

## ABOUT YOUR POSEY PASSIVE INFRARED (PIR) SENSOR

The Posey Passive Infrared (PIR) Sensor is designed to work with Posey Fall Alarms that are sensor activated. When used with a Posey Fall Alarm, the PIR Sensor is a non-invasive means to monitor patient movement. Powered by a 9-Volt battery or AC power, the PIR Sensor activates the alarm when it senses a temperature change, as when a person moves into range of the infrared beam.

Patients who may benefit from the use of a PIR Sensor include very active or restless patients, whose movements are likely to cause false alarms with the use of mattress or clip-on type sensors. The PIR Sensor reduces false alarms because it senses a temperature change rather than patient weight or motion (For example, the PIR Sensor will not cause an alarm if the patient moves from one end of the mattress to the other, or if an object falls off the bed).

When used properly, Posey Sensors and Fall Alarms provide the earliest possible warning that a patient is at immediate risk of falling. However, these devices DO NOT prevent falls and are not a substitute for good nursing care and regular visual monitoring.

### CAUTION

- This device may not be suitable for all high fall-risk patients. See Posey catalog for other options for such patients.
- The PIR Sensor is designed for use with Posey Fall Alarms ONLY. NEVER connect a Posey Sensor to other manufacturers' alarm units.
- Read this entire instruction sheet and save for future reference. Before use, staff should read and follow all use and safety instructions in the Posey Fall Alarm manual.

## PIR SENSOR COMPONENTS

Each PIR Sensor is shipped to you with:

- PIR Sensor
- 9-Volt Alkaline battery
- AC Power Adapter with extension cord
- Mounting Arm
- Self-adhesive hook-and-loop straps (2 sets)
- 24" (61 cm) Sensor cord
- Cable tie

**REF 8351** PIR Sensor

**WARNING** PIR Sensor will not function unless connected to a working Posey Fall Alarm.

Posey Fall Alarms sold separately.



## PREPARING THE PIR SENSOR FOR USE

### Powering the PIR Sensor

The PIR Sensor can be powered by either: one 9-Volt alkaline battery; or AC power using the included adapter. Estimated life of a 9-Volt alkaline battery is 30 days. Actual life depends on frequency of alarm.

### Inserting/Changing the Battery:

1. Turn PIR Sensor "OFF".
2. Slide battery door off in direction of arrow, and set it aside (fig. 1).
3. Remove battery and hold in one hand with thumb on terminal cap. Terminal cap wires should be away from your thumb. DO NOT pull on terminal cap.
4. Use your thumb to push terminal cap up, off battery (fig. 2).
5. Connect terminal cap to a fresh 9-Volt alkaline battery.
6. Carefully insert battery and slide battery door in place.
7. Slide switch to turn PIR Sensor "ON". LED should flash once per second to indicate power is ON.

**WARNING** PIR Sensor will "chirp" when a new battery is needed. Change battery at once. ALWAYS check PIR Sensor and alarm function after changing battery.



Fig. 1



Fig. 2

## CONNECTING THE POWER ADAPTER:

### **⚠WARNING**

- Use of AC power bypasses the PIR Sensor battery; the PIR Sensor will NOT switch to battery power in an electrical failure. If this occurs, UNPLUG the AC power cord and use the 9-Volt battery until electricity returns. Check to ensure the PIR Sensor is ON and alarm works properly.
- ALWAYS keep a fresh 9-Volt battery in the PIR Sensor in case of loss of electrical power.

1. The AC power adapter comes with a 6 ft. (1.83 m) cord and a 6 ft. (1.83 m) extension cord.
2. Connect the AC cord to PIR Sensor jack labeled "9VDC" (fig. 3). If a longer cord is needed, connect the PIR Sensor extension cord (fig. 4).

**⚠WARNING** Make sure to route power cord so it is out of the footpath and does not pose a tripping hazard.



Fig. 3



Fig. 4

## INSTALLING THE PIR SENSOR AND CONNECTING TO A POSEY FALL ALARM

The PIR Sensor can be used:

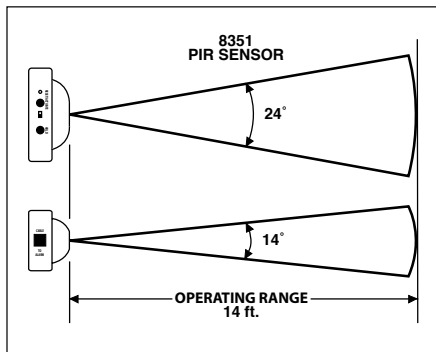
- On the exit side of a bed to alert staff of an attempted bed exit; or
- In a doorway to monitor an attempted entry or exit.

## OPERATING RANGE

See diagram below.

- With the PIR Sensor horizontal, the infrared beam projects up to 14 feet (4.27 m) at an angle: 24° WIDE; and 14° HIGH (This is the normal position for bed use).
- With the PIR Sensor vertical, the beam projects at an angle: 14° HIGH; and 24° WIDE (This is the normal position for door use).

How and where you attach the PIR Sensor may vary. Try different positions until you find the setup best suited to your patient.



## BED MOUNT

1. Use mounting arm (fig. 5) to attach PIR Sensor to footboard.
2. Choose a site outside of footboard on exit side of bed. Mounting arm should extend beyond width of footboard so PIR beam projects along entire side of bed.
3. Clean site with an alcohol wipe and let dry.
4. Peel backing off self-adhesive loop (soft) patch and press into place at mounting site (fig. 6).
5. Attach mounting arm to footboard (fig. 7).



Fig. 5



Fig. 6



Fig. 7



Fig. 8

**NOTE:** To make sure hook and loop hold securely, "work" strips side-to-side as you press them firmly together.

6. Attach PIR Sensor to mounting arm so beam is directed parallel to side of bed (fig. 8).
7. Mount Posey Fall Alarm close to PIR Sensor:
  - **Posey KeepSafe Alarm.** Attach hook section of alarm to loop section of mounting arm (fig. 9).
  - **All other Posey Fall Alarms.** Attach alarm to footboard using appropriate bed bracket (fig. 10).
8. Plug one end of sensor cord into PIR Sensor jack labeled "cable to alarm" (fig. 11).
9. Plug other end of sensor cord into alarm jack (fig. 12).
10. Use cable tie to secure excess slack to mounting arm (fig. 13).



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 14



Fig. 15



Fig. 13



Fig. 16



Fig. 17



Fig. 18

**⚠ WARNING** To avoid false alarms, DO NOT point PIR beam towards anything that could change ambient room temperature, such as: a window; a mirror that reflects sunlight; or a heating or cooling vent or fan.

## DOOR MOUNT

1. Use hook-and-loop strips to secure PIR Sensor in the doorway.
2. Choose a site on outer edge of door frame. Possible locations are:
  - At top of door frame, with beam pointing towards floor; or
  - On side of the door frame, with beam pointing across width of door.
3. Clean site with an alcohol wipe and let dry.
4. Attach self-adhesive loop (soft) patch to bottom of PIR Sensor. Be sure not to cover edge of battery door (fig. 14).
5. Attach self-adhesive hook (rough) patch to mounting site (fig. 15).
6. Attach PIR Sensor to door frame, making sure it does not interfere with opening or closing door (fig. 16).
7. Mount Posey Fall Alarm to wall near PIR Sensor (fig. 17). **NOTE:** To make sure hook and loop hold securely, "work" strips side-to-side as you press them firmly together.
8. Plug one end of sensor cord into PIR Sensor jack labeled "cable to alarm".

9. Plug other end of sensor cord into alarm jack.
10. Use cable tie to take up excess slack (fig. 19).

## USING THE PIR SENSOR

The PIR Sensor responds to a change in temperature. Once it adjusts to ambient room temperature, it triggers the alarm when it senses a change in temperature, as when a person moves into range of PIR beam.

**⚠ WARNING** The Posey PIR Sensor is an electronic device. It may fail if immersed in liquid or subjected to severe shock, such as being dropped. To reduce risk of serious injury or death, inspect and test PIR Sensor and alarm function EACH TIME before leaving patient unattended.

## MONITORING YOUR PATIENT/RESIDENT:

1. With PIR Sensor connected to a Posey Fall Alarm, turn PIR Sensor and alarm unit ON.
2. PIR Sensor LED will flash once every second, indicating power is ON.
3. Press the PIR Sensor Reset/Activate button.
  - You will hear two short “beeps”; you have 30 seconds to move out of range of PIR beam.
  - After 30 seconds, you will hear another short “beep”. The LED will flash once every three seconds to indicate PIR Sensor is monitoring.

MODE	LED STATUS
Power Up	1 flash per second
Activating	2 flashes per second
Monitor	1 flash every 3 seconds
Alarming	Solid Red with alarm sounding
HOLD	Solid Red and no alarm

**⚠️WARNING** ALWAYS check alarm and PIR Sensor function if LED displays SOLID red. This may indicate: alarm is OFF; sensor cord is damaged or not properly connected; alarm or PIR Sensor is on HOLD; or other possible failure.

## TO VERIFY ALARM FUNCTION:

1. Plug sensor cord into PIR Sensor and Posey Fall Alarm jacks.
2. Turn on both units. Make sure PIR Sensor LED and alarm LED are lit, indicating units are ON.
3. Check that batteries are fresh. Change batteries at once if you hear a low-battery warning “chirp” from either device.
4. Press Reset/Activate button to activate the PIR Sensor. Listen for a “beep”. **NOTE:** PIR Sensor will NOT activate on its own.
5. Move your hand or arm into range of PIR beam. Alarm should sound and/or the Nurse Call Interface (if in use) should activate each time you do this.

**⚠️WARNING** To reduce the risk of severe injury or death: ALWAYS check to make sure that PIR Sensor and alarm units are ON and working properly before leaving patient unattended. Move your hand or arm into range of PIR beam to check alarm function. STOP USE AT ONCE if alarm fails to activate.

## RESPONDING TO AN ALARM:

1. When a portion of patient’s body moves into range of the beam, alarm will activate and PIR Sensor LED will stay ON.
2. **To pause alarm for 5 seconds:**
  - Press PIR Sensor Reset/Activate button. You will hear a short “beep” and LED will flash 2 times per second to indicate PIR Sensor is resetting.
  - You have 5 seconds to attend to patient and move out of range of PIR beam.
  - After 5 seconds, you will hear another short “beep” and LED will flash every 3 seconds to indicate monitoring has resumed.
3. **If you need more than 5 seconds:**
  - Press the HOLD button on the PIR Sensor. You will hear a long “beep” and LED will stay ON, indicating PIR Sensor is on HOLD.
  - PIR Sensor will remain on HOLD until you press the Reset/Activate button. After 5 seconds, you will hear another short “beep” and LED will flash every 3 seconds to indicate monitoring has resumed.

## ⚠️WARNING

- **DO NOT use HOLD feature of fall alarm when a PIR Sensor is connected. Doing so will override the PIR Sensor. The alarm will remain on HOLD and will fail to activate even after the PIR Sensor is reset. Use the PIR Sensor HOLD button instead.**
- **ALWAYS check PIR Sensor and alarm function before leaving patient unattended.**

## CARE OF YOUR POSEY PIR SENSOR

### CLEANING:

1. Dampen a clean cloth with disinfectant. Take extra care with sensor plugs, and make sure liquid does not enter PIR Sensor unit.
2. **NEVER:**
  - Use any cleaner that contains Phenol or Benzyl;
  - Immerse in liquid; or
  - Sterilize with heat.
3. Dry with a clean cloth.

### STORAGE:

- This device is designed for use in normal indoor environments.
- Store in ambient warehouse temperatures at normal humidity levels. Avoid excess moisture or high humidity that may damage unit.

### DISPOSAL:

Dispose of per facility policy for BIOHAZARDOUS material. Be sure to follow all laws that apply.

