WHERE TO INSTALL

CITY WATER INLET

WATER METER

PRESSURE TANK

GROUNDED & UNSWITCHED 115 VOLTS OUTLET

SERVICE

WELL INLET

PUMP

INLET

WELL

RELIEF VALVE

INSTALLED MUST BE TOTALLY OFF

WHERE TO INSTALL

GREEN FILTER GOOD

YELLOW CHANGE SOON 10% LIFE REMAINING

RED CHANGE NOW

PRESS THE RED PRESSURE RELIEF VALVE & PULL SNAP-RING

LIFT TOP CAP

REPLACING THE CARTRIDGE

1. Turn off the water supply to the system by shutting off the inlet and outlet valves on the bypass.
2. (Optional) Install a 3/8” PEX tubing hose to the provided John Guest® fitting and shut-off that connects to the inlet side of the filtration system. Run the hose to a floor drain or bucket, and use to drain sediment or to aid in filter removal during change-out.
3. Remove Umbrella Cap on the top of the vessel. Replace the 3-AAA batteries with new batteries. Push and hold the reset button on the metered board for 3 seconds to reset the totalizer. When the totalizer is reset the LED lights will flash green 3 times to confirm that it is reset.
4. Depressurize the system by pushing down on the red depressurization button on the top cap of the system. Keep the button pushed down until all the air or water pressure is completely released.
5. Push down the top cap with both hands to unseat the retaining ring.
6. Remove the retaining ring by carefully grasping the handle and pulling inward, then upward. The retaining ring should slide completely out of the groove.
7. Remove the top cap of the system by lifting up on the top handles, remove old filter.
8. Open the John Guest® fitting and shut-off, and flush out the bottom of the system.
9. Look down into the tank assembly, and you should see a small opening centered in the bottom of the tank.
10. Remove packaging from the new filter, place the new cartridge into the tank with the double o’ring facing down.
11. Position the cartridge so that it is aligned with the bottom, center opening.
12. Press down on the cartridge so that the double o’ring seal moves into place within the bottom, center opening.
13. Reposition the Top Cap into its original location.
14. Reattach the top tank Snap Ring, pull up on the Top Cap to seat o-rings.
15. (If completed Step 2, then…) Close the John Guest® fitting and shut-off.
16. Turn the water supply on, opening the inlet and outlet valves on the bypass.
17. Relieve the system of air in the tank as the system fills with water, by pushing down on the red depressurization button on the top cap of the system. Keep the button pushed down until all the air pressure is completely released, and water comes out of the red depressurization button.
18. Release the red depressurization button.
19. Replace the Umbrella cap to the top of the system.
20. Check for leaks.
21. Flush the new cartridge per its installation instructions.
22. During flush, confirm green LED lights are flashing with flowing water. If lights are not flashing green, go back to step 3.

EASY TO UNDERSTAND LED REPLACEMENT NOTIFICATIONS

The Real-time Dynamic LED System monitors water and flow rate and provides a visual color-coded notification to the homeowner, letting them know when to replace their filter.

PRESS THE RED PRESSURE RELIEF VALVE & PULL SNAP-RING\
LIFT TOP CAP

EASY FILTER REPLACEMENTS AND NO TOOLS REQUIRED

PIONEER uses state-of-the-art snap-ring technology to eliminate the need for cumbersome tools. Homeowners can easily replace the filter in their PIONEER system by following a few simple steps.

1. Push down the top cap with both hands to unseat the retaining ring, and remove the retaining ring by carefully grasping the handle and pulling inward, then upward. The retaining ring should slide completely out of the groove.
2. Remove the Top Cap from the housing assembly by pulling the cap out of the top of the tank, by lifting up on the top handles. Place removed Top Cap on a clean and dry surface, free of debris, so no contamination of the o-ring occurs.
3. Look down into the tank assembly, and you should see a small opening centered in the bottom of the tank.
4. Remove packaging from filter, then place the cartridge into the tank with the double o’ring facing down.
5. Position the cartridge so that it is aligned with the bottom. center opening.
6. Press down on the cartridge so that the double o’ring seal moves into place within the bottom. center opening.
7. Reposition the Top Cap into its original location.
8. Reattach the top tank Snap Ring, pull up on the Top Cap to seat o-rings.
9. Run water through system for 10 minutes before use.

*Meter preset at 100,000 gallons; see page 6 for adjusting presets.
*Three AAA batteries not included, for battery back-up. Change annually with filter change-out.

INSTALLING THE CARTRIDGE

The System comes preassembled without the cartridge installed.
**SIMPLE ASSEMBLY INSTRUCTIONS**

1. Connect #3 to #4 on the bottom of the Filter Housing #1
   **HAND TIGHTEN ONLY**

2. Connect #4 to #3; Flow Meter Assembly should be placed on the Outlet Side. (Note the flow direction arrow on the meter body.)
   **HAND TIGHTEN ONLY**

3. Connect #5 Bypass to #4
   **HAND TIGHTEN ONLY**

4. Use either part of #6 for connecting your plumbing to the system
   **HAND TIGHTEN ONLY**

5. Install part #7 into #3 using the threaded connection & Teflon® tape
   **HAND TIGHTEN ONLY**

6. Connect 3/8” PEX Plumbing to drain
   **NOT PROVIDED**

7. Install 3-AAA batteries to the Umbrella Cap
   Connect to Power Supply

**Performance Data Sheet accompanying the system and change the filter as suggested. The contaminants or other substances removed or reduced by this water filter are not necessarily in all users’ water.**

**WARNINGS**

If this or any other system is installed in a metal (conductive) plumbing system, i.e. copper or galvanized metal, the plastic components of the system will interrupt the continuity of the plumbing system. As a result any errant electricity from improperly grounded appliances downstream or potential galvanic activity in the plumbing system can no longer ground through contiguous metal plumbing. Some homes may have been built in accordance with building codes, which actually encouraged the grounding of electrical appliances through the plumbing system. Consequently, the installation of a bypass consisting of the same material as the existing plumbing, or a grounded “jumper wire” bridging the equipment and reestablishing the conductive nature of the plumbing system must be installed prior to your systems use.

**DO NOT USE** extra lubricants, unapproved sealants and tools to tighten hand tightened only parts. Use of tools other than hand tightening only parts voids warranty. Testing was performed under standard laboratory conditions; actual performance may vary. Flush the system and change the filter as suggested. The contaminants or other substances removed or reduced by this water filter are not necessarily in all users’ water.

**Performance**

This system conforms to NSF/ANSI standard 61 and California Prop 65 Compliant certified coconut shell carbon and raw materials.

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**SIMPLE ASSEMBLY INSTRUCTIONS**

1. Filter housing
2. Bottom Inlet/Outlet cap assembly
3. Vertical elbow
4. Flow Meter Assembly
5. Bypass manifold
6. Straight or 90-degree Angled In/Out 1” MNPT plumbing connectors
7. 3/8” PEX Drain valve assembly with shut-off
8. Umbrella Cap with PCB assembly and battery backup

**NOT SHOWN:** Power Supply

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**IMAGE AND INSTALLATION INSTRUCTIONS**

**PART IDENTIFICATION**

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>PART IDENTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-094020EBKPL-04C08</td>
<td>Filter housing</td>
</tr>
<tr>
<td>CT-INOUTASSY</td>
<td>Bottom Inlet/Outlet cap assembly</td>
</tr>
<tr>
<td>CT-VERTICELBOW</td>
<td>Vertical elbow</td>
</tr>
<tr>
<td>CT-CLOTTASSY</td>
<td>Flow Meter Assembly</td>
</tr>
<tr>
<td>CT-BPMANIFOLD</td>
<td>Bypass manifold</td>
</tr>
<tr>
<td>CT-INOUTELBOWSET-04C08</td>
<td>Straight or 90-degree Angled In/Out 1” MNPT plumbing connectors</td>
</tr>
<tr>
<td>CT-BATUBRELLA</td>
<td>3/8” PEX Drain valve assembly with shut-off</td>
</tr>
<tr>
<td>CT-PCBUMBRELLA</td>
<td>Umbrella Cap with PCB assembly and battery backup</td>
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<tr>
<td>CT-POWERSUPPLY</td>
<td>NOT SHOWN: Power Supply</td>
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**PERFORMANCE**

This system conforms to NSF/ANSI standard 61 and California Prop 65 Compliant certified coconut shell carbon and raw materials.

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**WARNINGS**

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**DO NOT USE** extra lubricants, unapproved sealants and tools to tighten hand tightened only parts. Use of tools other than hand tightening only parts voids warranty. Testing was performed under standard laboratory conditions; actual performance may vary. Flush the system and change the filter as suggested. The contaminants or other substances removed or reduced by this water filter are not necessarily in all users’ water.
**WATER TOTALIZER NOTIFIER**

The overall purpose of this device is to receive a water meter input, and totalize the amount of water that passes through the meter. When there is flow through the meter, turn yellow at a rate that increases with the light flows rate. When the total amount of water flowed reaches within 10% of a pre-selected amount, all the LEDs will turn red.

This unit is to be powered using +12VDC. The power input is a wire with a 2.5mm, center positive barrel jack.

**Operation**

**Water Meter**

The totalizer keeps track of the gallons using a water meter. The water meter is a turbine style meter with a magnetic pickup that sends a pulse to the electronics for every revolution of the meter turbine. The meter turbine is removable for inspection and cleaning. Make sure water is not bypassed or turned off when removing the meter for maintenance. The meter has a three pin plug that connects to the electronic board.

**LEDs**

Normal colors for the LEDs are Green, Yellow, and Red. Depending on the Totalizer value:

- **Green:** 0 – 99% of the programmed totalizer maximum
- **Yellow:** 100% - 101% of the programmed totalizer maximum
- **Red:** >101% of the programmed totalizer maximum

If there is flow, the LEDs should alternately turn off in the following patterns: 1-2-3-2 (repeat). The frequency that they turn off is linearly correspondent to the flow rate being received from the water meter. For every revolution from the meter, the LED pattern should be incremented to turn off the next LED. If there are no pulse edges for 2 seconds, all the LEDs will turn on solid.

**Totalizer**

The totalizer has a battery backup. The battery backup uses 3 AAA size batteries. The battery holder is a part of the PCB assembly and can be accessed by removing the lid to the cartridge filter. The battery life will vary based on water flow when running on battery mode and type of batteries used. With high continuous flow, the batteries are expected to last approximately 14 days. With no flow the batteries are expected to last approximately 6 months.

**Pushbutton**

The pushbutton allows for the totalizer to be reset as well as the maximum value to be programmed.

To reset the totalizer, the user should press and hold the button for 3 seconds. When the totalizer is reset LEDs should flash green 3 times to confirm that it is a reset.

The push button allows the unit to be programmed for the total gallons limit. It can be programmed for the range of 10 gals – 990 gals.

To program the maximum value using the push button: Press and hold the button while powering up the board (either battery power or 12VDC power). Once the board is powered LED 1 (left LED) will represent 100,000’s place and should be green. LED 2 (middle LED) will represent 10,000’s place and should be blue. Both LEDs will be flashing at the number of flashes that corresponds to the current setting for that digit placeholder. To indicate the start of the flash sequence both LEDs should flash white for 1 second, then flash the appropriate number of times. Once both are done once more and repeat. Below, Figure 1, is an example:

- Press button for 1 second. LED1 should turn solid green, LED2 should turn off, and LED3 should flash the number of times that corresponds to the current setting. Pressing the button for less than 1 second would increment the value. Rolling over from 9 to 0. Below, Figure 2, is an example of the LEDs in this mode.

**Serial Port**

The serial port allows for quick and efficient programming through a basic terminal type interface. The board responds with a message when the enter key is pressed:

```
Totalizer Current Value: 0
Totalizer Current Max Setting: 250,000 gallons
(Send ‘Y’ to reset) (Send ‘N’ to enter new setting in 10,000s range 0-399)
```

Consult the manufacturer for more details on connecting to the boards serial port.

**Power Monitoring and Battery Mode**

The board monitors the 12VDC power and the battery power. If there is a power failure and no batteries are installed, the current totalizer value will be saved to non-volatile memory. When power is resumed, the totalizer count will resume from where it previously had lost power.

The LEDs should shut off during battery mode. If the totalizer is in the yellow or red state if the battery voltage gets low, the LEDs will flash on in the appropriate colors for 1.5 seconds every 4 seconds. If the push button is pressed in battery mode, the LEDs will turn on for 4 seconds and then return to battery mode.

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**WARRANTY**

ENPRESS LLC- PIONEER™ System - Limited Warranty

ENPRESS LLC warrants this product to be free from defects in manufacture for a period of one year, and replacement PIONEER™ unit will be installed for a period of 90 days. This warranty is extended to the original purchaser, by authorized ENPRESS customers. Use of this product constitutes Buyer’s acceptance of the Limited Liability.

This warranty does not cover any equipment purchased for use in applications in which the product is not suited. It is the responsibility of the buyer to determine if product is suitable for the end-use application.

Our obligations under the warranty are limited to the repair or replacement of ENPRESS LLC’s sole discretion of the failed parts of the water treatment unit manufactured by ENPRESS, and are exclusive of any other rights, duties, liabilities, consequential, special, general, or direct damages.

We assume no liability for the determination of the proper equipment necessary to meet your requirements, and are not authorizes others to assume such obligations for us.

We assume no liability and extend no warranties, expressed or implied for the use of this product with a system which does not meet the conditions for use described in the owner’s guide or performance data sheet for the product.

The warranty provided herein only applies to the complete product specifications and service life, from the date of installation, beyond which ENPRESS LLC is absolved of any and all liability for any use of the product. There are no other warranties, either of merchantability or fitness, either expressed or implied. Some states do not allow exclusion or limitation of incidental or consequential damages, so the warranty given above, which varies from state to state, may not apply to your state. To know what your legal rights are, consult your local or state consumer affairs office, your state’s Attorney General, or your national equivalent for international users.

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**LEGAL NOTICES**

- **Care**
  - Do not use solvent or cleaning agents on the exterior of the appliance. The filter must be submerged in a cleaning solution for 24 hours before it can be replaced.
  - The system is designed and certified for use with water that is not contaminated with chemicals or other substances.
  - The system may be used for the treatment of water that is not contaminated with chemicals or other substances.
  - The system is designed and certified for use with water that is not contaminated with chemicals or other substances.
  - The system is designed and certified for use with water that is not contaminated with chemicals or other substances.

- **Warranty**
  - The warranty is limited to the repair or replacement of the failed parts of the water treatment unit manufactured by ENPRESS, and only applies to the parts which are defective in material or manufacture. The warranty does not cover any equipment purchased for use in applications in which the product is not suited. It is the responsibility of the buyer to determine if product is suitable for the end-use application.
  - Our obligations under the warranty are limited to the repair or replacement of ENPRESS LLC’s sole discretion of the failed parts of the water treatment unit manufactured by ENPRESS, and are exclusive of any other rights, duties, liabilities, consequential, special, general, or direct damages.
  - We assume no liability for the determination of the proper equipment necessary to meet your requirements, and are not authorize others to assume such obligations for us.
  - We assume no liability and extend no warranties, expressed or implied for the use of this product with a system which does not meet the conditions for use described in the owner’s guide or performance data sheet for the product.
  - The warranty provided herein only applies to the complete product specifications and service life, from the date of installation, beyond which ENPRESS LLC is absolved of any and all liability for any use of the product. There are no other warranties, either of merchantability or fitness, either expressed or implied. Some states do not allow exclusion or limitation of incidental or consequential damages, so the warranty given above, which varies from state to state, may not apply to your state. To know what your legal rights are, consult your local or state consumer affairs office, your state’s Attorney General, or your national equivalent for international users.

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**LIMITED LIABILITY**

- **ENPRESS LLC makes no warranties of any kind, expressed or implied, statutory or otherwise, and expressly disclaims all warranties of every kind, concerning the product, including, without limitation, warranties of merchantability and fitness for a particular purpose.
  - ENPRESS LLC makes no warranties of any kind, expressed or implied, statutory or otherwise, and expressly disclaims all warranties of every kind, concerning the product, including, without limitation, warranties of merchantability and fitness for a particular purpose.
  - We assume no liability for the determination of the proper equipment necessary to meet your requirements, and are not authorize others to assume such obligations for us.
  - We assume no liability and extend no warranties, expressed or implied for the use of this product with a system which does not meet the conditions for use described in the owner’s guide or performance data sheet for the product.
  - The warranty provided herein only applies to the complete product specifications and service life, from the date of installation, beyond which ENPRESS LLC is absolved of any and all liability for any use of the product. There are no other warranties, either of merchantability or fitness, either expressed or implied. Some states do not allow exclusion or limitation of incidental or consequential damages, so the warranty given above, which varies from state to state, may not apply to your state. To know what your legal rights are, consult your local or state consumer affairs office, your state’s Attorney General, or your national equivalent for international users.

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**SPECIAL NOTICES**

- While the testing was performed under standard laboratory conditions, actual performance may vary. Systems using these filters must be installed and operated in accordance with manufacturer’s recommendations and guidelines.

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**SERVICE**

Please be prepared with the following information:

<table>
<thead>
<tr>
<th>1</th>
<th>Model number and serial number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Date of installation</td>
</tr>
<tr>
<td>3</td>
<td>Name of installer</td>
</tr>
<tr>
<td>4</td>
<td>Nature of problem</td>
</tr>
<tr>
<td>5</td>
<td>Your address and contact information</td>
</tr>
</tbody>
</table>

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**Return Goods Authorization (RGA) number must be received from the above office and placed on all shipments to and in correspondence with ENPRESS LLC.**