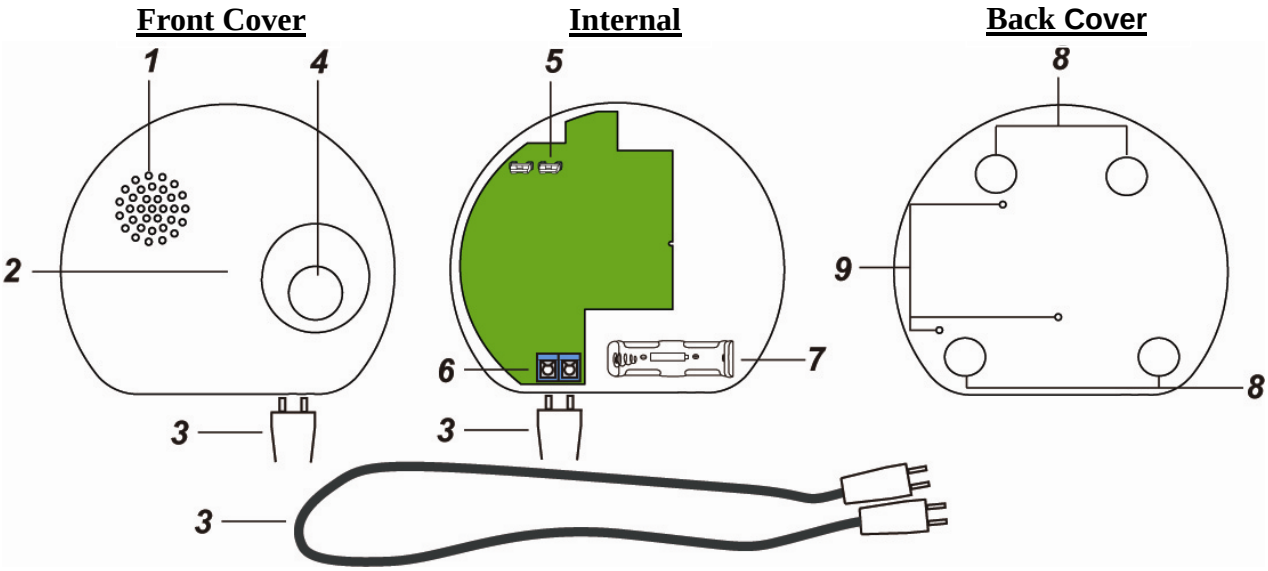
Water Sensor (WLS-15 / WLS-15-F1)

The Water Sensor is specially designed to monitor water level and raise alarm when high water level is detected.



PARTS IDENTIFICATION

1. Buzzer
2. Red LED (Inside)
3. Extension Water Detection Probe
4. Learn/Test Button
5. Supervision Jumper (JP2)

 **Open**: Supervision On (Factory default for 868FM)

 **Close**: Supervision Off (Factory default for 868WF and 433AM).

6. Extension Water Detection Probe Terminal
7. Battery Compartment
8. Wall Fixing Knockouts x 4 (Inside)
9. Ground Deployment Water Detection Probe

POWER:

Water Sensor uses 1 Energizer CR123A 3V Lithium batteries as its power source. Water Sensor can also detect low battery status. When low battery voltage is detected, the low battery signal will be sent to the Control Panel along with regular signal transmission for the Control Panel to display the status accordingly. When battery is exhausted the Water Sensor will stop functioning, the LED will flash every second to indicate.

SUPERVISION:

Supervision is enabled when the Supervision Jumper (JP2) is in the “open” position. Supervision is disabled when the Supervision Jumper (JP2) is in the “close” position.
When supervision is enabled, the Water Sensor conducts Self-test periodically by transmitting a supervisory signal once every 30~50 minutes.
If the Control Panel fails to receive the Supervisory signals transmitted from a certain Water Sensor, an “Out-Of-Order” fault message will be generated.

LEARNING IN WATER SENSOR:

Step 1. Open the cover by removing the bottom fixing screw on the Water Sensor.

Step 2. Insert the battery in the battery compartment

Step 3. Program the Control Panel to enter the learn mode.

Step 4. Press the Learn/Test button once to transmit learn code, the Water Sensor will emit 1 beep and the Red LED will flash once

Step 5. If the Control Panel receives the learn code, it will display the information accordingly, refer to the Control Panel manual to complete the learning process.

Step 6. Replace the cover on the Water Sensor

Step 7. The Learning-In process is now complete.

MOUNTING WATER SENSOR:

The Water Sensor can be deployed on the ground or mounted on the wall

Ground Deployment

When deployed on the ground, the Water Sensor detects water through the probes protruding from its back cover.

1. (If extension probe is connected) Open the cover by removing the bottom fixing screw on the Water Sensor.
2. Remove the extension probe from the terminal.
3. Replace the cover.
4. Put the Water Sensor on the ground with the back cover facing downward.

Wall Mounting:

For wall mounting, the Water Sensor must be connected to the external extension probe, then installed at desired height.

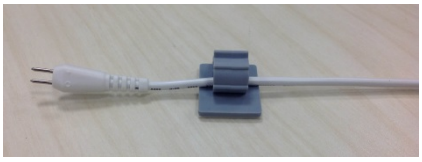
1. Remove the fixing screw and cover assembly.
2. Use a Philip screw driver to turn counter-clockwise and loosen the 2 screws on the extension probe terminal. (**Figure 1**)
3. Insert the extension probe into the terminal, use the Philip screw driver to turn clockwise and tighten and screws to secure the probe. (**Figure 2**)

Figure 1

Figure 2

4. Break through the wall mounting knockouts on the base.
5. Using the holes as a template, drill holes in the surface.
6. Insert the wall plugs if fixing it into plaster or brick.
7. Screw the base into the wall plugs.
8. Screw the cover back onto its base.
9. Find the plastic clip included in the package, insert the extension probe in the clip. (**Figure 3**)
10. Remove the cover double-side adhesive tape on the clip and apply the clip to desired location on the wall to secure the probe.

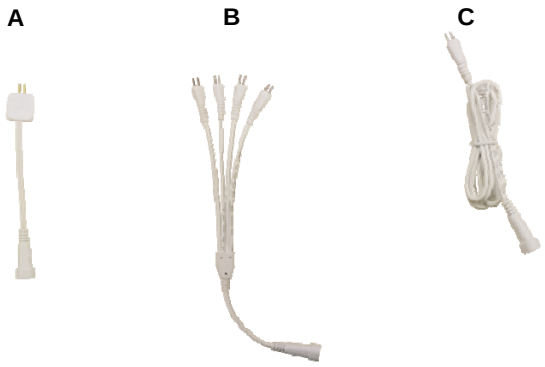
Figure 3



- ***Water Detection Probe***

The Water Sensor is shipped with a factory supplied water detection probe. The probe may be further extended by connecting other optional probes to improve detection rage.
Available option probe types include

A. 1 to 1 19cm probe.
B. 1 to 4 33cm probe.
C. 1 to 1 180 cm probe.



Multiple extension probes can be further interconnected according to user need. See pictures below for some wiring samples.

NORMAL OPERATION:

- When the probes come into contact with water, Water Sensor will transmit an alarm signal to the Control Panel, and raise alarm with its built in buzzer.
- Whenever the water level subsides, the Water Sensor will transmit an alarm restore signal and stop the alarm.
- You can silence the alarm by pressing the Learn/Test button once. The Water Sensor will silence the buzzer and enter Sleep Mode until the water subsides. During the Sleep Mode, if the water condition persists, the Water Sensor will no longer raise alarm. If you press the Learn/Test button under Sleep Mode, the Water Sensor will emit a long beep to remind you the water has not subsided yet.
- After the water has subsided and the probes are no longer in contact with water, the Water Sensor will send a restore signal to the Control Panel to indicate the water condition has been restored. The Water Sensor then returns to Normal Operation Mode.

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.