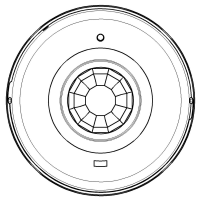


# INSTALLATION INSTRUCTIONS



## ZWN-BPC Ceiling Mounted PIR Motion Sensor

### SPECIFICATIONS

Power Supply.....2AA batteries  
 PIR Sensitivity Adjustment.....25%/50%/75%/100%  
 Test Mode.....15 sec.  
 Operation Temperature.....32-104°F  
 PIR Detection Coverage.....Up to 600ft<sup>2</sup>  
 Z-Wave Frequency.....908.42MHz(US)  
 RF Range.....Up to 131 feet line of sight between the Wireless Controller and the closest Z-Wave receiver module.

### FEATURE

- Adopt wireless RF technology
- 360 degree ceiling mounted cover up to 600ft<sup>2</sup>
- Low battery detection
- Adjustable PIR Sensitivity
- LED motion indicator
- Support Z-Wave associations, sending commands up to 5 associated Z-Wave devices
- For indoor use only

### DESCRIPTION

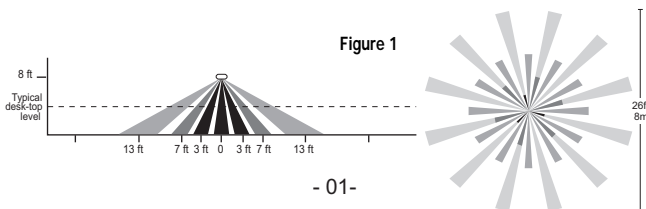
The PIR Motion Sensor ZWN-BPC is a Z-Wave enabled device and is fully compatible with other Z-Wave certified device from other manufacturers and/or other applications. This device is typically used in conjunction with the ZWN-BDS to monitor the environment and provide hand-free lighting control, it can also trigger a Z-Wave enabled alarm when motion is detected.

This sensor acts as a security device by detecting changes in infrared radiation levels. when some body moves within or across the detection of coverage, one triggering signal will be transmitted to associated Z-Wave devices.

### COVERAGE PATTERN

The ZWN-BPC provides a 360° coverage pattern, up to 600 square feet. The coverage shown represents walking motion at a mounting height of 8 feet( See Figure 1 ). For building spaces with lower levels of activity or with obstacles and barriers, coverage size may decrease.

Figure 1



### PLACEMENT

Place of PIR Motion Sensor:

It is very important to place the sensor with 6-7 feet from the primary location, at least 8 feet away from the possible false triggering area.

**Hotel Room :**

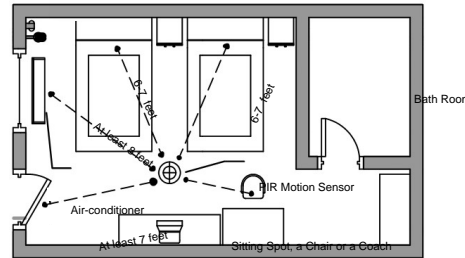


Figure 2

**Private Office :**

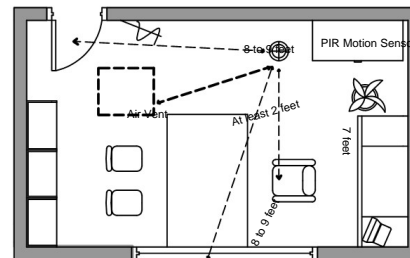


Figure 3

### INSTALLATION

- 1.The PIR Motion Sensor consists of two parts: Attachment Base and Motion Sensor.
- 2.Place Attachment Base on ceiling by using both screws and adhesive pad.
- 3.Insert the two AA batteries noting the proper orientation.
- 4.Lock the Motion Sensor by twisting onto the base.

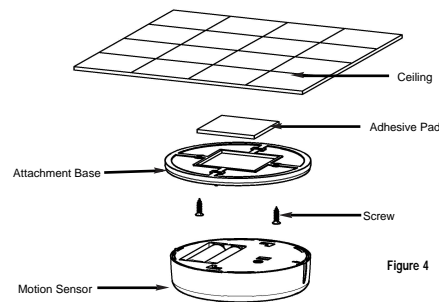
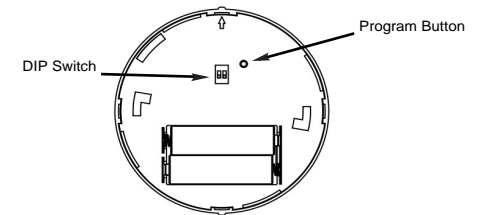


Figure 4

### ADJUSTMENT



### Sensor Sensitivity Range

Adjustable: 25%/50%/75%/100%

DIP Switch	PIR Sensitivity
↓↓	25%
↑↓	50%
↑↑	75%
↑↑	100%

### OPERATION

#### Adding to Z-Wave network

At the back of Motion Sensor, there is a program button which is used to add/remove and associated with other Z-Wave devices.

#### Manual Control

The program button on the ZWN-BPC Ceiling Mounted PIR Motion Sensor allows the user to:

1. When the controller is in add mode, press and hold the program button of ZWN-BPC for 2 second, and then the controller will verify the add.
2. When the controller is in remove mode, press and hold the program button of ZWN-BPC for 2 second, and then the controller will remove it from the current Z-Wave network.
3. Once program button is pressed and hold for 10 second, the device will send a device reset locally notification to controller. Then clear all of information for the network, and restore factory defaults, and reset the module. Use this procedure only in the event that the network primary controller is missing or otherwise inoperable.
4. Short press the program button of ZWN-BPC will send a Wake Up Notification.

### ADVANCED FEATURE

#### Wakeup command class

The motion sensor will send a wakeup notification command if it has been added into a Z-Wave network. The motion sensor will wake up

# INSTALLATION INSTRUCTIONS

periodically(default is 1 minutes) as desired depending on time interval you set from wakeup command class and resend the wakeup notification command unless configured for another time interval. The motion sensor will stay awake for 2 seconds and then go back to sleep to conserve battery life. It will also go to sleep when receives command WAKEUP\_NO\_MORE\_NOTIFICATION. The motion sensor can be woken up manually: Once short press the program button,it will send singlecast wake up notification to controller devices.

## Specification for WAKEUP\_INTERVAL\_SET:

0x00003C Minimum value (Equal to 60 seconds)  
 0x015180 Maximum value (Equal to 68400 seconds, or 24 hours)  
 0x00003C Default value (Equal to 60 seconds, or 1 minutes)  
 0x000000-0x00003B, 0x015181-0xFFFF, these values will be ignored.

## Configuration command class

Configuration parameter can be used to adjust the delay time of sending basic set off command after motion sensor sends the basic set on when motion detected. Example, if the configure parameter is 3 , the nodes of association group 4 that have turn on ,will turn off after third times waking up. When the Wake\_Up\_Internal are 5 minutes ,the minimum time of turning on are 15 minutes.

For some controller, after configuration and association setting, please wake up ZWN-BPC manually by pressing the program button.

Parameter NO.	Size	Description	Valid Value	Default Value
1	1 Byte	It is minimum time when the associated nodes keep turn on	(n*WAKE_UP_INTERVAL)	1

**Note :** Removing device from the network, the value of data will be reset.

## Notification

V1 Alarm Type	0x00
V1 Alarm Level	0x00
Notification Type	0x07
Event	0x08

## Association

Grouping ID	Max number of nodes	Description
1	1	1. Battery Report Lifeline: 2. Notification Report 3. Device Reset Locally Notification

2	5	Sensor Basic rep: Basic Report
3	5	Sensor Notifi rep: Notification Report
4	5	Sensor Basic set: Basic Set 0x00/0xFF

## Restoring Factory Defaults

All information of network can all be restored to their factory default settings by using your primary controller or manual reset control to reset the device.

## Battery command class

ZWN-BPC will check the battery power level every day and report the battery level by sending singlecast BATTERY\_REPORT. When battery

level is greater than 2.8V, it will send singlecast command (BATTERY\_REPORT, value 0x64). Or else when battery level is greater than 2.6V, it will send singlecast command (BATTERY\_REPORT, value 0x10). Or else when battery level is greater than 2.4V, it will send singlecast command (BATTERY\_REPORT, value 0x00). Or else when battery level is less than 2.4V, it will send singlecast command (BATTERY\_REPORT, value 0xFF).User needs to replace new batteries.

## FCC COMPLIANCE STATEMENT

The 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 uses, generates and can radiate radio frequency energy and if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. 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 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 .

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

## TROUBLESHOOTING

### Cannot carry out adding, deleting or association

1. Check to see if the battery is running out.
2. Make sure the battery is in right place.
3. Check if the wireless distance is too far

### Cannot control the connected modules

1. Check to see if the battery is running out.
2. Check if the wireless distance is too far.

### The sensor does not working

1. Check to see if the battery is running out.
2. Check if the wireless distance is too far.
3. Look for any nearby source of infrared energy that may interface.

## WARRANTY INFORMATION

Our company warranties this product to be free of defects in materials and workmanship for a period of two(2) years. There are no obligations or liabilities on the part of our company for consequential damages arising out of, or in connection with, the 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.

Sep, 2017  
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