

INSTALLATION AND OPERATING INSTRUCTIONS FOR THE FOLLOWING PRODUCTS:

CAT. NO. KT-EMRG-LED-4C-400-EN2

INSTALLATION

Product includes the following components:

PARTS	QUANTITY
LED Emergency Driver	1
Instruction Sheet	1
Luminaire Modification Label	1
Test Button	1



Installation should be conducted by qualified electricians only.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

WARNING: AC power must be off before proceeding with assembly or installation of emergency driver.

CAUTION: DO NOT MOUNT NEAR GAS OR ELECTRONIC 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 AN UNSAFE CONDITION.

CAUTION: DO NOT USE THIS EQUIPMENT FOR OTHER THAN ITS INTENDED USE.

CAUTION: Use with grounded, UL Listed, damp location rated fixtures and case should be grounded.

CAUTION: The equipment is intended for ordinary locations and for permanent installation into one or more listed emergency luminaires.

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: This product is produced with built-in batteries, which may be stocked for up to one year. If not used for over one year, the batteries may be damaged. This is not covered in the warranty.

NOTE: Do not use outdoors.

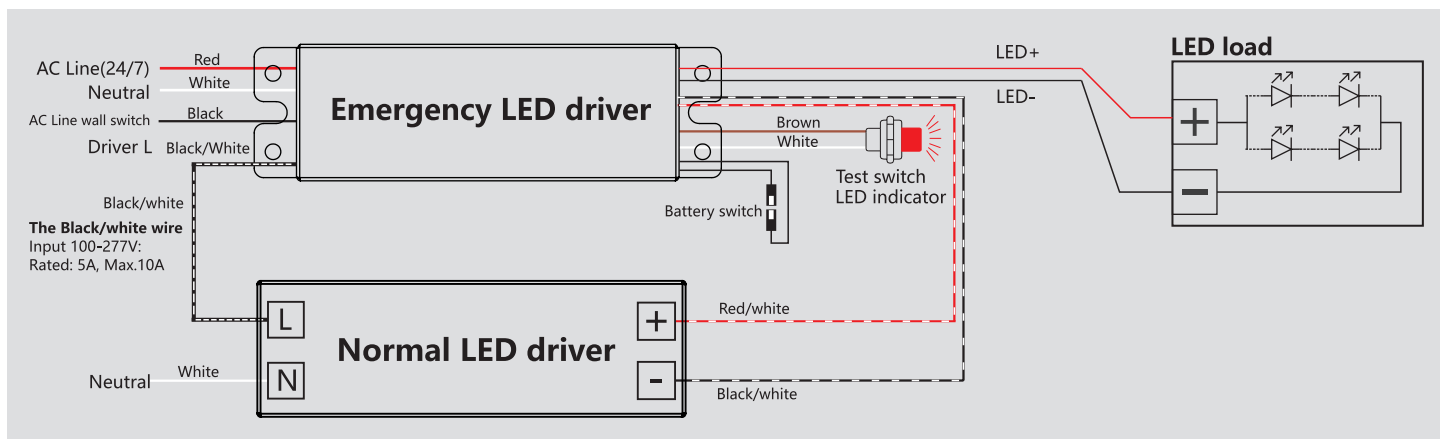
NOTE: Do not let power supply cords or wiring touch hot surfaces.

NOTE: No Serviceable Parts. The battery is NOT replaceable.

SAVE THESE INSTRUCTIONS

Catalog Number	Input Voltage	Output Voltage in EM Mode	Power	Battery Pack	Duration
KT-EMRG-LED-4C-400-EN2	100-277Vac, 50/60Hz	12-55 Vdc	4W	LiFePO4 6.4V 1.6Ah	90 Minutes

WIRING DIAGRAM



INSTALLATION

1. Read and understand all warning and notes stated above, before proceeding with installation.

- 2. Fixture Compatibility & Applications:** The KT-EMRG-LED-4C-400-EN2 can be used with most LED loads that have a forward voltage requirement between 12-55Vdc. Verify the existing Normal LED Driver in the fixture is Class 2 compliant per driver manufacturer specifications. Verify LED load has a forward voltage requirement between 12-55Vdc. Confirm that the output power (4W) does not exceed the power delivered to the LED load under normal operation from the Normal LED Driver.

These emergency packs have been evaluated to and found compliant to UL 924. The emergency pack assembly is accepted as a component of a luminaire where the suitability of the combination shall be determined by UL or Authorities Having Jurisdiction. The as-installed performance of the system must meet or exceed all Federal, State, and Local code requirements.

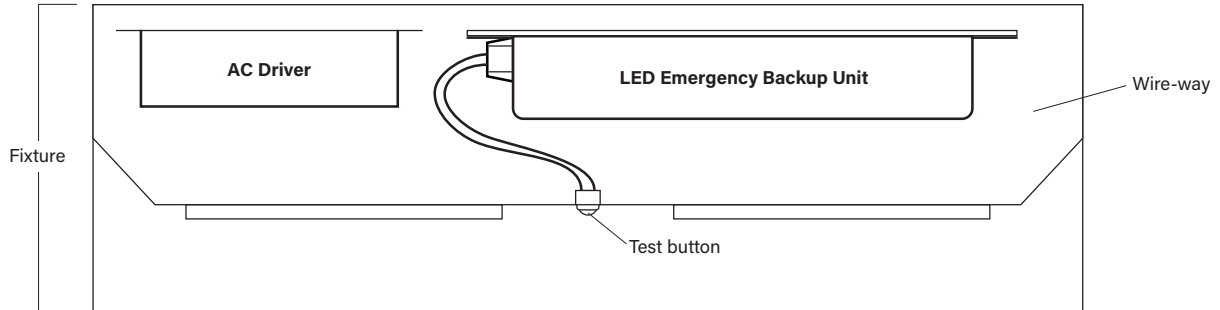
- 3. Calculate Emergency Lumen Output:** Multiply efficacy of fixture (lm/W) by the rated output power of the Emergency LED Driver (4W) to determine lumen output of fixture during emergency operation. (Example: 125 lm/W x 4W = 500 lumens.)
- 4. Determining adequacy of means-of-egress lighting levels:** Follow industry standards by utilizing available .ies files and lighting design software for your dedicated emergency luminaires, with the above calculated emergency lumens, and validate your as-installed plans in accordance with the applicable life safety codes governing your project.

While these products are 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.

5. Mounting:

- Determine appropriate location for the LED Emergency Driver in the fixture. Install the LED Emergency Driver using existing mounting holes in fixture or make new holes as needed. Ensure location of LED Emergency Driver is within 12" of the location for the test switch installation.
- Locate the hole or knockout for the test switch. If no hole exists, drill one 1/2" hole into the fixture housing cover/wire-way cover within 12" of Emergency LED Driver location. Ensure the test switch location is visible and accessible to service personnel.

FIGURE 1



6. Wiring & Labeling:

- Insert test switch into the pre-drilled hole made above and secure.
- Complete wiring as indicated in above Wiring Diagram. Install in accordance with National Electric Code. Emergency LED Driver and Normal LED Driver must be on the same branch circuit. Do not join battery switch connectors until all other wiring is complete and AC power is on.
- Adhere luminaire modification label to the fixture on the ballast cover where it is easily visible to anyone servicing the fixture in the future.

7. Completing Installation:

- When the installation is complete, verify all necessary connections have been made.
- Switch the AC Power on and connect the white battery switch connectors. This will engage the emergency battery.

8. Operation:

Normal Mode: AC Power is present. The Normal LED Driver operated the LED load as designed. The Emergency LED Driver is charging in a standby mode. The test button will be continuously lit, showing that the battery is charging. When battery is fully charged, the test button will remain lit.

Emergency Mode: When AC Power is lost, the Emergency LED Driver detects the power outage and automatically switches to emergency mode. The LED Load is illuminated for a minimum of 90 minutes. The test button will not be lit. When AC Power is restored, the Emergency LED Driver will switch back to standby and the Normal LED Driver will provide power. The Emergency LED Driver will begin re-charging.

9. Testing Procedures:

Press the test button to cut the power to the Normal LED Driver and switch the system to emergency mode. Release the test button to return to normal mode. Switch off the circuit breaker to simulate a full power outage. Allow a 24-hour charge for first time use. NFPA 101, Life Safety Code outlines the following test schedule:

Monthly: Ensure that the test button light is illuminated. Conduct a 30-second discharge test by depressing the test button. The LED load should operate at reduced output.

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

Written records of the testing shall be kept by the owner for inspection by the authority having jurisdiction.