

# REPLACING A SENSOR

*Perform the following steps to install a replacement sensor from the factory.*

**IMPORTANT:** Sensors ship from the factory with a Sensor Address of ONE, so it is imperative that these steps be followed carefully to ensure no address conflicts are introduced.

## Scenario 1

**If there is only one sensor in the network or if the sensor to be replaced was previously removed or is no longer communicating with the Controller:**

1. If only one sensor is communicating with the Controller, proceed to step 6. If there are a network of sensors, proceed to step 2.
2. Perform a check to ensure no sensors in the current sensor network has an address equal to ONE.
  - For EchoSmart systems, go to **Modify Settings → Advanced Settings → Controller Setup → Manually Set Database**.
  - For FilterSmart systems, go to **Modify Settings → Controller Setup → Manually Set Database**.A check of the communication with each connected sensor will be performed. Once all sensors have been checked, the entire sensor list will be populated.
  - If any of the sensor addresses is equal to ONE, proceed to step 3.
  - If ALL the sensor addresses (non-zero) are greater than ONE, skip to step 6.
3. Press **Cancel**.
  - For EchoSmart systems, press **Back to Advanced Settings → Back to Settings**.
  - For FilterSmart systems, press **Back to Settings**.
4. If the sensor with an address of 1 is not currently selected, press **Change Sensor**, use the arrow keys to scroll to the desired sensor, then press **Select Sensor**.

5. From the Settings page, select **Modify Name & Address**. Scroll down to highlight the sensor address, then use the **Increase/Decrease** options to change the sensor's address to a unique value. Press the **Save & Go Back to Settings** option.
6. Install and power the replacement sensor.
7. Go to the Manually Set Database menu by following the system-specific button presses from step two.
8. Press the **Modify Sensor Database** option. Press the Down arrow until the address of the sensor to replace is highlighted. The address will have "??" displayed after the number. Use the **Decrease Address** option to change the sensor's address to "1".
9. Press **Done**. A check of the connected sensors will be performed again. Once the list is fully populated, press the **Manually Set Database** option to save the changes.
10. After several seconds, the Initial Sensor Setup screen will appear. This menu provides the opportunity to set up the replacement sensor's most important parameters. Update the sensor address to a unique value (most likely the address of the sensor it is replacing).
  - For EchoSmart systems, input the Tank Depth and Zero Adjust parameters.
  - For FilterSmart systems, input the Media Depth parameter. Update any of the other listed parameters as needed.
11. Press the **Sensor Setup Complete** option, followed by the **Network Setup Complete** option. The sensor is now operational and will report the current value as soon as the initialization routine completes.

## Scenario 2

If the sensor to be replaced is part of a network of sensors and is still actively communicating with the Controller:

1. Perform a check to ensure no sensors in the current sensor network has an address equal to ONE.
  - For EchoSmart systems, go to **Modify Settings → Advanced Settings → Controller Setup → Manually Set Database**.
  - For FilterSmart systems, go to **Modify Settings → Controller Setup → Manually Set Database**.

A check of the communication with each connected sensor will be performed. Once all sensors have been checked, the entire sensor list will be populated. Note if there is an address 1 present in the list.
2. Press **Cancel**.
  - For EchoSmart systems, press **Back to Advanced Settings → Back to Settings**.
  - For FilterSmart systems, press **Back to Settings**.
3. Based on the findings from step 1:
  - If any of the sensor addresses is equal to ONE, proceed to step 4.
  - If ALL the sensor addresses (non-zero) are greater than ONE, skip to step 6.
4. If the sensor with an address of 1 is not currently selected, press **Change Sensor**, use the arrow keys to scroll to the desired sensor, then press **Select Sensor**.
5. From the Settings page, select **Modify Name & Address**. Scroll down to highlight the sensor address, then use the **Increase/Decrease** options to change the sensor's address to a unique value. Press the **Save & Go Back to Settings** option.

6. If the sensor to be replaced is not currently selected, press **Change Sensor**, use the arrow keys to scroll to the desired sensor, then press **Select Sensor**.
7. From the Settings page, select **Modify Name & Address**. Scroll down to highlight the sensor address, then use the **Decrease Address** option to change the sensor's address to "1". Press the **Save & Go Back to Settings** option.
8. Proceed with the removal of the sensor to be replaced and install the new sensor. Since all new sensors from the factory have an address of ONE, the Controller will be ready to communicate with the new sensor.
  - If the Controller doesn't automatically begin communicating with the replacement sensor once it's installed, power down the Controller and power it again. This forces the Controller to re-initiate communication with all connected sensors.
9. The Initial Sensor Setup screen will appear. This menu provides the opportunity to set up the replacement sensor's most important parameters. Update the sensor address to a unique value (most likely the address of the sensor it is replacing).
  - For EchoSmart systems, input the Tank Depth and Zero Adjust parameters.
  - For FilterSmart systems, input the Media Depth parameter. Update any of the other listed parameters as needed.
10. Press the **Sensor Setup Complete** option, followed by the **Network Setup Complete** option. The sensor is now operational and will report the current value as soon as the initialization routine completes.