

EMERGENCY LED DRIVER

VEMB40W-10V(S)

100-347Vac



FEATURES

- Constant output power. Self-testing.
- Long life high temperature recyclable Li-ion battery.
- Includes 2-in 1 test switch and charge indicator light.
- 5 year limited warranty.
- Suitable for use in dry and damp location.
- UL Listed for factory or field installation-UL924 & CSAC22.2 NO.141.
- Certified for CA Title 20.

ELECTRICAL SPECIFICATIONS

- Input Voltage:100-347Vac,50/60Hz
- Input Power: 15W max
- Input Current: 200mA max
- Output Voltage: 120-190Vdc
- Emergency Output Power: 40W
- Recharge Time: 24 Hours
- Discharge Time: 90 minutes
- Battery: Li-ion battery
- Output Current: 600mA max
- Ambient Temp: 5°C to 50°C(41°F to 122°F)

**CONSTANT
POWER**
EMERGENCY OUTPUT

Self Test

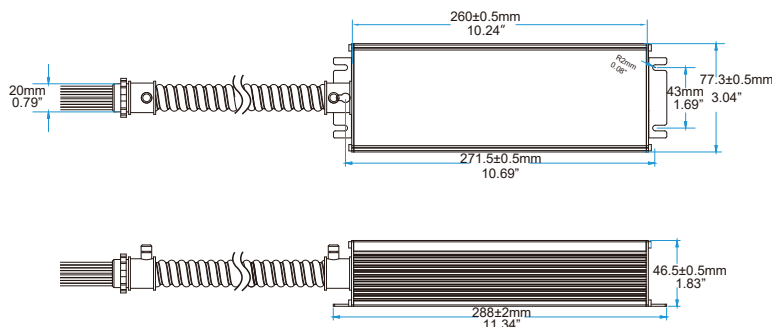


Product includes the following components:

PARTS	QUANTITY
Emergency LED Driver	1
Charging Indicator/Testing Button	1
Instruction Sheet	1

Dimension:

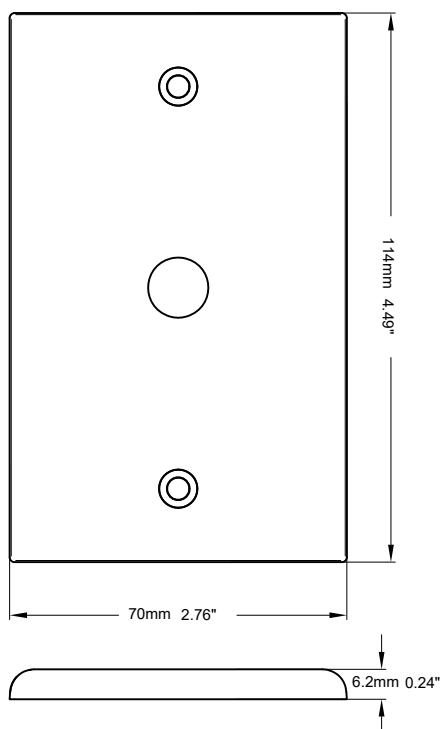
L*W*H=288x77.3x46.5mm(11.34"x3.04"x1.83"), mounting center 271.5mm(10.69")



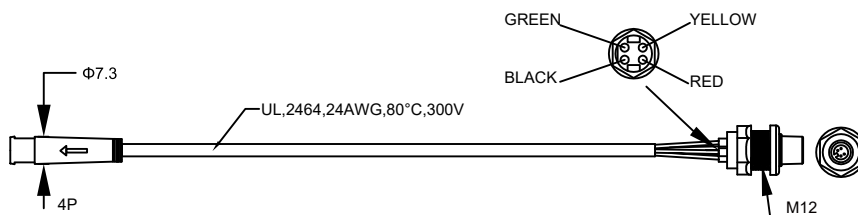
SEMB40W-10V(S)

OPTIONAL TEST SWITCH

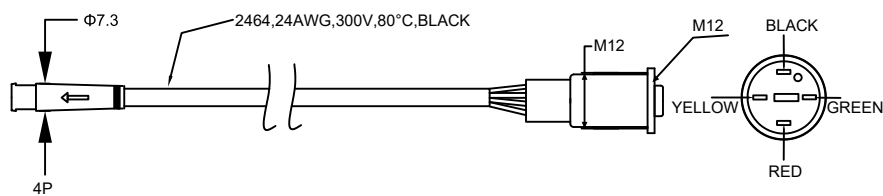
Test Plate:



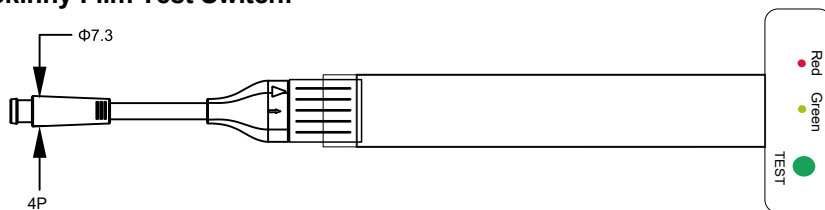
2 In 1 Plastic Test Switch:



M12 Metal Test Switch:



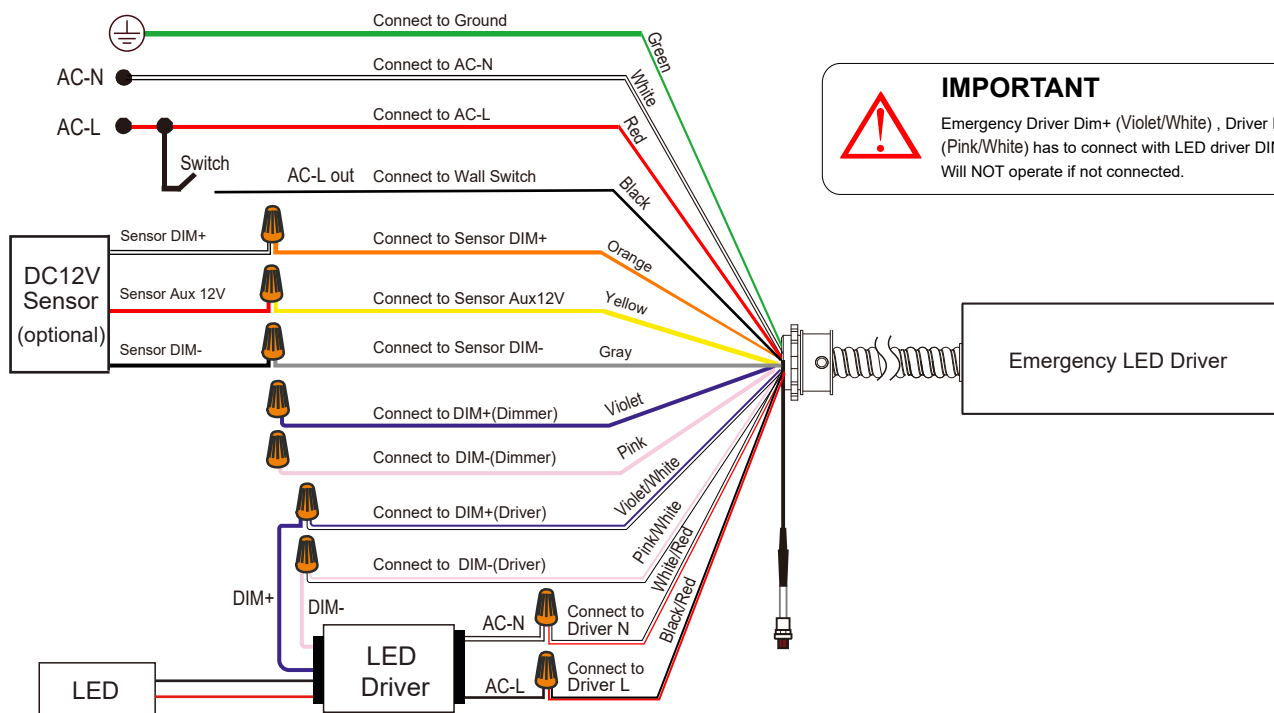
Skinny Film Test Switch:



WIRING DIAGRAM



CAUTION: Before installing, make certain the AC power is off.



IMPORTANT

Emergency Driver Dim+ (Violet/White) , Driver Dim- (Pink/White) has to connect with LED driver DIM+ and DIM- Will NOT operate if not connected.

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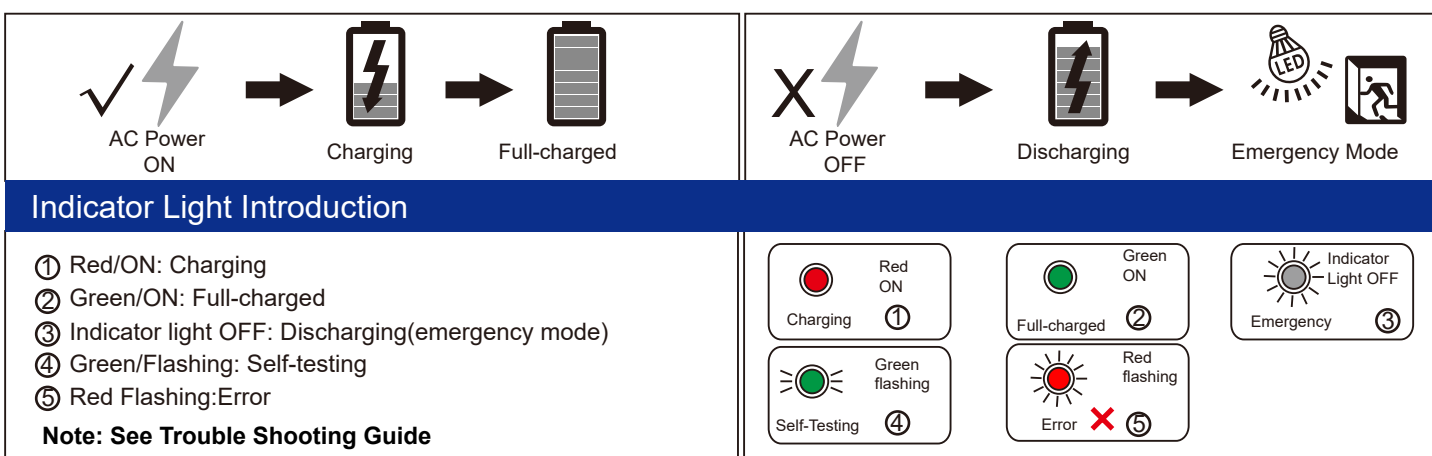
OPERATION

AC Mode: AC power is present, the LED load from the LED driver is normal power supply, AC LED driver output current can not exceed 4A, the emergency driver is charging in a standby mode.

Emergency Mode: When AC power fails, the emergency driver automatically switches to emergency mode, operating the LEDs for a minimum of 90 minutes. When AC power is restored, the emergency driver switches the system back to the normal mode and restores to the battery charging state.

SELF-TEST:

This unit contains a control/monitor circuit that if enabled automatically performs a 30-second discharge test once a month and a full 90-minute discharge test once a year. During routine testing, the self-testing emergency driver simulates an AC power failure causing the unit to automatically switch to emergency mode. The unit will monitor the operation of the LED load, and emergency duration. If the emergency system functions properly, then the unit will return to normal mode.



TEST SWITCH INDICATOR STATUS & TROUBLE SHOOTING GUIDE

The charge indicator will be lit Solid Red when charging, and will be lit Solid Green when fully charged and in the standby mode. The indicator will flashing Green when self-testing.

Mode	LED Indicators Status	Error	EM Driver Status / Mode	Corrective Action
Normal Mode	Solid Green 	None	Battery fully charged/System OK	/
	Solid Red 	None	Battery is charging	/
	Both LEDs OFF 	None	In EM mode or emergency run-time is ended	/
	Flashing Green 	None	Self-Diagnostic test underway	/
Fault Mode	Flashing Red 	Overload protection		1. Check load power and connect 2. Check input and dimming line 3. Powered on again 4. Contact after-sales

MANUAL TEST

Test Mode	Description	Action	Status	Quit
Fast Test	Quick discharge test	Press the test button 1 time	LED load will light up for 5s	/
Monthly	30-second test	Press the test button 3s continuously	LED load will light up for 30s	Hold the test button/switch for 1s
Annually	90-minute test	Press the test button 6s continuously	LED load will light up for 90 minutes	Hold the test button/switch for 1s

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OPERATION

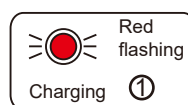
Normal Mode: AC power is present. The AC driver operates the LED load as designed. The emergency driver is charging in a standby mode. The charging indicator will be lit, showing that the battery is charging.

Emergency Mode: When AC power fails, the emergency driver automatically switches to emergency mode, operating the LEDs for a minimum of 90 minutes. When AC power is restored, the emergency driver switches the system back to the normal mode and restores to the battery charging state.



Indicator Light Introduction

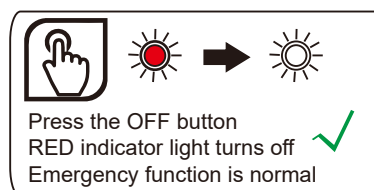
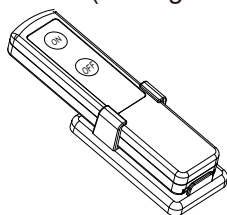
- ① Red/Flashing: Charging
- ② Red/ON: Full-charged
- ③ Red/OFF: Discharging(emergency mode)



Remote Controller Introduction

ON Press the ON button to test emergency function. The fixture will switch to emergency mode for 30 seconds and the indicator light will turn off. To quite the 30 seconds EM test, press the OFF button, then fixture will revert to normal mode.

OFF When main power supply is OFF(emergency mode), press the OFF button can turn off emergency function.



Note: Remote must be pointed at the indicator light and be within a 45 degree angle to send signal to LED emergency driver. Remote controls requires two AAA batteries to operate. Batteries are not included.

Sleep Mode

- In EM mode, press remote controller OFF button to cut off emergency output and enter sleep mode.
- In sleep mode, the battery is completely disconnected, and the small leakage current can ensure longer shelf time.
- The Automatic Power Activate feature will reactivate the unit upon installation and first power-up.

Testing And Maintenance

Press the remote controller ON button to cut the power to the AC driver and force the unit into emergency mode. The LED load is now being lit by the emergency driver. Press the remote controller OFF button, the fixture returns to normal mode. Switch off the circuit breaker to simulate a full power outage.

Initial Testing – Allow the unit to charge approximately 1 hour, then conduct a short discharge test. Allow a 24 hour charge before conducting a one hour test.

The emergency driver is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule:

1. Visually inspect the indicator light monthly. It should be illuminated when AC power is applied.
2. Monthly-Conduct a 30 second discharge test by depressing the remote controller ON button or by switching off the mains power every month.
3. Annually-Conduct a 90 minutes discharge test once per year. The unit should operate as intended for the duration of the test.

**“Written Records of the Testing should be kept by the owner for inspection by the authority having jurisdiction.”
SERVICING SHOULD BE PERFORMED BY QUALIFIED PERSONNEL.**

VEMB40WHV-10V(S)

INSTRUCTION MANUAL

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

- CAUTION: RISK OF SHOCK-disconnect emergency and normal input power sources before servicing.
- ASSEMBLY and FIELD INSTALLATION WIRING: WARNING: AC power must be off before proceeding with assembly or installation of emergency driver.
- IMPORTANT: An un-switched AC power source is required(100-347Vac). It is designed for fixtures listed for dry and damp locations
- IMPORTANT: Please charge the battery consistently for >24 hours for the first time usage so as to activate the whole battery cells of discharging/charging duration.
- IMPORTANT: Customers are advised to charge emergency LED drivers 24 hours every 6 months during storage, and which could be stocked for 1 year at most. If customers don't install and recharge for more than 1 year, the batteries may be damaged. This is not covered in the warranty, and we would charge for replacement.
- IMPORTANT: Lighting fixture manufacturers, electricians, and end-users need to ensure product system compatibility test before using and final installation.
- CAUTION: Make sure all electrical connections conform to the National Electrical Code and all applicable local regulations.
- CAUTION: This is a sealed unit. Components are not replaceable. Replace the entire LED Emergency Backup unit when necessary.
- CAUTION: Equipment should be mounted in locations and at heights where it is not be subjected to tampering by unauthorized personnel.
- CAUTION: The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.
- CAUTION: Use with grounded, UL Listed, dry or damp location rated fixtures. Case should also be grounded.
- CAUTION: Battery is rechargeable Li-ion type and must be recycled or disposed of properly
- CAUTION: Suitable for use in 5°C -50°C ambient temperatures
- CAUTION: This product is for use in indoor fixtures only. Do NOT use near heated air handling outlets or hazardous locations..
- Do not let power supply cords touch hot surfaces. Do not mount near gas or electric heaters. Do not use this equipment for other than its intended use. Failure to follow this may cause an unsafe condition and will void warranty. Servicing of this equipment should be performed by qualified personnel only.



THIS PRODUCT CONTAINS A RECHARGEABLE LI-ION BATTERY.
THE BATTERY MUST BE RECYCLED OR DISPOSED OFF PROPERLY.