

Signet 3-8630 Chlorine Transmitter Troubleshooting Guide

Several factors can cause irregular or incorrect readings. The first thing to check is to verify that the transmitter and sensors have been installed correctly. The list below outlines possible causes and remedies.

Transmitter Troubleshooting		
Problem	Possible Cause	Remedies
Transmitter does not turn on.	Incorrect wiring. No or low voltage supplied to transmitter. Blown fuse. Bad wire connections or splices.	Check wiring, power supply and wiring connections.
Display screen is too dark or too dim.	Contrast set incorrectly or ambient temperature is too high.	Adjust contrast in Options Menu.
LCD backlight, relays and sensors do not work.	No power supplied to terminals 1 and 2.	Transmitter requires power to terminals 1, 2, 3 and 4.
Incorrect temperature reading.	Faulty chlorine sensor. Bad sensor connection.	Check connections, or replace sensor.
Digital or Current output is erratic.	Electrical noise interfering with the measurement. Sensor malfunction.	Ensure system is properly grounded. See Sensor Troubleshooting.
Output is not zero when electrode is placed in non-chlorinated water.	Electrode not properly conditioned. Noise interfering with the measurement. Calibration incorrect.	Condition new sensor for 4 hours. Cap replacement or electrolyte refill: 2 hours. Properly ground system. Replace sensor.
4 to 20 mA output is incorrect.	4 to 20 mA is not scaled same as Loop device. Loop device is not scaled same as sensor.	Re-span loop device to match sensor.
Chlorine Sensor Troubleshooting (see 2630 sensor manual)		
Incorrect readings	Sensor conditioning time too short.	Run for 4 hours before calibrating.
	Membrane cap damaged or contaminated.	Clean or replace cap.
	Interference from water contaminants.	See technical data (Section 19).
	Low flow rate.	Check flow.
	Air bubbles on membrane.	Install flow cell vertically with upwards flow.
	pH outside working range (see technical data, Section 19).	Check pH.
	Low or no electrolyte in sensor.	Fill sensor with electrolyte.
	Membrane cap loose.	Inspect/tighten (do not use tools).
	Only combined chlorine present when measuring free chlorine.	Validate with DPD test.
	Sensor not making good contact with electronics.	Inspect and reconnect.
	Defective sensor.	Replace.
	No pH compensation being used.	Manually enter pH value in Options or calibrate pH sensor.
	Cl sensor not calibrated.	Calibrate Cl sensor.