ENERWAVE®

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 600ft²
Z-Wave Frequency..... 908.42MHz(US)
RF Range.....Up to 100 feet line of sight

◆ FEATURE

- Adopt wireless RF technology
- 360 degree ceiling mounted cover up to 600ft²
- 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

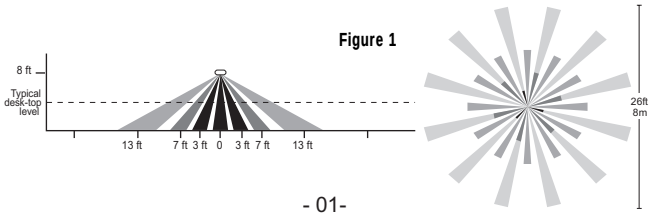
The PIR Motion Sensor ZWN-BPC is a Z-Wave enabled device and is fully compatible with other Z-Wave certified device. This device is typically used in conjunction with the ZWN-BDS to monitor the environment and provide hand-free lighting control, it can also trigger a Z-Wave enabled alarm when motion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

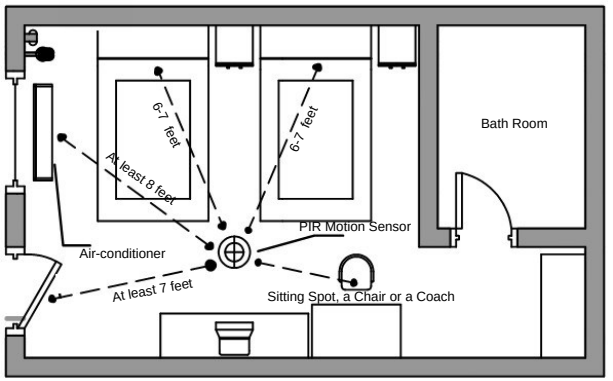


Figure 2

Private Office :

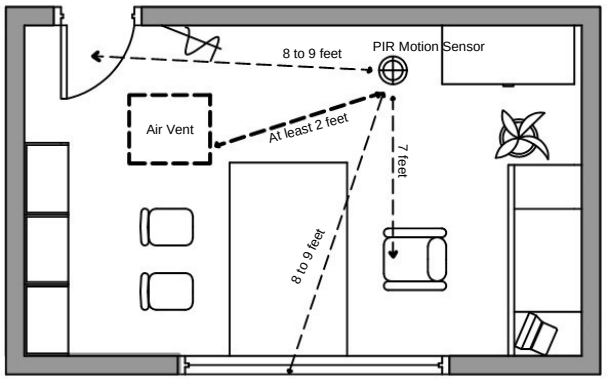


Figure 3

◆ 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.

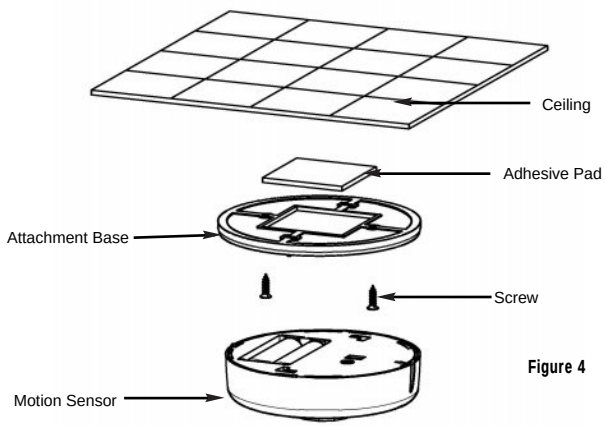
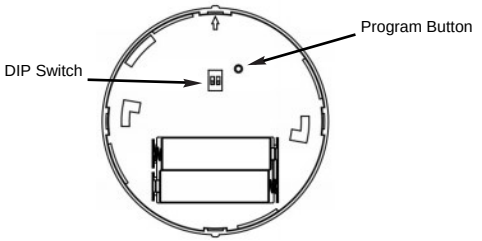


Figure 4

◆ ADJUSTMENT



Sensor Sensitivity Range

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

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

INSTALLATION INSTRUCTIONS

◆ OPERATION

Adding to Z-Wave network

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

Adding

1. Set a Z-Wave controller into adding mode.
2. Press and release the program button located at the back of motion sensor to add it into your Z-Wave network and send Node Information Frame.
3. Program LED will stay solid for 5 seconds and turn off when succeeds.
4. If the LED never light on and adding mode times out, then repeat the adding process again and delete it if necessary.

Deleting

1. Set a Z-Wave controller into deleting mode.
2. Press and release the program button located at the back of motion sensor to delete it into your Z-Wave network and remove Node Information Frame.
3. Program LED will blink 3 times after press the program button, that means it is not in any Z-Wave network.

Association

To complete Z-Wave association, please refer to your controller's manual . Each controller has its own association method. If your controller needs sensor to wake up, please press and hold the program button for 1 second, the ZWN-BPC will wake up manually.

Note: If the motion sensor is not added in Z-Wave network, program LED will blink three time when power applied or program button pressed.

◆ ADVANCED FEATURE

Test mode

This is designed for users to test the PIR function. When ZWN-BPC is in test mode, it will be awake for 15 seconds. Users can make any movement to check whether the PIR function works. If ZWN-BPC detects movement, the red LED will blinks.

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 periodically(default is 30 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 10 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: press and hold the program switch for one second, when release the switch it will send broadcast wakeup notification or single--cast wakeup notification to associated devices.

Specification for WAKEUP_INTERBAL_SET:

0x0000F0 Minimum value (Equal to 240 seconds)
0x015180 Maximum value (Equal to 68400 seconds, or 24 hours)
0x000708 Default value (Equal to 1800 seconds, or 30 minutes)
0x000000-0x0000EF, 0x015181-0xFFFFFF, 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.

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

Parameter number	0
Parameter Size	1
Valid value	0-255
	0: Not send basic set off
	1-240: N minutes
	241-255: 15 seconds

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

Battery command class

ZWN-BPC will check the battery power level every day and report the battery level by sending broadcast BATTERY_REPORT. When battery level goes down to 1%, it will send broadcast low power warning command (BATTERY_REPORT, value 0xFF). User needs to replace new batteries.

Association command class

ZWN-BPC can control devices by using this command class and COMMAND_CLASS_BASIC. If a device is associated by ZWN-BPC, the motion sensor will send basic set on/off to it when motion detected. ZWN-BPC only supports one group with 5 nodes association.

◆ 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.

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