



# E-Tronic® 80 Series Installation Instructions

Touchless Faucets

# CHICAGO FAUCETS®

Geberit Group

## Safety Information

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

Please follow these important safety guidelines while handling and installing this product:

- FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment
- Make sure there is enough space and lighting available during installation and service.
- Do not modify or convert this product before, during, or after installation. Doing so voids all warranties

## Internal Antenna Specifications

- Peak Gain of the antenna: -1.7 dBi
- Frequency range: 2400-2500 MHz
- FCC ID: 2APTX-CFC02

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## Notice to the Installer

- Read this entire instruction sheet before installing to ensure proper installation.
- Installation must comply with local codes and ordinances.
- Do not use sealing compound. Possible solenoid contamination could occur and will void any warranty.
- Exercise care when installing the device to prevent marring the exposed, decorative surfaces.

The supply piping to these devices shall be securely anchored to the building structure to protect the installed device against unnecessary movement when operated by the user.

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

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.

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 internal control and mixing valves.

NOTE: Faucet must be serviced using only a Chicago Faucets recommended replacement outlet.

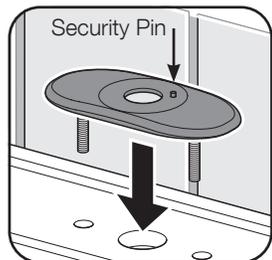
The faucet comes complete and ready to install. You will need the following tools and supplies to complete the installation:

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

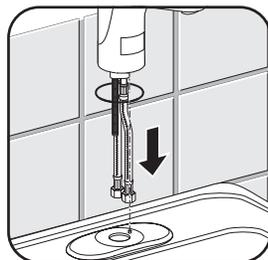
## Mounting of Faucet

### Prerequisites

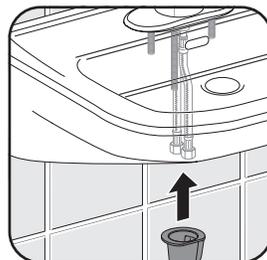
- Supply valve is installed
- Water supply lines are flushed properly
- Do not remove protective covering from sensor until starting up faucet operation.
- Do not tighten locknut before step 4 is completed.



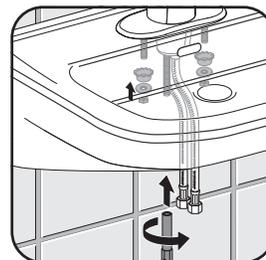
1. Mount cover plate if required. Use silicone caulk to seal plate to the sink. Security pin should be on the right side.



2. Insert o-ring into base of faucet and lower faucet into sink.



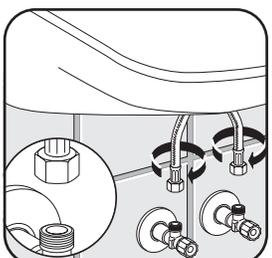
3. Below sink, feed hoses through large opening, and threaded mounting rod through small opening, of deck flange. Deck flange should sit securely against underside of sink. For AC and LTPS take care not to pinch wire.



4. Place nut onto mounting rod and tighten with wrench.



6. Install outlet and tighten with outlet key (supplied).



7. Connect braided hose with filter to supply valve. Cold water line has a white label.

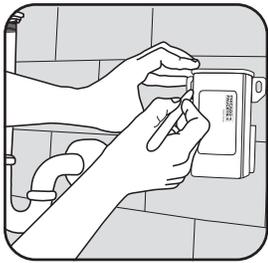


8. Connect to power supply.

## Specifications

Operating static pressure: 20-125 PSI (138-862 kPa)  
 Minimum static pressure for mixing: 30 PSI (207 kPa)  
 COLD water inlet temperature range: 40-70°F (4-21°C)  
 HOT water inlet temperature range: 100-180°F (38-82°C)  
 Maximum hot water range outlet from thermostatic mixing valve: 80-120°F (27-49°C)  
 Maximum hot water range outlet from mechanical mixing valve: 40-140°F (4-60°C)  
 Maximum pressure differential between Hot & Cold water supplies: 20%; Minimum inlet water supply temperature differential: 20°F (9°C)

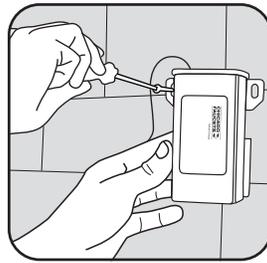
## Mounting of Long Term Power System (LTPS) Pack (LTPS Models Only)



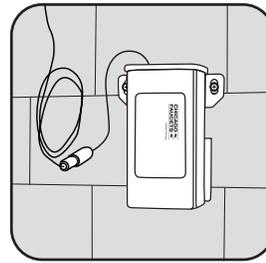
1. Position LTPS unit on wall and mark mounting holes on mounting surface.



2. Drill holes for screw anchors.



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

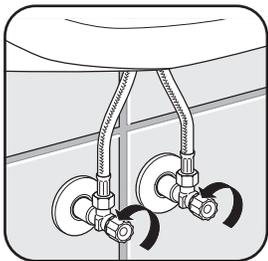


4. Connect spout wire to LTPS connector wire, making sure connectors are oriented correctly.

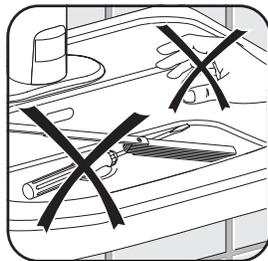
### LTPS End of Life Directives:

In an effort to produce environmentally conscious products, the LTPS contains materials that must 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



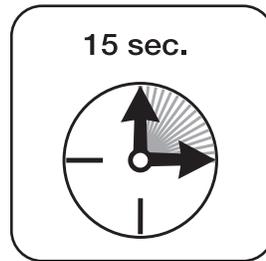
1. Fully open supply valves



2. Remove all items from sink



3. Remove protective covering from sensor



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

The faucet is now activated.

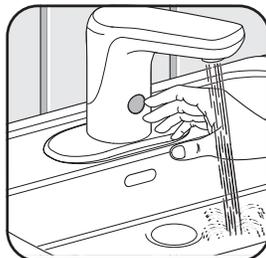
### WARNING!

Delivery of water to fixtures intended for hand washing is recommended to be controlled by valves listed to ASSE 1070. E-Tronic 80 faucets without integrated scald protection are NOT factory preset and can be adjusted to deliver water at temperatures exceeding 110°F (43°C). Further, mechanical mixing valves DO NOT provide automatic control of water temperature. Due to effects of various water conditions, periodic verification of outlet water temperature is required.

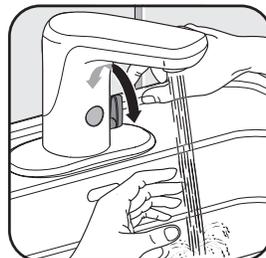
## Test Function



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

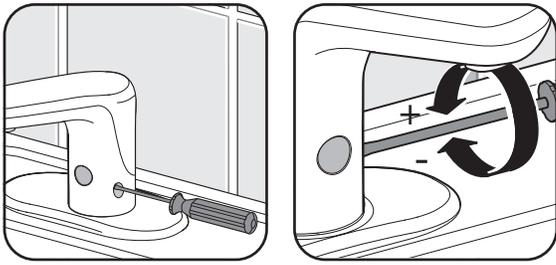


1. Hold hand in front of sensor until water begins to flow.



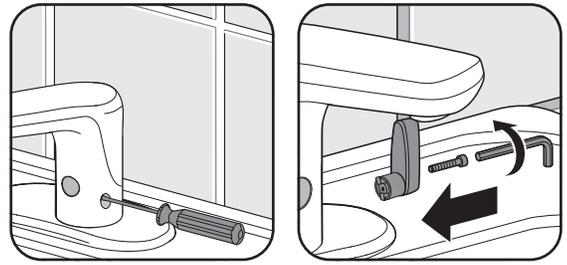
2. For faucets with external mixer installed, turn mixer handle from cold to warm. You should feel the water temperature increase.

## Adjusting Water Temperature (Internal Mix)



1. With a screwdriver, remove the round tab on the side of the faucet.
2. Adjust internal mixer with screwdriver  
Clockwise > cold  
Counterclockwise < warm
3. Replace tab.

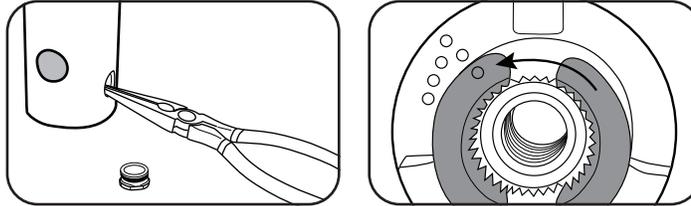
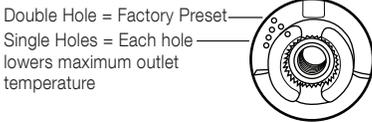
## Adding Temperature Adjustment Lever



1. With a screwdriver, remove the round tab on the side of the faucet.
2. With hex key, install lever into side of faucet.  
Insert color-coded cap with red toward front of faucet.

## Adjusting Hot Water Limit

An adjustable hot water limit stop can be adjusted for faucets installed with user adjustable temperature lever by adjusting brass insert counter clockwise.



1. With tab removed, pull brass ring from faucet.
2. Reinsert and align with single hole on silver insert inside faucet body to set desired limit.

## Optional Commander Handheld Programming Unit

Use the Commander™ Handheld Programming Unit to program, maintain, and monitor your faucets from the palm of your hand. Commander features a ruggedized housing, infrared communications, and touch-screen technology. See *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 or with Commander™ Handheld Programming Unit. Faucet adjustment operations apply to all models. For more information, visit [chicagofaucets.com/commander](http://chicagofaucets.com/commander).

In order to set the operating modes, the faucet needs to be placed into “Manual Teach In” mode. While the faucet is in “Manual Setting” mode, operating modes can be changed within the next 30 minutes. See next page for instructions to set modes.

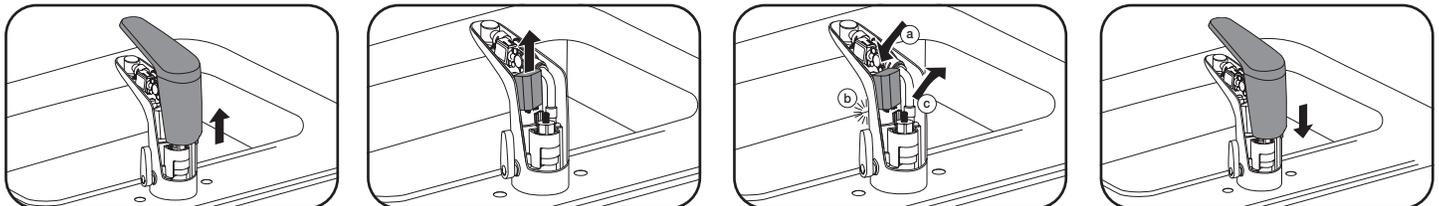
Operating Modes	Description
<b>Cleaning Mode</b>	The faucet is inactive for 90 seconds.
<b>Normal Mode</b>	The faucet is activated if it senses a hand presence. This is the default operating mode of the faucet.
<b>Metering Mode (10 s)</b>	The faucet will shut off after 10 seconds regardless of hand presence 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.
<b>Hygiene Flush*</b>	The faucet will run for an assigned time to keep fresh water in lines and refill trapways.
<b>WaterSaver Mode</b>	The faucet is activated for a maximum of 10 seconds.

\*Listed in “Other Settings” section of Commander programming guide.

## Enabling Manual Adjustment

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. **Before performing the following steps, make sure:**

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



1. Loosen screw on underside of spout with allen wrench and remove cover.
2. Remove battery or AC power module from battery holder.
3. The following procedure (a, b, c) must be done three times in a row:  
a - Reinsert battery or AC module  
b - LED lights up  
c - Remove battery or AC module
4. Reinsert battery or AC power module, allow to calibrate, and reinstall faucet cover.  
The “Manual Setting” Mode is now enabled.

## Setting Operating modes

In order to set the operating modes, the faucet needs to be placed into "Manual Setting" mode. While the faucet is in "Manual Setting" mode, operating modes can be changed within the next 30 minutes. See previous page for instructions to enable "Manual Setting" mode and descriptions of each mode.

### Setting Cleaning Mode

1. Fully cover sensor with hand, until water flow stops.  
(This takes 5 seconds.)
2. Remove hand.  
The Cleaning Mode is now active.  
For the next 90 seconds, the faucet will be inactive.

### Setting Normal Mode

1. Fully cover sensor with hand.  
Water flow stops after 5 seconds - keep sensor covered for one (1) additional water pulse.
2. Remove hand.  
Normal Mode is now activated.

### Setting Metering Mode

1. Fully cover sensor with hand.  
Water flow stops after 5 seconds - keep sensor covered for another two (2) additional water pulses.
2. Remove hand.  
Metering Mode is now activated for 10 seconds.

### Sensor Range Adjustment

1. Remove all items from sink.
2. 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)

1. Fully cover sensor with hand.  
Water flow stops after 5 seconds - keep sensor covered for another three (3) additional water pulses.
2. Remove hand.  
Scrub Mode is now activated for 60 seconds.

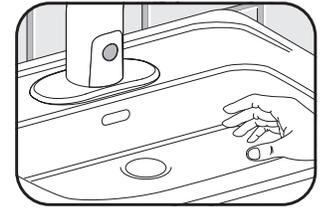
### Setting Scrub Mode (180 seconds)

1. Fully cover sensor with hand.  
Water flow stops after 5 seconds - keep sensor covered for another four (4) additional water pulses.
2. Remove hand.  
Scrub Mode is now activated for 180 seconds.

### Reset

The procedure for the reset is the same as "Enabling Manual Setting Mode", but step 4 needs to be done six (6) times in a row. (see previous page)

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



#### QUICK TROUBLESHOOTING

Follow the steps below to fix common problems. For detailed troubleshooting, visit [chicagofaucets.com](http://chicagofaucets.com). Before troubleshooting, remove any objects in detection zone and make sure sensor is clear of debris. Ensure power is applied and solid red light appears during first 5 seconds after power-up.

##### The faucet is leaking:

From outlet – tighten or replace outlet insert using included key.

From supply stops – install or replace filter screen gaskets (see diagram on pg. 1).

##### No water flow or flow is limited:

Make sure supply hoses are connected and supply stops are fully open. Clean or replace filter screen gaskets or outlet insert.

##### Water flow does not stop:

If water flows continuously but stops when hand enters detection zone, reverse solenoid electrical connections.

##### Faucet does not properly detect user:

Remove and reapply power or run faucet to maximum run time. This will cause automatic recalibration of sensing field. Recalibration is complete when solid red light disappears.

If the steps above do not solve the problem, you may need to replace the spout assembly or control box. For additional information contact Chicago Faucets customer service at 800/832-8783.

#### Care and Maintenance

Periodic inspection and yearly maintenance by a licensed contractor is required for all thermostatic mixing elements. Corrosive water conditions and/or unauthorized adjustments or repair could render the thermostatic valve ineffective for service intended. Regular checking and cleaning of the valve's internal components and check stops helps assure maximum life and proper product function. Frequency of cleaning and inspection depends on local water conditions. 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).*

## 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 WARRANTY** — 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 WARRANTY** — Certain Products or 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 series 90, 99, 150, 410, 420, 430, STB, STC, W4D, W4W, W8D, W8W, 1900, 1905, SH, 537, 548, 549, 640, 897, 2500, 8400, 9800 and E-Tronic®.

**ELECTRONIC AND METERING FAUCETS MECHANICAL WARRANTY** — Electronic and metering faucet mechanicals are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase.

**ELECTRONIC AND SOLENOID WARRANTY** — Electronics and solenoids are warranted against material manufacturing defects for a period of three (3) years from the date of Product purchase. This warranty does not cover the life of the battery. The Company offers **NO WARRANTY** for Product batteries.

**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/terms-conditions](http://chicagofaucets.com/terms-conditions).

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