

# HyTronic® User Guide Installation Instructions

For single supply and dual supply HyTronic faucets

**CHICAGO  
FAUCETS**  
Geberit Group

## Overview

Chicago Faucets deck mounted faucets feature cast brass bodies and precision cartridges for years of reliable operation. Metering models with adjustable cycle time offer true water savings.

## Notice to the Installer

- Make sure there is enough space and lighting available during installation and service
- Do not modify or convert this Chicago Faucets product yourself. All warranties will be voided.

Pressurized plumbing fixtures shall be installed in accordance with manufacturer's recommendations. The supply piping to these devices shall be securely anchored to the building structure to prevent installed device from unnecessary movement when operated by the user. Care shall be exercised when installing the device to prevent marring the exposed surface.

NOTE: The information in this manual is subject to change without notice.

Please leave this manual with the facility manager after completing the faucet installation. This document contains information necessary for routine maintenance and servicing.

NOTE: Before installation, turn off water supplies to existing faucet and remove faucet if replacing. Clean faucet basin and clear away debris. Flush all supply lines before connecting to faucet. Failure to do so can result in debris clogging the inlets and/or cartridges.

NOTE: Before installing a new ceramic cartridge flush lines completely.

## Safety Information

Read this entire user guide to ensure proper installation. Compliance and conformity to local codes and ordinances is the responsibility of the installer.

The following safety notes must always be complied with during handling of this product:

- Make sure there is enough space and lighting available during installation and service.
- Do not modify or convert this Chicago Faucets product yourself. All warranties will be voided.

## Important

- Installation may be performed at different times of construction by different individuals. For this reason, these instructions should be left on-site with the facility or maintenance manager.
- Pressurized plumbing fixtures shall be installed in accordance with manufacturer's recommendations. The supply piping to these devices shall be securely anchored to the building structure to prevent installed device from unnecessary movement when operated by the user. Care shall be exercised when installing the device to prevent marring the exposed significant surface.
- Do not use pipe dope.
- Flush all the water supply lines before making connections.

This faucet comes with all the components needed for installation, however, some tools and supplies are not included.

- Basin Wrench
- Plumber's Putty
- Adjustable Wrench
- Hex Key (supplied)
- Adjustable Locking Pliers
- Aerator Key (supplied)

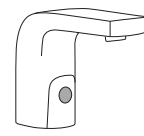
NOTE: Do not use pipe dope on faucet and supply connections.  
Possible solenoid contamination could occur and will void any warranty.



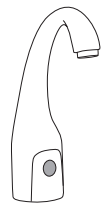
Traditional  
Lavatory



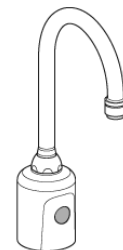
Contemporary  
Lavatory



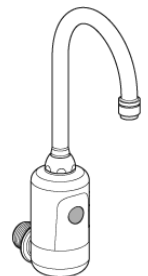
Edge



Curve



Gooseneck



Wall Mount

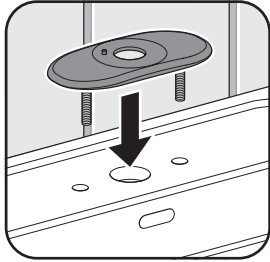
## Mounting of Lavatory and Gooseneck Faucet

### Prerequisites

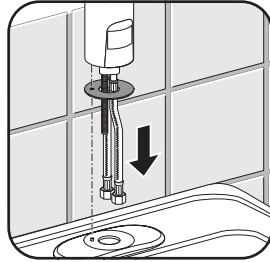
- Supply valve is installed
- Water supply lines are flushed properly
- For AC and faucets with EBPS, power outlet is installed

### Important

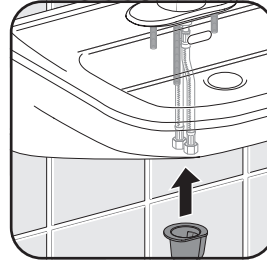
- It is not necessary to unscrew the connection between braided hose and housing to install the product.
- Do not remove protective covering from sensor until starting up faucet operation.
- Do not tighten locknut before step 4 is completed.



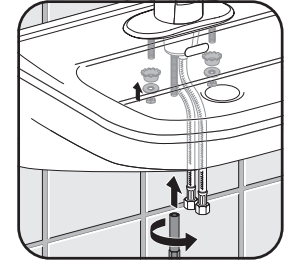
1. Mount cover plate if required. Plumber's putty is recommended to seal cover plate to the sink. Security pin must be located on the left side.



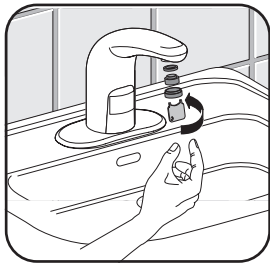
2. Mount gasket and put faucet into sink.



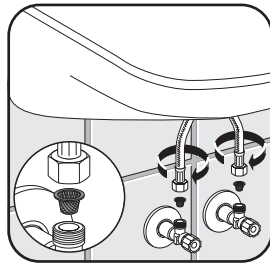
3. Mount bracket from underneath. Place hoses through large opening and mounting rod through small opening. Make sure flange sits securely against surface.



4. Place nut onto mounting rod and tighten with wrench.  
5. If faucet was installed with cover plate, secure with basin washer, flat washer and locknut.



6. Install aerator and tighten with aerator key (supplied).  
7. For Gooseneck faucets, tighten spout with wrench.



8. Connect braided hose with filter to supply valve.

Cold water > white label  
Hot water > no label

Note: For AC faucets and faucets with EBPS, please refer to the plugin or hardwired transformer installation instructions.

9. Connect to power supply.  
The faucet is now mounted.

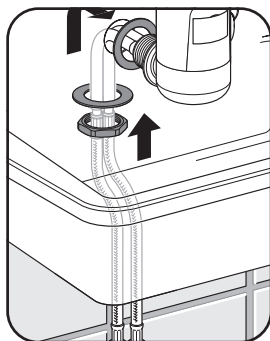
## Mounting of Wall Mount Faucet

### Prerequisites

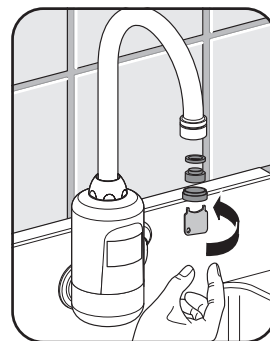
- Supply valve is installed
- Water supply lines are flushed properly
- For AC faucets and faucets with EBPS power outlet is installed

### Important

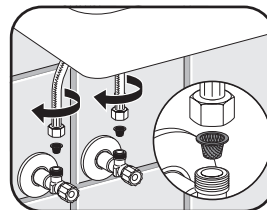
- It is not necessary to unscrew the connection between braided hose and housing to install the product.
- Do not remove protective covering from sensor until starting up faucet operation.



1. Mount gasket, put faucet into opening and tighten  
2. Install aerator and tighten with aerator key (supplied)



3. For gooseneck faucets, tighten spout with wrench



4. Connect braided hose with filter to supply valve

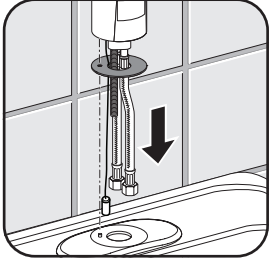
Cold water > white label  
Hot water > no label

For AC faucets and faucets with EBPS, please refer to the plugin or hardwired transformer installation instructions.

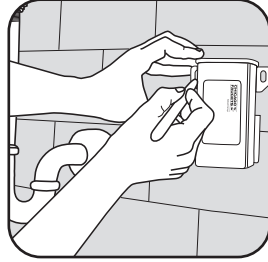
5. Connect to power supply  
The Wall Mount faucet is now mounted.

## Mounting of Long Term Power System (LTPS) Pack (LTPS Models Only)

The LTPS Power Pack comes with mounting hardware (screws and anchors). You will need a drill and Phillips screwdriver to complete the installation.



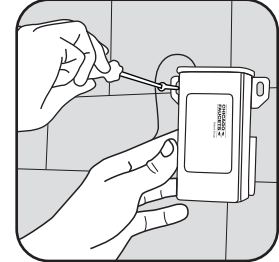
1. Mount faucet by following the standard mounting instructions on page 2.



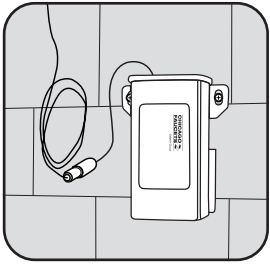
2. Position LTPS unit on wall and mark mounting holes on mounting surface.



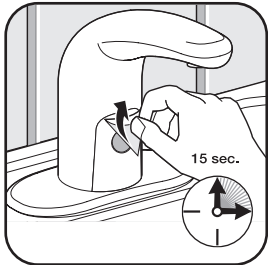
3. Drill holes for screw anchors.



4. Insert anchors into holes and mount LTPS unit to wall with supplied screws.



5. Connect spout wire to LTPS connector wire, making sure connectors are oriented correctly.



6. Remove protective covering from sensor.  
Wait 15 seconds for faucet to calibrate to its environment.

### **LTPS End of Life Directives:**

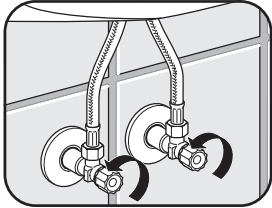
In an effort to produce environmentally conscious products, the LTPS contains materials that are required be recycled by specialized companies. Please ensure you dispose of your LTPS according to local regulations. Follow applicable laws and regulations for transport, shipping, and disposal of batteries. For details on, and locations for recycling lithium-based batteries, please contact a government recycling agency, your waste-disposal service, or visit reputable online recycling sources such as [www.call2recycle.org](http://www.call2recycle.org).

## Start-up Operation

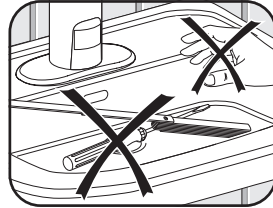
A traditional lavatory faucet is shown as an example. The start-up operation applies to all models.

### Prerequisites

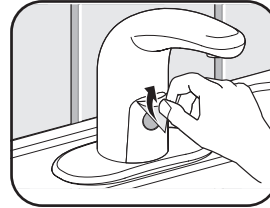
- Faucet is mounted
- Water supply is on
- Water supply lines are flushed properly
- For AC faucets and faucets with EBPS, power outlet is installed



1. Fully open supply valves



2. Remove all items from sink



3. Remove protective covering from sensor

15 sec.

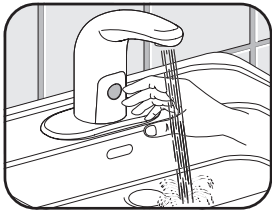


4. Wait for 15 seconds for faucet to calibrate to its environment

The faucet is now activated.

## Test Function

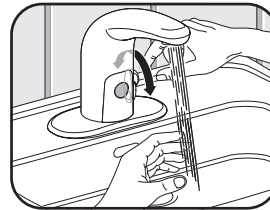
NOTE: If the faucet does not work as described below, see "Troubleshooting" section.



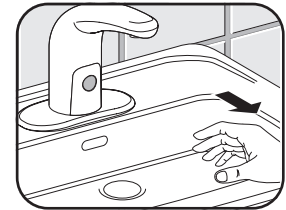
1. Hold hand in front of sensor until water begins to flow.



WARNING: Hot water may burn your skin. Avoid contact with the water stream until the water temperature has been properly adjusted. See page 5 for instructions on adjusting water temperature.



2. For faucets with external mixer, turn mixer handle from cold to warm. You should feel the water temperature increase.



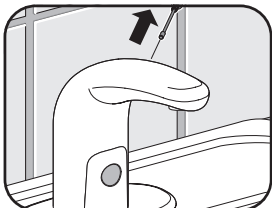
3. Move hand away from sensor until water flow stops.

## Enabling "Manual Setting" Mode

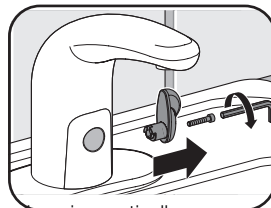
A battery model is shown in the following example. These instructions apply to all models. After 30 minutes, the "Manual Setting" mode will be disabled automatically and all settings will be saved.

### Prerequisites

- Water supply valve is open
- Battery is full (LED does not blink) for DC faucets
- For EBPS faucets, disconnect AC power
- AC power is on for AC faucets



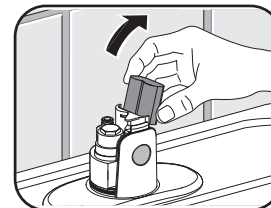
1. Remove shut-off screw



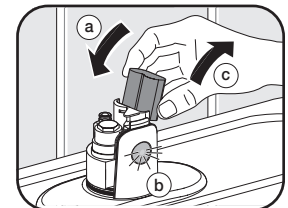
2. Remove mixer handle (only for faucets with external mixer)



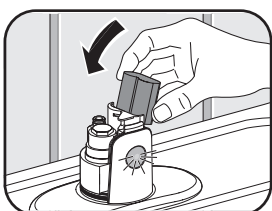
3. Remove housing vertically



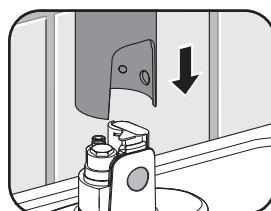
4. Remove battery from battery holder



5. The following procedure (a, b, c) must be done three (3) times in a row.  
a - Reinsert battery  
b - LED lights up  
c - Remove battery immediately after LED switches off



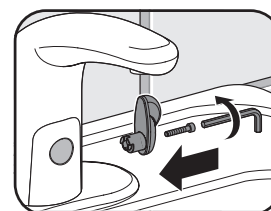
6. Insert battery



7. Mount housing vertically



8. Mount shut-off screw



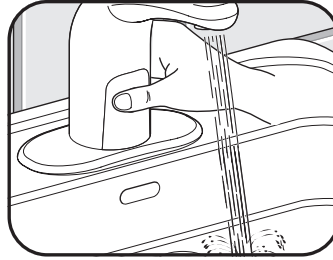
9. Mount mixer handle (only for faucets with external mixer)

The "Manual Setting" Mode is now enabled.

## CARE AND MAINTENANCE INSTRUCTIONS

The following instructions are described in this section:

- Setting Various Modes
- Reset to Default Settings
- Replacing Battery
- Adjusting Water Temperature (Internal Mixer)
- Adjusting Hot Water Limiter (External Mixer)
- Cleaning or Replacing Inlet Filter
- Cleaning or Replacing Outlet



### Setting Cleaning Mode

Setting the Cleaning Mode will make the faucet inactive for 90 seconds.

1. Enable "Manual Setting" Mode  
> see "Enabling Manual Setting Mode" section (page 3).
2. Fully cover sensor with hand, until water flow stops.  
(This takes 5 seconds.)
3. Remove hand.

The Cleaning Mode is now active.

For the next 90 seconds, the faucet will be inactive.

### Setting Normal Mode

Setting the Normal Mode will allow the faucet to activate only when it senses a hand presence.

1. Enable "Manual Setting" Mode  
> see "Enabling Manual Setting Mode" section (page 3).
2. Fully cover sensor with hand.  
Water flow stops after 5 seconds  
- keep sensor covered for one (1) additional water pulse.
3. Remove hand.

Normal Mode is now activated.

### Setting Metering Mode (10 seconds)

Setting the Metering Mode will allow the faucet to activate for a full 10 seconds after it senses a hand presence.

1. Enable "Manual Setting" Mode  
> see "Enabling Manual Setting Mode" section (page 3).
2. Fully cover sensor with hand.  
Water flow stops after 5 seconds  
- keep sensor covered for another two (2) additional water pulses.
3. Remove hand.

Metering Mode is now activated for 10 seconds.

### Sensor Range Adjustment

The detection distance of the sensor can be adjusted between approximately 4 - 11 inches from the infrared window.

1. Enable "Manual Setting" Mode  
> see "Enabling Manual Setting Mode" section (page 3).
2. Remove all items from sink.
3. Fully cover sensor with hand.  
Water flow will stop after 5 seconds - keep sensor covered for five (5) additional water pulses.
4. Remove hand.
5. Hold hand in the current detection area until LED flashes. Then move hand to the desired detection distance. When LED stays lit for (2) seconds, detection distance has been re-set to new location.

### Setting Scrub Mode (60 seconds)

Setting the Scrub Mode for 60 seconds will allow the faucet to activate and run continuously for 60 seconds before shutting off.

1. Enable "Manual Setting" Mode  
> see "Enabling Manual Setting Mode" section (page 3).
2. Fully cover sensor with hand.  
Water flow stops after 5 seconds  
- keep sensor covered for another three (3) additional water pulses.
3. Remove hand.

Scrub Mode is now activated for 60 seconds.

### Setting Scrub Mode (180 seconds)

Setting Scrub Mode for 180 seconds will allow the faucet to activate and run continuously for 180 seconds before shutting off.

1. Enable "Manual Setting" Mode  
> see "Enabling Manual Setting Mode" section (page 3).
2. Fully cover sensor with hand.  
Water flow stops after 5 seconds  
- keep sensor covered for another four (4) additional water pulses.
3. Remove hand.

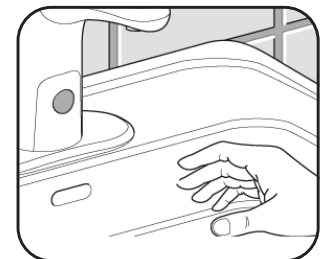
Scrub Mode is now activated for 180 seconds.

### Reset

All settings will be reset to default setting. The "Manual Setting" Mode will be disabled.

The procedure for the reset is the same as "Enabling Manual Setting Mode", but step 5 needs to be done six (6) times in a row.

All settings are reset to default settings and the manual-setting-mode is now disabled.



The detection distance is now calibrated.

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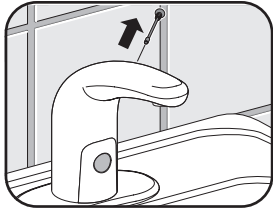
(continued)

## Replacing Battery

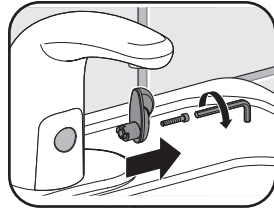
A traditional lavatory faucet is shown as an example. These instructions apply to all DC and EBPS models.

### Prerequisites

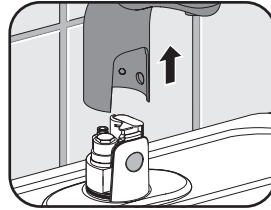
- Battery is low (LED is lit)
- New 6 V Lithium battery (CR-P2) is required
- NOTE: For EBPS units, low battery LED will only light when AC power is disconnected



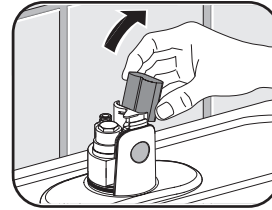
1. Remove shut-off screw



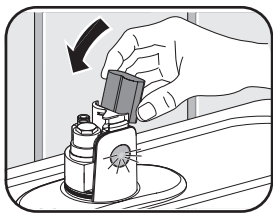
2. Remove mixer handle  
(for faucets with external mixer only)



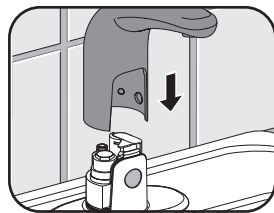
3. Remove housing  
vertically



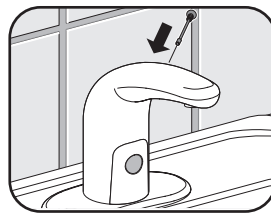
4. Remove used battery  
from holder and recycle



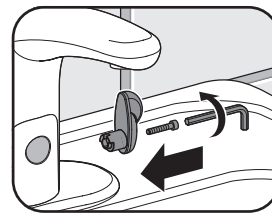
5. Insert new battery.  
**IMPORTANT:** be sure  
battery is fully seated.  
LED will illuminate when  
battery is properly  
installed.



6. Mount housing vertically



7. Install shut-off screw

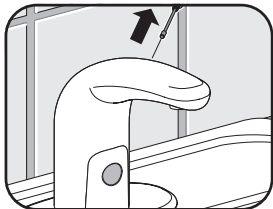


8. Install mixer handle  
(for faucets with external  
mixer only)

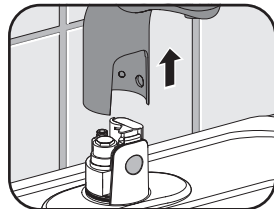
The battery is now  
replaced.

## Adjusting Water Temperature (Internal Mix)

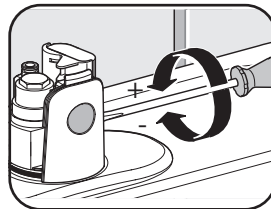
A traditional lavatory faucet is shown as an example. These instructions apply to all models with internal mixers.



1. Remove shut-off screw



2. Remove housing  
vertically



3. Adjust internal mixer with  
screwdriver  
Clockwise > warm  
Counterclockwise < cold



4. Mount housing vertically



5. Install shut-off screw

The temperature is now  
adjusted. Carefully test  
the new temperature. If  
necessary, adjust again.

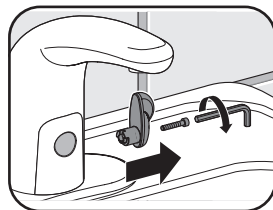
## Adjusting Hot Water Limiter (External Mixer)

A traditional lavatory faucet is shown as an example. These instructions apply to all models with user adjustable temperature control. The proportion of hot water can be switched from approximately 85% to 95% (or reverse) depending upon inlet water pressures and temperatures. The default setting is 85%.

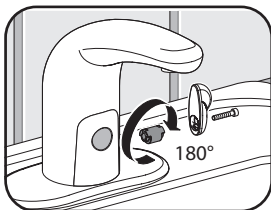
**WARNING:** Hot water  
may burn your skin.

To avoid the risk  
of scalding, use a  
thermometer to check  
water temperature.

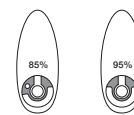
Avoid contact with the  
water stream until the  
water temperature has  
been properly adjusted.



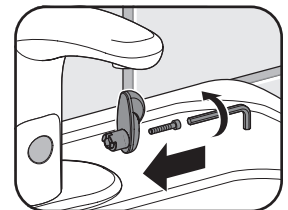
1. Remove mixer handle



2. Carefully pull out hot  
water limiter from handle  
(using pliers) and reverse  
by 180°

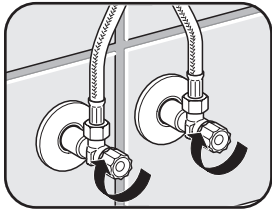


Settings of hot water limiter  
(View from placement in  
mixer handle)

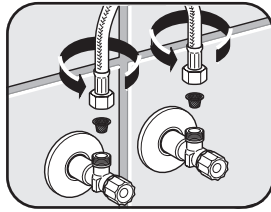


3. Mount mixer handle  
The proportion of hot water  
is now changed.

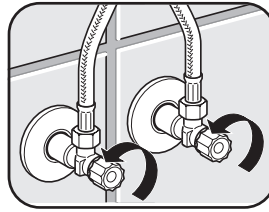
## Cleaning or Replacing Inlet Filter



1. Close supply valves



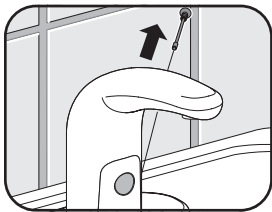
2. Disconnect braided hoses and carefully remove filter that is pressed into hose. Clean or replace filter.



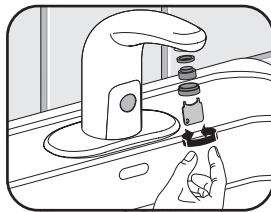
3. Connect braided hoses with filter to supply valves and open the valves.  
Cold water > white label  
Warm water > no label

The filter is now cleaned or replaced.

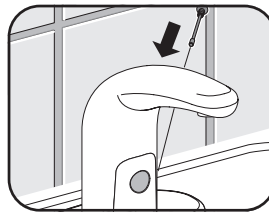
## Cleaning or Replacing Aerator



1. Remove shut-off screw



2. Remove outlet with vandal resistant wrench supplied with the faucet. Clean or replace outlet, then reinstall.



3. Install shut-off screw

The outlet is now cleaned or replaced.

## Commander Handheld Programming Unit

Use the Commander™ Handheld Programming Unit to change settings quickly and easily on your Chicago Faucets HyTronic® and E-Tronic® products. The Commander™ Handheld Programming Unit lets you program, maintain, and monitor our electronic faucets from the palm of your hand. Commander features a ruggedized housing, infrared communications, and touch-screen technology. Refer to the *Commander Quick Start Guide* to get started.



## Faucet Adjustment Overview

Operating modes and sensor ranges can be adjusted with a manual operation through the infrared sensor. A traditional lavatory faucet is shown as an example. Faucet adjustment operations apply to all models. Alternatively, operating modes and sensor ranges can be adjusted with the Chicago Faucets Commander™ Handheld Programming Unit. For more information, visit [chicagofaucets.com/commander](http://chicagofaucets.com/commander).

Operating Modes	Description
<b>Cleaning Mode</b>	The faucet is inactive for 90 seconds.
<b>Normal Mode</b>	The faucet is activated if it senses a hand presence. This is the default operating mode of the faucet.
<b>Metering Mode (10 s)</b>	The faucet will shut off after 10 seconds regardless of hand presence detected.
<b>Scrub Mode (60 s)</b>	The faucet will shut off 60 seconds after the detection of the last hand presence.
<b>Scrub Mode (180 s)</b>	The faucet will shut off 180 seconds after the detection of the last hand presence.
<b>Sensor Range Adjustment</b>	Change the detection distance of the infrared sensor. The default sensor range is approximately 1" beyond the spout.
<b>Reset</b>	All settings will be reset to original factory settings.

In order to set the operating modes, the faucet needs to be placed into "Manual Setting" mode. At this time, operating modes can be changed within the next 30 minutes.

## Care and Maintenance

All Chicago Faucets fittings are designed and engineered to meet or exceed industry performance standards. Care should be taken when cleaning this product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap with warm water for cleaning and protecting the surface of Chicago Faucets fittings.

*For additional technical assistance, call 800/TEC-TRUE (800-832-8783) or visit our website at [chicagofaucets.com](http://chicagofaucets.com).*

## TROUBLESHOOTING

No Water Flow	
Cause	Solution
Supply valves are closed	Open supply valves.
Aerator is blocked or dirty	Clean or replace outlet. See "Care and Maintenance".
Water line filter is dirty or blocked	Clean or replace filter. See "Care and Maintenance".
Braided hose is kinked	Eliminate braided hose kink.
No external water pressure	Check water pressure. Provide water pressure.
Battery is drained	Replace SSPS unit. Contact Chicago Faucets technical service or replace power adapter
Reverse green adapter insertion	Insert green adapter correctly.
Connector between SSPS and power adapter unplugged	Plug connector. (green plugs)
Corroded power adapter contacts	Clean contacts.
Connecting cable is kinked or broken	Replace defective parts. See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a>
Shut-off screw is missing or defective	Replace shut-off screw or defective See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a>
Solenoid valve inoperable	Replace solenoid valve. See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a> .
Faucet is in cleaning mode	Wait for cleaning mode to end (appr. 90 seconds)
Electronics module inoperable	Contact technical service or replace power adapter See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a>
Green Power adapter defective	Contact technical service or replace power adapter See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a>
Sensor distance is not adjusted properly	Remove and re-install shut-off screw. Do not disturb scanning procedure until water stops and LED is off.
Infrared window scratched or dirty	Clean window with smooth cloth
Interfering reflections from sink	Remove and re-install shut-off screw. Do not disturb scanning procedure until water stops and LED is off. Adjust upper and lower beam to compensate for reflections. (Commander™ Handheld Unit required. Go to <a href="http://www.chicagofaucets.com/commander">www.chicagofaucets.com/commander</a> for details)
Water Runs Continuously and Stops When Object Present	
Cause	Solution
Connector between electronics module and solenoid valve plug is reversed	Plug connector properly
Water Flows Although Shut-Off Screw Is Removed	
Cause	Solution
Electronics module inoperable	Contact technical service or replace power adapter See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a>
Water drops on infrared window	Clean window with smooth cloth

Water Runs Continuously	
Cause	Solution
Interfering object is in monitoring range	Remove object from monitoring area. Remove and re-install shut-off screw. Do not disturb scanning procedure until water stops and LED is off.
Defective electronics module	Replace electronics module. See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a>
Improper electronics module	Change mode or reset sensor. See "Care and Maintenance".
External water pressure is too high	Check external water pressure. Provide pressure between 20 - 125 psi.
Solenoid valve inoperable	Replace solenoid valve. See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a> .
Faucet Turns On By Itself	
Cause	Solution
Infrared window scratched or dirty	Clean window with smooth cloth
Faucet is influenced by room environment (mirror, stainless steel or glass sink, etc.)	Remove and re-install shut-off screw. Do not disturb scanning procedure until water stops and LED is off. Adjust upper and lower beam to compensate for reflections. (Commander™ Handheld Unit required. Go to <a href="http://www.chicagofaucets.com/commander">www.chicagofaucets.com/commander</a> for details)
Input line pressure fluctuates	Install appropriate line pressure regulators
Faucet Is Leaking Water	
Cause	Solution
Connections between housing and braided hose	Check O-rings. Replace damaged or missing O-rings.
Connection between braided hose and inlet supply are loose	Check rubber washers. Replace washers when damaged or missing.
Connection between valve body and solenoid valve is loose	Check O-rings. Replace damaged O-rings. Carefully re-install solenoid valve & do not over tighten.
Faucet drips, solenoid valve does not close	Clean or replace solenoid valve. See "Replacement Parts" at <a href="http://chicagofaucets.com">chicagofaucets.com</a> .
Temperature Cannot Be Adjusted Properly	
Cause	Solution
Supply valves not fully opened.	Fully open supply valves.
Water line filter is dirty or blocked	Clean or replace filter. See "Care and Maintenance".
Braided hose is kinked	Eliminate braided hose kink.
Backflow preventer in faucet is blocked	Unblock backflow preventer
Temperature of hot or cold supply is too low	Check inlet temperature or inspect boiler.
Hot water temperature not sufficient	Reverse hot water limiter. See "Care and Maintenance"
Inlet hoses are reversed	Correct the connections.

## CHICAGO FAUCETS LIMITED WARRANTY

**TO WHOM DOES THIS WARRANTY APPLY?** — The Company extends the following limited warranty to the original user only.

**WHAT DOES THIS WARRANTY COVER AND HOW LONG DOES IT LAST?**

This warranty covers the following Commercial Products:

**LIFETIME FAUCET WARRANTY** — The "Faucet," defined as any metal cast, forged, stamped or formed portion of the Product, not including electronic or moving parts or other products separately covered by this Limited Warranty or water restricting components or other components, is warranted against material manufacturing defects for the life of the Product.

**FIVE YEAR FAUCET WARRANTY** — Certain Products and portions of the Product are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase. Products warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase are referred to by the product numbers 42X, 43X, 15XX and E-Tronic™ - 4X, 5X, 6X, 7X, 8X and 9X. All zinc die cast portions of Product are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase.

**THREE YEAR ELECTRONICS WARRANTY** — Electronic components, including the solenoid, are warranted for three (3) years from the date of installation.

**FIVE YEAR CARTRIDGE WARRANTY** — The "Cartridge", defined as the metal portion of any Product typically referred to by the product numbers containing 1-099, 1-100, 377X, 217X and 274X, excluding any rubber or plastic components, is warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase. All Cartridges included in the Company's Single Control or Shower Products also are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase.

**ONE YEAR FINISH WARRANTY - COMMERCIAL** — For Products used in commercial applications, the finish of the Product is warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

**OTHER WARRANTIES** — All other Products not covered above are warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

Other restrictions and limitations apply. For complete warranty details, call Chicago Faucets Customer Service at 847-803-5000 or visit [chicagofaucets.com](http://chicagofaucets.com).

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