

Emergency Backup Battery Installation



Remote Control Reception, Up to 98ft

Emergency Backup Battery

FEATURES

- Listed to UL924 and CSA C22.2
- Listed to CEC Title20 Compliance
- Listed to IP65 Rating, Suitable for Dry and Wet Locations
- Over Temperature / Charge / Discharge Protection for Battery
- Integrated Junction Box Design
- Remote test: Distance for 98ft
- Self-test Function
- High output voltage
- Constant Power



PRODUCT DESCRIPTION

Driver Type	Constant Emergency Power LED Driver	Service Life	800 Times
Safe Standard	UL 924 and CSA C22.2	Output Power	25W / 40W
Warranty	5 Years		

SELF-TEST

The integrated self-diagnostic circuitry will automatically implement monthly 30-second and annual 90-minute tests to verify proper emergency capability complying per life safety code requirements. NFPA 101, life safety code outlines the schedule below:

- Monthly Test: During AC mode, the system conducts a 30-second self-discharge test of the emergency LED driver every 30 days and automatically restore normal charge after 30-second discharge.
- Annual Test: During AC mode, the system conducts a 90-minute self-discharge test of the emergency LED driver every 365 days and automatically restore normal charge after full discharge.

* For LED fixture less than or equal to 150W / 320W (If the fixture power dimmed to the minimum, its power must be less than the output power of emergency backup battery.)

ELECTRICAL SPECIFICATIONS

Input

Input Voltage: 100-347Vac

Frequency: 50/60Hz

Power Factor: > 0.9, @120~277Vac Input

Max. Power: 12W

Inrush Current: 3A

Max input current: 50mA @120V, 35mA @240V, and 30mA @277V

Output

Output current:	25W	40W
	1250mA @20Vdc, 431mA @58Vdc	2000mA @20Vdc, 690mA @58Vdc

Output voltage: 170Vdc

Output power: 25W (Constant) / 40W (Constant)

Over Voltage Protection: YES

Over Power Protection: YES

Turn-on Delay Time: <4S

Overshoot: <10%

Ripple & Noise (pk-pk): <10%

Withstand Voltage: L to N-3kV

Leakage Current: Sample: Maximum 0.5mA at 277Vac, 60Hz Input

Vaux for DC Sensor: 12Vdc, 0.2A

Battery

Emergency Operation Time: 90 Minutes

Turn-on Delay Time: < 2s

Recharge Time: 24Hrs

Battery Charging Current: 200mA Max

Capacity:	25W	40W
	14.4V/5000 mAh	18V/5000mAh

Material: Li-ion

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: 32°F to 132°F

Storage Temperature: - 4°F to 131°F

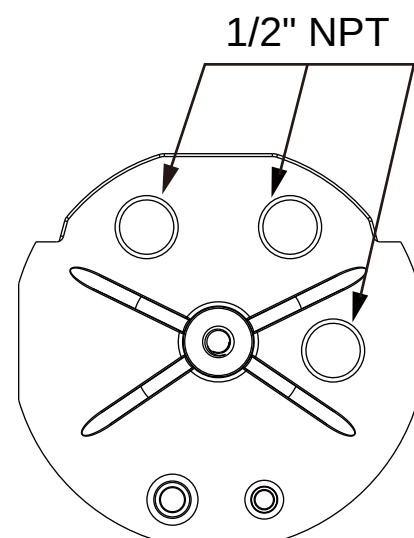
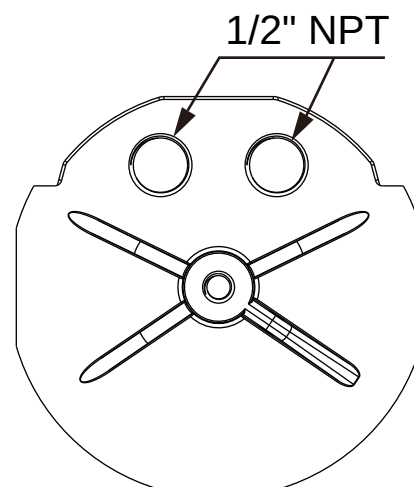
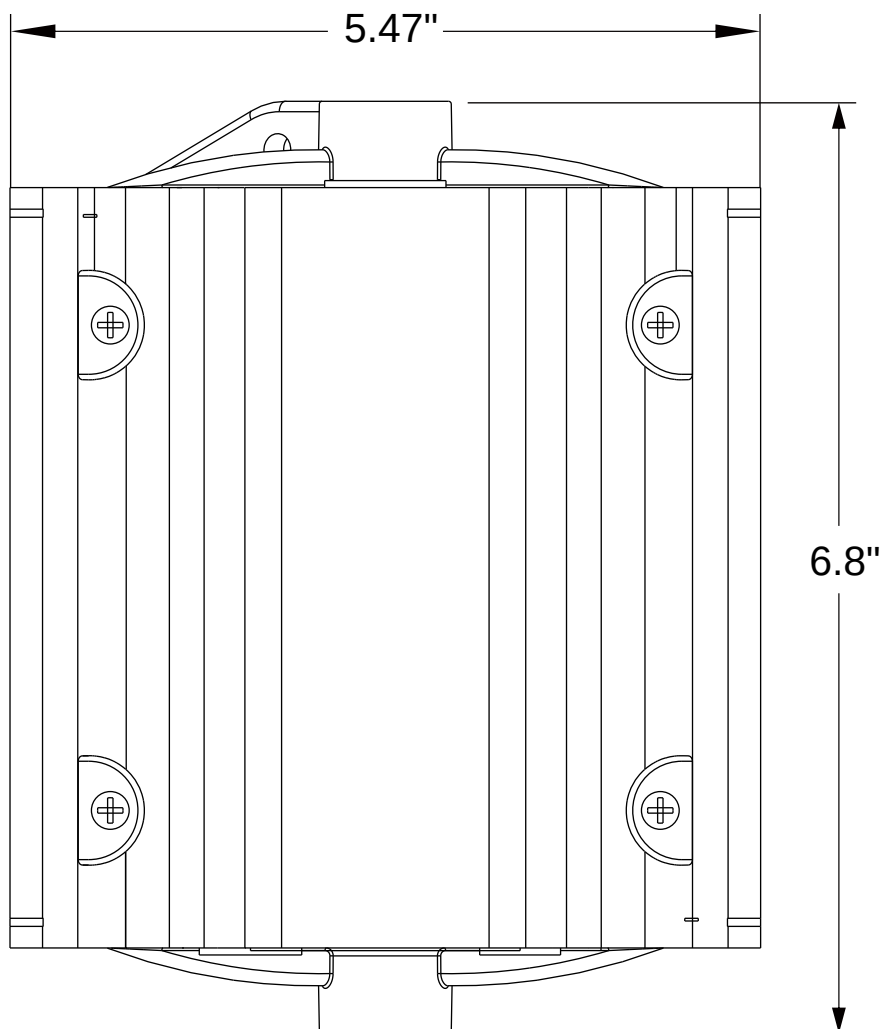
Humidity: ≤65%

Maximum Case Temperature: 157°F for LED Driver

DIMENSIONS

SIZE: H6.8" X D5.47"

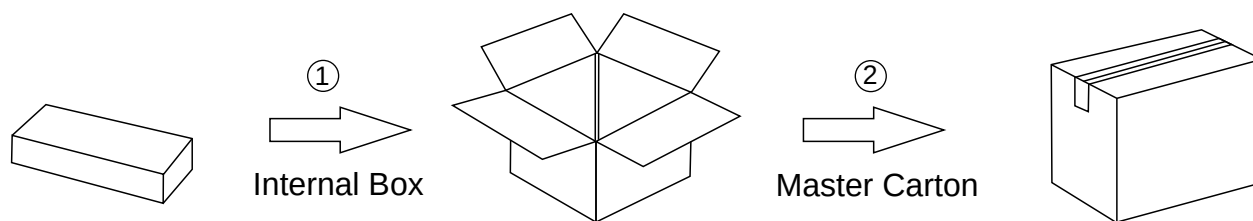
Net Weight: Max 3.96 lb.



Mounting Assembly Kit

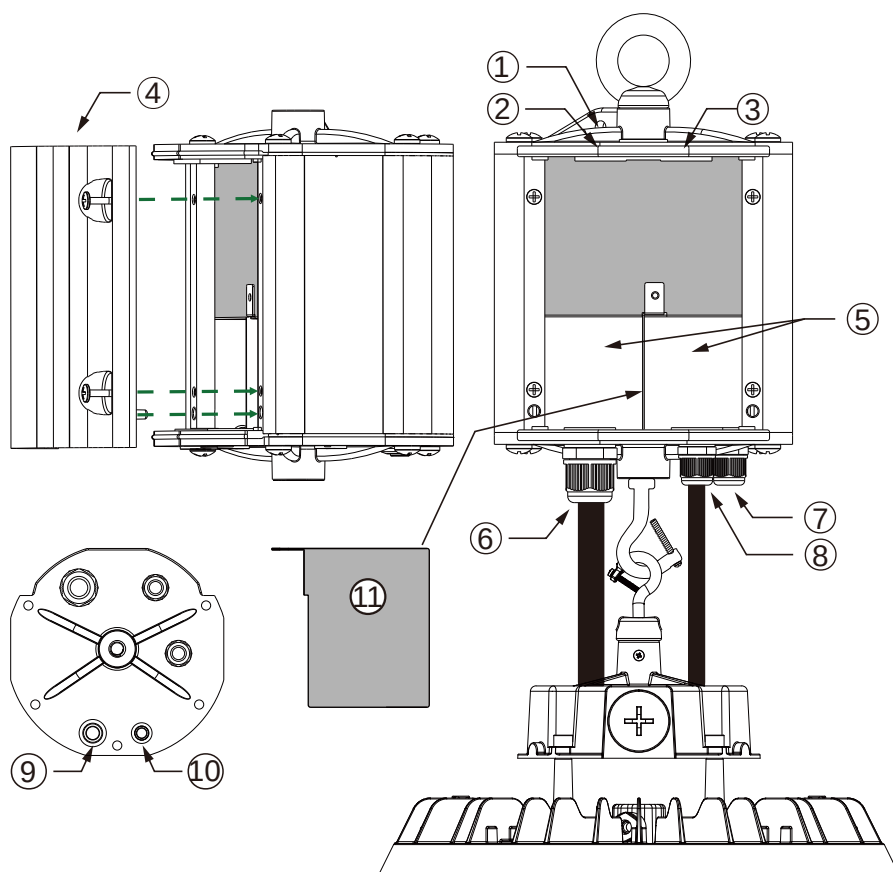
				
11pcs Wire-nut	1pc of Stainless Steel Suspension Wire Cable 2pcs of Wire Cable connector	1pc Hanging Hook with M10 Thread 1pc Hanging Ring with M10 Thread	1pc Remote Control 1pc Antenna	2pcs Waterproof Plug for wire diameter: 0.118-0.248" 2pcs Waterproof Plug for wire diameter: 0.196-0.393"

PACKAGE



Model	Dimensions	G.W (lb.)	N.W (lb.)	QTY (pcs)
25W	14.96"L X 14.96"W X 9.84"H	21.16	14.99	4
40W	14.96"L X 14.96"W X 9.84"H	22.04	15.87	4

INTERNAL STRUCTURE



① Safety Rope Cable Interface	⑥ LED Input Driver Interface
② AC Input Power Interface	⑦ Sensor Wiring Interface
③ Dimming Wiring Interface	⑧ LED Driver Dimming Interface
④ Junction Box Cover	⑨ Charge Indicator & Test switch
⑤ Junction Box	⑩ Antenna Interface
⑪ Septum	

INSTALLATION GUIDE MANUAL

READ AND FOLLOW THESE SAFETY INSTRUCTIONS!



1. **CAUTION**-This emergency driver provides more than one power supply output. To reduce the risk of electrical shock, turn off the AC branch circuit and disconnect the battery on/off connector.
2. **CAUTION**-Servicing of this product should be performed by a qualified personnel only.
3. **CAUTION**-Do not attempt to maintain the battery. A sealed, no-maintenance battery is used that is not field replaceable. Replace the entire unit when necessary.
4. **CAUTION**-The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition, void warranty and result in non-compliance with UL requirements.
5. **CAUTION**-The emergency driver requires an un-switched AC power of 100-347VAC, 50/60Hz. Verify the corresponding electrical rating at the LED fixture before installing. The emergency backup battery will supply power under an output voltage of 170VDC in the emergency mode for at least 90 minutes.
6. **CAUTION**-Emergency Backup Battery should be charged for 24 hours every 6 months during storage.
7. **CAUTION**-Press test switch once again to turn off before shipping.
8. Battery in this unit may not be fully charged. After the emergency backup battery is connected to the fixture for at least 24 hours, then normal operation of this unit will take effect.
9. Use in 0°C minimum, 50°C maximum ambient temperatures. Suitable for use in wet locations and plenum spaces.
10. The product should be mounted in locations and height where it not be subject to tampering by unauthorized personnel.
11. Do not use this equipment for other anything than its intended use.
This equipment only used for LED Lighting.
12. Do not mount near gas or electric heaters. Do not let power supply cords touch hot surfaces.
13. Do not make or leave any other open holes in the wiring enclosure or electrical component enclosure during installation.
14. This product is used for grounded, UL Listed, damp location rated, indoor fixture.
Don't use in heated air outlets or hazardous locations.
15. The battery exists in the junction box, forbidden for insulation voltage(I/P-O/P) test.
16. Maximum installation height: 28.5 feet.
17. Suitable for minimum 10W LED fixture.

LUMEN OUTPUT DURING EMERGENCY OPERATION

The luminaire rated data and maximum mounting height can be found as follows:

1. Determine the fixture efficacy under normal AC operation, based on fixture manufacturer published data in lumens per watt(LM/W).
2. Refer to DLC QPL (www.designlights.org) and Energy Star QPL (www.energystar.gov) for rated data on fixture efficacy. If a fixture is not found on DLC or Energy Star Qualified Product List, contact the manufacturer.
3. Multiple fixture luminous flux by rated output power of emergency backup battery
Example: Model-EMB08YY-050 is 25W x 100 LM/W = 2500 Lumens



CAUTION: BEFORE INSTALLATION, MAKE SURE THE AC POWER IS OFF !

STEP1: ASSEMBLY NOTICE

Select a suitable location on the hangable surface. The maximum weight of light fixture should be less than 20kg.
Turn off the AC power before installing. Assemble the emergency LED driver with the safety rope with the wire cable connector.
Please use waterproof plugs in AC input wiring and dimming wiring interface position for application in wet locations.

STEP2: INSTALLING THE EMERGENCY BACKUP BATTERY

Install the Hanging Ring and Hook to the emergency LED driver by using screws. Hang the UFO high bay light to the hanging hook of emergency LED driver and tighten screws.

STEP3: FINISH ELECTRICAL WIRING

Before wiring, make sure the safety steel cable is securely locked and make sure all mounting screws are tight. Open the cover of junction box. Select the appropriate wiring diagram to connect the emergency backup battery to the LED driver.
For other diagrams, consult the manufacturer. The input voltage to the dimmable wires (DIM+, DIM-) of emergency backup battery must less than 20Vdc. Using wire nuts to cover un-used wires and make sure all connections are in accordance with the NEC and any local regulations.

STEP4: TESTING

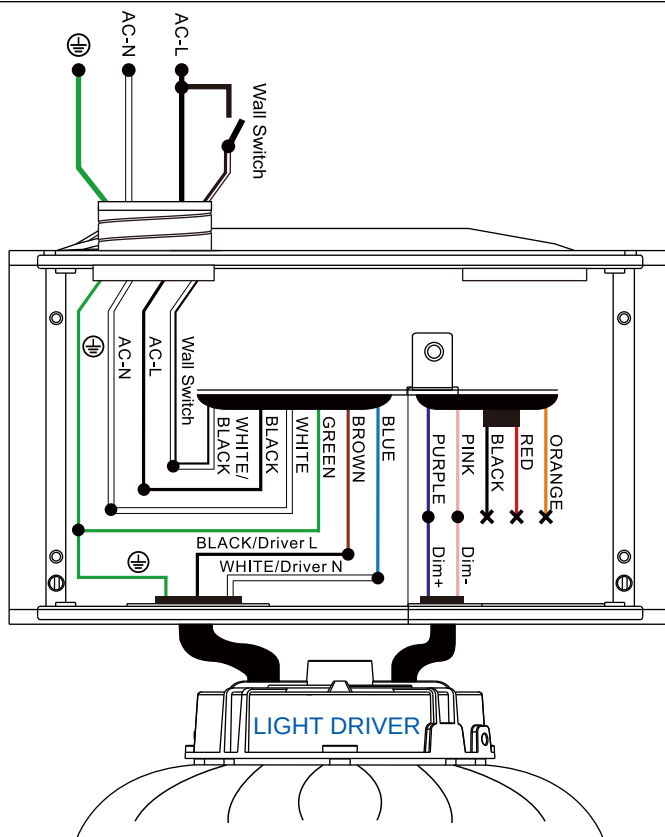
After wiring is complete, check whether the indicator light lights or not , which will indicate the battery charging situation.
The battery in this unit may not be fully charged. A short-term discharge test may be conducted after the emergency driver has been charging for 1 hour. Charge for 24 hours before conducting a long-term discharge test.

OPERATION

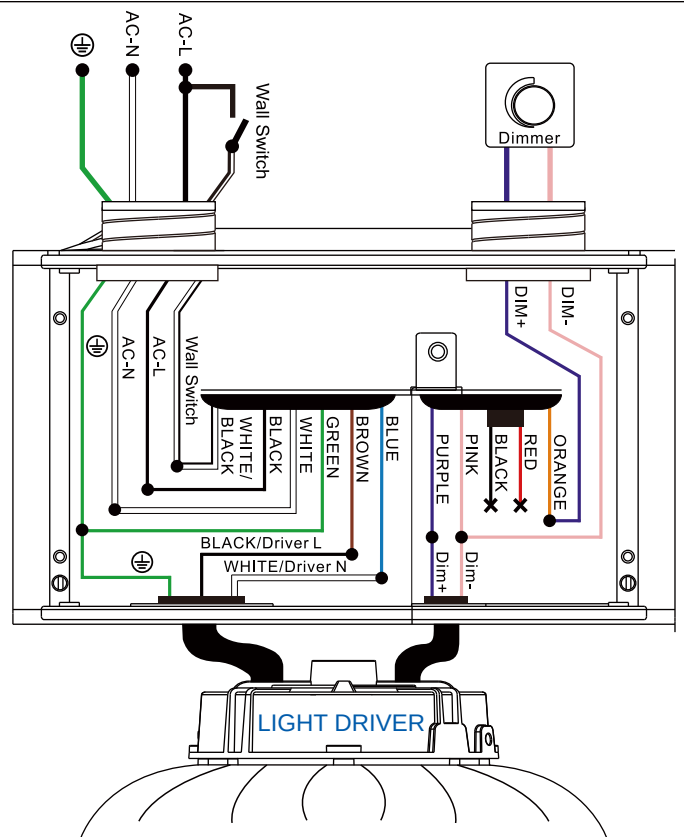
Mode	Test Button Operation	Indication	Explanations
Charging Mode(1)	Not Press	ON (No Flashing)	Emergency led driver is charging.
Charging Mode(2)	Press Once	2s ON and 2s OFF (Slow Flashing)	Emergency LED driver is conducting a 30s short-term emergency test. After 30 seconds, it will automatically restore to normal charging mode.
Charging Mode(3)	Press Twice (2s) in sequence	2s ON and 2s OFF (Slow Flashing)	Emergency LED driver is conducting a long-term emergency test, until battery is fully discharged
Emergency Mode	Not Press	2s ON and 2s OFF (Slow Flashing)	Emergency LED driver is discharging in a emergency until battery is fully discharged.
Malfunction	When flashing is (50ms)ON and (50ms) OFF fast, the emergency backup battery is abnormal. Please contact the manufacturer for help.		
WARNING Risk of Electric Shock 		Note: Please press once test button to make sure the battery is turned off, before installation, maintenance, storage or shipping.	

WIRING DIAGRAM

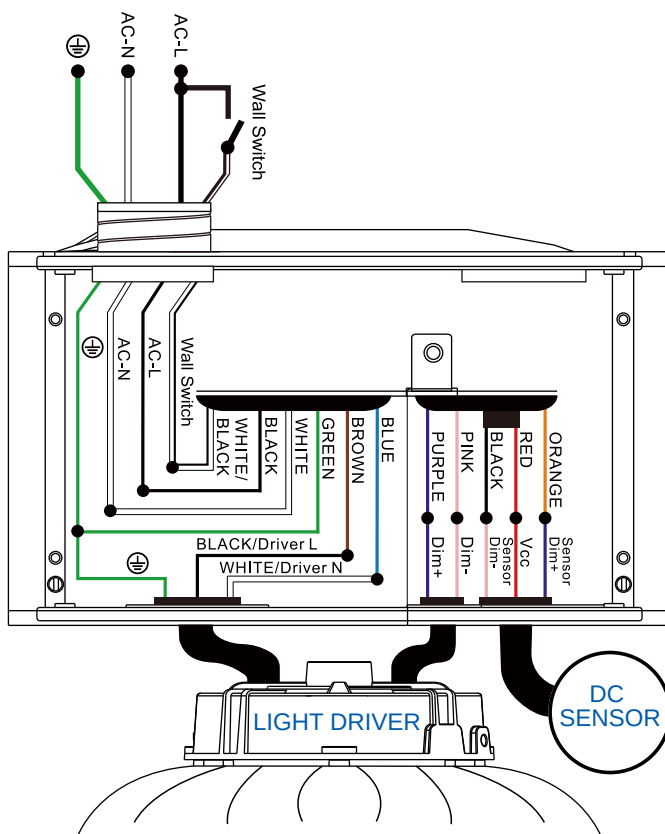
A. Standard Installation



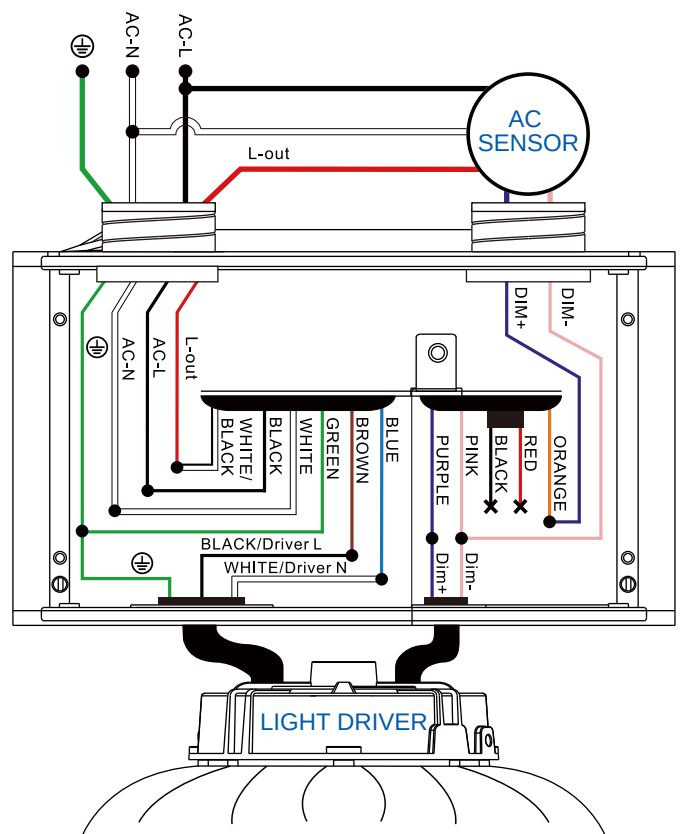
B. Installation with Dimmer



C. Installation with DC Sensor



D. Installation with AC Sensor



APPLICATIONS

* The EMUFO series is compatible with the following products and other outdoor fixtures with AC Input and DC Output Drivers.
If used in other products, please consult the manufacturer.

25W		YHB High Bay Light ≤ 150W	40W	YHB High Bay Light ≤ 320W
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