Emergency Battery Backup Low Voltage (G3) Installation Instructions

⚠ IMPORTANT SAFEGUARDS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. CAUTION-To avoids electrical shock, do not mate unit connector until installation is complete and AC power is supplied to the unit.
2. CAUTION-This fixture provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency sources by turning off the AC branch circuit and by disconnecting the unit connector.
3. CAUTION-This is a sealed unit. Components are not replaceable. Replace the entire unit when necessary.
4. CAUTION-Installation and servicing should be performed by qualified personnel only. Please disconnect before opening.
5. Do not use outdoor.
6. For use with grounded, UL Listed, damp location rated, indoor fixtures and case should be grounding.
7. The drivers are intended for ordinary locations and for permanent installation into one or more listed emergency luminaires.
8. This equipment has not been investigated for use in an air-handling fixture.
9. Do not for use in heated air outlets or hazardous locations.
10. The LED emergency driver requires an unswitched AC power source of 100-277 volts. Properly cap the unused AC lead.
11. Do not mount near gas or electric heaters.
12. The LED emergency driver will supply 54VDC output at the individual rated specification for 90 minutes. See individual units for output specifications.
13. When the red indicator flashes or off, the emergency power supply is abnormal.
14. For use in 0°C minimum, 50°C maximum ambient temperatures.
15. The use of accessory of LED emergency driver not recommended by the manufacturer may cause an unsafe condition.
16. Install in accordance with the National Electrical Code and local regulations.
17. Lighting fixture manufacturers, electricians, and end users need to ensure product system compatibility before final installation.
18. LED emergency driver and indicator should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel. Indicator light should be mounted where can be seen.
19. CAUTION- LED emergency driver only uses for LED lighting. Do not use this LED emergency driver for other than its intended use.
20. The weight of the LED emergency driver should be considered before installation.

Installation of this emergency LED driver will vary based on the luminaire type, however, generally follow these steps:

DETERMINE SUITABILITY

Ensure the LED load's rated power is equal or greater than the power output of this emergency LED driver.
Determine per "Reported Date" efficacy shown in lumens per watt (lm/W)
Multiply lumens per watt by emergency driver rated output.
Refer to table below for the wattage of the specific model to be used in the luminaires.

Output Power (Constant)
8 Watts
25 Watts

Lumens In Emergency Mode=Lumens per watt of Fixture*Output Power of Chosen Product
_____(Lumens)= _____ (lm/W)* _____ (W)

Using the results of this calculation and industry standard lighting design tools, calculate the anticipated illumination levels in the path of egress.

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

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

Operation

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

When AC power fails, the LED emergency driver automatically switches to emergency mode, keeping the load illuminated for a minimum of 90 minutes. When AC power is restored, the LED emergency driver returns to charging mode. The LED 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.

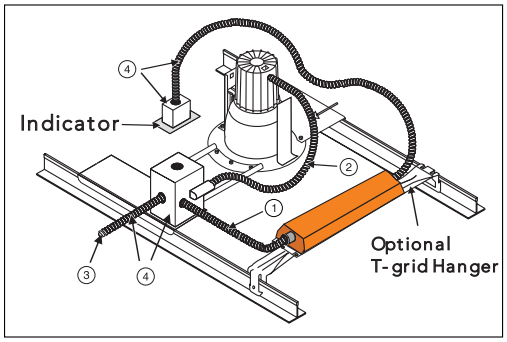
The AC power is fed to the LED emergency driver.

Installing The Emergency Driver

Pack Version

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

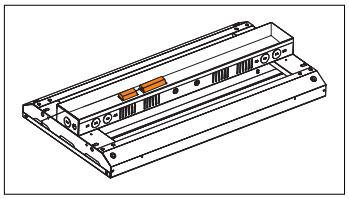
The T-grid hanger is safer to mount the LED emergency driver on the T-grid ceiling. It is sold separately and is available from the factory as an accessory kit. Call your local distributor or the factory for complete information



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).

Split Version

Mount the control board and battery pack inside the LED luminaire, then connect together and wire.



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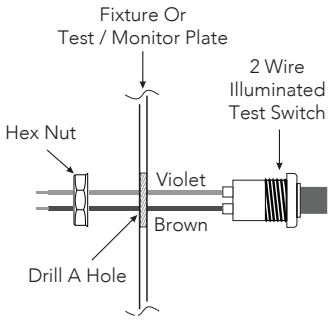
Installing The Illuminated Test Switch

Standard Indicator:

Mount the supplied indicator in a location that is visible and accessible by maintenance personnel.

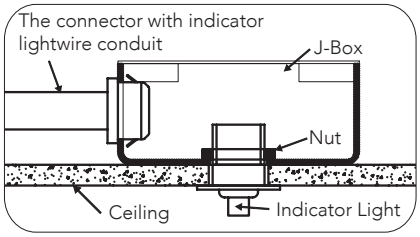
- The indicator mounts through a hole which may need to be made in the luminaire or could come pre-punched by the luminaire supplier.
- Connect the indicator per wiring diagrams provided on these instructions.
- If wired correctly, the indicator light should be ON when AC power is supplied to the fixture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



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.



Indicator Status

LED Indicators Status	EM Driver Status/Mode
• Solid Red ON	System OK/AC OK
• None (LED OFF)	Normal working on EM mode
• Flashing Red, 1s on/1s off (cycle)	Battery voltage is too low
• Flashing Red, 0.3s on/0.3s off (cycle)	System NG;Battery not detected, check battery connection

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:

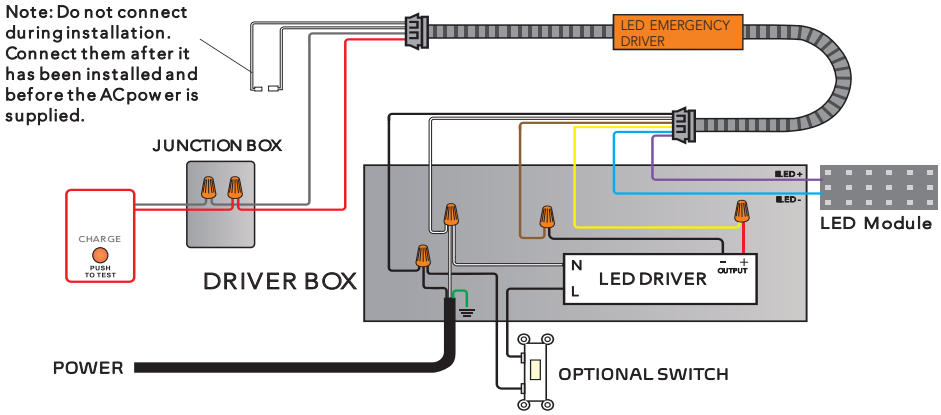
- Visually inspect the charging indicator light monthly. It should be illuminated.
- Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds.
- The lamp should operate at illumination.
- Conduct a 90-minute discharge test once a year. The lamp should operate at illumination 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.

Wiring the Emergency Driver

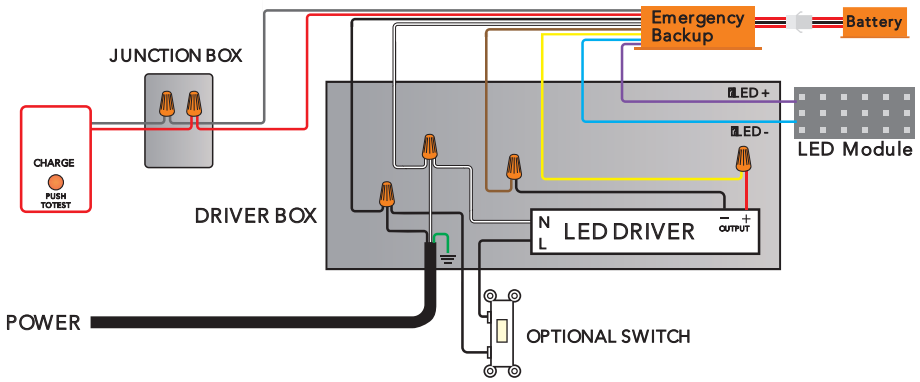
Select the appropriate wiring diagram to connect the emergency driver to the AC driver and LED load. Make sure all connections are in accordance with the National Electrical Code and any local regulations. After installation is complete, supply AC power to the emergency driver.

Emergency Battery Backup Low Voltage (G3) Installation Instructions

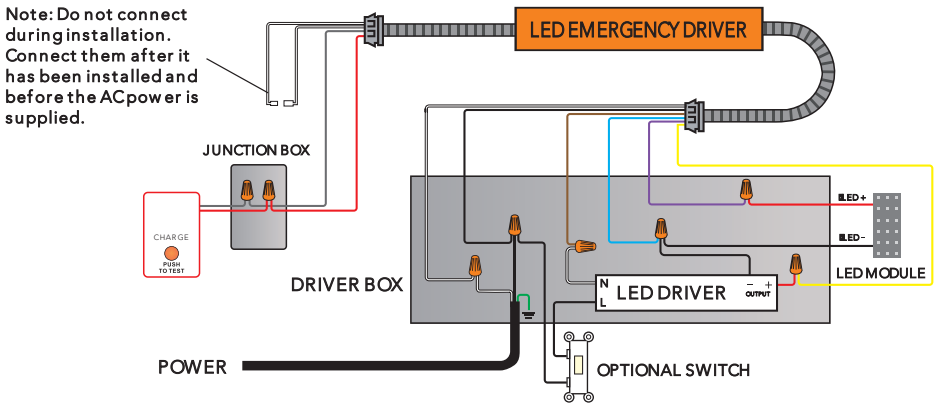
Wiring diagram for 8W LED emergency driver
Compatible for LED Luminaire (≤100W) that driver's output is able to do wiring



Wiring diagram for 8W LED emergency driver (Split Version)
Compatible for LED Luminaire (≤100W) that driver's output is able to do wiring



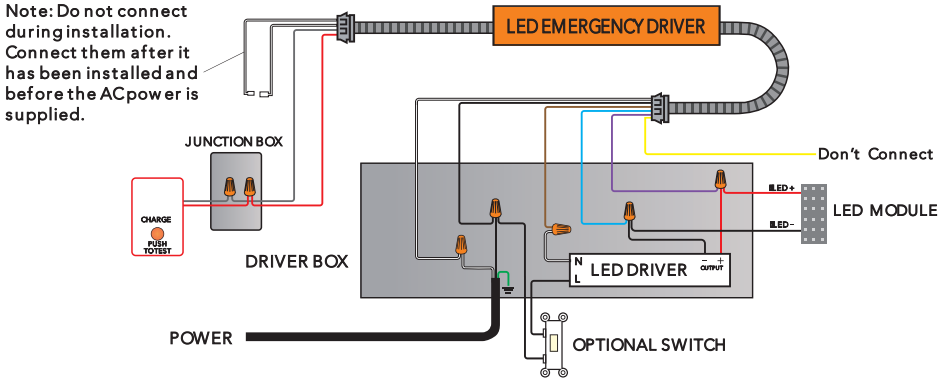
Wiring diagram for 25W LED emergency driver
Compatible for LED Luminaire (≤100W) that driver's output is able to do wiring



Note: Current Of Yellow Wire: 4A (Max

Emergency Battery Backup Low Voltage (G3) Installation Instructions

Wiring diagram for 25W LED emergency driver
Compatible for LED Luminaire (100W-300W) that driver's output is able to do wiring



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.