# PIERLITE®

| Pierlite Australia | Pierlite New Zealand |
|---|---|
| Phone: 1300799300 | Phone: 0508 743 754 |
| pierlite.com.au | pierlite.co.nz |

**INSTALLATION / WARRANTY INSTRUCTIONS**
**PRODUCT BRAND:** PIERLITE
**PRODUCT NAME:** PIERLUX GS HIGHBAY With Sensor
**PRODUCT CODE:** PLHB120LS4GSH, PLHB120LS5GSH, PLHB200LS4GSH, PLHB200LS5GSH
        PLHBSENMW, PLHBREM

Issue Date:01/02/2024

Please read these installation instructions carefully before installing or maintaining this equipment. The product is designed for installation and maintenance in accordance with relevant Australian standards (AS/NZ3000), by an authorized and licensed electrician. The installation instructions were correct at the time of print. To reflect changes in technology and Australian and New Zealand standards; Pierlite reserves the right to amend the instructions without notice. Updated guidelines can be found on relevant brand web site.

## 1. PRODUCT SPECIFICATION:

| Item code | PLHB120LS4GSH, PLHB120LS5GSH | PLHB200LS4GSH, PLHB200LS5GSH |
|---|---|---|
| Type of protection | Class I luminaire | |
| IP rating | IP65 | |
| IK rating | IK08 | |
| IC rating | N/A | |
| Nominal voltage | 220V to 240Vac | |
| Nominal frequency | 50/60 Hz | |
| Number of wattages per fitting | 4 power selections per fitting | |
| Available wattages | Refer to section 4 | |
| Power factor | >0.9 (full load) | |
| Surge protection rating | L-N 4KV/2KA, L-E: 4KV/2KA, N-E: 4KV/2KA Maximum impulse voltage, 10KV (where SPD installed) | |
| Inrush current | Cold start 60A at 106us Measured at 100% load at 240Vac | Cold start 65A at 113us Measured at 100% load at 240Vac |
| Earth leakage | <0.7mA | |
| Rated operating ambient temperature | -25 to +50°C | |
| LED lifetime | • Reported >60000 hours(L70/B10) +50°C<br>• Reported 42,000 hours (L90/B10) @ +50°C | • Reported >60000 hours(L70/B10) +50°C<br>• Reported 37,000 hours (L90/B10) @ +50° |
| Colour temperature | 4000K or 5000K | |
| Colour rendering index (CRI) | 85 | |
| LED control gear | Lumen select | |
| Available in emergency | N/A | |
| Emergency battery technology | N/A | |
| Electrical connection | Supplied with 1.7m long 3-pin flex and plug | |
| Cable type | Z | |
| Cable entry | N/A | |
| Installation type | Fixed | |
| Dimensions (LxWxH) | 290x290x146mm | 330x 330x147mm |
| Net weight of luminaire | 2kg | 2.6kg |
| Warranty | 5 years | |
| Suitability | Indoor and outdoor | |
| Suitable for rough service | Yes | |

## 2. CONSUMABLES AND ACCESSORIES (ACCESSORIES TO BE PURCHASED SEPARATELY)

| Product Code | Accessories | Suitable for Pierlux Sensor Highbay |
|---|---|---|
| PLHBSENMW (PLHBXXXLSXGSH with 1pcs in the package) | Sensor to suit sensor highbay | |
| PLHBREM | Sensor remote control to suit sensor highbay | |
| HBBRKT | Surface mounting bracket kit 166mm x 127mm x 29mm | PLHB120LS4GSH |
| HBDUSTCOV (Dip set should not more than 120W for PLHB200LS4GSH and PLHB200LS5GSH) | Annodized aluminium dust cover Ø371mm x 79.5 mm | PLHB120LS5GSH |
| HBPCREFR | Transparent polycarbonate reflector Ø410mm x 141mm | PLHB200LS4GSH |
| HBPCLENS | Transparent PC reflector Lens to suit HBPCREFR Ø413mm x 40.6mm | PLHB200LS5GSH |
| HBRODBRKT | Rod mount bracket black 275.5*239.9*218mm | |

## 3. SERVICE & OPERATION (EMERGENCY VERSION)

Normal Operation: Maintained Emergency Operation.

Battery: Sealed **Lithium Iron Phosphate (LiFePO4)** rechargeable battery pack. As per AS/NZS 2293, it is required that the battery pack is discharged and recharged at least once every 6 months.
In case of a replacement, same brand and type of battery pack must be used. Allow 24 hours charging time before carrying out any discharge tests.
Charge Duration: 16 Hours
Discharge Duration: M2 = 2 Hours for standard emergency or M4 = 4 hours for rail/heavy industry emergency (Initial Test)

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Test Switch: If manual test switch pressed, the fixture will operate from its battery supply.
Please ensure battery plug is connected to the inverter battery terminal.

**Warning: All maintenance, such as battery change on this luminaire is to be changed by qualified personnel only. De-energize all supplies before maintenance.**
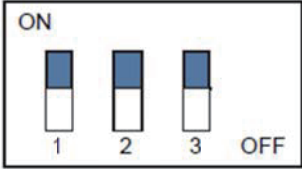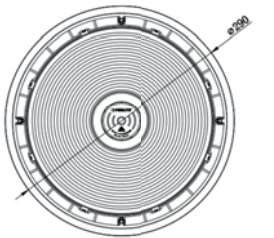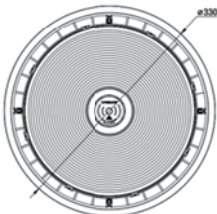
## 4. LUMEN SELECT TABLE (contractor selectable output)

Pierlite's lumen select products allows all licensed electricians to purchase one luminaire that can be set as multiple fixed wattages/fixed lumen outputs. By offering this capability within one fitting it provides the following benefits

- One fitting multiple fixed outputs
- Less stocked items
- Easy to change settings
- IES files available for all available for wattages shown in the above table
- No control system or software required to change fixed output

The lumen output can be altered by changing the driver dip switches from the factory default setting to the driver milli-amps as specified in the table. Dip switches are located next to suspension hook of the Highbay.

| Product Code# | Power (W) | Line Current (A) | Lumen Output (Lm) | Dip Switch Settings Refer section 5 | | | CCT (K) |
|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | |
| PLHB120LS5GSH | 120（default） | 0.53 | 18300 | Off | Off | Off | 5000K |
| | 100 | 0.45 | 15600 | On | Off | Off | |
| | 80 | 0.36 | 12700 | Off | On | Off | |
| | 60 | 0.29 | 9700 | Off | Off | On | |
| PLHB120LS4GSH | 120（default） | 0.53 | 18300 | Off | Off | Off | 4000K |
| | 100 | 0.45 | 15600 | On | Off | Off | |
| | 80 | 0.36 | 12700 | Off | On | Off | |
| | 60 | 0.29 | 9700 | Off | Off | On | |
| PLHB200LS5GSH | 200（default） | 0.89 | 30000 | Off | Off | Off | 5000K |
| | 170 | 0.76 | 26400 | On | Off | Off | |
| | 120 | 0.54 | 19100 | Off | On | Off | |
| | 100 | 0.45 | 16100 | Off | Off | On | |
| PLHB200LS4GSH | 200（default） | 0.89 | 30000 | Off | Off | Off | 4000K |
| | 170 | 0.76 | 26400 | On | Off | Off | |
| | 120 | 0.54 | 19100 | Off | On | Off | |
| | 100 | 0.45 | 16100 | Off | Off | On | |



**Note:** *Make sure to disconnect power before changing a DIP switch on the luminaries. Setting the DIP switches according to the above ONLY. All other settings may affect the luminaries' performance. After setting, secure the silicon cover over the DIP switches.*

**PLHB120LS5GSH**

| Dip Switch Setting | | | Power (W) | Lumen output (lm) |
|---|---|---|---|---|
| 1 | 2 | 3 | | |
| Off | Off | Off | 120 (def.) | 18300 |
| On | Off | Off | 100 | 15600 |
| Off | On | Off | 80 | 12700 |
| Off | Off | On | 60 | 9700 |

**PLHB200LS5GSH**

| Dip Switch Setting | | | Power (W) | Lumen output (lm) |
|---|---|---|---|---|
| 1 | 2 | 3 | | |
| Off | Off | Off | 200(def.) | 30000 |
| On | Off | Off | 170 | 26400 |
| Off | On | Off | 120 | 19100 |
| Off | Off | On | 100 | 16100 |

**PLHB120LS4GSH**

| Dip Switch Setting | | | Power (W) | Lumen output (lm) |
|---|---|---|---|---|
| 1 | 2 | 3 | | |
| Off | Off | Off | 120(def.) | 18300 |
| On | Off | Off | 100 | 15600 |
| Off | On | Off | 80 | 12700 |
| Off | Off | On | 60 | 9700 |

**PLHB200LS4GSH**

| Dip Switch Setting | | | Power (W) | Lumen output (lm) |
|---|---|---|---|---|
| 1 | 2 | 3 | | |
| Off | Off | Off | 200(def.) | 30000 |
| On | Off | Off | 170 | 26400 |
| Off | On | Off | 120 | 19100 |
| Off | Off | On | 100 | 16100 |

## 5. LINE DIAGRAMS AND DIMENSIONS

| Item code | Diameter (mm) | Height (mm) | Weight in (kg) |
|---|---|---|---|
| PLHB200LS4GSH PLHB200LS5GSH | 330 | 147 | 2.6 |
| PLHB120LS4GSH PLHB120LS5GSH | 290 | 146 | 2 |

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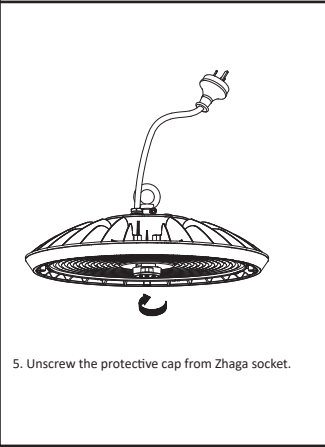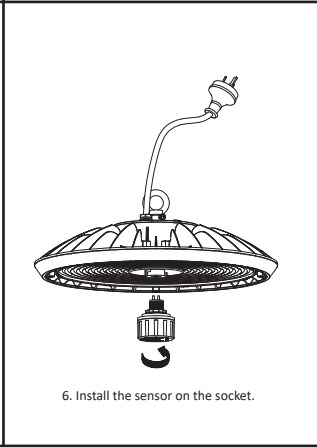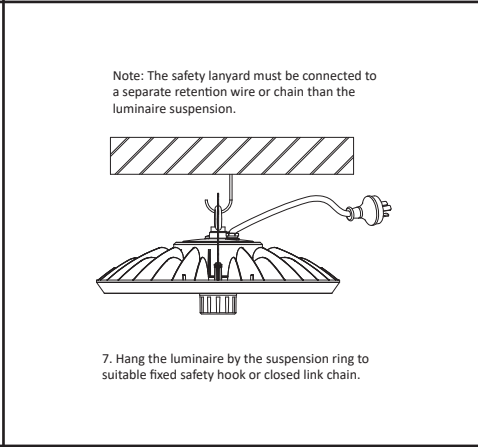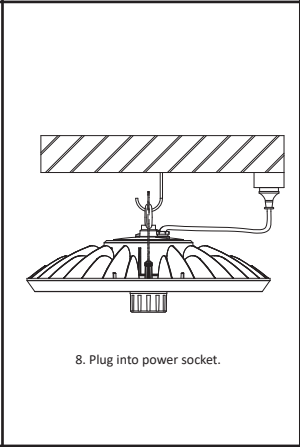PLHB120LS4GSH, PLHB120LS5GSH

PLHB200LS4GSH, PLHB200LS5GSH

**6.    INSTALLATION / GENERAL:**    Installation of the product is to be completed by an authorized and licensed electrician, in accordance with these instructions, relevant Australia standards and local regulations (where applicable). Termination of product wiring, together with the installation of the product must be in a manner and orientation that maintains the integrity of the designated IP rating of the product for electronic control equipment (when supplied) DO NOT MEGGER between A and N.

**Installation:**

**Tools Required**
- **Flat blade screwdriver**

installation steps

1. Double check suspension ring and safety labyard and make sure they are tightly fixed on the body.

2. Use a flat head screw driver to unscrew the sealingcap. (If you use the default output, please ignore this step)

3. Set the lighting level to the desired lumen output via the lumne select switches. (If you use the default output, please ignore this step)

ON
OFF

4. Use a flat head screw driver to tighten the sealing cap. (If you use the default output, please ignore this step)

5. Unscrew the protective cap from Zhaga socket.

6. Install the sensor on the socket.

Note: The safety lanyard must be connected to a separate retention wire or chain than the luminaire suspension.

7. Hang the luminaire by the suspension ring to suitable fixed safety hook or closed link chain.

8. Plug into power socket.

**Warning: The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.**

**7.    IMPORTANT** - 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. Good practice does not recommend the 24/7 use of products without the application of suitable switch cycle intervals. Furthermore, with the omission of nominated survival curves and or recommended operating hours, product design expectations provide for a continual daily usage of 6 hours for residential applications and a continual daily usage of 12 hours for commercial and industrial applications. All products must be thoroughly cleaned on a regular basis at intervals that reflect in the installation environment, ensuring the optical performance, together with the electrical, mechanical, and structural integrity as designed, is maintained throughout the service life of the product.

**8.    APPROVALS:** The RCM marking of this product applies to AS/NZS CISPR15 (EMC) "Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment". This product is designed to conform to AS/NZS60598 "Luminaires, general requirements and tests".

**9.    STORAGE: Prior to installation products are to be stored in cool and dry conditions.**

**10.    APPLICATION: The installation application and orientation of the product is designed in accordance with the nominated product IP rating, class designation and these installation** installations. Installation environments outside these conditions are not recommended.

**11.    MAINTENANCE:**
**(a**) The supply must be isolated before opening or accessing the luminaire. Product maintenance is IMPORTANT and is critical to the products designed performance. The product is to be maintained in accordance with the manufacturer's instructions. For the latest product maintenance guides please go to relevant brand web site. Pierlite is not responsible for any product not maintained in accordance with the recommended procedure or intervals.
**(b) Lamps (where provided):**    The product is designed with the supplied (LEDs) / LAMP/s and it is strongly recommended that any LAMP / (LEDs) changes (if any) be made in accordance with the type, colour and brand supplied. For recommended LAMP / LED maintenance or operating guides (inclusive of recommended product switch cycles and mandatory run-in procedures for HID and Fluorescent lamps when used with dimming circuits), Pierlite recommends the application of the lamp manufacturer's operating guidelines, which can be found on manufacturer's website. Pierlite is not responsible for the product performance of alternative lamp/s used. As a member of FluroCycle, we encourage recycling of lamps and components.
**(c) For products supplied with glass visors or covers**, do not operate the product with a damaged visor or cover; it is recommended the product be turned off, area surrounding the product vacated, and the damaged glass replaced by a professional installer immediately.
**(d) Cables or cords,** If any external cable or cord of the X or Y type luminaire is damaged, it shall be replaced by a by a qualified person or manufactures service agent. For Z type attachments to luminaire, cord cannot be replaced if damaged, the luminaire shall be removed from service.
    Flex cord types.
- X: A specially prepared flexible cable or cord, may also include a part of the luminaire and only available from manufacture.
- Y: Attachment may be used either with ordinary or special flexible cable or cord.
- Z: Attachment of cable or cord that cannot be replaced without damage to luminaire

**WARRANTY INSTRUCTIONS:** For the purpose of warranty claims (if any) the following instructions apply:
**Warranty period** - The above components are provided with a warranty (refer to product specifications for details) 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** – Pierlite, 96 Gow Street Padstow NSW 2211, phone T 1300 799 300 contact – Pierlite 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, Pierlite will review the claim and if found to be accepted, Pierlite 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 Pierlite 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 Pierlite 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).
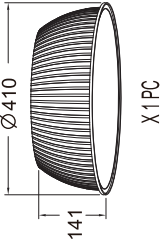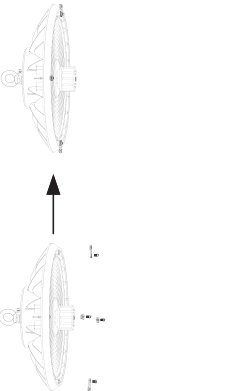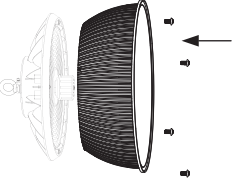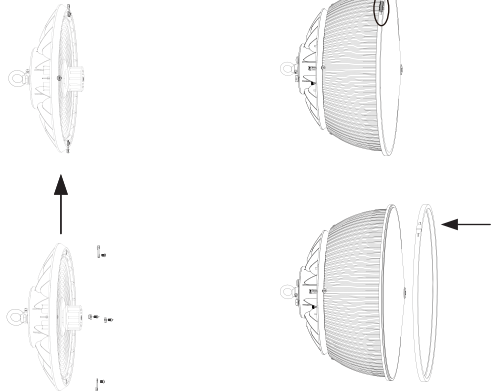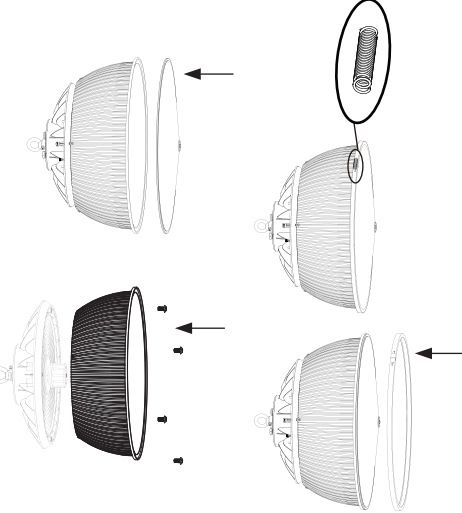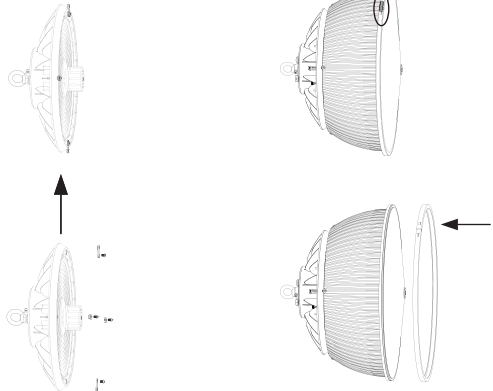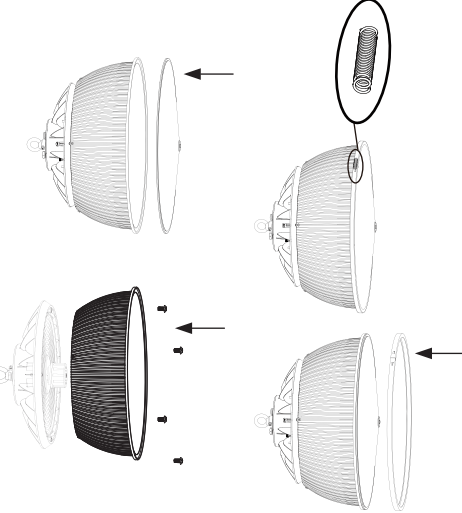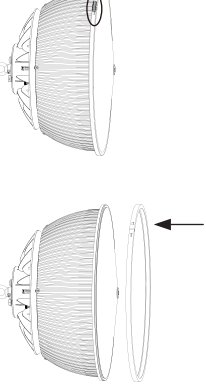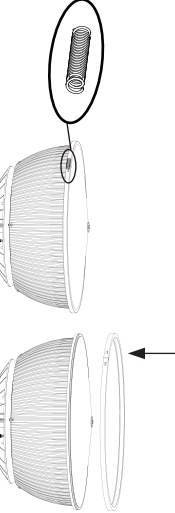
**Terms of Sale** – these warranty provisions are in substitution for any inconsistent provisions in the Pierlite Terms and Conditions of Sale in so far as they apply to the warranty components.
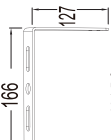
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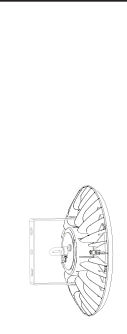**PLHBSENMW Sensor Function**

o ON-OFF function       Stand-by Period be set to "0s"

o 2-step dimming       Stand-by Period be set to "+∞"

o 3-step dimming       Stand-by Period be set to "10s/1min/3min/5min/10min/30min"

o Daylight priority       Remote press DH Mode and Daylight Sensor be set to "5Lux/15Lux/30Lux/50Lux/100Lux/150Lux"

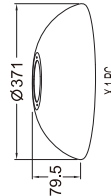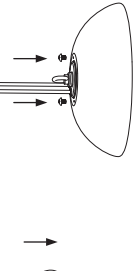o Daylight harvesting       N/A

**PLHBSENMW Sensor Default Setting**
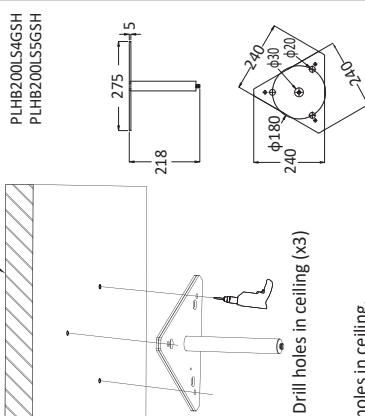Sensitivity: 100%, Hold time: 10min, Daylight sensor: Disable, Stand by period: 30min, Stand by DIM level: 10%

**PLHBREM instruction：**

| Remote Control Setting | Button | Remarks |
|---|---|---|
| | ON/OFF (red) | Press the "ON/OFF" button, the load light enters the normal on/off mode, and the sensing function is disabled. This button has no power off memory function |
| | Reset | Press "Reset" button, all parameters are same as setting of DIP switch or factory settings. Note: Only the product has DIP switch, it will revert to the current DIP setting. |
| | Sensor motion | Press "Sensor motion" button, the light quits from the normal on/off mode, and the sensor starts to work. (The latest setting stays in validity) |
| | DIM Test | Press "DIM Test" button, the 0-10V dimming works to test whether the 1-10Vdc dimming ports are connected properly. After 2s, it returns to the latest setting automatically. |
| | Override DH | Long Press 3s "Override DH" button to exit the Daylight priority mode or Daylight harvesting mode, and then enter the Daylight Sensor mode. (The latest setting stays in validity) |
| | DIM+   DIM- | Short press "DIM+/DIM-" button to set occupancy light level, the brightness of the load light adjusts at 5% per unit. Long press "DIM+/DIM-" button to set occupancy light level, the brightness of the load light adjusts at 5% per unit. Dimming range: 50%-100%. (apply for normal on mode and sensor with daylight harvesting function) |
| | DH Mode | Long Press 3s to enter the Daylight priority function or Daylight harvesting function. Note: Short press "Disable" button will exit the Daylight priority mode and the Daylight Sensor is uncontrolled. |
| | QS1   QS2   QS3 | (see table below) Note: The sensor parameters can be adjusted by pressing the corresponding button. When user press any button to change the sensor parameters, the last setting prevails. If the sensor doesn't have the function of the above parameters, that parameter is invalid. (Stand-by period and Stand-by DIM Level are not applicable to ON-OFF Sensor. Induction way is not applicable to low-mount sensor) |
| | TEST 2s | Press the "TEST 2s" botton can enter the test mode anytime. At test mode, the sensor parameters as below: Detection Area is 100%, Hold Time is 2s, Stand-by Dim Level is 10%, Stand-by Period is 0s, Daylight sensor is disabled. This function only for testing. Quit the test mode by pressing "RESET" or any other function buttons. This mode has no memory function. After powering on again, the parameters are restored to the last setting. Note: If the sensor have the wireless networking function, the botton provides the functions is entering the distribution network mode. |
| | HS   LS | Press "HS" botton to set the detection area to high sensitivity. Press "LS" botton to set the detection area to low sensitivity. The Induction mode is adjusted at the setting detection area. Note: This button is invalid for low-mount sensor. |
| | (daylight icon) | Daylight Sensor Set up Daylight Sensor: 5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable |
| | (clock icon) | Stand-by period Set up Stand-by period: 0s/10s/1min/3min/5min/10min/30min/+∞ Note: Stand-by period is not applicable to ON-OFF Sensor. |
| | (clock icon) | Hold time Set up Hold time: 5s/30s/1min/3min/5min/10min/20min/30min |
| | (dim level icon) | Stand-by dim level Set up stand-by dim level: 10%/20%/30%/50% Note: Stand-by DIM Level is not applicable to ON-OFF Sensor. |
| | (detection icon) | Detection Area Set up Detection Area: 25%/50%/75%/100% |
| | (remote icon) | Remote Distance Toggle bottom can set the remote distance of remote control and sensor. |

Table (for QS1/QS2/QS3):

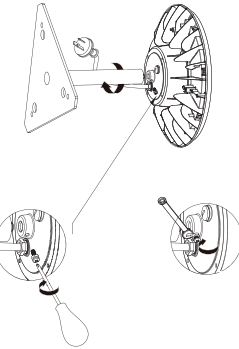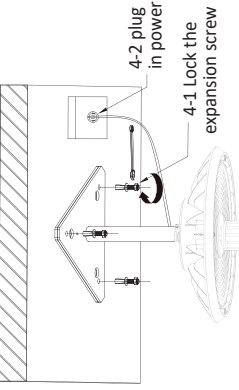| Scence Options | Dection Area | Hold Time | Stand-by period | Stand-by dim level | Daylight Sensor | Induction way |
|---|---|---|---|---|---|---|
| QS1 | 100% | 5min | 10min | 10% | 30Lux | HS |
| QS2 | 100% | 10min | 30min | 10% | Disable | HS |
| QS3 | 100% | 20min | 30min | 10% | Disable | HS |

# PIERLITE ®

**ACCESSORIES** (TO BE PURCHASED SEPARATELY – Line drawings installation could also be found in the individual accessories pack).

## HBPCREFR

| PLHB120LS4GSH | | |
| PLHB120LS5GSH | Screws TM4X6 X 8 PCS | BRK For REF X 4 PCS |
| PLHB200LS4GSH | | |
| PLHB200LS5GSH | Screws TM4X6 X 4 PCS | |

Ø410 — 141

X 1 PC

Install to PLHB120LS4GSH or PLHB120LS5GSH

Install to PLHB200LS4GSH or PLHB200LS5GSH

## HBPCREFR

| PLHB120LS4GSH | | |
| PLHB120LS5GSH | Screws TM4X6 X 8 PCS | BRK For REF X 4 PCS |
| | | Spring X 1 PCS |
| PLHB200LS4GSH | | |
| PLHB200LS5GSH | Screws TM4X6 X 4 PCS | Spring X 1 PCS |

Ø410 — 141

LENS — 413 — 40.6

X 1 PC

RING
HBPCLENS

X 1 PC

Install to PLHB120LS4GSH or PLHB120LS5GSH

Install to PLHB200LS4GSH or PLHB200LS5GSH

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# PIERLITE ®

## HBBRKT

| PLHB120LS4GSH | | | |
| PLHB120LS5GSH | Bracket base X 2 PCS | Screw TM5X10 X 8 PCS | Spring washer M5 X 8 PCS | Washer M5 X 8 PCS |
| PLHB200LS4GSH | | | |
| PLHB200LS5GSH | | | |

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X 1 PC

Install to PLHB120LS4GSH / PLHB120LS5GSH / PLHB200LS4GSH or PLHB200LS5GSH

## HBRODBRKT

Ceiling

275 — 218 — Ø180 — Ø30 — Ø40 — 240

1-1 Drill 3 holes in ceiling (x3)

1. Drill 3 holes in ceiling.

2-1 Unscrew screws

2-2 Remove eyebolt

2. Unscrew the screw of eyebolt, then remove the eyebolt.

3-1 Assembly the rod mounting to luminaire

3-2 Lock the screw beshide the hole

3-3. Lock the nut in the screw, and the nut is snug against the light fixture

3. Asembly the rod mounting to luminaire.

4-1 Lock the expansion screw

4-2 plug in power

Ceiling

4. Install the luminaire on the ceiling with 3 expansion screws, then plug in power.

## HBDUSTCOV

| PLHB120LS4GSH | |
| PLHB120LS5GSH | Screws TM3X4 X 2 PCS |
| PLHB200LS4GSH | |
| PLHB200LS5GSH | |

Ø371 — 79.5

X 1 PC

Install to PLHB120LS4GSH / PLHB120LS5GSH / PLHB200LS4GSH or PLHB200LS5GSH