



Installation Manual

FM-196 ZC

Operation and Installation Instructions for the FloodMaster Zone Control System (FM-196 ZC)

System Overview:

The FloodMaster Zone Control System is designed to provide a wide area of coverage for FloodMaster wireless leak detection and alarm shutoff systems. The Zone Control system combines standard FloodMaster products FM-196 Wireless Alarm Boxes and sensor pucks and the FM-080 Total Water Main Shutoff. Custom length cable between the FM-196 Wireless Alarm Boxes and the Water Main Valve Control (FM-080) can be ordered to meet specific installation requirements.

When a sensor puck comes in contact with water it will signal the system to shut down the water source and sound an audible alarm. Only the alarm box in the affected zone will sound. Alarm boxes in unaffected zones will not be alerted and will not need to be reset. See diagram on back for more information.

The FloodMaster Zone Control System is ideal for use in spaces where multiple pucks and alarm boxes are needed. The Zone Control System allows you to isolate and reset the system components in only the area affected by a leak.

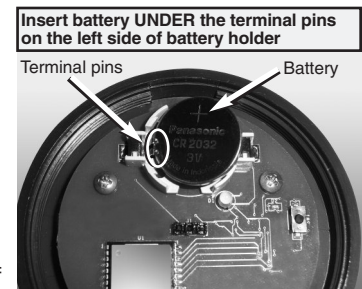


Actual models may vary.



Installation Instructions:

1. Identify the location for the Water Main Valve Control shutoff (FM-080). Install the valve per the FM-080 installation instructions.
2. Install the FM-196 Wireless Alarm Boxes per the following:
 1. Mount the alarm box in the desired location using supplied two-sided tape.
 2. Plug the transformer into a 110VAC wall outlet; the green power ON/OFF indicator light on the alarm box will turn on.
 3. Unscrew and remove the sensor puck cap.
 4. Place the lithium battery into the battery holder slot in the sensor puck base – positive (+) or label side up.
Note: With the battery holder at 12 o'clock, the battery should slide under the terminal pins on the left side of the battery holder. (See photo on right)
 5. Replace the sensor puck cap and screw it into place.
 6. Place the sensor puck in the desired leak detection area. (Potential leak areas: water heater, washing machine, sink, dishwasher, beaker, etc.)
 7. Close all interior doors in the testing area.
 8. Function Test:
 - a. Place a damp paper towel on the floor in the desired leak detection area where the sensor puck will be located. Place the sensor puck on top of the damp paper towel, making sure the probes on the bottom of the puck make contact with the paper towel. Step five feet away from the puck.
 - b. The audible alarm will sound. To confirm good signal strength, press and release the reset button on the alarm box and the alarm should activate again in 10 to 15 seconds. Press and release the reset button again after alarm activation. If the unit activates three times in quick succession (10 to 15 seconds apart), you have good signal strength and can move onto Step 8c. If you are unable to get the alarm to activate repeatedly, relocate the sensor puck a few inches from the original test spot and repeat Step 8a. **Note:** If you are unable to get the alarm to activate in a particular room or critical location, a wireless signal repeater may be required to overcome signal interference - see Optional Features and Connections for more information.
 - c. Press and release the silence button on the alarm box to silence the audible alarm; the yellow silence mode light will turn on to indicate the unit is in silence mode.
 - d. Remove the sensor puck from the paper towel and dry off the steel pins located on the bottom.
 - e. Press and release the reset button on the alarm box to return the unit to its original state.
3. Run the connecting cables between the FM-196 Wireless Alarm Boxes to the Water Main Valve Control shutoff box. Plug the cable connector into the FM-196 Wireless Alarm Box by inserting and twisting to make a solid connection. Next, insert the cable to the terminal strip on the Water Main Valve Control box as follows:
 - Red wire to red terminal strip post.
 - Black wire to black terminal strip post.Connect the bare wire to earth ground; a wire nut may be used to make this connection.
Repeat for each connector cable.
4. Perform a final test of the system by applying a damp paper towel to a sensor puck. Confirm audible alarm and valve closure. Reset the FM-080 Valve Control Box and FM-196 Wireless Alarm Box. Repeat this test for each FM-196 Wireless Alarm Box.

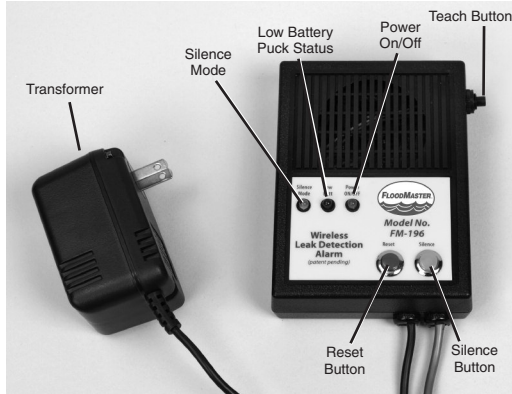




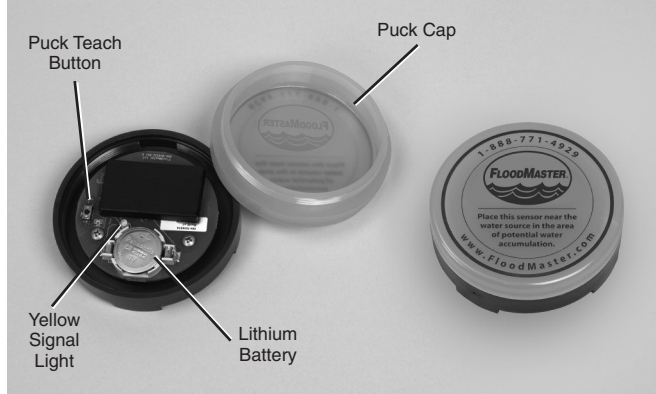
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FM-196 Zone Alarm Box



Sensor Puck



In the event of a leak:

1. Remove the sensor puck from the water and dry it off.
2. Press and release the Reset button on the FM-196 Wireless Alarm Box to silence the audible alarm.
3. Repair the leak.
4. Press and release the Reset button on the FM-080 Valve Control Alarm box to begin the flow of water again.
5. Retest the system as necessary to confirm wireless signal strength remains strong and system is fully operational.

Maintenance:

Alarm Box – Exercise (press and release) the reset, silence and teach buttons on the alarm box annually to ensure correct operation and to maintain product warranty status.

Sensor Puck Status – In the event a sensor puck reaches a low battery status, the sensor puck will begin to flash a yellow signal light and the red indicator light on the FM-196 Wireless Alarm Box will turn on. The zone alarm box will also sound a pulsing, audible alarm. Identify the low battery sensor puck and replace the battery. Press and release the reset button on the zone alarm box after the battery has been replaced. Model #CR2032 replacement batteries are commercially available at national retailers. If a sensor puck is moved beyond the wireless range (typically 100') from the alarm box, the red indicator light on the alarm box will turn on. The alarm box will also sound a pulsing, audible alarm. Identify the out-of-range puck and relocate it within the range of the alarm box (100'). Press and release the reset button on the alarm box after the sensor puck has been relocated.

To Delete a Sensor Puck – In the event that a sensor puck needs to be or has been removed from the system, the programming memory of the alarm box will have to be cleared and remaining sensor pucks reprogrammed. Failure to do so will result in Low Battery (lost signal) Alarms. The instructions for clearing of the system memory and reprogramming remaining sensor puck(s) are as follows:

1. Press and hold the teach button on the alarm box for 45-50 seconds to clear the memory.
2. Confirm the sensors are NO LONGER linked to the alarm box by placing a damp paper towel under the sensor puck. There should be no response from the alarm box.
3. Unscrew and remove sensor puck cap.
4. Place the lithium battery into the battery holder slot in the sensor puck base – positive (+) or label side up. **Note:** With the battery holder at 12 o'clock, the battery should slide under the terminal pins on the left side of the battery holder. (See photo under Installation Instructions)
5. Press and release the black teach button on the side of the alarm box.
6. Press and release the black teach button located in the sensor puck base. Red light in sensor base will flash once to confirm signal.
7. Repeat Steps 3-6 for each sensor.
8. Test the unit for functionality per the function test listed above. (See Installation Instructions, Step 2, #8a-e)

Optional Features and Connections:

Additional Sensor Pucks – For applications where a wider area of leak detection coverage is desired, additional sensor pucks can be added to the system. They are sold separately and require an extra step to teach them to communicate with the alarm box. To program additional sensor pucks:

1. Unscrew and remove the sensor puck cap.
2. Place the lithium battery into the battery holder slot in the sensor puck base – positive (+) or label side up. **Note:** With the battery holder at 12 o'clock, the battery should slide under the terminal pins on the left side of the battery holder. (See photo under Installation Instructions)
3. Press and release the black teach button located on the side of the installed alarm box.
4. Press and release the black teach button located in the sensor puck base.
5. Replace the sensor puck cap and screw it into place.
6. Test the unit for functionality per the function test. (See Installation Instructions, Step 2, #8a-e)

Security Alarm Connection – Use for applications where connection to a home security system or control panel is desired. This dry contact relay signal on the FM-080 Valve Control Box can be wired per your application requirements as follows:

- Red/White – Normally Closed Circuit
- Black/White – Normally Open Circuit

