

# WPIR Motion Sensor

## WPIR3

Made in Australia  
A.C.N 001 621 610

## Introduction

The **WPIR3 Motion Sensor** is an infrared movement sensor, which is battery operated and communicates with a receiver via radio transmission (RF). This detector is easy to install, provides excellent detection sensitivity and has a long battery life. The **WPIR3 Motion Sensor** can transmit different codes to your Receiver:

1. Alarm
2. Tamper
3. Low Battery



### IMPORTANT NOTES:

- **NEVER TOUCH THE PYRO SENSOR**
- **DURING THE WARM UP PERIOD**, (first 5 minutes after installing the batteries) **THE DETECTOR WILL NOT RESPOND TO THE TAMPER SWITCH OR TO MOVEMENT IN FRONT OF THE DETECTOR. YOU MUST WAIT 5 MINUTES BEFORE IT WILL RESPOND.**

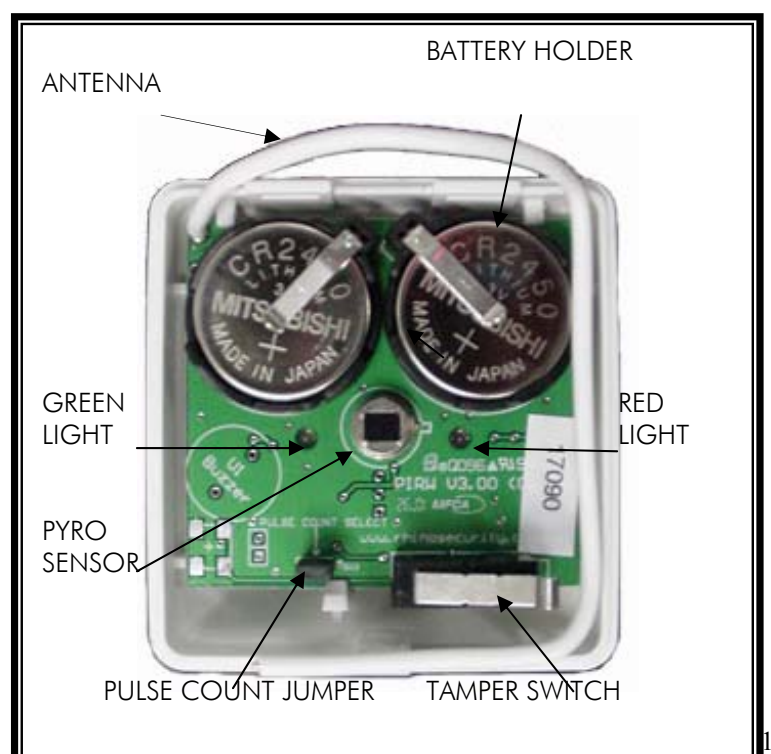
## Setup

Remove the front cover of the detector by unclipping the case from the top. Once the case is open, you will see a small square piece of insulation under one of the battery terminals. Remove this insulation. The Red & Green LED's will flash together 6 times to confirm that the detector now has power connected. Now replace the front cover.

### Warm Up Period:

You must wait approximately 5 minutes for the detector to warm up after connecting the batteries. During this period the detector **will not** detect or transmit. Once the detector has warmed up, the green and red lights will flash together 6 times to confirm that the warm up period has finished. The detector will now automatically enter **Normal** (Intelligent Power Saving) **Mode** - refer to page 2.

**Battery Type:** 2 x Lithium button cells  
Model: CR2450  
Voltage: 3 Volts



# Operation

## Test Mode:

- This mode is used when installing detectors to check & adjust operation, and also when programming detectors into your receiver. Refer to Receiver manual for programming instructions.
- Power the PIR up as previously described
- To place the detector in test mode, remove the front cover off the detector so that the tamper switch opens. This tells the detector to enter test mode. Both the red and green lights on the detector will flash together 6 times. Now replace the front cover.
- The detector will stay in test mode for approximately 3 minutes. During this time, each movement into and out of an infrared beam zone will be indicated via the LED's.
- Each pulse detection will be indicated by a single flash of the GREEN light.
- Valid alarm detection will be indicated by the RED light flashing once (see pulse count).
- Both detector lights will flash together 6 times to indicate that test mode has finished.
- Once test mode has finished the detector will automatically enter normal mode.

## Normal Mode: (Intelligent Power saving mode)

- The detector will enter this mode immediately after the warm up period. Normal operation is a very efficient mode for preserving battery life.
- The GREEN light is NOT operational in this mode.
- After a valid detection, the detector will transmit the alarm code to the receiver (the red LED will flash once) and then not respond for approximately 3 minutes. It will enter instead "intelligent power saving mode".
- After the three-minute period following a valid detection, the detector will be ready to detect again & transmit the alarm signal.

## Pulse Count on Valid Detection:

- The pulse count feature enables you to adjust the real life detection sensitivity of the detector i.e. how much movement is required to cause alarm detection. The pulse count can either be set to 2 or 3 via the jumper on the PCB. If the jumper is placed across both pins of the jumper, then the detector will operate on 3 pulse counts within 10 seconds to confirm a valid detection. If the jumper is removed or only placed on one pin, then the detector will operate on 2 pulse counts within 10 seconds for a valid detection.
- On valid detection, the RED light will give a single flash, and will transmit the alarm detection code to the receiver.
- **Note:** If you change this setting, it will take 3 minutes to take effect after you close the case. Alternatively, press & then release the tamper switch before replacing the case for the setting to take effect immediately.

## Tamper:

The tamper switch will open whenever the front cover of the detector is removed. A tamper signal is automatically sent to the receiver. Each time this occurs the detector will also automatically enter test mode.

## Low Battery Warning:

If the detector has flat batteries (combined power supply below 4.8 Volts) then on detection the RED light will flash 6 times in a row instead of once. The batteries should be replaced immediately.

There are 3 different circumstances when the RED light will flash 6 times in a row instead of once:

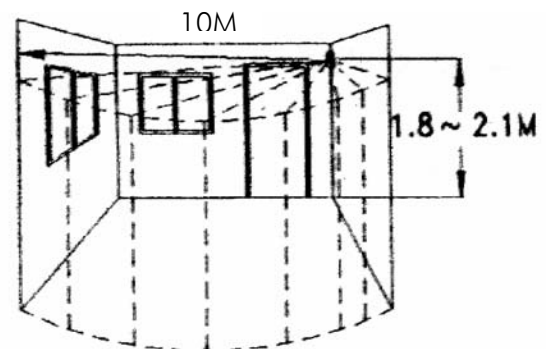
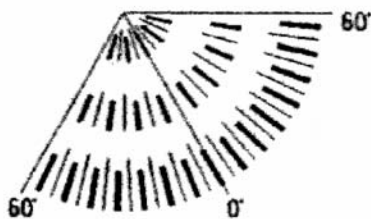
- i) When the tamper switch is opened to enter test mode **after** both red & green lights have flashed 6 times to indicate that the detector has entered test mode, the RED light only will flash 6 times in a row to signal a low battery. It will send the low battery signal code to the receiver.
- ii) Whenever detection is made in normal mode and the detector has flat batteries, the RED light will flash 6 times in a row on a valid detection.
- iii) If the detector has not had a valid detection within 8 to 12 hours and the detector has flat batteries it will automatically send a low battery signal to the receiver.

# Installation

- This sensor utilises the very latest in detection processing technology to reduce the possibility of false alarms. However, correct mounting of the detector is critical to ensure best detection or "catch" performance. You can not just screw the sensor directly to a wall up high in a corner and expect best performance. Please refer to the diagram & notes opposite. Thoroughly walk test each sensor, and if detection is not acceptable in the location you have chosen, adjust the angle of the sensor slightly & re-test. You will find that a slight up/down angle change may improve catch performance significantly.
- Mount the detector on your wall using the swivel mount provided at a minimum height of 1.2 metres and maximum of 2.1 metres (lower is better). Make sure the detector is a minimum of 5 metres away from the Receiver.
- Always mount the **WPIR Motion Sensor** so that an intruder has to walk across its zones, i.e. walk past the detector, not towards it.
- **DON'T** mount detector facing glass doors or windows. Always mount above windows and doors to look inside.
- **DON'T** mount detector facing hot areas, e.g. open fireplaces, direct sunlight or air conditioning vents.
- Select a location where the detector can provide the best detecting range.
- Always ensure that you do not cover an area with 2 detectors, so as to avoid simultaneous transmission back to the receiver in your alarm control panel.
- If the unit is mounted close to metal frames or doors, this may reduce the radio transmitting range.



**VERY IMPORTANT!**  
**Always** mount the sensor using the swivel bracket provided, as this will allow you to adjust the up/down angle of the detector so you can optimise the catch performance of the sensor. *Walk test each sensor thoroughly, and adjust as required.*



Detection range (at 25°C)

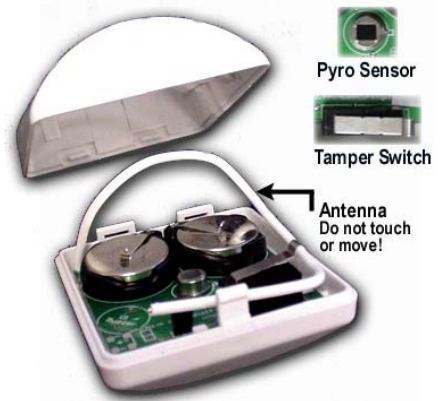
Outside View



Inside View



Components



## Mounting



Approx mounting angle at 2.1 metres in height

Mounting hole into wall should be:

- Diameter: 5mm
- Hole depth: 30mm

Swivel bracket enables the detector to be pointing various directions as required.

After mounting the swivel bracket to the wall, firmly push the detector so that the ball of the bracket clicks into the socket built into the rear of the detector.

## Opening the Case

1.



The orientation of the detector should be upside down as shown for ease of removing the case.

**Press down** (with thumb) on the rear case as shown

2.



**Pull** the front case away from the back case



### Powering the detector



The detector is powered by removing the piece of plastic from under either of the battery terminals in the direction indicated by the arrow.

### Replacing the batteries



The batteries are removed as per the normal instructions. The new style detector has its battery holders on an angle. It uses the same batteries. (CR2450)

*All other operational information in the original instruction manual is applicable to this detector.*