



# Arvin Home Systems

## Hello Everyone!

In the last issue we reminded you to test your alarm system and how to do it. This issue we'd like to talk about Motion Detectors. You most likely have one in your home. It's the small white box with the little red light probably sitting on the wall in a corner somewhere.

### What is the Motion Detector for?

-As the name implies it detects motion and is the second best line of detection in your home.

### What kind of motion does it detect?

-In the alarm industry, your motion detector is usually referred to as a 'P.I.R.', which stands for Passive Infra-Red. What it is basically sensing is heat, or more accurately, the differing amounts of heat being given off by any object and the movement of that object.

### How does it do that?

-Behind the squarish, glossy, plastic Fresnel lens that you see in the middle of the motion detector is an 'eye'. The 'eye' is made of a material that can 'see' the infrared energy that is given off most effectively by living things -namely you, me and our pets. It can read each cell that makes up the Fresnel lens and when too many cells register a large difference in heat it can trigger your alarm.



### Does it give off infrared?

-Nope. It's a passive device and only detects infrared.

### Then what is the little red light for?

-That light is simply to let you know when it senses, or 'sees', movement. If your alarm system were armed then it would be setting it off at that same moment.

### The little red light doesn't seem to go on and off consistently. How come?

-Although it senses heat, what it's really seeing is the **difference** in heat between the average room temperature and the bodies moving through the room. The bigger the difference, the more likely it is to trip the sensor eye. Since room temperatures and body heat can vary so much, the sensor may seem inconsistent. The simple fact is, an infrared motion detector will work best when the room is cold and a warm body moves through it. Plus, it does take it a few short seconds to process the heat signature once it's tripped.

### So, my pet will set it off too?

-Most likely. We do have Pet Immune Motion Detectors that need a bigger heat signature than say a small child to trip and we can replace your current detectors with those if you need.

### Can it cause a false alarm?

-We try to install the Motion Detector in a location that would least likely be prone to false alarms, but it can still happen. Any heat source and/or anything that can move is a potential trigger. Plants sitting in front of an air vent, or balloons left floating around are common. The difficulty of any security system is to make it as sensitive as possible without making it too sensitive!

Don't forget, you are responsible for maintaining your alarm system.

We are here to repair any problems, but we must rely on you to let us know when they happen!

We want to make sure that you're getting what you're paying for  
-communication between your alarm system and our monitoring company!

Visit our website! [www.arvinhomesystems.com](http://www.arvinhomesystems.com)