TRADER®

ARCTIC OWL™

OWPIR360RS

Passive Infrared Sensor, 360° Recess or Surface Mount
INSTRUCTIONS

Specifications

Power Source: 220-240V/AC	**Detection Range**: 360°
Power Frequency: 50/60Hz	**Detection Distance**: Radius 8m (<24°) (adjustable)
Ambient Light: <3-2000LUX (adjustable)	**Working Temperature**: -20~+40°
Time Delay: **Min**: 10sec±3sec **Max**: 30min±2min	**Rated Load**: Max.2000W 1000W
Working Humidity: <93%RH	**Power Consumption**: approx 0.5W
IP Class: IP44	**Installation Height**: 2.2-4m
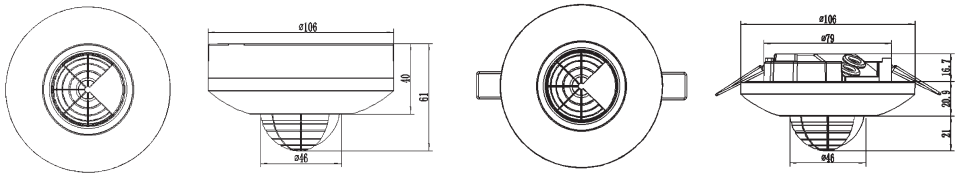
Safety Information

The OWPIR360RS is a mains connected device and is intended for installation in a fixed location by a Licensed Electrical Contractor in accordance to applicable Australian wiring rules. The product must be installed and used in conjunction with detail provided in the enclosed instructions, failure to do so may cause serious injury. The product contains no user serviceable parts and must be returned to GSM Electrical (Australia) Pty Ltd (GSME) if the product is damaged and requires repair.

Installation

The OWPIR360RS comes with accessories to allow it to be fitted both as recessed mount where it clips into the hole in the ceiling or as surface mounting with a rear housing mounted to the ceiling surface.

METHOD 1: RECESSED MOUNTING

Installation instructions Recessed mounting (FIG 1)

1. Measure and cut out an 84mm hole into mounting surface.

2. Remove the screws in the terminal cover and disconnect from the unit. Run cables through supplied rubber grommets into terminal cover.

    a. Wire the Active incoming supply to the terminal block marked "L in'', as per FIG 4.

    b. Wire the incoming supply Neutral and the load Neutral connection to the terminal block marked "N'', as per FIG 4.

    c. Wire the load active to the switched Active output on the terminal block marked "L out", as per FIG 4.

NOTE: Installation must be carried out according to Australian Wiring Rules (AS/NZS 3000).

3. Plug the terminal cover back into the main unit and install the two screws to hold it in place.

4. Fold the metal springs back towards the centre of the sensor until they are parallel to each other. Insert clips into pre-cut hole and carefully release the clips into hole (Caution: clips are spring loaded and can damage fingers if not handled correctly)

5. Remove face plate by rotating anti-clockwise and commission sensor (see commission sensor for correct procedure).

6. Once commissioning has been completed install face plate onto unit by lining up clips and rotating cover clockwise until you feel a slight click.

FIG 1:
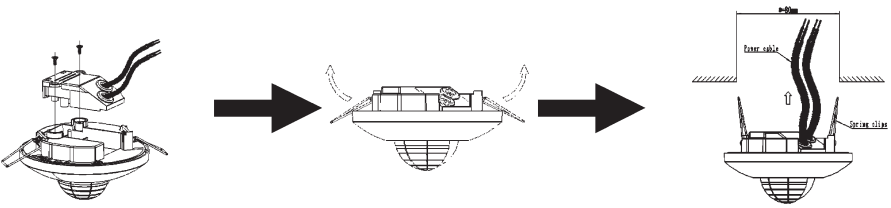
METHOD 2 – SURFACE MOUNT (FIG 2):

1. Remove metal springs from unit. (Caution: clips are spring loaded and can damage fingers if not handled correctly)

2. Mount separate housing in desired position, be sure to use supplied grommets for cable penetrations. Where grommets aren't used, please use a silicon or similar product to seal any cable penetrations into base plate.

3. Remove face place by rotating anti-clockwise.

4. Remove the screws in the terminal cover and disconnect from the unit. Run cables through supplied rubber grommets into terminal cover.

   a. Wire the Active incoming supply to the terminal block marked "L in'', as per FIG 4.

   b. Wire the incoming supply Neutral and the load Neutral connection to the terminal block marked "N'', as per FIG 4.

   c. Wire the load active to the switched Active output on the terminal block marked "L out", as per FIG 4.

NOTE: Installation must be carried out according to Australian Wiring Rules (AS/NZS 3000).

5. Install supplied cable management on base plate to secure terminal block.

6. Plug in sensor onto base plate and install supplied screws on either side of sensor to secure it correctly to base plate.

7. Commission sensor before installing face plate. (See commission sensor for correct procedure).

8. Once commissioning has been completed install face plate onto unit by lining up clips and rotating cover clockwise until you feel a slight click.
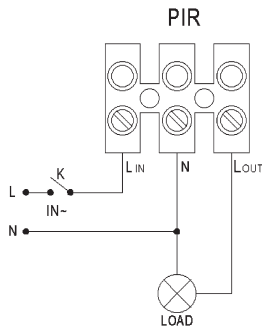
FIG 2:
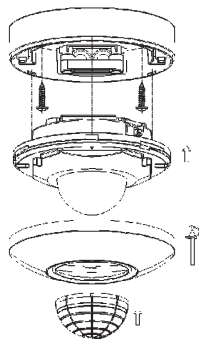
Note: supplied detection zone restrictor (FIG3) can be modified to suit specific installations by using scissors and removing needed sections – DO NOT cut bottom ring of restrictor, this will remove the ability for it to remain in place on sensor.

FIG 3:
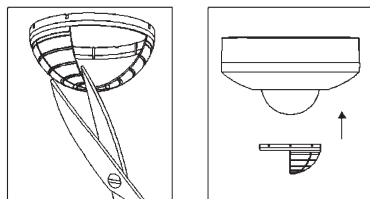
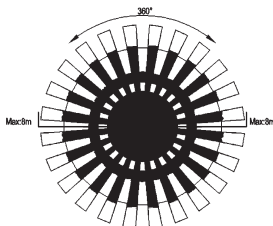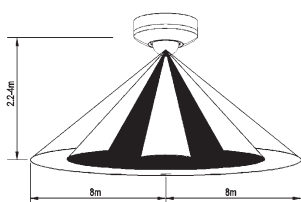## Wiring diagram (connecting to the terminal block):

FIG 4:

Connection:

>
>
> # WARNING!
> ### Warning. Danger of death through electric shock!
> - Must be installed by professional electrician.
> - Disconnect power source.
> - Cover or shield any adjacent live components.
> - Ensure device cannot be switched on.
> - Check power supply is disconnected.

Sensor Information:

FUNCTION:

- Identifies day and night automatically. Can be adjusted for ambient light according to your desire: when turned to '+' (day/bright light), it will work during the day and at night. When turned to '-' (night/darkness), it will only work under less than 3LUX when set to the minimum. For adjustment instructions, please refer to the Test section.

- The 'Switch On Duration' is added to continually when the OWPIR360RS receives additional sensor signals following the first initiation (if a presence continues to be detected). It then switches OFF after the 'Switch On Duration' completes its cycle and the triggering source is removed. This can be adjusted with the time setting.

- Switch On Duration: this can be set according to your desire. The minimum is 10±3sec; the maximum is 30min±2min.

- Time-Delay is added continually: When it receives the second induction signals within the first induction, it will restart to time from the moment.

- SENS adjustable: It can be adjusted according to using location. The detection distance of low sensitivity could be only 6m and high sensitivity could be 16m which fits for large room.

## MANUAL OVERRIDE FUNCTION:

1. **Sensor mode > Stay on**

Now switch wall switch OFF-ON, OFF-ON twice within 3 seconds. The sensor will now hold your light ON continuously just like a normal light.

2. **Stay on > Sensor mode (The following either method is ok)**

    1)   Switch your wall switch OFF, then switch ON after 3 seconds.

    2)   If the light left ON (not change the sensor to sensor mode by hand), the sensor itself will also automatically return to the sensor mode after 8hours.
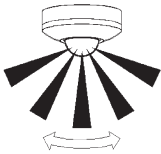

Good Sensitivity
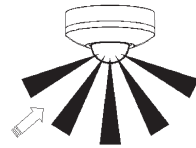
Poor Sensitivity

INSTALLATION ADVICE:

As the detector responds to changes in temperature, avoid the following situations:

- Avoid pointing the detector towards objects with highly reflective surfaces, such as mirrors etc.

- Avoid mounting the detector near heat sources, such as heating vents, air conditioning units, light etc.

- Avoid pointing the detector towards objects that may move in the wind, such as curtains, tall plants etc.
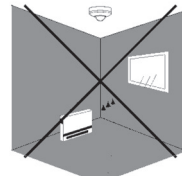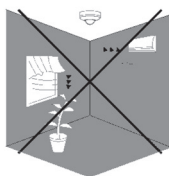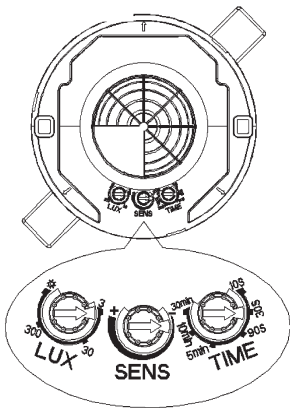
TEST:

Height of installation: 2.2-4m   Detection Distance: Max.16m

- Turn the LUX knob clockwise on the maximum (sun). Turn the SENS knob clockwise on the maximum (+).
  Turn the TIME knob anti-clockwise on the minimum (10s).

- Turn the TIME knob clockwise to the minimum, turn the LUX knob clockwise to the maximum '☼' (day/bright light)

- Turn on the power, the sensor will switch on and warm-up, 30 sec later, the unit will be entered into the functioning AUTO state.

- 5-10 seconds after the light goes out for the first time, the unit will start sensing, the load connected should switch on if triggered.

- Turn LUX knob anticlockwise to the minimum '☾' (night/darkness). The sensor should not work after load switches off, provided the lux level in the room is higher than the level set for the minimum.

- Adjust the timer setting to allow the load to stay on to the desired time and performance, then replace the outer cover and Fresnel lens and confirm it is functioning correctly.

Note: when testing in daylight, please turn LUX knob to '☼' position ie: fully clockwise, otherwise the sensor lamp will not work! If the lamp is more than 60W, the distance between lamp and sensor should be 60cm at least.

Warning: The manual override is linked with the lux setting, and switching on the manual override will only function at night if the sensor settings are set to functioning in the dark. It will only work during the day if the lux level is set to daylight.

NOTES:

- Avoid installing it on or near moving objects.
- There shouldn't be any obstruction or moving object in front of the detection window that can affect detection and performance.
- Avoid installing it near air temperature alteration zones such as air conditioners, central heating, air conditioning ducts, etc.
- For safety reasons do not tamper with the unit after installation, contact the installing electrician.

TIPS FOR SOLVING INSTALLATION PROBLEMS:

- **The load doesn't work:**
  a. Please check the power and load connected is correct.
  b. Check if the load is functioning.
  c. Check if the LUX level that is set, corresponds to the ambient light.
- **The sensitivity is poor:**
  a. Please check if there are obstructions in front of the detection window impacting the signals.
  b. Please check if the ambient temperature is too high.
  c. Please check if the signal source is in the detection field for the sensor.
  d. Please check if the installation height corresponds to the height shown in the instructions.
- **The sensor cannot switch the load off automatically:**
  a. Check if there are continual signals in the detection field.
  b. Check if the time delay is set to the longest possible.
  c. Check if the power corresponds to the instructions.
  d. Check if the temperature is changing near the sensor, such as air conditioning or central heating etc.
  e. Check if Manual Override has been initiated.

2 Year Manufacturer's Warranty

This product has been manufactured to the highest quality standards.
This product is warranted to the original purchaser and is not transferable.

The product is guaranteed to be free from defects in workmanship and parts for a period of 5 Years from the date of purchase. Defects that occur within this warranty period, under normal use and care will be repaired, replaced or refunded. The benefits conferred by this warranty are in addition to all other rights and remedies of the consumer under Commonwealth, State and Territory laws in relation to the goods or services to which this warranty relates and Australian Consumer Law. Risk in regard to the product to be repaired shall at all times remain with the Purchaser. The warranty is given on the condition that the product to which it applies is used for the purpose and in the manner intended by its construction and for no other purposes whatsoever.

GSM Electrical (Australia) Pty Ltd shall not be responsible for damage of any kind, caused by accidents, power surges, electrical storm damage, incorrect power current, infestation (vermin or insect), incorrect installation, incorrect electricity or plumbing installation, improper use of controls or failure to use the product in accordance with the operating instructions, general misuse or abuse or from normal wear and tear. Any attempt by an unauthorised person to repair or tamper with the equipment shall render the warranty null and void.

GSM Electrical (Australia) Pty Ltd's liability under this warranty is limited to the replacement and/or repair of the defective parts within the warranty period and does not extend to installation or removal of the product. Acceptance of liability by GSM Electrical (Australia) Pty Ltd contained herein is to the exclusion of any other remedy whatsoever and howsoever arising in respect of any equipment to which it applies.

GSM Electrical (Australia) Pty Ltd
Level 2 142-144 Fullarton Road
Rose Park SA 5067
www.gsme.com.au
Phone: 1300 301 838
Fax: 1300 301 778

230323