

Section 3 - Electronics

Display Icons

This is a complete list of icon, please be aware that some icons will not appear on all of the units covered in this manual.

4	Accept
Ō	Auto Restart
G	Scroll Back
Ġ	Step Back
\bigoplus	Alarm
G	Standby
÷=÷	Calibration Point
×	Cancel
④	Clock
31	Date
於	Day
3 ^r	Spanner / Wrench

Drain	*
Viewing Angle	<u>P</u> ↔
Hazard	\triangle
Feed	Ð
Fill	\bigoplus
Add Chemical	<u> </u>
User Recognition Key	0 -m
Locked	⋳
Menu	
Mute Alarm	黛
Night	(

•	Option On
	Option Off
₽	Recirculate
••	Reset
•	Right
×	Sanitization Pass Key
N ₃	Sanitization Reminder
Q	Scroll
₽	Transport Mode
A	Up
•	Down

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Alarm Codes

Status rating	Classification	System status	Intended for
1	Critical! The system is unable to supply water.	Process off. Awaiting action.	Service/ Technician
2	Caution! Final water purity effected and may result in final application problems. User has the opportunity to make the decision if the purity is acceptable.	Process on. Alarms may require user intervention (consumable change).	User
3	Notification! System fault which will have a limited effect on water purity in the short term but may result in long term performance issue.	Process on. System will continue to operate without user intervention.	User
4	Maintenance! Not critical if the unit is serviced regularly.	Process on. System will continue indefinitely without intervention.	User/ Technician

Alarm	Code	Audible alarm	Visual alarm	BMS output	Alarm mute	Reset method	Comments	Status rating
Low voltage	99	None	Yes	On	No		System about to shut down due to low voltage <20Vdc. (Should be 24Vdc) System needs urgent attention	1
Leak detected	98	Cont.	Yes	On	Yes	Manual	Leak Sensor activated, internal Fault may cause damage to system or local environment. System needs urgent attention.	1
LS1 error	97	Cont.	Yes	On	Yes		Faulty product water level switch. System may overflow and cause damage to system or local environment. System needs urgent attention by Technician.	1
High pressure	96	Cont.	Yes	On	Yes		Pressure in the recirculation loop too high and may lead to damage. System needs urgent attention. May be caused by a pressure spike power system on/off.	1
TS1 over-temp	95	Cont.	Yes	On	Yes	Manual	Inlet water temperature >50 °C may result in permanent damage to the system. System needs urgent attention. Check water supply.	1
S2 over-temp	94	Cont.	Yes	On	Yes	Manual	Recirculation loop water temperature or final water temperature >50 °C and may result in permanent damage to the system. System needs urgent attention. May be caused by high inlet temp and long periods of recirculation.	1

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Alarm	Code	Audible alarm		BMS output	Alarm mute	Reset method	Comments	Status rating
Protek not in place	93	Cont.	Yes	On	Yes	Manual	Leak prevention. User needs to install Protek or check that it is correctly located. Also check Connection between cartridge data tag and system.	1
Medpure or Optipure not in place	92	Cont.	Yes	On	Yes	Manual	Leak prevention. User needs to install Medpure/s or Optipure (Biopure only) check it is correctly located, also check connection between cartridge data tag and system.	1
Low level	91	3 beeps	Yes	On	No	Auto	System unable to continue to supply until product reservoir is refilled to >10 litres. 3 beeps notify the user of potential lack of water. Visual alarm displayed until level recovers	3
QS2 alarm	90	5 sec cont.	Yes	On	Yes	Auto	Notifies the user that water quality in the recirculation loop or final product quality is below alarm point. Alarm sounded continuously for 5 sec to get user attention.	2
TS2 alarm	89	5 sec cont.	Yes	On	Yes	Auto	Notifies the user that water temperature in the recirculation loop or final product quality is above the alarm point. Alarm sounded continuously for 5 sec to get user attention. Visual alarm displayed until the temperature 0.5 oC below the setpoint.	2
QS1 alarm	88	3 beeps	Yes	On	No	Auto	Notifies the user that RO water quality is below alarm point. 3 beeps notify the user that the system is operating outside of ideal limits and this may result in reduced consumable life or system performance. Visual alarm displayed until the quality recovers.	3
TS1 alarm	87	3 beeps	Yes	On	No	Auto	Notifies the user that the temperature of the RO water is higher than the set point. 3 beeps notify the user that the system is operating outside of ideal limits and this may result high temperatures in the loop. Visual alarm displayed until the temperature drops 0.5 oC below the setpoint.	3
Break tank low	86	Cont.	Yes	On	Yes	Manual	Notifies the user that the system has run out of feed water. Continuous alarm as this requires intervention by the user.	1

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	Alarm	Code	Audible alarm		BMS output	Alarm mute	Reset method	Comments	Status rating
	UV fail	85	3 beeps	Yes	On	No	Auto	Notifies the user that the UV lamp has failed to light after three attempts. 3 beeps notify the user that the system is operating without this additional treatment. Visual alarm displayed until the lamp lights on restart of process or the lamp is replaced.	3
S	Service key expired	84	None	Yes	Off	N/A	Manual	Visual display only. Require new Yellow service key.	4
	I2C Error	83	None	No	Off	N/A	Manual	Internal error code only – Try powering system on/off, if still present please contact the Manufacture (PCB fault).	4
	Clock fault	82	Cont.	Yes	On	Yes	Manual	Internal error code only – Try adjusting clock settings, if error still present please contact the Manufacture.	1
	Softener inhibit	81	None	Yes	Off	N/A	Auto	Softener inhibit – prevents RO from running. Visual alarm in place until the event is cleared automatically.	4
	Temp dump	80	None	Yes	Off	N/A	Auto	Recirculation loop temperature above alarm setpoint, system directs water to drain to allow cool water to enter the system. Visual alarm in place until the event is cleared automatically.	4
	Invalid LC type	79	None	Yes	Off	N/A	Manual	Wrong type of Lab Consumable installed in a position. The user is notified through a visual alarm only.	4
	LC date expired	78	None	Yes	Off	N/A	Manual	Expiry date has exceeded on the Lab Consumable. The user is notified through a visual alarm only.	4

Alarm	Code	Audible alarm		BMS output	Alarm mute	Reset method	Comments	Status rating
Reveal today	77	None	Yes	Off	N/A	Manual	Visual alarm displayed when the service key has expired and the date has been changed in order to rectify the error. Cleared when the date is reset.	4
Reveal magic	76	None	Yes	Off	N/A	Manual	Visual alarm displayed when a Technician is resetting the date to escape the fault above. Cleared when the date is reset.	4
PT blockage	75	3 beeps	Yes	On	No	Auto	Indication at the end of an RO cycle that the pre-treatment is starting to block. 3 beeps notifies the user that the system may require a new pre-treatment cartridge. The system automatically clears the visual alarm if the system recovers after the end of the next RO cycle, this may also mean the feed water pressure is low.	3
Sanitization reminder	74	None	Yes	Off	N/A	Manual	Calendar icon flashes above PF2 (central button) to notify the user that a date has expired. Reset manually by the customer at the end of sanitation or can be reset when the master user enters the opinion menu.	
Replace DI	73	None	Yes	Off	N/A	Auto	Calendar icon flashes above PF2 (central button) to notify the user that a date has expired. Reset automatically on insertion of new consumables.	4
Replace VF	72	None	Yes	Off	N/A	Manual	Calendar icon flashes above PF2 (central button) to notify the user that a date has expired. Reset manually by the customer.	
Replace UF	71	None	Yes	Off	N/A	Auto	Calendar icon flashes above PF2 (central button) to notify the user that a date has expired. Reset automatically on insertion of new consumables.	4
Replace UV	70	None	Yes	Off	N/A	Manual	Calendar icon flashes above PF2 (central button) to notify the user that a date has expired. Reset manually by the customer.	4

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Alarm	Code	Audible alarm		BMS output	Alarm mute	Reset method	Comments	Status rating
Replace PT	69	None	Yes	Off	N/A	Auto	Calendar icon flashes above PF2 (central button) to notify the user that a date has expired. Reset automatically on insertion of new consumables.	4
Manual Drain	68	Cont.	Yes	Off	Yes	Manual	System requires user intervention during the sanitization stage to drain the reservoir. Push process button to continue.	1
Expired bypass	67	None	Yes	Off	N/A	Manual	Expiry date exceeded on the consumable. The user is notified through a visual alarm only.	4
Bypass in place	66	None	Yes	Off	N/A	Manual	User notified that the bypass block should be replaced by a Medpure or Optipure (Biopure). Visual alarm only. System will not progress to the next stage.	4
Low sanitization chemical	65	3 beeps	Yes	Off	No	Manual	Notifies the user during the sanitization chemical recirculation stage that the chemical concentration is not sufficient to ensure an effective clean. The user is promoted to add more chemical and reinstigate the process. The visual alarm clears automatically.	3
High sanitization residue	64	3 beeps	Yes	Off	No	Manual	Notifies the user that chemical is still present in the system and this may have an effect on final water purity.	3
UF not in place	63	Cont.	Yes	On	Yes	Manual	Leak prevention. User needs to install pack or check that it is correctly located.	1
QS3 alarm	62	3 beeps	Yes	On	No	Auto	Notifies the user that DI water quality is below alarm point. 3 beeps notify the user that the system is operating outside of ideal limits and this may result in reduced system performance. Visual alarm displayed until the quality recovers or the fill process is stopped.	3
Transit mode	50	None	Yes	Off	N/A		Notifies Technician that system is in transit mode - Initial start-up flush to drain must be carried out completely before unit can be switched to Process On mode.	1