

Sensor Faucets and Flush Valves



OPERATION & MAINTENANCE MANUAL 2603C Series Faucet

www.hydrotekintl.com

5055 Forsyth Commerce Rd, Ste 124, Orlando, FL 32807 Phone (800) 922-9883 | Fax (866) 670-5580



Sensor Faucets and Flush Valves

2603C Series

AC or Battery Powered Sensor Operated Faucet

The 2603C Series faucet is a single-hole deck mounted, piston operated sensory faucet that provides a vandal resistant, no touch lavatory solution that promotes better hygiene and energy savings.

- 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

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.
- Solid brass body with single hole deck mounting. Optional 4" or 8" cover plate for 3 point anchoring.
- Includes in-line filter with clean-out trap to reduce maintenance costs.
- 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 ammonia.
- Standard 1.5 or 0.5 GPM Laminar flow control for water conservation and annual savings.
- Control module allows a unique self-check of all electrical components.



Compliances & Certifications





- ADA Compliant
- ASME A112.18.1
- NSF/ANSI Standard 372 Lead Free Compliant

Available Models

H-2603C-LR: Lead Free, AC Powered

HB-2603C-LR: Lead Free, Battery Powered

H-2603C-LRDC: Lead Free, AC Powered with Battery Backup

Special Finishes

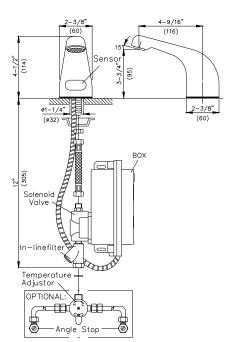
• Additional Finishes Upon Request

The information contained within this document subject to change without notice



AC or Battery Powered Sensor Operated Faucet

Deck Mounted



Specifications:

Faucet Construction: - Solid brass, chrome plated

Control Circuit: - Solid state, AC or battery, switchable
Auto. Time-out: - 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 Sensor Range: - Preset and adjustable

Shut-off Delay: - Presets and adjustable from 1-8 seconds

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

- Wattage: 0.4W (idle), 5W (in use) - Operating Pressure: 5 psi to 125 psi

Flow Control: - 1.5 or 0.5 GPM, vandal resistant

AC Mode

Power Adapter

Standard Plug-in:

(UL/CSA)

Power Cable:

Optional Multi-Unit Adapter:

- Input AC 120V 60 Hz or 220V

- Output DC 12V, 0.8A/Class 2

- Armored, vandal resistant

- Serves up to 8 faucets

(UL/CSA) - Serves up to 8 raucets

- Serves up to 8 raucets
- 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-2603C, -DC, -LR, and -LRDC only)

(1) In-line filter with clean-out trap

(1) Copper supply tube, 3/8"

(1) Mounting hardware

(1) 1.5 GPM vandal resistant flow control

(4) AA Alkaline batteries (HB-2603C, -LR; H-2603C-DC, -LRDC only)

(1) Battery holder (HB-2603C, -LR; H-2603C-DC, -LRDC only)

Dimensions:

Base Width (Outside Measurement)

2-3/8"
Base Depth

2-3/8"
Faucet Height (Aerator to Base)

3-3/8"
Faucet Height Overall

Depth (Center of Aerator to Center of Faucet Base)

Mounting Bolt Length

2-1/4"

Mounting Bolt Pattern Single-hole mount

Optional Variations and Accessories

- 0.35, 0.5, 2.2 GPM Laminar Flow, 1.5 GPM VR Soft-Flow Aerator
- 4" or 8" Centerset Cover Plate
- 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-03-LR Thermostatic Mixing Valve with Checks (Lead Free)

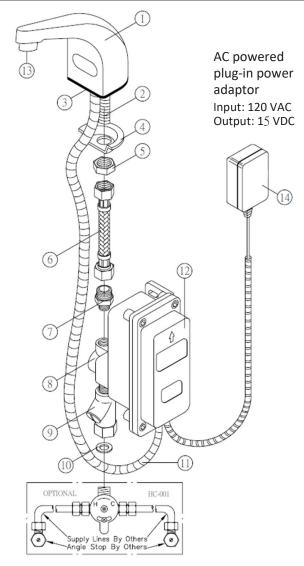
DC Powered Sensor Operated Mixing Faucet

Installation Instructions

- 1. Prior to installation, thoroughly flush all water lines and replace stop washers, if required.
- To ensure proper operation, "DRY TEST" the faucet by plugging the Sensor Eye Cable (11) into the matching connector on the PC board inside of the Control Box (12).
 - a. AC Powered: Connect the Power Adapter (14) to the PC board inside of the Control Box (12), 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.
- After a successful "DRY TEST", unplug the Sensor Eye Cable (11) and Power Adapter (14) or battery holder from the PC board.
- 4. Attach the Supply Tube (6), and Mounting Bolts (2) to the inlet on the Faucet Body (1).
- Install the Mount Gasket (3) onto the Faucet Body and mount the faucet onto the sink. Apply plumber's putty to the bottom of the gasket and secure the faucet using the Slotted Washers (4) and Mounting Nuts (5).
- 6. Reconnect the Sensor Eye Cable (11) and Power Adapter (14) or battery holder as described in step #2 making sure the cables going into the Control Box (12) are seated properly. Reinstall the cover for the Control Box (12) and tighten the screws to ensure water resistance. Coil excess cables and secure in a safe, dry area.
- 7. Attach the **Solenoid Valve (8)** to the **Supply Tube (6)** using the **Compression Fitting (7)**. Insert the **Nylon Washer (10)** into the swivel nut located on the **In-Line Filter (9)**.
 - 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 (9)*.
 - b. Tempered water: Attach an optional Hydrotek *HC-001* or *HC-003* mixing valve to the *In-Line Filter (9)*. Connect the supply lines (not supplied) to the mixing valve.

USE TEFLON TAPE FOR ALL CONNECTIONS, NO PIPE DOPE

- 8. Turn on the water and check for leaks. Plug the *Power Adapter* (14) into a 120V AC outlet (for AC Powered). Push the reset button on the PC Board. Place hand in front of the sensor eye to activate water flow. Remove hands and the water should stop. If not, refer to the troubleshooting guide.
- 9. Periodically clean the filter element in the *In-Line Filter(9)*.
- 10. For minor adjustments, refer to instructions located inside the cover of the *Control Box (12)*.
- 11. 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:

Parts.		
1.		8. Solenoid Valve
2.	Mounting Bolt	9. In-Line Filter
3.	Mount Gasket	10. Nylon Washer
4.	Slotted Washer	11. Sensor Eye Cable
5.	Mounting Nut	12. Control Box
6.	Supply Tube	13. Aerator
7.	Compression Fitting	14. Power Adapter

HYDROTEK INTERNATIONAL, INC. 5055 Forsyth Commerce Rd., Ste 124 Orlando, FL 32807 800.922.9883 (Phone) 866.670.5580 (Fax) www.hydrotekintl.com

0090H062-2

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
	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
Faucet will not turn on:	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.

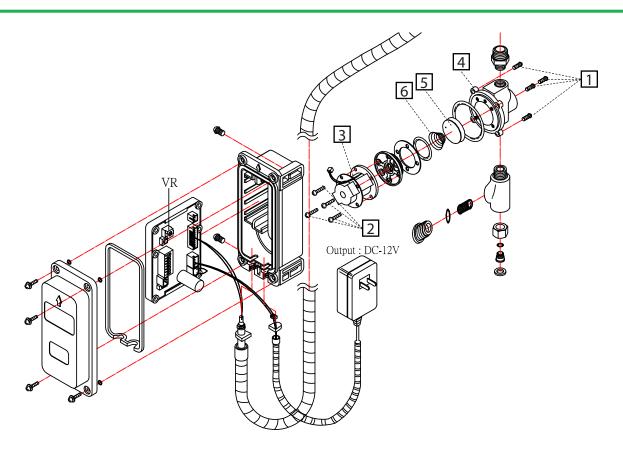
For service and inquiry about available repair kits, please call Hydrotek Technical Support at (800) 922-9883.

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



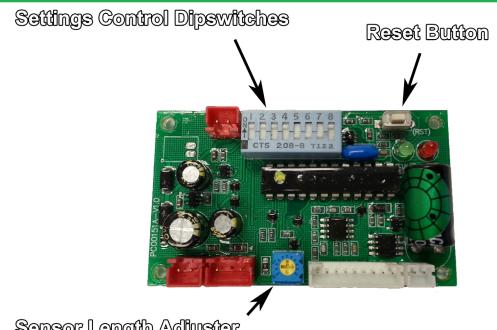
- 1. Turn off water supply at stop valve.
- 2. Remove control box (if possible) to gain access to the solenoid valve.
- 3. Remove four Screws (#1) and separate the valve from the box.
- 4. Remove four Coil Screws (#2) and separate Coil (#3) from Valve Seat (#4).
- 5. Clean or replace Control Disc (#5), 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



Sensor Length Adjuster

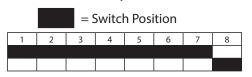
Shut Off Time Delay (After hands are removed)

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

Sensor Operated Mixing Faucet
Assembly Parts

No	Description	Part Number	R
1	PCB Module	HCC-011B	
2	Sensor Eye and Cable	HCC-031	
3	Solenoid Valve Repair Kit	HCB-017A	
4	Solenoid Assembly	HCC-005	
5	Solenoid Coil	HCC-019	(2)
	Battery Holder	HCC-103A	
	Plug-in Adapter	HCC-008B	