WAPIRZ-1 WIRELESS PIR MOTION DETECTOR

Linear’s family of Z-Wave™ certified wireless lighting controls (switches, dimmers, outlets and plug-in modules) and Security devices (alert sounder, passive infrared sensor and door/window transmitter) brings a new level of intelligent wireless capability to commercial and residential environments.

The Z-Wave wireless protocol is an international wireless standard for remote home automation, security and other applications. Embedded in each device, the Z-Wave smart chip enables two-way RF communication among hundreds of Z-Wave enabled devices, allowing products and services from multiple manufacturers to work seamlessly.

Linear Z-Wave products are easy to install, and allow dealers to create an integrated wireless network with nearly limitless expansion and interoperability with security and health monitoring systems, energy management, home entertainment, appliances, and more.

For indoor use only. Retain instructions for future use.

TEMPERATURE MONITORING

The PIR uses the SENSOR_MULTILEVEL_V4 command class to report to the Z-Wave Hub a change in the ambient temperature of 1 degree. Every rise or drop of 1 degree will trigger a notification to the Hub. It is up to the Hub and how the consumer programs it to determine actions based on these notifications.

DETECTION PATTERN

INSTALLATION

1. Release the cover tab to open the cover.
2. Insert a CR123A battery into the battery compartment and LED will start to flash slowly, which means the sensor has not yet performed “inclusion” with the controller.
3. Replace the cover.

For “Inclusion” to (adding to) a network:

Refer to your Controller operating instructions to add this module under the command of the Wireless Controller.

4. Prepare the Controller to include a unit to the network by adding it to a group (method of adding a node to the network). Refer to controller instructions.
5. If your Controller supports Network Wide Inclusion (NWI) locate the WAPIRZ-1 near the proposed installation location. If not skip to Step 7.
6. With your Controller in Inclusion mode, you should see an indication on your Controller that the “device was included” in the network. It should display binary switch / Linear. The LED will stop blinking. Skip to Step 10.
7. Place the WAPIRZ-1 within 3 feet of the Controller.
8. With your controller in Inclusion mode, depress the Tamper switch for 1 second then release.
9. You should see an indication on your Controller that the “device was included” in the network. It should display binary switch / Linear. The LED will stop blinking.
10. The device will appear in the list of Switches.

✓ NOTE: If you have trouble adding the WAPIRZ-1 to a group it may be that the Home ID and Node ID were not cleared from it after testing. You must first “RESET UNIT” with your controller to remove it from the network. Although adding it to a group includes it in the network, removing it from a group does not remove it from the network. If removed from a group, it functions as a repeater (only). “RESET UNIT” removes it completely from the network.

For “Association” with another device:

The motion detector supports one association group with up to 5 nodes.

1. Set up the Z-Wave™ Interface Controller into “association” mode, and following its instruction to associate the WAPIRZ-1 with another device.
2. Open the motion detector case to “wake” the unit. In the Controller, associate the detector with the other device.
3. Close the motion detector case.

For “Exclusion” from (removing from) a network:

1. Set up the Z-Wave™ Interface Controller into “exclusion” mode, and following its instruction to delete the WAPIRZ-1 from the controller.
2. Press the Tamper switch of WAPIRZ-1 for 1 second and release to be excluded. The LED light will flash continuously when the sensor is in the Exclusion condition.
**Mounting**
The motion detector should be mounted on a wall or in a corner 6 feet above the floor. Use the double-sided tape supplied to mount the detector.

**NOTE:** The passive infrared sensor detects motion by sensing fast changes in temperature when a person moves through the detector’s field of view. DO NOT MOUNT THE DETECTOR IN A LOCATION WHERE HEAT SOURCES (HEATERS, VENTS, ETC.) ARE IN THE DETECTOR’S FIELD OF VIEW. False activation may occur.

**BASIC OPERATION**

- During normal operation without detecting any motion, the detector’s red LED will be off.
- When the sensor detects motion, it will send a status of “ON” (Basic Set, Value: 0xFF) and alarm report (Type: 07, Level: 0xFF) to any associated nodes. The red LED will flash once.
- When no movement is detected for 3 minutes (adjustable by configuration setting), the detector will send a status of “OFF” (Basic Set, Value: 0x00) and alarm restore report (Type: 07, Level: 0x00) to any associated nodes, then the unit assumes “sleep” mode.
- The motion detector is equipped with a tamper switch. If the cover of the detector is removed, it will send an alarm report (Type: 07, Level: 0xFF) and the red LED will light constant.

**CONFIGURATION**
The WAPIRZ-1 supports the Configuration command. The WAPIRZ-1 can be configured to operate slightly differently than how it works when you first install it. Using the Configuration command you can configure the following:

**Parameter 1: Re-trigger Wait Time**
By default, to conserve battery life, after the WAPIRZ-1 detects motion it cannot be re-triggered by motion again for 3 minutes. Each time motion is detected (even during this wait time) the 3 minute timer starts over. The length of the re-trigger wait time can be adjusted with this setting.

- **Parameter No:** 1
- **Length:** 2 Bytes
- **Valid Values = 1-255 (minutes). Default is 3.**

**Default Setting**
The configuration Parameter can be set to its default setting by setting the default bit in the Configuration Set command. See your controller’s instructions on how to do this (and if it supports it).

All configuration commands will be reset to their default state when the WAPIRZ-1 is excluded from the Z-Wave network by using the controller to reset the node.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Battery</th>
<th>CR123A Lithium Battery</th>
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<tbody>
<tr>
<td>Frequency</td>
<td>908.42 MHz</td>
</tr>
<tr>
<td>Operating Temp</td>
<td>5°F–140°F / -15°C– 60°C</td>
</tr>
<tr>
<td>Repeater</td>
<td>Yes</td>
</tr>
<tr>
<td>Range</td>
<td>Up to 100 feet line of sight between the Z-Wave Controller and/or the closest Z-Wave Repeater</td>
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**INTEROPERABILITY WITH Z-WAVE DEVICES**
A Z-Wave network can integrate devices of various classes, and these devices can be made by different manufacturers, just as the WAPIRZ-1 can be incorporated into existing Z-Wave networks.