

<b>5</b> YEAR PRODUCT WARRANTY	<b>W</b> WATTAGE SELECTABLE	<b>S:</b> COLOUR SELECTABLE	<b>S</b> SENSE TECHNOLOGY
<b>E</b> EMERGENCY FUNCTION	<b>IP</b> <b>65</b> INGRESS PROTECTION	<b>IK</b> <b>08</b> IMPACT PROTECTION	

# [VIPER]

## WEATHERPROOF LED BATTEN

USER MANUAL



## INTRODUCTION

Thank you for selecting the [VIPER] LED Weatherproof Batten. 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.

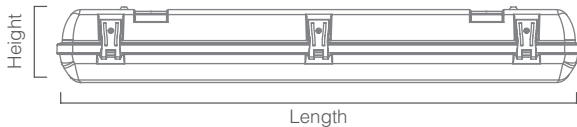
Features:

- > 5-year professional warranty
- > High efficacy up to 100lm/W
- > Durable polycarbonate body and diffuser with stainless steel clips
- > Emergency and sensor options available

## 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 licenced 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](http://www.tekniklighting.com.au)) or your local distributor.

## DIMENSIONAL DRAWING



Wattage	Length mm	Width mm	Height mm
14W-8W/16W-10W	655	130	88
24W-14W/26W-16W	1265	130	88

## SPECIFICATIONS

Model	BV-2-14S120	BV-2-14S120-E	BV-2-14S120-SD	BV-4-24S120	BV-4-24S120-E	BV-4-24S120-SD	BV-4-24S120-ESD
Input Voltage	220-240 VAC ~ 50/60Hz						
Power	14W-8W	16W-10W	14W-8W	24W-14W	26W-16W	24W-14W	26W-16W
Lumen Output	1960lm-1120lm			3360lm-1960lm			
Colour Temp	3000K / 4000K / 5700K						
CRI	>83						
Beam Angle	120°						
Connection	Terminal Block with Quick Connect Plug						
Net Weight	1.3kg	1.6kg	1.6kg	2.1kg	2.4kg	2.2kg	2.5kg
Lifetime	>30,000 hrs						
IP Rating	IP65						
Battery Type (-E Mode)	LiFePO4 6.4V 3.0ah						
Usage	For indoor + outdoor use						

## GREEN/AMBER VERSIONS

Model	BV-2-20GA120	BV-2-20GA120-E	BV-4-40GA120	BV-4-40GA120-E
Input Voltage	220-240 VAC ~ 50/60Hz			
Power	20W-11W	22W-13W	40W-23W	42W-25W
Lumen Output	2040lm-1872lm		3920lm-3600lm	
Colour Temp	Green 516nm / Amber 587nm			
CRI	n/a			
Beam Angle	120°			
Connection	Nylon Cable Gland PG13.5			
Net Weight	1.3kg	1.6kg	2.1kg	2.4kg
Lifetime	>50,000 hrs			
IP Rating	IP65			
Battery Type (-E Mode)	Cyantronic LFP7302-S20			
Usage	For indoor + outdoor use			

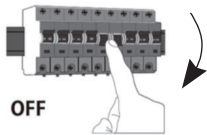
# INSTALLATION

## WARNING:

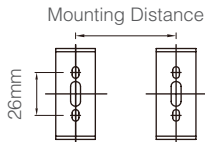
1. Switch off before installation.
2. Switch on only after complete installation and examination of the circuit.
3. Installation and maintenance to be undertaken by professional electrician.



**1** Disconnect power to circuit

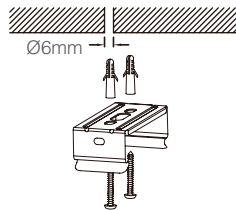


**2** Drill Ø6mm holes as per the diagram below.



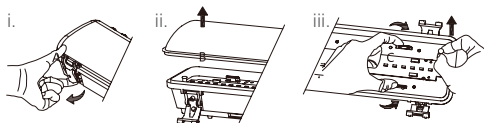
Model	Mounting Distance
600mm	420mm
1200mm	905mm

**3** Insert wall plugs and secure the mounting bracket with provided M4 screws.



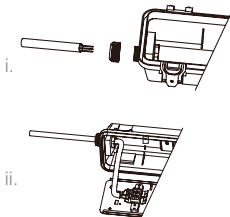
**4**

- i. Open all external clips.
- ii. Remove diffuser.
- iii. Squeeze internal retention clips and remove gear tray

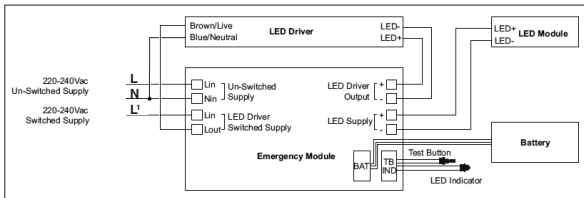


**5**

- i. Install cable gland and feed through cable.
- ii. Connect the cable to the terminal block as shown below.
- iii. Connect the battery (Emergency Version).
- iv. Tighten the cable gland.



## Emergency Wiring Diagram



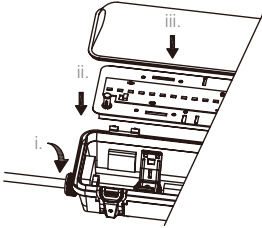
**For Maintained Emergency**  
*(always on full output, emergency mode activates with loss of power)*  
 Bridge L1 and L terminals.

**For Non Maintained Emergency**  
*(only on with loss of power)*  
 Connect permanent active to L terminal.

**For Switched Non Maintained Emergency Function**  
*(light operates via a switch for normal on and off operation and emergency mode activated with loss of power)*  
 Connect permanent active to L and switched active to L1.

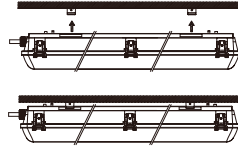
6

- i. Tighten cable gland as shown below.
- ii. Replace gear tray.
- iii. Close the diffuser and ensure all clips fastened.



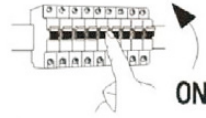
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Affix luminaire to mounting bracket.



8

Reconnect power to the circuit.



For emergency versions (-E) please connect the battery before use and use the test switch to test the emergency function and for maintenance.

## WATTAGE SWITCHING

1. Remove gear tray from housing
2. On the DC output side of the LED driver, use the dip switch to select the preferred output level.
  - i. 4ft Model: 24W (350mA), 21W (300mA), 17W (250mA), 14W (200mA)
  - ii. 2ft Model: 14W (350mA), 12W (300mA), 10W (250mA), 8W (200mA)

## WITHOUT SENSOR

**ELEMENT**  
**EM FIT 40/220-240/350 D CS L**  
Constant Current LED Power Supply  
恒流型 LED 控制装置

PIN1	PIN2	Inrated(mA)	Rated(W)	Unrated(Vdc)	U <sub>in</sub> / f <sub>n</sub>	I <sub>o</sub> (A)	t <sub>a</sub> (°C)	PF
OFF	OFF	200	24,0	40-120	220-240V 50/60Hz	0,150	-20 → 60	0,8<math>C</math>-0,92<math>C</math>
OFF	ON	250	30,0	40-120		0,190		0,7<math>C</math>-0,90<math>C</math>
ON	OFF	300	36,0	40-120	0,220	0,8<math>C</math>-0,94<math>C</math>		
ON	ON	350	42,0	40-120	0,250	0,9<math>C</math>-0,95		

Connect PE to case or PIN 3  
wire preparation  
push in  
S: 0,5 - 1,6  
f: 0,75 - 1,6  
7 - 8mm

SEC= U-OUT=280V  
LED Only

LED+ → 21  
LED- → 22

ON ← OFF  
2  
1

**OSRAM** GmbH  
Berliner Allee 65  
86163 Augsburg  
Germany  
www.osram.com

Made in China

## WITH SENSOR

N  
 L  
 ⊕

**merrytek®**  
www.merrytek.com  
**LED Driver**  
Model No.: MLC40C-NPS

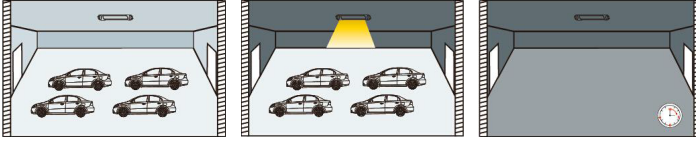
Wire preparation  
S: 0,5-1,0  
E: 0,7-1,0

Input Voltage	220-240Vac	Output Voltage	160Vdc Max	I <sub>o</sub> (mA)	200	65-120	13-24	Output Current Setting	mA	1	2
Input Frequency	50/60Hz	Output Power	42W Max	250	65-120	16,2-30	200	ON	ON		
Input Current	190mA Max	t <sub>a</sub>	-25~+50°C	300	65-120	19,5-36	250	—	ON		
Power Factor(λ)	≥0,95	t <sub>c</sub>	90°C	350	65-120	22,7-42	300	ON	—		
							350	—	—		

12V+  
GND  
PWM  
(5V/3.3V)

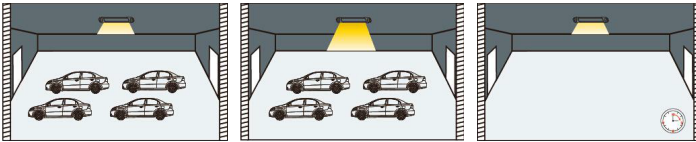
## SENSOR DIMMABLE OPTION (-SD)

### 1. On/OFF Function: *stand-by period be set to "0s"*



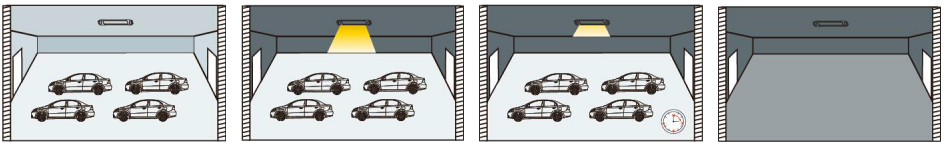
- 1 With sufficient ambient light, the light will not be switched on even if with motion signal.
- 2 With insufficient ambient light, the sensor switches on the light when motion is detected.
- 3 After elapse of hold time, the sensor switches off the light when no motion is detected.

### 2. 2-Step Dimming Function: *stand-by period be set to "+∞"*



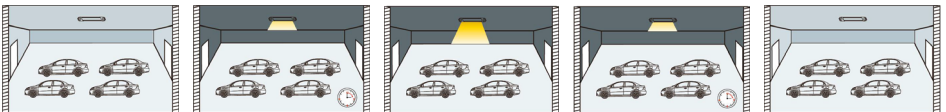
- 1 If there is no motion detected, the light will be remained at a low light level all the time.
- 2 When motion is detected, the sensor will switch on the light to 100% brightness
- 3 After elapse of hold time, the sensor dims the light at the present low level if no motion is detected.

### 3. 3-Step Dimming Function: *stand-by period be set to "10S/1min/3min/5min/10min/30min"*



- 1 With sufficient ambient light, the light will not be switched on even if with motion signal.
- 2 With insufficient ambient light, the sensor switches on the light when motion is detected.
- 3 After elapse of hold time, the sensor dims the light at a low light level if no new motion is detected.
- 4 After elapse of standby period, the sensor switches off the light if no motion is detected in the detection zone.

### 4. Daylight Priority: *stand-by period set to "DH Mode"*



- 1 With sufficient ambient light, the light will not be switched on even if with motion signal.
- 2 When the ambient light is insufficient, the lamp will turn on and enter the low light state (standby level).
- 3 With insufficient ambient light, the lamp goes on full light when a mobile signal is detected.
- 4 After hold time, if no motion is detected in the detection area, the lamp will automatically turn to standby brightness.
- 5 After standby time, if no moving object is detected in the detection area and the ambient light is sufficient, the lamp will turn off automatically.

## EMERGENCY TEST BUTTON INSTRUCTIONS

1. Remove the gear tray diffuser from the body.
2. Connect the battery to the emergency converter via plug.
3. To test the [VIPER], press the red button to simulate AC mains failure. If the light is in maintained mode, it will result in a brighter luminaire. If the light is in non-maintained mode, it will switch on to 2W energy power mode.

### NOTE:

If the green light is illuminated, the product is currently re-charging. If the green light is not illuminated, the product is fully charged.

## 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.