



# resilience<sup>®</sup>

## *E Series*

**TROUBLESHOOTING GUIDE**



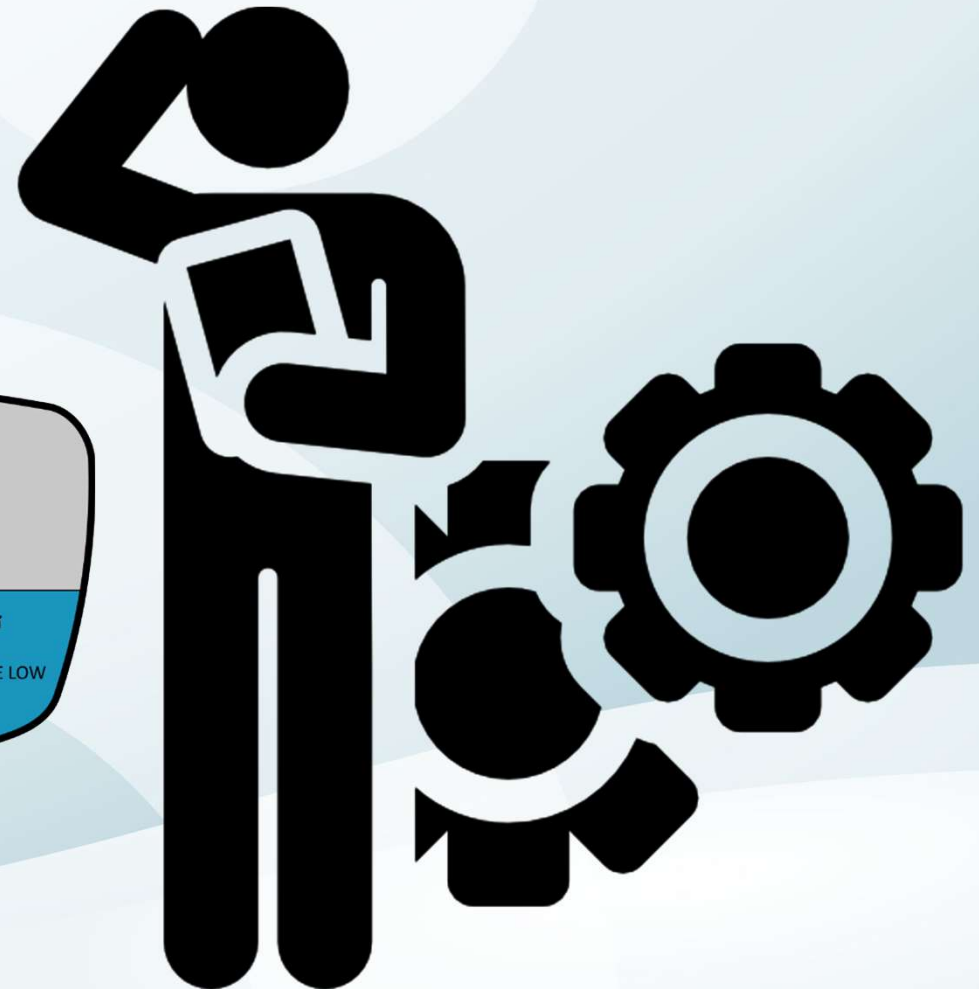
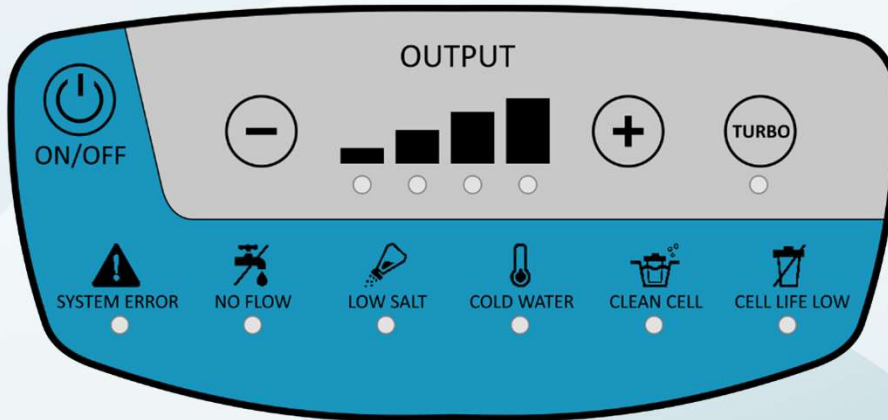
# resilience<sup>®</sup>

## *E Series*

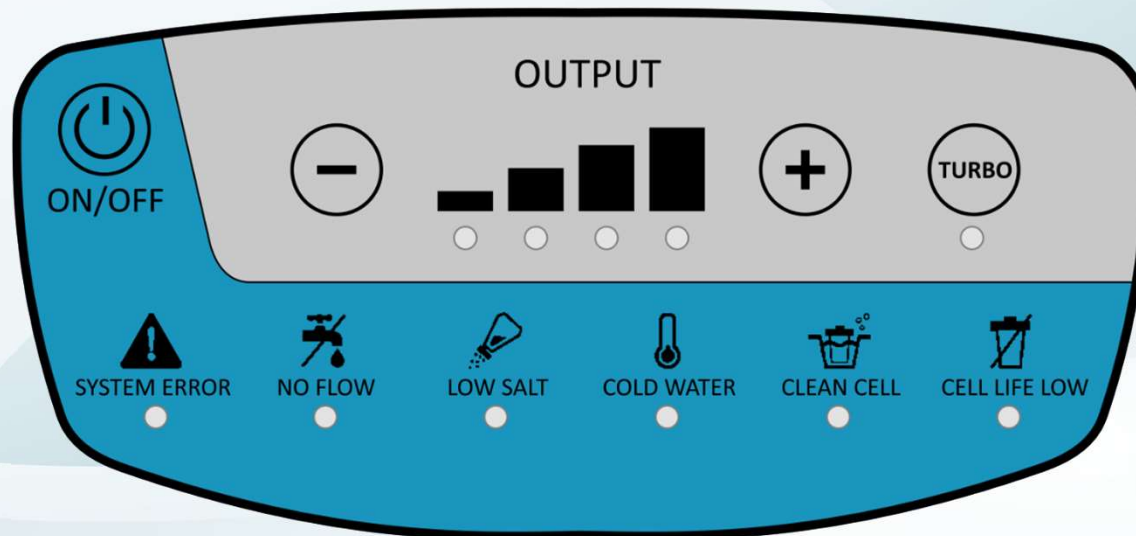
- One pipe to cut and glue
- Unique sliding slots for quick cartridge removal (no need to remove the entire device from the line)
- Built in service and maintenance alerts. Easy to know when to clean/replace the cartridge

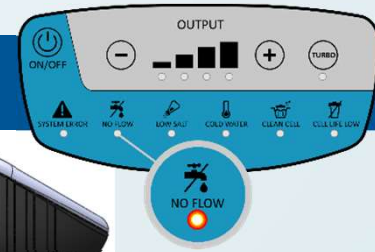


# TROUBLESHOOTING



1. Check that the salinity in the pool water is above 2400 PPM.
2. Check for scale buildup on the cartridge and clean it if necessary.
3. Disconnect the plug, Dismantle the power box, connect the plug and check that all the LED is on for 1 sec. and then the system error LED is blinking.
4. Assemble and turn on the system – check if the problem solved.



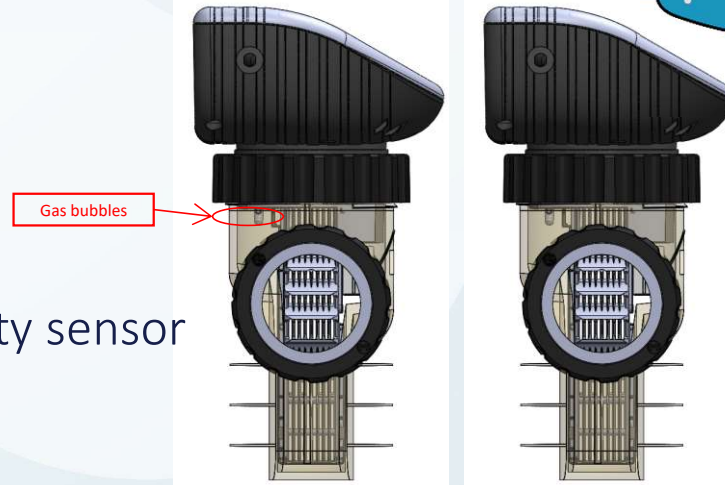


LED “no flow” Turns On When:

Flow switch paddle is centered

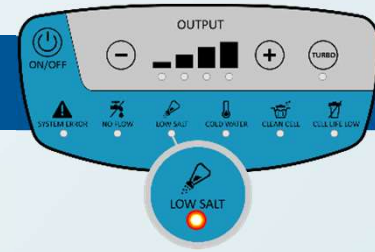
And / OR

There are air bubbles in the salinity sensor



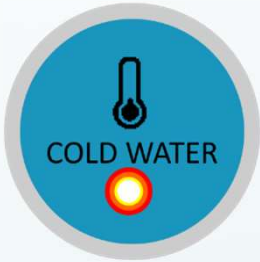
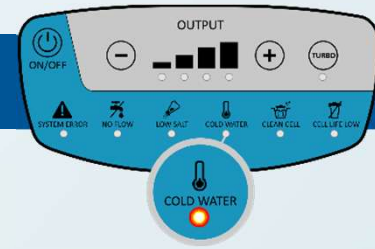
Possible Causes	What to do
Air bubbles form in the salinity sensor	This may happen if there is air in the pipe lines or for a few minutes at initial startup. Wait until air bubble disappear
	Clean filters and strainers
	Check for closed valves, pump cavitation, faulty pump etc'
	In case you have a variable frequency pump installed, increase the flow until the LED is turned off
Paddle is stuck at the center	Slightly tilt the cell sideways to remove air bubble
Low salinity	Dismantle cartridge from cell body and remove scale build up. Refer to relevant chapter in manual or appropriate YouTube videos
	Check pool salinity with a stick, if needed add salt according to the salinity table in the installation manual
Other	If none of the above resolves the problem replace <b>cartridge</b>





LED LOW SALT Turns On when:  
Measured water salinity levels are below 2400 ppm

Possible Causes	What to do
Not enough salt in pool water	Manually check the salinity of the pool water with a stick. If needed, add salt according to the salinity table in the installation manual
Scale build-up inside the cartridge	Visually inspect the cartridge for lime-scale. Clean blades if necessary refer to relevant chapter in manual or appropriate YouTube video
Air bubbles in the salinity sensor	See NO FLOW slide
Other	If none of the above resolves the problem replace <b>cartridge</b>



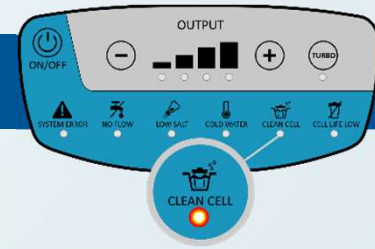
**LED Turns On when:**

Measured Water temperature is below 68 °F –

When below 68 °F/ 20 °c - max. chlorine output level – 50%

When below 59 °F/ 15 °c - max. chlorine output level – 25%

Possible Causes	What to do
Water temperature is below 68 °F/ 20 °c	Manually check the water temperature. If water temp. is below 68°F system is OK. If water temp. is higher than 68°F then temp. sensor had failed
Temperature sensor failed	Replace cartridge. Refer to relevant Youtube video



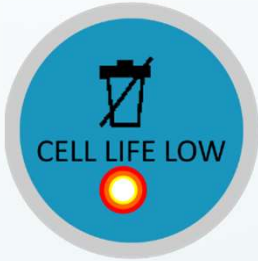
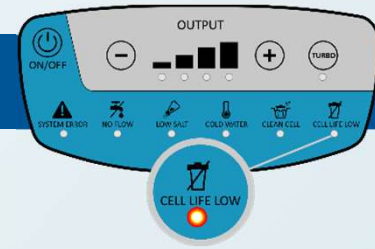
**LED Turns On when:**

Chlorine output level doesn't reach the set point and the following parameters are OK:

- Salinity levels above 2400 ppm
- Water temperature above 68 °F

Possible Causes	What to do
Scale build-up inside the cartridge	Clean cartridge, refer to relevant chapter in manual or appropriate YouTube video
Low salinity	Increase salinity levels to 3500-4000 ppm
Worn cartridge	If none of the above resolves the problem replace the cartridge with a new one. Refer to relevant YouTube video



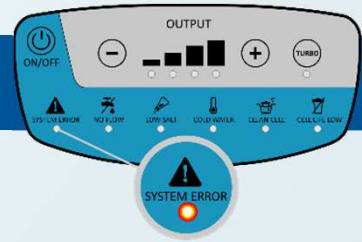


**LED Turns On when:**

Cell operating hours above 8000, Chlorine output level doesn't reach the set point and the following parameters exist:

- Salinity levels above 2400 ppm
- Temperature water above 68 °F

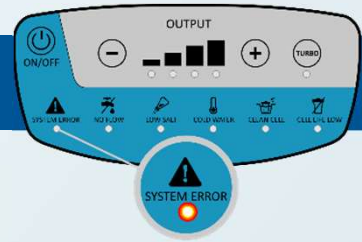
Possible Causes	What to do
Scale build-up inside the cartridge	Clean cartridge, refer to relevant chapter in manual or appropriate YouTube video
Low salinity	Increase the salinity levels to 3500-4000 ppm
Blades are worn	If none of the above resolves the problem replace the cartridge with a new one (check warranty). Refer to relevant YouTube video



LED is Blinking when:

No communication is detected between the cartridge and control box

Possible Causes	What to do
Incorrect assemble of the power box	Assemble correct refer to relevant chapter in “clean cartridge” YouTube video
Debris is stuck in the electrical connection of the cartridge	Clean cartridge, refer to relevant chapter in manual or appropriate YouTube video
Communication problem between the cartridge and control box	Replace the cartridge, if problem is not resolved replace the control box



Turns on when:




The control box can't deliver power (current) to the cartridge.

Possible Causes	What to do
Salinity High, too much salt has been added	Test salt levels in pool water, if high, it is recommended to drain part of the pool water and refill with fresh water
Low salt levels	Manually check the salinity of pool water with a stick. If needed, add salt according to the salinity table in the manual
Debris in electrical connector of the cartridge	Disconnect the control box from cartridge and visually inspect the electrical connector. In case debris has settled there, gently remove it and re-attach
Worn cell/scale build up	Visually inspect the cartridge to see if blades are dirty or damaged. If dirty, clean cartridge. Refer to relevant chapter in manual or appropriate YouTube video
A more profound error occurred	Dismantle the power box and turn on if the System Error LED is <b>not</b> blinking replace the power box. If it is blinking - Replace the cartridge, if the problem isn't resolved - replace the control box . Refer to relevant YouTube videos

## No Display (power supply does not turn on)

Possible Causes	What to do
System is turned off	Turn the system on
Power supply is disconnected	Connect the plug into socket
Circulation pump is off	Unit should be wired in such a way that it operates only when the circulation pump is on, verify that pump is in fact operating
Other malfunction in the unit	Replace control box



Possible Causes	What to do	Display (LED)
Output level set too low	Press the "+" button to set the output level to a higher setting	
Low pool water temperature	In case <b>Cold Water</b> LED is on refer to slide 9	
Not enough salt due to heavy rain, initial miscalculations etc.	In case <b>Low Salt</b> LED is on, refer to the Low Salt warning - slide 8	
Overheating protection	In extreme conditions, when the unit identifies overheating it will automatically reduce chlorine production to protect itself	
Scale build-up inside cartridge	Clean cartridge, refer to relevant chapter in manual or appropriate Youtube video	
Worn cartridge	If none of the above resolves the problem the cartridge may be worn and requires replacing	



Possible Causes	What to do
Side/Top nut leaking	Tight the nut
	Replace the O-ring

## TOP NUT CRACKED/BROKEN

Possible Causes	What to do
Production problem – Old version	Replace control box and the O-ring to the latest version

**Thank you!**