![Pierlite logo - professional lighting solutions]

Sensor for Pierlux Eco Highbay Gen4

IP65 Motion Sensor and Light Level Sensor providing ON/OFF control

Note: The Pierlux Highbay is not included. It is shown for illustration purposes only.

CE ⚠

Introduction

Please read these installation instructions carefully before installing or maintaining this sensor. The product is designed for installation and maintenance in accordance with relevant Australian standards (AS3000) and local regulations (where applicable), by an authorised and licenced electrician.

> The product must be maintained and operated in accordance with the manufacturer's instructions, failure to do so may damage the product and services. It is strongly recommended that this important note be communicated to the owner and or operator of the installation at the time of site commissioning.

If you require information or assistance regarding the installation or operation of this product, please contact Gerard Lighting Technical Support.

Product summary

This sensor is a motion sensitive on/off switch, which turns on the light upon detection of motion, and turns off after a pre-selected hold-time when there is no movement. A daylight sensor is also built in to prevent the light from switching on when there is sufficient natural light.

Product Features

'Plug and go' installation

The sensor is supplied with a pre-fitted piggyback plug and socket. This allows fast installation, without any additional terminations for the sensor or the highbay.

On/off Control

This sensor is a motion switch, which turns on the light upon detection of motion, and turns off after a pre-selected hold-time when there is no movement. A daylight sensor is also built in to prevent the light from switching on when there is sufficient natural light.

The sensor switches on/off the load at the AC mains zero-cross point, to ensure that the in-rush current is minimised, enabling the maximum lifetime of the relay.

Rotary Switch Programming

Quick installation is made possible by choosing one of 16 pre-set programs via a simple rotary switch. Each of the 16 pre-sets programs a specific detection range, hold-time and daylight sensor setting. See page 7 for more information.

One-Key Commissioning (using the optional remote control)

Using an optional remote control, the required sensors settings can be programmed and saved as a custom scene into the remote. Then, with just one button press, the saved programming scene can be applied to other sensors in the installation. See pages 8 and 9 for more information.

Ambient daylight threshold (requires the optional remote control)

This feature enables the daylight sensor to be commissioned based on the installation environment. When the lighting reaches a level where the highbay needs to be on, pressing the 'Ambient' button on the remote control will switch the highbay on and store the daylight level setting at this point. From this point on, the highbay will switch on when the daylight level falls below the stored level.

Intelligent Photocell (daylight detection prior to motion detection)

The built-in photocell will automatically turn off the light when the ambient natural light exceeds the programmed lux level for more than 5 minutes, regardless of whether motion is detected or not. See the example below.

With sufficient natural light, the highbay does not switch on when presence is detected.

With insufficient natural light, the sensor switches on the highbay when presence is detected.

The sensor switches off the highbay when natural light is sufficient, even when presence is detected.

Product Installation

1 | Loosen the lock screw on the sensor elbow clamp, set a suitable angle and re-tighten lock screw.
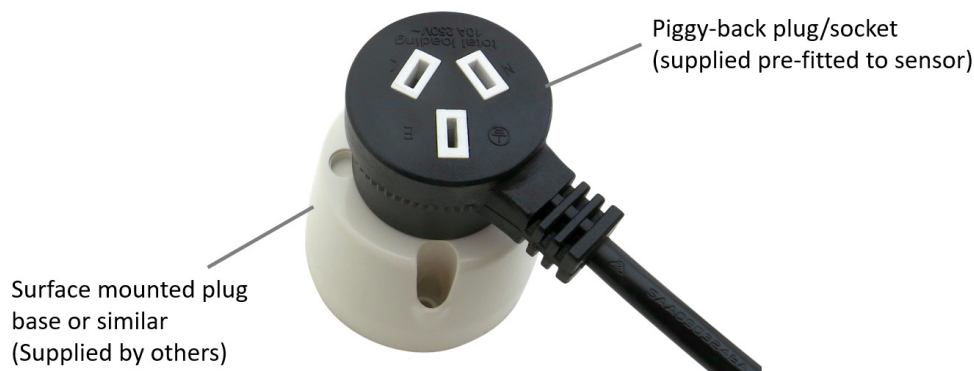

Tighten lock screw

Loosen lock screw
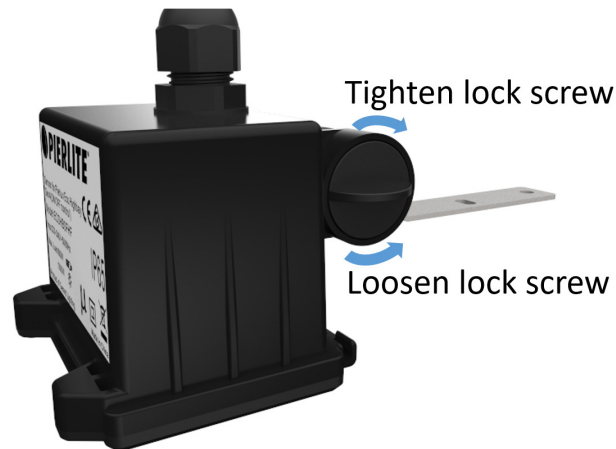
2 | Locate the two sensor bracket mounting locations on the Highbay.

2 x Sensor bracket mounting locations on Highbay
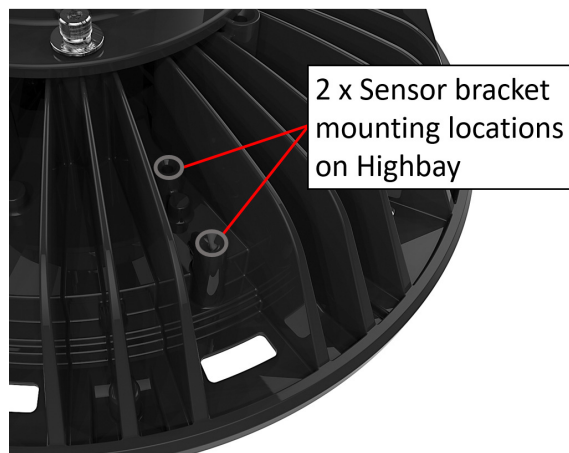
3 | The sensor is pre-fitted with a mounting bracket suitable for the Pierlux GEN4 Highbay. Line up the two holes in the mounting bracket with the sensor mounting locations on the highbay (see above). Attach the mounting bracket/sensor assembly to the highbay using the two supplied screws.
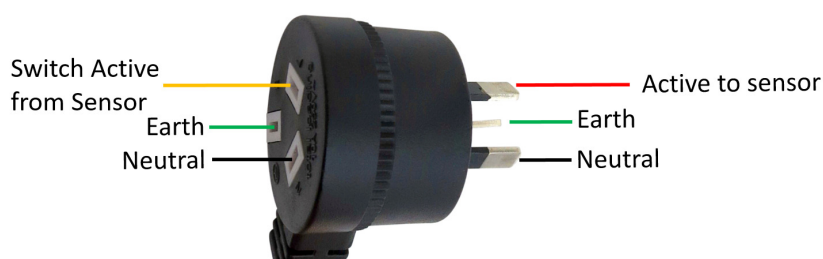
4   Ensure the sensor is at a suitable angle required for detection. See the range diagram on page 6.

5   Plug in the piggyback plug which is pre-fitted to the sensor. This allows for plug and play operation.

Piggy-back plug/socket
(supplied pre-fitted to sensor)

Surface mounted plug
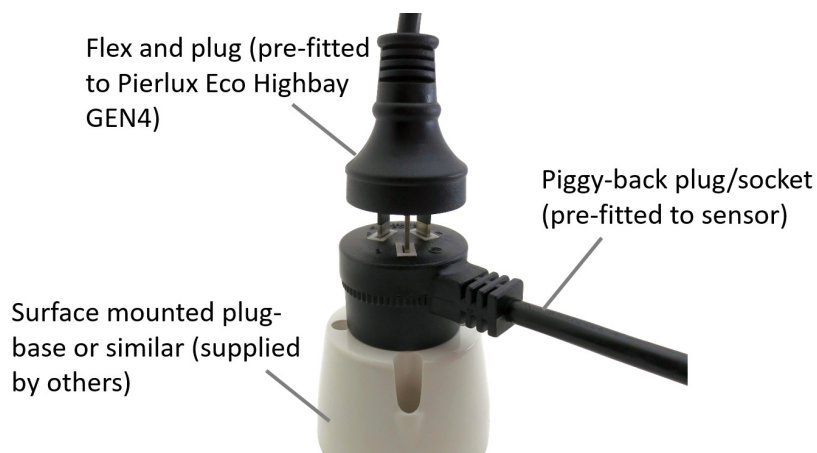base or similar
(Supplied by others)

⚠️ The Neutral and Earth connection on the pins of the piggyback plug pass straight through to the piggyback socket. **However**, The Active supply on the pin of the piggyback plug **does not** pass through to the socket. The Active on the piggyback socket uses the Switched Active from the sensor.

This allows the highbay plugged into the piggyback socket to be controlled (ON/OFF) via the sensor, without any additional terminations.
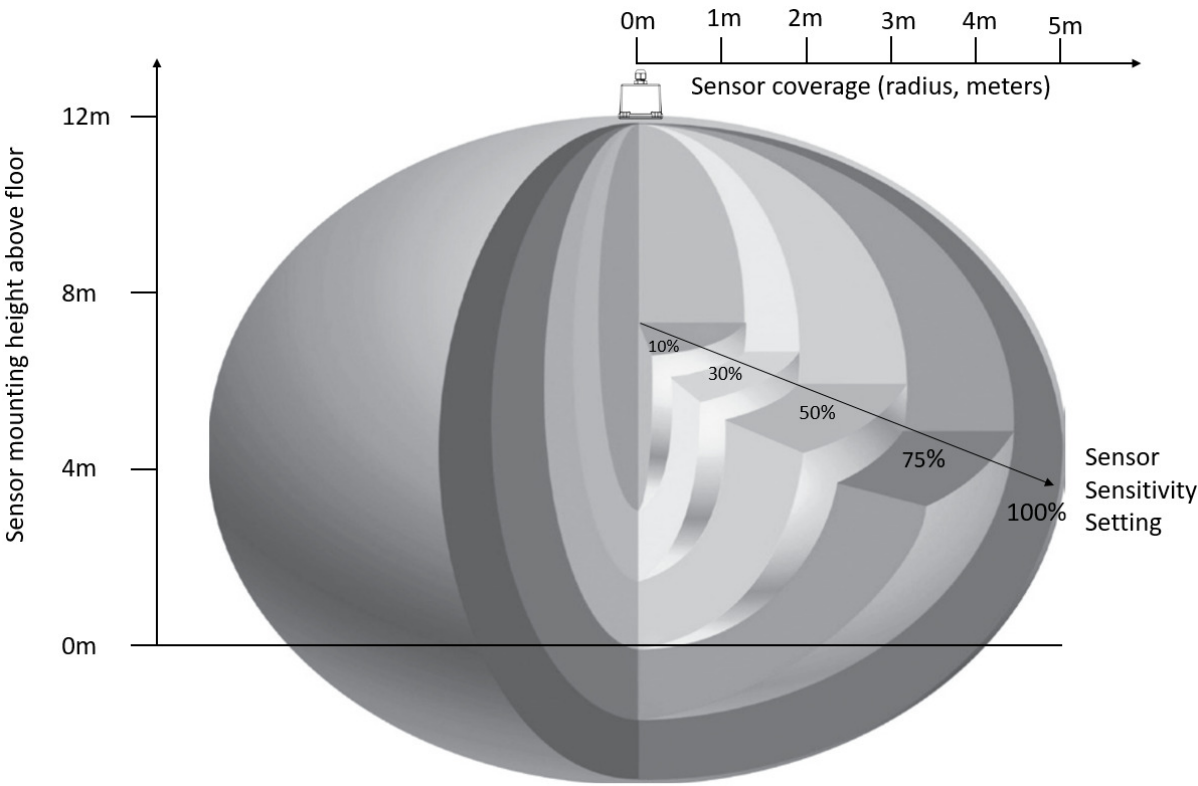
Pre-wired piggyback plug and socket connections

Switch Active
from Sensor
Earth
Neutral

Active to sensor
Earth
Neutral

6   Plug the Highbay into the piggyback socket.

Flex and plug (pre-fitted
to Pierlux Eco Highbay
GEN4)

Piggy-back plug/socket
(pre-fitted to sensor)

Surface mounted plug-
base or similar (supplied
by others)

7   Adjust the sensor settings to suit the application using the rotary switch pre-sets (see page 7) or by using the optionally purchased remote control (see pages 8 and 9).

Sensor detection pattern

0m 1m 2m 3m 4m 5m

Sensor coverage (radius, meters)

Sensor mounting height above floor

12m

8m

4m

0m

10%

30%

50%

75%

100%

Sensor Sensitivity Setting

Programming the sensor using the rotary switch pre-sets

A rotary switch is built inside the sensor for scene selection / fast programming. A total of 16 pre-sets are available. The rotary switch is accessed by removing the two screws which retain the front cover of the sensor housing. The front cover then hinges back to expose the rotary switch.

Remove screws and hinge back the cover to expose the rotary switch
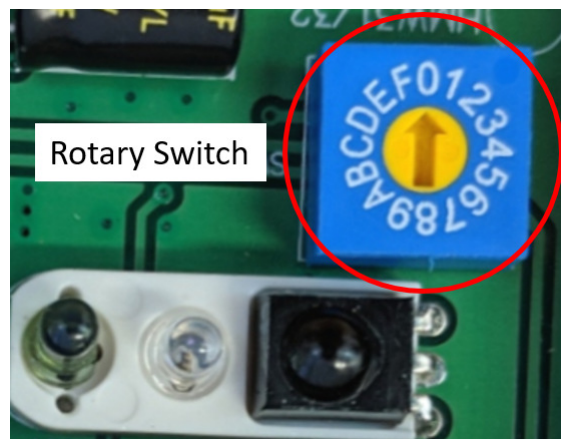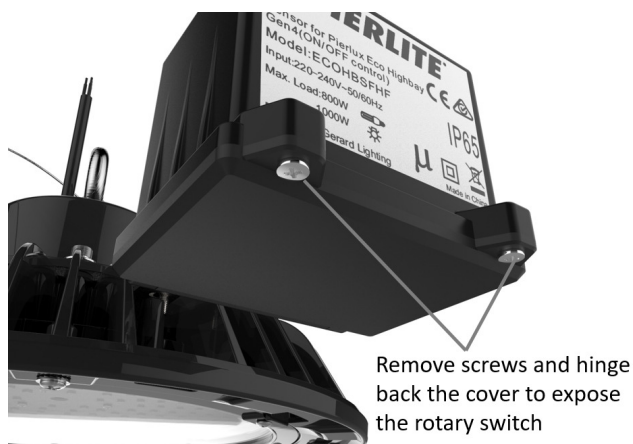
Rotary Switch

Rotary Switch Pre-sets

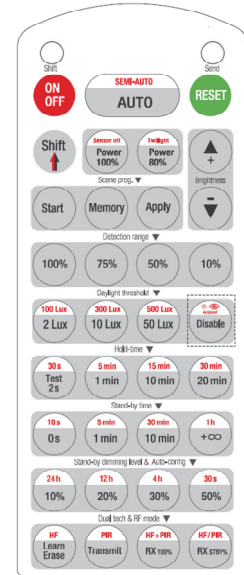| Rotary Switch position	Pre-set values		
	Detection range	Hold-time	Daylight Sensor
0	100%	5s	Disabled
1	100%	1min	2 Lux
2	100%	5min	10 Lux
3	100%	5min	30 Lux
4	100%	5min	10 Lux
5	100%	5min	30 Lux
6	100%	5min	Disabled
7	100%	10min	2 Lux
8	100%	10min	10 Lux
9	100%	10min	30 Lux
A	100%	10min	Disabled
B	75%	10min	30 Lux
C	50%	10min	10 Lux
D	100%	30min	50 Lux
E	100%	30min	Disabled
F	100%	5s	2 Lux

Note: settings can also be changed via the optional remote control, part number PRC11 (see the next section). The last programming changes made, regardless of whether made via the rotary switch or remote control, are used by the sensor.

Programming the sensor using the optional Remote Control

In addition to programming the sensor via the rotary switch pre-sets, an optional remote control, part number PRC11, can purchased separately.
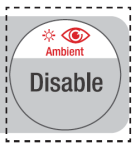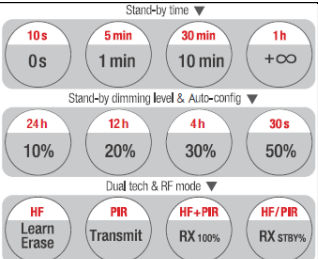
The PRC11 remote control has the following additional benefits.

- The programming is not limited to the 16 pre-sets on the rotary switch; any combinations of detection range, hold-time and daylight sensor setting can be programmed.
- One-Key Commissioning. The required sensor settings can be saved to the remote and copied to further sensors in the installation by pressing one button.
- Advances features, such as 'Ambient Daylight threshold', can be utilised.
- The sensor can be programmed without removing the sensor cover to access the rotary switch.

Remote Control PRC11 functions

Function	Button(s)	Description
Permanent ON/OFF		Press button "ON/OFF" to select permanent ON or permanent OFF mode. Press button "AUTO", "RESET" to quit this mode.
Reset		All settings go back to rotary switch settings.
Shift		When the "Shift" button is pressed, the LED in the top left corner turns on to indicate "Shift" mode is selected. All button functions in RED can be set while in "Shift" mode. "Shift" mode is valid for 20 seconds.
AUTO mode		Press the "AUTO" button to initiate Automatic mode. The sensor starts working and all settings remain as before the light is switched ON/OFF. Note: "Semi-auto" function is disabled.
Power output		These factions are disabled on this sensor
Brightness +/-		These factions are disabled on this sensor

Scene program - 1-key commissioning	Start Memory Apply	1.Press button "Start" to program 2.Select the required "Detection range", "Daylight threshold", "Hold-time" 3.Press button "Memory" to save all the settings programmed in the remote control 4.Press "Apply" to set each sensor unit individually For example, to set detection range 100%, daylight threshold Disable, hold-time 5min, the steps should be: Press button "Start", button "100%", "Disable", "Shift", "5min", "Memory". By pointing to the sensor unit(s) and pressing "Apply", all settings are passed on the sensor(s)
Detection range	Detection range ▼ 100% 75% 50% 10%	Set required detection range to 100% / 75% / 50% / 10%
Daylight threshold	Daylight threshold ▼ 100 Lux 300 Lux 500 Lux ☀ ◉ Ambient 2 Lux 10 Lux 50 Lux Disable	Set daylight sensor / target lux level to 2lux /10lux / 50Lux / 100Lux / 300Lux / 500Lux / Disable Note: To set daylight sensor at 100Lux / 300Lux / 500Lux, press "Shift" button
Ambient daylight threshold	☀ ◉ Ambient Disable	1. Press "Shift" button, the red LED starts to flash. 2. Press "Disable" button. The surrounding Lux level is sampled and set as the new daylight threshold / target lux level
Hold-time	Hold-time ▼ 30 s 5 min 15 min 30 min Test 2s 1 min 10 min 20 min	Set the hold-time at 2s / 30s / 1min / 5min / 10min / 15min / 20min / 30min Note: 1 To set hold-time at 30s / 5min / 15min / 30min, press "Shift" button first Note 2 2s is for testing purpose only, stand-by period and daylight sensor settings are disabled in this mode. To exit from Test mode, press "RESET" or any button in "Hold-time"
Stand-by time Stand-by dimming & Auto-config Dual tech & RF mode	Stand-by time ▼ 10s 5 min 30 min 1h 0s 1 min 10 min +∞ Stand-by dimming level & Auto-config ▼ 24 h 12 h 4 h 30 s 10% 20% 30% 50% Dual tech & RF mode ▼ HF Learn Erase PIR Transmit HF+PIR RX 100% HF/PIR RX STBY%	These factions are disabled on this sensor

Product specifications

Mains voltage	220-240VAC 50/60Hz
Stand-by power	<1W
Load ratings	Capacitive 800W Resistive 1000W
Warming-up	20s
Sensor technology	High Frequency (microwave)
Operation frequency	5.8GHz +/- 75MHz
Transmission power	<0.2mW
Detection range	Max. (Ø x H) 10m x 12m
Detection angle	360°
Operation temperature	Ta: -20°C +50°C
IP rating	IP65

Dimensions
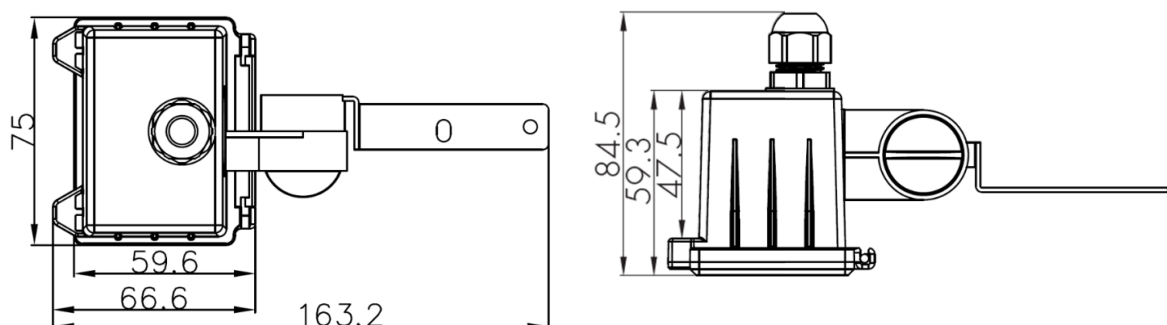
Standards and compliance

EMC standard (EMC)	EN55015:2013+A1:2015, EN61547:2009, EN61000-3-2:2014, EN61000-3-3:2013
Safety standards	AS/NZS 3105:2014/Amdt 1:2017 AS/NZS 3100:2017
Radio Equipment	EN300440:2017 EN301489-1:2017, EN301489-3:2017, EN62479:2010
Certification	RCM

Warranty

Warranty Instructions

For the purpose of warranty claims (if any) the following instructions apply

Warranty components – THE PRODUCT, (identified as the THE PRODUCT only). Warranty period - The above components are provided with a warranty of THREE (3) year/s or 15,000 hours of operation (which ever arrives first) against manufacturing defects or failure to perform to specifications for products installed by an authorised installer in accordance with the manufacturer's installation instructions and which have not been subject to incorrect operation or maintenance, unauthorised modification or damage arising from any intervening cause. Warranty reference - The warranty reference date commences from the date of purchase. Warranty point of contact – Gerard Lighting Pty Ltd, 96 Gow Street Padstow NSW 2211, phone T 02 9794 9300 contact – Gerard Lighting After Sales Support.

Warranty claim procedure

For the purpose of making a claim the customer must:

1. Contact the "point of contact" above and upon provision of proof of purchase the customer will receive a goods return advice (GRA) number.

2. At the customer's expense, collect and return the goods to the "point of contact" with the issued GRA number.

3. Upon receipt of the goods, Gerard Lighting will review the claim and if found to be accepted, Gerard Lighting will return a replacement product to the customer to install at the customer's expense. Alternatively if the claim is rejected, the customer may request the return of the goods at their expense.

Consumer Contracts

The benefits to the customer given by the Gerard Lighting warranty are in addition to other rights and remedies of the customer if the goods are the subject of a Consumer Contract under the Australian Consumer Law. In that event the following statement is required to be brought to the Consumer's attention:-

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Limitation of Liability

If the goods are not purchased by the customer under a Consumer Contract within the Australian Consumer Law then but not otherwise:-

(a) the Company is not liable in tort for any loss or damage suffered by the customer or by any third party; and

(b) in no circumstances is Gerard Lighting liable to the customer or to any third party for any loss of profits, loss of anticipated savings, economic loss or interruption of business or for any indirect or consequential loss (Consequential Loss). Terms of Sale – these Warranty provisions are in substitution for any inconsistent provisions in the Gerard Lighting Terms and Conditions of Sale in so far as they apply to the Warranty components.

The installation instructions were correct at the time of print. To reflect changes in technology and Australian standards; Gerard lighting reserves the right to amend the instructions without notice. Updated guidelines can be found on the relevant brand web site. The identified trademarks and copyrights are the property of Gerard Lighting unless otherwise noted

Pierlite is a brand of Gerard Lighting

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