

## Smart2Pure Consumables Replacement Information

External Pretreatment	Pretreatment is important for the life of the RO membrane. One or more of the following pretreatment cartridges may be used depending on feed water quality. Check the boxes below for the external pretreatment installed before this system. <b>Note:</b> Frequency of replacement may vary based on feed water supply. <input type="checkbox"/> 06.5452 Hardness stabilizer; Replace 6-12 months <input type="checkbox"/> 06.5201 5 µm filter with carbon cartridge 3-4 months <input type="checkbox"/> 06.5101 10" 1 micron prefilter 4-6 months <input type="checkbox"/> 06.5204 10" 5 µm filter with hardness stabilizer cartridge 6-12 months			
System Consumables	Consumable	Part #	Estimated Life Time *	How You Will Know To Change
Smart2Pure 12 LPH Pretreatment Cartridge (RO Membrane)  Ultrapure Cartridge  0.2 µm Filter For System And Hand Remote Dispenser  Ultrafilter  UV Lamp For Type I System	Smart2Pure 12 LPH Pretreatment Cartridge (RO Membrane)	09.2012	Up to 12 months	<ul style="list-style-type: none"> <li>• Ultrapure cartridge exhausting quickly</li> </ul>
	Ultrapure Cartridge	09.1020	Up to 12 months	<ul style="list-style-type: none"> <li>• Purity drops below acceptable limits</li> <li>• "Limit value Cond." alarm and LED on</li> </ul>
	0.2 µm Filter For System And Hand Remote Dispenser	09.1003	Up to 12 months	<ul style="list-style-type: none"> <li>• Dispensing water flow is reduced</li> <li>• Ultrapure cartridge is replaced</li> <li>• Bacteria is present in product water</li> </ul>
	Ultrafilter	50133981	When applicable – up to 2 years	<ul style="list-style-type: none"> <li>• Dispensing water flow is reduced</li> <li>• Replace every 2 years</li> </ul>
	UV Lamp For Type I System	09.1002	When applicable – up to 2 years	<ul style="list-style-type: none"> <li>• UV lamp is not lit</li> <li>• Replace every 2 years</li> </ul>
Storage Reservoir Consumable	CO2 Vent Filter	06.5002	Up to 12 months	<ul style="list-style-type: none"> <li>• Turns from white to blue</li> </ul>
	UV Light For Storage Reservoir – 230 V, 50 Hz only	06.5006	When applicable – up to 2 years	<ul style="list-style-type: none"> <li>• Replace every 2 years</li> </ul>
Cleaning	Cleaning Solution	CMX25	n/a	<ul style="list-style-type: none"> <li>• Ultrapure cartridge is replaced</li> <li>• Minimum once a year</li> <li>• Bacteria is present in system</li> </ul>

**Note:** The actual life time of the consumables depend on the quality of the feed water and the amount of water used by the system.



## Smart2Pure System



[thermoscientific.com/purewater](http://thermoscientific.com/purewater)

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## Thermo Scientific

Barnstead Smart2Pure 12LPH System  
Quick Reference Guide

Please refer to operation manual for complete instructions



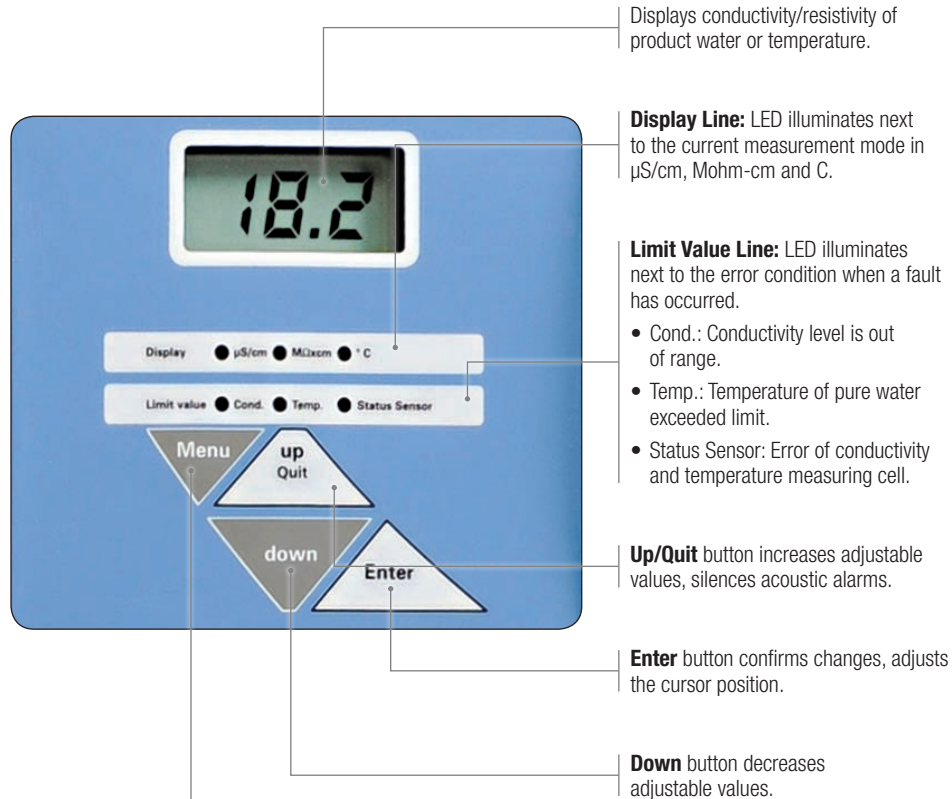
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## Display Functionality Keys and Display Readout



### Note:

Avoid draining the tank completely to prevent introducing air to the system.

**Menu** button: Access to system display or limit value parameters. Press **Menu** to go to setting,  $\uparrow$   $\downarrow$  to change setting. Press **Enter** to save changes.  
**Note:** Parameters scroll up or down, not in continuous loop.

- Press Menu 1X: Set display purity units and temperature, recommended setting:  $\text{M}\Omega\text{xcm}$  or  $\mu\text{S/cm}$ .
- Press Menu 2X: Set purity limit value in conductivity or OFF.
- Press Menu 3X: Set temperature limit value, set to "OFF" in units with UV.

## Operation

### • Start Up

- **On/Off Power:** To power up/down the system, simply unplug power supply.

### • Daily Operation

- **When Water Is Being Dispensed:** System is in *run* mode. Water is recirculated through system and tank continuously for optimal water quality.
- **When Water Is NOT Being Dispensed After 20 Minutes:** System automatically switches to *standby* mode, system and tank re-circulates ~10 minutes every 30 minutes.
- **Nights And Weekends:** Keep system power on and allow it to automatically switch to *standby* mode.

### • Key Components

- **Boost Pump:** 3 minute delay upon start up. Turns on when storage tank is low. Water will flow from concentrate line when tank is filling.
- **External Pretreatment:** Protects reverse membrane (RO)/ pretreatment cartridge.
- **Units With UV Light:** UV light is on during recirculation mode, water temperature can increase with recirculation. Suggested setting for temperature limit = OFF.

### • Dispensing Options

- **Type 1 Water:** Dispense Type 1 water by manually turning the flow control knob counter-clockwise to open to the desired flow.  
**Note:** Do not over tighten dispense knob to close.
- Water can be dispensed from right side of system using supplied valve or remote hand dispenser.
- **Type 2 Water:** Access water directly from tank.

## Maintenance

- Water in storage tank should be turned over every 1-2 days.
- Replace external prefilters, pretreatment cartridge (RO membrane), UV light, UF, and tank vent filter on regular set schedule.
- Clean system before replacing ultrapure cartridge and final filter when conductivity limit value is reached or minimum of once a year.
- When cleaning Smart2Pure, use disinfection adapter supplied with unit.
- When pretreatment cartridge (RO membrane) is replaced, rinse membrane by discarding first tank of water.

## Common Alerts

- Audible alarm and red LED when limit value is reached.
- Press Up/Quit button to silence alarm.
- Purity Alarm: Change ultrapure cartridge.
- Temperature Alarm: Drain water from system to reduce water temperature. If alarm continues, contact service.
- Sensor Error: Contact service.

