

Federal Communications Commission Statement

This equipment has been followed 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 instruction, 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 and 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 and outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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 Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



Installation & Operation Manual

M360PIRZ-1

Wireless PIR Motion Sensor

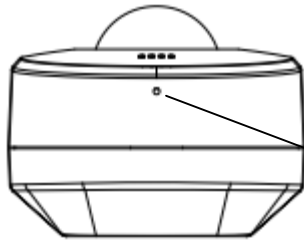
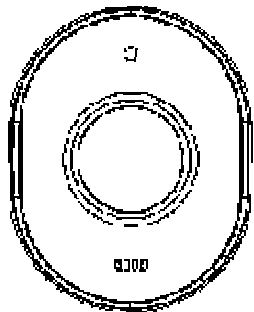
Introduction

Thanks for choosing this wireless PIR Motion Sensor of the home security device. The new multi-sensor consists of motion, temperature, humidity & light sensor for combining several functionality in one device; more attractive and economic consideration. This sensor is a Z-Wave™ enabled device (interoperable, two-way RF mesh networking technology) and is fully compatible with any Z-Wave™ enabled network and it's security framework. Every mains powered Z-Wave™ enabled device acts as a signal repeater and multiple devices result in more possible transmission routes which helps eliminate "RF dead-spots".

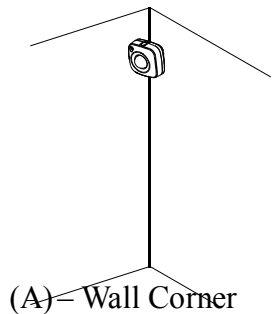
Z-Wave™ enabled device displaying the Z-Wave™ logo can also be used with it regardless of the manufacturer, and ours can also be used in other manufacturer's Z-Wave™ enabled networks. This sensor monitors movement, and send Z-Wave™ signal when movement is detected inside the building. With Temperature sensor built inside, it will send the signal out when temperature changed. When the device is secure included into Z-Wave network, above communication will be encrypted.

Product Description and Specification

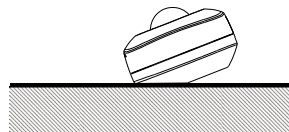
*** For indoor use only ***



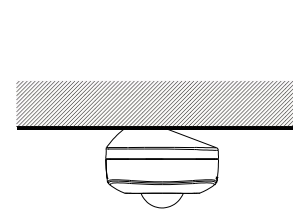
Program Switch



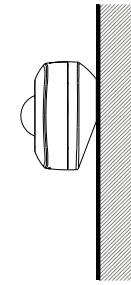
(A) – Wall Corner



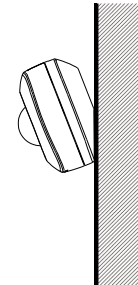
(B) – Table



(C) - Ceiling



(D) – Vertical



(E) - Angled

Protocol: Z-Wave™ (ZM5202)	1pc	M360PIRZ-1
Frequency Range: 908.42MHz (M360PIRZ-1)	1pc	Adhesive tape for sensor
Operating Range: Up to 100 feet line of sight	2pc	AAA Alkaline Battery
Operating Temp.: -10°C~ 40°C (5°F~104°F)	1pc	Installation & Operation Manual
Battery: AAA x 2		

(Installation for Information)

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

Specification:	Package Content:
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Configuration – Motion Sensor:

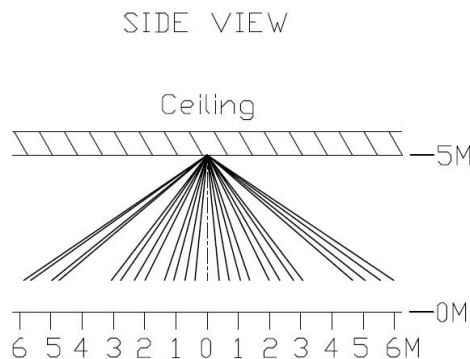
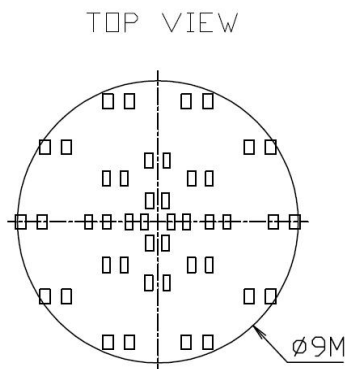
	Size	Value
Parameter 5	1	1 ~ 255 (unsigned decimal) Minutes (default: 3 minutes)
Parameter 6	1	1 ~ 7 (default: 4)

(Table 1)

(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

DETECTING AREA: unit: meter



Installation

Notice: If you are installing the entire Z-Wave™ system for the first time, please refer to the installation guide of Z-Wave™ Interface Controller before installing M360PIRZ-1.

1. Release cover tab to open the cover and insert two AAA battery into the battery compartment and close the cover back to sensor.
2. Press the program switch, the LED will flash 5 times which means the sensor has not been “included” yet or flash once which means the sensor has been “included” already.
3. **For “Inclusion (Auto-Inclusion)”** in (adding to) a network: To add the M360PIRZ-1 to your Z-Wave network (inclusion), place your Z-Wave primary controller into inclusion mode and the distance between sensor and controller is suggested to be in one meter. Press the Program Switch of M360PIRZ-1 for sending the NIF. After sending NIF, Z-Wave will send the auto inclusion, otherwise, M360PIRZ-1 will go to sleep after 20 seconds.
4. **For “Exclusion”** from (removing from) a network: To remove the M360PIRZ-1 from your Z-Wave network (exclusion), place your Z-Wave primary controller into “exclusion” mode, and following its instruction to delete the M360PIRZ-1 to your controller. Press the Program Switch of M360PIRZ-1 once to be excluded.

For “Association”: Press the program switch for sending NIF, the LED will flash once and send the Wake Up Notification in 5 seconds. Put the Z-Wave™ Interface Controller into “association”, and following its instruction to associate the M360PIRZ-1 with other device. Support grouping identifier=1. Support one association group (5 nodes). “Association” is used for other grouping devices chain reaction. Red LED will flash once when trigger.

5. **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
6. **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
7. **Factory Default Reset:** Remove cover to trigger tamper switch, LED flash once & send out Alarm Report. Press Program Switch 10 times within 10 seconds, M360PIRZ-1 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.)
8. All the rest commands depend on Z-Wave standard.

Operation

1. Using adhesive tape to mount M360PIRZ-1 at 2 meters above surface. To enhance proper operation, place M360PIRZ-1 on the location which can detect the room widely.
2. Walk in front of M360PIRZ-1, sensor will send Basic set On (0xFF), Red LED will flash once and please refer to status report as table below.

3. If no movement detected in three minutes (default is 3 minutes - based on user's configuration setting, refer Table 1 (Parameter 5) will send Basic Set OFF (0x00), Red LED will flash once, and refer to table for status.
4. The M360PIRZ-1 sensor equipped with tamper switch. If the tamper switch is triggered (or remove the cover), the M360PIRZ-1 sensor will send Alarm Report, LED will flash once and refer to table for status.
5. If the tamper switch is closed (or closed the cover), M360PIRZ-1 will send Alarm Report,
and refer to table for status.

	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)		
Notification Type		0x07	0x07
Notification Event		0x08(Motion Detected)/ 0x00 (no movement after 3 mins)	0x03(remove cover)/ 0x00 (cover closed)
Notification Event Parameter		0x08	0x03

6. Support OTA Firmware update from controller. Please refer to your controller manual and use COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2. To proceed the OTA process.