Emergency LED Driver

High Voltage | AC Wiring | Gen 4

All-in-One Emergency Lighting Solutions

Emergency LED driver provides reliable power for any LED fixture in emergency mode, offering 16W or 25W options for up to 90 minutes. With its compact size and robust feature set, these drivers stand out as some of the most capable and versatile solutions on the market.

AC Wiring

Fully enclosed systems integrate the battery and emergency driver into a single unit, simplifying installation while maintaining a sleek, compact design. The emergency backup powers the driver, not the LEDs directly, ensuring optimal performance and compatibility with a wider range of lighting applications.

Standard

CERTIFIED

CEC Compliance
California Energy Commission
Title 20 efficiency standards

QUICK SHIP

Feature

☑ Built for Reliability

- Field-installable (UL Listed for US & Canada)
- *Energy-efficient charger (CEC Title 20 compliant) *
- *Premium battery backup – 90+ minutes runtime during outages*
- *Backed by a 5-Year Limited Warranty*

☑ Seamless Compatibility

- Supports most LED luminaires (Up to 200W)
- Universal input voltage (100–277V AC)
- Pre-installation service available for hassle-free install

☑ Smarter Features

Automatic self-diagnostic testing with monthly, semi-annual, and annual checkups.

☑ More Intuitive

Enhanced indicators for real-time working status and issue notifications, making it easier to monitor performance.

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PRODUCT ORDERING GUIDE

Example: EM-H16170-RBF

EM	-	H		170	-	RBF
Product Series		Type	Output Power	Output Voltage		Flexible Conduit
EM QuickShip Emergency LED Driver		**H** QuickShip High Voltage-AC Wiring Version Individual Pack	**16** QuickShip 16W **25** QuickShip 25W	**170** QuickShip 170V DC		**RBF** QuickShip Dual Flex

OPTIONAL ACCESSORY

2-in-1 LED Test Switch And Indicator Light Included

Standard QuickShip

Fix the indicator light on to the ceiling with nut, suitable for all mounting configurations. It may be remotely mounted up to 50 ft from the EM-H emergency driver.

Optional Recessed Make to Order

Install the indicator light to the opening hole and fix it and j-box onto the ceiling with the nut. It may be remotely mounted up to 50 ft from the EM-H emergency driver.

Optional Mounting Kit

T-Grid Mounting Kit QuickShip

It is safer to mount the LED emergency driver on the T-grid ceiling.

SPECIFICATION

Situation 1)
To ⩽18W LED luminaire **without 0-10V dimming wires**
(Such as LED Tube, LED Bulb, Triac Dimming LED Downlight.)

Situation 2)
To ＞18W LED luminaire (Up to 160W) **with 0-10V dimming wires**
Minimum Dim-down Power⩽Output Power of LED emergency driver.
(Such as LED Panel, LED Linear Highbay, LED Downlight, LED Linear Light.)

EM-H16170-RBF

Output Power
16 Watts

Output Voltage
170V DC

Input Current
70 mA Max (120V)

Input Power
4.5 Watts Max (120V)

Input Voltage
100-277VAC, 50-60Hz

Emergency Operation
⩾90 Minutes

Standby Power
＜0.24W(120V)

Operating Temp
0℃ to 50℃

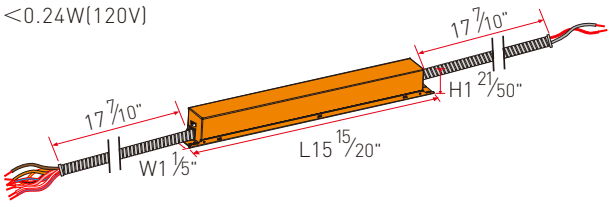
Battery
LiFePo4

Recharge
24 Hrs

Luminaire Load Power
160W (Max)
If Wiring the 0-10V dimming wires
Minimum dim-down power⩽ EM power
18W (Max)
If NO wiring the 0-10V dimming wires

Certificate
UL , CEC

Dimensions



Situation 1)
To ⩽25W LED luminaire **without 0-10V dimming wires**
(Such as LED Tube, LED Bulb, Triac Dimming LED Downlight.)

Situation 2)
To ＞25W LED luminaire (Up to 200W) **with 0-10V dimming wires**
Minimum Dim-down Power⩽Output Power of LED emergency driver.
(Such as LED Panel, LED Linear Highbay, LED Downlight, LED Linear Light.)

EM-H25170-RBF

Output Power
25 Watts

Output Voltage
170V DC

Input Current
80 mA Max (120V)

Input Power
6 Watts Max (120V)

Input Voltage
100-277VAC, 50-60Hz

Emergency Operation
⩾90 Minutes

Standby Power
＜0.24W(120V)

Operating Temp
0℃ to 50℃

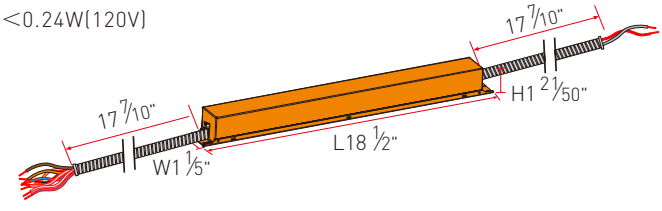
Battery
LiFePo4

Recharge
36 Hrs

Luminaire Load Power
200W (Max)
If Wiring the 0-10V dimming wires
Minimum dim-down power⩽ EM power
25W (Max)
If NO wiring the 0-10V dimming wires

Certificate
UL , CEC

Dimensions



APPLICATION

The EM-H series is UL Listed for factory or field installation and allows the same LED luminaire to be used for normal and emergency operations. The emergency LED driver works in conjunction with an AC LED driver that has an output current not to exceed 5.0A to convert new or existing LED fixtures into emergency lighting. All-in-one solution combines a maintenance-free LiFePO4 battery, charger and circuitry in a rugged metal enclosure. The EM-H is suitable for indoor and damp locations.

OPERATION

When AC power fails, the EM-H immediately switches to the emergency mode, operating the LEDs at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency driver automatically returns to the charging mode.

INSTALLATION

The EM-H does not affect normal fixture operation. It must be fed from the same branch circuit as the AC driver. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C. The LED emergency driver may be installed near the fixture or remote from the fixture. The maximum remote distance using 16AWG wire is 15ft.

MOUNTING CONFIGURATIONS:

Each unit is available in 4 different mounting configurations to accommodate various performance requirement and fixtures types.

- Dual Flex (Standard) **QuickShip**

  Provides dual flex for wiring to both the fixture or driver compartment and test accessories.

- Integral Non-Flex (Optional) **Make to Order**

  Allows for integral installation within the driver compartment. May also be mounted atop the fixture when used with a TMK cover accessory.

- Single Flex (Optional) **Make to Order**

  Mounts to the junction box and provides flexible conduit for remote mounting of the test accessories.

- Top-Mount Non-Flex (Optional) **Make to Order**

  Top-mounting option for running wires directly into the driver compartment. Test accessories are then installed within the fixture.

CODE-REQUIRED TESTING

More secure, more rigorous than standard requirements.

Automatic Detection Modes	
Power-On Self-Test:	Trigger: Upon power connection
	Duration: Max. 2 minutes
Monthly Auto-Test:	Trigger: Day 30 (after light OFF + 6-hour delay)
	Duration: 35 seconds
Semi-Annual Auto-Test:	Trigger: Day 180 (after light OFF + 6-hour delay)
	Duration: 30 minutes
Annual Auto-Test:	Trigger: Day 365 (after light OFF + 6-hour delay)
	Duration: 90 minutes

Key Notes:
All time-based tests initiate 6 hours after the fixture is turned OFF
Test cycles are calculated from the last power-on date
"Day 30/180/365" refers to cumulative operational days

Manual Button Test Operations
Single Press (1×) Action: Initiates 35-second self-test
Double Press (2×) Action: Initiates 30-minute self-test
Triple Press (3×) Action: Initiates 90-minute self-test
Long Press for 3 seconds Action: Cancels ongoing self-test
Long Press for 10 seconds Action: Forces system reset & reboot

Safety Notice:
» Interrupting tests may require manual restart of the detection cycle.

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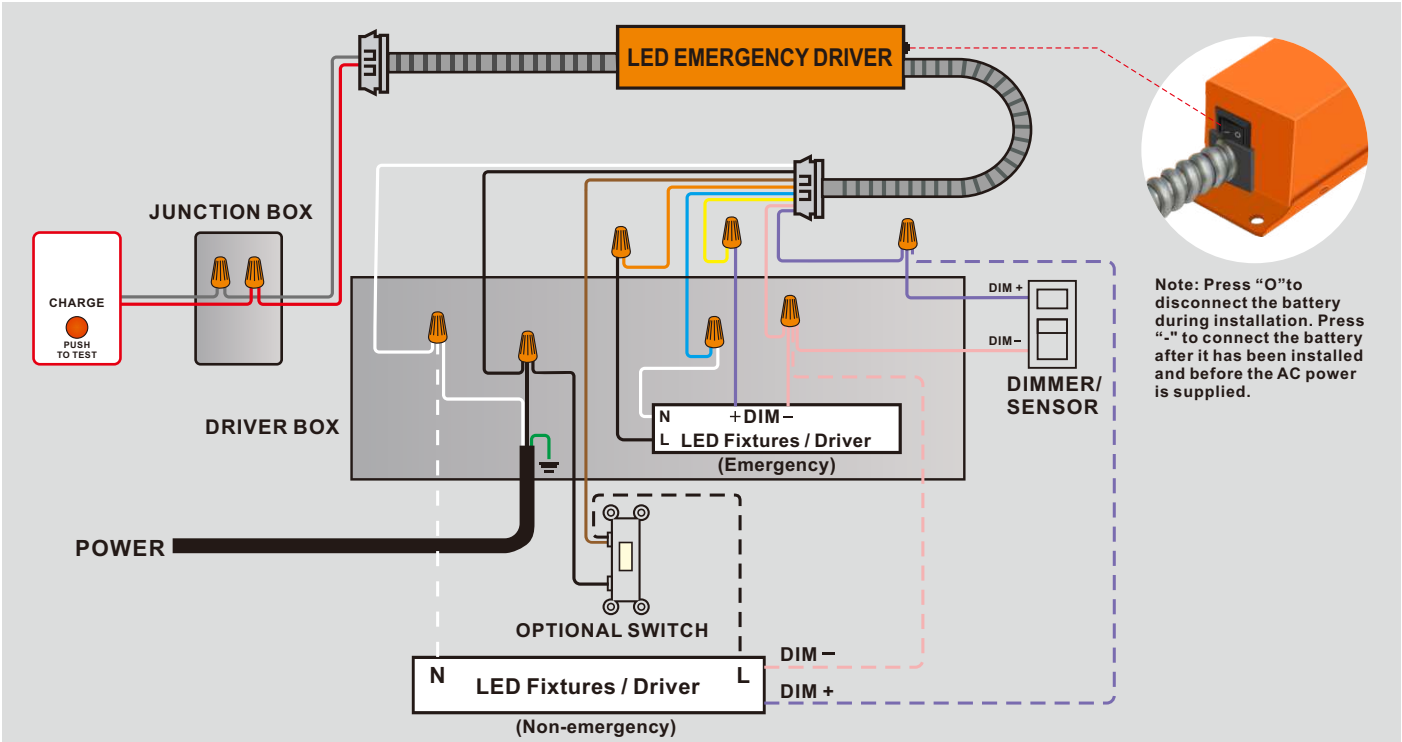
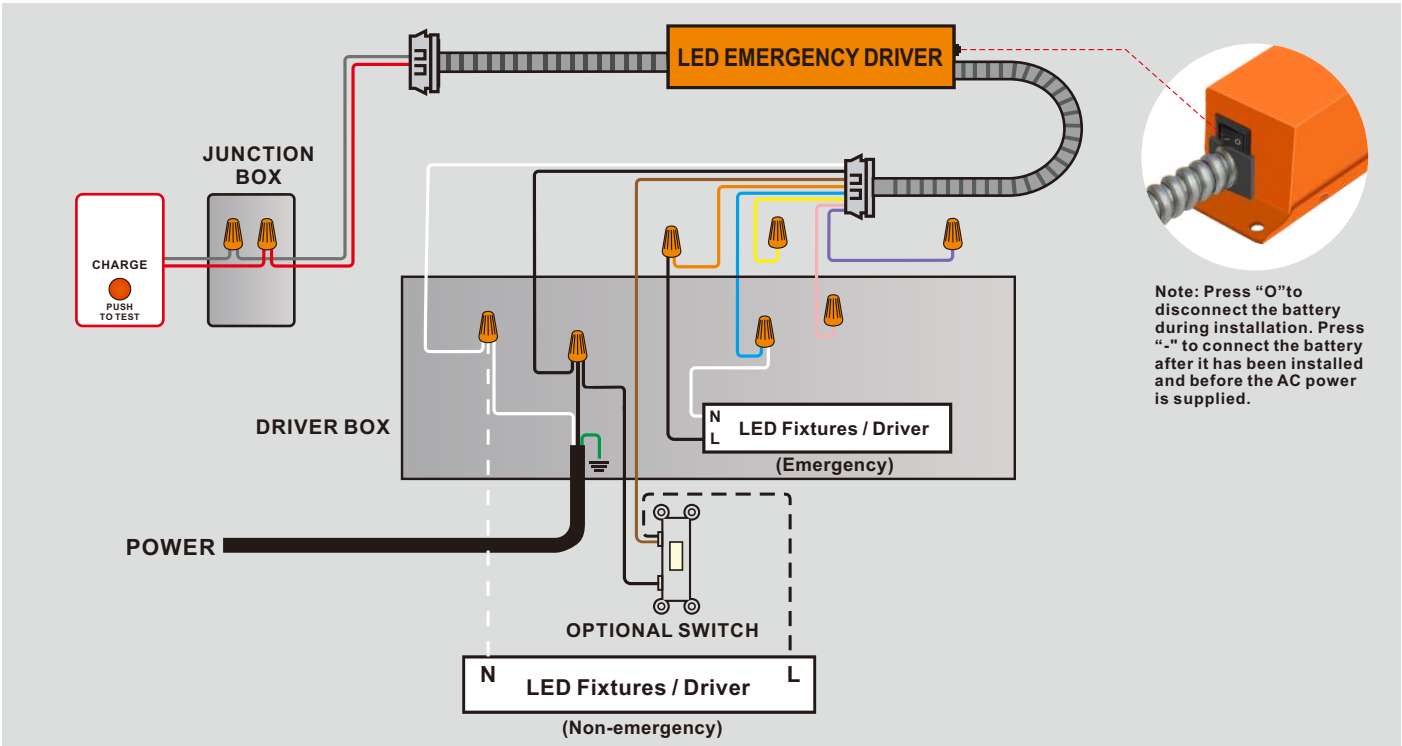
WIRING DIAGRAM



Power of Luminaire > Power of Emergency Driver
If Wiring the 0-10V dimming wires.



Power of Luminaire ≤ Power of Emergency Driver(18W Max)
If NO wiring the 0-10V dimming wires.

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