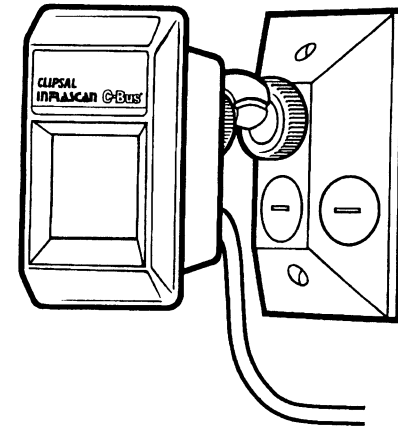


**C-Bus™****Infrascan****Installation Instructions****5750WP****CE****DIRECTIVES**

LVD 73/23/EEC

EMC 89/336/EEC

**STANDARDS**

BS-EN 55014

February 1996

Product of **Gerard Industries Pty Ltd** ACN 007 873 529

12 Park Terrace, Bowden, South Australia 5007

Telephone (08) 269 0511 Facsimile (08) 340 1724

12111

F1126/01

*Please leave these instructions  
at the installation site*

## **DESCRIPTION OF THE INFRASCAN**

### **INTRODUCTION**

The Clipsal 5750WP automatic sensing device is part of the Clipsal C-Bus system and should be connected in conjunction with this system only.

A flat multi-segmented lens divides the 'Field of View' into 48 zones at 4 different levels, ensuring immediate reaction to body movement.

This has led to a much improved density of the detection field.

### **HOW IT WORKS**

The 5750WP Infrascan monitors its immediate environment and whenever it detects movement of body heat in that area it will issue commands over the C-Bus network to control C-Bus output devices.

The Infrascan has one adjustment on the underside of the sensor head for 'light level' adjustment.

Activation of the load will depend on the ambient light level in the 'Field of View' and the setting of the light sensor adjustment. This adjustment can be set to allow the Infrascan to operate the load at any light level between full daylight and almost complete darkness.

### **NOTE:**

1. When making adjustments do not attempt to force adjustment screw past stops.
2. A small plastic screwdriver is supplied for the above adjustment or a standard screwdriver may be used.

**The Warrantor Is Gerard Industries Pty Ltd**  
12 Park Terrace, Bowden, South Australia 5007.  
Telephone (08) 269 0511.

Registered Offices in all Australian States

### **New South Wales**

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### **Tasmania**

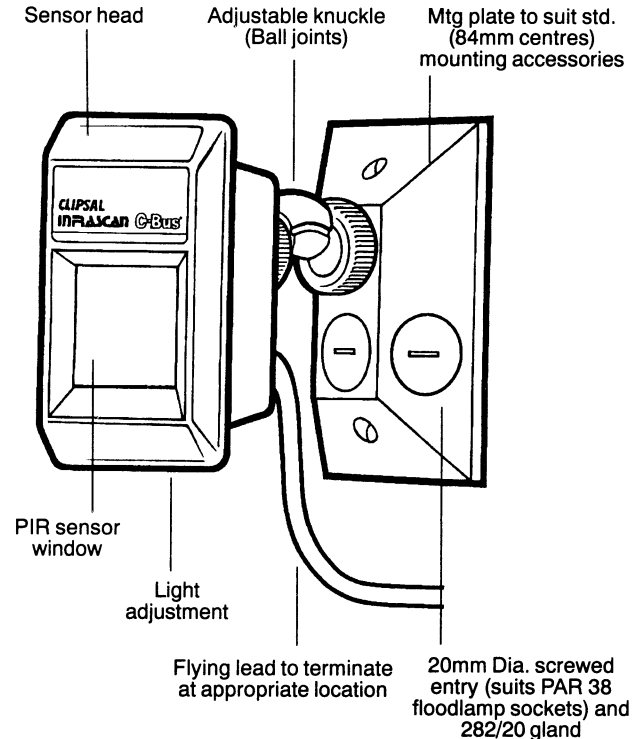
Launceston - 2B Racecourse Crescent, Launceston 7250  
Telephone (003) 31 6951  
Hobart - 55 Lampton Avenue, Derwent Park 7009  
Telephone (002) 72 3177

## 2 YEAR WARRANTY

1. This Clipsal Electronic Product is guaranteed against faulty workmanship and materials for a period of two (2) years from the date of installation.
2. Gerard Industries Pty Ltd reserves the right, at its discretion, to either repair free of parts and labour charges, replace or offer refund in respect to any article found to be faulty due to materials, parts or workmanship.
3. This warranty is expressly subject to the Clipsal Electronic Product being installed, wired, tested, operated and used in accordance with the manufacturer's instruction.
4. The product should be returned securely packed, complete with details of the date and place of purchase, description of load and circumstances of malfunction.
5. All costs of a claim shall be met by Gerard Industries Pty Ltd, however, should the product that is the subject of the claim be found to be in good working order all such costs shall be met by the claimant.
6. When making a claim the consumer shall forward the Clipsal Electronic Product to the nearest office of Gerard Industries Pty Ltd together with adequate particulars of the defect within 28 days of the fault occurring.
7. The benefits conferred herein are in addition to, and in no way shall be deemed to derogate; either expressly or by implication, any or all other rights and remedies in respect to this Clipsal Electronic Product, which the consumer has under the Commonwealth Trade Practices Act or any other similar State or Territorial laws.

Before starting any electrical work always switch off at the mains. If in doubt consult a qualified electrician.

## IDENTIFICATION OF PARTS



**NOTE:** The sensor head lens is specially designed to give optimum performance. Under no circumstances should it be tampered with.

## INSTALLATION AND WIRING LOCATION

An Infracan must be positioned correctly to ensure effective operation. The recommended mounting height is 2.4 metres. The 'Field of View' is optimum when the sensor head is mounted in a vertical position at a height of 2.4 metres and the 'approach path' is across the face of the sensor.

### NOTE:

1. Do not mount the Infracan close to objects which can create rapid temperature changes e.g. air conditioning vents, heater flues, moving water i.e. fountains and sprinklers.
2. Do not mount the Infracan on any surface that is subject to movement due to wind or other causes.
3. In all cases, locate the Infracan so that the 'approach path' is across the 'Field of View' and not directly towards the Infracan.

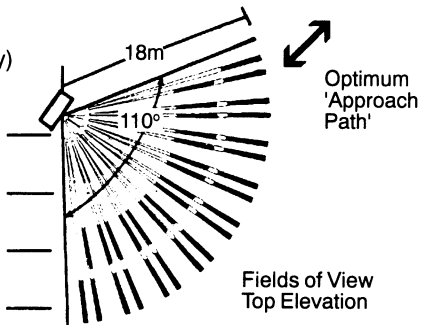
### FIELD OF VIEW (at maximum sensitivity)

Ultra Short Zones  
Nominal Range 1.2m

Short Range Zones  
Nominal Range 4m

Intermediate Zones  
Nominal Range 8m

Long Zones  
Nominal Range 18m



Head vertical

2.4m



Fields of View  
Side Elevation

There may be noticeable differences in the range due to differing conditions (background temperature, speed of movement, types of clothing worn, etc).

## TECHNICAL SPECIFICATIONS

|  |   |
|--|---|
| <b>Catalogue Number</b>                      | <b>5750WP</b>   |
| Operating Voltage Range                      | 15 - 36V d.c.   |
| Maximum Load Current                         | 18mA  |
| Operating Temperature Range                  | 0° to +50°C   |
| Rated Detection Field at Maximum Sensitivity | 18m Radius x 110°   |
| Timer Delay Range                            | 0 sec. to 18 hrs 12 min.<br>(5 sec. interval)                                   |
| Light Level Inhibit Threshold sunlight       | Continuous from below 1 Lux to full   |
| Mounting Surface                             | Wall and ceiling mounting   |
| Mounting Height for Rated Detection Field    | 2.4 metres with sensor head vertical  |
| Number of Detection Zones                    | 18 Long Range<br>16 Intermediate Range<br>10 Short Range<br>4 Ultra Short Range |
| International Protection Rating              | IP66  |

## TROUBLE SHOOTING

| Problem                                    | Possible Cause  | Possible Action  |
|--|---|--|
| 1 Light turns on for no apparent reason.   | a. Momentary power failure.<br>b. Unseen target.<br>c. Extreme draughts of hot and cold air.<br>d. Trees/bushes moving in the wind.<br>e. Vehicular or pedestrian traffic on edge of 'Field of View'.   | a. None, unit will reset after 'Time Out'.<br>b. Check for animals e.g. dogs/cats, etc.<br>c. Check doors, windows, or air-conditioning outlets.                   |
| 2 Light turns on during daylight           | a. Wrong setting on 'Light Adjustment'  | a. Reset according to 'Commissioning Instructions'.  |
| 3 Light not on in Dim and Dark conditions. | a. C-Bus installation incorrect.<br>b. Light globe 'blown'.<br>c. As above (#2).  | a. Refer to C-Bus Installation Procedure Manual.<br>b. Replace light globe.<br>c. As above (#2).   |
| 4 Light remains on permanently.            | a. Unit not installed correctly.<br>b. Moving Infrared source being detected.<br><b>Note</b> Do not mount close to objects which can change temperature rapidly e.g. air-conditioning vents, heater flues, moving water i.e. fountains, sprinklers. | a. Refer to C-Bus Installation Procedure Manual.<br>b. Blank viewing of window; Light should turn off after 'Time Out'.—If light still remains on: call installer. |

**NOTE:** Take care not to scratch or damage the translucent window on the Infracan as it forms part of the optical detection system. For continued optimum performance ensure that the window is cleaned periodically with mild soap, water and a soft cloth.

## INSTALLATION AND WIRING (cont.)

### MOUNTING AND TERMINATION PROCEDURE

The Infracan can be mounted on a vertical or horizontal surface. Simply loosen the clamping nuts at each of the ball joints, allowing the knuckle assembly to rotate. This enables the Infracan to be mounted on walls or ceilings as shown below.

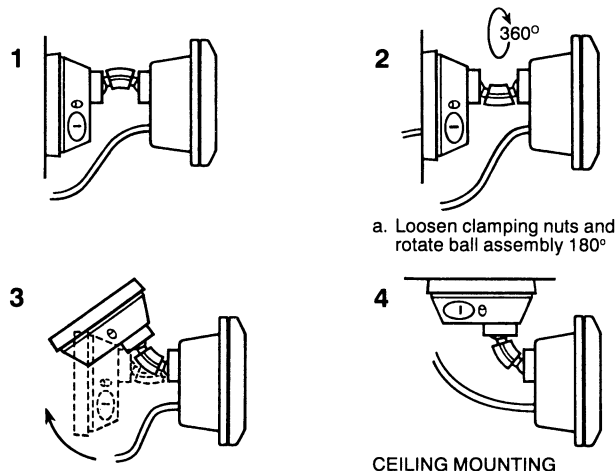
Caps are provided to cover screw heads when mounted.

C-Bus connections are made via a flexible lead:

1. Using the loose terminals supplied and passing the cable through a gland into a standard surface mounting box.
2. Using the loose terminals supplied and passing the cable through a gland directly into the mounting plate.
3. Termination can be carried out in a junction box mounted in a ceiling space or wall cavity.

**NOTE:** If using option 1 or option 2, the supplied gasket must be used and all surfaces must be adequately sealed to ensure IP66 rating.

### WALL MOUNT TO CEILING MOUNT



- a. Loosen clamping nuts and rotate ball assembly 180°
- b. With clamp nuts still loose rotate mounting plate 90° as indicated by arrow. Tighten clamp nuts.

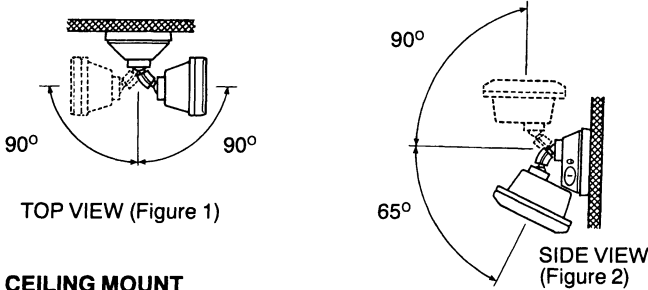
CEILING MOUNTING

## KNUCKLE ADJUSTMENTS

Clipsal's unique knuckle adjustment design incorporates the use of ball joints at each pivot point, enabling the sensor head to be located in almost any position.

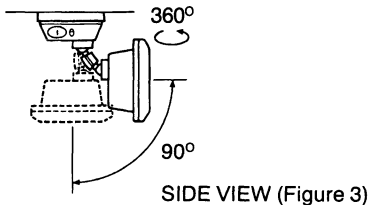
### WALL MOUNT

The sensor head, in the horizontal plane, can be positioned  $\pm 90$  degrees from the centre as shown in Figure 1. In the vertical plane, the sensor head can be rotated upwards 90 degrees and downwards 65 degrees as shown in Figure 2.



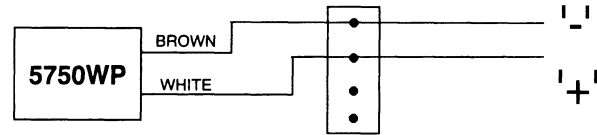
### CEILING MOUNT

The sensor head, in the horizontal plane, can rotate 360 degrees. In the vertical plane, the sensor head can rotate downwards 90 degrees as shown in Figure 3.



**NOTE:** The curve in the knuckle assembly must follow the direction in which the sensor head is to be directed. Do not try to force the sensor head at any time, check that the knuckle is correctly aligned.

## WIRING DIAGRAM — 5750WP



### COMMISSIONING

When setting the 'Light Level' adjustment keep clear of the 'Field of View' when assessing the affect of the adjustment.

### SET UP FOR WALK TEST

1. Connect power to unit and allow at least 2 minutes for the sensor to stabilize before conducting tests.
2. Set 'Light Level' sensor adjustment fully anti-clockwise.



3. Using C-Bus installation software set up the 5750WP unit to control a load. Set the time out interval to 1 sec.
4. Loosen the clamp nuts, aim the sensor head towards the desired 'Field of View'. Tighten clamp nuts and remove card.
5. Walk slowly around the area in the desired 'Field of View' to confirm the load is activated in the required area. If necessary, re-aim the sensor head.
6. Using C-Bus installation software, set the time out interval as desired.

### LIGHT LEVEL

Rotate clockwise to avoid having load activated when natural light is adequate.



### EXAMPLES

- a. Load activated at dusk
- b. Load activated at night only
- c. Load activated at both night and day