



**Sensor Faucets and Flush Valves**



## **OPERATION & MAINTENANCE MANUAL**

### **7000E Series Faucet**

[www.hydrotekintl.com](http://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

# 7000E Series

U.S. Patent 6192530B1

AC or Battery Powered Sensor Operated Faucet

The 7000E Series faucet is a 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

### Available in:

- ✓ Lead Free, AC Powered (H-7000E-LR)
- ✓ Lead Free, Battery Powered (HB-7000E-LR)



## Features:

- Vandal-resistant faucet body with chrome plated, solid brass construction.
- Faucet design allows quick "above the deck" access to all major faucet component parts.
- 30 second time-out feature prevents accidental sink overflow.
- Low battery indicator light (battery powered models only).
- Standard 0.5 GPM flow control for water conservation and annual savings.
- Single-hole deck mounting with optional 4" and 8" cover plate for vandal resistant, three point anchoring.
- Patented electronics and slow closing solenoid valves provide reliable and smooth operation without water hammer.
- Preset/adjustable sensor range of 6" - 8" for various installation requirements.
- Includes in-line filter adapter for easier cleaning.
- Superior VSI silicone elastomer piston seals are unaffected by chlorine, chloramines, or ammonia.

Deck Mounted / Non-Mixing  
Meets ANSI/ASME A112.18.1 M-1989

Figure 1: Mounting Dimensions

The diagram illustrates two mounting configurations for a sensor. The left configuration shows a vertical mounting with a 2" wide sensor, a 3" height from the wall, and a 21" distance from the wall to the mounting bracket. The right configuration shows an angled mounting with a 2" wide sensor, a 7 1/2" height from the wall, a 30° angle, and a 4 1/2" distance from the wall to the mounting bracket. Both configurations show a sensor connected to a switching power supply (122V) via a cable. An optional detail shows a temperature adjuster and an angle stop.

Technical drawing of the sensor assembly showing side and top views with dimensions:

- Side View (Left):**
  - Overall height: 21"
  - Height from base to sensor: 3"
  - Height from base to mounting bracket: 7 1/2"
  - Width of sensor housing: 2"
  - Label: "Sensor"
  - Label: "Temperature Adjustor"
  - Label: "OPTIONAL: Angle Stop"
- Top View (Right):**
  - Width of mounting bracket: 4 1/2"
  - Angle of mounting bracket: 30°
  - Minimum clearance: Min  $\phi 1"$
  - Maximum height: Max 1 3/16"

- 1.5 VR Soft Flow, 0.35, 2.2 GPM Laminar Flow Control
- 4" or 8" Center Set Cover Plate
- HC-001 Mixing/Checking Valve (Mechanical)
- HBL-04 Thermostatic Mixing Valve with Check

**HYDROTEK INTERNATIONAL, INC.**  
5055 Forsyth Commerce Rd., Ste 124  
Orlando, FL 32807  
800.922.9883 (Phone)  
866.670.5580 (Fax)  
[www.hydrotekintl.com](http://www.hydrotekintl.com)



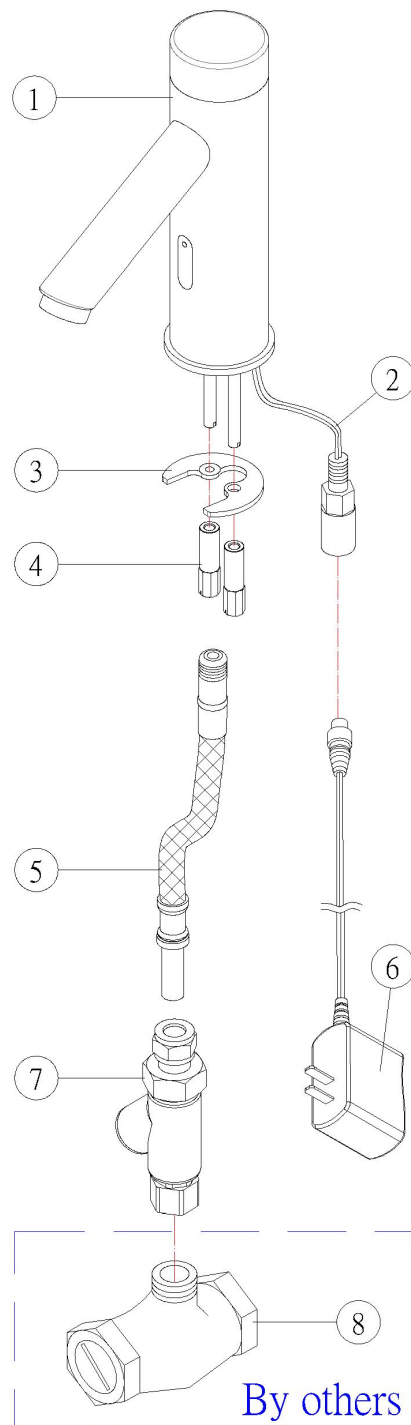
# H-7000E

AC Powered Sensor Operated Mixing Faucet

## Installation Instructions

### Installation Instructions:

1. Attach the plug-in adapter(6) to the AC connector(2) and plug the plug-in adapter into a powered outlet. Place hand in front of spout, it should click. If not, check the connection between the AC connector and plug-in adapter.
2. Connect the supply tube(5) to the faucet by turning the threaded ends into the bottom of the body(1). Teflon tape is **NOT REQUIRED**.  
**DO NOT USE PIPE DOPE.**
3. Remove the washer(3) and lock nuts(4) and slide the faucet supply rods through the deck hole. If there are 3 holes, use the cover plate(4"or 8") from Hydrotek, call 800-922-9883. Tighten faucet to deck using washer(3) and lock nuts(4).
4. Connect in-line filter(7) to the supply tube and the in-line filters to the stop valves(8). A 3/8" union connector (**provided by others**) is required to connect the inline filters to the stop valves.
5. Turn on water from the stop valve and check for leaks.
6. Place hand in front of the sensor eyes, water should start to flow. Remove hands, water stops.
7. **IMPORTANT:** The control stop valve should never be opened to the point where the flow from valve exceeds the flow capability of the sink fixture. In the event of a valve failure, the sink fixture must be able to accommodate a continuous flow from the valve.
8. **IMPORTANT:** This product contains mechanical components that are subject to normal wear. Periodical maintenance is required in order to maintain the faucet performance.
9. **DO NOT USE** abrasives, acids or cleaning fluids to clean Hydrotek Sensor faucet. Use only soap and water then wipe with clean cloth or towel.



### Parts:

- |                 |                                    |
|-----------------|------------------------------------|
| 1. Body         | 5. Supply Tube                     |
| 2. AC Connector | 6. Plug-in Adapter                 |
| 3. Washer       | 7. In-Line Filter                  |
| 4. Lock Nut (2) | 8. Stop Valve (provided by others) |

**HYDROTEK INTERNATIONAL, INC.**  
5055 Forsyth Commerce Rd., Ste 124  
Orlando, FL 32807  
800.922.9883 (Phone)  
866.670.5580 (Fax)  
[www.hydrotekintl.com](http://www.hydrotekintl.com)



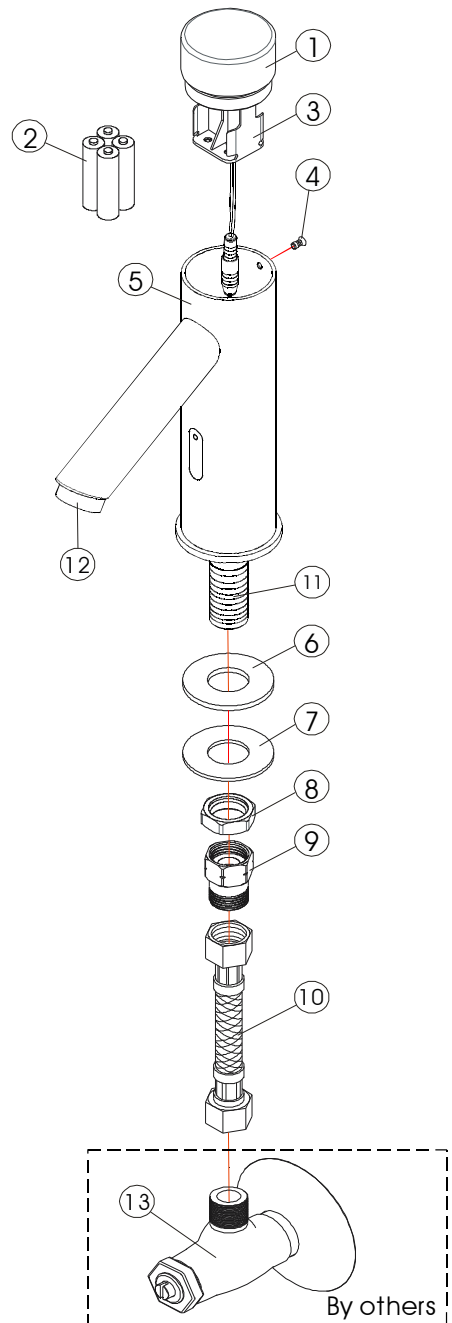
# HB-7000E

DC Powered Sensor Operated Mixing Faucet

## Installation Instructions

### Installation Instructions:

1. Using the wrench supplied, remove the Set Screw(4) and carefully pull up on the Top Cap(1).
2. Insert Batteries(2) into the Battery Holder(3). Gently insert the battery holder assembly into the Top Cap(1). Slowly push wire connector and the top cap including the battery holder down into the Body(5). Be gentle in order to avoid crimping the wire.
3. Attach the Set Screw(4) on the back of the faucet. Place a hand in front of the spout, it should click. If not, check the battery contacts and wires.
4. Remove the Rubber Gasket(6), Washer(7), and Lock Nut(8) and slide the faucet Supply Rod(11) through the deck hole. Secure the faucet to the deck from the underside with the Rubber Gasket(6), Washer(7), and Lock Nut(8).
5. Install the Adapter with Filter(9) to the end of the Supply Rod(11). Connect the Supply Rod(11) and Stop Valve(13) using the Supply Tube(10).
6. Turn on the water from the Stop Valve(13) and check for leaks.
7. Place a hand in front of the sensor. Water should start to flow. Remove your hand and the water should stop.
8. **IMPORTANT:** The control stop valve should never be opened to the point where the flow from the valve exceeds the flow capability of the sink fixture. In the event of a valve failure, the sink fixture must be able to accommodate the continuous flow from the valve.
9. **IMPORTANT:** This product contains mechanical components that are subject to normal wear. Periodic maintenance is required in order to maintain faucet performance.
10. **NOTE:** Use only soap and water to clean the faucet. Abrasives, acids, or other cleaning fluids can damage the finish of the faucet.



### Parts:

- |                   |                                     |
|-------------------|-------------------------------------|
| 1. Top Cap        | 8. Lock Nut                         |
| 2. AA Batteries   | 9. Adapter with Filter              |
| 3. Battery Holder | 10. Supply Tube                     |
| 4. Set Screw      | 11. Supply Rod                      |
| 5. Body           | 12. Aerator                         |
| 6. Rubber Gasket  | 13. Stop Valve (provided by others) |
| 7. Washer         |                                     |

**HYDROTEK INTERNATIONAL, INC.**  
5055 Forsyth Commerce Rd., Ste 124  
Orlando, FL 32807  
800.922.9883 (Phone)  
866.670.5580 (Fax)  
[www.hydrotekintl.com](http://www.hydrotekintl.com)





Sensor Faucets and Flush Valves

## 7000 Series Sensor Adjustment Guide

The Hydrotek 7000 series faucets are equipped with an adjustable infrared sensor with 6 distinct sensor length settings. This allows the faucets to better suit various applications and affords a method to troubleshoot any issues due to improperly set sensor lengths or environmental factors such as sink basin reflectivity.

1. To begin, disconnect the power source. Wait approximately 20 seconds for completely reset the control module and sensor eye.
2. Reconnect power. When the LED indicator light in the sensor starts blinking, immediately wave your hand across the front of the sensor once to put it into adjustment mode. Then quickly proceed to the next step.
3. The sensor has 6 set sensing lengths. Each wave of your hand across the sensor will change the setting to the next one. **Note:** Whenever entering sensor adjustment mode, the first setting will always be setting 1.

Setting	6	1	2	3	4	5
Length	7"	6.5"	6"	5.5"	5"	4.5"

4. Once the desired adjustment setting has been chosen, clear any object in front of the sensor and wait until the sensor starts to blink rapidly. When it starts to blink rapidly, wave your hand in front of the sensor to confirm the setting. **Note:** If sensor length is not confirmed, the faucet will return to its original preset.
5. Once the setting is confirmed, the sensor will blink slowly a couple of times and there will be a short spurt of water. This completes the sensor adjustment procedure.

#### Notes:

- The sensor distance for each setting is a relative distance. Factors such as color and reflectivity can and will affect sensor distance.



**HYDROTEK INTERNATIONAL, INC.**  
5055 Forsyth Commerce Rd., Ste 124  
Orlando, FL 32807  
800.922.9883 (Phone)  
866.670.5580 (Fax)  
[www.hydrotekintl.com](http://www.hydrotekintl.com)



# 7000E Series

## 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.		

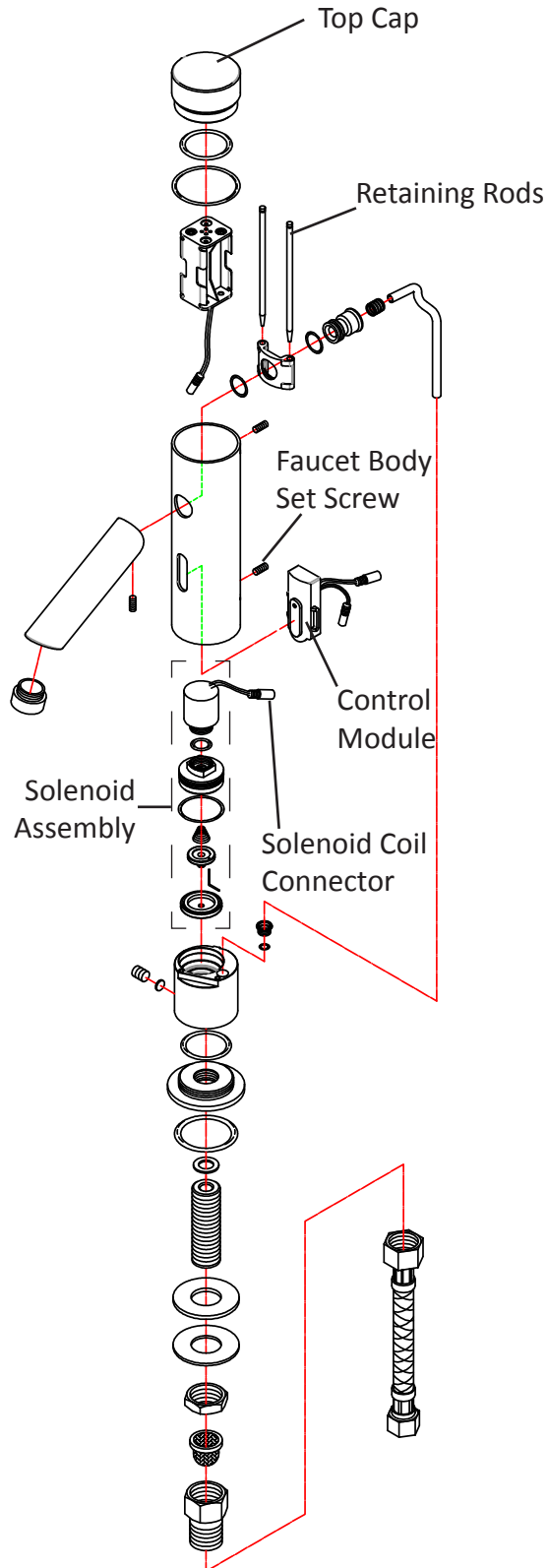
**IMPORTANT:** Periodic maintenance is required for smooth and trouble-free operation of this faucet.

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



# 7000E Series

## Sensor Operated Mixing Faucet Maintenance Tasks



### PRESSURE RELEASE VALVE REPLACEMENT

1. Remove faucet **Top Cap**.
2. Remove batteries (battery powered faucets) or unplug power adapter (AC powered faucets).
3. Unscrew the **Faucet Body Set Screw** and with an upward motion, pull the the faucet body off of the faucet base.
4. Disconnect the **Solenoid Coil connector**.
5. Unscrew the **Solenoid Assembly** and remove it from the faucet base.
6. Install the new **Solenoid Assembly** and reassemble the faucet in reverse order.

### CONTROL MODULE (P.C. BOARD) REPLACEMENT

1. Remove faucet **Top Cap**.
2. Remove batteries (battery powered faucets) or unplug power adapter (AC powered faucets).
3. Unscrew the **Faucet Body Set Screw** and with an upward motion, pull the faucet body off of the faucet base.
4. Disconnect the **Solenoid Coil** connector.
5. Pull the **Retaining Rods** up and out through the top of the faucet body.
6. Remove the **Control Module**.
7. Install the new **Control Module** and reassemble the faucet in reverse order.

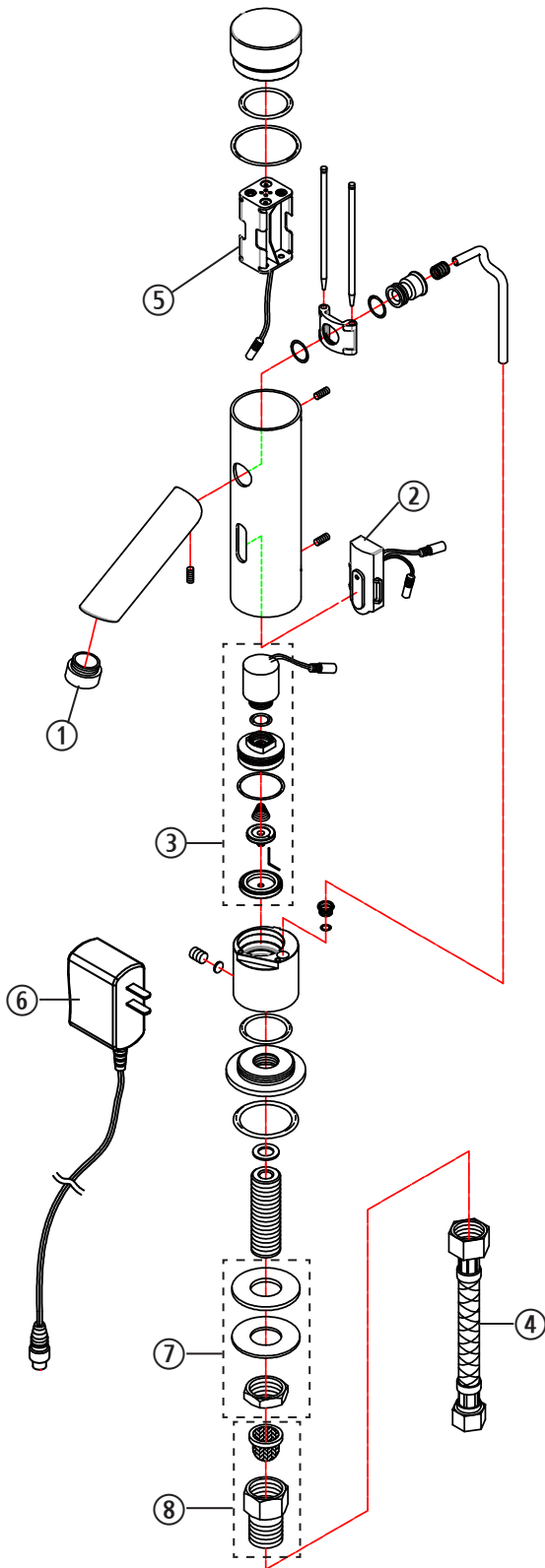
*For further questions, please call Hydrotek Technical Support at (800) 922-9883.*



# 7000E Series

Sensor Operated Mixing Faucet

## Assembly Parts



No	Description	Part Number
1	Laminar Flow Control - 0.5 GPM - Male - Vandal Resistant	HB-003AMVR
2	Control Module & Sensor (A for AC, B for DC Powered)	HCE-007A (AC) HCE-007B (DC)
3	Solenoid Assembly	HCE-020
4	Flexible Supply Tube	HB7-027
5	Battery Holder (DC Powered Only)	HCC-103B
6	Plug-In Adapter (AC Powered Only)	HCE-008
7	Mounting Kit	HC-015D
8	In-Line Filter	HC-009A

Please visit our website, [www.hydrotekintl.com](http://www.hydrotekintl.com), for our most current Products Pricing Sheet.