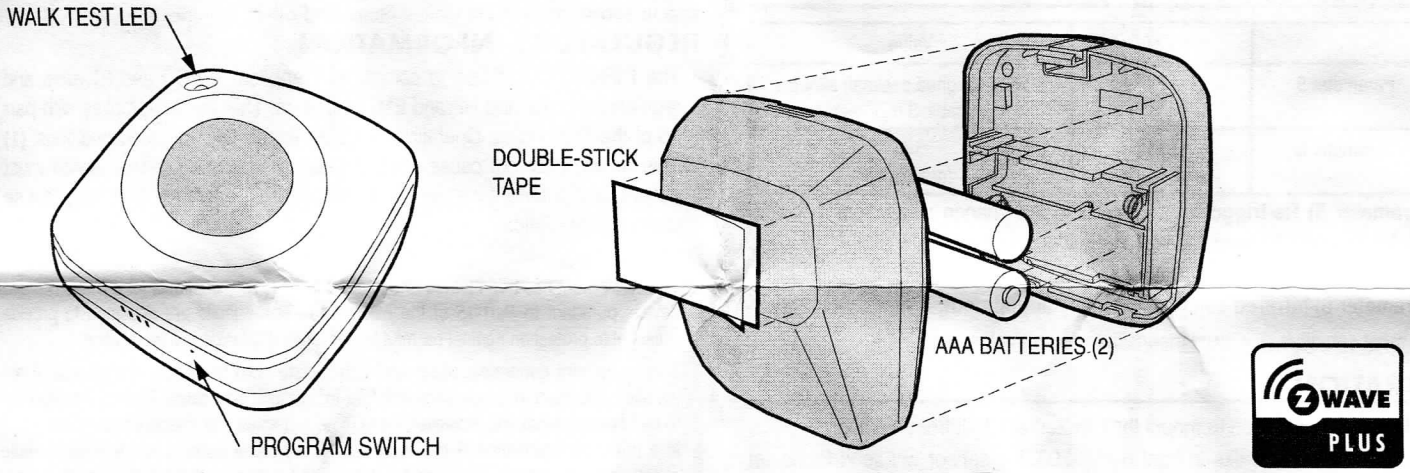
PIR-200-EVOLVE

Z-Wave Radio Frequency (RF) Controlled



PIR-200

The PIR-200 Z-Wave Plus® certified motion sensor utilizes the Z-Wave wireless protocol. This 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.

The PIR-200 Smart PIR is simple to set up and provides an alert when there is movement in the general area. GoControl Z-Wave products are easy to install, are Z-Wave Plus certified, and allow dealers to create an integrated wireless network with nearly limitless expansion and interoperability with security, energy management, home entertainment, appliances, and more.

For indoor use only. Retain instructions for future use.

Z-Wave Plus Features

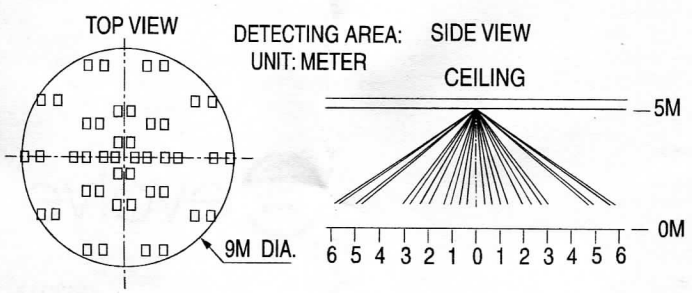
The PIR-200 contains a Z-Wave 500 Series Module that supports Z-Wave Plus® features. A Z-Wave certified portable or stationary Controller can communicate with the Z-Wave 500 Series Module. Depending on the capability of the Controller or gateway software, the following operations will be performed by PIR-200. Refer to the controller or gateway manual for details.

- Send an alert if motion is sensed.
- Add or Remove PIR-200.
- Over-the-air firmware update by the gateway or static Controller.

INSTALLATION

The PIR-200 can be mounted on a wall, ceiling or on a table top. This can be done using a piece of double-sided tape (included) to the flat area on the back of the PIR housing.

1. Remove the rear cover and insert two AAA batteries. Replace the rear cover.
2. Press the program switch. The Walk Test LED will flash 5 times if the sensor has not been "included" in a Z-Wave network. If the LED flashes once, the sensor has been already been "included".



Z-WAVE PROGRAMMING

Adding to a Network:

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

1. With your Controller in Discovery or Add Mode, press the Program Switch for 1 second. The Red LED will blink slowly.
2. When the PIR-200 is added, the LED will stay on for 3 seconds.
3. You should see an indication on your Controller that the "device was added" to the network.

If the Controller/Gateway shows the addition failed, repeat Steps 1-3.

✓ *NOTE: If you have trouble adding the PIR-200 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" 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. "RESET UNIT" removes it completely from the network*

To Reset Unit (If Required):

In the event that the primary Controller is lost or otherwise inoperable, to reset the PIR-200 and clear all network information, follow these steps:

1. Remove cover to trigger the tamper switch. The LED will flash once & send out Alarm Report.
2. Press Program Switch 10 times within 10 seconds. The PIR-200 will send the "Device Reset Locally Notification" command and reset to the factory default. (Remark: This is to be used only in the case of primary controller being inoperable or otherwise unavailable.).
3. The PIR-200 will completely reset to factory defaults.

Removing from Network:

The PIR-200 can be removed from the network by the Controller/Gateway.

Refer to the Controller operating instructions for details.

1. With your Controller in Remove Mode, press the Program Switch for 1 second.
2. You should see an indication on your Controller that the device was removed from the network.

Association

1. Press the program switch on the PIR-200 to initiate the "Awake" mode. The LED will flash once.
2. Put your Controller into "Association", and following its instruction to associate the PIR-200 to other devices.

Other Z-Wave Commands

Auto Wake Up:

Use "Wake Up" command to set up the awaking time (from 10 minutes to 1 week) and send the wake up notification to controller

Battery Capacity Detection:

- Use "Battery Get" command to have the battery capacity back in %
- It will detect the battery capacity automatically
- Low Battery Auto Report when power is lower than 2.6V +/-0.1V

CONFIGURATION

	Size	Value
Parameter 5	1 bit	1-255 (unsigned decimal) Minutes (default: 3 minutes)
Parameter 6	1 bit	1-7 (default: 4)

(Parameter 5) Re-trigger duration: User can change value from 1 to 255 minutes to setup the re-trigger time when there is no movement detected in the period of time. Default is 3 minutes.

(Parameter 6) Infrared sensor sensitivity adjustment, 7 levels sensitivity, 1 = most sensitive, 7 = most insensitive, default values= 4

OPERATION

- Using adhesive tape to mount the PIR-200 at 6 feet from the floor.
- When a person walks in front of PIR-200, the sensor will send Basic set On (0xFF) and the Red LED will flash once. Refer to status report as table below.
- If no movement is detected in three minutes (default), a will send Basic SetOFF (0x00) will be sent and the Red LED will flash once.
- The PIR-200 is equipped with tamper switch. If the tamper switch is triggered (or the cover is removed), the PIR-200 will send an Alarm Report and the LED will flash once.
- If the tamper switch is closed (or the cover closed), the PIR-200 will send an Alarm Report.

	Alarm V1 (Movement & Tamper Switch)	Notification V4 (Movement)	Notification V4 (Tamper Switch)
Alarm Type	0x07		
Alarm Level	0x00 (No movement after 3 mins) 0xFF (Motion detected)	0x07	0x07
Notification Event		0x08 (Motion detected) 0x00 (No movement after 3 mins)	0x03 (Cover removed) 0x00 (Cover closed)
Notification Event Parameter		0x8 (Motion detected) 0x00 (No movement after 3 mins)	0x03

Z-WAVE COMMAND CLASSES

COMMAND_CLASS_ASSOCIATION_GRP_INFO
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_BATTERY
COMMAND_CLASS_CONFIGURATION
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_NOTIFICATION_V4
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_SECURITY
COMMAND_CLASS_SENSOR_MULTILEVEL_V7
COMMAND_CLASS_VERSION_V2
COMMAND_CLASS_WAKE_UP_V2
COMMAND_CLASS_ZWAVEPLUS_INFO_V2

SPECIFICATIONS

Power: 2 - AAA batteries (included)
Signal (Frequency): 908.42 MHz / 916 MHz
Range: Up to 130 feet line of sight

REGULATORY INFORMATION

The PIR-200 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 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

IC Notice

This Class B digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with the Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

WARRANTY

For warranty and general product information visit our website at :

www.evolvecontrols.com

IMPORTANT !!!

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.

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