

IMPORTANT SAFEGUARDS

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

IMPORTANT: Before installing, make certain the AC Power to the fixture is off to avoid electric shock.

IMPORTANT: An un-switched AC power source of 100~347VAC is required.

IMPORTANT: Verify that all replacement lamp types marked on the installed luminaire are also identified as suitable for use with this emergency battery pack.

IMPORTANT: It is recommended to charge the battery every 6 months to prevent over-discharge

CAUTION: Make sure all electrical connections conform to the National Electrical Code and all applicable local regulations. Proper grounding is required for safety.

CAUTION: RISK OF SHOCK — DISCONNECT EMERGENCY AND NORMAL INPUT POWER SOURCES BEFORE SERVICING.

CAUTION: Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED Emergency Backup. Check for enclosed wiring and components.

CAUTION: Risk of fire or electric shock. This LED Emergency Backup installation requires knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

CAUTION: To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

CAUTION: Do not handle energized fixture when hands are wet, when standing on wet or damp surfaces, or in water.

CAUTION: The electrical rating of this product is 100-347V AC. Installer must confirm that there is 100-347Vac to the fixture before installation.

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.

Suitable for use in damp locations and dry locations where the ambient temperature is 5 °C minimum, +50 °C maximum.

Not for use in heated air outlets or hazardous locations.

Do not use outdoors.

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.

The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.

Use with grounded, UL Listed, dry or damp location rated fixtures.

IMPORTANT: Indicator (LED light) illuminated indicates battery in charge mode when AC power is applied. It is recommended and required by applicable code to test emergency function to ensure proper operation of the system; push the test switch for thirty (30) seconds every 30 days to ensure the emergency driver is functioning as LED light source illuminated. Conduct a ninety minute (90) discharge test one time (1) per year; LED light source should be illuminated for a minimum of ninety minutes (90).

TESTING SYSTEM: The emergency battery requires a charge minimum of one (1) hour before testing the circuit. A full charge requires twenty four(24) hours.



EMERGENCY LED DRIVER FOR USE
WITH LED LUMINAIRES IDENTIFIED IN
THE MANUFACTURER'S INSTALLATION
INSTRUCTIONS
E493915



THIS IS AN EMERGENCY BATTERY BACKUP FIXTURE
THAT CONTAINS A RECHARGEABLE LITHIUM BATTERY.
THE BATTERY MUST BE RECYCLED OR DISPOSED OFF
PROPERLY.

SAVE THESE INSTRUCTIONS

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 switches 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 faults, the yellow LED on

| <p>AC Power ON → Charging → Full-charged</p> | <p>AC Power OFF → Discharging → Emergency Mode</p> |
|---|--|
| Indicator Light Introduction | |
| <ul style="list-style-type: none"> ① Green/Flashing: Charging ② Green/ON: Full-charged ③ Red/ON: Discharging(emergency mode) ④ Red/Flashing: Low battery ⑤ Yellow: Error | |
| Test Switch Introduction | |
| <ul style="list-style-type: none"> ① Press the test switch to confirm whether emergency function is normal ② During Emergency Mode, Press test switch twice to cut off the emergency output and enter Shipping Mode | <p>Press the test switch Green turns to Red Emergency function is normal</p> |

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.”

WIRING DIAGRAM



CAUTION: The Emergency LED inverter must connect to 0-10V dimming wires(DIM+,DIM-) of the luminaire if the LED luminaire power is exceed the emergency LED driver power.

Model: LSED20W

Input Voltage: 100-347Vac, 50/60Hz
 Input Current: ≤ 100mA
 Input Power: 12W Max.
 Output Voltage: 170V DC
 Input Current: ≤ 100mA

Output Power: 20W
 Ambient Temperature: 5°C ~ 50°C (30°F ~ 122°F)
 Application: (1) ≤ 150W (0-10V dimming luminaire)
 (2) ≤ output power (non-dimming luminaire)

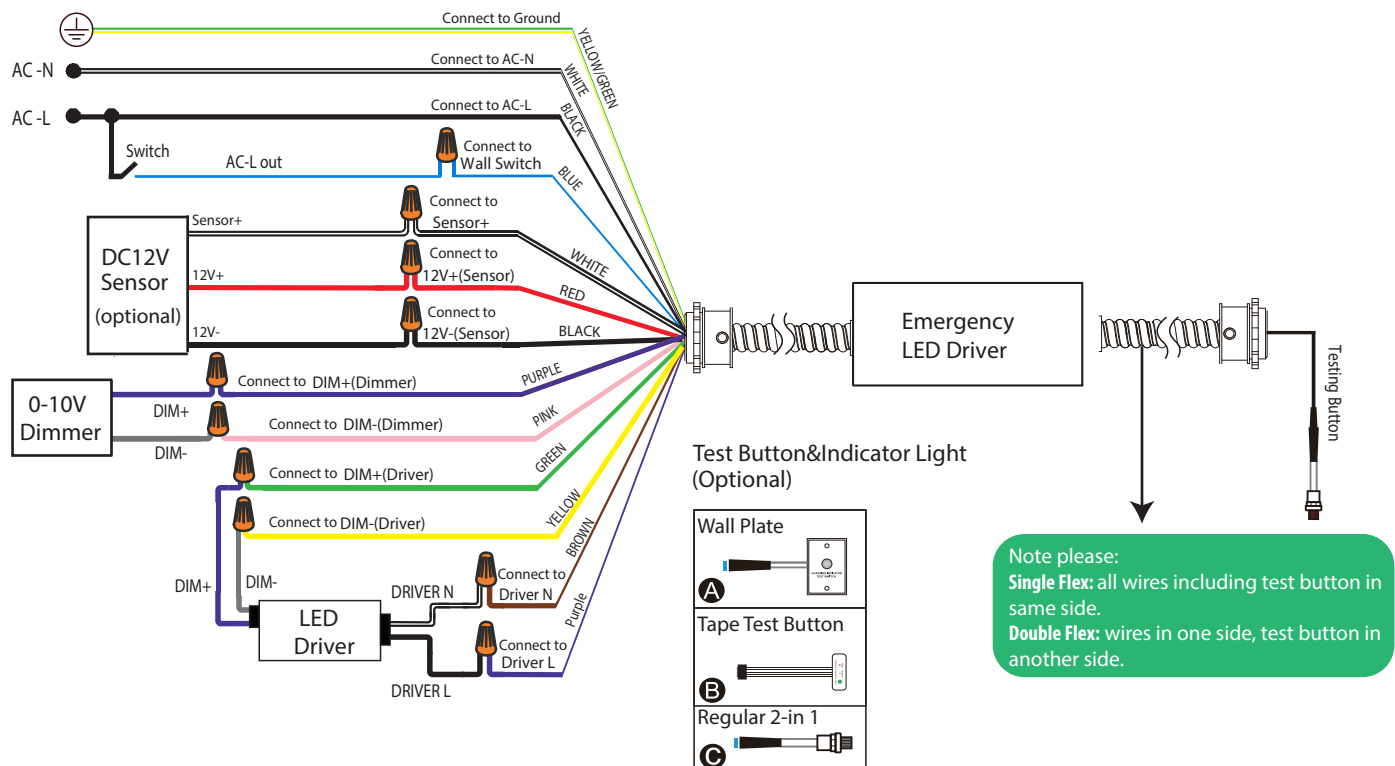


* During Emergency Mode, Press testing button twice to cut off the emergency output and enter Shipping Mode

Product includes the following components:

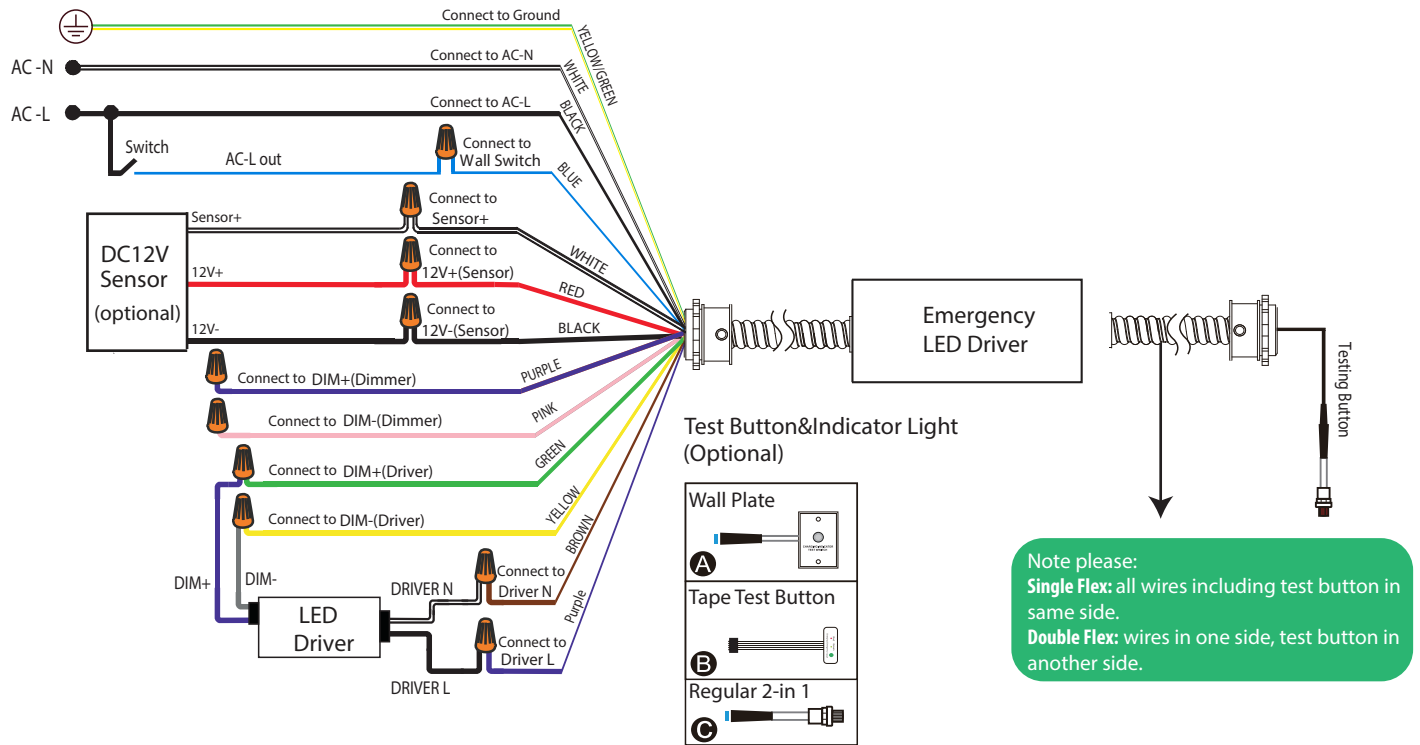
| PARTS | QUANTITY |
|--|----------|
| LED Emergency Inverter | 1 |
| Charging Indicator/Testing Button | 1 |
| Charging Indicator/Testing Button Wall Cover | 1 |
| Instruction Sheet | 1 |

1. For luminaire with 0-10V LED driver and using 0-10V dimmer (* LED DRIVER INPUT POWER NOT GREATER THAN 100W)
 Emergency Inverter Dim+ (Green) , Driver Dim- (Yellow) has to connect with LED driver DIM+ and DIM-



Note please:
Single Flex: all wires including test button in same side.
Double Flex: wires in one side, test button in another side.

2. For luminaire with 0-10V LED driver, without using 0-10V dimmer (* LED DRIVER INPUT POWER NOT GREATER THAN 100W)
Emergency Inverter Dim+ (Green), Driver Dim- (Yellow) has to connect with LED driver DIM+ and DIM-



3. For luminaire with non-dimming LED driver (* LED DRIVER INPUT POWER NOT GREATER THAN EMERGENCY OUTPUT POWER)

