

Sensor Faucets and Flush Valves



OPERATION & MAINTENANCE MANUAL 1000C Series Faucet

www.hydrotekintl.com

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



AC or Battery Powered Sensor Operated Faucet

The 1000C Series faucet is a 4-inch center-set, 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.
- All 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 20 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 cast 4" center-set and 3 point anchoring system. Twist-free and tamper resistant. Adapts to 8" center-set.
- 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 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-1000C-LR: Lead Free, AC Powered
- HB-1000C-LR: Lead Free, Battery Powered
- H-1000C-LRDC: Lead Free, AC Powered with Battery Backup

Special Finishes

- Polished Brass (-PB)
- Brushed Nickel (-BN)
- Matte Black (-MB)
- Additional Finishes Upon Request

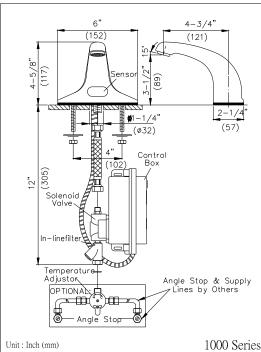


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AC or Battery Powered Sensor Operated Faucet

Deck Mounted



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	Specifications:		
	Faucet Construction:	- Solid brass, chrome plated	d
	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 ho	urs or 24 hours
	Scrub Mode Delay (request only):	- 60, 120, 180 seconds	
	Sensor Range:	- Preset and adjustable	
	Shut-off Delay:	- Presets and adjustable fro	om 1-8 seconds
	Control Cable:	- Armored, vandal resistant	t
\backslash	Solenoid Valve:	- 6V DC, normally closed	
		- Wattage: 0.4W (idle), 5W	(in use)
5		- Operating Pressure: 5 psi	to 125 psi
/4"	Flow Control:	- 0.5 GPM, vandal resistant	
)	AC Mode		
	Power Adapter		
	Standard Plug-in:	- Input AC 120V 60 Hz or 22	
	(UL/CSA)	- Output DC 12V, 0.8A/Clas	
	Power Cable:	- Armored, vandal resistant	t
	Optional Multi-Unit Adapter:	- Serves up to 8 faucets	
	(UL/CSA)	- Input AC 120V, Output DC	C 12V, 3A
	Battery Mode		
	Battery Powered Models:	- (4) AA Alkaline Batteries	t. A
	Battery Service Life:	- 400,000 on/off cycles, up	to 4 years
	Package Includes:		
pply s	(1) Faucet with electronic sensor(1) Control box w/6V DC solenoid		
	(1) 12V DC plug-in power adaptor (H-	1000C DC LB and LBDC	ophy)
	(1) In-line filter with clean-out trap	1000C, -DC, -EK, and -EKDC	Ulliy)
	(1) Copper supply tube, 3/8"		
Series	(1) Mounting hardware		
	(1) 0.5 GPM vandal resistant flow co	ntrol	
	(4) AA Alkaline batteries (HB-1000C,)
	(1) Battery holder (HB-1000C, -LR; H-		, ,
	Dimensions:		
	Base Width (Outside Measurement)	6"	
	Base Depth	2-1/4"	
	Faucet Height (Aerator to Base)	3-1/2"	
	Faucet Height Overall	4-5/8"	
	Depth (Center of Aerator to Center of	Faucet Base) 4-3/4"	
	Mounting Bolt Length	2-1/2"	
	Mounting Bolt Pattern	4" Cent	terset
	Optional Variations and Accessories		
	• 1.6GPM VR Soft-Flow Aerator; 0.	35, 1.5 & 2.2 GPM Laminar Fl	low
	8" Centerset Cover Plate		
	HC-010 Multi-Unit Voltage Adapt		
	 HC-0104 Multi-Unit Voltage Adag 	oter (AC Powered Only) - 4 ur	nits

- HC-0104 Multi-Unit Voltage Adapter (AC Powered Only) 4 units
- HC-001 Mixing/Check Valve (Mechanical)
- HBL-04 Thermostatic Mixing Valve with Checks

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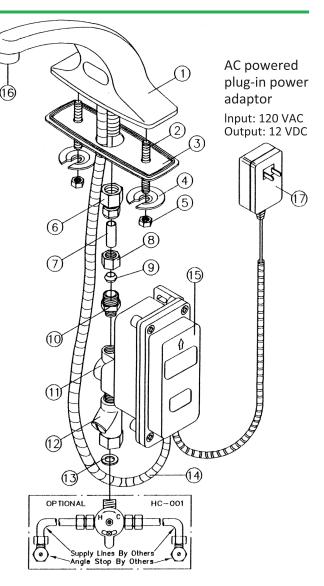
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DC Powered Sensor Operated Mixing Faucet Installation Instructions

- 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 (14) into the matching connector on the PC board inside of the Control Box (15).
 - a. AC Powered: Connect the Power Adapter (17) to the PC board inside of the Control Box (15), 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 (14) and Power Adapter (17) or battery holder from the PC board.
- 4. Attach the Compression Adapter (6), Supply Tube (7), and Mounting Bolts (2) to the inlet on the Faucet Body (1).
- 5. 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).
- Reconnect the Sensor Eye Cable (14) and Power Adapter (17) or 6. battery holder as described in step #2 making sure the cables going into the *Control Box (15)* are seated properly. Reinstall the cover for the Control Box (15) and tighten the screws to ensure water resistance. Coil excess cables and secure in a safe, dry area.
- 7. Attach the Solenoid Valve (11) to the Supply Tube (7) using the supplied Compression Nut (8), Compression Ferrule (9), and Compression Fitting (10). Insert the Nylon Washer (13) into the swivel nut loacted on the In-Line Filter (12).
 - 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 (12).
 - b. Tempered water: Attach an optional Hydrotek HC-001 or HC-003 mixing valveto the In-Line Filter (12). 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** (17) 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 (12).
- 10. For minor adjustments, refer to instructions located inside the cover of the Control Box (15).
- 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:

- Faucet Body 1.
- 2. Mounting Bolt 3. Mount Gasket
- 4.
- Slotted Washer
- 5. Mounting Nut
- 6. Compression Adapter 15. Control Box
- 7. Supply Tube
- 16. Aerator 17. Power Adapter
- 8. **Compression Nut** 9.
 - Compression ferrule

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10. Compression Fitting

11. Solenoid Valve

12. In-Line Filter

13. Nylon Washer

14. Sensor Eye Cable

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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
	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.		

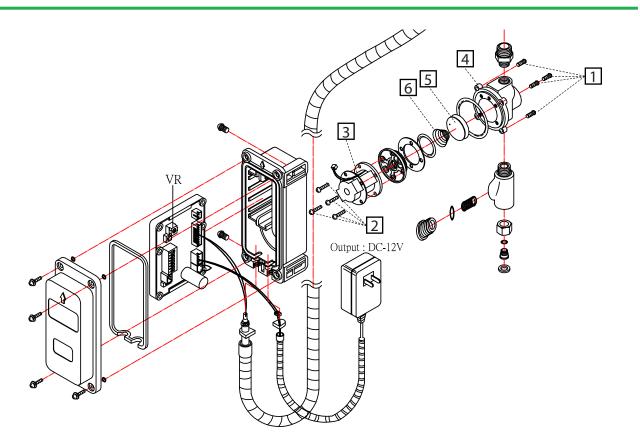
IMPORTANT: Periodic maintenance is required for smooth and trouble-free operation of this faucet.

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.

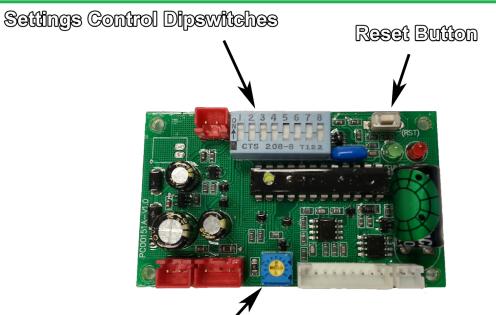
7. Re-install solenoid on the control box and remount box in water line. 8. Check and clean Filter Screen (#24) in Filter Body (#22).

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



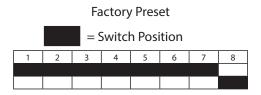
Sensor Length Adjuster

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



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
1	PCB Module	HCC-011B
2	Sensor Eye and Cable	HCC-030
3	Solenoid Valve Repair Kit	HCB-017A
4	Solenoid Assembly	HCC-005
5	Solenoid Coil	HCC-019
	Battery Holder	HCC-103A
	Plug-in Adapter	HCC-008B

