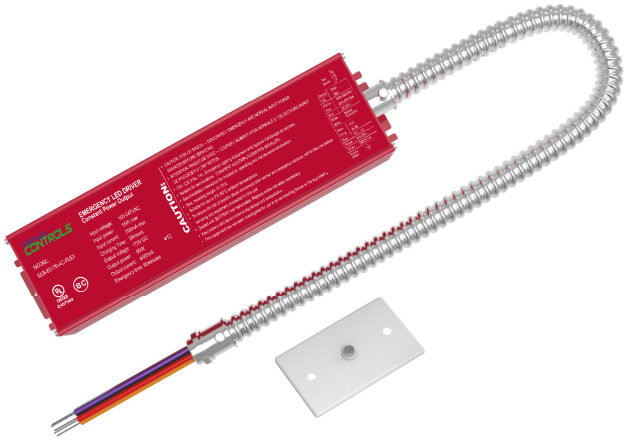
EMERGENCY LED DRIVER

ELB-60170-AC-FLEX



CONSTANT POWER EMERGENCY OUTPUT

Self Test

FEATURES

- Constant output power. Self-testing.
- Long life high temperature recyclable Li-ion battery.
- Includes 2-in 1 test switch and charge indicator light.
- 5 year limited warranty.
- Suitable for use in dry and damp location.
- UL Listed for factory or field installation-UL924 & CSAC22.2 NO.141.
- Certified for CA Title 20.

ELECTRICAL SPECIFICATIONS

- Input Voltage:100-347Vac,50/60Hz
- Input Power: 15W max
- Input Current: 200mA max
- Output Voltage: 170Vdc
- Emergency Output Power: 60W
- Recharge Time: 24 Hours
- Discharge Time: 90 minutes
- Battery: Li-ion battery
- Output Current: ≤460mA
- Ambient Temp: 5°C to 50°C(41°F to 122°F)

CERTIFICATES

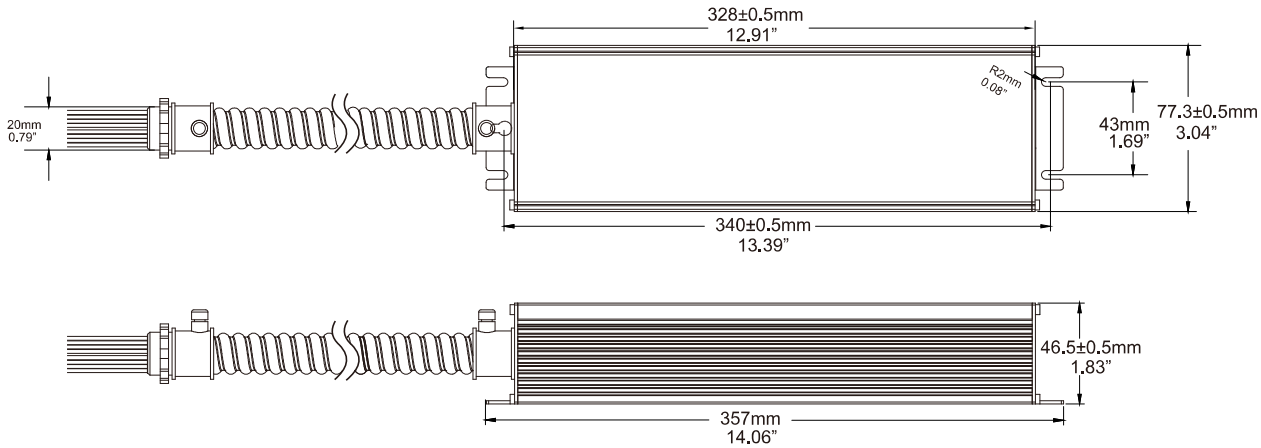
UL LISTED E497969

CALIFORNIA ENERGY COMMISSION COMPLIANT

RoHS

DIMENSIONS

Driver- 14.06"x3.04"x1.83" (357mmx77.3mmx46.5mm) Mounting center-13.39"(340mm)



This guide contains important information regardinand operation, please keep this guide for future reference.

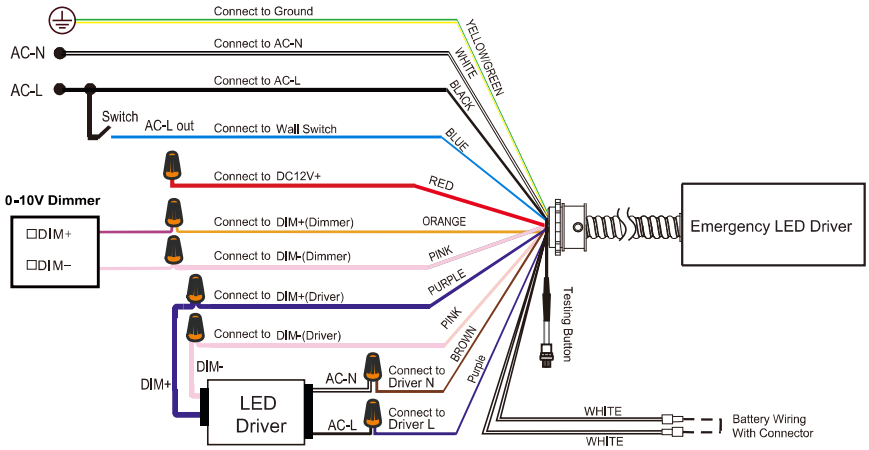
CAUTION:

① The Emergency LED driver must connect to 0-10V dimming wires(DIM+,DIM-) of the fixture if the LED luminaire power exceeds the emergency LED driver power.When dimming to minimum,the LED luminaire power must be less than emergency driver's power.

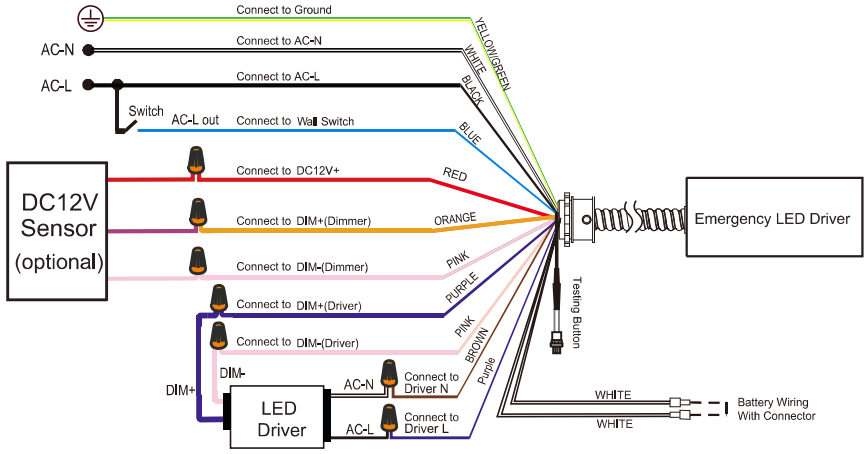
② Do not connect the battery cable during storage and transportation. Do not mate battery connector until installation is complete and AC power is supplied.

WIRING DIAGRAM

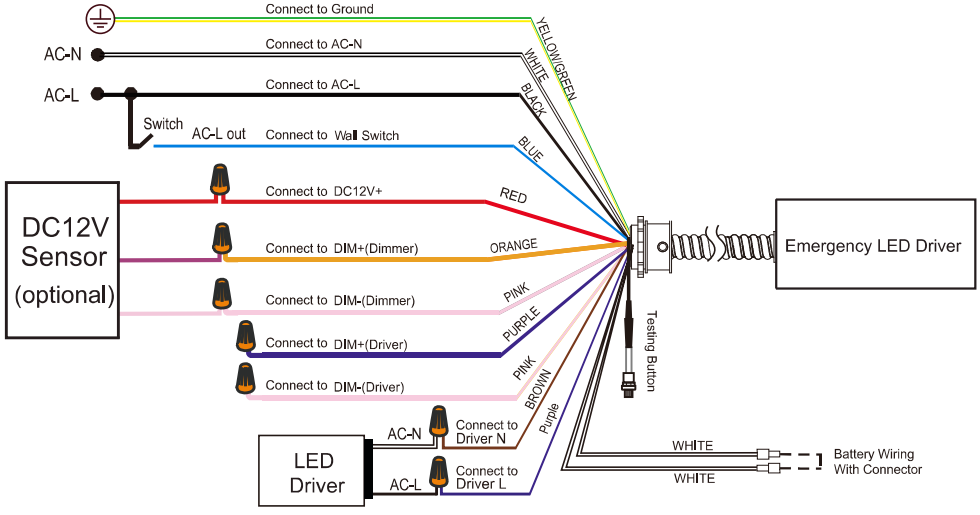
Wiring 1 : For LED driver with input power higher than emergency output power
0-10V Dimmable LED Driver + Dimmer Switch
Emergency Driver Dim+(Purple) , Driver Dim-(Pink) have to connect with LED driver DIM+ and DIM-



Wiring 2 : For LED driver with input power higher than emergency output power
0-10V Dimmable LED Driver + Wall Switch
If the 0-10V sensor is used, the 12V wirings of sensor must be connected to the 12V wirings of emergency dirver.
If not, please cap off.



Wiring 3 : For LED driver with input power less than emergency output power
NON Dimmable LED Driver
If the 0-10V sensor is used, the 12V wirings of sensor must be connected to the 12V wirings of emergency dirver.
If not, please cap off.



EMERGENCY LED DRIVER

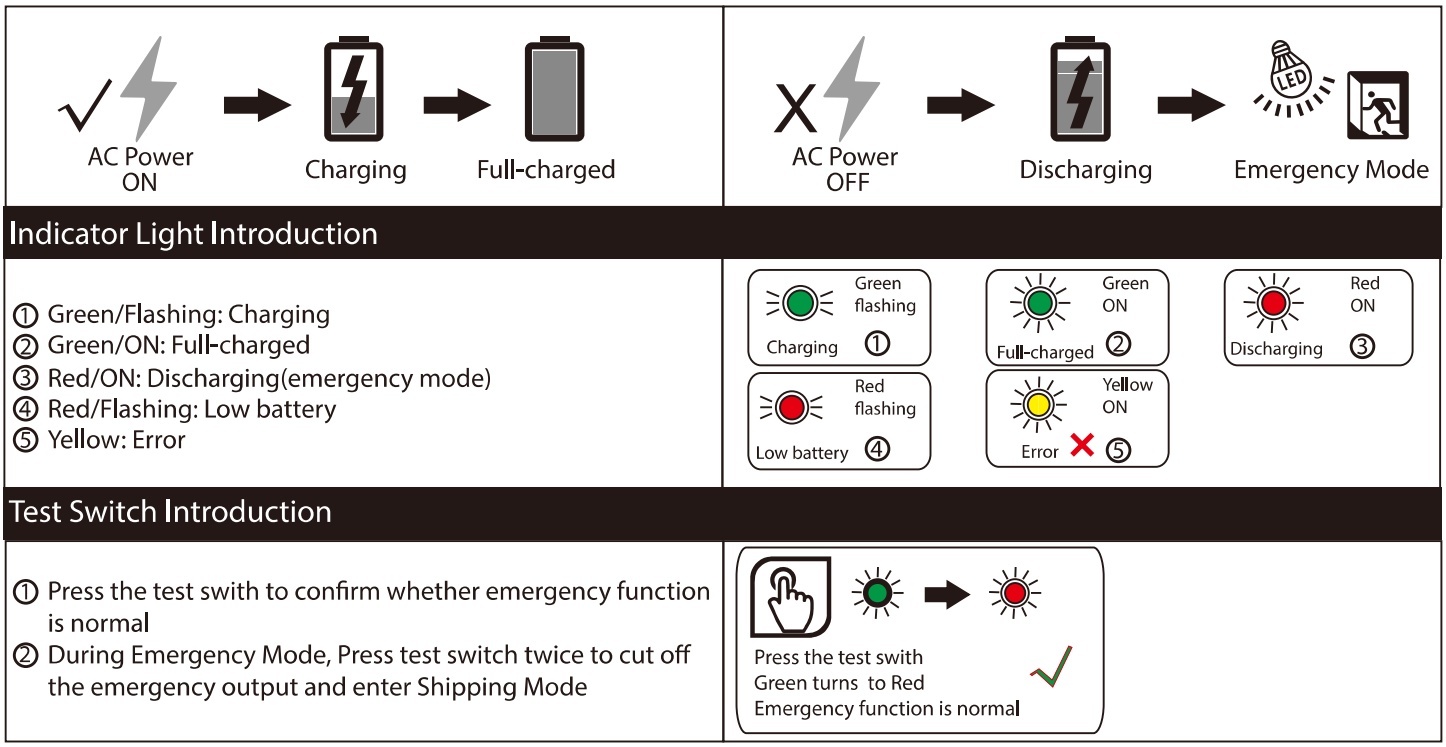
ELB-60170-AC-FLEX

OPERATION

AC Operation: AC power is present.The AC driver operates the LED load as designed.The emergency driver is charging in a standby mode.The charging indicator will be lit,showing that the battery is charging.

Emergency Operation: When the AC power goes out ,The emergency driver detects the AC power outage and automatically switch to the working emergency mode. The red LED light on indicates that it is discharging, the red LED flashes to indicate low battery power. The red LED light off indicates that the discharge is complete. When the AC power is restored, The emergency driver backs to AC power working and starts recharging.

Malfunction Operation:
When the emergency LED driver fault, the yellow LED on.



TESTING AND MAINTENANCE

Press the test button to cut the power to the AC 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.

Initial Testing – Allow the unit to charge approximately 1 hour, then conduct a short discharge test. Allow a 24 hour charge before conducting a one hour test.

Periodic tests are recommended to ensure the system is functioning normally:

1. Visually inspect the test switch monthly. It should be illuminated when AC power is applied.
2. **Monthly-**Conduct a 30 second discharge test by depressing the test button or by switching off the mains power every month.
3. **Annually-**Conduct a 90 minutes discharge test once per year. The unit should operate as intended for the duration of the test.

SELF-DIAGNOSTIC

The integrated Self- Diagnostic circuitry will automatically conduct 1 monthly 30-second and annual 90-minute tests to verify proper emergency capability:

1. **Monthly-**Monthly self test is executed 30 seconds self-discharge test every 30 days. The system will transfer from normal lighting to emergency mode, and the reverse.
2. **Annually-**Annual self test is executed 90 minutes self-discharge test every 365 days.The system will transfer from normal lighting to emergency mode, and the reverse.

"Written Records of the Testing should be kept by the owner for inspection by the authority having jurisdiction."

INSTRUCTION MANUAL

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

- CAUTION: RISK OF SHOCK-disconnect emergency and normal input power sources before servicing.
- ASSEMBLY and FIELD INSTALLATION WIRING: WARNING: AC power must be off before proceeding with assembly or installation of emergency driver.
- IMPORTANT: An un-switched AC power source is required(100-347Vac). It is designed for fixtures listed for dry and damp locations
- 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: Customers are advised to charge emergency LED drivers 24 hours every 6 months during storage,and which could be stocked for 1 year at most. If customers don't install and recharge for more than 1 year, the batteries may be damaged. This is not covered in the warranty, and we would charge for replacement.
- IMPORTANT: Lighting fixture manufacturers, electricians, and end-users need to ensure product system compatibility test before u sing and final installation.
- CAUTION: Make sure all electrical connections conform to the National Electrical Code and all applicable local regulations.
- CAUTION: This is a sealed unit. Components are not replaceable. Replace the entire LED Emergency Backup unit when necessary.
- CAUTION: Equipment should be mounted in locations and at heights where it is not be subjected to tampering by unauthorized personnel.
- CAUTION: The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.
- CAUTION: Use with grounded, UL Listed, dry or damp location rated fixtures. Case should also be grounded.
- CAUTION: Battery is rechargeable Li-ion type and must be recycled or disposed of properly
- CAUTION: Suitable for use in 5°C -50°C ambient temperatures
- CAUTION: This product is for use in indoor fixtures only. Do NOT use near heated air handling outlets or hazardous locations..
- Do not let power supply cords touch hot surfaces. Do not mount near gas or electric heaters. Do not use this equipment for other than its intended use. Failure to follow this may cause an unsafe condition and will void warranty. Servicing of this equipment should be performed by qualified personnel only.