

- 1. Open back.
- 2. Select 15 second disable period by following the second paragraph of the instructions.
- 3. Don't install battery yet.
- 4. Connect wires to points shown in Fig. 1 (the output of the PIR unit).
- Note: this is the output of the PIR unit and it will light a LED or energize a 5V relay for about 2 seconds when it detects an intruder - simply wire as shown in Fig 2. Note: you can replace the relay in Fig. 2 directly with the G1148 electronic siren if you purchased this. Install a 9V battery in PIR unit.
- 6. If you wish a longer "alarm on" time build the circuit shown bottom right (Fig. 3).

Things to consider....

After installing a fresh battery, allow the unit to sit for about two minutes to give it ample time to charge its capacitors. There is a refractory period of about 10 seconds from the time that the unit is activated to when it can be activated again. You will also want to experiment with the orientation of the unit to the area that you are monitoring. You will notice more sensitivity towards the sides of the unit instead of straight on. Experiment for best results. If you experience signal transmission problems, the trim pot (P201) may need to be adjusted. Turn it all the way counterclockwise and then back clockwise. Do this several times.



Quorum

A-160 PASSIVE INFRARED SENSOR

Instructions for Use

Congratulations on your purchase of the Quorum A-160 Passive Infrared (PIR) Sensor. Used in conjunction with the Quorum A-160 Security Monitor and A-160 RF Receiver, you PIR Sensor will help secure any entry in your home, apartment, or office. When the RF Receiver receives an electronic signal from a PIR Sensor, it causes the Security Monitor alarm to sound, startling and intruder and alerting you of their presence.

In addition to the PIR Sensor, the RF Receiver will accept signals from the A-160 Window/Door Sensor and the A-160 Glass Break Sensor. Contact your Quorum Distributor for more information or to order any of these products.

Tamper Switch

The PIR Sensor has a tamper switch installed on the main circuit board. Whenever the two sections of the case are pulled apart, the switch will open, triggering the sensor to send a signal to the base unit. Ensure that the Security Monitor is turned off prior to opening the case.

Adjustments

All adjustable components on the circuit board are factory-set for proper operation of the sensor. Except where instructed in these instructions, do no change any of the settings on the circuit board, as this may make your sensor fail to operate and will void your warranty.





Installing Your Sensor

The PIR Sensor is designed to detect up to 40 feet away a moving heat source the size of a person. It has a cone of coverage approximately 90 degrees wide, directed straight ahead and downward from the unit (see figure 1). It should be installed to cover likely avenues of approach to and from the entryways of the house. Other possible coverage areas are hallways and areas around valuables. For installation tips specific to your home, consult your Quorum Distributor. This unit is not recommended for outdoor installation.

- 1. Open the sensor by depressing the rectangular tab on top of the casing while pulling the two sections apart.
- 2. Using the hardware provided with the sensor, attach the back plate of the sensor to the wall.
- 3. Proceed to the next section.

Setting the Electronic Address

There are six DIP switches inside the PIR Sensor, which are used to set the electronic address of the unit. Setting a unique electronic address decreases the likelihood of interference with other radio devices in your area. You should set these switches to the same electronic address as the one for your RF Receiver.

- 1. If you have not already done so, open the PIR Sensor.
- 2. To move a switch to the on or off position, push it with a paper clip or other narrow object.
- 3. Proceed to the next section.

Quorum

A-160

PASSIVE

SENSOR

INFRARED

Installing the Battery

- 1. If you have not already done so, open the PIR Sensor.
- 2. Insert a 9-volt alkaline battery, connecting the negative terminal of the battery to the terminal marked "GND" on the sensor circuit board.
- 3. Re-attach the two sections of the sensor by snapping the front section back into place.

Selecting the 15-Minutes Disable Period

The PIR is set at the factory for a 15-minute disable period. In other words, after the sensor is triggered it is disabled for 15 minutes to conserve battery power by preventing multiple triggering from the same moving heat source. To switch from a 15-minute to a 15-second disable period, follow these instructions. Please remember that turning off the 15-minute disable period will considerably decrease the expected battery lifespan.

- 1. If you have not already done so, open the PIR Sensor.
- 2. Locate the black pull-tab on the circuit board inside the PIR Sensor (see figure 2).
- 3. Pull the tab off of the top two pins, then push it completely onto the bottom two pins.
- 4. Re-attach the two sections of the sensor by snapping the front section back into place.

Testing Your Sensor

You should test your PIR Sensor after installing it, and once a month thereafter. Before testing your sensor, your RF Receiver must be installed.

- 1. Note the current setting of the SENSITIVITY knob on the back of your Security Monitor, then turn the sensitivity down to the minimum setting (0).
- 2. Turn the Security Monitor keyswitch to TEST, the red ARMED lamp will glow and the Security Monitor will emit a short test tone.
- 3. Walk in front of the sensor within the intended coverage area. The Security Monitor should emit a series of several beeps or clicks. If it does not, refer to the troubleshooting section at the end of these instructions.
- 4. Turn the Security Monitor keyswitch to OFF.
- 5. Return the SENSITIVITY knob to its original setting.

Important Points

- The PIR Sensor should not be exposed to water or excessive moisture. Clean with a cloth dampened with water.
- Only Quorum accessories should be used with the PIR Sensor.
- Replace the battery only with a 9-volt battery. The estimated battery life is 6 months.

Troubleshooting

Problem: Frequent false alarms.

Solution: Change the electronic address on your PIR Sensor, RF Receiver and all other sensors.

Solution: Make sure you are using A-160 sensors.

Solution: Disconnect the RF Receiver from the Security Monitor, then adjust the sensitivity of the Security Monitor according to the steps in the Security Monitor instruction book.

Solution: Check each of your RF Sensors for correct functioning using the test procedure in the Sensor instructions.

Problem: A moving person in front of your PIR Sensor does not cause the Security Monitor to sound an alarm. **Solution:** Make certain that the electronic address of your PIR Sensor matches the electronic address of your RF Receiver.

Solution: Check that the battery is fresh and correctly installed in your PIR Sensor.

Solution: Check that the RF Receiver cable is firmly seated in the INPUT socket on the back of the Security Monitor. **Solution:** Check the power supply to your Security Monitor.

Solution: Turn the Security Monitor key switch to the ARMED position.