

## 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 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.

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.

## Limited Warranty

Vision Guarantees that every wireless PIR sensor is free from physical defects in material and workmanship under normal use for one year from the date of purchase. If the product proves defective during this one-year warranty period, Vision will replace it free of charge. Vision does not issue any refunds. This warranty is extended to the original end user purchase only and is not transferable. This warranty does not apply to: (1) damage to units caused by accident, dropping or abuse in handling, or any negligent use; (2) units which have been subject to unauthorized repair, taken apart, or otherwise modified; (3) units not used in accordance with instruction; (4) damages exceeding the cost of the product; (5) transit damage, initial installation costs, removal cost, or reinstallation cost.

For information on additional devices, please visit us at [www.visionsecurity.com.tw](http://www.visionsecurity.com.tw)



## Installation & Operation Manual

ZP3111IN-5  
ZP3111MY-5  
ZP3111EU-5  
ZP3111RU-5  
ZP3111US-5  
ZP3111IL-5  
ZP3111KR-5  
ZP3111HK-5  
ZP3111BR-5  
ZP3111JP-5

**4-in-1 Motion Sensor  
(Temp./Humidity/Light Sensor Built-In)**

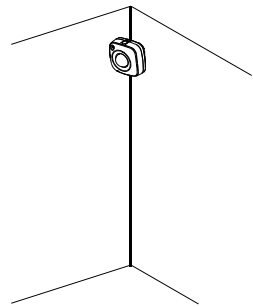
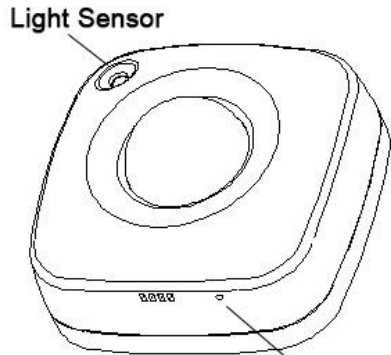
## Introduction

Thanks for choosing the Vision's wireless 4-in-1 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".

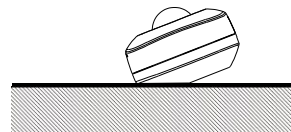
Z-Wave™ enabled device displaying the Z-Wave™ logo can also be used with it regardless of the manufacturer, and ours can also be used in other manufacturer's Z-Wave™ enabled networks. This sensor monitors movement, and send Z-Wave™ signal when movement is detected inside the building. With Temperature,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

## Product Description and Specification

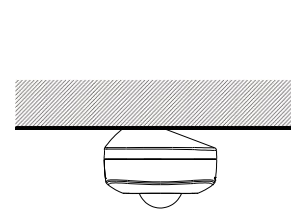
\*\*\* For indoor use only \*\*\*



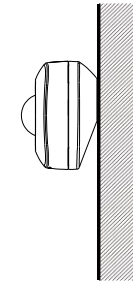
(A)– Wall Corner



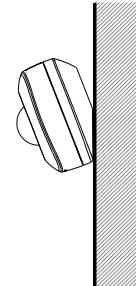
(B) – Table



(C) - Ceiling



(D) – Vertical



(E) - Angled

Specification:	Package Content:	
Protocol: Z-Wave™ (ZM5202)	1pc	ZP 3111 Multi-Sensor
Frequency Range:	1pc	Adhesive tape for sensor
865.22MHz (ZP3111IN-5)	2pc	AAA Alkaline Battery
868.10MHz (ZP3111MY-5)	1pc	Installation & Operation Manual
868.42MHz (ZP3111EU-5)		
869.00MHz (ZP3111R'')		
908.42MHz (ZP3111U)	<b>(Installation for Information)</b>	
916.00MHz (ZP3111IL)		
919.80MHz (ZP3111HK-5)		
920.00MHz~923.00MHz (ZP3111KR-5)		
921.42MHz (ZP3111BR-5)		
922.00MHz~926.00MHz (ZP3111JP-5)		
Operating Range: Up to 100 feet line of sight		
Operating Temp.: -10°C~ 40°C (5°F~104°F)		
Battery: AAA x 2		

### 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

**Configuration – Temperature**

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	Size	VALUE		Default
Parameter 1	1	°C	0x00	°C(0x00)
		°F	0x01	
Parameter 2	1	1~50 (Set up from 0.1°C~5°C)		1 (°C)

**Configuration – Humidity**

	Size	VALUE	Default
Parameter 3	1	1~50 (Set up from 1%~50%)	10%

**Configuration – Light**

	Size	VALUE	Default
Parameter 4	1	0,5~50 (Set up from 0 for Off or 5%~50%)	10%

**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

**Configuration – LED Mode:**

	Size	Value (Default: Mode 3)
Parameter 7	1	1 ~ 3 (Mode 1 ~ Mode 3) Mode 1 → LED Turn Off (Both Temp./PIR Trigger) Mode 2 → Temp. (Breathing Light Mode) PIR (Quick Flash) Mode 3 → LED Quick Flash (Temp./PIR Trigger)

**(Caution: Mode 2 will shorten the battery life due to the Breathing Light Mode.)**

**Installation**

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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 ZP3111.

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 ZP3111 to your Z-Wave network (inclusion), place your Z-Wave primary controller into inclusion mode. Press the Program Switch of ZP3111 for sending the NIF. After sending NIF, Z-Wave will send the auto inclusion, otherwise, ZP3111 will go to sleep after 20 seconds.
4. **For “Exclusion”** from (removing from) a network: To remove the ZP3111 from your Z-Wave network (exclusion), place your Z-Wave primary controller into “exclusion” mode, and following its instruction to delete the ZP3111 to your controller. Press the Program Switch of ZP3111 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 ZP3111 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. **Temperature-**If the present temperature is different with the sensor record and exceed the setting program, the sensor will report the present temperature. LED flash every 3 minutes to represent the temperature or wake up by press the Program SW.

Temperature	LED Color
Under 15°C	Green
15~23°C	Blue
23~28°C	Yellow/YellowGreen
28~36°C	Purple
Over 36°C	Red

Multilevel Sensor Report	
Sensor Type	0x01
Scale	0x00 (°C) 0x01 (°F)
Size and Precision	2

8. **Humidity Report-** If the present humidity is different with the sensor record and exceed the setting program, the sensor will report the present humidity.

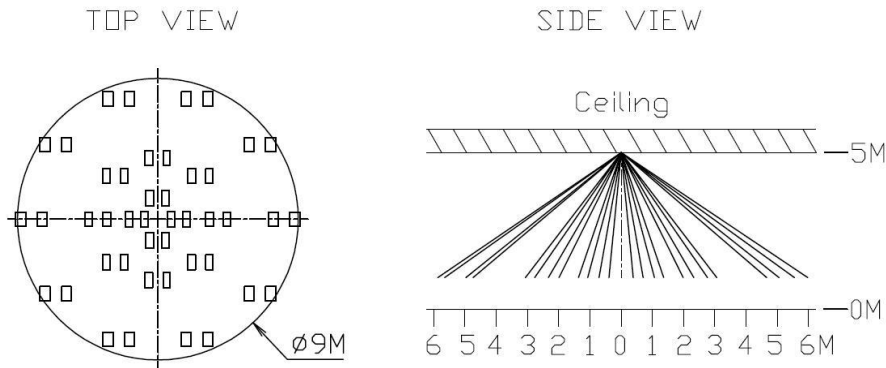
Multilevel Sensor Report	
Sensor Type	0x05
Scale	0x00 (%)
Size and Precision	2

9. **Light Report-** If the present illumination is different with the sensor record and exceed the setting program, the sensor will report the present illumination.

Multilevel Sensor Report	
Sensor Type	0x03
Scale	0x00 (%)
Size and Precision	2

10. **Factory Default Reset:** Remove cover to triggered tamper switch, LED flash once & send out Alarm Report. Press Program Switch 10 times within 10 seconds, ZP3111 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.)

DETECTING AREA: unit: meter



11. All the rest commands depend on Z-Wave standard.

## Operation

- Using adhesive tape to mount ZP3111 at 2 meters above surface. To enhance proper operation, place ZP3111 on the location which can detect the room widely.
- Walk in front of ZP3111, sensor will send Basic set On (0xFF) , Red LED will flash once and please refer to status report as table below.
- 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.
- The ZP3111 sensor equipped with tamper switch. If the tamper switch is triggered (or remove the cover), the ZP3111 sensor will send Alarm Report, LED will flash once and refer to table for status.
- If the tamper switch is closed (or closed the cover), ZP3111 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

- 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.
- A Security Enabled Z-Wave controller must be used to fully utilize the product.