

TEKNIK

LIGHTING SOLUTIONS

[SMARTBAY]

“ONE BOX” LED HIGHBAY

USER MANUAL



Teknik Lighting Solutions Pty Ltd

ABN: 44 608 397 913

Tel: 1300 313 780

www.tekniklighting.com.au



INTRODUCTION

Thank you for selecting the [SMARTBAY] “One Box” LED Highbay. Please ensure that the luminaire is installed in accordance with the below instructions. **Teknik Lighting Solutions Pty Ltd** assumes no responsibility for inappropriate use or installation of the product, including any associated damage caused.

- 5 year warranty
- 5 option wattage switchable functionality
- Unique heat sink design to reduce dust build up
- Smart hook system for easy and quick installation
- Integrated motion and daylight sensor for intelligent lighting control

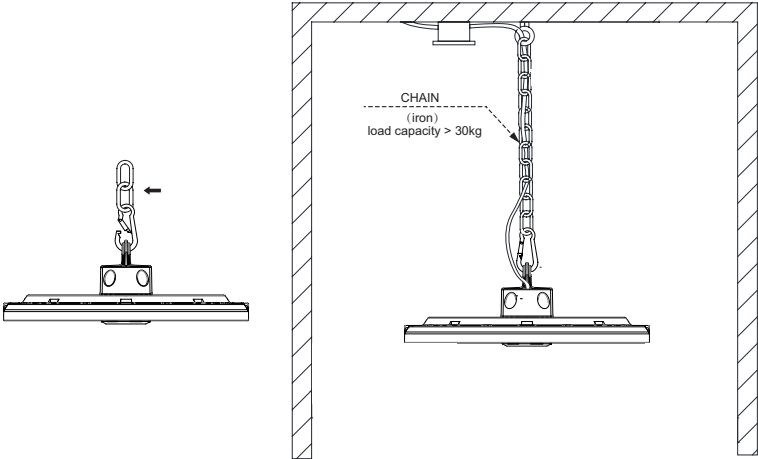
PRECAUTION

1. Read the entire manual carefully prior to installation and operation.
2. The warranty period is listed on the product as well as on the packaging. Teknik will repair or replace the product if it becomes defective under normal use due to a manufacturing defect within the prescribed period.
3. Declared lumen output is based upon measurements obtained during operation on the appointed LED electronic driver under standardised laboratory conditions.
4. Installation must be performed by a licensed and qualified electrician, in accordance with these instructions and relevant Australian Standards.
5. Instant restart is allowed.
6. Do not change or tamper with any internal electric circuits, add any wires, connectors or cables for any reason.
7. Please do not insert any physical objects of any nature into the fitting as this may cause electric shock, malfunction or damage to the products.
8. Before replacement of the fitting turn the power off and allow to cool down.
9. In case of weight discrepancy when replacing old lamps, please ensure that the mounted structure is rated to withstand the weight of the new lamp and installation materials.
10. For further information, please contact Teknik (www.tekniklighting.com.au) or your local distributor.

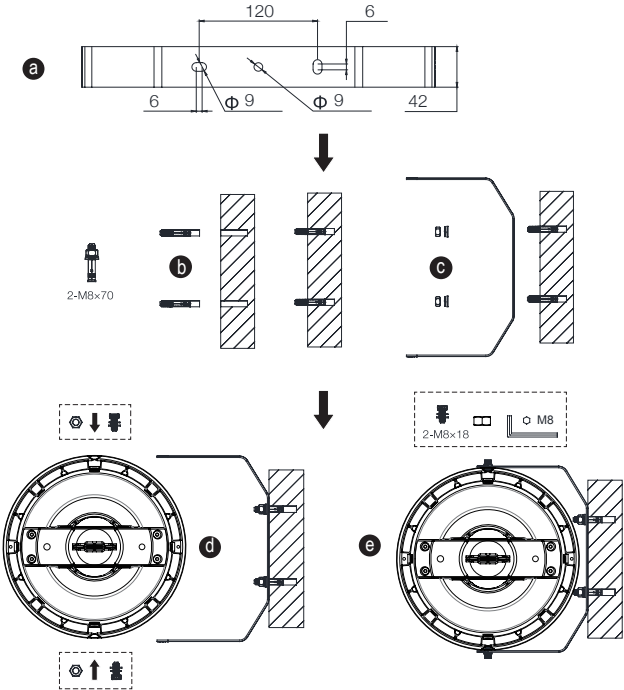
INSTALLATION DIAGRAM

Note: Supplied safety lanyard should be used for all installation options.

Hook Mount



Bracket Mount (Optional)

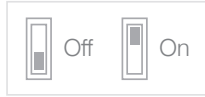


WATTAGE SWITCHABLE FUNCTION

Locate the Wattage Switch box as per the dimensional drawing below. To access the switches use a large skewdriver or coin to open the box.

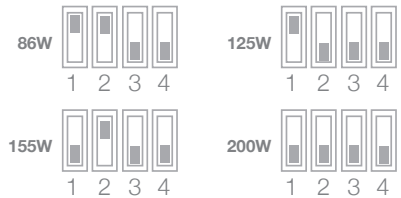
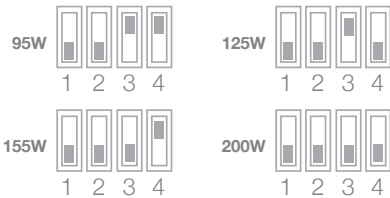
When sensor option is required, ensure sensor module is fitted and use sensor option switching as below.

When non sensor option is required, ensure blanking module is fitted and use non sensor switching as below.



With Sensor

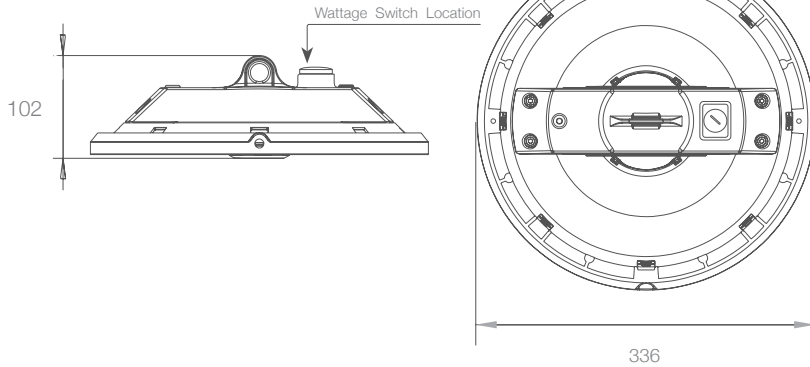
Without Sensor



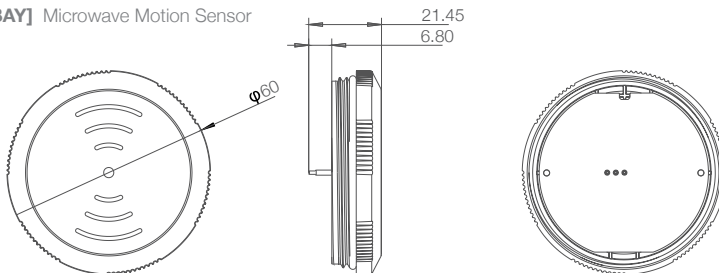
DIMENSIONAL DRAWING

Unit = mm

[SMARTBAY] "One Box" LED Highbay

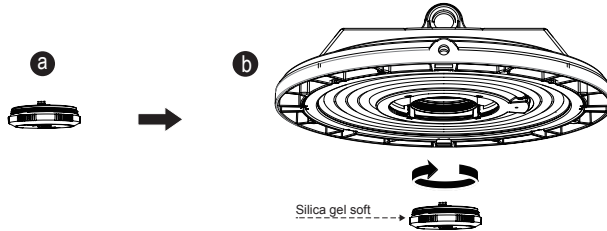


[SMARTBAY] Microwave Motion Sensor



SENSOR INSTRUCTIONS

Note: When sensor option is not required, replace sensor module with supplied blanking module



SENSOR INFORMATION

Product Type	Microwave Motion Sensor
Operating Voltage	12VDC/55mA
HF System	5.8GHz CW radar
Detection Angle	30° ~ 50°
Power Consumption	<1W
Detection Range (DXH)	Max 16x12m
Hold Time	30s ~ 30min
Daylight Sensor	2 ~ 500Lux; Disable
Stand-by Period	0s, 10s ~ 1h, +∞
Stand-by Dimming Level	10% ~ 50%
Mounting	Indoors, ceiling & wall mounted
Working Temperature	-20 ~ +60°C
Model	HS-SEN Microwave/constant illumination HS-SEN-RF Microwave/constant illumination + RF (868MHz)

SENSOR DEFAULT SETTINGS

Detection Range (DXH)	100%
Hold Time	20mins
Daylight Sensor	500Lux
Stand-by Period	+∞
Stand-by Dimming Level	30%

SECTION 1: TYPICAL APPLICATIONS

HF MOTION DETECTOR

Daylight Harvesting

When the ambient light is below the selected **daylight threshold** lux level, The [SMARTBAY] will adjust its output to maintain that selected level. If no motion is detected for the selected **hold time**, the [SMARTBAY] will dim to the selected **standby dimming level**. If no motion is detected during the **standby time**, the [SMARTBAY] will switch off.



The [SMARTBAY] will remain off if the ambient light level is above the **daylight threshold**.



When the ambient light level is below the selected **daylight threshold** the [SMARTBAY] will automatically adjust light output to meet selected **daylight threshold** level.

The [SMARTBAY] turns on at full or dims to maintain the lux level. The light output regulates according to level of natural light available

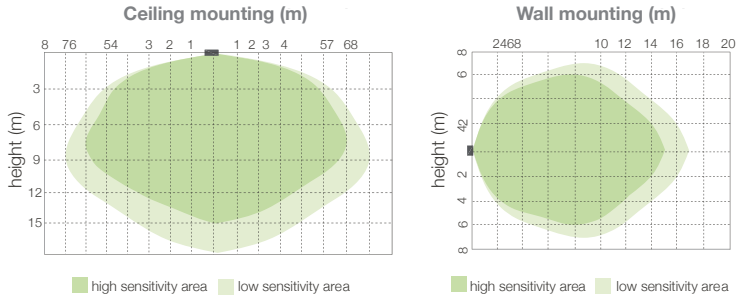


When no movement is detected after the selected **hold time**, light will dim to the selected **standby level**.



When no motion is detected during the selected **standby time** the [SMARTBAY] will automatically turn off .

DETECTION PATTERN



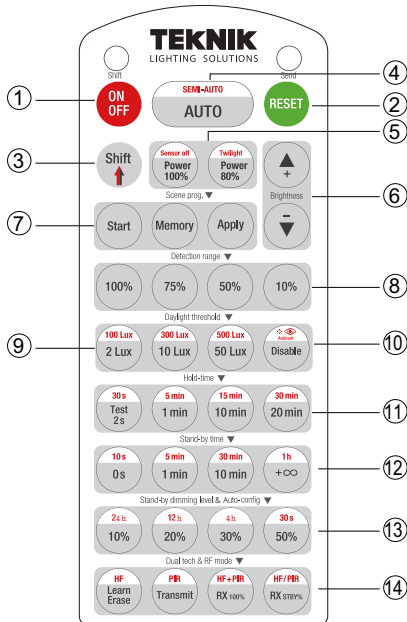
SECTION 2: REMOTE CONTROL (OPTIONAL)

Permanent ON/OFF[button ①]

Press button ①, to select permanent ON or permanent OFF mode

* Press button ② / ④ to resume automatic operation.

The mode will change to AUTO Mode after power failure or circuit power is cycled (via switch or breaker)



HS-REM

Note: the red LED indicator will flash once when RC receives signal successfully

Shift [button③]

Press button ③ , the LED on the top left corner will flash to indicate mode selection. All values / settings in RED are valid for 20 seconds.

Auto Mode [button④]

Press button ④ to initiate automatic mode. The sensor starts working and all settings remains before the light was switched ON/OFF.

Semi-auto Mode[button ③ & ④]

1. Press button ③ Shift (the red LED is on for indication),
2. press button ④ to initiate semi-auto mode. The fixture is manually on by push-switch and automatically off in semi-auto mode.

Power output [button⑤]

Press button ⑤ , the light output shifts between 80% and 100%.
Note: the function of "Sensor off" and "Twilight" are disabled.

Brightness +/- [button⑥]

Press button ⑥ to adjust the light brightness between 10%~100% .

Scene prog. [zone⑦] (One-key-commissioning)

1. Press button "start" to program.
2. Select the buttons in ⑧ "Detection range", ⑨/ ⑩ "Daylight hreshold", ⑪ "Hold time", ⑫ "Stand-by time", "Stand-by dimming level" to set all parameters.
3. Press button "Memory" to save all the settings programmed in the remote control.
4. Press button "Apply" to set the settings to each sensor unit(s). For example, to pre-set detection range 100%, daylight threshold Disable, hold time 5min, stand-by time +∞, stand-by dimming level 30%, the steps should be as follows: Press button Start, ⑪ 5min,③ Shift,⑫ +∞,⑬ 30%,⑭ Memory. By pointing to the sensor unit(s) and pressing ⑦ Apply, all settings are passed on the sensor(s).

Detection range [zone⑧]

Press buttons in zone ⑧ to set detection range at 100% / 75%/ 50% / 10%.

Daylight threshold [zone ⑨]

Press buttons in zone ⑨ to set the daylight sensor at 2Lux / 10Lux / 50Lux / 100Lux / 300Lux / 500Lux or Disable.
Note: To set daylight sensor at 100Lux / 300 Lux / 500Lux, press button ③ Shift at first.

Ambient daylight threshold [button⑩]

1. Press button ③ Shift, the red LED is on for indication.
2. Press button ⑩, the ambient lux level is sampled and set as the new daylight threshold.

Hold time [zone ⑪]

Press buttons in zone ⑪ to 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 button ③ Shift at first.

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 button ② or anybutton in zone ⑬.

Stand-by time [zone ⑫]

Press buttons in zone ⑫ to set the stand-by period at 0s / 10 s / 1min / 5min / 10min / 30min / 1h / +∞.

Note: "0s" means on/off control; "+∞" means bi-level control, 100% on when motion is detected, and remains at the stand-by diming level when no presence is detected after hold-time.

Stand-by dimming level [zone ⑬]

Press buttons in zone ⑬ to set the stand-by dimming level at 10% / 20% / 30% / 50%.

Note: 24h / 12h / 4h / 30s are disabled.

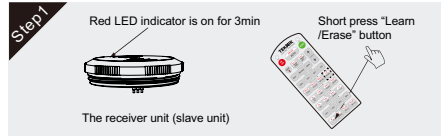
Dual tech & RF mode [zone ⑭] (For optional sensor model HS-SEN-RF Microwave/constant illumination + RF (868MHz))

1. HF, PIR, HF+PIR, HF/PIR are disabled.
2. For RF grouping, please see below.

RF GROUPING

Short press "Learn/Erase" button on RC to activate pairing mode, and the receiver unit will flash once every second for 3min.

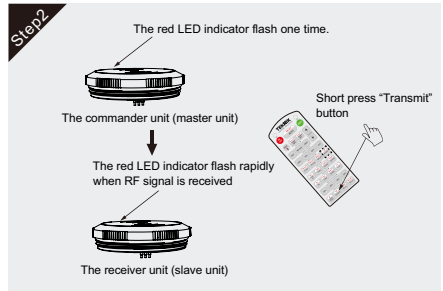
Note: the unit can only pair up to 30 units.



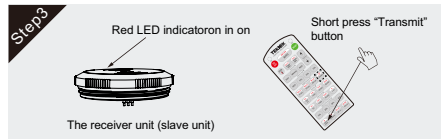
Short press "Transmit" button on RC, the commander unit (master unit) will flash one time to send the transmission signal.

Upon receiving the transmission signal, the receiver unit (slave unit) will rapidly flash 3 times in 1s to indicate the success of pairing. Repeat this step to pair more units. One more short press on "Learn/Erase" button to the receiver unit to complete the pairing process, the receiver unit will quit the pairing mode.

Note:
Press button RX100%, the light on receiver unit is 100% on upon receiving RF on signal; Press "RX STBY%" button, the light(s) goes to preset stand-by dimming level directly.'



Erase:
Long press "Learn/Erase" button for 3s to the sensor unit. The red LED indicator rapidly flash for about 5s. all commands it has received before will be erased.



SECTION 3: TROUBLESHOOTING

FAULT	CAUSE	REMEDY
The fixture does not light up	Incorrect daylight threshold setting	Adjust daylight threshold setting
	Faulty fixture	Replace fixture
	No power supply	Check power to sensor
The fixture is always on	Continuous movement in the detection zone	Check detection area setting
The fixture is on when it should not	Sudden change in temperature due to weather (wind, rain, snow) or air expelled from fans, or open windows	Adjust zone, change installation site

NOTES

1. Minimum distance from luminaire to any flammable object is 2m.
2. In case of weight discrepancy when replacing old luminaires, please ensure that the mounting structure is rated to withstand the weight of the new luminaires and installation materials.
3. For further information, please contact Teknik (www.tekniklighting.com.au) or your local distributors.

DISCLAIMERS

1. This product must be installed and used as per these instructions.
2. This product contains no serviceable parts and no attempt should be made to repair this product. If the product is faulty it should be discarded.
3. This product is not suitable for installation in hazardous and/or corrosive areas.
4. Electrical installations periodically receive transient over voltages. This product has been designed to minimise the effect of such voltages on connected equipment. It may not give full protection for extreme over-voltage transients such as those resulting from a close lightning strike.
5. This product utilises intellectual property in the form of registered designs, trademarks, and/or patents. Such intellectual property remains the property of Teknik Lighting Solutions Pty Ltd in all cases.
6. This product has been designed to operate in ambient temperatures -40°C to $+50^{\circ}\text{C}$.