Motion Sensor detailed information

Introduction

The abode wireless motion sensor uses advanced ADSP algorithms to ensure exceptional performance in sensitivity, reliability, and false alarm immunity

Once installed, and your system is armed in the away mode, when movement is detected, the device will be triggered and transmit an alarm signal to the abode gateway for processing using the web and mobile app. The motion has been designed to give a detection range of 40'+ when mounted at 6.5' to 8' above the floor. When installed as suggested, its _invisible motion sensing beams can pass over the head of a pet_. For large pets, install 8' from the floor, this will help to raise the detection beams higher. Correct placement of the motion is important to help prevent false alarms from pets.

The motion sensor is designed to be mounted on ether a flat surface or in a corner, there is 2 side tape included that can be used on the flat back or on each edge of the device so it will stick into a surface or corner position . Although there are screws included with the device for mounting, if more 2 sided tape is needed it can be found at your local hardware store.

It is recommended to install the motion sensor in the following locations.

- Mount where the pets cannot come into the detection area by climbing on furniture, or other objects, and do not aim the detector at stairways that animals can climb on.
- Locate in a position such that an intruder would normally move across the motion's field of view.

Identifying the components

Please follow the instructions below to complete the installation of the motion sensor. The motion sensor needs to be Paired (added) to the gateway, follow guide on page 4 for pairing the motion sensor.
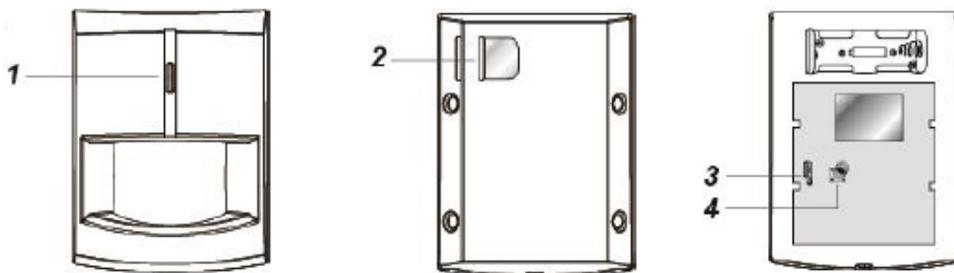
1. **Function Button/LED indicator**
   Used to pair the motion with the gateway
   Used to place the sensor into the test mode
2. **Battery pull tab** (Pull out to active the sensor)
3. **Sensitivity Jumper Switch (JP3)** -If the jumper is ON, the sensors detection sensitivity is set to high. **(Factory default).** If jumper is removed (OFF) it is set for normal sensitivity detection
4. **Tamper Switch** protects the sensor from unauthorized cover opening and will send notification to users.

abode Systems Inc. Website: www.goabode.com 2016
abode reserves the right to update this product information at any time without notice.

1

Sleep Timer

The motion sensor has a "sleep time" of approximately 1 minute to conserve battery power. When system is armed away and motion is detected the motion sensor will not retransmit for 1 minute; if any further movement is detected during this sleep period, it will extend the sleep time by another minute so the continuous movement in front of the motion will not exhaust the battery.

Test Mode

Test mode is for you to check the motion sensors detection range. To enter the test mode, press and hold the function button 3 full seconds and release the button to enter the test mode for 3 minutes. The motion camera will warm up for 30 seconds. Please do not trigger the device during this warming-up period. After the warm-up period, you can trigger motion camera (by walking in front of it) to check motion detection range. If motion is detected, the Red LED will light up for 2 seconds.

LED Indicator light

Under normal conditions there will be no light on the motion sensor. The LED function light will not light up unless it is in the walk test mode, or if there is a fault in its communication to the gateway.

• When the cover is opened and the tamper switch is violated, the LED will light up for 2 sec to indicate it is transmitting the "Tamper" signal.

• When the sensor is in Test mode, the LED will light up every time a movement is detected.

For live testing, arm the system into the away mode and leave the room so the motion can not view you. What for the system to fully arm. The motion will wake up 30 seconds after the system has fully armed. And only then can you walk across its field of view, it should detect and trigger the alarm instantly, then disarm the system immediately

Battery

The motion sensor uses one CR123 lithium3V batteries as its power source. Low battery detection occurs about one month before complete exhaustion. A low battery notification will be sent to the web and mobile app. The battery has been installed by the factory before shipment with a pull tab activator installed.

Mounting the sensor

The sensor is designed to be mounted on either a flat surface or in a corner situation with fixing screws provided.

• The base has knockouts, where the plastic is thinner, for mounting purpose. Two knock outs are for surface fixing and four knockouts are for corner fixing as shown in the picture

Surface mounting:

I. Remove the fixing screw and cover assembly.
II. Break through the knockouts on the inside of base.
III. Using the holes as a template, drill holes in the surface.
IV. Insert the wall plugs if fixing it into plaster or brick.
V. Screw the base into the wall plugs.
VI. Screw the cover onto the base.

Corner mounting:

I. Break through the four corner knockouts.
II. Using the four holes as a template, drill holes in the surface of the corner
III. Insert the wall plugs
IV. Screw the base into the wall plug.
V. Screw the cover onto the base.

Installation Recommendations

The motion sensor is designed to give a typical detection range of 40' when mounted at 6.5' above floor. When mounted at 6.5' above ground, it gives a PET resentence of 25'. As the motion is higher from the floor, it gives a farther PET resistive range

Pet Immunity

While it's not possible to insure that a pet will not be detected by the motion sensor, there are some basic rules that when followed, can help to mitigate the chance of pet detection.

When deciding on the height of the motion, remember to take the possible blind spot into consideration.

The blind spot underneath the motion sensor enlarges Proportionally to the height of the devices mounting site.

- Please note that the performance is affected by external factors, such as height of detected object, desired detection range, installation area…etc. The suggested mounting height could be adjusted according to actual installation environment factors.
- Mount where the animals cannot come to the detection area by climbing on furniture or other objects.
- Don't aim the detector at stairways the animals can climb on.
- In a position such that an intruder would normally move across the motions field of view.
- In a corner to give the widest view.
- Where its field of view will not be obstructed e.g. by curtains, ornaments etc.

Limitations

- Do not install the motion completely exposed to direct sunlight.
- Avoid installing the motion in areas where devices may cause rapid change of temperature in the detection area, i.e. air conditioner, heaters, etc.
- Avoid large obstacles in the detection area.
- Not pointing directly at sources of heat e.g. fire places heating vents etc.
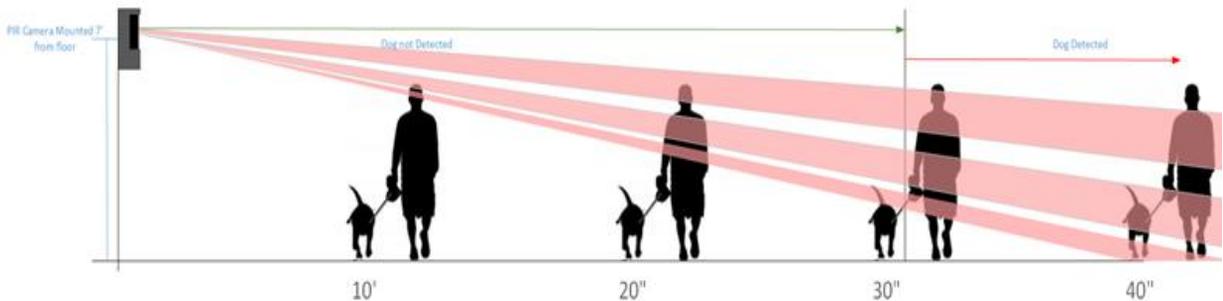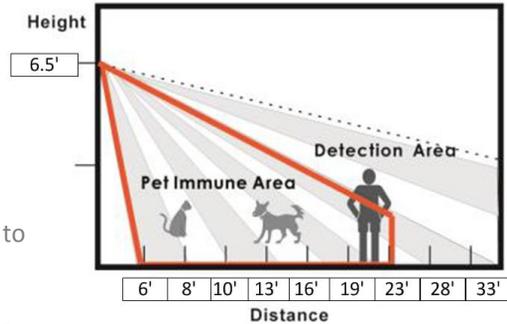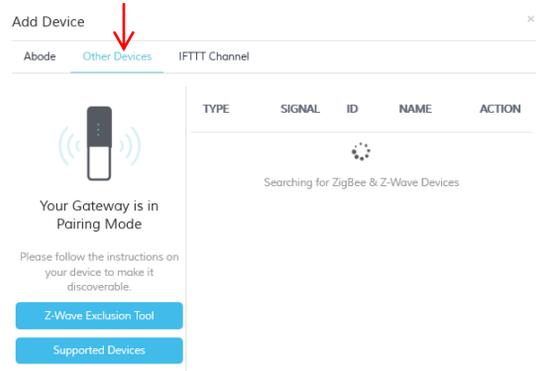
a b o d e

When adding the motion sensor to your gateway, you will need to use the abode web app. Log into your account at www.my.goabode.com and follow the three steps below.
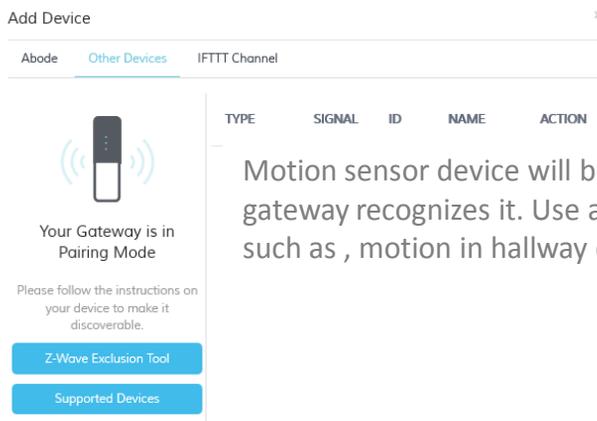
① Click on Add device

Devices		+	( )
DEVICE	**NAME**	**STATUS**	
	Balcony door		
	Basement Door		
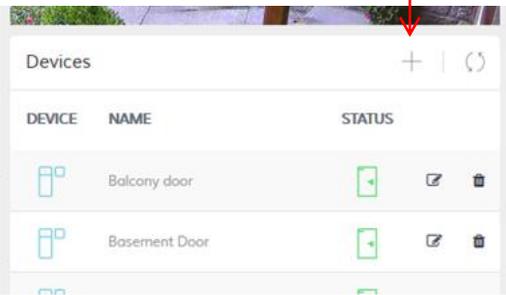
② Then click on Other Devices. This will open the paring screen and the gateway is ready for you to add the device.

Add Device					×
Abode	Other Devices	IFTTT Channel			

TYPE	SIGNAL	ID	NAME	ACTION

Searching for ZigBee & Z-Wave Devices

Your Gateway is in Pairing Mode

Please follow the instructions on your device to make it discoverable.

Z-Wave Exclusion Tool

Supported Devices

③ **Follow the steps below to pair the motion sensor with the gateway.**

A. Pull the battery tab out form the back of the motion sensor, this will activate the motion sensor. Press in the function button on the face of the motion sensor and release, this will send the pairing signal to the gateway. If the motion sensor successfully pairs with the gateway, the motion sensor will show up in the Add Device list, you can then complete the process and name the siren.

Add Device					×
Abode	Other Devices	IFTTT Channel			

TYPE	SIGNAL	ID	NAME	ACTION

Your Gateway is in Pairing Mode

Please follow the instructions on your device to make it discoverable.

Z-Wave Exclusion Tool

Supported Devices

Motion sensor device will be listed, when gateway recognizes it. Use a descriptive name such as , motion in hallway etc.

After paring the motion sensor with the gateway, check the web app to insure that it has been included into the device list. If it did not pair with gateway , repeat steps 1 though 3.

abode Systems Inc. Website: www.goabode.com 2016
abode reserves the right to update this product information at any time without notice.

4

System Operation

Arming and disarming the system

The system has three modes of operation that the user can choose from

1 **Away mode** turns on the perimeter protection: door/window sensors and interior motion sensor

2 **Home mode** turns on the perimeter protection: door/window sensors and turns off the interior motion sensor.

3 **Standby mode** turns off the intrusion protection: door/window sensors and interior motion sensors are off, but other sensors such as flood sensors, smoke and CO sensors are still enabled.

ENTRY DELAY- When the system is armed, the user can enter the home and the system will start the entry delay timer, giving the user time to disarm the system. If system is not disarmed before the entry delay ends, the alarm system will be triggered and the siren will start screaming. (Time delay is set to one minute but user adjustable from the abode web app)

EXIT DELAY- When the system is armed while the user is inside the home, the system provides the user with a one minute exit delay to leave the home. (This timer can be adjusted on the web pp). If the system is armed into the home mode, the user can stay inside and the system will arm the entry points of the home but leave the interior motion sensors off. If armed in the away mode all occupants must leave before the exit delay timer ends. If some one remains in the home after the end of the exit delay and passes in front of a motion sensor the alarm will be triggered and the siren will scream.

Notifications for system mode change.
All system mode change events, are listed on the web and mobile app timeline. Push notifications to the mobile app and email notifications can be sent when mode change takes place. All notifications are user controllable from the abode customer's web app account under settings.