

# INFRA ALERT™



## INSTRUCTION MANUAL

### Read entire manual prior to installation and operation

Thank you for purchasing the **InfraAlert** System. The **InfraAlert** is manufactured under strict quality control standards using the best available materials. We hope you will be pleased with its all weather construction and excellent performance.

As an option, additional receivers and sensors may be used in conjunction with your **InfraAlert** product. This will allow you to place them in various locations for improved effectiveness.

In addition, a very effective extension sounder can be readily connected to the receiver if required extending the audible range.

#### INFRARED SENSOR OPERATION:

The infrared detector is positioned behind the round lens. It has a detection angle of 40 degrees. The effective detection range of the sensor can be up to 12 metres.

The Infrared sensor detects vehicles, intruders, guests, inlaws & outlaws by sensing their heat and motion. When someone or something moves through

the detection zone, the sensor detects the movement or intrusion and transmits a signal to the receiver.

#### INFRARED SENSOR INSTALLATION:

First, install the high quality, 9 volt, alkaline battery in the compartment located in back of the sensor. Securely close the battery cover.

NOTE: Always use **ALKALINE** Batteries.



Mount the sensor approximately 1.5 metres above the ground to a **secure** wood post, fence, railing etc, in a position that is not going to be seen. A metal bracket is provided for this purpose. **Lightly grease mounting screws** so they can be removed in the future.

The lens must have an unobstructed view of the coverage area. Extend the flexible antenna upward, some objects may not be detected if the sensor is pointed or placed too high or too low, **adjustment may be required to optimise performance.**

Keep the sensor as close to the edge of the driveway as possible.

The sensor should be strategically located so that it detects objects moving across the detection zone.

#### Caution.

Do not mount the sensor facing the sun, bodies of water or any reflections. This causes variations in the temperature pattern 'seen' by the sensor and may cause false alarms or even damage the lens or sensor. Avoid situations where livestock through a fence can be 'seen' by the sensor causing false trips.

#### Note:

A shorter detection range may occur when the outside temperature falls below 6 degrees C. due to a natural drop in battery voltage. Lower

sensitivity may occur during periods of fog, rain or snow. This is due to moisture diffusing the infrared energy. The sensors and transmitters are rated to -20 degrees C.

#### DETECTION SENSITIVITY

Optical sensitivity can be adjusted by means of the two switches on the right hand side of the address switches under the battery cover as follows:

*Note: Do not alter the first five switches.*



- 1 & 2 Off - Normal
- 1 On & 2 Off - sensitivity 2
- 1 Off & 2 On - sensitivity 3
- 1 & 2 On - Highest

#### RECEIVER OPERATION

#### **Caution!**

Use the **InfraAlert** power supply **only** as it uses a reverse polarity. Use of an incorrect power supply will void the guarantee.

Situate the receiver on the transmitter side of the house near a window if possible. Insert the DC plug into the socket on the side of the receiver, and plug the transformer into a 230 volt AC 3 pin outlet.

Stand the receiver on a bench or mount it to a wall with the enclosed adhesive pad, and extend the flexible antenna upward.

The receiver will sound the alert when the sensor is activated. The alert sound resets itself after 6 seconds and will alert you with every detection of movement within the sensing range.

The volume control can be used to change the sound level.

**The receiver comes equipped with an accessory jack for the easy addition of an optional external sounder if a different sound or more volume is desirable.**

The light emitting diode will light when the receiver is activated and will remain lit until the button is manually reset.

In a 'Line of Sight' situation, the reception range can reach up to 300 metres. Range may be reduced by certain obstructions. For instance; metal buildings, wire netting, dense hedges and trees etc.

For maximum range. locate the **receiver** in an area in your home with some direct visibility to the sensor. (Close to a window perhaps)

Be aware that metal or netting cladding (Roughcast or Stucco) will effect range capability.

**WALK TEST:**

After setting up your system perform a 'walk' test to confirm the operational performance. Walk and drive through the detection area and have someone listen for the receiver to sound. The sensor can then be re-positioned if not performing properly as required.

**ADDRESS CODING ADJUSTMENT:**

The system address coding is factory preset and should only require to be adjusted in the event of interference from another source.

A DIP switch is located in both the sensor and receiver. Only the first five positions on the switches can be changed and the switch settings in the transmitter must match the settings in the receiver. To open the receiver remove the volume control knob first. It will pull off.

As with all passive infrared devices certain weather conditions and other acts of nature may cause false alarms or reduce sensitivity. Below is a list of the most common problems and the solutions to solve them.

PROBLEMS -can be caused by:

- Use of low quality or non-alkaline battery.
- Use of an old weak battery.
- The sun shining into the sensor lens at a certain time of the day.
- The sun reflecting off shiny objects into the sensor.
- A poorly secured sensor. (Moves in the wind)
- The sensor 'seeing' livestock in a paddock beyond.

**TROUBLESHOOTING:**

**Where poor range is a problem.** Check the obvious - Does the Tx have a fresh ALKALINE battery, Are both aerials able to 'see' each other - trees have not grown to block the 'line of sight'. Is it possible to improve the situation. i.e. Receiver upstairs, extension speaker down stairs. Is the aerial situated against metal i.e. Metal window frame, Stucco, (wire netting) reinforcing, brick work etc etc. Is the transmitter close to fence wire netting or in a dense hedge or the like. The aerials should protrude clear of obstructions. Is the receiver situated close to an interference source, - Television, computer, cell or cordless phone, microwave etc. If range still seems wanting, discuss the situation with your supplier. If a service check is called for, return both **Tx & Rx** as it is important they work as a pair. If possible send several photos looking both ways along the transmission line and of the Tx and Rx situation. This can be of immense help for the serviceman in analysing a range problem. Ensure the fault is clearly stated.

**Where poor optical range or intermittent detection is experienced.-** Check the obvious again. Is the lens clean, & dry (water droplets shorten range) not scratched or dished in, - and clear of insects such as spiders. Grass or vegetation obstructing its view. Don't forget that the sensitivity can be increased with the two switches under the battery cover !!

**Where false trips are experienced.-** Can the transmitter be moved by the wind. Are branches or grass waving in front of the lens. Is the sun or reflections shining into the lens? Can it 'see' livestock through the fence. Is the sensitivity too high? Is it pointing too high or too low. (small climbing animals or dogs perhaps) Can direct sun be overheating the transmitter enclosure?

**LIMITED WARRANTY**

**Agtronics** Ltd. will guarantee this product to be free from manufacturing defects for one year from date of purchase.

This warranty shall not apply to defects resulting from improper installation or use, unauthorised repair and consequential damage, abuse. modification, used in a fashion other than intended, fire, flood or act of God, or in situations where serial numbers have been altered, defaced or removed.

Agtronics will assume no liability for commercial loss or damage resulting from malfunction of the product or resulting from its unsuitable use. In any event liability shall not exceed the original purchase price.

Product requiring warranty repair must be returned to Agtronics Ltd. by **prepaid freight**. Repaired product will be returned within 30 days. During warranty period there is no charge for parts or labour, but a handling and return freight charges are applicable.

**Purchasers Record:**

Retailer . . . . .

Date Purchased . . . . . Serial #. . . . .

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