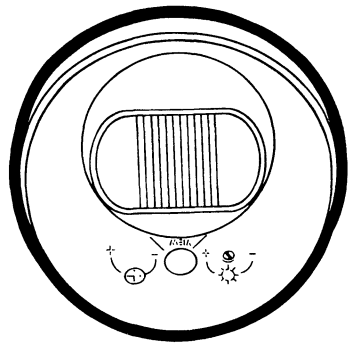
CLIPSAL®
INTEGRATED SYSTEMS

C-Bus™

PIR Occupancy Sensor

Installation Instructions

5751



CE

DIRECTIVES
LVD 73/23/EEC
EMC 89/336/EEC
STANDARDS
BS-EN 55014

March 1999

Products of Gerard Industries Pty Ltd
ACN 007 873 529
12 Park Terrace, Bowden, South Australia 5007
Telephone (08) 8269 0511 Facsimile (08) 8340 1724
Internet http://www.clipsal.com.au E-Mail plugin@clipsal.com.au

F1022/01

Please leave these instructions at the installation site

CE

INTRODUCTION

The Clipsal 5751 automatic sensing device is part of the Clipsal C-Bus system and should be connected in conjunction with this system only. The 5751 PIR Occupancy Sensor monitors its immediate environment and whenever it detects movement of body heat in that area, will issue commands over the C-Bus network to control C-Bus output devices.

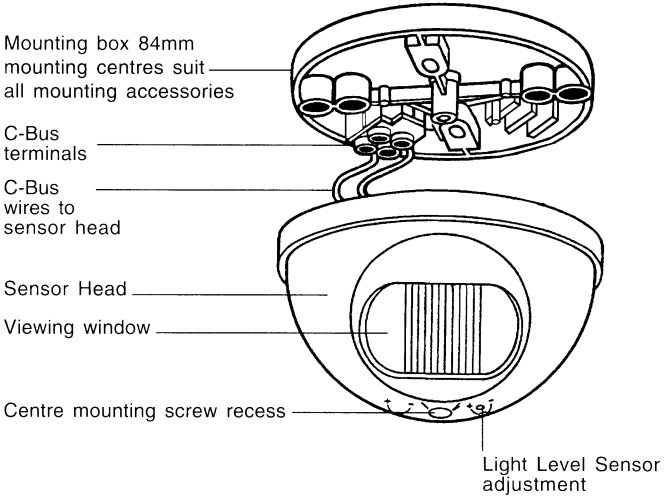


Diagram shown in normal ceiling mount position

The Warrantor is Gerard Industries Pty Ltd
12 Park Terrace, Bowden. South Australia 5007
Telephone (08) 8269 0511
Registered Offices in all Australian States

New South Wales
122 Canterbury Road, Padstow 2200
Telephone (02) 9794 9200

Victoria
81-89 Queens Parade, North Fitzroy 3068
Telephone (03) 9207 3200

Northern Territory
16 Albatross Street, Winnellie 0802
Telephone (089) 8947 0278

Queensland
Brisbane - 919 Nudgee Road, Nudgee 4014
Telephone (07) 3244 7444
Townsville 5-7 Leyland Street, Garbutt 4814
Telephone (077) 4725 1822

Western Australia
23 Truganina Road, Malaga 6090
Telephone (08) 9442 4444

Tasmania
Launceston - 63 Boland, Launceston 7250
Telephone (03) 6331 6951
Hobart - 55 Lampton Avenue, Derwent Park 7009
Telephone (03) 6272 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 occuring.

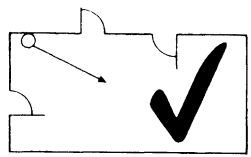
7 The benefits conferred herein are in addition to, and in no way shall be deemed to derogate; either expressly or by implication, any or all other rights and remedies in respect to this Clipsal Electronic Product, which the consumer has under the Commonwealth Trade Practices Act or any other similar State or Territorial laws.

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

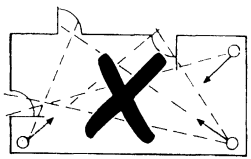
LOCATION

The best position to mount the sensor is on the ceiling in a corner of the room diagonally facing across the room. Ideally, doorways into the room should be in the walls forming the corner.
Of the diagrams below, Figure A is ideal as the doorways are not in the field of view, and the sensor will not be activated by people passing outside the doors.

Fig. A



Plan of Room (Example)
Best Position



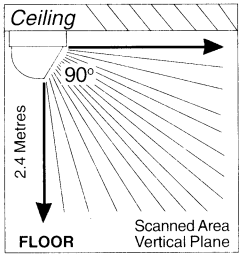
Plan of Room (Example)
Incorrect Positions

Note: Do not mount close to objects which can change temperatures rapidly e.g. air-conditoning vents, heater flues, moving water ie. fountains, sprinklers.

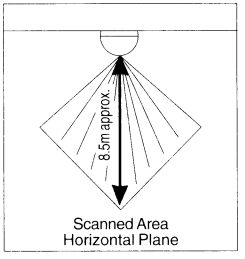
HOW IT WORKS

When connected to an operating C-Bus network, the sensor will be able to detect any 'moving' Infrared source (e.g. human) that may intrude upon the 'Field of View'.
The sensor includes and ambient light sensor which is used to allow different behaviour between 'dark' and 'light' conditions. The light level required to change from dark to light is adjustable at the 5751 and can be set from any condition between full daylight and almost complete darkness.
The 'Time-On' adjustment is set from the C-Bus installation software.
Note: A small plastic screwdriver is supplied for 'Light Level Sensor' adjustments.

FIELD OF VIEW



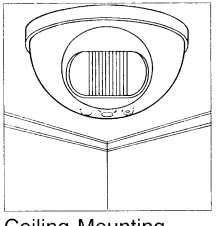
90° Viewing Angle



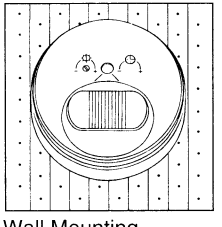
Detection area 6 x 6 metres

Note: the absolute range of all PIR detectors is subject to variations because of daily differences in the background temperature characteristics and type of amount of clothing worn. Rapid and large changes in temperature may be detected even if they appear to be well beyond the stated range.

Suitable for:



Ceiling Mounting



Wall Mounting

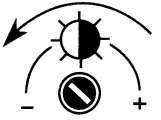
TROUBLE SHOOTING

Problem	Possible cause	Possible action
1. Light turns on for no apparent reason.	Momentary power failure.	None, unit will reset after 'Time Out'.
	Unseen target.	Check for animals e.g. dogs/cats, etc.
	Extreme draughts of hot and cold air.	Check doors, windows, or air-conditioning outlets.
2. Light turns on during daylight.	Wrong setting on 'Light Adjustment.'	Reset according to 'Commissioning' Instructions.
3. Lights not on in Dim & Dark conditions.	C-Bus installation incorrect. As above (#2). Light globe 'blown'.	Refer to C-Bus installation procedure manual. As above (#2). Replace light globe.
4. Light remains on permanently.	Unit not installed correctly.	Refer to C-Bus installation procedure manual.
	Moving infrared source being detected.	Blank off viewing window; Light should turn off after 'Time Out'.
	Note: Do not mount close to objects which can change temperature rapidly e.g. air-conditioning vents, heater flues, moving water i.e. fountains, sprinklers.	If light still remains on; call installer.

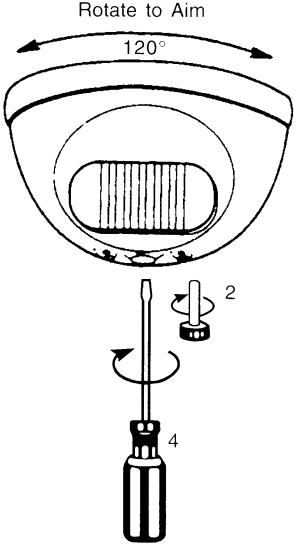
COMMISSIONING PROCEDURE

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

Set up for walk test and adjustment of 'Field of View'.

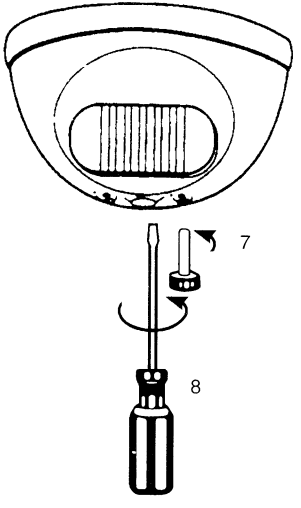


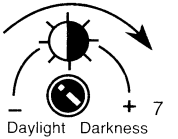
1. Connect power to unit and allow at least 2 minutes for the sensor to stabilise before conducting tests.
2. Set 'Light Level Sensor' adjustment fully anti-clockwise.
3. Using C-Bus installation software, set up the 5751 unit to control a load. Set the time out interval to 1 second.
4. Loosen centre mounting screw lightly, to aim Sensor Head toward desired 'Field of View'.
5. Walk slowly around room and through doorways in desired 'Field of View', to confirm the load is activated in the required area. If necessary, re-aim Sensor Head as in Step 4 and then repeat Step 5.
6. Using C-Bus installation software, set the time out interval as desired.

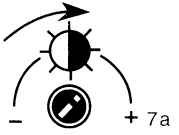


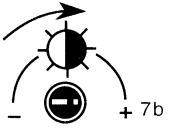
ADJUSTMENT OF 'LIGHT LEVEL SENSOR'

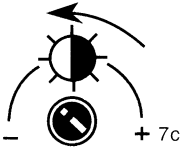
7. 'Light Level Sensor' adjustment. Rotate clockwise to avoid having load activated when natural light is adequate.
   a. Load activated at dusk. Set in this area.
   b. Load activated at night. Set in this area.
   c. Load activated day and night. Set in this position.
8. Tighten centre mounting screw and install cap.











TECHNICAL SPECIFICATIONS

Catalogue Number	5751
Operating Voltage Range	15 - 36V d.c.
Operating Current	18mA
Operating Temperature Range	0° to 50° C
Rated Detection Field at Maximum Sensitivity	Approx. 6m x 6m, 8.5m from Sensor Head rotatable through 120° when installed
Timer Delay Range	0 sec. to 18 hrs 12 min. 15 sec. (1 sec. interval)
Light Level Inhibit Threshold	Continuous from below 1 Lux to full sunlight
Mounting Surface	Wall and ceiling mounting
Mounting Height for Rated Detection Field	2.4 metres
Overall Dimensions	100mm diameter x 57mm high
Mounting Centres	50mm; 60.3mm; 84mm

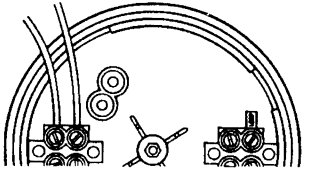
MOUNTING PROCEDURE

Step 1
Fit Mounting Flange

a. **Ceiling Mount:**
Mounting Flange fitted onto ceiling with arrow (moulded on flange) pointing to the direction of the area to be scanned.

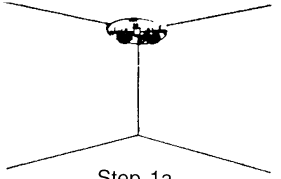
b. **Wall Mount:**
Mounting Flange fitted onto wall with arrow (moulded on flange) pointing down to the floor.

Step 2
Terminate wiring on the appropriate terminals.
Note: If leads from Sensor Head are disconnected form the terminal block, reconnect red lead in the '+' terminal and the second lead in the remaining terminal.

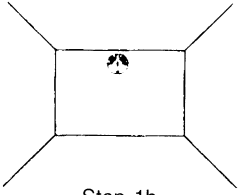


Step 2

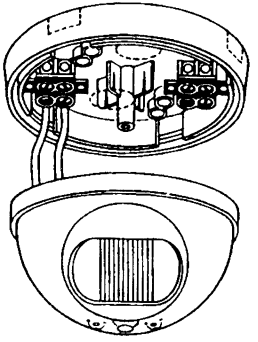
Step 3
Fit Sensor Head to Mounting Flange via single centrally located mounting screw (between 'Time-On and Light Level Sensor' adjustment screws).
Note: Do not fully tighten screw until Sensor Head has been aimed at the area you wish to monitor (Refer 'Commissioning' procedure).



Step 1a



Step 1b



Step 3