

INSTALLATION INSTRUCTIONS

EMERGENCY LED DRIVER

! IMPORTANT SAFEGUARDS !

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

1. **CAUTION:** To prevent electrical shock, do not mate converter connector until installation is complete and A.C. 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 A.C. 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. De-energize before opening.
5. An unswitched A.C. power source of 120 to 277volts AC, 50-60Hz is required.
6. Do not mount near gas or electric heaters.
7. The **EMERGENCY LED DRIVER** should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The **EMERGENCY LED DRIVER** will supply 180-320VDC output to an LED luminaire with a power rating of upto 20W for a minimum of 90 minutes in emergency mode.
9. This product is suitable for use in damp locations where the ambient temperature is in the 0°C – 50°C range. Product is not suitable for used in sealed & gasketed fixture, heated air outlets and wet or hazardous locations.
10. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition, void warranty, and result in non-compliance with UL specifications.
11. Do not use this equipment for other than its intended use.
12. Install in accordance with the National Electrical Code and local regulations.
13. The emergency LED driver is for use with grounded, UL listed LED luminaire, shall be enclosed by the LED luminaire and bonded to the grounding of LED luminaire.
14. Lighting fixture manufacturers, electricians, and end-users need to ensure product system compatibility before final installation.

SAVE THESE INSTRUCTIONS

WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON YELLOW & YELLOW/BLACK OUTPUT LEADS PRIOR TO INSTALLATION, CONVERTER CONNECTOR MUST BE OPEN. DO NOT JOIN CONVERTER CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY DRIVER.

INSTALLATION:

CAUTION: Before installing, make certain the A.C. power is off and the EMERGENCY LED DRIVER converter connector is disconnected.

1. FIXTURE

This **EMERGENCY LED DRIVER** can be used with the LED loads (with internal AC driver) that operate at 180-320VDC (120-230VAC) input, and have a power rating of up to 20W. The EMERGENCY LED DRIVER has been evaluated to and found to be compliant with UL 924 standard. The as-installed performance of system must meet or exceed all federal, State and local code requirements.

2. MOUNTING THE EMERGENCY LED DRIVER

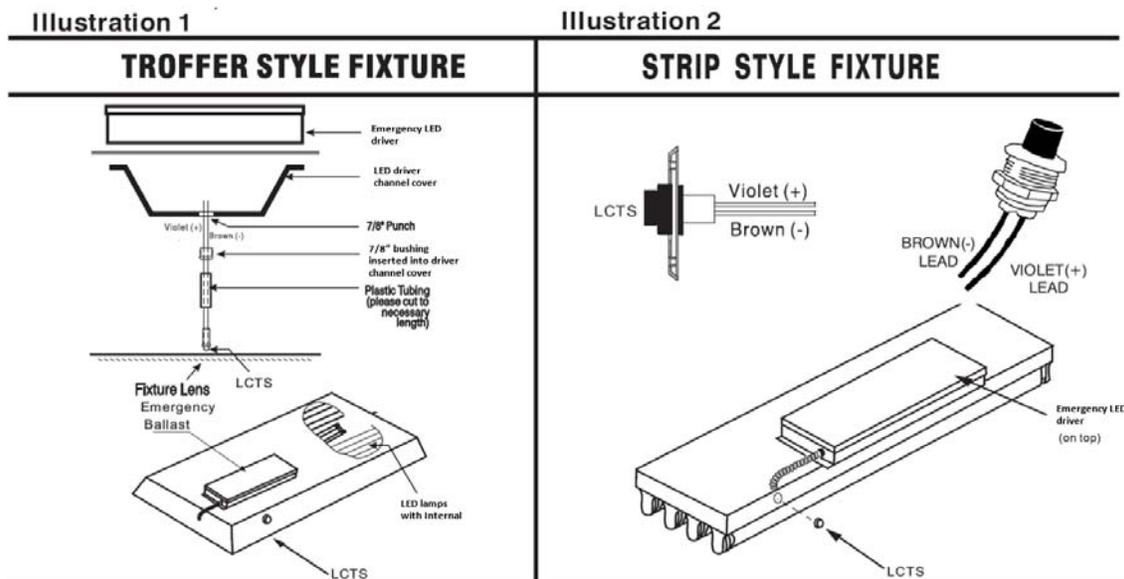
Mount the **EMERGENCY LED DRIVER** in the driver/lamp compartment or an enclosed wire way as the application permits. When battery packs are remote mounted, consult the manufacturer for the maximum allowable distance between the battery pack and the load.

3. WIRING

Refer to the wiring diagram on page 3 for the appropriate wiring of the LED load and Emergency driver. Install in accordance with the National Electrical Code and local regulations. For additional wiring diagrams consult Customer Service.

4. INSTALLING THE LED COMBO TEST SWITCH (LCTS)

Recessed Troffer Fixture - Select a convenient location with proper clearance in the channel cover and drill or punch a 7/8" hole. Insert the 7/8" bushing into the hole. Push the plastic tube through the bushing. Route the leads of the **TEST SWITCH** through the plastic tube. Connect the LED wires from the unit to the **TEST SWITCH** (Violet to Violet, Brown to Brown). Push the entire assembly back into the tube until the lens collar rests against the plastic tube. The plastic tube should be adjusted so that the **TEST SWITCH** is within 1/4" of the fixture lens. The **TEST SWITCH** must be visible after installation. Refer to Illustration 1.



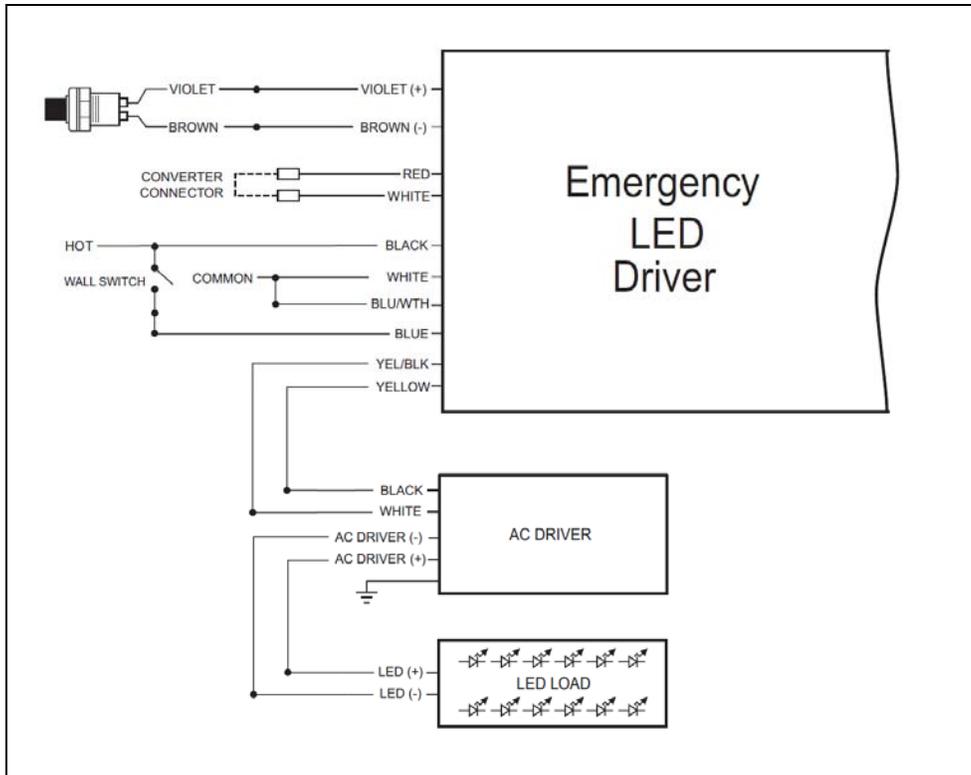
Strip Fixture - Select a convenient location on the fixture so the TEST SWITCH can be seen after installation. Allow for proper clearance inside the fixture and drill or punch a 1/2" hole. Remove the nut from the TEST SWITCH. Push the Test switch housing into the 1/2" hole and secure with the nut. Connect the LED wires from the unit to the Test switch (Violet to Violet, Brown to Brown). Refer to illustration 2.

MARKING

Attach the appropriate labels adjacent to the **TEST SWITCH**. Annotate Replacement Label with identical manufacturer part number(s). The Caution and the Replacement labels must be on the fixture in a readily visible location to anyone attempting to service the fixture.

WIRING DIAGRAM

The **EMERGENCY LED DRIVER** requires an unswitched A.C. power source of 120 to 277VAC, 50-60Hz, therefore when used with switched fixtures, the driver's input must be wired ahead of the switch. When the installation and wiring are complete, switch the A.C. power ON and join the **EMERGENCY LED DRIVER** unit connector.



OPERATION

Normal Mode - A.C. power is present. The A.C. driver operates the LED load as intended. The **EMERGENCY LED DRIVER** is in the standby charging mode. The **TEST SWITCH** will be lit providing a visual indication that the battery is being charged.

Emergency Mode- A.C. power fails. The **EMERGENCY LED DRIVER** senses the A.C. power failure and automatically switches to the Emergency Mode. The LED load continues to illuminate at it's full output for a minimum of 90 minutes. When A.C. power is restored, the **EMERGENCY LED DRIVER** switches back to the Normal Mode and resumes battery charging.

TESTING& MAINTENANCE

Pressing the **TEST SWITCH** interrupts power to the designated A.C. driver and forces the unit into emergency mode. The LED load is now being lit by the **EMERGENCY LED DRIVER**. Once the **TEST SWITCH** is released, the fixture returns to normal operation after a momentary delay. To simulate a "BLACK OUT" use the circuit breaker to turn off A.C. power.

Initial Testing - Allow the unit to charge for atleast (1) hour, to conduct a short discharge test. Allow a 24-hour charge before conducting a complete 90-minute test.

The **EMERGENCY LED DRIVER** is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule -

Monthly - Ensure that the **TEST SWITCH** light is illuminated. Conduct a 30 second discharge test by depressing the **TEST SWITCH** and confirm that the LED load remains illuminated.

Annually - Ensure that the **Charge Indicator** is illuminated. Conduct a full 90 minute discharge test. The unit should operate as intended for the duration of the test.

SERVICING SHOULD BE PERFORMED BY QUALIFIED PERSONNEL

Emergency LED driver Compatibility and Suitability of Use Guidelines

This product is suitable for field installation with suitable LED loads including LED luminaires, AC/DC voltage driven LED tubes with internal drivers and other similar fixtures. Ensure the LED load's rated power is less than or equal to the power output of this emergency LED driver. This is to ensure that this emergency product will not produce more power than the LED load can handle, thus ensuring that the LED load will not be damaged when the system is in the emergency mode.

Determining Adequacy of Means-of-Egress Lighting Levels

While this model has been found compliant with the requirements of UL standard 924, it is ultimately the responsibility of the Designer/Specifier to assure the as-installed system delivers code-compliant path of egress illumination in accordance with Federal, State or local municipal requirements.