

Sensor Faucets and Flush Valves



OPERATION & MAINTENANCE MANUAL 6700C Series Faucet

www.hydrotekintl.com

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ISO 9001 Certified

6700C Series

U.S. Patent 6192530B1

AC or Battery Powered Sensor Operated Faucet

The 6700C Series faucet is a piston operated, wall mounted sensor faucet that provides a vandal resistant, no touch solution that promotes better hygiene and energy savings.

Using Hydrotek's patented gooseneck design, the 6700C Series faucet is ideal in clinics, hospitals, and manufacturing facilities for scrub stations.

- ADA Compliant. Meets all barrier free codes
- Conserves water and energy
- Easily installed in new or retrofit applications
- Competitively priced for today's commercial market
- Promotes cleanliness & hygiene
- Proven Hydrotek craftsmanship and reliability

Available in:

- ✓ Low Lead, AC Powered (H-6700C-LR)
- ✓ Low Lead, Battery Powered (HB-6700C-LR)
- ✓ Low Lead, AC Powered with DC Backup (HB-6700C-LRDC)

Features:

- ACCU-SENSE adjustable sensor eyes.
- Chrome plated, solid brass construction.
- Wall mountable, waterproof control box with armored, vandal resistant control and power cables.
- Preset/adjustable sensor range of 6" 30" for various installation requirements.
- Standard automatic time-out feature. Preset at 30 seconds, but adjustable to 10, 30, or 60 seconds. Prevents accidental sink overflow.
- Shut-off delay is adjustable from 1 (preset) to 8 seconds.
- Single-hole, wall/splash mounting
- Includes in-line filter with clean-out trap to reduce maintenance costs.
- Standard 6" gooseneck spout and 2.0 GPM or 0.5
 GPM Laminar flow control.

- All parts are field-replaceable to ensure quick and easy repair.
- Same faucet-field switchable to AC or battery powered.
- AC with DC backup models automatically switch to batteries during a power outage.
- Slow closing, piston-operated solenoid valve provides reliable and smooth operation without water hammer.
- Superior VSI silicone elastomer piston seals are unaffected by chlorine, chloromines, or
- Control module allows a unique self-check of all electrical components.
- No-touch system enhances hygiene in medical, institutional, food service industries, etc.

Hydrotek Automatic Faucets

6700C Series

Wall Mounted / Non-Mixing

Meets ANSI/ASME A112.18.1 M-1989

Operation:

- 1. A continuous, invisible beam is emitted from the sensor.
- The faucet is activated by placing hands under the spout within the effective range of the beam. Water starts to flow immediately for as long as the user's hands remain in the sensor range.
- When hands are removed, the water flow stops. The sensor will automatically reset and be ready for the next user.
- 4. In the battery powered version, a flashing red light will indicate a low battery condition.

Specifications:

Faucet Construction: Control Circuit: Auto. Time-out: Solid brass, chrome platedSolid state, AC or battery, switchable

- Preset at 20 seconds and adjustable to 10, 30, or 60 seconds

Line Purge (request only):

- 2 minute run every 12 hours or 24

hours

Scrub Mode Delay (request only):

- 60, 120, 180 seconds - Preset and adjustable

Sensor Range: Shut-off Delay:

- Presets and adjustable from 1-8

acando

Control Cable: Solenoid Valve: - Armored, vandal resistant- 6V DC, normally closed

- Wattage: 0.4W (idle), 5W (in use)

- Operating Pressure: 5 psi to 125 psi - 2.0 or 0.5 GPM, Laminar Flow Control

AC Mode

Power Adapter

Flow Control:

Standard Plug-in:
(UL/CSA)
- Output DC 12V, 0.8A/Class 2
Power Cable:
- Armored, vandal resistant
Optional Multi-Unit Adapter:
- Serves up to 8 faucets

(UL/CSA) - Input AC 120V, Output DC 12V, 3A

Battery Mode

Battery Powered Models:

- (4) AA Alkaline Batteries

Battery Service Life:

- 400,000 on/off cycles, up to 4 years

Package Includes:

- (1) Faucet with electronic sensor
- (1) Control box w/6V DC solenoid
- (1) 12V DC plug-in power adaptor (H-6700C, -DC, -LR and -LRDC only)
- (1) In-line filter with clean-out trap
- (1) 18" Flex, S.S. supply tube, 3/8"
- (1) 6" Gooseneck Spout
- (1) Mounting hardware
- (1) 2.0 GPM Flow Control
- (4) AA Alkaline batteries (HB-6700C, -DC, -LR, -LRDC only)
- (1) Battery holder (HB-6700C, -DC, -LR, -LRDC only)

Dimensions:

Base Width (Outside Measurement)

2-1/4"
Base Depth

2-1/2"
Faucet Height (Aerator to Base)

8-3/4"
Faucet Height Overall

Depth (Center of Aerator to Center of Faucet Base)

Mounting Bolt Length

1-7/16"

Mounting Bolt Pattern Single-hole mount

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H-6700C (AC Powered)

- Angle Stop

Solenoid

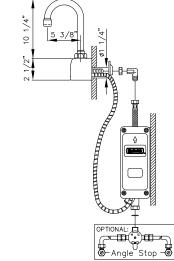
Temperature Adjustor 🔪

HB-6700C (Battery Powered)



Optional Variations and Accessories

- 0.35, 0.5, 1.5, 2.2 GPM Laminar Flow
- HC-010 Multi-Unit Voltage Adapter (AC Powered Only) 8 units
- HC-0104 Multi-Unit Voltage Adapter (AC Powered Only) 4 units
- HC-001 Mixing/Check Valve (Mechanical)
- HBL-04-LR Thermostatic Mixing Valve with Checks (Low Lead)
- 8" deep Gooseneck and 6" or 8" Swing Spout



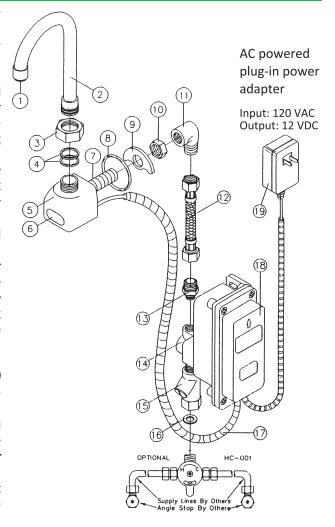
DC Powered Sensor Operated Mixing Faucet

Installation Instructions

- 1. Prior to installation, thoroughly flush all water lines and replace stop washers, if required.
- 2. To ensure proper operation, "DRY TEST" the faucet by plugging the *Sensor Eye Cable (17)* into the matching connector on the PC board inside of the *Control Box (18)*.
 - a. AC Powered: Connect the Power Adapter (19) to the PC board inside of the Control Box (18), then plug the Power Adapter into a 120 V AC wall outlet. Place your hand in front of the sensor eye and listen for a clicking sound. If there is no clicking sound, call the factory.
 - b. Battery Powered: Properly install new batteries into the battery holder and ensure the battery holder is connected to the PC board. Place your hand in front of the sensor eye and listen for a clicking sound. If there is no clicking sound, call the factory.
- 3. After a successful "DRY TEST", unplug the *Sensor Eye Cable (17)* and *Power Adapter (19)* or battery holder from the PC board.
- 4. Loosen Flow Control Device (1) and assemble the Gooseneck Spout (2) using the Split Washers (4) and Spout Nut (3). Mount the Gooseneck Spout (2) onto the Body (5). Feed the Sensor Eye Cable (17) through the sink wall and tighten the faucet onto the sink using the O-Ring (8), Washer (9), and Mounting Nut (10). Attach the 90-Degree Elbow (11) to the Supply Rod (7).

USE TEFLON TAPE ONLY, NO PIPE DOPE

- 5. Reconnect the **Sensor Eye Cable (17)** and **Power Adapter (19)** connections described in STEP #2, making sure the cables are seating in the **Control Box (18)** housing properly.
- Attach the Compression Fitting (13) to the Solenoid Valve (14) and connect it to the Elbow (11) using the Supply Tube (12). Insert the Nylon Washer (16) into the swivel nut located on the In-Line Filter (15).
 - a. **Pre-tempered or cold water only:** Use a union fitting (not supplied) to connect the supply line (not supplied) from the supply stop to the *In-Line Filter (15)*.
 - b. **Tempered water:** Attach an optional Hydrotek *HC-001* or *HC-003* mixing valveto the *In-Line Filter (15)*. Connect the supply lines (not supplied) to the mixing valve.
- 7. Turn on water and check for leaks. Plug the *Power Adapter (19)* into a 120V AC outlet (for AC Powered). Push the reset button on the PC Board. Reinstall the cover for the *Control Box (18)* and tighten screws to ensure water resistance. Place hands in front of the sensor eye to activate water flow. Remove hands and the water should stop. If not, refer to the troubleshooting guide or call the factory.
- 8. Periodically clean the filter element located inside the *In-Line Filter* (15).
- 9. For minor adjustments, refer to the instructions located inside the cover of the *Control Box (18)*.
- 10. **IMPORTANT:** The stop valve should never be opened to the point where the water flow exceeds the flow capability of the fixture. The fixture must be able to accommodate the continuous water flow from the faucet in the event of a failure. Should the fixture overflow due to water exceeding the capability of the fixture and/or the drain pipe, Hydrotek will not be responsible for any damages.



Parts:

Flow Control Device

2. Gooseneck Spout

3. Spout Nut

4. Split Washer

5. Body

6. LED Sensor Cover

7. Supply Rod

8. O-Ring

9. Washer

10. Mounting Nut

- 11. 90 Degree Elbow
- 12. Supply Tube
- 13. Compression Fitting
- 14. Solenoid Valve
- 15. In-Line Filter
- 16. Nylon Washer
- 17. Sensor Eye Cable
- 18. Control Box
- 19. Power Adapter

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Sensor Operated Mixing Faucet

Troubleshooting Guide

Normal Operation: When power is connected, the faucet will immediately perform diagnostic function. You will hear a clicking sound and see lights flash. When the user's hands are placed under the spout, the light will flash once and water will start to flow. Water flow will stop when hands are removed. The red indicator light will flash when the batteries are low.

Turn the manual handle clockwise to increase temperature and counter-clockwise to decrease.

| Problem | Possible Cause | To Diagnose | Remedy |
|---|--|--|--|
| Faucet will not turn on: | Water not turned on | Check water supply | Turn water on |
| | Power supply failure | No light, no clicking: • Check batteries • Check power adapter | Reinstall or replace batteries/ Replace power adapter |
| | Low battery | Light continues to flash | Replace batteries |
| | Electronic PCB / Sensor is defective | No light, no clicking: • Reinsert batteries • Reattach power adapter | Replace electronic PCB |
| | Solenoid valve is clogged | Solenoid is clicking but no water is coming out | Clean solenoid |
| | In-line filter is clogged | Open clean-out trap and check filter screen | Clean or replace filter screen |
| | Solenoid coil is defective | Insert new batteries or reattach power adapter. Light blinks but no solenoid is clicking | Replace solenoid coil |
| | Flow control is clogged | Open flow control device and check | Celan the flow control device |
| Faucet will not shut off, has low glow, or drips: | The solenoid valve is normally closed. Turn off water and activate the faucet. If there is a clicking sound, the solenoid valve is dirty. If there is no clicking sound, then check the solenoid valve. If the faucet is dripping, clean the solenoid valve. | | |

IMPORTANT: Periodic maintenance is required for smooth and trouble-free operation of this faucet.

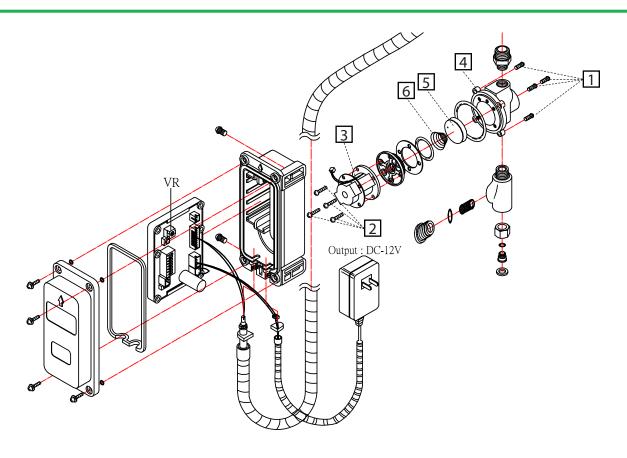
For service and inquiry about available repair kits, please call Hydrotek Technical Support at (800) 922-9883.

Care and Cleaning Instructions:

- WARNING! Using abrasive or chemical cleaners will damage the chrome or decorative finishes.
- Use only soap and water to clean the finish, then wipe dry with a clean cloth.
- If chemical cleaners are used for other parts of the lavatory, ensure that the faucet is protected from potential contact from those cleaners.

Sensor Operated Mixing Faucet

Solenoid Valve Cleaning



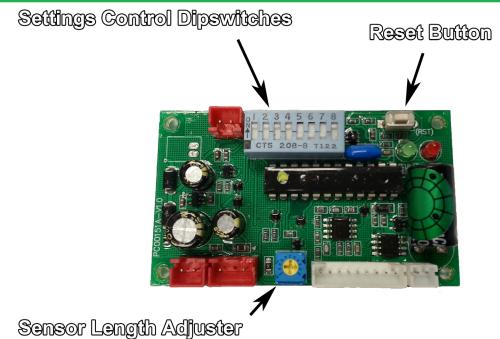
- 1. Turn off water supply at stop valve.
- 2. Remove control box (if possible) to gain access to the solenoid valve.
- 3. Remove four Screws (#1) and separate the valve from the box.
- 4. Remove four Coil Screws (#2) and separate Coil (#3) from Valve Seat (#4).
- 5. Clean or replace Control Disc (#5), Disc Spring (#6), Piston, Piston Spring, and check the Piston Sleeve for corrosion.
- 6. Re-install all parts in same order as the diagram below.
- 7. Re-install solenoid on the control box and remount box in water line.

- 8. Check and clean Filter Screen (#24) in Filter Body (#22).
- 9. Reset P.C. Board and make sure solenoid clicks open and thumps closed.
- 10. Turn on water and check for leaks and proper operation.

(For further questions, please call Hydrotek Tech Support at 1-800-922-9883 ext. 103)

Sensor Operated Mixing Faucet

Control Module Settings



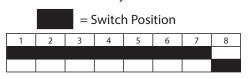
Shut Off Time Delay (After hands are removed)

| Sw1 | Sw2 | Sw3 | Delay |
|-----|-----|-----|-------|
| On | On | On | 1 Sec |
| On | On | Off | 2 Sec |
| On | Off | On | 3 Sec |
| On | Off | Off | 4 Sec |
| Off | On | On | 5 Sec |
| Off | On | Off | 6 Sec |
| Off | Off | On | 7 Sec |
| Off | Off | Off | 8 Sec |

Automatic Time Off (maximum run time after activation)

| • | | |
|-----|-----|----------|
| Sw4 | Sw5 | Time Off |
| On | On | OFF |
| On | Off | 15 Sec |
| Off | On | 30 Sec |
| Off | Off | 60 Sec |

Factory Preset



Sensor Distance

| Sw6 | Mode | Distance |
|-----|----------|-----------|
| On | Std | 4" - 12" |
| Off | Enhanced | 10" - 12" |

To increase distance, turn adjuster CLOCKWISE To decrease distance, turn adjuster COUNTER-CLOCKWISE

Faucet Switch - DO NOT TOUCH

| Sw7 | Sw8 | Mode |
|-----|-----|-------------|
| On | Off | Auto Faucet |

IMPORTANT: Always push the Reset Button after any adjustments