

Installation Instruction LED-EMB-30W-HV-UFO

IMPORTANT SAFEGUARDS

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

CAUTION: RISK OF SHOCK-disconnect emergency and normal input power sources before servicing.

CAUTION: DO NOT JOIN BATTERY CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY INVERTER.

ASSEMBLY and FIELD INSTALLATION WIRING WARNING: AC power must be off before proceeding with assembly or installation of emergency driver.

IMPORTANT: An unswitched AC power source is required (100-347 VAC, 50/60 Hz). This device is designed for fixtures listed for dry, 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: To maintain good battery lifespan during storage and warranty coverage, recharge emergency driver every 6 months. Storage time is 12 months(max). If customers don't install and recharge for more than 12 months, 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 before final installation.

IMPORTANT: Make sure all connections are in accordance with the National Electrical Code or Canadian Electrical Code and any local regulations.

IMPORTANT: For LED-EMB-30W-HV-UFO-XX, use with LED lamps less than 150W. When dimming to minimum the power should be less than 25W. For LED-EMB-40W-HV-UFO-XX, use with LED lamps less than 300W. When dimming to minimum the power should be less than 35W.

CAUTION: To reduce the risk of electric shock disconnect both normal and emergency sources within this unit before servicing any equipment connected to this unit.

CAUTION: Do not mount near gas or electric heaters.

CAUTION: Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.

CAUTION: The use of accessory equipment not recommended by the manufacturer may cause unsafe condition.

CAUTION: Do not use this equipment for other than its intended use.

CAUTION: Use with grounded, UL Listed, dry or damp location rated fixtures. Case should also be grounded.

CAUTION: This product is for use in indoor fixtures only. Do NOT use near heated air handling outlets or hazardous locations. Suitable for use in 41°F -58°F ambient temperatures.

CAUTION: SERVICING OF THIS EQUIPMENT SHOULD BE PERFORMED BY QUALIFIED PERSONNEL ONLY.

CAUTION: Battery is rechargeable Li-ion type and must be recycled or disposed of properly. Do not use this emergency driver with accessory equipment other than recommended by the manufacturer. Failure to follow this may cause an unsafe condition and will void warranty. Servicing of this equipment should be performed by qualified personnel only.

IMPORTANT: Illuminated Indicator (LED light) means battery is in charge mode when AC power is applied. It is recommended and required by applicable code to test emergency function to ensure proper operation of the system; press the remote controller ON button every 30 days to ensure the emergency driver is functioning and LED light source is illuminated. Conduct a ninety minute (90) discharge test one time (1) per year; LED light source should be illuminated for a minimum of ninety minutes (90).

TESTING SYSTEM: The emergency battery requires a minimum charge of one (1) hour before testing the circuit. A full charge requires twenty four(24) hours.



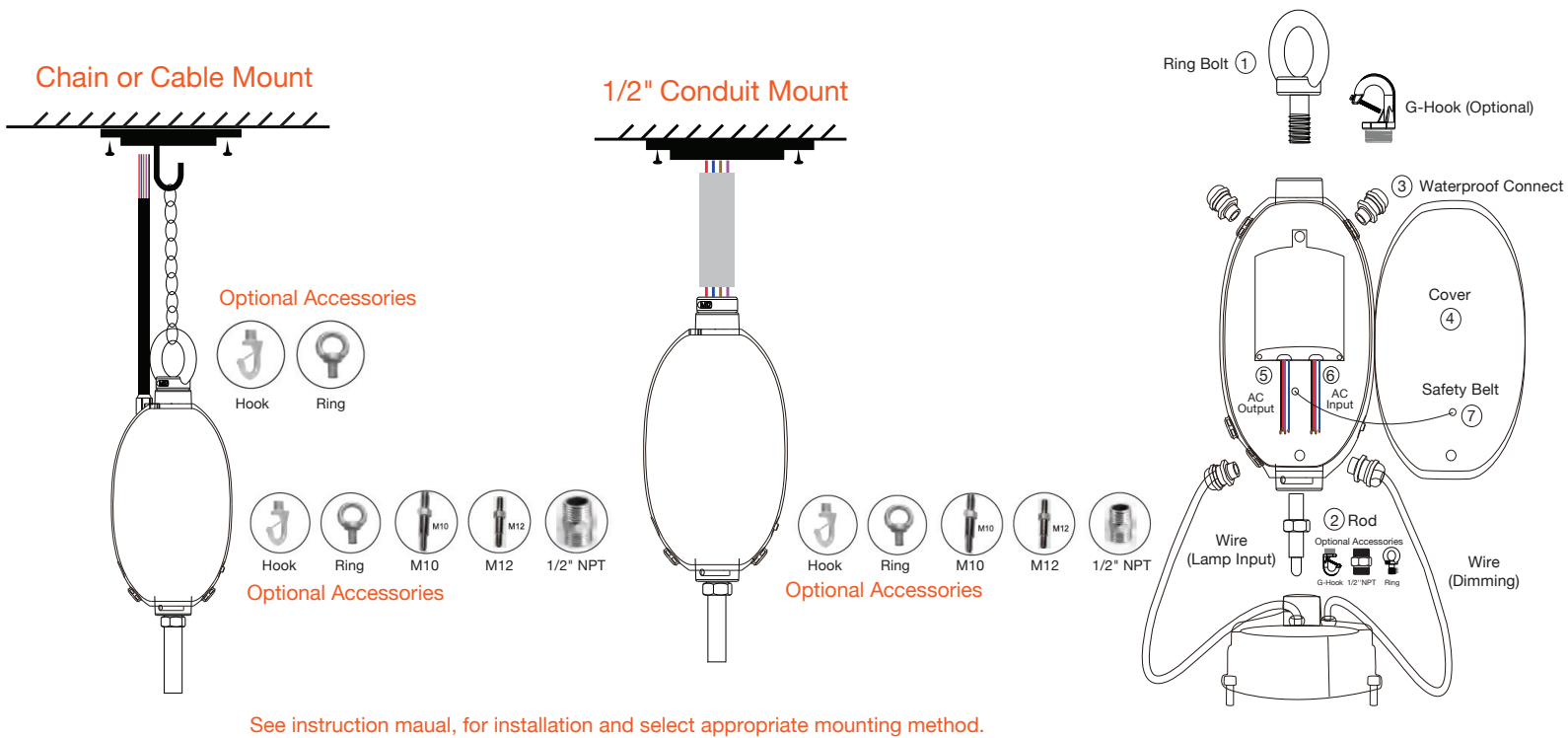
LISTED
E501344



Li-ion

THIS PRODUCT CONTAINS A RECHARGEABLE LITHIUM BATTERY.
THE BATTERY MUST BE RECYCLED OR DISPOSED OFF PROPERLY.

Installation



Installation Steps



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

Step #1: Notice

- (A): Disconnect all power sources to the lighting fixture and ensure they are locked out during installation and maintenance.
- (B): Select a suitable location on the ceiling for proper mounting of LED emergency driver (battery).

Step #2: Installation

- (A): Install ring /G-hook to top threaded hole of LED emergency driver (opposite the Red Indicator light) and secure it with screw.
- (B): Install G-hook / Ring / M10-rod/M12-rod / 1/2" NPT to the bottom hole (near Red Indicator light) and secure with screw.
- (C): Install LED emergency driver to highbay fixture with screw.
- (D): Open LED emergency driver cover and remove the plastic connectors and install the waterproof connectors (4pcs).

Step #3: Wiring

Pull all wires through the waterproof connectors into the cavity of emergency driver.

- (A): Connect the AC output wires (Brown, Blue and Green) of emergency driver with AC input wires of LED highbay fixtures.
- (B): Connect the dimming output wires (Purple and Pink) of emergency driver with the dimming input wires of LED Driver.
- (C): Connect AC input wires (Black, White and Red) of emergency driver with AC main power cord.
- (D): Connect the input dimming wires (Purple, Pink) of emergency driver with dimming wires from dimmer.
- (E): Join battery cable connectors together to close circuit.
- (F): Close and lock emergency driver and secure close using screw.
- (G): Hang the emergency led driver to suitable structure (not included, by others) located in the ceiling.

Note: Refer to LED emergency driver wiring diagram.

Step #4: Testing

- After installation is complete, apply AC power.
- At this point power should be connected to the fixture driver and the emergency LED driver. Charging indicator light should be illuminated, indicating the LED emergency driver (battery) is charging.
- A short-term discharge test may be conducted after the emergency LED driver has been charging for 1 hour. Charge for 24 hours before conducting a long-term discharge test.

Operation

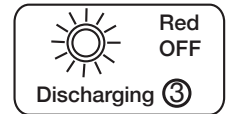
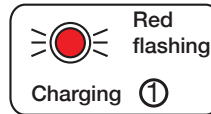
Normal Mode: AC power is present. The AC driver operates the LED load as designed. The emergency driver is charging in a standby mode. The charging indicator will be lit, showing that the battery is charging.

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

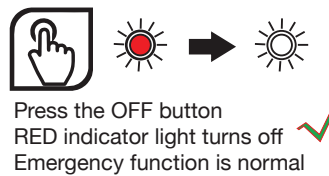
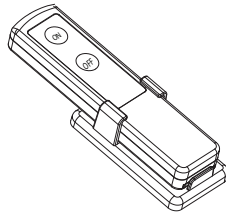
- ① Red/Flashing: Charging
- ② Red/ON: Full-charged
- ③ Red/OFF: Discharging(emergency mode)



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 main 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.

Product Model

Model No.	Input Voltage	Output Power	Emergency Time	Applications Recommendation
LED-EMB-30W-HV-UFO-XX	100-347V AC	30W	90 Minutes	100-347Vac 0-10V dim fixtures ≤150W
LED-EMB-40W-HV-UFO-XX	100-347V AC	40W	90 Minutes	100-347Vac 0-10V dim fixtures ≤300W
LED-EMB-60W-HV-UFO-XX	100-347V AC	60W	90 Minutes	100-347Vac 0-10V dim fixtures ≤500W

(XX can be BL or WH, BL for black, WH for white)

Important: Test compatibility before final installation.

WIRING DIAGRAM

Refer to the diagram below for the appropriate wiring of the LED load and driver. Install in accordance with the National Electrical Code and local regulations. For additional wiring diagrams consult Customer Service.

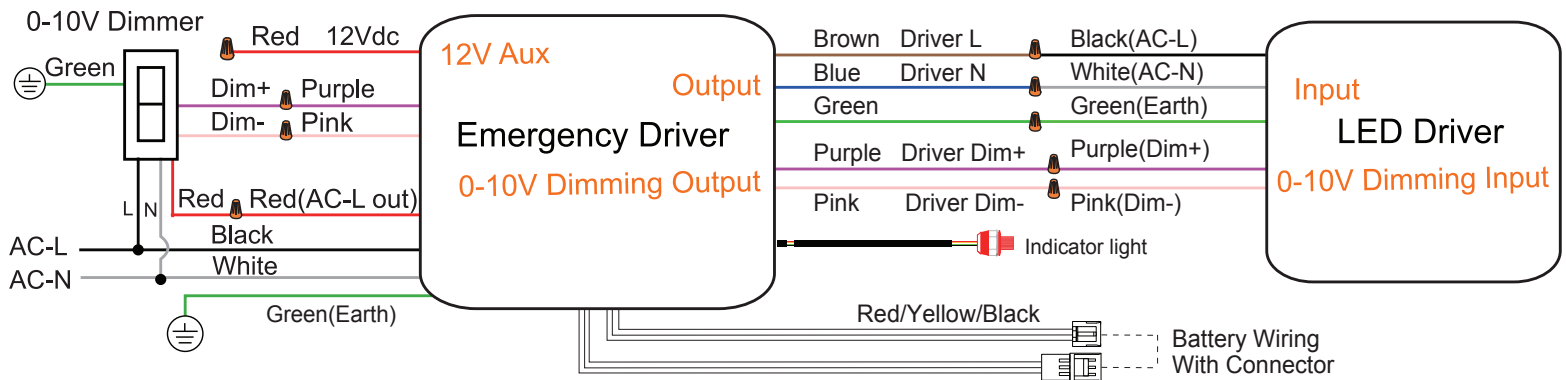
*Note: This product is not compatible with all luminaires, please conduct a compatibility test before use.
DO NOT MATE UNIT CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED



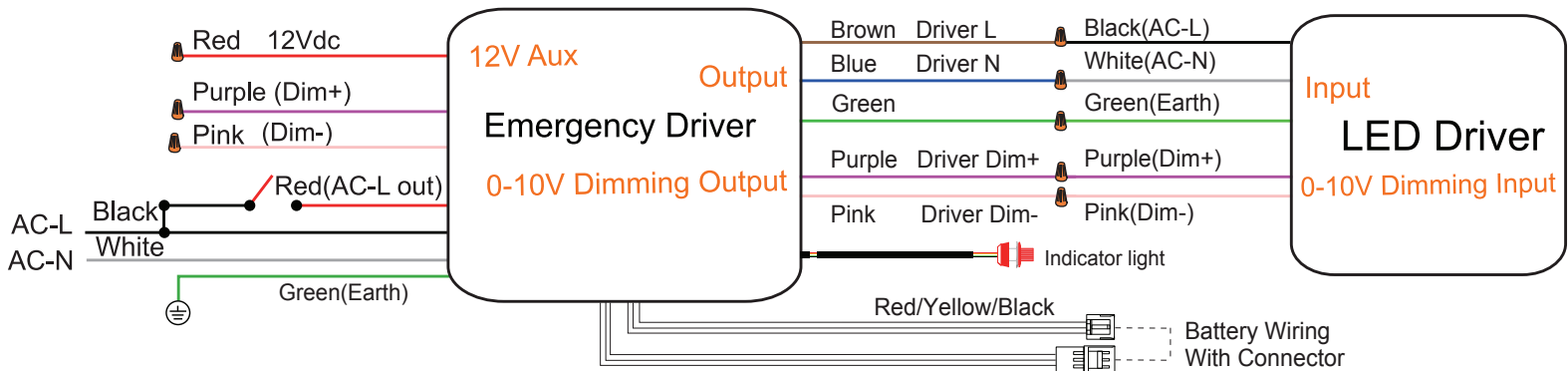
IMPORTANT

EM driver output dimming wires must connect to 0-10V dimming wires (DIM+, DIM-) of fixture LED driver. Will NOT operate if not connected.

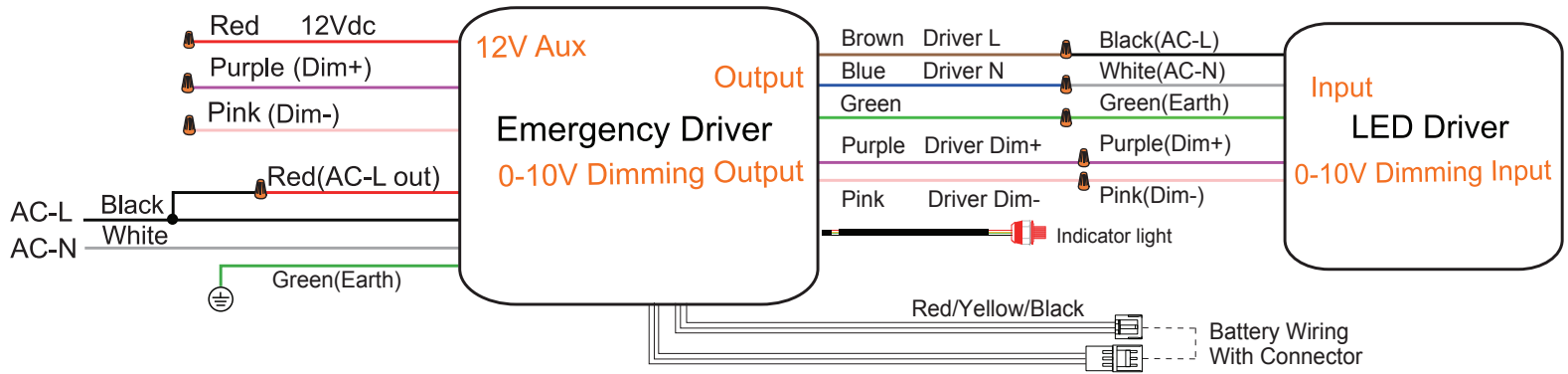
1 With Dimmer



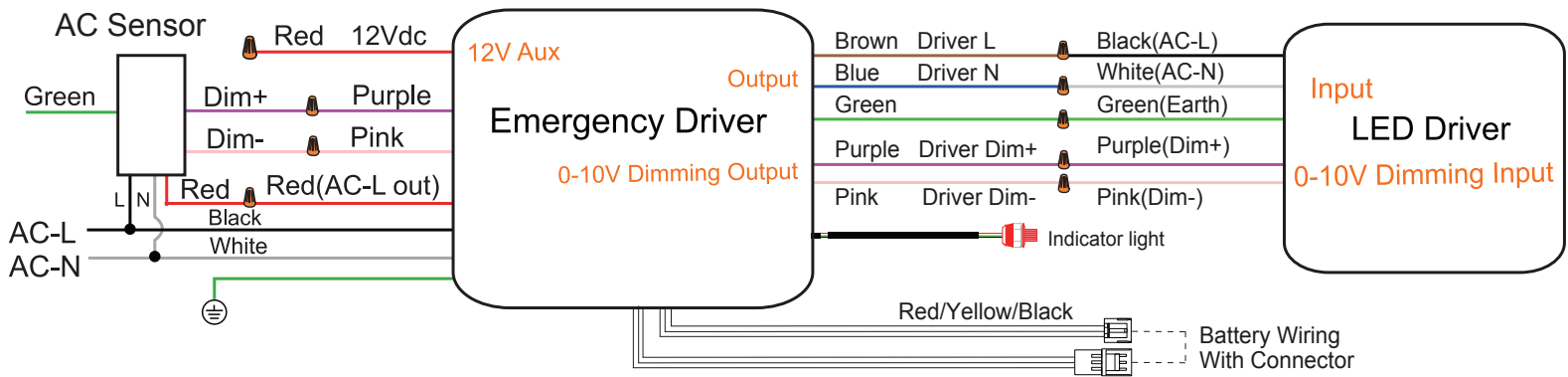
2 With Wall Switch (Without Dimmer)



3 Without Wall Switch & Dimmer, 24hours lighting

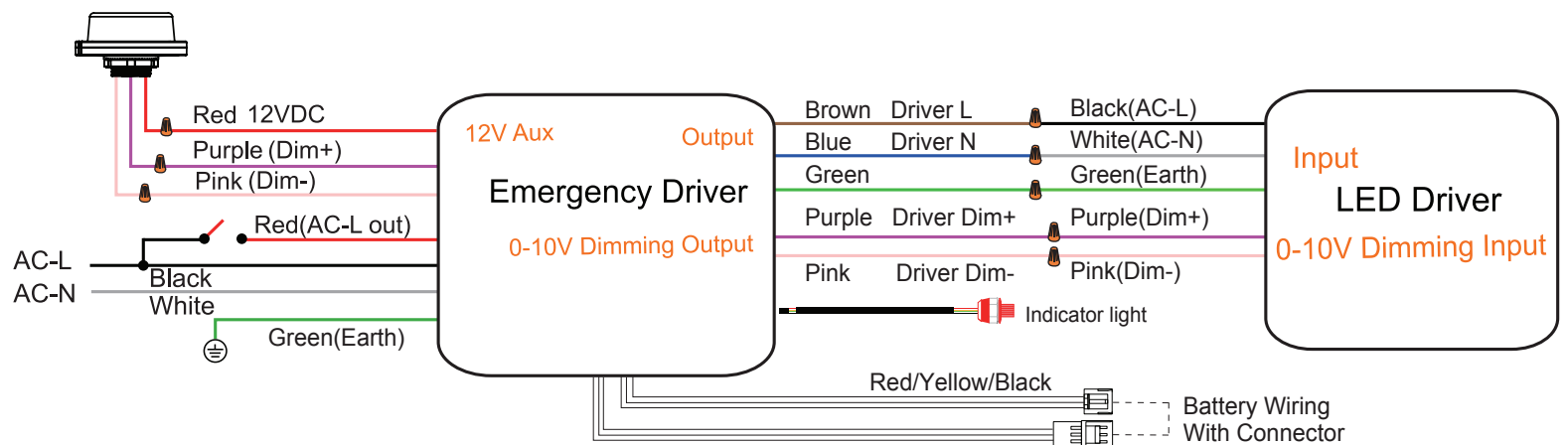


4 With AC Sensor (100-347Vac)



5 With 12V DC Sensor

(The current is less than 30mA, and 12Vdc sensor must connect to emergency LED driver's 12Vdc wire, can't connect to UFO LED driver's 12Vdc wire.)



Note:

1. Verify compatibility before installation.
2. During Emergency Mode, press the OFF button of remote controller to cut off the emergency output and enter Shipping Mode
3. For short-term testing of the emergency function, the battery must be charged for at least one hour.
The emergency driver must be charged for at least 24 hours before conducting a long-term test
4. MATE UNIT CONNECTOR AFTER INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED