Sensor Activated Lavatory Faucet
S-6080-AC-12V
S-6080-ACM-12V
Installation, Operation & Service Instructions

Model Numbers
- S-6080-AC-12V
  Sensor faucet and AC wall plug-in transformer
- S-6080-ACM-12V
  Sensor faucet for multi-faucet installations with 10' DC power cord

Tools & Materials
- 2.5 mm (included)
- Solenoid valve removal wrench (included)

Need Help?
Symmons customer service:
P: (800) 796-6667, F: (800) 961-9621
gethelp@symmons.com
Mon - Fri 7:30 am - 6:00 pm EST

Quick Install Guide Ultra-Sense Lavatory Faucet, S-6080-AC/ACM-12V

Single hole mount
Step 1
Attach faucet to deck

Step 2
Connect power and water supply lines

Step 3
Test and check for leaks

Three hole mount with deck plate
Step 1
Attach faucet and deck plate to deck

Step 2
Connect power and water supply lines

Step 3
Test and check for leaks

Faucet supply configuration options
1) Temperature adjust using lever handle (factory configured)

2) Tempered water preset internally (field modified)

For California Residents
WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.
**Installation Instructions, S-6080-AC-12V and S-6080-ACM-12V**

**Important!** Prior to connecting the water supply, ensure supply lines are flushed. Particles can clog filter and result in malfunction. Excessive particles from supply lines may require installing a separate efficient filter.

**Supply Configuration Options**
Install faucet in one of two supply configurations.

1) **Water temperature adjust handle**  
   Factory modified as shipped.

2) **Tempered water preset internally**  
   Field modification required.  
   *Ref. page 3, Preset Supply Temperature, option #2*

**Option 1) Water Temperature Adjust Handle**  
(Factory default as shipped)

**Step 1 Attach faucet to deck (1 hole)**
Single hole mount without deck plate

**Step 2 Attach faucet to deck (3 hole)**
Three hole mount with deck plate

**Step 3 Connect water supply line**

**Step 4 Connect power supply line**  
(for S-6080-AC-12V only)

**Step 5 Test operation and check for leaks**
Option 2) Tempered water preset internally

[1] Remove handle and mixer

[2] Remove faucet body

[3] Insert plug button retainer

[4] Re-attach faucet body

[5] Connect water supply line

Ref. page 2, Factory modified, option #1

[6] Connect power supply line (for S-6080-AC-12V only)

Ref. page 2, Factory modified, option #1

[7] Set water temperature, install mixing plug

Test operation and check for leaks

Option 2) Tempered water preset internally

Installation Instructions, S-6080-AC-12V and S-6080-ACM-12V
Multi-Faucet Installation Instructions, S-6080-AC-12V and S-6080-ACM-12V

**Visual Install Guide Multi-Faucets S-6080-ACM-12V**

Input: 100 - 240 VAC
47-63 Hz @ 1.0 amps
green...(Protective earth)
white.......... (Neutral)
black.......... (Line)

Power supply supports up to eight (8) Sensor Faucets

**Termination Enclosure Box, Model # S-6244**
Standard electrical termination enclosure or equivalent (6"H x 10"W x 4"D).
Model S-6244 enclosure box may be purchased from Symmons or similar type from a local electrical supplier.

**Installation Requirements**
The following items are not included and purchased separately:

**Switching Powers Supply, Model# S-6240-12V**
Power Supply supports up to eight faucets. Mounting strap and screws are included.
Input: 100/240 VAC @ 1.0 amp
Output: 12 VDC @ 3.3 amps max

**Wire nuts** - Secure wire connections using two wire nuts that can join (8) AWG #20 wires and (1) AWG #16 wire. Purchase from a local electrical supplier.

**Electrical Installation**
100/240 VAC to 12 VDC power supply must be mounted in a electrical termination enclosure box with wire connection in accordance with local state electrical codes.

**Note:** Dimensions and product structure subject to change without notice.
Multi-Faucet Installation


Step 1 Install Faucets
- Install each sensor faucet per installation instructions on page 2.
- The maximum number of faucets DC power supply can support is (8) eight.
- A 10 foot (20 foot optional) extended DC power cable is supplied with each faucet.

Step 2 Mount Termination Box
- Mount box to a wall, under a sink or closet location.
- Ensure the furthest faucet is located within 19 feet (5.8 meters) of the termination enclosure.

Step 3 Run faucet’s extended DC power cable
- Plug extended DC power cable plug into each faucet’s power receptacle.
- Run each extended power cable from faucet under the sink to the termination box. Feed cable through a strain relief and punched-out hole into the termination box.
  
  Avoid contact with water pipes and secure cable in accordance with state and local electrical codes.

Step 4 Prepare power cable wire ends
- Faucet extended DC power cables
  Strip off a few inches of cable jacket and then strip each wire to expose copper ends.
- Power supply DC power cable
  Strip off a few inches of cable jacket and then strip ends of each wire to expose copper ends.

Step 5 Connect DC power wires
- +12 VDC line - Connect each of the faucet’s +LEAD #1 black wires to the power cables red wire.
- -RET (GND) line - Connect each of the faucet’s -LEAD #2 black wires to the power cables black wire.
- Wire nuts - Secure wire connections using two wire nuts with size that can join (8) AWG#20 wires and (1) AWG#16 wire.

Step 6 Connect AC Power
- Connect 100/240 VAC power source to wire ends of AC power cord. Note: A licensed electrician must connect AC power source to power cord.

Wire color codes
- green ......................... (Protective earth)
- white ......................... (Neutral)
- black ......................... (Line)
- Plug AC power cord into power supply.
  Faucets may all activate for one cycle on initial power up.

Dimensions
- Power Supply, S-6240-12V

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Receptical AC Input (IEC 320 Inlet)</td>
<td>4-3/16&quot; (106 mm)</td>
</tr>
<tr>
<td>1-7/8&quot; (47 mm)</td>
<td></td>
</tr>
<tr>
<td>1-3/16&quot; (30 mm)</td>
<td></td>
</tr>
<tr>
<td>6 foot AC power cord</td>
<td></td>
</tr>
<tr>
<td>12VDC Output</td>
<td>4 foot DC power cord</td>
</tr>
</tbody>
</table>

- Enclosure Box, S-6244

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot; (152 mm)</td>
<td></td>
</tr>
<tr>
<td>10&quot; (254 mm)</td>
<td></td>
</tr>
<tr>
<td>4&quot; (102 mm)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Dimensions subject to change without notice.
**Replacing Solenoid Valve (p/n SF-240)**
- Remove old o-ring from valve body before replacing solenoid valve. Replacement solenoid valve will come with new o-ring installed to allow proper seal and prevent leaking from valve body.

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**Faucet Operation**

**Sensor recognition range is factory preset at 1/2 - 4 inches**
Place hand under faucet, water will flow automatically for 10 seconds and shut off.

**Auto shut-off time is factory preset at 1/2 to 1 second**
Remove hands, water will stop automatically within 1/2 to 1 second.

**Security OFF after 10 seconds**
Faucet will automatically shut off after continuous water flow for 10 seconds.

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**Temperature Operation**

**Using Temperature adjustment handle**
Option #1)
- Remove temperature adjustment handle.
- Set maximum water temperature limit by turning handle limit stop clockwise (CW).
- Increase maximum water temperature by turning handle limit stop counter clockwise (CCW).
- Re-install temperature adjustment handle.

**Adjusting preset water temperature**
Option #2)
- Remove temperature adjustment handle plug.
- Adjust the maximum water temperature limit by inserting handle into faucet and turning counter clockwise (CCW).
- Increase temperature by turning handle clockwise (CW).
- Remove handle and re-install plug.

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**Troubleshooting**

**No water flow**
- Faucet is not receiving power from AC outlet. In multi-faucet installations, faucet is not receiving power.
- Filter in strainer is clogged. Excessive clogged filter may require installing of separate efficient filter into supply line.
- Solenoid valve connector inside faucet is loose.
- Circuit board is faulty. Do not attempt repair, please contact Symmons customer service.
- Solenoid valve is faulty. Do not attempt repair, please contact Symmons customer service.
- Clean around photo cell sensor area or replace sensor.

**Water flow is weak**
- Water supply stops are not fully open.
- Clean aerator and check strainer on end of supply line. Excessive clogging may require installing of separate efficient filter into supply line.

**Water flow from spout fails to turn off**
- Sensing range may be too low. Clean around photo cell sensor area.
- Clean solenoid valve membrane or replace solenoid valve.

**Water temperature can't be adjusted**
- Clean the check strainer on end of supply line.
- Clean or replace the mixer.

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**Faucet care**

**Cleaning surface finish**
- Block sensor with plastic cleaning cover to prevent faucet from turning on while cleaning.
- Clean finish area by using mild soap and water or non-abrasive cleaner and then rinse immediately. A non-abrasive wax may be used to preserve finish area.

**Precautions**
- Ensure sensor is not damaged through impact or scratches.
- Ensure sensor is not blocked or disturbed by any object with its detection range.
- Ensure that no strong light source is aimed directly at sensor or through a mirror.

**Risk of Freezing**
When installing the faucet in a location where the temperature may fall below freezing, the entire system must be drained of water to prevent damage in freezing weather.
- Turn off water supply.
- Disconnect all flexible hoses.
- Drain all parts and hoses of water.
**Dimensions Ultra-Sense Lavatory Faucet, S-6080-AC/ACM-12V**

**Note**
1. Faucet shown with 4 inch centered deck plate.
2. Dimensions subject to change without notice.

- Deck plate, 6” (152 mm)
  - Hole diameter
    - 1-5/16” - 1-3/8” (33 mm - 35 mm)
    - 1/4”-20 UNC
    - 4” (102 mm)
- Strainer/adapter, 3/8” compression
- 1/2” (13 mm) with spacer
- 1-1/8” (29 mm) without spacer

**Parts Assembly Ultra-Sense Lavatory Faucet, S-6080-AC/ACM-12V**

**Replacement Parts**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF-240</td>
<td>Solenoid valve with removal tool</td>
</tr>
<tr>
<td>SF-239</td>
<td>Sensor and retaining clip</td>
</tr>
<tr>
<td>SF-186</td>
<td>Check / strainer kit for flex hose connections</td>
</tr>
<tr>
<td>SF-158</td>
<td>Single hole mounting kit</td>
</tr>
<tr>
<td>SF-125</td>
<td>Aerator, vandal resistant with removal key #LL-60K</td>
</tr>
<tr>
<td>LN-100</td>
<td>Non-aerated laminar flow vandal resistant spray outlet with removal key #LL-60K</td>
</tr>
<tr>
<td>LN-217</td>
<td>0.5 gpm (1.9 L/min)</td>
</tr>
<tr>
<td></td>
<td>1.5 gpm (5.7 L/min)</td>
</tr>
<tr>
<td>SF-163</td>
<td>Cleaning cover</td>
</tr>
</tbody>
</table>

**Ordering replacement parts:**
Call Symmons customer service at (800) 796-6667, (781) 848-2250 M-F 7:30 am - 6:00 pm EST or check our website at www.symmons.com for a list of Symmons distributors.