

# High Voltage Emergency Battery Backup Installation Instructions

#### ▼ IMPORTANT SAFEGUARDS

- To prevent high voltage from being present on the purple and blue output leads prior to installation.
   The high voltage emergency driver connector must be open. Join the unit connector after it has been installed and before the AC power is supplied.
- 2. Make sure all connections are in accordance with the National Electrical Code or any local regulations.
- 3. To reduce the risk of electric shock, disconnect both normal and auxiliary power supplies and unit connector of the high voltage emergency driver before servicing.
- An AC power source (100-277VAC, 50/60Hz) ahead of any wall switch is required to provide battery charging current.
- 5. Do not install near gas or electric heaters.
- 6. This product is for use with indoor or damp locations where ambient temperature is ( 32°F to 122°F). It is not suitable for wet. Do not use in heated air outlets, hazardous locations and outdoor.
- 7. For use with grounded, UL Listed, damp location rated, indoor fixtures and case should be grounding.
- The high voltage emergency drivers are intended for ordinary locations and for permanent installation into one or more emergency luminaires.
- 9. This high voltage emergency driver has not been investigated for use in an air handling fixture.
- 10. This is a sealed unit. Integral battery is not replaceable. Replace entire unit when necessary.
- 11. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 12. Servicing should be performed by qualified service personnel.
- 13. High voltage emergency driver should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel. Indicator light should be mounted can see location.
- 14. High voltage emergency driver is only use for LED lighting emergency backup. Do not use it for other than its intended use.
- 15. The weight of the high voltage emergency driver should be considered before installation.
- CAUTION This high voltage emergency driver pack for use LED lamp or LED fixture. Suitable voltage of LED fixture is AC100-120V.

#### **OPERATION**

During normal operation, AC power is supplied to the AC driver through the high voltage emergency driver and charged the battery. The AC input line voltage (100-277V AC) of high voltage emergency driver automatically sets the output voltage during emergency mode.

When AC power fails, the high voltage emergency driver automatically switches to emergency mode, keeping the load illuminated for a minimum of 90 minutes. When AC power is restored, the high voltage emergency driver returns to charging mode. The high voltage emergency driver consists of a low-battery voltage disconnect which is reset when AC power is restored.

#### INSTALLING THE EMERGENCY DRIVER

- •The LED emergency driver will be located between the AC power sources and the AC driver as shown in wiring diagram section of instructions.
- •The LED emergency driver may be installed in close proximity to the fixture or remote from the fixture.
- The maximum remote distance using 16AWG wire is 250ft. Contact the factory for more information.
- •The AC power is fed to the high voltage emergency driver.
- •The AC driver receives power from the LED emergency driver. Identify the output wires of the high voltage emergency driver by the presence of the orange and blue leads.

#### SAVE THESE INSTRUCTIONS



This product contains a rechargeable lithium ion battery.

THE BATTERY MUCH BE RECYCLED OR DISPOSED OF PROPERLY TO PREVENT FIRE.

#### **MOUNTING**

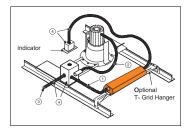
Method 1: Mount the LED emergency driver outside the LED luminaire with flexible conduct.

Method 2: Mount the LED emergency driver inside the LED luminaire without flexible conduct.

Method 3: Optional T-grid Hanger.

The T-grid hanger is asfer to mount the emergency driver on the T-grid ceiling. It is sold separately and is available from TGS as an accessory.

- 1)-Flexible conduit (supplied) to connect AC driver wires.
- 2-Existing conduit to run existing wires to lamp holder.
- ③-AC line in.
- 4-Conduit and junction box (not supplied).





CAUTION: Before installing, make certain the A.C power is off and the LED Lamp emergency backup unit connector is disconnected.

NOTE: Make sure the that the necessary branch circuit wiring is available. An unswitched source power is required. The unswitched and switched power source must be fed from the same branch circuit.

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#### INSTALLING THE ILLUMINATED TEST SWITCH

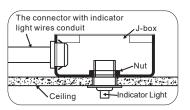
#### Standard Indicator:

- Mount the supplied indicator in a location that is visible and accessible by maintenance personnel.
- The indicator mounts through a hole which may need to be made in the luminaire or could come pre-punched by the luminaire supplier.
- Connect the indicator per wiring diagrams provided on these instructions.
- If wired correctly, the indicator light should be ON when AC power is supplied to the fixture indicating that the unit is charging.

# Fixture Or Test/Monitor Plate 2 Wire Illuminated Test Switch Violet Brown Drill A Hole

#### **Optional Recessed Indicator:**

- The recessed indicator is only use for LED emergency driver with dual-flex wiring.
- Install the indicator to the opening hole onto the ceiling with the nut.
- Connect the indicator per wiring diagrams provided on these instructions.
- · Closing the J-box, then finish.



#### **MAINTENANCE**

Although no routine maintenance is required to keep the LED emergency driver functional, it should be checked periodically to ensure it is working.

The following schedule is recommended:

- Visually inspect the charging indicator light monthly. It should be illuminated.
- Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds.
- The lamp should operate at illumination.
- · Conduct a 90-minute discharge test once a year. The lamp should operate at illumination for at least 90 minutes.
- This red indicator flashes or off, the emergency power supply is abnormal.
- If the emergency power supply is abnormal after the first installed, please charge for 2 hours and then check if it is normal.

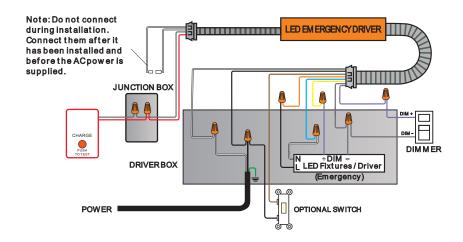
#### **JOIN CONNECTOR & APPLY POWER**

- · After installation is completed, join the LED emergency driver's connector and apply AC power.
- At this point, power should be connected to both the AC driver and the LED emergency driver.
   The charging indicator light should be illuminated indicating the battery is charging.
- At short-term discharge test may be conducted after the LED emergency driver has been charging for 2 hours. Please charge for 24 hours before conducting a long term discharge test. Refer to operation.

### WIRING THE EMERGENCY BATTERY BACKUP

## 1. Wiring If Power Of Luminaire > Power Of High Voltage Emergency Battery Backup Driver. Ensure the LED load's rated power is greater than the power output of this emergency LED driver:

- 8W: Compatible up to 60W LED luminaire with internal or external driver which has 0-10V dimming.
- 25W: Compatible up to 220W LED luminaire with internal or external driver which has 0-10V dimming Minimum dim-down power of LED luminaire ≤ the power output of this emergency LED driver.
- It must connect 0-10V dimming wires



#### 2. Wiring If Power Of Luminaire ≤ Power Of High Voltage Emergency Battery Backup Driver.

Ensure the LED load's rated power is less than or equal to the power output of this emergency LED driver No need to connect 0-10V dimming wires

