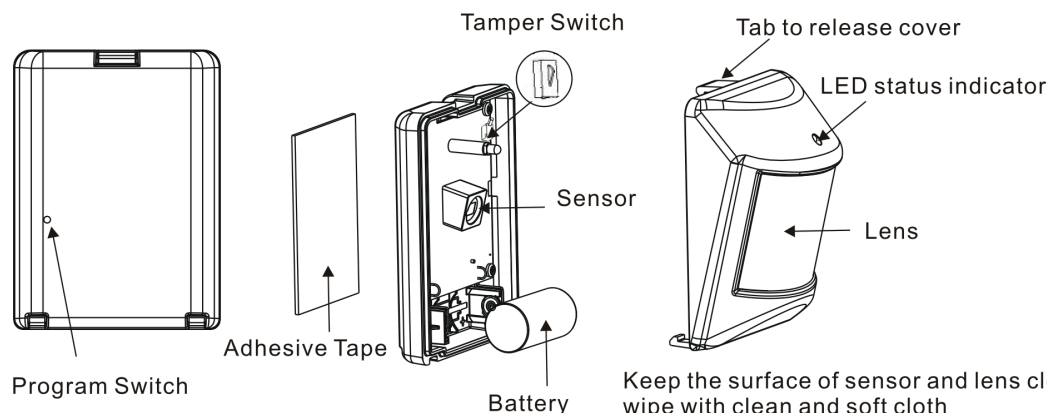




WAPIRZ-1

Radio Frequency Controlled
 Wireless Passive Infrared (PIR) Motion Detector



NOTE: This unit must be "included in the Network" **only where it will be permanently installed.** The proper operation of this node in the mesh network is dependent on it knowing its location with respect to other nodes. You cannot "test bench" configure this module, then install.

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.

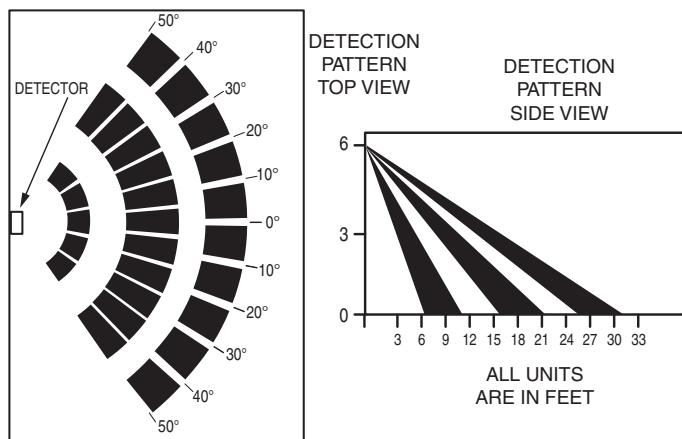
The Z-Wave wireless protocol is an international wireless standard for remote home automation, security and other applications. Embedded in each device, the Z-Wave smart chip enables two-way RF communication among hundreds of Z-Wave enabled devices, allowing products and services from multiple manufacturers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

As part of a Z-Wave network, the WAPIRZ-1 will also act as a wireless repeater to insure that commands intended for another device in the network are received. This is useful when the device would otherwise be out of the radio range of the wireless controller.

For indoor use only. Retain instructions for future use.

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.**
 If the LED does not stop blinking, relocate the WAPIRZ-1 to within 100 feet (line of sight) of a Z-Wave device or your hub and repeat Step 6. If the LED continues to blink, your Controller does not support NWI and continue with Step 7.
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

Battery	CR123A Lithium Battery
Frequency	908.42 MHz
Operating Temp	5°F~140°F / -15°C~ 60°C
Repeater	Yes
Range	Up to 100 feet line of sight between the Z-Wave Controller and/or the closest Z-Wave Repeater

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.

PACKAGE CONTENTS

- WAPIRZ-1 with Wall mounting bracket
- Double-sided mounting tape
- CR123A Battery
- Installation Manual

REGULATORY INFORMATION

The WAPIRZ-1 is certified to comply with applicable FCC and IC rules and regulations governing RF and EMI emissions.

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 received that may cause undesired operation.

FCC Notice

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 or more 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 to help.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

WARRANTY

This Linear product is warranted against defects in material and workmanship for twelve (12) months. **This warranty extends only to wholesale customers** who buy direct from Linear or through Linear's normal distribution channels. Linear does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any. **There are no obligations or liabilities on the part of Linear Corporation for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation.** All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until Warranty Expiration Date as labeled on the product. **This Linear LLC Warranty is in lieu of all other warranties express or implied.** All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Returns at 1-855-546-3351 for an RPA# and other important details.

IMPORTANT !!!

Linear radio controls provide a reliable communications link and fill an important need in portable wireless signaling. However, there are some limitations which must be observed.

- For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15 devices. As such, they have limited transmitter power and therefore limited range.
- A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.
- Changes or modifications to the device may void FCC compliance.
- Infrequently used radio links should be tested regularly to protect against undetected interference or fault.
- A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users.