Water Leak Sensor (WLS-16 / WLS-16-R3)

Introduction

WLS-16 / WLS-16-R3 is a Water Leak Sensor. It is capable of sending wireless signals to the Control Panel upon water detection. The Water Sensor can be mounted on the wall using the extension probe to detect water leakage or flood condition.

The Water Leak Sensor includes the following models:

WLS-16: Water Sensor cover is secured by a fixing screw.

WLS-16-R3: Water Sensor cover is secured by two latches at top and bottom

Parts Identification

1. Water Detection Probe (WPS-30)

2. Learn/Test Button aka LED Indicator

LED Indication:

- Flashes 3 times:
 - The Water Sensor is transmitting a signal. Flashes 6 times:
 - The Water Sensor is transmitting an alarm/restore signal. Flashes twice:
- The Water Sensor receives acknowledgement from the Control Panel.

Learn/Test button usage:

- Press once to send a learning signal to the Control Panel.
- 3. Mounting Knockouts
- 4. Battery Insulator
- 5. Battery Compartment
- 6. External Water Probe Connection Terminal

Features

- Water Detection
 - The Water Sensor will be activated when water is detected by the probe and the Water Sensor will transmit an alarm signal to the Control Panel, the LED will flash 6 times to indicate.
 - The Water Sensor will check if water is present every 2 minutes, if water persists after 2 minutes, the Water Sensor will send an alarm signal again to the Control Panel. If water still remains, the Water Sensor will not send anymore alarm signal to the Control Panel unless water is subsided.
 - If water is subsided, the Water Sensor will transmit a restore signal and the LED will flash 6 times.

Battery and Low Battery Detection

 Water Sensor uses 1 CR123A 3V Lithium battery 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.

Supervision

• The Water Sensor conducts Self-test periodically by transmitting a supervisory signal once every 15~18 minutes.

Getting Started

- 1. Remove the battery insulator to power on the Water Sensor.
- 2. Put your Control Panel into learning mode (Please refer to your Control Panel manual for details).
- 3. Press the Learn/Test button once to transmit a learn code to the Control Panel, the LED will flash 3 times to indicate.



4. 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. You can start *Mounting* process.

Installation

Mounting

The device can be flexibly installed, either upright or upside-down, at a desired height based on users' installation needs.

There are two ways to mount the Water Sensor:

• Screw mounting:

- 1. Open the cover of the Water Sensor.
 - To open the cover for WLS-16 model:
 - Use a screwdriver to loosen the cover fixing screw of the Water Sensor's cover.
 - To open the cover **for WLS-16-R3 model:**
 - Use your thumb to press on the Latch, while pressing it, pull out the cover from the base of the Water Sensor (see on the right from upper view angle).
- 2. Break through the 2 mounting knockouts on the base.
- 3. Using the holes as a template, drill holes in the surface.
- 4. Insert the wall plugs if fixing it into plaster or brick.
- 5. Screw the base into the wall plugs.
- 6. Replace the front cover back onto its base.
- 7. Find the plastic clip included in the package, insert the extension probe in the clip.
 - To use the plastic clip:
 - Remove the double-side adhesive tape at the back of the clip and apply it to desired location on the wall.
 - Open the clip as in (Fig 1) by using your thumbs.
 - Once clip is opened, insert the water probe and secure the probe's sensor head, make sure the sensing probes are touched on the ground for water detection, then close the clip (Fig 2).



(Fig 1.)



(Fig 2.)

- Self-adhesive mounting:
 - 1. Clean the surface with a suitable degreaser.
 - Remove the protective covering from one side of the double-sided adhesive pad and firmly apply to the back of the device.
 - 3. Next remove the other cover and firmly press the item onto the desired location.
 - 4. Find the plastic clip included in the package, use the plastic clip as instructed above (Fig 1.) and (Fig 2.).

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<u><NOTE></u>
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Do not use the adhesive pad method of installation on a surface with peeling or cracked paint, or on a rough surface.

Water Detection Probe

The water detection probe is pre-installed in the Water Sensor. 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.



Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

. Reorient or relocate the receiving antenna.

. Increase the separation between the equipment and receiver.

. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

. Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.