

FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:
- INSTALLATION DOES NOT INCLUDE:

- REMOVAL OF ANY EXISTING CASEWORK OR EQUIPMENT
- INSTALLATION OF PLUMBING FIXTURES OR HOOK UP
- FINAL CONNECTION OF ANY SPECIFIED ELECTRICAL SYSTEM (SEE NOTES BELOW)

- INSTALLATION/REMOVAL OF DATA OR PHONE LINES.

- TOE KICK IS 4"

- INSTALLATION PROVIDED BY RC SMITH.

- CEILING HEIGHT IS _____ A.F.F.

- ALL COUNTERTOPS ARE PLASTIC LAMINATE WITH T-NOSE EDGE UNLESS NOTED OTHERWISE.

- LOCKS FOR DOORS & DRAWERS ARE OLYMPUS MODEL: DCN-1-26D

- ALL DESK UNITS OVER 48" WIDE SHALL HAVE METAL UNDER COUNTER SUPPORT BRACKETS.

ELECTRICAL / DATA:

- RCS IS RESPONSIBLE FOR INSTALLATION OF MODULAR ELECTRICAL SYSTEM, BUT ASSUMES NO RESPONSIBILITY FOR THE FINAL CONNECTION OF THAT SYSTEM.

- THE QUOTED ELECTRICAL SYSTEM ACCOMMODATES EITHER NORMAL OR EMERGENCY POWER. IF BOTH NORMAL AND EMERGENCY POWER ARE TO BE UTILIZED, ADDITIONAL ELECTRICAL SYSTEM MAY NEED TO BE ADDED. THIS CONDITION WILL RESULT IN AN UPCHARGE.

NOTE TO CONTRACTORS:

- RC SMITH IS NOT RESPONSIBLE FOR PROVIDING DATA LINES OR DEVICES. THE ROUGH IN LOCATIONS THAT ARE USED FOR BRINGING ELECTRICAL SYSTEM INTO CASEWORK CAN ALSO BE USED TO BRING IN DATA WIRING.

- VERIFY IF THERE ARE WALL ELEC / TD RECEPTACLES THAT WILL REQUIRE CUTOUTS IN THE CABINETS TO GAIN ACCESS. RC SMITH WILL NEED TO KNOW QUANTITY AND LOCATIONS OF RECEPTACLES.

COMMON PHARMACY FLOORING:

- FLOORING SHOULD BE INSTALLED PRIOR TO ARRIVAL OF CABINETS. VINYL BASE WILL BE CUT BACK WHERE CABINETS CONTACT WALL.

- IF FLASH COVE IS SPECIFIED, RC SMITH NEEDS TO BE NOTIFIED PRIOR TO FINALIZING PLAN. ADDITIONAL COST IS REQUIRED TO ACCOMMODATE THAT CONDITION.

SPECIAL NOTES:

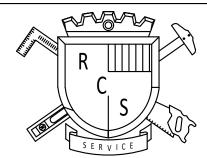
SOLID SURFACE COUNTERTOPS

MODIFY LEG TO 6" DEPTH TO ALLOW FOR KNEE SPACE

3 LBEZ 6"X6"

4 REMOVABLE BOTTOM

PLASTIC LAMINATE:					
GROUP 1:	CABINET EXTERIOR:				
	CABINET INTERIOR:				
	DOORS/ DRAWERS:				
	SHELVING:				
GROUP 2:	COUNTERTOPS:				
SOLID S	SURFACE COUNTERTOPS:				
	SINKS BOWL: STAINLESS STEEL DROP-IN				
GROUP 3:	BACK PANELS:				
В	ACK PANELS (BACKSIDE):				
COLOR SELECT INT:	BB INTERIOR:				
	HARDWARE / COUNTERTOP EDGING				
C'TOP EDGE:	T-NOSING:				
HARDWARE:	POSTS/BRACKETS:				
WALL MOUN	T SHELVING STANDARDS/BRACKETS (IF APPLICABLE): ANOC	HROME			
	MISC. MATERIALS:				
FABRIC:	GALAXY:				
CARPET:	METROWALL:				
SEATING:	CHAIRS:				
	FLOORING TYPE				
CLEANROOM FLOORING					
CLEANROOM BASE:					
COMMON RX FLOORING	:				
COMMON RX BASE:					



R.C. Smith Company 14200 Southcross Drive West Burnsville, MN 55306

HTTP:/WWW.RCSMITH.COM (952) 854-0711 / (952) 854-8160 FAX. / (800)-747-7648 TOLL FREE

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REVISIONS:

REVISION DATE:	REVISED BY:						
10/01/18	CA						
12/11/18	CA						
12/17/18	CA						
CHECKED BY:							
DATE:	CHECKED BY:						
X/X/XX	X.X.						
X/X/XX	X.X.						
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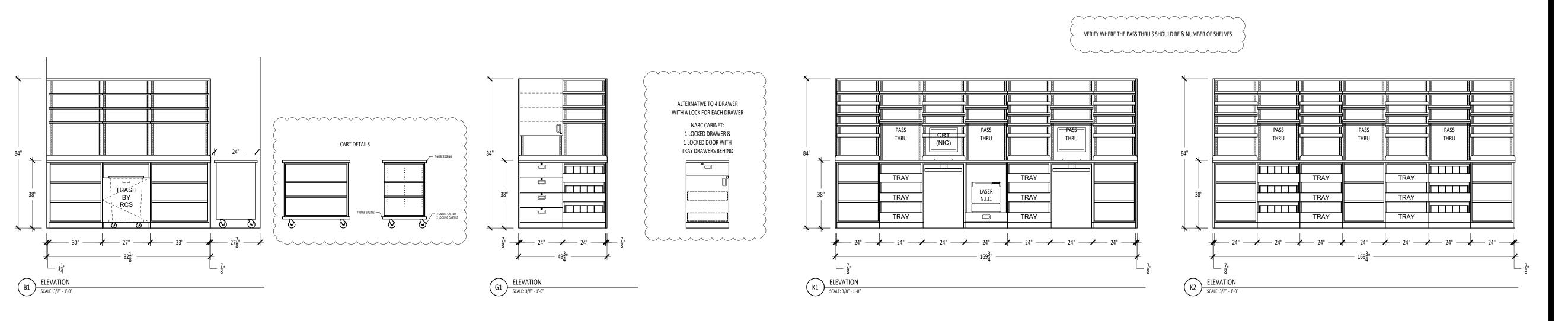
CHEROKEE NATION STILWELL WILMA MANKILLER CLINIC

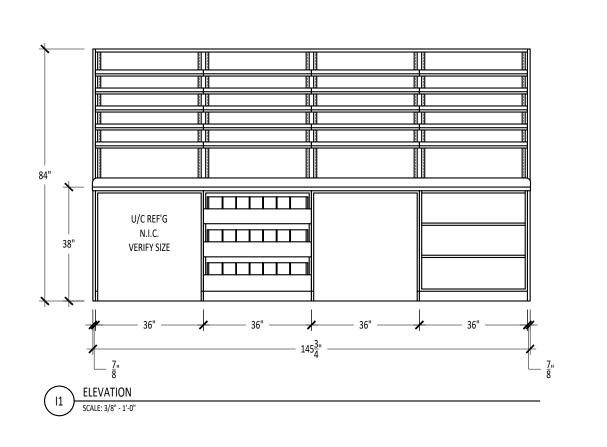
HWY 51 STILWELL, OK

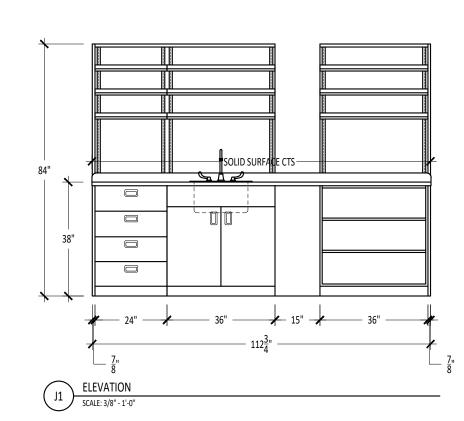
FACILITY CONTACT:		SALES REP.:	
JEFF SAN	DERS		PAUL GILES
DRAWN BY:	SCALE:	IOTED	DATE: 09/12/18
PROJECT #/FILE NAME:	OK-	12289	
SHEET:			SERIES:

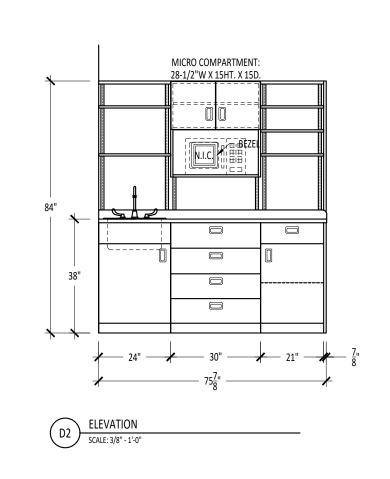
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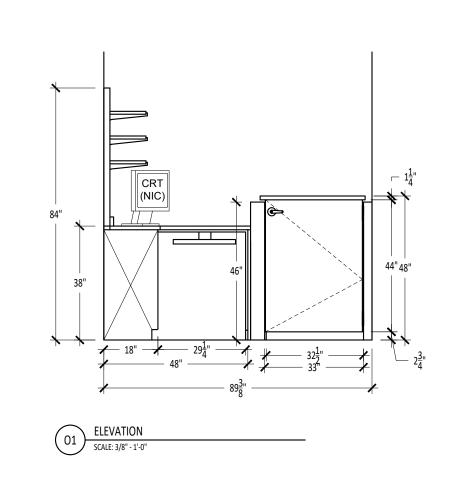
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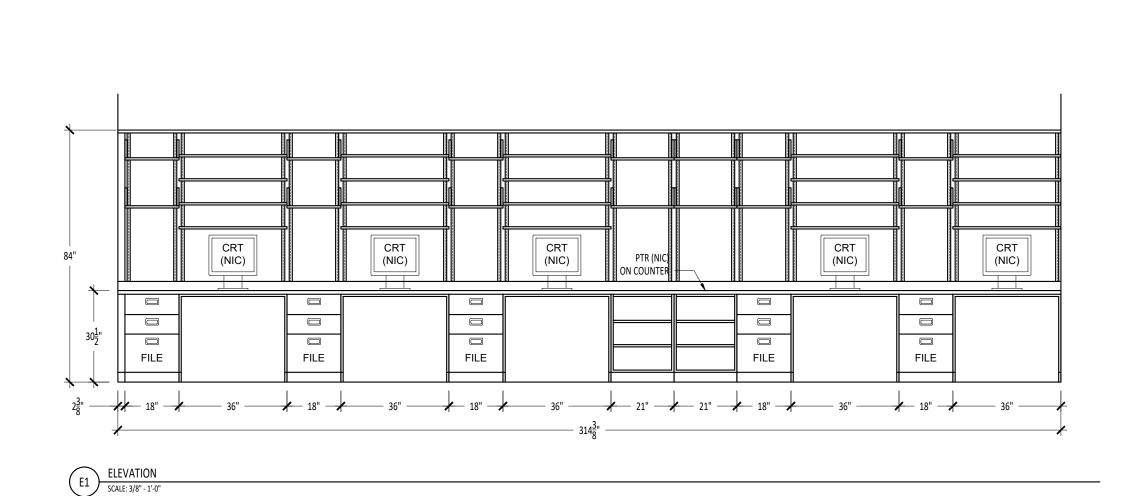


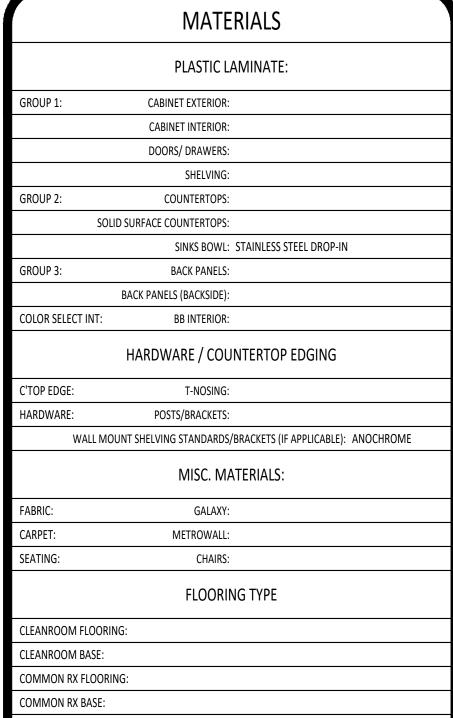


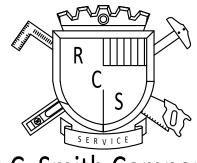


O2 ELEVATION

SCALE: 3/8" - 1'-0"







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REVISIONS:

REVISION:	REVISION DATE:	REVISED BY:
В	10/01/18	CA
С	12/11/18	CA
D	12/17/18	CA
	CHECKED BY:	
	DATE:	CHECKED BY:
PRE-MATERIALS	X/X/XX	X.X.
PRE-RELEASE TO PROD.	X/X/XX	X.X.
NECT NAME:		

CHEROKEE NATION STILWELL WILMA MANKILLER CLINIC

HWY 51 STILWELL, OK

FACILITY CONTACT:		SALES REP.:	
JEFF SAI	NDERS		PAUL GILES
DRAWN BY:	SCALE:	l	DATE:
CA	AS N	OTED	09/12/18
PROJECT #/FILE NAME:			
	OK-1	2289	
SHEET:			SERIES:

2 OF 2

A2



Midmark Corporation 60 Vista Drive Versailles, Ohio 45380

Midmark Corporation 1000 Civil War Road, Area #5 Carthage, MO 64836

Casework Drawings

Project Name: Stilwell Cherokee Clinic

Project #: MS181039

Phase #: 01

Rev: B

Date: 11/6/2019

Midmark Rep: Spencer Davenport

Sdavenport@midmark.com

Designer: Jenni Brunswick Ext: 128291

jbrunswick@midmark.com

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Project Name: Stilwell Cherokee Clinic	
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Project #: MS181039

Color Schedule

Phase #: **01**

Rev: B

Signed Drawings Required To Process Order

(Signature)

(Date)

See Cover Page For Terms and Conditions

Panel Finishes

Panel Styles: Serenity

Handle Types: TBD

Handle Finishes: Brushed Nickel

Finish Colors:



TBD Woodgrain/Metallic

Countertop Materials

Top Materials: Solid Surface

Top Colors:

TBD Solid Surface



www.midmark.com

design@midmark.com

Project Name: Stilwell Cherokee Clinic

Project #: M\$181039

Phase #: 01

Rev: B

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(Date)





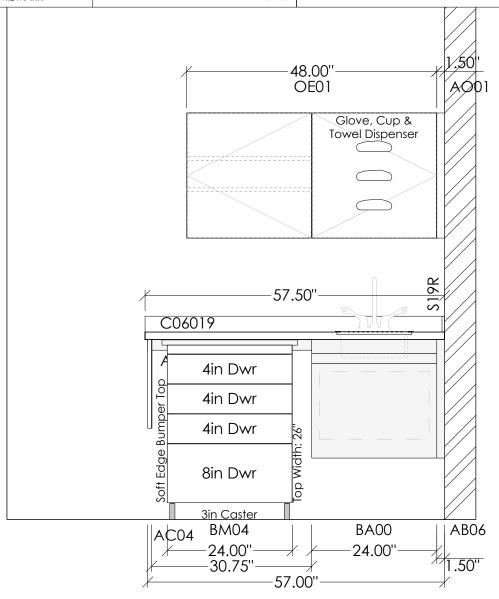


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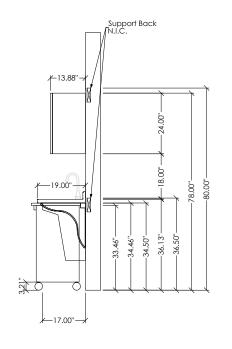
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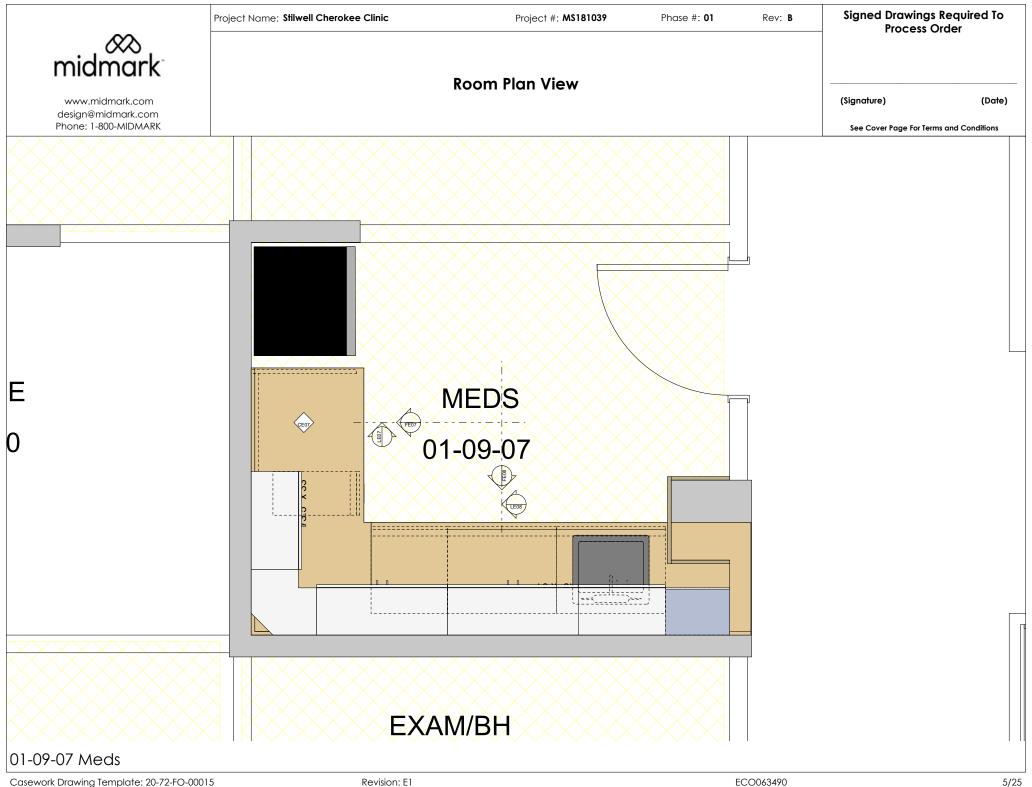
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Lock: T105

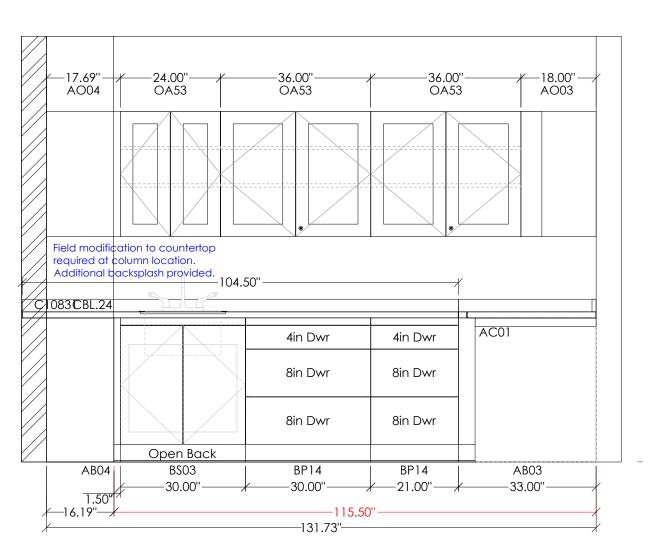
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Signed Drawings Required To Process Order

(Signature) (Date)

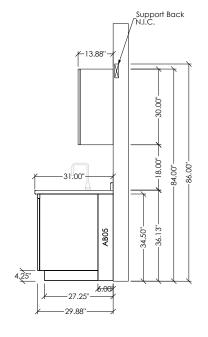
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Keyed Locking (See Elevation) Note:



CFT-6GS4WB-3



01-09-07 Meds

See Countertop Detail Sheet: Solid Surface D, Rolled Edge w/ Set-On BS 1" x 3"

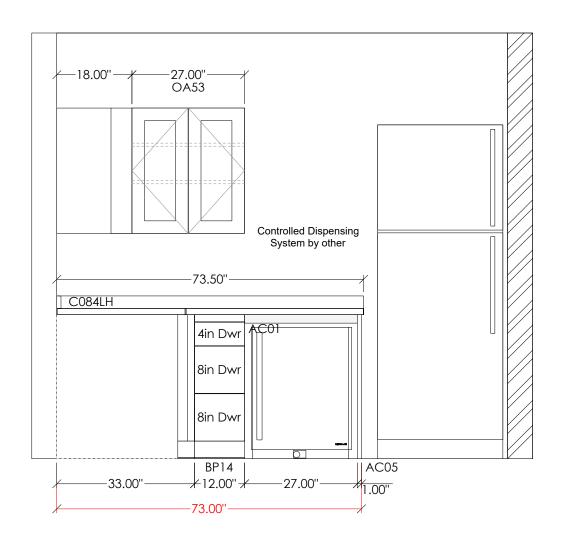


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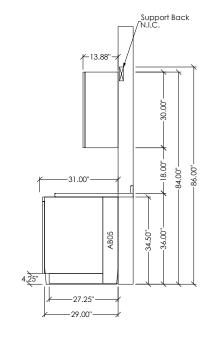
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01-09-07 Meds

See Countertop Detail Sheet: Solid Surface D, Rolled Edge w/ Set-On BS 1" x 3"



ct #: MS181039

Phase #: **01**

Rev: B

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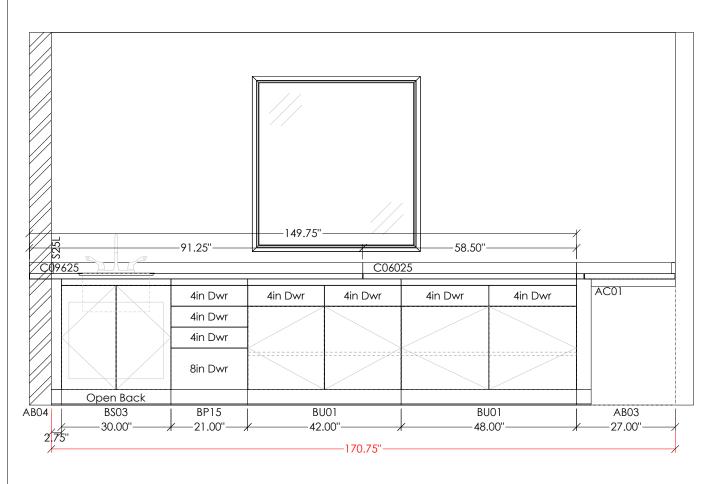
Room Plan View



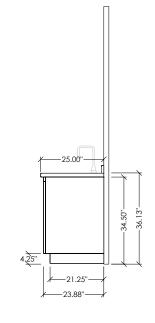


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Lock:	No Lock	Note:	Field Measurement Required	Faucet:	CFT-6GS4WB-3	

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01-09-12 Clean

See Countertop Detail Sheet: Solid Surface D, Rolled Edge w/ Set-On BS 1" x 3"

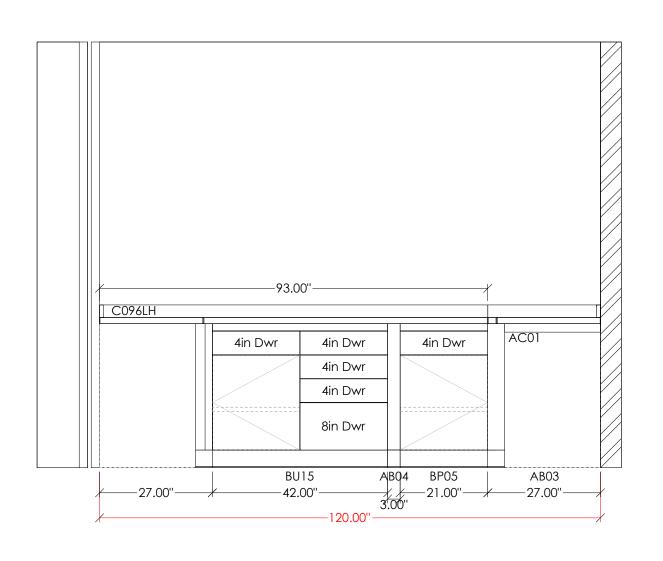


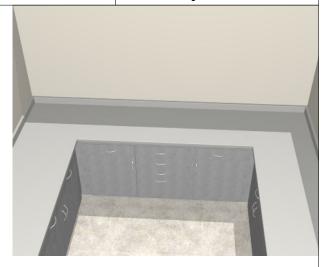
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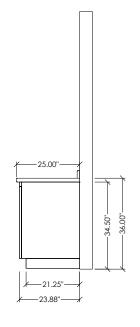
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01-09-12 Clean

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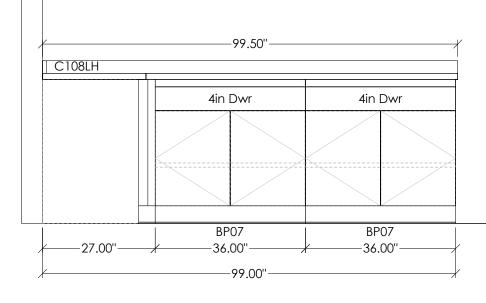
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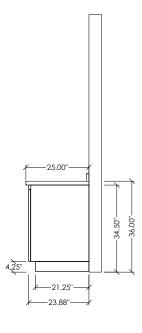
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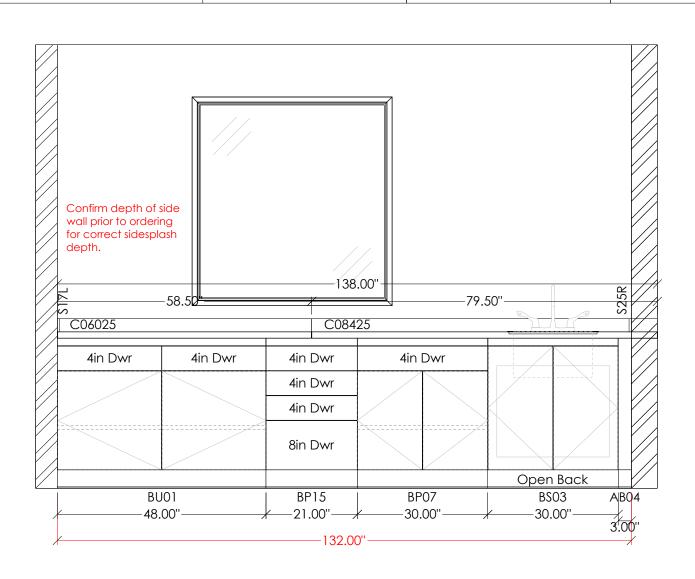


Lock:

Project Name: Stilwell Cherokee Clinic		Project #: M\$181039	Phase #: 01	Rev: B	
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Upper Finish:		Grommet:	None	Top Color:	TBD Solid Surface
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Handle:	Brushed Nickel TBD	Note:		Sink:	CSK-S181411-3

Field Measurement Required Faucet:

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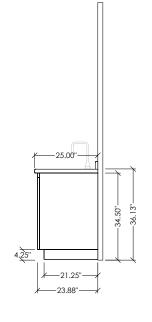


No Lock

Note:



CFT-6GS4WB-3



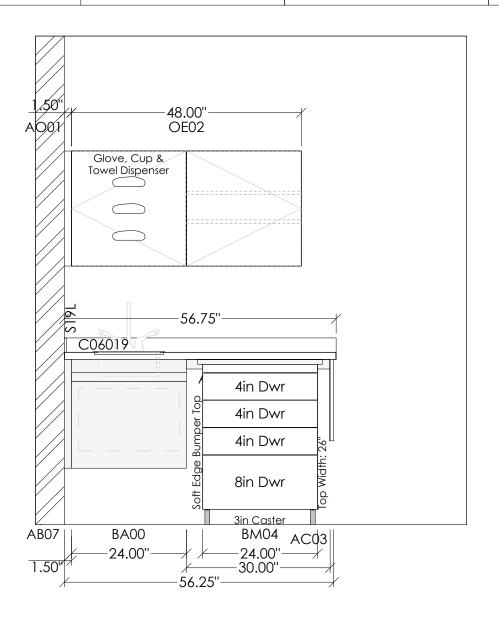
01-09-13 Soiled

See Countertop Detail Sheet: Solid Surface D, Rolled Edge w/ Set-On BS 1" x 3"

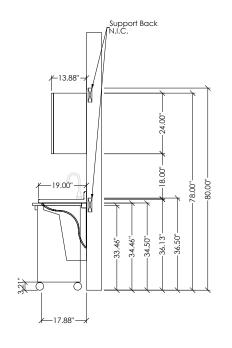


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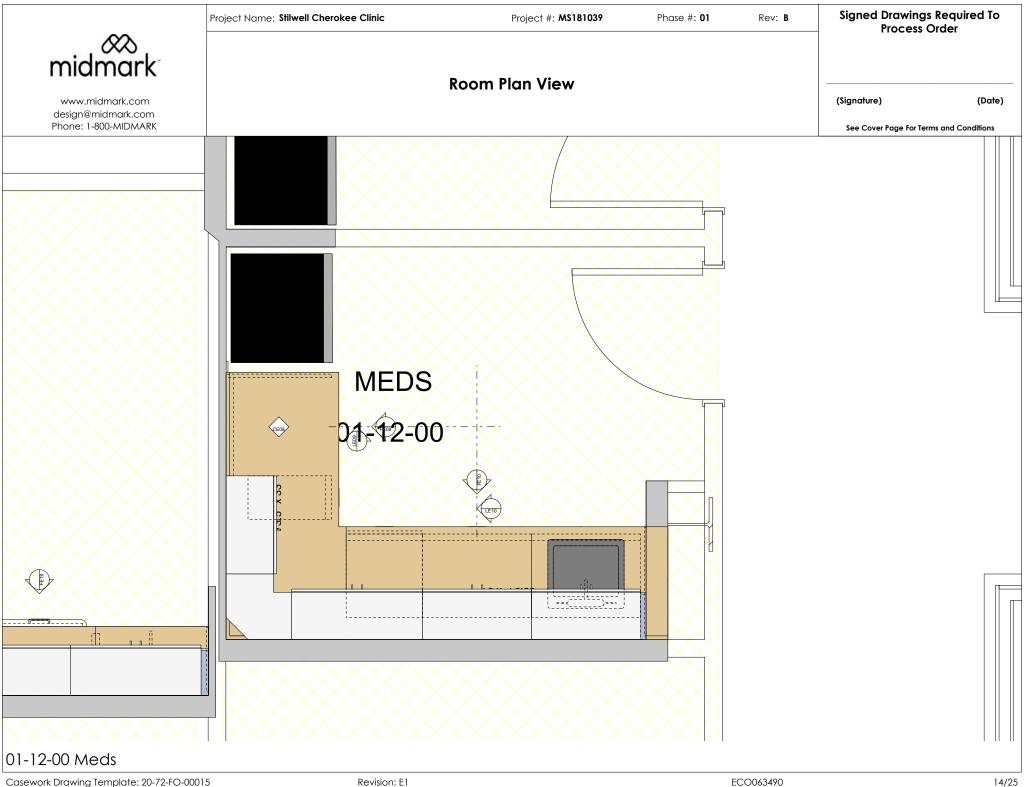






01-11-02 Breastfeeding Room

See Countertop Detail Sheet: Solid Surface A , Rolled Edge w/ Int BS 1" x 3"



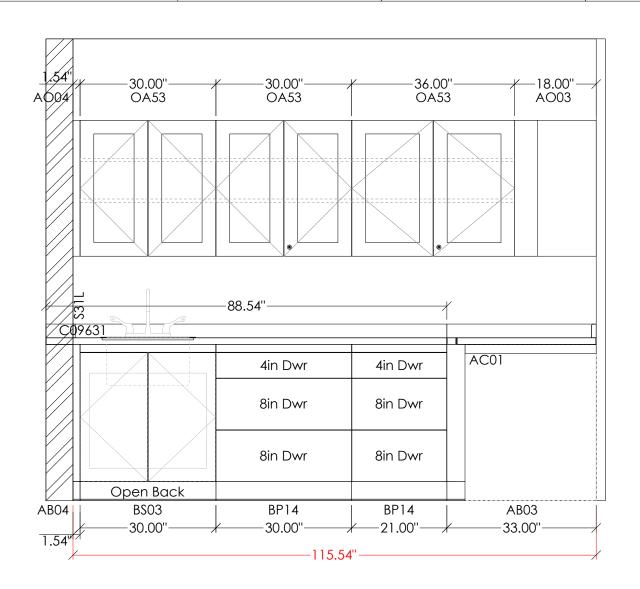


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Signed	Drawings Required To	
	Process Order	

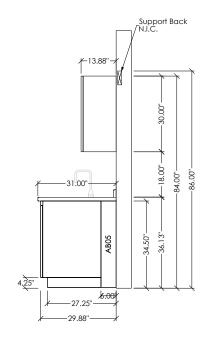
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Revision: E1





01-12-00 Meds

See Countertop Detail Sheet: Solid Surface D, Rolled Edge w/ Set-On BS 1" x 3"

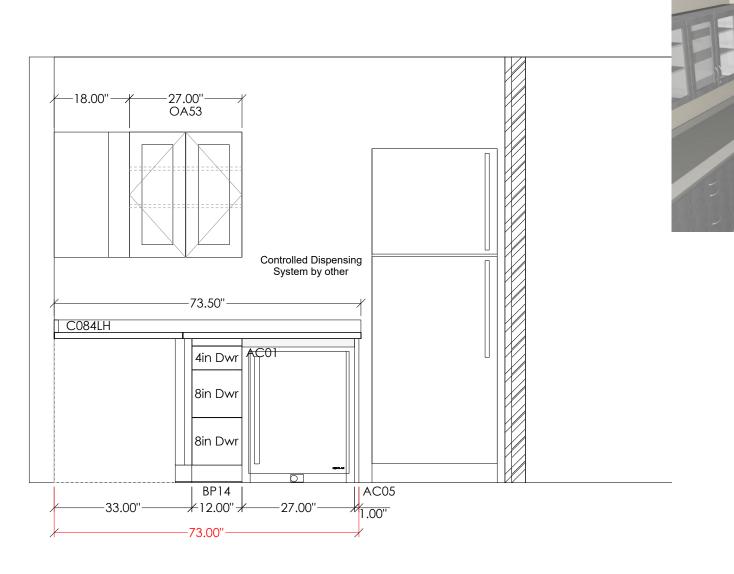


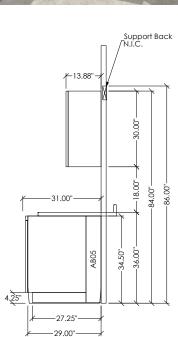
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Handle:	Brushed Nickel TBD	Note:		Sink:	None	
Lock:	No Lock	Note:	Field Measurement Required	Faucet:	None	

Signed	Drawings Required To
	Process Order

(Signature) (Date)

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01-12-00 Meds

See Countertop Detail Sheet: Solid Surface $\,\,$ D $\,$, Rolled Edge $\,$ w/ Set-On BS 1" $\,$ x 3"



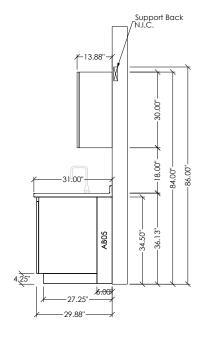
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Panel Style:	Serenity Panel	Cutout:	None	Note:		-
Handle:	Brushed Nickel TBD	Note:		Sink:	CSK-\$181411-3	
Lock:	No Lock	Note:		Faucet:	CFT-6G\$4WB-3	

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8ir Open Back	n Dwr
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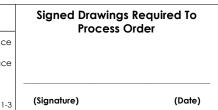


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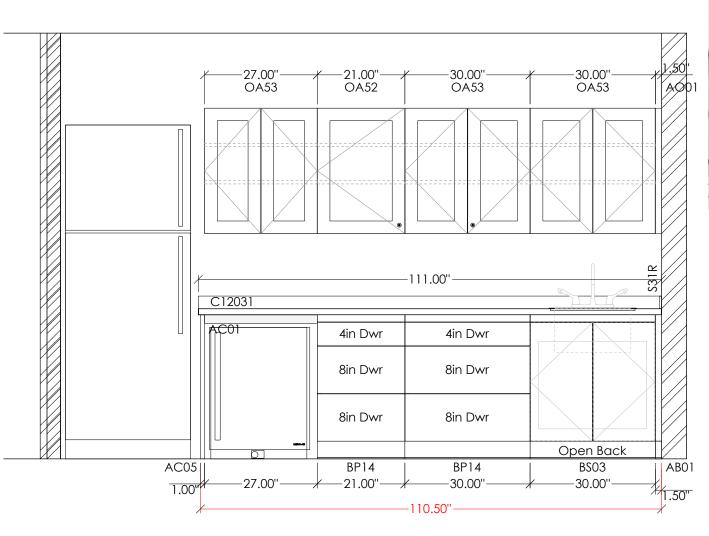
See Countertop Detail Sheet: Solid Surface A, Rolled Edge w/ Int BS 1" x 3"



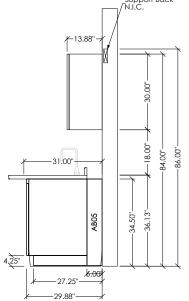
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Lock: T105	Keyed Locking (See Elevation)	Note:	Field Measurement Required	Faucet:	CFT-6G\$4WB-3



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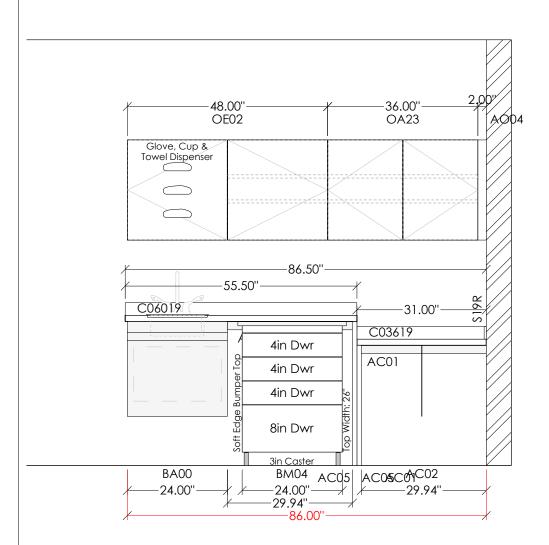


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(Signature) (Date)

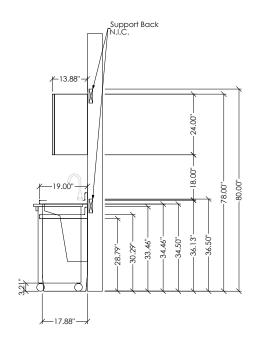
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Rooms:

01-10-03 Exam Refrac 01-10-04 Exam Refrac 01-10-07 Exam Non-Refrac 01-10-09 Exam Refrac





Exam Refrac Typ 1 (Qty 4)

See Countertop Detail Sheet: Solid Surface $\,$ A $\,$ Rolled Edge $\,$ w/ Int BS 1" $\,$ x 3"

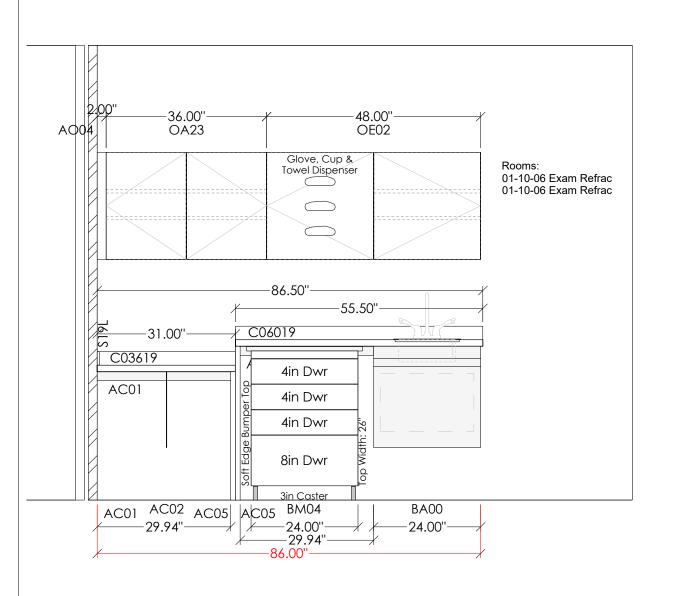


_						
	Project Name: St	ilwell Cherokee Clinic		Project #: MS181039	Phase #: 01	Rev: B
	Base Finish:	100-TBD Woodgrain/Metallic	Tasklight:	None	Top Material:	Solid Surface
	Upper Finish:	100-TBD Woodgrain/Metallic	Grommet:	None	Top Color:	TBD Solid Surface
	Panel Style:	Serenity Panel	Cutout:	None	Note:	
	Handle:	Brushed Nickel TBD	Note:		Sink:	CSK-S131105-2
	Lock:	No Lock	Note:	Field Measurement Required	Faucet:	CFT-3G\$4WB-2

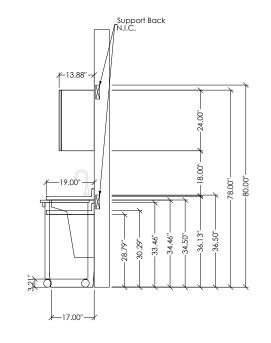
•	Drawings Required To Process Order
	riocess order

(Signature) (Date)

See Cover Page For Terms and Conditions







Exam Refrac Typ 2 (Qty 2)

See Countertop Detail Sheet: Solid Surface A, Rolled Edge w/ Int BS 1" x 3"

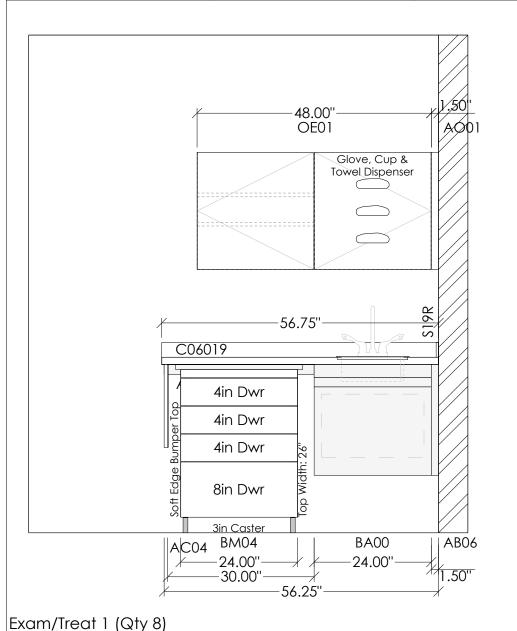


Project Name:	Stilwell Cherokee Clinic		Project #: M\$181039	Phase #: 01	Rev: B
Base Finish:	100-TBD Woodgrain/Metallic	Tasklight:	None	Top Material:	Solid Surface
Upper Finish:	100-TBD Woodgrain/Metallic	Grommet:	None	Top Color:	TBD Solid Surface
Panel Style:	Serenity Panel	Cutout:	None	Note:	
Handle:	Brushed Nickel TBD	Note:		Sink:	CSK-S131105-2
Lock:	No Lock	Note:		Faucet:	CFT-3G\$4WB-2

Signed Drawings Required To Process Order	

(Signature) (Date)

See Cover Page For Terms and Conditions

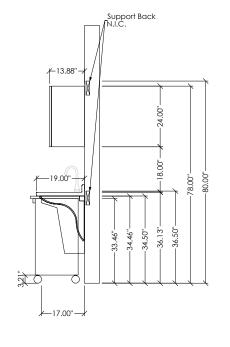


Rooms: 01-07-09 PT Trtmt 01-07-11 PT Trtmt 01-09-04 PC Exam 01-09-05 PC Exam 01-09-08 PC Exam/BH

01-12-01 Specialty Exam 01-12-03 Specialty Exam

01-13-05 PHN Exam



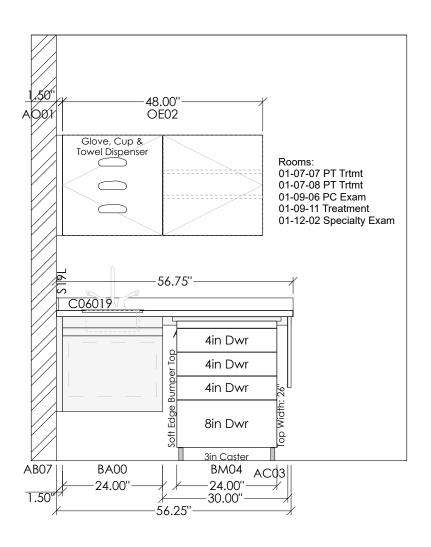


See Countertop Detail Sheet: Solid Surface A , Rolled Edge w/ Int BS 1" x 3"

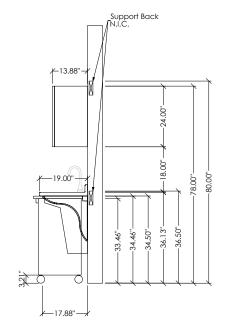


Project Name: St	ilwell Cherokee Clinic		Project #: M\$181039	Phase #: 01	Rev: B	
Base Finish:	100-TBD Woodgrain/Metallic	Tasklight:	None	Top Material:	Solid Surface	
Upper Finish:	100-TBD Woodgrain/Metallic	Grommet:	None	Top Color:	TBD Solid Surface	
Panel Style:	Serenity Panel	Cutout:	None	Note:		
Handle:	Brushed Nickel TBD	Note:		Sink:	CSK-\$131105-2	
Lock:	No Lock	Note:		Faucet:	CFT-3GS4WB-2	

	Signed Drawings Required To Process Order
асе	
асе	
05-2	(Signature) (Date)









Solid Surface Detail A Integrated Backsplash 1" x 3"

Design Considerations:

- * Tops that exceed 144" or form an "L" or "U" shape will be sent as multiple pieces and require field seaming by a qualified solid surface fabricator.
- * Integrated and undermount sinks and chutes will be attached.
- * Sink and faucet cutouts provided only if sink and faucet are purchased from Midmark.
- * Tops will be manufactured based on the field measurements provided at the time of order. Tops may be sent long. See elevations for exact countertop width.
- * Side splashes next to tall towers and drop down ultrasonic areas will be nonwrapped (see detail drawing).
- * See color guide for standard color options. Confirm availability for nonstandard color options. Extended lead time will apply.

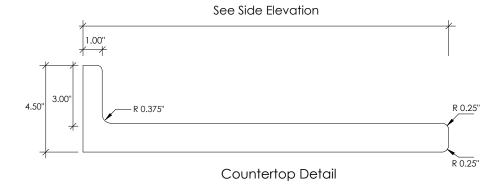
Material:

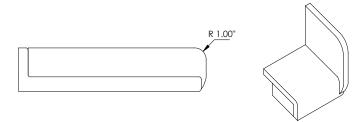
* 1/2" thick solid surface material.

Features:

- * Outside corners of solid surface tops will have 3/8" radius.
- * Standard countertop overhang for base cabinets is 1/2".
- * Integrated solid surface sink will be White.
- * Loose set on side splash available.

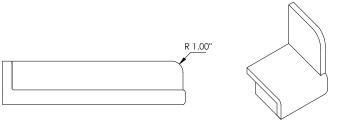
Detail drawings:





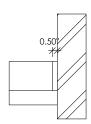


Wrapped Side Splash Front Edge 3D

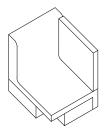


Non Wrapped Side Splash Detail

Nonwrapped Side Splash Front Edge 3D



Side Splash Front Detail



Side Splash & Backsplash 3D



Solid Surface Detail D Set-On Backsplash 1" x 3"

Design Considerations:

- * Tops that exceed 144" or form an "L" or "U" shape will be sent as multiple pieces and require field seaming by a qualified solid surface fabricator.
- * Integrated and undermount sinks and chutes will be attached.
- * Sink and faucet cutouts provided only if sink and faucet are purchased from Midmark.
- * Tops will be manufactured based on the field measurements provided at the time of order. Tops may be sent long. See elevations for exact countertop width.
- * Side splashes next to tall towers and drop down ultrasonic areas will be nonwrapped (see detail drawing).
- * See color guide for standard color options. Confirm availability for nonstandard color options. Extended lead time will apply.

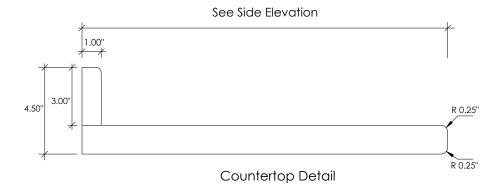
Material:

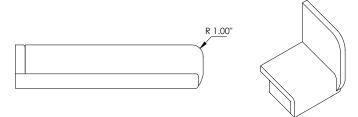
* 1/2" thick solid surface material.

Features:

- * Outside corners of solid surface tops will have 3/8" radius.
- * Standard countertop overhang for base cabinets is 1/2".
- * Integrated solid surface sink will be White.
- * Loose set on side splash available.

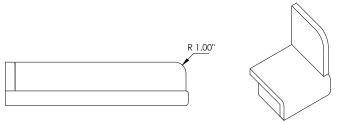
Detail drawings:





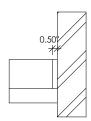


Wrapped Side Splash Front Edge 3D

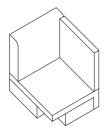


Non Wrapped Side Splash Detail

Nonwrapped Side Splash Front Edge 3D



Side Splash Front Detail



Side Splash & Backsplash 3D

24/25

Casework Detail Sheet

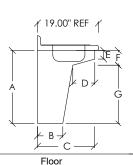
Wall Mount Sink

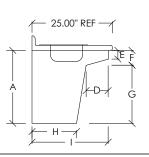
For Reference Only. Not all cabinet depths may be used in project quotation.

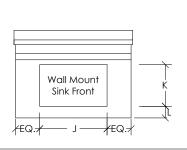
Wall Mount Sink BA00 Cabinet

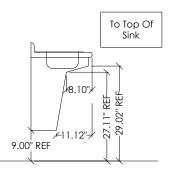
Cabinet Clearance Guidelines:

Letter	Length
Α	22.71"
В	7.88"
С	17.75"
D	6.85"
E	2.69"
F	4.60"
G	18.11"
Н	13.88"
I	23.75"
J	21.00"
K	13.00"
L	3.62"





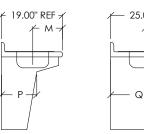


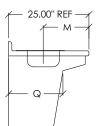


ADA Compliance Reference

Sink Clearance Guidelines:

Letter	Note	Length
M	Min Drain	10.13
Р	Frame Depth	10.90"
Q	Frame Depth	16.90"





Sink Options:

	Lami	nate	Corian			
Sink Name	18 Deep	24 Deep	18 Deep	24 Deep		
CSK-S131105-1	X	X	Х	Х		
CSK-S131105-2	X	X	X	Х		
CSK-S11D05-0	X	Х	X X			
CSK-S211605-3		X		X		
CSK-D141605-3		X		X		
Corian 802			X*	Х		

X* - Faucet must be side

Disclaimer

Sink cabinets are manufactured to be compliant with the Federal ADA Standards along with other local and state building codes. Please confirm local standards to ensure compliance.

Additional plumbing connections may be required for installation, not provided by Midmark.

Floor



Specification Sheet

Item No.: .	
Project No.:	
S.I.S. No.: .	

Wire Shelving Components and Accessories—Slides, Tote Boxes



adjustable undershelf slides with tote box

MODELS:			
□ <i>US*-S</i>	☐ TS1417	□ <i>HDTS24*</i>	□ A203*
□ 0US*	□ TS2517	□ A2085*	□ <i>A217*</i>
<i>□USS*-S</i>	□ <i>TS18*</i>	□ TB1016*	
□ <i>TS1421</i>	□ <i>TS24*</i>	□ TB1022*	

□ TB1722*



one-piece slide with tote box

Undershelf Slides

ADJUS UNDERSH Stainless ste tote box wid	el. Accep	DES	8	E-PIECE * SLIDES taches to of shelf.		SLIDES END I Allows totes from the end				
model #	weig lbs.	jht kg	model #	weigh lbs.	nt kg	weight model # lbs. kg			fii shelf in.	
US18-S	3	1.4	OUS18	6	2.7		n/a		18″	457
US21-S	3	1.4	OUS21	8	3.6	n/a			21″	533
US24-S	3	1.4	OUS24	9	4.1	USS24-S 3 1.4			24"	610
US30-S	4	1.8		n/a	4	1.8	30"	762		

□ TS2021



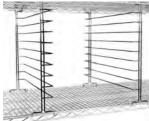
slide system with tote boxes

Slide Systems *

Easily attaches to underside of shelf without the use of tools.

	width	lengtl	h d	epth	fits s	shelf adaptable tote boxes		weig	yht
model #	in. mm	in. n	nm in.	mm	in.	mm	(see back page)	lbs.	kg
TS1421	215/8" 683	14" 3	356 10	4" 260	24"	610	TB1022-3, TB1022-	5.0	2.3
TS2021	215/8" 683	20″ 5	508 10	4" 260	24"	610	TB1722-3, TB1722-6, TB1722-9	7.5	3.4
TS1417	17%" 543	14" 3	356 10	4" 260	21"	533	TB1016-3, TB1016-6	4.0	1.8
TS2517	17%" 543	25½″ 7	797 10	4" 260	21"	533	TB1722-3**, TB1722-6**, TB1722-9**	5.0	2.3

^{**} Fits TS2517 sideways



tray slides

Tray Slides

Maximizes your use of space between shelves. Available in chrome or epoxy. 1¾" (45mm) spacing.

	STANDAKD			HEAVY DUTY							
	Holds 9 trays.		Holds 11 trays. Features panel assembly								
chrome	EAGLEgard [®]	wei	ght	welde chrome	ed to the back of EAGLEgard ®	slides wei g	ght	wic	dth	hei	ight
model #	model #	lbs.	kg	model #						in.	mm
TS18-C	TS18-E	9	4.1	HDTS18-C	HDTS18-E	12	5.4	17%"	435	22"	559
TS24-C	TS24-E	11	5.0	HDTS24-C	HDTS24-E	15	6.8	23%"	587	22"	559

^{*} A variety of tote boxes are available for use with these slides and slide systems. See back page.

EAGLE GROUP

100 Industrial Boulevard, Clayton, DE 19938-8903 USA

Phone: 302-653-3000 • Fax: 302-653-2065

www.eaglegrp.com

Foodservice Division: Phone 800-441-8440 MHC/Retail Display Divisions: Phone 800-637-5100

For custom configuration or fabrication needs, contact our SpecFAB® Division.

Phone: 302-653-3000 • Fax: 302-653-2065 • e-mail: quotes@eaglegrp.com





[□] *HDTS18** * See charts for complete model numbers.



Item No.:	
Project No.:	
S.I.S. No.:	

Wire Shelving Slides & Tote Boxes



assorted molded fiberglass boxes and trays

Molded Fiberglass Boxes and Trays

Boxes are stackable for maximum storage efficiency. Made of thermoset polyester composite material. Flame and chemical resistant.

		ins	inside dimensions				tside di	ns —			
		widt	th	len	gth	width le			ngth dept		pth
model #	description	lin.	mm	in.	mml	lin.	mm	in.	mm	in.	mm
A208505	tray	16¼"	412	24%"	619	17¾″	454	25¾"	654	1″	25
A208506	stacking box	15¾″	403	23%"	606	17¾"	451	25¾"	654	3″	76
A208507	stacking box	15%"	403	23%"	606	17¾"	451	25¾"	654	4½"	114
A208508	stacking box	15%"	403	23%"	606	17¾"	451	25¾"	654	6″	152
A208513*	lid	_	-	-	-	17¾"	451	25¾"	654	-	_

^{*}Model #A208513 lid fits models A208506, A208507, and A208508 stacking boxes.



TB1016 and TB1722 series



TB1022 series

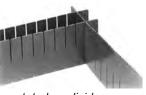
Tote Boxes

Injection molded from high-density polyethylene material for uniformed wall thickness ensures impact resistance and durability. Also available in molded fiberglass (see bottom of this page).

		wic	lth	leng	length		depth		ght	fits Slide System
color	model #	in.	mm	in.	mm	in.	mm	lbs.	kg	(see previous page)
grey	TB1016-3	10%"	276	16½"	419	3½"	89	1.0	0.5	TS1417
9.09	TB1016-6	10%"	276	16½"	419	6″	152	1.5	0.7	TS1417
	TB1722-3*	17½″	444	22½"	572	3″	76	2.3	1.0	TS2021, TS2517
grey	TB1722-6*	17½"	444	22½"	572	6″	152	3.5	1.6	TS2021, TS2517
	TB1722-9*	17½"	444	22½"	572	8″	203	4.0	1.8	TS2021, TS2517
white	TB1022-3	11″	279	22½"	572	3″	76	1.5	0.7	TS1421, TS2517
Willia	TB1022-6	11″	279	22½"	572	53/4"	146	2.0	0.9	TS1421, TS2517

^{*} Fits Slide System #TS2517 sideways

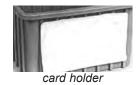
Tote Box Accessories



		100	V	
1	ote b	ox div	iders	
		and the same of		

tote box cover (for TB1016 and TB1722 series)

	LUNG DIVIDERS		SHORT DIVIDERS		COVERS	
color	model #	maximum number accepted	model #	maximum number accepted	model #	fits tote box #
grey	A217766	7	A217760	11	A217765	TB1016-3
grey	A203841	7	A203843	11	A217765	TB1016-6
	A217763	11	A217764	15	A217638	TB1722-3
grey	A203842	11	A203844	15	A217638	TB1722-6
	A203845	11	A203846	15	A217638	TB1722-9
white	A203838	7	A203839	15	A203874	TB1022-3
Willie	A217759	7	A217791	15	A203874	TB1022-6



CARD HOLDERS

Clear vinyl, with velcro fasteners.

	holds labels		
model #	inches	mm	
CH28	2" x 8"	51 x 203	
CH35	3" x 5"	76 x 127	
CH58	5" x 8"	127 x 203	

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Rev. 12/14



E-SERIES HIGH PERFORMANCE 20-POUND CAPACITY WASHER-EXTRACTOR

Designed to drive down gas, water and electrical costs while improving productivity, Continental E-Series High-Performance Washer-Extractors deliver high-speed extract, an easy-to-install freestanding design, unmatched durability and the ultimate in programmability!

INNOVATIVE TECHNOLOGY

CONTINENTAL'S MOST FLEXIBLE CONTROL EVER

The highly flexible Logi Pro Control offers 25 individually modifiable programs—each with up to 11 baths including multiple pre-wash, wash and rinse cycles. Variables within each bath—including wash temperature, six water levels, cycle times, rotation and G-force extract speeds—can be individually programmed for maximum efficiency given the load type. E-Series Washers can also be programmed for automatic chemical injection—ensuring a consistent clean with every wash and eliminating the possibility of chemical overuse and resulting damage to fabric.

E-Series technology allows for superior wash quality using considerably less water than

chemical overuse and resulting damage to fabric. STINGY ON WATER

most toploads on the market. A sump-less design, exclusive AquaFall™ system and a highly programmable control combine to slash water usage and ensure excellent wash quality. Compared with most top-load washers, which

a nignly programmable control combine to slash water usage and ensure excellent wash quality. Compared with most top-load washers, which consume 31-40 gallons of water per load, E-Series uses as little as 13.4*gallons per load! Less water used equates to less water heated and additional savings in gas and electricity. No wonder it's ENERGY STAR® qualified as a top tier industrial washer for efficiency!





LOGI PRO



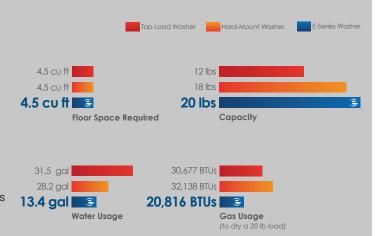
E-SERIES WASHER-EXTRACTORS DELIVER MORE USING LESS

SMALLER MACHINE - GREATER OUTPUT

E-Series Washers fit into the same space as most top-load washers, yet offer 40% greater capacity. Larger loads equate to increased productivity. E-Series Washers use the same power requirements as top-load washers and as a result are an easy replacement for these less efficient models.

MORE EFFICIENCY - DECREASED UTILITY COSTS

E-Series Washers use up to 57 percent less water per load! This translates into significant savings of water usage and water-heating costs. The high-speed extract of E-Series' further reduces utility costs by decreasing the gas or electricity used to dry a load.



THE BOTTOM LINE—BOOSTED PRODUCTIVITY

How can E-Series Washers produce more laundry per hour when compared to larger, lower-performance machines? The answer lies in wash and dry throughput. E-Series Washers reach much higher extraction speeds—resulting in greater moisture removal, shortened dry time and boosted productivity. E-Series Washers move soiled laundry through the wash and dry process faster. This boosts productivity, reduces labor costs and extends linen life by minimizing exposure to dryer heat and tumbling.

Models Used in Comparison: Continental JWT820 top-load washer; Continental L1018 3-phase hard-mount washer; Continental EH020 1-phase E-Series Washer

UNIQUE DESIGN

HIGH-SPEED EXTRACT & FREESTANDING DESIGN

A 20-pound capacity washer, E-Series features a freestanding design that allows for extraction speeds of up to 300 G-force, about 200 G-force more than most top-load washers and 100-150 G-force more than most similarly sized hard-mount washers. The super-speed extract removes more water from each load—slashing dry time and resulting gas consumption by up to 50%! Production, in turn, is significantly enhanced using less labor and utilities. And, unlike hard-mount machines that must be bolted to concrete foundations, the freestanding design of E-Series Washers allows them to be easily installed and moved—using the same footprint as most top-load washers. To further facilitate easy installation, E-Series Washers use single-phase power which is easily available at most on-premise locations.



PROVEN CONSTRUCTION, DURABILITY & LONGEVITY

E-Series Washers feature inner and outer drums of durable AISI-304 stainless steel, oversized bearings and bearing housings and a quality sealing system. They are engineered using as few welds as possible to attain unmatched strength. The oversized door, which allows for easy loading and unloading, is equipped with heavy-duty, bolt-style door hinges to withstand the rigors of constant use.

EASE OF MAINTENANCE

Nearly all components are accessible via the front or top cover of the washer, which is easily removed without interfering with detergent dispensers. Bearings are lubricated for a lifetime, the poly-v belt needn't be tightened, and bearings and seals are easily replaced without removing the washer drum. Everything about E-Series mandates ease of maintenance and component accessibility. Choose from standard gravity drain, or optional pump drain.







ENERGY STAR QUALIFIED

Continental E-Series Washers offer unrivaled efficiency for on-premise laundries looking for a small-load commercial washer-extractor. E-Series Washers boast a superior 2.21 MEF (Modified Energy Factor) and 5.03 WCF (water consumption factor); use just 13.4 gallons of water per load; and offer high-speed extract for shortened dry times and improved productivity. Energy Star qualified, E-Series Washers often qualify for local utility rebates.





BACKED BY A COMMERCIAL WARRANTY

Engineered to withstand the rigors of constant use, E-Series Washers offer an industry-leading commercial warranty.



E-SERIES HIGH PERFORMANCE 25-POUND CAPACITY DRYING TUMBLER

Equipped with an oversized door, dryer window and cylinder light, E-Series Drying Tumblers are not only easy to use, they are incredibly efficient! With up to 25 pounds of capacity and gas or electric heat, E-Series Dryers are the right choice for any on-premise laundry with small load requirements. Loaded with industrial-grade features that ensure durability and simplify maintenance, E-Series Dryers are built to last.

COMPACT DRYING TUMBLER

INDUSTRIAL-GRADE EFFICIENCY AND DURABILITY

Featuring AISI-304 stainless steel top, front and side panels, the E-Series Drying Tumbler echos the efficiency and durability of the E-Series Washer-Extractor. The robust 7.0 cu. ft. cylinder and 1/3 HP motor are a perfect match in capacity and power to the E-Series Washer. In addition, E-Series Dryers boast efficient axial airflow that maximizes water removal. Laundry dries faster—resulting in a significant savings in labor and utility costs.

ERGONOMIC DESIGN

Utilizing a sensible ergonomic design with an oversized door, cylinder light, unique dryer window, and optional elevation base, the E-Series Dryer makes loading and unloading a snap. The large door—with a left or right swing—features heavy-duty hinges to withstand the rigors of constant use.



FLEXIBLE CONTROL

The dryer control, which mirrors the look of the E-Series Washer control, offers four temperature settings including high, medium, low and delicate. It couldn't be simpler to operate thanks to easy-to-understand icons that show operating instructions and a digital display that illuminates machine cycle status.

EASY TO INSTALL, SERVICE & MAINTAIN

E-Series Dryers share the same dimensions and utility connections as most home-style dryers, and as a result, are an smart replacement for

these less efficient models. Designed for minimal maintenance and simplified serviceability, the drying tumbler features a lint filter that's easy to reach and clean, but doesn't get in the way of users. When service is necessary, most components are accessible from the front—eliminating the need to move the machine. The motor, blower, heating element, gas valve and thermostats are serviceable through a lower front panel without having to disconnect the door switch.

GAS OR ELECTRIC

Underwriters Laboratories (UL) and CSA International listed, E-Series Dryers are available in gas or electric heat.







BACKED BY A COMMERCIAL WARRANTY

Constructed for longevity in the most demanding environments, E-Series Drying Tumblers are backed by an industry-leading commercial warranty.



ADVANCED ENGINEERING FOR UNRIVALVED EFFICIENCY

ELECTRIC UNIT

	EH020
Capacity lbs (kg)	20 (8)
Cylinder Diameter inch (mm)	21.1 (536)
Cylinder Depth inch (mm)	13.8 (351)
Cylinder Volume cu ft (dm³)	2.8 (79.2)
Net Weight Ibs (kg)	279 (127)
Crated Weight Ibs (kg)	301 (137)
Machine Width inch (mm)	27 (685)
Machine Depth inch (mm)	27.6 (700)
Machine Height inch (mm)	42.5 (1080)
Door Opening inch (mm)	12.7 (322)
Floor to Door inch (mm)	15.4 (390)
Shipping Dimensions inch (mm) (WxDxH)	28.3 x 29.1 x 47.7 (720 x 740 x 1212)
Control Options	Logi Pro
Washing Speeds rpm	50
Spin Speeds rpm	50/100/580/690/780/970
G-force	0.75/3/101/143/183/300
Modified Energy Factor (MEF)*	2.21
Water Consumption Factor (WCF)*	5.03
Drain Diameter inch (mm) pump gravity	1 (25.4) 2 (51)
Water Inlets inch (mm)	3/4 (19)
Recommended Water Pressure PSI (bar)	30-60 (2-4)
Water Flow gal/min (I/min)	8 (30)
Motor Power kW	0.8

Capacity Ibs (kg)	up to 25 (10)
Cylinder Volume cu ft (dm³)	7 (199)
Net Weight Ibs (kg) Electric / Gas	150 (68) / 155 (70)
Crated Weight Ibs (kg) Electric / Gas	160 (73) / 165 (75)
Machine Width inch (mm)	26.88 (683)
Machine Depth inch (mm)	28 (711)
Machine Height inch (mm)	44.34 (1126)
Door Opening inch (mm)	20.5 (521)
Shipping Dimensions inch (mm) (WxDxH)	29.5 × 30.5 × 45 (749 × 775 × 1143)
Exhaust Diameter inch (mm)	4 (102)
Exhaust Air Flow cfm (m³/h)	220 (374)
Cylinder Motor Power Hp	1/3
Gas Heating BTU/h (Kcal/h)	25,000 (6300)
Gas Inlet Diameter inch	3/8 NPT







^{*} Modified Energy Factor (MEF) measured in cubic feet per kilowatt-hour per cycle. Water Consumption Factor (WCF) measured in gallons per cycle per cylinder cubic feet. MEF and WCF statistics are according to Department of Energy (DOE) testing standards report by Intertek, an independent testing laboratory.

KFE/KFG

SNC

^{**} Product specifications and details are subject to change without notice. For the most current and complete technical specifications, architectural line drawings and warranty information, please visit www.continentalgirbau.com. E-Series Washer-Extractors are available in 20- to 255-pound capacities.

CONTINENTAL GIRBAU INC. & GIRBAU GROUP

Continental Girbau Inc. (Continental) was established in 1995 as the North American subsidiary of the commercial laundry equipment manufacturer, Girbau Group, headquartered in Vic, Spain. Family owned, Girbau employs more than 600 people throughout its corporate headquarters in Vic and 14 subsidiaries throughout the world. It markets its industrial and commercial laundry products to more than 90 countries worldwide.

THE TOTAL LAUNDRY SOLUTION

Continental delivers the total laundry solution to vended, on-premise and industrial laundries throughout North America. As the provider of highly-efficient batch tunnel washers, washer-extractors, drying tumblers, feeders, ironers, folders and related machinery, Continental serves the complete laundry production and efficiency needs of virtually any application. Proven durable and reliable, Continental laundry systems are engineered for unrivaled productivity, efficiency and ease of use.

OUR MISSION: YOUR SUCCESS

Continental's mantra – "Our Mission: Your Success" – reflects the company's commitment to its distributors and customers. We offer robust laundry systems backed by unrivaled customer care.















WARRANTY

Backed by an industry-leading ContinentalCare™ warranty E-Series Washer-Extractors and Drying Tumblers are built to last.



SIZING & CONFIGURATION

Every laundry operation is unique, with a distinctive set of production and efficiency goals. Uniquely, E-Series Washer-Extractors and Drying Tumblers offer the flexibility and programmability to meet any need—boosting production and lowering labor, water and energy usage. Continental's team of experts work closely with facilities to properly size equipment for improved laundry room efficiency and productivity.

FINANCING

Financing allows you to retain full ownership of your business and its assets while helping to preserve your cash, liquidity and revolving lines of credit for emergency use, working capital and other investments. Through CustomSelect™ Financing, Continental Girbau offers flexible financing and competitive fixed rates to all qualifying applicants.

ENVIRONMENTALLY FRIENDLY

Continental laundry products meet rigorous environmental and safety standards established by the International Organization for Standardization (ISO). Ever focused on laundry efficiency, Continental Girbau is a member of the U.S. Green Building Council (USGBC), a 501(c)(3) nonprofit that developed the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.





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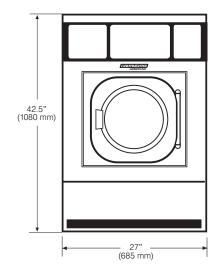
PRODUCT SPECIFICATIONS

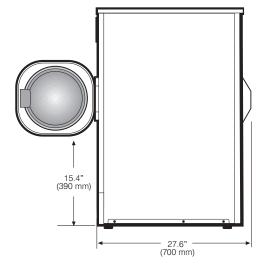
EH020

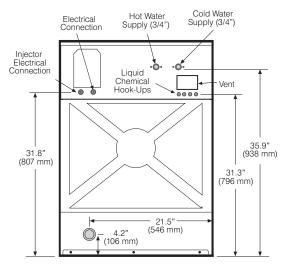
ON-PREMISE E-SERIES SOFT-MOUNT WASHER-EXTRACTOR

PRODUCT SPECS	
Capacity <i>lbs</i>	20
Cylinder Diameter <i>inch</i>	21.1
Cylinder Depth <i>inch</i>	13.8
Cylinder Volume cu ft	2.8
Net Weight <i>lbs</i>	249
Crated Weight <i>lbs</i>	271
Machine Dimensions <i>inch</i> WxDxH	27 x 27.6 x 42.5
Door Opening inch	12.7
Floor to Door inch	15.4
Shipping Dimensions <i>inch</i> WxDxH	28.3 x 29.1 x 47.7
Washing Speed <i>rpm</i>	50
Spin Speed rpm	50/100/400/600/800/970
G-force	0.75/3/49/108/192/300
Static Force Transmitted <i>lbs</i>	340
Dynamic Force Transmitted <i>lbs</i>	115
Frequency of Dynamic Force Hz	16.2
Available Voltages/Wire Conductor/Am Hot Water (standard) Hot Water (standard) Electric Auxiliary Heat (optional)	p 120/60/1, 3-prong cord, 15 208-240/60/1, 2W+G, 5 208-240/60/1, 2W+G, 20
Electric Auxiliary Heat (optional)	208-240/60/3, 3W+G, 20
Modified Energy Factor (MEF)	2.21
Water Consumption Factor (WCF)	5.03
Drain Diameter <i>inch</i> Pump Drain Gravity Drain	1 2
Water Inlets inch	3/4
Recommended Water Pressure <i>PSI</i>	30-60
Water Flow gal/min	8
Total Power kW	0.8
Electrical Heating Power (optional) kW	4.3
Liectrical Fleating Fower (optional) KW	4.3

^{*} Specifications subject to change without notice or obligation. Contact Continental Girbau at (800) 256-1073 for dimensions not shown or for clarification.









^{*} Modified Energy Factor (MEF) measured in cubic feet per kilowatt-hour per cycle. Water Consumption Factor (WCF) measured in gallons per cycle per cubic feet. MEF and WCF statistics are according to DOE test results report by Intertek, an independent testing laboratory, dated February 27, 2007.









Operating Instructions Manual for LOGI CONTROL LOGI PRO CONTROL

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EN LOGI **LOGIPRO** control

Model	From serial no.		
High speed			
HS-6008	2,080,884		
HS-6013	2,110,200		
HS-6017	2,120,320		
HS-6023	2,140,001		
HS-6024	2,390,001		
EH020	1,430,001		
EH030	1,460,021		
EH040	1,470,060		
EH055	1,490,001		
EH060	2,400,001		
Medium speed			
RMS610	2,021,494		
RMS/RMG613	2,330,000		
RMS/RMG617	2,340,000		
RMS/RMG623	2,350,000		
RMS/RMG628	2,410,001		
REM025	1,371,423		
REM/RMG033	2,360,000		
REM/RMG040	2,370,000		
REM/RMG055	2,380,000		
REM/RMG070	2,420,001		



CONTENTS

SAFETY INSTRUCTIONS	6
1. INTRODUCTION AND APPLICATION	9
2. DESCRIPTION	9
2.1. Intended use of the machine and inappropriate use	
2.2. Construction characteristics	
2.3. Protection, safety and control elements 2.4. Safety functions	
2.5. Characteristics of the controls	
3. MODES OF USE	
4. PROGRAM EXECUTION MODE	
4.1. LOGI CONTROL control panel	12
4.2. LOGI PRO CONTROL control panel	
4.3. Stop modes	14
4.3.1. End of cycle	
4.3.2. Interrupting a program	14
4.4. Unbalance control	
4.6. Using the dispenser	
4.7. Starting a program	
4.8. Modifying a program in progress	
4.8.1. Program acceleration	
4.8.2. Crease-guard stop	
4.9.1. Delaying a program	
4.10. Consultations during a program	
LOGI CONTROL. SPECIFIC INFORMATION	22
5. LOGI CONTROL. WASH PROGRAMS	
5.1. Main reports that appear on the display	
5.2. Interpretation of the program tables	
5.3. Original content of the washing programs	
5.3.2. USA/Canada application. EH020 model: SP-0	25
5.3.3. USA/Canada application. EH020 model: SP-I; EH, REM: other models except REI	
5.3.4. United Kingdom application. HS, RMS models	
6. LOGI CONTROL. ADVANCED USE MODE	
6.1. ADVANCED MODE menus	
6.2. Access to ADVANCED MODE	28
6.3. Modifying the contents of programs. Menu Pro	
6.4.1. General application HS, RMS models	29
6.4.2. USA/Canada application. EH020 model: SP-0	
6.4.3. USA/Canada application. EH020 model: SP-I; EH, REM: other models except RE	M02531
6.4.4. United Kingdom application. HS, MS, RMS models	
6.5. Modifying a program	
6.5.1. Programming vectors	
6.5.3. Definition of programmable functions and values for each phase	
6.5.4. Program modification sequence	
6.6. Information menu. INFO menu.	
6.7. Modifying the operating parameters. Mod menu	
6.7.1. Summary table of the changeable parameters	
6.7.2. Summary table of the changeable parameters Applicable only in the United Kingd 6.7.3. Parameter modification sequence	
6.8. Code for accessing the ADVANCED USE MODE. Ncod menu	
6.8.1. Modifying of the access code	40
0.0	
6.9. System clock. Hour Menu	46 46



LOGI PRO. SPECIFIC INFORMATION	47
7. LOGI PRO. WASH PROGRAMS	47
7.1. Main reports that appear on the display	
7.2. Interpretation of the program tables	
7.3. Original content of the washing programs	49
7.3.1. General application. HS-6008, RMS610, RMG models	
7.3.2. USA/CANADA application. EH020, REM025, RMG models	
7.3.3. United Kingdom application. HS-6008, RMS610, RMG models	53
8. LOGI PRO. ADVANCED USE MODE	55
8.1. ADVANCED MODE menus	
8.2. Access to ADVANCED MODE	55
8.3. Modifying the contents of programs. Menu Pro	
8.4. Initial program content	56
8.4.1. General application. HS-6008, RMS610, RMG models	
8.4.2. USA/CANADA application. EH020, REM025, RMG models	
8.4.3. United Kingdom application. HS-6008, RMS610, RMG models	
8.5. Modifying a program	
8.5.1. Programming vectors	
8.5.2. Definition of programmable functions and values for each phase .	62
8.5.3. Program modification sequence	
8.6. Information menu. INFO menu.	
8.7. Modifying the operating parameters. Mod menu	
8.7.2. Parameter modification sequence	
8.8. Code for accessing the ADVANCED MODE. Ncod menu	71
8.8.1. Modifying of the access code	71
8.9. System clock. Hour Menu	71
8.9.1. Setting the clock	
3	
INFORMATION COMMON TO BOTH LOGI CONTROL AND LOGI PRO CO	NTROL72
9. TROUBLESHOOTING	72
9.1. Freeing a trapped person	
9.2. Manual releasing the safety lock	
9.3. Disassembling the door of the washing machine	
9.4. What to do when	
9.5. System alarms	75
10. MAINTENANCE	76
10.1. Cleaning the washer	
10.2. Cleaning the door seal	
10.3. Cleaning the solenoid valve filters	
10.4. Checking safety mechanisms	
10.4.1. Checking the door lock	
10.4.2. Checking the emergency stop	78
10.5. Cleaning the dispenser	
10.5.1. Washers with front dispenser	
10.5.2. Washers with top dispenser	
10.6. Cleaning the drain pump	
10.7. Checking the condition of the bearing housing seals	
10.8. General Overhaul	80
11 WITHDRAWING FROM SERVICE	81









IMPORTANT SAFETY INSTRUCTIONS

WARNING: To reduce the risk of fire, electric shock or injury to persons when using the machine, follow basic precautions, including the following:

- 1. **READ** all instructions before using the machine, and **KEEP** them in a prominent location for customer use.
- Do not wash articles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, dry cleaning solvents, and other flammable or explosive substances as they GIVE OFF VAPOURS that could ignite or explode.
- 3. **DO NOT ADD** gasoline, dry-cleaning solvents, or other flammable or explosive substances to the wash water. These substances give off vapours that could ignite or explode.
- 4. Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using the washing machine, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. As the gas is flammable, do not smoke or use an open flame during this time.
- 5. Do not allow children to play on or in the washer. **CLOSE SUPERVISION** of children is necessary when the washer is used near children.
- 6. Before the washer is removed from service or discarded, **REMOVE** the door.
- 7. DO NOT TRY TO OPEN THE WASHER'S DOOR if the drum is moving.
- 8. Do not install or store the washer where it will be exposed to the **WEATHER**.
- 9. **DO NOT TAMPER** with controls.
- 10. **DO NOT REPAIR OR REPLACE** any part of the washer or attempt any servicing, unless this is specifically recommended in the user instructions or in published user-repair instructions that you understand and have the skills to carry out.
- 11. **DO NOT REMOVE** any safety device **OR MODIFY OR MANIPULATE** any component or part of the machine. **DO NOT INSTALL** any extra elements inside the machine.
- 12. Any part of the machine that is replaced may affect its operation and the user's safety. For this reason, **USE ONLY THE MANUFACTURER'S ORIGINAL SPARE PARTS**. Failure to comply with this warning can cause serious accidents, malfunctions and the loss of the machine's guarantee and certifications.
- 13. Failure to comply with or observe the legislation and regulations covering health, safety and prevention of risks in the workplace applicable in the country where the machine has been installed, or actions contrary to common sense, **MAY CAUSE** personal injury or even death to the user.
- 14. The machine should only be used for those purposes established by the manufacturer and following the instructions for use set out in the instruction manuals. Any use not specified in the manuals may lead to additional risks. Pay special attention to information headed DANGER, WARNING and PRECAUTION.
- 15. The room where the machine is located **MUST** comply with the environmental conditions (air venting, temperature, humidity, etc.) specified in the technical specifications table. NEVER INSTALL THE MACHINE IN ENVIRONMENTS where it will be splashed with water or where there is a very high level of humidity in the atmosphere.
- 16. Clearly mark out danger areas and **PREVENT** public access to them when the machine is operating. Do not expose yourself to drainage areas or to vapour, condensation, combustion gas or ventilation outlets.
- 17. All machines working at temperatures present a fire risk. Take **EXTREME** care: **CLEAN** the machine of inflammable materials: lint, fluff, soot, etc. on a regular basis. **KEEP** the environment free of combustible materials and **PLACE** suitable extinguishers near the machine in easily accessible places.

Cod. 523340



- 6
- 18. All installations required for the proper operation of the machine **MUST** be carried out by a duly accredited Registered Installation Contractors (see Note 3), in compliance with the legal regulations applicable in the country of use.
- 19. The machine **MUST** be commissioned by the Authorised Technical Service in the presence of the Customer Technical Service (see Notes 2 and 4) or a responsible person appointed by the customer.
- 20. This machine **MUST BE USED** by personnel who are properly trained in how to use it (see Note 1).
- 21. **NEVER** START THE MACHINE, OR USE IT, IF THE FOLLOWING ARE ABSENT, INCORRECTLY POSITIONED OR MALFUNCTIONING:
 - · COVERS (GUARDS) AND PROTECTIVE DEVICES
 - SAFETY DEVICES
 - CONTROL ELEMENTS
- 22. **DO NOT USE** the machine if you notice any abnormal noise or smell or if you suspect that the machine is faulty or defective.
- 23. The inspections required by the regulations applicable to the country where the machine is being used must be carried out. It is advisable to request an overall, detailed service of the machine by the Authorised Technical Service every year (see Note 2).

24. 🔼

WARNING!!

INSPECTION, MAINTENANCE OR REPAIR OPERATIONS

Before carrying out any action on the machine:

- Close and mechanically lock the manual fluid supply valves.
- Check that the bath has **COMPLETELY** drained, that no part of the machine is at a high temperature and that no circuits or containers are under pressure.
- Check that all the machine's moving parts are halted or in their rest position. Securely fix all the machine's moving parts that could cause an accident.

To reduce the risk of electric shock:

- COMPLETELY disconnect the machine from the mains power supply and take steps to prevent accidental reconnection. TURNING OFF THE ON SWITCH OR PRESSING THE STOP KEY IS NOT ENOUGH.
- Disconnect the electrical connection of any circuit external to the machine; for example external dosing equipment, central vending units, linen feeders or folders, etc. The electrical connection for these circuits is independent of the machine's electrical connection.
- To prevent the risk of electrical discharge caused by residual voltage, wait at least five minutes before removing any guard or cover from the machine.

Failure to follow these warnings may cause a serious accident.

- 25. **CONTACT** the Installation Contractors or the Authorised Technical Service (see Notes 3 and 2) in the event of any doubt, anomaly or problem.
- 26. It is advisable to copy and enlarge the **SAFETY INSTRUCTIONS** and place them in a visible place in the laundry.
- 27. THE MANUFACTURER ACCEPTS NO RESPONSIBILITY IF THESE SAFETY INSTRUCTIONS AND ALL THE INFORMATION IN THE CORRESPONDING MANUALS ARE NOT FOLLOWED.

SAVE THESE INSTRUCTIONS.



SYMBOLS USED IN MACHINE LABELLING



Electrical risk

Protective guard for elements carrying an electric current.



High temperature risk

Handle with caution. Use adequate protection.



Mechanical risk

Protective guard for moving parts.



Risk of inhaling harmful or irritant vapours

Keep the doors/covers closed. Use adequate protection.



Flame risk (only on some machines) Protective guard for flame.



Risk of falling

Use proper access and safety methods.



Access prohibited



Refer to instruction manual/booklet

SYMBOLS USED IN THIS MANUAL



Symbol used to highlight a possible HAZARD, WARNING or NOTE.



This symbol is used to emphasise a particular explanation.

TRANSLATION OF THE ORIGINAL MANUAL

NOTES:

- (1) Trained personnel refers to those who have read and understood the Instruction Manual, who have been trained by the Authorised Technical Service or by a representative of the customer present at the start-up who is familiar with the operation of the machine and is authorised to use it.
- (2) Authorised Technical Service (ATS) is one that has been recognised under contract and properly trained by the manufacturer.
- (3) Registered Installation Contractors are those officially approved by the government of the country the machine is to be installed.
- Customer Technical Service (CTS) is one that has been authorised by the customer and which has sufficient basic technical knowledge to correctly interpret and carry out the actions attributed to it in this manual. The manufacturer strongly recommends that the customer should have its own technical service, particularly in laundries with large-scale machinery installations.

8



IMPORTANT INSTRUCTIONS FOR USE AND PRESERVATION

- INTENDED USE OF THE MACHINE AND INAPPROPRIATE USE. This machine is designed and intended solely for processing fabrics washed in a water bath or that have been previously treated in these conditions. Any use other than this is contraindicated without written authorisation from the manufacturer.
- 2. Maximum output, performance, reliability and durability are achieved when the machine is installed, used and maintained correctly, and if a comprehensive and detailed service is carried out annually by the Authorised Technical Service.
- 3. The machine's **MATERIALS** that are in direct contact with the chemical products involved in treating the linen are detailed in the manual.
- 4. The user must consult the supplier of the chemical products USED THROUGHOUT THE WHOLE LINEN TREATMENT PROCESS regarding the risks associated with its products and their combination. It must be confirmed that the products are not flammable, ARE MUTUALLY COMPATIBLE, and that they will not cause oxidisation or deterioration of the machine or any injury to the people using them. It should be noted that, under certain conditions of use, hypochlorite (bleach) generates chlorine gas. Chlorine is a corrosive, oxidising substance which, at high concentrations and temperatures, damages stainless steel and elastomers. This same effect can also be caused by other strongly oxidising agents, including ozone.
- 5. FOLLOW the treatment recommendations for each fabric indicated by its manufacturer. THE MANUFACTURER OF THE MACHINE accepts no responsibility for damage caused by inappropriate treatment of a fabric.
- 6. Periodically **CLEAN** the outside of the machine to prevent damage to its metal parts. This will improve safety and extend its life. To clean the machine, use water and detergent. Rinse with a damp cloth and then dry off. To remove accumulated lint, use a suitable vacuum cleaner. **Water jet or pressurised steam cleaning is prohibited.**
- 7. **NEVER** use aggressive products to clean the machine or the premises. There are products on the market that give off highly corrosive vapours.
- 8. If the machine is left idle for long periods of time, it must be thoroughly **PROTECTED** from humidity and temperature variations.
- 9. Faults arising from improper machine operation may **VOID THE WARRANTY**.
- 10. When asking for information on your machine, **MENTION** the model and serial number. This information can be found on the specification nameplate incorporated into the machine.

With every machine, the manufacturer provides all the necessary technical information and documents required for its use. **KEEP IT IN GOOD CONDITION**.

Cod. 523340

9



1. INTRODUCTION AND APPLICATION

This manual contains the OPERATION, PROGRAMMING and ADVANCED USE MODE instructions for washing machines with LOGI CONTROL and **LOGI PRO CONTROL** systems.

Most of the contents in this manual are common for both controls. However, the information on PROGRAMMING and ADVANCED USE MODE is specific for each control. See the Contents section.

Application

This manual applies to the following models:

LOGI CONTROL.

Applicable to HS-6, EH models with software version 25 or higher Applicable to RMS and REM models (except REM025) with software version 01 or higher.

LOGI PRO

Applicable to HS-6008, RMS610, RMG, EH020, REM025 and RMG models with software version 01 or higher.

2. DESCRIPTION

Washer extractor designed to wash or treat fabric in a water bath.

2.1. Intended use of the machine and inappropriate use

This machine has been made and designed for treating textile materials in a water bath. These textile materials must be free of flammable or explosive products. Unless approved by the manufacturer in writing, it is not considered appropriate for any other use.

Under-loading as well as overloading is not recommended. Always endeavour to match the capacity of the machine.

It is not advisable to insert bags full of laundry. Where necessary, load the machine up to its set limit.

It is not recommended to spin carpeting, canvas or waterproof fabrics.

2.2. Construction characteristics

- **HIGH SPEED MODELS (HS / EH).** Washing machines capable of spinning at a speed higher than 350G (280G in model HS-6008/EH020) without needing to be bolted down. The design of its suspension system cushions up to 95% of the vibrations produced during the spin cycle.
- MEDIUM SPEED MODELS (RMS/REM/RMG). Hard-mount construction. They have to be bolted down to the floor.
 - Approximate spin speed: 125G, 150G, on models RMS, REM.
 - Spin speed: 200G on models RMG.
- Stainless steel **inner and outer drum.** The openings in the drum blades promote the uniform distribution of bath water and improve the yield of the washer both during the wash and the rinse cycles.
- The drum rotation is produced by an asynchronous AC motor controlled by an inverter.
- The hot and cold water connections have a safety mechanism to prevent contaminating by back-flowing into the general drinking water system.
- Large capacity drain valve. (Option for pump drainage in models HS-6008/EH020).
- Water inlets and all product dispensers made using a common collector with an anti-siphon mechanism.
- Option for heating the bath using electric heaters or steam injection.

Cod. 523340





2.3. Protection, safety and control elements

- **Fixed guards**: Covers. These prevent access to dangerous points or moving parts. Protect from accidental machine spattering.
- Moving guards:
 - Dispenser cover.
 - Door with interlock microswitch, door lock and delayed opening.
- Overflow. When the bath level is exceeded due to solenoid valve failure, the bath is drained through the drain outlet.
- Thermal fuse to protect the electric heaters.
- **Emergency stop**: a red button on a yellow background, located at the front of the machine. Stops the machine from operating and opens the drain valve (applicable in models with a load equal to or exceeding 13 kg / 30 lb.)
- **Electric circuit safety measures:** To protect the electric circuit against external malfunctions and prevent any malfunctioning from causing harm to the operator.
- Sound alarm: Among other functions, the acoustic signal warns of possible alarms.
- **Unbalance microswitch**. (Only in high speed models). Additional electromechanical safety to protect against unbalance of drum load during the spin cycle.

2.4. Safety functions

- Bath level control. Allows selecting different bath levels during the wash cycle and controls the overflow safety and minim level of connection to the heating system and door opening.
- **Temperature control.** Allows selecting the bath temperature during the wash cycle and controls the bath insufficient temperature and overheat safeties.
- Unbalance control. Repositioning of the washer's load if the inverter power control detects unbalance.
- Door opening safety. Allows the opening of the door in safety conditions.
- Safety measures against entrapment. To reduce the risk of a child becoming trapped inside a washing machine while playing, or to help in freeing them during the first moments of launching a program, the running sequence of a wash cycle is as follows:
 - After giving the start order, a 30-second security time is started during which the drum rotation and the water inlet operate at short impulses and door remains released. Further information in Sections: Freeing a trapped person (Chapter 9) and Stopping methods (Chapter 4)

2.5. Characteristics of the controls

- Operation of the washer controlled by microprocessor.
- Operation of the washer adaptable to the possibilities of the installation and the needs of the user.
- Great versatility in individually modifying the content of each program. Further information in specific sections of the advanced use mode.
- Temperature control achieved by the hot and cold water mixer in accordance with the programmed temperature and the activation of the heating system. Precision of +/- 2 °C (+/- 3,5 °F).
- Level control achieved using an electronic pressure transmitter.
- Series communication between the washer microprocessor and the inverter's control of the motor.
- Multiple controls that assure the safe use of the washer.

Cod. 523340





3. MODES OF USE

LOGI CONTROL and LOGI PRO CONTROL present TWO MODES OF USE.

PROGRAM EXECUTION MODE

Covers the functions or interventions aimed at:

- Selecting and executing the various wash programs.
- Programming the delayed start of a program.
- Accessing information about the different functions that the washing machine is executing.
- Making small specific modifications to the program being executed.

Information regarding this intervention mode: Chapter 4 of this manual.

ADVANCED USE MODE

Covers the functions or interventions aimed at:

- Modifying or displaying the content of the washing programs.
- Consult the software version for the washer and the contents of the different program meters.
- Modifying the general operating parameters.
- Modifying the access code for Advanced use mode.
- Setting the time of the system clock (optional).
- LOGI CONTROL models. Information regarding this intervention mode: Chapter 5 and 6.
- LOGI PRO CONTROL models. Information regarding this intervention mode: Chapter 7 and 8.



4. PROGRAM EXECUTION MODE

4.1. LOGI CONTROL control panel

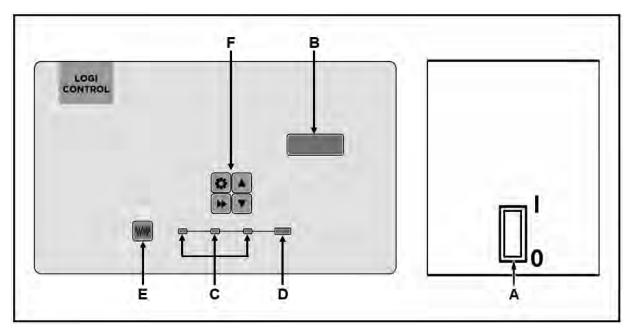


Fig. 4.1

CONTROL PANEL		
Α		ON switch
В		Display
С		LEDs indicating the phase of the program in progress
D		LED indicating end of cycle
E	START STOP	Starting and stopping a program
	94	Access to the ADVANCED USE MODE
	*	Start program delay (option)
F	•*	Modification of the program in progress
	•	Salaction and mayamant kays
	V	Selection and movement keys



4.2. LOGI PRO CONTROL control panel

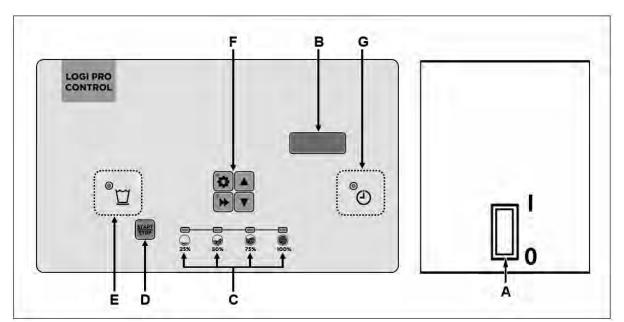


Fig. 4.2

CONTROL PANEL		
Α		ON switch
В		Display
С		Load selection indicator LEDs
D	START STOP	Starting and stopping a program
	(°44)	Access to the ADVANCED USE MODE
	Start program delay (option)	Start program delay (option)
E	••	Modification of the program in progress
_	A	Selection and movement keys
	•	Selection and movement keys
F		Rinse hold function activated
G	1	Start delayed program



4.3. Stop modes

4.3.1. End of cycle

The acoustic warning and the *End* report on the display inform the user that the program has finished and that the door lock is released.

4.3.2. Interrupting a program

A. START Key. This key interrupts a washing program. STOP appears on the display. Once the safety delay

has finished, the acoustic warning and the *End* report on the display inform the user that the program has finished and that the door lock is released.

B. Emergency stop

(Except on models with a load of less than 13 kg / 30 lb)

Pressing the **EMERGENCY** switch once interrupts the washer operation and opens the drain valve. The corresponding alarm report appears on the display.

After a delay of approximately 3 minutes, the door is released.

To resume the wash cycle, release the switch and press the



To cancel the wash cycle, release the switch and press the



key TWICE.

C. Other stopping methods include:

- Disconnecting the ON/OFF switch
- Disconnecting the SWITCH DISCONNECTOR
- Disconnecting the EXTERNAL AUTOMATIC SWITCH

We do not recommend these stop methods, except in an emergency. In these cases, as long as the door remains closed, the machine will understand that there has been a power failure. When the power is switched back on, the machine will resume the program in progress.



When a washing program is interrupted by electrical power failure, disconnecting the switches described in this section, or activating the Emergency Stop, the door lock mechanism stops being controlled by the microprocessor and the opening of the door is thermally delayed. In these circumstances, it is normal to have a washer delay or inactive time of about 3 minutes.

Never disconnect these switches to rescue a person trapped inside the washing machine. See information with regard to this in Chapter 9.

D. <u>Interruption of the power supply</u>. The operation of the washing machine is interrupted: the drain valve opens and after a delay of approximately 3 minutes, the door is released.

If the door remains closed when the power supply is re-established, the wash cycle is resumed.

If the door is open, the wash cycle is cancelled.



On machines with pumped drain, the disconnection of the external automatic switch or the ON switch does not allow the bath to drain.

Cod. 523340

15



4.4. Unbalance control

Before starting the spin, the washing machine's electronic control checks the correct distribution of the load. If it detects that the load is not well distributed and that can cause an excessive unbalance during the spin, the linen will be repositioned.

If there is still unbalance during the final phase spin, the washer can end the washing cycle at a reduced spin speed.

Unbalance control with a micro-switch (HS/EH models only). It is only activated in cases of extreme unbalance.



To improve the efficiency of the washer's spin, it is advisable to:

- · Load the washer up to its nominal value.
- · Load the washer with homogeneous loads.

4.5. Loading the washing machine

Group the fabrics to be washed into homogeneous loads, attempting wherever possible to reach the nominal value of the load. Empty all pockets, fasten buttons, close zippers and remove accessories that are not machine-washable. Mixing whites with other colours is not recommended.

Open the door and load the machine.

Washer load recommendations according to the type of fabric to be washed:

- Cotton fabrics: nominal load
- Synthetic fabrics: between 80% & 90% of nominal load
- Delicate fabrics: between 35% & 50% of nominal load

Do not overload the machine; the door must be able to close easily.

Whilst the door is open, the display reads *door* indicating that the door must be closed in order for the program to begin.

Health and safety instructions for loading and unloading the washer

Installing washing machines on raised bases or pedestals, in accordance with the instructions set out in the corresponding installation manuals, aids in loading and unloading the machine by avoiding the need to adopt awkward positions.

Use linen collecting and transporting containers that are of a suitable height for the washer size. Consult the dimensions of the washers set out in the corresponding installation manual.

Take care not to overload the machine. Overloading the washer leads to excessive strain when processing the linen.

Certain chemical products that are used in the washing process are toxic. Handle them with care and wear appropriate protection.

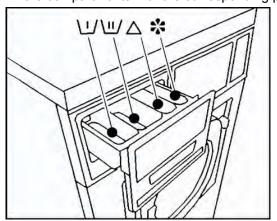
Follow the legislation and regulations for Health and Safety in the Workplace in force in the country where the machine has been installed.

Cod. 523340



4.6. Using the dispenser

Fill the compartments with the corresponding products, according to these symbols:



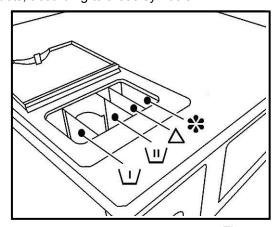


Fig. 4.3

Fig. 4.4

Symbols used in the dispenser (Fig. 4.3, 4.4).

	LOGI CONTROL	LOGI PRO CONTROL
L	Powdered detergent for pre-wash	Dispensing compartment 1 (powder)
\11/	Powdered detergent for wash	Dispensing compartment 2 (powder)
Δ	Liquid bleach (chlorine, bleach, etc.)	Dispensing compartment 3 (liquid)
88	Liquid softener / neutraliser	Dispensing compartment 4 (liquid)



IN ORDER TO OPERATE CORRECTLY AND TO PREVENT POSSIBLE DAMAGE AND SPLASHING, THE DISPENSER DRAWER MUST ALWAYS REMAIN CLOSED, EXCEPT WHEN ADDING PRODUCTS.



SUDS CONTROL

The mechanical action of front-loading washing machines improves the quality of the wash but encourages the creation of suds.

Remember that a suds bath always reduces the efficiency of your wash. ALWAYS USE CONTROLLED SUDS DETERGENT.

Models with a capacity lower than 13 kg (30 lb) incorporate a group of programmes (SP-I) for a superior rinse efficiency.

Oversudsing causes an increase in the pressure inside the machine and decreases the efficiency of the sealing systems.

Repeated washing with a large amount of suds considerably reduces the life of seals and bearings. THIS CIRCUMSTANCE IS NOT COVERED BY THE MACHINE'S WARRANTY.



4.7. Starting a program

LOGI CONTROL

- Close the door of the washing machine. The **door** report on the display will change to **Pr-*** (last executed program). (If **Pr** does not appear on the display, repeat the door closing operation).
- Select the desired program with the program selection keys. The selected program number will be shown on the display. (To find out the initial content of each program, see Section 5.3.: Content of the washing programs).
- Place the washing products in the dispenser and close the cover.
- After pressing the START ; key, the temperature value will appear for the washing phase.
- The ▲/▼ keys enable the temperature of the program selected to be modified. (This option can be disabled in the **Mod** menu (see Section 6.7).
- Press the START key again to confirm the temperature selected and start the washing program.
- Door lock. After giving the start order, a 30-second security time is started during which the drum rotation and the water inlet operate at short impulses and door remains released. At the end of this time, the locking mechanism closes and the wash cycle begins.
- While the program is running, and depending on the configuration of parameter dt in the Mod, menu, the
 display will show the various functions being executed by the washing machine or the time remaining for the
 program (see Section 6.7)
- Once the program has finished, the door will remain locked until the end of program LED indicator comes on and the turn and the *End* report appears on the display.
- If the washing temperature has been modified at the start of the program, once the program has finished the temperature returns to the programmed value.



DOOR FITTED WITH SAFETY LOCK

Never attempt to open the door if:

- · the program has not finished.
- the drum has not come to a complete halt.
- the bath has not been completely evacuated.

18



LOGI PRO CONTROL

- Close the door of the washing machine. The door report on the display will change to Pr-* (last executed program). If **Pr** does not appear on the display, repeat the door closing operation).
- Select the desired program with the program selection keys. The selected program number will be shown on the display. (To find out the initial content of each program, see Section 7.3.: Content of the washing programs).
- Place the washing products in the dispenser and close it.
- key will cause the LOAd report to be shown on the display. The load selection LEDs Pressing the light up.
- The [▲]/[▼] keys allow the user to modify the machine's load selection. The load selection LEDs switch on or off depending on the load selected. (This option can be disabled in the Mod menu (see Section 8.7).
- Press the START key again to confirm the load selected and start the washing program.
- Door lock. After giving the start order, a 30-second security time is started during which the drum rotation and the water inlet operate at short impulses and door remains released. At the end of this time, the locking mechanism closes and the wash cycle begins.
- While the program is running, and depending on the configuration of parameter dt in the Mod, menu, the display will show the various functions being executed by the washing machine or the time remaining for the program (see Section 8.7)
- Once the program has finished, the door will remain locked until **End** appears on the display.
- Once the program has finished, the load selection returns to the maximum value.



DOOR FITTED WITH SAFETY LOCK

Never attempt to open the door if:

- the program has not finished.
- the drum has not come to a complete halt.
- the bath has not been completely evacuated.

Cod. 523340



4.8. Modifying a program in progress

4.8.1. Program acceleration

You can modify the duration of a program whilst it is in progress.

- Press the key to activate the option. The display will flash.
- Pressing the A key repeatedly increases the rotation times minute by minute. The duration of the spin cycle cannot be increased.
- Pressing the vertex key repeatedly decreases the rotation or spin times.
- **Moving on to the subsequent phase.** Moving on from one phase to the next is delayed. Press the $\lceil \mathbf{v} \rceil$ until the end of the phase and wait a few moments until the first operation of the next phase appears. Continue pressing the ▼ key.
- After a few seconds without pressing any key the display will remain fixed and the modification option is deactivated.

Important: (UK only) The duration of the bath filling phase in Program 3 cannot be altered.

4.8.2. Crease-guard stop

A function exclusive to LOGI CONTROL

Once the washing program has started, you can program the drum rotation to stop before the final spin, with the objective of avoiding creases.

To activate this function once the washing cycle has started, press the key for a few seconds. The message **rh-0** will appear on the display. Press the key. The display message will change to **rh-1**. The crease-guard Stop function has been activated.

Before the final spin, the drum rotation will be interrupted and the PUSH/ STAR message will appear on the display. To resume the program, press the

4.9. DELAY option

The **DELAY** option allows you to program the start time of a program depending on the needs of the user. For example: to use two-rate electricity, to rationalise electricity consumption, to adjust the laundry production system, etc.

To use the DELAY option (start program delay) it is essential that the washing machine has the clock installed that allows operating in real time. If this option is not incorporated originally, it can be easily installed. Contact your dealer.

Before the first use, and each time there is a time change, verify and/or adjust the time on the clock. (See ADVANCED USE MODE) Sections 6.9 and 8.9.

Cod. 523340



4.9.1. Delaying a program

- Load the washing machine and close the door.
- Place washing products in the dispenser compartment.
- Select the program to be used and press the key. The dLY report will appear on the display.
- To cancel de **dLY** option, press the START key.
- When *dLY* is displayed, press the key. The current time will appear on the screen, in *hh.mm* format (hours, minutes, using a 24-hour clock).
- The minutes are shown flashing. They can be modified using the ▲/ ▼ keys.
- Press the button to validate the minutes and start to modify the hours.
- The hours are shown flashing. They can be modified using the ▲/▼ keys.
- Once you have chosen the desired start time, press
 START STOP
 The start time and the selected program will be displayed alternatively.
- To cancel the delay of a program, select and hold START button, for five seconds.

4.10. Consultations during a program

Certain washer operating parameters can be consulted while a program is running.

LOGI CONTROL

Sequence of parameters that can be consulted and how they are shown on the display:

dt-0		
consultable parameter	display	
Percentage of load detected	**	
percentage of water consumption and dosing used	%**	

dt-1		
consultable parameter	display	
Percentage of load detected	**	
percentage of water consumption and dosing used	%**	

Note 1. These parameters can only be consulted if the **JL** function has been activated on the MOD menu (Section 6.7)

The parameters can be consulted by pressing the key successively while the program is running.

Cod. 523340



LOGI PRO CONTROL

Sequence of parameters that can be consulted and how they are shown on the display: The parameters that can be consulted vary slightly depending on the dt parameter selected in the Mod menu (Section 8.7).

dt-0	
consultable parameter	display
program running	P-**
remaining program time	t-**
Bath temperature	C-**
percentage of water consumption and dosing used	%-**

dt-1	
consultable parameter	display
program running	P-**
phase running (see Note 1)	Ph**
Bath temperature	C-**
percentage of water consumption and dosing used	%-**

Note 1. The numbering of the phase running refers to the program tables in Section 8.4.

The parameters can be consulted by pressing the **\(\bigsim \)** key successively while the program is running.



LOGI CONTROL. SPECIFIC INFORMATION

5. LOGI CONTROL. WASH PROGRAMS

The washer offers the possibility of selecting from among eight different wash programs for different kinds of garment and soiling.

Depending on the AREA OF USE defined in the washing machine SETUP, the original content of the programs varies.

The original content of the programs is defined as indicated in the charts in Section 5.3.

The content of the programs may be modified; see Chapter 6: ADVANCED USE mode.

5.1. Main reports that appear on the display

REPORT	MEANING
Pr-*	Program selected. Machine ready to wash
C-** F***	Water temperature in degrees Celsius or Fahrenheit
rt-*	Rotation time left
C-**	Cooling temperature
Et-*	Spin time remaining
End	End of program. Door unlocked
door	Washer with door open





5.2. Interpretation of the program tables

SYMBOL	OPTION	DESCRIPTION
		Estimated program time
O		Minimum program time based on a machine with hot water supply and without
	**	heating. Time in minutes.
Ph **		Phase number
		The phase indicated with a grey background belongs to the wash phase.
		Bath level
L	1	Low level
-	2	Medium level
	3	High level (units with pumped drain, levels 2 and 3 are the same)
C/F		Temperature of the bath
C/F	**	Value in degrees Celsius or Fahrenheit
		<u>Dosings</u>
	0	No dosing
d	1	Pre-wash dosing
l a	2	Wash dosing
	3	Bleach dosing
	4	Softener / neutraliser dosing
		<u>Drum rotation sequence</u>
r	1	Vigorous sequence rotation: 25 seconds ON / 5 seconds stop
•	2	Normal rotation sequence: 15 seconds ON / 15 seconds stop
	3	Light rotation sequence: 5 seconds ON / 25 seconds stop
rt ** Rotation time Value in minutes		
		Gradual cool down
С	0	Option not available
	1	Option available
_		Program stop in final rinse (rinse hold)
rh	0	Option not available
	1	Option available
		Bath drain
E	0	Access to the next phase without draining in the bath
	1	Drain + wash speed
<u> </u>	2	Drain + positioning speed
	4	Drain + medium spin speed
	6	Drain + high spin speed
		Spin time
Et	**	Value in minutes
		Non programmable function in the phase





5.3. Original content of the washing programs5.3.1. General application. HS, RMS models

Pr - ′	1. Ехт	RA HE	AVY S	OIL				ூ 66 ப	MIN
Ph	L	С	d	r	rt	С	rh	Е	Et
1	2	20	1	1	2			0	
2	2	40	0	1	6			1	
3	2	40	1	1	6			3	3
4	1	80	2	1	12	0		2	2
5	2	40	3	1	6			1	
6	3		0	1	2			3	
7	3		0	1	2			1	
8	2	0	4	1	4		0	6	7

Pr - 2	2. HEA	VY SO	IL – W	HITE				ூ 56 ப	MIN
Ph	L	С	d	r	rt	С	rh	Е	Et
1	2	20	0	1	2			1	
2	2	30	1	1	6			3	3
3	1	60	2	1	10	0		2	2
4	2	40	3	1	6			1	
5	3		0	1	2			3	3
6	3		0	1	2			1	
7	2	0	4	1	4		0	6	7

Pr - 3	3. W ні	TE						₾ 51	MIN
Ph	L	С	d	r	rt	С	rh	Е	Et
1	2	40	1	1	6			3	3
2	1	50	2	1	8	0		2	2
3	2	30	3	1	6			1	
4	3		0	1	2			3	3
5	3		0	1	2			1	
6	2	0	4	1	4		0	6	7

Pr - 4	1. Ligi	HT SOII	L - W H	lite®				37	MIN
Ph	L	С	d	r	rt	С	rh	Е	Et
1	1	40	2	1	6	1		0	
2	2	30	3	1	6			1	
3	3		0	1	2			3	3
4	3		0	1	2			1	
5	2	0	4	1	4		0	6	7

Pr -	5. HEA	VY SO	IL – C	OLOR				51 MIN		
Ph	L	O	d	r	rt	С	rh	Е	Et	
1	2	0	0	1	4			1		
2	2	40	1	1	6			3	3	
3	1	50	2	1	10	0		2	2	
4	3	0	0	1	2			3	3	
5	3		0	1	2			1		
6	2	0	4	1	4		0	6	7	

Pr - 6	6. Med	DIUM S	OIL - (Color			① 40 MIN			
Ph	L	С	d	r	rt	С	rh	Е	Et	
1	2	30	1	2	4			2	2	
2	1	40	2	1	8	0		2	2	
3	3		0	2	2			3	3	
4	3		0	2	2			1		
5	2	0	4	2	4		0	6	7	

Pr - 7	7. SYN	THETIC	s					少 30	MIN
Ph	L	С	d	r	rt	С	rh	Е	Et
1	1	40	2	2	6	0		2	2
2	3		0	2	2			3	3
3	3		0	2	2			1	
4	2	0	4	2	4		0	6	6

Pr - 8	3. DEL	ICATE	S AND	WOOL				① 31 MIN		
Ph	L	С	d	r	rt	С	rh	Е	Et	
1	3	0	1	3	4			1		
2	3	30	2	3	8	1		1		
3	3		0	3	2			1		
4	3		0	3	2			1		
5	3	0	4	3	4		0	2	2	





5.3.2. USA/Canada application. EH020 model: SP-0

Pr - 1	1. Ехт	RA HE	AVY S	OIL - W	/HITE			① 22	MIN
Ph	٦	F	đ	С	rh	ш	Et		
1	1	90	2	1	7	0		1	
2	1	32	3	2	2			1	
3	2	32	4	2	2		0	6	6

Pr - 2	2. HEA	VY SO	IL - W	HITE				ٿ 19 ا	MIN	
Ph	L	F	d	r	rt	rt c rh E E				
1	1	90	2	1	4	0		1		
2	1	32	3	2	2			1		
3	2	32	4	2	2		0	6	6	

Pr - 3	3. MEC	DIUM S	OIL - V	VHITE				① 19	MIN
Ph	Ph L F d r rt c rh E								
1	1	82	2	1	4	0		1	
2	1	32	3	2	2			1	
3	2	32	4	2	2		0	6	6

Pr - 4	t. Ligi	HT SOII	L - WH	IITE				ٿ 19 ا	MIN
Ph	L	L F d r rt c rh E E							
1	1	68	2	1	4	1		1	
2	1	32	3	2	2			1	
3	2	32	4	2	2		0	6	6

Pr -	5. HEA	VY SO	IL - CC	LOR				少 20	MIN
Ph	L	F	С	rh	Е	Et			
1	1	90	2	1	6	0		1	
2	1	32	0	2	1			1	
3	2	32	4	2	2		0	6	6

Pr - 6	6. ME	DIUM S	OIL - C	OLOR				ت 18 ا	MIN
Ph	L	F	d	r	rt	С	rh	Е	Et
1	1	90	2	1	4	0		1	
2	1	32	0	2	1			1	
3	2	32	4	2	2		0	6	6

Pr - 7	7. SYN	THETI	cs					少 18	MIN
Ph	L	rh	Е	Et					
1	1	82	2	2	4	0		1	
2	1	32	0	2	1			1	
3	2	32	4	2		0	6	6	

Pr - 8	3. W o	OL ANI	DELI	CATES				ئ 15 ا	MIN
Ph	L	F	d	r	rt	С	rh	Е	Et
1	2	68	2	2	4	1		1	
2	1	32	0	3	1			1	
3	2	32	4	3	2		0	4	3





5.3.3. USA/Canada application. EH020 model: SP-I; EH, REM: other models except REM025

Pr - ′	1. Ехт	RA HE	AVY S	OIL - W	/HITE			少 49 MIN	
Ph	L	F	d	r	rt	С	rh	Е	Et
1	2	104	1	1	6			3	2
2	2	176	2	1	12	0		1	
3	2	140	3	1	6			3	2
4	3		0	1	1			1	
5	2		0	1	2			1	
6	2	32	4	1	2		0	6	6

Pr - 2	2. HEA	VY SO	IL - W	HITE				ው 42 ו	MIN
Ph	٦	F	d	r	rt	С	rh	ш	Et
1	2	104	1	1	3			3	2
2	2	150	2	1	8	0		1	
3	2	140	3	1	5			3	2
4	3		0	1	2			1	
5	3		0	1	2			1	
6	2	32	4	1	3		0	6	6

Pr - 3	3. MEC	DIUM S	OIL - V	VHITE	ഈ 37 ₪					
Ph	L	F	d	r	rt	С	rh	Е	Et	
1	2	140	2	1	10	0		1		
2	2	140	3	1	5			3	2	
3	3		0	1	2			1		
4	3		0	1	2			1		
5	2	32	4	1	2		0	6	6	

Pr - 4	4. Ligi	HT SOII	L - W H	IITE				ئ 28	MIN
Ph	L	F	d	r	rt	С	rh	Е	Et
1	1	140	2	1	6	1		1	
2	2	140	3	1	4			3	2
3	3		0	1	2			1	
4	2	32	4	1	2		0	6	6

Pr - 5	5. HEA	VY SO	IL - CC	LOR				少 42	MIN
Ph	L	F	d	r	rt	С	rh	Е	Et
1	2	104	1	1	4		- 1	3	2
2	2	140	2	1	10	0		1	
3	2	70	0	1	2			3	2
4	3		0	1	2			1	
5	3		0	1	2			1	
6	2	32	4	1	3		0	6	6

Pr - 6	6. ME	DIUM S	OIL - C	OLOR	1		少 36 MIN			
Ph	L	F	d	r	rt	С	rh	Е	Et	
1	2	86	1	1	4			3	2	
2	1	104	2	1	8	0		1		
3	2	70	0	1	2			3	2	
4	3		0	1	2			1		
5	2	32		0	6	6				

Pr - 7	7. SYN	THETI	cs					⁽¹⁾ 29	MIN
Ph	L	F	d	rt	С	rh	Е	Et	
1	2	104	2	1	8	0		1	
2	2	70	0	1	2			3	2
3	3		0	1	2			1	
4	2	32	4	1	3		0	6	6

Pr - 8	3. W o	OL ANI	D DELI	CATE	S			① 27	MIN
Ph	L	F	d	r	rt	С	rh	Е	Et
1	2	86	2	2	8	1		2	2
2	3		0	2	2			1	
3	3			2	2			1	
4	2	32	4	3	2		0	5	4





5.3.4. United Kingdom application. HS, RMS models

Pr –	1. HE	ALTHC	ARE SI	LUICE				少 43	MIN
Ph	٦	C	đ	r	rt	С	rh	ш	Et
1	2	0	0	1	2		-	1	
2	2	0	1	1	2		-	1	
3	1	67	2	1	11	0	-	2	2
4	2	0	3	1	3		-	1	
5	3	0	0	2	2			1	
6	3	0	4	1	4		0	6	7

Pr - 2	2. HEA	VY SO	IL					<u> 37</u> ا	MIN
Ph	٦	С	đ	r	rt	С	rh	ш	Et
1	2	0	1	1	3			3	3
2	1	55	2	1	6	0		2	2
3	2	0	3	1	2			3	3
4	3	0	0	1	2			1	
5	2	0	4	2	3			6	7

Pr - 3	B. ECC	D. 60	e ^w					① 32	MIN	
Ph	Ph L C d r rt c rh E									
1	3	60	2	1	10			2	2	
2	4	0	0	1	3	0		1	1	
3	4	0	4	1	3			6	9	

	Pr - 4	1. Ligi	HT SOI	L					ن 32 ا	MIN
	Ph	٦	C	d	r	rt	С	rh	ш	Et
	1	1	40	2	1	6	0		1	
	2	2	0	3	2	4			3	3
1	3	3	0	0	1	2			1	
I	4	2	0	4	1	4			6	7

F	Pr - 5	5. Col	.OR						⁽¹⁾ 48	MIN
	Ph	٦	C	d	r	rt	С	rh	Е	Et
	1	2	0	0	2	4			1	
	2	2	0	1	2	6		-	3	3
	3	1	40	2	1	7	0		2	2
	4	3	0	0	2	2		-	3	3
	5	3	0	0	2	2		-	1	
	6	2	0	4	2	4		0	6	7

PR -	6. EC	О ЕХР	RESS 4	10°C				ن 28 ا	MIN
Ph	Ph L C d r rt c rh E								
1	1	40	2	1	6			2	2
2	2	0	0	2	3	0		3	3
3	2	0	4	2	4			6	7

Pr - 7	Pr - 7. Synthetics ② 29 MIN													
Ph	Ph L C d r rt c rh E													
1	1	40	2	2	5	0		2	2					
2	3	0	0	2	2			3	3					
3	3	0	0	2	2			1						
4	2	0	4	2	4		0	6	6					

Pr - 8	3. W o	OL ANI	D DELI	CATES				ூ 32 ।	MIN
Ph	٦	C	d	ш	Et				
1	3	0	1	3	3		1	1	
2	2	30	2	2	8	1		1	
3	3	0	0	3	3			1	
4	3	0	0	3	2			1	
5	3	0	4	3	4		0	4	3

^{*} **Pr-3. ECO. 60 e^w:** Special program in accordance with WTL certification. * **Pr-3. ECO. 60 e^w:** Cannot be modified. Neither can the phase be sped up while water is entering. Water inputs occur with the drum stationary, as does heating.



28

6. LOGI CONTROL. ADVANCED USE MODE

There is an ADVANCED USE mode: This mode includes five different menus by means of which each user can personalise the operation of the washing machine.

6.1. ADVANCED MODE menus

MENU	PURPOSE
Pro	Modification of the program contents
INFO	Information menu
Mod	Modification of the operation parameters
Ncod	Modifying of the access code
HOUR	Adjustment of the system time (option)

6.2. Access to ADVANCED MODE

Connect the washer and open the door. The display will show door.

Hold down the key until the display shows *Cod*.

Enter the access code into the menus by pressing the sequence of eight keys of the code without interruption. In basic configuration (when the machine is delivered) the code for accessing ADVANCED mode is: **12341234**.

Numerical correspondence of each key

KEY	CORRESPONDENCE
	1
A	2
••	3
▼	4

If the sequence entered is correct, the display will show *Pro*, corresponding to the first menu.

The ▲/▼ keys allow the selection of ADVANCED MODE menus. The menu selected is shown on the display following its keyword. To enter the menu, press the key when displaying it.

If you wish to skip the ADVANCED mode, press **START/STOP** and machine will return to the programs execution mode.

6.3. Modifying the contents of programs. Menu Pro

In its original configuration, the washing machine has eight wash programs with content adapted to a wide range of usage. However, the content of each program can be modified to be adapted to the specific needs of different situations.

Modifications will always be carried out within the limits marked by PROGRAMMING VECTORS (see Section 6.5.1) which include the possible programmable parameters and the maximum and minimum values of certain options.

The master program is composed of nine phases. At the start of each phase, a parameter of the value **Ph-Y** / **Ph-N** (executable phase **YES** / executable phase **NO**) will allow the user to determine whether the accessed phase should either be executed or omitted.

Once the phase is defined as to be executed, proceed to the display and modification (if desired) of the parameters or values of the phase.

Note: (UK setting only) Program 3 cannot be modified.

 ${}^{\textcircled{\tiny{1}}}$ 56 min



6.4. Initial program content

6.4.1. General application HS, RMS models

Pr - 1. EXTRA HEAVY SOIL Ph Ph L C d r rt c rh 1 Y 2 20 1 1 2 2 Y 2 40 0 1 6 3 Y 2 40 1 1 6 4 Y 1 80 2 1 12 0 5 Y 2 40 3 1 6 6 N 3 0 1 2 7 Y 3 0 1 2									66 N	66 MIN	
Ph	Ph	١	С	d	r	rt	С	rh	ш	Et	
1	Υ	2	20	1	1	2			0		
2	Υ	2	40	0	1	6			1		
3	Υ	2	40	1	1	6			3	3	
4	Υ	1	80	2	1	12	0		2	2	
5	Υ	2	40	3	1	6			1		
6	Z	3		0	1	2			1		
7	Υ	3		0	1	2			3	3	
8	Υ	3		0	1	2			1		
9	Υ	2	0	4	1	4		0	6	7	

Ph	Ph	L	С	d	r	rt	С	rh	Е	Et
1	Ν	2	20	0	1	4			1	
2	Υ	2	20	0	1	2			1	
3	Υ	2	30	1	1	6			3	3
4	Υ	1	60	2	1	10	0		2	2
5	Υ	2	40	3	1	6			1	
6	Ν	3		0	1	2			1	
7	Υ	3		0	1	2			3	3
8	Υ	3		0	1	2			1	
9	Υ	2	0	4	1	4		0	6	7
		•							•	
D.:	4 1 .			\A/				Œ	27.	

Pr - 2. HEAVY SOIL - WHITE

Pr -	3. W	HITE						T	51 N	ΛIN
Ph	Ph	٦	С	d	r	rt	С	rh	Е	Et
1	Z	2	30	0	1	4			1	
2	Ζ	2	0	0	1	2			1	
3	Υ	2	40	1	1	6			3	3
4	Υ	1	50	2	1	8	0		2	2
5	Υ	2	30	3	1	6			1	
6	Ν	3		0	1	2			1	
7	Υ	3		0	1	2			3	3
8	Υ	3		0	1	2			1	
9	Υ	2	0	4	1	4		0	6	7

Pr -	4. Lı	GHT S	SOIL -	WHI	TE			Ţ	37 N	ΛIN
Ph	Ph	٦	С	d	r	rt	С	rh	Е	Et
1	Ν	2	30	0	1	4			1	
2	Ν	2	0	0	1	2			1	
3	Ν	2	30	1	1	6			3	3
4	Υ	1	40	2	1	6	1		0	
5	Υ	2	30	3	1	6			1	
6	Ν	3		0	1	2			1	
7	Υ	3		0	1	2			3	3
8	Υ	3		0	1	2			1	
9	Υ	2	0	4	1	4		0	6	7

Pr -	5. H	EAVY	SOIL	– Co	LOR			T	51 N	ΛIN
Ph	Ph	٦	С	d	r	rt	С	rh	Е	Et
1	Z	2	40	0	1	4			1	
2	Υ	2	0	0	1	4			1	
3	Υ	2	40	1	1	6			3	3
4	Υ	1	50	2	1	10	0		2	2
5	Ν	3	0	0	1	2			1	
6	Ζ	3		0	1	2			1	
7	Υ	3		0	1	2			3	3
8	Υ	3		0	1	2			1	
9	Υ	2	0	4	1	4		0	6	7

Pr -	6. M	EDIUI	M SOI	L – C	OLOF	₹		Ţ	40 n	ΛIN
Ph	Ph	۲	С	d	r	rt	С	rh	ш	Et
1	Z	2	30	0	2	4			1	
2	Z	2	0	0	2	2			1	
3	Υ	2	30	1	2	4			2	2
4	Υ	1	40	2	1	8	0		2	2
5	Z	3	0	0	2	2			1	
6	Ν	3		0	2	2			1	
7	Υ	3		0	2	2			3	3
8	Υ	3		0	2	2			1	
9	Υ	2	0	4	2	4		0	6	7

Pr -	7. S	YNTH	ETICS	;				T	30 N	ΛIN
Ph	Ph	L	С	d	r	rt	С	rh	Е	Et
1	Z	3	30	0	2	4			1	
2	Ζ	3	0	0	2	2			1	
3	Ν	2	40	1	2	4			2	2
4	Υ	1	40	2	2	6	0		2	2
5	Ζ	3	0	0	2	2			1	
6	Ν	3		0	2	2			1	
7	Υ	3		0	2	2			3	3
8	Υ	3		0	2	2			1	
9	Υ	2	0	4	2	4		0	6	6

1 N 3 0 0 3 4 1 2 N 3 0 0 3 2 1 3 Y 3 0 1 3 4 1 4 Y 3 30 2 3 8 1 1	Pr -	- 8. D	Pr -	ELICA	ATES	AND V	VOOL			Ţ	31 N	ΛIN
2 N 3 0 0 3 2 1 3 Y 3 0 1 3 4 1 4 Y 3 30 2 3 8 1 1	Ph	Ph	Ph	L	С	d	r	rt	С	rh	Е	Et
3 Y 3 0 1 3 4 1 4 Y 3 30 2 3 8 1 1	1	N	1	3	0	0	3	4			1	
4 Y 3 30 2 3 8 1 1	2	N	2	3	0	0	3	2			1	
	3	Υ	3	3	0	1	3	4			1	
	4	Y	4	3	30	2	3	8	1		1	
5 N 3 0 0 3 2 1 1	5	N	5	3	0	0	3	2			1	
6 N 3 0 3 2 1	6	N	6	3		0	3	2			1	
7 Y 3 0 3 2 1	7	Υ	7	3		0	3	2			1	
8 Y 3 0 3 2 1	8	Y	8	3		0	3	2			1	
9 Y 3 0 4 3 4 0 2 2	9	Y	9	3	0	4	3	4		0	2	2

6.4.2. USA/Canada application. EH020 model: SP-0

Pr -	1. E	XTRA	HEAV	/ SOI	L - W	/HITE		Ţ	22 N	ΛIN
Ph	Ph	Ш	F	đ	r	rt	С	rh	Ш	Et
1	Z	2	104	1	1	4			1	
2	Ζ	2	32	0	1	2			1	
3	Ν	2	104	1	1	6			3	3
4	Υ	1	90	2	1	7	0		1	
5	Υ	1	32	3	2	2			1	
6	Ν	3		0	1	1			1	
7	Ν	3		0	1	1			1	
8	Ν	3		0	2	1			1	
9	Υ	2	32	4	2	2		0	6	6

Pr -	2. H	EAV	SOIL -			T	19 N	ΛIN		
Ph	Ph	L	F	đ	r	rt	С	rh	Е	Et
1	Z	2	104	0	1	4			1	
2	Ζ	2	32	0	1	2			1	
3	Ν	2	104	1	1	6			3	3
4	Υ	1	90	2	1	4	0		1	
5	Υ	1	32	3	2	2			1	
6	Ν	3		0	1	1			1	
7	Ν	3		0	1	1			1	
8	Ζ	3		0	1	1			1	
9	Υ	2	32	4	2	2		0	6	6

Pr -	3. M	EDIU	M SOIL	– W	HITE			Ţ	ำ 19 เ	ΛIN
Ph	Ph	Ь	F	d	r	rt	С	rh	Е	Et
1	Z	2	86	0	1	4			1	
2	Z	2	32	0	1	2			1	
3	Z	2	104	1	1	6			3	3
4	Υ	1	82	2	1	4	0		1	
5	Υ	1	32	3	2	2			1	
6	Z	3	-	0	1	1			1	
7	Z	3	-	0	1	1			1	
8	Z	3		0	1	1			1	
9	Υ	2	32	4	2	2		0	6	6

Pr -	4. Lı	GHT	SOIL -	WHI	TE			Ţ	์ 19 เ	ΛIN
Ph	Ph	L	F	d	r	rt	С	rh	Е	Et
1	Z	2	86	0	1	4			1	
2	Ν	2	32	0	1	2			1	
3	Ν	2	86	1	1	6			3	3
4	Υ	1	68	2	1	4	1		1	
5	Υ	1	32	3	2	2			1	
6	Ν	3		0	1	1			1	
7	Z	3		0	1	1			1	
8	N	3		0	1	1			1	
9	Υ	2	32	4	2	2		0	6	6

Pr -	5. H	EAV	/ SOIL -	- Co	LOR			Ţ	20 n	ΛIN
Ph	Ph	L	F	d	r	rt	С	rh	Е	Et
1	Ζ	2	104	0	2	4			1	
2	Ν	2	32	0	2	4			1	
3	Ν	2	104	1	2	6			3	3
4	Υ	1	90	2	1	6	0		1	
5	Υ	1	32	0	2	1			1	
6	Ν	3		0	2	1			1	
7	Ν	3		0	2	1			1	
8	Ν	3		0	2	1			1	
9	Υ	2	32	4	2	2		0	6	6

Pr -	6. M	EDIUI	VI SOIL	- C	OLOF	₹		T	18 N	1IN
Ph	Ph	۲	F	a	r	rt	С	rh	ш	Εt
1	Ν	2	86	0	2	4			1	
2	N	2	32	0	2	2			1	
3	N	2	104	1	2	4			2	2
4	Υ	1	90	2	1	4	0		1	
5	Υ	1	32	0	2	1			1	
6	N	3		0	2	1			1	
7	Ν	3		0	2	1			1	
8	N	3		0	2	1			1	
9	Υ	2	32	4	2	2		0	6	6

Pr -	7. S	YNTH	IETICS					T	18 ו	ΛIN
Ph	Ph	L	F	d	r	rt	С	rh	Е	Et
1	Ν	3	32	0	2	4			1	
2	Ν	3	32	0	2	2			1	
3	Ζ	2	32	1	2	4			2	2
4	Υ	1	82	2	2	4	0		1	
5	Υ	1	32	0	2	1			1	
6	Ζ	3		0	2	1			1	
7	Ν	3		0	2	1			1	
8	Ν	3		0	2	1			1	
9	Υ	2	32	4	2	2		0	6	6

Pr -	8. W	OOL	AND D	ELIC	ATES			Ţ	15 N	ΛIN
Ph	Ph	٦	F	d	r	rt	С	rh	ш	Et
1	Z	3	32	0	3	4			1	
2	Z	3	32	0	3	2			1	
3	Z	3	32	1	3	4			1	
4	Υ	2	68	2	2	4	1		1	
5	Υ	1	32	0	3	1			1	
6	Ν	3		0	3	1			1	
7	Ν	3		0	3	1			1	
8	Ν	3		0	3	1			1	
9	Υ	2	32	4	3	2		0	4	3

6.4.3. USA/Canada application. EH020 model: SP-I; EH, REM: other models except REM025

Pr -	1. E	XTRA	HEAV	Y SOI	L - W	/HITE			少 49	MIN
Ph	Ph	Ш	F	đ	r	rt	С	rh	Ш	Et
1	Z	2	104	1	1	4			1	
2	Ζ	2	32	0	1	2			1	
3	Υ	2	104	1	1	6			3	2
4	Υ	2	176	2	1	12	0		1	
5	Υ	2	140	3	1	6			3	2
6	Ν	3		0	1	1			1	
7	Υ	3		0	1	2			1	
8	Υ	3		0	1	2			1	
9	Υ	2	32	4	1	2		0	6	6

Pr -	2. H	EAV	SOIL -	-W	HITE			Ţ	42 N	ΛIN
Ph	Ph	Ш	F	a	r	rt	С	rh	ш	Et
1	N	2	104	0	1	4			1	
2	Ν	2	32	0	1	2			1	
3	Υ	2	104	1	1	3			3	2
4	Υ	2	150	2	1	8	0		1	
5	Υ	2	140	ფ	1	5			3	2
6	N	3		0	1	1			1	
7	Υ	3		0	1	2			1	
8	Υ	3		0	1	2			1	
9	Υ	2	32	4	1	3		0	6	6

Pr -	3. M	EDIU	M SOIL	– W	HITE			Ţ	37 n	ΛIN
Ph	Ph	Ь	F	d	r	rt	С	rh	Е	Et
1	Ν	2	86	0	1	4			1	
2	Ζ	2	32	0	1	2			1	
3	Ν	2	86	1	1	6			3	3
4	Υ	2	140	2	1	10	0		1	
5	Υ	2	140	3	1	5			3	2
6	Ν	3		0	1	1			1	
7	Υ	3		0	1	2			1	
8	Υ	3		0	1	2			1	
9	Υ	2	32	4	1	2		0	6	6

Pr -	4. Lı	GHT	SOIL -	WHI	TE			Ţ	28 n	ΛIN
Ph	Ph	L	F	d	r	rt	С	rh	Е	Et
1	Ν	2	86	0	1	4			1	
2	Ν	2	32	0	1	2			1	
3	N	2	86	1	1	6			3	3
4	Υ	2	140	2	1	6	0		1	
5	Υ	2	140	3	1	4			3	2
6	N	3		0	1	1			1	
7	N	3		0	1	1			1	
8	Υ	3		0	1	2			1	
9	Υ	2	32	4	1	2		0	6	6

Pr -	5. H	EAV	Y SOIL -	- Co	LOR			Ţ	42 N	ΛIN
Ph	Ph	L	F	d	r	rt	С	rh	Е	Et
1	Ν	2	104	0	2	4			1	
2	Ν	2	32	0	2	4			1	
3	Υ	2	104	1	1	4			3	2
4	Υ	2	140	2	1	10	0		1	
5	Υ	2	70	0	1	2			3	2
6	Ν	3		0	2	1			1	
7	Υ	3		0	1	2			1	
8	Υ	3		0	1	2			1	
9	Υ	2	32	4	1	3		0	6	6

Pr -	6. M	EDIUI	VI SOIL	- C	OLOF	₹		Ţ	36 N	ΛIN
Ph	Ph	۲	F	a	r	rt	С	rh	ш	Ĕ
1	Z	2	86	0	2	4			1	
2	Ν	2	32	0	2	2			1	
3	Υ	2	86	1	1	4			3	2
4	Υ	2	104	2	1	8	0		1	
5	Υ	2	70	0	1	2			3	2
6	Z	3		0	2	1			1	
7	Ν	3		0	2	1			1	
8	Υ	3		0	1	2			1	
9	Υ	2	32	4	1	3		0	6	6

Pr -	7. S	YNTH	IETICS					(P	29 N	ΛIN
Ph	Ph	L	F	d	r	rt	С	rh	Е	Et
1	Ν	3	32	0	2	4			1	
2	Ν	3	32	0	2	2			1	
3	Z	2	32	1	2	4			2	2
4	Υ	2	104	2	1	8	0		1	
5	Υ	2	68	0	1	2			3	2
6	Z	3		0	2	1			1	
7	Ν	3		0	2	1			1	
8	Υ	3		0	1	2			1	
9	Υ	2	32	4	1	3		0	6	6

Pr -	8. W	OOL	AND D	ELIC	ATES			Ţ	27 N	ΛIN
Ph	Ph	۲	F	a	r	rt	С	rh	ш	Et
1	Ζ	3	32	0	3	4			1	
2	Ν	3	32	0	3	2			1	
3	Ν	3	32	1	3	4			1	
4	Υ	2	86	2	2	8	1		2	2
5	Ν	2	32	0	2	2			1	
6	Z	3		0	2	1			1	
7	Υ	3		0	2	2			1	
8	Υ	3		0	2	2			1	
9	Υ	2	32	4	2	3		0	5	4



6.4.4. United Kingdom application. HS, MS, RMS models

Pr -	1. H	EALT	HCAR	E SLL	JICE			Ţ	43 n	ΛIN
Ph	Ph	L	С	d	r	rt	С	rh	Е	Et
1	Ν	2	40	1	1	4			1	
2	Υ	2	0	0	1	2			1	
3	Υ	2	0	1	1	2			1	
4	Υ	1	67	2	1	11	0		2	2
5	Υ	2	0	3	1	3			1	
6	Υ	3	0	0	2	2			1	
7	Ζ	3		0	1	2			1	
8	Ν	3		0	1	2			1	
9	Υ	3	0	4	1	4		0	6	7

Pr -	2. H	EAVY	SOIL					Ţ	37 N	ΛIN
Ph	Ph	٦	С	d	r	rt	С	rh	Е	Et
1	Ζ	2	40	0	1	4			1	
2	Ν	2	0	0	1	2			1	
3	Υ	2	0	1	1	3			3	3
4	Υ	1	55	2	1	6	0		2	2
5	Υ	2	0	3	1	2	0		3	3
6	Υ	3	0	0	1	2			1	
7	Ν	3		0	1	2			1	
8	Ν	3		0	1	2			1	
9	Υ	2	0	4	2	3			6	7

Pr -	3. E	CO. (60 e ^v	I				① 32 MIN			
Ph	Ph	٦	С	d	r	rt	С	rh	Е	Et	
1	Z	2	30	0	1	4			1		
2	Z	2	0	0	1	2			1		
3	Ζ	2	40	1	1	6			3	3	
4	Υ	3	60	2	1	10			2	2	
5	Υ	4	0	0	1	3	0		1	1	
6	Ζ	3		0	1	2			1		
7	Ν	3		0	1	2			1		
8	Ν	3		0	1	2			1		
9	Υ	4	0	4	1	3			6	9	

Pr -	4. Lı	GHT S	SOIL					① 32 MIN		
Ph	Ph	٦	С	d	r	rt	С	rh	Е	Et
1	Ν	2	30	0	1	4			1	
2	Ν	2	0	0	1	2			1	
3	Ν	2	30	1	1	6			3	3
4	Υ	1	40	2	1	6	0		1	
5	Υ	2	0	3	2	4			3	3
6	Υ	3	0	0	1	2			1	
7	Z	3		0	1	2			1	
8	Ν	3		0	1	2			1	
9	Υ	2	0	4	1	4			6	7

Pr -	5. C	OLOR	1					T	48 n	ΛIN
Ph	Ph	L	С	d	r	rt	С	rh	Е	Et
1	Ν	2	40	0	2	4			1	
2	Υ	2	0	0	2	4			1	
3	Υ	2	0	1	2	6			3	3
4	Υ	1	40	2	1	7	0		2	2
5	Υ	3	0	0	2	2			3	3
6	Ν	3		0	2	2			1	
7	Z	3		0	2	2			1	
8	Υ	3	0	0	2	2			1	
9	Υ	2	0	4	2	4		0	6	7

Pr -	Pr - 6. ECO EXPRESS 40°C									① 28 MIN		
Ph	Ph	۲	С	d	r	rt	С	rh	ш	Et		
1	Z	2	30	0	2	4			1			
2	Z	2	0	0	2	2			1			
3	Z	2	40	1	2	4			2	2		
4	Υ	1	40	2	1	6			2	2		
5	Υ	2	0	0	2	3	0		3	3		
6	Z	3		0	2	2			1			
7	Ν	3		0	2	2			1			
8	Ν	3		0	2	2			1			
9	Υ	2	0	4	2	4			6	7		

Pr -	7. S	YNTH	ETICS	<u> </u>			◆ 29 MIN			
Ph	Ph	L	C	d	r	rt	С	rh	Е	Et
1	Z	3	30	0	2	4			1	
2	Ζ	3	0	0	2	2			1	
3	Ζ	2	40	1	2	4			2	2
4	Υ	1	40	2	2	5	0		2	2
5	Υ	3	0	0	2	2			3	3
6	Ζ	3		0	2	2			1	
7	Ν	3		0	2	2			1	
8	Υ	3	0	0	2	2			1	
9	Υ	2	0	4	2	4		0	6	6

Pr -	8. W	OOL	AND [DELIC	ATES	1		① 32 MIN			
Ph	Ph	L	С	d	r	rt	С	rh	Е	Et	
1	Ν	3	0	0	3	4			1		
2	Z	3	0	0	3	2			1		
3	Υ	3	0	1	3	3			1		
4	Υ	2	30	2	2	8	1		1		
5	Υ	3	0	0	3	3			1		
6	Ζ	3		0	3	2			1		
7	Ν	3		0	3	2			1		
8	Υ	3	0	0	3	2			1		
9	Υ	3	0	4	3	4		0	4	3	

^{*} **Pr-3. ECO. 60 e^w:** Special program in accordance with WTL certification.



6.5. Modifying a program

6.5.1. Programming vectors

See the definition of the functions and values programmable in each phase in the following sections.

PHASE	EXECUTION	LEVEL	TEMP.	DISP.	ROTATION	ROTATION TIME	COOL DOWN	PAUSE	EXTRACT	EXTRACT TIME
	Ph	L	C/F	d	r	rt	С	rh	E	Et
1	Y/N	14	0 90 32 194	0, 14	13	112	n.p.	n.p.	0 / 1	n.p.
2	Y/N	14	0 90 32 194	0, 14	13	112	n.p.	n.p.	0 / 1	n.p.
3	Y/N	14	0 90 32 194	0, 14	13	112	n.p.	n.p.	03	n.p. 24
4	Y	14	0 90 32 194	0, 14	13	120	0 / 1	n.p.	02	n.p. 24
5	Y/N	14	0 60 32 140	0, 14	13	112	n.p.	n.p.	13	n.p. 24
6	Y/N	14	n.p.	0, 14	13	112	n.p.	n.p.	13	n.p. 24
7	Y/N	14	n.p.	0, 14	13	112	n.p.	n.p.	13	n.p. 24
8	Y/N	14	n.p.	0, 14	13	112	n.p.	n.p.	1	n.p.
9	Y	14	0 60 32 140	0, 14	13	112	n.p.	0 / 1	16	n.p. 29

Note: (UK setting only). Program 3 cannot be modified.

6.5.2. Definition of phases

PHASES	DEFINITION						
1, 2, 3	Soaking and pre-washes. Optional execution phase.						
4	ashing. Obligatory execution phase.						
5	First Rinse. Optional execution phase.						
6 - 8	Second, third and fourth rinses. Optional execution phase.						
9	Final Rinse. Obligatory execution phase.						



6.5.3. Definition of programmable functions and values for each phase

FUNCTION	CONCEPT		OPTIONS
Ph	Phase execution	Ph-Y	Phase can be executed
PII	Priase execution	Ph-N	Phase cannot be executed
		L-1	Low level
		L-2	Medium level
L	Bath level	L-3	High level (level not programmable in machines with pump drain or valve closed without current)
		L-4	Extra high level (level not programmable in machines with pump drain or valve closed without current)
	T	0/**	Programmable range in degrees Celsius
C/F	Temperature of the bath	32 / ***	Programmable range in degrees Fahrenheit
	butti	n.p	Not possible to program temperature in phase
		d-0	Phase without dosing
		d-1	Dosing via pre-wash compartment Pre-wash external dosing signal
d	Dosings	d-2	Dosing via wash compartment Wash external dosing signal
		d-3	Dosing via whitening compartment Whitening external dosing signal
		d-4	Dosing via softener or neutraliser compartment Softener or neutraliser external dosing signal
		r-1	Vigorous rotation sequence: 25 sec. ON - 5 sec. OFF
r	Rotation sequence	r-2	Normal rotation sequence: 15 sec. ON - 15 sec. OFF
		r-3	Light rotation sequence: 25 sec. ON - 5 sec. OFF
rt	Rotation time	112	Programmable range in soak, pre-wash and rinse phases
71	(in minutes)	120	Programmable range in the wash phase
		0	Without gradual cool-down
С	Gradual cool down	1	Gradual cool-down in wash phase
		n.p	Option not programmable
		0	Without stop in final rinse
rh	Program stop in final rinse	1	Stop in final rinse
	TITISC	n.p	Option not programmable
		0	Access to the next phase without draining in the bath
		1	Drain + wash speed
		2	Drain + positioning speed
E	Bath drain	3	Drain + low extract speed
		4	Drain + medium spin speed
		5	Drain + medium/high extract speed
		6	Drain + high spin speed
Et	Extract time	**	Time in minutes.

6.5.4. Program modification sequence

Access the ADVANCED USE MODE (Section 6.2). The display shows *Pro*.

Press the key to access the PROGRAMMING menu.

The display shows *Pr-1*. Program 1 is ready for modification. The ▲/▼ keys allow the user to select another program. Press the 🎏 key to access the modification of the displayed program.

The display shows $\overline{Pr-1}$. Phase 1 is ready for modification. The \triangle/∇ keys allow the user to select another phase. Press the (\bigcirc) key to start modifying the values of the selected phase.

When the number of the phase is displayed (at the start of phase), the **START/STOP** key is used to finalise the program modification.

Once a program modification has been finalised, the display will show the **Pr-*** report (modified program). Pressing the **START/STOP** key allows the user to access the higher level of the menu. Pressing twice consecutively allows the user to exit the ADVANCED USE MODE.

Note: (UK setting only) Program 3 cannot be modified.

Activation of the phase

Allows the user to program the execution of the selected phase.

Once the desired phase to be modified has been selected, press the key. The display shows *Ph-**.

OPTIONS	MEANING
Ph-Y	The phase to be executed is available
Ph-N	The phase to be executed is unavailable

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Bath level

Bath level allows the selection of the bath level inside the washer.

OPTIONS	MEANING
L-1	Low level
L-2	Medium level
L-3	High level
L-4	Extra high level

For safety reasons, options **L-3** and **L-4** are not programmable in machines with a pump drain or a valve closed without current.

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Cod. 523340





Temperature of the bath

This allows the user to modify the water temperature in the phases in which this function is available. In other phases, it is not possible to program the water temperature.

OPTIONS	MEANING
	Programmable range in soak, pre-wash and wash phases C-**: degrees Celsius F***: degrees Fahrenheit
	Programmable range in the pre-wash and last rinse phase C-**: degrees Celsius F***: degrees Fahrenheit

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Dosings

This allows the dosing of each phase to be selected.

OPTIONS	MEANING
d-0	Without dosing
d-1	Dosing via pre-wash compartment Pre-wash external dosing signal Programmable in the soak and pre-wash phases (Ph 13)
d-2	Dosing via wash compartment Wash external dosing signal Programmable only in the wash phase (Ph 4)
d-3	Dosing via whitening compartment Whitening external dosing signal Programmable in the 1 to 4 rinse phases (Ph 58)
d-4	Dosing via softener or neutraliser compartment Softener or neutraliser external dosing signal Programmable only in the last rinse phase (Ph 9)

The external dosing signals are simultaneously activated with the water inlets through the dispenser.

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Rotation sequence

The mechanical action of the washing machine with regard to the laundry is different according to the selected ON/OFF sequence.

Time **ON**: drum rotating Time **OFF**: drum stopped

OPTIONS	MEANING
r-1	Vigorous sequence rotation: ON: 25 sec. OFF: 5 sec.
r-2	Normal rotation sequence ON: 15 sec. OFF: 15 sec.
r-3	Light rotation sequence ON: 5 sec. OFF: 25 sec.

The ▲key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.



Rotation time

Rotation time programmed in the phase. Time in minutes.

This time is started once the programmed temperature and level are reached.

OPTIONS	MEANING
1 12	Programmable range in the soak, pre-wash and rinse phases
1 20	Programmable range in the wash phase

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Gradual cool down

The gradual cooling down of the water is achieved by adding cold water until a temperature of 45 °C (113 °F) is reached.

This function will appear only in the wash phase if the programmed temperature is over 50 °C (122 °F).

OPTIONS	MEANING
c-0	Gradual cool-down deactivated
c-1	Gradual cool-down activated

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Rinse hold

All the functions of the washing machine stop, maintaining the water inside, with a light rotation of the drum at 15 minute intervals. This is only programmable in the final phase of the program.

This function is designed to prevent the laundry from remaining for a long time inside the drum, once the final spin is finished, thus preventing the appearance of creases.

OPTIONS	MEANING
rh-0	Rinse hold OFF
rh-1	Rinse hold ON

The ▲key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Bath drain

The draining of the water from the washing machine is achieved by activating of the drain system and a drum rotation speed.

Option E-1 implies an unchangeable time value. The duration of options E-2 - E-6 is programmable within a determined range.

OPTIONS	MEANING
E-0	Access to the next phase without draining in the bath
E-1	Drain + wash speed
E-2	Drain + positioning speed
E-3	Drain + low extract speed
E-4	Drain + medium extract speed
E-5	Drain + medium/high extract speed
E-6	Drain + high extract speed Only programmable in the final phase of the program

Cod. 523340

Rev. 11/1218





R.P.M. (G FORCE) FOLLOWING MACHINE MODEL					
OPTIONS	RMS610	RMS613/17 REM033/040	RMS623 REM055	RMS628 REM070	
E-1	50	47	44	42	
E-2	100	100	100	86	
E-3	410	300	300	342	
E-4	500	400	400	433	
E-5	580	500	500	530	
E-6	600(108)	600(125)	600(140)	592(150)	

	R.P.M. (G FORCE) FOLLOWING MACHINE MODEL					
OPTIONS	HS-6008 HS-6013 HS-6017 HS-6023 HS-6024 EH020 EH030 EH040 EH055 EH060					
E-1	50	48	45	43	42	
E-2	100	100	100	87	86	
E-3	400	400	375	330	350	
E-4	600	600	570	525	550	
E-5	800	800	750	725	725	
E-6	970(283)	1000(351)	950(354)	920(350)	966(400)	

The $\blacktriangle/\blacktriangledown$ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Spin time

Extract time programmed in the phase. Time in minutes.

OPTIONS	MEANING
n.p.	Draining time E-1 not programmable
2 4	Programmable range not in final phase of the program
2 9	Programmable range in final phase of the program

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the displayed selection and ends the phase programming.

The display will show the following phase.

When finalising the programming of the last phase of the program, display shows *Pr-** (modified program)



39

6.6. Information menu. INFO menu

PARAMETERS	MEANING			
LOGI	Type of control			
****	Washer model			
EP	0.5			
****	Software version			
Pr	Number of total cycles executed			
Pr-*	Number of cycles executed individually by each program			
SUD	Number of times the anti-suds function has been activated			

Access the ADVANCED USE MODE. Section 6.2. The display shows Pro.

Press the ▲ key. The display shows *INFO*.

Press the key to sequentially access the listing of the different parameters and the values for the corresponding counters.

Once the last option is listed, press the key. The display shows *INFO*.

The ▲/▼ keys allow the user to access to other menus.

To exit the ADVANCED USE MODE press the START/STOP key.





6.7. Modifying the operating parameters. Mod menu

The **Mod** menu allows the user to modify the operation parameters of all the programs. The modifications carried out from **Mod** menu affect the eight programs.

6.7.1. Summary table of the changeable parameters

PARAMETER	MODIFICATION OF	OPTIONS		CE	USA
		b-0	Without buzzer		
b	Buzzer	b-1	Low buzzer		
	Duzzei	b-2	Normal buzzer	+	←
		b-3	Strong buzzer		
dt	Information on the display during a	dt-0	Functions display	+	+
u.	program	dt-1	Program time remaining display		
C/F	Temperature unit	С	Temperature displayed in degrees Celsius	+	
C/P	remperature unit	F	Temperature displayed in degrees Fahrenheit		←
dc	Cleaning the	dc-0	Dispenser cleaning NO activated	+	+
ac	dispenser	dc-1	Dispenser cleaning YES activated		
AC	Dragram appalaration	AC-0	Without acceleration permission		
AC	Program acceleration	AC-1	With acceleration permission	+	+
SP	Suds prevention	SP-0	Without suds prevention	+	+
35	(note 1)	SP-1	Suds prevention option enabled		
	Wash temperatureselection whenstarting program		Wash temperature selection disabled		
tS			Wash temperature selection enabled	←	←
P.	Hot water purge	Pg-0	Purge option disabled	+	+
Pg (note	(note 2)	P250	Maximum purge time: 250 sec.		
Pd	Purge drain selection.	Pd-2	Purge water outlet via normally opened drain valve	+	+
Fu	(note 3)	Pd-3	Purge water outlet via normally closed drain valve or pump.		
Id	Network identifier	Id-0	Disabled communication	+	+
ld		Id-199	Enabled communication		

← Indicates default option following configuration.

Note 1: EH020 models only.

Note 2: Except models HS-6008, RMS610 & EH020.

Note 3: Option available only on models with a double drainage kit installed on the machine and activated on the configuration menu.





6.7.2. Summary table of the changeable parameters Applicable only in the United Kingdom

PARAMETER	MODIFICATION OF		OPTIONS	CE	USA
		b-0	Without buzzer		
b	Buzzer	b-1	Low buzzer		
b	Buzzei	b-2	Normal buzzer	+	+
		b-3	Strong buzzer		
dt	Information on the display during a	dt-0	Functions display	+	+
ut	program	dt-1	Program time remaining display		
C/F	Temperature unit	С	Temperature displayed in degrees Celsius	+	
071	remperature unit	F	Temperature displayed in degrees Fahrenheit		+
dc	Cleaning the	dc-0	Dispenser cleaning NO activated	+	+
	dispenser	dc-1	Dispenser cleaning YES activated		
AC	Program acceleration	AC-0	Without acceleration permission		
7.0	_	AC-1	With acceleration permission	+	+
tS	Wash temperature selection when	tS-0	Wash temperature selection disabled		
ເວ	starting program	tS-1	Wash temperature selection enabled	+	←
JL	Automatic weighing	JL-0	Option disabled	+	+
JL	system (notes 1 and 2)	JL-2	Option enabled		
di	Proportional dosing	dL-0	Option disabled	+	+
aL	time (notes 1 and 2)		Option enabled		
D.,	Hot water purge		Purge option disabled	+	+
Pg	(note 3)	P250	Maximum purge time: 250 sec.		
Pd	Purge drain selection.	Pd-2	Purge water outlet via normally opened drain valve	+	+
, u	(note 4)	Pd-3	Purge water outlet via normally closed drain valve or pump.		
14	Network identifier	Id-0	Disabled communication	+	←
ld		Id-199	Enabled communication		

← Indicates default option following configuration.

Note 1: The weighing system is only applicable to HS models (Programs: 2, 3, 4 and 7).

Note 2: The automatic weighing system is not applicable to model HS-6024.

Note 3: Except models HS-6008 & RMS610.

Note 4: Option available only on models with a double drainage kit installed on the machine and activated on the configuration menu.





6.7.3. Parameter modification sequence

Access to ADVANCED USE MODE. Section 6.2. The display shows Pro.

Press the ▲ key twice. The display shows *INFO*, *Mod* successively.

Press key to display the first parameter.

Buzzer

The door safety unlock can be warned by sounding a beep. The duration of this warning is programmable.

OPTIONS	MEANING			
b-0	Buzzer OFF			
b-1	Low buzzer: two beeps			
b-2	Normal buzzer: four beeps			
b-3	Strong buzzer: six beeps			

The ▲key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Information on the display during a program

Allows the user to select the information to be displayed during the program execution.

If the view functions option is selected, the table in Section 5.1 allows the user to identify the reports on the display with the functions that the washing machine is executing.

OPTIONS	MEANING
dt-0	Display of functions being executed by the washer
dt-1	Display of the program time remaining in minutes

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Temperature unit

The bath water temperature can be displayed in degrees Celsius or Fahrenheit.

OPTIONS MEANING	
С	Temperature unit in degrees Celsius
F	Temperature unit in degrees Fahrenheit

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.



Dispenser cleaning



CAUTION!

DO NOT ACTIVATE THIS OPTION IN MACHINES CONNECTED TO EXTERNAL DOSING INSTALLATIONS.

This option activates the cleaning of the dispenser liquid product compartments by opening their water filling valves to eliminate the possible remaining products.

OPTIONS	MEANING	
dc-0	Dispenser cleaning NO activated	
dc-1	Dispenser cleaning YES activated	

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Program acceleration

Program acceleration can reduce the time of the programs accessing functions or subsequent phases, or reducing the times of rotation and spinning. There is also the possibility of increasing the rotation times. The **AC** option enables or disables the use of the **ACCEL** (acceleration) key.

OPTIONS	MEANING
AC-0	Acceleration option disabled
AC-1	Acceleration option enabled

The ▲key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Suds prevention program

(EH020 models only.)

Certain detergents commonly used in some countries produce large quantities of suds and can complicate the proper functioning of the wash programs.

To reduce this problem it is advisable to activate the suds prevention option (**SP-I**). This option modifies the contents of the programmes (see Section 5.3) by increasing rinsing efficiency.



CAUTION!

THE USE OF SOAP CHEMICALS WITH SUDS CONTROL IS RECOMMENDED. DO NOT EXCEED THE RECOMMENDED DOSAGE.

OPTIONS	MEANING
SP-0	Without suds prevention
SP-1	Suds prevention option enabled

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.





One-off wash phase temperature selection

This option allows the user to disable the possibility of modifying the temperature of the wash phase for the program that is currently in use.

OPTIONS	MEANING
tS-0	Wash phase temperature selection disabled
tS-1	Wash phase temperature selection enabled

The ▲key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Automatic weighing system (UK setting only)

This option enables the user to activate the automatic weighing system. HS models only.

OPTIONS	MEANING
JL-0	Automatic weighing system disabled
JL-2	Automatic weighing system enabled

The ▲key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Proportional dosing time (UK setting only)

This option only appears if **JL-2** has been programmed in the previous stage.

This modifies the dosing time in proportion to the bath level calculated according to the load detected.

OPTIONS	MEANING
dL-0	Proportional modification of the dosing time deactivated
dL-1	Proportional modification of the dosing time activated

The ▲ key allows the user to modify the option displayed.

The **PRO** key validates the selection on the display and allows the user to access the following programmable function.

Hot water purge

(Option not available on **HS-6008**, **MS-610**, **RMS610**, **EH020** and **EM025**)

The purge is an option that keeps the water inlet valve and the drain valve simultaneously open during the programmed time, with the aim of purging the hot water pipe.

The purge function is only executed at the first phase of the program with water filling at a temperature equal to or higher than 86 °F (30 °C).

Purge time: programmable in 5 second steps.

	OPTIONS	MEANING	
	Pg-0	Purge disabled	
ĺ	P***	Purge time in seconds (maximum time 250 sec.)	

The ▲/▼ keys allows to activate and modify the purge time.

The key validates the selection on the display and allows the user to access the following programmable function.

Cod. 523340

Rev. 11/1218





Purge drain

(Option available only on models with a double drainage kit installed on the machine and activated on the configuration menu. Intervention reserved for the Authorised Technical Service)

The parameter only appears if a Purge Time other than 0 has been programmed in the previous parameter.

This option allows selecting the drain through which the purging water will be drained.

OPTIONS	MEANING
Pd-2	Purge water outlet via normally opened drain valve
Pd-3	Purge water outlet via normally closed drain valve or pump.

The ▲/▼ keys allows to activate and modify the purge time.

The key validates the selection on the display and allows the user to access the following programmable function.

Network identifier

This parameter assigns a network identifier to the washer. This identifier enables the communication of the washer with the environment through a protocol based on RS-485. Selected option by default: **Id-0.**

OPTIONS	MEANING	
Id-0	Disabled communication	
Id-199	Enabled communication	

For further information, see the Communication Protocol Instruction Manual.

The ▲/▼ keys allows to activate and modify the Network identifier.

Press key [. The display shows **Mod**.

The ▲/▼ keys allow the user to access to other menus.

To exit the ADVANCED USE MODE press the START/STOP key.

6.8. Code for accessing the ADVANCED USE MODE. Ncod menu

As described in Section 6.2, the access to the CONFIGURATION mode is restricted by an access code.

This code can be modified by the user if so desired.

The code must always contain a combination of EIGHT numbers.

6.8.1. Modifying of the access code

Access the ADVANCED USE MODE. Section 6.2. The display shows Pro.

Press ▲ key three times. The display shows *INFO*, *Mod*, *NCod successively*.

Press the key to set a new code. All the information on the display will disappear.

Enter a combination of eight numbers using the four central keys in the control panel.

The key pressed is shown on the display as follows:

KEY	CORRESPONDENCE
•	1
A	2
••	3
T	4

At the end of the sequence the SURE report will be shown.

Confirm the new code with the key

If you do not wish to validate the new code, press the START/STOP key.

In both cases, the display will show Ncod.

The ▲/▼ keys allow the user to access to other menus.

To exit the ADVANCED USE MODE press the **START/STOP** key.

NOTE

If you forget the modified code, call the Service Department to restore the original code.

6.9. System clock. Hour Menu

Access to this menu is only possible if the clock option is available, and it allows the user to enquire and / or modify the time in the system.

The clock must be set at the real time for the proper operation of the starting time.

6.9.1. Setting the clock

Access the ADVANCED USE MODE. Section 6.2. The display shows Pro.

Press the ▲ key four times. The display will show *INFO*, *Mod*, *NCod*, *Hour* successively.

When displaying *Hour* press the [key. The *SURE* report will be displayed.

The washing machine control requests confirmation of the access command for the time modification.

To exit the *Hour* menu, press **START/STOP**.

Press | key to access and modify the clock time.

The system time is shown on the display in the format: hh.mm (24 hour time format).

The changeable parameters are shown flashing.

Press | key to pass from the minute modification to the hour modification.

Change the selected value with the ▲/▼ keys.

Press the key to validate the selection.

The **START/STOP** key allows the user to exit the menu without validating the modification.

After validating the time selection, *Hour* is shown on the display.

The ▲/▼ keys allow the user to access to other menus.

To exit the ADVANCED USE MODE press the **START/STOP** key. The washing machine can execute the programs.

47



LOGI PRO. SPECIFIC INFORMATION

7. LOGI PRO. WASH PROGRAMS

The washing machine offers the possibility of selecting from among 25 different washing programs. The first 8 programs are devoted to different types of linen and degrees of soiling. The remaining programs have a single content in all their phases and are designed for the user to be able to modify them, thereby creating new programs.

Depending on the AREA OF USE defined in the washing machine SETUP, the original content of the programs varies.

The original content of the programs is defined as indicated in the charts in Section 7.3.

The content of the programs may be modified; see Chapter 8: ADVANCED USE MODE.

7.1. Main reports that appear on the display

Viewing on the display the parameters that the washer is executing during the washing cycle. Value of the *dt-0* parameter in the **Mod** menu. (Section 8.5).

REPORT	MEANING	
LOAd	Determination of load volume.	
Pr-*	Program selected. Machine ready to wash	
A-1	Cold water inlet	
A-2	Hot water inlet	
d-*	First dosing	
C-** F***	Water temperature in degrees Celsius or Fahrenheit	
rt-*	Rotation time left	
C-**	Cooling temperature	
PUSH STAR	Program halt using the rh function	
Et-*	Spin time remaining	
End	End of program. Door unlocked	
door	Washer with door open	



7.2. Interpretation of the program tables

SYMBOL	OPTION	DESCRIPTION
_		Estimated program time
•		Minimum program time based on a machine with hot water supply and without
	**	heating. Time in minutes.
Ph		Phase number
ГП	**	The phase indicated with a grey background belongs to the wash phase.
		Phase execution
Y/N	Y	Phase can be executed
	N	Phase cannot be executed
	_	Bath level
l L	0	Without water inlet
_	1	Low level
, , .	2	Medium low level
(see note in Section	3	Medium level
8.5.3)	4	Medium high level
0.0.0)	5 6	High level
	0	Extra high level
C/F	**	Temperature of the bath Value in degrees Celsius or Fahrenheit
		First dosing
	0	No dosing
	1	Dispensing via Compartment 1 (solid product)
1d	2	Dispensing via Compartment 1 (solid product)
	3	Dispensing via Compartment 2 (solid product) Dispensing via Compartment 3 (liquid product)
	4	Dispensing via Compartment 4 (liquid product)
	-	First dosing time
dt	**	Value in seconds (see note in section 8.5.3)
0.1	**	Second dosing
2 d	**	The same parameters as in the first dosing
al 4	**	Second dosing time
dt		Value in seconds
		Drum rotation sequence
	no	No rotation in the phase
r	Lo	Light rotation sequence: 5 sec. ON / 25 sec. OFF
	Md	Normal rotation sequence: 15 sec. ON / 15 sec. OFF
	Hi	Vigorous sequence rotation: 25 sec. ON / 5 sec. OFF
rt		Rotation time
11	**	Value in minutes
		Gradual cool down
С	0	Option not available
	1	Option available
	_	Program stop
rh	0	Option not available
	1	Option available
	_	Bath drain
	0 1	Access to the next phase without draining in the bath
l E	2	Drain + wash speed Drain + positioning speed
	4	Drain + medium spin speed
	6	Drain + high spin speed
	<u> </u>	
Et	**	Spin time Value in minutes
=:	**	Non programmable function in the phase
		Non programmable function in the phase



7.3. Original content of the washing programs 7.3.1. General application. HS-6008, RMS610, RMG models

Pr -	·1. E	XTRA I	HEAVY	SOIL									එ 66	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	E	Et
1	Υ	3	20	68	1	30	0		Hi	1	0	0	0	
2	Υ	3	40	104	0		0		Hi	6	0	0	1	
3	Υ	3	40	104	1	30	0		Hi	6	0	0	3	3
4	Υ	2	80	176	2	30	0		Hi	12	0	0	1	
5	Υ	3	40	104	3	30	0		Hi	6	0	0	1	
6	Υ	4	0	32	0		0		Hi	2	0	0	3	3
7	Υ	4	0	32	0		0		Hi	2	0	0	1	1
8	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	2. H	EAVY	SOIL -	WHITE									© 56	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	E	Et
1	Υ	3	20	68	0		0		Hi	2	0	0	1	
2	Υ	3	30	86	1	30	0		Hi	6	0	0	3	3
3	Υ	2	60	140	2	30	0		Hi	10	0	0	2	2
4	Υ	3	40	104	3	30	0		Hi	6	0	0	1	
5	Υ	4	0	32	0		0		Hi	2	0	0	3	3
6	Υ	4	0	32	0		0		Hi	2	0	0	1	1
7	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	3. V	VHITE											⁽²⁾ 51	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	40	104	1	30	0		Hi	6	0	0	3	3
2	Υ	2	50	122	2	30	0		Hi	8	0	0	2	2
3	Υ	3	30	86	3	30	0		Hi	6	0	0	1	
4	Υ	4	0	32	0		0		Hi	2	0	0	3	3
5	Υ	4	0	32	0		0		Hi	2	0	0	1	1
6	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	4. L	IGHT S	SOIL - V	VHITE									⁽²⁾ 37	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	E	Et
1	Υ	2	40	104	2	30	0		Hi	6	0	0	0	
2	Υ	3	30	86	3	30	0		Hi	6	0	0	1	
3	Υ	4	0	32	0		0		Hi	2	0	0	3	3
4	Υ	4	0	32	0		0		Hi	2	0	0	1	1
5	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7





Pr -	5. HE	AVY S	OIL – C	OLOR									[®] 51	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	0	32	0		0		Hi	4	0	0	1	
2	Υ	3	40	104	1	30	0		Hi	6	0	0	3	3
3	Υ	2	50	122	2	30	0		Hi	10	0	0	2	2
4	Υ	4	0	32	0		0		Hi	2	0	0	3	3
5	Υ	4	0	32	0		0		Hi	2	0	0	1	1
6	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	6. N	/IEDIUN	/ SOIL	- Colo)R								® 40	MIN (
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	30	86	1	30	0		Md	4	0	0	2	2
2	Υ	2	40	104	2	30	0		Hi	8	0	0	2	2
3	Υ	4	0	32	0		0		Md	2	0	0	3	3
4	Υ	4	0	32	0		0		Md	2	0	0	1	1
5	Υ	3	0	32	4	30	0		Md	4	0	0	6	7

Pr -	7. 8	YNTHE	ETICS										® 30) MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	40	104	1	30	0		Md	4	0	0	2	2
2	Υ	2	40	104	2	30	0		Md	6	0	0	2	2
3	Υ	4	0	32	0		0		Md	2	0	0	3	3
4	Υ	4	0	32	0		0		Md	2	0	0	1	1
5	Υ	3	0	32	4	30	0		Md	4	0	0	6	6

Pr -	· 8.	DELICA	TES AN	ID WOO)L								少 31	I мім
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	4	0	32	1	30	0		Lo	4	0	0	1	
2	Υ	4	30	86	2	30	0		Lo	9	0	0	1	
3	Υ	4	0	32	0		0		Lo	2	0	0	1	
4	Υ	4	0	32	0		0		Lo	2	0	0	1	
5	Υ	4	0	32	4	30	0		Lo	4	0	0	2	2

Pr-	- 9	25.	SINGL	E CON	TENT P	ROGRA	MS						® 5	MIN
Ph	Y/N	L	С	C F 1d dt 2d dt r rt c rh								rh	Е	Et
1	Υ	2	0	32	0	0	0		Hi	2	0	0	1	

51



7.3.2. USA/CANADA application. EH020, REM025, RMG models

Pr -	· 1. E	XTRA I	HEAVY	SOIL -	WHITE								® 49	MIN (
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	40	104	1	30	0		Hi	6	0	0	3	2
2	Y	3	80	176	2	30	0		Hi	12	0	0	1	
3	Y	3	60	140	3	30	0		Hi	6	0	0	3	2
4	Y	4	0	32	0		0		Hi	2	0	0	1	
5	Y	4	0	32	0		0		Hi	2	0	0	1	
6	Υ	3	0	32	4	30	0		Hi	2	0	0	6(*)	6

Pr -	2. H	EAVY	SOIL - V	WHITE									少 42	2 MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	40	104	1	30	0		Hi	3	0	0	3	2
2	Υ	3	66	150	2	30	0		Hi	8	0	0	1	
3	Υ	3	60	140	3	30	0		Hi	5	0	0	3	2
4	Υ	4	0	32	0		0		Hi	2	0	0	1	
5	Υ	4	0	32	0		0		Hi	2	0	0	1	
6	Υ	3	0	32	4	30	0		Hi	3	0	0	6(*)	6

Pr -	- 3. N	lEDIUN	SOIL -	WHITE									® 37	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Y	3	60	140	2	30	0		Hi	10	0	0	1	
2	Y	3	60	140	3	30	0		Hi	5	0	0	3	2
3	Y	4	0	32	0		0		Hi	2	0	0	1	
4	Υ	4	0	32	0		0		Hi	2	0	0	1	
5	Υ	3	0	32	4	30	0		Hi	2	0	0	6(*)	6

Pr -	4. L	IGHT S	OIL - W	/HITE									① 28	В мім
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	60	140	2	30	0		Hi	6	0	0	1	
2	Υ	3	60	140	3	30	0		Hi	4	0	0	3	2
3	Υ	4	0	32	0		0		Hi	2	0	0	1	
4	Υ	3	0	32	4	30	0		Hi	2	0	0	6(*)	6





Pr -	5. H	EAVY	SOIL - (COLOR									⁽¹⁾ 42	. MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Y	3	40	104	1	30	0		Hi	4	0	0	3	2
2	Υ	3	60	140	2	30	0		Hi	10	0	0	1	
3	Υ	3	21	70	0		0		Hi	2	0	0	3	2
4	Υ	4	0	32	0		0		Hi	2	0	0	1	
5	Y	4	0	32	0		0		Hi	2	0	0	1	
6	Y	3	0	32	4	30	0		Hi	3	0	0	6 ^(*)	6

Pr -	- 6. N	I EDIUM	SOIL -	COLO	R								[®] 36	3 МІМ
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	30	86	1	30	0		Hi	4	0	0	3	2
2	Υ	3	40	104	2	30	0		Hi	8	0	0	1	
3	Υ	3	21	70	0		0		Hi	2	0	0	3	2
4	Υ	4	0	32	0		0		Hi	2	0	0	1	
5	Υ	3	0	32	4	30	0		Hi	3	0	0	6(*)	6

Pr -	· 7.	SYNT	HETICS	3									① 29	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	40	104	2	30	0		Hi	8	0	0	1	
2	Υ	3	21	70	0		0		Hi	2	0	0	3	2
3	Υ	4	0	32	0		0		Hi	2	0	0	1	
4	Y	3	0	32	4	30	0		Hi	3	0	0	6(*)	6

Pr -	- 8. V	OOL A	ND DE	LICATE	S								② 27	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Y	3	30	86	2	30	0		Md	8	0	0	2	2
2	Y	4	0	32	0		0		Md	2	0	0	1	
3	Y	4	0	32	0		0		Md	2	0	0	1	
4	Υ	3	0	32	4	30	0		Md	3	0	0	5	4

Pr	– 9	25.	Singi	LE CON	ITENT F	PROGR	AMS						()	5 мім
Ph	Y/N	L	С	F 1d dt 2d dt r rt c rh								rh	Ш	Et
1	Υ	2	0	32	0	0	0		Hi	2	0	0	1	

 $^{^{(*)}}$ In Models RMG033/40/55/70 the default spin value is 5.



7.3.3. United Kingdom application. HS-6008, RMS610, RMG models

Pr ·	-1. H	EALTH	ICARE	SLUIC	E								少43	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	0	32	0		0		Hi	2	0	0	1	
2	Υ	3	0	32	1	30	0		Hi	2	0	0	1	
3	Υ	2	67	153	2	30	0		Hi	11	0	0	2	2
4	Υ	3	0	32	3	30	0		Hi	3	0	0	1	
5	Υ	4	0	32	0		0		Md	2	0	0	1	
6	Υ	4	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	· 2.	IEAVY	SOIL										少 37	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	0	32	1		0		Hi	3	0	0	3	3
2	Υ	2	55	131	2	30	0		Hi	6	0	0	2	2
3	Υ	3	0	32	3	30	0		Hi	2	0	0	3	3
4	Υ	4	0	32	0		0		Hi	2	0	0	1	
5	Υ	3	0	32	4	30	0		Md	3	0	0	6	7

Pr -	- 3. E	CO. 6	60 e ^w										① 32	2 MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	E	Et
1	Υ	3	60	140	2	30	0		Hi	10	0	0	2	1
2	Υ	4	0	32	0		0		Hi	3	0	0	1	
3	Υ	4	0	32	4	30	0		Hi	3	0	0	6	9

Pr -	- 4. L	IGHT S	OIL										少 32	2 MIN
Ph	Y/N	٦	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	2	40	104	2	30	0		Hi	6	0	0	1	
2	Υ	3	0	32	3	30	0		Md	4	0	0	3	3
3	Υ	4	0	32	0		0		Hi	2	0	0	1	
4	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	· 5. (COLOR											少 48	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	3	0	32	0		0		Md	4	0	0	1	
2	Υ	3	0	32	1	30	0		Md	6	0	0	3	3
3	Υ	2	40	104	2	30	0		Hi	7	0	0	2	2
4	Υ	4	0	32	0		0		Md	2	0	0	3	3
5	Υ	4	0	32	0		0		Md	2	0	0	1	
6	Υ	3	0	32	4	30	0		Md	4	0	0	6	7

Pr -	6. E	CO E	XPRES	s 40°C	;								₂₈	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	2	40	104	2		0		Hi	6	0	0	2	2
2	Υ	3	0	32	0	30	0		Md	3	0	0	3	3
3	Υ	3	0	32	4	30	0		Md	4	0	0	6	7





Pr -	· 7.	ЗҮИТНІ	ETICS										① 29	MIN (
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	2	40	104	2	30	0		Md	5	0	0	2	2
2	Υ	4	0	32	0		0		Md	2	0	0	3	3
3	Υ	4	0	32	0		0		Md	2	0	0	1	
4	Υ	3	0	32	4	30	0		Md	4	0	0	6	6

Pr -	- 8. V	Vool /	AND DE	LICATI	ES								① 32	2 MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Υ	4	0	32	1	30	0		Lo	3	0	0	1	
2	Υ	3	30	86	2	30	0		Md	8	1	0	1	
3	Υ	4	0	32	0		0		Lo	3	0	0	1	
4	Υ	4	0	32	0		0		Lo	2	0	0	1	
5	Υ	4	0	32	4	30	0		Lo	4	0	0	4	3

Pr-	- 9	25.	SINGL	E CON	TENT P	ROGRA	AMS						① 5	MIN
Ph	Y/N	L	С	C F 1d dt 2d dt r rt c rh										Et
1	Υ	2	0	32	0	0	0		Hi	2	0	0	1	

8. LOGI PRO. ADVANCED USE MODE

There is an ADVANCED USE mode: This mode includes five different menus by means of which each user can personalise the operation of the washing machine.

8.1. ADVANCED MODE menus

MENU	PURPOSE
Pro	Programming menu. Modification of the program contents
INFO	Information menu
Mod	Modification of the general operating parameters menu
Ncod	Modification of the access code menu
HOUR	Adjustment of the system time menu

8.2. Access to ADVANCED MODE

Connect the washer and open the door. The display will show door.

Hold down the key until the display shows *Cod*.

Enter the access code into the menus by pressing the sequence of eight keys of the code without interruption. In basic configuration (factory set) the code to access the ADVANCED USE MODE is: **12341234**

Numerical correspondence of each key

KEY	CORRESPONDENCE
	1
A	2
••	3
▼	4

If the sequence entered is correct, the display will show *Pro*, corresponding to the first menu.

The ▲/▼ keys allow the user to select the precedent table menus. The menu selected is shown on the display following its keyword. To enter the menu, press the key when displaying it.

If you wish to skip the ADVANCED USE MODE, press **START/STOP** and the machine will return to the program execution mode.

8.3. Modifying the contents of programs. Menu Pro

In its original configuration the washer presents the first eight programs with a content adapted to a broad sector of use.

The content of the remaining programs is the same in all the phases.

The content of each program can be modified to adapt it to specific needs of different areas.

The modifications are always made within the limits set by a PROGRAMMING VECTORS that includes the possible programmable parameters and the maximum and minimum values of certain options.

At the start of each phase, a parameter of the value *Ph-Y / Ph-N* (executable phase *YES /* executable phase **NO**) will allow the user to determine whether the accessed phase should either be executed or omitted.

Once the phase is defined as to be executed, proceed to the display and modification (if desired) of the parameters or values of the phase.

In the **LOGI PRO CONTROL**, the programmable values are the same in all the phases of all the programs. Phase 11 is always of obligatory execution since it defines the end of the program.

Cod. 523340

Rev. 11/1218





8.4. Initial program content

8.4.1. General application. HS-6008, RMS610, RMG models

Pr -	·1. E	XTRA I	HEAVY	SOIL									එ 6 6	З МІМ
Ph	Y/N	Ь	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	Υ	3	20	68	1	30	0		Hi	1	0	0	0	
4	Υ	3	40	104	0		0		Hi	6	0	0	1	
5	Υ	3	40	104	1	30	0		Hi	6	0	0	3	3
6	Υ	2	80	176	2	30	0		Hi	12	0	0	1	
7	Υ	3	40	104	3	30	0		Hi	6	0	0	1	
8	N	4	0	32	0		0		Hi	2	0	0	1	
9	Υ	4	0	32	0		0		Hi	2	0	0	3	3
10	Υ	4	0	32	0		0		Hi	2	0	0	1	1
11	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7
D.:	0 11-		-·· V	M									@ F/	

Pr -	2. HE	AVY S	OIL – V	VHITE									ٿ 5 6	Э МІМ
Ph	Y/N	Ь	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Ν	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	20	68	0		0		Hi	4	0	0	1	
4	Υ	3	20	68	0		0		Hi	2	0	0	1	
5	Υ	3	30	86	1	30	0		Hi	6	0	0	3	3
6	Υ	2	60	140	2	30	0		Hi	10	0	0	2	2
7	Υ	3	40	104	3	30	0		Hi	6	0	0	1	
8	N	4	0	32	0		0		Hi	2	0	0	1	
9	Υ	4	0	32	0		0		Hi	2	0	0	3	3
10	Υ	4	0	32	0		0		Hi	2	0	0	1	1
11	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	- 3. W	/HITE											少 5°	1 MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	C	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	30	86	0		0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Hi	2	0	0	1	
5	Υ	3	40	104	1	30	0		Hi	6	0	0	3	3
6	Υ	2	50	122	2	30	0		Hi	8	0	0	2	2
7	Υ	3	30	86	3	30	0		Hi	6	0	0	1	
8	N	4	0	32	0		0		Hi	2	0	0	1	
9	Υ	4	0	32	0		0		Hi	2	0	0	3	3
10	Υ	4	0	32	0		0		Hi	2	0	0	1	1
11	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	- 4. L	IGHT S	SOIL - V	VHITE									① 37	7 MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	30	86	0		0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Ξ	2	0	0	1	
5	N	3	30	86	1	30	0		Ξ	6	0	0	3	3
6	Υ	2	40	104	2	30	0		Ξ	6	0	0	0	
7	Υ	3	30	86	3	30	0		Ξ	6	0	0	1	
8	N	4	0	32	0		0		Ξ	2	0	0	1	
9	Υ	4	0	32	0		0		Ξ	2	0	0	3	3
10	Υ	4	0	32	0		0		Hi	2	0	0	1	1
11	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7



Pr -	5. H	EAVY	SOIL -	Colo	R								_{\$\begin{aligned} \text{\$\text{\$}}\end{aligned}}	1 мім
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Ν	3	0	32	0		0		Ή	2	0	0	1	
2	Ν	3	0	32	0		0		Ή	2	0	0	1	
3	Ν	3	40	104	0		0		Ή	4	0	0	1	
4	Υ	3	0	32	0		0		Ή	4	0	0	1	
5	Υ	3	40	104	1	30	0		Ή	6	0	0	3	3
6	Υ	2	50	122	2	30	0		Ή	10	0	0	2	2
7	Ν	4	0	32	0		0		Ή	2	0	0	1	
8	Ν	4	0	32	0		0		Ή	2	0	0	1	
9	Υ	4	0	32	0		0		Ή	2	0	0	3	3
10	Υ	4	0	32	0		0		Ή	2	0	0	1	1
11	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7

Pr -	- 6. M	EDIUM	SOIL -	Colo	R								少40) MIN
Ph	Y/N	Ш	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0	-	0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	30	86	0		0		Md	4	0	0	1	
4	N	3	0	32	0		0		Md	2	0	0	1	
5	Υ	3	30	86	1	30	0		Md	4	0	0	2	2
6	Υ	2	40	104	2	30	0		Hi	8	0	0	2	2
7	N	4	0	32	0		0		Md	2	0	0	1	
8	N	4	0	32	0		0		Md	2	0	0	1	
9	Υ	4	0	32	0		0		Md	2	0	0	3	3
10	Υ	4	0	32	0		0		Md	2	0	0	1	1
11	Υ	3	0	32	4	30	0		Md	4	0	0	6	7

Pr -	7. S	YNTHE	TICS										少30) MIN
Ph	Y/N	Ш	C	F	1d	dt	2d	dt	r	rt	C	rh	ш	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	4	30	86	0		0		Md	4	0	0	1	
4	N	4	0	32	0		0		Md	2	0	0	1	
5	Υ	3	40	104	1	30	0		Md	4	0	0	2	2
6	Υ	2	40	104	2	30	0		Md	6	0	0	2	2
7	N	4	0	86	0		0		Md	2	0	0	1	
8	N	4	0	32	0		0		Md	2	0	0	1	
9	Υ	4	0	32	0		0		Md	2	0	0	3	3
10	Υ	4	0	32	0		0		Md	2	0	0	1	1
11	Υ	3	0	32	4	30	0		Md	4	0	0	6	6

Pr -	8. C	ELICA	TES AN	ID WOO	DL								① 3´	1 MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	Ν	3	0	32	0		0		Ξ	2	0	0	1	
3	Ν	4	0	32	0		0		Lo	4	0	0	1	
4	Ν	4	0	32	0		0		Lo	2	0	0	1	
5	Υ	4	0	32	1	30	0		Lo	4	0	0	1	
6	Υ	4	30	86	2	30	0		Lo	9	0	0	1	
7	N	4	0	32	0	-	0		Lo	2	0	0	1	
8	N	4	0	32	0		0		Lo	2	0	0	1	
9	Υ	4	0	32	0		0		Lo	2	0	0	1	
10	Υ	4	0	32	0		0		Lo	2	0	0	1	
11	Υ	4	0	32	4	30	0		Lo	4	0	0	2	2

Pr -	9	25. Sı	NGLE C	ONTEN	IT PRO	GRAMS	3						① 5	MIN
Ph	h Y/N L C F 1d dt 2d dt r rt c rh E													Et
110	Ν	3	0	32	0		0		Hi	2	0	0	1	
11	Υ	2	0	32	0	0	0		Hi	2	0	0	1	



8.4.2. USA/CANADA application. EH020, REM025, RMG models

Pr	- 1. E	XTRA I	HEAVY	SOIL - W	HITE								ئ 49 ك	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	40	104	1	30	0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Hi	2	0	0	1	
5	Υ	3	40	104	1	30	0		Hi	6	0	0	3	2
6	Υ	3	80	176	2	30	0		Hi	12	0	0	1	
7	Υ	3	60	140	3	30	0		Hi	6	0	0	3	2
8	N	4	0	32	0		0		Hi	1	0	0	1	
9	Υ	4	0	32	0		0		Hi	2	0	0	1	
10	Υ	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	4	30	0		Hi	2	0	0	6(*)	6

Pr	- 2. H	EAVY S	SOIL - \	WHITE									ئ 42 ا	MIN
Ph	Y/N	٦	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Ξ	2	0	0	1	
2	Ν	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	40	104	0		0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Hi	2	0	0	1	
5	Υ	3	40	104	1	30	0		Ξ	3	0	0	3	2
6	Υ	3	66	151	2	30	0		Ξ	8	0	0	1	
7	Υ	3	60	140	3	30	0		Ξ	5	0	0	3	2
8	N	4	0	32	0		0		Ξ	1	0	0	1	
9	Υ	4	0	32	0		0		Hi	2	0	0	1	
10	Υ	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	4	30	0		Hi	3	0	0	6(*)	6

Pr	- 3. N	IEDIUN	I SOIL -	- WHITE									<u> 37 ا</u>	MIN
Ph	Y/N	Ш	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Ν	3	0	32	0		0		Ξ	2	0	0	1	
2	Ν	3	0	32	0		0		Ξ	2	0	0	1	
3	Ν	3	30	86	0		0		Ξ	4	0	0	1	
4	Ν	3	0	32	0		0		Ξ	2	0	0	1	
5	Ν	3	30	86	1	30	0		Ξ	6	0	0	3	3
6	Υ	3	60	140	2	30	0		Ξ	10	0	0	1	
7	Υ	3	60	140	3	30	0		Ξ	5	0	0	3	2
8	Ν	4	0	32	0		0		Hi	1	0	0	1	
9	Υ	4	0	32	0		0		Hi	2	0	0	1	
10	Υ	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	4	30	0		Hi	2	0	0	6(*)	6

Pr	- 4. L	IGHT S	OIL - W	/HITE									® 28 1	ΛIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	E	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Ħ	2	0	0	1	
3	N	3	30	86	0		0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Hi	2	0	0	1	
5	N	3	30	86	1	30	0		Hi	6	0	0	3	3
6	Υ	3	60	140	2	30	0		Hi	6	0	0	1	
7	Υ	3	60	140	3	30	0		Hi	4	0	0	3	2
8	N	4	0	32	0		0		Hi	1	0	0	1	
9	N	4	0	32	0		0		Ξ	1	0	0	1	
10	Υ	4	0	32	0		0		Ξ	2	0	0	1	
11	Υ	3	0	32	4	30	0		Hi	2	0	0	6(*)	6





Pr ·	- 5. H	EAVY S	SOIL - (COLOR									少 42	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	40	104	0		0		Md	4	0	0	1	
4	N	3	0	32	0		0		Md	4	0	0	1	
5	Υ	3	40	104	1	30	0		Hi	4	0	0	3	2
6	Υ	3	60	140	2	30	0		Hi	10	0	0	1	
7	Υ	3	21	70	0		0		Hi	2	0	0	3	2
8	N	4	0	32	0		0		Md	1	0	0	1	
9	Υ	4	0	32	0		0		Hi	2	0	0	1	
10	Υ	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	4	30	0		Hi	3	0	0	6 ^(*)	6
D::	C N	1				•	•		•	•	•		@ <u>20</u>	

Pr -	- 6. N	IEDIUM	SOIL -	COLO	R								少 36	MIN
Ph	Y/N	٦	С	щ	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Ν	3	0	32	0		0		Hi	2	0	0	1	
2	Ν	3	0	32	0		0		Hi	2	0	0	1	
3	Ν	3	30	86	0		0		Md	4	0	0	1	
4	Ν	3	0	32	0		0		Md	2	0	0	1	
5	Υ	3	30	86	1	30	0		Hi	4	0	0	3	2
6	Υ	3	40	104	2	30	0		Hi	8	0	0	1	
7	Υ	3	21	70	0		0		Hi	2	0	0	3	2
8	Ν	4	0	32	0		0		Md	1	0	0	1	
9	Ν	4	0	32	0		0		Md	1	0	0	1	
10	Υ	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	4	30	0		Hi	3	0	0	6 ^(*)	6

Pr -	7. S	YNTHE	TICS										少 29	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	Ν	3	0	32	0		0		Hi	2	0	0	1	
3	Ν	4	0	32	0		0		Md	4	0	0	1	
4	Ν	4	0	32	0		0		Md	2	0	0	1	
5	Ν	3	0	32	1	30	0		Md	4	0	0	2	2
6	Υ	3	40	104	2	30	0		Hi	8	0	0	1	
7	Υ	3	21	70	0		0		Hi	2	0	0	3	2
8	Ν	4	0	32	0		0		Md	1	0	0	1	
9	Ν	4	0	32	0		0		Md	1	0	0	1	
10	Υ	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	4	30	0		Hi	3	0	0	6(*)	6

Pr -	- 8. W	OOL A	ND DE	LICATE	S								① 27	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Ν	3	0	32	0		0		Ξ	2	0	0	1	
2	Ν	3	0	32	0		0		Ξ	2	0	0	1	
3	Ν	4	0	32	0		0		Lo	4	0	0	1	
4	Ν	4	0	32	0		0		Lo	2	0	0	1	
5	Ν	4	0	32	1	30	0		Lo	4	0	0	1	
6	Υ	3	30	86	2	30	0		Md	8	0	0	2	2
7	N	3	0	32	0		0		Md	2	0	0	1	
8	N	4	0	32	0		0		Md	1	0	0	1	
9	Υ	4	0	32	0		0		Md	2	0	0	1	
10	Υ	4	0	32	0		0		Md	2	0	0	1	
11	Υ	3	0	32	4	30	0		Md	3	0	0	5	4

Pr-	- 9	25. Sı	NGLE C	ONTEN	IT PRO	GRAMS	3						少 5	MIN
Ph	Ph Y/N L C F 1d dt 2d dt r rt c rh													Et
110	Ν	3	0	32	0		0		Hi	2	0	0	1	
11	Υ	2	0	32	0	0	0		Hi	2	0	0	1	

 $[\]ensuremath{^{(*)}}$ In Models RMG033/40/55/70 the default spin value is 5.



8.4.3. United Kingdom application. HS-6008, RMS610, RMG models

Pr ·	<u>- 1. H</u>	EALTH	CARE	SLUICE									<u> </u>	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	E	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	40	104	1	30	0		Hi	4	0	0	1	
4	Υ	3	0	32	0		0		Hi	2	0	0	1	
5	Υ	3	0	32	1	30	0		Hi	2	0	0	1	
6	Υ	2	67	153	2	30	0		Hi	11	0	0	2	2
7	Υ	3	0	32	3	30	0		Hi	3	0	0	1	
8	Υ	4	0	32	0		0		Md	2	0	0	1	
9	N	4	0	32	0		0		Hi	2	0	0	1	
10	N	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	4	0	32	4	30	0		Hi	4	0	0	6	7
Pr ·	- 2.	HEAVY	SOIL										① 37	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	Υ	3	40	104	0		0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Hi	2	0	0	1	
5	Υ	3	0	32	1	30	0		Hi	3	0	0	3	3
6	Υ	2	55	131	2	30	0		Hi	6	0	0	2	2
7	Υ	3	0	32	3	30	0		Hi	2	0	0	3	3
8	Υ	4	0	32	0		0		Hi	2	0	0	1	
9	N	4	0	32	0		0		Hi	2	0	0	1	
10	N	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	4	30	0		Md	3	0	0	6	7
Pr ·	- 3. E	ECO. 6	60 e ^w										① 32	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	30	86	0		0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Hi	2	0	0	1	
5	N	3	40	104	1	30	0		Hi	6	0	0	3	3
6	Υ	3	60	140	2	30	0		Hi	10	0	0	2	1
7	Υ	4	0	32	0		0		Hi	3	0	0	1	
8	N	4	0	32	0		0		Hi	2	0	0	1	
9	N	4	0	32	0		0		Hi	2	0	0	1	
10	N	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	4	0	32	4	30	0		Hi	3	0	0	6	9
Pr ·	- 4. L	IGHT S	SOIL										① 32	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	E	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	30	86	0		0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Hi	2	0	0	1	

Pr.	· 4. L	IGHT S	OIL										© 32	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Ш	Et
1	Ν	3	0	32	0		0		Ξ	2	0	0	1	
2	Ν	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	30	86	0		0		Hi	4	0	0	1	
4	N	3	0	32	0		0		Hi	2	0	0	1	
5	N	3	30	104	1	30	0		Hi	6	0	0	3	3
6	Υ	2	40	104	2	30	0		Hi	6	0	0	1	
7	Υ	3	0	32	3	30	0		Md	4	0	0	3	3
8	Υ	4	0	32	0		0		Hi	2	0	0	1	
9	N	4	0	32	0		0		Hi	2	0	0	1	
10	N	4	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	4	30	0		Hi	4	0	0	6	7



Pr ·	- 5. (COLOR											⁽¹⁾ 48	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	40	104	0	30	0		Md	4	0	0	1	
4	Υ	3	0	32	0		0		Md	4	0	0	1	
5	Υ	3	0	32	1	30	0		Md	6	0	0	3	3
6	Υ	2	40	104	2	30	0		Hi	7	0	0	2	2
7	Υ	4	0	32	0		0		Md	2	0	0	3	3
8	N	4	0	32	0		0		Hi	2	0	0	1	
9	N	4	0	32	0		0		Md	2	0	0	1	
10	Υ	4	0	32	0		0		Md	2	0	0	1	
11	Υ	3	0	32	4	30	0		Md	4	0	0	6	7

Pr -	- 6. E	CO E	XPRES	s 40°C									少 28	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	N	3	0	32	0		0		Hi	2	0	0	1	
2	N	3	0	32	0		0		Hi	2	0	0	1	
3	N	3	30	86	0		0		Md	4	0	0	1	
4	Ν	3	0	32	0		0		Md	2	0	0	1	
5	Ν	3	40	104	1	30	0		Md	4	0	0	2	2
6	Υ	2	40	104	2	30	0		Hi	6	0	0	2	2
7	Υ	3	0	32	0		0		Md	3	0	0	3	3
8	N	4	0	32	0		0		Md	2	0	0	1	
9	Ν	4	0	32	0		0		Md	2	0	0	1	
10	N	4	0	32	0		0		Md	2	0	0	1	
11	Υ	3	0	32	4	30	0		Md	4	0	0	6	7

Pr -	7. 8	SYNTH	ETICS										少 29	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Z	3	0	32	0		0		Hi	2	0	0	1	
2	Z	3	0	32	0		0		Hi	2	0	0	1	
3	Ν	4	30	86	0		0		Md	4	0	0	1	
4	N	4	0	32	0		0		Md	2	0	0	1	
5	Ν	3	40	104	1	30	0		Md	4	0	0	2	2
6	Υ	2	40	104	2	30	0		Md	5	0	0	2	2
7	Υ	4	0	32	0		0		Md	2	0	0	3	3
8	Ν	4	0	32	0		0		Md	2	0	0	1	
9	N	4	0	32	0		0		Md	2	0	0	1	
10	Υ	4	0	32	0		0		Md	2	0	0	1	
11	Υ	3	0	32	4	30	0		Md	4	0	0	6	6

Pr -	- 8. V	VOOL A	AND DE	LICATI	ES								① 32	MIN
Ph	Y/N	L	C	F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
1	Ν	4	0	32	0		0		Hi	2	0	0	1	
2	Ν	4	0	32	0		0		Hi	2	0	0	1	
3	Ν	4	0	32	0		0		Lo	4	0	0	1	
4	Ν	4	0	32	0		0		Lo	2	0	0	1	
5	Υ	4	0	32	1	30	0		Lo	3	0	0	1	
6	Υ	3	30	86	2	30	0		Md	8	1	0	1	
7	Υ	4	0	32	0		0		Lo	3	0	0	1	
8	N	4	0	32	0		0		Lo	2	0	0	1	
9	N	4	0	32	0		0		Lo	2	0	0	1	
10	Υ	4	0	32	0		0		Lo	2	0	0	1	
11	Υ	4	0	32	4	30	0		Lo	4	0	0	4	3

Pr-	- 9	25.SIN	IGLE C	ONTEN	T PRO	GRAMS	;						₾ 5	MIN
Ph	Y/N	L	С	F	1d	dt	2d	dt	r	rt	С	rh	E	Et
110	Ν	3	0	32	0		0		Hi	2	0	0	1	
11	Υ	3	0	32	0	0	0		Hi	2	0	0	1	



8.5. Modifying a program

8.5.1. Programming vectors

PHASE	Ph	L	C/F	1d	dt	2d	dt	r	rt	С	rh	Е	Et
110	Y/N	06	0 90 32 194	04	199	04	199	no, Lo, Md, Hi	020	0/1	0/1	0 / 16	n.p. 29
11	Υ	06	0 90 32 194	04	199	04	199	no, Lo, Md, Hi	020	0/1	0 / 1	16	n.p. 29

8.5.2. Definition of programmable functions and values for each phase

FUNCTION	CONCEPT		OPTIONS
D/-	Dhara	Ph-Y	Phase can be executed
Ph	Phase execution	Ph-N	Phase cannot be executed
		L-0	Without water inlet
		L-1	Low level
	Bath level	L-2	Medium low level
L		L-3	Medium level
	(see note in Section 8.5.3)	L-4	Medium high level
		L-5	High level
		L-6	Extra high level
C/F	Tomporature of the both	0/90	Programmable range in degrees Celsius
C/F	Temperature of the bath	32 / 194	Programmable range in degrees Fahrenheit
		1d-0	Phase without dosing
		1d-1	Dosing via compartment 1 (powder) External dosing signal 1
1d	First dosing	1d-2	Dosing via compartment 2 (powder) External dosing signal 2
		1d-3	Dosing via compartment 3 (liquid) External dosing signal 3
		1d-4	Dosing via compartment 4 (liquid) External dosing signal 4
t	First dosing time	0/99	Value in seconds (see note in section 8.5.3)
2d	Second dosing	2d-*	The same parameters as in the first dosing
t	Second dosing time	1/99	Value in seconds
		no	No rotation in the phase
r	Rotation sequence	Lo	Light rotation sequence: ON: 5 sec. / OFF: 25 sec.
,	Trottation doquerios	Md	Normal rotation sequence: ON: 15 sec. / OFF: 15 sec.
		Hi	Vigorous rotation sequence: ON: 5 sec./ OFF: 25 sec.pm
rt	Rotation time	120	Value in minutes
С	Gradual cool down	0	Without gradual cool-down
Ů	0.0000.000.	n.p	Gradual cool-down activated
rh	Program stop	0	Without program stop
		1	Program stop activated
		0	Access to the next phase without draining in the bath
		1	Drain + wash speed
_	D. W. J. J.	2	Drain + positioning speed
E	Bath drain	3	Drain + low extract speed
		4	Drain + medium spin speed
		5	Drain + medium/high extract speed
-		6	Drain + high spin speed
Et	Extract time	**	Time in minutes.



8.5.3. Program modification sequence

Access the ADVANCED USE MODE (Section 8.2). The display shows *Pro*.

Press the key to access the PROGRAMMING menu.

The display shows *Pr-1*. Program 1 is ready for modification. The ▲/▼ keys allow the user to select another program. Press the 🎏 key to access the modification of the displayed program.

The display shows $\overline{Pr-1}$. Phase 1 is ready for modification. The \triangle/∇ keys allow the user to select another phase. Press the \bigcirc key to start modifying the values of the selected phase.

When the number of the phase is displayed (at the start of phase), the **START/STOP** key is used to finalise the program modification.

Once a program modification has been finalised, the display will show the **Pr-*** report (modified program). Pressing the **START/STOP** key allows the user to access the higher level of the menu. Pressing twice consecutively allows the user to exit the ADVANCED USE MODE.

Activation of the phase

Allows the user to program the execution of the selected phase.

Once the desired phase to be modified has been selected, press the key. The display shows **Ph-***.

OPTIONS	MEANING
Ph-Y	The phase to be executed is available
Ph-N	The phase to be executed is unavailable

The ▲key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Bath level

Bath level allows the selection of the bath level inside the washer.

OPTIONS	MEANING
L-0	Without water inlet
L-1	Low level
L-2	Medium low level
L-3	Medium level
L-4	Medium high level
L-5	High level
L-6	Extra high level

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.



CAUTION!

Programming levels L4, L5 and L6 IS NOT ALLOWED in models with a pump drain or drain closed without power supply.



Temperature of the bath

Allows the water temperature to be modified

OPTIONS	MEANING
	Programmable values
C-00 C-90	C-**:degrees Celsius
F 32 F 194	F***:degrees Fahrenheit

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

First dosing

This allows the dosing of each phase to be selected.

The simultaneous dosing of two products can be programmed in each phase. The programming option for the second product will only appear if product dosing has been programmed in the first dosing.

OPTIONS	MEANING		
1d-0	hase without dosing		
1d-1	Dosing via compartment 1 (powder) External dosing signal 1		
1d-2	osing via compartment 2 (powder) xternal dosing signal 2		
1d-3	Dosing via compartment 3 (liquid) External dosing signal 3		
1d-4 Dosing via compartment 4 (liquid) External dosing signal 4			

The external dosing signals are simultaneously connected with the water inlets via the dispenser.

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

First dosing time

Duration of the first dosing programmed in the phase.

This option will only appear if product dosing has been programmed in the first dosing.

The dosing time controls both the duration of the opening of the valve for entry of water into the dispenser and the signal for activating the external dosing.



CAUTION!

IT IS NOT ADVISABLE TO REDUCE THE DISPENSING TIME IN MACHINES THAT ARE NOT CONNECTED TO EXTERNAL DISPENSING EQUIPMENT.

Default values of the program tables may slightly vary depending on the machine model.

OPTIONS	MEANING
1 99	Programmable range. Value in seconds

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

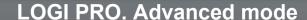
Second dosing and second dosing time

This allows the user to select the second dosing of each phase and its corresponding duration.

The second dosing is initiated at the same time as the first dosing.

These options only appear if the product dosing has been programmed in the first dosing.

Programmable options and range as in the first dosing.





Rotation sequence

The mechanical action of the washing machine on the linen is different depending on the rotation sequence selected.

			R.P.M. FOLLOWING MACHINE MODEL				
OPTIONS	ROTATION SEQUENCE	REVERSE	HS-6008 RMS610 EH020 REM025	RMG613/17 RMG033/040	RMG623 RMG055	RMG628 RMG070	
no	No rotation in the phase						
Lo	Low	ON: 5 sec. OFF: 25 sec.	25	30	30	20	
Md	Normal	ON: 15 sec. OFF: 15 sec.	35	37	37	36	
Hi	High	ON: 25 sec. OFF: 5 sec.	50	47	44	42	

Time **ON**: drum rotating Time **OFF**: drum stopped

The speeds may vary slightly depending on the type of load.

The ▲key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Gradual cool down

The gradual cooling down of the water is achieved by adding cold water until a temperature of 45 °C (113 °F) is reached.

This function will appear only if the programmed temperature in the phase is over 50 °C (122 °F).

OPTIONS	MEANING
c-0	Gradual cool-down deactivated
c-1	Gradual cool-down activated

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Program stop

All the functions of the washing machine stop, maintaining the water inside, with a light rotation of the drum at 15 minute intervals.

This option can be programmed in any phase of the program.

When programmed before the final phase spin, the indicator light for the function lights up on the control panel.

OPTIONS	MEANING
rh-0	Program stop deactivated
rh-1	Program stop active in the phase

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

66



LOGI PRO. Advanced mode

Bath drain

The emptying of the washing machine bath involves activating the draining system, and the selection of a drum rotation speed.

Option E-1 implies an unchangeable time value. The duration of options E-2...E-6 is programmable within a determined range.

		F	R.P.M. (G FO	RCE) FOLLO	WING MAC	HINE MODE	L
	MEANING	HS-6008 EH020	RMS610 REM025	RMG613 RMG033	RMG617 RMG040	RMG623 RMG055	RMG628 RMG070
E-0	Without draining Access to the next phase						
E-1	Drain + wash speed	50	50	44	47	47	45
E-2	Drain + positioning speed	100	100	100	100	100	100
E-3	Drain + low extract speed	400(50)	400(50)	380(50)	380(50)	360(50)	342(50)
E-4	Drain + medium spin speed	600(110)	500(75)	574(115)	574(115)	505(100)	485100)
E-5	Drain + medium/high extract speed	800(190)	580(100)	635(140)	635(140)	600(140)	570(140)
E-6	Drain + high spin speed	970(280)	600(108)	760(200)	760(200)	715(200)	685(200)

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Spin time

Extract time programmed in the phase. Time in minutes.

OPTIONS	MEANING			
n.p.	Draining time E-1 not programmable			
2 9	Programmable values			

The ▲/▼ keys allow the user to modify the option displayed.

The key validates the displayed selection and ends the phase programming.

The display will show the following phase.

When finalising the programming of the last phase of the program, the display shows *Pr-** (modified program).

The ▲/▼ keys allow the user to select another program in the PROGRAMMING menu.

8.6. Information menu. INFO menu

PARAMETERS	MEANING
LOGI	Type of control
****	Washer model
EP	Coffugra varian
****	Software version
Pr	Number of total cycles executed
Pr-*	Number of cycles executed individually by each program
SUD	Number of times the anti-suds function has been activated

Access the ADVANCED USE MODE. Section 8.2. The display shows Pro.

Press the ▲key. The display shows *INFO*.

Press the key to sequentially access the listing of the different parameters and the values for the corresponding counters.

Once the last option is listed, press the key. The display shows *INFO*.

The ▲/▼ keys allow the user to access to other menus.

To exit the ADVANCED USE MODE press the START/STOP key.



8.7. Modifying the operating parameters. Mod menu

The **Mod** menu allows the user to modify the operation parameters of all the programs. The modifications carried out from **Mod** menu affects all programs.

8.7.1. Summary table of the changeable parameters

PARAMETER	MODIFICATION OF		OPTIONS	CE	USA
	Buzzer	b-0	Without buzzer		
b		b-1	Low buzzer		
		b-2	Normal buzzer	←	+
		b-3	Strong buzzer		
dt	Information on the	dt-0	Functions display	←	←
at .	display during a program	dt-1	Program time remaining display		
C/F	Temperature unit	С	Temperature unit in degrees Celsius	+	
C/F	remperature unit	F	Temperature unit in degrees Fahrenheit		←
dc	Cleaning the	dc-0	Dispenser cleaning NO activated	+	+
uc_	dispenser	dc-1	Dispenser cleaning YES activated		
AC	Program acceleration	AC-0	Without acceleration permission		
AC		AC-1	With acceleration permission	←	←
JL	Proportional water		Option disabled	←	←
JL	level	JL-1	Option enabled		
الم	Proportional dosing	dL-0	Option disabled	←	←
dL	time	dL-1	Option enabled		
Des	Het water purge	PG-0	Purge option disabled	+	+
Pg	Hot water purge	PG***	Maximum purge time: 250 sec.		
l al	Nietuoni, identifie:	Id-0	Disabled communication	+	+
ld	Network identifier	Id-199	Enabled communication		

[←] Indicates default option following configuration.

8.7.2. Parameter modification sequence

Access to ADVANCED USE MODE. Section 8.2. The display shows Pro.

Press the ▲ key twice. The display shows *INFO*, *Mod* successively.

Press key to display the first parameter.

Buzzer

The door safety unlock can be warned by sounding a beep. The duration of this warning is programmable.

OPTIONS	MEANING			
b-0	Buzzer OFF			
b-1	Low buzzer: two beeps			
b-2	lormal buzzer: four beeps			
b-3	Strong buzzer: six beeps			

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

69



Information on the display during a program

Allows the user to select the information to be displayed during the program execution.

If the View Functions option is selected, the table in Section 7.1 allows the user to identify the reports displayed with the functions that the washing machine is executing.

OPTIONS	MEANING
dt-0	Display of functions being executed by the washer
dt-1	Display of the program time remaining in minutes

The \blacktriangle key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Temperature unit

The bath water temperature can be displayed in degrees Celsius or Fahrenheit.

OPTIONS	MEANING
С	Temperature unit in degrees Celsius
F	Temperature unit in degrees Fahrenheit

The \(\Lambda \) key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Dispenser cleaning



CAUTION!

DO NOT ACTIVATE THIS OPTION IN MACHINES CONNECTED TO EXTERNAL DOSING INSTALLATIONS.

This option activates the cleaning of the dispenser liquid product compartments by opening their water filling valves to eliminate the possible remaining products.

OPTIONS	MEANING
dc-0	Dispenser cleaning NO activated
dc-1	Dispenser cleaning YES activated

The ▲/▼ keys allow the modification of the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Program acceleration

Program acceleration can reduce the time of the programs accessing functions or subsequent phases, or reducing the times of rotation and spinning. There is also the possibility of increasing the rotation times.

The **AC** option enables or disables the use of the | (acceleration) key.

OPTIONS	MEANING
AC-0	Acceleration option disabled
AC-1	Acceleration option enabled

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Cod. 523340



Proportional water level

This modifies the values of the bath levels in proportion to the predetermined load.

OPTIONS	MEANING	
JL-0	Proportional modification of the bath time deactivated	
JL-1	Proportional modification of the bath time activated	

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Proportional dosing time

This option only appears if *JL-1* has been programmed in the previous stage.

It modifies the dosing time in proportion to the bath level calculated according to the predetermined load.

OPTIONS	MEANING	
dL-0	Proportional modification of the dosing time deactivated	
dL-1	Proportional modification of the dosing time activated	

The ▲ key allows the user to modify the option displayed.

The key validates the selection on the display and allows the user to access the following programmable function.

Hot water purge

The purge is an option that keeps the water inlet valve and the drain valve simultaneously open during the programmed time, with the aim of purging the hot water pipe.

The purge function is only executed during the first phase of the program with water filling if the programmed temperature is equal or higher than 86 °F (30 °C).

Purge time: programmable in 5 second steps.

OPTIONS	MEANING
Pg-0	Purge disabled
Pg**	Programmed purge time. Maximum time: 250 sec.

The ▲/▼ keys allows to activate and modify the purge time.

The key validates the selection on the display and allows the user to access the following programmable function.

Network identifier

This parameter assigns a network identifier to the washer. This identifier enables the communication of the washer with the environment through a protocol based on RS-485. Selected option by default: **Id-0.**

OPTIONS	MEANING
Id-0	Disabled communication
Id-199	Enabled communication

For further information, see the Communication Protocol Instruction Manual.

The ▲/▼ keys allows to activate and modify the Network identifier.

Press the key. The display shows **Mod**.

The ▲/▼ keys allow the user to access to other menus.

To exit the ADVANCED USE MODE press the **START/STOP** key.



8.8. Code for accessing the ADVANCED MODE. Ncod menu

As described in Section 8.2 the access to ADVANCED MODE is restricted by an access code.

This code can be modified by the user if so desired.

The code must always contain a combination of EIGHT numbers.

8.8.1. Modifying of the access code

Access to ADVANCED MODE. Section 8.2. The display shows Pro.

Press ▲ key three times. The display shows *INFO*, *Mod*, *NCod successively*.

Press the key to set a new code. All the information on the display will disappear.

Enter a combination of eight keys using the four central keys in the control panel.

The pressed key is shown on the display as follows:

KEY	CORRESPONDENCE
	1
+	2
••	3
_	4

At the end of the sequence the **SURE** report will be shown.

Confirm the new code with the key [**]

If you do not wish want to validate the new code, press the **START/STOP** key.

In both cases, the display will show Ncod.

The ▲/▼ keys allow the user to access to other menus.

To exit the ADVANCED USE MODE press the **START/STOP** key.

NOTE.

If you forget the modified code, call the Service Department to restore the original code.

8.9. System clock. Hour Menu

Access to this menu is only possible if the clock option is available.

This menu allows the user to check and / or modify the time in the system.

The clock must be set at the real time for the proper operation of the starting time.

8.9.1. Setting the clock

Access to ADVANCED MODE. Section 8.2. The display shows Pro.

Press the ▲ key four times. The display shows *INFO*, *Mod*, *NCod*, *Hour* successively.

When displaying *Hour* press the key. The *SURE* report will be displayed.

The washing machine control requests confirmation of the access command for the time modification.

To exit the *Hour* menu, press **START/STOP**.

Press | key to access and modify the clock time.

The system time is shown on the display in the format: hh.mm (24 hour time format).

The changeable parameters are shown flashing.

Press | key to pass from the minute modification to the hour modification.

Change the selected value with the ▲/▼ keys.

Press the key to validate the selection.

The **START/STOP** key allows the user to exit the menu without validating the modification.

After validating the time selection, *Hour* is shown on the display.

The ▲/▼ keys allow the user to access to other menus.

To exit the ADVANCED MODE press the **START/STOP** key. The washing machine can execute the programs.



INFORMATION COMMON TO BOTH LOGI CONTROL AND LOGI PRO CONTROL

9. TROUBLESHOOTING

9.1. Freeing a trapped person



PROCEDURE IN THE EVENT OF ENTRAPMENT OF A PERSON OR AN ANIMAL INSIDE THE WASHER

- 1. **Press the START/STOP key**. This action interrupts the wash cycle in operation and opens the washing machine drain. The washing machine control circuit remains in operation.
- 2. **Open the door**. After the bath has been drained and the drum rotation has ended, the door lock is unblocked allowing the door to be opened.
- 3. If the door fails to release: Consult the following sections: Dismantling the door of the washing machine, or Manual realising of the safety lock (sections 9.2 and 9.3)

CAUTION! If instead of pressing the START/STOP key you perform one of the following actions THE DOOR LOCK WILL NOT BE RELEASED immediately:



- Pressing the EMERGENCY STOP
- Disconnecting the ON/OFF switch
- Disconnecting the SWITCH DISCONNECTOR

9.2. Manual releasing the safety lock



WARNING:

This procedure is recommended in problems caused by a failure to realise the door of the machine. It should only be carried out by the Authorised Technical Service except in emergency situations.

Specific information for HS-6023, HS-6024, EH055, EH060, RMS/RMG628, REM/RMG070 models.

Before disassembling the door of the washing machine:

- Check that the bath level does not exceed the door opening level.
- Close and mechanically interlock the manual water supply valves.
- Close and mechanically lock the manual steam inlet valve (steam heated washing machines)
- Disconnect and mechanically lock the External Automatic Switch or the of the washing machine disconnector switch.

In order to release the safety lock manually, completely insert a rod with a diameter of 0.2 inches (3 mm) and an approximate length of 4 inches (100 mm)into the bottom side of the safety lock cover, and at the same time turn the knob downwards (Fig. 9.3).

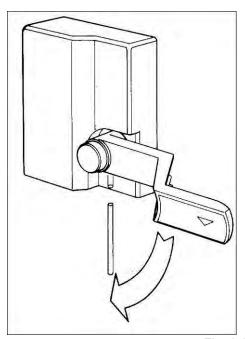


Fig. 9.3



9.3. Disassembling the door of the washing machine



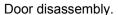
WARNING:

It should only be carried out by the Authorised Technical Service except in emergency situations. This procedure is recommended in problems caused by a failure to realise the door of the machine.

Specific information for RMS610, RMS/RMG613, RMS//RMG617, RMS/RMG623, RMS/RMG628, HS-6008, HS-6013, HS-6017, HS-6024, REM/025, REM/RMG033, REM/RMG040, REM/RMG055, REM/RMG070, EH020, EH030, EH040, EH060.

Before disassembling the door of the washing machine:

- Check that the bath level does not exceed the door opening level.
- Close and mechanically interlock the manual water supply valves.
- Close and mechanically lock the manual steam inlet valve (steam heated washing machines)
- Disconnect and mechanically lock the External Automatic Switch or the of the washing machine disconnector switch.



- Remove the protective caps from the hinge securing screws. (Fig. 9.1). On RMS/RMG628, REM/RMG070, HS-6024 and EH040 models, the plastic protector has to be removed first (Fig.9.2/A).
- Remove the hinge securing screws (Fig. 9.3).

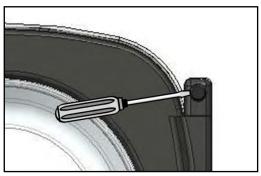


Fig. 9.1

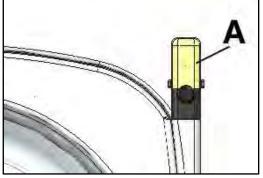


Fig. 9.2



Fig. 9.3

74





9.4. What to do when ...

Some of the washing machine's operating problems can be solved by the user intervention. These problems are detailed below.

Should you have any questions, remember to consult the Authorised Technical Service.

.....the wash cycle ends with the report: END/BAL

This report indicates that the final spin cycle is not possible because the load is unbalanced.

- Unload the machine and reload it.
- Begin the wash cycle and accelerate the program to the last phase.
- The washing machine will repeat the last spin cycle without refilling with water.
- If the problem persists, or occurs often, contact the Authorised Technical Service.

.....the machine makes a strange noise during the spin cycle

- Check the levelling of the machine. See Instruction Manual for Installation.
- Tighten the locking screws on the outside panels.
- If fault persists, contact the Authorised Technical Service.

.....the door is leaking

Clean the door seal of any possible deposits or remains of linen.

.....there is water leaking inside the washer cabinet

- Check the outlet draining pipe.
- Check the seals on the water inlet hoses; tighten the connection couplings.
- Check the condition of the door seal and check whether there are any ruptures.
- If the problem persists, seal all of the water inlets and contact the Authorised Technical Service.

.....you have forgotten the access code for the advanced mode

Contact the Authorised Technical Services.

.....the clock (option) stops working correctly. Possible battery failure. Contact the Authorised Technical Services.

Cod. 523340

Rev. 11/1218



9.5. System alarms

The safety of the washing machine in use requires the machine to monitor itself closely for any possible anomalies. These anomalies are reported in the form of alarms.

The **ALM** message will appear on the washing machine's display alternating with the specific alarm report.

DISPLAY REPORT	LIKELY CAUSE	PROCEDURE			
ALM/A-*	Faulty water inlet	Check water entry pressure. Check the manual water inlet valves. Check the status of the filters in the solenoid valves. (Refer to section 10: Maintenance)			
	Defect in the solenoid valves Defect in the level control system	Contact Authorised Technical Services.			
	Machines with pump drain: obstruction of the draining pump	Contact Authorised Technical Services.			
ALM/E	Anomaly in the drain system Error in drain configuration	Check the status of the washing bath's output hoses. Contact Authorised Technical Services.			
ALM/HOT	Inadequate stop of the washing machine with bath at high temperature Excessive temperature when machine is stopped Anomaly in the heating system	Close the door of the washing machine to allow opening of cold water valve. Press START/STOP key to drain the bath and access the door opening. Repeat this operation until the alarm report disappears. If the alarm report does not disappear after five attempts, disconnect the general power supply and close the water inlet manual valves. Contact AUTHORISED TECHNICAL SERVICES.			
ALM/L	Leakage in the solenoid valve Bath level with machine idle	Close manual water inlet valves. Contact AUTHORISED TECHNICAL SERVICES.			
ALM/SL	Bath level exceeded	Close manual water inlet valves. Contact AUTHORISED TECHNICAL SERVICES.			
ALM/C	Defect in the temperature probe Error in the heating configuration Defect in the heating circuit	Contact AUTHORISED TECHNICAL SERVICES.			
ALM/Prob	Defect in the temperature probe	Contact AUTHORISED TECHNICAL SERVICES.			
ALM/BAL	Defect in the unbalance control switch	Contact AUTHORISED TECHNICAL SERVICES.			
ALM/VAR*	Disconnection of the motor's thermal protection Alarm set off by the inverter	Contact AUTHORISED TECHNICAL SERVICES.			
ALM door	Faulty door lock	Contact AUTHORISED TECHNICAL SERVICES.			
Hot	Interruption of the program using the START/STOP key with the bath at high temperature	The washing machine will automatically accept cold water and will not allow the door unlock. When the bath temperature is below 45 °C (133 °F) the bath will drain and the safety door lock will be released.			
door	Door badly closed	Open and close the door.			

Cod. 523340 Rev. 11/1218



10. MAINTENANCE



Caution

- The users must refrain from carrying out actions reserved for the Authorised Technical Services.
- Before performing any work on the washing machine, disconnect and mechanically lock the external switch, and close and mechanically lock the manual water inlet valves.
- Check that the temperature of the parts to be handled represents no risk of burns.
- The dispenser may contain residues of chemical products. In cleaning operations, avoid direct contact with the skin and protect the eyes.
- The draining pump and valve may contain residual water. When handling these components, avoid direct contact with the skin and use eye protection.
- Remember to reassemble ALL of the panels and replace them correctly after any maintenance
- It is highly recommended to ask the Authorised Technical Service for a register or report of all the maintenance and service work done on your washer.

Operations described

USER-MAINTENANCE INSTRUCTIONS

- Cleaning the washer (Section 10.1)
- Cleaning the door seal (Section 10.2)
- Cleaning the solenoid valve filters (Section 10.3)
- Checking safety devices (Section 10.4)



ONLY TO BE PERFORMED BY THE AUTHORISED TECHNICAL SERVICE

- Cleaning the dispenser (Section 10.5)
- Cleaning the drain pump (Section 10.6)
- Checking the condition of the bearing housing seals (Section 10.7)
- General overhaul (Section 10.8)

10.1. Cleaning the washer

- We recommend cleaning the outside of the washing machine periodically. Use a damp cloth or sponge.
- To remove grease marks use a neutral soap and rinse well.
- Never use aggressive products, solvents, abrasive scourers or tools that may scratch or deteriorate the external surface of the washing machine.

10.2. Cleaning the door seal

- Use a cloth or sponge moistened in water.
- Be especially careful to remove traces of laundry products or pieces of fabric that could be caught between the folds of the seal.
- Never use abrasive products or tools that could cut or damage the seal.

Cod. 523340

Rev. 11/1218



10.3. Cleaning the solenoid valve filters



Only by qualified personnel

Required tools:

- Disassembly of the fittings: Slip-joint pliers or pipe spanner diam. 1-½ in. (35 mm)
- Disassembly of the filter supports: spanner 1-3/8 in (34 mm)
- Disassembly of the filters: pliers

Steps to follow

- Disconnect and mechanically lock the external switch. Close and mechanically interlock the manual water supply valves.
- To avoid the risk of burns, check the temperature of the hot water inlet hose.
- Disassemble the fittings that connect the hoses to the washing machine.
- Disassemble the filter supports (according to model).
- Remove the filters from their housings and clean the filters with pressurised water. Refit them in their housings.
- Assemble the solenoid valve supports (according to model).
- Assemble the hoses in their corresponding inputs. Tighten the fittings.
- Connect the external switch, open the manual water input valves and check the water-tightness of the coupling.

10.4. Checking safety mechanisms

10.4.1. Checking the door lock

Check the door safety lock device on a DAILY basis.



CAUTION. Only by qualified personnel

Take great care in checking the safety mechanisms.

Carry out the check described below while the drum is turning at washing speed and never at a higher speed.

If there is a failure in the door lock, never place one's hand in the loading area of the washer.

Checking procedure:

Disconnect the **ON** switch. The display is off.

Close and mechanically interlock the manual water supply valves (and steam inlet valve in washers with this option included).

Open the washing machine door.

Connect the **ON/OFF** switch. The display will read **door**.

Close the door.

Select and start a wash cycle.

About a minute after starting the cycle, check that the door is locked.

Press the **START/STOP** key to finish the check.

After a safety period of no longer than 30 seconds has passed, the door lock will be released.

The check is completed.

If no anomaly has been detected, open the fluid inlet valves.



CAUTION

If anything other than that was described is detected during the operation, disconnect the washer, do not use it, and contact the Authorised Technical Service **URGENTLY**.

Cod. 523340

78



10.4.2. Checking the emergency stop

(Only models with Emergency Stop Button)

Check the Emergency Stop on a WEEKLY basis.

Checking procedure:

Connect the **ON/OFF** switch. The display will read **door**.

Close the door. Select and start a wash cycle.

About a minute after starting the cycle, activate the EMERGENCY button. The buzzer will sound and the drum will stop rotating. The display will read ALM EMER.

Unlock the Emergency Stop button by turning the activation in the direction of the arrows, and press the START key to resume the operation of the washing machine.

After a safety period of no longer than 3 minutes has passed, the washing machine will resume operation.

Press the **START/STOP** key to end the washing cycle. The check is completed.



CAUTION

If anything other than that was described is detected during the operation, disconnect the washer, do not use it, and contact the Authorised Technical Service URGENTLY.

Cod. 523340



10.5. Cleaning the dispenser



Only to be performed by the Authorised Technical Service

- Disconnect and mechanically lock the external switch. Close and mechanically interlock the manual water supply valves.
- Clean the dispenser by using a cloth or sponge dampened with water. Warm water makes cleaning easier. Never use abrasive products, solvents or tools that could scratch or damage the dispenser.

Once the dispenser cleaning and assembly operations are finished:

- Connect the external switch and open the manual water inlet valves.
- Start a washing program that uses a bleaching agent and softener and check that both compartments drain properly.

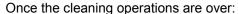
10.5.1. Washers with front dispenser

Required tools:

Unscrewing the fastening tabs: Torx T20 screwdriver

Disassembly and assembly:

- Open the dispenser drawer and loosen the screws on the retaining tabs visible along the bottom (Fig. 10.1).
- Completely remove the drawer and dismount the siphon tubes from the liquid compartment by pulling them upwards.



- Replace the siphon tubes and replace the drawer in its housing.
- Refit the fastening tabs and check that the drawer cannot be completely removed.

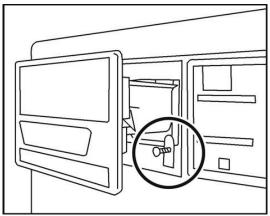


Fig. 10.1

10.5.2. Washers with top dispenser

Disassembly and assembly

- Open the fastening clasps on the top cover. The dispenser is now accessible.
- Detach the siphon tubes from the liquid compartment by pulling them upwards.
- To clean the lower basin, remove the leak seal and separate the two dispenser bodies by separating the side lips (Fig. 10.2).

Once the cleaning operations are over:

- Refit the two dispenser bodies and check that the side lips fasten both pieces.
- Replace the siphon tubes.
- Check that the dispenser is set well in its bracket.
- Check the condition of the top cover seal. If seal is damaged, deformed or has lost elasticity, call the AUTHORISED TECHNICAL SERVICE for replacement.
- Replace the seal. Fit the top cover. Close the clasps.

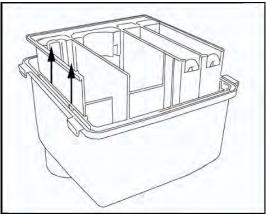


Fig. 10.2



VERY IMPORTANT

The dispenser protection seal is necessary to prevent humidity and corrosion inside the machine and the premature damage of the electrical and electronic circuits of machine control.



10.6. Cleaning the drain pump

(Drain pump washers. Fig. 10.3)



Only to be performed by the Authorised Technical Service

Required tools. Disassembly of the lower front panel: Torx. T25 screwdriver

- Before disassembling the lower front panel of the washing machine, disconnect and mechanically lock the external switch, and close and mechanically lock the manual water inlet valves.
- Empty any residual water contained in the drain ducts, placing the corrugated rear tube horizontally on the floor. The water will come out of the end.
- Disassemble the lower front panel. The draining pump is accessible.
- Turn the filter counter-clockwise and separate it from the pump body.
- Clean the filter and any possible deposits from the inside of the pump body.
- Assemble the filter and the draining pump.
- Replace the bottom panel.
- Connect the external switch and open the manual water inlet valves.
- Begin a washing program and check that there are no water leaks.

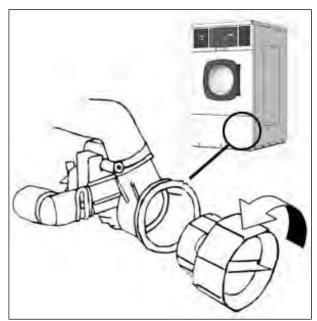


Fig. 10.3



The bottom front cover is a stabilising element of the washer cabinet. Make sure that it is properly fitted and fastened.

10.7. Checking the condition of the bearing housing seals



Only to be performed by the Authorised Technical Service

At regular intervals check that no water is leaking out of the bearing drain pipe located at the back of the washer at the bottom. Water loss indicates that the seals are in poor condition and need to be replaced.

10.8. General Overhaul



Only to be performed by the Authorised Technical Service

- As preventive maintenance action, it is very important to request the Authorised Technical Service for a periodic overhaul of the washing machine.
- Recommended periodicity: once a year or every 3000 washing cycles.
- When performing this overhaul on **HS-6008** / **EH020** models, due to the wear and tear it is subject to, we recommend carefully checking the door seal and replacing it if wear is noticed.

Cod. 523340 Rev. 11/1218

81



11. WITHDRAWING FROM SERVICE



- Removing the washer from service requires a specialised company.
- Never release the washer unsecured.
- To release the washer and carry out subsequent transportation, refer to the same specifications and cautions indicated for Installation.

When removing the machine from service:

- Disconnect and mechanically lock the external switch. Remove the supply cables.
- Close and mechanically interlock the manual water supply valves. Remove the water supply hoses.
- Disassemble the drain outlet pipe and empty any residual water left in the washing machine.
- Assemble the shipping restraints.
- Dismantle the door of the washing machine (consult the Authorised Technical Service).

Dismantling

Most of the machine's components are made of recyclable or recoverable materials.

The injected pieces bear information on the materials that were used to make them.

The main materials are:

- Steel plates
- Stainless steel plate
- Grey cast iron
- Aluminium
- Glass
- Polypropylene (PP)
- Ethylene Propylene (EPDM)
- ABS
- Copper
- Electronic components



Management of waste from electronic devices

In compliance with Directive 2002/96/EC on the management of waste from electronic devices, it is the obligation of the manufacturer to warn that:

The electronic components installed in the washing machine, must be dismantled and delivered to treatment facilities authorised for this purpose.

Cod. 523340

Rev. 11/1218





ON-PREMISE LAUNDRY HIGH-PERFORMANCE SOFT-MOUNT WASHER-EXTRACTORS

EH030 | EH040 | EH060 | EH080

E-Series Washers, in 30-, 40-, 60- and 80-pound capacities, offer an easy-to-install freestanding design, highly programmable controls and superior energy efficiency. Designed to reach extract speeds up to 400 G-force, E-Series Washers remove more water from every load, cutting dry time and catapulting laundry productivity. Simple to use, E-Series Washers properly clean virtually any fabric type in considerably less time, using less labor. Robustly engineered, E-Series Washers are backed by an industry-leading 5/3-year ContinentalCare Warranty.

ZERO-IMPACT INSTALLATION

The freestanding design of E-Series allows for quick installation and same-day operation. Unlike hardmount washers, there is no need to bolt E-Series Washers to concrete foundations. The machines are constructed using a Multi-Directional Springs (MDS) system that absorbs 95 percent of all vibrations during the wash process. This allows installation in unconventional locations, including rooms with in-floor heat and second-story laundries — all with little or no floor preparation or cost. Moreover, the freestanding design allows laundries to easily relocate E-Series Washers with zero impact on the facility.

PROVEN CONSTRUCTION, DURABILITY & LONGEVITY

E-Series Washers feature durable AISI-304 stainless steel inner and outer drums designed for constant use. The front, side and top panels are constructed of steel and coated with Continental's unique Titan Steel Finish* for superior appearance and corrosion resistance. Each component is engineered with as few welds as possible for unmatched strength. The oversized door, which allows for easy loading and unloading, is also equipped with a heavy-duty, bolt-style hinge to withstand the rigors of constant use. Rounded cabinet corners, oversized bearings and a quality sealing system ensure years of trouble-free use.

EASE OF MAINTENANCE

We've simplified maintenance requirements on our E-Series line, and simultaneously, ensured accessibility of components. The top panel of the washer is easily removed without interfering with chemical dispensers. The drain is easily accessible via the removal of the front panel. Bearings are lubricated for a lifetime, the poly-v belt needn't be tightened and bearings and seals are easily replaced without removing the washer drum.

SMOOTH TOUCH

This system of deep-punched holes, without sharp edges, ensures that the linen is treated delicately. SmoothTouch aids the evacuation of water during the final spin, resulting in very low residual moisture levels.

SUPERIOR WASH QUALITY

E-Series technology allows for superior wash quality using considerably less water than many competitive washers. E-Series Washers are designed without a sump — a water containment area at the base of the washer. This saves up to 3 gallons of water with each fill when compared to machines equipped with an outer tub sump. Less water used equates to lower water-heating costs and reduced chemical usage.

AquaFall — Advanced engineering also allows E-Series Washers to conserve even more water via the exclusive AquaFall™ system. With AquaFall, water is released into the load through holes in the drum lifters. As the drum turns, the lifters release water from above for better saturation and rinsing using less water and time. Less water used equates to considerable savings in water usage and water heating costs!

AquaMixer — Continental's AquaMixer™ system further improves wash action by mixing hot and cold water to achieve precise bath temperatures — saving energy while minimizing hot water consumption and reducing wash time.











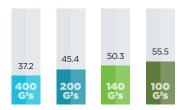
DELIVER MORE USING LESS

Whether you're replacing or buying new, highly efficient laundry equipment may seem like a big investment up front, but the monetary investment will pay for itself in no time through utility efficiencies and increased staff productivity.

LESS WATER REMAINING AFTER EXTRACT

The freestanding design of E-Series enables extraction speeds up to 400 G-force. The high-speed extract removes significantly more water from each load — decreasing dry time. With less moisture in the linen upon completion of the wash cycle, the time and utilities required to dry a load are significantly reduced and sometimes eliminated. Linen can then be directly transferred from the washer to a flatwork ironer

Assumptions: 100% load saturation; moisture retention: 62% - 400Gs, 76% - 200Gs, 84% - 140Gs, 92% - 100Gs.

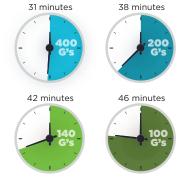


Pounds of Water Retained - 60lb Load

LESS DRY TIME

Because less water is retained in linen, dry time is reduced and linen is exposed to less mechanical action and heat — reducing linen wear. Dryer operating time is also reduced — extending equipment life and slashing gas consumption.

Assumptions: Water removal rate of 1.2 lbs/minute.



Minutes of Dry Time - 75lb Dryer

LESS DRYER GAS USAGE

Reducing dry time can cut the gas consumed to dry a load by more than 33 percent! In turn, on-premise laundries will significantly decrease associated gas costs.

Assumptions: 11 loads/day, 2103 BTUs evaporates 1lb of water, \$1.54/therm (U.S. March 2018 National



Annual Gas Costs - 75lb Dryer

THE BOTTOM LINE? BOOSTED PRODUCTIVITY!

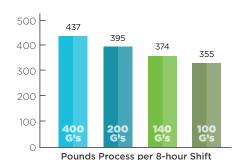
How can E-Series Washers produce more laundry per hour when compared to lower-performance machines? The answer lies in wash and dry throughput. E-Series Washers reach much higher extraction speeds — resulting in greater moisture removal, shortened dry time and boosted productivity. This boosts productivity, reduces labor costs and extends linen life by minimizing exposure to dryer heat and tumbling.

The two most important factors that impact the dayto-day laundry operation are equipment and labor. On average, labor accounts for 60 percent of the laundry room budget. By installing high-extract washers, one full time employee can process more pounds of soiled laundry per hour — reducing your cost to process laundry per pound.

Assumptions: 1 FTE at \$10/hour operating 3 60lb washers and 3 75lb dryers 8 hours a day 365 days per year



Reduced Cost per Pound









Load Assumptions: 60lb 100% cotton soiled load (60lb washer & 75lb dryer; 35 minute wash cycle time. All calculations have been derived from engineering information available to Continental Girbau at the time this brochure was produced. CGI makes no guarantee of actual results as conditions may vary.



SAME DAY OPERATION

The freestanding, soft-mount design of E-Series Washer-Extractors remove the variables associated with installation that can potentially cause problems in machine performance. Because there is no need to bolt the machines to the floor, concrete preparation, curing, grouting, hole drilling and foundation anchoring are eliminated. Continental's soft-mount design allows for fast installation. Once the machine is leveled and connected to utilities, it is ready for use! In addition, if your laundry has outgrown its space, or is in need of additional equipment, your soft-mount washer can be moved with zero impact on the existing space.

INNOVATIVE TECHNOLOGY

E-Series offers two programmable controls — the Logic and Intelligent. Both offer unrivaled flexibility by allowing programmability of nearly every variable of the wash process. In doing so, E-Series Washers can be programmed to maximize productivity and water savings, while meeting the cleaning specifications of a wide variety of fabric types. Automatic chemical injection ensures items are properly cleaned every time, eliminating fabric damage due to chemical overuse. Despite their advanced technology, the controls couldn't be easier to use. Once the programs are set, operators simply select a program number and push start.

INTELLIGENT (INTELI) CONTROL

Continental's most flexible and dynamic control ever, the Inteli allows complete control of every conditional aspect of the wash process. Featuring an LCD display with easy-to-understand icons that indicate cycle and programming status, the control can be programmed manually or by using a memory card. With 20 preprogrammed cycles and up to 79 individually modifiable cycles, users can control water temperature (by degree), wash rotation speed and duration, five on/off wash rotation combinations, multiple water levels, bath cool-down (by degree) and six programmable extract speeds. The Inteli is so flexible, it can be programmed for a wash cycle of as little as three minutes up to an extended program lasting hours or days. An auxiliary heat option allows bath water temperatures to be increased by degree.

E-Series 30- and 40-pound capacity models feature four standard (12 optional) chemical injection signals with programmable time dosing and flush. The 60- and 80-pound capacity E-Series Washers feature 12 standard chemical injection signals. The Intelialso supports independent flush control of its four compartment chemical hopper. Optional overnight soak and delayed start are also standard features.

- 99 programs (20 preprogrammed & 79 modifiable)
- Unlimited number of phases per program
- 6 selectable water levels
- Connection to an external dosing system
- Adjustable dosing signal length
- Simultaneous dosing of two products
- Failure check and alarm messages

- Test program
- Can manually adjust parameters during wash cycle
- Load Sensing adjusts water and detergent according to load
- Rinse Hold soak option
- Crease-guard thermal cool down
- Programmable for delayed start
- Individual cycle and program counter
- Gradual cool down



LOGIC (LOGI) CONTROL

The highly flexible Logi Control, available on EH030, EH040 and EH060 models, offers eight individually modifiable programs — each with up to nine baths including multiple pre-wash, wash and rinse cycles. Variables within each bath — wash temperature, water levels, cycle times, rotation and G-force extract speeds — can be individually programmed for maximum efficiency given the load type. E-Series Washers can also be programmed for automatic chemical injection, which ensures a consistent clean and eliminates chemical overuse and fabric damage.

- 8 modifiable programs
- Up to 9 phases per program
- 4 selectable water levels
- Connection to an external dosing system
- Failure check and alarm messages
- Test program
- Rinse Hold soak option
- Crease-guard thermal cool down
- Programmable for delayed start
- Gradual cool down





E-Series washers have dual safety features. The washer is only active if a closed door and locked door signal have been validated. In each washing cycle, the system checks the status (open/closed) of the safety controls.



An exclusive management and communication system — between the inverter, motor and microprocessor — ensures that the whole assembly is properly balanced for a longer life. GDrive works to save energy while reducing noise, vibration and component fatigue.

SERIES PRODUCT SPECIFICATIONS

	EH030	EH040	EH060	EH080
Capacity Ibs	30	40	60	80
Cylinder Diameter inch	24.4	27.6	30.1	32.5
Cylinder Depth inch	16.4	17.7	20.5	23.5
Cylinder Volume cuft	4.4	6.1	8.4	11.3
Net Weight Ibs	758	1049	1289	1499
Crated Weight Ibs	820	1102	1338	1583
Machine Width inch	31.3	34.2	38.4	41.5
Machine Depth inch	34.9	37.9	48.2	50.9
Machine Height inch	52.2	55.3	58.1	59.1
Door Opening inch	12.9	16.8	16.8	16.8
Floor to Door inch	20	20.3	22.9	23.6
Shipping Dimensions inch (WxDxH)	32.4 x 37.2 x 58.9	35.3 x 40 x 61.6	39.4 X 49.6 X 64.2	42.3 x 52 x 65.2
Control Options	Logic or Intelligent	Logic or Intelligent	Logic or Intelligent	Intelligent
Washing Speeds rpm Logic Control Intelligent Control	48 13/27/36/43/48	45 13/25/34/40/45	42 22/27/36/42	42 21/26/36/42
Spin Speeds rpm	99/400/600/800/1005	99/350/550/750/950	86/350/550/725/966	83/335/530/698/931
G-force	0.75/3/56/125/222/351	0.75/4/48/119/221/354	3.15/52/130/225/400	3.17/52/130/225/400
Drain Diameter inch	3	3	3	3
Water Inlets inch	3/4	3/4	2 @ 3/4	2 @ 3/4
Recommended Water Pressure PSI	30-60	30-60 (2-4)	30-60 (2-4)	30-60
Water Flow gal/min	16 (60)	16 (60)	16 (60)	16
Total Power kW	0.87	1.6	1.88	4.2



^{*} Product specifications and details are subject to change without notice. For the most current and complete technical specifications, architectural line drawings and warranty information, please visit www.continentalgirbau.com. E-Series Washer-Extractors are available in 20- to 255-pound capacities.

Continental Girbau Inc. (Continental) was established in 1995 as the North American subsidiary of the commercial laundry equipment manufacturer, Girbau Group, headquartered in Vic, Spain. Family owned, Girbau employs more than 600 people throughout its corporate headquarters in Vic and 15 subsidiaries throughout the world. It markets its industrial and commercial laundry products to more than 100 countries worldwide.

THE TOTAL LAUNDRY SOLUTION

Continental delivers the total laundry solution to vended, onpremise and industrial laundries throughout North America. As the provider of highly efficient batch tunnel washers, washer-extractors, drying tumblers, feeders, ironers, folders and related machinery, Continental serves the complete laundry production and efficiency needs of virtually any application. Proven durable and reliable, Continental laundry systems are engineered for unrivaled productivity, efficiency and ease of use.



OUR MISSION: YOUR SUCCESS

Continental's mantra – "Our Mission: Your Success" – reflects the company's commitment to its distributors and customers. We offer robust laundry systems backed by unrivaled customer care.

WARRANTY

E-Series Washer-Extractors are backed by an industry-leading 5/3-year ContinentalCare warranty.

SIZING & CONFIGURATION

Every laundry operation is unique, with a distinctive set of production and efficiency goals. Uniquely, E-Series Washer-Extractors offer the flexibility and programmability to meet any need — boosting production and lowering labor, water and energy usage. Continental's team of experts work closely with facilities to properly size equipment for improved laundry room efficiency and productivity.

FINANCING

Financing allows you to retain full ownership of your business and its assets while helping to preserve your cash, liquidity and revolving lines of credit for emergency use, working capital and other investments. Through CustomSelect™ Financing, Continental Girbau offers flexible financing and competitive fixed rates to all qualifying applicants.

ENVIRONMENTALLY FRIENDLY

Continental laundry products meet rigorous environmental and safety standards established by the International Organization for Standardization (ISO), including ISO9001 and ISO14001. Ever focused on laundry efficiency, Continental Girbau is a member of the U.S. Green Building Council (USGBC), a 501(c)(3) nonprofit that developed the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.





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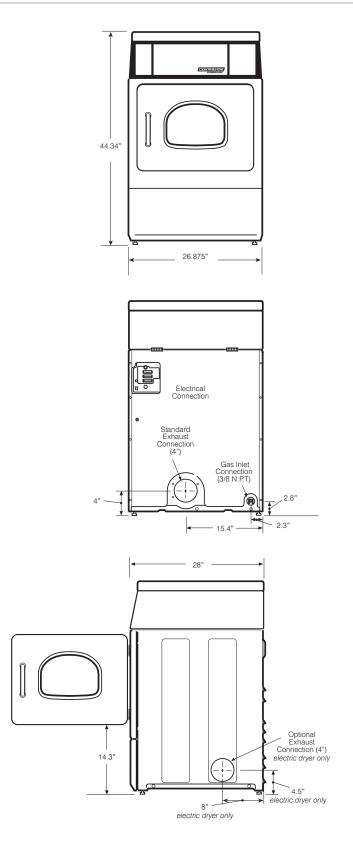
PRODUCT SPECIFICATIONS

KDE/KDG

LIGHT COMMERCIAL ON-PREMISE DRYER

PRODUCT SPECS	
Capacity Ibs	up to 25
Cylinder Volume cu ft	7
Net Weight <i>lbs</i> Electric Gas	150 155
Crated Weight <i>lbs</i> Electric Gas	160 165
Machine Dimensions <i>inch</i> WxDxH	26.875 x 28 x 44.34
Door Opening inch	23.5
Shipping Dimensions inch WxDxH	29.5 x 30.5 x 45
Motor Power hp	1/3
Exhaust Diameter inch	4
Exhaust Air Flow cfm	220
Gas Connection inch	3/8 NPT
Gas Heating <i>BTU/h</i>	25000
Available Voltages/Wire Conductor/# Electric Electric Gas	Amp 240/60/1, 3-prong cord, 30 240/60/1, 4-prong cord, 30 120/60/1, 3-prong cord, 15

^{*} Specifications subject to change without notice or obligation. Contact Continental Girbau at (800) 256-1073 for dimensions not shown or for clarification.





Laundry Soap Dispensing System

TYPE AND SOURCE TO BE DETERMINED BY OWNER AS TYPICALLY PROVIDED AT NO EXPENSE FROM JANITORIAL SUPPLIER.



PRODUCT DESCRIPTION

Wall-mounted unit dispenses up to four chemical products--four high flow, four low flow. Diluted product will dispense at rate of 2.5 GPM. Dispenser system is closed loop, reducing human exposure to chemicals. Easy to install--no tubes or metering tips to install. Water supply must be available to use dispenser. Designed for use with Zep® Professional Advantage+ chemicals.

BRAND NAME	Zep Professional
MANUFACTURER	Zep Inc.
MPN	1045914
UPC	723783210915
GTIN	00723783210915
SELLING UNIT	1/Each
DIMENSION	19.75" Length x 6.75" Width x 29" Height
PRODUCT LENGTH	19.75" Length
PRODUCT WIDTH	6.75" Width
PRODUCT HEIGHT	29" Height
REQUIRES	Water Supply

SOURCE: https://www.pjpmarketplace.com/zep-professional-advantage-4-1-wall-mount-dispensing-system-blue-plastic-metal-19-5x6-75x29.html



The Cleaning Station Gym Wipe + Hand Sanitizer Dispenser



FEATURES:

- Gym Wipes Dispenser or Paper Towel Dispenser with Interchangable Nozzles
- · Built-in shelf for foam hand sanitizer dispensers
- Hidden trash receptacle with removeable waste basket
- FREE Hand Sanitizer Dispenser Included
- Four shelves provide easy access to even more cleaning supplies (sold separately)
- · Base is weighted for stability and ease of mobility

SPECS:

- Weight: 37 lbs
- Dimensions: 47" h x 12" w x 17" d
- Trash Can Capacity: 4 gal
- · Material: Plastic

ORDERING INFORMATION

SKU # PRODUCT DETAILS

TCS-S-9325 The Cleaning Station (Silver)
TCS-B-9325 The Cleaning Station (Black)



Unmatched Customer Service



Wipe Cases Ship Free



Lowest Price Guarantee



Bulk Pricing Discounts



Happiness Guaranteed



Autoship Program



HAND SINKS SPECIAL PURPOSE



Conforms To NSF 61/9 Lead Free Requirements

Keyhole Bracket for easier installation and greater stability.

7-PS-72



Item #:	Qty #:
Model #:	
Project #:	





7-PS-64





7-PS-727 **CLASS 1 SECURITY INSTALLATION** (SP

7-PS-747 **CLASS 2 SECURITY INSTALLATION**









IMPORTANT: Faucet-mounted eyewashes require two motions to operate (turn on water, pull knob to activate eyewash flow). Therefore, Advance Tabco does not believe that these units meet the provisions of ANSI Z358.1-2004 as eyewash units. These units are intended solely as supplemental units in addition to dedicated, plumbed eyewash equipment installed in the workplace.

Faucet-mounted eyewashes should be used with cold or warm water only. Use of hot water might cause scalding.

Eyewash Faucets not to be used with Electronic Faucets.

FEATURES:

One piece Deep Drawn sink bowl design.

Sink bowl is 10" x 14" x 5".

All sink bowls have a large liberal radii with a minimum dimension of 2" and are rectangular in design for increased capacity. Keyhole wall mount bracket.

Stainless steel basket drain 1-1/2" IPS.

Splash mounted 4" O.C. gooseneck faucet furnished with aerator.

Specific Features:

7-PS-55 features eye wash faucet attachment.

7-PS-64 features tubular support brackets.

7-PS-72 is H.A.C.C.P. compliant hand sink featuring slow. self-closing, metering faucet with mixing valve.

7-PS-727 Unit totally enclosed. Bottom security panel provides access for installation and services. Vandal Proof Aerators. All fasteners are stainless steel tamper proof. Concealed drain. Heavy duty gooseneck faucet. Towel dispenser with hinged towel box with lock. Unit uses standard C-fold towels. Liquid Soap dispenser.

7-PS-747 Unit totally enclosed. Bottom security panel provides access for installation and services. Vandal Proof Aerators. All fasteners are stainless steel tamper proof. Concealed drain. Heavy duty gooseneck faucet.

CONSTRUCTION:

All TIG welded.

Welded areas blended to match adjacent surfaces and to a satin finish.

Die formed Countertop Edge with a 3/8" No-Drip offset. One sheet of stainless steel - No Seams.

MATERIAL:

Heavy gauge type 304 series stainless steel. Wall mounting bracket is galvanized and of offset design. All fittings are brass / chrome plated unless otherwise indicated.

MECHANICAL:

Faucet supply is 1/2" IPS male thread hot and cold.

WARNING:

Equipment that includes a faucet may expose you to chemicals, including lead, that are known to the State of California to cause cancer or birth defects or other reproductive harm. For more Info., visit www.p65warnings.ca.gov.



Customer Service Available To Assist You 1-800-645-3166 8:30 am - 8:00 pm E.S.T.

For Orders & Customer Service:

Email: customer@advancetabco.com or Fax: 631-242-6900

For Smart Fabrication™ Quotes: Email: smartfab@advancetabco.com or Fax: 631-586-2933

DIMENSIONS and SPECIFICATIONS

3159

FITTINGS SUPPLIED AS SHOWN TOL Overall: ± .500" Interior: ± .250" ALL DIMENSIONS ARE TYPICAL 7-PS-72 -17 1/4" 7-PS-64 -17 1/4" -8 5/8" 15 1/4" 10" 17 1/4" 10' Faucet Metered Faucet p 🖁 🧟 13" 25 lbs. 10 1/2 15 lbs. 1 1/2" -17 1/4" -7-PS-55 **EYE WASH DETAIL** 55/64"-27 FEMALE INLET 15 1/4" DIVERTER VALVE 10 (PULL KNOB TO ACTIVATE EYE WASH) (76mm) Faucet Eye Wash 1 1/2 Attachment 8" pod 13' AERATED OUTLET HEAD MAY BE ADJUSTED TO ANY DESIRED ANGLE REMOVABLE AERATOR 15 lbs. Mounting 7-PS-747 Detail 17 1/4" -23-1/4" 15-3/4 77 6 15 1/4" 10" 17-1/8" 15-1/8" Faucet **Security Skirt Enclosure** p Ba 23 1/2" 15 7/8" 7-PS-727 45 lbs. P-Trap **Unit with Towel Dispenser**



ADVANCE TABCO is constantly engaged in a program of improving our products. Therefore, we reserve the right to change specifications without prior notice.

STAINLESS STEEL



DROP-IN SINKSThree Compartments - FOR GENERAL PURPOSE USE

Sinks Includes Faucet & Drain

Item #: 3160 Qty #: 1 Model #: K55 Project #:

FEATURES:

One piece seamless Deep Drawn sink bowl design.

All sink bowls have a large liberal radii with a minimum dimension of 2" and are rectangular in design for increased capacity.

Self-Rim Design. Mounting clips provided accommodates all thicknesses of counter. (Quantity supplied varies based on drop in sink ordered).

Includes 4" O.C. $\mathbf{K\text{-}50}$ faucet (DI-3-1612 includes $\mathbf{K\text{-}53}$ faucet) & basket drain.

CONSTRUCTION:

Bowls fabricated from one sheet of stainless steel.

All bowls are Sound Deadened.

Units feature Advance Tabco's **Smart Finish**TM.

MECHANICAL:

Faucet supply is 1/2" IPS male thread.

Deck mounted faucets are furnished with aerator.

MATERIAL:

18 gauge type 304 series stainless steel.

Faucets are brass-nickel plated.

Stainless Steel 1-1/2" IPS basket drain.



STANDARD MOUNTING CLIPS

For countertops over 7/8" and up to 2" thick.

Replacement # K-28 (Per Sink)

Available Faucets & Accessories	Model #	Qty
Deck Mounted 8" Swing Spout. 4" O.C.	K-50	
Deck Mounted 12" Swing Spout. 4" O.C.	K-53	
Deck Mounted 8 1/2" Large Gooseneck. 4" O.C.	K-55	
Deck Mounted Swing w/Spray. 8" O.C.*	K-58	
Mounting Clips (Bag of 4).	K-28	

^{*}REQUIRES K-472 FAUCET HOLE REVISION



NOTE: Multi-Compartment Drop-In Sinks ARE NSF Approved when used in Mobile Food Carts and Kiosks only.







WARNING: Faucets on this page may expose you to chemicals, including lead, that are known to the State of California to cause cancer or birth defects or other reproductive harm. For more Info., visit www.p65warnings.ca.gov.



Customer Service Available To Assist You 1-800-645-3166 8:30 am - 8:00 pm E.S.T.

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For Smart Fabrication™ Quotes:

Email: smartfab@advancetabco.com or Fax: 631-586-2933

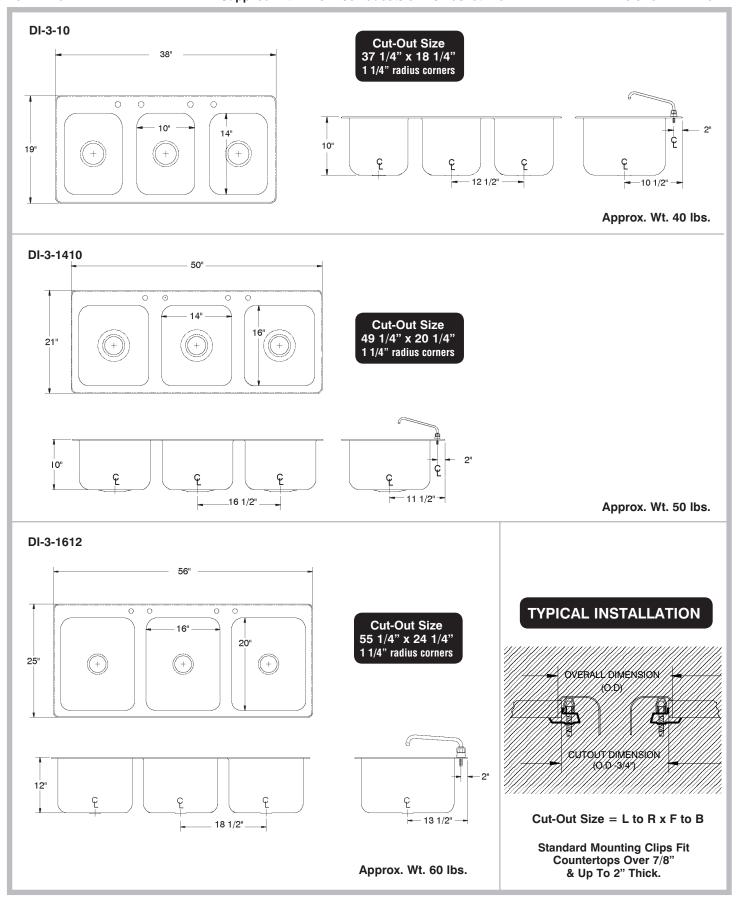
DIMENSIONS and SPECIFICATIONS

3160

TOL ± .125"

Supplied with Two K-50 Faucets & K-6 Basket Drain

ALL DIMENSIONS ARE TYPICAL





REF-A

PROLINE WALL HOOD



THIS IS AN EXAMPLE OF A HIGH END RESIDENTIAL EXHAUST HOOD (NON COMMERCIAL) SIZE AND FEATURES TBD

True to BlueStar's heritage as a manufacturer of commercial-quality cooking products for the home, we offer hood lines that combine heavy-duty construction with seamless design to offer uncompromised durability, functionality and beauty. BlueStar hoods are available in 24", 30", 36", 42", 48", 54", 60" and 66" width sizes and peak at 1400CFM.



PRODUCT FEATURES

- Handcrafted seamless construction with 16 gauge material
- Dishwasher safe stainless steel baffles
- Welded seamless corners
- Reversible top or rear exhaust
- Available in 750+ colors and finishes
- 12" duct cover available (Sold separately)
- Duct free recirculating kits available for all sizes
- Transition or collar required for installation (Included with hood)

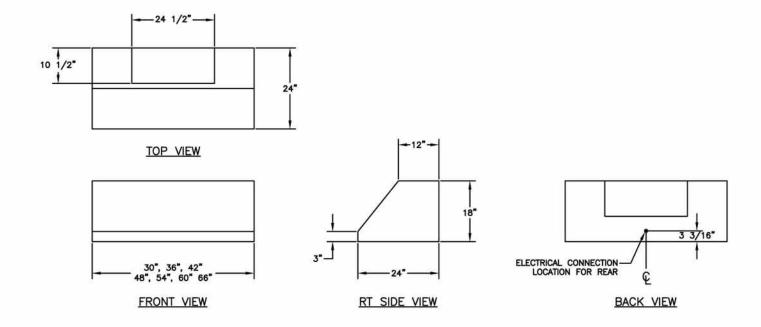
Blower Options:

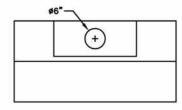
In-hood Blowers: 300, 600 & 1200CFM
In-line Blowers: 300, 600 & 1200CFM
Remote Blowers: 1000 & 1400CFM

24" Proline Hood	BS-PL24240 TS
30" Proline Hood	BS-PL30240 TS
36" Proline Hood	BS-PL36240 TS
42" Proline Hood	BS-PL42240 TS
48" Proline Hood	BS-PL48240 TS
54" Proline Hood	BS-PL54240 TS
60" Proline Hood	BS-PL60240 TS
66" Proline Hood	BS-PL66240 TS

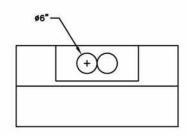
		IN-HOOD			IN-LINE			REMOTE		DISCHARGE	
MODEL	300	600	1200	300	600	1200	1000	1400	TOP	REAR	
BS-PL24240 TS				· ·							
BS-PL30240 TS	*		17#17	3≇			¥	35#33	**		
BS-PL36240 TS		•)(● ((i *		5 € 0 -	*	((•)	•		
BS-PL42240 TS	1				•		ŧ			•	
BS-PL48240 TS	**	÷	U#8	*		24:0	¥	3241	-	94.	
BS-PL54240 TS		*	0.00	#	. •	(*)	*1				
BS-PL60240 TS		•		*		(6)		•			
BS-PL66240 TS		*	1980	19		V•7	¥	3(4)		14.1	

VENTILATION HOOD DIMENSIONS





600 CFM BLOWER



1200 CFM BLOWER

BLOOMFIELD

MODEL 8792

8792 Gourmet 1000™ Dual Automatic Airpot Coffee Brewer

(with Hot Water Faucet)

Gourmet 1000™ Dual Airpot brewers offer volume brewing, proper extraction and holding capacity. Traditional electromechanical controls and a high level of component compatibility mean many years of dependable, quality brewing. These uniquely designed units eliminate flow control problems and resist clogging in adverse water conditions. Coffee is brewed into an airpot for easy transport to remote serving areas where the coffee will be preserved for optimal temperature and taste.



- **Dual brewer** will accomodate demand fluctuations and brewing variables.
- A high level of commonality of parts
 with other Bloomfield brewers will significantly
 reduce the inventory of spare parts required to
 service many body styles.
- Exclusive design provides easy access to components for quick, efficient service.
- Water volume adjustments can be made with ease; no tools required and no panels to remove.
- Ready-to Brew light indicated the proper water temperature to help eliminate guesswork in brewing.
- **Built-in pour over feature** provides flexibility of installation.
- Premium quality thermostat has a stainless steel bulb that recognizes water temperature extremely accurately and cycles less frequently.
- Superior sprayhead design spreads water over the coffee grounds, creating aggitation and a floating action that completely saturates the coffee to capture the full rich essence of every bean.



- Unique water valve with built-in flow control assures consistent operation for inlet water pressures between 20 80 p.s.i..
- Independent front mounted hot water faucet allows drawing of hot water without affecting coffee taste or brew cycle.
- One-piece drawn stainless steel water tank has a superior design for extended life.
- Rugged base rails provide stability and strength while minimizing brewer herght, and provides easy placement of airpot.
- High quality easy to clean stainless steel construction.
- Convenient tank heater on/off switches located on rear of unit provide energy saving options.

Accessories

Bloomfield offers a full line of airpots, thermal servers and coffee grinders.





8792.indd 1

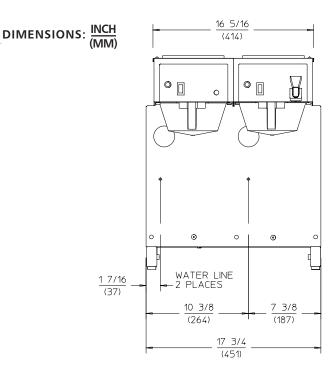


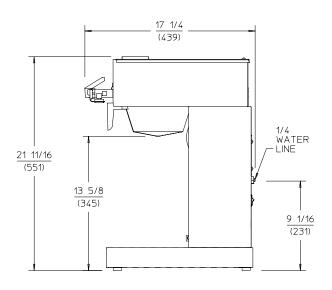
BLOOMFIELD



MODELS 8792







SPECIFICATIONS:

MODELS	WATTS	VOLTS	AMPS	PHASE	POWER SUPPLY CORD
* 8792	4000	120/240 4-WIRE	17	SINGLE	NONE

(

NOTE: Specifications are subject to change without notice and are not intended for installation purposes. See operation and maintenance manual for complete instructions.

ACCESSORIES: See the Bloomfield Brew Brew product catalog for a complete listing of brewers and accessories.



^{*} Also meets Canadian tandards

MODELS 1012, 1016, 1040, 1072

1012 E.B.C.™ Three Warmer In-Line Automatic Coffee Brewer(with Hot Water Faucet)

1016 E.B.C. Three Warmer In-Line Automatic Coffee Brewer (with Hot Water Faucet)

1040 E.B.C. Two Warmer
In-Line Automatic Coffee Brewer
(with Hot Water Faucet)

1072 E.B.C. Three Warmer Stepped Right Automatic Coffee Brewer

(with Hot Water Faucet)

The E.B.C.™ systems have added Electronic Brewer Control technology to our standard electro-mechanical brewers. Many of the same body configurations and parts of our standard electro-mechanical units were used, making service quick and easy. The E.B.C. system uses a touch keypad with switches and lights, plus an audible signal. The lights and signal guide the user through the different brewer operations.

Features

- After Hours Mode will automatically reduce water temperature when not in use, saving energy and increasing component life.
- Precise brewing temperature is established and maintained throughout the brew cycle, providing cold brew lockout and ensuring full flavored coffee and faster brewer recovery.
- Countdown Quality Timer™ will signal the end of preset coffee holding time.
- Brew cycle timer eliminates the risk of double brewing during brew cycle.
- A high level of commonality of parts with other Bloomfield models will significantly reduce the inventory of spare parts required to service many body styles.
- Exclusive design provides easy access to components for quick service.
- Ready-to-Brew light indicates the proper water temperature to help eliminate the guesswork in brewing.
- Built in **pour over feature** provides flexibility.
- Unique water valve with built-in flow control assures consistent operation at 20-80 p.s.i.





- **Electronic sensor** recognizs water temperature extremely accurately for more consistent product.
- Superior sprayhead design spreads water over the coffee grounds, creating agitation and a floating action that completely saturates the coffee to capture the full, rich essence.



BLOOMFIELD

MODELS 1012, 1016, 1040, 1072

- Water volume adjustment can be made with ease, no panels to remove or tools required.
- One-piece drawn stainless steel water tank has a superior design for extended life.
- Independent front-mounted hot water faucet allows drawing of hot water without affecting coffee taste or brewing cycle.
- Warming stations with porcelain enameled warmer plates position decanters securely and, with no exposed screw heads, will not scratch or scrape decanters.
- High quality easy to clean stainless steel construction.

Accessories

Bloomfield offers a full line of coffee warmers, grinders and glass decanters.







9253 STD

E925



SPECIFICATIONS:

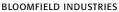
	MODELS	WATTS	VOLTS	AMPS	POWER SUPPLY CORD	DIMENSIONS
	1012	1800	120	15	NEMA 5-15P	21"D x 8 5/8"W x 18 7/8"H
	1016	3800	115/230 4 WIRE	17	NONE	21"D x 8 5/8"W x 18 7/8"H
	1040	1700	120	14	NEMA 5-15P	17"D x 8 3/4"W x 16 7/8"H
	1072	1800	120	15	NEMA 5-15P	17"D x 16 1/4"W x 16 7/8"H
 *	I 1012CA	1500	120	12.5	NEMA 5-15P	21"D x 8 5/8"W x 18 7/8"H
*	1040CA	1500	120	12.5	NEMA 5-15P	17"D x 8 3/4"W x 16 7/8"H
*	1072CA	1500	120	12.5	NEMA 5-15P	17"D x 16 1/4"W x 16 7/8"H

■●■ Meets Canadian standards.

NOTE: Specifications are subject to change without notice and are not intended for installation purposes. See operation and maintenance manual for complete instructions.

ACCESSORIES: See the Bloomfield Brew Brew product catalog for a complete listing of brewers and accessories.







(888) 356-5362 • FAX (800) 356-5142 • www.wellsbloomfield.com • Export: (775) 689-5700 • (775) 689-5972 5850 KEATON CRESCENT, MISSISSAUGA, ONTARIO L5R 3K2 CANADA • (905) 507-1700 • FAX (905) 507-1777 • www.bloomcan.com







OWNER TO DETERMINE IF THEY PREFER BULK (REACH IN) Manitowoc DISPENSING OR HOTEL TYPE DISPENSING



Indigo™ Series 322 Ice Cube Machine

ID-0322A _____ID-0323W I_{IY-0324A} Model: Indiao Series i-322

Ice Machine Flectric

115/60/1 standard. (208-230/60/1 and 230/50/1 also available)

Minimum circuit ampacity:

Air-cooled: 11.5 1ph Water-cooled: 10.7 1ph

Maximum fuse size:

Air-cooled: 15 amps Water-cooled: 15 amps

Ice Machine on B-320 Bin

Specifications

BTU Per Hour:

3,300 (average) 4,500 (peak)

Refrigerant:

R-404A CFC-free

Operating Limits:

- Ambient Temperature Range: 35° to 110°F (1.7° to 43.3°C) Water Temperature Range: 35° to 90°F (1.7° to 32.2°C)
- · Water Pressure Ice Maker Water In: Min. 20 psi (137.9 kPA) Max. 80 psi (551.1 kPA)

Designed for operators who know that ice is critical to their business, the Indigo™ Series ice machine's preventative diagnostics continually monitor itself for reliable ice production. Improvements in cleanability and programmability make your ice machine easy to own and less expensive to operate.

J_{IY-0325}W

- Space-Saving Design Up to 350 lbs. (159 kgs.) daily ice production and only 22" (55.88 cm) wide.
- Intelligent Diagnostics provide 24 hour preventative maintenance and diagnostic feedback for trouble free operation.
- Acoustical Ice Sensing Probe for reliable operation in challenging water conditions.
- EasyRead Display communicates operating status, cleaning reminders, and asset information through a blue illuminated display.
- Programmable Ice Production by On/Off Time, Ice Volume or Bin Level (with accessory bin level control) further improves energy efficiency and savings.
- Easy to Clean Foodzone Hinged front door swings out for easy access. Removable water-trough, distribution tube, curtain, and sensing probes for fast and efficient cleaning. Select components made with AlphaSan® antimicrobial.
- DuraTech™ Exterior provides superior corrosion resistance. Stainless finish with innovative clear-coat resists fingerprints and dirt.
- Available LuminIce™ Growth Inhibitor controls the growth of bacteria and yeast within the foodzone.



Ice Shape



Half Dice (.95 x 2.86 x 2.22 cm)



Dice ½" x ½" x ½" (2.22 x 2.22 x 2.22 cm)













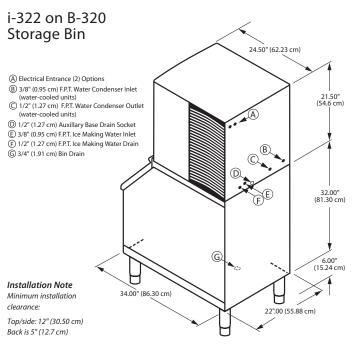
COMPANY WITH QUALITY SYSTEM

2110 South 26th Street PO Box 1720 Manitowoc, WI 54221-1720 USA Tel: 1.920.682.0161 Fax: 1.920.683.7589 www.manitowocice.com









Space-Saving Designs



	i-322 B-320	i-322 B-420
Height	59.50" 151.13 cm	71.50" 181.61 cm
Width	22.00" 55.88 cm	22.00" 55.88 cm
Depth	34.00" 86.30 cm	34.00" 86.30 cm
Bin Storage	210 lbs. 95 kgs.	310 lbs. 141 kgs.

Height includes adjustable bin legs 6.00" to 8.00", (15.24 to 20.32 cm) set at 6.00" (15.24 cm).

Specifications

			Ice Production 24 Hours		Power Usage kWh/100 lbs.	Water Usage/100 lbs. 45.4 kgs. of Ice	ENERGY	
	Model	Ice Shape	70°Air/ 50°F Water	90°Air/ 70°F Water	@90°Air/70°F	Potable Water	STAR*	
۵	dice		335 lbs.	225 lbs.	7.40	23.9 Gal.		
30LE	ID-0322A		152 kgs.	102 kgs.	7.49	90.5 L		
R-C	ID-0322A IY-0324A	IY-0324A half-dice	350 lbs.	230 lbs.	7.32	23.9 Gal.		
Ā			159 kgs.	104 kgs.		90.5 L		
	ID-0323W	dice	330 lbs.	270 lbs.	6.19	23.9 Gal.	NA	
)TED	ID-0323VV		150 kgs.	122 kgs.	0.19	90.5 L	INA	
OO-	IV 0225W	half-dice	350 lbs.	290 lbs.	5.94	23.9 Gal.	NIA	
MATER (10-0323W)			159 kgs.	132 kgs.	5.94	90.5 L	NA	
Ž	* Water-cooled Condenser Water Usage / 100 lbs /45 4 kgs Of Ice 193 gal/731 I							

* Water-cooled models are excluded from ENERGY STAR qualification.

Order ice storage bin separately.

Accessories

LuminIce™ **Growth Inhibitor** reduces yeast and bacteria growth for a

cleaner ice machine.



Bin Level Control Allows ice bin level to be automatically set. Built-in LED light illuminates bin.



Arctic Pure® Water Filters Reduces sediment and chlorine odors for

better tasting ice.



AuCS® schedules and performs routine ice machine cleaning automatically.



4775 E ©2014 Manitowoc 2/14. Continuing product improvement may necessitate change of specifications without notice

2110 South 26th Street PO Box 1720 Manitowoc, WI 54221-1720 USA Tel: 1.920.682.0161 Fax: 1.920.683.7589 www.manitowocice.com





Project #: _			
Item #:			



Model RCS10TS shown

Medium Volume This category of microwave is ideal for...

Applications:

- Pizza restaurants
- Casual dining
- Clubs
- Deli

Defrost:

- Defrosts most frozen food products

All ACP, Inc. commercial ovens are backed by our Culinary Center. Call us with any question regarding food preparation, menu development and cooking times. 866-426-2621.

Medium Volume

Amana Commercial Microwave Model RCS10TS

Power Output

- 1000 watts of power.
- Five power levels for consistent, delicious results for frozen, refrigerated and fresh foods - from the freezer to table in minutes.

Easy to Use

- Up to 100 programmable menu items simplifies cooking and ensures consistent results.
- Four stage cooking option for easy one-touch cooking.
- Multiple quantity pad calculates the proper cooking times for multiple portions.
- User friendly touch controls are easy to use.
- Time entry option for added flexibility.
- Digital display with countdown timer for simple operation and "at-a-glance" monitoring.
- Braille touch pads are ADA compliant.
- See-through door and lighted interior for monitoring without opening the door.
- 1.2 cubic ft. (.034m³) capacity accommodates a 14" (356 mm) platter, prepackaged foods and single servings.
- Stackable to save valuable counter space.

Easy to Maintain

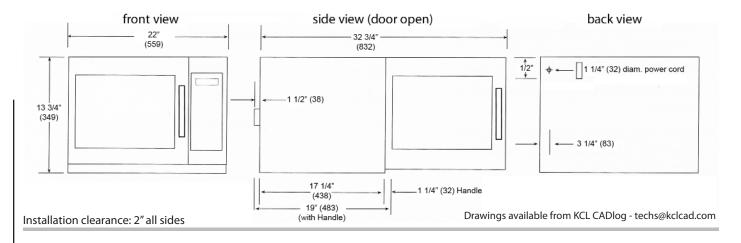
- Stainless steel exterior and interior for easy cleaning and a professional look.
- Non-removable air filter protects oven components.
- Constructed to withstand the foodservice environment.
- Limited 3 year warranty.
- Backed by the ACP, Inc. 24/7 ComServ Support Center, 866-426-2621.
- UL and ETL Listed.







Amana Commercial Microwave Model RCS10TS | Medium Volume



Specifications			
Model	RCS10TS	UPC Code 728	3028020724
Configuration	Countertop		
Control System	Touch		
Programmable Control	10		
Settings Programmable	100		
Max. Cooking Time	60:00		
Power Levels	5		
Defrost	Yes		
Time Entry Option	Yes		
Microwave Distribution	Rotating anter	ına, top	
Magnetron(s)	1		
Display	LED		
Stackable	Yes		
Stage Cooking	Yes, 4		
Interior Light	Yes		
Door Handle	Grab & Go		
Signal	End of cycle, adjustable		
Air Filter	Non-removable with cleaning reminder		
Multiple Portion Setting	Yes, X2		
Exterior Dimensions	H 13¾" (349.25	5) W 22" (558.8)	D*19" (482.6)
Cavity Dimensions	H 8½" (216)	W 14½" (368.3	3) D 15" (381)
Door Depth	34" (864 mm), 90°+ door open		
Usable Cavity Space	1.2 cubic ft. (.034 m ³)		
Exterior Finish	Stainless steel		
Interior Finish	Stainless steel		
Power Consumption	1550 W, 13 A		
Power Output**	1000 W** Microwave		
Power Source	120V, 60 Hz, 15 A single phase		
Plug Configuration / Cord	NEMA 5-15	5 ft. (1.5m)	
Frequency	2450 MHz		
Product Weight	41 lbs. (18.6 kg	.)	
Ship weight (approx.)	48 lbs. (21.8 kg.)		
UPS Shippable	Yes		
Shipping Carton Size	H 17 ¼" (432)	W 25 ½" (660)	D 20 ½" (508)

Measurements in () are millimeters

- * Includes handle
- ** IEC 705 Tested

Form # ACRR0968 Rev. 1/10

Specifications

Commercial microwave 10 touch pad control panel shall be programmable with the ability to program up to 100 menu items with two multiple portions. Touch pad shall include Braille for ADA compliance. Cooking timer shall be 60 minute, countdown style with a time entry option and an adjustable end of cycle audible signal. LED display shall be a backlit. There shall be 5 power levels, including defrost and 4 cooking stages. Microwave output shall be 1000 watts distributed by one magnetron with a rotating top antenna to provide superior even heating throughout the cavity. Durable door shall have a tempered glass window and a grab and go handle with a 90°+ opening for easy access. An interior light shall facilitate monitoring without opening the door. The large 1.2 cubic ft. (.034 m³) cavity shall accommodate a 14" (356 mm) platter. Interior ceramic shelf shall be sealed and recessed on oven bottom to reduce plate-to-shelf edge impact. Oven shall have a stainless steel interior and exterior and be stackable to save counter and shelf space. Front air filter shall be permanently affixed to the front of the oven and have a clean filter reminder. Microwave oven shall comply with standards set by the U.S Department of Health and Human Services, UL for safety and ETL for sanitation.



Warranty

Limited 3 year warranty:

Year 1 - parts, labor, and travel are covered.

Years 2 - 3 - magnetron tube (part only) is covered.

Service

All products are backed by the ACP, Inc. 24/7 ComServ Support Center.





Printed in the U.S.A.

INSTALLATION INSTRUCTIONS 30" (76.2 CM) FREESTANDING ELECTRIC RANGE WITH DOUBLE OVENS

INSTRUCTIONS D'INSTALLATION POUR CUISINIÈRE ÉLECTRIQUE AUTOPORTANTE AVEC FOURS DOUBLES DE 30" (76,2 CM)

Table of Contents/Table des matières

RANGE SAFETYINSTALLATION REQUIREMENTS	
Tools and Parts	
Location Requirements	
Electrical Requirements - U.S.A. Only	
Electrical Requirements - Canada Only	
INSTALLATION INSTRUCTIONS	
Unpack Range	
Adjust Leveling Legs	
Install Anti-Tip Bracket	6
Electrical Connection - U.S.A. Only	
Verify Anti-Tip Bracket Is Installed and Engaged	
Level Range	12
Complete Installation	13
Remove Oven Door(s)	
Moving the Range	14



RANGE SAFETY

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING." These words mean:

ADANGER

You can be killed or seriously injured if you don't immediately follow instructions.

AWARNING

You can be killed or seriously injured if you don't follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

IMPORTANT:

Save for local electrical inspector's use.

IMPORTANT:

À conserver pour consultation par l'inspecteur local des installations électriques.

AWARNING



Tip Over Hazard

A child or adult can tip the range and be killed.

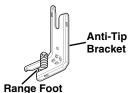
Install anti-tip bracket to floor or wall per installation instructions.

Slide range back so rear range foot is engaged in the slot of the anti-tip bracket.

Re-engage anti-tip bracket if range is moved.

Do not operate range without anti-tip bracket installed and engaged.

Failure to follow these instructions can result in death or serious burns to children and adults.



To verify the anti-tip bracket is installed and engaged:

- · Slide range forward.
- Look for the anti-tip bracket securely attached to floor or wall.
- Slide range back so rear range foot is under anti-tip bracket.
- See installation instructions for details.

INSTALLATION REQUIREMENTS

Tools and Parts

Gather the required tools and parts before starting installation. Read and follow the instructions provided with any tools listed here.

Tools Needed

- Tape measure
- Level
- Phillips screwdriver
- Flat-blade screwdriver
- Wrench or pliers
- 3/8" nut driver
- Hand or electric drill
- 1/8 (3.2 mm) drill bit

Parts supplied

Check that all parts are included.

- 3 10-32 hex nuts (attached to terminal block)
- 3 Terminal lugs
- Oven racks
- 2 #12 x 1⁵/₈" (4.1 cm) screws (for mounting anti-tip bracket)
- Anti-tip bracket (taped inside upper oven with package containing literature)

Anti-tip bracket must be securely mounted to back wall or floor. Thickness of floor may require longer screws to anchor bracket to sub floor. Longer screws are available from your local hardware store.

Parts needed

If using a power supply cord:

- A UL Listed power supply cord kit marked for use with ranges. The cord should be rated at 250 V minimum, 40 A or 50 A that is marked for use with nominal 13/8" (3.5 cm) diameter connection opening and must end in ring terminals or open-end spade terminals with upturned ends.
- A UL Listed strain relief.

Check local codes. Check existing electrical supply. See the "Electrical Requirements" section.

It is recommended that all electrical connections be made by a licensed, qualified electrical installer.

Location Requirements

IMPORTANT: Observe all governing codes and ordinances.

- It is the installer's responsibility to comply with installation clearances specified on the model/serial/rating plate. The model/serial/rating plate is located behind the control panel.
- To eliminate the risk of burns or fire by reaching over-heated surface units, cabinet storage space located above the surface units should be avoided. If cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5" (12.7 cm) beyond the bottom of the cabinets.
- Cabinet opening dimensions that are shown must be used.
 Given dimensions are minimum clearances.
- The floor anti-tip bracket must be installed. To install the anti-tip bracket shipped with the range, see the "Install Anti-Tip Bracket" section.
- Grounded electrical supply is required. See the "Electrical Requirements" section.

IMPORTANT: To avoid damage to your cabinets, check with your builder or cabinet supplier to make sure that the materials used will not discolor, delaminate or sustain other damage. This range has been designed in accordance with the requirements of UL and CSA International and complies with the maximum allowable wood cabinet temperatures of 194°F (90°C).

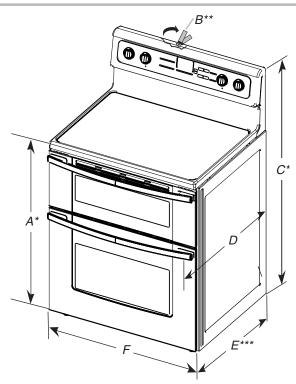
Mobile Home - Additional Installation Requirements

The installation of this range must conform to the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD Part 280). When such standard is not applicable, the Standard for Manufactured Home Installations, ANSI A225.1/NFPA 501A or with local codes.

Mobile home installations require:

- When this range is installed in a mobile home, it must be secured to the floor during transit. Any method of securing the range is adequate as long as it conforms to the standards listed above.
- Four-wire power supply cord or cable must be used in a mobile home installation. The appliance wiring will need to be revised. See the "Electrical Connection" section.

Product Dimensions



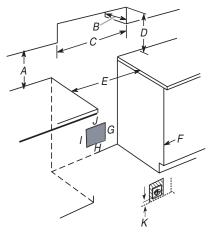
- A. 35³/₄" ± ¹/₈" (90.8 cm ± 0.3 cm) cooktop height (minimum) with leveling legs screwed all the way in*
- B. Model/serial/rating plates (located behind the control panel)**
- C. 47'/8" ± ¹/8" (120.3 cm ± 0.3 cm) overall height (minimum) with leveling legs screwed all the way in*
- D. 28¹/₂" ± ¹/₄" (72.4 cm ± 0.6 cm) depth with handle
- E. 26¹/₈" ± ¹/₈" (66.4 cm ± 0.3 cm)***
- F. 29¹⁵/₁₆" ± ¹/₁₆" (76.0 cm ± 0.2 cm) width
- * Range can be raised approximately 1" (2.5 cm) by adjusting the leveling legs.
- ** Model/serial/rating plates may be rotated up from behind the control panel for viewing from the front of the range.
- *** Excludes handle. Dimension given is from wall to front of oven door and will vary based on electric outlet receptacle installation.

Cabinet Dimensions

Cabinet opening dimensions shown are for 25" (63.5 cm) countertop depth, 24" (61.0 cm) base cabinet depth, and 36" (91.4 cm) countertop height.

IMPORTANT: If installing a range hood or microwave hood combination above the cooking surface, follow the range hood or microwave hood combination installation instructions for dimensional clearances above the cooktop surface.

A freestanding range may be installed next to combustible walls with zero clearance.



- A. 18" (45.7 cm) upper cabinet to countertop
- B. 13" (33.0 cm) upper cabinet depth
- C. 30" (76.2 cm) min. opening width
- D. For minimum clearance to the top of the cooktop, see NOTE.
- E. U.S.A.: 30" (76.2 cm) min. opening width Canada: 31" (78.7 cm) min. opening width
- F. Cabinet door or hinge should not extend into cutout*
- G. 1¹/₂" (3.8 cm) min. from right side cabinet
- H. 2" (5.1 cm) min. from floor
- I. 7" (17.8 cm) height
- J. 8" (20.3 cm) width
- K. 3¹/₂" (8.9 cm) min. from floor

Proper positioning of outlet shown above.

* Nothing located in shaded areas can extend more than 11/2" (3.8 cm) from wall or range will not slide all the way back.

NOTE: 24" (61.0 cm) minimum when bottom of wood or metal cabinet is covered by not less than ¹/₄" (0.64 cm) flame-retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015" (0.4 mm) stainless steel, 0.024" (0.6 mm) aluminum, or 0.020" (0.5 mm) copper.

30" (76.2 cm) minimum clearance between the top of the cooking platform and the bottom of an uncovered wood or metal cabinet.

Electrical Requirements - U.S.A. Only

If codes permit and a separate ground wire is used, it is recommended that a qualified electrical installer determine that the ground path and wire gauge are in accordance with local codes.

Do not use an extension cord.

Be sure that the electrical connection and wire size are adequate and in conformance with the National Electrical Code, ANSI/ NFPA 70-latest edition and all local codes and ordinances.

A copy of the above code standards can be obtained from:

National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471

WARNING: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service technician if you are in doubt as to whether the appliance is properly grounded. Do not modify the power supply cord plug. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Electrical Connection

To properly install your range, you must determine the type of electrical connection you will be using and follow the instructions provided for it here.

- Range must be connected to the proper electrical voltage and frequency as specified on the model/serial/ rating plate. The model/serial/ rating plate is located behind the control panel. Refer to the figures in "Product Dimensions" in the "Location Requirements" section.
- This range is manufactured with the neutral terminal connected to the cabinet. Use a 3-wire, UL Listed, 40- or 50- amp power supply cord (pigtail) (see the following Range Rating chart). If local codes do not permit ground through the neutral, use a 4-wire power supply cord rated at 250 V, 40 or 50 A and investigated for use with ranges.

Range Rating*		Specified Rating of Power Supply Cord Kit and Circuit Protection
120/240 Volts	120/208 Volts	Amps
8.8 - 16.5 KW	7.8 - 12.5 KW	40 or 50**
16.6 - 22.5 KW	12.6 - 18.5 KW	50

^{*}The NEC calculated load is less than the total connected load listed on the model/serial/ rating plate.

- A circuit breaker is recommended.
- The range can be connected directly to the circuit breaker box (or fused disconnect) through flexible or nonmetallic sheathed, copper, or aluminum cable. See the "Electrical Connection - U.S.A. Only" section.
- Allow 2 to 3 ft (61.0 cm to 91.4 cm) of slack in the line so that the range can be moved if servicing is ever necessary.
- A UL Listed conduit connector must be provided at each end of the power supply cable (at the range and at the junction box).
- Wire sizes and connections must conform with the rating of the range.
- The wiring diagram is located on the Tech Sheet.
- The Tech Sheet is located on the back of the range inside a clear plastic bag.

If connecting to a 4-wire system:

This range is manufactured with the ground connected to the neutral by a link. The ground must be revised so the green ground wire of the 4-wire power supply cord is connected to the cabinet. See the "Electrical Connection - U.S.A. Only" section.

Grounding through the neutral conductor is prohibited for new branch-circuit installations (1996 NEC); mobile homes; and recreational vehicles, or an area where local codes prohibit grounding through the neutral conductor.

When a 4-wire receptacle of NEMA Type 14-50R is used, a matching UL Listed, 4-wire, 250 V, 40 or 50 A, range power supply cord (pigtail) must be used. This cord contains 4 copper conductors with ring terminals or open-end spade terminals with upturned ends, terminating in a NEMA Type 14-50P plug on the supply end.

The fourth (grounding) conductor must be identified by a green or green/yellow cover and the neutral conductor by a white cover. Cord should be Type SRD or SRDT with a UL Listed strain relief and be at least 4 ft (1.22 m) long.



4-wire receptacle (14-50R)

The minimum conductor sized for the copper 4-wire power cord are:

40-amp circuit

2 No.-8 conductors

1 No.-10 white neutral

1 No.-10 green grounding

If connecting to a 3-wire system:

Local codes may permit the use of a UL Listed, 3-wire, 250 V, 40 or 50 A range power supply cord (pigtail). This cord contains 3 copper conductors with ring terminals or open-end spade terminals with upturned ends, terminating in a NEMA Type 10-50P plug on the supply end. Connectors on the appliance end must be provided at the point the power supply cord enters the appliance. This uses a 3-wire receptacle of NEMA Type 10-50R.



3-wire receptacle (10-50R)

^{**} If connecting to a 50-amp circuit, use a 50-amp rated cord with kit. For 50-amp rated cord kits, use kits that specify use with a nominal 13/8" (34.9 mm) diameter connection opening.

Electrical Requirements - Canada Only

AWARNING



Electrical Shock Hazard

Electrically ground range.

Failure to do so can result in death, fire, or electrical shock.

If codes permit and a separate ground wire is used, it is recommended that a qualified electrical installer determine that the ground path is adequate and wire gauge are in accordance with local codes.

Be sure that the electrical connection and wire size are adequate and in conformance with CSA Standard C22.1, Canadian Electrical Code, Part 1 - latest edition, and all local codes and ordinances.

A copy of the above code standards can be obtained from:

Canadian Standards Association 178 Rexdale Blvd. Toronto, ON M9W 1R3 CANADA

 Check with a qualified electrical installer if you are not sure the range is properly grounded.

Range Rating*		Specified Rating of Power Supply Cord Kit and Circuit Protection
120/240 Volts	120/208 Volts	Amps
8.8 - 16.5 KW	7.8 - 12.5 KW	40 or 50**
16.6 - 22.5 KW	12.6 - 18.5 KW	50

- *The NEC calculated load is less than the total connected load listed on the model/serial/rating plate.
- ** If connecting to a 50-amp circuit, use a 50-amp rated cord with kit. For 50-amp rated cord kits, use kits that specify use with a nominal 13/s" (34.9 mm) diameter connection opening.
- A time-delay fuse or circuit breaker is recommended.
- This range is equipped with a CSA International Certified Power Cord intended to be plugged into a standard 14-50R wall receptacle. Be sure the wall receptacle is within reach of range's final location.



Do not use an extension cord.

INSTALLATION INSTRUCTIONS

Unpack Range

AWARNING

Excessive Weight Hazard

Use two or more people to move and install range. Failure to do so can result in back or other injury.

- Remove shipping materials, tape, and film from the range. Keep cardboard bottom under range.
- 2. Remove oven racks and parts package from inside oven.
- 3. To place range on its back, take 4 cardboard corners from the carton. Stack one cardboard corner on top of another. Repeat with the other 2 corners. Place them lengthwise on the floor behind the range to support the range when it is laid on its back.
- **4.** Using 2 or more people, firmly grasp the range and gently lay it on its back on the cardboard corners.
- 5. Pull cardboard bottom firmly to remove.
- 6. Use an adjustable wrench to loosen the leveling legs.
- Place cardboard or hardboard in front of range. Using 2 or more people, stand range back up onto cardboard or hardboard.

Adjust Leveling Legs

1. If range height adjustment is necessary, use a wrench or pliers to loosen the 4 leveling legs.

This may be done with the range on its back or with the range supported on 2 legs after the range has been placed back to a standing position.

NOTE: To place range back up into a standing position, put a sheet of cardboard or hardboard in front of range. Using 2 or more people, stand range back up onto the cardboard or hardboard.

 Adjust the leveling legs to the correct height. Leveling legs can be loosened to add up to a maximum of 1" (2.5 cm). A minimum of ³/₁₆" (5.0 mm) is needed to engage the anti-tip bracket

NOTE: If height adjustment is made when range is standing, tilt the range back to adjust the front legs, then tilt forward to adjust the rear legs.

3. When the range is at the correct height, check that there is adequate clearance under the range for the anti-tip bracket. Before sliding range into its final location, check that the anti-tip bracket will slide under the range and onto the rear leveling leg prior to anti-tip bracket installation.

Install Anti-Tip Bracket

WARNING



Tip Over Hazard

A child or adult can tip the range and be killed.

Install anti-tip bracket to floor or wall per installation instructions.

Slide range back so rear range foot is engaged in the slot of the anti-tip bracket.

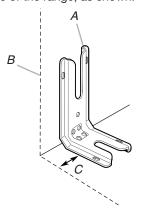
Re-engage anti-tip bracket if range is moved.

Do not operate range without anti-tip bracket installed and engaged.

Failure to follow these instructions can result in death or serious burns to children and adults.

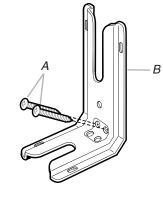
- 1. Remove the anti-tip bracket that is taped inside the upper oven with the package containing literature.
- 2. Determine which mounting method to use: floor or wall. If you have a stone or masonry floor, you can use the wall mounting method.

3. Determine and mark edge of range in the cutout space. The mounting bracket can be installed on either the left side or right side of the cutout. Position mounting bracket in cutout so that right (or left) edge of the bracket is $^{15}/_{16}$ " (2.4 cm) from the marked edge of the range, as shown.



- A. Anti-tip bracket
- B. Mark edge of range.
- C. 15/16" (2.4 cm)
- Drill two 1/8" (3.0 mm) holes that correspond to the bracket holes of the determined mounting method. See the following illustrations.

Floor Mounting



Wall Mounting

- A. #12 x 15/8" (4.1 cm)screws
- B. Anti-tip bracket
- A. #12 x 15/8" (4.1 cm)screws B. Anti-tip bracket
- 5. Using a Phillips screwdriver, mount anti-tip bracket to the wall or floor with the two #12 x 15/8"(4.1 cm) screws provided.

Electrical Connection - U.S.A. Only

Power Supply Cord

AWARNING



Electrical Shock Hazard

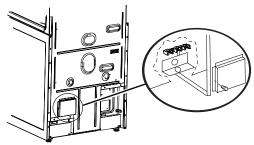
Disconnect power before servicing.

Use a new 40 amp power supply cord.

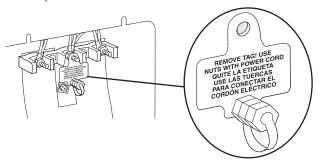
Plug into a grounded outlet.

Failure to follow these instructions can result in death, fire, or electrical shock.

- 1. Disconnect power.
- Use Phillips screwdriver to remove the terminal block cover screw located on the back of the range. Pull cover down and toward you to remove cover.



3. Remove plastic tag holding three 10-32 hex nuts from the middle post of the terminal block.



4. Add strain relief.

Direct Wire

AWARNING



Electrical Shock Hazard

Disconnect power before servicing.

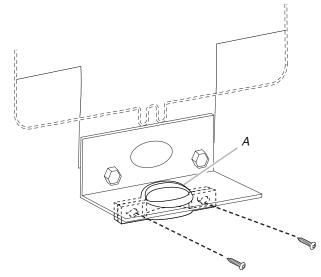
Use 8 gauge copper or 6 gauge aluminum wire.

Electrically ground range.

Failure to follow these instructions can result in death, fire, or electrical shock.

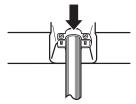
Style 1: Power supply cord strain relief

Assemble a UL Listed strain relief in the opening.



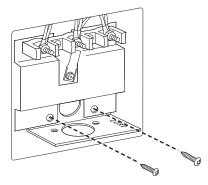
A. UL Listed strain relief

- Feed the power supply cord through the strain relief in the cord/conduit plate on bottom of range. Allow enough slack to easily attach the wiring to the terminal block.
- Tighten strain relief screw against the power supply cord.

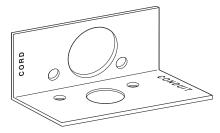


Style 2: Direct wire strain relief

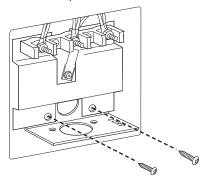
 Use Phillips screwdriver to remove screws and slide cord/ conduit plate down and out.



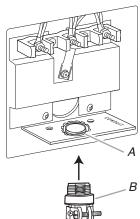
 Position cord/conduit plate as shown in the following illustration.



■ Replace cord/conduit plate and insert screws.



Assemble a UL Listed conduit connector in the opening.



- A. Removable retaining nut
- B. Strain relief

- Feed the flexible conduit through the strain relief, allowing enough slack to easily attach wiring to the terminal block.
- Tighten strain relief screw against the flexible conduit.



- 5. Replace back panel and screws on rear of range.
- **6.** Complete installation following instructions for your type of electrical connection:
 - 4-wire (recommended)
 - 3-wire (if 4-wire is not available)

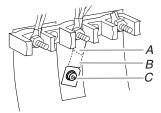
Electrical Connection Options

	Торионо	
If your home has:	And you will be connecting to:	Go to Section:
4-wire receptacle (NEMA type 14-50R)	A UL Listed, 250-volt minimum, 40-amp, range power supply cord	4-Wire Connection: Power Supply Cord
4-wire direct	A fused disconnect or circuit breaker box	4-Wire Connection: Direct Wire
3-wire receptacle (NEMA type 10-50R)	A UL Listed, 250-volt minimum, 40-amp, range power supply cord	3-Wire Connection: Power Supply Cord
3-wire direct (2.5 cm) (7.6 cm)	A fused disconnect or circuit breaker box	3-Wire Connection: Direct Wire

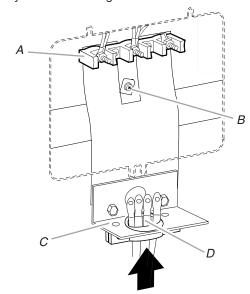
4-Wire Connection: Power Supply Cord

Use this method for:

- New branch-circuit installations (1996 NEC)
- Mobile homes
- Recreational vehicles
- In an area where local codes prohibit grounding through the neutral
- 1. Part of metal ground strap must be cut out and removed.

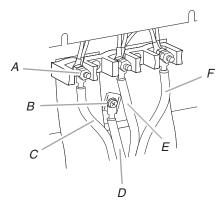


- A. Metal ground strap
- B. Discard
- C. Ground-link screw
- Use Phillips screwdriver to remove the ground-link screw from the back of the range. Save the ground-link screw and the end of the ground link under the screw.
- Feed the power supply cord through the strain relief in the cord/conduit plate on bottom of range. Allow enough slack to easily attach the wiring to the terminal block.



- A. Terminal block
- B. Ground-link screw
- C. Cord/conduit plate
- D. Power supply cord wires
- 4. Use Phillips screwdriver to connect the green ground wire from the power supply cord to the range with the ground-link screw. The ground wire must be attached first.

 Use ³/₈" (9.5 mm)nut driver to connect the neutral (white) wire to the center terminal block post with one of the 10-32 hex nuts.



- A. 10-32 hex nut
- D. Green ground wire
- B. Ground-link screw
- E. Neutral (center) wire
- C. Line 1 (black)
- F. Line 2 (red)
- 6. Connect line 1 (black) and line 2 (red) wires to the outer terminal block posts with 10-32 hex nuts.
- 7. Securely tighten hex nuts.

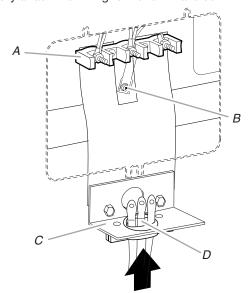
NOTE: For power supply cord replacement, only use a power cord rated at 250 volts minimum, 40 amps or 50 amps that is marked for use with nominal 13/8" (3.5 cm) diameter connection opening, with ring terminals and marked for use with ranges.

- 8. Replace terminal block access cover.
- 9. Slide range back so rear range foot is under the anti-tip bracket. See the "Verify Anti-Tip Bracket is Installed and Engaged" section.

3-Wire Connection: Power Supply Cord

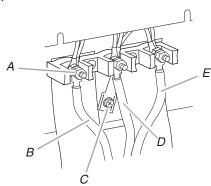
Use this method only if local codes permit connecting chassis ground conductor to neutral wire of power supply cord.

 Feed the power supply cord through the strain relief in the cord/conduit plate on bottom of range. Allow enough slack to easily attach the wiring to the terminal block.



- A. Terminal block
- B. Ground-link screw
- C. Cord/conduit plate
- D. Power supply cord wires

2. Use ³/₈" (9.5 mm) nut driver to connect the neutral (white) wire to the center terminal block post with one of the 10-32 hex nuts.



- A. 10-32 hex nut
- D. Neutral (white) wire
- B. Line 1 (black)
- E. Line 2 (red)
- C. Ground-link screw
- terminal block posts with 10-32 hex nuts.

with ranges.

4. Securely tighten hex nuts. NOTE: For power supply cord replacement, only use a power cord rated at 250 volts minimum, 40 amps or 50 amps that is marked for use with nominal 13/8" (3.5 cm) diameter connection opening, with ring terminals and marked for use

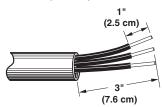
- 5. Replace terminal block access cover.
- 6. Slide range back so rear range foot is under the anti-tip bracket. See the "Verify Anti-Tip Bracket is Installed and Engaged" section.

3. Connect line 1 (black) and line 2 (red) wires to the outer

Direct Wire Installation: Copper or Aluminum Wire

This range may be connected directly to the fuse disconnect or circuit breaker box. Depending on your electrical supply, make the required 3-wire or 4-wire connection.

1. Strip outer covering back 3" (7.6 cm) to expose wires. Strip the insulation back 1" (2.5 cm) from the end of each wire.

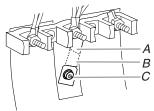


- Allow enough slack in the wire to easily attach the wiring terminal block.
- Complete electrical connection according to your type of electrical supply (4-wire or 3-wire connection).

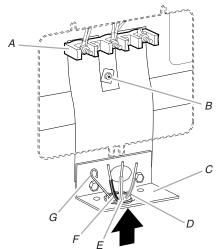
4-Wire Connection: Direct Wire

Use this method for:

- New branch-circuit installations (1996 NEC)
- Mobile homes
- Recreational vehicles
- In an area where local codes prohibit grounding through the neutral
- 1. Part of metal ground strap must be cut out and removed.

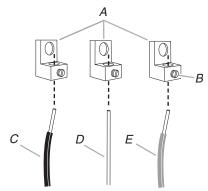


- A. Metal ground strap
- B. Discard
- C. Ground-link screw
- Use Phillips screwdriver to remove the ground-link screw from the back of the range. Save the ground-link screw and the end of the ground link under the screw.
- Pull the conduit through the strain relief on cord/conduit plate on bottom of range. Allow enough slack to easily attach wiring to the terminal block.



- A. Terminal block
- B. Ground-link screw
- C. Cord/conduit plate
- D. Line 2 (red) wire
- E. Neutral (white) wire
- F. Line 1 (black) wire
- G. Bare (green) ground wire

4. Attach terminal lugs to line 1 (black), neutral (white), and line 2 (red) wires. Loosen (do not remove) the setscrew on the front of the terminal lug and insert exposed wire end through bottom of terminal lugs. Securely tighten setscrew to XX lbs-in. torque. See "Bare Wire Torque Specifications" chart.



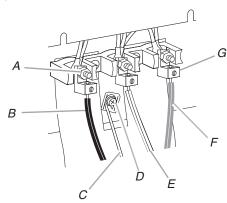
- A. Terminal lug
- B. Setscrew
- C. Line 1 (black) wire
- D. Neutral (white) wire
- E. Line 2 (red) wire

Bare Wire Torque Specifications

Attaching terminal lugs to the terminal block - 20 lbs-in. (2.3 N-m)

Wire Awg	Torque
8 gauge copper	25 lbs-in. (2.8 N-m)
6 gauge aluminum	35 lbs-in. (4.0 N-m)

- 5. Use Phillips screwdriver to connect the bare (green) ground wire to the range with the ground-link screw. The ground wire must be attached first and must not contact any other terminal.
- Use 3/8" (9.5 mm) nut driver to connect the neutral (white) wire to the center terminal block post with one of the 10-32 hex nuts.

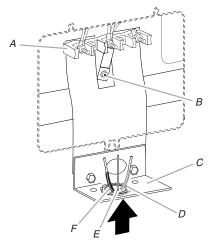


- A. 10-32 hex nut
- E. Neutral (white) wire
- B. Line 1 (black)
- C. Bare (green) ground wire
- F. Line 2 (red)
- G. Terminal lug
- D. Ground-link screw
- 7. Connect line 1 (black) and line 2 (red) wires to the outer terminal block posts with 10-32 hex nuts.
- 8. Securely tighten hex nuts.
- 9. Replace terminal block access cover.
- 10. Slide range back so rear range foot is under the anti-tip bracket. See the "Verify Anti-Tip Bracket is Installed and Engaged" section.

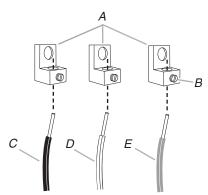
3-Wire Connection: Direct Wire

Use this method only if local codes permit connecting ground conductor to neutral supply wire.

1. Pull the conduit through the hole and conduit plate on bottom of range. Allow enough slack to easily attach the wiring to the terminal block.



- A. Terminal block
- B. Ground-link screw
- C. Cord/conduit plate
- D. Line 2 (red) wire
- E. Bare (green) ground wire
- F. Line 1 (black) wire
- 2. Attach terminal lugs to line 1 (black), bare (green) ground, and line 2 (red) wires. Loosen (do not remove) the setscrew on the front of the terminal lug and insert exposed wire end through bottom of terminal lugs. Securely tighten setscrew to XX Ibs-in. torque. See "Bare Wire Torque Specifications" chart.



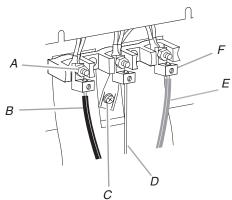
- A. Terminal lug
- B. Setscrew
- C. Line 1 (black) wire
- D. Bare (green) ground wire
- E. Line 2 (red) wire

Bare Wire Torque Specifications

Attaching terminal lugs to the terminal block - 20 lbs-in. (2.3 N-m)

Wire Awg	Torque
8 gauge copper	25 lbs-in. (2.8 N-m)
6 gauge aluminum	35 lbs-in. (4.0 N-m)

 Use ³/₈" (9.5 mm) nut driver to connect the bare (green) ground wire to the center terminal block post with one of the 10-32 hex nuts.



- A. 10-32 hex nut
- B. Line 1 (black)
- C. Ground-link screw
- D. Bare (green) ground wire
- E. Line 2 (red)
- F. Terminal lug
- 4. Connect line 1 (black) and line 2 (red) wires to the outer terminal block posts with 10-32 hex nuts.
- 5. Securely tighten hex nuts.
- 6. Replace terminal block access cover.
- Slide range back so rear range foot is under the anti-tip bracket. See the "Verify Anti-Tip Bracket is Installed and Engaged" section.

Verify Anti-Tip Bracket Is Installed and Engaged

 Place the outside of your foot against the bottom front of the oven door to keep the range from moving, and grasp the lower right or left side of the control panel as shown.

NOTE: If your countertop is mounted with a backsplash, it may be necessary to grasp the range higher than is shown in the illustration.



- 2. Slowly attempt to tilt the range forward.

 If you encounter immediate resistance, the range for
 - If you encounter immediate resistance, the range foot is engaged in the anti-tip bracket.
- 3. If the rear of the range lifts more than 1/2" (1.3 cm) off the floor without resistance, stop tilting the range and lower it gently back to the floor. The range foot is not engaged in the anti-tip bracket.

IMPORTANT: If there is a snapping or popping sound when lifting the range, the range may not be fully engaged in the bracket. Check to see if there are obstructions keeping the range from sliding to the wall or keeping the range foot from sliding into the bracket. Verify that the bracket is held securely in place by the mounting screws.

- Slide the range forward, and verify that the anti-tip bracket is securely attached to the floor or wall.
- 5. Slide range back so the rear range foot is inserted into the slot of the anti-tip bracket.

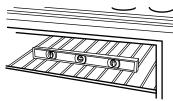
IMPORTANT: If the back of the range is more than 2" (5.1 cm) from the mounting wall, the rear range foot may not engage the bracket. Slide the range forward and determine if there is an obstruction between the range and the mounting wall. If you need assistance or service, refer to the "Assistance or Service" section of the Use and Care Guide, or the cover or the "Warranty" section of the User Instructions, for contact information.

6. Repeat steps 1 and 2 to ensure that the range foot is engaged in the anti-tip bracket.

If the rear of the range lifts more than $^{1}/_{2}$ " (1.3 cm) off the floor without resistance, the anti-tip bracket may not be installed correctly. Do not operate the range without anti-tip bracket installed and engaged. Please reference the "Assistance or Service" section of the Use and Care Guide, or the cover or the "Warranty" section of the User Instructions, to contact service.

Level Range

- 1. Place a rack in oven.
- Place level on rack and check levelness of range, first side to side, then front to back.



- 3. If range is not level, pull range forward until rear leveling leg is removed from the anti-tip bracket.
- 4. Use a wrench or pliers to adjust leveling legs up or down until the range is level. Push range back into position.
- Check that rear leveling leg is engaged in the anti-tip bracket.

NOTE: Range must be level for satisfactory baking performance.

Complete Installation

- Check that all parts are now installed. If there is an extra part, go back through the steps to see which step was skipped.
- 2. Check that you have all of your tools.
- 3. Dispose of/recycle all packaging materials.
- 4. Check that the range is level. See the "Level Range" section.
- 5. Use a mild solution of liquid household cleaner and warm water to remove waxy residue caused by shipping material. Dry thoroughly with a soft cloth. For more information, read the "Range Care" section of the Use and Care Guide.
- 6. Read the range Use and Care Guide.
- Plug power cord into appropriate outlet. Slide range into its final location. Check that the flexible conduit or power supply cord is not bent.
- Turn power on. Turn on surface elements and oven. See the Use and Care Guide for specific instruction on range operation.

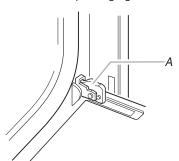
If range does not operate, check the following:

- Household fuse is intact and tight, or circuit breaker has not tripped.
- Range is plugged into a grounded outlet.
- Electrical supply is connected.
- See the "Troubleshooting" section in the Use and Care Guide.

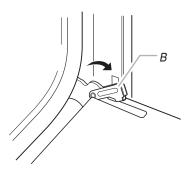
When the range has been on for 5 minutes, check for heat. If range is cold, turn off the range and contact a qualified technician.

Remove Oven Door(s)

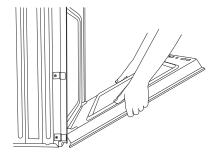
- The range is designed to not need the oven doors removed for standard usage and cleaning, however, they can be removed if necessary.
- Do not lift or move the range by the door handle(s).
- Prepare a surface where you will place the door(s). This surface should be flat and covered with a soft blanket, or use the corner posts from the packaging material.



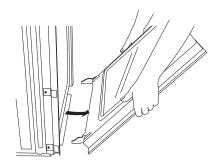
A. Oven door hinge in the locked position



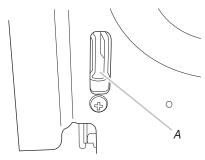
B. Oven door hinge in the unlocked position



Partially close the door to engage the door latch locks. The door will stop at this point.



Use two hands to remove and replace the oven door(s). It may be necessary to gently shift door from side to side.



A. Slot in the oven frame for the door hinge lock

- To replace the oven door(s), locate the slots in the oven cavity for the hinge locks and repeat the steps above in reverse order. Make sure the door closes properly and there is no interference from the door latch. If necessary, remove the door and repeat the steps above. If power is connected to the range, open and close the door to make sure the oven light comes on and goes off appropriately.
- Follow the installation instructions found in the bag containing the literature.

Moving the Range

AWARNING



Tip Over Hazard

A child or adult can tip the range and be killed.

Install anti-tip bracket to floor or wall per installation instructions.

Slide range back so rear range foot is engaged in the slot of the anti-tip bracket.

Re-engage anti-tip bracket if range is moved.

Do not operate range without anti-tip bracket installed and engaged.

Failure to follow these instructions can result in death or serious burns to children and adults.

When moving range, slide range onto cardboard or hardboard to avoid damaging the floor covering.

If removing the range is necessary for cleaning or maintenance:

For power supply cord-connected ranges:

- **1.** Slide range forward.
- 2. Unplug the power supply cord.
- 3. Complete cleaning or maintenance.
- 4. Plug power supply cord into a grounded outlet.
- 5. Slide range back so rear range foot is under anti-tip bracket.



- **6.** Refer to the "Verify Anti-Tip Bracket Is Installed and Engaged" section to verify engagement.
- 7. Check that range is level.

For direct-wired ranges:

AWARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

- 1. Disconnect power.
- 2. Slide range forward.
- 3. Complete cleaning or maintenance.
- 4. Slide range back so rear range foot is under anti-tip bracket.



- 5. Refer to the "Verify Anti-Tip Bracket Is Installed and Engaged" section to verify engagement.
- **6.** Check that range is level.
- 7. Reconnect power.



TRUE MANUFACTURING CO., INC. U.S.A. FOODSERVICE DIVISION

2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400 Fax (636)272-2408 • Toll Free (800)325-6152 • Intl Fax# (001)636-272-7546 Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: _	AIA#	
Location:		
Item #:	Qty:	SIS #
Model #:		

Model:

T-49DT-HC

T-Series:

Reach-In Solid Swing Door Dual Temperature Refrigerator/Freezer with Hydrocarbon Refrigerant



T-49DT-HC

- Designed using the highest quality materials and components to provide the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.
- Refrigerator located in left section; freezer in the right.
- Factory engineered, self-contained, capillary tube system using environmentally friendly R290 hydro carbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential
- High capacity, factory balanced refrigeration systems that maintains cabinet refrigerator temperatures of 33°F to 38°F (.5°C to 3.3°C) and freezer temperatures of -10°F (-23.3°C).
- Stainless steel solid doors and front. The very finest stainless with higher tensile strength for fewer dents and scratches.
- Adjustable, heavy duty PVC coated shelves.
- Positive seal self-closing doors. Lifetime guaranteed door hinges and torsion type closure system.

Bottom mounted units feature:

- "No stoop" lower shelf.
- Storage on top of cabinet.
- Compressors perform in coolest, most grease free area of kitchen.
- Easily accessible condenser coil for cleaning.

ROUGH-IN DATA

Specifications subject to change without notice. Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

				et Dime (inches) (mm)			IP			NEMA	Cord Length (total ft.)	Crated Weight (lbs.)
Model	Doors	Shelves	W	D	H*	Ref.	Frz	Voltage	Amps	Config.	(total nt.)	(kg)
T-49DT-HC	2	6	54% 1375	29½ 750	78¾ 1991	1/4	1/2	115/60/1	4.6 N/A	5-15P	9 2.74	510 232

^{*} Height does not include 5" (127 mm) for castors or 6" (153 mm) for optional legs.

MADE WITH INNOVATION (YEAR) (U) us natural refrigerant.		APPROVALS:	AVAILABLE AT:
1/19	Printed in U.S.A.		

Model:

T-49DT-HC

T-Series:

Reach-In Solid Swing Door Dual Temperature Refrigerator/Freezer with Hydrocarbon Refrigerant



STANDARD FEATURES

DESIGN

- True's solid door reach-in's are designed with enduring quality that protects your long term investment.
- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

REFRIGERATION SYSTEM

- Equipped with two, independent, factory engineered, self-contained, capillary tube refrigeration systems using environmentally friendly environmentally friendly R290 hydrocarbon refrigerant that has zero (0) ozone depletion potential (ODP), & three (3) global warming potential (GWP).
- Refrigerator located in left section; freezer in the right.
- High capacity, factory balanced refrigeration system that maintain colder standard temperatures for the best in food preservation. Refrigerator holds 33°F to 38°F (.5°C to 3.3°C); freezers holds -10°F (-23.3°C).
- State of the art, electronically commutated evaporator and condenser fan motors. ECM motors operate at higher peak efficiencies and move a more consistent volume of air which produces less heat, reduces energy consumption and provides greater motor reliability.
- Bottom mounted condensing units positioned for easy cleaning. Compressors run in coolest and most grease free area of the kitchen. Allows for storage area on top of unit.
- Automatic freezer defrost system time-initiated, temperature-terminated. Saves energy consumption and provides shortest possible defrost cycle.

CABINET CONSTRUCTION

- Exterior Stainless steel front. Anodized quality aluminum ends. Corrosion resistant GalFan coated steel back.
- Interior attractive, NSF approved, clear coated aluminum liner. Stainless steel floor with coved corners.
- Insulation entire cabinet structure and solid doors are foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- Welded, heavy duty steel frame rail, black powder coated for corrosion protection.
- Frame rail fitted with 4" (102 mm) diameter stem castors locks provided on front set.

DOORS

- Stainless steel exterior with clear aluminum liners to match cabinet interior. Doors extend full width of cabinet shell. Door locks standard.
- Lifetime guaranteed recessed door handles. Each door fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Positive seal self-closing doors. Lifetime guaranteed door hinges and torsion type closure system.
- Magnetic door gaskets of one piece construction, removable without tools for ease of cleaning.

SHELVING

- Six (6) adjustable, heavy duty PVC coated wire shelves 22% "L x 23 ¼ "D (582 mm x 591 mm).
 Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on ½" (13 mm) increments.

LIGHTING

 Compartmentalized, interior lighting (one per section) - safety shielded. Lights activated by rocker switch mounted above doors.

MODEL FEATURES

- Two (2) exterior digital temperature displays, one for refrigerator section and one for freezer.
- Evaporators are epoxy coated to eliminate the potential of corrosion.
- Freezer rear airflow guards prevent product from blocking optimal airflow.
- Minimum wattage heater in cabinet frame and freezer door.
- NSF/ANSI Standard 7 compliant for open food product.

ELECTRICAL

 Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.

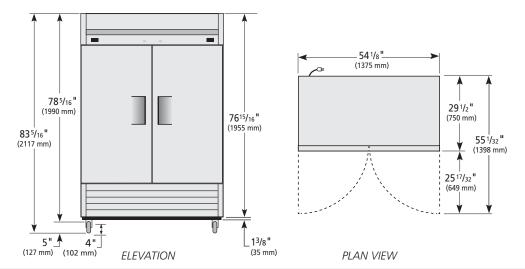


OPTIONAL FEATURES/ACCESSORIES

Upcharge and lead times may apply.

- ☐ 6" (153 mm) standard legs.
- ☐ 6" (153 mm) seismic/flanged legs.
- ☐ 2½" (64mm) castors.
- ☐ 2½" (64 mm) standard legs.
- ☐ Half door bun tray racks. Each holds up to eleven 18"L x 26"D (458 mm x 661 mm) sheet pans (sold separately) (airflow guard needs to be removed from freezer).
- ☐ Full door bun tray racks. Each holds up to twentytwo 18"L x 26"D (458 mm x 661 mm) sheet pans (sold separately) (airflow guard needs to be removed from freezer).
- □ Additional shelves.
- ☐ Novelty baskets.

PLAN VIEW



WARRANTY

Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only) METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

K	25	Model	Elevation	Right	Plan	3D	Back
K	•	T-49DT-HC					

MANITOWOC*



CNF0201 • CNF0202 Countertop Nugget Ice Maker & Dispenser

Models CNF0201AL CNF0201A CNF0202AL CNF0202A Three dispense settings are standard: ice only, water only, or ice and water. • New 15% cooling to cooling the cooling of the cooling that the cooling of the cooling that the cooling of the cooling

Ice Machine Electric

115/60/1. (230/50/1 also available.) 115/60/1 ice machines are factory pre-wired with a 6' (180 cm) power cord and NEMA 5-15P-plug configuration. 230/50/1 ice machines are factory pre-wired with a 6' (180 cm) power cord only, no plug is supplied.

Total ampacity: Air-cooled: 10.3 amps.

Maximum fuse size: Air-cooled: 15 amps.

HACR-type circuit breakers can be used in place of fuses.

Specifications

BTU Per Hour: 2,300 (average)

Compressor: Nominal rating: 1/3 HP Refrigerant: R404A Operating Limits:

- Ambient Temperature Range: 45°-110°F (7.2°-43.3°C)
- Water Temperature Range: 45°-90°F (7.2°-32°C)
- Water Pressure Ice Maker Water In: Min. 20 psi (137.9 kPA)
 Max. 80 psi (551.1 kPA)

- New bite-sized nugget boasts 85% ice content* with only 15% water offering one of the best nugget ratios for maximum cooling and minimal drink dilution.
- Up to 315 lbs. (143 kgs) standard daily ice production including ice and water content.
- New DuraTech™ front panel for easy cleaning and reduced hardwater staining in the dispense area.
- Only 16.25" (41.28 cm) wide by 24.00" (61.00 cm) deep by 35.00" (89.00 cm) tall on the RNS12 and 42.00" (107.00 cm) tall without legs; legs sold separately.
- Trouble-free ice dispensing. Simply place cup under chute and activate.
- Two ice activation options: activation arm or touchless.
- Dispense opening (10.50"/ 26.67 cm) from grate to chute maximizes clearance for tall containers.
- · Larger drain pan minimizes ice spillage.
- Blue LED light provides dispense visibility for rooms with limited ambient light.
- Water and drain connections in back or bottom of unit for flush mounting.
- Manitowoc's patented cleaning technology manages the cleaning process from start to finish.

*70/50°



Ice Shape

Nugget ice consists of small pieces ranging from 3/8" to 1/2" in width and length on average. Offers a 85% ice to water ratio with a softer, chewable texture while still providing maximum cooling effect and great dispensibilty.









COMPANY WITH QUALITY SYSTEM

2110 South 26th Street Manitowoc, WI 54220 USA Tel: 1.920.682.0161 Fax: 1.920.683.7589 www.manitowocice.com



MANITOWOC[®]



		Power kWh/ 100 lbs.		
Model	Ice Shape	70°Air/50°F Water 21°Air/10°C Water	90°Air/70°F Water 32°Air/21°C Water	@ 90°/70°F 32°/21°C
CNF0201A		315 lbs.	222 lbs.	6.69
CNFUZUTA	nugget	143 kgs	101 kgs	0.09
CNF0202A		315 lbs.	222 lbs.	6.69
CNFUZUZA	nugget	143 kgs	101 kgs	0.09
Water usage/100 lbs./45.4 kgs of Ice				
		Potable Water: 12 gallo	ns, 45.4 liters	

[&]quot;A" following model number indicates "Air" condensing unit.

Space-Saving Designs



	CNF0201	CNF0202
Height*	35.00" 89.00 cm	42.00" 107.00 cm
Width	16.25" 41.30 cm	16.25" 41.30 cm
Depth	24.00" 61.00 cm	24.00" 61.00 cm
Bin Storage	10 lbs. 4.5 kgs	20 lbs. 9.1 kgs

^{*}Height without legs. Legs sold separately: K-00345.

Air Flow





Initiate ice, off and clean operations with simple upfront selector switch. No need to remove front panel.

Front Access



*Height includes 6" legs

© Electrical Entrance

CNF0201/202 42.00" (107.00 cm) 35.00" (89.00 cm) 12.50" (31.80 cm) **24.00**" (61.00 cm) 16.25" (41.30 cm) (A) 3/8" (0.95 cm) F.P.T. Ice Making Water Inlet B 3/4" (1.91 cm) Bin Drain

MINIMUM INSTALLATION CLEARANCE -

Top: 24" (60.96 cm); Sides: 8" (20.32 cm); Back: 5" (12.7 cm); Bottom: 0" (0 cm).

Stand offers a solution when there is no counter space available for an CNF0201 or 202 unit.

Kit Number	WxDxH	Shipping Weight
K-00453	22.2 x 29.2 x 36"	100 lbs
	56.4 x 74.2 x 76.2 cm	50 kgs

Lever-activated or Touchless Dispensing*



CNF0201L

CNF0202L



CNF0202

*Select at time of purchase. K-00377 can be used to convert from lever-activated to touchless sensing.

2110 South 26th Street Manitowoc, WI 54220 USA Tel: 1.920.682.0161 Fax: 1.920.683.7589 www.manitowocice.com 6550 03/18





AL750 Series

32.0" x 23.63" x 23.5" (H x W x D)

ADA compliant undercounter all-refrigerators for freestanding use, with auto defrost

Highlights:

Available in a range of styles including white, black, and stainless steel; to see all options, scroll down in your browser and view the full collection

Includes adjustable glass shelves for flexible storage

32 inch ADA compliant height fits under 34 inch counters

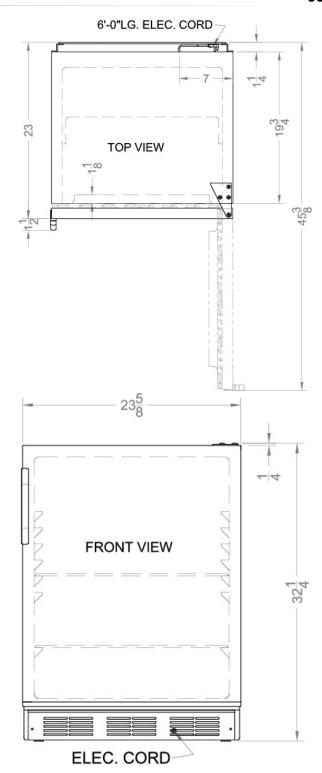
Deep shelf space accommodates large trays



ADA compliant	32 inch height fits under standard ADA counters
Automatic defrost	Simplify appliance care by letting your refrigerator defrost itself
Slim undercounter dimensions	Perfectly sized at 24 inches wide for easy placement in any location
Fully finished cabinet	Allows the refrigerator to be used as a freestanding model
Interior light on rocker switch	Turn the light on when you need it and off when you're done with a convenient rocker switch located just behind the thermostat
Adjustable glass shelves	Rearrange your refrigerator space to accommodate all shapes and sizes or remove shelves for a simple clean-up
Adjustable thermostat	Manage your food's temperature with ease and accuracy
Deep shelf space	Interior accommodates large trays up to 19 1/2" x 15 1/2"
Hidden evaporator	SUMMIT's original "hidden" evaporator is concealed in the wall so it never touches your fingers or your food
Seamless one piece interior liner	Enjoy easy clean-up with a one piece liner that won't hold a mess in hidden crevices

Specifications:

	32.0"
Width	23.63"
Depth	23.5"
Capacity	5.5 cu.ft.
Ext Depth with Handle	24.5"
Interior Height 1	26.25"
Interior Width 1	21.0"
Interior Depth 1	17.75"
Comp Step Height	5.5"
Comp Step Width	21.0"
Comp Step Depth	5.5"
Shipping Weight	102.0 lbs.
Canadian Electrical Safety	ULC
US Electrical Safety	UL
Amps	1.3
Energy Usage/Year	405.0 kWh/year
Door Swing	RHD
Shelf Quantity	3
Adjustable Shelf	true
Shelf Type	Glass
Gallon Storage	true
Defrost Type	Automatic
Depth with door at 90°	45.38"
Height to Hinge Cap	32.25"
Light	true
Thermostat Type	Dial
Freon Oz	1.8
Low Side PSI	88.0
High Side PSI	285.0
Refrigerant Type	R134a
Level Legs Quantity	4
Parts/Labor Warranty	1 Year
	5 Years



Phone: 718-893-3900 • Fax: 718-842-3093

Email: info@summitappliance.com

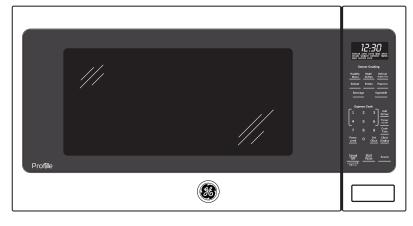
PES7227DL/SL/EL/BL/FM

GE Profile[™] Series 2.2 Cu. Ft. Countertop Sensor Microwave Oven

DIMENSIONS AND INSTALLATION INFORMATION (IN INCHES)

EXTERIOR I	DIMENSIONS* (IN INCHES)
WxHxD	24" x 13 1/2" x 18 1/2"

^{*}Height includes feet. Depth does not include handle.



This unit designed to be placed on countertop.





PES7227DL/SL/EL/BL/FM

GE Profile[™] Series 2.2 Cu. Ft. Countertop Sensor Microwave Oven

FEATURES AND BENEFITS

2.2 cu. ft. capacity - 1100 watts (IEC-705 test procedure)

Sensor cooking controls - Automatically adjusts time and power

Weight and time defrost – Simply enter the weight of the food, and the oven automatically sets the optimal defrosting time and power level or set your desired time for defrosting

Extra-large 16.5" turntable – Rotates food throughout the cycle and accommodates large cookware

Instant on controls - One-touch instant operation

Control lockout - Helps prevent accidental activation

Add 30 seconds - Add 30 seconds of microwave cooking time

Kitchen timer - Minute timer helps keep you on track

Model PES7227DLWW - White

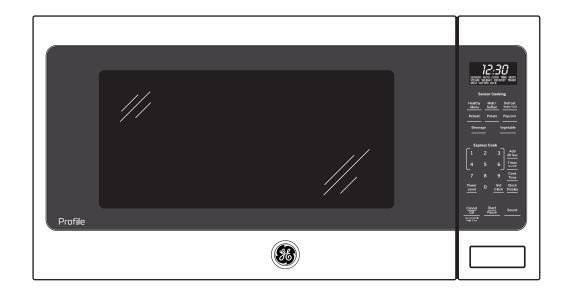
Model PES7227DLBB - Black

Model PES7227SLSS – Stainless steel

Model PES7227ELES - Slate

Model PES7227BLTS - Black stainless steel

Model PES7227FMDS - Black slate







Professional Dishwashers PG 8056 & PG 8061







Various baskets and inserts available

The new generation of professional dishwashers

The world's fastest fresh water commercial dishwashers provide impeccable cleaning results, unmatched performance, and user friendliness. Miele's new dishwashers can run up to 40 cycles per day and can accommodate a large variety of baskets and inserts, including commercial plastic baskets. The PG 8056 and PG 8061 are equipped with an innovative, high-performance circulation pump and new spray arm design for even better cleaning results and reduced water consumption.

Both models are exclusively recommended by Riedel and are ADA compliant. The PG 8056 is ideal for homes, butler's pantries and offices while the PG 8061, with its final rinse temperature of 185° F, is ideal for applications requiring sanitization including wineries, nursing homes, inns, community kitchens, restaurants, schools and other businesses.

The Miele difference at a glance

- Fastest cycle time as short as 6 minutes
- Large capacity and multi-level cleaning for high throughput
- Low noise emission 59 db or less
- Special programs and cycles e.g. China & Crystal
- Built-in water softener

Designed to last

The PG 8056 and PG 8061 fresh water dishwashers are designed to last at least 15,000 operating hours. If used 6 times a day, 6 days a week, the unit will last for more than 13 years.

Email proinfo@mieleusa.com for a full brochure with information on all dishwasher models, baskets, inserts and accessories.



Standard basket configuration





Professional Dishwashers PG 8056 & PG 8061





Model	PG	8056		PG	8061	
Design				4		
Style	Undercounter			Undercounter		
Freestanding Conversion Kit	Optional			Optional		
Baskets	U 890 with 2 x E 816 and 2	x E 165, O 891 with 1 x E	810	U 890 with 2 x E 816 and 2	x E 165, O 891 with 1 x E 810	
Commercial Dish Racks	Optional			Optional		
Cutlery	Cutlery Holder			Cutlery Holder		
Door Panel	Stainless steel			Stainless steel		
Performance Features						
Fastest Cycle	6	mins		15	mins	
Max. Number of Recommend Cycles/Day		40			40	
Number of Programs		10			3	
Convenience Features						
AutoClose/ComfortClose					•	
AutoOpen					•	
EasyOpen		•				
Delay Start	•			•		
Automatic Liquid Detergent Dispenser Pump	Optional			Optional		
Cleaning Features						
Condenser/Auto Open Drying				•		
Built-In Water Softener		•		•		
Perfect GlassCare		•				
Safety Features						
Double WaterProof System		•			•	
Approvals, Certifications and Compliance						
ADA Compliant		•		•		
NSF Certified				Pe	nding	
Riedel Exclusively Recommends		• /		Y	•	
Technical Data						
Dimensions	33" H x 24" W x 23" D			33" H x 24" W x 24" D		
Weight	154 lbs		160 lbs			
Water Connection	2 (hot and cold water)		3 (hot, cold, cold)*			
Noise Emission	59 db		57 db			
Electrical Requirements						
Model Number	61805650USA	61805655USA		61806120USA	61806125USA	
Voltage	2 AC 208V	2 AC 240V		3 AC 208V (conv. 2 AC 208V)	3 AC 240V (conv. 2 AC 240V)	
Rated Load	5.8 kW	5.8 kW		5.8 kW	5.8 kW	
Circuit Breaker	30 A	30 A		3 x 20 A (30 A)	3 x 20 A (30 A)	
Plug	NEMA L6-30	NEMA L6-30	Y	NEMA L15-20 (NEMA L6-30)	NEMA L15-20 (NEMA L6-30)	

^{*}Use supplied Y-connector if only one cold water connection is available

NOTE: UNIT REACHES 185 DEGREE WATER TEMP ON

Miele, Inc. • 9 Independence Way • Princeton, NJ 08540 • 800-991-9380 • Fax: 609-419-42 FINAL RINSE



Supporting technology in the exam room

As the practice of healthcare evolves, technology will play a bigger role in the medical space, including how you interact with your patients. The integration of electronic medical records (EMR) and computers may seem disruptive at first, but we can help ease the transition. Designed to improve the caregiver-patient interaction, Midmark Care Exchange® workstations bring digital information to the point of care.

Technology where you need it most

With changing technology comes different needs. Midmark Care Exchange® workstations offer a variety of options for the integration of technology in the medical space. Configure your workstation the way you need it, where you need it, no matter your choice of hardware platform or location in a facility.







A flexible workstation, right at your fingertips

Work comfortably, your way

Midmark Care Exchange® workstations are designed to provide the flexibility you need to support technology within a room, from room to room, or when you need a space-saving solution. Work how you are most comfortable, whether seated, standing, mobile or stationary. Workstations adjust in height while tilt and rotation allow you to maintain a proper working position without sacrificing eye contact with the patient.





Care Exchange® workstations, flexible and efficient

Non-powered Care Exchange® workstations are designed to improve flexibility and efficiency, allowing you to work from a variety of positions while maintaining eye contact with patients. Since the workstations are mobile, the addition of technology in the exam room can complement your workflow—working with you, not against you.



Non-powered options



Midmark 6201
Traditional-style laptop

Traditional-style laptop workstation with a keyed laptop security system, mouse surface and a secondary workshelf. Work surface: 20" x 20"



Midmark 6204

Compact rectangular workstation designed for smaller work areas. Ideal for wireless users who carry a laptop room to room.

Work surface: 15" x 26"



Midmark 6207

Basic kidney-style laptop workstation with an ample work surface for basic mobile computing needs.

Work surface: 22" x 32"



Midmark 6202

Flat panel PC workstation with a slim-line PC/thin-client holder, mouse surface and flat panel monitor arm. Standard 75/100mm VESA Work surface: 20" x 20"



Midmark 6205

Compact kidney-style workstation designed for smaller work areas. Ideal for wireless users who carry a laptop room to room.

Work surface: 18" x 28"



Midmark 6208

Flat panel kidney-style workstation with a large work surface that can be used with a computer or a flat panel monitor.

Standard 75/100mm VESA

Work surface: 22" x 32"



Midmark 6203

Flat panel PC workstation with a keyed laptop security system, mouse surface and flat panel monitor arm.

Standard 75/100mm VESA
Work surface: 23" x 20"



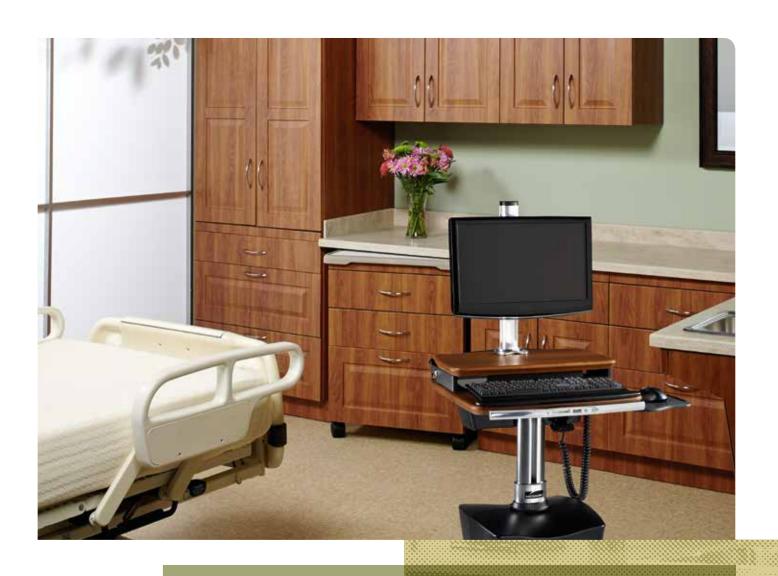
Midmark 6206

Kidney-style laptop workstation with a keyed laptop security system and a spacious work surface. Work surface: 22" x 32"



Midmark 6231

Procedure workstation with large worksurface designed for use with a laptop. Includes equipment pole, rear basket and technology accessories. Shown with optional large basket. Worksurface: 20" x 20"



Power designed to last

AC powered Care Exchange® workstations offer two dependable, long-lasting battery options. Choose from a traditional Sealed Lead Acid (SLA) battery or a Lithium Ion Phosphate (LiFe) battery.

	SLA Battery	LiFe Battery
Weight	888	8
Cost*	§	9999
Recharge Time	ZZZZZ	XX
Recharge Cycles	3	3 3 3 3 3 3 3
Runtime	<u> </u>	ඵඵඵඵඵ

For more information about battery options, please visit midmark.com and reference the AC Cart User Guide in the Technical Library.



Midmark 6261

AC powered traditional laptop cart with keyed laptop security system, secondary workshelf and mouse surface.

Work surface: 20" x 20"



Midmark 6263

AC powered traditional-style laptop cart with a flat panel monitor arm, keyed laptop security system, secondary workshelf and mouse surface. Standard 75/100mm VESA Work surface: 20" x 20"

AC powered workstations, compact yet powerful

Care Exchange® powered workstations can conveniently support up to a 12-hour shift before needing recharged, aiding in workflow efficiency and clinical accuracy. The AC power module gives you a flexible platform with the universal compatibility to use the hardware you need with your workstation. And, with the compact base design, you can maneuver between exam or patient rooms.

Accessories designed to improve mobility



Integrated Cable Management

Organize cables out of the way with a 3-plug AC outlet and ample space for cable storage while the clear cover protects against dust and debris.



Medical Grade Power Cord

Midmark powered Care Exchange® carts come with a medical grade cord and holder to dock the plug while the workstation is in use.



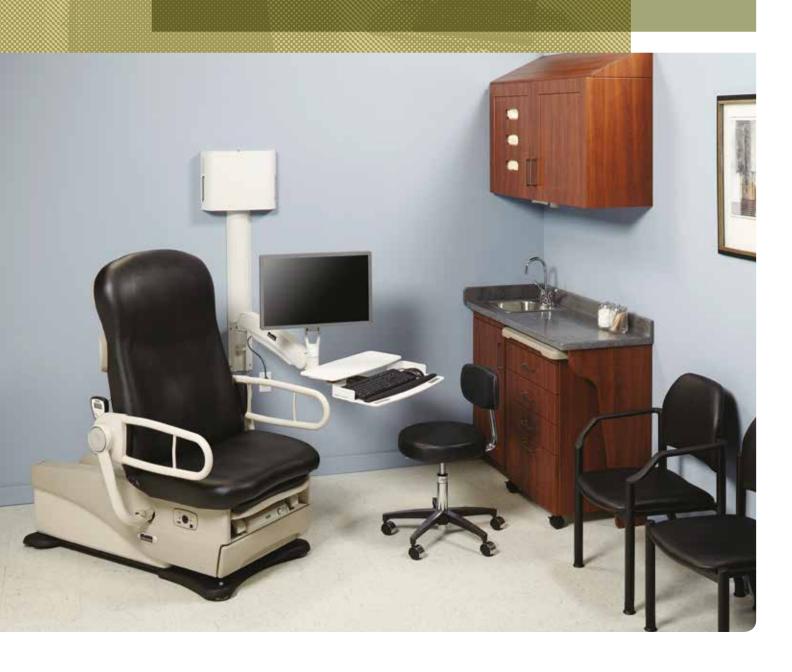
Power Handle

The power handle allows you to maneuver the workstation with an added power interface so you can monitor battery level and power the device on/off.

 $^{^{\}ast}$ Cost compared is that of the battery, not the entire workstation.

Wall mounted workstations, when you need extra space

When space is limited and a mobile technology platform isn't optimal, wall mounted Care Exchange® workstations can provide you with the form and function of mobile units in a space-saving, wall mount design. These units are cost effective and allow you to bring technology into the exam room without sacrificing your workflow or caregiver-patient interaction.





Form and function in a single, compact unit

Care Exchange® wall mounted workstations offer an adjustable height keyboard, work surface and monitor, allowing you to maintain a proper working position whether seated or standing.



Space-saving Design

Rotates up and out of the way (9.5" from the wall), addressing the needs of technology in a compact space while internal pivot limiters eliminate damage to wall surfaces.



Articulates from left to right, placing the worksurface exactly where it's needed to accommodate the user and maintain eye contact at the point of care.



Wall mounted options to fit your needs

Slim profile workstations make the most of your space

Each clinical space is different, and the incorporation of technology takes on a life of its own at times. That's why we want to ensure that you have the tools you need to support technology in the clinical space in your own unique way. Whether you are using mobile computing, standard PCs or a combination, we have a workstation that can help you integrate this technology as painlessly as possible.



Midmark 6282 Standard Duty Wall Mounted Workstation

Wall mounted workstation designed for 22" of independent height adjustment for Standard PC based technology components. *Available in Mist color only.*



Midmark 6281 Laptop Wall Mounted Workstation

Wall mounted workstation designed for 22" of independent height adjustment for laptop and tablet based technology components.

Available in Mist color only.



Midmark 6283 Heavy Duty Wall Mounted Workstation

Wall mounted workstation designed with an increased weight capacity and 22" of independent height adjustment for all-in-one PC based technology components.

6280 Series Wall Mounted Accessories



Adjustable PC Holder

Rack or wall mounted adjustable PC holder. Adjusts from 1"- 3.75" D 10" W x 7" H Available in Mist color only.



Tamper-proof PC Holder

Wall or track mounted PC holder designed to prevent theft or tampering while still providing cord management options.

15.74" W x 12.13" H x 3.96" D

Available in Mist color only.



Extension Arm

Designed to provide the user up to 20" of additional reach from the wall.

22" W x 2" D x 5.8" H

Available in Mist color only.



VESA Mount Bar Code Holder

Designed to optimize the location of a bar code scanner. For use with monitors up to 24" with up to 2" of horizontal adjustment.

14.35"-16.2" W x 4.35" H x 6.25" D Available in Mist color only.



Track Mount Bar Code Holder

Designed to hold the bar code scanner on the track.

5" W x 9" H x 4.73" D

Available in Mist color only.



Dual Monitor Arm

Designed to support up to two 8 lb monitors up to 24", also supporting 70 and 100 VESA mounting patterns. 26.8" W x 2.58" H x 4.6" D Available in Mist color only.

6270 Series Wall Units



Midmark 6271

Adjustable height workstation with flip-up keyboard that folds flat to a depth of 5.5" from the wall, flat screen monitor, folding work surface and monitor mount. (Optional workshelf and built-in cable management.) Work surface: 9" x 25"



Midmark 6272

Fixed height workstation with flip-up keyboard that folds flat to a depth of 5.5" from the wall, flat screen monitor, folding work surface and monitor mount. (Optional workshelf and built-in cable management.) Work surface: 9" x 25"



Midmark 6276

Keyboard and work surface that folds flat to a depth of 5.5" from the wall. *Work surface: 13" x 25"*



Midmark 6273

Fixed height monitor mount bracket allows for tilt and rotation functions. Standard 75/100 mm VESA Weight limit: 20 lb



Midmark 6274

Wall mounted, fixed height, flip-up keyboard folds flat to a depth of 5.5" from the wall for spaces that require customized workflows.

Work surface: 9" x 25"



Midmark 6275

Adjustable height flat screen monitor mount, including tilt and rotation, designed to improve flexibility and function.
6.5" W x 1.5" D x 22.75" H
Weight limit: 20 lb

6270 Series Wall Unit Accessories



Multipurpose Shelf

The multipurpose shelf provides a usable space for items that are needed for the daily workflow. 25.5" W x 9" D x .25" H



Wall Column CPU Holder

This accessory provides a thin-client mount for wall units. 8" W x 1.35" D x 8.5" H

6270 Series Wall Unit and Mobile Accessories



Slim-line CPU Holder

The thin-client, slim-line CPU holder accessory provides a secure, column mount platform for mobile CPU storage up to 3.5-6.0" in depth. 10" W x 3.5" D x 6.5" H



Thin-client CPU Holder

Provides a secure, wall mount platform for CPU storage with 75 and 100 mm VESA mount patterns.

8" W x 8.5" H

Weight limit: 5 lb



Utility Basket

The column mount utility basket provides additional storage space needed for folders or supplies, ensuring you have the information you need on hand. 12"Wx4"Dx10"D

Additional wall mounted options to fit your needs

Accessories that add versatility and improve function

Storage Accessories



Cord Tray Rear Basket

Designed to hold everything from blood pressure cuffs, technology components and other items needed for the day. Basket dimensions:

16.25" W x 5.24" D x 6" H



Medical Drawer with Lock

Elevated pull-out drawer with keyless security system. Includes a removable insert organizer.

18.44" W x 2.2" H x 8.75" D



Non-Powered Handle

The non-powered handle provides the option for additional control while moving the workstation.



Extended Security Bracket

Height adjustable upper surface adapter bracket fits taller components. Height spacing: 3.5", 4", 4.5"



Medical Drawer

Elevated pull-out drawer with removable insert organizer. 18.44" W x 2.2" H x 8.75" D



Rear Basket

Stores various technology components and miscellaneous items. Mounts to the work surface.

17.5" W x 6" H x 6.83" D



Lockable Medical Drawer

Lockable medical drawer mounts under worksurface. 6.5" W x 7" D x 2" H



Elevated chart pocket for storage area within easy access. 17" W x 7.35" D x 3" H



Large Utility Basket

Stores various technology components and miscellaneous items. 17" W x 3" H x 7.35" D

Technology Accessories



Cordless Barcode Holder

Worksurface mounted, cordless barcode holder with a 90° swivel. 4.5" W x 9.5" D



Bar Code Holder

The optional bar code holder accessory mounts to the workstation worksurface, allowing you to secure equipment for mobile computing at the point of care. 4" W x 6" D x 3.5" H



Monitor Arm CPU Holder

The thin-client holder accessory provides a secure, column mount platform for mobile CPU storage. Standard 75/100 mm VESA



Equipment Pole

Weight limit: 5 lb

The equipment pole workstation accessory helps reduce clutter with the added convenience of being fully mobile. It can also serve as a digital ECG holder, preventing entanglement or damage to leads.



Coiled Power Cord

The coiled, hospital grade power cord retracts to 1.5' and extends to 7.5', designed to provide flexibility without the clutter of traditional cords.



Multipurpose Shelf

The multipurpose shelf accessory with adjustable strap conveniently mounts to the workstation column for added equipment or extra space. 20" W x 12" D 18" W x 14.89" D



Flat Panel Monitor Arm

Flat panel monitor arm offers 16" of height adjustment, plus tilt, swivel and rotation. Standard 75/100 mm VESA Weight limit: 10 lb



Left Hand Swing-a-mouse

The left hand swiveling mouse surface mounts to the workstation work surface, providing added space when needed and rotating out of the way when it's not. 8" W x 9" H



HD Flat Panel Monitor Arm

HD flat panel monitor arm offers tilt and swivel. Standard 75/100 mm VESA Weight limit: 20 lb



Scale Holder

This convenient holder is designed to store the Fairbanks® digital scale on the side of a standard workstation base. 15.125" W x 12.5" H x 4.375" D



Counterweight

The counterweight accessory allows the workstation to support heavier items.



Specifications

Non-powered Workstations

18" of height adjustment, from 29" to 47"

18" x 20" base dimension

2 locking casters front; 2 nonlocking casters rear

3.94" (100 mm) oversized casters

Polished aluminum column and caster base

Worksurface dimensions:

6201 - 20" D x 20" W 6202 - 20" D x 20" W 6203 - 23" D x 20" W

6204 - 15" D x 26" W 6205 - 18" D x 28" W

6206 - 22" D x 32" W 6207 - 22" D x 32" W 6208 - 22" D x 32" W

6230 - 26" D x 20" W 6231 - 20" D x 20" W

Weight limits:

6201 - 30 lb 6202 - 30 lb

6203 - 30 lb 6204 - 10 lb

6205 - 10 lb

6206 - 30 lb 6207 - 10 lb

6208 - 30 lb

6230 - 30 lb

6231 - 30 lb

ANSI/BIFMA compliant

*18" of height adjustment, from 33" to 51" for 6230

Wall Mount Workstations

6271 and 6276 have 18" of height adjustment.

6281, 6282 and 6283 have 22" of height adjustment.

Polished aluminum column



Worksurface dimensions:

6271 - 9" D x 25" W

6272 – 9" D x 25" W

6274 - 9" D x 25" W

6276 - 13" D x 25" W 6281 - 14" D x 19" W

6282 - 10" D x 25" W

6283 - 10" D x 25" W

Weight limits:

6271 - 20 lb Monitor

20 lb Keyboard

6272 - 20 lb Monitor 20 lb Keyboard

6273 - 20 lb

6274 - 20 lb

6275 - 20 lb

6276 - 40 lb

6281 - 0 - 8 lb 6282 - 5 - 20 lb

6283 - 20 - 35 lb

AC Powered Workstations

18" of height adjustment, from 29" to 47"

30 lb weight capacity

18" x 20" base dimension

2 locking casters front; 2 non-locking casters rear

3.9" (100 mm) heavy duty casters

Polished aluminum column and caster base

Worksurface dimensions: 6261 - 20" D x 20" W

6263 - 20" D x 20" W ANSI/BIFMA compliant

AC power supply complies with the following safety and environmental standards:

IEC 60601-1, UL 60601, UL1778, and RoHS

Please refer to AC Powered Workstation Operators Manual for further details.

Midmark 6230 Phlebotomy Workstation

The specialized phlebotomy workstation includes a column mounted sharps container and utility basket. It provides blood draw supply storage and a work surface area. Height adjusts from 33" to 51". Available in Pebble Grey only.



Pebble Grey - 216



Whisper - 649



Fawn - 490



Frost - 791



Pebble Grey PVC Free - 793



Henna - 803



Storm - 802



Timber - 801



Acorn - 459



Earth - 487



Radiance - 800



Sediment - 799



Path - 798



Hewn - 797





Flax - 795



Dune - 794



Earthen Bronze -



Flat Iron - 807



Venus Silver -804



Pearl Essence -805



Mist - 813 (Available for the 6280 Series Workstations only.)

CARB 93120.2 Phase 2 Compliant

Midmark is an ISO 13485 and ISO 9001 Certified Company. For more information or a demonstration, contact your Midmark dealer or call: 1-800-MIDMARK Fax: 1-800-365-8631 Outside the U.S.A. call: 1-937-526-3662 Fax: 1-937-526-8392 or visit our website at midmark.com

Manufactured and/or distributed by Midmark Corporation, Versailles, OH.

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BOARDROOM ELECTROL®

Concealed-In-The-Ceiling Electric Screen

- Designed specifically for ceiling recessed installation in any conference or boardroom.
- Patented in-the-roller motor mounting system for quiet operation.
- Fully automatic ceiling closure doors conceal screen when not is use.





Optional remote control operation.

Matte White fabric up to and including 10' high will be seamless. Glass Beaded fabric up to and including 8' high will be seamless. Video Spectra® 1.5 fabric up to and including 8' high will be seamless. High Power fabric up to and including 6' high will be seamless.

SQUARE FORMAT

Si H x in./ft.	ze « W cm.		erall of Case cm.	Matte White	Glass Beaded	Video Spectra® 1.5	High Power
50" x 50"	127x 127	63-1/2"	161	Х	Х	X	Х
60" x 60"	152 x 152	73-1/2"	186	Х	Х	Х	Χ
70" x 70"	178 x 178	83-1/2"	211	X	Х	X	Χ
84" x 84"	213 x 213	97-1/2"	248	Х	Х	Χ	Х
6' x 8'	183 x 244	109-1/2"	278	X	Χ	X	X
8' x 8'	244 x 244	109-1/2"	278	Χ	Χ	X	X
7' x 9'	213 x 274	121-1/2"	309	X	X	X	X
9' x 9'	274 x 274	121-1/2"	309	X	Х		Х
8' x 10'	244 x 305	133-1/2"	339	X	X	X	Х
10' x 10'	305 x 305	133-1/2"	339	X	Χ		Х
9' x 12'	274 x 366	157-1/2"	400	X	X		X
12' x 12'	366 x 366	157-1/2"	400	x	X		

VIDEO FORMAT

Ho	g Area c W	Dia	minal gonal	Ove Length		Matte	Glass	Video	High
in.	cm.	in.	cm.	in.	cm.	White	Beaded	Spectra®1.5	Power
43" x 57"	109 x 145	72"	183	73-1/2"	187	X	X	X	X
50" x 67"	127 x 170	84"	213	83-1/2"	212	X	X	X	X
57" x 77"	145 x 196	96"	244	97-1/2"	248	Х	Х	X	Χ
60" x 80"	152 x 203	100"	254	97-1/2"	248	Х	Х	X	X
69" x 92"	175 x 234	120"	305	109-1/2"	278	Х	X	Х	Χ
87" x 116"	221 x 295	150"	381	133-1/2"	339	X	Х	Х	X
105" x 140"	267 x 356	180"	457	157-1/2"	400	Χ	X		X
120" x 160"	305 x 406	200"	508	177-1/2"	441	X	Х		

HDTV FORMAT

	Viewin H : in.	ig Area k W cm.		ninal Jonal cm.	Over Length of in.		Matte White	Glass Beaded	Video Spectra®1.5	High Power
i	45" x 80"	114 x 203	92"	234	97-1/2"	248	Х	Х	X	Х
•	52" x 92"	132 x 234	106"	269	109-1/2"	278	X	X	X	X
	58" x 104"	147 x 264	119"	302	121-1/2"	309	Χ	Х	Χ	Х
	65" x 116"	165 x 295	133"	338	133-1/2"	339	Х	Х	Х	Х
.	78" x 139"	198 x 353	159"	404	157-1/2"	400	Y	Y	Y	Y

Boardroom Electrol®

Automatic Electric Projection Screen Model



SUGGESTED SPECIFICATIONS: ________projection screen(s), _______(H) x ______(W), electrically operated 120 volt (60Hz), not more than 2.4 amp. Shall have specially designed motor mounted inside the roller, to be three wire with ground, quick reversal type, oiled for life, with automatic thermal overload cutout, integral gears, capacitor and an electric brake to prevent coasting. To have preset but adjustable limit switches to automatically stop picture surface in the "down" position. The roller to be of rigid metal. Screen fabric to be flame retardant and mildew resistant fiberglass with black masking borders standard. Bottom of fabric shall be formed into a pocket holding a metal rod. The ends of the rod shall be protected by heavyduty plastic caps. Case to be of wood with metal-lined wiring compartment. A section of the bottom of the case shall be a door equipped with hinges so that

it opens and closes automatically with the lowering and raising of the picture surface. When the picture surface is being lowered, the door shall drop open by gravity. When the picture surface is being raised, the two ends of the slat in the bottom pocket of the screen fabric shall engage two hooks on the door to lift it to the closed position where the door will engage a micro switch that will cut off the electrical current to the motor. The balance of the bottom of the case shall be a second hinged door with manual opening to provide access. Hinges shall be mounted to allow matching of the doors to the ceiling. Case to be finished with a black primer coat, ready to accept final finish by others. To be complete with three position control switch with cover plate. Screen to be listed by Underwriters' Laboratories.

c (UL) us

HDTV (16:9) Format Dimensions (2" Standard Black Drop at Top)

Viewing A	rea (H x W)	Nominal	Diagonal	Overall Len	igth of Case	Approx.	Ship. Wt.
In.	Cm	In.	Cm	In.	Cm	Lbs.	Kg
45" x 80"	114 x 203	92"	234	97½"	248	91	41.3
52" x 92"	132 x 234	106"	269	109½"	278	101	45.8
54" x 96"	137 x 244	110"	279	113½"	288	112	50.8
58" x 104"	147 x 264	119"	302	121½"	309	122	55.3
65" x 116"	165 x 295	133"	338	133½"	339	136	61.7
78" x 139"	198 x 353	159"	404	157½"	400	155	70.3
90" x 160"	229 x 406	184"	467	177½"	451	188	85.3

Wide (16:10) Format Dimensions (2" Standard Black Drop at Top)

Viewing A	rea (H x W)	Nominal	Nominal Diagonal		gth of Case	Approx.	Ship. Wt.
In.	Cm	In.	Cm	In.	Cm	Lbs.	Kg
50" x 80"	127 x 203	94"	239	97½"	248	91	41.3
57½" x 92"	146 x 234	109"	277	1091/2"	278	101	45.8
60" x 96"	152 x 244	113"	287	113½"	288	112	50.8
65" x 104"	165 x 264	123"	312	121½"	309	122	55.3
69" x 110"	175 x 279	130"	330	1271/2"	324	133	60.3
72½" x 116"	184 x 295	137"	348	133½"	339	136	61.7
87" x 139"	221 x 353	164"	417	157½"	400	155	70.3
100" x 160"	254 v 406	189"	480	1771/5"	451	188	85.3

Video (NTSC 4:3) Format Dimensions (2" Standard Black Drop at Top)

Viewing A	rea (H x W)	Nominal	Nominal Diagonal		gth of Case	Approx.	Ship. Wt.
In.	Cm	In.	Cm	In.	Cm	Lbs.	Kg
43" x 57"	109 x 145	72"	183	73½"	187	72	32.7
50" x 67"	127 x 170	84"	213	83½"	212	80	36.3
57" x 77"	145 x 196	96"	244	97½"	248	90	40.8
60" x 80"	152 x 203	100"	254	97½"	248	91	41.3
69" x 92"	175 x 234	120"	305	109½"	278	101	45.8
87" x 116"	221 x 295	150"	381	133½"	339	136	61.7
105" x 140"	267 x 356	180"	457	157½"	400	164	74.4
120" x 160"	305 x 406	200"	508	177½"	441	188	85.3

Square Format Dimensions (Screens With ^ Have 2" Standard Black Drop at Top)

Sizes (H x W)	Overall Len	gth of Case	Approx.	Ship. Wt.
In.	Cm	In.	Cm	Lbs.	Kg
50" x 50"	127 x 127	63½"	161	64	29.0
60" x 60"	152 x 152	73½"	186	73	33.1
70" x 70"	178 x 178	83½"	211	83	37.7
84" x 84"	213 x 213	97½"	248	95	43.1
6' x 8'^	183 x 244	109½"	278	101	45.8
8' x 8'	244 x 244	109½"	278	105	47.6
7' x 9'^	213 x 274	121½"	309	112	50.1
9' x 9'^	274 x 274	121½"	309	119	54.0
8' x 10'^	244 x 305	133½"	339	134	60.8
10' x 10'^	305 x 305	133½"	339	141	64.0
9' x 12'^	274 x 366	157½"	400	164	74.4
12' x 12'	366 x 366	157½"	400	168	76.2

4120a & 4120b DROP DOWN PROJECTION SCREENS

PRODUCT NOTES

- Matte White: Seamless in all sizes.
- Video Spectra 1.5: Available in sizes where both dimensions do not exceed 8'.
- High Power®: Available in sizes up to 9' x 12'. Horizontal seam required when both dimensions exceed 8'.
- *Add 3" to overall length of case for mounting brackets.
- Overall case length dimensions +/- 1/4" (6 mm).
- Detail dimensional drawings, wiring diagrams and installation instructions available upon request.
- · Specifications subject to change without notice.
- · Custom formats and sizes available upon request

WHEN ORDERING, MARK APPROPRIATE SELECTIONS

- 1. Select size from charts on other side.
- 2. Select viewing surface (All Da-Lite surfaces are GREENGUARD GOLD Certified.):

Matte White O High Power®	O Video Spectra 1.5
---------------------------	---------------------

3. Optional accessories:

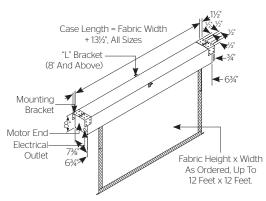
0

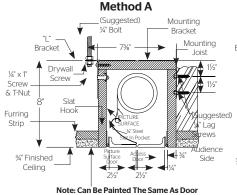
- Extra Drop available to lower picture area more than normal. Specify total drop at top ____ (black or white) or at bottom ____ (black or white). 13' maximum total surface height including picture area.
- Single Motor Low Voltage Control (LVC) external.
- ☐ Wireless Remote Control for LVC.
 - Radio Frequency Remote.
 - Radio Frequency Range Extender available
 - ☐ Infrared Remote.
- ☐ Key Locking Cover Plate for 120V or LVC Switch.

- ☐ Silent Motor.
- ☐ Key Operated Switch for 120V only (NOTE: Cannot be used with LVC).
- ☐ No Borders (Black masking borders standard).
- ☐ 220 Volt (50 Hz) Motor.
- ☐ Video Projector Interface Control external.
- ☐ External SCB-100 RS-232 Serial Control Board
 - □ NET-100 Ethernet-Serial Adapter
- ☐ White doors (brushed aluminum standard).
- ☐ White box (black standard).

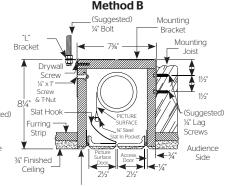
PRODUCT VIEW

SUGGESTED METHODS OF INSTALLATION





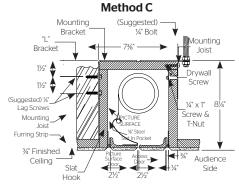
Offset mounting, recessed above ceiling.
For plaster, dry wall, tile or paneling. Doors and bottom of case painted same finish as ceiling.



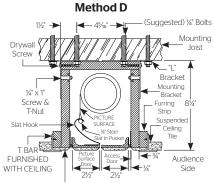
Ceiling Tile Cut To ¼" Thick (Attach With Mastic)

Offset mounting, recessed above ceiling.

May be adapted for ¾" ceiling, but cut to
¼" thick under doors and screen case



Flush mounting, recessed above ceiling. May be adapted for $\frac{1}{4}$ paneling for ceiling and doors.



Ceiling Tile Cut To ¼" Thick (Attach With Mastic)

Flush mounting, recessed above ceiling. For use with dropped ceiling. May also be adapted for use with acoustical or other ceiling ¼" thick but cut to ¼" thick under doors and screen case

	®
DA-LITE	

A Milestone AV Technologies Brand

3100 North Detroit Street Warsaw, Indiana 46582 P: 574.267.8101 or 800.622.3737 F: 574.267.7804 or 877.325.4832 E: info@da-lite.com www.da-lite.com

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Project Name:	
Architect:	Phone:
Contractor:	Phone:
Supervisor:	Phone:
Supplier:	Date:
Revised:	

4120a & 4120b installation instructions



INSTRUCTION BOOK FOR

Boardroom Electrol®



Important Safety Instructions

When using your video equipment, basic safety precautions should always be followed, including the following:

- 1. Read and understand all instructions before using.
- Position the cord so that it will not be tripped over, pulled, or contact hot surfaces.
- 3. If an extension cord is necessary, a cord with a current rating at least equal to that of the appliance should be used. Cords rated for less amperage than the appliance may overheat.
- 4. To reduce the risk of electric shock, do not disassemble this appliance. Contact an authorized service dealer when repair work is required. Incorrect reassembly can cause electric shock when the appliance is used subsequently.
- The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.

Save These Instructions

Pre-Installation

- Carefully unpack screen and remove outer wrapping from case.
- 2. Make sure to recheck measurement of screen location before installation.
- Remove center support brackets (on 8' and wider screens only), reverse brackets and reinstall flush with the top of the box.

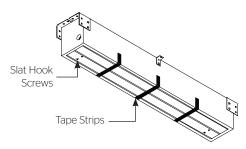


Figure 1

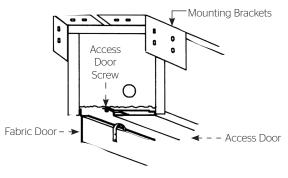


Figure 2

Installation

NOTE: Unit is not to be installed in air handling space.

- Install screen by raising unit into position between joists at one end only. Install one lag screw or appropriate fastener in each mounting bracket. Secure opposite end. Secure center support brackets. Install sufficient fasteners in each bracket for secure installation.
- 2. Make sure unit is level and plumb.
- ▲ CAUTION! Do not secure access door or seal in unit until screen has been secured in position and properly tested for satisfactory operation. Do not fit unit so tightly that the screen surface drop door binds. Door drops by gravity only.
- ATTENTION! Ne fixez pas la trappe d'accès ou ne scellez pas l'unité jusqu'à ce qu'il ait été correctement mis en place et qu'il fonctionne convenablement. Ne serrez pas l'unité au point que la surface de la trappe d'accès de l'écran soit bloquée. La trappe tombe uniquement à cause de la gravité.
- 3. If you are going to cover screen door with paneling or other materials, allow access (suitable holes or plug) to slat hook screws (4) when servicing (Fig. 1).
- 4. Open access door by removing access door screws.
- 5. Remove junction box cover plate.

Boardroom Electrol® Installation

6. Remove switch assembly (boxed, located at pin end of fabric).

A CAUTION! Do not cut wrapping paper or tape with knife or any sharp tool. Remove by hand.

ATTENTION! Ne coupez pas le ruban adhésif sur la toile avec un couteau ou un outil tranchant. Retirez à la main.

- 7. Pull orange string to remove wrapping paper.
- 8. Install electrical hook up that applies to your unit. Standard installation is for a single 120VAC or 240VAC wall switch to control the screen. Optional Control units may have been ordered. Refer to additional instructions for the external VPI, external low voltage control and SCB-100. Refer to the appropriate wiring diagram for your screen.

NOTE: Screen has been internally wired at DA-LITE. Wiring designated "external" is completed by installer conforming to local and national codes.

- 9. Lower picture surface approximately 4"-6" so that the slat will rest on top of the slat hooks. Guide slat past hooks by gently pulling fabric forward (Fig. 3). Do not bend hooks.
- 10. Test installation by carefully running picture surface up and down 2-3 times. Be prepared to stop screen. Standard Duty Cycle: 1 MIN. ON / 3 MIN. OFF.
- 11. Run the picture surface upward. The surface door will automatically close when the picture surface rolls into the case. The ends of the slat will catch the two hooks on the surface door and pull the door closed. When the door closes,

a limit switch is tripped and the motor shuts off.

A CAUTION! Excessive continuous operation may cause overheating.

ATTENTION! Le fonctionnement continu et excessif peut provoquer une surchauffe.

- 12. Run picture surface downward until picture surface door fully opens.
- 13. Install junction box cover plate.
- 14. Close access door and reinstall screws at each end of access door.

ACAUTION! Do not attempt to restore a lost wrap by adjusting limit switches. Allow one-eighth of an inch (1/8") clearance around surface door. Make sure door does not bind. Check hinges. Paint or tile cement will interfere with free operation. Gravity drops door.

ATTENTION! N'essayez pas de réintégrer un tour de toile en réglant les interrupteurs de limite! Laissez un espace 0,30 cm (1/8 po) autour de la trappe. Vérifiez que la trappe n'est pas entravée. Vérifiez les gonds. La peinture ou le ciment à tuile nuira au bon fonctionnement. La gravité fait tomber la trappe.

15. Complete installation by painting and finishing to suit your needs. Finish to allow access door to be removed if necessary.

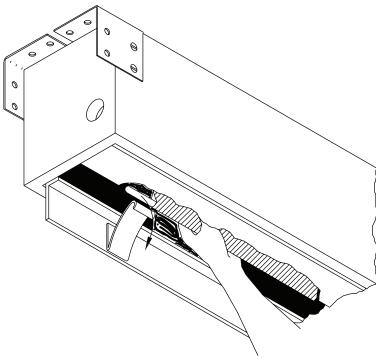
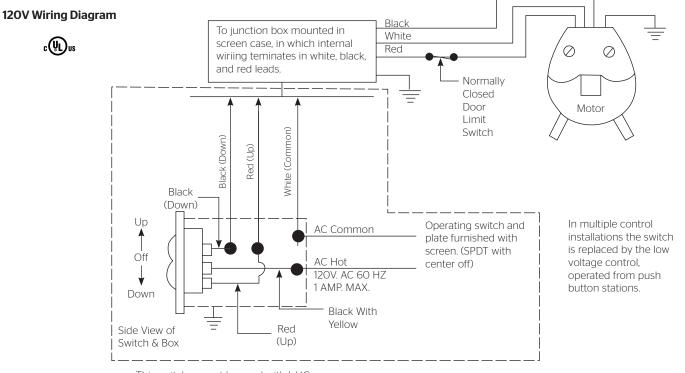


Figure 2

Boardroom Electrol® Installation 120V Screens



This switch cannot be used with L.V.C.

NOTE: A single switch cannot be used to operate more than one screen. Contact the factory for further information.

Screen Adjustment For 120V Screens

Surface travel is stopped automatically in the fully opened and closed positions by limit switches that are properly adjusted at Da-Lite. Should it be necessary to adjust for more or less drop of picture, proceed in the following manner:

NOTE: Use a screw driver or 5/32" allen wrench to make adjustments.

More screen drop

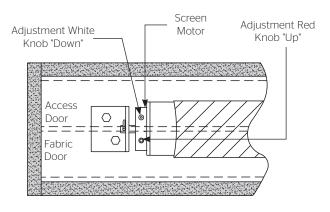
- 1. Place operating switch in "down" position.
- When the screen stops, turn the white "down" limit knob (Fig.4) one-quarter turn counterclockwise. Test by raising picture surface approximately two feet, then lower again. Repeat until desired picture surface position is attained.

Less screen drop

- 1. Raise picture surface approximately two feet above desired level.
- 2. Place operating switch in "off" position.
- 3. Turn the white "down" limit knob (Fig.4) one-quarter turn clockwise. Test by raising picture surface approximately two feet, then lower again. Repeat until desired picture surface position is attained.

▲ CAUTION! Do not adjust for more drop than what was ordered. At least 1-1/2 wraps of fabric must remain on the roller. This screen comes standard with 0" or 2" black at the top. See the specification data sheet for details.

ATTENTION! N'effectuez pas de réglage pour obtenir un déroulement supérieur à celui commandé. Au moins 1 à 1/2 tour de toile doit être maintenu sur le cylindre. Cet écran est doté de série d'une bande noire supérieure de 0 cm (0 po) ou 5 cm (2 po). Consultez la fiche technique pour plus de renseignements.



4

240 Volt Wiring Diagram for Standard Wall Switch:

Da-Lite offers two styles of 240 volt wall switches for standard operation. Please see wiring diagram included in wall switch box included with screen.

Screen Adjustment For 220/240V Screens

Surface travel is stopped automatically in the fully opened and closed positions by limit switches that are properly adjusted at Da-Lite. Should it be necessary to adjust for more or less drop of picture, proceed in the following manner:

NOTE: Use a screw driver or 5/32" allen wrench to make adjustments.

More screen drop

- 1. Place operating switch in "down" position.
- When the screen stops, turn the white "down" limit knob (Fig.5) one-quarter turn counterclockwise. Test by raising picture surface approximately two feet, then lower again. Repeat until desired picture surface position is attained.

Less screen drop

- Raise picture surface approximately two feet above desired level.
- 2. Place operating switch in "off" position.
- 3. Turn the white "down" limit knob (Fig.5) one-quarter turn clockwise. Test by raising picture surface approximately two feet, then lower again. Repeat until desired picture surface position is attained.

ACAUTION! Do not adjust for more drop than what was ordered. At least 1-1/2 wraps of fabric must remain on the roller. This screen comes standard with 0" or 2" black at the top. See the specification data sheet for details.

ATTENTION! N'effectuez pas de réglage pour obtenir un déroulement supérieur à celui commandé. Au moins 1 à 1/2 tour de toile doit être maintenu sur le cylindre. Cet écran est doté de série d'une bande noire supérieure de 0 cm (0 po) ou 5 cm (2 po). Consultez la fiche technique pour plus de renseignements.

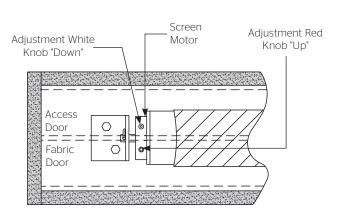
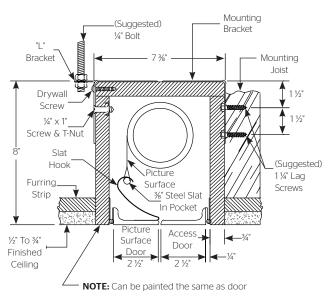


Figure 5

Boardroom Electrol® Intallation

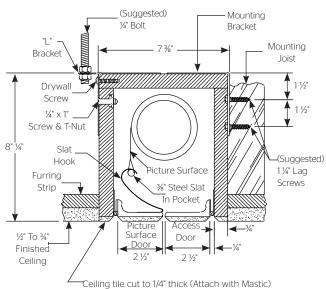
Select installation method according to ceiling type.

Method A



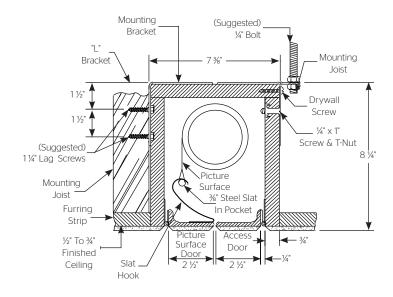
Offset mounting, recessed above ceiling. For plaster, dry wall, tile or paneling. Doors and bottom of case painted same finish as ceiling.

Method B



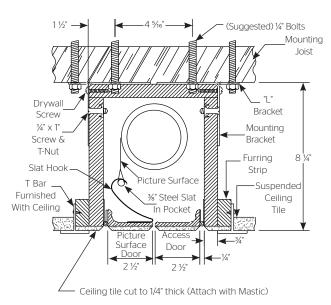
Offset mounting, recessed above ceiling. May be adapted for 1/2" to 3/4" ceiling, but cut to 1/4" thick under doors and screen case.

Method C



Flush mounting, recessed above ceiling. May be adapted for 1/4" paneling for ceiling and doors.

Method D



Flush mounting, recessed above ceiling. For use with dropped ceiling. May also be adapted for use with acoustical or other ceiling 1/2" to 3/4" thick but cut to 1/4" thick under doors and screen case.

Troubleshooting

Visit www.da-lite.com to find installation and troubleshooting tutorials. You will also find a link to Live Chat for interactive support and you can contact us by email at info@da-lite.com or by phone at (800) 622-3737 or (574) 267-8101 with any troubleshooting questions.

Symptom	Cause	Solution		
Screen will not operate or will	Blown fuse.	Replace fuse.		
not go "down". Motor does not hum.	Tripped circuit breaker.	Reset circuit.		
	No power to operating switch or junction box.	Check above. Tighten all loose wire connections. Recheck wiring. See installation instructions.		
	Insufficient line voltage (must be at least 115V or 220V, depending on motor type).	Correct line voltage. "Down" Position Check for power across black and white leads.		
	Power at junction box Thermal overload tripped.	Let motor cool down for 15 minutes. Try again.		
	Broken wire in the "down" position.	Check for continuity.		
	Defective motor, limit switch or capacitor.	Replace motor assembly. NOTE: Motor is a sealed assembly.		
Motor hums.	Capacitor burned out.	Replace motor assembly.		
Screen will not move upward.				
	Blown fuse.	Replace fuse.		
Screen will not move upward. Motor does not hum.	Blown fuse. Tripped circuit breaker.	Replace fuse. Reset circuit breaker.		
	Tripped circuit breaker.	Reset circuit breaker. Check above. Tighten all loose wire connections. See above. "Up" Position		
	Tripped circuit breaker. No power to operating switch or junction box. Insufficient line voltage (must be at least 115V or	Reset circuit breaker. Check above. Tighten all loose wire connections. See above. "Up" Position Check for power across red and white leads.		
	Tripped circuit breaker. No power to operating switch or junction box. Insufficient line voltage (must be at least 115V or 220V, depending on motor type).	Reset circuit breaker. Check above. Tighten all loose wire connections. See above. "Up" Position Check for power across red and white leads. Correct line voltage.		
	Tripped circuit breaker. No power to operating switch or junction box. Insufficient line voltage (must be at least 115V or 22OV, depending on motor type). Open door micro switch. Power at junction box	Reset circuit breaker. Check above. Tighten all loose wire connections. See above. "Up" Position Check for power across red and white leads. Correct line voltage. Replace micro switch.		
	Tripped circuit breaker. No power to operating switch or junction box. Insufficient line voltage (must be at least 115V or 22OV, depending on motor type). Open door micro switch. Power at junction box Thermal overload tripped.	Reset circuit breaker. Check above. Tighten all loose wire connections. See above. "Up" Position Check for power across red and white leads. Correct line voltage. Replace micro switch. Let motor cool down for 15 minutes. Try again.		

Troubleshooting

Symptom	Cause	Solution				
	Hinge is bound or has a foreign substance on it which does not allow it to open by gravity	Check installation to free door. Clear any foreign substance; i.e., paint or plaster from hinge.				
Door will not open	Slat hooks catch on access door	Adjust slat hooks. Door can be opened by removing four screws holding slat hooks to door. Access should be provided to these screws during and after installation.				
Door does not close tightly.	"Up" limit switch in motor is out of adjustment.	NOTE: This switch is not normally used when operating screen. Motor automatically shuts off if fabric does not close fabric door. If adjustment allows motor to shut off too soon, it will leave fabric door open. Adjust black limit switch clockwise (towards +).				
"Down" limit switch incorrect.	"Down" limit switch out of adjustment.	See installation instructions.				
	Squeaking, rubber end plug rubbing on motor.	Center roller in case.				
Noise. NOTE: Screen will operate with a low-pitched hum.	Grinding. Foreign object in screen rubbing on roller or fabric.	Remove.				
	Gear noise	Replace motor assembly				
Coasting.	Defective brake.	Replace motor assembly.				
Roller displaced from mounting bracket. Pin end slipped out of nylon bearing		Remove pin end mounting. Realign motor in tube. Reattach pin end.				
Fabric door hangs down on one	Slat hooks not formed equally.	Bend slat hook slightly or apply tape to end of slat where door hangs. Build slat up enough to close door.				
end.	Crooked pocket.	If not corrected by applying above, replace fabric.				
	Screen not installed properly	Check for level and plumb.				
Fabric hangs crooked or is rubbing on slat hook.	Fabric has backed up inside case.	Adjust "down" limit switch slowly until roller is exposed and wrinkle comes out, then readjust for proper drop.				
	Fabric is damaged.	Replace fabric.				

LIMITED ONE YEAR WARRANTY ON DA-LITE PRESENTATION PRODUCTS

Milestone AV Technologies LLC warrants certain Da-Lite branded products to the original purchaser only, to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase by the original purchaser; provided they are properly operated according to Da-Lite's instructions and are not damaged due to improper handling or treatment after shipment from the factory.

This warranty does not apply to equipment showing evidence of misuse, abuse or accidental damage, or which has been tampered with or repaired by a person other than authorized Da-Lite personnel.

Da-Lite's sole obligation under this warranty shall be to repair or to replace (at Da-Lite's option) the defective part of the merchandise. Returns for service should be made to your Da-Lite dealer. If it is necessary for the dealer to return the screen or part to Da-Lite, transportation expenses to and from Da-Lite are payable by the purchaser and Da-Lite is not responsible for damage in shipment. To protect yourself against damage or loss in transit, insure the product and prepay all transportation expenses.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES AS TO FITNESS FOR USE AND MERCHANTABILITY. Any implied warranties of fitness for use, or merchantability, that may be mandated by statute or rule of law are limited to the one (1) year warranty period. This warranty gives you specific legal rights, and you may also have other rights, which vary from state-to-state. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NO LIABILITY IS ASSUMED FOR EXPENSES OR DAMAGES RESULTING FROM INTERRUPTION IN OPERATION OF EQUIPMENT, OR FOR INCIDENTAL, DIRECT, OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

In the event that there is a defect in materials or workmanship of a Da-Lite product, you may contact our Sales Partners at PO Box 137, Warsaw, IN 46581-0137, (574) 267-8101, (800) 622-3737.

IMPORTANT: THIS WARRANTY SHALL NOT BE VALID AND DA-LITE BRANDED PRODUCTS SHALL NOT BE BOUND BY THIS WARRANTY IF THE PRODUCT IS NOT OPERATED IN ACCORDANCE WITH THE DA-LITE WRITTEN INSTRUCTIONS.

Keep your sales receipt to prove the date of purchase and your original ownership.



A Milestone AV Technologies Brand

3100 North Detroit Street Warsaw, Indiana 46582 P: 574.267.8101 or 800.622.3737 F: 574.267.7804 or 877.325.4832 E: info@da-lite.com www.da-lite.com



PRODUCT HIGHLIGHTS

- 4K Ultra High Definition (3840 x 2160)
- · UHD Upscaling
- UHD Dimming
- PurColor
- Smart TV with Quad-Core Processor

SIZES









UN75JU6500

UN65JU6500

UN60JU6500

UN55JU6500







UN50JU6500

UN48JU6500

UN40JU6500

With 4K UHD resolution you'll enjoy a picture with 4X the detail of Full HD. Watch and play your way with the advanced Samsung Smart TV platform that lets you quickly and easily access your favorite content.

KEY FEATURES

PICTURE QUALITY

- 4K UHD (3840 x 2160 Resolution)
- · Contrast Enhancer
- Ultra Clear Panel
- · UHD Upscaling
- UHD Dimming
- PurColor
- Motion Rate 120

SMART

- Quad-Core Processor
- Smart TV
- Smart Apps
- Full Web Browser

SMART INTERACTION

• Motion Control with Optional Camera Accessory

SMART CONNECTIVITY

- Screen Mirroring
- ConnectShare™ Movie
- Smart View 2.0
- Briefing on TV

CONNECTIONS

- 4 HDMI® Connections¹
- 3 USB Connections
- 802.11ac Wi-Fi Built In
- 1 Component In
- 1 Composite In (Shared with AV Component input)

AUDIO

- Dolby® Digital Plus
- DTS® Premium Sound 5.1™
- DTS® Studio Sound

INCLUDES

• Standard Remote Control

SAMSUNG

KEY FEATURES (page 1 of 2)

PICTURE QUALITY

4K UHD (3840 x 2160 RESOLUTION)

Enjoy incredible picture crispness and dramatic detail, no matter how big the screen, with 4X the resolution of full HD.

CONTRAST ENHANCER

Experience a greater sense of depth with optimized contrast across multiple zones of the screen.

ULTRA CLEAR PANEL

Get superior picture quality with minimized glare from any angle with a screen that absorbs ambient light, reduces reflections, and lets the picture come to life.

UHD UPSCALING

Upgrade all lower resolution media to a stunning near ultra high-definition experience with enhanced detail and optimized picture quality.

UHD DIMMING

Experience UHD picture quality with deeper blacks, purer whites, brighter colors, and enhanced detail in every image.

PURCOLOR

Enjoy incredible shades of color, as nature intended, with technology that accurately blends primary and secondary colors for spectacular picture performance.

MOTION RATE 120

Enjoy improved fast-action moving picture resolution at Motion Rate 120 with outstanding refresh rate, processing speed and backlight technology.

SMART

QUAD-CORE PROCESSOR

Enjoy a fluid browsing experience and faster control – switching between apps, streaming content, and other media effortlessly.¹

SMART TV

Access your favorite program choices, live TV, video on demand, apps, and social media in one easy-to-browse navigation experience.²

SMART APPS

Put your favorite media and entertainment at your fingertips with apps built for your Samsung Smart TV – including streaming TV and movies, sports, social media, interactive games, weather, and more.²

FULL WEB BROWSER

Easily browse the web right on your TV – enjoy everything from online shopping and social media to entertainment news.²

SMART INTERACTION

MOTION CONTROL WITH OPTIONAL CAMERA ACCESSORY

Make Skype calls from your TV and control things like volume, content browsing, and playback with hand motion control by adding Samsung's VG-STC5000/ZA.

SMART CONNECTIVITY

SCREEN MIRRORING

The screen mirroring feature allows you to mirror your phone or other compatible mobile device's screen onto the TVs screen wirelessly instead of your devices smaller screen for showing content, media playback, or other function.

CONNECTSHARE™ MOVIE

Enjoy a fluid browsing experience and faster control – switching between apps, streaming content, and other media effortlessly.

SMART VIEW 2.0

Watch your TV entertainment on your mobile device – or your mobile media on your ${\sf TV}.^2$

BRIEFING ON TV

Have your Samsung Smart TV act as an alarm when synchronized with your other Samsung mobile devices. Use the large screen to display important items such as the time, weather, and your daily schedule.

CONNECTIONS

HDMI®

Enjoy higher quality audio and video with an HDMI connection that transmits both signals over a single cable.³

WI-FI

Enjoy your favorite on-demand content seamlessly through your existing network with built-in Wi-Fi (802.11ac).

1 COMPONENT IN

Analog video connection transmits HD RGB video using three RCA connections.

1 COMPOSITE IN (SHARED WITH AV COMPONENT INPUT)

Analog video connection transmits video using one RCA connection.



¹Versus Dual-Core Processor

² All devices must be on the same network and internet connection is required

³ HDMI – CEC (Consumer Electronics Control) facilitates convenient control functions with compatible devices

KEY FEATURES (page 2 of 2)

AUDIO

DOLBY® DIGITAL PLUS

Enjoy the ultimate in digital sound quality on all your favorite movies, TV shows and streaming content. Dolby Digital Plus optimizes your entertainment experience with enhanced sound richness and clarity.

DTS STUDIO SOUND

Advanced audio processing adapts the Digital Theater System stream to your stereo system, creating a cinematic digital audio experience for your home entertainment system.

DTS® PREMIUM SOUND 5.1™

Feel like you're part of the action by immersing your senses in 5.1 surround sound.

INCLUDES

STANDARD REMOTE CONTROL

Remote control that operates the TV.

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SAMSUNG

MODELS

MODEL: UN75JU6500

ORDER CODE: UN75JU6500FXZA

SCREEN SIZE CLASS: 75"

SCREEN DIAGONAL MEASUREMENT: 74.5"

UPC CODE: 887276075686

COUNTRY OF ORIGIN: Mexico

DIMENSIONS (INCHES W x D x H):

TV WITHOUT STAND: 66.5 x 2.6 x 38.3

• TV WITH STAND: 66.5 x 14 x 40.7

• **SHIPPING:** 71.5 x 9.8 x 44.2

WEIGHT (LBS):

• TV WITHOUT STAND: 80.5

• **TV WITH STAND:** 93.7

• **SHIPPING:** 113.1

VESA SUPPORT: Yes (400 mm x 400 mm)

ACCESSORIES INCLUDED IN BOX:

• **REMOTE MODEL:** Standard TM1260C

MODEL: UN65JU6500

ORDER CODE: UN65JU6500FXZA

SCREEN SIZE CLASS: 65"

SCREEN DIAGONAL MEASUREMENT: 64.5"

UPC CODE: 887276075679

COUNTRY OF ORIGIN: Mexico

DIMENSIONS (INCHES W x D x H):

• TV WITHOUT STAND: 57.6 x 2.5 x 33.2

• TV WITH STAND: 57.6 x 12.5 x 35

• **SHIPPING:** 65.8 x 7.3 x 37.5

WEIGHT (LBS):

• TV WITHOUT STAND: 52.2

• **TV WITH STAND:** 60.6

• **SHIPPING:** 72.8

VESA SUPPORT: Yes (400 mm x 400 mm)

ACCESSORIES INCLUDED IN BOX:

MODELS

MODEL: UN60JU6500

ORDER CODE: UN60JU6500FXZA

SCREEN SIZE CLASS: 60"

SCREEN DIAGONAL MEASUREMENT: 60"

UPC CODE: 887276075662

COUNTRY OF ORIGIN: Mexico

DIMENSIONS (INCHES W x D x H):

TV WITHOUT STAND: 53.7 x 2.5 x 31.1

• TV WITH STAND: 53.7 x 12.5 x 32.8

• **SHIPPING:** 62.8 x 7.2 x 36.1

WEIGHT (LBS):

• TV WITHOUT STAND: 46.1

• **TV WITH STAND:** 54.5

• SHIPPING: 67

VESA SUPPORT: Yes (400 mm x 400 mm)

ACCESSORIES INCLUDED IN BOX:

• **REMOTE MODEL:** Standard TM1260C

MODEL: UN55JU6500

ORDER CODE: UN55JU6500FXZA

SCREEN SIZE CLASS: 55"

SCREEN DIAGONAL MEASUREMENT: 54.6"

UPC CODE: 887276075655

COUNTRY OF ORIGIN: Mexico

DIMENSIONS (INCHES W x D x H):

• TV WITHOUT STAND: 48.9 x 2.5 x 28.3

• TV WITH STAND: 48.9 x 10.5 x 30.1

• **SHIPPING:** 55.8 x 6.1 x 32.1

WEIGHT (LBS):

• TV WITHOUT STAND: 33.1

• **TV WITH STAND:** 38.1

• **SHIPPING:** 47.2

VESA SUPPORT: Yes (400 mm x 400 mm)

ACCESSORIES INCLUDED IN BOX:

MODELS

MODEL: UN50JU6500

ORDER CODE: UN50JU6500FXZA

SCREEN SIZE CLASS: 50"

SCREEN DIAGONAL MEASUREMENT: 49.5"

UPC CODE: 887276075648

COUNTRY OF ORIGIN: Mexico

DIMENSIONS (INCHES W x D x H):

TV WITHOUT STAND: 44.4 x 2.5 x 25.8

• **TV WITH STAND:** 44.4 x 10 x 27.1

• **SHIPPING:** 53 x 5.6 x 29.1

WEIGHT (LBS):

• TV WITHOUT STAND: 26.9

• **TV WITH STAND:** 31.7

• **SHIPPING:** 39.7

VESA SUPPORT: Yes (400 mm x 400 mm)

ACCESSORIES INCLUDED IN BOX:

• **REMOTE MODEL:** Standard TM1260C

MODEL: UN48JU6500

ORDER CODE: UN48JU6500FXZA

SCREEN SIZE CLASS: 48"

SCREEN DIAGONAL MEASUREMENT: 47.6"

UPC CODE: 887276075709

COUNTRY OF ORIGIN: Mexico

DIMENSIONS (INCHES W x D x H):

• TV WITHOUT STAND: 42.8 x 2.5 x 24.8

• TV WITH STAND: 42.8 x 10 x 26.6

• **SHIPPING:** 51.4 x 5.5 x 28.1

WEIGHT (LBS):

• TV WITHOUT STAND: 25.1

• TV WITH STAND: 30

• **SHIPPING:** 35.1

VESA SUPPORT: Yes (400 mm x 400 mm)

ACCESSORIES INCLUDED IN BOX:

MODELS

MODEL: UN40JU6500

ORDER CODE: UN40JU6500FXZA

SCREEN SIZE CLASS: 40"

SCREEN DIAGONAL MEASUREMENT: 40"

UPC CODE: 887276075716

COUNTRY OF ORIGIN: Mexico

DIMENSIONS (INCHES W x D x H):

• TV WITHOUT STAND: 36.1 x 2.5 x 21.1

• **TV WITH STAND:** 36.1 x 9.5 x 22.9

• **SHIPPING:** 44.5 x 5.3 x 23.5

WEIGHT (LBS):

• TV WITHOUT STAND: 17

• **TV WITH STAND:** 20.7

• **SHIPPING:** 24.3

VESA SUPPORT: Yes (200 mm x 200 mm)

ACCESSORIES INCLUDED IN BOX:











42" class (42.2"/1071mm diagonal)



Run messages on up to 50 TVs in the form of a billboard without any additional hardware. Advertisements, information and broadcast content can be arranged on the same screen to attract attention and deliver specific messaging to your customer base.

MESSAGE DELIVER

Deliver your messages while broadcasting live channels simultaneously.



ALL-IN-ONE DISPLAY SOLUTION

No need to purchase any additional hardware or software.



SIMPLE CONNECTION

Needs only a power, LAN connection and a USB to operate.



FREE SUPERSIGN LITE

- 74 pre-installed templates for multiple verticals
- Schedule your messages to show on all or on specific TV's, at the times you choose.
- Remotely control maximum 50 TVs over the network



Free templates

HOW TO USE SUPERSIGN TV

Option 1. Stand-alone





LX530S TV Tuner Built-In Digital Signage



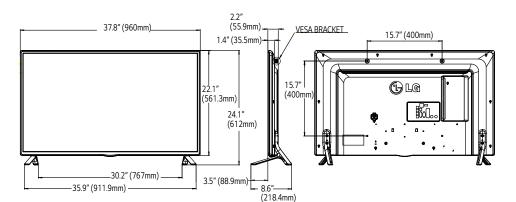
42" class (42.2"/1071mm diagonal)











Rear Jack Panel

MARKING: To prevent I'll from halling over, the TV should be accounty obtained to the Sootheal par restalation instructions. Exposing, of bashing, or modeling the machine may season injury.	
A0000 001	EXTERNAL SPEAKER OUT
RGB IN (PC) RS-232C IN (CONTROL & SERVI	00
	ANTENNA/ CABLE IN
Manufactured under license from Doby Laboratories. Doby and the double-D WDEO/@ @ BEXTO AUDO @ \$\frac{\text{MED}}{2} \text{MED} \text{AUDO @ \$\frac{\text{MED}}{2} \text{MED}}	
symbol are trademarks of Dolby Laboratories. COMPONENT IN/AV IN	MCR65307622

Side Jack I allet			
Hamin 2	USB IN	USB IN 2	MEZINOCIII SONI PERING

PANEL	MODEL	42LX530S
PANEL	Size	42" Class (42.2"/1071mm" diagonal)
	Panel Technology	IPS
	Backlight Type	LED (Direct)
	Brightness	300 cd/m ²
	Dynamic Contrast Ratio	1,000,000 : 1
	Static Panel Contrast Ratio	1,200 : 1
	Viewing Angle	178°/178°
	Response Time (G to G)	8 ms
	Frame Rate	60Hz
BROADCASTING	Analog	NTSC
SYSTEM	Digital	ATSC, Clear QAM/VSB
VIDEO	Resolution	1920 x 1080 (FHD)
VIDEO	Triple XD Engine	Yes
	Aspect Ratio	Yes 6 modes (16:9, Just scan,Set by program, 4:3,Zoom,Cinema zoom1)
AUDIO	Audio Output	10W + 10W
AUDIO	Sound System	2.0 ch
	Sound Mode	Yes 6 modes
	Souria Mode	(Standard, News, Music, Cinema, Sport, Game)
	Clear Voice	Yes
	Sound Optimizer	Yes 3 modes (Normal, Wall-Mount Type, Stand Type)
SPECIAL FEATURES	Remote Diagnosis/ Self Diagnosis	Yes (USB)
	HDMI-CEC	Yes (without ARC)
	HTNG-CEC	Yes
	Welcome Screen	Yes (Splash Image)
	Lock Mode	Yes
	Multi IR Code	Yes
	Public Display Mode	Yes
	USB Cloning	Yes
	IR Out	RS-232C
	USB Auto Play Back	Yes
	Moving Picture Playback (SD/HD/Plus HD)	asf, wmv, 3gp, 3gp2, divx, avi, mp4, m4v, mov, mkv, ts, trp, tp, mts, m2ts, vob, mpg, mpeg, mpe
	Picture	jpeg, jpg, jpe, BMP, PNG
	Audio Codec	mp3, AAC, M4A, OGG, WMA, WMA 10 Pro
	External Speaker Out	Variable/Fixed/Line Out, 3.5mm, Stereo, Single Ended Type (GND,L+,R+), 1W with 8Ω
	RJP Compatibility	RS232C, HDMI
	RJP Interface	RS232C, HDMI CEC
	Auto Off/ Auto Sleep	Yes
	Smart Energy Saving	Yes
	Kensington Lock	Back Cover
	RTC (Real Time Clock)	Yes
	Wi-Fi	Wi-Fi Dongle Ready
	SuperSign Lite (3.0)	Yes

INTERFACE	MODEL	42LX530S
(SIDE)	HDMI In	1
	USB	2 (2.0)
INTERFACE	RF In	1
(REAR)	AV In (Composite)	1 (Sharing with Component In)
	Component In	1 (Y, Pb,Pr) + Audio (L/R)
	Digital Audio Out	1 (Optical)
	RGB In	1 (D-sub 15pin)
	PC Audio Input	1 (Sharing with Component In)
	RS-232C	1 (D-sub 9pin)
	HDMI In	1
	LAN	1 (RJ45)
	External Speaker Out	1 (3.5mm Phone Jack)
POWER	Voltage	110 ~ 240V, 50/60Hz
	Typical	35.5W
	Stand-by	0.5W↓
CABINET	Bezel On (L/R, T, B) (mm)	11.0/11.0, 11.0, 16.5
	Bezel Off (L/R, T, B) (mm)	8.5/8.5, 8.5, 14.0
	Depth	2.2" (55.5mm)
	Without Stand (WxHxD)	37.8"x22.3"x2.2" (960mm x566.4mm x55.9mm)
	With Stand (WxHxD)	37.8"x24.0"x8.6" (960mm x609.6mm x218.4mm)
	Weight	20.9 lbs
	Carton (WxHXD)	41.5"x 25.4"x5.7" (1,054mm x645.2mm x 144.7mm)
	Carton Weight	25.6 lbs
	VESA™ Compatibility	400mm x 400mm
CERTIFICATION	Safety	UL, FCC
(STANDARD)	Environment	RoHS, cUL, NOM
	Energy Star® 7.0	Yes
WARRANTY	2-Year Limited Warranty (Parts an	nd Labor) Extended Warranties Available
UPC	7 19192 19705 3	
ACCESSORIES	Cable	Power cord
	Manual / ESG	Simple book
OPTIONAL ACCESSORIES	AN-WF500 (Wi-Fi Dongle)	



The estimated annual energy cost determined in accordance with 16 CFR Part 305.5 for models 42LX530S is \$9.

"Your energy cost depends on your utility rates and use. The estimated cost is based on 11 cents per kWh and 5 hours of use per day. For more information, visit www.ftc.gov/energy." 1

¹FTC Television labeling rule (18 CFR Part 305, as added by 76 Fed. Reg. 1038 (Jan 6, 2011)).















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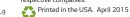






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26" CLASS (26.0" MEASURED DIAGONALLY) 22" CLASS (21.6" MEASURED DIAGONALLY)



LED Commercial Widescreen Integrated HDTV

The estimated annual energy cost determined in accordance with 16 CFR Part 305.5 for models 2617560C and 2217560C are \$8 and \$5, respectively.

"Your energy cost depends on your utility rates and use. The estimated cost is based on 11 cents per kWh and 5 hours of use per day. For more information, visit www.ftc.gov/energy." 1

¹FTC Television labeling rule (18 CFR Part 305, as added by 76 Fed. Reg. 1038 (Jan 6, 2011)).





ENERGY STAR 5.3 AND ROHS COMPLIANT

PUBLIC DISPLAY SETTING-Cloning Capable

BED 1/2/3/4 CONTROLLABILITY when used with Optional 124-213-10 remote

MPEG-2/MPEG-4 H.264 DECODING

NATIVE DISPLAY RESOLUTION 1366 x 768 HD (26"/22")

BUILT-IN ATSC/NTSC/QAM CLEAR TUNER

INVISIBLE SPEAKER SYSTEM Hidden speaker grilles

90° DETACHABLE SWIVEL STAND

LG'S EXCLUSIVE XD ENGINE®

USB 2.0 MEDIA HOST FOR PHOTOS AND MUSIC

USB CLONING

CLEAR VOICE II

REAL CINEMATM

3 HDMITM INPUTS WITH HDCP V.1.3 with deep color

AUTO SENSING REMOTE JACK PACK (RJP) COMPATIBLE*

MATTE BLACK WITH GLOSSY BLACK EDGE

2 YEAR LIMITED WARRANTY (parts and labor)





WHEN IT'S GREEN.

LG is committed to improving product development, manufacturing and usage to meet the demand for environmentally friendlier products. Our LT560C televisions have technologies to reduce power consumption and in return increase **cost savings** per room.

EcoSmart

Energy Saving Levels - Manually select your choice for the brightness level for the television.

- CEC Compliant Meets the Appliance Efficiency Regulations of the California Energy Commission.
- RoHS Compliant
 Meets directive on restriction of hazardous substances.
- Energy Star 5.3 Qualified Meets current reduction requirements of energy consumption.

PICTURE

(i) (c)

© e∅ Energy Saving : Off

FEATURES



LG's newest core technology, Picture Wizard, enables easy selfcalibration by providing on-screen reference points for key picture quality elements such as black level, color, tint, sharpness and backlight levels. By using this easy-to-use calibration process, the picture setting can be set to better fit the type of room application.





Dramatization

BED1/2/3/4 REMOTE CONTROLLABILITY (with optional remote)

LG TVs with Bed 1/2/3/4 function eliminates the remote control signal interference between TVs in multiple dwelling rooms. This system will work using the same LG TV model.



ENGINE

Six distinct processes contribute to picture improvement. LG's XD Engine® takes the low resolution of analog signals to near HD levels by improving brightness, contrast, detail and enhancing color as well as reducing signal noise.

Manually select your choice for the brightness level for the television. By selecting Minimum, Medium, or Maximum, the power consumption will

be reduced and an increase in energy savings can be achieved. (Note:

Selecting minimum level may slightly increase power consumption on some models)



ENERGY SAVING LEVELS

Brightness



Dramatization

Dramatization

OPTIONAL ACCESSORY SIMPLE 7 BUTTON REMOTE

Resident / Simple 7 button sanitary membrane remote control. Model: 124-213-10 (sold separately)



USB 2.0 will support JPG and MP3 files from a USB storage device.

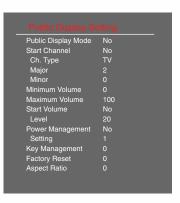


Drive1	Up Fe	older	l KY	103 03/30/200
IMJ001	KY10	1 06/10/2008	KY	/104 06/19/200
	KY10	2 04/03/2008	KY	/105 01/31/200
2	= JW10	01/01/2000	≡ JN	1J005 05/13/200
1366×768. 125KB	□ JW10	02 06/15/2008	≡ JN	1J006 05/26/200
1300-700, 12310	□ JW10	03 04/03/2008	≡ JN	1J007 02/18/200
Up Folder	□ JMJ0	04 02/18/2008	≡ JN	1J008 02/18/200



PUBLIC DISPLAY SETTINGS

When used in public areas, these HDTVs can be easily programmed by the installer to have the TV turn on at a specified channel/volume level, set the minimum/ maximum volume, lock out the control panel/remote, set the aspect ratio, and return to a factory reset. By using Power Management, these displays can be programmed to turn off if there has been no activity (remote or control panel buttons) for a preset time (1-7) hours.



USB CLONING

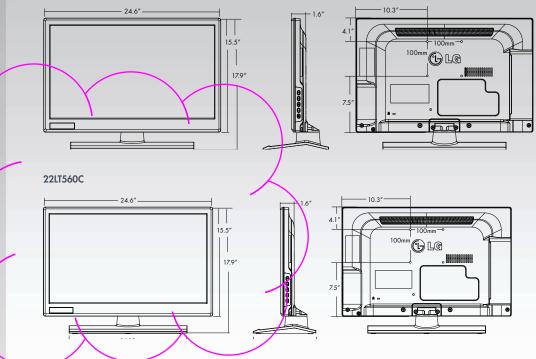
USB cloning will allow for easy transfer of Public Display Settings from the "Master TV" to an unlimited number of same type televisions.



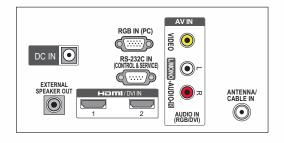
invisible SPEAKER SOUND IS HEARD, NOT SEEN Enjoy a combination of smart technology and stylish design with the invisible

and stylish design with the invisible speaker system custom tuned by audio expert Mr. Mark Levinson. This unique system provides a clean, polished look and an enhanced auditory experience by increasing the sweet spot and providing a wider sound field.

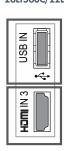




REAR JACK PANEL 26LT560C/22LT560C



SIDE JACK PANEL 26LT560C/22LT560C



26" CLASS (26.0" MEASURED DIAGONALLY) 22" CLASS (21.6" MEASURED DIAGONALLY)

LCD SPECIFICATION

LCD SPECIFICATION	
LED Backlighting	Edge lit
Screen Size	26" class (26.0" measured diagonally) 22" class (21.6" measured diagonally)
Native Display Resolution	1366 x 768 (HD)
Viewing Angle Degree	178°/178°
Frame Rate	60Hz
BROADCASTING SYSTEM	
Analog	Yes (NTSC)
Digital	Yes (ATSC / Clear QAM / Mpeg4)
VIDEO	, , , , , , , , , , , , , , , , , , , ,
XD Engine	Yes
24p Real Cinema (24p 5:5/2:2 Pull down)	Yes
Eye Care (Anti Dazzling)	Yes
AUDIO	
Audio Output	5W+5W
Speaker System	1 Way 2 Speakers
Infinite Sound	Yes
Invisible Speaker	Yes
Clear Voice II	Yes
COMMERCIAL FEATURES	103
TV Link Tuner	Yes
Big Size Menu	Yes
Hotel Mode/PDM	Yes (PDM 2.6)
IR Out	Yes (RS-232C)
SIMPLINK	Yes
External Speaker Out	
RJP Compatibility	Yes (Variable, 3.5mm, Stereo, 1W with 8 Ω) LG, Teleadapt, Guestlink
USB (2.0)	Yes (MP3, Jpeg, HD DivX)
USB Cloning	Yes
One Channel Map / Logical Channel Map	Simple Channel List
Multi IR Code	Yes
Welcome Screen (Splash Image)	Yes
Auto Off/Auto Sleep	Yes
Video Mute	Yes
Smart Energy Saving	Yes
	Yes
Anti-theft System Kensington Lock	Yes
AUDIO/VIDEO INPUTS/OUTPUTS	163
HDMI In	17:13
	1 (side)
USB 2.0 RF In	1 (side)
AV In	1 (rear)
	1 (rear)
HDMI/HDCP Input	2 (rear)
RGB In (D-sub 15pin) - PC	l (rear)
PC Audio Input	1 (Sharing with AV In)
RS-232C (Control / SVC only)	1 (rear)
POWER External Speaker Out (3.5mm phone jack)	1
Voltage, Hz	100V - 240V, 50/60Hz
Stand-by Mode (Max)	Under 1W
Power Consumption	Typical 32W (26"), 21W (22")
CABINET/ACCESSORIES	
Cabinet Color	Matte black with glossy black edge
Swivel Stand (degrees)	+90°/-90°
VESA® Standard Mount Compatible (WxH)	100mm x 100mm
Remote Control	Yes
Optional Accessory	124-213-10 remote
. ,	

REQUIRED LISTING (CERTIFICATION)	
Required Approvals	UL, cUL, NOM
RoHS Compliant	Yes
ENERGY STAR 5.3 Qualified	Yes
DIMENSIONS & WEIGHT	
TV without stand (WxHxD)	24.6" x 15.5" x 1.6" (26") 20.4" x 13.0" x 1.6" (22")
TV with stand (WxHxD)	24.6" x 17.9" x 7.6" (26") 20.4" x 15.2" x 7.6" (22")
Unit Weight	with Stand 10.4 lbs (26") 9.0 lbs (26") 8.2 lbs (22") 6.8 lbs (22")
Shipping Dimensions (WxHxD)	27.0" x 21.0" x 4.7" (26") 23.0" x 18.2" x 4.4" (22")
Shipping Weight	14.8 lbs (26") 11.0 lbs (22")
SERVICE/LIMITED WARRANTY	2 Years (Parts/Labor)
UPC CODE	
26LT560C	7 19192 90391 3
22LT560C	7 19192 90390 6

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SPEC_LT560Cseries_101206_PR



















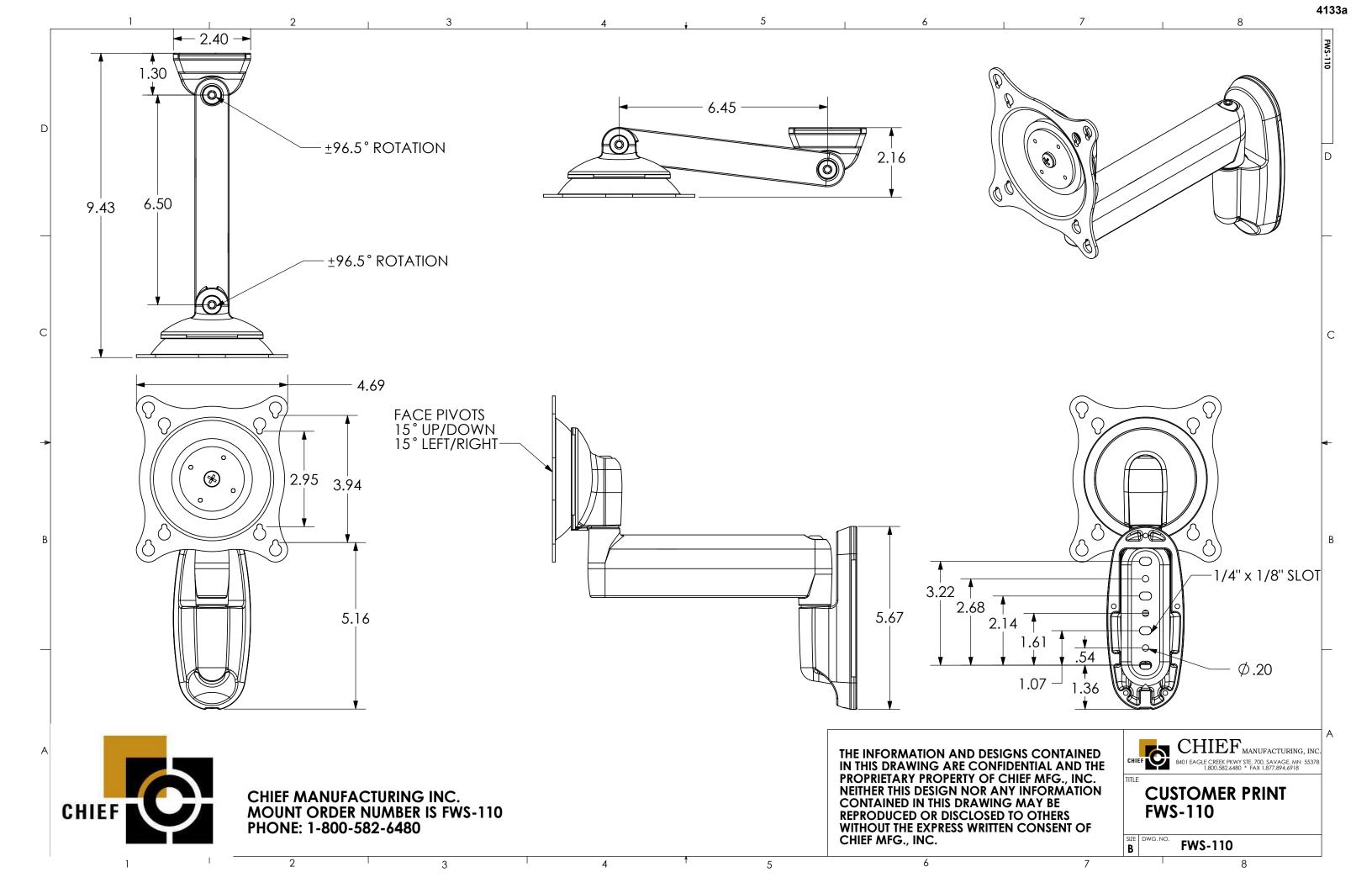






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QuickSpecs

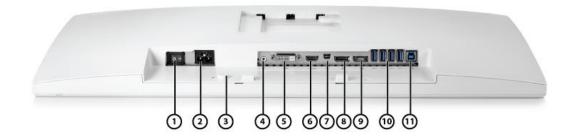
Overview

HP HC270 Healthcare Edition Display



- 1. Menu button
- **2.** Luminance
- 3. Color control

- 4. Input control
- 5. Information
- 6. Power button/LED



- 1. Master power switch
- **2.** Power connector
- 3. Security lock slot
- 4. Audio output 3.5 mm
- 5. DVI-D
- **6.** HDMI v 1.4 input (MHL 2.0)

- **6.** Mini-DisplayPort
- 7. DisplayPort v 1.2 in
- 8. DisplayPort v 1.2 out
- **9.** (4) USB 3.0 downstream ports (one fast charging)
- **10.** (1) USB 3.0 upstream port

QuickSpecs

Overview

Overview

Work efficiently and accurately with the HP HC270 Healthcare Edition Display, a DICOM Part 14-calibrated QHD display that delivers consistent views of clinical data and non-diagnostic images¹.

Key features:

- Be assured that grayscale and color medical images and patient information are consistent and accurate on every display, plus the HP Pixel Policy² guarantees zero bright dots.
- View up to 60% more³ of your images and records onscreen with a 2560 x 1440, 27" diagonal display⁴; work across multiple displays⁵ with micro-edge bezels and DisplayPort™ multi-stream support.
- Attach your HP Desktop Mini or select HP Thin Client behind the display⁶ for an integrated, small footprint solution that's perfect for busy and shared spaces like nurse's or charting stations.
- Connect to multiple display and devices with a range of integrated ports right at the display.
- Use Picture-in-Picture or Picture-by-Picture to boost your multi-tasking productivity with simultaneous views from two connected devices.
- Work comfortably with customizable tilt, height adjustment, swivel, and pivot settings.
- Design the screen for how you work with HP Display Assistant software, which enables screen partitioning and helps deter theft by deactivating a display that's disconnected without approval.
- Reduce power consumption and help lower your costs with an energy-efficient design.
- Rest assured that your IT investment is supported by a three-year standard limited warranty, and optional HP Care service.⁷
- 1 The display is not intended for primary image interpretation or diagnostic use.
- 2 The HP Pixel Policy allows no bright sub-pixel defects for this display. For complete details, see http://support.hp.com/us-en/document/c00288895.
- 3 Compared to a WUXGA display.
- 4 All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.
- 5 Each sold separately.
- 6 Sold separately. HP PC Mounting Bracket for Monitors required and sold separately; see Bracket QuickSpecs for exact compatibility.
- HP Care Packs are sold separately. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. For details, visit www.hp.com/go/cpc. HP Services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.



QuickSpecs

Change Log

Models: Z0A73A4

Panel Type 27-inch IPS w/LED backlight

Viewable Image Area

(diagonal)

68,47 cm (27-inch) widescreen; diagonally measured

Panel Active Area

(W × H)

59,67 x 33,56 cm (23.49 × 13.21 in)

Resolution 2560 x 1440 @ 60 Hz (QHD)

Aspect Ratio 16:9

Viewing Angle Up to 178° horizontal/178° vertical typical

Brightness 350 cd/m²

Contrast Ratio (Typical) 1000:1 Static; 5,000,000:1 Dynamic (DCR)

Response Times* 14 ms typical (G-to-G)

Pixel Pitch 0.2331 mm
Pixels Per Inch (PPI) 108.8 DPI

Backlight Lamp Life (to half brightness)

30,000 hours minimum

Color Gamut Up to 16.7 million colors with the use of FRC technology

Color Gamut (Typical) 99% sRGB

Default Color Setting DICOM

User Controls Buttons or Switches Menu, Information, Input Control, Color Control, Luminance

User Programmable Modes 20

Languages 10 (German, S-Chinese, T-Chinese, Japanese, English, Spanish,

French, Italian, Netherlands and Portuguese)

On Screen Display (OSD) User Controls Luminance, Color Control, Input Control, Image Control, PIP Control, Power Control, OSD Control, Management, Language, Information

Audio Controls N/A

Signal Interface/ Performance **Horizontal Frequency** 30 - 90 kHz (DVI, DP, HDMI); 27 - 75 (MHL) **Vertical Frequency** 50 - 60 Hz (DVI, DP, HDMI); 24 - 60 (MHL)

Native Resolution2560 x 1440 @60HzPreset Graphic Modes640 x 480 @ 60Hz(non-interlaced)720 x 400 @ 70 Hz

800 x 600 @ 60 Hz 1024 x 768 @ 60 Hz 1280 x 720 @ 60 Hz 1280 x 800 @ 60 Hz 1280 x 1024 @ 60 Hz 1366 x 768 @60Hz



^{*} Performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

QuickSpecs

Change Log

1440 x 900 @ 60 Hz 1600 x 900 @ 60 Hz 1600 x 1200 @ 60 Hz 1680 x 1050 @ 60 Hz 1920 x 1080 @ 60 Hz 1920 x 1200 @ 60 Hz 2560 x 1440 @ 60 Hz **Maximum Pixel Clock Speed** 250 MHz(DVI, DP, HDMI); 150 MHz (MHL) **Anti-Glare** Yes Video/Other **Plug and Play** Yes Inputs **Input/Output Connectors** (1) DVI-D Dual Link (1) MHL 2.0¹/HDMI 1.4 (1) DisplayPort 1.2, (1) Mini-DisplayPort, (1) DisplayPort 1.2 out **HDCP** support on all inputs **USB** 4 USB 3.0 [4 downstream (one fast charging), 1 upstream] **Video Cables Included** (1) DisplayPort **1,8 m** (5.9 ft) (1) HDMI **1,8 m** (5.9 ft) (1) USB 3.0 1.8 m (5.9 ft) **Audio** (1) Audio output 3.5mm Multimedia N/A **Speakers Power Power Supply** Internal **Input Power** 100 - 240 VAC 50/60 Hz **Maximum Power** 85 W **Typical Power** 50 W **Sleep Power** 0.5 W (standby) **Power Cable Length** 1,8 m (5.9 ft) Unpacked w/stand Mechanical **Dimensions** 61,43 x 21,82 x 53,37 cm $(W \times D \times H)$ 24.2 x 8.6 x 21 in (max height) 61,43 x 21,82 x 40,37 cm 24.2 x 8.6 x 15.9 in (min height) Unpacked w/o stand 61,43 x 5,39 x 36,41 cm (head only) (24.2 x 2.1 x 14.3 in) 73,1 x 28,5 x 47,9 cm Packaged (28.8 x 11.2 x 18.9 in) Weight **Head Only 5,1 kg** (11.16 lb) Unpacked **7,7 kg** (16.9 lb) Packaged **10 kg** (22.1 lb) Ergonomic **Detachable Stand** Yes, ships detached **Features Height Adjustment** Yes, 130 +/-3 mm **Tilt Range** -2° to + 20° vertical Yes, 45° +/-2° (Clockwise/Counterclockwise) **Swivel**



QuickSpecs

Change Log

Pivot Yes, 90° Quick Release⁵ HP QR2 guick release included **Environmental** 5° to 35° C (41° to 95° F) **Temperature - Operating** Temperature - Non-**-20° to 60° C** (-4° to 140° F) operating **Humidity - Operating** 20% to 80% non-condensing **Humidity - Non-operating** 5% to 95%, 38.7° C max wet-bulb Altitude - Operating 0 to 5,000 m (0 to 16,404 ft) 0 to 12,192 m (0 to 40,000 ft) Altitude - Non-operating White LED Backlights Yes **CCFL Panel** No **Arsenic-Free Display Glass** Yes Low Halogen² Yes (except cables) **Mercury-Free Display** Yes **Backlighting** HP LCD Speaker Bar—Part **Options** Powered directly by the connected PC, the Speaker Bar seamlessly attaches to the monitor's lower bezel to bring full audio support to (each sold number NQ576AA select HP flat panel monitors. Features include dual speakers with separately) full sound range and dual external headphone jacks. Sold separately. For more information, refer to the product's QuickSpecs. **HP PC Mounting Bracket** Customize an altogether better solution with the HP PC Mounting for Monitors— Part Bracket for Monitors, which lets you attach your HP Desktop Mini, HP number N6N00AA Chromebox, or select HP Thin Client directly behind the monitor. **HP Single Monitor Arm**— The flexible design of the HP Single Monitor Arm provides a Part number BT861AA seemingly endless range of display adjustments with an amazing 13 inches of lift, 75 degrees of tilt, and 360 degrees of pan and rotation - all at your fingertips -- helping you stay comfortable and productive throughout the day. HP DisplayPort Cable Kit — Connects a DisplayPort connector on an HP Business Desktop Part number VN567AA computer to a DisplayPort connector on a monitor **HP Ouick Release Bracket—** An easy-to-use, VESA-compliant, LCD monitor mounting solution Part number EM870AA5 that allows you to quickly and securely attach an LCD monitor to a variety of stands, brackets, arms or wall mounts. For more information, refer to this product's QuickSpecs document. **HP Business PC Security** Attaches to the rear of the PC with a six-foot steel cable that can be **Lock Kit** — Part number used to secure a PC or peripherals such as mice, keyboards, monitors PV606AA or USB security devices to protect them against unauthorized removal by physically connecting the system to an anchor point. What's in the **Monitor and Accessories** HP HC270 Healthcare Edition Display, AC power cord 1,83 m (6 ft), box? DisplayPort cable 1,8 m (5.9 ft), HDMI cable 1,8 m (5.9 ft), USB 3.0



cable 1,8 m (5.9 ft)

QuickSpecs

HP HC270 Healthcare Edition Display

Change Log

Documentation CD (includes user guide, warranty, drivers)

Software HP Display Assistant

Other User Guide Languages English, Arabic, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish,

French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Brazilian Portuguese, Russian, Slovenian, Spanish,

Swedish and Turkish.

Warranty Languages English, Arabic, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish,

French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Brazilian Portuguese, Russian, Slovenian, Spanish,

Swedish and Turkish.

Color White

VESA Mounting 100 mm VESA mount

Security Lock-Ready Yes
Country of Origin China

Certification and Compliance

ENERGY STAR® Qualified, EPEAT® Gold³,

CE, CB ,KC, KCC, NOM, PSB, ICE, TUV-S, ISO 9241-307, EAC, UL, CSA, PSB, ISC, CCC, CEL, CECP, TCO Certified Edge, ISC, VCCI, FCC, BSMI, Vietnam MEPS, Australian-New Zealand MEPS, WEEE, DICOM Part

14, CE, FCC(Canada), BSMI, KC, VCCI, C-Tick, NFPA 99 certification for EMI

Microsoft WHQL Certification (Windows 10, Windows 8, and Windows 7); SmartWay Transport

Partnership (NA)

Compatibility Compatible with platforms using the VESA standard video modes. Recommended for use with HP

products.

Service and Warranty

Protected by HP, including a 3 year standard limited warranty. Optional HP Care Pack Services are

extended service contracts that extend your protection beyond the standard warranties.⁴

- 1. MHL 2.0 port will charge a MHL compatible smart phone and tablet battery. Requires the smart phone or tablet to be enabled for MHL or have an HDMI dongle to connect to the monitor. See your mobile device specifications.
- Power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
- 3. EPEAT ® registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country. See HP's 3rd party option store for solar energy accessory http://www.hp.com/go/options.
- 4. Service levels and response times for HP Care Pack Services may vary depending on your geographic location. Service starts from date of hardware purchase. Restrictions and limitations apply. See www.hp.com/go/cpc for details.
- 5. The HP Quick Release has been designed to support a maximum of up to 24 lbs (10.9 kg) for all devices mounted. Because mounting surfaces vary widely and the final mounting method and configuration may vary, mounting fasteners are not supplied (other than the VESA-compliant screws). HP recommends that you consult with a qualified engineering, architectural or construction professional to determine the appropriate type and quantity of mounting fasteners required for your application and to ensure that your mounting solution is properly installed to support applied loads.

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The information contained herein is subject to change without notice. The only warranties for HP products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

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QuickSpecs

Change Log

Change	Log		
Date	Version	Description	
	Version 1 to 2		













▶ 60LN549E

60" class (59.58" measured diagonally)

▶ 55LN549E

55" class (54.6" measured diagonally)

▶ 47LN549E

47" class (46.9" measured diagonally)

▶ 42LN549E

42" class (41.9" measured diagonally)

▶ 39LN549E

39" class (38.5" measured diagonally)

▶ 32LN549E

32" class (31.5" measured diagonally)



Digital Signage + Television: Billboard TV

The LG EzSign TV is the world's first TV that comes with a signage function. Run messages on the TV screen in the form of a billboard without additional hardware. Advertisements, information and broadcast content can be arranged on the same screen to attract attention and deliver specific messaging to your customer base.



COST EFFECTIVE

No need to buy a media player - Create your own signage content by using your PC and the free EzSign TV software. Transfer that content by using a USB flash drive and plug it in to the EzSign TV to run it.



CUSTOMIZED TO YOUR NEEDS

Signage content can be customized for your business - The LG EzSign TV allows you to create your own signage content and make revisions on the fly.



Edit content quickly and easily - Select one of the pre-made templates. Add your images and text to it. It's that simple.



Choose from a broad range of template designs - The LG EzSign TV gives you the power to choose and change according to your needs.







The Best Award Winner (two consecutive years) from the Commercial Integrator magazine for digital signage hardware and the product of the year from CRN, the LG EzSign TV is an innovation in digital signage that can entertain while maximizing the impact of your message.



LG EzSign TV Free Software v3.0

CREATE CONTENT IN JUST 4 EASY STEPS



Choose from a wide array ofpre-installed



Schedule events, make playlists.



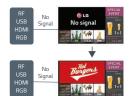
into the content boxes



Export your content to the TV via USB or wirelessly.

FAIL OVER

An image without a signal can be replaced with a customized image.



INSTANT MESSAGE

Pop-Up messages can be added for adding special promotions or breaking news



CONTROL TV

Users can control several TVs through Wi-Fi.



FOR EFFICIENT MANAGEMENT



PUBLIC DISPLAY MODE

From channel selection to energy-saving features, Public Display Mode allows you to control the TV settings in your business area prevent misuse by customers, set volume limits, or restore factory defaults on any TV. You are in control of it all.





JSB CLONING

The USB Cloning feature allows you to simply copy the TV settings onto all TVs using a USB stick, a process that is fully automated to save time without having to set each TV one by one.





WELCOME SCREEN

Welcome visitors with a warm greeting message that includes your business name and logo.







RS232C CONTROL

Via the TV's RS-232C port, you can remotely control multiple TVs' power and volume settings simultaneously.



FOR CONVENIENCE & ENTERTAINMENT



EXTERNAL SPEAKER OUT

Enhance the entertainment experience by adding an additional speaker, visitors to listen to and control the TV audio from anywhere in your business area, including restrooms.





REMOTE JACK PACK

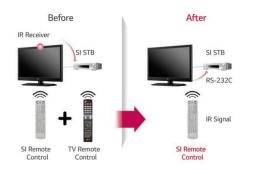
The plug and play function with compatible Remote Jack Pack enables guests to view media from their portable devices on the TV screen seemlessly.





IR OUT

IR Out enables customized set-top boxes to receive IR signals via LG TV Signage. This added convenience requires only simple connections and allows easy management using a single remote control.





USB 2.0

You can play images and videos from and record TV programs to external storage devices. Immediate recording and reserved recording options are available.



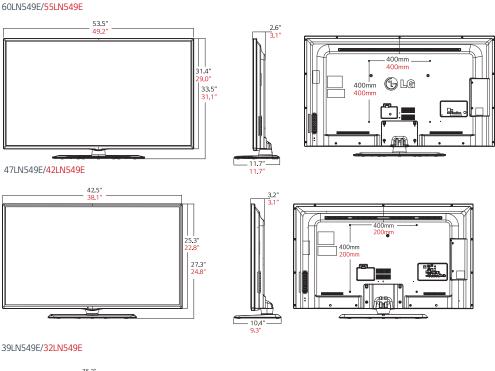


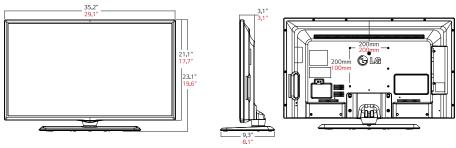
when it's green.

LG is committed to improving product development, manufacturing and usage to meet the demand for products with environmentally friendlier features. Our televisions have technologies to reduce power consumption and in return increase cost savings per room.

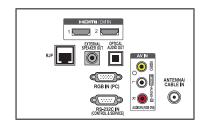
EcoSmart

- Energy Saving Levels Manually select your choice for the brightness level for the
- CEC Compliant Meets the Appliance Efficiency Regulations of the California Energy Commission.
- RoHS Compliant Meets directive on restriction of hazardous substances.
- Energy Star 6.0 Qualified Meets current reduction requirements of energy consumption.





Rear Jack Panel



Side Jack Panel



The LG EzSign TV LED Commercial Widescreen

▶ 60LN549E

60" class (59.58" measured diagonally)

▶ 55LN549E

55" class (54.6" measured diagonally)

▶ 47LN549E

47" class (46.9" measured diagonally)

▶ 42LN549E

42" class (41.9" measured diagonally)

▶ 39LN549E

39" class (38.5" measured diagonally)

▶ 32LN549E

32" class (31.5" measured diagonally)

							32	CldSS	
PANEL	Model	60LN549E	55LN549E	47LN549E	42LN549E	39LN549E	32LN	1549E	
	Backlighting		Direct LED						
	LCD Panel Type (measured diagonally)	60" Class (59.58")	55" Class (54.6")	47" Class (46.9)	42" Class (41.9")	39" Class (38.5)		Class 1.5")	
	Native Resolution	,		20 x 1080 (FH		(00.0)		768 (HD)	
	Brightness		300cd/m ²					,	
	Dynamic CR			1,000,	000:1				
	Viewing Angle (HxV)		178°,	/178°		176°/176°	178°	/178°	
	Response Time		9	ns		9.5ms	9	ms	
	Frame Rate			60	Hz				
VIDEO	Built-In Tuner			atsc/ntsc,	/Clear QAN	١			
	XD Engine			Ye	es				
	24p Real Cinema (24p 5:5/2:2 Pull down)			Ye	es				
	Eye Care (Anti Dazzling)			Ye	es				
AUDIO	Audio Output	20W (10W x 2) (W/RJP 7W x 2)							
	Speaker System	1 Way 2 Speakers							
	Infinite Sound			Ye					
	Invisible Speaker								
Clear Voice II Yes									
SPECIAL	RF(1/2Tuner)			Yes (1	Tuner)				
FEATURES	HCAP (GEM/RASH/ HTML) ** Service Carousel (TLX)	Flash							
	Simplink		Yes (HDMI-CEC)						
	SI Compatible (TVLink Protocol)	Yes (TV Link Tuner)							
	WiFi	USB dongle							
	Hotel Mode/ PDM /Installer Menu	Yes							
	IR Out			Yes (RS	-232C)				
	External Speaker Out	Yes		ed/Line Out, e(GRD,L+,R+		reo, Single ended 3Ω)			
	RJP Interface			Yes (RJ4:	5, HDMI)				
	RJP Compatibility		.G,Teleadap	t (RJ45, HDM	II CEC), G-Lir	nk(HDMI-CEC	k(HDMI-CEC)		
	USB		USB2.0,	USB Auto Pla	ay back, USE	3 Cloning			
	Moving Picture Playback (SD/HD/Plus HD)			Divx	: HD				
	Picture			JPE	G				
	Audio Codec	1	AC3(Dolby D	igital), EAC3	, AAC, Mpe	g, MP3, PCI	М		
	USB Cloning			USB	2.0				
	Multi IR Code	Yes							
	Welcome Screen (Splash Image)			Ye	es				
	Auto Off / Auto Sleep	Yes							
	Video Mute			Ye	es				
	Smart Energy Saving			Ye					
	Anti-theft System		Kensington Lock						
	Credenza Bracket	Yes							

ENERGY GUIDE	7 4 F
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The estimated annual energy cost determined in accordance with 16 CFR Part 305.5 for models 60LN549E, 55LN549E, 47LN549E, 42LN549E, 39LN549E and 32LN549E are \$20, \$17, \$14, \$11, \$10 & \$9 respectively.

"Your energy cost depends on your utility rates and use. The estimated cost is based on 11 cents per kWh and 5 hours of use per day. For more information, visit www.fic.gov/energy." "FTC Television labeling rule (18 CFR Part 305, as added by 76 Fed. Reg. 1038 (Jan 6, 2011)).

Life's Good LGsolutions.com

Customer Service: 888.865.3026 www.LGsolutions.com/support

Contact your LG Regional Sales Representative: Channel: 800.897.8871 Hospitality: 800.228.1236 E-mail: info@LGsolutions.com

SPEC_LN549E_EzSignTV_091328_PR







INPUTS/ OUTPUTS	Model	60LN549E	55LN549E	47LN549E	42LN549E	39LN549E	32LN549E	
	USB (2.0)	2 Side (1-Dongle only)						
	RF In	1 Rear						
	AV In	1 Rear						
	Digital Audio Out (Coaxial / Optical)	1 Rear (Optional)						
	HDMI/HDCP Input	3 (2 Rear, 1 Side)						
	RGB In (D-sub 15pin) - PC	1 Rear						
	PC Audio Input	1 (Sharing with AV In)						
	RS-232C (D-Sub 9pin)	1 Rear						
	RJ45 (RJP interface)	1 Rear						
	External Speaker Out (3.5mm phone jack)	1 Rear						
CABINET	Bezel Width (off Bezel) (mm)	19.9mm, 24.5mm						
	With Stand	53.5"×33.5"×11 <i>7</i> "	49.2"×31.1"×11.7"	42.5"×273"×10.4"	38.1"×24.8"×9.3"	35.2"×23.1"×9.3"	29.1" x 19.6" x 8.1	
	Weight	58.0 lbs.	46.7 lbs.	32.0 lbs.	23.6 lbs.	21.4 lbs.	15.4 lbs.	
	Without Stand	53.5" x 31.5" x 2.6"	49.2" x 29.0" x 3.1"	42.5"×25.3"×3.2"	38.1"×22.8"×3.1"	35.2"×21.1"×3.1"	29.1" x 17.7" x 3.1	
	Weight	53.4lbs	42.1 lbs	28.9 lbs	21.2 lbs	18.9 lbs	14.1 lbs	
	Carton	65.0" x 34.6" x 8.9"	61.0" x 33.1" x 8.3"	524"×29.5"×6.9"	45.3" x 26.0" x 6.9"	423"x252"x6.5"	35.5"×20.9"×6.4	
	Weight	70.5 lbs.	59.5 lbs.	40.6 lbs.	31.3 lbs.	28.2 lbs.	20.3 lbs.	
	Swivel	Fixed	±90°			±15°		
	Color	Black with Hairline Finish						
	VESA™ Standard Mount Interface	400mm × 400mm 200mm × 200mm				200mm x 100mm		
	Flame Retardant	Yes (Back Cover only)						
EQUIRED	Safety	cUL, UL, NOM, FCC						
ISTINGS	RoHS	Yes						
	Energy Star 6.0	Yes						
IPC		7 19192 91585 5	7 19192 90448 4	7 19192 90447 7	7 19192 90446 0	7 19192 91560 2	7 19192 90444 6	
POWER	Power Source	100~240V 50/60Hz						
	Watts (Typical)	89W	74W	64W	50W	43W	37W	
	Stand-by	0.5W						
VARRANTY	2 Year Limited War	rranty (Parts/Labor/Backlight)						







HDMI















STX645(P) STX645I





Display size 32"-60"



Max load 100lb (45kg)

SMARTMOUNT Universal Tilt Wall Mount

FOR 32" TO 60" DISPLAYS

Limitless placement opportunities are delivered with speed and ease with both horizontal and vertical adjustment capability. Its slim, open wall plate architecture delivers display placement flexibility and enables hands-free behind-the-display access along with cable management. Quick and easy installation and optional IncreLok™ Tilt technology complete the ultimate secure, low profile display installation

STX645's pre-tensioned universal tilt adaptor brackets offer up to +15/-5° of One-Touch™ tilt adjustment in one easy motion.

Additional Features

- Open wall plate design allows for total wall access, increasing electrical and cable management options
- Optional IncreLok™ feature offers fixed tilt lock in 5° increments
- Easy-Glide[™] design ensures that the display is securely attached to the wall plate
- 5° of back tilt offers 3" of space for hands-free, behind the display access
- Up to 13" (330mm)of horizontal adjustment for centering display on wall
- Up to 1" (25mm) of vertical adjustment on each universal display adaptor bracket for post-installation leveling and height adjustment fine-tuning
- Universal tilt adaptor brackets easily hook onto wall plate for fast installation
- Low profile design holds display 1.69" (43mm) from the wall
- Fits displays with mounting hole patterns from 100 x 100mm (3.94"W x 3.94"H) to 431 x 405mm (16.96"W x 15.95"H)





IDEAL VIEWING ANGLE Pre-tensioned universal tilt

adaptor brackets offer up to +15/-5° of One-Touch™ tilt adjustment in one easy motion

SECURE INSTALLATION

Theft resistant screws on secure units

OPEN ARCHITECTURE Open wall plate architecture for flexible cable management and















Patented. Design Patent No. D659.689. Utility Patent No. 8,313,073; 8,348,212; 8,282,059; 8,517,322.



Contact your Peerless-AV sales representative for more information



Increased security with included Master Lock 510KAD keyed-alike padlock on locking model



Model Numbers

STX645 SmartMountXT[™] Universal Tilt Wall Mount for 32" to 60" Displays - security models
STX645L SmartMountXT[™] Universal Tilt Wall Mount for 32" to 60" Displays - security locking model
STX645P SmartMountXT[™] Universal Tilt Wall Mount for 32" to 60" Displays - standard models

Product Specifications

	DIMENSIONS (W x H x D)	PRODUCT WEIGHT	LOAD CAPACITY	FINISH	AVAILABLE COLORS
STX645(P) STX645L	19.37" x 16.89" x 1.69"-6.55" (492 x 429 x 43-166mm)	7.13lb (3.23kg) 7.63lb (3.45kg)	100lb (45kg)	Powder coat	Black

Package Specifications

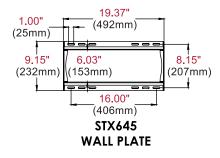
	PACKAGE SIZE (W x H x D)	PACKAGE SHIP WEIGHT	PACKAGE UPC CODE	PACKAGE CONTENTS	UNITS IN PACKAGE
STX645(P) STX645L	10.125" x 3.5" x 21.125" (257 x 89 x 537mm)	9.1lb (4.13kg) 10.6lb (4.99kg)	STX645: 735029278931 STX645L: 735029278943 STX645P: 735029279372	Universal Tilt Wall Mount, attachment hardware, installation instructions	1

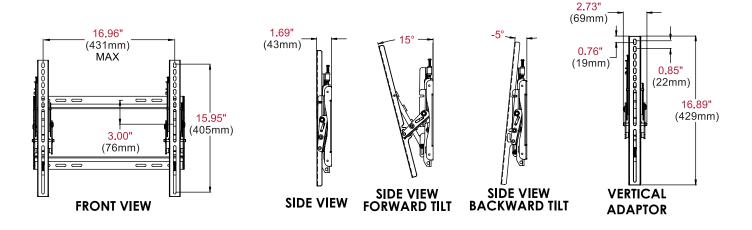
Accessories

ACCXT302: SmartMountXT™ Video Conferncing Shelf accessory

ACCXT400: In-Wall Cable and Power Management Accessory with AC Surge Suppressor

All dimensions = inch (mm)





Architect Specifications

The SmartmountXT™ Universal Tilt Wall Mount shall be a Peerless-AV® model STX645, STX645L or STX645P and shall be located where indicated on the plans. Assembly and installation shall be done according to instructions provided by the manufacturer.

Visit peerless-av.com to see the complete line of AV solutions from Peerless-AV, including outdoor displays, wireless, kiosks, digital audio, display mounts, projector mounts, carts/stands, and a full assortment of accessories.

Peerless-AV

2300 White Oak Circle Aurora, IL 60502 USA

(800) 865-2112 (630) 375-5100 Fax: (800) 359-6500

Peerless-AV Europe

Unit 3 Watford Interchange Colonial Way, Watford Herts, WD24 4WP United Kingdom

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Peerless-AV de México

Ave de las Industrias 413 Parque Industrial Escobedo Escobedo, N.L., Mexico 66050

+52 (81) 8384-8300 Fax: +52 (81) 8384-8360



LIT-0743 rev.3



Installation & Assembly - Suspended Ceiling Kit

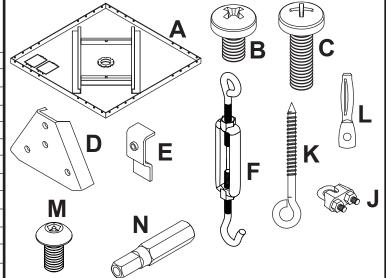
| Model: CMJ450

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:(UL) us LISTED Max. UL Load Capacity: 250 lb (113 kg)

IMPORTANT! Read entire instruction sheet before you start
assembly and installation.

P/	ART#	QTY.	DESCRIPTION
Α	1455-476W	1	ceiling tray
В	520-9401	8	M6 x 10 mm long phillips screw
С	520-9402	4	M6 x 20 mm long phillips screw
D	1452-278	4	hanger bracket
Е	1452-279	4	hanger bracket clamp
F	560-9620	4	turnbuckle
G	1450-522	1	20' (6.1m) tie wire (not shown)
Н	1450-517	1	safety cable (not shown)
J	1450-518	2	safety cable clamp
κ	580-0006	5	eye bolt
L	580-0005	5	concrete anchor
М	505-9010	1	M5 x 10 mm penta pin screw
N	520-9249	1	M5 x 1" penta pin driver



A WARNING

Weight of TV or screen shall not exceed maximum UL load capacity.

IMPORTANT PRE-ASSEMBLY INFORMATION:

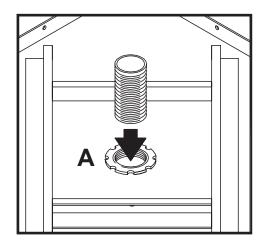
Ceiling Tray (**A**) is designed to fit within a 24" (610 mm) x 24" (610 mm) section of a conventional suspended ceiling system. Ceiling runners (see **DETAIL 1, page 2**) should have a "T" cross section and a minimum height of 1.5" (38 mm). In cases where 24" (610 mm) x 48" (1219 mm) ceiling tiles are used, cut one tile in half and add another 24" (610 mm) ceiling runner in order to make a 24" (610 mm) x 24" (610 mm) section.

For certain installations it may be best to install ceiling anchors (step 3) before installing the ceiling tray (step 2).



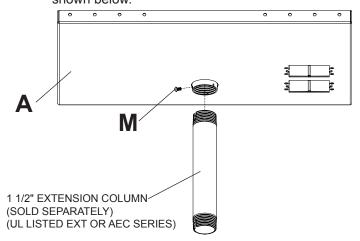
For FLUSH MOUNT TUBE Installation: From the top, thread the Flush Mount Tube (not included) through center of ceiling tray (**A**).

Skip to step step 2.

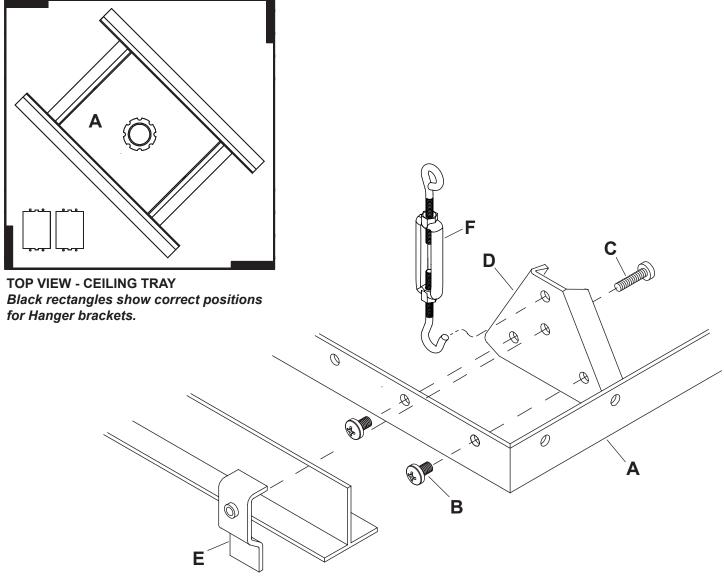




For EXTENSION COLUMN Installation: From the bottom up, thread extension column (not included) up through retaining collar in adjustable collar mount plate. Align notch in extension column with hole in collar and fasten using M5 x 10 mm penta pin screw (M) with M5 penta pin driver (N) as shown below.



Attach four Hanger Brackets (**D**) to four corners of Ceiling Tray (**A**) using 10 mm long phillips screws (**B**). Place Ceiling Tray (**A**) into 24" (610mm) x 24" (610mm) opening in ceiling (in place of a ceiling tile). Clamp Ceiling Tray (**A**) to Ceiling Runners using Hanger Bracket Clamps (**E**) and 20 mm long phillips screws (**C**). Hook Turnbuckles (**F**) into Hanger Brackets (**D**).





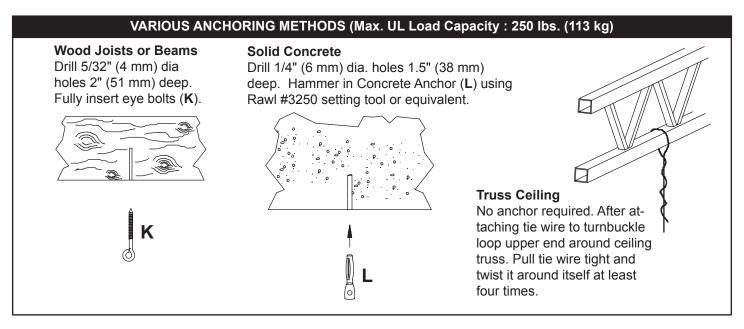
Cut tie wire (**G**) into four pieces of equal length. Insert wires through ends of turnbuckles. Twist each wire around itself at least four times.

Drill holes for four ceiling anchors (see "Various Anchoring Methods"). Position the holes so that when the tie wires (**G**) when attached and taut will angle out at 15°. Drill a fifth anchor hole directly above the **center** of the ceiling tray.

Pull tie wires tight and attach to ends of ceiling anchors (or truss). Again twist each wire around itself at least four times.

When this step is complete, the weight of the ceiling tray should be supported by the tie wires.

Note: 20' (6.1 m) of tie wire (**G**) is provided. If space between the true ceiling and suspended ceiling is more than 36" (914 mm), additional wire (12 gauge annealed, steel, black) will be needed.



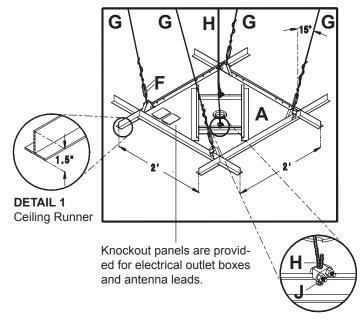
A WARNING

 Installer must verify that the ceiling will safely support four times the combined weight of all attached equipment and hardware.



Run the safety cable (**H**) through the remaining ceiling anchor. Pass each end through holes in ceiling plate reinforcements and join with cable clamp (**J**). **DO NOT TIGHTEN YET!**

Suspended Ceiling Kit installation is now complete. After all components (Jumbo Mount, Extension Column, etc.) and equipment (monitor, VCR, etc.) have been attached, tension the tie wires by adjusting turnbuckles (F). Load must be carried by tie wires - not suspended ceiling runners. Finally, take up the slack in safety cable (H) leaving it slightly loose. Tighten both safety cable clamps (J).



DETAIL 2Safety Cable and Cable Clamp.

LIMITED FIVE-YEAR WARRANTY

Peerless Industries, Inc. establishes a warranty period of five years for products manufactured or supplied by Peerless. This period commences from the date of sale of the product to the original consumer, but will in no case last for more than six years after the date of the product's manufacture. During the warranty period such products will be free from defects in material and workmanship, provided they are installed and used in compliance with the instructions established by Peerless Industries, Inc. Subject to applicable legal requirements, during the warranty period Peerless will repair or replace, or refund the purchase price of, any such product which fails to conform with this warranty.

Any other warranties prescribed by the law which may apply with respect to such products also are limited in duration to the warranty period specified in this Limited Five-Year Warranty.

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RoomWizard II Scheduling System

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Concept & Design Steelcase Product design RoomWizard II, media:scape & i2i Steelcase Design in collaboration with IDEO.

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Observations & Insights

40% of workers waste up to 30 minutes a day searching for space to collaborate.*

*Steelcase Workplace Survey realised over the last 10 years.





Observation: according to a Steelcase workplace survey, 40% of workers waste up to thirty minutes a day searching for space to collaborate.*

Insight: users should have a tool that allows to save time in setting up meetings.





Observation: how people go about scheduling space varies. First-come-first-serve, post-it notes and even corporate calendar systems haven't proven effectiveness.

Insight: people need an effective and seamless scheduling system.





Observation: meetings often take place in informal spaces, not only in rooms.

Insight: companies need a solution that manages open and closed collaborative spaces.

RoomWizard II Scheduling System

Collaborative work is more important than ever. The world is becoming more and more global, especially in workplaces which leads to an increase of team work and of collaborative spaces.

In modern office environments people still face a lack of consistent scheduling methods to easily and quickly find available spaces to collaborate.

That's why Steelcase has introduced RoomWizard II, a solution designed specifically to organize today's workplace.

Why RoomWizard II?

- **1. Effective**: it saves time in searching for a room and avoids interruptions in meetings.
- **2. Simple**: it allows users to find and reserve a room from any network PC or smartphone.
- **3. Flexible**: it provides a solution that manages open and closed collaborative spaces.



11:00 AM

Supply Chain group meeting Matt Peterson 11:00 am – 11:45 am

11

12

1 2

5:00 PM

Q4 Planning Wendy James 5:00 pm - 6:00 p

5

Reserves spaces. Not just rooms.

Facilitating workers collaboration in helping them scheduling and organizing meetings while saving time is essential.

The redesigned RoomWizard II is a web-based room scheduling system that solves the dilemma of connecting workers to meeting spaces. It offers an interactive touch screen display providing real-time meeting information, right outside the room. The red and green status lights display immediately availability of the space.

It can be used in a synchronised mode: RoomWizard II works with a variety of calendaring systems including Microsoft® Outlook® and Lotus Notes® or other calendaring systems. So meetings can be managed seamlessly on web, via computers or smartphones.

Room reservations become easy.



Red light status indicates immediately room unavailability to workers.



When users see a green light status, they can reserve the room instantly directly from the screen or via their network.



RoomWizard II mounted on a media:scape Totem.



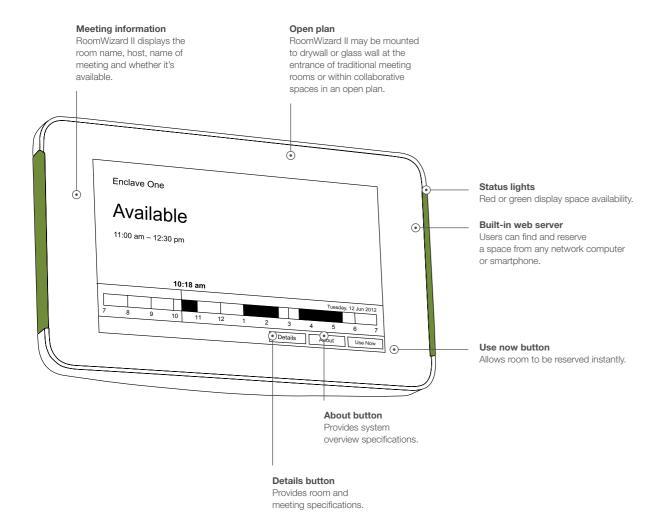
11:00 AM

Stephan Kieffer 11:00 am - 12:00 am

4:30 PM

Karin O'Connor

Technology





Reporting

What percentage of time are rooms occupied? What is the average number of meetings per day?

RoomWizard II even keeps careful track of space utilization with a database that measures and report reservation patterns.



Introducing SnapTag™

The SnapTag™ app from Steelcase captures whiteboard notes, connects with RoomWizard II and sends the content directly to meeting participants.

Currently for iPhone only.



ZigBee wireless connectivity

ZigBee is a short-range, low-power, wireless protocol that enables communication with other ZigBee enabled devices. A ZigBee enabled RoomWizard II could allow future connection with building and energy controls along with mobile devices and other future Steelcase ZigBee devices.

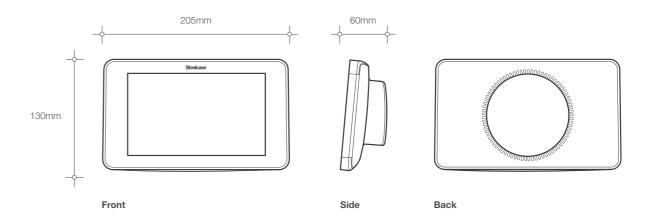
Statement of line

Use RoomWizard II as a stand-alone system, or seamlessly book rooms with an existing reservation system such as Microsoft Outlook, Lotus Notes or other advanced scheduling systems.

RoomWizard II was designed for ease of installation with its power over Ethernet support and its flexible fixing options.

Thanks to the standard fixing bracket, RoomWizard II can be mounted to drywall applications. Glass applications are accommodated with the direct to glass mounting bracket.

The universal mounting bracket thoughtfully manages the cable by cantilevering the RoomWizard II off the door frame out in front of the glass.



Features	
Color Touchscreen	7" (16:9), Capacitive Touch, 16M Colors
Weight	600g
Memory	4 GB
Ethernet	10BaseT/100BaseTX, DHCP, IEEE 802.3U & 802.3af compliant
Power	PoE (Power over Ethernet)
Status Lights	Yes
ZigBee Wireless Connectivity	Yes
Self-contained device. No external server or software required	Yes
Synchronisation – Available Connectors	Microsoft Exchange, Lotus Domino and other advanced scheduling systems
Open Platform for additional connectivity and integration	Yes
Remote Administration	Yes
Mobile Phone Apps	SnapTag™

You require official certifications. We can deliver them.

Designed by Steelcase, Room Wizard II is manufactured in Meridian, USA, for the EMEA (Europe, Middle East and Africa) market.

Sustainability actions and results are annually communicated in the annual Steelcase Corporate Responsibility report. See on our website **www.steelcase.com**

INSTALLATION INSTRUCTIONS AND SERVICE GUIDE

FILLMASTER® FILTRATION



GIVE THIS TO PHARMACY MANAGER

FILLMASTER® SYSTEMS, LLC

www.fillmastersystems.com 619-596-9900 FAX 619-596-8700 TOLL FREE 1-888-284-7873 PO BOX 711537 SANTEE, CA 92072-1537

Fillmaster® Pharmacy Water Purification and Dispensing System Installation Instructions and Service Guide

Model Fillmaster® Filtration Assembly with Model FMD 3400, 3600, and 2600 dispenser

IMPORTANT INFORMATION

Welcome to the Fillmaster® Family! This illustrated guide contains step-by-step instructions and service information to facilitate installation and continued life of your new system. Average installation time is about one hour. Before beginning the installation process, please review this guide and examine all the contents of your shipment.

If you have questions about installation steps, please call customer service at (619) 596-9900. Most situations can be explained over the phone.

The Fillmaster® System is an Advanced Reverse Osmosis Water Purification and Dispensing System. When properly installed and maintained (See page 11 for recommended routine maintenance) the system will provide a long life of constant pharmacy grade measured water. Keep in mind that you may use the Air Gap Faucet located near the sink as a source of healthy drinking water. You may dispense non-measured water with the faucet or measured water with the dispenser. Mount your dispenser at a convenient location anywhere in the pharmacy.

Be careful not to overturn the valves on the 2600 dispenser. Follow the arrows indicating the proper way to turn the valve knobs for filling and dispensing. Don't forget to maintain a service schedule. Use the last page of this service guide to write down the date when the system was installed and each time you perform any service to the system. Change the filters and clean the system frequently. NOTE: The filters must be replaced every 12 months at a minimum. As an added value service, we can ship the filters automatically every 12 months to you. If you would like this service please indicate on the product registration form.

Please return your product registration form promptly! This form is needed to activate the product warranty. We need this so we can keep constant communication with you for product bulletins and updates regarding your Fillmaster® system.

Please install as directed. Any variance from the steps outlined in this guide may void the warranty. Please consult with our customer service department before making any modifications.

NOTE: Professional installers, plumbers and contractors:

You must make this service guide available to the Pharmacy Manager where the unit is installed.

FILLMASTER® SYSTEMS, LLC
Customer Service
619-596-9900 FAX 619-596-8700
TOLL FREE 1-888-284-7873
www.fillmastersystems.com
PO BOX 711537
SANTEE, CA 92072-1537

CONDITIONS FOR USE

This Reverse Osmosis (RO) Pharmacy Water Purification and Dispensing System has been designed for serviceability and ease of installation and constructed with the finest materials available. Using these guidelines and paying close attention to the parameters outlined within the "conditions for use" will ensure a successful installation. To insure the system continues to operate at the optimum level, it is necessary to have a routine maintenance and replacement schedule. The frequency at which the filters need changing will depend upon the quality of the feed water supply and the level of system usage. Filters must be replaced at least every 12 months, and the membrane every 24 months.

Familiarity with RO installations and city, state, and local plumbing codes is important. In case there is a conflict between this manual and your local plumbing code, you must follow your local plumbing code.

MEMBRANE: THIN FILM COMPOSITE (TFC)

SOURCE WATER SUPPLY		
Community/Private Chlorinated/Non-Chlorinated		
System 242 – 690 kPa (35 – 100 psig)		
Temperature 4° - 38° C (40° - 100° F)		
pH Range	3.0 to 11.0	
Maximum TDS Range	2000 mg/L	
Turbidity	<1.0 NTU	
Silt Density Index <4.0 SDI		

CHEMICAL PARAMETERS		
Hardness (CaCO ₃) 350 mg/L (<20 grains/gallon U.S.)		
Iron (Fe) <0.1 mg/L		
Manganese (Mn) <0.05 mg/L		
Hydrogen Sulfide (H ₂ S)	<0.00 mg/L	
Chlorine (Cl ₂) <2.0 mg/L		

CAUTION

DO NOT USE THIS SYSTEM WHERE WATER IS MICROBIOLOGICALLY UNSAFE OR WITH WATER OF UNKNOWN QUALITY.

NOTE

This water treatment system is for use on potable water supplies only. Source water exceeding Chemical Parameters requires pretreatment.

PARTS LIST

Use the following list of components to ensure that all parts are included with your system while familiarizing yourself with the items before installation.

<u>Qty</u>	Part Number	<u>Description</u>
1	FAUC1360	Air Gap Faucet
1	FITT2206	Faucet Adapter 3/8" x 7/16"
1	TANK1400	Water Storage Tank (reservoir)
1	MANI1201	FMF Fillmaster® Filtration System



Fillmaster System Components

<u>Qty</u>	Part Number	<u>Description</u>
1	DRAN1350	DLA-12 Drain Line Adapter Package
1	EZFA2400	EZ Faucet Adapter Kit
1	TUBE2355	3/8" Blue Tubing, 48" long
1	FITT2209	Reducing Tee inserted
1	TUBE2353	3/8" Clear Tubing, 48" long
1	TUBE2354	3/8" Red Tubing, 48" long
1	TUBE2350	1/4" White Tubing, 36" long
1	REGU2200*	50 PSI Regulator
1	FLOW1253	1/4" FLR Red Tubing
	*[ONLY for sys	stems with FMD 3400 and 3600 Dispenser]



Fillmaster® Tubing and Fitting Kit

<u>Qty</u>	Part Number	<u>Description</u>
1	20126	FMD 2600 Fillmaster® Dispenser
1	TUBE2351	1/4" White Parflex Tubing, 50' long
1	BAGG2300	Installation Hardware Bag (see page 5)

Note: If you order two or more Dispensers you will receive an additional 25 feet of 1/4" White Tubing and Hardware bag, per dispenser.



Fillmaster® Dispenser, Tubing and Hardware

PARTS LIST (continued)

<u>Qty</u>	Part Number	<u>Description</u>
3	TIPP2310	Dispensing Tip Package
4	ANCH2301	Hallow Blue Wall Anchors
2	SCRE1300	Fillmaster® filltration Mounting Screws
4	SCRE2303	Dispenser Mounting Screws
2	SCRE2304	Dispenser Assembly Screws
4	CABL2302	Dispenser Tubing Staples



Installation Hardware Bag Contents

OTHER FILLMASTER® PRODUCTS

Fillmaster® 3400 and 3600 - Dispenser

Designed as an addition to the Fillmaster[®] dispenser product line, the fully computerized, battery-operated Fillmaster[®] 3400 and 3600 dispenser employ multiple microprocessors to provide accurate and even-flow dispensing. By using the electronic dispenser, pharmacists increase prescription integrity by greatly reducing the possibility of human error while dispensing prescriptions.

Script Scanner - Bar Code Scanner

The Script Scanner is a pager-sized, plug-in modular upgrade to the Fillmaster \$\mathbb{g}\$ 3600 dispenser. Users simply scan a prescription's NDC bar code in front of the dispenser, and the Fillmaster 3600 displays the product name and required water quantity. The prescription is then dispensed at the touch of a button. The Script Scanner's database contains proprietary and generic oral drug types by manufacturers including Bristol-Meyers Squibb Co., Apothecon, SmithKline Beecham, Eli Lilly & Co. and many others.

For more information about these or any other FILLMASTER® SYSTEMS, LLC products, please contact our sales department at (888) 284-7873 or our website www.fillmastersystems.com

PRELIMINARY INSTALLATION STEPS

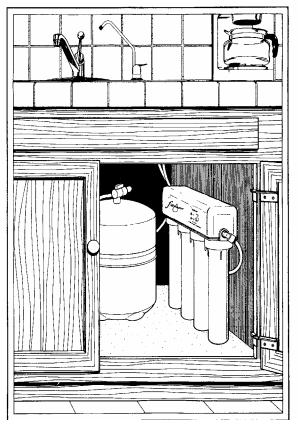
- 1. Examine the cold water feed line, usually located underneath the pharmacy sink. You will be installing an In-Line Adapter and Ball Valve on the cold water line.
- 2. Determine the location for the Fillmaster® Filtration System. In most pharmacies the Fillmaster® filter unit will fit underneath the pharmacy sink inside the cabinet. Mount the filter unit on the right side of the cabinet if possible. The Water Storage Tank should fit inside the cabinet as well. If the tank does not fit, place as close as possible to the filtration system.
- 3. Determine the location of the Fillmaster[®] Dispenser. The dispenser requires a flat, vertical surface at least 24" high. The end cap of a prescription bay, or close to your consulting counter are generally excellent locations for maximum convenience. When mounting the dispenser, be conscious of varying heights among your staff. The ideal height for mounting the dispenser is 66" from the floor to the top of the dispenser.
- **4.** Determine the location of the Air Gap Faucet. If you have an unused knockout in your sink, the faucet will fit there. If not, you will need to drill a 1¼" diameter hole through the counter next to the sink.
- 5. Assemble installation tools: Electric Drill with ¼" and ½" drill bits, Hack Saw, Small Adjustable Wrench, Hammer, Flat Blade Screwdriver, Phillips Screwdriver, Razor Knife and a 1¼" Hole Saw or Spade Bit to drill a hole for the faucet.



Installation Tools



Typical Fillmaster® Dispenser location.

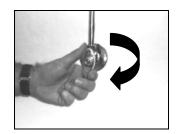


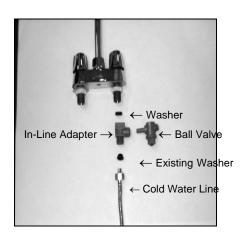
Standard location for Fillmaster® Filtration System and Water Storage Tank.

INSTALLATION INSTRUCTIONS

Installing the In-Line Adapter and Ball Valve

- 1. Turn off the cold water under your sink by rotating the cold water supply valve in a *clockwise* direction. If you are not sure which is the cold water, run both taps, then feel the tubing. The hot water feed will be noticeably warmer. Drain the line by opening the sink faucet.
- 2. Using a wrench, disconnect the cold water supply where it connects to the cold water inlet on your faucet.
- 3. Insert the rubber washer into the In-Line Adapter and install the adapter onto the supply connecting to the cold inlet on your faucet.
- **4.** Align the outlet hole (in the side of the adapter) toward the Pharmapure Unit location.
- 5. Replace existing rubber grommet on cold water supply line and attach cold water supply line to the cold water inlet on your faucet to the In-line adapter.
- **6.** Firmly push in the stem of the Ball Valve into the In-Line Adapter all the way until it locks (refer to Inter-Component Connection Instructions below).
- 7. Insert the 3' length of ¼" White Tubing into the Ball Valve all the way until it seats firmly in the bottom of the fitting. Be sure the valve is in the closed position before proceeding. Closed position is horizontal to the ¼" white tubing.



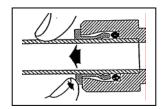


Inter-Component Connections (Speed Fittings)

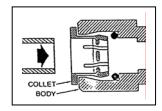
The Inter-Component Connection Fittings consist of 2 parts: a Body and a colored Collet (collar or ring). Most collet colors corresponds to the tubing color to be used at that connection.

- ♦ To remove a tube or protective plug: Push and hold the collet against the body while pulling out the tube.
- ♦ **To install a tube**: Push it through the collet until it seats firmly at the bottom of the fitting.

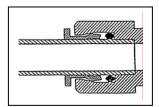
 Make sure to cut tube ends square and straight. Sharp points or scratches on a tube can result in leaking.



To Remove: push Collet against Body to release



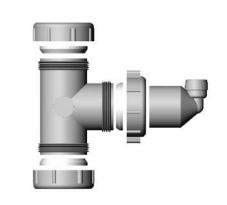
To Install: firmly push tube through Collet into Body



Tube must seat firmly (lock) into bottom of fitting

Installing the Drain Line Adapter

1. Open and verify the DLA-12 Drain Line Adapter parts.



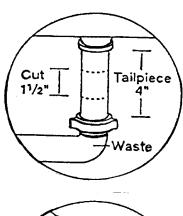
<u>Qty</u>	<u>Description</u>
3	Slip-Joint Nuts
3	Beveled Washers
1	3-Way Repair Tee
1	Adapter

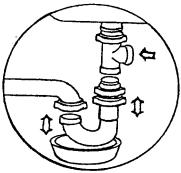
2. Check the drainpipe directly below the sink drain. Make sure that you have at least 4" of vertical pipe between sink drain and the trap. Also confirm that the drain line adapter can be mounted above the trap outlet, but low enough so that the 3/8" red drain tube runs "downhill" all the way to the drain, as indicated in the photo below.

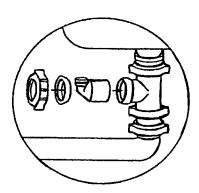


The Drain Line Adapter must be above trap outlet pipe

- **3.** Cut 1½" section from the drain tailpiece using a hacksaw.
- **4.** Disconnect and lower (or simply loosen if you have enough play in the system) the J-Bend of the trap, using a bowl or small trash can to catch the water in the trap.
- **5.** Put the Slip-Joint Nuts and Beveled Washers on the exposed ends of the drain pipe with the beveled side of the washer towards the cut portions.
- **6.** Insert the 3-way Repair Tee, reconnect the trap and tighten the washers on the Tee.
- 7. Insert the new drain line adapter into the side outlet of the Tee as shown. Tighten the slip-joint nut.





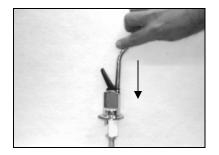


Installing the Air Gap Faucet and Fillmaster® Filtration Unit

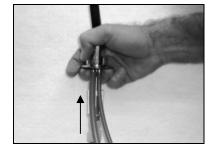
- 1. *IMPORTANT:* Installation of the air gap faucet is <u>not</u> optional. It <u>must</u> be installed. The air gap faucet is the systems' means of drain water backflow prevention. If you have a knockout hole in your sink the Air Gap Faucet will fit there. If not, drill a 1¼" hole in your counter. Allow enough room for the faucet base, do not drill too close to the sink. Be sure to install faucet so that the spout empties water into the sink.
- 2. Assemble the faucet. Remove the protective plugs. Push the gooseneck into the base until it stops. Loosen the brass nut on the faucet stem, remove the slotted washer and slide the white plastic spacer down to the bottom of the stem. If the black plastic lever comes loose, it will lock in place by a metal "T" that the slotted lever will fit into.
 CAUTION: The Flow Restrictor (FLR) is installed inside the 1/4" red tubing at the end connected to the manifold. DO NOT TRIM THE END OF THE 1/4" FLR RED TUBING (END WITH FLR LABEL) CONNECTED TO MANIFOLD. (See Figure 1)
- 3. Attach the red tubes to the black faucet barbs. Firmly push the red tubes all the way onto the black barbs. The 1/4" FLR red tube from the manifold will fit on the smaller barb and the 3/8" red tube will fit on the larger barb.
- **4.** Feed tubes through the hole and drop the faucet into place. Place the slotted washer on the underside of the counter. Move the spacer up and tighten the nut. Insert the blue tube with the "T" fitting into the faucet stem by pushing it up into the plastic faucet connector with the blue collet.
- 5. Remove the protective plugs from the Fillmaster® Filtration Unit (See pg. 7, Inter-Component Connections (Speed Fittings)), and mount on the cabinet wall using the two longest (#12 x ¾" PH) metal screws provided.



Step 1. Alternate location for hole.



Step 2. Push gooseneck down.



Step 3. Push tubes up into the barbs.



Step 4. Drop tubes down through



Step 5. Mount Pharmapure on wall.

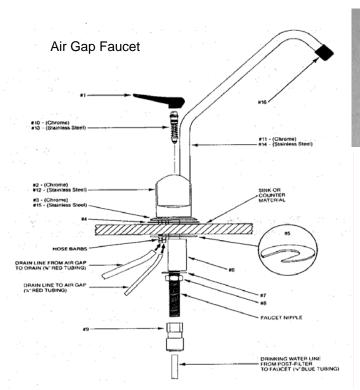


Figure 1

10 TON 00

Installing the Fillmaster® FMD 2600 Dispenser

- 1. Assemble the Fillmaster® Dispenser by joining the lower and upper part of the dispenser together with the two #10 x ½" FH metal screws.
- **2.** Ask the pharmacist where he or she would like the dispenser mounted.
- 3. Mount the dispenser on the most convenient flat vertical surface using the four #10 x ¾" FH metal screws. Average height is 66" from the floor to the top of the dispenser.

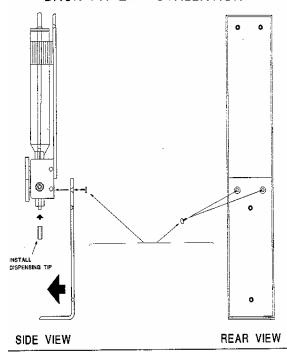
If you need to use wall anchors (drywall or stucco), drill a $\frac{1}{4}$ " hole to accommodate the wall anchors.

- Install one of the three dispensing tips on the white ¼" tube on the bottom side of the control box.
- **5.** Attach the 50', ¼" white tubing into the elbow on the side of the dispenser.
- **6.** Run the white tubing from the dispenser to the filtration unit. Trim for proper length.

Note: Dispensing tips should be sanitized and/or changed frequently, to eliminate cross contamination. To sanitize tips, soak in a mild bleach solution and rinse.

DISPENSER ASSEMBLY

BACK PANEL INSTALLATION



IMPORTANT: Be careful not to force or overturn the dispenser valves. Doing so may strip the handles with the valve stuck in an open or closed position.

Final Tubing Connections

Finish making system connections as indicated below. (**Read all steps 1-5**) For a look at the completed Fillmaster[®] System refer to the Inter-Connect Diagram on page 9. For all connections, make sure to trim any excess tubing to eliminate slack and improve flow rate. Be sure all tubes are cut square and straight. Sharp points or scratches on the tube will cause leaking. Avoid sharp changes in direction when routing the tubing. Sharp turns cause the tubing to flex and deform which reduces the flow rate. The tubes and appropriate fittings are color coded for convenience.

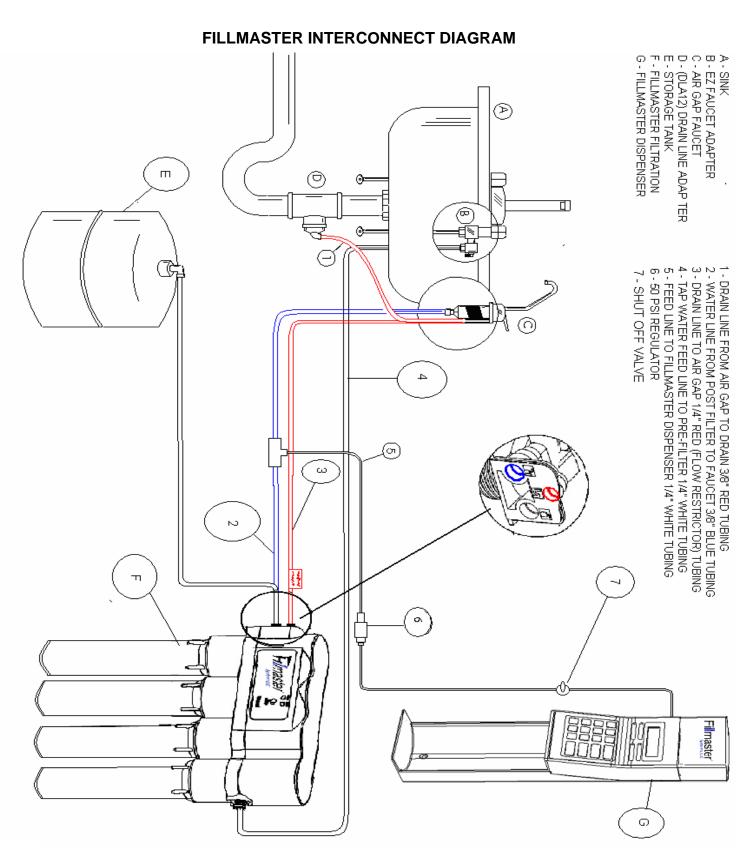


- Connect the large 3/8" red tube from the faucet barb to the DLA-12 Drain Line Adapter. The tube must be as straight as possible so the water will travel "Downhill" to the drain. IMPORTANT: Any sag or slack in the drain line will cause water to back up and leak from the air gap on the back of the faucet.
 - 2. Connect the blue 3/8" tube from the faucet stem to the blue connector on the back of the Fillmaster® Filtration Unit.
- 3. Connect the 1/4" white tube from cold water line to the right side of the filtration unit.
- 4. Connect the 3/8" clear tube from left side of filtration unit to the water storage tank.

Final Tubing Connections (continued)

5. Connect the 1/4" tubing from the dispenser to the "T" connector between the 3/8" blue tubing.

NOTE: Systems with the FMD 3400 and 3600 dispenser: Connect the ¼" tubing form the dispenser to the regulator that is connected to the "T" connector.



ACTIVATING THE SYSTEM

CAUTION: Make sure all water supply lines, drain lines, and fittings are secure and free from leakage.

- 1. Open source water supply valve. Close product water faucet. Check for leakage.
- 2. Turn tank valve one-quarter turn counter-clockwise to open valve (handle should be in line with tubing as it enters connection).
- 3. Confirm system is producing water. Module will be sending rinse water to drain.

Optional AquaScan Water Quality Monitor Perform Steps 4-7

- **4. CAUTION:** Wiring within module cover connects monitor components. If wires, circuit board, or connections are damaged and/or wetted, monitor will not function.
- **5. CAUTION:** Verify battery connector alignment before making connection.

CAUTION: Connect battery to monitor after system has been in production mode for at least 5 minutes. This ensures sensing switch is in proper position to record data.

- Connect battery on manifold by pressing clip onto battery terminals.
- **6.** Replace manifold cover and tighten screws
- 7. Test battery connection by activating monitor. Press push button. If either indicator light illuminates, connection is good.

NOTE: Release button or close faucet immediately after light illuminates. Test is to confirm battery connection, not water quality.

- **8.** Open product water faucet and let water flow until all air has been expelled from system. Lock faucet by rotating the handle 90 degree or by lifting handle. As applicable.
- 9. Close product water faucet. In 30 minutes, check connections for leaks and correct if necessary
- 10. Allow storage tank to fill overnight.
- 11. WARNING: DO NOT USE THE FIRST FULL STORAGE TANK OF WATER

Discard (to drain) first full tank of water by opening product water (and extra point-of-use) faucet until water flow stops, then close faucet. This will flush sanitizing solution from system.

12. System is ready to use. Should there be any aftertaste or odor to water, repeat Steps 10 and 11

DO NOT USE THE FIRST STORAGE TANK OF WATER

Allow storage tank to fill overnight. Dispense this water to drain.

This process removes factory-installed sanitizing solution from the entire system and sends it to drain.

This process also sanitizes fittings and tubing used during installation

MAINTENANCE PROCEDURE PREPARATION

Liquid dish soap

RECOMMENDATIONS HAVE ALL EQUIPMENT AND REPLACEMENT COMPONENTS ON HAND AND READY BEFORE BEGINNING PROCEDURE. A CLEAN WORK AREA AND EQUIPMENT ARE ESSENTIAL TO PROPERLY CLEAN AND/OR SANITIZE THE SYSTEM. (i.e,. CLEAN HANDS, TOOLS, WORK SURFACE, AND CONTAINERS) EQUIPMENT NEEDED Safety glasses Rubber gloves, sanitary Wash Cloth, Clean and Lint-free RECOMMENDATIONS BEGINNING PROCEDURE. A CLEAN WORK AREA AND EQUIPMENT ARE ESSENTIAL TO PROPERLY CLEAN AND/OR SANITIZE THE SYSTEM. (i.e,. CLEAN HANDS, TOOLS, WORK SURFACE, AND CONTAINERS) Plastic bucket Plastic bowl "O" ring lube FDA Approved

Congratulations! You now have an endless supply of Pharmacy grade water, and are free from ever having to buy bottled water again. We are confident that you will find your Fillmaster® an essential Pharmacy efficiency tool.

Manual Air Pump

If you have any questions or concerns regarding your new system, our Customer Service Department is available Monday-Friday 8am-5pm PST and after hours for emergencies. Please call us at 619-596-9900 or our website www.fillmastersystems.com

RECOMMENDED ROUTINE MAINTENANCE

To insure the system operates at its maximum efficiency level, the following routine maintenance must be performed:

- Test your system frequently using the AquaScan button. The AquaScan monitor does not indicate when the filters should be changed, it does measure the integrity of the product water and the membrane. To accurately test using the AquaScan button, the system must be in the "make-water" mode. To do so, draw at least one quart of water from faucet. Wait 10-15 minutes and press button.
- ◆ The Filters (one sediment and two carbon) must be replaced every 12 months, at a minimum. High usage and poor feed water quality will dictate more frequent filter changes.
- Drain the storage tank at least once each week (best at the end of a work day) by lifting the faucet handle up, until all the water stops, lower handle. Allow storage tank to refill overnight. This ensures that enough water passes through the filtration system.
- The Thin Film Composite Membrane must be replaced every 24 months, or every other time you change the filters.
- ◆ The 9-volt battery for the AquaScan light should be changed every 2 years, or when you replace the membrane.
- The system should be cleaned and sanitized every time you change filters.
- Change and clean your dispensing tips frequently to avoid cross-contamination between antibiotics.
- DO NOT put anything down your drain that is not a free-flowing liquid. Too much buildup in your drain will cause a backflow of drain water around the auxiliary faucet.

Cleaning the Dispenser

- Open the fill valve allowing the graduated cylinder to fill.
- 2. Using an eye dropper, insert 2-3 full droppers of bleach in the vent, which is covered by a silver screen on top of the reconstitube.
- 3. Let the solution sit for 30 minutes.
- 4. Flush the dispenser with water.

Changing The AquaScan Battery

The AguaScan monitor and battery are mounted inside the manifold cover.

- 1. Remove the cover by gently pulling it up and away from the manifold body. You may need to loosen mounting bracket screws.
- 2. Disconnect the battery. The connection to the battery is a snap type connector. Remove the battery by sliding it out of its holder.
- 3. Replace the battery with an alkaline 9-volt transistor battery.
- 4. Carefully slide the battery into its holder.
- 5. Press the AquaScan button to test the new battery. If either indicator light illuminates, the battery is good.

Cleaning and Sanitizing the System During a Filter Change

- 1. Mix a mild cleaning solution of dish soap and water.
- 2. Turn off the cold water supply and open the Air Gap Faucet. Lock the faucet in the open position by lifting the lever to the full-up position. This will empty the storage tank and relieve pressure in the system.
- Unscrew each filter housing by turning it counter-clockwise. Remove each filter and discard.
- 4. If you're not changing the membrane, clean the membrane outer wrap with cleaning solution. Do not immerse the membrane in the solution. Do not scrub the membrane wrap with abrasive cleaners. Rinse the membrane well with clean water.
- 5. Place membrane into clean plastic bag and close bag.
- 6. Remove the filter housing "O" rings and wash them with cleaning solution. Rinse them well with clean water. Inspect the "O" rings for damage (i.e., nicks or scratches). Replace damaged "O" rings.
- 7. Clean the inside and outside of the filter housings and the manifold. Use a soft cloth; do not use abrasive materials. Rinse the housings and manifold well with water. Inspect manifold and filter housing "O" ring groove area for damage (i.e., nicks or scratches). Replace damaged components. Use caution when cleaning the manifold cover. Do not get the AquaScan electronics wet.
- 8. Lightly lubricate the filter housing "O" rings. Install the "O" ring into the filter housing groove.
- - #1 Carbon Filter #2 Membrane #3 Carbon Filter #4 Sediment Filter
 - #5 AquaScan Battery
- 9. Mix a sanitizing solution of 1.5 ml (1/3 teaspoon) of household bleach and 3.8 L (1 gallon) of clean water in a bucket. Mix the solution well. Excessive concentrations of chlorine (sodium hypochlorite) may damage plastic and rubber components. Rinse all parts that contact the bleach with clean water. Handle the sanitizing solution carefully to avoid contact with unprotected areas.
- 10. Add 236 ml (one cup or 8 oz.) of sanitizing solution to each of the filter housings and install them onto the manifold (do not install filters or membrane at this time). Tighten each filter housing by hand only. Do not use a filter-housing wrench, as this will over torque the housing. Do not use pliers, as they will damage the housing.
- 11. Slowly open the feed water supply valve. Leave the air gap faucet open until water starts coming out.
- 12. Close the air gap faucet. Leave the feed water supply valve open for five minutes, and then close the valve. This will fill the entire system and tank with the chlorine solution.
- 13. After 30 minutes, fill the Fillmaster with the solution and drain then, lift and lock the air gap faucet lever in the open position to drain the rest of the system. Remove the filter housings and dispose of the water. Rinse the housings thoroughly with clean water.
- 14. Do not remove the protective plastic bag from the filters or membranes. Open the top of the bag only enough to expose the top cap and "O" rings.
- 15. Holding the cartridge by the protective plastic bag, insert the cartridge into the manifold turning it 1/2 turn as it enters the port. Slide the protective plastic bag from the cartridge and discard. Replace each filter housing as each cartridge is installed. Be sure to tighten filter housings by hand only.
- 16. Turn the feed water valve to the open position. Open the air gap faucet. Let the water flow until all the air has been expelled from the system. This will take about one hour. Close the air gap faucet.
- 17. Allow the storage tank to fill overnight.
- 18. **Do not use the first tank of water!** Drain the first full tank of water by opening the air gap faucet until the water flow stops, then close the faucet. This will flush the sanitizing solution from the system. The system is ready to use when the tank fills up. This takes up to 8 hours.

TROUBLE SHOOTING GUIDE

Symptom	Symptom Probable Cause	
Leak from Air Gap Faucet	Excessive slack in drain tubing <i>(new system)</i>	Cut off excess tubing (*Tubing #1) so that tube runs "downhill" to drain
	incorrect (new system)	3/8" blue tube (*Tubing #2) to plastic fitting on very bottom of faucet, 1/4" and 3/8" red tubes (*Tubing #3 & #1) onto faucet barbs
		1. Turn off cold water. 2. Turn tank handle off. 3. Disconnect 3/8" red drain tube (*Tubing #1) from drain elbow and remove any debris using a pipe cleaner or swab. 4. Disconnect drain elbow and remove any debris. 5. Turn cold water and tank handle back on. 6. If still having backflow, treat sink drain with Drano or Liquid Plumber buildup remover, not clog remover (enzyme-based and plastic pipe approved only).
Leaks from Tubing Connections	Tubing end cut at an angle	Re-cut tubing straight
5	Tube not seated at bottom of fitting	Push in tube until it seats firmly at the bottom of fitting
Leak from Top of Filter Vessel Housing	rom Top of Filter Vessel Housing Missing or damaged vessel housing "O" ring (recent filter change)	
No Water <i>or</i> Not Enough Water	Not enough time to fill reservoir tank (new system or recent filter change)	Allow at least 8 hours for tank to fill
		Follow 1/4" white tube (*Tubing #4) away from filtration. Turn aqua handle to parallel to white tube. If your valve is a tapping valve (small metal "t" type handle), turn counter-clockwise until fully open.
	Main cold water supply "off"	Turn to "on" position (counter-clockwise)
	Reservoir tank handle "off"	Turn blue handle to "on" position (parallel to gray or white fitting underneath)
	Clogged filters or depleted membrane	Replace filters annually, replace membrane every 2 years (at a minimum)
		Check filters. Should have 2 "O" rings at top of each filter.
	Clogged flow restrictor tubing/depleted membrane	Replace flow restrictor tubing (model FMF 950) flow control (FMF 940) and membrane
	•	Check water pressure coming into filtration. System will not operate at less than 35 psi.
Low Product Water Pressure (tank is full- heavy)		Empty water from storage tank and adjust tank air pressure to 8 psi

^{* -} Refers to the Fillmaste $^{\text{@}}$ Interconnect Diagram on page 11

TROUBLE SHOOTING GUIDE (CONTINUED)

Symptom	Probable Cause	Solution
Yellow Service Light on Aquascan Monitor	Low usage or non-usage NOTE: The AquaScan monitor does not check filter condition (see Routine Maintenance, page 12)	Drain one quart of water from auxiliary faucet. Wait 10-15 minutes and retest.
	Depleted or fouled membrane	Replace membrane and sanitize system (see page 12)
	Clogged FR tube	Replace FR tube
Air Noises from Air Gap Faucet	Initial pressurization of system	Pressure will automatically be bled from system over the 1st week of use. Can speed up this process by draining tank nightly for 2-3 days.
Hear Water Running to Drain	Is normal. The reverse osmosis process separates impurities from feed water and transports them through water to the drain	No solution necessary
Cloudy Water	First tank of filtered water not emptied (new system or recent filter change)	Empty tank of water. Let refill for 8 hours.
Water has Offensive Taste and/or Odor	Sanitizer not flushed out (new system or recent filter change)	Empty tank of water. Let refill for 8 hours.
	Carbon filter depleted	Empty tank of water. Replace post carbon filter.
	Sediment/carbon filters depleted	Replace filters, sanitize system
	Membrane depleted or fouled	If AquaScan monitor reads yellow <i>or</i> if TDS test shows less than 70% rejection, drain storage tank, replace membrane, sanitize system.
Boil Alert Issued	Boil alerts are issued when there is the possibility of microbes being passed into the drinking water	1) Discontinue use of the system 2) Turn off cold water supply to system 3) The remaining water in the reservoir tank may be used until the tank is empty 4) Replace the 1 sediment, 2 carbon filters, sanitize, and clean manifold
		This will ensure that the system will remain uncontaminated after the boil alert has been lifted
Manual Dispenser	Call Customer Service	Call Customer Service
3400 And 3600 dispenser	See 3400, 3600 and Script Scanner User Guide	See 3400, 3600 and Script Scanner User Guide
Script Scanner	See 3400, 3600 and Script Scanner User Guide See 3400, 3600 and Script Sca User Guide	

WARRANTY

Subject to the conditions and limitations described below, FILLMASTER® SYSTEMS, LLC warrants its Fillmaster® System, Model FMF (Fillmaster® filtration) Reverse Osmosis Water Purification Unit and Model FMD-2600, 3400 and 3600 Fillmaster® Dispenser to be free from defects in materials and workmanship under normal use within the operating specifications listed below. For a period of two years from the date of purchase, FILLMASTER® will repair or replace any part of this Water Purification and Measurement System with the exception of the cartridge filters and the battery. Fillmaster® filtration carries a five-year warranty (READ CONDITIONS OF WARRANTY). The RO Membranes carry a 12-month prorated warranty as follows: Credit 1/12th of replacement cost for each unused month provided the system is installed and maintained according to factory instructions. The unit and/or parts under warranty will be repaired or replaced and returned to the customer, FOB California.

CONDITIONS OF WARRANTY

The above warranty shall not apply to any part of the Fillmaster[®] filtration Reverse Osmosis Unit or Fillmaster[®] Dispenser that is damaged because of neglect, misuse, alteration, accident, misapplication, physical damage, fouling and/or scaling of membranes by minerals, bacterial attack, sediment or damage caused by fire, flood, Act of God, freezing or hot water. If the Unit is altered, modified or if it is installed in a manner inconsistent with the attached instructions or if it is not maintained according to factory instructions, this warranty is void.

FILLMASTER® assumes no warranty liability in connection with the Reverse Osmosis Unit or Dispenser Unit other than as specified herein. FILLMASTER® shall not be liable for consequential damages of any kind or nature due to the use of FILLMASTER® SYSTEMS, LLC products.

OPERATING SPECIFICATIONS

Membrane TFC
Feed water pressure 35-100 psi
Feed water temperature 40-100° F (4-38° C)
Feed water supply Chlorinated
Maximum TDS 2000
Feed water pH 3-11

The filters must be replaced every (12) months minimum and the membrane every (24) months. Depending on the feed water quality and system usage, the Pharmapure System may require replacement of filters and membrane at more frequent intervals. Routine maintenance such as cleaning and sanitizing the system at least once a year is required. See page 12 for recommended routine maintenance.

MAINTENANCE SCHEDULE

Date system installed:	Filters Replaced Date	Membrane Replaced Date	Other Services Performed Date
Serviced Performed By:			Date

Notes:

PRODUCT REGISTRATION

This form must be returned within 10 days of installation or warranty will not be valid

Company	Store Number
Pharmacy Owner / Manager	
Address	
	State Zip
Pharmacy Phone	Fax
Installation Date	
Filtration Serial Number	(label on the back of the filtration system hood)
3400 or 3600 Serial Number	Script Scanner Bar Code Reader? Yes No
I certify that I have received the installation guide.	on manual, including the warranty information and service
Signature	Date
As an added value service we can provid your installation, and membrane shipmen	natic Filter Ship Program le automatic filter shipments on the yearly anniversary of lts every other year. It is critical that filter changes are made performance and system integrity. Simply sign below and
Signature <i>(Required)</i>	Date
Print Name <i>(Required)</i>	
	eleted form within 10 days of installation

to validate warranty via fax or email @ www.fillmastersystems.com

FILLMASTER® SYSTEMS, LLC CUSTOMER SERVICE DEPARTMENT 619-596-9900 FAX 619-596-8700

Fax: (619) 596-8700 TOLL FREE 1-888-284-7873

PO BOX 711537 SANTEE, CA 92072-1537



FILLMASTER® SYSTEMS, LLC 619-596-9900 FAX 619-596-8700 TOLL FREE 1-888-284-7873 www.fillmastersystems.com PO BOX 711537 SANTEE, CA 92072-1537





18-Gallon MedSafe®

18-Gallon #17818

Dispose of ultimate users unused controlled (Schedules II-V) and non-controlled medications with MedSafe, an easy-to-operate, affordable system, that is DEA compliant. MedSafes generate foot traffic at retail locations promoting take-back events or act as a value-added service for pharmacies managing long-term care facilities. They are also great for hospitals with on-site pharmacies, law enforcement and drug treatment centers. However, a DEA registered collector must manage the program.

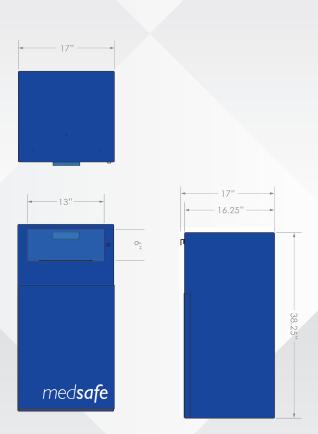
MedSafe combines a powder-coated, stainless steel collection receptacle with a removable, prepaid shipback inner liner. The receptacle, which secures to the floor or wall, is equipped with two locks on the main door and a one-way medicine drop with lock. When the inner liner is full, it is removed from the collection receptacle by authorized persons, securely sealed and returned by way of common carrier for proper destruction.

SYSTEM INCLUDES

- · Outbound shipping from seller to customer
- · Collection receptacle
- · One serialized inner liner for tracking
- Prepaid return shipping via common carrier for liner
- Proper destruction and online documentation

ADVANTAGES

- Fixed, cost-effective pricing inner liners to fit your needs
- · Approved for controlled and non-controlled medications
- · Convenient return shipping for inner liners
- Online tracking and proof of destruction via SharpsTracer available 24/7









38-Gallon MedSafe®

38-Gallon #17838

Dispose of ultimate users unused controlled (Schedules II-V) and non-controlled medications with MedSafe, an easy-to-operate, affordable system, that is DEA compliant. MedSafes generate foot traffic at retail locations promoting take-back events or act as a value-added service for pharmacies managing long-term care facilities. They are also great for hospitals with on-site pharmacies, law enforcement and drug treatment centers. However, a DEA registered collector must manage the program.

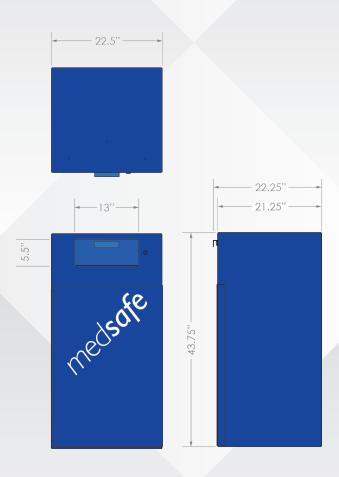
MedSafe combines a powder-coated, stainless steel collection receptacle with a removable, prepaid shipback inner liner. The receptacle, which secures to the floor or wall, is equipped with two locks on the main door and a one-way medicine drop with lock. When the inner liner is full, it is removed from the collection receptacle by authorized persons, securely sealed and returned by way of common carrier for proper destruction.

SYSTEM INCLUDES

- · Outbound shipping from seller to customer
- · Collection receptacle
- · One serialized inner liner for tracking
- Prepaid return shipping via common carrier for liner
- Proper destruction and online documentation

ADVANTAGES

- Fixed, cost-effective pricing inner liners to fit your needs
- · Approved for controlled and non-controlled medications
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Cactus Smart Sink® Frequently Asked Questions

Contents

1.	What is the Cactus Smart Sink How does it work?	2
2.	How does it render narcotics unrecoverable, non-retrievable and unusable?	2
3.	Where do I install the Smart Sink [®] ?	2
4.	Who maintains access?	2
5.	How big is the Cactus Smart Sink [®] ? Will it fit on a wall or on a cabinet?	3
6.	What kind of waste can the Cactus Smart Sink® accept?	3
7.	Can the Cactus Smart Sink® accept RCRA hazardous waste (such as Coumadin)?	3
8.	What happens to the cartridges once they are full? Who can take them? Can we just throw them in the trash?	3
9.	What if we do not have a contracted waste management company?	4
10.	Do State and Federal regulatory agencies approve the Smart Sink®?	4
	What is the DEA's position on partially dispensed controlled substances in medical facilities? Do they consider t te drugs "unrecoverable, non-retrievable and/or unusable"?	
12.	Does the Cactus Smart Sink® meet the DEA's requirements for controlled substance disposal?	5
13.	How does the Cactus Smart Sink® fit in with our hospital drug waste program?	5
14.	Is the Cactus Smart Sink® economical to use? What about cost?	5
15.	How long will the cartridges last?	6
16.	Will this add to our disposal costs?	6
17.	I can just put my waste in sharps containers or down the drain for free. Why do I need to have this?	6
18.	How much training is involved?	7
19.	Does it need power or an outlet?	7
20.	How much security does it have?	7
21.	What is the Cactus Pharma Lock®? How does it work?	7



1. What is the Cactus Smart Sink®? How does it work?

- The Cactus Smart Sink® is an easy to use, go green waste solution for unused pharmaceuticals. It accepts unused portions or partial doses of controlled substances and provides for a secure alternative to a sink, toilet, red sharps container or waste bin for drug waste. This innovative and compact system helps bring medical facilities into compliance by eliminating the impact to our environment while preventing unauthorized use of unused narcotics.
- The Smart Sink® system automatically secures and renders controlled substance waste "unrecoverable, un-usable, non-retrievable" while providing a secured bridge from traditional drug disposal to proper and responsible disposal.
- This one-of-a-kind system utilizes two replaceable cartridges: One liquid cartridge for liquid waste and one solid cartridge for capsules, tablets, and patches. Both cartridges allows for continuous disposal over time and are designed to last up to 90 days. The system utilizes automatic timers and weight indicators providing notice when cartridges are full or have expired. The system also allows you to choose a preferred expiration date by using the built-in timer selector switch.
- The Smart Sink® helps bring medical facilities into compliance by providing a secured and environmentally friendly method of disposal. It forces proper witnessed-wasting of narcotics in the open and near the drug dispensing systems where needed, improving safety and saving time. It allows for up-front waste documentation and forces this process to be completed immediately (when controlled substances are dispensed) rather than sometime later. It eliminates the unacceptable practice of inserting unused drugs into red sharps containers. (This practice if out of compliance with today's regulations). It reduces the opportunities for drug diversion by incorporating two person witnessed-wasting and by keeping partially filled vials and syringes out of red sharps containers, which have become a key source for drug diversion in medical facilities.

2. How does it render narcotics unrecoverable, non-retrievable and unusable?

- When liquid waste is introduced it is automatically filtered through proprietary mixture of denaturants and deterrents
 and it is converted to a semi-solid state within fifteen seconds, rendering waste unrecoverable, non-retrievable and
 unusable. The byproduct cannot be recovered or used.
- Solids (tablets, capsules and patches) are captured through a one-way pill maze and patch slot, secured and rendered
 unrecoverable, non-retrievable and unusable with a proprietary liquid mixture. Solid cartridges are activated by your
 facility upon installation.
- Smart Sink® allows for multiple, secured waste events over time and does not require frequent change-out or disposal.
 This system is automatic and hands free, and does not require any action by the user after the introduction of waste.

Where do I install the Smart Sink®?

- The Cactus Smart Sink® can be installed wherever controlled substances or medications are drawn, stored, or administered or wherever there is a need for a secured disposal system for controlled substance waste.
- The most common application is next to automated medication dispensing systems.
- Near locations where out of compliance wasting tends to occur (i.e. sink, toilet, waste bin, or red sharps container).
- Good locations include: nursing stations, procedure rooms, ICU, ER, OR, near Pyxis & Omnicell systems, pharmacy, outpatient clinics, surgery centers, long-term care facilities, hospice, and EMS/ambulances.

4. Who maintains access?

- Access or control is determined by your facility policies and procedures (P&Ps). Only authorized facility personnel can gain access to the unit with a secured and coded lock system. Cactus can provide P&P templates upon request.
- Even though controlled substance waste is rendered "unusable and non-retrievable" limited access is still recommended for proper waste control.



5. How big is the Cactus Smart Sink®? Will it fit on a wall or on a cabinet?



- Measurements are 15 % inches wide, 12 % inches tall, 9 % inches deep. Installation is very simple; instruction manual, installation video, "how to use" inservice videos are also provided.
- \bullet The Smart Sink $^{\circ}$ liquid capacity is approximately 3.0L, and the solids capacity is approximately 1.7L.

(Approximately 500-1500 tablets/capsules).

- The system can be easily mounted to a wall or countertop.
- The Smart Sink® comes with a mounting bracket, installation hardware and installation instructions.

6. What kind of waste can the Cactus Smart Sink® accept?

- Raw pharmaceutical waste only. The system is not a sharps container and **does not** accept syringes, tubing or packaging such as vials or bottles.
- The system is ideal for unused and remaining portions of partially-dispensed controlled substances.
- Non-hazardous or hazardous pharmaceutical waste. All units must be labeled and disposed of per proper waste
 protocols. If RCRA Hazardous waste is introduced into the Cactus Smart Sink®, the appropriate RCRA guidelines for
 labeling, tracking and disposal must be followed.
- Will not accept sharps or bio-hazard waste.
- Will not accept chemotherapy or nuclear medicine waste. Please use the appropriate of containers for this type of waste.

7. Can the Cactus Smart Sink® accept RCRA hazardous waste (such as Coumadin)?

- Yes, however some facilities may designate just one or two units as hazardous only. This will reduce RCRA waste accumulation.
- Due to its many safety and security features, most facilities use the Smart Sink® system for controlled substance waste only.
- Most facilities prefer to place a small black RCRA waste bin nearby in order to sort out hazardous waste. This will limit the amount of hazardous waste that is accumulated in various locations. If the Smart Sink® is used for controlled substance waste only there are very few (if any) that are considered hazardous. Most of these are not part of a hospital formulary.
- Cactus can provide referrals to pharmaceutical waste consultants upon request.
- If RCRA Hazardous waste is introduced into the Cactus Smart Sink®, the appropriate RCRA guidelines for labeling, tracking and disposal must be followed.

8. What happens to the cartridges once they are full? Who can take them? Can we just throw them in the trash?

- Unused drugs are securely captured and rendered unrecoverable, non-retrievable and unusable using a proprietary technology and mixture. Once introduced, narcotics may be disposed of as "non-hazardous" pharmaceutical waste. (If RCRA hazardous waste is introduced into the Cactus Smart Sink®, the appropriate RCRA guidelines for labeling, tracking and disposal must be followed).
- Once the cartridges are full or expired, they can be disposed of through your authorized waste management company.
- Even though some states may consider the waste or byproduct to be "unusable" or "neutral", to reduce environmental impact or risk, Cactus recommends final incineration of the used cartridges. (Per standard EPA and state Department of Environmental Protection guidelines). This service can be provided by most contracted waste companies. Should your facility consider trash disposal for the used cartridges, we recommend that you request state Environmental Agency

^{*}Always follow all Federal, State, tribal, and local disposal regulations for RCRA Hazardous Waste.



- approval prior to doing so. Even though some waste containers may be marketed as "inert", from an environmental perspective, proper approval from your state or local solid waste facility should be obtained. Always follow State, Tribal and Federal guidelines for proper waste categorization and disposal. Some States and local solid waste municipalities may not allow for trash disposal of a pharmaceutical waste from medical facilities in any form, regardless of claims.
- Federal and State agencies hold medical facilities responsible for the tracking pharmaceuticals from the time that they are received until the time they are either administered or destroyed ('cradle to grave'). Pharmaceutical waste that is captured, stored and disposed of by medical facilities (regardless of its classification) must be accounted for by the facility. If an authorized waste service provider manages your waste, this documented disposal service should be provided by them and should follow all Federal and State requirements. If a medical facility chooses to dispose of waste containers in the garbage there is typically no tracking or documentation of pharmaceutical waste, and the facility may be held accountable for the documentation and tracking of the final waste product. Any environmental impact of the waste will be the responsibility of the medical facility. This could create risk and negative effects for the medical facility.

 Our recommendation: Should a medical facility choose to use garbage disposal of any container regardless of its claims of being "inert" we recommend periodic randomized independent testing of the containers to prove that final contents are "inert" and not harmful to the environment. Since no two waste containers are alike in content, this on-going process may be required by your State and local solid waste municipality.
- Cactus provides individualized bar coding specific to each cartridge that provides for tracking and proper disposal documentation if needed.
- Smaller facilities may have local exceptions to dispose of the sealed containers through regular disposal methods regardless of its classification or product claims of being "inert".

9. What if we do not have a contracted waste management company?

• Cactus can recommend an authorized waste management company or other compliant solution upon request.

10. Do State and Federal regulatory agencies approve the Smart Sink®?

- Federal and State Agencies do not recommend or endorse **any** specific product, but may recommend a general procedure, technology or alternative method of disposal. These agencies now prefer methods other than flushing or red sharps container disposal. Federal, State, Tribal and hospital regulatory agencies still recommend diversion prevention protocols, witness and wasting, proper waste sorting and proper waste policies be followed.
- The Cactus Smart Sink® meets the DEA requirements for controlled substance waste disposal. (DEA Rule on Disposal of Controlled Substances, 9/9/14).
- Many agencies have reviewed the system and agree that the Cactus Smart Sink® fits the requirement for safe and proper drug disposal.
- If needed seek appropriate approvals and follow all state and federal guidelines for pharmaceutical waste.

11. What is the DEA's position on partially dispensed controlled substances in medical facilities? Do they consider the waste drugs "unrecoverable, non-retrievable and/or unusable"?

- Based on the recent DEA Ruling on September 9th, 2014 and the DEA "Dear Practitioner" Letter, it is up to the facility to
 decide as to the best method of disposal for partially administered controlled substance waste. Witness and wasting
 protocols and effective diversion prevention programs are still recommended by the DEA.
- The Smart Sink® provides an excellent alternative to a red sharps container, sink, toilet, or waste bin for drug disposal.
- Many States and regions have now moved toward a "no flush" policy and are working at the state level to provide solutions and alternatives to wasting in the sink, toilet or waste bins. The Smart Sink® system provides this solution.
- Based on extensive lab recoverability testing, Cactus, LLC maintains a position that unused controlled substances put into the Smart Sink® system, will be rendered "unrecoverable, non-retrievable and unusable".

^{*}Always follow all Federal, State, tribal, and local disposal regulations for pharmaceutical waste



12. Does the Cactus Smart Sink® meet the DEA's requirements for controlled substance disposal?

- Yes.
 - Partial doses: The DEA does not require or recommend any particular method or means of destruction. Once a
 controlled substance has been dispensed or administered to a patient, the remaining waste portion should be
 properly disposed of and is no longer subject to the DEA's regulations. DEA strongly recommends witness and
 waste documentation and effective diversion prevention. See DEA "Dear Practitioner" Letter
 (http://www.deadiversion.usdoj.gov/drug_disposal/dear_practitioner_pharm_waste_101714.pdf).
 - o For other controlled substances: The new DEA rule allows for on-site destruction of controlled substance waste with "deactivation" capability so long as such destruction is consistent with the standards set forth in the rule and the destruction results in a non-retrievable state. See DEA Title 21 Code of Federal Regulations, part 1317 subpart C (http://www.deadiversion.usdoj.gov/21cfr/cfr/1317/subpart c.htm).
 - Unused hospital inventory: Current reverse distributor programs with 222 transfer forms must be used.
 However, a destruction system may be used for non-returnable product. Destruction Form 41 must be filed with the DEA if a facility choses to destroy unused inventory.
 - o For patient prescriptions/patient-owned medication: A new category of "Collector" has been established to allow for medical facilities to accept patient-owned medications. The facility must register with the DEA as a "Collector" and must follow all new protocols for destruction or removal of the waste. The Cactus Smart Sink® will only accept raw pharmaceutical waste and will not accept packaging in any form. (No vials, packages, bottles, syringes).
- The DEA is allowing Smart Sink® cartridges to be handled by authorized waste companies as pharmaceutical waste.

13. How does the Cactus Smart Sink® fit in with our hospital drug waste program?

- In our surveys, we find most medical employees promote good environmental stewardship and, as an alternative to drain disposal, tend to waste unused controlled substances in inappropriate containers, such as red sharps bins. About 90% of the facilities we visit may not have near-by sinks or toilets in order to "witness and waste" drugs. Their tendency is to deposit unused drugs into sharps bins, trash cans, and other type containers, all of which do not meet protocol, are potential violations of regulations and provide opportunities for diversion.
- The Smart Sink® can accept roughly 94% of pharmaceutical waste usually what is flushed down the toilet or sink, or put in sharps containers or waste bins. (It is best to review this protocol with your pharmacy director).
- In the hospital nursing suite or procedure room environment, we find about 90% of the drug waste will be liquids and the rest consists of a few tablets, capsules and patches. Other facilities, such as long-term-care, may waste more capsules, patches and tablets than liquids. The Cactus Smart Sink® provides a universal central waste system for liquid, capsules and patches.
- Smart Sink® complements drug waste programs and protocols and addresses the need to responsibly dispose of partially administered doses of medication while simplifying the complex process of controlled substance waste disposal.

14. Is the Cactus Smart Sink® economical to use? What about cost?

- Upon installation the Smart Sink® system is very easy and economical to use.
- When considering the benefits:
 - 1- Time savings
 - 2- Bringing the facility into proper witness and waste protocol
 - 3- Proven success in eliminating drug-filled vials and syringes in red sharps containers
 - 4- Allows for hands-free use for tablets and liquids
 - 5- Forces witness and wasting up front rather than later
 - 6- Allows for continuous automatic use over time no mixing or shaking each time it is used
 - 7- Secured with locks, expiration alerts and alarms and is self-monitoring
 - 8- Improves patient safety and reduces potential for patient overdoses during administering of medications
- Pricing is based on facility size and number of units purchased.
- Please email sales@cactusLLC.net or call 843-856-7400 for pricing.



15. How long will the cartridges last?

- The Cactus Smart Sink® incorporates built-in timers that can be set for 30, 60, 90 or 180 days. This will allow your facility to determine the frequency of cartridge change out.
- The change-out frequency is also determined by what goes in the unit, quantity of waste, and how the waste may be classified.
- It is recommended that cartridges containing non-hazardous pharmaceutical waste should be changed out every 90 days or less.
- The system will automatically alert you when the cartridges are full or expired.
- We find most hospitals dispose of more liquid waste than solid waste. The cartridges can be changed independent of each other as they fill up or expire.

16. Will this add to our disposal costs?

- When you consider the cost of monitoring and managing drug waste protocols, possible fines, and bringing your facility into compliance, the Smart Sink® should help reduce your cost overall. In many cases the Smart Sink® saves a lot of time for your staff due to convenient locations and easy classification.
- The Smart Sink® will accept the drug waste in its raw form and therefore the weight of vials, tubing and other containers are not a part of the pharmaceutical waste accumulation. The empty containers can now go into regular waste or sharps bins rather than into the more expensive pharmaceutical waste bins.
- Many facilities spend thousands of dollars per year managing this program and utilizing consultants. Facilities must also consider the cost and risk of unused drugs ending up in the hands of unauthorized personnel in the acute setting. We also help to simplify the confusion and errors that occur when wasting controlled substances. The system provides an easy solution to a very complex issue. The Smart Sink® helps complement your waste protocols and programs.
- Some facilities may utilize a universal waste classification system and 'overclassify' all pharmaceutical waste as RCRA hazardous (black bin waste). While this practice ensures that no RCRA Hazardous waste is accidentally entered into the regular pharmaceutical waste stream, this process tends to be more costly than segregating waste. RCRA hazardous waste is more expensive to dispose of than regular pharmaceutical waste. By implementing the Cactus Smart Sink® system, many facilities are able to reduce their waste cost by disposing of all or some of their non-hazardous pharmaceutical waste in the Smart Sink® and utilizing black bin for the small amounts of RCRA hazardous waste they generate.

17. I can just put my waste in sharps containers or down the drain for free. Why do I need to have this?

- Red sharps containers and waste bins are not acceptable means of pharmaceutical waste disposal. Red sharps
 containers do not render pharmaceutical waste unrecoverable, non-retrievable or unusable, nor do they provide proper
 security and have become a key and common source for illegal drug diversion.
- Many state and federal agencies as well as numerous healthcare facilities are more concerned than ever about
 pharmaceutical waste in our environment. This environmental issue has also been the primary topic for many
 government agencies. Many facilities understand that waste regulations are becoming more stringent, and now there is
 an alternative to a sink, toilet or sharps bin with the Smart Sink® system.
- Many states, counties and cities are moving toward 'no-flush' policies and medical facilities are being held accountable
 for all waste that they generate. Methods of disposal that were allowed in the past such as 'sewering' or red sharps
 containers may no longer be allowed. Failure to comply with these new regulations could result in sanctions and/or
 fines.
- Many hospitals are currently in the process of updating their pharmaceutical waste programs to bring them into compliance. As part of this initiative, they are moving toward innovative technologies and environmentally friendly, "Go Green" concepts.
- The Cactus Smart Sink® forces witness and wasting in the open. In many facilities sinks or toilets are not always available where needed and in many cases nurses may not follow proper witness and wasting protocols because of the location of these disposal methods.



By installing the Cactus Smart Sink® near medication dispensing systems and by forcing the double witness and wasting
process up front, hospitals will realize improved patient safety, significant time savings for nursing staff, and a dramatic
reduction in accumulation of half-filled vials in red sharps bins. The opportunity for drug diversion is also significantly
reduced.

18. How much training is involved?

- Very little The Cactus Smart Sink® goes anywhere needed, is easy to install and easy to use.
- The security bracket and installation hardware is provided with each unit.
- Educational programs, installation guides and video in-services are available from Cactus, LLC.
- Install, lock it down, add cartridges, and start filling them. The machine does the rest. It's that simple.
- The system allows for continuous wasting events over time. The Smart Sink® is hands-free and there is no need for opening, shaking or mixing. Patches are inserted via the patch plunger.

19. Does it need power or an outlet?

- The Cactus Smart Sink® is battery powered so that you do not have to worry about electrical outlets.
- As an option, Cactus offers an AC Adapter plug-in pack for your Smart Sink®.
- The typical battery life is about 12 to 14 months. A low battery warning light indicates that battery replacement is needed.

20. How much security does it have?

- Quite a bit! Smart Sink® provides a heavy duty bracket that allows for secured countertop or wall mounting with a lock and key. A full installation hardware kit is also provided.
- The Smart Sink® has alarms that alert you when the unit is full, expired, or when the system is being accessed. One cannot access the system without the coded security key. The low battery warning system also provides advance notice when the battery needs to be replaced. The warning will typically allow for 2 to 3 week notice prior to battery expiration.
- Unused narcotics that are injected or inserted into the Smart Sink® are not only secured with the locking system, but are rendered "non-retrievable, unusable and non-recoverable". If preferred, for added security and tracking each cartridge is individually coded to account for final documentation and incineration of the byproduct.

21. What is the Cactus Pharma Lock®? How does it work?

- The Cactus Pharma Lock® is a compact unit that consists of a simple design that will securely house one cartridge. It is designed to be placed in areas where space is limited (i.e. anesthesia carts, ambulances).
- It works with current Cactus liquids or solids cartridges.
- It is easily mounted to any flat surface.
- An optional OR Kit can be purchased which will provide an antimicrobial coating to allow for easy cleaning in sterile
 environments.
- Cactus Pharma Lock® *does not* require a power source and *does not* include visual or audible alerts.

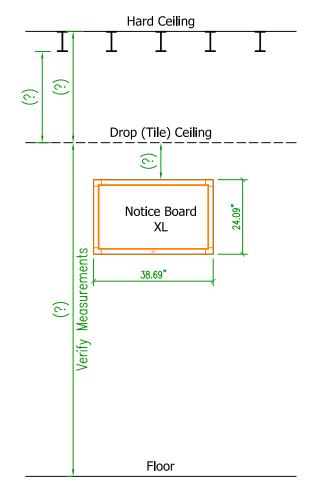


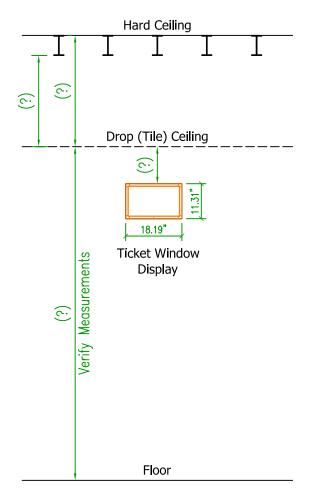
Cactus, LLC 1040 Le Grand Blvd., ste D Charleston, SC 29492

Web Site: www.cactusLLC.net

f in

Main office: 843-856-7400





Notice Board XL



SP Central's Notice Board XL is a large screen option that offers quick patient notification when prescriptions are ready for pickup. The final step of the prescription filling process triggers the Notice Board XL to display the patient's name, or partial name, depending on the pharmacy's choice. Display information is configurable to meet HIPAA requirements and supports pharmacy messages such as holiday store hours.

Patients know immediately when their prescription is ready. Wait time is reduced and questions to the staff about prescription status are minimized. Everyone benefits from the quiet, efficient information exchange.



Configurable to show full or protected patient name (as shown), or other identifying information such as ticket number for sites utilizing ScriptPro's Pharmacy Services Portal.

Features and Benefits

- Offers efficient, easy-to-see in-store prescription notifications
- Minimizes wait times and improves customer service
- Configurable to protect PII
- Supports pharmacy-specific messaging

About ScriptPro

We create innovative, seamlessly-integrated robotics and workflow systems that optimize pharmacy services. As patient care progresses from inpatient to outpatient and long-term care settings, the need for advanced systems to support medication therapy is evolving. Our solutions include strategic planning and financial management services that help health systems succeed in a dynamic and financially challenging environment.



Notice Board XL



Specifications*

Weight: A. Notice Board XL: 39.7 lbs (18 kg)

- B. Computer: 12.7 lbs (5.8 kg)
- C. Wall Mount: 8 lbs (3.6 kg)
- D. Ceiling Mount: 24 lbs (10.9 kg)
- E. Slim Wall Mount: 6.1 lbs (2.7 kg)

Electrical Input:

- A. Notice Board XL: 100-240 VAC, 1.4-0.7 AMPs, 50/60 Hz, 1 Phase. Outlet located within 5 feet (1.5m) of power connection.
- B. Computer/Software: Client on ScriptPro-installed network server; Intel Core i5 PC. TCP/IP socket connections.

Five Notice Boards count as a single client against server load limit.

Screen: 40"; 1920 x 1080 resolution; 16:9 aspect ratio

Temperatures:

Operating: 41°F to 104°F (5°C to 40°C) Storage: -4°F to 140°F (-20°C to 60°C)

Relative Humidity: 20-85% Altitude up to 9,843 feet (3,000m)

Installation Mounting Options:

C. Wall Mount: (corner mount available with same hardware, not shown)

Note: Wall Mount allows monitor to tilt up to 20 degrees from vertical. Supports mounting surfaces of concrete, wood studs, and metal studs.

D. Ceiling Mount:

Note: Ceiling Mount allows monitor to tilt up to 20 degrees from vertical.

E. Slim Wall Mount:

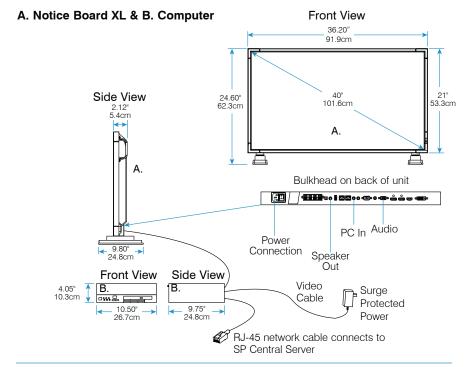
Note: Slim Wall Mount allows monitor to tilt up to 10 degrees from vertical. Supports mounting surfaces of concrete, wood studs, and metal studs. Requires remote installation of Computer (length of video cable between Computer and Monitor cannot exceed 50 ft).

Television (optional): Supports split screen television/ DVD option; standard type F coaxial cable connection for cable television; digital signal only. Compatible Models: 1800-3010-003 and 1800-3010-002. May require firmware update.

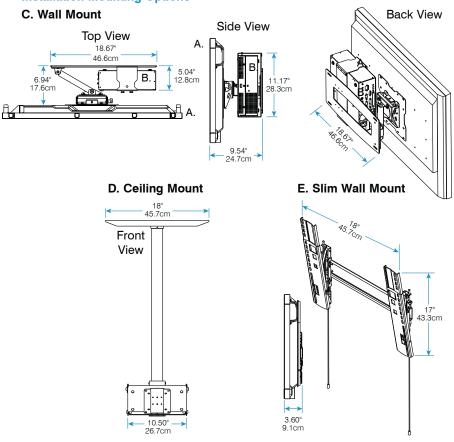
Customer is responsible for installing Notice Board mounting brackets and all required facilities preparation, including electrical and data drops. Installation must be per local codes and provided by local licensed contractor (at customer's expense).

*Specifications subject to change without notice.

**Requires one additional inch clearance for installation.



Installation Mounting Options





KL1Plus

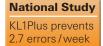
Streamlined Counting Plus Verification Device

Assurance against dispensing errors for all medications, plus simple, accurate counting.

- Orders are verified and filled in less time than traditional hand-counting; average 30-count Rx verified, counted and poured into patient vial in 10.6 seconds.
- Filled orders can be retrieved quickly to validate quantity and time of each dispense.
- Based on the unique KL1 tablet counter, the KL1Plus is about the same footprint as a counting tray.
- Bar code scanning provides verification for all dispensed medications (tablets, capsules and unit of use). KL1Plus software alerts the technician to a mismatch.
- Interfaces with your pharmacy management system (2-way interfaces available).
- Inventory counting software.

Software and Design Updates

The KL1Plus is assurance against errors. Your patients receive the right medication every time.





Filling accurate orders is simple



Scan the patient's Rx label.



Scan the matching stock bottle (or unit-of-use item). KL1Plus alerts you to a match or mismatch.



Pour the exact amount of tablets/capsules through.



With two screen taps, an Rx Archive can be brought up, from 1 minute ago to 10 years ago.

KL1Plus Updates

Inventory: Track inventory counts by UPC and total quantity; export as .csv.

User login and tracking: Track who filled each prescription (optional fingerprint scan).

Double-count reminder: For controlled or expensive meds.

Scan-override: Allows for generic substitution during the filling process.

Partial fill management: Store IOU records to fill the following day. Tracks both fills. **Indicate what's filled by your robot:** Show what medications are in your onsite pharmacy robot (any brand). Double-count your robot's controls/expensive meds on the KL1Plus.

Design update: Better accommodates a variety of tablet-pouring techniques.

View KL1Plus Video

KL1Plus Technical Specifications

Streamlined Counting Plus Scan-Verification Device

Function: Tablet counter with barcode scan-verification

for retail and outpatient pharmacies

Verification: All medications (tablets/capsules and unit-of-use) can be verified by scanning the barcode on the pharmacy label and then the barcode on the medication stock bottle/box

Medication Counting: Counts almost all non-

translucent oral solid medication

Dimensions: 14.6"H x 12.5"D x 8"W

(37.1cm x 31.75cm x 20.3cm)

Top Funnel Diameter: 5.2" (13.2cm)

Weight: 9.65 lb (4.4kg)

Touch Screen: 7" WSVGA (1024 x 600) color TFT

LCD display

Tray Capacity: 800cc

Tray Pouring: Left or right opening

Count Capacity: Up to 9,999

Maximum Tablet Size: 0.86" long (22mm) and 0.74"

wide (19mm)

Minimum Tablet Size: 0.125" smallest diameter

(3.175 mm)

Throughput: Up to 15 tablets/capsules per second

Special Mode: For counting items with odd shapes or

noies

Inventory Mode: Count full and partial stock bottles and unit-of-use medications; export as .csv file

Pharmacy Management System Interface: See

KL1Plus website page for link to available interfaces; 2-way interfaces available

User Maintenance & Tracking: Flexible system to track usage and authorize tasks; can be turned on & off

Optional: Biometric fingerprint scanner

Barcode Scanner: Imaging scanner reading traditional

and 2D barcodes

Rx Archive: Retrieve the time/date of fill, count quantity, NDC match and user (if enabled), record kept

up to 10 years

Operating Systems: Windows 7 Embedded **Network:** RJ45 connector for interfacing and

networking automation



Drug Images: 100,000+ medications pre-loaded; updates quarterly via USB update

USB: 2 external connectors

Power: Standard wall outlet, 110V/220V/240V,

60Hz/50Hz (no adjustments needed)

Vial Size Indicator: Recommends vial size (drams) based on what was poured through

Cleaning & Maintenance: Once-a-day cleaning recommended; see Kirby Lester's Service & Support website page for complete cleaning instructions

Warranty: 1 year from ship date

SP 200 with Collating Control Center Robotic Prescription Dispensing System

ScriptPro's SP 200 with Collating Control Center is a proven and reliable prescription dispensing system that automates the repetitive, manual dispensing tasks most subject to human error and automatically collates all prescriptions for each patient.

SP 200 interfaces with the pharmacy computer system to fill, label, and collate up to 150 prescriptions per hour. Each slot displays the patient name for easy vial retrieval.

The system can be configured to collate the prescriptions in various ways, such as for a given patient or dispensing priority. Electronic displays on both sides of the control center show the contents of the slot.



SP 200 contains 200 universal dispensing cells, which are easily calibrated on-site by pharmacy staff, and three vial dispensers or two bulk load vial dispensers. It dispenses tablets and capsules of all shapes and sizes into standard pharmacy vials. There is no drug cross-contamination because the system fills directly from the dispensing cells into the vial. The system also prints and applies the prescription and auxiliary labels and collates the uncapped vials into slots for final inspection using on-screen drug image verification.

Barcodes are used throughout the process for accuracy and quality control. Pharmacy staff manages the dispensing process from prescription entry to approval of the finished product.

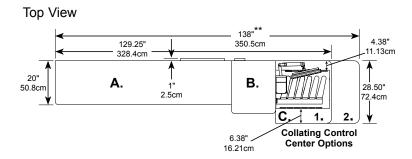


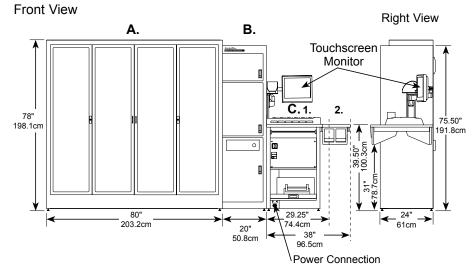
SP 200 with Collating Control Center and Bulk Load Vial Dispensers

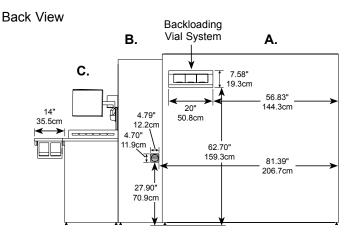


Pharmacy Automation

SP 200 with Collating Control Center









Specifications*

Weight:

- A. Robotics Cabinet: 850.5 lbs (385.8 kg)
 - 1. Vial Dispensers: 166.5 lbs (75.5 kg)
 - 2. Bulk Load Dispensers: 87.5 lbs (39.7 kg)
 - 3. Spiral Vial Dispenser: 64 lbs (29 kg)
- B. Electrical Cabinet: 326 lbs (147.9 kg)
- C. Collating Control Centers:
 - 1. 190 lbs (86.2 kg) or
 - 2. 235 lbs (106.6 kg)

Robot Footprints:

- 1. 20.2 sq. ft. (1.88m²)
- 2. 22 sq. ft. (2.04m²)

Electrical Input: 120-127 VAC, 50/60 Hz, 12 AMP (robot only, includes UPS), 16 AMP with all peripherals, 1 Phase, Uninterruptible Power Supply included. Dedicated 20 AMP power outlet located within 10 feet (3m) of power connection

Communications: Serial, parallel, or ethernet pharmacy computer connection. Firewall provided for network connectivity.

Remote Support Requirements:

- VPN over high-speed Internet connection.
 Also requires access to backup telephone line as specified in #2 below, such as a fax line.
 OR
- Modem-Dedicated analog RJ-11 telephone outlet accessible to outside line and capable of sending and receiving calls.

Barcode Scanner - Caution: Class IIa Laser Product.

Do not stare into beam. 650nm visible laser light diode - .663 mW maximum output.

Computer/Software: Client/Server system on ScriptPro-installed network; Intel Core 2 Duo PCs with dual SATA drives. TCP/IP socket connections; USB connections; Software built with Visual C++; Windows XP/MSDE. Redundant data and transaction log backups. Customer access limited to SP Central user interface.

Monitor: 17" touchscreen with articulating arm

Temperatures:

Operating: 41°F to 86°F (5°C to 30°C) Storage: 5°F to 104°F (-15°C to 40°C) Relative Humidity: 20–85% Altitude: Up to 9,843 feet (3000m) Dissipated Heat: 1,926 BTU/HR max

Cell Capacity:

Single Cell: 676 cc/183 dram Extended Cell: 1900 cc/514 dram

Peripheral Products Supported:

See product sheet on peripheral products

System has 6 slots with a maximum capacity of 7 vials per conveyor.

ANSI Barcode Print Quality Grade: B

Sound Level: 77 db at front edge of Control Center

Training: Up to four Full Time Equivalent (FTE) training days included with original lease/purchase. Approx. two FTE days for Training and Setup and approx. two FTE days for Go-Live and Support.

One "FTE" day is defined as one trainer on-site for one day for up to 10 hours. If more than one trainer is on-site, it is counted as multiple FTE days.

* Specifications subject to change without notice.



^{**}Requires one additional inch clearance for installation.

OmniRx[®] TT

Ideal for operating rooms, cath labs, nursing homes, assisted living centers, and other areas short on space, the OmniRxTT provides automated dispensing of medications in a secure and controlled manner within a flexible, space-efficient system.

Modular, Space-Efficient Design

Measuring just 24.5" high by 26" wide by 23.5" deep, the OmniRxTT facilitates the automated dispensing of medications in areas where space is limited and fewer medications are typically needed. The system fits easily on any counter or table and can be bolted to the surface to provide additional security. The OmniRxTT can also be integrated with Omnicell's auxiliary cabinet options to maintain a single user interface for supply and medication dispensing throughout the facility.

Small Footprint, Large Capacity

Despite its small size, the OmniRxTT provides plenty of space for medication dispensing. A single system can hold up to 288 items.

Flexible Security Levels

Providing a full spectrum of security options, the OmniRxTT can accommodate a wide variety of drawer types, including the high-security FlexBin Single-Dose Drawer, the high-security locking drawer, the medium-security Sensing Drawer, the Lighted Matrix Drawer, and the Matrix Drawer.

Greater Accountability and Control

The OmniRxTT includes the easy-to-use Omnicell Color Touch graphical user interface. Using this touch-screen technology, users simply enter their user ID and password to access the system. Alternatively, users can use integrated magnetic or optical card readers, or Touch & Go[™],



Omnicell's biometric, positive ID system, to gain access to the OmniRxTT. Integrated with the OmniCenter® server, the OmniRxTT provides greater accountability for medications and allows the pharmacy to maintain tight control over narcotics and other sensitive medications.

Specifications

Height: 24.5" Width: 26" Depth: 23.5"

Total Footprint: 4.25 sq. ft.

Weight: 115 lbs. (excluding variable drawer weight)

For more information about OmniRxTT, please call (800) 850-6664, e-mail info@omnicell.com, or visit www.omnicell.com.

SP Checkpoint™

SP Checkpoint is an interactive prescription verification, tracking and management device that provides control over the entire dispensing process. With SP Checkpoint, managers and supervisors can access pharmacy operations, local or remote, and view the status of prescriptions in process. Workload and workflow can be managed on-screen in real time.

Used at the point of dispensing, SP Checkpoint provides paperless prescription tracking for each patient.

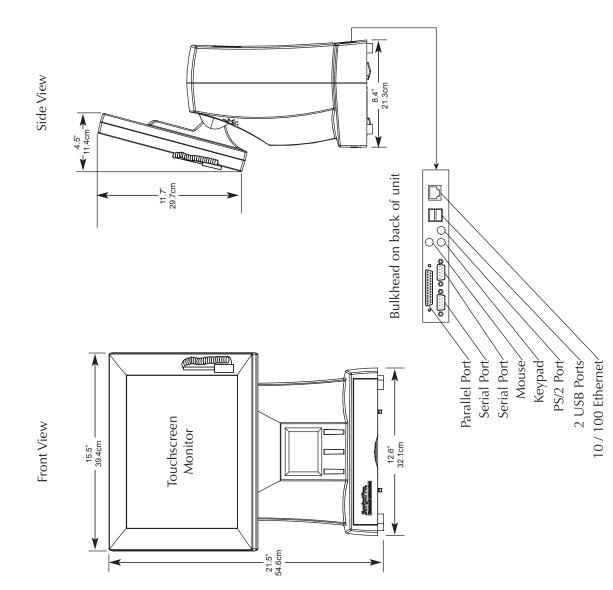


ScriptPro_®

Pharmacy Automation

For more information call: 800.673.9068 913.384.1008 www.scriptpro.com

SP CheckpointTM



Specifications

Weight: 36 lbs (16 kg)

120 VAC ±10%, 50/60 Hz, 1.5 AMP, 1 Phase Outlet located within 5 feet (1.5m) from Electrical Input: North American specs. International specs available upon request. power connection. Bar Code Scanner - Caution: Class II Laser Product. Avoid long-term viewing of direct laser light.

Computer/Software: Client on ScriptPro-installed network server; Pentium III-class PC. TCP/IP socket connections.

Operating Temp: 41°F to 86°F (5°C to 30°C) Storage Temp: 5°F to 104°F (-15°C to 40°C)

Electronic Signature (one per unit) Peripheral Products Supported: Wireless Scanner (one per unit) Script Scanner (one per unit)

Keyboard Options:

Full Size Ergonomic (on countertop) Full Size (on countertop) Śmall (standard, in tray)



ScriptPro

Pharmacy Automation

800.673.9068 • 913.384.1008 www.scriptpro.com

SP Printer

ScriptPro's SP Printer works with ScriptPro's SP Datapoint and SP Checkpoint to produce high quality direct thermal prescription labels. With its flexible design, the printer can be used in a horizontal or vertical position to print labels with clear and legible fonts, barcodes, and detailed drug image line drawings.

For filling accuracy and safety, SP Printer interfaces with ScriptPro's SP Central software to ensure the user scans the correct product code before printing the prescription label. Once the product code is verified, SP Printer presents the label in the label window for quick and easy retrieval.

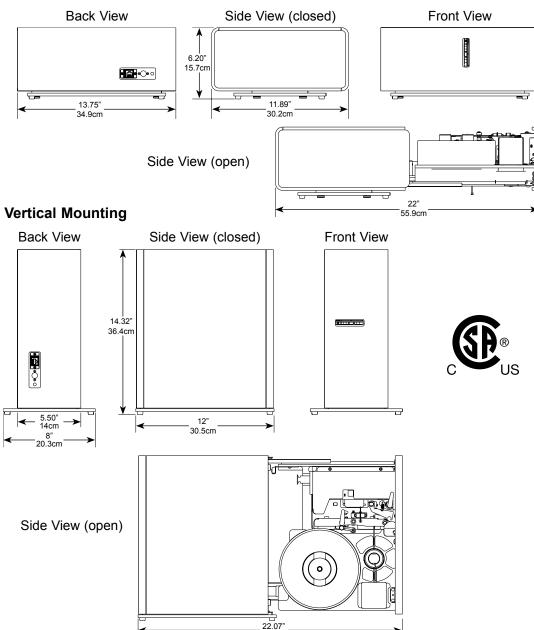
Labels are easy to load, and the printer's compact size allows it, along with the SP Datapoint or SP Checkpoint, to fit on any pharmacy countertop.



SP Printer with an SP Datapoint

SP Printer

Horizontal Mounting



56.1cm

Specifications*

Weight: 53 lbs (24 kg)

Electrical Input: 100-240 VAC ±10%, 50/60 Hz, 2-1 AMP, 1 Phase. Outlet located within 5 feet (1.5m) of power connection.

Computer/Software: USB connections; requires SP Central software, build series 10.14+.

Temperatures:

Operating: 41°F to 86°F (5°C to 30°C) Storage: 5°F to 104°F (-15°C to 40°C)

Relative Humidity: 20–85% Altitude: Up to 9,843 feet (3000m) Dissipated Heat: 200 BTU/hr

Print Technology: Direct Thermal

Print Color: Black

Mounting: May be placed horizontally under SP Datapoint/SP Checkpoint or vertically next to

SP Datapoint/SP Checkpoint.

Labels: Supports ScriptPro's specifically designed and certified 2" x 4" Direct Thermal Prescription Label and Reorder Label. Use of non-certified labels may cause harm to the SP Printer and result in unsatisfactory labels.

Label Capacity: 1 roll; 1,250 labels per roll ANSI Barcode Print Quality Grade: B





Pharmacy Automation

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^{*}Specifications subject to change without notice.

Electronic Signature

Electronic Signature interfaces with ScriptPro's SP Central system to electronically capture a patient's signature regarding the counseling decision and third party insurance message acceptance.

Although a physically small device, Electronic Signature has a big impact on pharmacy. Now your pharmacy can record, then easily recall who signed for a prescription and when it was picked up.



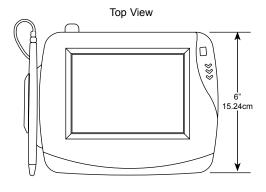
Electronic Signature allows patients to request counseling on any prescriptions. The choice on counseling and the accompanying signature is recorded electronically, replacing cumbersome paper logs. Patients appreciate the courtesy and personal service while pharmacy staff save valuable time by managing signatures electronically.

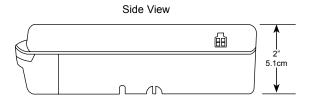
HIPAA form acknowledgment and pharmacy-customized forms are also supported.



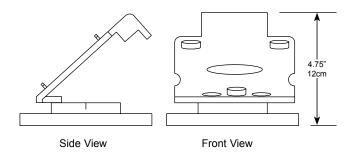
Electronic Signature

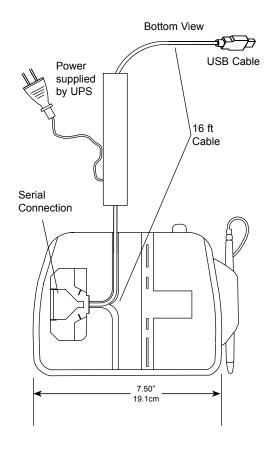
A. Electronic Signature





B. Optional Counter Mount (additional charges may apply)





Specifications*

Weight:

A. Electronic Signature: 3 lbs (1.4 kg) B. Counter Mount: 1 lbs (0.5 kg)

Electrical Input: 12-24 VDC, 1-0.6 AMP

Computer/Software: Electronic Signature requires one SP Datapoint, SP Station, SP Checkpoint, or SPUD per unit.

Display: 65,536 color, ¼ VGA, active matrix, 5.7" TFT screen with capacitive/chemically-hardened glass.

Temperatures:

Operating: 32°F to 104°F (0°C to 40°C) Storage: 0°F to 150°F (-18°C to 66°C)

Humidity: 15–95%

Installation: Optional Counter Mount that includes four screws available for purchase in the ScriptPro Supplies Catalog.

Platforms Supported:

SP Central Workflow System

SP Central Pharmacy Management System

*Specifications subject to change without notice.





Pharmacy Automation

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Pharmacy Services Portal (PSP)

Pharmacy Services Portal is an enterprise-wide hardware and software application of SP Central Workflow System that provides self-service patient pharmacy services, ticket queuing, and patient/prescription integration. PSP checks patients into pharmacies, notifies pharmacy staff of the check-in, prints patient tickets, calls patients to pharmacy pickup windows and exception areas, and broadcasts pharmacy waiting room statistics to pharmacy staff.



Pharmacy Services Portal (PSP)

Using the following PSP components, patients can manage the time and the location where they will pick up their prescriptions.



Welcome Notice Board

When patients arrive at the pharmacy waiting area, ScriptPro's Welcome Notice Board greets them with a pharmacy-configured welcome message, pharmacy video, and/or television program.

SP Kiosk

ScriptPro's SP Kiosk, a standalone kiosk located in the pharmacy waiting area, allows the patient to get a check-in ticket for pharmacy services, select a prescription pickup time and pharmacy location, and request prescriptions for family members. SP Kiosk prints a barcoded ticket, projects the patient wait time, and sends the data to SP Central Workflow System to prioritize and link the ticket with the patient's prescriptions.

For added flexibility, an SP Kiosk also may be located in the physician clinic, allowing patients to select the time and location for their prescription pickup. The SP Kiosk includes a privacy filter on the screen to ensure patient check-in remains private.







SP Central Workflow Integration

SP Central Workflow prioritizes tickets for processing and collates all prescriptions for the pharmacy staff to fill, verify, and dispense. Prescriptions can be expedited in the pharmacy based on the ticket priority.



PSP Prescription Dispensing

Pharmacy staff uses PSP Dispensing Queues to place automated ticket calls for dispensing. Tickets are queued and called for dispensing based on ticket priority.

Now Serving Notice Board

ScriptPro's Now Serving Notice Board brings visible organization to the pharmacy waiting area by displaying which tickets are being processed at each pharmacy pickup window. It also can (option) play pharmacy videos or television programs.





Ticket Window Display

ScriptPro's Ticket Window Display mounts above each pharmacy pickup window so patients can easily see which ticket number is being processed at that window.

Ticket Statistics Notice Board

Inside the busy pharmacy, ScriptPro's Ticket Statistics Notice Board broadcasts important operation metrics (wait times, number of queued tickets, etc.) in a large, easy-to-see, dashboard view.



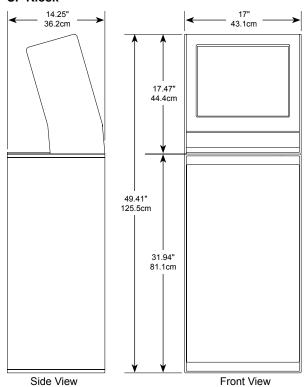
Reporting Package

PSP offers many reports to manage patient wait times and filling, including:

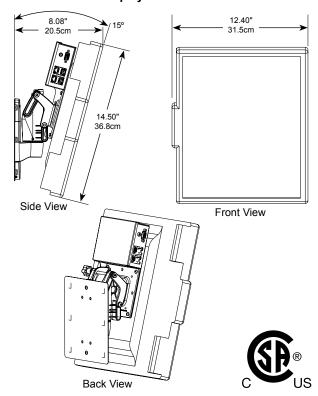
- Number of patients served and # of prescriptions filled per technician or window
- Patient wait time from kiosk check-in to prescription pickup
- Average and maximum wait times by category
- Tickets created versus tickets checked in

Pharmacy Services Portal (PSP)

SP Kiosk



Ticket Window Display



Specifications*

Pharmacy Services Portal

Communications: Serial, parallel, or Ethernet pharmacy computer connection. Firewall provided for network connectivity.

Computer/Software: Client/Server system on ScriptPro-installed network; requires Pharmacy Services Portal (single site) or Pharmacy Services Portal Enterprise Package (multiple sites) and SP Central Workflow System. Pharmacy Services Portal site setup required for each pharmacy in the enterprise.

SP Kiosk

Weight: Kiosk: 60.5 lbs (27.4 kg); Stand: 103 lbs (46.7 kg)

Mounting: Kiosk: Stand or tabletop; 2 M6 socket head cap screws

Stand: Floor or wall; mounting hardware of appropriate type for floor/wall material

Supports mounting surfaces of concrete, wood studs, and metal studs.

Electrical Input: 100-240 VAC ±10%, 50/60 Hz, 1.5 AMP (Includes UPS),

1 Phase. Outlet located within 5 feet (1.5m) of power connection.

Computer/Software: Client on ScriptPro-installed network server; Core 2 Duo-Class PC. TCP/IP socket connections; Windows Operating System.

Temperatures:

Operating: 41°F to 86°F (5°C to 30°C) Storage: 5°F to 140°F (-15°C to 60°C)

Relative Humidity: 20-85% non-condensing

Altitude: Up to 9,843 feet (3000m)

Barcode Scanner: 2-D scanner. Class I LED. Visible red LED 645 nm ±7.5 nm.

Monitor: 17" touchscreen; privacy filter standard

Ticket Paper: 31/s" x 273' single ply thermal paper. Recommend PM Company, part #: PMC05213.

Ticket Window Display

Weight: 15.4 lbs (7 kg)

Electrical Input: 100-240 VAC, 50/60 Hz, 2.3 AMPs, 1 Phase. Outlet and RS 422 serial daisy chain drop located within 5 feet (1.5m) of power connection. Distance from computer to last Ticket Window Display must not exceed 1,000 ft.

Screen: 17" monitor

Welcome Notice Board XL and Now Serving Notice Board XL[†]

Electrical Input: Notice Board: 100-240 VAC, 50/60 Hz, 2 AMPs, 1 Phase. Outlet located within 5 feet (1.5m) of power connection

Computer/Software: Client on ScriptPro-installed network server; Intel Core 2 Duo PC. TCP/IP socket connections.

Screen: 40"; 1366 x 768 resolution; 16:9 aspect ratio

Audio: Television audio stops when Now Serving Notice Board XL calls a ticket or produces other audio feed

Audio Package: Supports 1-20 speakers. See installation guide for audio recommendations. Speakers: Ceiling or wall mount

Weight: 2.8 lbs (1.27 kg)

Dimensions: 7" (17.8cm) H x 10.3" (26.2cm) W x 3.4" (8.6cm)

Television: Supports split screen television/DVD option; Standard type F coaxial cable connection for cable television. Compatible Models: 1800-3010-003 and 1800-3010-002. May require firmware update.

Now Serving Notice Board XL Package includes 1 Now Serving Notice Board XL and Ticket Window Display Setup. Additional parts purchased separately.

Ticket Statistics Notice Board XL[†]

Electrical Input: Notice Board: 100-240 VAC, 50/60 Hz, 2 AMPs, 1 Phase. Outlet located within 5 feet (1.5m) of power connection.

Computer/Software: Client on ScriptPro-installed network server; Intel Core 2 Duo PC. TCP/IP socket connections.

Screen: 40"; 1366 x 768 resolution; 16:9 aspect ratio

Data Refresh: Every 15 seconds

Training: Up to two Full Time Equivalent (FTE) training days included with original lease/ purchase. Approx. one FTE day for Training and Setup and approx. one FTE day for Go-Live and Support.

One "FTE" day is defined as one trainer on-site for one day for up to 10 hours. If more than one trainer is on-site, it is counted as multiple FTE days.

For specifications on PSP Server and PSP Enterprise Server see SP Central Server, SP Central Expanded Server, and/or SP Central Expanded Server (Rackmount) product sheets.

*Specifications subject to change without notice.

†See Notice Board XL product sheet for additional specifications and mounting options.



Pharmacy Automation







Refrigerators

Laboratory & Pharmacy





Laboratory & Pharmacy Refrigerators

Precisely executed. Sharply designed.

Helmer has provided high-quality laboratory equipment and refrigerated products for over 30 years. Our experience and attention to detail allow us to provide a product that offers superior uniformity, outstanding reliability, and exceptional benefits that bring value every day. In addition, our commitment to service and support ensures satisfaction throughout the life of your product. Whether storing blood products, reagents, vaccines, or medication, a Helmer product offers **True Blue** protection.

We're not like everyone else, we're Distinctly Helmer.



Helmer Refrigerators Deliver

High-Quality Craftsmanship

- Superior chamber temperature uniformity and quick recovery with heavy-duty, air-cooled refrigeration system
- $\cdot~$ Operating temperature range from +2°C to +10°C
- Bacteria-resistant powder coated exterior and interior for added security
- Sure-Seal self-closing door with magnetic closure eliminates broken door latches
- Custom storage capabilities with roll out baskets, full or half-size shelves, and stainless steel drawers provide maximum storage versatility
- Adjustable LED lighting provides energy-efficient illumination with auto-on feature and ON/OFF switch
- · Hospital grade plug enhances electrical safety/serviceability

Secure Monitoring for a Safe Storage Environment

- · i.C³™ with 7" (177mm) full-color touchscreen (i.Series)
- Microprocessor temperature controller with built-in alarm/monitor (Horizon Series)
- Key lock
- · Password protected settings (i.Series)

Designed for Convenience & Performance

- Single and double door models from 5 cu ft (142 liters) to 58 cu ft (1642 liters)
- ADA compliant door handle(s)
- Position flush with a countertop, cabinet, or other equipment with no additional clearance required
- · Recessed floor contains spills for easy clean-up
- Rechargeable battery backup (i.C3)

i.Series® and Horizon Series™

Helmer has two distinct refrigerator lines. The i.Series offers many unique features not found on other refrigerator models. The i.C³ anchors this top-of-the-line series. It offers constant temperature monitoring and control, multiple information logs, event acknowledgement and downloading via a 7" (177mm) full-color touchscreen. (See page 5 for more information.)

The Horizon Series offers a offers a temperature controller with a built-in alarm. It features an LED digital temperature display, programmable high and low temperature alarms, manual alarm checks, and a programmable operating range.

Both the i.Series and Horizon Series offer high quality construction and attention to detail throughout.





Laboratory & Pharmacy Models

- · i.Series and Horizon Series lines.
- · Upright, Undercounter, and Pass-Thru models
- · Capacity from 5 cf to 58 cf (142 I 1642 I)

Upright Models

- Double door with 8 shelves (Laboratory) or 2 shelves and 12 roll out baskets (Pharmacy)
- · Single door with 4 shelves (Laboratory)
- Single door with 1 shelf and 6 roll out baskets (20 and 25 cf 572 and 714 l) or 1 shelf and 5 roll out baskets (11 cf 326 l) (Pharmacy)
- · Door-mounted, eye-level controls (i.Series)

Undercounter Models

- · Single door with 2 shelves
- · Door-mounted controls
- · Front ventilation



Pass-Thru Models

- · Double door with 6 two-way drawers and 6 shelves
- · Single door with 3 two-way drawers and 3 shelves
- · Door-mounted, eye-level controls (i.Series)

Upright Refrigerators

Temperature Control and Monitoring

i.Series®

- i.C³, with 7" (177mm) full-color touchscreen monitor described on page 5
- Two stainless steel monitoring probes in product simulation bottles (single probe in iLR111 / iPR111)
- · Temperature display in °C or °F

Horizon Series™

- Digital microprocessor temperature controller with a built-in alarm/ monitor factory set to 4°C
- · Single, stainless steel monitoring probe in product simulation bottle
- · Digital offset adjustment for calibration

Refrigeration System

- Heavy-duty, air-cooled refrigeration system with non-CFC R134A refrigerant provides high efficiency and is environmentally friendly
- Forced-air circulation maintains chamber uniformity and provides quick recovery after door openings
- Auto condensate evaporation. Evaporator fan(s) shut off during door openings to maintain stable temperatures
- · Low humidity levels with reduced condensation

Storage

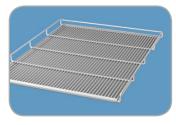
- · Adjustable, epoxy coated wire shelves (Laboratory & Pharmacy)
- · Side and rear guards prevent items from falling off shelves
- · Roll out baskets with fully extendable slides (Pharmacy)
- · Stainless steel standards guard against rust and corrosion





Cabinet Construction

- · Bacteria-resistant powder coated interior, exterior, and door handle(s)
- Ergonomic Sure-Grip door handle is padded for comfort (i.Series)
- · Superior engineered frame for maximum rigidity
- Dual-pane glass door(s) with ADA compliant full-length handle(s)
- · Innovative self-closing Sure-Seal door system with magnetic seal
- · Key lock
- · LED lighting with control panel mounted switch
 - Auto ON/OFF (i.Series)
- · Minimum of 2" (51mm) non-CFC foamed urethane insulation
- · Dual, swivel locking casters
- Access port located in top of cabinet for external monitoring probe(s) and one side-wall access port with interior and exterior plugs.
- · Rechargeable battery is environmentally friendly and long-lasting (i.C3)
- · Recessed floor for easy clean-up
- · Hospital grade plug and cord











i.C3_{TM}

Monitor · Acknowledge · Download

Exclusively on i.Series® Models

i. Series refrigerators are monitored with Helmer's exclusive i.C3 user interface. The i.C3 provides constant temperature monitoring and control, and multiple information logs with historical data that can be downloaded and saved.

i.Act™ event acknowledgement allows users to immediately record corrective actions on-screen at the time of the event. Once downloaded, this information will be available to maintain quality control data for auditing purposes.

This icon driven monitoring system features a door mounted 7" (177mm) full-color touchscreen ergonomically placed at eye-level on upright models and angled on undercounter models. The i.C³ includes sound and visual indicators, and touch navigation. An interactive temperature graph, home screen customization, password protection, and modular design for future options are also included.

The i.D™ Integrated Electronic Access Control factory-installed option is currently available. It offers secure access to the unit via PIN entry on the i.C3 for up to 100 users. For more information see page 8.



Enter Event Cause, Action Taken, and Signature directly on-screen and download for audits





Home



Temperature Graph



Download

i.Series® / Horizon Series™ Monitoring

i.Series®



Horizon Series[™]



Exclusive i.C3_™ User Interface

- · 7" (177mm) full-color, door-mounted touchscreen
- · Automatic high/low alarm testing (Peltier based)
- · USB ports (2) for download/upload/upgrade
- · RJ45 hub
- · Optional RS232 data port
- · Dry contact alarm connection
- · Password protected settings
- · Dual alarm probes*
- · Digital display of upper and lower chamber temperatures*
- · Event log displays date, time, and temperature data
- · Compressor log displays compressor temperature performance
- · Interactive temperature graph
- · Digital calibration
- · Rechargeable battery backup
- · Date and time display
- · Alarm mute with adjustable ring-back interval
- · Adjustable alarm volume
- · Four alarm tones
- · High and low temperature alarms
- · Door ajar alarm
- · Power failure alarm
- · Condenser temperature alarm



Microprocessor-based controller with alarm/monitor

- · LED digital display, top bezel mounted
- · Manual alarm test
- · Dry contact alarm connection
- · Single alarm probe
- · LED display of chamber temperature
- · Digital calibration
- · Battery backup
- · Alarm mute with 5-minute ring-back interval
- · Alarm silence with key switch
- · High and low temperature alarms
- · Door aiar alarm
- · Power failure alarm

^{* 11} cu ft (326 liter) models: single alarm probe and upper temperature display only

Specifications

Specificati	ions										
Model/Series	Operating Range	Doors	Volume (cu ft /liter)	Interior Dimensions (w x h x d) (in/mm)	Exterior Dimensions (w x h x d) (in/mm)	Shelves	Baskets	Drawers	Compressor	Electrical	Net Weight
Undercounte	r										
iLR105 i.Series	2° to 10°C	1	5 / 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 33.5 x 26.75 610 x 851 x 680	2	0	0	.25 HP Air-Cooled R134A Non-CFC	115V 60Hz 5.0FLA 230V 50/60Hz 4.0/3.25FLA	195 lb / 89 kg
HCR105 Horizon Series	2° to 10°C	1	5 / 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 33.5 x 26.75 610 x 851 x 680	2	0	0	.25 HP Air-Cooled R134A Non-CFC	115V 60Hz 5.0FLA 230V 50/60Hz 4.0/3.25FLA	189 lb / 86 kg
SLR105 Scientific Series	2° to 10°C	1	5 / 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 33.5 x 26.75 610 x 851 x 680	2	0	0	.25 HP Air-Cooled R134A Non-CFC	115V 60Hz 5.0FLA 230V 50/60Hz 4.0/3.25FLA	165 lb / 75 kg
Single Door											
iLR111 i.Series	2° to 10°C	1	11.5 / 326	20 x 49.5 x 20 508 x 1258 x 508	24.25 x 70.5 x 24.5 616 x 1791 x 623	4	0	0	.25 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.0FLA 230V 50/60Hz 3.5FLA	322 lb / 147 l
HLR111 Horizon Series	2° to 10°C	1	11.5 / 326	20 x 49.5 x 20 508 x 1258 x 508	24.25 x 70.5 x 24.5 616 x 1791 x 623	4	0	0	.25 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.0FLA 230V 50/60Hz 3.5FLA	315 lb / 143
iLR120 i.Series	2° to 10°C	1	20.2 / 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 79.5 x 29.5 750 x 2020 x 750	4	0	0	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.5FLA 230V 50/60Hz 4.2FLA	473 lb / 215
HLR120 Horizon Series	2° to 10°C	1	20.2 / 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 78.75 x 29.5 750 x 2001 x 750	4	0	0	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.5FLA 230V 50/60Hz 4.2FLA	470 lb / 214
iLR125 i.Series	2° to 10°C	1	25.2 / 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 79.5 x 35.5 750 x 2020 x 902	4	0	0	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.5FLA 230V 50/60Hz 4.2FLA	484 lb / 220
HLR125 Horizon Series	2° to 10°C	1	25.2 / 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 78.75 x 35.5 750 x 2001 x 902	4	0	0	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.5FLA 230V 50/60Hz 4.2FLA	481 lb / 219
iPR111 i.Series	2° to 10°C	1	11.5 / 326	20 x 49.5 x 20 508 x 1258 x 508	24.25 x 70.5 x 24.5 616 x 1791 x 623	1	5	0	.25 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.0FLA 230V 50/60Hz 3.5FLA	357 lb / 162
HPR111 Horizon Series	2° to 10°C	1	11.5 / 326	20 x 49.5 x 20 508 x 1258 x 508	24.25 x 70.5 x 24.5 616 x 1791 x 623	1	5	0	.25 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.0FLA 230V 50/60Hz 3.5FLA	350 lb / 159
iPR120 i.Series	2° to 10°C	1	20.2 / 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 79.5 x 29.5 750 x 2020 x 750	1	6	0	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.5FLA 230V 50/60Hz 4.2FLA	525 lb / 239
HPR120 Horizon Series	2° to 10°C	1	20.2 / 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 78.75 x 29.5 750 x 2001 x 750	1	6	0	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.5FLA 230V 50/60Hz 4.2FLA	522 lb / 237
iPR125 i.Series	2° to 10°C	1	25.2 / 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 79.5 x 35.5 750 x 2020 x 902	1	6	0	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.5FLA 230V 50/60Hz 4.2FLA	552 lb / 251
HPR125 Horizon Series	2° to 10°C	1	25.2 / 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 78.75 x 35.5 750 x 2001 x 902	1	6	0	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 7.5FLA 230V 50/60Hz 4.2FLA	549 lb / 250
Double Door											
iLR245 i.Series	2° to 10°C	2	44.9 / 1271	55 x 58.25 x 24.25 1397 x 1480 x 616	59.25 x 79.5 x 29.5 1505 x 2020 x 750	8	0	0	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 11.5FLA 230V 50/60Hz 6.0FLA	702 lb / 319
HCR245 Horizon Series	2° to 10°C	2	44.9 / 1271	55 x 58.25 x 24.25 1397 x 1480 x 616	59.25 x 78.75 x 29.5 1505 x 2001 x 750	8	0	0	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 11.5FLA 230V 50/60Hz 6.0FLA	701 lb / 318
iLR256 i.Series	2° to 10°C	2	56 / 1586	55 x 58.25 x 30.25 1397 x 1480 x 769	59.25 x 79.5 x 35.5 1505 x 2020 x 902	8	0	0	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 11.5FLA 230V 50/60Hz 6.0FLA	738 lb / 335
HLR256 Horizon Series	2° to 10°C	2	56 / 1586	55 x 58.25 x 30.25 1397 x 1480 x 769	59.25 x 78.75 x 35.5 1505 x 2001 x 902	8	0	0	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 11.5FLA 230V 50/60Hz 6.0FLA	728 lb / 331
iPR245 i.Series	2° to 10°C	2	44.9 / 1271	55 x 58.25 x 24.25 1397 x 1480 x 616	59.25 x 79.5 x 29.5 1505 x 2020 x 750	2	12	0	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 11.5FLA 230V 50/60Hz 6.0FLA	824 lb / 374
HPR245 Horizon Series	2° to 10°C	2	44.9 / 1271	55 x 58.25 x 24.25 1397 x 1480 x 616	59.25 x 78.75 x 29.5 1505 x 2001 x 750	2	12	0	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 11.5FLA 230V 50/60Hz 6.0FLA	823 lb / 374
iPR256 i.Series	2° to 10°C	2	56 / 1586	55 x 58.25 x 30.25 1397 x 1480 x 769	59.25 x 79.5 x 35.5 1505 x 2020 x 902	2	12	0	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 11.5FLA 230V 50/60Hz 6.0FLA	876 lb / 398
HPR256 Horizon Series	2° to 10°C	2	56 / 1586	55 x 58.25 x 30.25 1397 x 1480 x 769	59.25 x 78.75 x 35.5 1505 x 2001 x 902	2	12	0	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 11.5FLA 230V 50/60Hz 6.0FLA	866 lb / 393
Pass-Thru											
iPR225 i.Series	2° to 10°C	2	26.5 / 750	24.75 x 58.25 x 32 629 x 1480 x 813	29.5 x 80 x 36 750 x 2032 x 915	3	0	3	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 9.25 FLA	534 lb / 243
HPR225 Horizon Series	2° to 10°C	2	26.5 / 750	24.75 x 58.25 x 32 629 x 1480 x 813	29.5 x 80 x 36 750 x 2032 x 915	3	0	3	.33 HP Air-Cooled R134A Non-CFC	115V 60Hz 9.25 FLA	523 lb / 238
iPR456 i.Series	2° to 10°C	4	58 / 1642	55 x 58.25 x 32 1397 x 1480 x 813	59.25 x 80 x 36 1505 x 2032 x 915	6	0	6	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 13.25 FLA	797 lb / 362
HPR456 Horizon Series	2° to 10°C	4	58 / 1642	55 x 58.25 x 32 1397 x 1480 x 813	59.25 x 80 x 36 1505 x 2032 x 915	6	0	6	.5 HP Air-Cooled R134A Non-CFC	115V 60Hz 13.25 FLA	786 lb / 357
nacifications sub				able III and CSA standard	I NET!						

Specifications subject to change · Certified to applicable UL and CSA standards by a NRTL Product Specification Sheets for all Laboratory and Pharmacy Refrigerators are available at www.helmerinc.com Published interior volumes are nominal; usable cu ft (liters) capacity may be offset by protrusions into cabinet.



Custom Storage Options

Roll Out Baskets

Epoxy coated wire baskets are 4" (102mm) high and adjustable in 1" (26mm) increments. Maximum load 100 lb (46 kg) per basket.

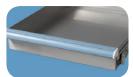


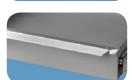
Pull out drawers are 4" (102mm) high and adjustable in 1" (26mm) increments.

Maximum load 100 lb (46 kg) per drawer.

i.Series and Horizon Series available

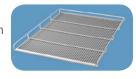






Full-Size Shelf with Hardware

Epoxy coated wire shelves are adjustable in 1" (26mm) increments. Maximum load 100 lb (46kg) per shelf.



Half-Size Shelf with Hardware

Epoxy coated wire shelves are adjustable in 1" (26mm) increments. Maximum load 30 lb (14 kg) per shelf. (20-56 cu ft / 572-1586 liters only)

Bridge Shelf

Spans the space between two shelves in a double door refrigerator offering over 13% more storage area per shelf.



Options & Accessories

Left-Hinged Single Door

Factory installed

Heated Glass Door

Removes fogging and condensation in humid environments

Solid Door

Ideal for storage of light-sensitive products

Stainless Steel Interior

Specify when ordering

Leveling Feet

Field-installable kit. Can be installed without tipping unit.



Access Ports

A second side-wall access port can be factory installed, 1.75" (45mm). Custom access ports are available.

Vapor-Proof Duplex Outlet

Duplex outlet power is independent from refrierator power cord. Limit 1 per refrigerator. (115 V only)

Temperature Chart Recorder

4" (102mm), 7-day inkless chart recorder. Includes battery backup and a supply of 52 charts. Factory installed



Temperature Validation

Package certifies the temperature performance of the refrigerator. This option must be ordered at the time the unit is purchased. Contact Helmer for additional details.

Certificate of Calibration

Certifies that monitor was calibrated with NIST traceable thermometer before it left Helmer facility.

Chart Recorder Paper

4" (102mm) diameter, -5°C to +20°C, package of 52

i.C3 Screen Protectors

Package of 3 clear screen protectors for use on i.C³ User Interface

USB Flashdrive

Used to download and upload information from/to the i.C³



Floor and Wall Bracket Kit

Secures refrigerator to the building floor and/or wall. The unit has factory threaded mounting holes. Heavy-gauge, powder coated steel floor mounting brackets and cabinet anchor hardware are provided. Customer to provide floor and/or wall anchor hardware and onsite assembly.

Remote Lock Adapter Kit

Factory or field installation. Compatible with automated medication dispensing systems.

Storage Trays

Simplify and organize your storage needs. Each tray comes with dividers and rails so that individual storage areas can be customized. Great for storage of medication and vaccines.



Remote Alarms (RA1 and RA4)

Extends existing alarms to remote locations within the facility. The RA1 offers monitoring of one device or zone and the RA4 provides monitoring of up to four devices or zones. Operational up to 3000 ft / 915m away. (wiring not included)



Chromatography Kit

Factory installed on Laboratory Refrigerators. Includes pole mast, vapor-proof duplex outlet, four half shelves, and a second sidewall access port. (Not available for 11 cu ft models) (115V only)

Access Control

i.Series®

i.D™ Integrated Electronic Access Control via i.C3





Optional Access Control offers secure access to a refrigerator or freezer. An

electronic lock is integrated into the unit and controlled by PIN entry.

- Up to 100 User ID's can be set up directly from the i.C³ and programmed with an individual access PIN
- The Access Control display can be set as an alternative Home Screen
- · Key override

The Access Control log provides an audit trail of all refrigerator or freezer entries and includes the User ID, Date, Time, Duration and Method of Entry. This log can be downloaded and saved.

Warranty

i.Series® / Rel.i™ Plus

7 years compressor / 2 years parts / 1 year labor at Helmer

Horizon Series™ / Rel.i™

5 years compressor / 2 years parts / 1 year labor at Helmer

Warranties applicable in the U.S. and Canada. For international warranty information, contact your local distributor.

Undercounter Refrigerators





i.Series® and Horizon Series™ Laboratory Undercounter Refrigerators feature High-Quality Craftsmanship, Secure Monitoring, and Easy Access for Cleaning and Maintenance.

Please refer to our Undercounter Refrigerator literature or www. helmerinc.com for more information.

Horizon Series™

Integrated Access Control via Keypad



The optional Horizon
Access Control keypad
provides fail-secure
digital keypad access.
A lock is integrated
into the unit and
unlocked by entering a
user code on the integrated keypad.

- Up to 100 User Codes can be entered into the keypad.
- · Key override

Pass-Thru Refrigerators





i.Series® and Horizon Series™ Pharmacy Pass-Thru Refrigerators feature Superior Temperature Uniformity, Advanced Monitoring, and Convenient Operation.

Please refer to our Pass-Thru Refrigerator literature or www.helmerinc.com for more information.



5274

Dri Bath Incubator 1 Block



Specifications

Hertz 50/60Hz

Temperature Range (Metric) Ambient +5° to 130°C (Ambient at 25°C)

Certifications/Compliance CE, cULus, RoHS

Electrical Requirements 100-120V 50/60Hz (US)

Dimensions (L x W x H) 11.3 x 7.9 x 3.9 in. (288 x 200 x 100mm)

Includes Dry bath, US style plug, block lifter

No. of Blocks

Temperature Uniformity $\leq \pm 1^{\circ}C$

SOURCE: https://www.fishersci.com/shop/products/isotemp-digital-dry-baths-block-heaters/s28681



The premium intraoral X-ray unit...

ProX Intraoral X-ray

PLANMECA is proud to introduce a new intraoral X-ray unit to its comprehensive collection of imaging products- the ProX.

This advanced unit provides easy and precise positioning, a simple easy-to-use procedure, and high-quality, high-resolution images.

The unique design concept of PLANMECA's ProX makes intraoral imaging easier and more reliable than ever.

- Optimal images for all diagnostic needs: variable kV and mA
- Quick and easy to use: pre-programmed quick settings, practical design
- Digital-ready
- Integrates cleanly with PLANMECA ProSensor system
- Perfect workflow with PLANMECA Romexis
- Versatile installation options



Superior imaging...

Optimal images for all diagnostic needs

Advanced technology and practical design make PLANMECA's ProX a premium choice for intraoral imaging. The freely selectable exposure parameters (kV, mA and exposure time) maximize the diagnostic value of intraoral radiography. The focal spot size of the X-ray tube is 0.4 mm, which ensures optimal resolution and clear images.

PLANMECA's ProX provides options that assure the best image contrast and density for every diagnostic need and anatomical condition, enabled by variable kilovolts (50–70 kV) and milliamperes (2–8 mA).

50 kV: Low kV settings result in high-contrast images that are useful for endodontics, apex, and bone structure diagnostics.

60 kV: Medium kV settings provide a wide grayscale for general diagnostics when a wide range of clinical information is required.

70 kV: High kV settings produce images with a long grayscale spectrum, which is useful in the detection of caries and periodontal diagnostics





The high-frequency operation of the ProX's constant potential X-ray generator provides significant advantages:

- Reduced radiation dose by up to 25% when compared to conventional AC generators
- Quality, uniform image contrast
- Improved reliability and prolonged lifespan of the X-ray tube



Ease of use...

Ergonomic design for easy imaging

The unique design of the X-ray tube head makes aiming exceptionally easy and precise. Both short cone (20 cm SSD) and long cone (30 cm SSD) imaging techniques can be used, and an additional rectangular collimator can be adapted to the long cone for improved accuracy and localization of radiation to the patient. The steady arm provides smooth and precise movements, ensuring drift-free and accurate positioning of the lightweight tube head.

Quick settings with intuitive operation

The imaging parameters are selected from the intuitive control panel.

The unit is pre-programmed with 66 quick settings of different exposure value combinations, and imaging parameters are automatically retrieved according to the selected exposure region and the diagnostic need:

- Periapical imaging
- Upper and lower occlusal plane imaging
- Bitewing imaging
- Endodontic imaging.

The control panel displays the selected values, which can be manually adjusted if needed. There are distinct optimally adjusted settings for adults and children. Altered settings can also be saved into the quick setting memory.



Easy imaging mode selection and self-diagnostic system

PLANMECA's ProX offers a smart control for maintaining constant darkness of radiographs whenever imaging conditions change. The unit has 11 density steps that adjust all quick settings when changing the film type or switching between the short and long cone. The selection of the imaging mode allows a rapid transformation of all pre-programmed settings when changing to a new image receptor type. There are predefined imaging modes for film, imaging plate, and digital sensor, which allows a quick and hassle-free transition to new imaging technologies without any reprogramming.

The unit's self-diagnostic control system monitors all functions and displays error messages in the case of abnormal operation; this assists in the correct use of the unit and speeds up technical service.

Image ready...

Integrated control electronics for digital sensors

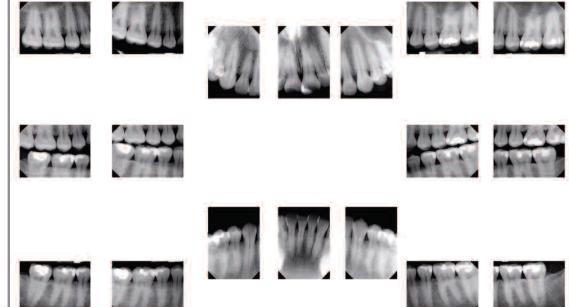
The PLANMECA ProSensor digital intraoral X-ray imaging system supports the workflow of dental treatment. A simple selection of the ProX image mode (film, phosphor plates, or digital) automatically adapts the pre-programmed settings for digital sensors.

The ProX works with PLANMECA's ProSensor digital sensor system for ultimate user-friendliness:

- User can easily position the sensor into patient's mouth with the sensor holder.
- The PLANMECA ProSensor interconnection cable is routed inside the X-ray unit arm, which results in a clear and clean working area with no interfering cables.

To guarantee a smooth workflow, the PLANMECA ProX has integrated-control electronics and a magnetic connector for Planmeca ProSensor intraoral sensors; this ensures that the ProSensor is always in the right place and within easy reach. All the components of the imaging system – the sensor, the control box, and the PC – can be optimally placed in the treatment environment.





Full mouth series customization and support

After the exposure, the image is displayed on the screen within seconds, dramatically shortening the time needed for an intraoral X-ray examination when compared to imaging plates or conventional film.



ProX Technical Specifications

Generator	Constant potential, microprocessor controlled, operating frequency 66 kHz					
X-ray tube	Toshiba D-041SB					
Focal spot size	0.4 mm according to IEC 60336					
Cone diameter	60 mm (2.36 in.) Rectangular 33 x 43 mm (1.30 x 1.69 in.)					
Max. symmetrical radiation field	Ø60 mm at SSD 200 mm Ø60 mm at SSD 300 mm according to IEC 806					
Total filtration	min. 2.5 mm Al equivalent at 70 kV according to IEC 60522					
Anode voltage	7 mA: 50, 52, 55, 57, 60 kV, ±2 kV 2–6 mA: 50, 52, 55, 57, 60, 63, 66, 70 kV, ±2 kV					
Exposure times	0.01-2 sec. ±(5% + 0.001 sec.), 24 steps					
SSD (Source-Skin Distance) Standard/Long	200 mm (8 in.)/300 mm (12 in.)					
Mains voltage	100 V~/110-115 V~/220-240 V~, 50/60 Hz					
Duty cycle	1:30, automatic control					
Electrical classification	Class I Type B					
Weight	total 29 kg (64 lbs) tube head with standard cone 4.2 kg (9.3 lbs) tube head with long cone 4.5 kg (10 lbs)					
Color	White (RAL 9016)					

ProSensor Specifications

	Size 0	Size 1	Size 2			
Sensor type	CMOS with Scintillator	CMOS with Scintillator	CMOS with Scintillator			
Sensor Size	33.6 x 23.4 mm (1.33 x .92 in.)	39.7 x 25.1 mm (1.56 x 0.99 in.)	44.1 x 30.4 mm (1.76 x 1.2 in.)			
Active Area	25.5 x 18.9 mm (1.0 x 0.74 in.)	31.5 x 20.7 mm (1.24 x 0.81 in.)	36 x 26.1 mm (1.42 x 1.03 in.)			
Physical pixel size	15μm x 15μm					
Theoretical Resolution	33 lp/mm					
Resolution	17 lp/mm					
Pixel size	30 μm					
Interface	USB or Ethernet					

Mounting height from floor:

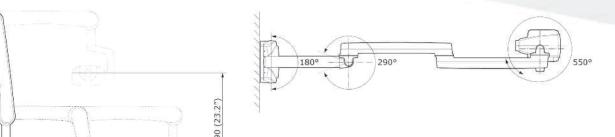
Minimum Requirement:

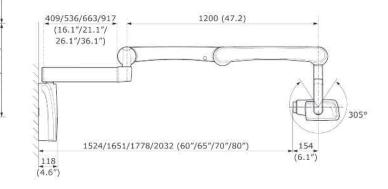
Recommended: 990 mm (39")

790 mm (31")

PLANMECA®

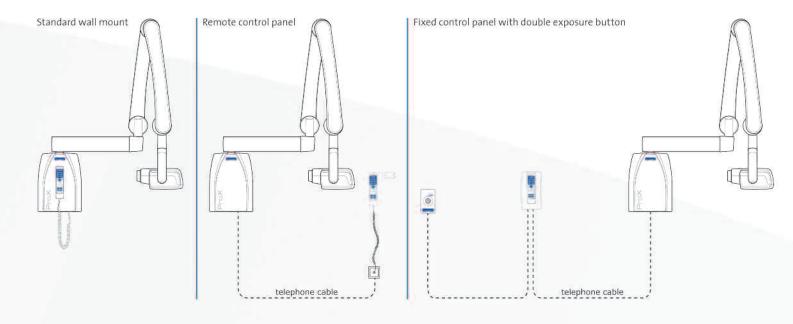
5760





Installation options

Dimensions



digital perfection



5760

PLANMECA

Technical specifications

Technical data

Generator Constant potential, microprocessor controlled, operating frequency 66 kHz

X-ray tube Toshiba D-041SB

Focal spot size 0.4 mm according to IEC 60336

Cone diameter 60 mm (2.36 in.), Rectangular 33 x 43 mm (1.30 x 1.69 in.)

Max. symmetrical radiation field Ø60 mm at SSD 200 mm, Ø60 mm at SSD 300 mm, according to IEC 806

Total filtration min. 2.5 mm Al equivalent at 70 kV according to IEC 60522

Inherent filtration 1 mm Al equivalent at 70 kV according to IEC 60522

Anode voltage 60, 63, 66, 70 kV, ±2 kV

Anode current 8, 7, 6, 5, 4, $3, 2 \text{ mA} \pm (5\% + 0.2 \text{ mA})$

Exposure times 0.01-2 sec. $\pm(5\% + 0.001$ sec.), 24 steps

SSD (Source-Skin Distance) Standard/Long 200 mm (8 in.)/300 mm (12 in.)

Mains voltage 100 V~/110-115 V~/220-240 V~, 50/60 Hz

Duty cycle 1:30, automatic control

Electrical classification Class I Type B

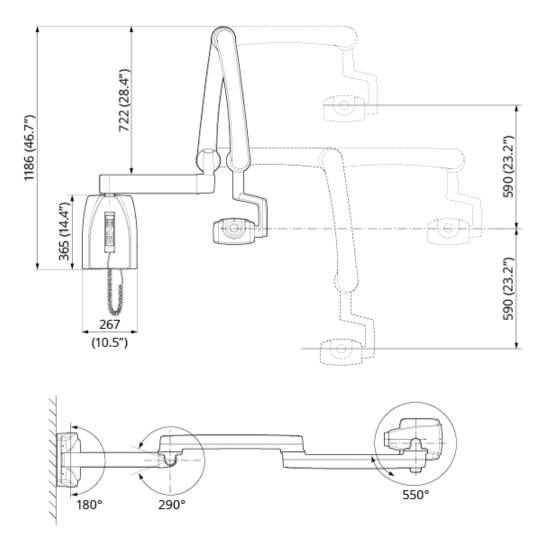
Weight total 29 kg (64 lbs), tube head with standard cone 4.2 kg (9.3 lbs), tube head with long cone 4.5 kg (10 lbs)

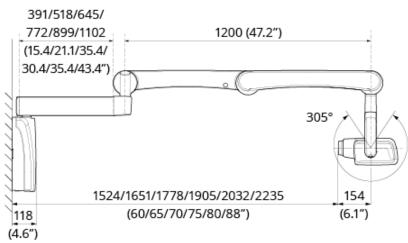
Colour White (RAL 9016)





Dimensions

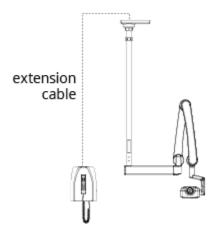




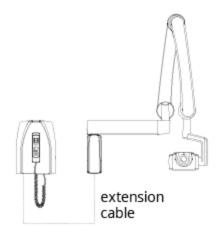
Installation options



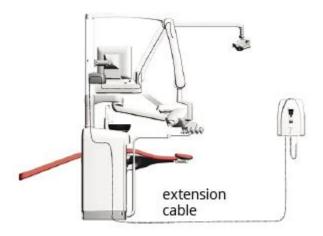
Standard wall mount



Ceiling mount



Single stud mount



Dental unit mount



Mobile stand



Floor column



Generator	Constant potential, microprocessor controlled, operating frequency 80kHz
X-ray tube	D-052SB
Focal spot size	0.5 x 0.5 mm (IEC 336)
Total filtration	2.5 mm Al equivalent
Anode voltage	Pan 50 - 84 kV Ceph 60 -84 kV Tomo 50 - 80 kV
Anode current	Pan 1 - 16 mA DC Ceph 1 - 16 mA DC Tomo 0.5 - 15 mA DC
SID	Pan 480 mm (19 in.) Ceph 163 - 170 cm (64 -67 in.)
Primary collimator	Automatic 4-blade
Focal Trough	9-way adjustment
Segmentation	5 vertical; 3 horizontal
Line voltage regulation	100 - 240 VAC 50 / 60 Hz, ± 10 % (automatic)
Line current	8 - 15 Amps
Exterior color	RAL 9016 (white)
Weight	ProMax pan only - 113 kg (248 lbs.) ProMax pan / ceph - 128 kg (282 lbs.)

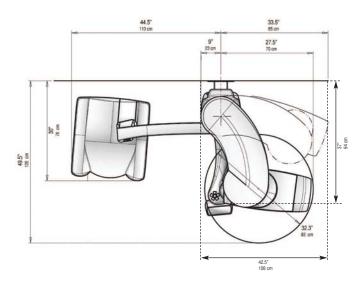
ProMax Film Specifications

Film size	Pan 15 x 30 cm Pan 12.5 x 30 cm Ceph 18 x 24 cm Ceph 8 x 10 in Ceph 24 x 30 cm
Cassette type	Flat
Scan time	Pan 2.7 - 16 sec Ceph 0.2 - 5 sec Tomo 3 - 12 sec
Magnification	Pan constant 1.2 Ceph film 1.08 - 1.13

ProMax Digital Specifications

Digital sensor	CCD Technology
CCD pixel size	33 microns
Image pixel size (selectable)	66 microns, 99 microns, 132 microns
CCD sensor active sensor area	Pan: 9 x 136 mm Ceph: 9 x 270 mm
Grayscale range	12 to 16-bit dynamic range 131,072 grayscale
Image resolution	Pan: 9 lp / mm Ceph: 5.7 lp / mm
Magnification	Pan constant 1.2 Ceph digital 1.13
High speed ceph	Reduce scan time by 50%
Scan time	Pan: 2.5 - 16 sec Ceph: 10 -17 sec Tomo: 3 - 12 sec
Digital image field	Pan: 14 x 30 cm (5.5 x 12") Ceph: 24 x 18 cm (9 x 7") Ceph: 24 x 29 cm (9 x 11.4") Ceph: 27 x 18 cm (10.6 x 7") Ceph: 27 x 29 cm (10.6 x 11.4") Ceph: 18 x 24 cm (7 x 9") Ceph: 18 x 27 cm (7 x 10.6") Ceph: 29 x 24 cm (11.4 x 9") Ceph: 29 x 27 cm (11.4 x 10.6")





Dimensions and space requirements

		PLANMECA ProMax	PLANMECA ProMax w / Cephalostat	
ace nts	Width	113 cm (44.5 in.)	198 cm (78 in.)	
Physical Space Requirements	Depth	126 cm (49.5 in.)	76 cm (30 in)	
Phy	Height*	154 - 243 cm (60.5 - 95.75 in.)	130 - 220 cm (51.25 - 86.5 in.)	
	Width	150 cm (59 in.)	216 cm (85 in.)	
Minimum Operational Space Requirements	Depth	163 cm (64 in.)	163 cm (64 in.)	i
Minimum Operational Space Requiremen	Height*	244 cm (96 in.)	244 cm (96 in.)	

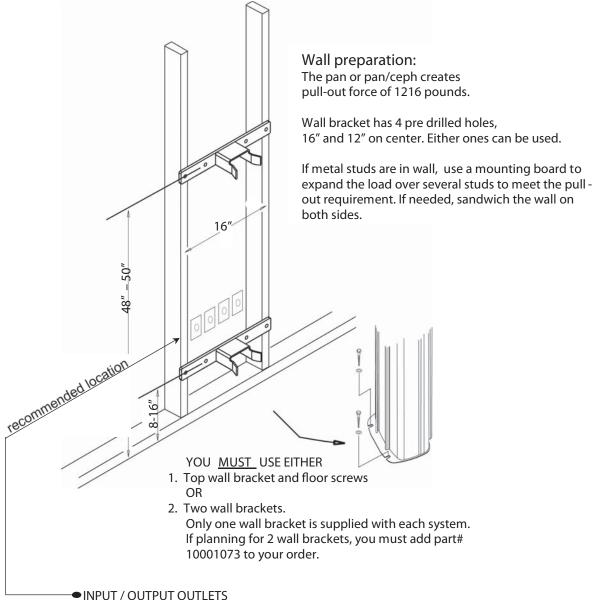
113 kg (248 lbs)

Weight

128 kg (282 lbs)

* The maximum height of the unit can be adjusted for offices with limited ceiling clearance

ProMax PRE INSTALLATION INSTRUCTIONS AND DIMENSIONS



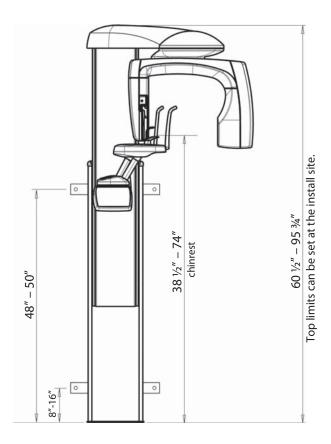
All outlets must be within 3ft from the back of the column and 12"-48" from the floor.

- 1. Power: 110V, 20A dedicated circuit.
- 2. Remote exposure switch (See page 6 for wiring diagram): 2"x4" electrical outlet boxes at ProMax and remote exposure switch location. ½ " conduit between the 2"x4" electrical boxes required.

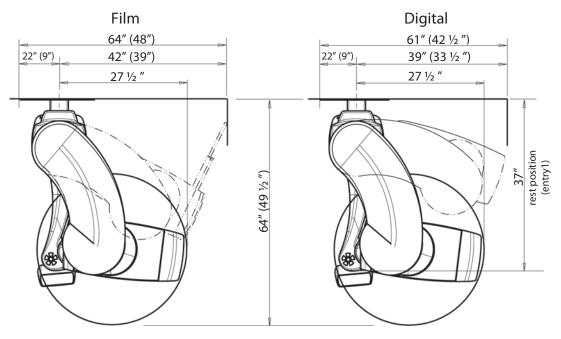
All parts supplied for exposure switch connection.

- 3. Pan/ceph film units w/ Admark: 1½ " conduit to the darkroom, 30ft. cable supplied.
- 4. ProMax Ethernet interface: Standard Ethernet RJ45 port to the network HUB/SWITCH.

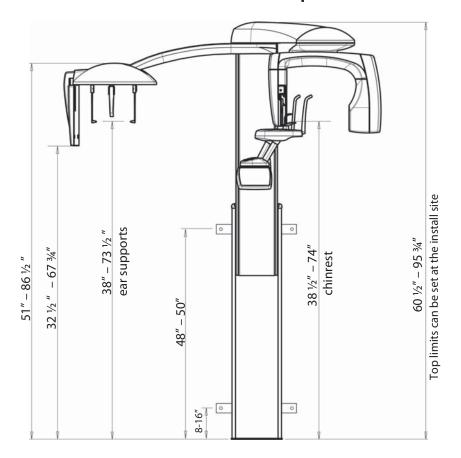
ProMax Panoramic



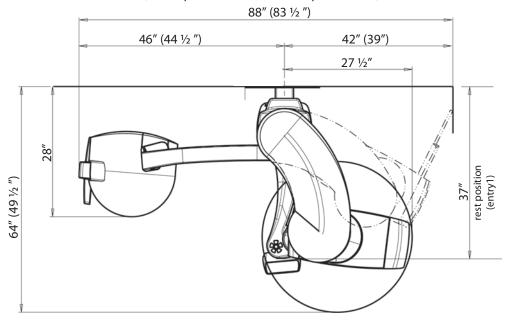
Recommended operating dimensions (actual product dimensions in parenthesis)



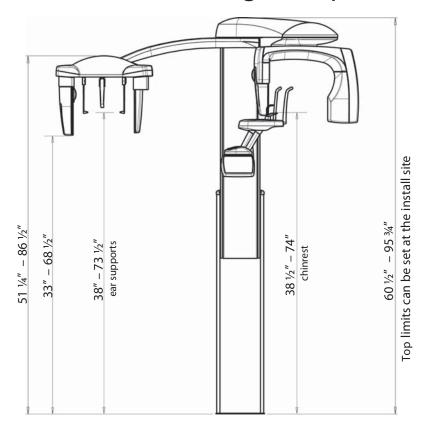
Promax Film Ceph



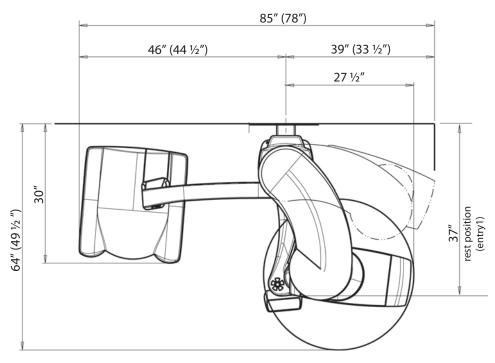
Recommended operating dimensio ns (actual product dimensions in parenthesis)



ProMax Digital ceph



Recommended operating dimensions (actual product dimensions in parenthesis)





Other install information:

Each film based machine comes with one Autoprint Pan Cassette (pan unit)

Standard Pan Cassette plus Ceph Cassette for Admark use (pan/ceph unit)

Extra cassettes Standard panoramic, order number 50024021 w/ Lanex screens: Autoprint panoramic, order number 10001288

Cephalometric, order number 50024015

Film recommended: pan: Agfa Dentus Ortholux 6"x12"

ceph: Agfa Dentus Ortholux 8"x10"

Bite sticks: Bite sticks are autoclavable

Extra bite sticks,10-pak, order number 10004280 Tomo bite plates, 10-pak w/ 2 rods: order number 10005520

2nd wall bracket: (optional)

order number 10001073

Handheld exposure switch w/ wall mount

order number 10004040

(optional)

Darkroom: Light tight, GBX2 filter on safe light, 15W frosted maximum.

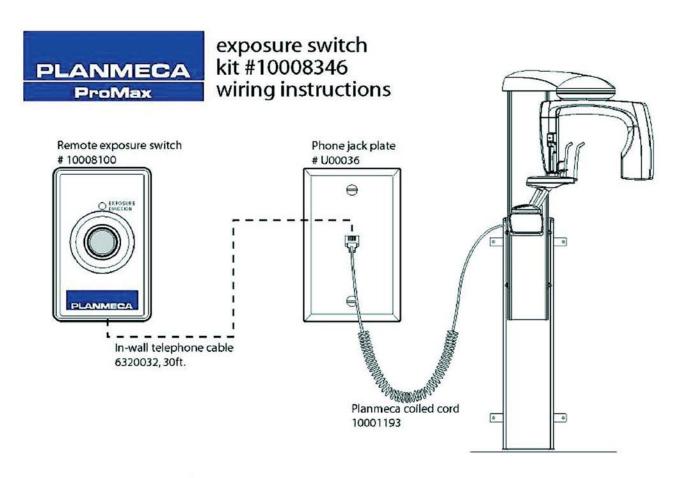
No closer than 48" from open film.

Computer specs: 512 MB of RAM for digital Win 2000, XP

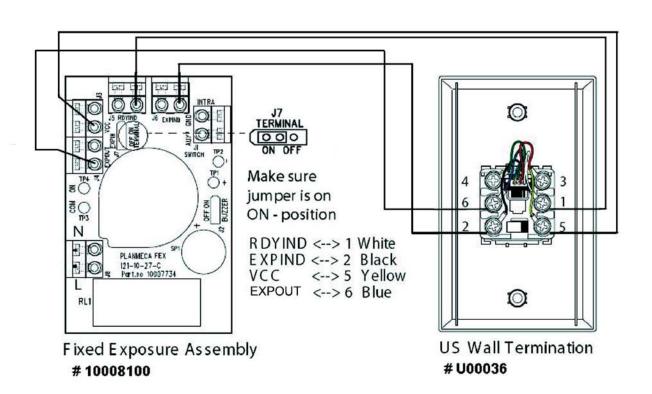
PCAnywhere connection in Imaging Station and Image server computers Hard drive: 2x 40GB for average size practice. Please consult with Planmeca certified computer provider for your computer needs. Requirements vary

greatly based on usage.

For more technical information, please contact Planmeca Customer Care (630) 529-2300 or visit www.PlanmecaUSA.com



Connection view from behind the plates



Digital X-ray Imaging Hardware Diagrams

and System Requirements for Planmeca Digital Panoramic and Dixi X-Ray Systems

Planmeca

Digital X-Ray

(ProMax Shown)

CPU Specifications Digital Image Workstation

For Panoramic, Bitewing, Tomographic and Cephalometric 2D images
• Pentium 4 or Higher

- 60 GB or better HD
- · 2 GB or more RAM
- WINDOWS XP / Server 2003 OS / Vista (32 bit OS Only)
- Ethernet 10/100 Mbit
- · 24-32 bit graphic card
- monitor 1024 x 768 res. min. · High Speed Internet, DSL or better

NOTE: Dimaxis is NOT compatible with 64Bit OS Systems

Image Acquisition Workstation (2D)

· Dimaxis Software acquires the Panoramic, Tomographic and Cephalometric images (2D).

· Dimaxis Imaging Software is used to enhance, filter, measure, diagnose, archive and export the images.

Database Server Specifications

- · Pentium 4 or Higher
- 2 Hard Drives, 160 GB each min.
- 1 GB or more RAM
 WINDOWS XP / Server 2003 OS / Vista (32 bit OS Only)
- Ethernet 10/100 Mbit

• Stores and archives all data to MS SQL or SOLID. The data server should have large hard drive disk space, hardware redundancy and a logical backup system.

Note: If using Vista, only Vista Business or Vista Ultimate (32 bit) OS is required and requires Dimaxis 4.3.X or newer.

CPU Specifications Additional Workstations

For Panoramic,

Tomographic and Cephalometric

images
• Refer to Digital Image Acquisition Workstation (2D)

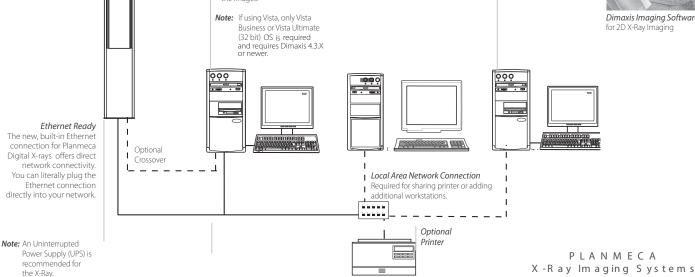
Additional Workstation

For Panoramic, Tomographic and Cephalometric images (2D)

· Dimaxis Software

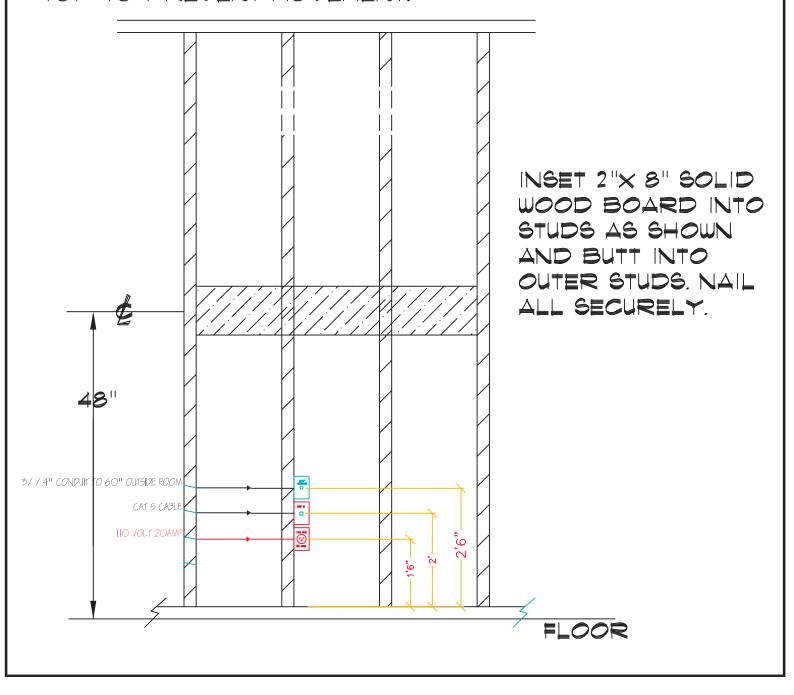


Dimaxis Imaging Software for 2D X-Ray Imaging



PXRB PANORAMIC XRAY BACKING (NOT TO SCALE)

EACH SUPPORT BOLT MUST WITHSTAND 120 LBS. OF SHEAR LOAD AND 400 LBS. OF WITHDRAWAL FORCE. FLOOR MUST SUPPORT A WEIGHT OF APPROX. 500 LBS. PARTITION SHOULD BE STRUT-BRACED TO TRUSSES AT TOP TO PREVENT MOVEMENT.







M A730 Series

110-013-079 REV E ECO 202802

Date Effective: JUNE 2017

When contacting Global Surgical Corporation for either Customer Service or Technical Service, it will be helpful if you have your **Customer Identification Number** and your **Customer Order Number** available. Please take a moment to record these numbers (printed on invoice) in the spaces below.

Customer Identification Number: _	
Customer Order Number:	



3610 TREE COURT INDUSTRIAL BLVD. ST. LOUIS, MO 63122 1-800-861-3585 IF OUTSIDE THE USA:1-636-861-3388

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Congratulations on your purchase of the A-Series Surgical Operating Microscope System.

We truly appreciate your business, and we're grateful for the trust you've placed in us.

TABLE OF CONTENTS

וסטו	LE OF CONTENTO	
Secti	on 1 Important Safety Instructions	
1.1	Symbol Definitions	1-1
1.2	Warnings and Cautions	1-2
Secti	on 2 Unpacking Instructions	2-1
Secti	on 3 Product Information	3-1
3.1	A-Series Surgical Operating Microscope Systems	3-1
3.2	Microscope Support Systems Configurations	3-1
Secti	on 4 Accessories	4-1
4.1	Microscope Components and Accessories	4-1
4.2	Installation of Optical Accessories	
4.3	Installation of the Multi Focal Objective Lens	
Secti	on 5 Operating Instructions	5-1
5.1	Turning On The System	
5.2	Description and Location of Controls	5-1
5.3	Counterbalancing Adjustment	5-2
5.4	Spring Arm Tension Adjustment	5-2
5.5	Pivot Adjustment	5-3
5.6	Roll Angle Adjustment	5-3
5.7	Pitch Angle Adjustment	5-3
5.8	Floorstand Locking Casters	5-3
5.9	Microscope Maneuvering Handles	5-3
5.10	Microscope Components	5-4
5.11	Magnification Selection	5-4
5.12	Focusing The Microscope	5-5
5.13	M A801-LED Light Source Operation	5-6
5.14	Brightness Settings and Memory	5-7
5.15	Filter	
5.16	Binocular Adjustment	5-8
5.17	Eyepieces	5-8
5.18	Diopter Adjustment	5-8
5.19	Fuse Replacement	5-9

TABLE OF CONTENTS

	ion 6 Care and Maintenance	
6.1	Cleaning and Disinfecting	6-1
6.2	Cleaning the Microscope Optics	6-1
Sect	ion 7 Troubleshooting	7-1
7.1	Troubleshooting	7-1
Sect	ion 8 Service and Warranty	8-1
8.1	Warranty Information	8-1
8.2	Technical Services Department	
Sect	ion 9 Technical Information	9-1
9.1	Microscope Support System Specifications	9-1
9.2	Binocular Focal Lengths	9-1
9.3	M A801-LED Storage and Operations Specifications	9-2
9.4	A-Series Microscope Total Magnification Chart	
9.4	Finding Total Magnification	
9.5	Effects of Changing Components	



THE SAFETY AND SATISFACTION OF OUR CUSTOMERS AND THEIR PATIENTS ARE THE HIGHEST PRIORITIES OF GLOBAL SURGICAL CORPORATION. THIS MANUAL CONTAINS IMPORTANT INFORMATION REGARDING THE SAFE AND PROPER USE OF THIS EQUIPMENT AND SHOULD BE READ THOROUGHLY BY ALL OPERATORS PRIOR TO THEIR FIRST USE OF THE EQUIPMENT. FAILURE TO READ AND UNDERSTAND THIS MATERIAL COULD RESULT IN INJURY TO PATIENTS OR PERSONNEL OR IN DAMAGE TO THE EQUIPMENT.

1.1 Symbol Definitions



This symbol on the product is an attention symbol, alerting the user to read the Owner's Manual for important installation, operating instructions or safety information.



This symbol on the product indicates a potential electrical shock hazard and alerts the user to read the Owner's Manual for important safety information.



Symbol indicating "not for general waste." Recycle per the EUROPEAN WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE) DIRECTIVE.



This symbol indicates earth ground.



For Professional Use Only.



Do Not Push.



This symbol indicates a surface that could be hot to the touch.



This symbol alerts the user that this product emits bright light.



This symbol indicates an explosion hazard.



This symbol indicates a situation in which incorrect handling through disregard of a warning might result in death or serious personal injury.



This symbol indicates a situation in which incorrect handling through disregard of a caution might result in personal injury or may result in damage to property.



This symbol indicates a message to avoid property damage or additional information to help complete a procedure.

1.2 Warnings and Cautions



ONLY QUALIFIED PERSONNEL SHOULD WORK ON OR AROUND THIS EQUIPMENT AFTER BECOMING THOROUGHLY FAMILIAR WITH ALL WARNINGS, SAFETY NOTICES AND MAINTENANCE PROCEDURES CONTAINED HEREIN. FOR THE PURPOSES OF THIS MANUAL AND PRODUCT LABELS, A QUALIFIED PERSON IS ONE WHO HAS BEEN TRAINED ON THE INSTALLATION, CONSTRUCTION, OPERATION AND MAINTENANCE OF THIS EQUIPMENT AND WITH THE HAZARDS INVOLVED.



DISCONNECT ALL ELECTRICAL POWER PRIOR TO CLEANING AND DISINFECTING. RISK OF ELECTRIC SHOCK RESULTING IN DEATH OR INJURY IS POSSIBLE IF THE ELECTRICAL POWER IS NOT DISCONNECTED PRIOR TO CLEANING THE UNIT.



TO AVOID THE RISK OF ELECTRIC SHOCK, THIS EQUIPMENT MUST ONLY BE CONNECTED TO A SUPPLY MAINS WITH PROTECTIVE EARTH (=GROUND).



THIS UNIT MUST BE USED ONLY WITH HOSPITAL GRADE EARTH-GROUNDED AC OUTLETS.



RISK OF EXPLOSION IF USED IN THE PRESENCE OF FLAMMABLE ANESTHETICS.



CONNECTING EQUIPMENT TO THE MULTIPLE SOCKET-OUTLET EFFECTIVELY LEADS TO CREATING A MEDICAL ELECTRICAL SYSTEM AND THE RESULT CAN BE A REDUCED LEVEL OF SAFETY.



IT IS HIGHLY RECOMMENDED THAT THE INSTALLATION OF THIS EQUIPMENT BE PERFORMED BY QUALIFIED TECHNICIANS. INSTALLATION BY UNQUALIFIED INDIVIDUALS COULD RESULT IN PERSONAL INJURY.



MINIMIZE SKIN EXPOSURE BY FOCUSING THE LIGHT ON THE AREA WHERE SURGERY IS BEING PERFORMED.



START THE MICROSCOPE WITH MINIMAL LIGHT INTENSITY AND INCREASE THE INTENSITY GRADUALLY. AVOID MAXIMUM INTENSITY OR USE IT FOR AS SHORT A TIME AS POSSIBLE.



NO MODIFICATION OF THE EQUIPMENT IS ALLOWED.



FAILURE TO FOLLOW THESE INSTRUCTIONS WILL RESULT IN DAMAGE TO THIS SYSTEM OR POSSIBLE INJURY (RECEIVER'S RESPONSIBILITY).



WHEN OPENING THE SHIPPING CARTON THE PLASTIC BANDS WILL SPRING APART WHEN CUT. ENSURE THEY WILL NOT HIT ANYONE OR ANYTHING. EYE PROTECTION SHOULD BE WORN WHEN REMOVING THE PLASTIC BANDS. WATCH FOR SHARP EDGES.



CONTACT GLOBAL TECHNICAL SERVICES BEFORE REPLACING THE FUSE.

Section 1	60 Important Safety Instructions
Section	important Salety instructions
WARNING	DISCONNECT ALL ELECTRICAL POWER PRIOR TO REPLACING FUSE.
WARNING	USE ONLY A 5MM X 20MM CYLINDER, SLOW-BLOW, 6 AMP 250 VOLT FUSE.
WARNING	NEVER REPLACE A BLOWN FUSE WITH A HIGHER-AMP FUSE. ALWAYS REPLACE THE FUSE WITH ONE WITH THE SPECIFIED AMP RATING.
CAUTION	Contents are fragile and should be removed carefully.
CAUTION	Some of the parts may be damaged by knives, open boxes carefully.
CAUTION	After opening boxes check the serial numbers of the optics against the packing slip.
CAUTION	Open boxes containing the optics over a table or counter.
CAUTION	When handling the optics do not touch the glass with your fingers.
CAUTION	Do not clean any surface with petroleum-based solvents such as acetone or M.E.K. (Methyl Ethyl Ketone). These solvents will remove paint and cause permanent damage to plastic surfaces. Using these solvents also presents a danger to individuals if the solvents are opened in a poorly ventilated room.
CAUTION	Replacement parts, such as cables, must be purchased through Global Surgical to ensure proper compliance requirements. The use of other cables may affect EMC performance. Unauthorized use of these items will void warranty and may cause injury to you, others and/or the equipment.
CAUTION	When used in clinical or residential areas near radio or TV units, this equipment may be subjected to radio interference. To avoid adverse electromagnetic effects, do not operate this equipment near RF energy equipment.
CAUTION	To prevent any potential electromagnetic interference, do not use any kind of cellular phone near the equipment.
NOTICE	Check for damage before discarding the shipping material and notify Global Surgical Customer Service if shipping damage is observed.

NOTICE

NOTICE

Save this manual for future reference.

components are still within.

NOTICE

If you have ordered accessories, then some of these may be assembled to the unit while others are supplied unassembled. Please examine the content of the box thoroughly. If any accessories require assembly, then instructions will be included.

Contents are packed in several boxes. Before discarding any packaging ensure no



This equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the installation manual 110-013-080 M A730 Series Installation Manual.



Portable and mobile RF communications equipment can affect medical electrical equipment.



See the owner's manual for each electrical component for specific safety and use information.





ARMS SHOULD BE FOLDED AND LOCKED IN STORAGE POSITION, AS SHOWN IN THIS FIGURE FOR SAFE TRANSPORT. FAILURE TO DO SO COULD RESULT IN DAMAGE TO THE SYSTEM OR PERSONAL INJURY.

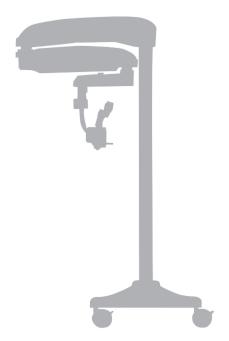








DO NOT PUSH UNTIL SUPPORT SYSTEM IS IN TRANSPORT POSITION.



WARNING

FAILURE TO FOLLOW THESE INSTRUCTIONS WILL RESULT IN DAMAGE TO THIS SYSTEM OR POSSIBLE INJURY (RECEIVER'S RESPONSIBILITY).



THE PLASTIC BANDS WILL SPRING APART WHEN CUT ON THE SHIPPING BOX. ENSURE THEY WILL NOT HIT ANYONE OR ANYTHING. EYE PROTECTION SHOULD BE WORN WHEN REMOVING THE PLASTIC BANDS. WATCH FOR SHARP EDGES.



Contents are fragile and should be removed carefully.



Some of the parts may be damaged by knives, open boxes carefully.



After opening boxes check the serial numbers of the optics against the packing slip.



Open boxes containing the optics over a table or counter.



When handling the optics do not touch the glass with your fingers.

NOTICE

Check for damage before discarding the shipping material and notify Global Surgical Customer Service if shipping damage is observed.

NOTICE

Contents are packed in several boxes. Before discarding any packaging ensure no components are still within.

NOTICE

Save this manual for future reference.

NOTICE

If you have ordered accessories, then some of these may be assembled to the unit while others are supplied unassembled. Please examine the content of the box thoroughly. If any accessories require assembly then instructions will be included.

All shipping materials should be retained until it has been determined that the unit was not damaged during shipment.

If damage is discovered, complete the following:

- 1. Do not refuse shipment.
- 2. Make a notation on the delivery receipt and inspect the carton for damage.
- Take pictures of damage to the equipment and to the packaging (if evident).
- 4. If damage is discovered, leave in original container and request immediate inspection from the carrier within 3 days.
- 5. Contact the Global Surgical Customer Service Department at 1-800-861-3610.

If the product is damaged electrically or mechanically and in the event the original packing materials are no longer available, contact Global Surgical Technical Services Department.

Refer to Section 8 of this manual regarding Technical Service contact information and proceed as instructed.

3.1 A-Series Surgical Operating Microscope Systems

The Surgical Operating Microscope is a system of modular components intended to improve ergonomics, vision, and lighting during dental and medical procedures/examinations. If the options are chosen, the microscope system may also aid in documentation. Components may include, but are not limited to, support system, binoculars, objective lens, light source, beamsplitters, and video/photography systems. There are four support system options to choose from to meet the clinician's needs: a floor stand model, a floor mounted model, a wall mounted model and a ceiling mounted model. All support system models provide maneuverability and sturdy, stable support for the microscope and coupler arm assemblies. These systems fold into convenient storage positions when not in use.

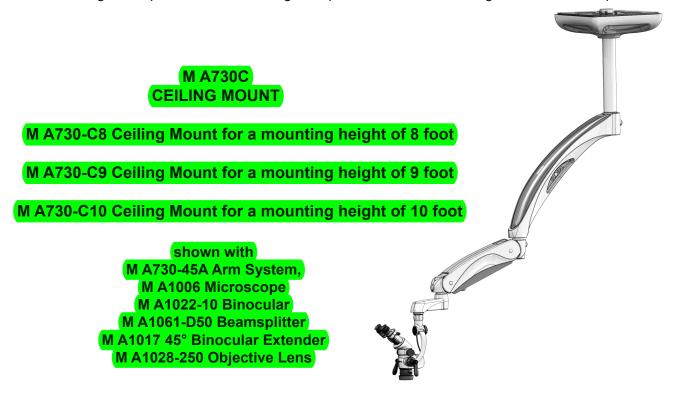
3.2 Microscope Support Systems Configurations

The A-Series Microscope Support System is available in four configurations:

Floor Stand Support System Model (M A730F) The floor stand support system model is designed for portability around the office/examination room. It uses a compact H-Base with four large casters, occupying minimal floor space. All four casters may be locked to prevent rolling. As the floor stand support system is mobile, care must be taken to ensure safe transportation and to avoid any personal injury or damage to the system.



Ceiling Mount Support System Model (M A730-C8, M A730-C9 and M A730C-10) The ceiling mount support system model is designed to permit maximum range of operation while eliminating the use of floor space.



Floor Mount Support System Model (M A730FM) and Thru The Floor Mount (M A730FMT)

The floor mount support system model is designed to be installed on the floor in a fixed location within the office/examination room.

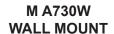


M A730FM FLOOR MOUNT

M A730FMT FLOOR MOUNT THROUGH THE FLOOR

shown with
M A730-HA Arm System,
M A1006 Microscope
M A1022-10 Binocular
M A1061-D50 Beamsplitter
M A1017 45° Binocular Extender
M A1028-250 Objective Lens

Wall Mount Support System Model (M A730W) The wall mount support system model is designed for areas with limited floor space. It provides an unobstructed range of working area and folds flat against the wall for convenient storage.



shown with
M A730-HA Arm System,
M A1006 Microscope
M A1022-10 Binocular
M A1061-D50 Beamsplitter
M A1017 45° Binocular Extender
M A1028-250 Objective Lens



M A730W HIGH WALL MOUNT

shown with
M A730-45A Arm System,
M A1006 Microscope
M A1022-10 Binocular
M A1061-D50 Beamsplitter
M A1017 45° Binocular Extender
M A1028-250 Objective Lens

4.1 Microscope Components and Accessories

Microscope Head

The A-Series M A1003 Microscope provides the user with 3 steps of magnification, the M A1004 provides 4 steps of magnification and the M A1006 Microscope provides 6 magnification steps.

Each of the A-Series Microscopes may be used with a variety of A-Series binoculars, objective lenses and other accessories.



M A801-LED

The A-Series M A801-LED Light Source provides light to the surgical site for illumination and improved optical clarity.



Section 4

M A1047LFM Laser Filter

This laser filter is meant for use with a corresponding specific wavelength laser and A-Series Microscope System equipped with a M A1047LFM laser filter module.



M A1019 Binocular Rotation Ring



Allows for better operator positioning. Rotates the binocular +/- 25 degrees.

M A512 Dual Iris Diaphragm



Allows for greater depth of field which is particularly valuable for photography.

M A1061-D50 & M A1061-DVA50 Dual Port Beamsplitter



The dual port beamsplitter models have two (2) mounting ports for camera adapters. This allows the simultaneous use of a still camera and video camera if so desired, but other configurations are certainly feasible. The dual port beamsplitters can be configured with either one 50/50 prism and one 95/5 prism, M A1061-DVA50 or with two 50/50 prisms, M A1061-D50. The beamsplitter can mount to the microscope with either prism on the right or left, depending on personal preference. The choice of which prisms to use should be based on the type of cameras intended to be mounted to the microscope.

M A1061-SVA & M A1061-S50 Single Port Beamsplitter



The single port beamsplitter models have one (1) mounting port for a camera adapter. The beamsplitter can be configured with a 50/50 prism M A1061-S50 or 95/5 prism M A1061-SVA. The M A1061-S50 model directs 50% of the light through the microscope toward a camera mounted on the side of the beamsplitter, while the other 50% of light passes through to the user's eye. The M A1061-SVA prism directs only 5% of the light toward the camera while the other 95% of the light passes through to the user's eye. The beamsplitter can mount to the microscope with the port oriented toward the user's right or left, depending on personal preference. The choice of which prism to use should be based on the type of camera intended to be mounted to the microscope.

M A1017 Carr Adapter, 45° Binocular Extender



Provides ergonomic benefits by positioning the binocular higher and further from the microscope body.

M A1022 Series Binoculars



The inclinable binoculars allow for 0-220 degrees of tilt articulation. This feature accommodates multiple user heights while maintaining optimal ergonomic posture. It also allows the user to maintain this posture while moving the microscope head.

M A1021 Series Binoculars,

The inclined binoculars are a more economical choice, but limited to a fixed 45 degree tilt angle.

M A1020 Series Binoculars

The straight binoculars are for use in ENT and otolaryngology and may also be used with the binocular coobservation systems.

M A1028-200, M A1028-250, M A1028-300 Objective Lens



Convenient fine focus feature allows for easy adjustment of objective lens. Range of 20mm allows for easy focus adjustment without moving the microscope. The M A1028-200 provides 200mm working distance between the lens and the surgical site; the M A1028-250 provides 250mm and the M A1028-300 provides 300mm.

M 1028ML Multi-Focal Objective Lens



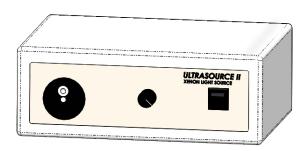
The Multi-Focal Objective Lens allows the user to focus the microscope on an object anywhere between 200 and 350mm away from the microscope without having to move the microscope. This promotes optimal ergonomic comfort and minimal adjustment throughout multiple procedures.

M A517HD1080 Series HD Color Video Camera



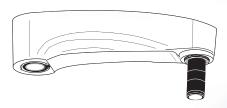
The M A517HD1080 Series high definition camera outputs HDMI video at true 1080p HD resolution. The 1/3" C-mount design offers a compact and lightweight HD video solution. The on-camera push-button is used for one-push white balance and push-hold for image flip. Use with camera adapter M A528STHDC.

M A794XA-730 UltraSource II™ Xenon LightSource



The UltraSource II™ Xenon LightSource is a high efficiency light source utilizing Xenon illumination technology.

M A730-717 17" Support Extension Arm



Provides additional reach for the microscope system for use in a wide variety of office applications. This arm can be used to avoid other obstacles in offices such as x-ray units or cabinets.

Eyecups

M 1039GL



Long Silicone Eyecup for A and G-Series Binocular

5/8 inches tall for Aand G-Series binocular this is the ideal eyecup for users who do not wear glasses.

M 1039G



Low Profile Short Silicone Eyecup for A-Series Binocular

Low profile 5/16 inches silicone eyecup for A-Series binocular. This is the ideal eyecup for users who wear glasses.

Multiple Socket-Outlet



ONLY CONNECT ITEMS THAT GLOBAL SURGICAL HAS SPECIFIED AS BEING COMPATIBLE WITH THE MICROSCOPE SYSTEM. CONNECTING EQUIPMENT THAT IS NOT INTENDED FOR USE WITH THE MICROSCOPE SYSTEM TO THE MULTIPLE SOCKET OUTLETS MAY RESULT IN INJURY AND/OR DAMAGE TO THE MICROSCOPE SYSTEM.



CONNECTING ELECTRICAL EQUIPMENT TO THE MULTIPLE SOCKET OUTLETS EFFECTIVELY LEADS TO CREATING A MEDICAL EQUIPMENT SYSTEM AND THE RESULT CAN BE A REDUCED LEVEL OF SAFETY.



ADDITIONAL MULTIPLE SOCKET OUTLETS AND/OR EXTENSION CORDS SHOULD NOT BE CONNECTED TO THE MICROSCOPE SYSTEM'S MULTIPLE SOCKET OUTLETS.

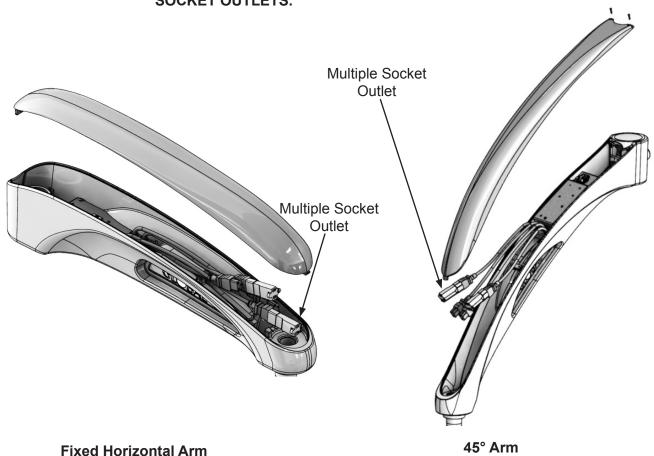


Figure 4-1 Multiple Socket Outlet

The multiple socket outlet provided with the microscope system allows for attaching additional equipment to aid in vision, lighting and documentation.

These outlets should only be used for supplying power to equipment that is intended to form part of the medical equipment system: digital camera, video camera, Xenon Ultrasource LightSource, and TV monitor. Please refer to International Standard IEC 60601-1:2005, Medical electrical equipment – Part 1: General requirements for basic safety and essential performance, for the requirements that are applicable to a medical equipment system.

The maximum permitted load for the microscope system is 240 VAC.

4.2 Installation of Optical Accessories

Installation of the A-Series Binocular

To install the binocular, **Refer to Figure 4-2** and proceed as follows:

- 1. Loosen the set screw on the microscope body with a 5/64" hex wrench so it will not interfere with the dovetail-shaped bottom of the binocular head.
- 2. Slide the binocular head into the retaining ring so the dovetail-shaped bottom slides under the two wedge-shaped tabs at the rear of the retaining ring.
- 3. To align the binocular, position the binocular head so the U-Shaped slot at the rear of the binocular base is installed over the slotted screw in the binocular retaining ring.
- 4. Tighten the set screw. When the microscope body and the binocular head are properly aligned, the binocular head will not rotate in the binocular retaining ring.

NOTICE

M A1047LFM Laser Filter, M A1019 Binocular Rotation Ring, M A512 Dual Iris Diaphragm, M A1061-D50 & M A1061-DVA50 Dual Port Beamsplitter, M A1061-SVA & M A1061-S50 Single Port Virtual Beamsplitter, M A1017 Carr Adapter will install in very much the same way. See the installation instructions that are included with each accessory.

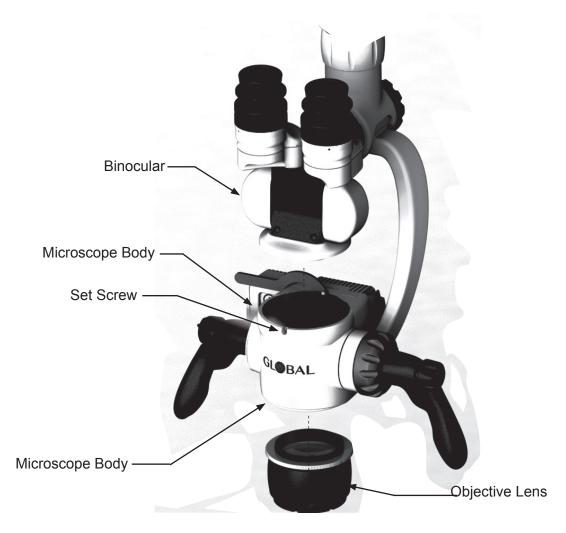


Figure 4-2 Installation of the A-Series M A1003, M A1004, and M A1006 Optics

4.3 Installation of the Multi Focal Objective Lens

To install the threaded objective lens to the microscope body, **Refer to Figure 4-3** and proceed as follows:

NOTICE

The knob is shipped unattached. Do not attach until after the multi-focal lens is assembled to the microscope.

- 1. Ensure the lock ring is threaded down fully on the Multi Focal lens before installing the lens on the microscope body.
- 2. Thread the Multi Focal lens into the microscope body in the direction of the arrow shown until the lens stops.
- 3. The knob location can be positioned for user comfort. Back the lens out of the microscope body (NO MORE THAN 1 FULL TURN) to position the knob shaft in the desired location (right side for right-handed user or left side for left-handed user is recommended).
- 4. While holding the multi-focal lens body, turn the lock ring until it is tight against the bottom of the microscope body. This prevents the multi-focal lens from rotating after installation.
- 5. Attach the knob by pushing it onto the shaft until fully seated.

NOTICE

The M A1028-200, M A1028-250 and M A1028-300 fine focus will install in very much the same way. See the installation instructions that are included with each accessory.

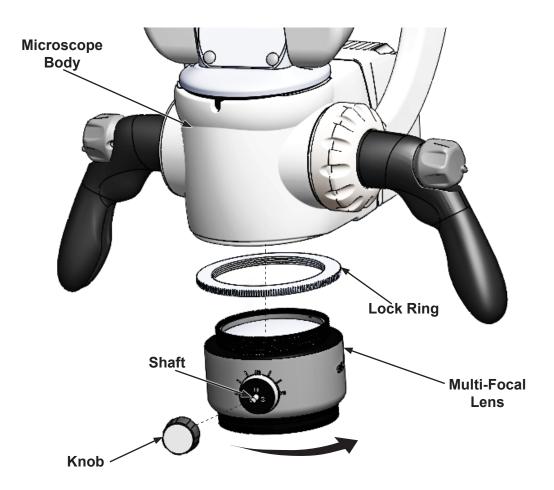


Figure 4-3 Installation of the A-Series™ M A1028ML Multi-Focal Lens

5.1 Turning On The System



THIS UNIT MUST BE USED ONLY WITH HOSPITAL GRADE EARTH-GROUNDED ACOUTLETS.

Plug in the system into a hospital grade earth-ground AC outlet. Turn power on to the system by depressing the LED power button. The green indicator light(s) at the lowest setting will come on indicating that there is power to the system and the intensity setting. When the LED power button is depressed again the light(s) will extinguish indicating that the power to the system is turned off. Depress the power button again and the LED will come on at the last intensity setting used. **See Section 5.13** "M A801-LED Light Source Operation" or the LED owner's manual 110-013-081 for instructions.

If set up with a wall switch make sure the wall switch is turned on and then depress the LED power button.

To safely terminate the operation of the microscope system, unplug the microscope or turn off the microscope via wall switch where applicable.



Figure 5-1 Power Button

5.2 Description and Location of Controls

Figure 5-2 shows the location of the system controls.

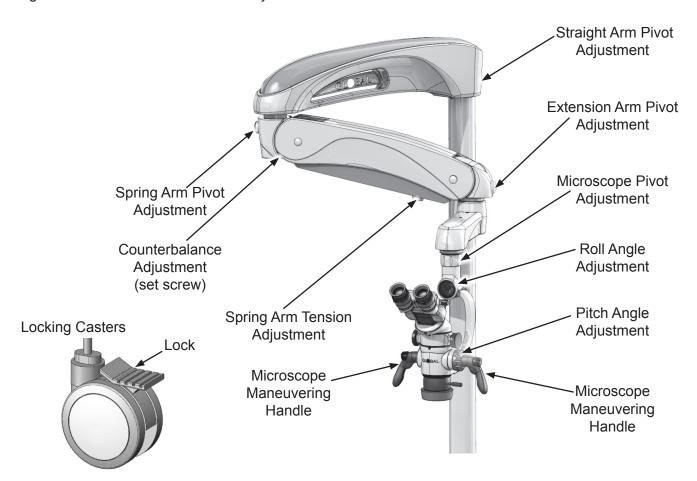


Figure 5-2 Location of Controls

It is best to set the feel of the microscope before attempting to use the microscope so the user comfort is optimized for the microscope procedures.

5.3 Counterbalancing Adjustment

Counterbalancing is done to ensure the microscope head moves with very little pressure (typically from user pressing on the eyecups) To do this the weight of the microscope head must be counterbalanced with the spring arm.

The upward lift of the spring arm assembly can be adjusted to match the weight of the microscope and its accessories. This adjustment is called "counterbalancing". Before adjusting the counterbalance, ensure that all accessories are installed on the microscope and the spring arm tension adjustment knob is loose. To loosen the spring arm tension adjustment knob turn the knob clockwise. Insert the 3/16" hex wrench into the center hex-socket screw (located under the end of the spring arm assembly that attaches to the horizontal arm) and turn the tool to the right (clockwise) if the microscope falls when released, or turn the tool to the left (counterclockwise) if the microscope rises when released.

See Figure 5-3

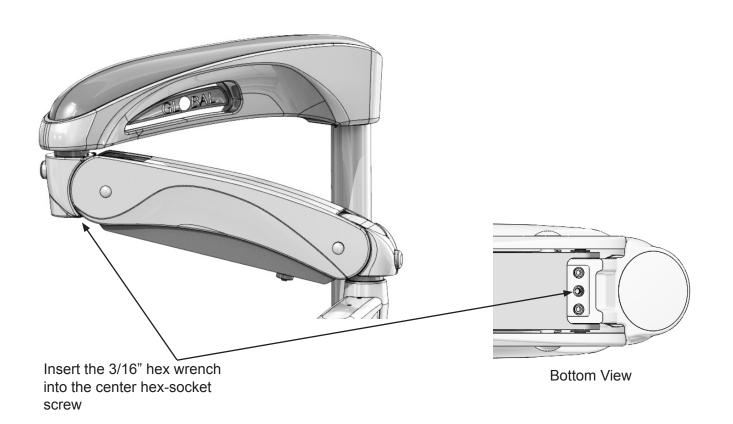


Figure 5-3 Counterbalancing Adjustment

5.4 Spring Arm Tension Adjustment

Adjusts the amount of tension required to move the spring arm up and down. Turn the knob to adjust the spring arm tension. **See Figure 5-2**

5.5 Pivot Adjustment

Adjusts the amount of effort required to rotate the spring arm and extension arm from side to side. Push in the pivot knob until it pops out. Turn the pivot adjustment knob to the right to tighten the tension or turn to the left to loosen the tension. **See Figure 5-4**

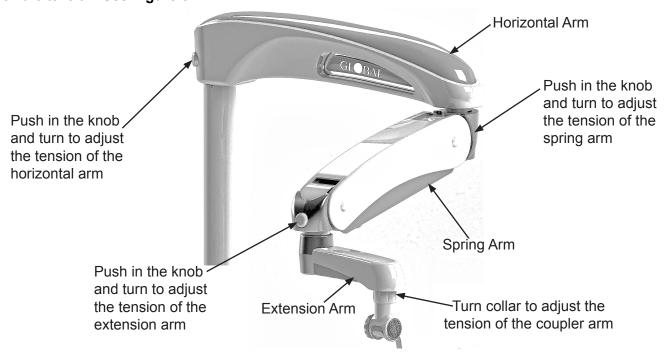


Figure 5-4 Pivot Adjustment

5.6 Roll Angle Adjustment

Adjusts the amount of tension required to rotate the microscope right or left. It can be adjusted by tightening or loosening the roll angle adjustment knob. This knob is located at the rear of the coupler arm. **See Figure 5-5**

5.7 Pitch Angle Adjustment

Adjusts the amount of tension required to rotate the microscope forward or backward. It is adjusted by tightening or loosening the pitch angle adjustment knob. This knob is located on the right side of the microscope body. **See Figure 5-5**

5.8 Floorstand Locking Casters

To secure the support system after it is rolled to its desired location, engage the locks on the casters. The lock is pushed down to obstruct regular wheel movement. This fixes the support system into a desired place. You can pull up the caster lock to release the wheel and move the support system, if necessary. **See Figure 5-2**

5.9 Microscope Maneuvering Handles

Maneuvering handles can be adjusted to user's preferred position. To change the position of the maneuvering handles, depress the handles in towards the body of the microscope. While depressing the handles, position the handles to a position comfortable for your purposes and then release the handles. The handles will lock into place. **See Figure 5-5**

5.10 Microscope Components

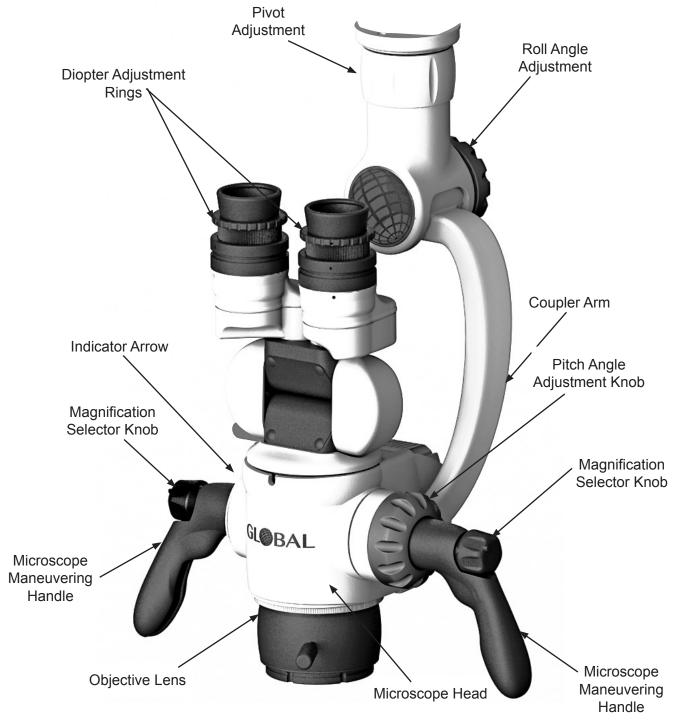


Figure 5-5 Microscope Components

5.11 Magnification Selection

All A-Series M A1003, M A1004 and M A1006 Microscopes have two magnification factor selection knobs, one on each side of the microscope body. Either of these knobs should be turned until the desired magnification factor is facing the indicator arrow on the left side of the microscope body.

See Section 9, Technical Information, for the magnification and focal length information.

5.12 Focusing The Microscope

The coarse focus on the microscope system is achieved by raising or lowering the microscope assembly with the spring arm. Fine focus is obtained by moving the fine focus objective lens.

The parfocal adjustment of the microscope allows the user to adjust the eyepieces to correct for nearsightedness or farsightedness. It is essential to perform the parfocal adjustment prior to using any still or video camera applications. If the parfocal adjustment is not performed, the microscope can still be focused on a selected magnification, but other magnification settings may not be in focus.

The steps listed below should be followed for making the parfocal adjustments on the microscope:

- Each operator of the microscope will require his or her own parfocal settings which should be set before any procedures are performed. Due to changes in eye correction associated with time, it is recommended that this procedure be performed by each operator a minimum of one time per year.
- 2. Position the microscope above a flat stationary surface, with the bottom of the objective lens parallel to the surface.
- 3. Using a pen or pencil, mark an "X" on a piece of white paper for a focusing target and place it in the center of the illumination field of the microscope.
- 4. Depress the diopter tension lever and set the diopter adjustment rings on both eyepieces to "0". **See Section 5.18** for additional information.
- 5. Without looking through the binoculars, adjust the fine focus objective lens to its approximate midpoint.
- 6. Set the magnification to the highest setting. Raise or lower the microscope vertically until the "X" is in optimum focus.
- 7. Adjust the fine focus objective lens until a sharp focus is acquired.
- 8. Tighten the spring arm tension adjustment (**See Figure 5-2** for location) on the spring arm assembly to prevent the microscope from moving. Set the magnification to the lowest setting. Focus both eyepieces, one at a time, by turning the diopter adjustment ring until the image is clear and sharp.



It is particularly important to perform the parfocal procedure when an image through the microscope is clear but the same image through a still or video camera is not focused, or vice-versa.

Use direct vision whenever possible to free hands for instruments.

5.13 M A801-LED Light Source Operation

Once the light source is installed, it is ready for operation. The light source has instant on/off capabilities. The power button will toggle power off and on with each press of the button. When power is first applied to the light source, the green bottom indicator light will turn on. When the power button is pressed off and then on again the last level used will be illuminated. **See Figure 5-6**



BEFORE operating the light source, refer to the Owner's Manual 110-013-081 for any warnings and cautions associated with the use of the Light Source to ensure safe operation.



The LED light source has been tested according to IEC 60601-2-57 Non-laser light source. The test results show no photobiological hazard associated with the use of this LED light source as it is intended, to include hazards associated with blue light wavelengths.

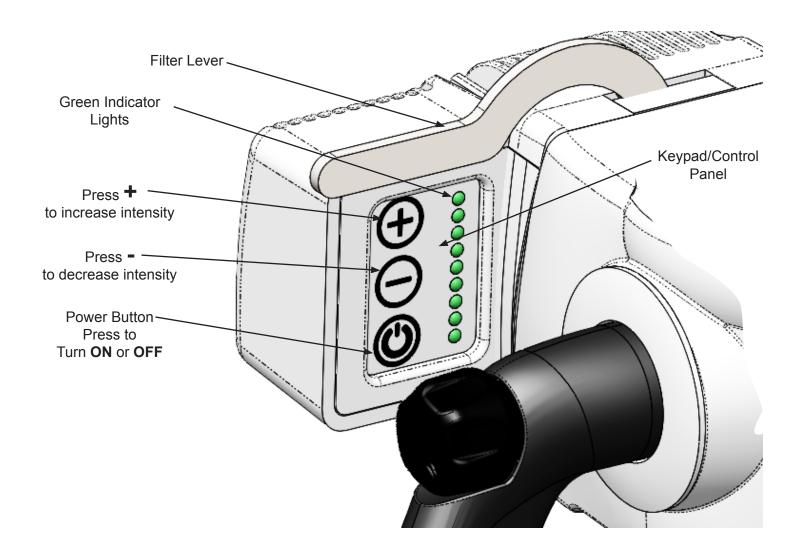


Figure 5-6 LED Control Panel

5.14 Brightness Settings and Memory

There are nine levels of brightness which can be selected using the \bigoplus and \bigoplus buttons while the power is on. The level of brightness is indicated by the green indicator lights located on the keypad/control panel. An indicator light will light up for each increase in brightness. **See Figure 5-6.**

The + button is used to increase brightness setting. Each press will increase light source brightness. Any additional press of + will have no effect once the highest setting is reached.

The button is used to decrease brightness setting. Each press will decrease light source brightness. Any additional press of will have no effect once the lowest setting is reached.

Each button performs its intended function when the button is pressed. Holding a button has no effect. For example to increase the brightness from minimum to maximum, the user must press and release the button eight times. Pressing and holding the button will only increase the brightness to the next higher setting.

The light source has a recall feature. This feature remembers the last level of brightness used before being powered off. Any time the light source is powered on, the brightness level will be at the last level used.

5.15 Filter

The LED light source emits white light, which includes all the colors of light combined in the visible light spectrum. Depending on what area of the patient is illuminated, a filter may be used to enhance the observation through the microscope. The LED light source has two kinds of filters: an amber filter (composite) and a green filter.

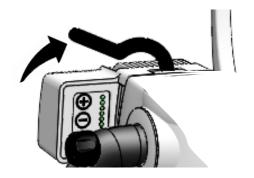
The use of the amber filter (composite) helps reduce the emissions of wavelengths below 520 nm (blue light) which are used to cure dental resins.

The use of the green filter provides a higher contrast of tissue by reducing the emissions of wavelengths around 650 nm (red light).

See M A801-LED Owner's Manual 110-013-081 for operation information



Filter Lever **DOWN** for **NO FILTER**



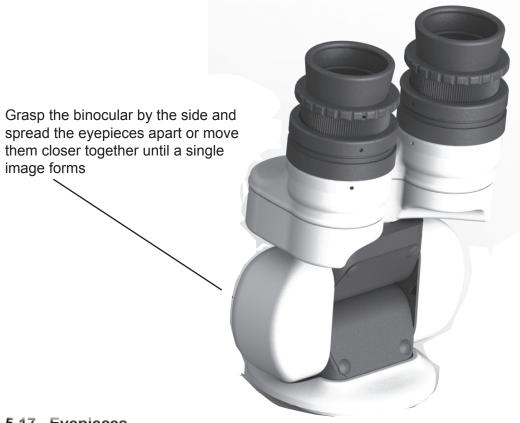
Filter Lever CENTER
for
AMBER DENTAL COMPOSITE
FILTER



Filter Lever UP for GREEN FILTER

5.16 Binocular Adjustment

The distance between the user's eyes is called the **inter-pupillary distance**. The inter-pupillary distance of the binocular **must** be adjusted to match the user's eyes in order to maintain proper stereoscopic vision. To adjust the binocular, the user should look into both eyepieces, grasp the binocular by the side and spread the eyepieces apart or move them closer together until a single image forms. A grid of the inter-pupillary distance in millimeters is engraved on the binocular for reference.



5.17 Eyepieces

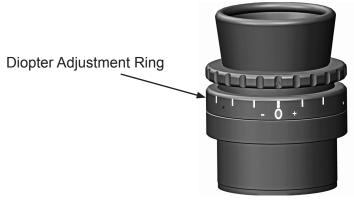
The eyepieces used on A-Series Microscopes are high eye point eyepieces. This means that a full-sized image is formed approximately one inch (25 mm) above the eyepiece to assist users who wear glasses.

Eyecups are used to position the user's head at the correct distance from the eyepiece without the user becoming fatigued. The eyecups on the A-Series M A1003, M A1004, M A1006 Microscopes are adjustable to provide maximum comfort for the user. To lower the eyecup, grasp the rubber eyecup and turn it clockwise. Turning it counterclockwise will raise the eyecup. The eyecups are properly adjusted when the user's eyes (or glasses) are touching the eyecups with the image through the microscope in full view. Reference lines are provided on the outside surface of the eyecups to verify that both are adjusted to the same height.

5.18 Diopter Adjustment

Each binocular eyepiece is equipped with a diopter adjustment ring which is marked in plus(+) or minus(-) one diopter increments. To adjust the diopter setting, firmly grasp the diopter adjustment ring and adjust the settings until the image is clear and sharp.

The diopter adjustment corrects for the user's vision prescription, providing relaxed 20/20 vision with or without glasses or contact lenses. The diopter adjustment has a correction range of +5 diopters to -5 diopters. Users with natural correction outside this range must wear additional corrective lenses to achieve relaxed 20/20 vision.



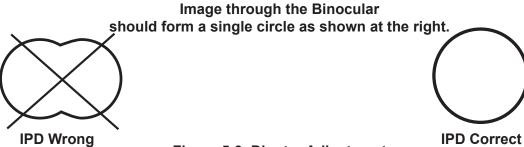


Figure 5-9 Diopter Adjustment

5.19 Fuse Replacement



CONTACT GLOBAL TECHNICAL SUPPORT BEFORE REPLACING THE FUSE.



DISCONNECT ALL ELECTRICAL POWER PRIOR TO REPLACING FUSE.



USE ONLY A 5MM X 20MM CYLINDER, SLOW-BLOW, 6 AMP 250 VOLT FUSE.



NEVER REPLACE A BLOWN FUSE WITH A HIGHER-AMP FUSE. ALWAYS REPLACE THE FUSE WITH ONE WITH THE SPECIFIED AMP RATING.

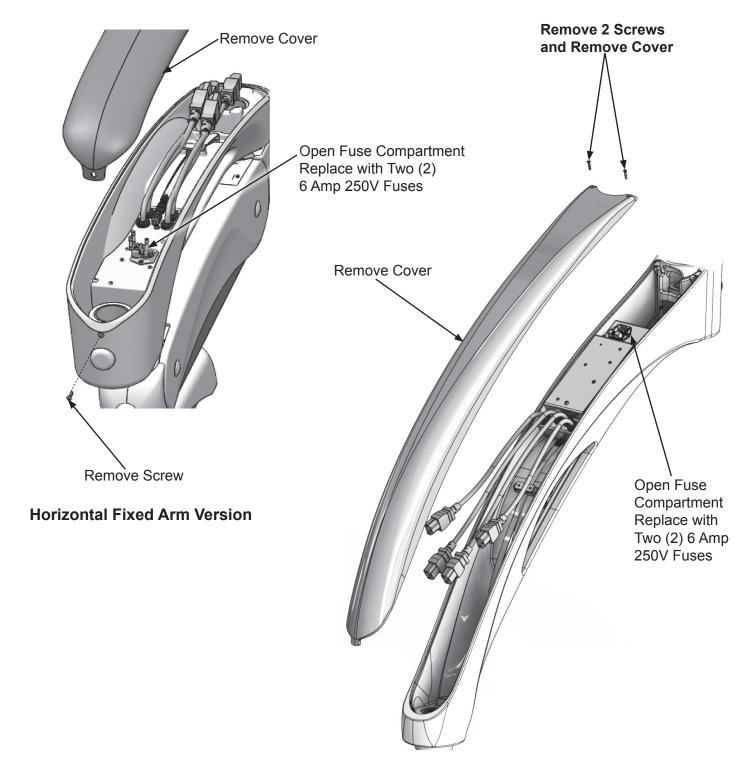
The fuse protects your electrical components in the system from a sudden and unexpected power surge.

To replace the fuses follow the steps below:

- 1. Unplug the power cord from the outlet to remove power to the system.
- 2. Remove the screw(s) holding the cover on the arm. See Figure 5-10
- 3. Remove the cover.
- 4. Open the fuse compartment cover.
- 5. Remove both fuses even if only one fuse is blown.
- 6. Replace with two (2) new 5mm x 20mm cylinder, slow-blow, 6 Amp 250 Volt Fuses.
- 7. Replace arm cover and insert screw(s) into arm and tighten.
- 8. Plug the power cord back into the outlet.

NOTICE

If your new fuse blows soon after installing it, you could have problems in that circuit. Contact Global Surgical Technical Support for assistance.



45° Arm Version

Figure 5-10 Fuse Replacement



DISCONNECT ALL ELECTRICAL POWER PRIOR TO CLEANING AND DISINFECTING. RISK OF ELECTRIC SHOCK RESULTING IN DEATH OR INJURY IS POSSIBLE IF THE ELECTRICAL POWER IS NOT DISCONNECTED PRIOR TO CLEANING THE UNIT.



Clean and disinfect after every patient according to CDC and OSHA requirements for non-critical devices.

6.1 Cleaning and Disinfecting

- 1. The support system can be cleaned with any cleaning agent, which is used for external cleaning of electrical equipment, according to instructions given by the manufacturer of the cleaning solution. Do not use cleaning agents that are not permitted for use with plastics, i.e., ammonia, acetone, salty acids (HCI), etc.
- 2. Do not allow excessive moisture or liquids to come in direct contact with the unit.
- 3. Avoid spraying optical components.
- 4. Do not allow cleaning agents or liquids to enter the power input.
- 5. Use any disinfectant agents which are commonly applied while disinfecting surfaces of electric medical equipment. Such disinfectant agents are usually in the form of sprays or damp cloths.
- Follow the instructions given by the manufacturer of the disinfectant solution.

6.2 Cleaning the Microscope Optics

The exposed lens surfaces of the microscope system should only be cleaned when necessary to remove dust, fingerprints and other smudges. Handling optics increases their chances of getting dirty or damaged. Extreme care should be taken to avoid scratching the coated surfaces of the lenses. You should not touch any exposed lens surfaces as oil and debris from your hands can stain or damage optical coatings.

Use a low-lint soft cloth wetted with isopropyl alcohol in a circular motion starting in the center and working out towards the edge of the lens. Clean edges with a low-lint cotton-tipped swab.

7.1 Troubleshooting

Table 7-1 (below) lists some symptoms, possible causes and solutions.

Table 7-1 Troubleshooting Guide

Symptoms	Solutions	
	Ensure that the AC power cord is properly connected.	
No power to the system	Verify building circuit breaker is not tripped, or that another device works in the same outlet.	
	Check the system's fuses. If necessary, replace. Replace both fuses if either is blown.	
System arms are hard to rotate right to left	The spring arm tension adjustment knob is adjusted too tight.	
Vertical movement is difficult	Adjust counterbalance per Section 5.3.	
Vertical position of arms/ microscope doesn't stay in position when released	Adjust counterbalance per Section 5.3.	
System arms drift	Apply slight tension to the spring arm tension adjustment. If still drifting, ensure wall, floor mount, or ceiling mount is installed level and plumb.	
horizontally on their own	If floorstand arms are still drifting, move to a different location on the floor and ensure column screws are tight.	
Floorstand seems unstable	Ensure that both weights are installed in the base (under the plastic cover)	
Floorstand is difficult to roll	Ensure that all the casters are unlocked.	
	Remove horizontal arm, spring arm, or 45 degree arm, and extension arm covers. Check for damaged or pinched cable.	
LED light source does not turn on	Ensure filter lever is located at one of the three correct positions.	
	Remove horizontal or 45 °arm cover, check to ensure that the LED power cord is securely plugged into one of the plugs on the multiple socket outlet located in the horizontal or 45° arm.	
For all other issues not covered above	Call Global Surgical Technical Services See Section 8.2 for contact information.	

8.1 Warranty Information

Global Surgical Corporation warranty information is located at:

http://www.globalsurgical.com/warranty.html

90-Day Money-back Guarantee on Microscopes and Accessories.

The microscope and microscope accessories you purchase will be unconditionally guaranteed and risk-free. You may return a product to Global in good condition for any reason within 90 days of invoice and receive a full product refund. Custom microscope parts are excluded from this policy. This money-back guarantee applies to the U.S. and Canada only.

Microscope Limited Lifetime Warranty

Your microscope will include an unprecedented lifetime warranty, including parts and labor, for all optical and support components. Please refer to detailed Limited Lifetime Warranty below.

Upgradeable

We will continue to do our best to design our microscopes to be modular and upgradeable, thus greatly minimizing the possibility of obsolescence.

Microscope Limited Lifetime Warranty

Except as set forth in this Limited Lifetime Warranty, Global Surgical Corporation (the "Company") hereby warrants that each microscope product manufactured and sold by the company ("Product") shall be free from defects in materials and workmanship under normal use and service for the life of the product. This warranty is non-transferable and is valid only with respect to the original purchase of the product. The Company's obligation under this warranty shall be limited to repairing or replacing at the Company's facility and at the Company's expense, any parts of components that are demonstrated to be defective. The purchaser shall be responsible for shipment of the product to and from the Company's facility at 3610 Tree Court Industrial Boulevard, St. Louis, Missouri, 63122, Attention: Technical Service, or such other facility as the Company may otherwise designate. Under certain circumstances which are pre-approved by the Company, necessary repairs may be made at the purchaser's facility.

A return authorization is required before returning any product for warranty service by calling 1-800-861-3610. The customer is responsible for all shipping expenses. Global Surgical suggests using a method that will allow you to track the package in the event it does not arrive. Global also recommends you insure the package.

This warranty shall not be applicable to: (I) any electrically-driven products sold by the Company, (II) any products which are not manufactured by the Company which may be attached to the product, such as video equipment, camera equipment, recording devices, monitors, printers (III) any components which are consumable or are required to be replaced or disposed of in connection with normal use of the product, such as lamps, fiber optic cables, rubber eyecups and drapes, or (IV) any product which was purchased prior to April 27, 1994.

This warranty shall be void and of no effect: (I) if the product is damaged due to misuse, use in a manner other than pursuant to the instructions for the use of Product, abuse, physical mishandling or natural causes such as flood, fire, earthquake, or other perils, as determined by the Company, or (II) if any repairs or replacements are made by persons not authorized by the Company to perform such services.

The warranties set forth herein are in lieu of any and all other warranties, expressed or implied, including, without limitation, warranties of merchantability and fitness for a particular purpose. Purchaser's rights thereunder are granted in lieu of any other rights purchaser may have and purchaser hereby waives all other rights, warranties, remedies or guarantees whatsoever with respect to the product. The Company shall not be liable for any third parties with respect to the product or its performance. Further, the Company shall not be liable for, and purchaser hereby releases the Company from any direct, or indirect, consequential, special, and incidental or punitive damages with respect to the product. In no event shall the Company be liable for any breach of warranty or other claim in an amount exceeding the purchase price of the product.

Warranty for Microscope products not included in the Limited Lifetime Warranty:

Electrical and electronic components, except for the LED lightsource, have a one-year warranty. The LED lightsource has a three-year warranty.

Consumables such as fiber optic cables, eyecups etc., have a one-year warranty. Light bulbs have a warranty equal to that given by the manufacturer.

This warranty applies to the U.S. and Canada only.

For international warranty information: Email: international@globalsurgical.com

Phone: 1-636-861-3388, Fax: 1-636-861-2969

8.2 Technical Services Department

When contacting our Technical Services Department, you will be served by highly knowledgeable representatives in an efficient manner. If service is required at your location, a skilled technician or sales representive will be dispatched within 24 hours.

If you have questions that are not covered in this manual, please call the Global Surgical Technical Services Department as listed below:

Toll Free Number: 1-800-861-3610

Technical Services Representatives: 1-636-861-3388

Fax Number: 1-636-861-5284

Email: techservice@globalsurgical.com

The staffing hours for the Global Surgical Technical Services Department are Monday through Friday from 8:00 a.m. to 5:00 p.m. Central Standard Time.

Internet Access

The Global Surgical Technical Services website has information about additional products and services and can be reached by using the online at: http://www.globalsurgical.com.

Service Information

In the event of any malfunction, you should immediately contact the Global Surgical Technical Services Department for assistance. A **Customer Identification Number and Customer Order Number** will be needed when contacting the Technical Services Department. These numbers are printed on your invoice. To save time in the event service is needed, record these numbers in the spaces provided in the front of this manual.

A **Return Material Authorization (RMA) number** must be obtained from the Global Surgical Technical Services Department prior to returning a product for repair. The following information must accompany all returned units:

- 1. Your name, address, and telephone number
- 2. The RMA number
- 3. A description of the problem

Ship or return the product to:

Global Surgical Corporation

3610 Tree Court Industrial Blvd. St. Louis, MO 63122

Attention: Technical Services Department

Table 9-1 Microscope Support System Specifications

SPECIFICATIONS		M A730 MICROSCOPE SUPPORT SYSTEM			
Model		Shipping Weight			
	M A730F	187 lbs. (85kg)			
Floor Systems:	M A730FM	50 lbs. (23kg)			
	M A730FMT	65 lbs. (29kg)			
	M A730C	30 lbs. (14kg) Required for M A730-C8, M A730-C9, M A730-C10			
	M A730CMF	31 lbs. (14kg) Required for M A730-C8, M A730-C9, M A730-C10			
Ceiling Systems:	M A730-C8	15 lbs. (7kg)			
	M A730-C9	21 lbs. (10kg)			
	M A730-C10	27 lbs. (12kg)			
Wall Systems:	M A730W	28 lbs. (13kg)			
A 0	M A730-HA	40 lbs. (18kg)			
Arm System:	M A730-45A	50 lbs. (23kg)			
Weight the suppor	ting structure must hold:	500 pounds (227 kg)			
Electrical Recepta		115 VAC, 15 A, 50/60 Hz			
	not required, connection should be d circuit breaker, and for Ceiling Mount	230 VAC, 15 A, 50/60 Hz			
	nt use a receptacle controlled with a	Standard: Duplex Outlet			
wall switch.		·			
Ceiling Mounting S	Surface:				
8' (2.44 m) Mounting	g Surface	8' (2.44 mm) high 2" x 8" (51 mm x 203 mm) or larger joists on 16" (406 mm) centers: Use Model M A730-C8			
9' (2.74 m) Mounting	g Surface	Use Model M A730-C9 (Same as Model M A730-C8 except column is 12" (305 mm) longer)			
10' (3.05 m) Mounti	ng Surface	Use Model M A730-C10 (Same as Model M A730C8 except column is 24" (610 mm) longer)			
		Special construction by independent contractor must meet the above specifications.			
Custom		* If mounting to a ceiling that does not have wooden mounting surfaces,			
		mount is considered "custom" and all hardware is to be supplied by contractor.			
		Standard: 2" x 4" (51 mm x 101 mm) wood studs on 16" (406 mm)			
		centers. If metal studs: order wall mount board M W557-32.			
		If 24" (610 mm) centers: wood or metal order special mounting board			
Wall Surfaces:		M 557			
		Note: Contractor to reinforce metal studded walls or particle walls.			
		OR:			
		Standard Concrete (Cinder) Block 8" x 16" (203 mm x 406 mm)			
		1			

Table 9-2 A-Series Binocular Focal Lengths

Binocular Model	Focal Length
M A1020 Series Straight Binocular	125 mm
M A1021 Series 45° Inclined Binocular	160 mm
M A1022 Series 220° Inclinable Binocular	160 mm

Table 9-3 M A801-LED Storage and Operation Specifications

ITEM	SPECIFICATION
Light Source Type	Light Emitting Diode (LED)
Color Temperature	5500°K
LED Life	50,000 Hours (typical)
Brightness Control	Controls Light Output Range from 30%-100%
Power Consumption	25 Watts
Input Voltage	90-240 VAC, 50/60 Hz, 0.9A
Output Voltage	25-35 VDC,(Variable, Dependant on Brightness) Constant 0.70A
Mode of Operation	Continuous Operation
Water Resistant	Non-Protected Equipment, IPX0
Operation Environment: Temperature Relative Humidity Air Pressure	+10° to +40°C (50° to 104°F) 0 to 95% 700 to 1060 kPa
Storage Environment: Temperature Relative Humidity Air Pressure	-20° to +60°C (-4° to 140°F) 0 to 95% 700 to 1060 kPa
Dimensions	4.70 in (119 mm) W x 3.25 in (83 mm) H x 3.0 in (76 mm) D
Weight	1.65 lbs (74 kg 140g)
IEC 62471 Risk Group	0
Regulations / Standards	Conforms to AAMI Std ES60601-1 & IEC 60601-1-6 Certified to CSA Stds C22.2 #s 60601-1 & 60601-1-6 FCC 47CFR 15B 15.103 IEC 60601-2-57
Maximum Optical Radiation Output	118.2 Lx
Maximum Variation of Output	147 Lx
Spectral Irradiance	$3.7 \times 10^{-3} \frac{W}{M^2}$ @ 400nm,3.23 x $10^{-3} \frac{W}{M^2}$ @ 750nm,3.32 x $10^{-3} \frac{W}{M^2}$ @ 1000nm

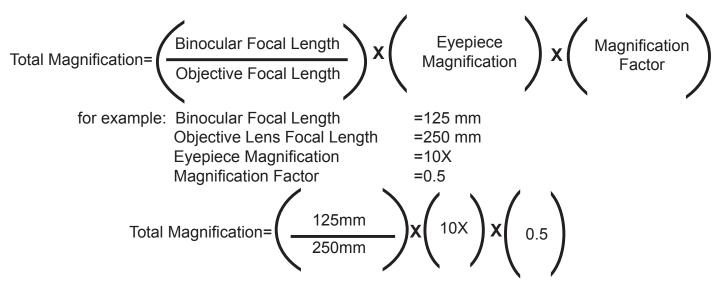
Table 9-4 A-Series Microscope Total Magnification Chart

			Turret Magnification Factor (X)						
			0.33 0.5 0.8 1.0 1.25 2.0 3.0						3.0
	A-Series A3 Microscope		X X X						
	A-Series A4 Microscope			Х	Х		Х	Х	
	A-Series A6 Microscope		Х	Х	Х		Х	Х	х
Binocular Focal Length (MM)	Objective Lens Focal Length (MM)	Eyepiece Mag (X)	Total Mag (X)	Total Mag (X)	Total Mag (X)	Total Mag (X)	Total Mag (X)	Total Mag (X)	Total Mag (X)
125	200	10	2.1	3.1	5.0	6.3	7.8	12.5	18.8
125	225	10	1.8	2.8	4.4	5.6	6.9	11.1	16.7
125	250	10	1.7	2.5	4.0	5.0	6.3	10.0	15.0
125	300	10	1.4	2.1	3.3	4.2	5.2	8.3	12.5
125	350 *	10	1.2	1.8	2.9	3.6	4.5	7.1	10.7
160	200	10	2.6	4.0	6.4	8.0	10.0	16.0	24.0
160	225	10	2.3	3.6	5.7	7.1	8.9	14.2	21.3
160	250	10	2.1	3.2	5.1	6.4	8.0	12.8	19.2
160	300	10	1.8	2.7	4.3	5.3	6.7	10.7	16.0
160	350*	10	1.5	2.3	3.7	4.6	5.7	9.1	13.7
125	200	12.5	2.6	3.9	6.3	7.8	9.8	15.6	23.4
125	225	12.5	2.3	3.5	5.6	6.9	8.7	13.9	20.8
125	250	12.5	2.1	3.1	5.0	6.3	7.8	12.5	18.8
125	300	12.5	1.7	2.6	4.2	5.2	6.5	10.4	15.6
125	350	12.5	1.5	2.2	3.6	4.5	5.6	8.9	13.4
160	200	12.5	3.3	5.0	8.0	10.0	12.5	20.0	30.0
160	225	12.5	2.9	4.4	7.1	8.9	11.1	17.8	26.7
160	250	12.5	2.6	4.0	6.4	8.0	10.0	16.0	24.0
160	300	12.5	2.2	3.3	5.3	6.7	8.3	13.3	20.0
160	350	12.5	1.9	2.9	4.6	5.7	7.1	11.4	17.1

^{*} Objective Lens Focal Length only available on M A1028ML - Multi-Focal Length Lens

9.4 Finding Total Magnification

The following formula is used to calculate the total magnification of the System:



Therefore: Total Magnification = 2.5X

The focal length is printed on each objective lens and the eyepiece magnification is marked on each eyepiece. The magnification selection knob on the microscope shows the selected magnification factor. For the binocular, the model number is printed on the bottom of the dovetail mount and the focal length of each model number is shown in Table 9-2.

9.5 Effects of Changing Components

The following chart lists the effects of changing components to the microscope system. For further information, contact Global Surgical Technical Services Department.

Table 9-5 Effects of Changing Microscope Components

What is the effect of changing		Magnification	Field of View	Intensity of Illumination	Working Height
Binocular	From 125 mm to 160 mm	Increases	Decreases	No Change	No Change
(Focal Length)	From 160 mm to 125 mm	Decreases	Increases	No Change	No Change
Objective Lens	From longer to shorter (i.e. 250 mm to 200 mm)	Increases	Decreases	Increases	Decreases
(Focal Length)	From shorter to longer (i.e. 200 mm to 250 mm)	Decreases	Increases	Decreases	Increases
Magnification	From higher to lower (i.e. 2X to 1X)	Decreases	Increases	No Change	No Change
(Manual Change)	From lower to higher (i.e. 1X to 2X)	Increases	Decreases	No Change	No Change
Eyepiece	From higher to lower (i.e. 12.5X to 10X)	Decreases	Increases	No Change	No Change
(Power)	From lower to higher (i.e. 10X to 12.5X)	Increases	Decreases	No Change	No Change







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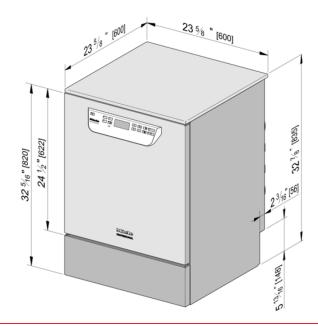
EMERGO EUROPE Prinsessegracht 20 2514 AP The Hague The Netherlands



Dental Washer-Disinfector

PG 8581



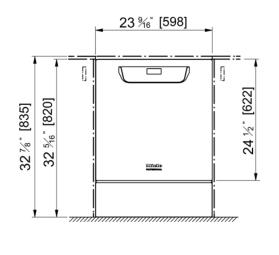


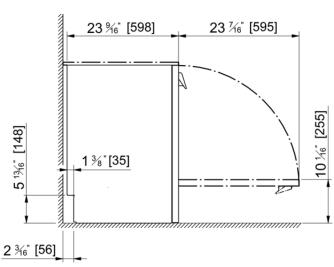
SPECIFICATIONS	
Unit Dimensions	
Overall Unit Dimensions (With Lid)	32 ⁷ / ₈ " - 35 ¹ / ₄ " (835 - 895 mm) H x 23 ⁵ / ₈ " (600 mm) W x 23 ⁵ / ₈ " (600 mm) D
Overall Unit Dimensions (Without Lid)	32 ⁵ / ₁₆ " - 34 ⁵ / ₈ " (820 - 880 mm) H x 23 ⁹ / ₁₆ " (598 mm) W x 23 ⁹ / ₁₆ " (598 mm) D
Built-in Cabinetry	
Minimum Cabinet Opening	32 ⁵ / ₁₆ " (820 mm) H x 23 ⁹ / ₁₆ " (598 mm) W x 23 ⁵ / ₈ " (600 mm) D
Plumbing	
Cold Water Connection Lines (2)	Connect to a cold water supply up to a maximum of $68^{\circ}F/20^{\circ}C$. The water pressure must be between 14.5 psi (100 kPa) and 145 psi (1,000 kPa). Recommende water pressure \geq 29 psi (200 kPa). 5' 7" (1.7 m) flexible water intake hose with a $^{3}/_{4}$ " GHT connection is supplied. If only one cold water connection is available, use supplied Y-adapter.
Hot Water Connection Line (1)	Connect to a hot water supply up to a maximum of 150°F/65°C. The water pressure must be between 5.8 psi (40 kPa) and 145 psi (1,000 kPa). 5' 7" (1.7 m) flexible water intake hose with a 3/4" GHT connection is supplied.
Demineralized Water Connection Line (1)	Connect to a pressurized demineralized water supply up to a maximum of 150°F/65°C. The water pressure must be between 4.4 psi (30 kPa) and 145 psi (1,000 kPa). 5' 7" (1.7 m) flexible water intake hose with a 3/4" GHT connection is supplied. Requirements for an unpressurized demineralized water system: An unpressurized demineralized water connection <4.4 psi (30 kPa) requires the installation of an external booster pump, which can be requested through Miele Service. Installation of pump must be carried out by Miele Service.
Drain Hose (1)	Maximum drain water temperature is 200°F/93°C. 4' 6" (1.4 m) flexible drain hose is supplied. The drain hose length cannot exceed 13' 1" (4 m). On-site hose connector ⁷ / ₈ " (22 mm) outer dia. x 1 ³ / ₁₆ " (30 mm) L.
Detergent Dispensing	
	Two internal pumps for liquid detergent and neutralizer dispensing.
Electrical Connection	
Electrical Requirements - Standard	2 AC 208V 60 Hz, 2 pole 30A, NEMA L6-30 - Rated Load: 6.2 kW
Electrical Requirements - Convertible	3 AC 208V 60 Hz, 3 pole 20A, NEMA L15-20 - Rated Load: 6.2 kW
Power Cord Length	5' 9" (1.8 m)
Other	
Net Weight	163 lbs (74 kg)
Shipping Dimensions	36¹/₄" (920 mm) H x 26³/ε" (670 mm) W x 29³/ε" (740 mm) D

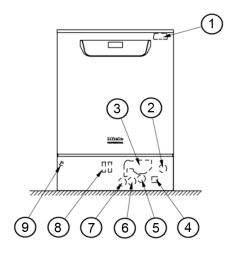


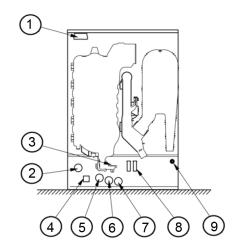
Dental Washer-Disinfector

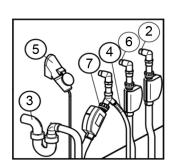
PG 8581











1	Network and printer connection
2	Demineralized water connection
3	Drain water
4	Cold water connection, steam condenser
5	Electrical connection
6	Hot water connection
7	Cold water connection
8	External dispensing system connection
9	Equipotential bonding





Installation plan

PG 8581 PG 8582 PG 8583

Installation notes

Installation requirements

Installation should be carried out by **authorized installers** in accordance with valid regulations, relevant standards and health and safety codes.

The machine must be commissioned and operators trained in its use by Miele Service or by an approved Miele Partner only. Only a Miele service technician is permitted to carry out the **startup**

procedure.

Surrounding area

Condensate can build up in the area surrounding the machine. Any cabinetry and fixtures in the room must be suitable for such an environment. If the machine is installed under a countertop (built-under model), a stainless steel panel must be installed above the door opening to provide protection from steam. The stainless steel panel can be ordered from Miele Service.

Plumbing

The cold water, hot water, demineralized water and drain water can be connected directly without a **non-return valve**. Use the supplied Y-adapter if only one cold water connection is available. The non-return valves of the water pipes must be easily accessible.

Requirements for demineralized water system

Unpressurized demineralized water system requires the installation of an external booster pump, which can be requested through Miele Service. Pump installation must be carried out by Miele Service.

Electrical connection

Connection to the electrical supply must be carried out in accordance with local and national safety regulations. The power cord must be protected from the risk of thermal damage.

It is recommended to make electrical connections via a **plug and socket** so that electrical safety checks can be carried out easily. For **hard-wired machines** this must be via a main switch to be provided on site, which must completely isolate the machine from the power supply with a contact gap of at least 1/8" (3 mm).

The plug and socket as well as the main switch must be easily accessible after the machine has been installed.

Equipotential bonding and grounding

For added safety the machine should be protected with a **residual current device** with a trip current of 30 mA. If necessary, an **equipotential bond** with good contact connection must be provided in accordance with all appropriate national and local regulations. Equipotential bonding and grounding must be completed before the machine is commissioned.

Installation notes

Connecting the external dosing system

Up to two dispensing systems for liquid process chemicals can be connected to the rear panel of the machine. The instructions below regarding machine model must be observed:

PG 8581: not availablePG 8582: 1 connection

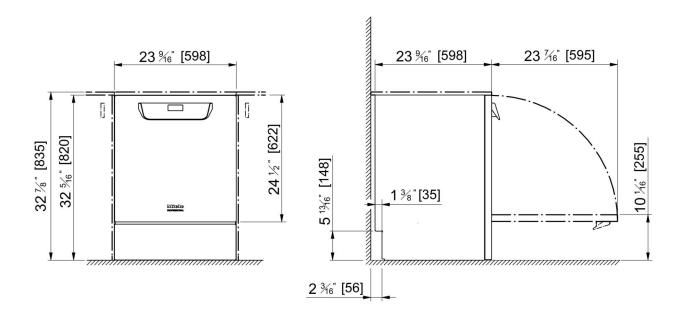
- PG 8583: 1 or 2 connections

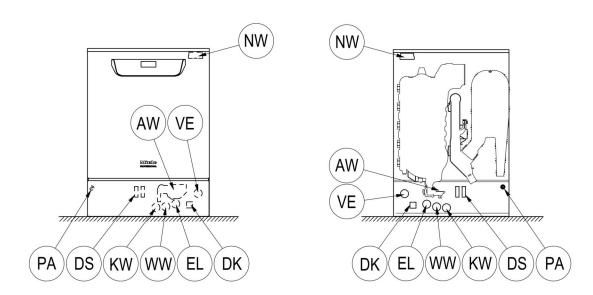
Liquid process chemicals: position of external containers The liquid process chemicals container for external dispensing must be installed **next to or underneath** the machine. Place the container next to the machine on the floor or in an adjacent cabinet. Do not position the container above the machine. The dispenser hose must not be kinked or trapped.

Communication module

An **RS 232 module** is available as an option to facilitate Process Documentation together with the PRT 100 printer.

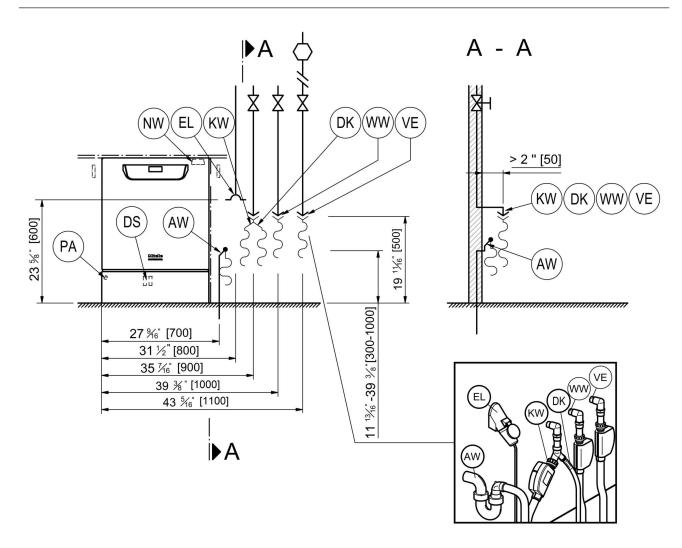
Dimensions





AW	Drain connection	NW	Network and printer connection (optional)
DK	Cold water connection, steam condenser	PA	Equipotential bonding
DS	External dispensing system connection	VE	Demineralized water connection
EL	Electrical connection	WW	Hot water connection
KW	Cold water connection		

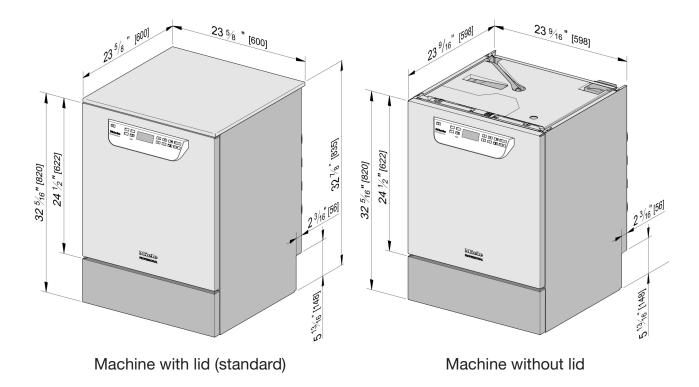
Dimensions



AW	Drain connection	NW	Network and printer connection (optional)
DK	Cold water connection, steam condenser	PA	Equipotential bonding
DS	External dispensing system connection	VE	Demineralized water connection
EL	Electrical connection	WW	Hot water connection
KW	Cold water connection		

Dimensions

Machine with and without lid



Technical data

Electrical connection

PG 8581, PG 8582

Voltage (default)	2 AC 208V 60 Hz	2 AC 208V 60 Hz
Rated load	6.2 kW	6.2 kW
Fuse rating	2 pole 30 Amp	2 pole 30 Amp
Power cord, cross-section min.	3 x AWG 10	3 x 5.2 mm ²
Length of power cord (UL 921) with plug	approx. 5'9''	approx. 1.8 m
Electrical connection	NEMA L6-30	NEMA L6-30
Voltage (convertible)	3 AC 208V 60 Hz	3 AC 208V 60 Hz
Rated load	6.2 kW	6.2 kW
Fuse	3 pole 20 Amp	3 pole 20 Amp
Power cord, cross-section min.	4 x AWG 12	4 x 3.3 mm ²
Length of power cord (UL 921) with plug	approx. 5'9''	approx. 1.8 m
Electrical connection	NEMA L15-20	NEMA L15-20

PG 8583

Voltage (default)	3 AC 208V 60 Hz	3 AC 208V 60 Hz
Rated load	6.2 kW	6.2 kW
Fuse rating	3 pole 20 Amp	3 pole 20 Amp
Power cord, cross-section min.	4 x AWG 12	4 x 3.3 mm ²
Length of power cord (UL 921) with plug	approx. 5'9''	approx. 1.8 m
Electrical connection	NEMA L15-20	NEMA L15-20
Voltage (convertible)	2 AC 208V 60 Hz	2 AC 208V 60 Hz
Rated power	6.2 kW	6.2 kW
Fuse rating	2 pole 30 Amp	2 pole 30 Amp
Power cord, cross-section min.	3 x AWG 10	3 x 5.2 mm ²
Length of power cord (UL 921) with plug	approx. 5'9"	approx. 1.8 m
Electrical connection	NEMA L6-30	NEMA L6-30

Cold water connections

Use supplied Y-adapter if only one water connection is available.

Max. temperature	68 °F	20 °C
Max. water hardness	73 gpg	70 °dH
Recommended flow pressure	29 psi	200 kPa
Minimum flow pressure with extended intake time	14.5 psi	100 kPa
Max. pressure	145 psi	1,000 kPa
Flow rate	2 gal/min	7.5 L/min
Connection Thread	3/4" Male Garden Hose Thread	3/4" Male Garden Hose Thread
Length of cold water inlet hose	5' 7"	1.7 m
Length of steam condenser inlet hose	5' 7"	1.7 m

Technical data

Hot water connection

Max. temperature	150 °F	65 °C
Max. water hardness	73 gpg	70 °dH
Recommended flow pressure	29 psi	200 kPa
Minimum flow pressure with extended water intake	5.8 psi	40 kPa
Max. pressure	145 psi	1,000 kPa
Flow rate	2 gal/min	7.5 L/min
Connection Thread	3/4" Male Garden Hose Thread	3/4" Male Garden Hose Thread
Length of hot water inlet hose	5' 7"	1.7 m

Demineralized water

Max. temperature	150 °F	65 °C
Recommended flow pressure (DI pressure-resistant)	29 psi	200 kPa
Minimum flow pressure with extended water intake	4.4 psi	30 kPa
Maximum pressure (DI pressure-resistant)	145 psi	1,000 kPa
Flow rate	2 gal/min	7.5 L/min
Connection Thread	3/4" Male Garden Hose Thread	3/4" Male Garden Hose Thread
Length of demineralized water inlet hose	5' 7"	1.7 m

Requirements for unpressurized demineralized water systems:

Minimum flow pressure with extended water intake (DI unpressurized)	1.3 psi	8.5 kPa
Maximum pressure (DI unpressurized)	8.7 psi	60 kPa
Hose from supply container to machine to be provided on site.		

Drain water

Drain water temperature	199 °F	93 °C
Length of drain hose	approx. 4' 6"	1.4 m
Drain hose, max. drainage length	approx. 13' 1"	4.0 m
Drain pump head height from floor level, max.	approx. 3' 3"	1.0 m
Drain hose delivery, max.	4.2 gal/min	16 L/min
On-site hose connector (external dia. x I)	7/8" x 1 3/16"	22 x 30 mm

Machine feet

Machine feet height-adjustable	0 - 2 3/8"	60 mm
Diameter of foot	1 3/8"	35 mm
Insert for machine foot, size of thread	M 8	M 8

Technical data

Machine dimensions

Height	32 7/8"	835 mm
Height without lid	32 5/16"	820 mm
Width	23 5/8"	600 mm
Width without lid	23 9/16"	598 mm
Depth	23 5/8"	600 mm
Depth without lid	23 9/16"	598 mm
Height of door	24 1/2"	622 mm
Net weight	163 lbs	74 kg
Dynamic floor load	1,200 N	1,200 N
Width including transport pallet min.	26 3/8"	670 mm
Depth including transport pallet min.	29 3/8"	740 mm
Height including transport pallet min.	36 1/4"	920 mm
Sound emissions in dB (A) Sound pressure LpA, washing and drying	< 70 dB	< 70 dB

Heat dissipation rate to installation room

From heat emission during operation	1,194 btu/h	0.35 kWh
From wash load on removal	1,365 btu/h	0.40 kWh

Setup requirements

Permissible ambient temperature	40 - 104 °F	5 - 40 °C
Max. relative humidity 88 °F	80 %	80 %
Rel. humidity, declining proportionally up to 104 °F	50 %	50 %
Max. altitude above sea level	4,921'	1,500 m

Please have the model and serial number of your appliance available when contacting Technical Service.



U.S.A.

Miele, Inc.

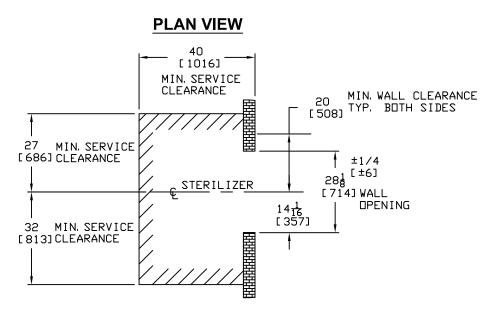
National Headquarters

9 Independence Way Princeton, NJ 08540 Phone: 800-991-9380 Fax: 609-419-4241 www.miele-pro.com

Technical Service & Support

Phone: 800-991-9380 Fax: 800-220-1348

proservice@mieleusa.com



CHAMBER SIZE
IN. (mm)

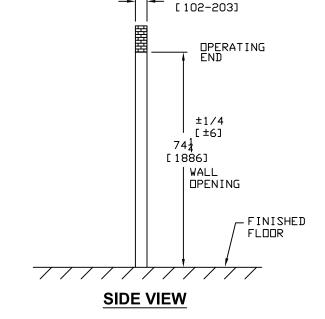
20 X 20 X 38
(508 X 508 X 965)

MAX. DUTSIDE DIM. DF STERILIZER

43 7/8 X 30 X 74 1/2
(1114 X 762 X 1891)

NOTES:

- 1. WALL THICKNESS: 4" TO 8" (102-203).
- 2. ALL DIMENSIONS IN INCHES AND (MM).
- 3. THESE SERVICE CLEARANCES MUST BE MAINTAINED TO ALLOW ACCESS TO STERILIZER FOR SERVICEABILITY.
- 4. IF LOADING CAR AND CARRIAGE ARE TO BE USED, FRONT CLEARANCE SHOULD EQUAL TWICE THE LENGTH OF THE STERILIZER.



4 TO 8

SERVICE CLEARANCE

SHT. 1 DF 6

ALL DIMENSIONS ARE IN INCHES

APPCICUAÇETE DUSTRIAN MONTHS

DWG. NO. 62941-091

STERIS*

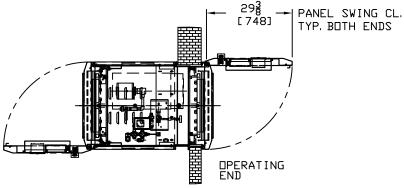
STERIS Corporation
Mentor, DH

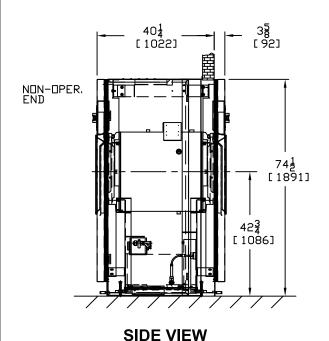
20 x 20 x 38 AMSCO 400 SERIES PREVACUUM STERILIZER DOUBLE SLIDING DOOR RECESSED ONE WALL ELECTRIC STEAM HEAT

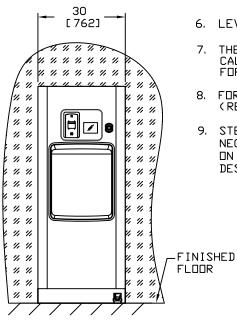
129394-055

ITEM ______
LDCATION(\$) _____

PLAN VIEW







GENERAL NOTES:

- 1. ALL DIMENSIONS IN INCHES AND (MM).
- 2. CURB WEIGHT:

20 x 20 x 38 DD VESSEL = 1600 LBS. (725 KG.)

3, MAXIMUM OPERATING WEIGHT BASED ON CHAMBER FULLY LOADED WITH WATER FLASKS:

20 x 20 x 38 DD VESSEL = 1726 LBS. (783 KG.)

- 4. FACILITY MUST PROVIDE REGULATED STEAM PRESSURE IN THE DYNAMIC RANGE SPECIFIED. FAILURE TO DO SO WILL RESULT IN IMPROPER EQUIPMENT OPERATION.
- 5. HEAT LOSS AT 70°F (21°C): 20 x 20 x 38 TO ROOM: 8750 BTU/HR (9.232 KILOJOULE)
- 6. LEVELING FEET ARE PROVIDED FOR PROPER INSTALLATION.
- 7. THE TIE-DOWN OF THIS STERILIZER HAS BEEN PRE-APPROVED IN CALIFORNIA (REF. OPA-0531). SEE STERIS DWG. NO. 83280-194 FOR SEISMIC LOADING AND TIE-DOWN SPECIFICATIONS.
- 8. FOR SEISMIC INSTALLATIONS: A SEISMIC ADD ON KIT (REF. 146660-184) MUST BE INSTALLED ON THE STERILIZER.
- 9. STERIS ASSUMES NO RESPONSIBILITY FOR CHANGES MADE NECESSARY THROUGH FAILURE TO OBSERVE THE SPECIFICATIONS ON EQUIPMENT DRAWING AND NOTE PAGES. SPECIFICATIONS AND DESCRIPTIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

FRONT VIEW

STERILIZER INSTALLATION

SHT, <u>2</u> DF <u>6</u>

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)		
APPLICABLE TO GOVERNAL NOTES APPLICABLE TO EQUIPMENT DRAWINGS		
DWG. N□.	62941-091	
STERIS"	STERIS Corporation Mentor, OH	

20 x 20 x 38 AMSCO 400 SERIES PREVACUUM STERILIZER DOUBLE SLIDING DOOR RECESSED ONE WALL ELECTRIC STEAM HEAT

129394-055

EQUIPMENT DRAWING NO.

18<u>3</u> [462]

118

[289] TO BOTTOM

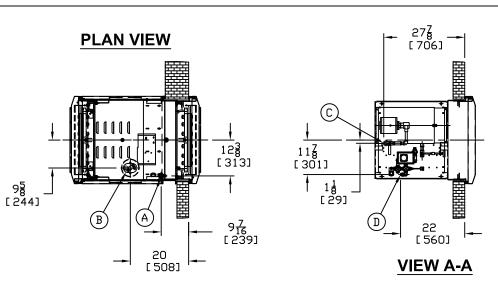
OF FUNNEL

23/

[70]

PLUMBING CONNECTIONS

- (A) STERILIZER COLD WATER
- (B) STERILIZER DRAIN
- © STERILIZER HOT WATER
- D ELECTRIC STEAM GENERATOR FLUSH DRAIN PORT



10

SIDE VIEW

[255]

NON-OPER. END OPERATING END FINISHED

NOTE: SEE SHEET 4 FOR PLUMBING INSTALLATION SPECS. AND PLUMBING REQUIREMENTS.

SHT. <u>3</u> □F <u>6</u>

ALL DIMENSIONS ARE IN INCHES APPLICABLE TO EQUIPMENT DRAWINGS DWG. NO. 62941-091 STERIS* STERIS Corporation Mentor, IIH

FRONT VIEW

FLOOR

20 x 20 x 38 AMSCO 400 SERIES PREVACUUM STERILIZER DOUBLE SLIDING DOOR RECESSED ONE WALL **ELECTRIC STEAM HEAT**

EQUIPMENT DRAWING NO. 129394-055 LOCATION(S)

INSTALLATION SPECIFICATIONS:

THE INSTALLATION OF THE CHIMERON STERILIZER MUST MEET ALL APPLICABLE REGULATIONS.

INSTALLATION SPECIFICATION IS LISTED AS ENGINEERING AND INSTALLATION GUIDES. REFERENCED COMPONENTS AND SERVICE CONNECTIONS ARE NOT FURNISHED AS PART OF EQUIPMENT UNLESS UNDER WRITTEN AGREEMENT WITH STERIS.

- 1. PIPE SIZES LISTED UNDER **PLUMBING REQUIREMENTS** INDICATE THE EQUIPMENT TERMINATION SIZES ONLY. SIZE PIPING TO EQUIPMENT DEPENDING ON LENGTH OF PIPE RUN FROM PRESSURE REGULATING STATION FOR STEAM LINE, AND MAIN WATER HEADERS. TO SUPPLY THE SPECIFIED SERVICE PRESSURE AND FLOW RATE AT EQUIPMENT TERMINALS, INCLUDE EFFECT OF COINCIDENT DRAW OF MULTIPLE UNIT INSTALLATIONS.
- 2. PROVIDE PIPING, SHUT-OFF VALVE, PIPE PLUGGED TEE, AND UNION IN STEAM AND WATER SUPPLY CONNECTIONS BETWEEN EQUIPMENT AND STUB DUTS. PLUGGED TEE CAN LATER BE USED FOR TEST PRESSURE GAUGE CONNECTION. ARRANGE CONNECTION PIPING TO ALLOW ACCESS TO MACHINE COMPONENTS AND ELECTRICAL CONTROL PANEL.
- 3. RECOMMEND PROVISION OF BLOW DOWN VALVE AT EACH STEAM AND WATER STRAINER TO ENABLE STRAINER CLEAN OUT.
- 4. FOR RECOMMENDED FEED WATER QUALITY FOR STERILIZERS AND CARBON STEEL STEAM GENERATORS, SEE STERIS DWG. NO. 62941-091
- 5. BLOW DOWN BUILDING STEAM AND WATER SUPPLY LINES BEFORE FINAL CONNECTION TO EQUIPMENT.
- 6. THE STERILIZER IS NOT SUPPLIED WITH A VACUUM BREAKER OR BACKFLOW PREVENTER AND WHERE REQUIRED BY LOCAL CODES, INSTALLATION OF SUCH A DEVICE IN WATER LINE IS BY OTHERS.
- 7. FOR GENERAL INSTALLATION INFORMATION SEE STERIS DRAWING NO. 62941-091. (THIS DWG. SHOULD ALWAYS ACCOMPANY THE EQUIPMENT DWGS.) IF DWG. IS NOT ATTACHED, CONTACT STERIS SERVICE ENGINEERING AT 1-800-333-8848 TO DBTAIN A COPY.
- 8. PLACEMENT OF PIPING SHUTOFFS: WHEN INSTALLING; SHUTOFFS MUST BE LOCATED IN A SUITABLE LOCATION WITHIN LINE OF SIGHT AND CLEAR OF ANY OBSTRUCTIONS THAT WOULD PUT THE SERVICE PERSON IN HARMS WAY IN ORDER TO SHUT IT OFF.

PLUMBING REQUIREMENTS

(A) STERILIZER COLD WATER: (SEE NOTE #4)

SUPPLY TEMPERATURE REQUIREMENTS ARE 50-70°F (10-21°C).

VACUUM EFFICIENCY IS REDUCED AT WATER TEMPERATURES

ABOVE 70°F (21°C).

1" NPT 30-50 PSIG DYNAMIC (2.1 TO 3.5 bar)

CONSUMPTION IN CYCLE:
PEAK-15 gpm (57 lpm)
AVERAGE-175 gal/cycle (662 l/cycle)

CONSUMPTION OUT OF CYCLE: AVERAGE-12 gal/hr (.76 lpm)

SFPP CYCLES REQUIRE A MINIMUM OF 40 psig COLD WATER PRESSURE.

B STERILIZER DRAIN:

1 1/2" ODT CFLOOR DRAIN CAPACITY MUST HANDLE PEAK WATER CONSUMPTION).

© STERILIZER HOT WATER:

SUPPLY TEMPERATURE REQUIREMENTS ARE =< 140°F.
WATER RESISTIVITY NOT TO EXCEED 26000 DHMS/CM.
TOTAL HARDNESS TO BE 0-3 PPM (CaCO)3
1/2" NPT:
20-50 DYNAMIC PSIG (137. 9-344. 7 KPA)
CONSUMPTION: PEAK 1 GPM, PER CYCLE 5 GAL, IDLE 1 GPH.

(D) DRAIN FROM ELECTRIC STEAM GENERATOR: 1/2" ODT.

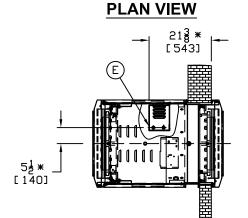
CHECK ALL NATIONAL CODES AND STANDARDS SHT. 4 DF 6

	NS ARE IN INCHES (METERS) IO GENERAL NOTES GUIPMENT DRAWINGS	20 x 20 x 38 AMSCO 400 SERIES PREVACUUM STERILIZER	EQUIPMENT DRAWING NO. 129394-055
DWG. NO.	62941-091	DOUBLE SLIDING DOOR	ITEM
STERIS*	STERIS Corporation Mentor, OH	RECESSED ONE WALL ELECTRIC STEAM HEAT	LOCATION(S)

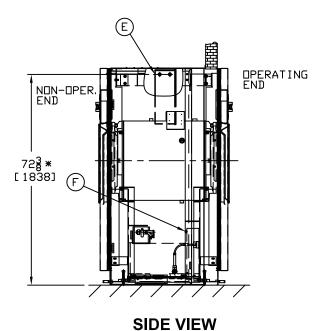
ELECTRICAL CONNECTIONS

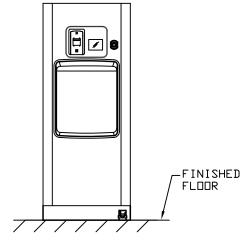
- © STERILIZER POWER
- F ELECTRIC STEAM GENERATOR POWER

NOTE: SEE SHEET 6 FOR ELECTRICAL INSTALLATION SPECS.
AND ELECTRICAL REQUIREMENTS.



* = TO CONTROL BOX HOLE (E)





FRONT VIEW

SHT. <u>5</u> DF <u>6</u>

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)		
APPLICABLE TO EQUIPMENT DRAWINGS		
DWG. NO.	62941-091	
STERIS"	STERIS Corporation	

20 x 20 x 38 AMSCO 400 SERIES PREVACUUM STERILIZER DOUBLE SLIDING DOOR RECESSED ONE WALL ELECTRIC STEAM HEAT EQUIPMENT DRAWING NO.
129394-055

ITEM ______
LOCATION(S) _____

INSTALLATION SPECIFICATIONS:

THE INSTALLATION OF THE CHIMERON STERILIZER MUST MEET ALL APPLICABLE REGULATIONS.

INSTALLATION SPECIFICATION IS LISTED AS ENGINEERING AND INSTALLATION GUIDES. REFERENCED COMPONENTS AND SERVICE CONNECTIONS ARE NOT FURNISHED AS PART OF EQUIPMENT UNLESS UNDER WRITTEN AGREEMENT WITH STERIS.

- PROVIDE GROUPED OR GANGED CIRCUIT PROTECTION AND DISCONNECT FOR STERILIZER POWER AS REQUIRED BY CODES AND STANDARDS. INDIVIDUAL POWER SHUTOFFS REQUIRED NEAR EACH MACHINE FOR SERVICING.
- 2. PROVIDE GROUNDED METAL CONDUIT AND WIRING BETWEEN EQUIPMENT TERMINALS AND STUB OUTS OR DISCONNECTS. CHECK LOCAL CODES FOR MINIMUM AWG. WIRE SIZE, #16 AWG. MINIMUM RECOMMENDED.
- 3. PLACEMENT OF ELECT. DISCONNECTS: WHEN INSTALLING; DISCONNECTS MUST BE LOCATED IN A SUITABLE LOCATION WITHIN LINE OF SIGHT AND CLEAR OF ANY OBSTRUCTIONS THAT WOULD PUT THE SERVICE PERSON IN HARMS WAY IN ORDER TO SHUT IT OFF. ALSO, THE LOCATION OF THE DISCONNECTS SHOULD ALLOW THE SERVICE PERSON TO SHUTOFF POWER FROM THE SIDE TO PREVENT POSSIBLE ARC FLASH.
- 4. CAUTION: DO NOT USE GROUND FAULT CURRENT INTERRUPTERS (GFCI).
- 5. ATTENTION: THE ELECTRICAL CLEARANCES REQUIRED BY THE NEC ARE THE RESPONSIBILITY OF THE INSTALLER. ALSO, ADHERENCE TO LOCAL CODES AND PROCUREMENT OF PERMITS ARE THE RESPONSIBILITY OF THE CUSTOMER UNLESS AGREED TO IN WRITING WITH STERIS.
- 6. FOR GENERAL INSTALLATION INFORMATION SEE STERIS DRAWING NO. 62941-091. (THIS DWG. SHOULD ALWAYS ACCOMPANY THE EQUIPMENT DWGS.) IF DWG. IS NOT ATTACHED, CONTACT STERIS SERVICE ENGINEERING AT 1-800-333-8848 TO DBTAIN A COPY.

ELECTRICAL REQUIREMENTS

E STERILIZER POWER:

CONTROL BOX FOR: 120V, 50/60 HZ, 9.5 AMP SINGLE PHASE SERVICE. MINIMUM RECOMMENDED LINE AND GROUND CONDUCTOR SIZE AWG #12 COPPER (2.05MM).

120VAC REQUIRE A THREE (3) WIRE CONNECTION (L1, NEUT, GND.).

MINIMUM 15A CIRCUIT BREAKER IS RECOMMENDED. INSTALLED NEAR THE EQUIPMENT WITHIN EASY REACH OF THE OPERATOR AND MARKED AS THE DISCONNECTING DEVICE FOR THE EQUIPMENT.

(F) ELECTRIC STEAM GENERATOR POWER:

30 KW HEATERS

208VAC, 50/60HZ, 83A, (3) PHASE. MINIMUM 90A CIRCUIT BREAKER RECOMMENDED. MINIMUM RECOMMENDED LINE CONDUCTOR SIZE AWG #1 COPPER (42.4 MM²) 75°C (167°F). REQUIRES A FOUR (4) WIRE "DELTA" CONNECTION (L1, L2, L3, GND.).

240VAC, 50/60HZ, 72A, (3) PHASE. MINIMUM 80A CIRCUIT BREAKER RECOMMENDED. MINIMUM RECOMMENDED LINE CONDUCTOR SIZE AWG #4 COPPER (21.5 MM²) 75°C (167°F). REQUIRES A FOUR (4) WIRE "DELTA" CONNECTION (L1, L2, L3, GND.).

480VAC, 50/60HZ, 36A, (3) PHASE. MINIMUM 45A CIRCUIT BREAKER RECOMMENDED. MINIMUM RECOMMENDED LINE CONDUCTOR SIZE AWG #8 COPPER (8.6 MM^2) 75°C (167°F). REQUIRES A FOUR (4) WIRE "DELTA" CONNECTION (L1, L2, L3, GND.).

CHECK ALL NATIONAL CODES AND STANDARDS SHT. 6 DF 6

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)			
APPLICABLE TO EQUIPMENT DRAWINGS			
DWG. N□.	62941-091		
STERIS*	STERIS Corporation Mentor, DH		

20 x 20 x 38 AMSCO 400 SERIES PREVACUUM STERILIZER DOUBLE SLIDING DOOR RECESSED ONE WALL ELECTRIC STEAM HEAT

EQUIPMENT DRAWING NO. 129394-055				
ITEM				
LOCATION(S)				



WALL LEGEND

EXTERIOR

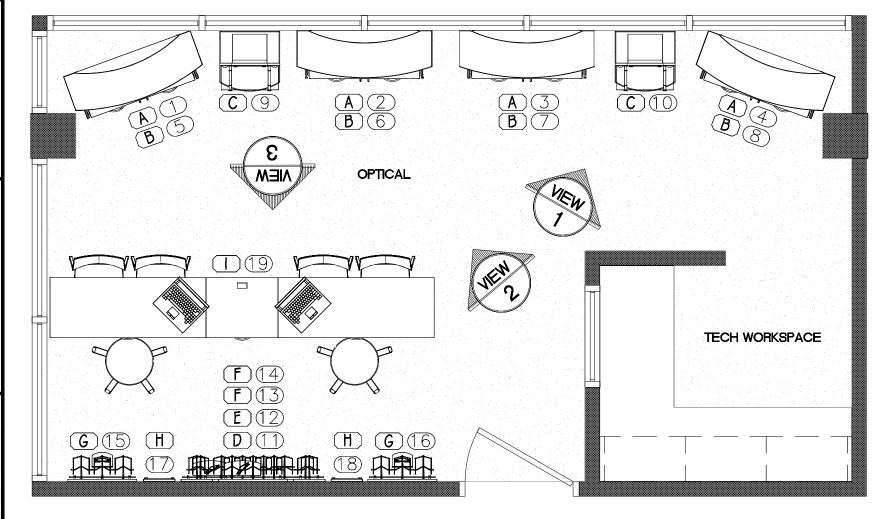
EXISTING

NEW

OPENING

NOTE: PLEASE VERIFY HEIGHTS. FASHION OPTICAL DISPLAYS CANNOT BE RESPONSIBLE FOR INACCURACIES

GROUND CEILING HEIGHT: 9'-0" SOFFIT HEIGHT FLOOR LEVEL



FLOOR PLAN

SCALE 3/8" = 1'-0"

SHEET

DESIGN PREPARED FOR: CHEROKEE NATION - STILWELL

DRAWN BY: LORI ESTRADA - BW FILE #: L57730J

DATE: October 7, 2019 DRAWING SCALE: 3/8" = 1'-0"

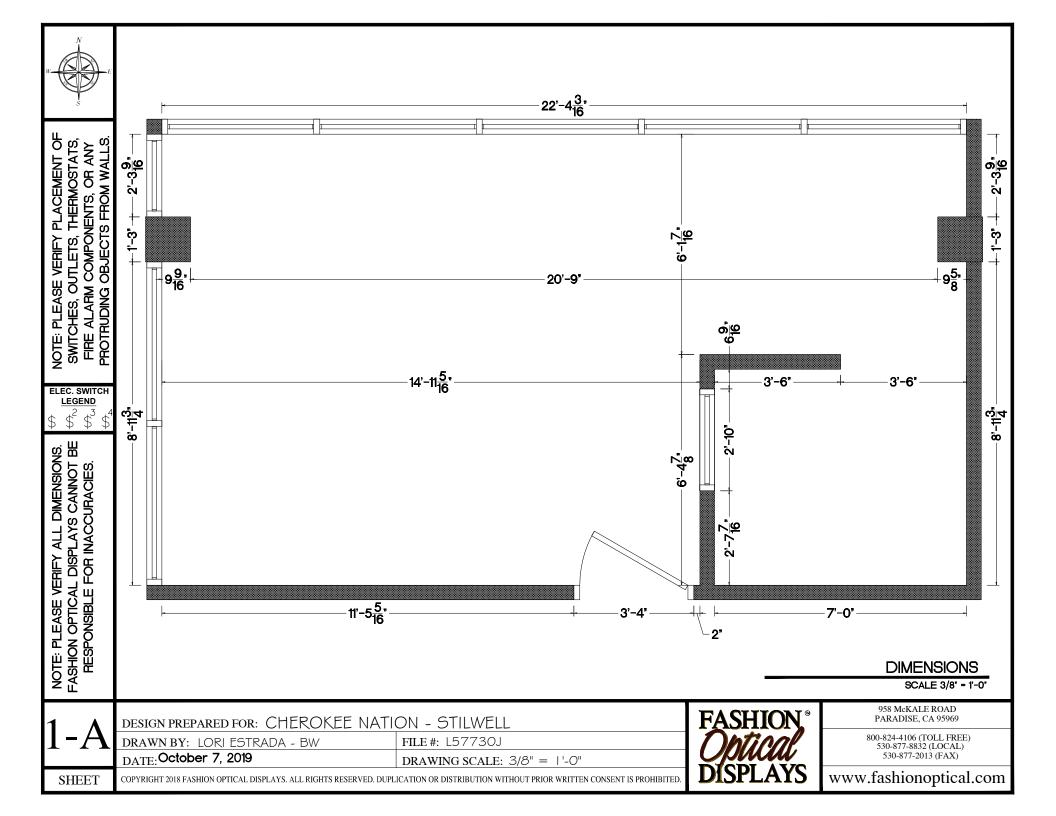
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958 McKALE ROAD PARADISE, CA 95969

800-824-4106 (TOLL FREE) 530-877-8832 (LOCAL) 530-877-2013 (FAX)

www.fashionoptical.com



APPROX. 467 FRAMES DISPLAYED + 100 FRAMES IN TRAYS

REF.#	DESCRIPTION	MODEL #
А	5-WIDE OVATION FREESTANDING DISPLAY (75 FRAMES)	FD-500C
В	OVATION ROLLING CREDENZA W/ FRAME DIVIDERS IN DRAWERS (25 FRAMES IN TRAYS)	CA-500C-ODD
С	FREESTANDING BOW MIRROR W/ PERMANENT GLASS SHELF	WD-42 A-PGS-FREESTANDING
D	6-ROW SHORT OMNI WALL DISPLAY (42 FRAMES)	OM-433
E	3-ROW SHORT OMNI WALL DISPLAY (2 FRAMES)	OM-4325
F	I-ROW SHORT OMNI WALL DISPLAY (7 FRAMES)	OM-4315
G	3-ROW TALL OMNI WALL DISPLAY (45 FRAMES)	OM-432T
Н	OMNI WALL MIRROR	OM-430
1	24" 3 DRWR TABORET W/ DUAL 53" STRAIGHT TABLE WINGS - TAPERED LEGS	TA-4 OA/ (2) STW53-TPL
J		
K		
L		
М		
N		
0		
Р		
Q		
R		
S		
Т		
U		

CRATES

DESIGN PREPARED FOR: CHEROKEE NATION - STILWELL

DRAWN BY: LORI ESTRADA - BW
DATE: October 7, 2019

SHEET

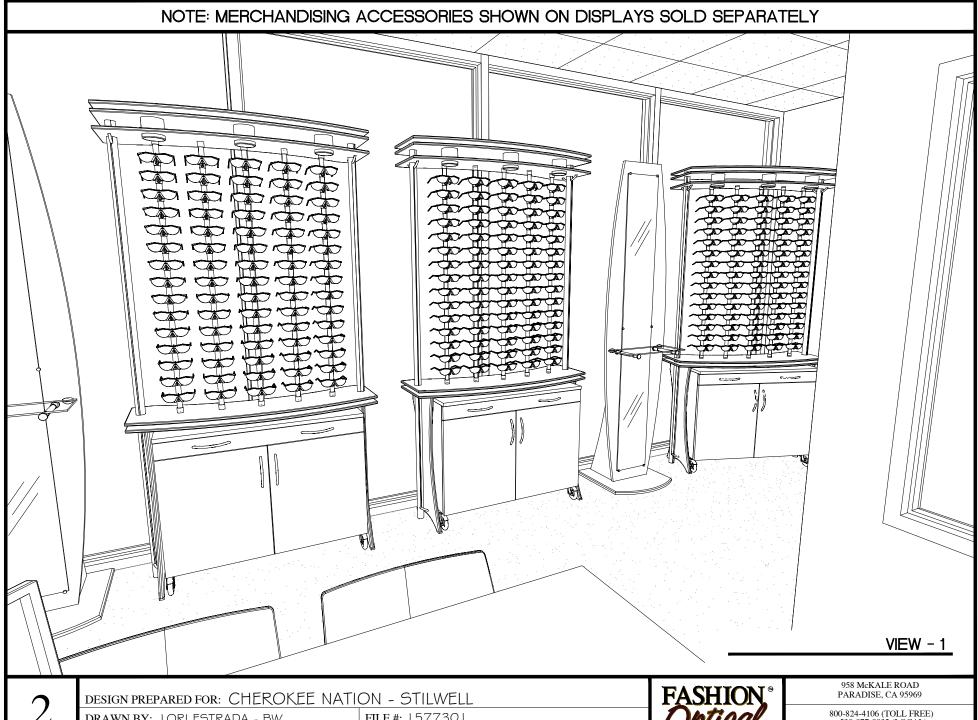
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SHEET

DRAWN BY: LORI ESTRADA - BW FILE #: L57730J

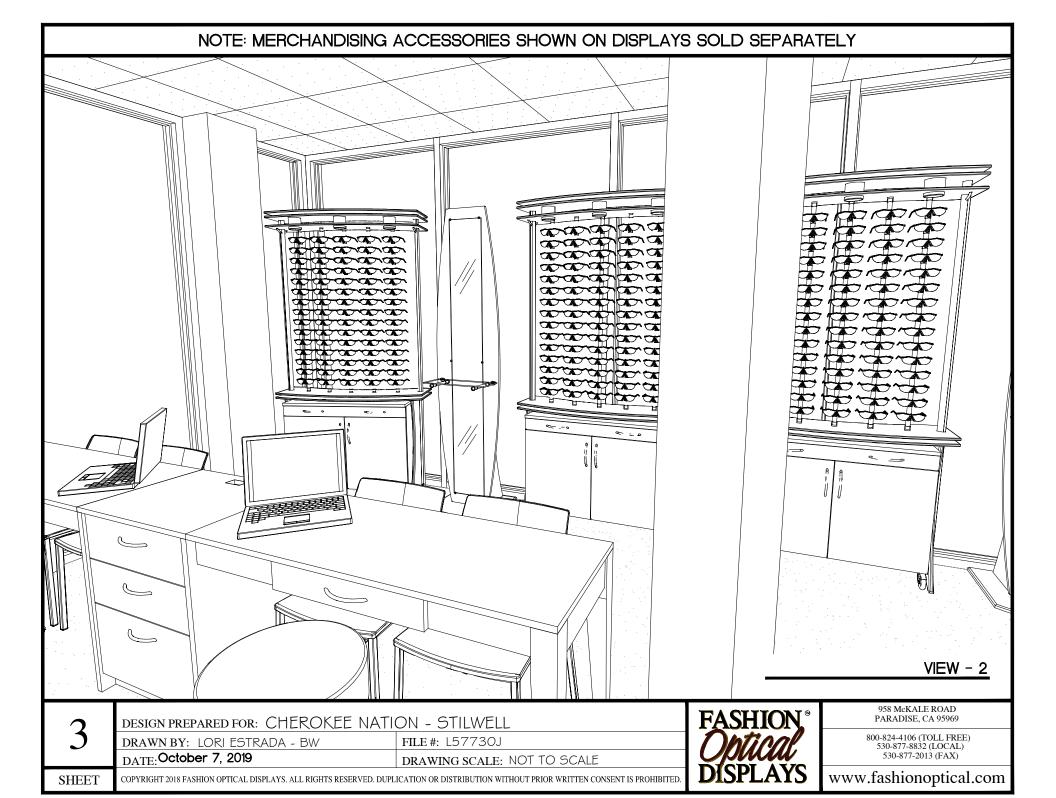
DATE: October 7, 2019 DRAWING SCALE: NOT TO SCALE

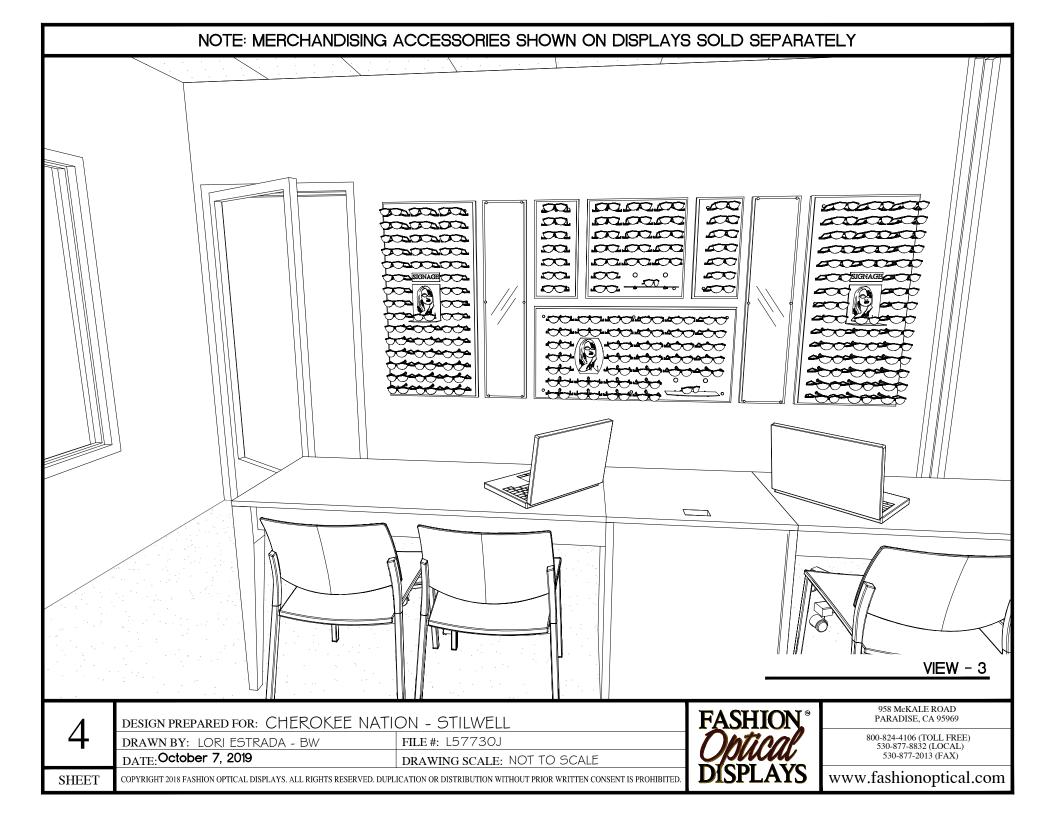
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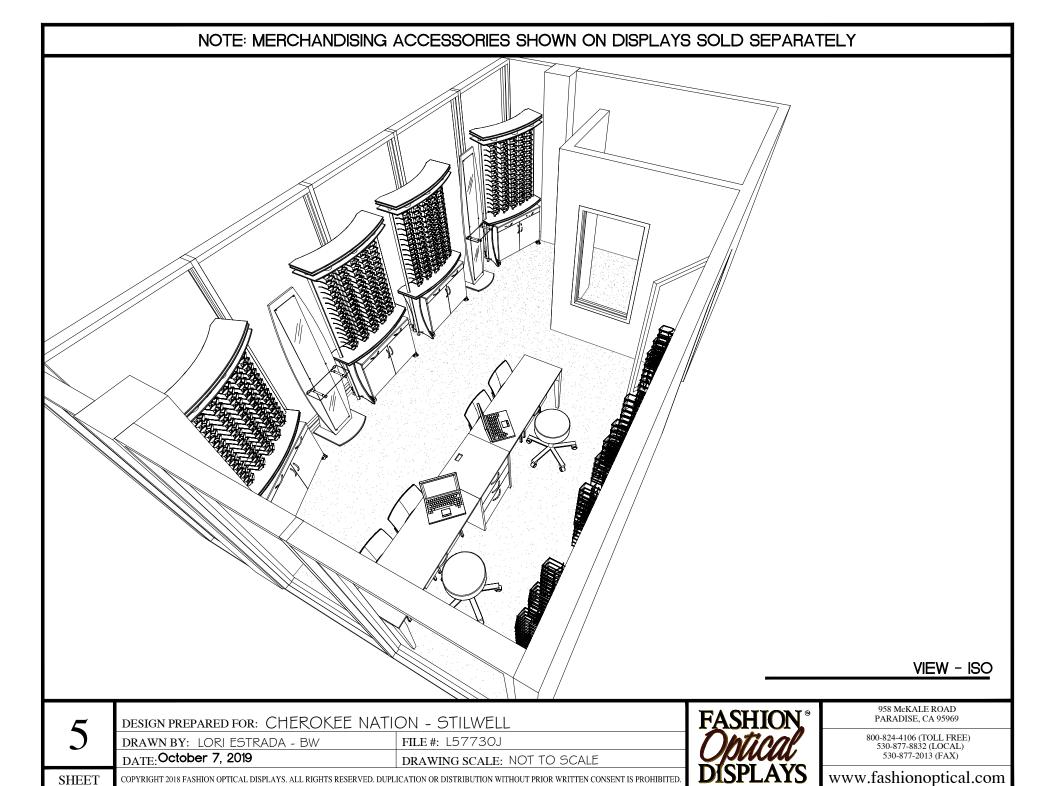


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ELECTRICAL LEGEND

STANDARD DUPLEX OUTLET

DATA /COM OUTLET

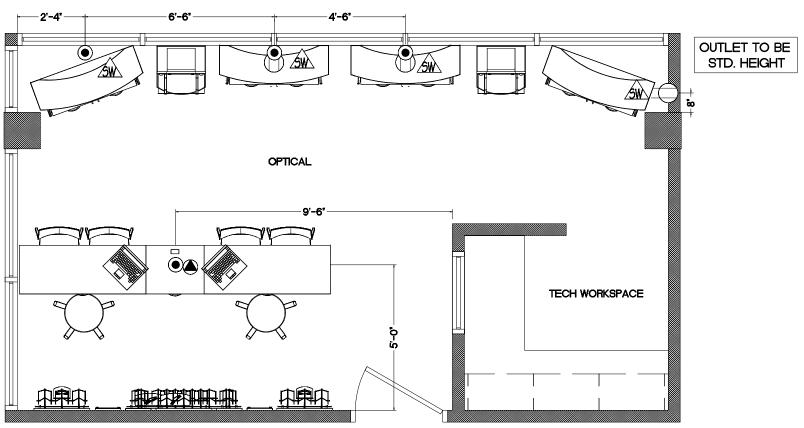
FLOOR OUTLET

ELEMENTAL LINEAR FIXTURE

FURNLITE CAN FIXTURE

PEGASUS FIXTURE

SWITCH PROVIDED BY
FASHION OPTICAL DISPLAYS



DESIGN PREPARED FOR: CHEROKEE NATION - STILWELL

FILE #: L57730J

REV. DATE: October 7, 2019

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NOTES:

- 1. ALL OUTLETS FOR DISPLAYS TO BE WIRED TO A MASTER SWITCH IF POSSIBLE.
- 2. CLIENTS TO VERIFY COMPLIANCE W/LOCAL BUILDING AND SAFETY CODES.

FASHION OPTICAL DISPLAYS CAN NOT BE RESPONSIBLE FOR NON-COMPLIANCE





CIRRUS™ HD-OCT 5000 and 500

Technical Specifications



CIRRUS™ HD-OCT Technical Specifications

OCT Imaging	T Imaging Model 5000 Model 500		
Methodology	Spectral domain OCT	Spectral domain OCT	
Optical source	Superluminescent diode (SLD), 840 nm	Superluminescent diode (SLD), 840 nm	
Scan speed	27,000 - 68,000 A-scans per second ¹	27,000 - 68,000 A-scans per second ¹	
A-scan depth	2.0 mm (in tissue), 1024 points	2.0 mm (in tissue), 1024 points	
Axial resolution	5 μm (in tissue)	5 μm (in tissue)	
Transverse resolution	15 μm (in tissue)	15 μm (in tissue)	

undus Imaging Model 5000		Model 500	
Methodology	Line scanning ophthalmoscope (LSO)	Live OCT Fundus™	
Live fundus image	During alignment and during OCT scan	During alignment	
Optical source	Superluminescent diode (SLD), 750 nm	Superluminescent diode (SLD), 840 nm	
Field of view	36 degrees W x 30 degrees H	36 degrees W x 22 degrees H	
Frame rate	> 20 Hz	> 1.7 Hz	
Transverse resolution	25 μm (in tissue)	45 μm (in tissue)	

Iris Imaging	Model 5000	Model 500	
Methodology	CCD camera	CCD camera	
Resolution	1280 x 1024	1280 x 1024	
Live iris image	During alignment	During alignment	

Electrical and Physical	Model 5000	Model 500	
Weight	80 lbs (36 kg)	76 lbs (34 kg)	
Dimensions of instrument	26L x 18W x 21H (in) 65L x 46W x 53H (cm)	26L x 18W x 21H (in) 65L x 46W x 53H (cm)	
Dimensions of table	39L x 22W (in) 99L x 56W (cm)	39L x 22W (in) 99L x 56W (cm)	
Fixation	Internal, external Internal, external		
Internal fixation focus adjustment	-20D to +20D (diopters)	-20D to +20D (diopters)	
Electrical rating (115V)	Single Phase, 100–120V~ systems: 50/60Hz, 5A	Single Phase, 100–120V~ systems: 50/60Hz, 5A	
Electrical rating (230V)	Single Phase, 220–240V~ systems: 50/60Hz, 2.5A	Single Phase, 220–240V~ systems: 50/60Hz, 2.5A	

Internal Computer	Model 5000	Model 500
Operating system/processor	Windows® 7, 4 th generation i7 Intel® processor	Windows® 7, 4th generation i7 Intel® processor
Memory	16 GB	16 GB
Hard drive/internal storage	≥ 2 T > 200,000 scans	≥ 2 T > 200,000 scans
Display	Integrated 19" color flat panel display	Integrated 19" color flat panel display
USB ports	6 ports	6 ports

Technical specifications subject to change.







5160 Hacienda Drive Dublin, CA 94568 USA www.zeiss.com/cirrus

Carl Zeiss Meditec, Inc.



Goeschwitzer Str. 51-52 07745 Jena Germany www.zeiss.com/cirrus

EN_31_022_00251 / US_31_022_00251

Printed in Germany. CZ-07/2016

All existing scan patterns in version 6.5 software run at 27,000 A-scans per second.
 The fundus image acquired with the Model 500 will be captured at 68,000 A-scans per second.

VISUCAM^{PRO NM} The non-mydriatic solution for fundus imaging.



Simplifying Photography.

The VISUCAM^{PRO NM} increases the quality and simplicity of fundus imaging. This compact device features a unique combination of functions, enhances fundus visualization and documentation, and sets the standard in ophthalmic photography. The VISUCAM^{PRO NM} provides leading edge performance enabled by the following benefits:

Optical brilliance

Legendary ZEISS optics and the integrated digital image sensor with 5.0 megapixels.

Work in total comfort

Focusing and positioning aids, software guidance, intuitive operation and real-time display on a flat screen monitor.

Auto flash mode

Every image is correctly illuminated, regardless of the pupil size and retina type.

Small pupil capabilities

Non-mydriatic image capture of fundus imaging through the smallest pupil size in the industry.

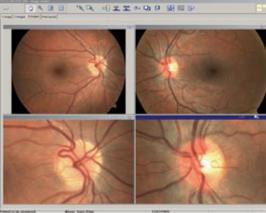
All-in-one approach

High quality ZEISS fundus imaging in a compact system:

- Highly corrected ZEISS optics with an advanced professional grade digital sensor
- Integrated computer and database, including multiple options for image comparison and review
- Quick image transfer via network, USB stick or DVD.









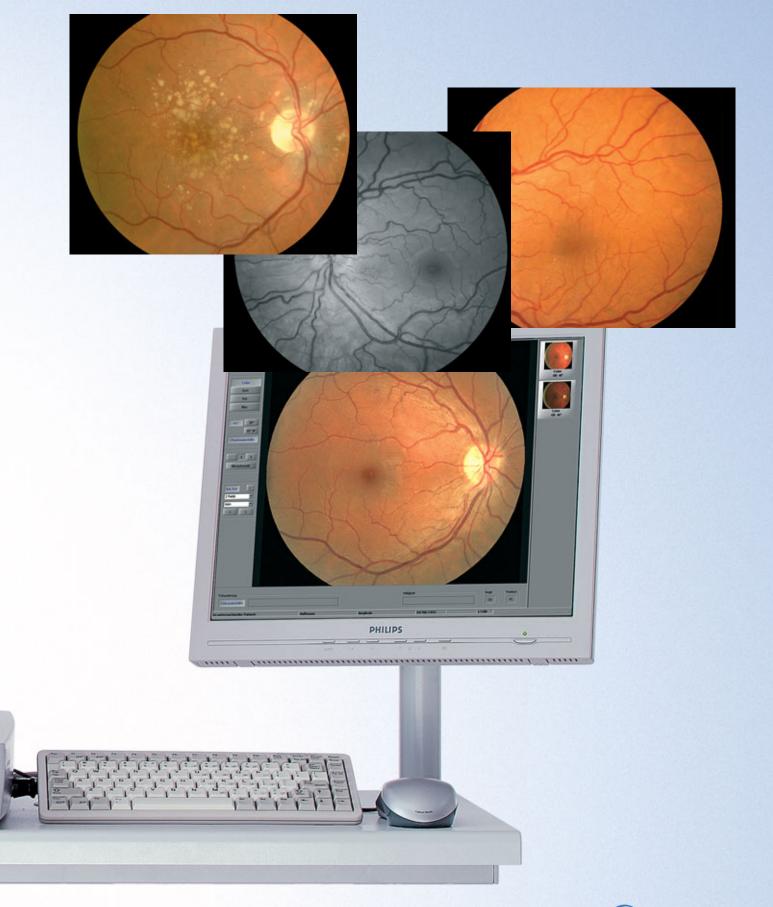






Image is everything.

ZEISS optics

The demonstrated quality of ZEISS optics assures that your images will give you the sharpest detail.

5.0 megapixel images

The pixel count and optimized signal processing enable outstanding quality in image documentation.

45° and 30° images

The system features the ophthalmoscope principle incorporated in modern fundus cameras and the two field angles 45° and 30°.

Different capture modes

Green, red and blue images are all possible either as separate photos or as a subsequent RGB layer of a color photo.

Stereo image mode

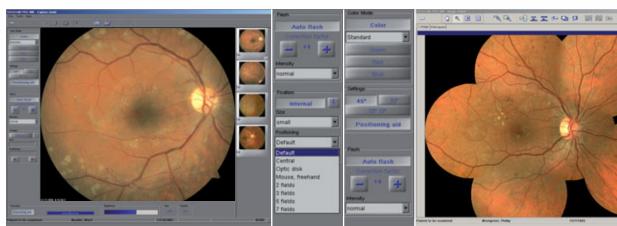
The stereo mode features easy capture and operation.

Fixation mode

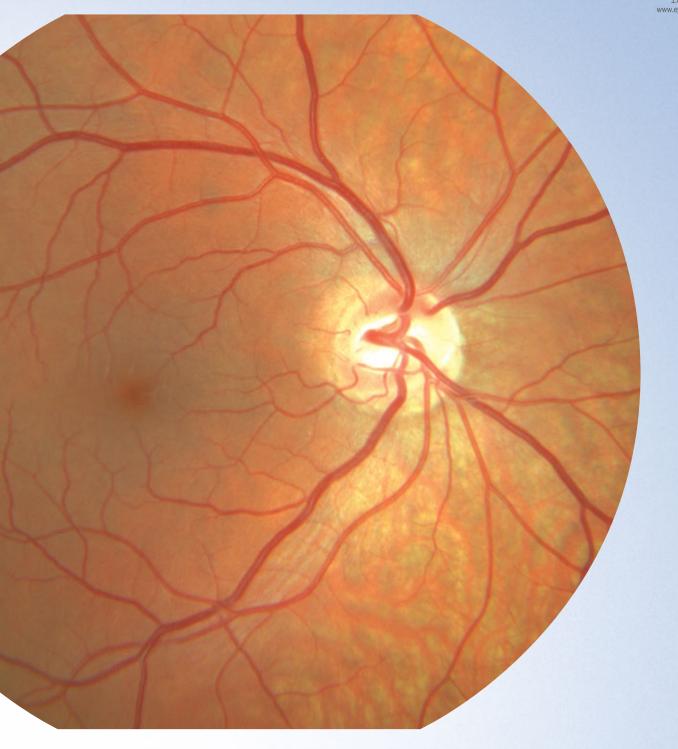
A single click suffices to switch between external and internal fixation. The internal targets are either freely positionable in different sizes or they follow programmed sequences.

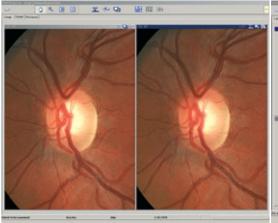
Zeiss Automap

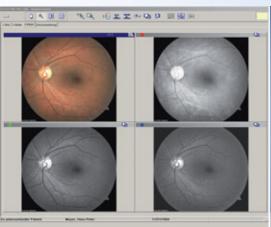
Clearly structured montages are automatically produced of peripheral photos.















Optimized practice efficiency.

Everything is integrated

The VISUCAM Offers a full performance spectrum from image capture to image documentation - in a single, state-of-the-art system featuring all hardware and software required.

Everything is simple

Easy operation ensures a smooth, rapid workflow for the user. The system's many excellent benefits include:

- Customized software settings
- Positioning aid with working distance dots
- · Focusing aid with paired coincidence lines
- Panorama mode for automatic image montages

Everything is visible

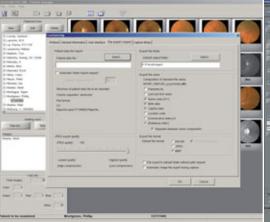
Visual overview and assessment are possible at all times in every phase of the examination - thanks to the 17" flat screen monitor. The path from the live focusing image to the digital document is short. When the image is captured, it immediately appears on the monitor and is automatically stored.

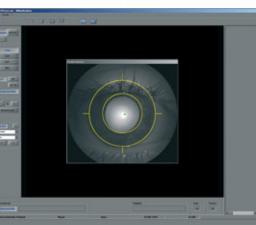
Everything is possible

With its excellent image quality, VISUCAM also makes the perfect solution for studies. The 7 field mode, the 30° field angle and 3D images are integrated for this purpose.

Everything is reliable

Software manages image display, editing, printing and data export. Password-protected user management prevents unauthorized access to images and patient data. VISUPAC performs archiving in networks, while DVDs/CDs or USB sticks are more suitable for simple export.











Technical Data.

Image capture

Field angle 45° and 30° Compensation +35 D ... -35 D, continuous

Compensation of ametropia

Filters UV and IR barrier filter

Pupil diameter ≥ 4.0 mm

≥ 3.3 mm (30°, SP mode)

Working distance 40 mm

Capture sensor CCD 5.0 megapixels

Monitor 17" flat screen (1280 x 1024 pixels)

Fixation external Optional

internal Programmed sequences

or freely positionable,

size selectable

Attention mode Fixation target, magnified and blinking

Flash for image capture Xenon flash lamp, 16 steps

Database Patient information and images

with field angle, R/L, date of visit

Computer

Operating system Windows XP professional
Hard drive Up to 60,000 images storable
Interfaces USB ports, Ethernet, VGA port
Export Image formats dcm, bmp, jpeg,

patient list

Internal DVD burner UDF format (DVD, CD)

Dimensions I/b/h mm (in.)

Basic system 480 x 410 x 670 (18.9 x 16.1 x 26.4) Monitor 400 x 400 x 100 (15.7 x 15.7 x 3.9)

Weight of basic system 30.0 kg (66.15 lbs)

Rated voltage $100 - 240 \text{ V} \pm 10 \text{ % (self-adjusting)}$

Frequency 50/60 HZ

Power consumption 400 VA

Instrument table Asymmetric

Accessories /add-ons External fixation device

USB printer USB stick 1 GB VISUPAC archiving and image analysis system Network insulator





When your patients entrust you with their eyesight, their vision and your expertise converge. For the world's most advanced surgical and diagnostic solutions in ophthalmology, you can turn to Carl Zeiss Meditec. We're committed to earning your trust anew, every day.



/ ENCORE AUTOMATIC CHAIR

• Easy-to-use backlit fingertip switches on both sides control chair elevation, recline and return functions.

Programmability allows the touch of a switch to instantly recline the chair to form a bed or any position desired. Another touch, and the chair assumes its original seated position.

- Recline, as well as elevation, is controlled by Marco's exclusive field-proven hydraulic system for smooth, quiet adjustments.
- Corded foot-pedal allows auxiliary control of elevation, recline and automatic return.
- •Can be interfaced with Marco's Encore and Deluxe2 Stands to form a wheelchair-accessible system.
- Standard single-handed headrest with unique lock indicator assures the headrest is firmly and securely in position. Optional pillow headrest and surgical package are also available.
- Scuff-resistant, high-impact covers on arms and chair base are easily cleaned.
- Standard Marco ten-step, hand-finished painting process.
- The Encore Automatic Chair includes the special Boltaflex
 Sierra upholstery which features a protective fabric finish that is easy to clean.
- •A pneumatically-assisted manual version of the Encore Chair is available for greater value in applications that don't require automated recline functions, Stock #1280.



With the touch of a button, the **Marco Encore Automatic Chair** quickly reclines from an upright position to a fully horizontal, flat-table mode—or anywhere in between. Another button instantly returns the chair to its upright position. Marco's exclusive hydraulic system ensures silky smooth elevation and recline. This

Single-handed headrest

unique, fail-safe hydraulic mechanism also enables the chair to descend to an extremely low position for easy entry by elderly patients, yet the high-end elevation remains uncompromised. Backlit flat overlay switches on both sides of the chair are easy to see in darkened rooms. The Marco Encore Automatic Chair is the ideal choice for those who prefer instant, automatic recline functions. Electrical requirements:



Backlit flat overlay switches are easy to see in a darkened room.



Easy, "dial-in" programming control with safety switch to disable chair operation

110V AC, 50/60 Hz, 7 amps maximum.



Encore Automatic Chair in fully reclined position with Surgical Package installed

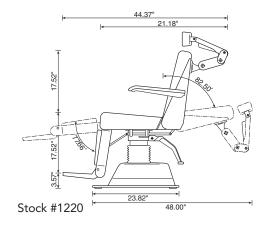


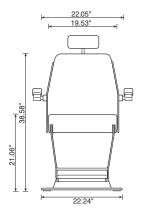
Ask your Marco Distributor about The Marco Package Plus Program.

PLAY IT SAFE.

Protect your warranty. Buy your Marco product only from an authorized Marco distributor. Call Marco for the name of the distributor nearest you.

MEASUREMENTS









The industry's standard in efficient, instrument-delivery systems just got better. The new modern **DELUXE 2 STAND** clearly offers more pure quality and cosmetic appeal than any other instrument stand on the

market. Innovative features such as an electronic slit lamp arm release button, overhead room light switch, and a laborious ten-step hand-finished painting process make the Deluxe 2 Stand a unique and differentiated product. While maintaining our usual high standards of function, quality and



Deluxe 2 Lower Slit Lamp Arm

durability, the new Deluxe 2 Stand also remains competitively priced. For a compelling side-by-side demonstration against any other instrument stand, contact your local authorized Marco distributor.

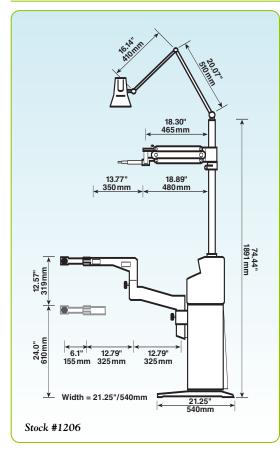


Deluxe 2 Stand fullfeatured instrument control panel, Stock #1206



Non-console Deluxe 2 Stand instrument control panel, Stock #1213

MEASUREMENTS





Ask your Marco Distributor about The Marco Package Plus Program.



PLAY IT SAFE. Protect your warranty. Buy your Marco product only from an authorized Marco distributor. Call Marco for the name of the distributor nearest you.







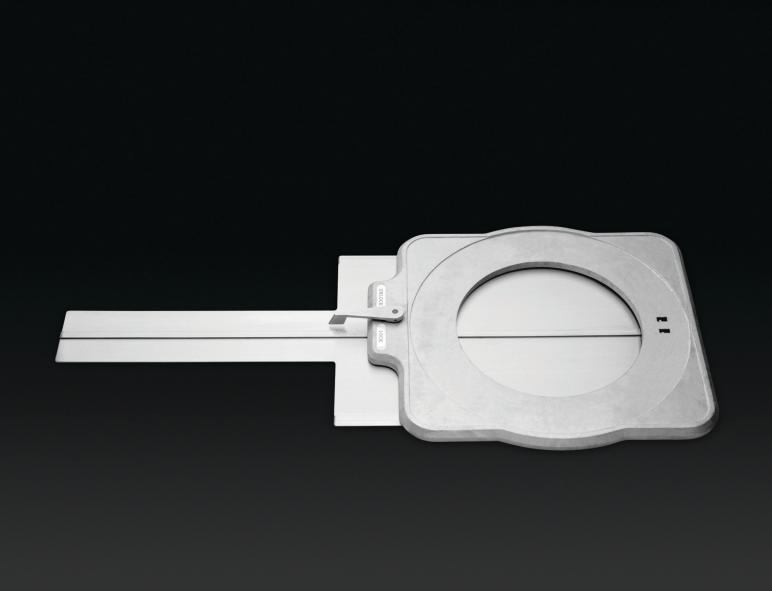












940Chair Glide for ADA Compliance



940Chair Glide for ADA Compliance



The 940 chair glide allows the practitioner to slide the existing chair back to accommodate wheelchairs. Its slimeline chair track also provides maximum access to the patient.

Base Plate

You can place the satin finished, stainless steel base plate on any floor or carpet. Centered on the plate, a stainless steel track guides the carriage and prevents lateral movement. Heavy-duty stops on the base plate limit the distance of travel.

Carriage

A heavy-duty cast aluminum carriage accommodates virtually any Reliance based chair.

Glide System

Case hardened steel rollers enable the practitioner to effortlessly slide chair out of the way and replace it with a wheelchair. The range of travel is 27".

Tapered Track

Track tapers into a 6" tail, which allows the practitioners to move an examination stool closer to the chair to provide greater accessibility to the patient.

Locking Pedal

Conveniently located foot lever activates and releases a friction lock that secures the chair in position anywhere along its 27" path.

ADA Compliance

The Model 940 helps practitioners comply with the mandatory requirements of the Americans with Disabilities Act. The entire cost of the Model 940 may be applied toward the tax credit provided by this legislation.

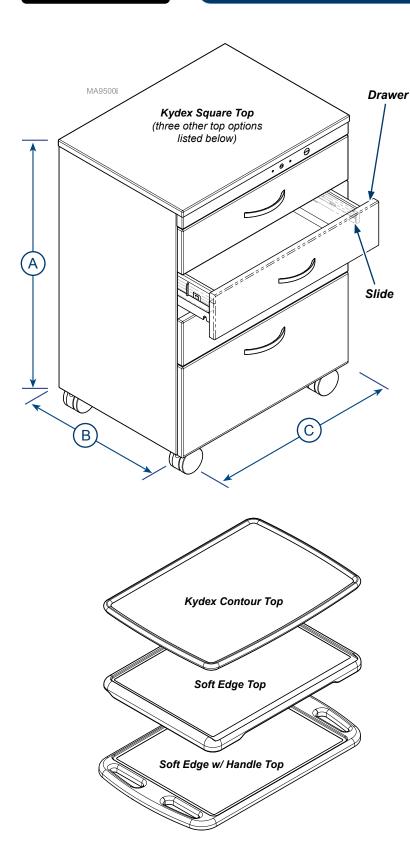
Dimensions and Specifications

Base plate length: 52" overall; wide section: 28"; narrow: 24". Base plate width: wide section: 20"; narrow: 6". Track: 3/4" wide x 3/16" high x 52" long. Overall carriage length: 29". Overall carriage width: 26".





Specifications: Mobile - Synthesis™ Casework Collection



Dimension Ranges				
(height) 27, 31 and 33 in				
B (depth) 18 and 24 in				
C (width)	18, 21 and 24 in			

Cabinet:

 Powdercoated 18 gauge cold rolled steel; multi-piece shell and frame design; riveted and press joined (Tog-L-Loc®)

Door Construction:

- Front/Back: 12 Mil. Seamless polymer-covered front; melamine back (Frost in color).
- Core: 45 lb. LEED IEQ compliant MDF board, 3/4 inch thick. All composite wood material to meet CARB P2 emission std of CARB reg. 91320.2.
- Hinges: Manufacturer's standard Blum®, concealed, selfclosing, 110 deg. opening, nickel-plated metal, clip-on mount, three adjustment points.
- Pulls: 128 mm pull offering for Serenity, Transcend, and Pinnacle Style Panels; Integrated front pull design (Cove style); Recessed clear snap-on handle w/interchangeable color strips (Renew style).

Drawers:

- Deep Drawer Construction: One piece molded polystyrene drawer bodies w/rounded corners; (Frost in color).
- File Drawer Construction: 18 gauge cold rolled steel frame; including suspended file system/bars.
- Front/Back: 12 Mil. Seamless polymer-covered front; melamine back (Frost in color).
- Core: 45 lb. LEED IEQ compliant MDF board, 3/4 inch thick.
 All composite wood material to meet CARB P2 emission std of CARB reg. 91320.2.
- Slide: Manufacturer's standard Accuride Aero (100 lb. capacity) ball bearing slides; Accuride Model 3832 (100 lb. capacity) for pullout writing surfaces and waste cans; and heavy duty Accuride Model 3640 (200 lb. capacity) slide for file drawers and heavy duty pull out shelves.
- Pulls: 128 mm pull offering for Serenity, Transcend, and Pinnacle Style Panels; Integrated front pull design (Cove style); Recessed clear snap-on handle w/interchangeable color strips (Renew style).

Adjustable Shelving:

 Powdercoated 18 gauge cold rolled steel, painted to match cabinet color; manufacturer's standard die cast zinc support clips.

Locks:

- Doors: Manufacturer's standard Timberline, individually mounted, cam style lock removable lock plug; locks keyed alike with two keys per lock.
- Drawers: Manufacturer's standard Timberline lock body with removable lock plug with 14 gauge cold rolled steel pivoting lock bar for central lock system; locks keyed alike with two keys per lock.

Casters

 Manufacturer's standard Shepherd Caster Corp®, 60 mm nylon or 4 in twin wheel design with elastomeric treads, stem mounting; locking wheel.



Humphrey Field Analyzer 3 from ZEISS

The best just got faster

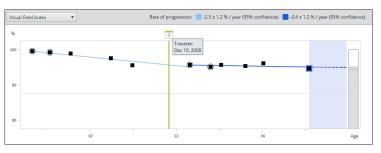


Review the complete HFA3 exam history with Glaucoma Workplace*

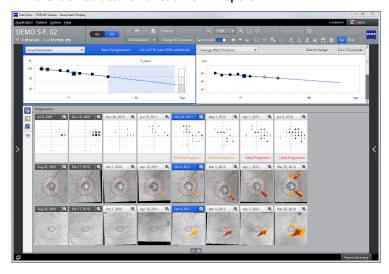
- Advanced, interactive review of all standard HFA analyses and GPA, including:
 - Mixed GPA
 - Trend analysis by superior vs. inferior hemifield
 - 10-2 MD trend analysis
 - Dual baselines
- Dynamic Structure-Function GPA for both HFA3 and CIRRUS HD-OCT on a single screen
 - Clinical Events indicate timing of intervention and initiation of new trend analysis
 - Color-coded alerts help you quickly identify statistically significant change
 - View HFA3 and CIRRUS information efficiently displayed in simple side-by-side format

Combined Reports: See the whole picture ZEISS CIRRUS™ HD-OCT or CIRRUS™ photo to generate combined structure and function reports in a single display.

HFA3 Dual Baseline Report and Clinical Event



HFA3 & OCT Structure-Function GPA Report





^{*} ZEISS FORUM and Glaucoma Workplace are required.

Technical data

Specifications

The HFA3 that's right for you

- All **HFA3 Models** perform custom static testing with custom static patterns for stimulus sizes I through V, and feature Guided Progression Analysis (GPA) to assist in care management over time.
- The **HFA3 Model 840**, like all models, performs custom static testing with custom static patterns for stimulus sizes I through V, and features Guided Progression Analysis (GPA) to assist in care management over time. In addition, it includes improved gaze tracking and head tracking.
- The **HFA3 Model 850** adds vertex monitoring, blue-on-yellow (SWAP) and the new RelEYE monitor.
- The **HFA3 Model 860** delivers all these features and adds the automated Liquid Trial Lens.

Considerations	Humphrey	Humphrey		HFA3	
Specifications	FDT	Matrix 800	840	850	860
Test specifications					
Maximum temporal range (degrees)	30	30	90	90	90
Stimulus duration	200-400 ms	300 ms	200 ms	200 ms	200 ms
Visual field testing distance	Infinity	Infinity	30 cm	30 cm	30 cm
Background illumination	100 cd/m ²	100 cd/m ²	31.5 ASB	31.5 ASB	31.5 ASB
Threshold test library					
N-30	•	•			
C-20	•				
24-2, 30-2, 10-2, Macula		•	•	•	•
60-4, Nasal step			•	•	•
Threshold test strategies					
MOBS	•	•			
ZEST		•			
SITA Standard, SITA Fast, SITA Faster, Full Threshold, FastPac			•	•	•
SITA-SWAP				•	•
Suprathreshold test library					
C40, C76, C80			•	•	•
C64, C-Armaly			•	•	•
C-20	•				
N-30	•	•			
24-2		•			
Peripheral test patterns			•	•	•
Suprathreshold test modes					
Age corrected	•	•	•	•	•
Threshold related, Single intensity			•	•	•
Specialty test library					
Social Security Disability, monocular, binocular				•	•
Esterman monocular, binocular, superior 36, 64			•	•	•
Kinetic testing				•	•
Custom Kinetic testing				•	•
Custom Static testing			•	•	•

Features	Humphrey FDT	Humphrey Matrix 800	840	HFA3 850	860
	101	Watrix 600	840	850	800
Fixation control	•	•	•	•	
Heijl-Krakau blind spot monitor	•	•	•	•	•
Video eye monitor		•	•	•	•
Gaze tracking			•	•	•
Head tracking			•	•	•
Vertex monitoring					•
Operator interface	150	160	То		CD
Display	LCD	LCD	10	uch-screen l	.CD
Keyboard		•	•	•	•
Stimulus		_			
Frequency doubling	•	•			
White-on-white			•	•	•
Red- or blue-on-white			•	•	•
Blue-on-yellow (SWAP)				•	•
General testing features					
Stimulus sizes	10°	2°, 5°, 10°	Goldmann I-V	Goldmann I-V	Goldmanr I-V
Foveal threshold testing			•	•	•
Automatic pupil measurement			•	•	•
Liquid Trial Lens (AutoTLC)					•
RelEYE eye review				•	•
Test storage					
User-defined		•	•	•	•
Software features					
Single Field Analysis (SFA)			•	•	•
Glaucoma Hemifield Test (GHT)		•	•	•	•
Visual Field Index (VFI)			•	•	•
Guided Progression Analysis (GPA)			•	•	•
Mixed GPA			•	•	•
Serial field overview		•	•	•	•
Networking		•	•	•	•
FORUM Connectivity		•	•	•	•
DICOM Connectivity		•	•	•	•
Printer				-	
Thermal printer	•				
Native generic PCL 3, PCL 5 and postscript printer support for	-				
local, shared and networked printers		•			
Native postscript printer support for network capable printers			Optional	Optional	Optional
Data storage, retrieval and analysis					
Hard drive		250 GB	500 GB	500 GB	500 GB
USB		•	•	•	•
CD-R/W drive		•			
Dimensions					
Height	17" (43 cm)	17" (43 cm)		23" (58 cm)
Width	10" (25 cm)	12.2" (31 cm)	20" (51 cm)		
Depth	19" (48 cm)	33.5" (85 cm)	18" (46 cm)		
Weight	19 lbs (8.6 kg)	37.5 lbs (17.4 kg)	63 lbs (28.7 kg)		
Electrical requirements		, , , , , , , , , , , ,		,	J.
	100-120V, 50/60Hz 230V, 50/60Hz	100-240V~, 50/60Hz, 200VA max	z, 100-120V~, 50/60Hz, 4 230V~, 50/60Hz, 1.8		
Standards	2307, 30/00072	ZOUVA IIIdX	230\	~, JU/0UHZ,	1.0A
Meets UL, CSA and CE standards	•	•	•	•	

For years, the Humphrey Field Analyzer has brought certainty to glaucoma diagnostics. The HFA3 preserves everything that made its predecessors the gold standard in perimetry—then takes that standard to new heights with innovations that enhance usability to streamline clinic flow.

Certainty for years with the ZEISS Glaucoma Suite

A broad range of innovative diagnostic and imaging solutions are transforming your point of care. Today, the **ZEISS Glaucoma Suite** delivers a ZEISS solution that can stand alone or seamlessly integrate into a comprehensive all-practice solution through FORUM, putting critical information at your fingertips—in an instant.



Partnering with reliable expertise

ZEISS is dedicated to enhancing the long-term value of your investment through a highly skilled field and technical support organization. ZEISS service agreements encompass the full range of support offerings to ensure optimal system uptime and workflow convenience. You can count on ZEISS to support your needs for high productivity and cost containment while delivering the optimum in customer care.



Humphrey Matrix 800

Proven early visual field loss detection with connectivity





Humphrey Matrix 800

With frequency doubling technology.

Proven to find early visual field loss. Quickly. Easily.

Operating a visual field instrument doesn't get much easier than a Humphrey Matrix®. It provides the ideal solution for busy practices for case detection and fast threshold testing. In addition to simplifying visual field testing, numerous studies show that frequency doubling perimetry can detect visual field loss missed by other methods.^{1,2,3,4}

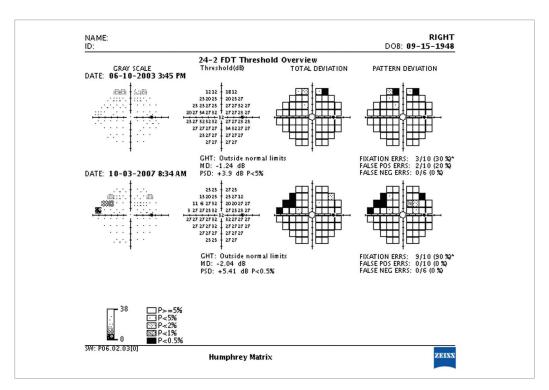


Validated clinical performance

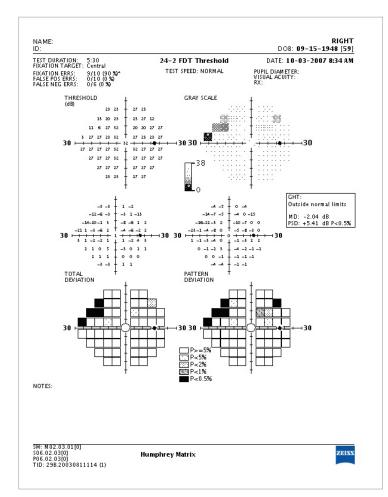
- Proven diagnostic performance in detecting early visual field loss 5,6
- 15% faster threshold testing on average and up to 70% faster for more advanced cases⁷
- Video eye monitoring and comfortable chin rest simplify patient alignment and fixation monitoring
- Patient-friendly stimulus eliminates the need for trial lens correction in most patients⁸

Designed for your practice

- Humphrey® Field Analyzer (HFA™) style reports are simple to interpret
- Light-weight, compact and portable
- Simple operation
- Ability to test in normal ambient light, no darkened room required
- Connectivity to office networks,
 EMRs and FORUM® Eye Care Data
 Management System



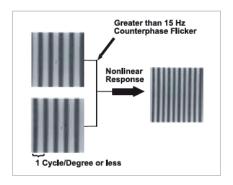
Serial Field Overview



Single Field Analysis

Patented Frequency Doubling Technology

The Humphrey Matrix frequency doubling stimulus can preferentially test for sensitivity loss in the magnocellular pathways of the visual system.⁹
Alternating black and white bars create a patient-friendly doubling illusion. Studies demonstrate that while all ganglion cell types are affected by glaucoma, and no single test always identifies the functional effects of glaucoma first, the Humphrey Matrix has proven high sensitivity and may find defects earlier in a unique subset of patients.^{10,11}

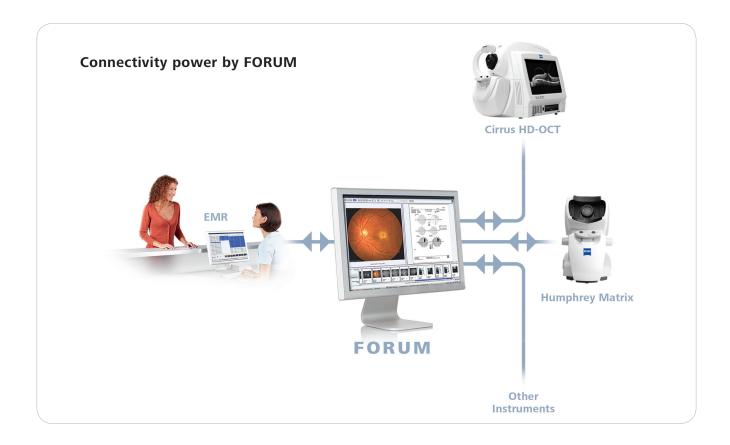


Frequency Doubling Stimulus

Connecting the way you need

Connectivity solutions to fit your practice

The Humphrey Matrix offers a choice of connectivity solutions – to office networks, to EMRs and to FORUM, the comprehensive data management system from Carl Zeiss Meditec.



Connectivity powered by FORUM

For comprehensive connectivity, FORUM Eye Care Data Management integrates the Humphrey Matrix 800 and all of your ZEISS instruments, as well as any DICOM device using the medical standard data protocol. FORUM can also connect to networked devices without DICOM – giving you virtually instantaneous access to the comprehensive patient information you need, whenever and wherever you need it.



Centralized report management and retrieval

FORUM allows you to access your glaucoma patient data instantly through centralized report management and retrieval. FORUM also provides simultaneous display of reports from multiple instruments, such as the Humphrey Matrix, HFA^{TM} , $Cirrus^{TM}$ HD-OCT, GDx^{TM} and fundus cameras.

EMR integration with FORUM

Connectivity to an EMR through FORUM delivers significant practice efficiency and offers closed-loop workflow helping to eliminate patient data errors. Patient demographics originate in the lead system, often the EMR, and are pulled in

to instruments connected to the EMR, through FORUM, in a standardized format using the FORUM Modality Worklist feature.

For legacy patient records, FORUM offers FORUM ASSIST Match, a quick and simple way to find and merge multiple patient records using a variety of match criteria.

With or without an EMR, FORUM offers immediate efficiencies in patient record management. For a practice planning a future EMR purchase, FORUM can ease the transition to a paperless electronic workflow.

Basic Networking

You can export jpg or pdf files via the USB port, or over the network, and save to shared folders on a PC for transferring data to EMRs.



Compare the Humphrey Matrix 800 to the Humphrey Matrix 715

Feature	Humphrey Matrix 800 Visual Field Analyzer with Frequency Doubling Technology	Humphrey Matrix 715 with Software 7.0 Visual Field Analyzer with Frequency Doubling Technology
Connectivity options	DICOM-compliant connectivity for:Patient scheduling FORUM Modality Worklist	Serial port data output to OfficeMate®/ExamWRITER® (USA)
	- Archive of exam reports (EPDF)	
	 Ethernet connectivity for data storage onto shared folders 	
	 Serial port data output to OfficeMate®/ExamWRITER® (USA) 	
Adjustable chin rest	Included with the purchase of every new instrument	Available separately
Portable data storage	■ USB	■ Floppy
	■ DVD/CD-R/W drive	■ CD-ROM
Printer	Ships standard with instrument	Ships standard with instrument
Additional Printer Options	Native generic PCL 3, PCL 5 and postscript printer support for local, shared or networked printers	Limited to approved printers
DICOM data output	Yes	No



Technical Data

Humphrey Matrix 800

Stimulus	Frequency doubled sinusoidal	Frequency doubled sinusoidal gratings		
Fixation Control	Video eye monitoring			
	Heijl-Krakau fixation method			
	Alternative fixation targets			
Area of Field Tested	Threshold - 30 degrees and n	nacula		
	Screening - 30 degrees			
Test Library	Threshold	Screening		
	24-2 FDT Full Threshold	N-30 FDT Supra-threshold		
	30-2 FDT Full Threshold	24-2 FDT Supra-threshold		
	N-30 FDT Full Threshold			
	10-2 FDT Full Threshold			
	Macula FDT Full Threshold			
Test Strategies	MOBS and ZEST	MOBS and ZEST		
Analysis Software*	Glaucoma Hemifield Test (GH	Glaucoma Hemifield Test (GHT)		
Printer (included)	External USB color inkjet prin	External USB color inkjet printer		
Data Storage, Retrieval and Analysis	DVD/CD-R/W drive, RS-232 ir data transfer, USB and Ethern	· ·		
Dimensions	Overall	Chinrest		
	Height: 17" (43 cm)	Height: 11" (28 cm)		
	Width: 12" (30 cm)	Width: 12.2" (31 cm)		
	Depth: 22" (56 cm)	Depth: 33.5" (85 cm)		
	Weight: 30 lbs. (14 kg)	Weight: 7.5 lbs. (3.4 kg)		
Electrical	100-240 V, ~ 50/60 Hz, 200 VA max			
	IEC-320 standard power inlet connector for worldwide use			
	Compiles with US, EU and Canadian medical electrical system standards			

^{*}Analysis software not available on N-30 tests.

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C€₀₂₉₇

Humphrey Matrix



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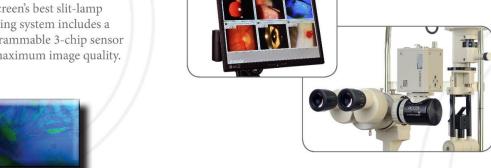
6452

Tel Screen Digital Imaging System for Slit Lamps



Platinum System

TelScreen's best slit-lamp imaging system includes a programmable 3-chip sensor for maximum image quality.







Computerized lensmeter

CL-300





CL-300 Computerized lensmeter

With a new UV Measurement Function, the CL-300 provides comprehensive data for the optometrists. Its compact, ergonomic design and intuitive touch color screen panel ensures that measurements can be easily and quickly obtained.

Features

- » LCD color touch panel
- » Compact slim body
- » Automatic mono- & multi-focal detection

- » UV transmittance measurement
- » Green measurement light beam

CL-300 FEATURES

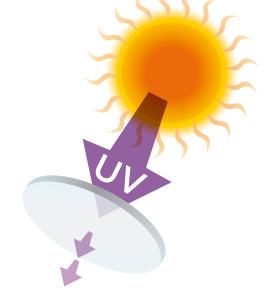
UV transmittance measurement function

The CL-300's new UV measurement function provides information on the ultraviolet transmittance in the range of 0% to 100%, providing reliable measurement results for eyeglasses and sunglasses.









* UV Transmittance Measurement is performed with the light beam of 365 nm wavelength.

Multi-focal lens measurement

Not only single lenses but also multifocal lenses can be easily measured. The CL-300 also features automatic detection for single lenses, bi-focal and progressive lenses.

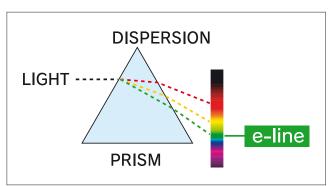
Example: Progressive lens measurement

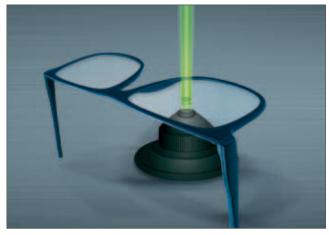
The image shows a near point measurement screen. With simple operation, the ADD value can be obtained by following the guide instructed on this progressive measuring mode.



Green light beam

The CL-300 incorporates the green light reading beam, which is also known as e-line. Due to the wavelength of 546 nm, the e-line can be well-sensed by the human's eye and it is determined as a standard by ISO 7944. ABBE compensation is no longer required with this new ISO 7944 compliant feature. Using green light beam in our instrument enhances lens measurement precision and reduces the chance of error in the measurements.





Improved lens support

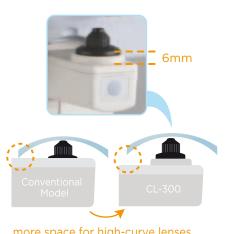
Due to its new design, the lens support of the CL-300 is 6 mm more in height compared to the conventional model. This change enables smooth and trouble-free measurement of high-curve lenses, preventing from contact of the lens edge with external parts of the lens support.

Large 5.7 inch LCD monitor with wider directional angle

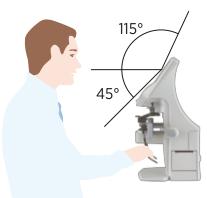
The wide LCD monitor covers a 160 degree angle of observation allowing clear, compatible readings from virtually any position regardless of the operator's height.

White ink cartridge standard

The newly featured white marking ink provides clear marking even on lenses with anti-staining and anti-fog coating. Due to these favorable qualities, Topcon made the white marking ink standard in the new CL-300.









Models and marking ink

	white ink	red ink
Cartridge type	standard	optional
Holder type	<u> </u>	standard

^{*} For availability in your region and other details please refer to the local Topcon authorized representative.

Contact lens measurement

Contact lenses can be easily measured using the CL-300 lens support and ring accessories that come standard with the instrument.



Fast, easy drop in printer

Loading the thermal paper into the printer has never been easier. Just drop the printer paper into the receptacle and close the cover. The quick and quiet printer is ready to go. This improvement saves time and enhances workflow.



Printout sample

TOP	CON CL	300	
$\langle R \rangle$	S	С	Α
	+0.00	+0.00	180
ADD	0.75		
PSM	0.00	OUT	0.00
$\langle L \rangle$	S	С	Α
	+0.75	+0.25	85
ADD	0.75		
PSM	0.00	OUT 3.5	0 DWN
TOP	CON Op	tical Store	

EASY OPERATION

Easy and fast operation

The large, newly designed color LCD monitor with a 5.7-inch touch panel simplifies the interpretation of readings even with progressive and multi-focal lenses. The dynamic color measuring graphics follow the measuring process and present each step of the operation with different color, providing better control and ease of use.





Smooth lens table support enables easy placement of eyeglasses.







Right after the lens is placed, the optical center (+) appears with the "BLUE" bar.





The "ALIGNMENT OK" is displayed when the target (+) comes within the circle. When BEEP function is ON, the buzzer will sound.





The measured data is memorized automatically with the "MARKING OK" when the target is aligned in the exact center (at $O\Delta$).

In order to do marking, place down the lens retainer to secure the lens and marking is stamped accurately with the equipped marking cartridge.

Specifications

Measurement range	sphere cylinder axis addition prism	0 to ±25 D (0.01/0.12/0.25D steps) 0 to ±10 D (0.01/0.12/0.25D steps) 0 to 180°(1°step) 0 to + 10D (0.01/0.12/0.25D steps) 0 to 10Δ
Cylinder mode		MIX /-/+
Prism mode	•	X-Y (Orthogonal Coordinates), P-B (Polar Coordinates),No Display
UV transmittance	•	0 - 100% (1% / 5% steps)
Lens detection	•	AUTO for single & progressive lenses
Contact lens measurement	•	Hard / Soft contact lens
Light source	refractive measurement UV measurement	Green LED 535±5nm UV LED 365±5nm
Wavelength criterion	•	e-line/d-line with ABBE compensation
Lens diameter		ø5 to 100 mm
Screen		5.7 inch color TFT-LCD touch screen
PD measurement range*		50-90mm
External interface	•	RS-232C × 2, LAN × 1*
Power supply		100-240V / 50/60Hz 1.2A (AC Adapter) : AUTO power save
Dimensions	•	197(W) × 220(D) ×404(H) mm
Weight		3.8Kg

Models	CL-300PL	CL-300PDL
PD measurement	-	included
Printer	included	included
LAN	-	included

System Chart



* LAN is available with CL-300PDL









IMPORTANT

Subject to change in design and/or specifications without advanced notice.

In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.

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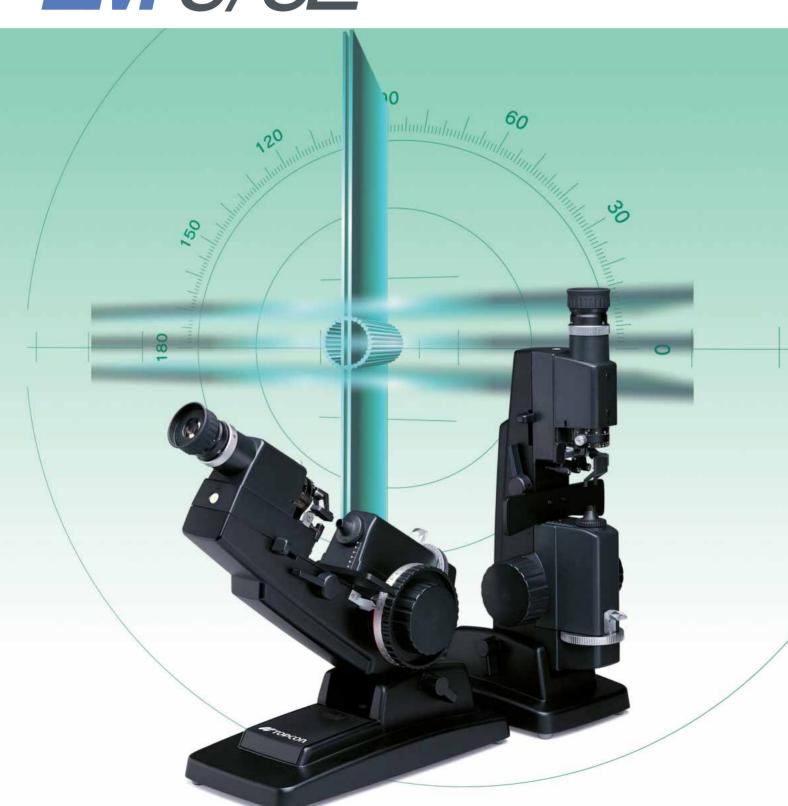
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LENSMETER

LW-8/8E



Improved Optics + Sharper Target =

Better Results are what you will see with the new LM-8 Series of Lensmeters. An improved optical system with newly coated optics provides a sharp target image for fatigue free operation. The new LED illuminated target revolutionizes lensometry with brighter, glare free viewing only dreamed of with other instruments.

AO Target

This traditional style target uses a familiar crosshair target already familiar to many user.

■ High and Wide Field Eyepiece

The newly designed eyepiece provides less shading effect. With an easier view, the measurement procedure becomes less fatiguing.



■ Easy Axis Scale Viewing

The enhanced view of the axis scale makes reading even easier.

■ Better Marking Dots

A new cartridge type marking device makes the dot targets more noticeable, especially on A /R coated lenses. Also, the new cartridges are less cumbersome to replace than earlier ink pad assemblies.





Coventional Marking

LM-8 Series



Place this unit anywhere - threre is no need for a power cable. If you wish, an AC adapter may be added to the unit. The LED light source eliminates the need for constant bulb replacement. The "sleep mode" preserves battery life.



■ Contact Lens Measurement

Both soft and hard contact lenses may be measured. The base locking mechanism allows for a 90 degree up-right position to make this procedure more practical.



■ Built-in Prism Compensator

The prism compensator with locking device allows for measurement of lenses with prismatic power above 5 diopters. The scale on the compensator has a range of 14 prism diopters.



SPECFICATIONS	LM-8	LM-8E
Target	American-st	yle crosshair
Scale Reading	Internal	External
Vertex Power Scale	0 to ± 25	diopters
Vertex Power Scale Graduation	0.125D up to ± 5 D	/ 0.25D above ± 5D
Prism Diopter Scale	0 to 6 prism diopte	rs 1 Δ graduations
Eyepiece Adjustment	+3 to -5 diopters	
Lens Diameter	24mm to 90mm in diameter	
Tilt Angle	0 to 90 degree, freely adjustable	
Light Source	LED 570 nm	
Dimensions	160 (W) x 420 (D) x 310 (H)mm	
Weight	Approx. 4.0kg	
Power Source	Battery operated (1.5V x 2) Auto shut off 5 min.	

Optional Accessories

- AC AdapterNew Cartridge Device

*Subject to change in design and/or specifications without advanced notice.

IMPORTANT In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.



Prescribed for Progress™



PRO1 Upper Body Product Specifications

Order Code: PRO117-INT

FEATURES

Bi-directional movement and resistance	Pedaling in forward and reverse provides versatility, helps prolong exercise and promotes reciprocal muscle balance
Low starting resistance	6 watts
Resistance range	191 levels of resistance - 20 levels adjustable in .1 increments
Resistance system	3 phase combination generator & eddy current brake - largest watt range in the industry
Foot rests	Foot rests included for comfort and multiple foot placement options
Easy to transport	Integrated transport wheels
Heart rate monitoring	Telemetric (chest strap required)

ACCESSIBILITY & ADJUSTABILITY &

Adjustable, tilt head	Accommodates users of all heights and allows them to exercise while seated or standing
Adjustable arm cranks	4 range of motion settings, plus unison motion
Step-through seating	Adjustable step-through allows easy entry and safe and easy access for all users
Direct wheelchair access	Seat slides off for direct wheelchair access - ADA compliant
Wheelchair platform	Provides a sturdy foundation for wheelchair use or for standing exercise
Bariatric seat	Wide seat adjusts forward and back, has side handles and 600 lb user weight capacity.
360° Therapist Assist Pedals	Adjust the seat forward and back from any point around the machine
Seat removal handle	Integrated handle on seat back makes it easy to remove the seat
Zero-sloping forward/back seat adjustment	Adjust forward and back on level monorail for optimum control and safe positioning

INTELLI-FIT™ CONSOLE

7" LCD full color touch screen display	Touch screen with clear, simple screens and large, readable font.
Audible beep	Yes
Tactile buttons	Tactile buttons in addition to touch screen
Resistance levels	191 levels of resistance - 20 levels adjustable in .1 increments
Display feedback	Time, level, distance, METs, heart rate, calories, RPM, watts
One touch quick start	Yes
Control METs - Constant Work Program	Set constant METs level and the workload remains constant throughout the program.
Iso-Strength Program	Isokinetic program for safe, accommodating resistance
Power Burst	8-second burst of high intensity training
Cool down	Automatic cool down begins after each exercise is completed
Administrative mode	User defined settings, metric or US units of measure and other custom settings
User-defined console languages	9 languages - English, Spanish, French, German, Russian, Japanese, Chinese, Italian, Dutch
Download results to USB flash drive	Plug USB flash drive into the Fit-Key® slot to save workout results in a .txt file
CSAFE port and 8-volt DC power port	Yes
USB charger	For phones and other electronic devices

PRO1 Upper Body Product Specifications (cont.)

Order Code: PRO117-INT

INTELLI-FIT™ CONSOLE (cont.)

Water bottle holder, accessory tray, reading rack	Integrated			
Personal Cooling Fan	Integrated dual	fans with three speeds		
Programs	Quick Start	Constant Work - METs	Hills	Heart Fit Test & Training
	Manual	Constant Work - Watts	Fit-Quik®	Power Fit Test & Training
	Heart Rate	Iso-Strength	Random	Stress Test

TECHNICAL SPECIFICATIONS

Power Requirements	Self-generating; low-voltage AC adapter, included
Maximum user weight capacity	600 lbs.
Unit weight	247 lbs.
Unit size	60″L x 30″W x 77″H
Color	Frame: Charcoal Cover: Cool Gray
Manufacturing	Assembled in USA

WARRANTY

Parts	3 years
Labor	1 year

ENHANCEMENTS

Fit-Key® software	Optional Fit-Key® software makes it easy to create specialized programs and track data
Entertainment options	Yes

ACCESSORIES

Internal/External Rotation Device	Strengthens internal and external rotators in one exercise
	Designed for individuals who require help gripping the hand cranks. Made of heavy-duty closed cell foam that resists moisture. Flexible, comfortable and easy to clean.
Straight Grips	For those who have spasticity, weakness, or tremors in their upper extremities.
Heavy duty wheelchair ramps	For manual and powered wheelchair access. Provides increased stabilization
Polar Chest Strap	Transmits heart rate directly to console - works on all SCIFIT products



SCIFIT Systems, Inc. reserves the right to change or alter specifications at any time without notice and without incurring any obligation.

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PRO1 Specs - PRO117-INT - 2015 - v1



over 100 years of innovation

UPC 835126203482



LK700R recumbent

- ≥ Easy walk-through design for safe entry and exit
- Self-generating, no external power required to operate the equipment. Enables flexible placement within a room without regard to power outlet location
- 16 Built-in programs and 16 levels of electronically controlled resistance
- Heavy duty commercial cranks, axles and bearings
- > Fore/Aft seat slider for a wide range of user sizes
- Oversized sure-grip pedals with racheting straps
- Convenient fingertip resistance controls allow for quick adjustments without losing focus on your workout
- Polar® wireless HR compatible. Polar Wireless compatible with built-in HR programming features

SPECIFICATIONS

- LED Display
- Polar® Heart Rate Strap Compatible
- Contact Heart Rate Grips
- 16 Built-in Programs
- Walk-Through Entry Design
- Self-Generating (No External Power Required)
- Electronic Resistance Adjustment
- 16 Levels of Resistance
- Fingertip Resistance Controls
- Fore/Aft Seat Adjustment
- Water Bottle Holder
- Transport Wheels
- Broadcast Vision® Television Mounts Compatible

Club Commercial Warranty

Frame: Lifetime | Parts: 3 years | Labor: 2 years | Club Commercial warranty applies when product is used in facilities where use may exceed 8 hours of use per day and all dues-paying facilities.

Commercial Warranty

Frame: Lifetime | Parts: 5 years | Labor: 2 years Commercial warranty applies when product is used in non-dues paying facilities with less than 8 hours of use per day.

Measurements	Max User Weight	350 lbs. 119 lbs.
Assembled Dimensions	Length Width Height	63.9 in. 25.4 in. 45.7 in.
Box Dimensions	Length Width Height	46 in. 13 in. 34 in

Note: All pricing and specifications are subject to change without notice



RBK 885

Experience™ Series

Recumbent Bike III

Product Highlights

The RBK 885 recumbent bike adds value to your facility by combining essential reliability and ease-of-use with smooth pedaling and biomechanically correct geometry. The RBK 885 features a step-through design to appeal to a wide range of exercisers of all ages. The simple seat adjustment allows the exerciser to change the position of the seat with one hand, either on or off the bike. A ventilated air flex seat provides exceptional comfort.

Product Features

1. P82 Console

The P82 console not only offers a brilliant 15 in / 38.1 cm screen that's ergonomically positioned to deliver crystal-clear entertainment viewing for exercisers in motion, but when networked, is also a direct-to-exerciser communication portal allowing you an opportunity to build your brand, share information about activities and services, and strengthen the sense of community within your facility.

2. Step-throuth Design

Designed for easy entry, the recumbent bike has a step-through design (14 in / 36 cm wide) with a low step-over height (4 in / 10 cm).

3. Air Flex Seat Back

The custom-designed air flex seat features a ventilated panel and unique suspension system for a cool, cushioned ride.

4. Seat Adjustment

The simple seat adjustment allows the exerciser to change the position of the seat with one hand, either on or off the bike.

5. Ease of Maintenance

The easy-to-remove shroud ensures quick access to the belt-drive system for maintenance and servicing without removing the pedals or crank.

6. Dual-sided Pedals

The dual-sided pedals allow the exerciser to use the pedals with or without the integrated straps. The extra wide pedals comfortably accommodate feet of all sizes to encourage proper pedaling form.

Specifications

Dimensions (L x W x H): 67 x 23 x 54 in / 170 x 58 x 136 cm

Equipment Weight: 219 lb / 99 kg **Power:** Dedicated 120 volt, 15 amp circuit

Total Workouts: 17
Resistance Levels: 25

Minimum Watts: 18 (level 1 at 20 RPM)

Maximum Watts: 750 (level 25 at 150 RPM)





Gloss Metallic Silver

Refined colorways with dark Tungsten covers and two frame color options.



Black Pearl

Language: English, Chinese, Danish, Dutch, French, Finnish, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Traditional Chinese, Turkish

Network Capabilities: Preva® network capable

Entertainment: 15 in / 38.1 cm LCD Capacitive Touch Screen

Mobile Device Charger and Audio Jack

Accessories: Integrated Reading Rack, Accessories Holder

Optional - Cable Management

Warranty: Visit www.precor.com for warranty terms.





RBK 885 Recumbent Bike

Like every piece of equipment in our Experience Series 880 Line, the RBK 885 recumbent bike adds value to your facility by combining essential reliability and ease-of-use with smooth pedaling and biomechanically correct geometry. The RBK 885 features a step-through design to appeal to a wide range of exercisers of all ages. The simple seat adjustment allows the user to change the position of the seat with one hand, either on or off the bike. A ventilated air flex seat provides exceptional comfort.

The clean and proven design of the touch screen console makes it easy for exercisers, whether new to Precor or familiar, to locate controls, inputs and adjustments. The user interface delivers the modern-day touch screen responsiveness to swipes and selections as exercisers enjoy an alluring workout experience.

At Precor, we recognize that a great workout is the sum of many parts. In your hands, the products, services and technologies we offer can be combined in countless ways to complement the programs, and atmosphere you're creating.





PRODUCT HIGHLIGHTS

Console

The 880 line console not only offers a brilliant 15" screen that's ergonomically positioned to deliver crystal clear entertainment viewing for exercisers in motion, but when networked is also a direct-to-exerciser communication portal allowing you an opportunity to build your brand, share information about activities and services, and strengthen the sense of community within your facility.

Ultra Comfortable Recumbent Seat Back

Custom-designed air flex seat, featuring a ventilated panel and unique suspension system for a cool, cushioned ride.

Step-through Design

Designed for easy mounting by the rider, the recumbent has a step-through design (14 in / 36 cm wide) with a low step-over height (4 in / 10 cm).

Seat Adjustment

The simple seat adjustment allows the user to change the position of the seat with one hand, while either on or off the bike.

Ease of Maintenance

The easy to remove shroud ensures easy access to the belt-drive system for maintenance and servicing without removing the pedals or crank arms.

Dual-sided Pedals

The dual-sided pedals allow the user to use the pedals with or without the integrated straps. The extra wide pedals comfortably accommodate feet of all sizes to ensure proper pedaling form.

PRODUCT SPECIFICATIONS

Dimensions (L x W x H): 67 x 23 x 54 inches / 170 x 58 x 136 centimeters

Weight: 219 lbs / 99 kg Power: 120 volt, 15 amp circuit

Total Workouts: 17 Resistance Levels: 25

Minimum Watts: 18 (level 1 at 20 RPM) **Maximum Watts:** 750 (level 25 at 150 RPM)

English, French, Dutch, German, Italian, Russian, Language Selection: Spanish, Portuguese (Iberian), Chinese (Simplified),

Japanese and Korean

Network Capabilities: Preva® network capable

> 15" LCD capacitive touch screen **Entertainment:**

Mobile Device Charger and audio jack

Accessories: Accessories holder

Reading rack

Optional - Cable management

Warranty: Visit www.precor.com for warranty terms







Reading rack accessory is standard and attaches easily to the P82 console



UBK 885

Experience™ Series

Upright Bike III

Product Highlights

The UBK 885 upright bike adds value to your facility by combining essential reliability and ease-of-use with smooth pedaling and biomechanically correct geometry. The UBK 885 features custom-designed handlebars with integrated touch heart rate in two places for maximum comfort.

Product Features

1. P82 Console

The P82 console not only offers a brilliant 15 in / 38.1 cm screen that's ergonomically positioned to deliver crystal-clear entertainment viewing for exercisers in motion, but when networked, is also a direct-to-exerciser communication portal allowing you an opportunity to build your brand, share information about activities and services, and strengthen the sense of community within your facility.

2. Over-molded Handlebars

The over-molded style adds comfort and durability while offering dual heart rate contacts and three ergonomic riding positions: upright, cruising, and road.

3. Seat Adjustment and Improved Saddle Design

The simple seat adjustment allows the exerciser to change the position of the seat with one hand, either on or off the bike.

4. Dual-sided Pedals

The dual-sided pedals allow the exerciser to use the pedals with or without the integrated straps. The extra wide pedals comfortably accommodate feet of all sizes to ensure proper pedaling form.

5. Ease of Maintenance

The easy-to-remove shroud ensures quick access to the belt-drive system for maintenance and servicing without removing the pedals or crank.

Specifications

Dimensions (L x W x H): 48 x 21 x 62 in / 122 x 53 x 157 cm

Equipment Weight: 169 lb / 77 kg **Power:** 120 volt, 15 amp circuit

Total Workouts: 17
Resistance Levels: 25

Minimum Watts: 18 (level 1 at 20 RPM)

Maximum Watts: 750 (level 25 at 150 RPM)

Language: English, Chinese, Danish, Dutch, French, Finnish, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese,

Russian, Spanish, Swedish, Traditional Chinese, Turkish





Gloss Metallic Silver

Refined colorways with dark Tungsten covers and two frame color options.



Black Pearl

Network Capabilities: Preva® network capable

Entertainment: 15 in / 38.1 cm LCD Capacitive Touch Screen

Mobile Device Charger and Audio Jack

Accessories: Integrated Reading Rack, Dual Bottle Holder

Optional - Cable Management

Warranty: Visit www.precor.com for warranty terms.





PR1000 Home Gym



Owner's Manual

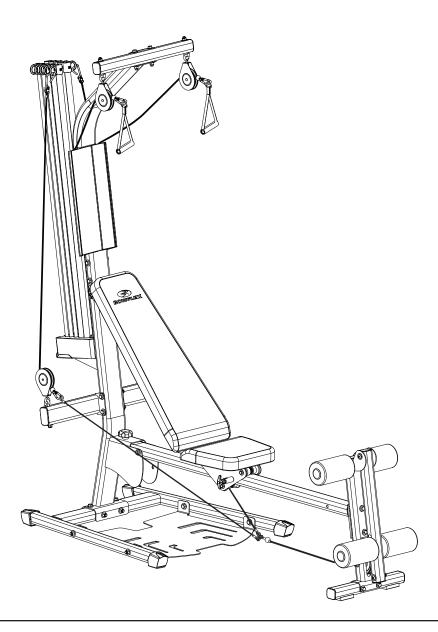




Table of Contents

Specifications	2 Exercises	20
Important Safety Instructions	3 Aerobic Rowing	20
Safety Warning Labels and Serial Number	4 Bench Press	21
Features and Use	6 Decline Bench Press	
How Often Should You Exercise	6 Incline Bench Press	
What to Wear	Seated Shoulder Press	
Stretching	Front Shoulder Raise	
Power Rod® Resistance	Crossover Seated Rear Deltiod Rows	
Adjusting and Understanding the Resistance	Scapular Retraction	
Connecting the Power Rod® Unit to the Cables	Narrow Pulldowns	
Safety	Stiff Arm Pulldowns	
When You Are Not Using Your Home Gym		
The Workout Bench	Reverse Grip Pulldown	
Maintenance and Care of Your Gym	y Trio ana Bughdayan	
Storing Your Home Gym	Triceps Pushdown	
Accessories and Equipment	Standing Ricons Curl	
Workouts	12 Standing Wrist Curl	
Define Your Goals	12 Seated (Resisted) Abdominal Crunch	
Design Your Program	13 Trunk Rotation	
Twenty Minute Better Body Workout	14 Lea Extension	_
Advanced General Conditioning	Calf Raise	
Twenty Minute Upper/Lower Body	15 Seated Hin Adduction	
Body Building	Seated Hin Abduction	
Circuit Training - Anaerobic/Cardiovascular	Standing Leg Kickhack	
True Aerobic Circuit Training	18 Leg Press	
Stength Training	Contacts	
Spece Physical Dimensions	cifications	
Length (not in use)82" (208c	m) Box Weight1	45 lbs. (65.8kg)
Length (maximum in use)103" (262c	m) Box Dimensions54	"I x 33"w x 8"h
Width (maximum in use)80" (203c	m) (137cm:	x 84cm x 21cm)
Height82" (209c	m) Capacities	
Weight131 lbs. (59.5)	kg) Maximum Weight Capacity	300 lbs. (136kg)
To validate warranty support, keep the original proof of pur Serial Number Date of Purchase To register your product warranty , go to: www.bowflex.com Or call 1 (800) 605–3369.	·	

2

If you have questions or problems with your product, please call 1 (800) NAUTILUS (628-8458).





Congratulations on purchasing your new Total Gym®

With this product in your home, you have everything you need to start your own workout program, to tone and strengthen the important muscle groups of your upper and lower body. This is vital for all of us, regardless of age, sex, or fitness level, and regardless of whether your primary goal is body sculpting, weight loss, health maintenance, or more energy for daily activities.

Strength training not only tones and conditions the muscles we use every day to stand, walk, lift, and turn; it can actually transform our body composition. By reducing body fat and increasing the proportion of lean muscle in our bodies, strength training can effectively turn up our metabolic thermostat, so that we burn calories all the time, no matter what we're doing.

It's easy - all you have to do is spend 15 to 20 minutes a day, 3 to 4 days per week on your Total Gym® to start realizing the benefits.

Be sure to read through this Owner's Manual carefully. It is the authoritative source of information about your Total Gym.

CUSTOMER SERVICE QUESTIONS

If you have guestions about your Total Gym[®], please call Customer Service at 1.800.501.4621, Monday through Friday, 8:30 am to 5:00 pm, EST.

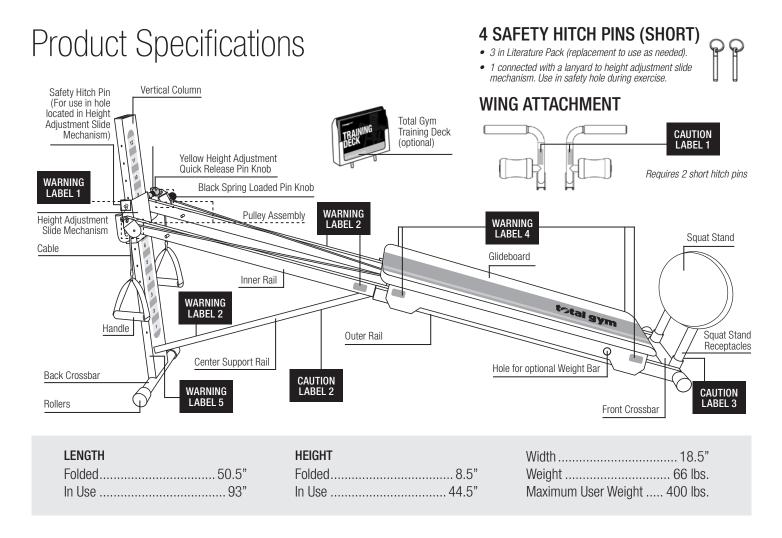
ORDERING REPLACEMENT PARTS

When ordering parts, please contact our Parts Department, toll free at 1.800.501.4621, Monday through Friday, 8:30 am to 5:00 pm, EST.

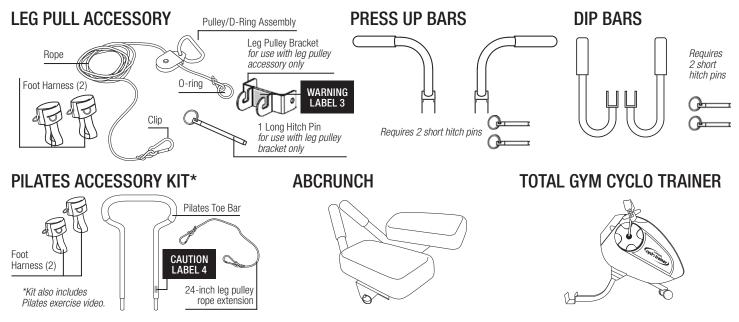
IMPORTANT: You must have your serial number and this manual ready when calling for parts. Serial #: _____

PLEASE ALSO PROVIDE THE FOLLOWING INFORMATION:

- 1. Name, Mailing Address and Telephone Number
- 2. Date of Purchase
- 3. Where Product was Purchased
- 4. Model Number
- 5. Part Order Number and Description



Optional Accessories Available for Purchase



ORDERING INFORMATION Part Number Description ColPac Chilling Unit Model C-5 3102 (110V Unit) 3114 220V Unit Standard Accessories 1500 Standard Size ColPacs (6x) 1506 Half Size ColPacs (6x)

Mains Power:	220~240 V 50 Hz; 115 V, 60 Hz
Weight:	74 kg
Dimensions*: 27	7"L x 16"W x 33"H
Electricial Safety Clas	ss: Type B

COLPAC® CHILLING UNIT





Note: there is a drain at the bottom of this unit to allow for cleaning

FEATURES

ColPac Chilling Unit

Large capacity and faster chilling time mean your patients will never have to wait for a ColPac. The ColPac Chilling Unit helps you keep pace throughout a busy day. No plumbing required, simply plug into a standard electrical outlet.

All ColPac Chilling Units include:

- Closed-cell foam insulation for efficiency
- Stainless steel, welded construction for long life
- Heavy-duty compressor for more efficient cooling
- Specially designed interior chilling coils cool packs faster
- $\, \cdot \, 8$ cm (3") swivel-type rubber casters for silent, friction-free movement of mobile units
- Drain valve for easy cleaning and defrosting
- One year warranty





Standard Accessories

ORDERING INFORMATION Part Number Description M-2 Mobile Hydrocollator 120 V Unit 2407 220 V Unit **Standard Accessories** Standard size HotPacs (12x) M-4 Mobile Hydrocollator 120 V Unit 220 V Unit 2506 **Standard Accessories** Standard size HotPacs (24x) SS-2 Mobile Hydrocollator 220 V Unit 2307

TECHNICAL SPECIFICATIONS (M-2 Mobile Hydrocollator) (Mains Power: (110~240V 50/60 Hz) (Power Consumption: (1000 W) (Weight: 39 kg) (Dimensions*: 27" w x 16" d x 33" h (Electrical Safety Class: (Lass 1, Type B) (Safety Tests: (EN 60601-1)

Standard size HotPacs (8x)

Mains Power:	110	J~240 V 50/60 Hz
Power Consun	nption: 15	00 W
Weight:	60	kg
Dimensions*:	89	x 51 x 84 cm

Class 1, Type B

EN 60601-1

110~240 V 50/60 Hz

110 2401/50/6011

SS-2 Mobile Hydrocollator

Electrical Safety Class:

Safety Tests:

Mains Power:

M-4 Mobile Hydrocollator

THUMBS TOTTELL	110 210 7 50,00112
Power Consumption:	1000 W
Weight:	30 kg
Dimensions*:	53 x 41 x 84 cm
Electrical Safety Class:	Class 1, Type B
Safety Tests:	EN 60601-1
* Dimensions are listed as L x W x H	

HYDROCOLLATOR® MOBILE HEATING UNITS





Note: unit has a drain at the bottom for cleaning purposes

FEATURES

Hydrocollator Mobile Heating Units

These durable stainless steel water tanks house the Hydrocollator Moist Heat HotPacs. The units are thermostatically controlled to ensure the ideal therapeutic temperature for HotPacs. Hydrocollator remains the benchmark heating unit against which all other units are judged.

- Full fiberglass insulation to prevent heat loss
- Dependable, rugged stainless steel design
- Simple to fill with water. No plumbing required
- Constant temperature of HotPacs is maintained
- Mobile units are equipped with 8 cm swivel, rubber casters for friction free movement about the clinic
- One year warranty

	M-2	M-4	SS-2	E-2	E-1
Tank Capacity	69 L	136 L	49 L	43 L	15 L
Temperature Range	71°-74°C	71°-74°C	71°-74°C	71°-74°C	71°-74°C
Thermal Cut-Out Temp.	82°-85°C	82°-85°C	82°-85°C	82°-85°C	82°-85°C
Accuracy	10%	10%	10%	10%	10%
Heat up Time (to 70°C)	8 Hours	8 Hours	4 Hours	4 Hours	2 Hours
Cool Down Time (from 70°C)	3 Hours	4 Hours	4 Hours	2 Hours	1 Hour
Fiberglass Insulation	Yes	Yes	Yes	No	No

HYDROCOLLATOR® STATIONARY HEATING UNITS





HYDROCOLLATOR ACCESSORIES

Side Table Rack

Stainless steel work surface and wire shelves add efficiency to units. Racks available to fit most models (M-4, M-2).

2.25"h x 38.25"w

Lotion Warmers

Keeps massage lotion and ultrasound gel at a comfortable temperature. Easily attaches to any treatment table or wall. Mini-Lotion Warmer hangs on the front of the Hydrocollator E-1 or E-2 heating units (bottles not included).

Wall Mounted Towel Rack

This stainless steel rack provides a convenient way to dry or store towels and terry covers (towels not included).





ORDERING INFORMATION Part Number Description E-1 Stationary Hydrocollator 2102 120 V Unit 220 V Unit **Standard Accessories** 1006 Standard size HotPacs (4x) E-2 Stationary Hydrocollator 2802 120 V Unit 220 V Unit 2806 **Standard Accessories** Standard size HotPacs (3x) 1006 1004 Oversize HotPacs (2x) Neck Contour HotPac (1x) 1002 **Hydrocollator Accessories Side Table Rack** 4010 Side Table Rack (not shown) 4230 Extra Shelf for Side Table Rack **TM-1 Electric Lotion Warmer** 4012 TM-1 Electric Lotion Warmer (110 V only) Mini Non-Electric Lotion Warmer Mini Lotion Warmer 22100 **Dial Thermometer** Dial Thermometer (not shown) 4228 **Wall Mounted Towel Rack**

TECHNICAL SPECIFICATIONS

4016

E-1 Stationary Hydrocollator		
Mains Power:	110~240 V 50/60 Hz	
Power Consumption:	1000 W	
Weight:	7 kg	
Dimensions*:	33 x 20 x 41 cm	
Electricial Safety Class:	Class 1, Type B	
Safety Tests:	EN 60601-1	
E-2 Stationary Hydrocollator		
Mains Power:	110~240 V 50/60 Hz	
Power Consumption:	1000 W	
Weight:	14 kg	
Dimensions*:	38 x 33 x 51 cm	
Electricial Safety Class:	Class 1, Type B	

Wall Mounted Towel Rack 5 x 84 cm

7113

Parallel Bars-Powered With Manual Crank Override



Models 1363 Power Height and Width Parallel Bars







- Motorized width adjustment of handrails from 13" to 25".
- Model 1363 15' long has (6) uprights.
- Motorized height adjustment from 27" to 37".
- Convenient hand control adjusts bars.
- 1 5/8" diameter stainless steel handrails.
- 34" wide wood platform is covered in textured gray styrene.
- Tapered ends for wheelchair access.
- Removable Abduction Board.
- Manual crank override.
- Steel uprights are powder coated in neutral cream finish.
- 30 ½" clearance between uprights.
- Hospital grade plug. 120 V, 60Hz, 5 Amps, UL Listed.
- Weight Capacity: 300 lbs.

MODEL #	LENGTH	WIDTH	HEIGHT
1363 (not	10 ft	13" -	27" - 37"
shown)	1011	25"	21 - 31

7115A

3 Section Hi-Low Treatment Table



Model 6053
3-Section Hi-Lo Multi-Position Treatment Table

Weight Capacity: 400 lbs.

MODEL #	LENGTH	WIDTH	HEIGHT
6053	76"	27"	19" - 37"

- Multi-position table can be used for a wide variety of therapy and treatment functions.
- Motorized height adjustment from 19" wheelchair height to 37" high.
- "Hands-free" foot control operation.
- Adjustable head section 15" x 27", raises up to 45° and lowers down to 90° below horizontal.
- 22"L x 27"W middle seat section is stationary.
- 39"L x 27"W leg/backrest section raises easily up to 73° with sturdy friction locking device and dual release handles.
- Top sections have welded steel support frames.
- Includes (4) 3" diameter swiveling casters with locking brakes.
- 110V., 60Hz, 1.8 amps. U.L. Listed
- 76"L x 27"W 3-section 1 ½" thick high-density gray vinyl top features contoured face/nose cutout in head section.

TOC

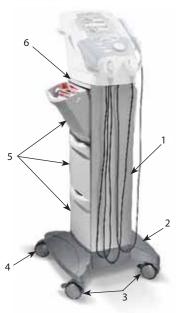
INSTALLATION/REMOVAL

GENERAL INFORMATION-THERAPY SYSTEM CART

The optional Therapy System Cart is designed for use with the Intelect Legend XT Electrotherapy and Combination Systems only and allows the user to easily transport the System from patient to patient within the clinic as well as store all necessary accessories, supplies and applicators used for the various modalities of the System.

The following instructions will explain the proper installation of the Intelect Legend XT Therapy System, with and without optional modules, to a Therapy System Cart.

Nomenclature



- **1.** Front and Rear Extrusion
- 2. Cart Base
- **3.** Front Locking Swivel Casters (2)
- **4.** Rear Swivel Casters (2)
- **5.** Removable Storage Bins (6)
- **6.** Cart Top

Specifications

Dimensions

Height

Power Required. . . . 100 - 240 V, 50/60 Hz



7122

CRUTCH AND CANE RACK



Sammons Preston® Storage Rack

Item Description: Cane, Crutch, Roll and Walker Rack

Item Number: 7297 **Price:** \$269.65

This attractive, 66" long, wall-mounted rack holds up to twelve 6" or 8" diameter rolls or six of the larger sizes. Rolls are hung out of the way by the loops built into each one. Also great for storing crutches, canes and walkers. Consists of two bases: each 33"L x 5-1/4" W; extends 16-1/2" from wall. Latex free.

RECOMMEND BACKING FOR ADDITIONAL SUPPORT WEIGHT OF THE MULTIPLE CRUTCHES/CANES/WALKERS ETC...THAT IS HUNG ON THIS RACK.

RECOMMEND 2 LEVELS: 1 MOUNTED @ 48" ABOVE FINISHED FLOOR FOR CANES & WALKERS; 2ND MOUNTED @ 72" ABOVE FINISHED FLOOR FOR HANGING OF CRUTCHES.

SOURCE: http://pattersonmedical.com/app.aspx?cmd=getItemDetail&id=081186501

7128b
Pro Form Pro 9000 Treadmill



ProForm Pro 9000 Treadmill - Key Specs:

Folding: Yes

Top Speed: 12 MPH Weight Capacity: 300 LBS

Dimensions: 80" L x 39.5" W x 73.5 H

Utilities: E 120V; Data



SMOOTH, FLOWING & PRECISE

EFX® 5361 Elliptical Fitness Crosstrainer™

Like every piece of equipment in the Assurance™ Series, the EFX 536i has been designed and built to withstand the rigors of a broad range of environments, from less supervised facilities such as hotels, corporate gyms, apartment complexes, or fire departments. Combining essential reliability and ease-of-use with a natural, low-impact stride, the EFX 536i features a console that provides clear visuals and a familiar layout that makes it easy for users to explore a variety of satisfying workouts.

At Precor, we recognize that a great workout is the sum of many parts. In your hands, the products, services and technologies we offer can be combined in countless ways to complement the programs, and atmosphere you're creating.



Elliptical Fitness Crosstrainer™



The EFX® 536i features the unique CrossRamp® technology which alters the elliptical path between 15 and 40 degrees in both forward and reverse stride motions, engaging various muscle groups to offer a wider range of exercises. Combined with moving handlebars users will receive a highly effective cross training and total-body workout.

PRODUCT HIGHLIGHTS

Console

Clear visuals and familiar layout increase program exploration, leading to greater satisfaction. Durable dome switches are tactile, responsive and easy for everyone to use.

Moving Handlebars Moving handlebars for a total-body workout.

Adjustable CrossRamp® Technology Users can isolate or cross-train specific lower body muscle groups simply by adjusting the angle of the ramp, making it easy for users to focus on their individual fitness goals.

Biomechanics

Our patented elliptical path perfectly mimics a natural running stride, allowing users to keep their heels down for a more comfortable, effective and ergonomically correct motion.

PRODUCT SPECIFICATIONS

Dimensions (L x W x H): 80 x 32 x 64 inches / 203 x 81 x 162 centimeters

Product Height with PVS: 80 in / 203 cm Weight: 207 lbs / 94 kg

Power: Self-Powered

Total Workouts: Resistance Levels: 20 CrossRamp® Range: 15-40°

Language Selection: English, French, Dutch, German, Portuguese,

Russian, Spanish

Network Capabilities: FitLinxx compatible

C-SAFE enabled

Entertainment: Standard - Mobile Device Charger"

Optional - 15" Personal Viewing System (PVS)

Optional - Wireless entertainment cap

Accessories: Optional - Reading rack

Optional - Cable management

Warranty: For warranty terms visit

http://www.precor.com/en-us/contact-us/customer-service/warranty







Streamlined LED Console



Streamlined LED Console with optional 15" Personal Viewing System







Prescribed for Progress™

StepOne™ Recumbent Stepper Product Specifications

Order Code: SONEØ2

FEATURES

Smooth, linear movement with start and stop motion
Low starting resistance
Resistance range
Neutral starting position
Arm to leg movement ratio
User-defined range of motion
Comfortable, ergonomic body position
Total body workout
Large flywheel
Small footprint
Easy to transport
Heart rate monitoring
Quiet belt drive



ACCESSIBILITY



Direct wheelchair access	Seat slides off easily for direct wheelchair access. ADA compliant.
Easy patient transfer	Adjustable swivel seat sits on a flat horizontal monorail and provides easy patient transfer.
Step-through seating	True adjustable step-through design, allows all users full access and ease of entry.
Step-through height	2"
Grab bar	Integrated for easy entry and support.

SEAT



Bariatric seat	Wide seat adjusts forward/back; side handles; and 600 lb user weight capacity
Removable seat	Seat removes easily without hardware for direct wheelchair access
360° Therapist Assist Pedals	Adjust the seat forward and back from any point around the machine
Seat removal handle	Integrated handle on seat back makes it easy to remove the seat
, ,	Adjust forward and back on a level monorail for optimum control and safe positioning

ARMS & GRIPS

Arm length adjustment : Adjust length of arms within a 12" range.	
60 degree hand grip rotation Position handles anywhere within the 60 degrees of hand grip rotation	
Non-absorbent, chemical resistant hand grips Easy to clean, durable, made from 100% recyclable material.	
Easy adjustment levers Yes	

FOOT PEDALS

. , , ,	Sturdy, oversized foot beds.
Heel cup	Yes
Foot straps	Yes

INTELLI-FIT™ CONSOLE

7" LCD full color touch screen display	Touch screen with	clear, simple screens	and large, readable font.
Audible beep	Yes		
Tactile buttons	Tactile buttons in	addition to touch scre	en.
Resistance levels	191 levels of resist	tance - 20 levels adjus	table in .1 increments.
Display feedback	Time, total steps, s heart rate and leve		e length, calories, ascent, METs, watts,
Intelli-Stride™ stride length measurement	Stride length is ac motion and impro		d displayed to help monitor range of
Ascent	Displays a true me	easure of ascent (ft.) b	ased on stride length and steps.
One touch quick start	Yes		
Control METs - Constant Work Program	Set constant METs program	s level and the worklo	ad remains constant throughout the
Iso-Strength Program	Isokinetic progran	n for safe, accommod	ating resistance
Power Burst	8-second burst of	high intensity training	9
Cool down	Automatic cool do	own begins after each	exercise is completed.
Administrative mode	User defined setti	ngs, metric or US unit	s of measure and other custom settings.
User-defined console languages	9 languages - Eng Italian, Dutch	lish, Spanish, French,	German, Russian, Japanese, Chinese,
Download results to USB flash drive	Plug USB flash driv	ve into the Fit-Key® slo	ot to save workout results in a .txt file.
CSAFE port and 8-volt DC power port	Yes		
USB charger	For phones and ot	ther electronic device	5.
Water bottle holder	Integrated		
Personal Cooling Fan	Integrated dual fa	ns with three speeds.	
Programs	Quick Start	Fit-Quik®	Constant Work - METs
	Manual	Hills	Constant Work - Watts
	Heart Rate	Random	Iso-Strength
	Stress Test		

TECHNICAL SPECIFICATIONS

Power Requirements	Self generating; low voltage AC adapter included
Maximum user weight capacity	600 lbs.
User height range	Fits users 4'6" - 6"7"
Accuracy to EN 957-8 standard	Yes
Unit weight	303 lbs.
Unit size	68″L x 30″W x 48″H
Color	Frame: Charcoal Cover: Cool Gray
Manufacturing	Assembled in USA

StepOne™ Recumbent Stepper Product Specifications (cont.)

Order Code: SONEØ2

WARRANTY

Parts	3 years
Labor	1 year
Frame	5 years

ENHANCEMENTS

Fit-Key® software	Optional Fit-Key® software makes it easy to create specialized programs and
	track data.
Entertainment options	Yes

ACCESSORIES

StepOne™ Leg Stabilizer	Attaches at the calf where support is needed most. Natural pivot point at ankle. Durable steel construction.
Wheelchair Platform	Provides a sturdy foundation for wheelchair use, includes tethers for stabilization.
Heavy-Duty Wheelchair Ramps	For manual and powered wheelchair access. Provides increased stabilization.
Assist Gloves	Wrist support and enhanced grip - helps user maintain grip and position.
Polar Chest Strap	Transmits heart rate directly to console - works on all SCIFIT products.



SCIFIT Systems, Inc. reserves the right to change or alter specifications at any time without notice and without incurring any obligation.

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StepOne Specs - SONE02 - 2016 - v1

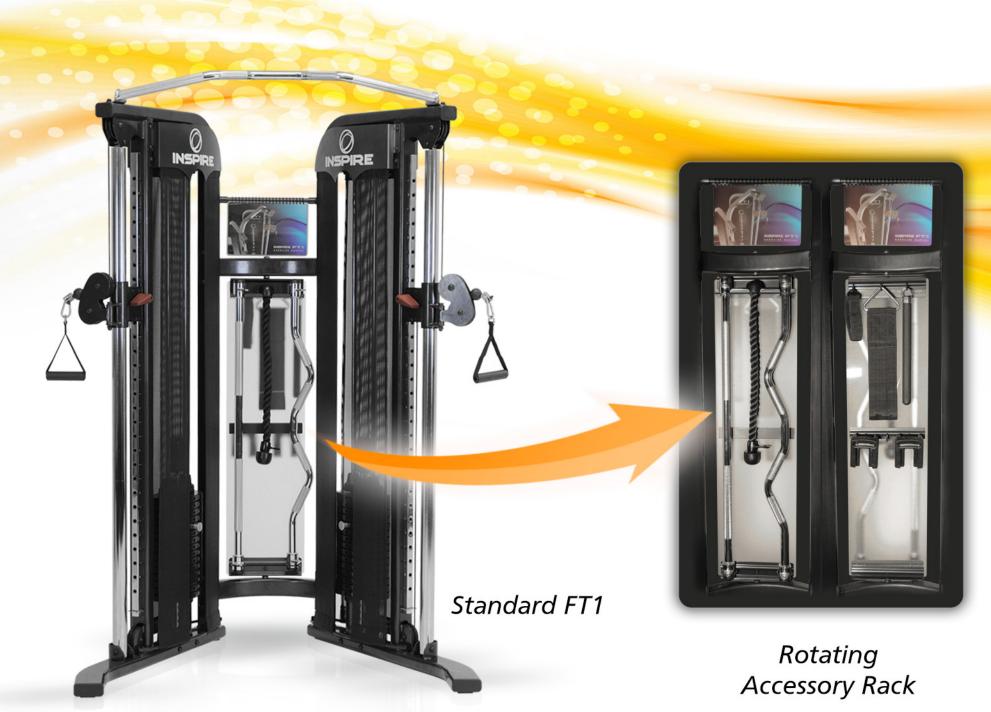
OINSPIRE

Check out our workouts on the web!





By Health In Motion LLC.
Phone (877) 738-1729 · Fax (714) 738-1728
www.inspirefitness.net



FT1 Product Specifications

Frame: Heavy-duty rectangular and round tubular steel.

Powder Coated Finish: The Electrostatic Powder Coat offers a durable, maintenance free finish.

Instructional Flip Chart: Offers color photos with over 40 different exercises right at your finger tips.

User-friendly adjustments: The quick, one-handed adjustable high/low pulley system adjusts to more than thirty height positions for all of your exercise needs.

Dual Independent Weight Stacks: The dual weight stacks allow you to work each side of the body independently for a more balanced workout.

Split Resistance: .5 resistance ratios provide a smooth, continuous feel and a longer range of motion for more versatility in your exercise movements.

Weight Stacks: 2 - 165 lb Commercial Weight Stacks with Solid Guide Rods and Center Drilled Weight Plates.

Rotating Accessory Holder: Includes the Multi-Functional Belt, Easy Curl Bar, Straight Bar, Ankle Cuff, Swing Handle, Tricep Rope, 2 – Single Handles, and 2 – 5 lb add-on weights.

Options Available: FID Bench, 50lbs Weight Stack add-on, and Abdominal Bar.

Warranty: Inspire (Health In Motion LLC.) Multi-Gyms have a (Residential) Lifetime Limited Warranty and a 10 Year Light-Commercial Warranty. Visit your local dealer for

Dimensions:

FT1 Footprint: Depth 47" x Width 54" x Height 81.5"

FT1 Footprint w / Optional Bench: Depth 83" x Width 54" x Height 81.5"

Inspire/Health In Motion LLC. reserves the right to alter product specifications at any time. This product covered by one or more of the following US Patents and others pending: 5,330,405; 5,961,427; 5,944,641; 7,905,818; 7,837,600; 7,645,217; 8,096,929; 7,722,513.

7137b Therapy Ball Rack Mobile



MJM Therapy Ball Racks

Specifications

• 64" L x 19" W x 62" H

- 4 Swivel Casters
- Holds 6 Plus Balls
- Assembles In Minutes

Item Description: Mobile Rack

Item Number: 8199 Price: \$262.85

SOURCE: PATTERSON MEDICAL.COM

Product Data Sheet







EXM3000LPS

Body-Solid - Selectorized Multi-Station Gym



EXM3000LPS

Selectorized Multi-Station Gym

If maximum strength and a weight room full of workout options is what you want in a minimum amount of space, then try the EX-M3000LPS on for size. This multi-station workhorse provides health club quality strength training for up to three people simultaneously. The EXM3000LPS features a multi-function Press Arm Station for bench press, incline press, shoulder press and chest supported mid-row exercises. The fully-adjustable Perfect Pec Station with range limiters allows users to achieve deeper muscle penetration for faster, more defined results.

The Leg Press/Calf Press Station operates on a 2 to 1 weight ratio giving the EXM3000LPS the awesome capacity of a 420 lb. leg press! The non-slip, rubber encased foot plate is constructed of heavy-gauge steel for safe operation during the most intense workouts.

Dimensions: 83"H x 91"L x 73"W

Special Features

- · Lifetime warranty
- Three stations in one with fully adjustable pads for all size users and full range of motion exercise
- Unique two bar linkage self-aligns the angle of the leg press plate to the user's body
- Perfect Pec Station with dual overhead cams with six increment settings per arm provide variable starting positions
- The Lat Pulldown/High Pulley Station is ideal for increasing size, strength and endurance of your back, shoulder and triceps muscles.

Job

Basix[™]-

Reliable performance for any application.

Basix[™] is constructed from a strong steel alloy to endure the rigors of a daily routine while providing a safe, ergonomic and flexible work area for the user. The Basix line of carts is available in four styles: Basix, Basix Compact, Basix Plus and Basix Plus Compact. Basix Plus and Basix Plus Compact are covered under separate specification sheets due to the many enhancements over the standard line.

- Safe The polymer base protects the cart and surrounding environment from incidental contact. The base is designed to allow the 5" (127mm) casters to be mounted outboard of the cabinet, which keeps the cart stable when a fully loaded drawer is accessed.
- Ergonomic Polymer top provides a userfriendly work surface. Optional accessory push handles can be mounted in an ergonomic fashion to allow for easy pushing or pulling of the cart.
- Flexible User defined configurations can be accommodated by filling an empty cart shell with desired 3", 6", 9" and 12" (76, 152, 229, 305 mm) drawer heights.
- Accessible Full-extension drawers and a full array of accessories put equipment and supplies where needed for convenient access. Optional drawer dividers keep supplies neat and organized.
- **Mobile** This cabinet comes with 5" (127mm) diameter casters (2 with swivel brakes, 2 with swivel-lock) allowing it to be rolled easily from location to location or moved for convenience when cleaning.
- Accessories A full array of task support accessories are available for above the work surface or the side of the cart.



MBX4101TL, MB-TE (Teal)



MBX3210TL. MB-SG (Seafoam Green) with Accessory Package MBXANES-1





Basix[™] Carts and Drawers

M B X 3 1 1 0 S B

Metro Basix Standard 3" Drawers 6" Drawers 9" Drawers 12" Drawers Color Tone¹ Lock Type²

¹ Color Tone: S- Solid - Cart body color matches drawer front color

T- Two Tone - Cart body color is light taupe

² Lock Type: B- Breakaway Lock Bar L- Keyed Lock

Part No.	Drawer Spac (in.) (mn	n) Config.	Color	Lock	Heiç (in.)	ght (mm)	Width (in.) (mm)	Le (in.)	ength (mm)	Approx. F (lbs.)	Pkd. Wt. (kg)
MBX3110SB	24 610	1 - 9"	Solid	Breakaway Lock Bar	381/2	978	24 ¹ / ₈ 613	30	762	151	72
MBX3110TB	24 610	1 - 9"	Two Tone	Breakaway Lock Bar	381/2	978	24 ¹ / ₈ 613	30	762	151	72
MBX3110SL	24 610	1 - 9"	Solid	Key Lock	381/2	978	24 ¹ / ₈ 613	30	762	151	72
MBX3110TL	24 610	1 - 9"	Two Tone	Key Lock	381/2	978	24 ¹ / ₈ 613	30	762	151	72
MBX1210TL	24 610	1 - 9"	Two Tone	Key Lock	381/2	978	24 ¹ / ₈ 613	30	762	151	72
MBX4101SB	30 762	1 - 12"	Solid	Breakaway Lock Bar	45	1140	24 ¹ / ₈ 613	30	762	159	75
MBX4101TB	30 762	1 - 12"	Two Tone	Breakaway Lock Bar	45	1140	24 ¹ / ₈ 613	30	762	159	75
MBX3210TB	30 762	1 - 9"	Two Tone	Breakaway Lock Bar	45	1140	24 ¹ / ₈ 613	30	762	159	75
MBX4101SL	30 762	1 - 12"	Solid	Key Lock	45	1140	24 ¹ / ₈ 613	30	762	159	75
MBX4101TL	30 762	1 - 12"	Two Tone	Key Lock	45	1140	24 ¹ / ₈ 613	30	762	159	75
MBX2201TL	30 762	1 - 12"	Two Tone	Key Lock	45	1140	24 ¹ / ₈ 613	30	762	159	75
MBX3210TL	30 762	3 - 3" 2 2 - 6" 1 - 9"	Two Tone	Key Lock	45	1140	24 ¹ / ₈ 613	30	762	159	75



Basix[™] Carts and Drawers

M B X 24 S B

Metro Basix Standard Vertical Color Tone Lock Type Drawer Space (in.)



MBX24SL with drawers

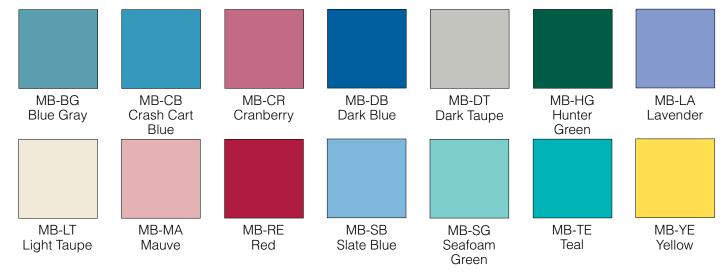
Empty Carts

	Drawer Spa	ce Drawer			Heig	jht	Width	Len	gth
Part No.	(in.) (mr	n) Config.	Color	Lock	(in.)	(mm)	(in.) (mm)	(in.)	(mm)
MBX24SB	24 61	0 Empty	Solid	Breakaway Lock Bar	38 ¹ / ₂	978	24 ¹ / ₈ 613	30	762
MBX24TB	24 61	0 Empty	Two Tone	Breakaway Lock Bar	381/2	978	24¹/ ₈ 613	30	762
MBX24SL	24 61	0 Empty	Solid	Key Lock	381/2	978	24¹/ ₈ 613	30	762
MBX24TL	24 61	0 Empty	Two Tone	Key Lock	38 ¹ / ₂	978	24 ¹ / ₈ 613	30	762
MBX30SB	30 76	2 Empty	Solid	Breakaway Lock Bar	45	1140	24¹/ ₈ 613	30	762
MBX30TB	30 76	2 Empty	Two Tone	Breakaway Lock Bar	45	1140	24¹/ ₈ 613	30	762
MBX30SL	30 76	2 Empty	Solid	Key Lock	45	1140	24 ¹ / ₈ 613	30	762
MBX30TL	30 76	2 Empty	Two Tone	Key Lock	45	1140	24¹/ ₈ 613	30	762

Drawers

		1		Interior D	Dimension ——					
		Hei	ght	Wi	idth	Lenç	gth	Weigh	Capacity	
Part No.	Description	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(lbs.)	(kg)	
MBX103	3" Deep Drawer	2 ⁷ / ₈	73	17	432	221/4	565	50	24	
MBX106	6" Deep Drawer	61/4	159	17	432	221/4	565	50	24	
MBX109	9" Deep Drawer	93/8	238	17	432	221/4	565	50	24	
MBX112	12" Deep Drawer	12 ¹ / ₂	318	17	432	221/4	565	50	24	

Colors





Basix™

Basix Specifications:

Cart Body: Double wall construction

Inner wall: 22 gauge (.030"/.8mm) steel Outer wall: 20 gauge (.036"/.9mm) steel

Finish: Powder coated

Base: Blow-molded, high-density polyethylene

Steel reinforced caster channels

Caster mounts located outside of cart body footprint to provide counterbalance to full

extension drawers

Work Surface: .125" (3mm) ABS, raised on four sides

Dimensions: 11/4" H x 181/2" W x 263/4" L (32H x 470W x 679mm L)

Usable work space: 17" x 25" (432mm x 635mm)

Casters: 5" (127mm) diameter with polyurethane tread

2 swivel-brake, 2 swivel-lock (coverts from swivel to rigid) 200 lbs. (90kg) per caster, 600lbs. (270kg) per cart

Drawers: 50 lbs. (23kg) load rating per drawer

Body: 22 Gauge (.030"/ .8mm) steel w/16 gauge (.060"/2mm) lock clips

Finish: Powder coated

Fronts: .032" (.8mm) coated aluminum

Finish: Powder coated

Pull: Polymer

Slides: Zinc-Plated Steel

Load Rating: 100 Lbs.(45kg)/set

Lock: Bright Nickel Type 3

G Cam, 7/8" (22mm) Cylinder

2 Keys,

Coded on lock and keys

All Metro Catalog Sheets are available on our Web Site: www.metro.com



For Product Information Call: 1-800-433-2232

8301

EXAM ROOM FLAGS

PROVIDE BACKING & MOUNT WITH BOTTOM AT 70 TO 72" AFF



Custom Labeled Metal Exam Room Flags: Custom Labeled Metal Exam Room Flags use position, color and text to show the room status (occupied, x-ray, ready for clean up, etc.) and increase the efficiency of your facility

- Custom Labeled Metal Exam Room Flags: Custom Printed Metal Exam Room Flags use position, color and text to show the room status (occupied, x-ray, ready for clean up, etc.) and increase the efficiency of your facility
 Custom Labeled Metal Exam Room Flags are available in custom colors, choose from green, red, grey, yellow
- Custom Labeled Metal Exam Room Flags are available in custom colors, choose from green, red, grey, yellow, turquoise, beige, white, blue, black, orange, lavender and coral (call 877-514-1140 to order). "Click" <u>Custom</u> Colors for color pallet
- To Order: Please complete this form "Click" <u>Custom Flags Order Form</u> and fax it to 616-514-1141 or e-mail to<u>sales@medicus-health.com</u>
- Tell us your preferred flag length 4" or 8"
- What text you would like for each flag
- Desired color
- Quantity desired
- Whether you want printing on both sides of the flag
- We can get you a quote
- Design your own color coding system to signal room status/occupancy
- Constructed of durable aluminum
- Flags can swing 180 degrees
- Lightweight and easy to mount (mounting hardware not included)

SOURCE: http://www.medicus-health.com/custom-labeled-exam-room-flags-metal.aspx





255 Lighting



Affordable, improved performance procedure lighting

Whether you practice in an office environment or specialized procedure area, your work requires superior, white, shadow-free illumination that is safe and cool to the touch. The Ritter 255 LED Procedure Light by Midmark is designed to deliver both quality and affordability with features that can help you provide the best care to your patients.



High-quality procedure lighting

Integrated controls on both sides of the light head provide convenient access to make lighting adjustments. You can turn the light on and off and adjust the light brightness from the control touchpad. The sleek contours and sealed light head were designed to make cleaning and care easier. And the handle can be removed for steam sterilization.



Features designed to make your life easier

The Ritter 255 LED Procedure Light is counterbalanced, designed to help you achieve precise positioning using less force – all without drifting or needing frequent adjustments like spring-based systems. And the yoke design is intended to further simplify positioning with its smooth range of motion.



Ritter 255 Mobile Procedure Light



Ritter 255 Combination
Procedure Light



Ritter 255 Wall Mount Procedure Light

Seeing is believing

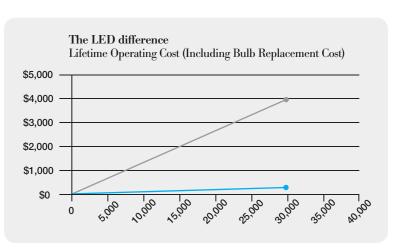
We've also designed the 255 light with a large reflector, including 1,040 reflecting facets, which provide an even distribution of light and reduction of shadows for uninterrupted illumination.



Superior lighting by design

The Ritter 255 LED Procedure Light is designed to deliver superior illumination. The combination of the optics enhances one's ability to see color variations in tissue and is intended to aid you in a more accurate diagnosis and treatment. Features include:

- 7,500 footcandles, significantly more light intensity of similar products
- An exceptional color rendering index of greater than 95
- And a color temperature of 4,400 K



• LED Light • Halogen Light

Lighting

S P E C I F I C A T I O N S

Ritter 255 Procedure Light Specifications

Illumination at 39" (1 m)

Focal length: 7,500 fc (80,700 lux) Pattern diameter: 7.5" (19 cm)

Depth of field: 29.8" (75.8 cm) Color temperature: 4,400 K

Diameter of lighthead: 20" (50.8 cm) LED Light Module: 16 LEDs arranged in

a 4x4 array, 32 Watt rating.

Electrical

115 VAC, 50/60 Hz, 0.7 amps 230 VAC, 50/60 Hz, 0.5 amps

Classified by TUV with respect to electric shock, fire, mechanical and luminaires for diagnosis hazards only in accordance with IEC/ES 60601-1, CAN/CSA C22.2 60601-1, 60601-1-2, 60601-2-41, CE Medical Device Directive 93/42/EEC Annex VII Class 1, and RoHS European Directive 2011/65/EU

Models

255-001 Single mount, 8' (2.4 m) ceiling 255-002 Single mount, 9' (2.7 m) ceiling 255-003 Dual mount, 8' (2.4 m) ceiling 255-004 Dual mount, 9' (2.7 m) ceiling 255-005 Mobile Procedure Light 255-006 Wall Mount

255-007 Mobile Procedure Light w/o cord

The following systems are recommended based on the following ceiling heights (measured from the bottom of the ceiling surface to the floor):

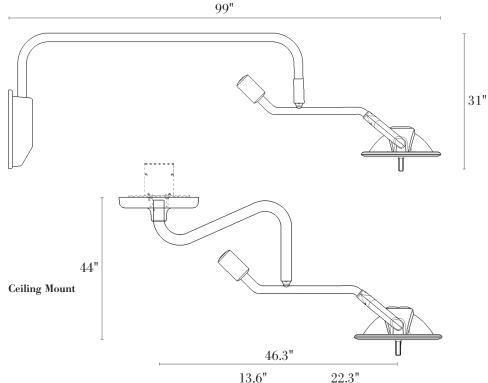
Less than 8' (2.4 m) Mobile Light

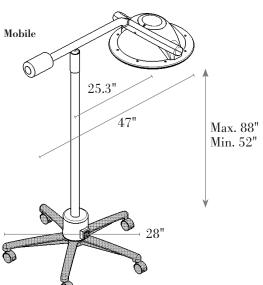
 $8' \ (2.4 \ m) \ to \ 9' \ (2.7 \ m) \\ 9' \ (2.7 \ m) \ to \ 10' \ (3 \ m) \\ 9' \ (2.7 \ m) \ Single \ or \ Dual \ Light$

Greater than 10' (3 m) 8' (2.4 m) Single or Dual Light with 10' ceiling mount adapter kit(s) or Mobile light

Wall Mount

63.5"





Authorized CE Representative

Countries in the EEC should direct all questions, incidents, and complaints to Midmark's Authorized CE representative listed below:

Midmark EMEA Ltd Beech House, First Floor East Wing, Ancells Business Park Fleet, Hampshire, GU51 2UN, UK Call: + 44 (0) 1252 360 940

Fax: + 44 (0) 1252 360 941

Ritter® by MIDMARK

Midmark is an ISO 13485 and ISO 9001 Certified Company.

For more information or a demonstration, contact your Midmark dealer or Midmark Corporation, Versailles, Ohio.

Call: 1-800-MIDMARK Fax: 1-800-365-8631 midmark.com

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Products subject to improvement changes without notice.

Litho in U.S.A. 007-1070-00 Rev. B1 (11/15)

PRODUCT AND ACCESSORY ORDERING INFORMATION

GS Exam Light IV

48810 GS Exam Light IV with Table/Wall Mount

48950 Mobile Stand for GS Exam Light IV

52640 Disposable Sheath for GS Exam Light IV (25/box, 5 boxes/case) 48810-M3001 GS Exam Light IV with Midmark* Bracket for Tables

204, 222, 223, 604, 622, 623, 625

48810-M4001 GS Exam Light IV with Midmark Bracket for Tables

230, 630, 641, 646, 647

GS 300 General Exam Light

44400 GS 300 General Exam Light with Mobile Stand 44410 GS 300 General Exam Light with Table/Wall Mount

44215 12" Wall Mount Extension

48960 Heavy Duty/Tall Mobile Stand

GS 600 Minor Procedure Light

44600 GS 600 Minor Procedure Light with Mobile Stand44610 GS 600 Minor Procedure Light with Table/Wall Mour

44610 GS 600 Minor Procedure Light with Table/Wall Mount44215 12" Wall Mount Extension

48960 Heavy Duty/Tall Mobile Stand

52630 Disposable Sheath for GS 600/GS 900 (50/box, 5 boxes/case)

GS 900 Procedure Light

44900 GS 900 Procedure Light with Mobile Stand 44900-C GS 900 Procedure Light with Ceiling Mount 44900-W GS 900 Procedure Light with Wall Mount

52630 Disposable Sheath for GS 600/GS 900 (50/box, 5 boxes/case)

GS Portable Headlight

46070R GS Portable Headlight with Rigid Headband and

Direct Power Supply/Charger

GS Portable Headlight with Terrycloth Headband and Direct Power Supply/Charger

GS Procedure Headlight

49020 GS Procedure Headlight with Direct Power Supply 75260 GS Procedure Headlight Battery Pack with Charger

SPECIFICATIONS

	GS Exam Light IV	GS 300	GS 600	GS 900	GS Portable Headlight	GS Procedure Headlight
# of LEDs	1 White LED	1 White LED	3 White LEDs	6 White LEDs	LED	LED
Color Temperature	5,500° K	5,500° K	5,500° K	5,500° K	5,300° K	5,700° K
Light Intensity @ Typical Working Distance	20,000 lux (1,858 footcandles)	20,000 lux (1,858 footcandles)	50,000 lux (4,645 footcandles)	80,000 lux (7,432 footcandles)	2,000 lux, 40 lumens	9,000 lux, 120 lumens
LED Life	50,000 hours	50,000 hours	50,000 hours	50,000 hours	10,000 hours	50,000 hours
Working Distance	16 in (40 cm)	12 in (30.5 cm) to 20 in (50 cm)	12 in (30.5 cm) to 20 in (50 cm)	24 in (60.9 cm) to 40 in (100 cm)	16 in (40 cm)	18 in (46 cm)
Spot Size at Working Distance	4 in (10 cm) to 10 in (25 cm)	5 in (13 cm) to 6 in (15 cm)	6 in (15 cm) to 7 in (18 cm)	9 in (23 cm) to 10 in (25 cm)	4 in (10 cm) to 8 in (20 cm)	1 in (2.5 cm) to 6 in (15 cm)
Electrical	Input: 100-240 V~ 50 Hz-60 Hz, 0.30 A max	Input: 100-240 V~ 50 Hz-60 Hz, 0.35 A max	Input: 100-240 V~ 50 Hz-60 Hz, 0.65 A max	Input: 100-240 V~ 50 Hz-60 Hz, 1.00 A max	100-240 V- 50 Hz-60 Hz, 0.2 A max	100-240 V~ 50 Hz-60 Hz, 0.2 A max
Power Cord	#18 AWG, 3-wire grounded cord set, 8' (2.5 m) long	#18 AWG, 3-wire grounded cord set, 8' (2.5 m) long	#18 AWG, 3-wire grounded cord set, 8' (2.5 m) long	#18 AWG, 3-wire grounded cord set, 8' (2.5 m) long		
Weight	Total Table/Wall Mount: 5.30 lbs (2.40 kg) Total Mobile Stand: 12.40 lbs (5.63 kg)	Total Table/Wall Mount: 5.65 lbs (2.56 kg) Total Mobile Stand: 12.75 lbs (5.78 kg)	Total Table/Wall Mount: 6.45 lbs (2.93 kg) Total Mobile Stand: 17.35 lbs (7.87 kg)	Total Wall Mount: 17.90 lbs (8.12 kg) Total Mobile Stand: 44.85 lbs (20.34 kg) Total Ceiling Mount: 2 4.50 lbs (11.11 kg)	4 ounces (113 g)	6 ounces (170 g)
Mounting Options	Table/Wall Mount Mobile Stand	Table/Wall Mount Mobile Stand	Table/Wall Mount Mobile Stand	Wall Mount, Mobile Stand, Ceiling Mount	Head Mount-Terrycloth or Rigid Headband	Head Mount-Rigid Headband
Accessory Options	Disposable Sheath #52640	NA	Disposable Sheath #52630	Disposable Sheath #52630	Soft Case #05232-U	Carrying Case #49099, Battery Pack with Charger #75260
Warranty	5-year limited	5-year limited	5-year limited	5-year limited	1-year limited	1-year limited

For more information about Green Series Medical Lighting, please contact your Welch Allyn representative, or visit welchallyn.com

Welch Allyn Corporate Headquarters 4341 State Street Road, P.O. Box 220 Skaneateles Falls, NY 13153-0220 USA (p) 800.535.6663 (f) 315.685.3361

WelchAllyn°

WWW.WELCHALLYN.COM

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WelchAllyn°

Welch Allyn Green Series™ Medical Lighting



Welch Allyn Green Series™ Medical Lighting

Whiter, brighter and greener.

Welch Allyn Green Series Medical Lights provide a brighter, whiter light and consume less energy than traditional halogen lights. See true tissue color within a well-defined lit field during an exam or procedure while also reducing your cost of ownership.





LED VS. HALOGEN





Whiter and brighter to help enhance patient exams.

- > 5,500° K provides true tissue color rendition
- > Focused light provides uniform spot—no dark or hot spots—with crisp edges
- > Industry-leading lumen performance provides bright light

Greener, for a low cost of ownership.

- > LEDs provide long life
- > No bulb replacement
- > Consume less energy

Designed with patient safety and satisfaction in mind.

- > Touchless controls to reduce your contact, to help reduce risk of cross-contamination
- > Ergonomic design that is easy to clean
- > Minimal heat dissipation to enhance patient comfort and safety
- > Use with Welch Allyn Disposable Sheaths to further help reduce risk of cross-contamination

Welch Allyn Green Series Medical Headlights





GS Portable Headlight

- > Ideal for general examination, minor suturing and foreign body removal
- > Weighs only 4 ounces, and choice of rigid or terrycloth headband for maximum comfort
- > Well-defined, shadow-free illumination with coaxial luminaire
- > Rechargeable batteries within headband, provide complete portability
- > LED provides up to 10,000 hours of life
- > 60 minutes of continuous run-time on fully charged battery

GS Procedure Headlight

- > Ideal for foreign body removal, OB/GYN and dermatology applications and procedures or any procedure that requires a small, bright spot
- > Weighs only 6 ounces, providing maximum comfort
- > Well-defined, shadow-free illumination with coaxial luminaire
- > Use with a direct power supply or rechargeable battery for portability
- > LED provides up to 50,000 hours of life
- > 60 minutes of continuous run-time on fully charged battery

Welch Allyn Green Series Exam and Procedure Lights



GS 600 Minor

Procedure Light

GS Exam Light IV

- > Perfect for the OB/GYN office or for specialties that require very focused light in specific areas
- > One LED with 3X the typical light output than halogen
- > Highly flexible light pipe that is twice as long as conventional pipes with a compact, unobtrusive head that ensures pinpoint accuracy

GS 300 General Exam Light

- > Ideal for primary care facilities, emergency rooms, outpatient facilities and dermatology
- > One LED provides the perfect combination of intense light output and cool operation, all delivered in a compact design
- > Affordable price and rugged performance



GS 300 General

Exam Light

GS 600 Minor Procedure Light

- > Ideal for minor procedures and exams in any healthcare environment
- > Touchless intensity controls provide the output you need, when you need it
- > Features 3 LEDs and a wider head specifically for demanding viewing conditions that require exceptionally good light

GS 900 Procedure Light

- > Perfect for minor procedures/procedures in the hospital, ambulatory care center, outpatient facility or physician's office
- > Features 6 LEDs with intensity controls, outstanding durability, extraordinary maneuverability and unparalleled spot quality
- > Ceiling mount option gives ability to maximize floor space and direct light wherever it is needed during a procedure

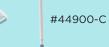


GS 900 Procedure Light

A VARIETY OF MOUNTING OPTIONS AVAILABLE:













Welch Allyn Vital Signs Monitor 300 Series

Advanced Monitoring Made Affordable



Welch Allyn°

Advancing Frontline Care™

Welch Allyn Vital Signs Monitor 300 Series.

Simple. Flexible. Affordable.

Your spot-check and continuous vital signs monitor, all in one.

As a clinician you are under pressure to improve outcomes, boost operating efficiencies and lower costs every day. It's a daunting challenge, but one that can be made a little easier thanks to the Welch Allyn Vital Signs Monitor 300 Series—an affordable vital signs monitor that's both flexible and easy to use.

Like the original Welch Allyn Vital Signs Monitor, the 300 Series helps enhance your productivity by providing automated vital signs before, during and after procedures. The simple, push-button menu operation and bright display allow you to quickly learn and easily obtain the important information you need, so you spend more time with your patients and less time with your equipment.

In addition to the great features you've come to expect from Welch Allyn, the Vital Signs Monitor 300 Series provides these exciting features:

- Separate patient modes with individual settings for adult, pediatric and neonatal support
- Fast, accurate temperature readings with industry-leading Welch Allyn SureTemp® Plus thermometry
- Simple, straightforward operation and intuitive menu navigation with our innovative monitor design

And because the 300 Series monitor is ideal for both routine assessment and continuous monitoring of vital signs, it's like getting two devices at one low price.



Procedures

The Vital Signs Monitor 300 Series is the ideal solution for taking routine patient vital signs or monitoring before, during and after procedures, minor surgery and treatments in a variety of settings, including:

- Medical/Surgical Floors
- Pediatric Floors
- Emergency Departments
- Hospital Special Procedures
 Departments
- Labor and Delivery Floors

- Outpatient Surgery Centers
- Outpatient Clinics
- Specialty Physician Offices
- Urgent Care Centers
- Dialysis Centers
- Dental Offices

Comprehensive Features

Noninvasive Blood Pressure

The Welch Allyn Vital Signs Monitor 300 Series begins as a noninvasive blood pressure (NIBP) monitor. Even in its most basic configuration, it delivers the features you need.

- Multiple Patient Modes—Adult, Pediatric and Neonatal operating modes
- Automatic Blood Pressure Mode—choose from 13 measurement intervals
- Programmable Alarms—for high/low systolic, diastolic and pulse rate
- LCD Display—clock window and menu navigation
- LED Display—bright, clear viewing of vital signs readings
- Built-In Memory—save up to 99 sets of measurement data

SureTemp® Plus Thermometry

Add SureTemp Plus Electronic Thermometry and take advantage of the revolutionary measurement capability developed by Welch Allyn. Obtain oral, rectal and axillary temperatures with the speed you want and the accuracy you demand.

- Oral—approx. 4-6 seconds
- Axillary—Adults, approx. 15 seconds; pediatrics, approx. 10 seconds
- Rectal—approx. 10 seconds





Pulse Oximetry

The Vital Signs Monitor 300 Series can be configured with motion-tolerant pulse oximetry (SpO_2) technology from Masimo® or OxiMax® technology from Nellcor.

- Programmable alarms—high/low saturation levels
- Wide variety of patient sensors
- Optional pulse tone feature—audible heart rate and SpO₂ saturation indicator

Optional Printer

Add an integrated thermal printer for trend analysis or record keeping and get what you need at the touch of a button.

Simple and Straightforward

The Welch Allyn Vital Signs Monitor 300 Series has a very short learning curve. Simple push-button programming and a large, digital display make learning and using the monitor easy and hassle-free.

Choose Only the Features You Need

The Vital Signs Monitor 300 Series is designed so you can select precisely the features you need today. That means you don't have to pay for functions you don't use. If your monitoring needs change, upgrading is easy. The 300 Series supports upgrades to all functions—pulse oximetry, approximately 4- to 6-second SureTemp Plus oral thermometry and integrated printer—so you can count on your monitor to accommodate your changing needs.

Take It Wherever You Need It

Carry it, set it on a countertop, wheel it on its own dedicated mobile stand, or mount it on a wall. Do it all—switching from one flexible mounting position to another is simple. The Welch Allyn Vital Signs Monitor 300 Series goes wherever your patient goes—effortlessly.

Ordering Information

53000	NIBP only (includes Pulse Rate and MAP)
5300P	NIBP/Printer
530T0	NIBP/Temperature
530TP	NIBP/Temperature/Printer
53S00	NIBP/Masimo Pulse Oximetry
53S0P	NIBP/Masimo Pulse Oximetry/Printer
53ST0	NIBP/Masimo Pulse Oximetry/Temperature
53STP	NIBP/Masimo Pulse Oximetry/Temperature/Printer
53N00	NIBP/Nellcor Pulse Oximetry
53N0P	NIBP/Nellcor Pulse Oximetry/Printer
53NT0	NIBP/Nellcor Pulse Oximetry/Temperature
53NTP	NIBP/Nellcor Pulse Oximetry/Temperature/Printer
008-0835-01	Mobile Stand with Accessory Basket
008-0834-01	Wall Mount with Accessory Basket
008-0890-00	IV Pole Mount



8500 S.W. Creekside Place, Beaverton, Oregon 97008 503.530.7500 toll free 800.289.2500 fax 503.526.4200 technical support 800.289.2501 www.welchallyn.com

E=English, F=French, G=German, I=Italian, S=Spanish, C=Chinese, D=Dutch, P=Polish, U=Portuguese, V=Swedish

1=North American, 2=European, 4=UK, 6=Australian

©2005 Welch Allyn. All rights reserved. SureTemp is a registered trademark of Welch Allyn, Inc. Nellcor and OxiMax are registered trademarks of Nellcor Puritan Bennett Inc. Masimo is a trademark of Masimo Corporation.



Advancing Frontline Care™

Language version suffix:

Transformer version suffix:

WelchAllyn°

34" Integrated Wall Panel (REF 77790-3, 4, 5)

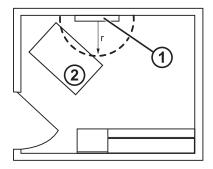
Manual part no. 718345, 80017426 Ver. B Revised 2016-06 © 2016 Welch Allyn



WARNING Welch Allyn is not responsible for the integrity of any mounting installation. Welch Allyn recommends that customers contact their Biomedical Engineering Department or maintenance service to ensure professional installation for safety and reliability of any mounting accessory.

 Choose a location for the panel near the examination table and an electrical outlet.

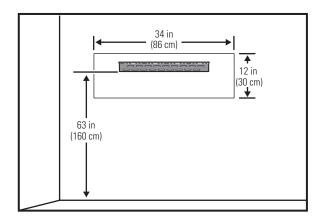
Sample room layout



- 1. Panel
- 2. Examination table

2. On the selected wall, find and mark the studs, and choose the panel height and corresponding height for the mounting rail bracket.

Recommendation: Place the bracket 63 in. (160 cm) from the floor.



3. Affix the mounting rail bracket to two studs at the selected height using the available screws (anchors are provided for additional support).

If studs are not available, use three anchors and screws.



Caution Ensure that the upper "lip" of the bracket sticks out from the wall and that the bracket is level.

4. Hang the panel on the mounting rail bracket.

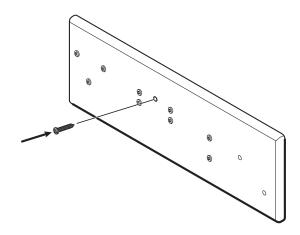


WARNING Ensure that the channel on the back of the panel fully engages the mounting rail bracket. The panel should be level and flush to the wall.

5. Secure the unit to the wall using the "A" screw.



WARNING Failure to install this security screw may result in personal injury and equipment damage.



6. Mount the Welch Allyn products to the panel according to the figures on the reverse side of this instruction sheet.

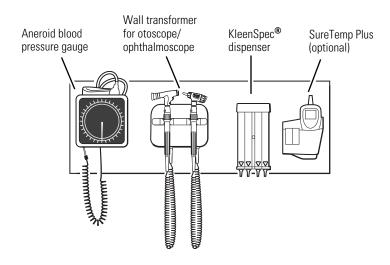
Aneroid blood pressure gauge: position the gauge bottom on the pre-installed screw and then secure the top of the gauge using the two additional screws provided.

SureTemp® Plus thermometer: position the thermometer on the pre-installed screws and then secure it with the two additional screws provided.

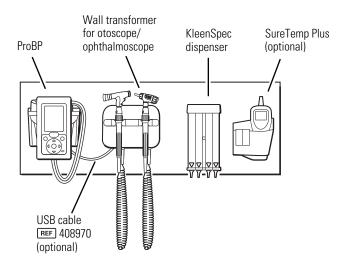
Install the remaining products on the pre-installed screws.

For diagnostic systems without SureTemp thermometry, cover the unused screw holes with the FastCaps provided.

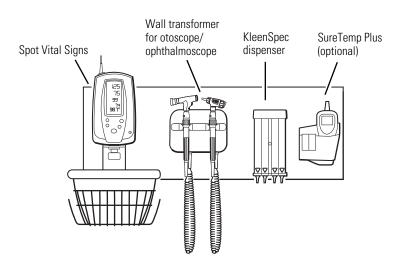
Instrument location—Aneroid blood pressure gauge



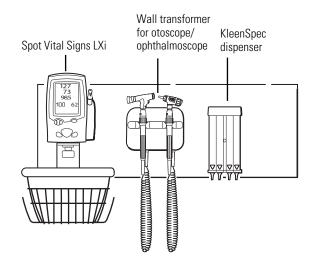
Instrument location—ProBP[™]



Instrument location—Spot Vital Signs®



Instrument location—Spot Vital Signs® LXi







Regulatory Affairs Representative Welch Allyn Limited Navan Business Park Dublin Road Navan, County Meath Republic of Ireland



Welch Allyn **Green Series™ 777 Integrated Wall System**

Welch Allyn Green Series[™] 777 Integrated Wall System

A reliable diagnostic solution that delivers accurate results whilst providing energy efficiency and cost savings.

Welch Allyn Green Series[™] 777 Wall Transformer – configured to your needs.

- Help reduce costs with a more energy-efficient product than the 767 Wall Transformer
- Help improve workflow and save energy with handles that automatically turn on/off
- Quickly and easily upgrade from the Welch Allyn 767 Wall Transformer to the Green Series 777 Wall Transformer
- No on/off switch reduces contact, to help reduce the risk of cross-contamination



Welch Allyn Otoscopes & Ophthalmoscopes

- Standardise or choose the technology you need
- Upgrade to the Welch Allyn LED bulbs for greater energy efficiency and lower cost of ownership



Welch Allyn MacroView[™] Otoscope

- Almost twice the field of view and 30% greater magnification than traditional otoscopes
- Allows for simplified diagnosis of Otitis Media through superior visualisation of the tympanic membrane



Welch Allyn 3.5 V Diagnostic Otoscope

- Halogen HPX lamp provides light output for true tissue colour and long-lasting performance
- Fibre optics project cool light to the distal tip with no reflections or obstructions for superior views of the tympanic membrane



Welch Allyn PanOptic™ Ophthalmoscope

- Fast, easy entry into undilated pupils with 5X larger view of the fundus for a streamlined exam
- 25° field of view vs. the standard 5° field of view provides optimal visualisation



Welch Allyn Coaxial Ophthalmoscope

- 18 unique aperture/filter combinations for greater versatility
- 28 focusing lenses with a range of -25 to +40 diopters



Welch Allyn industry-leading blood pressure and thermometry devices provide you with fast, accurate and reliable patient data you can trust – to help improve patient care and clinical decisions.



Welch Allyn Wall Aneroid

- Recessed, laser-engraved dial face with high-contrast pointer provides certified accuracy to reduce errors and improve patient care
- Lifetime calibration warranty reduces cost of ownership



Welch Allyn Connex® ProBP™ Digital Blood Pressure Device

- Improve patient comfort and increase throughput with fast, 15-second NIBP readings
- Portable, so you can take BP readings just about anywhere
- Connectivity to most leading EMR systems, to improve patient documentation accuracy and efficiency



Welch Allyn Spot Vital Signs® Device

- Improve workflow by using a device that includes NIBP, pulse rate and MAP
- Optional SureTemp® thermometry and Masimo® or Nellcor® pulse oximetry



Welch Allyn Spot Vital Signs® LXi Device

- Improve patient comfort and increase throughput with 15-second NIBP readings taken as the cuff inflates
- Connectivity to most leading EMR systems, to improve patient vitals documentation accuracy and efficiency
- \bullet Improve workflow by using a device that includes NIBP, pulse rate, MAP, thermometry and ${\rm SpO}_2$



Welch Allyn SureTemp® Plus Electronic Thermometer

- Provides accurate oral temperatures in 4 to 6 seconds, axillary and rectal temperatures in 10 to 13 seconds and adult axillary temperatures in 12 to 15 seconds
- Reduce risk of cross-contamination with single-use probe covers
- Improve efficiency with convenient storage for 75 probe covers
- Takes approximately 6,000 readings on 3 AA batteries and provides last temperature recall



Standardise for greater efficiency and consistent clinical approach.

	WALL BOARD	GS 777 WALL TRANSFORMER	OPHTHALMSOCOPE	COAXIAL OPHTHALMOSCOPE		OPTIC™ LMOSCOPE	DIAGN OTOSC	IOSTIC COPES	DIAGN MACRO OTOSO	VIEW™	PNEUMATIC 0T0SC0PE	767 ANEROID	CONNE	X PRO BP	KLEEN	ISPEC® NSERS	LOCKING COLLAR	SURETEMP® PLUS THERMOMETER
						A O			49								0	
Part #		7771X	11710	11720	11810	11820	25020	25021	23810	23820	20200	7670-01	34XFWT-2	34XFWT-4	52400-PF	52100-PF	76700	01690-300
Integrated Wall System	ıs																	
77791X	•	77710	•				•					•			•			•
77791-2X	•	77712	•				•					•			•			•
77791-4X	•	77714	•				•					•			•		•	•
77791-MX	•	77710		•					•			•			•			•
77791-1MPX	•	77710			•				•			•			•			•
77791-2MP2X	•	77712				•			•			•			•			•
77791-2MPX	•	77710				•			•			•			•			•
77792-2	•	77712	•				•					•			•			
77792-4	•	77714	•				•					•			•		•	
77792-M	•	77710		•					•			•			•			
77792-16M	•	77710		•					•			•			•			
77792-1MP	•	77710			•				•			•			•			
77792-2MP	•	77710				•			•			•			•			
77792-2MP2	•	77712				•			•			•			•			
77792-2MP4	•	77714				•			•			•			•			
77792-MNOBP	•	77710		•					•						•			
77792-4P20	•	77714				•	•					•			•		•	
77793-M2X	•	77712		•					•			•			•			•
77794-4	•	77714		•			•					•			•			
77795-2MPX	•	77710				•				•		•			•			•
77797-X	•	77710		•							•	•				•		•
Integrated Wall System	s for Spot o	r Spot LXI (includes	wall mounting bracket t	or Spot/Spot LXI) - Spot/	Spot LXI Mo	dels Sold Se	parately											
77792-2MPSP0T	•	77710				•			•						•			
77794-MLXI	•	77710		•					•						•			
77794-MSP0T	•	77710		•					•						•			
77794-2MPLXI	•	77710				•			•						•			
Integrated Wall System	s with Conn	nex ProBP Digital Blo	ood Pressure Device															
77791-MXPROBP2	•	77712		•					•				•		•			•
77791-2MPXPR0BP2	•	77712				•			•				•		•			•
77791-MXPROBP4	•	77714		•					•					•	•			•
77791-2MPXPROBP4	•	77714				•			•					•	•			•
Wall Transformer Sets	,																	
77510		77710													•			
77742		77712		•			•								<u> </u>		•	
77744		77714		•			•											
77754		77714		•				•										
77754-P20		77714				•		•										
77764		77714		•														
77710-71M		77710		•					•									
77710-72M2		77712		•					•									
77710-72M4		77714		•					•									
77710-82M		77710				•			•									
77710-82M2		77712				•			•									
77710-82M4		77714				•			•									
77742-1		77712	•				•										•	

Not all the configurations are available in every country. Please check with your local Welch Allyn representative.

The United States Green Building Council's Leadership in Energy and Environmental Design (LEED) is an internationally recognised green building certification system providing benchmarks for the design, construction and operation of high-performance green buildings.

Welch Allyn is proud to have earned a Gold rating in the LEED certification program.

To place an order, call our Customer Service Department at UK: 0207 365 6780 or contact your local Welch Allyn representative.







Advancing Frontline Care™



Welch Allyn Scale-Tronix scales are designed for your patients and your demanding healthcare environment.

With low-profile platforms designed to help reduce fall risks, readings that can help clinicians prescribe correct medication dosages with confidence and a wide variety of models, it's easy to see why **Scale-Tronix is a trusted brand for healthcare environments.**









Durable. Long Lasting. Designed for Demanding Healthcare Environments.







5002 Mobile Stand-On Scale

- Versatile and ideal for hightraffic areas
- Low-profile platform designed to help reduce fall risk

5702 Mobile Bariatric Stand-On Scale

- All the benefits of the 5002 model, with a larger platform designed for bariatric patients
- Weighing capacity up to 1,000 lb (454 kg)

6002/6702/6702W/6702SP Wheelchair Scales

- Three scales in one: wheelchair, chair and stand-on
- Easily accommodates most wheelchairs
- Four sizes for increasing capacity

Find the Right Scale for You

	5002 Stand-On Scales	5702 Bariatric Stand-On Scales	6002/6702/6702W/6702SP Wheelchair Scales
Weighing Capacity	880 lb / 400 kg	1,000 lb / 454 kg	880 lb / 400 kg
Platform	Low-profile 18" w x 19.5" d x 1.5" h	Low-profile 24" w x 26" d x 2"h	6002: 24" w x 26" d 6702: 28" w x 30" d 6702W: 28" w x 32" d 6702SP: 35" w x 30" d
Optional Accessories	1 7	_	l in others), integrated height er paper, line cord power supply
Resolution	0.1 lb / 100 gm		
Readout	Digital LED display in pounds	and kilograms (kilogram	-only options available)
Power Source (Cordless)	6 D-size disposable alkaline b	patteries. Line cord availal	ole.
Automatic Zero	Automatically returns to zero	, ready for next patient	
Weight Recall	Recalls last weight		
Reweigh	Recomputes patient's weight	while patient is on scale	
Wheels	Heavy-duty rubber wheels		
Computer Connectivity	RS-232 output (optional)		

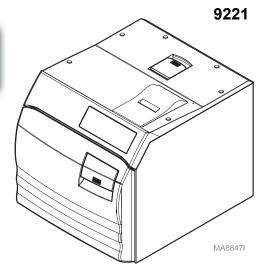
Welch Allyn, Inc. 4341 State Street Road Skaneateles Falls, NY 13153 USA (p) 800.535.6663 (f) 315.685.3361





Specifications: M9 / M9D (-020 thru -022) M11 / M11D (-020 thru -022)





WARNING

For 115 VAC models: Use 104 - 127 VAC, 50/60 Hz alternating current only. For 230 VAC models: Use 207 - 253 VAC, 50/60 Hz alternating current only.

Failure to do so may result in electric shock to personnel and / or damage to sterilizer.

Equipment Alert

A separate (dedicated) circuit is required for this sterilizer. Sterilizer should not be connected into an electrical circuit with other appliances or equipment unless circuit is rated for the additional load.

For model-specific ratings / dimensions, refer to the appropriate page.

Model Numbers	Refer to:
M9 / M9D (-020 / -022)	<u>Page 2</u>
M11 / M11D (-020 / -022)	<u>Page 3</u>

Electrical Requirements: I	M9 / M9D / M11 /M11D (-020 / -022)
Note To be properly grounded, unit must be connected receptacle.	to a matching, grounded, dedicated, properly polarized
115 VAC Unit:	115 VAC, (+/- 10%) 50/60 Hz, 12 amp Dedicated Supply Circuit*: 120 VAC, 50/60 Hz, 15 amp Max. Power Consumption: 1425 Watts
(230 VAC Unit:)	230 VAC, (+/- 10%) 50/60 Hz, 6.5 amp Dedicated Supply Circuit*: 230 VAC, 50/60 Hz, 10 amp Max. Power Consumption: 1500 Watts
_	mits less than 1500 watts from mains to ground. / Il in accordance to IEC664)
Fuse Ratings:	
115 VAC	F10.25 Amp, 250V, 3 AG Slo-blo, 1/4" x 1 1/4"
	F215 Amp, 250V, 3 AB Fast Acting, 1/4" x 1 1/4"
230 VAC	F10.125 Amp, 250V, Medium-Time Lag, 5 x 20 mm
	F28 Amp, Type F 250V, Fast Acting, 5 x 20 mm

this unit available in 115V & 230V; Verify which is preferred by owner

Specifications / Dimensions:

Specifications Chart: M9 / M9D (-020 / -022)	9 / M9D (-020 / -022)
Physical Dimensions:	
Overall Length w/Plug	20.38 in. (51.8 cm)
Overall Width	15.3 in. (38.9 cm)
Overall Height w/Printer	15.8 in. (40.1 cm)
Counter Area	15.3 in. x 18 in. (38.9 cm x 45.7 cm)
Chamber	9 in. dia. x 15 deep (22.9 cm x 38 cm)
Standard Tray, Large	7 5/16 in. x 12 in. x 7/8 in. (18.6 cm x 30.5 cm x 2.2 cm)
Standard Tray, Small	5 5/8 in. x 12 in. x 7/8 in. (14.3 cm x 30.5 cm x 2.2 cm)
Weights:	
Weight with Empty Reservoir	73 lbs. (33.1 kg)
Weight with Shipping Carton	81 lbs (36.7 kg)
Water Reservoir Capacity	1.1 Gallons (4.1 liters) to Full Mark usable volume is 0.5 gallons (1.9 liters)
Water Usage (per cycle)	
Standard Configuration	120 to 140 ml (varies depending on the cycle)
Connected to Direct -to-Drain Thermal Reduction system. (VistaCool ™)	500 ml
Chamber Pressure at 270 °F (132 °C)	27.1 psi. (186.2 kPa)
Safety Valve Setting	40 psi (275.8 kPa)
Heat Emission	5000 BTU / hr during operation
Certifications	ASME Boiler & Pressure Vessel Code, Section VIII, Division 1.
	Canadian Registration Number available
	UL61010-1 / IEC 61010-2-040 / CAN/CSA C22.2, #61010-1 / CSA C22.2, #61010-2-040- 07 Part 2-040

15.3" (38.9 cm) MA8640i **M9/M9D** 100.02 100.02 100.02 (40.15.8")

α

A .v98 1129T

Specifications / Dimensions:

Specifications Chart: M11 / M11D	//11 / ///////////////////////////////
Physical Dimensions:	
Overall Length w/Plug	23.8 in. (60.5 cm)
Overall Width	17.8 in. (45.2 cm)
Overall Height w/Printer	17.8 in. (45.2 cm)
Counter Area	17.8. x 21 in. (45.2 cm x 53.3 cm)
Chamber	11 in. dia. x 18 in. deep (28 cm x 46 cm)
Standard Tray, Large	9 in. x 15 in. x 1 1/8 in. (22.9 cm x 38 cm x 2.9 cm)
Standard Tray, Small	6 5/8 in. x 15 in. x 1 1/8 in. (14.3 cm x 38 cm x 2.9 cm)
Weights:	
Weight with Empty Reservoir	99 lbs. (44.9 kg)
Weight with Shipping Carton	131 lbs (59.4 kg)
Water Reservoir Capacity	1.4 Gallons (5.3 liters) to Full Mark usable volume is 1.0 gallons (3.8 liters)
Water Usage (per cycle)	
Standard Configuration	120 to 180 ml (varies depending on the cycle)
Connected to Direct -to-Drain Thermal Reduction system. (VistaCool $^{\text{IM}}$)	650 m <u>i</u>
Chamber Pressure at 270 °F (132 °C)	27.1 psi. (186.2 kPa)
Safety Valve Setting	40 psi (275.8 kPa)
Heat Emission	5000 BTU / hr during operation
Certifications	ASME Boiler & Pressure Vessel Code, Section VIII, Division 1. Canadian Registration Number available
	UL61010-1 / IEC 61010-2-040 / CAN/CSA C22.2, #61010-1 / CSA C22.2, #61010-2-040- 07 Part 2-040





The most tender care possible

The Midmark 640 Pediatric Examination Table is designed to provide all the features and benefits you need to give your patients the most tender care possible.

Upholstered end panels, beveled sides and flat surfaces with no sharp edges assure precious patients are safe and secure during examinations.

Weighing infants can be efficient and accurate with our integrated scale design. Press the Zero/On button and within seconds the scale display will read, "Scale ready." Place the infant on the scale and the weight will be automatically displayed. And the reweigh feature allows a quick recapture of weight, no need to pick the infant back up. Just press the button and the scale will recalculate the weight.

The 640's infantometer is designed to measure infants easily and accurately—it pulls out easily and articulates out of the way when you are finished measuring.

The Midmark 640 surface height of 36 inches provides easy access and eliminates strain and stress from repeated bending during the exam.

For your storage needs, the Midmark 640 provides an oversized drawer as well as a bulk storage area that's perfect for keeping diapers and equipment. A hidden paper roll holder with a paper tear strap at one end is yet another convenience.

Specifications

Patient Weight Capacity: 4.5 lb (2 kg) - 40 lb (18 kg)

Scale Resoluton: 0.5 oz for pounds-ounces 0.02 lb for pounds 0.01 kg for kilograms

Scale Accuracy: < 22 lb (10 kg) +/- 1.0 oz (28 g) ≥ 22 lb (10 kg) +/- 2.0 oz (56 g)

Working Height: 35.8" (90.8 cm)

Table Top Length: 41.9" (106.4 cm)

Table Top Depth: 20.8" (52.7 cm)

Paper Roll Holder: Upper portion of table accommodates one 14" x 3" (35.6 x 7.6 cm) diameter

Drawer: 33" x 15" x 4.125" (83.8 x 38.1 x 10.5 cm)

Drawer is constructed of high impact polystyrene with rounded corners for easy cleaning and is supported by side-mounted ball bearing steel slides.

Bulk Storage: 33.5" x 17" x 18.38" (85 x 43.2 x 46.7 cm)

Safety Standards

ANSI/AAMI ES 60601-1:2005 CAN/CSA C22.2 NO. 60601-1-08

Options

Door/Drawer Locks

Built-in Scale

Measures in pounds or kilograms with unit lock to assure consistency of reading. New reweigh feature allows for a quick weigh recheck with the push of a button.

Automatically shuts off after 30 seconds to conserve energy.

Midmark Premium Solid Upholstery Colors

Blueberry-235

Cashmere Blue-239

Silver Sage-236

Terra Cotta-240

Fossil Grey-238

Tea Green-237

Black-312

Midmark Designer Pattern Upholstery Colors

Belagio-247

Capri-251

Siena-248

Treviso-252

Firenze-250

Tuscany-249

Ritter Upholstery Colors

Navy-231

Dusty Blue-233

Moss-230

Clay-234

Pebble Grev-216

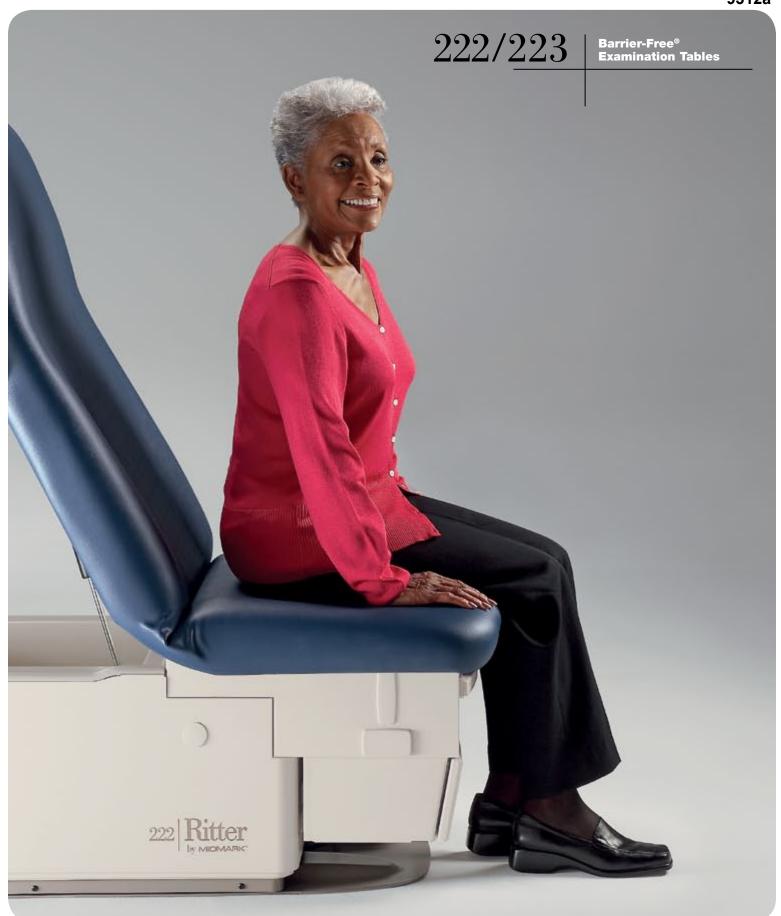
Shadow-232

Perfect Plum-229

Midmark is an ISO 13485 and ISO 9001 Certified Company For more information or a demonstration, contact your Midmark dealer or call: 1-800-MIDMARK Fax: 1-800-365-8631 Outside the U.S.A. call: 1-937-526-3662 Fax: 1-937-526-8392 or visit our website at midmark.com

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Ritter 222 & 223

S P E C I F I C A T I O N S



Ritter 223 Barrier-Free® Power Examination Table

The Ritter 222 & 223 Exam Assistant® drawer system provides an area to store basic pelvic and examination supplies at your fingertips. Its unique fold-down front can also turn into a work shelf for exam assistance, designed to make the exam easier and more efficient for you.

Features

With unprecedented low and high positioning heights, the Ritter 222 has a gas spring assisted back section with an easy access backrest mechanism while the Ritter 223 has a power back system. Both have builtin pillows, hideaway stirrups that lock in one of four lateral positions, foot extension shelves to expand the table length, paper roll holders hidden under the headrest, storage for four $21"x \ 3.5"$ diameter paper rolls, polystyrene treatment pans, foot control, Exam Assistant®, and leveling feet.

Specifications

Length with footrest extended: Soft touch upholstery: 74" (188 cm)

Seamless upholstery: 76" (193 cm)

Height:

Minimum 18" (45.7 cm) Maximum 37" (94.0 cm)

Patient weight capacity: 400 lb (181.4 kg)

Paper roll holder (hidden): Holds 21" x 3.5" paper rolls (53.3 cm x 8.9 cm)

Electrical receptacle (115 VAC, 5 Amps Max.) Duplex, hospital grade, electrical receptacle on left side

Pelvic tilt (7 degrees)

Drawer heater (35 watt)

Stirrups are standard

Options

Seamless upholstery top 28.5" W x 59.5" L (72.4 cm x 151.1 cm)

 $\begin{array}{c} \text{Soft touch upholstery top} \\ 28.5\text{" W x 56.25" L} \\ (72.4\text{ cm x } 142.9\text{ cm}) \end{array}$

Flat upholstery: Stitched, without pillow 28.5" W x 56.25" L (72.4 cm x 142.9 cm)

Accessories

 $\begin{array}{c} {\rm Rear\ storage\ pod\ (includes\ }\\ {\rm removable\ divider)}\\ 17.8"\ x\ 7.0"\ x\ 9.8"\ high\\ (45.2\ x\ 17.8\ x\ 24.8\ cm\ high) \end{array}$

Patient support rails

Adjustable arm system (right and left side arms included)

Knee crutches - articulating and fixed

Urology pan

Stainless steel pan

Assist Handles

Hand Control (223 only)

PC Work Surface

Supply Assistant Storage Unit

Ritter 253 LED Exam Light

Electrical - Ritter 222

115 VAC, 50/60 Hz, 11 Amps (with heater & receptacle -016) 230 VAC, 50/60 Hz, 2.75 Amps (basic unit -017, excludes receptacle)

Electrical - Ritter 223

115 VAC, 50/60 Hz, 12.5 Amps (with heater & receptacle -016)

Safety Standards

UL 60601-1 CAN/CSA No. 601.1-M90

Ritter Upholstery Colors:

Navy-231

Dusty Blue-233

Moss-230

Clay-234

Pebble Grey-216

Shadow-232

Perfect Plum-229

Black-312

CARB 93120.2 Phase 2 Compliant

Midmark is an ISO 13485 and ISO 9001 Certified Company.

For more information or a demonstration, contact your Midmark Dealer or Midmark Corporation, Versailles, Ohio. Call: 1-800-MIDMARK Fax: 1-800-365-8631 midmark.com



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Litho in U.S.A. 007-0344-00 Rev. K1 (9/15)





230 Universal Procedures Table



The Right Thing to Do-For Your Practice, Your Staff and Your Patients

As the practice of medicine changes, more procedures are being performed in the office than ever before, making efficiency essential.

Positioning patients can be a difficult task when dealing with less mobile, elderly and special needs patients. The Ritter 230, with its low height and multipositioning capabilities is designed to improve office efficiency by allowing you and your staff to easily position patients with the touch of a button—reducing the likelihood of fatigue, back and neck strain, and workplace injury.

The Ritter 230 is designed to make patients feel more comfortable and secure when they can easily get onto a table and experience smooth and steady movement during positioning. This allows patients' anxiety to be reduced and helps them feel satisfied with the level of care you provide.

Consider the Ritter 230 Power Procedures Table a long-term investment for your practice, your staff and your patients.





The Ritter 230-designed to satisfy your positioning needs.



Knee-chest

Tool-less reconfigure of the foot support provides the perfect position for lower body exams and procedures.



Lithotomy

Extending the stirrups and treatment pan, lowering the foot support and tilting the seat provide the perfect position for lower body exams and procedures.



Flat

The table supports exams and procedures requiring supine, prone, left lateral or right lateral positioning.



Low Entry

With the increasing number of elderly and disabled patients, the low entry position is designed to make it easy and safe for the patient to get on and off the table.



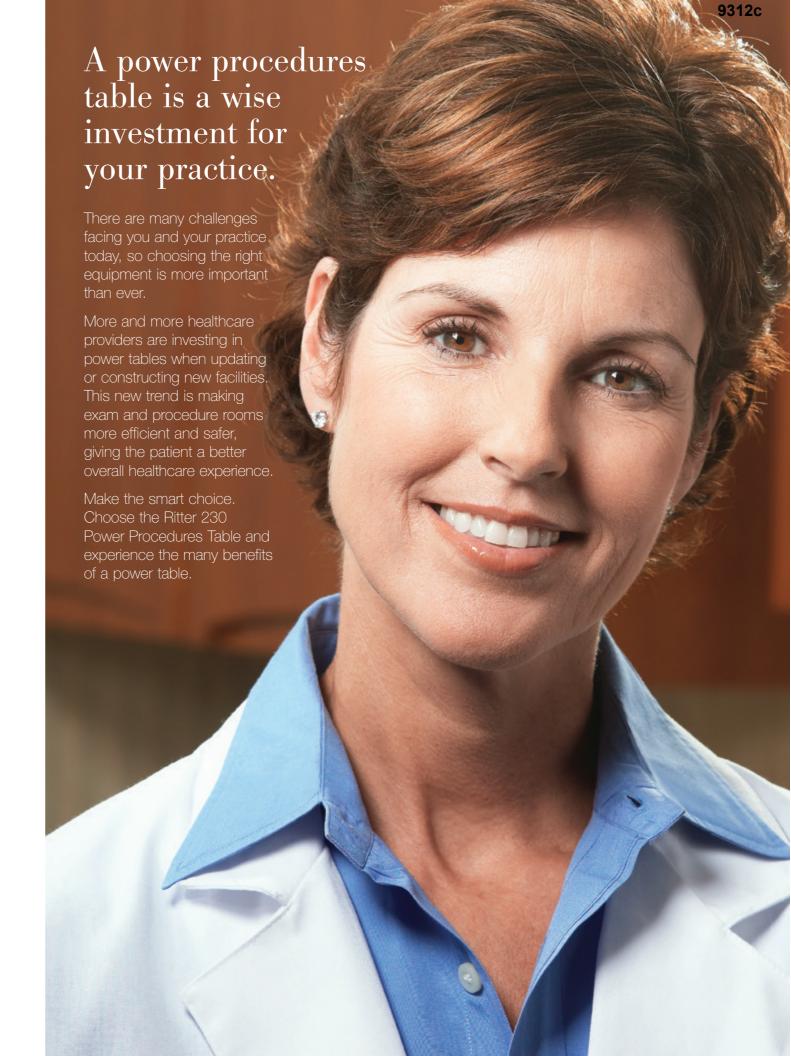
Trendelenburg

Whether better positioning for the patient, treating for shock or faintness, or increasing anesthesia onset, the Trendelenburg position offers a full 30° of tilt.



*Shown with Clay upholstery

The Ritter 230 is a power procedures table with basic features, making it very affordable. Better yet, the Ritter brand has provided quality to healthcare professionals for over 50 years and is recognized as an industry leader.



Options designed to improve efficiency





Rotation

Exam and procedure rooms are being equipped with more and larger devices. Inefficiency results when moving these devices to the patient. Outfitting your procedures table with the rotation option simplifies this task by allowing you to move the patient instead of the device.

The simple touch of a pedal (highlighted in the photo) on either side of the table permits 350 degrees of rotation—touch the pedal again to lock the table in place. It's that easy!



 ${\it Flat~Upholstery}$

A 24-inch wide and flat upholstery option offers greater access to the patient. The seamless design ensures a nice look and easy-to-clean surface.



Electrical Outlets

Optional hospital grade outlets (on each side) allow easy access to electrical power, providing a clean look to the room and floor space free of power cords.



Accessories that add versatility



Adjustable Arm System

Designed to offer patients a stable platform in accessing the table and sense of security during positioning. Arms rotate and lock into one of three possible positions and are removable, all without the use of tools.



Linear-Style Foot ControlOptional foot control accessory

maintains sterile field and can be used in combination with hand control.



Articulating Armboard

Attaches to either side of the table to support the patient's arm.

The ball joint design permits multi-directional movement.

Simply squeeze the lever, position the armboard and release the lever—no tools necessary.



Double Arm Instrument Tray

Provides a convenient surface to place your instruments or supplies during procedures and gives a wide range of motion for easy reach, no matter where you are standing.



Hand Surgery Armboard

Supports patient's arm. The telescoping pole rests on the floor to provide extra stability for delicate procedures.



Security Straps

Designed to improve safety by securing the patient to the chair before, during and after a procedure. Security strap width and location are adjustable to accommodate different patient demographics.



24" Wide Foot Rest

Designed to provide extra width for added support under the patient's feet.



Security Side Panels

Provides extra side-to-side security for the patient when side panels are in the vertical position. When in the flat position, the side panels can serve as an extra work surface.



Articulating Knee Crutches

Designed to be a more ergonomic and comfortable option compared to standard stirrups, especially for lengthier procedures.



Locking Casters

Designed to provide mobility without sacrificing valuable floor space. Casters add 3 ½" to the minimum and maximum seat height and creates space under the chair for Mayo stand legs.



Vision Block Screen

Attaches to the optional base rail accessory and is designed to block the patient's line of site to the lower leg area to help reduce anxiety. The screen can be attached to either side of the table and adjusts vertically and horizontally.



Ritter 253 LED Exam Light

Designed to be the perfect complement to any procedure room, the 253 is designed with features like easy access controls, high intensity light and an adjustable focal spot. Available in table mount and mobile options.

Ritter 230

S P E C I F I C A T I O N S



Ritter 230 Universal Power Procedures Table

(shown with optional adjustable arm system)

Specifications

Patient Weight Capacity: 450 lb (204 kg)

Height:

Minimum 22.5" (57.2 cm) Maximum 40" (101.6 cm)

Seat Tilt Angle Range: 0° to 30°

Back Support Angle Range: 0° to 85°

Foot Support Angle Range: 0° to 90°

Upholstery Width Dimensions: Headrest: 18" (45.7 cm) Back support: 28" (71.1 cm) Seat: 28" (71.1 cm) Foot support: 18" (45.7 cm)

Patient Support Surface Length: Flat position: 72" (185.4 cm) Flat position with headrest extended: 83" (213.4 cm)

Paper Roll Holder Capacity: Holds 18" x 3.5" paper roll $(45.7 \times 8.9 \text{ cm})$

Stainless Steel Treatment Pan Dimensions: 11.5" L x 9" W x 2.5" D (29.2 x 22.9 x 6.4 cm)

Stirrups are standard

Optional Electrical Outlet Rating: 115 VAC, 3 Amps

Accessories

Ritter 253 LED Exam Light Foot control - linear style 24" wide foot support

Adjustable arm system (right and left side arms included)

Adjustable arm receptacle

Articulating armboard

Hand surgery armboard

Fixed armboard

Knee crutches - articulating and fixed

Casters¹

Caster base^{1, 2}

Security straps

Security side panels

Base rails

Instrument tray

IV pole

Urology drain system¹

Facial pad

Vision block screen

3' power cord

Swing arm instrument tray

Swing arm PC workshelf

Options

Electrical Outlets: Duplex, hospital grade¹

Rotation:

Models equipped with rotation option add 3 1/2 inches to minimum and maximum height specifications

Flat upholstery set, 24" wide

Electrical Ratings

115 VAC, 10 Amps, 50/60 Hz (for electrical outlet models)

115/230 VAC, 7/3.5 Amps, 50/60 Hz (for non-electrical outlet models)

115/230 VAC, 7.5/3.8 Amps, 50/60 Hz (for rotation models)

Safety Standards

UL 60601-1 and CAN/CSA C22.2 No. 601.1 - M90

Ritter Upholstery Colors:

Navy-231

Dusty Blue-233

Moss-230

Clay-234

Pebble Grey-216

Shadow-232

Perfect Plum-229

Black-312

¹Not available on rotation models ²Not compatible with 24" wide foot support

CARB 93120.2 Phase 2 Compliant

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For more information or a demonstration, contact your Midmark Dealer, or contact Midmark Corporation, Versailles, Ohio. Call: 1-800-MIDMARK Fax: 1-800-365-8631 midmark.com

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Description

Our plastic bench with 3 cubbies is a great additional to your locker room, especially for use around pools, showers, spa areas, and other humid climates. Benches are sturdy and durable, constructed of 3/8" thick HDPE plastic, welded to a 1" thick HDPE bench top. The perfect way to combine convenient seating with easily accessible storage all in one; each bench has an overall measurement of 36" wide x 13-1/2" deep x 20" high, and includes 3 individual compartments or "cubbies" measuring 9-7/8" wide x 11-1/2" deep x 18" high each. All of our plastic cubby benches are resistant to scratching and denting, and are impervious to moisture so they will not rust.

Key Features

- Corrosion Proof: Plastic stands up to moisture and many harsh chemicals and will not rust or corrode
- **Strong & Durable:** Vandal resistant, all-welded construction; 3/4" thick HDPE bench with 1" thick HDPE bench top
- Green Initiative: Made from 30% post-industrial recycled HDPE plastic and releases no VOC's
- Low Maintenance: Easy cleaning and graffiti removal. Does not absorb gym odors
- Excellent Warranty: 20 year warranty against rust, delamination or breakage under normal use

Additional Options

Wide selection of color choices
 SOURCE: https://www.schoollockers.com/plastic-bench-with-3-cubbies.html