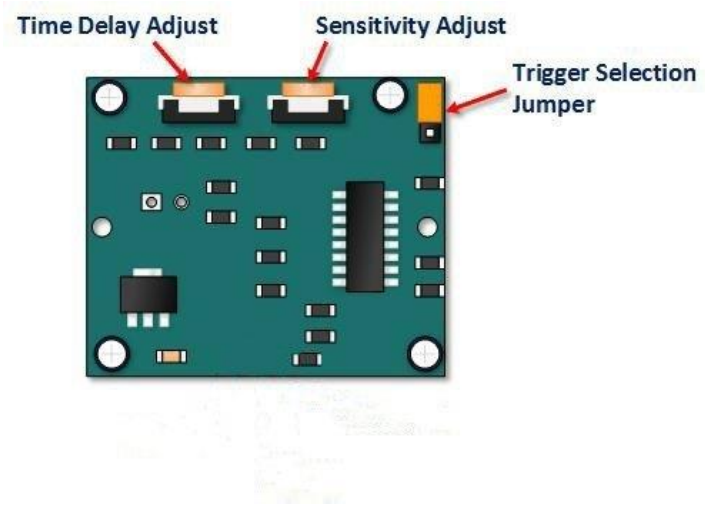
The I.R.I.S. by RelayAlert.com can utilize an optional HC-SR501 Passive Infrared (PIR) Motion Sensor relay module.

Our Passive Infrared Sensor combined with an output relay to alert when motion or a change in heat is detected.

Features adjustable sensitivity that allows for a detection range from 3 meters to 7 meters, also includes time delay adjustments and trigger selection that allow for fine tuning.

HC-SR501 Pin Outs and Controls



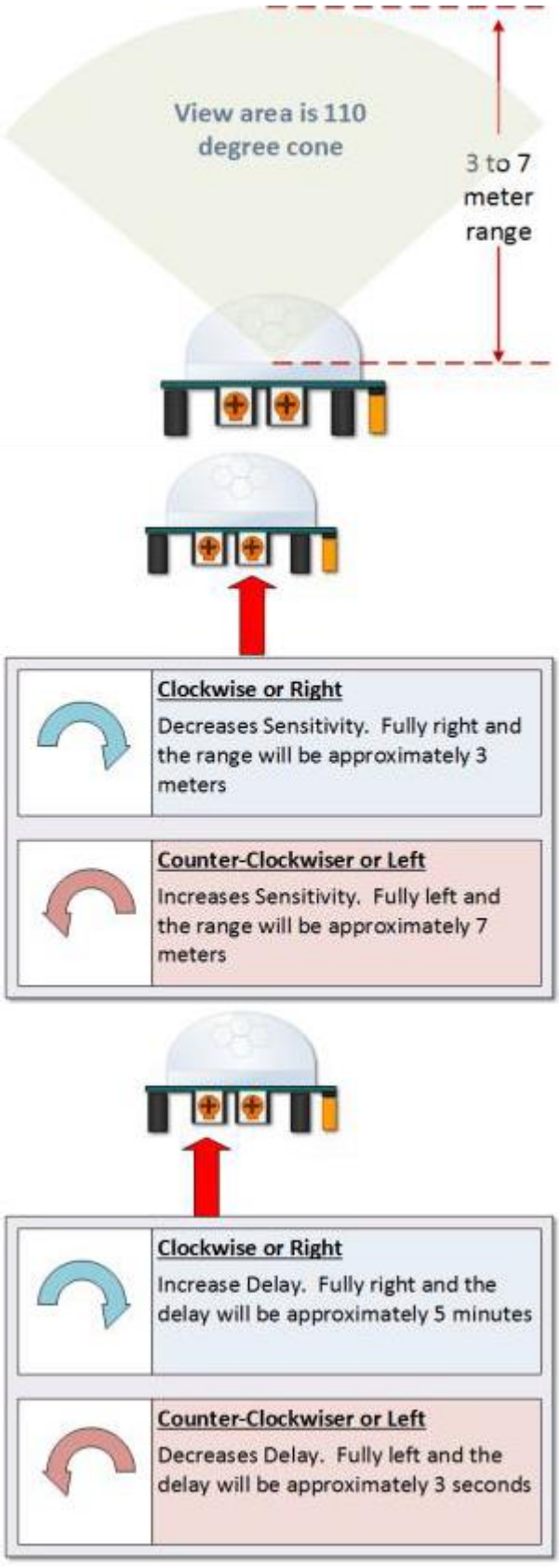
Pin or Control	Features	
Time Delay Adjust	Sets how long the output remains high after detecting motion	Anywhere from 5 seconds to 5 minutes.
Sensitivity Adjust	Sets the detection range	from 3 meters to 7 meters
Trigger Selection Jumper	Set for single or repeatable	
triggers.		
Wide Power Range	5 to 20 VDC Supply input	

IRIS PIR Functional Description

The SR501 will detect infrared changes and if interpreted as motion, will set its output low. What is or is not interpreted as motion is largely dependent on user settings and adjustments.

Device Initialization

The device requires nearly a minute to initialize.
During this period, it can and often will output false detection signals.
Circuit or controller logic needs to take this initialization period into consideration.



The I.R.I.S. eye module will detect motion inside a 110 degree cone with arange of 3 to 7 meters.

PIR Range (Sensitivity) Adjustment

As mentioned, the adjustable range is from approximately 3 to 7 meters.

Time Delay Adjustment

The time delay adjustment determines how long the output of the PIR sensor module will remain high after detection motion. The range is from about 3 seconds to five minutes.

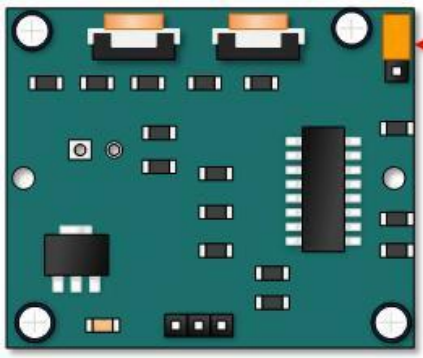
3 Seconds Off After Time Delay Completes – IMPORTANT

The output relay for this device will go LOW (or Off) for approximately 3 seconds AFTER the time delay completes. In other words, ALL motion detection is blocked during this three second period.

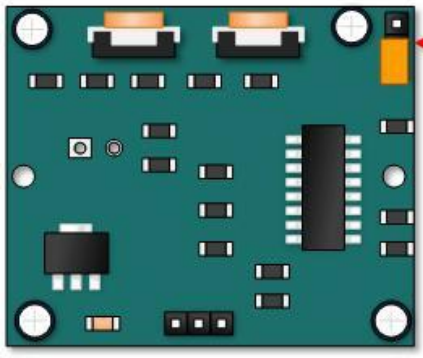
Trigger Mode Selection Jumper

The trigger mode selection jumper allows you to select between single and repeatable triggers. The affect of this jumper setting is to determine when the time delay begins.

- **SINGLE TRIGGER** – The time delay begins immediately when motion is first detected.
- **REPEATABLE TRIGGER** – Each detected motion resets the time delay. Thus the time delay begins with the last motion detected.



Single Trigger Mode – Time Delay is started immediately upon detecting motion. Continued detection is blocked



Repeatable Trigger Mode – Time Delay is re-started every time motion is detected.

More information about the I.R.I.S. Intelligent Relay Information System and other component modules available online at www.RelayAlert.com