

Capacitance FAQs

General Questions

1. **Where is the sensor?**
The entire Spout is the sensor. The faucet utilizes Capacitance-based sensing and close proximity is all that is needed (3-4 inches)
2. **How can I determine if the faucet uses IR sensing or capacitance sensing?**
Cover the raised bump above and to the right of the spray insert. If the green LED below the battery symbol starts blinking within 3-4 seconds, it is IR sensing. If the light does not blink it is capacitance.
3. **Is the sensing range adjustable?**
No. Faucet will automatically adapt to the environment and set range based on the installation.
4. **What do the flashing lights on the spout mean?**
Refer the diagnostic codes in the installation instructions.
5. **Can the spray insert (aerator) be serviced and/or changed?**
Yes. There are three different types offered. The removal tool is located under the crown and serves a dual purpose of locking the insert in place during use. Otherwise water pressure will force the insert out of the faucet. The removal tool must be used and reinstalled into faucet when change is complete.
6. **What are the three options?**
0.5-gpm (1.9 Lpm) Multi-Laminar Spray, 1.5-gpm (5.7 Lpm) Full Stream Aerated, and 1.5-gpm (5.7 Lpm) Full Stream Laminar
7. **What is the time out setting for the Capacitance? Is it adjustable?**
Time out for the 1.5 gpm units is 10 seconds. 30 seconds for .5 gpm. The timeout is automatic to the faucet and can not be adjusted.
8. **Is there a trim plate available? (Single Hole)**
Yes, base plates are available in 4- and 8-inch sizes.
9. **I touched the faucet and now it won't work? Now What?**
If the spout is touched for 10 seconds or longer, it will put the unit into "clean mode". Basically it will lock it out for 2 minutes. After 2 min, the unit will go back to it normal operating mode.
10. **Can faucet be mounted to any sink surface?**
No. The Capacitance cannot be mounted to stainless steel, steel, cast iron, or any other metal sink decks. Metal sink decks will interrupt the capacitance signal causing the faucet to not work.
The capacitance wire and mounting hardware must have an air gap of at least 0.5-inches from surrounding metal components (i.e., water supplies, drop in metal sink bowl)
11. **Can the control module be installed remote from the spout?**
The control module must be mounted within 30" of the spout.
12. **Do my hands have to be right in front of the spout for the unit to work?**
No. The Capacitance is omni-directional. Your hands need simply to be in the area of the unit for the unit to turn on. However, you hands must be in motion for the water to stay on. If not the unit will shut down after a couple seconds as it adapts to a stationary object.
13. **How long is the water supply from the spout?**
32" long; 3/8" compression fittings

Control Module Mounting

14. **Can the mounting plate be mounting in any orientation?**
The plate should be secured to the surface with the arrow pointing in the "up" direction. If needed to fit a particular installation the plate (and module) can be rotated up to 45-degrees in either direction from horizontal.
15. **Is it easy to mount the control module to the plate?**
Yes. Simply line up the mounting bolt though the center hole of the control module and turn the control module clockwise. Once you feel the click the module is locked into place.
16. **Can the control module be removed once the module and cover are secured to the plate?**
No. Once the cover for the control module is secured to the mounting plate, the unit is locked into position. The cover would need to be removed before anyone would be able to remove the control module from the mounting plate.
17. **What is the mounting plate made of?**
The bracket is made from steel and is zinc plated.

Hose Connections

18. **The water lines simply slide into the control module. Is there any risk of the water supply lines coming out? Vandalism, breakage, high pressure, etc...**
No. The quick connect water supply lines, once installed, are secure and locked into the module with stainless steel clips. The connections are brass and designed to be robust. The hoses freely spin upon installation so there is no residual stress placed on the connections other than the water pressure once the supply stops are opened. All of the water connections from the spout and water supply are sealed with o-rings to insure there are no leaks.

Power Supply

19. **What is the input voltage of the Capacitance-based sensing faucet?**
6.00 VDC
20. **What types of power supply's are available?**
This will be available in either a battery or line powered variations. The battery unit will use (4) Duracell "AA" Alkaline batteries. The plug in units will use a plug in voltage adapter (90-264 VAC/6.00 VDC 50/60 Hz). Voltage Adapter must be supplied by Sloan Valve Company.
21. **How long will the batteries last?**
The expected battery life is dependent on many variables; the energy density (capacity) of the battery, the number of activations per day (low, med, high traffic), and the water supply pressure (higher pressure requires more power to activate the solenoid valve). Another factor is the efficiency of the electronics. Under worst-case conditional of 8,000 cycles per month and high water pressure it is possible to realize a 5 year service life of the batteries.
22. **Can I use lithium batteries in this unit?**
Yes. It is possible to use "AA" lithium batteries in this faucet.

Capacitance FAQs

Power Supply (continued)

23. Are there any downsides to using lithium batteries?

The Sloan capacitance faucet electronics have been optimized for the discharge profile of alkaline batteries. Due to the different discharge profiles, there is a possibility that the low battery indicator light provides little or no warning when low battery power level is achieved.

24. Can I convert a battery unit to a plug in / vise versa?

Yes. Simply order an EFX-31 Plug-In voltage adapter for the battery unit. Plug in versions need only AA batteries installed into the battery holder. Note the EAF-11-A, EAF-37, EAF-39, EAF-41, and EFX-27 ARE NOT compatible with the Capacitance faucet.

Battery Holder

25. Are the batteries easy to install?

Yes. The battery holder is marked for polarity. Once the batteries are installed, the bottom of the holder twists so the batteries are locked into place. Once locked simply press the battery holder into the control module until the latching tabs snap into place.

Solenoid Coil

26. The solenoid and/or filter of my Capacitance-based sensing faucet needs to be serviced. Is this easy to do? Do I need to shut the water off to the faucet?

Servicing the solenoid/filters are easy as there is no need to turn the water off to the unit. Simply remove the control module cover to gain access to the solenoid. Unplug the solenoid plug at the control module. Twist the blue solenoid housing counter clockwise and pull the solenoid straight out of the control module. Now you are ready to replace the solenoid/filter.

Note: there is an extra water supply filter located inside the top of the control module cover.

Control Module

27. Is the Control module itself is water proof?

The components of the control module are sealed and tested per IP67 (splash standard). The electronic circuit board is epoxy encapsulated ensuring it is protected from the environment.

28. What are the two plug wires coming off of the spout?

The black plug is the power cable for the diagnostic indicators on the side of the spout. The thin white plug is the sensor capacitance plug.

Note: care must be used when installing cables. If cables are damaged in any way the spout must be replaced.

Environment/Startup

29. Without an infrared sensor; how does the unit work?

The entire spout body, as well as, water flow through the faucet act as an antenna. Your hands/body completes the connection. The unit will self calibrate to your hands in a running calibration mode. The unit will calibrate itself every 250 mS, on average.

30. How can I reset the unit?

Simply remove the battery pack or unplug the transformer from the unit to re-initiate start up.

31. Entire body is the antenna, as well as, water flow and hoses. Your body completes the connection.

Capacitance is proportional to the area of the planes, larger area higher capacitance. For example the area of one finger versus the area of the entire hand.

32. If I splash water, Liquid, foam, bottle, etc... my unit turns on for a second and shuts off. Is that normal?

Yes. Being that spout an antenna the unit will need to calibrate to the obstruction. The unit will activate one time and then back to normal calibration.

Certifications

33. To what certifications or standards does this faucet comply?

The product shall be tested and certified to industry standards: ASME A112.18.1M, CSA B125.1, California Health and Safety Code 116875 (AB1953-2006), and Vermont Bill S.152. This product meets ADA ANSI/ICC A117.1 requirements.

34. What about ASSE 1070?

Thermostatic mixer ordered separately to comply with ASSE 1070 requirements.