Installation Guide

- Install by licensed plumber strongly recommended
- Meters are plastic bodied so excessive force during install will break meter and cause leaks
- Meter orientation for all meters (except shower head) MUST be installed vertically

TOOLS NEEDED

- Plyers or channel locks- Qty. 2

PARTS NEEDED

Sinks

- Braided water supply connection- 3/8" female compression x ½" female NPT (Included)- Qty. 2
- Coupling- ½" female NPT x 3/8" male compression (Included)- Qty. 2
- Batteries- AA cell batteries, Energizer Lithium Ion preferred- Qty. 6 (Included)

Toilets

- Braided water supply connection- 3/8" female

TOILETS

FLOW METER INSTALLATION ON TOILETS

First identify the water supply behind the toilet. Carefully close the shut off valve completely and flush the toilet to drain the water in the tank. Next disconnect existing supply line from the shut off valve.

compression x ½" female NPT (Included)- Qty. 1

- Coupling- ½" female NPT x 3/8" male compression (Included)- Qty. 1
- Batteries- AA cell batteries, Energizer Lithium Ion preferred- Qty. 3 (included)

Dishwashers

- Braided water supply connection- 3/8" female compression x ½" female NPT (Included)- Qty. 1
- Coupling- ½" female NPT x 3/8" male compression (Included)- Qty. 1
- Batteries- AA cell batteries, Energizer Lithium Ion preferred- Qty. 3

Showers (shower head install)

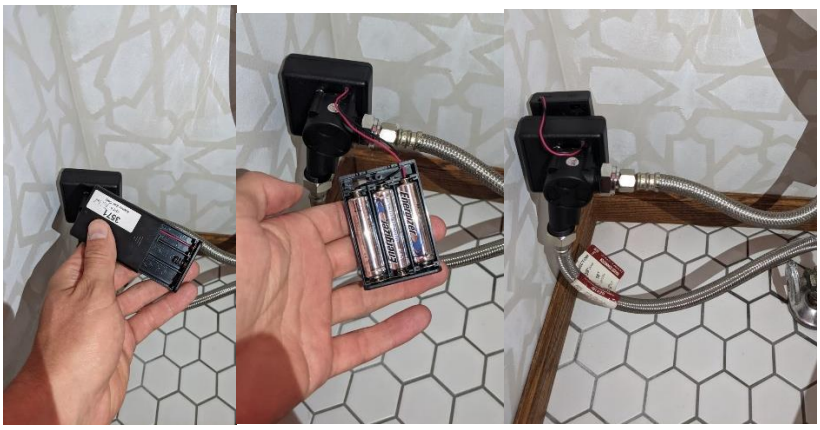
- ½" PVC female NPT Coupling (Included)- Qty. 1
- Batteries- AA cell batteries, Energizer Lithium Ion preferred- Qty. 3
- **Note: qty. 2 meters can be used and installed on showers before mixing valve if access is available**

Clothes washers

- 3/4 in. Female Hose Thread Swivel Nut x 1/2 in. O.D. Compression

With the water supply line disconnected at the shut off locate the water meter labeled for the "toilet." Ensure the meter has a new braided water supply line attached to the inlet end and a coupling ½" x 3/8" compression adaptor on the other. Find water flow direction arrows on the back side of the meter.

Connect existing supply line to the outlet end of the meter. Then connect the new water supply line provided to the water shut off valve. Make sure to align the flow direction arrow with the flow of water. Supply lines have additional length to allow looping. **It is critical to have the flow arrow pointing up, in a vertical orientation. This must be installed vertical! Use of zip ties help to keep orientation vertical.** Make sure all fittings are tight and turn on the water and check for leaks.



Last, remove battery box from Velcro, take off cover and insert 3 AA batteries. The meter is not ready to go when water starts flowing.

Dishwasher Elbow **(Not included)**- Qty. 4

- Braided water supply connection- 3/8" female compression x ½" female NPT (Included)- Qty. 2
- Coupling- ½" female NPT x 3/8" male compression (Included)- Qty. 2
- Batteries- AA cell batteries, Energizer Lithium Ion preferred- Qty. 6

Batteries

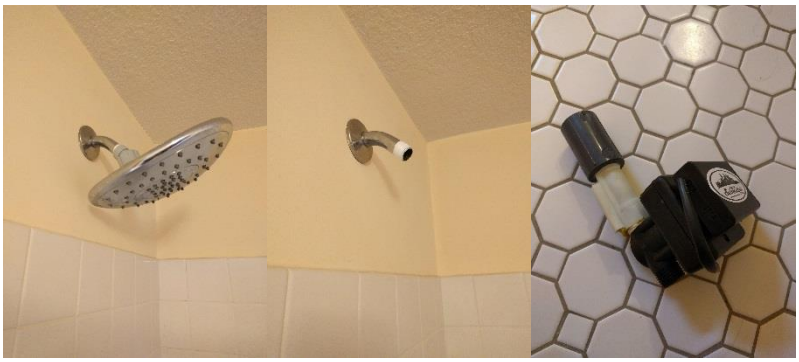
- Batteries used are AA Lithium Ion
- It is recommended to use high quality, name brand batteries for install and future replacements.
- Battery life will vary depending on water use habits of each tenant. In most cases battery life should last somewhere in the range of 1-3 years.
- Shorter life has been seen in high usage cases. More frequent battery replacement is required in these instances to ensure continuous water metering and bill the tenant for this high usage.

Cautions

- They are plastic bodied meters so excessive force during install will break meter and cause leaks
- Must install all meter in vertical orientation with

SHOWERS (SHOWER HEAD INSTALL)

FLOW METER INSTALLATION ON SHOWER HEADS



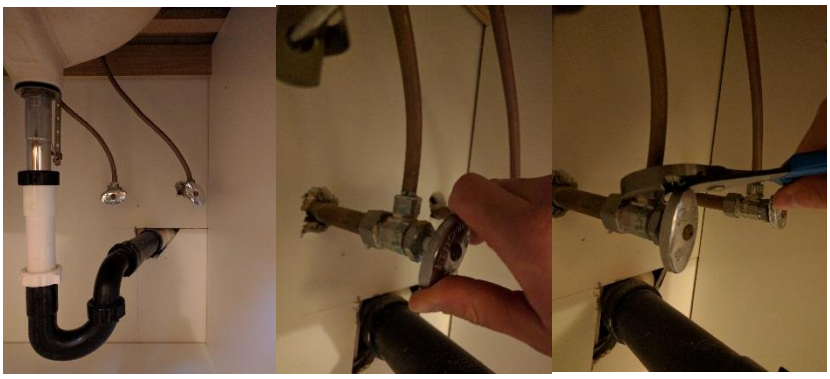
Identify shower head. Remove existing shower head and apply Teflon tape to the shower pipe threads. Locate the True Submeter labeled as "shower" with ½" NPT coupling attached.

Water flow direction arrows are found on the back side of the flow meter. Install True Submeter on to the shower water pipe via the ½" NPT coupling. Next apply Teflon tape to the True Submeter threads and re-install the existing shower head onto the flow meter. Turn shower on and check for leaks

flow arrow point up (except shower head meter insallation)

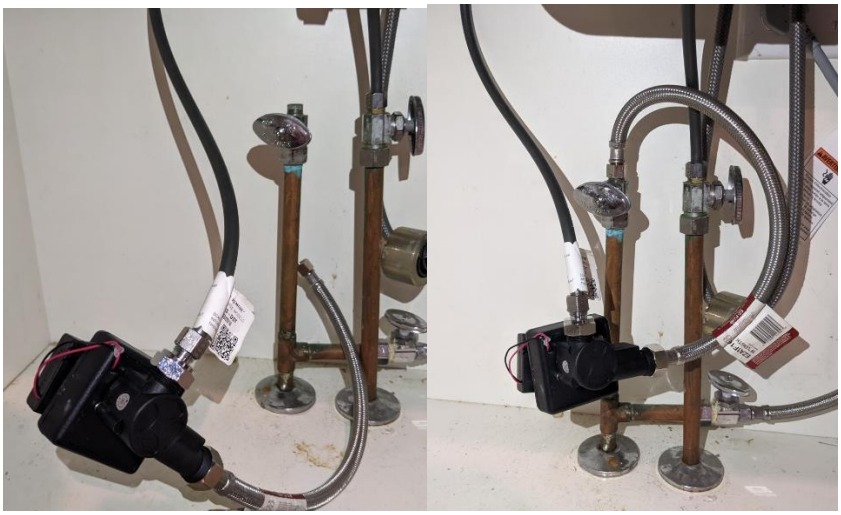
SINKS (HOT AND COLD METERS)

FLOW METER INSTALLATION ON HOT AND COLD WATER SUPPLY LINES

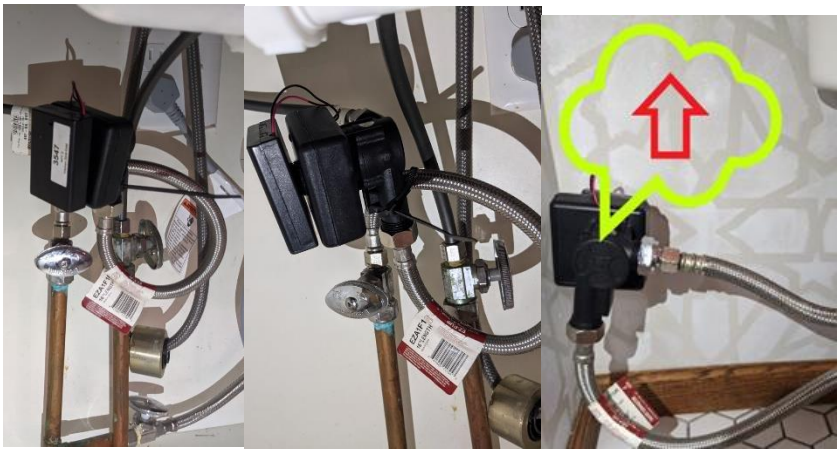


First identify the hot and cold water lines under the sink. Carefully close both shut off valves completely (relieve water pressure by opening faucet momentarily). Next disconnect existing supply line from the shut off valve. DO NOT remove the existing supply lines from the faucet.

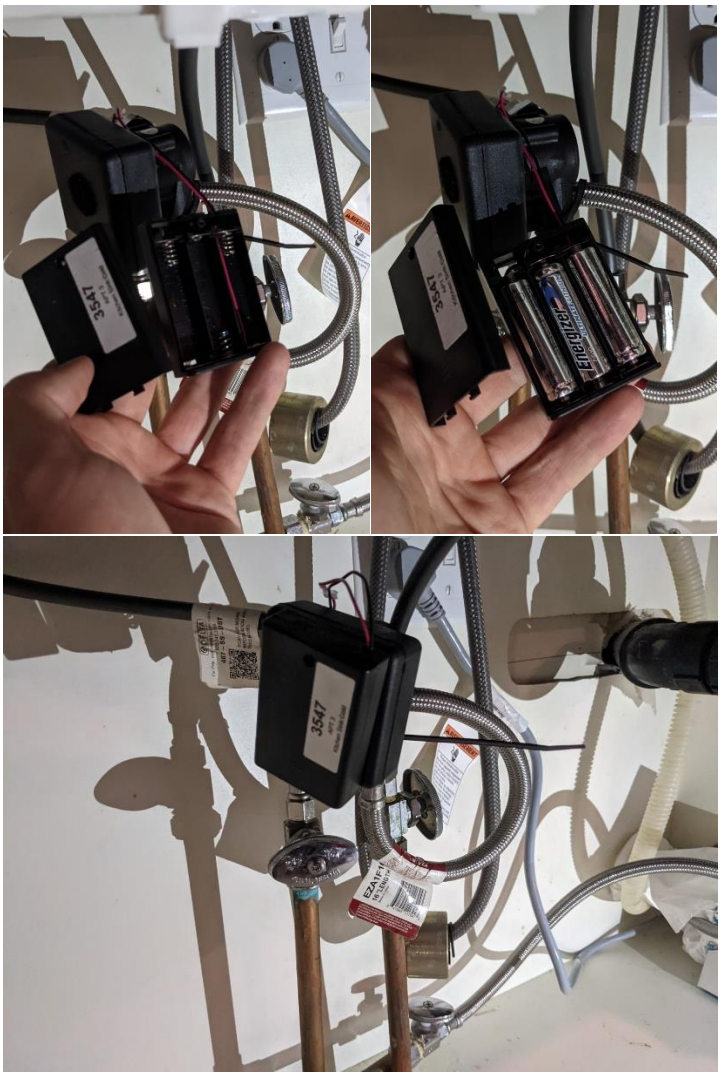
With both water supply lines disconnected at the shut off locate the meters for the hot and cold sinks (labels under the controller). Ensure both meters have a new braided water supply line attached to one end and a brass ½" x 3/8" compression adaptor on the other. The new meter supply line will connect to the existing shut off valve. The new 3/8" compression adaptor end will connect to the existing supply line.



Connect existing supply line to the outlet end of the meter. Then connect the new water supply line provided to the water shut off valve. Make sure to align the flow direction arrow with the flow of water. Supply lines have additional length to allow looping. It is critical to have the flow arrow pointing up, in a vertical orientation. This must be installed vertical! Use of zip ties help to keep orientation vertical. Make sure all fittings are tight and turn on the water and check for leaks.



Meter shown above with zip tie helping keeping meter orientation vertical (black arrow pointing up).



Last, remove battery box from Velcro, take off cover and insert 3 AA batteries. The meter is not ready to go when water starts flowing.

TOOLS NEEDED

- Smart phone
- WiFi App

PARTS NEEDED

- None
-

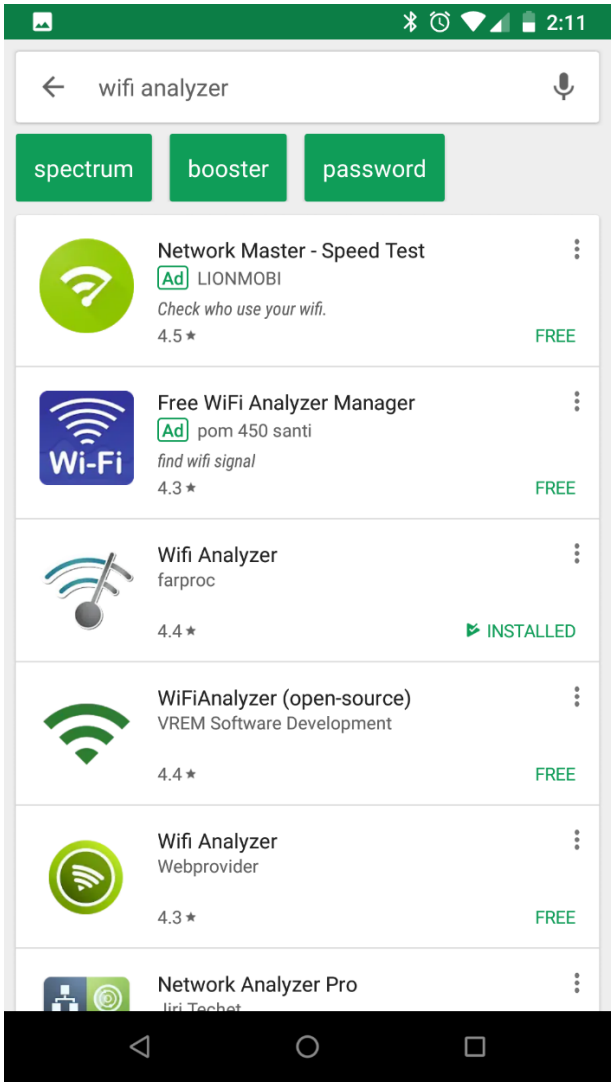
INSTALL ROUTER/VERIZON MODEM

THE ROUTER AND MODEM COME TOGETHER AND ARE PRE-PROGRAMMED AND PLUG AND PLAY.

Just plug the router into a wall outlet in a common area, utility room or somewhere as discrete as possible. Some routers will look different. Once powered up check that all lights are lighting up. If you do not have cellular signal on your cell phone chances are the True Submeter modem does not have cellular connection either. *(Note: some of our routers look slightly different and are black, have different USB modems and antennas)*

WIFI ANALYZER APPLICATION (IF NEEDED)

ON YOUR SMARTPHONE SEARCH FOR "WIFI ANALYZER" IN THE APP STORE. MOST ARE FREE.



We use the Wifi Analzyer by Farproc (shows installed). All seem to work similar. Install one of them.

Most apps have multiple different screen options to choose from, swiping right or left will display all WiFi networks currently in range. Look to make sure one labeled in some variation of "TrueSubmeter, TS***, True**…" is showing up.

Next swipe over screens to find a screen similar to the one above. At the bottom of the screen is a box that has a drop down list of all WiFi networks in range, choose the variant of "TrueSubmeter, TS***, True**…" that you found in the previous screen. Now walk the property with your phone going and standing near the installed (or soon to be installed) flow meters. Watch what the signal pointer does. -40 is the best signal strength you can get. Our submeters will work up until about -89 dBm but -70 and better is preferred to get the strongest connection with the meters and router.

Tip: Take notes of the wifi strength at each location and send us the results and we can help.