

# Lumination™ LED Luminaires

LALS Series



## BEFORE YOU BEGIN

Read these instructions completely and carefully.

### ⚠ WARNING/AVERTISSEMENT

#### RISK OF ELECTRIC SHOCK

- Turn power off before inspection, installation or removal.
- Properly ground electrical enclosure.

#### RISK OF FIRE

- Follow all NEC and local codes.
- Use only UL approved wire for input/output connections. Minimum size 18 AWG.

#### RISQUES DE DÉCHARGES ÉLECTRIQUES

- Coupez l'alimentation avant d'inspecter, installer ou déplacer le luminaire.
- Assurez-vous de correctement mettre à la terre le boîtier d'alimentation électrique.

#### RISQUES D'INCENDIE

- Respectez tous les codes NEC et codes locaux.
- N'utilisez que des fils approuvés par UL pour les entrées/sorties de connexion. Taille minimum 18 AWG.

## Save These Instructions

Use only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.

## Important

- 120V 60Hz - maximum 100 feet of luminaires can be connected on a single through wiring run
- 277V/347V 60Hz - maximum 200 feet of luminaires can be connected on a single through wiring run
- Please see technical data sheet for electrical properties to ensure safe installation
- Under any circumstance, maximum current through connected fixtures shall not exceed 16A

## Materials Supplied with Luminaire

- Fixture
- Knockout plate (2)
- 8-18 x 1/4" screws for knockout
- Suspension cable
- T-bar clip
- Locating tabs

## Prepare Electrical Wiring



### Electrical Requirements

The LED luminaire must be connected to the mains supply according to its ratings on the product label.



### Grounding Instructions

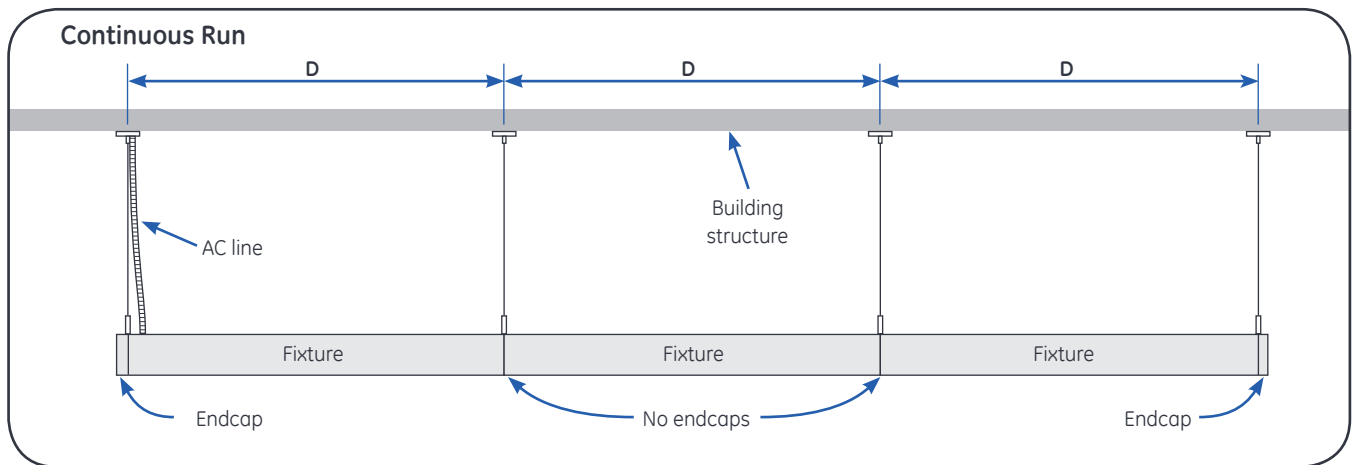
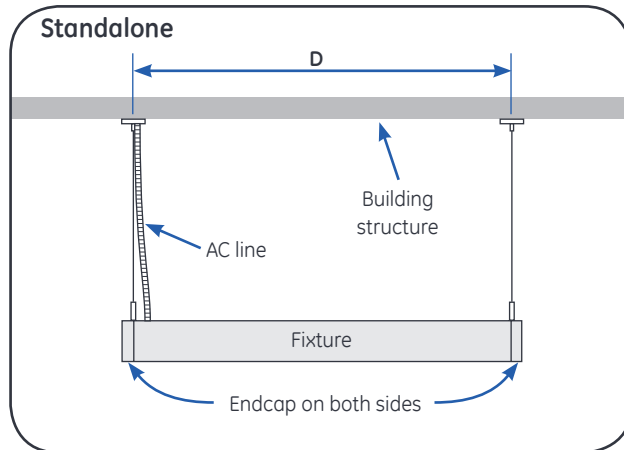
The grounding and bonding of the overall system shall be done in accordance with National Electric Code (NEC) Article 600 and local codes.

## Materials Supplied with Starter Kit

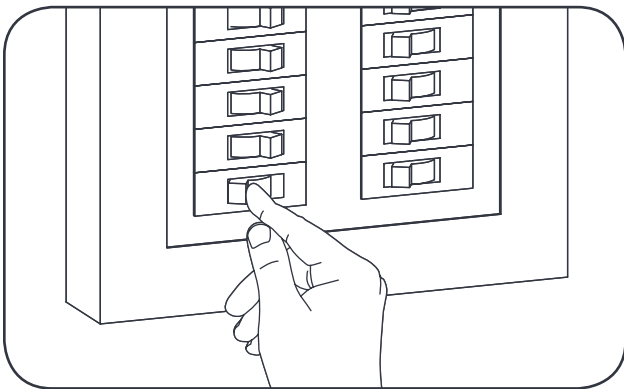
- End caps (2)
- 8-18 x 2" screws
- Suspension bracket
- Suspension cable
- T-bar clip
- Locating tabs
- AC and dimming leader cables
- Power cords



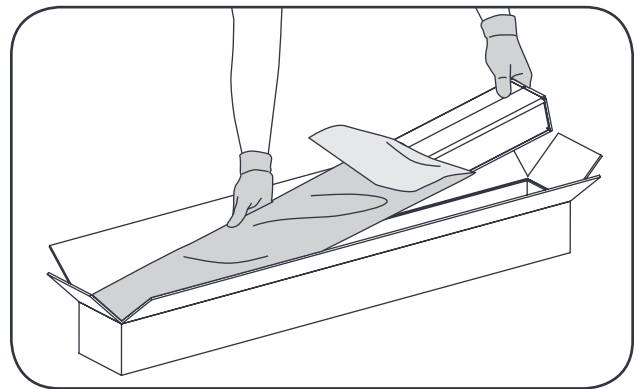
## Planning



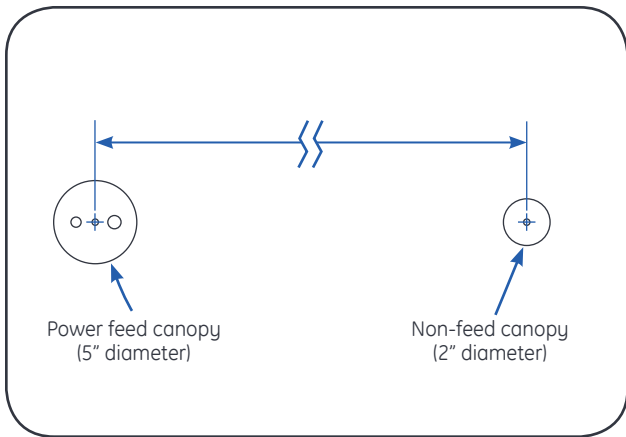
## Installation



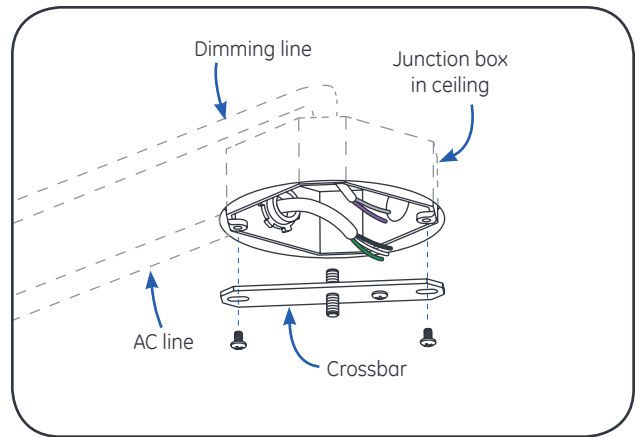
**1** TURN OFF POWER at the source to the fixture.



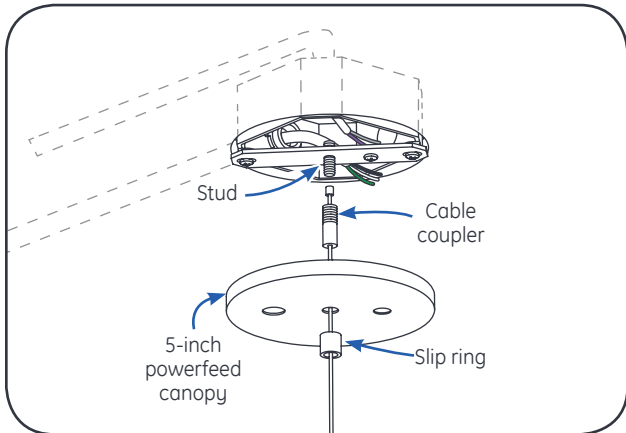
**2** Carefully unpack unit from its packaging. Properly inspect for defects before installing. Wear work gloves to prevent dirt and oil from being transferred to the luminaire.



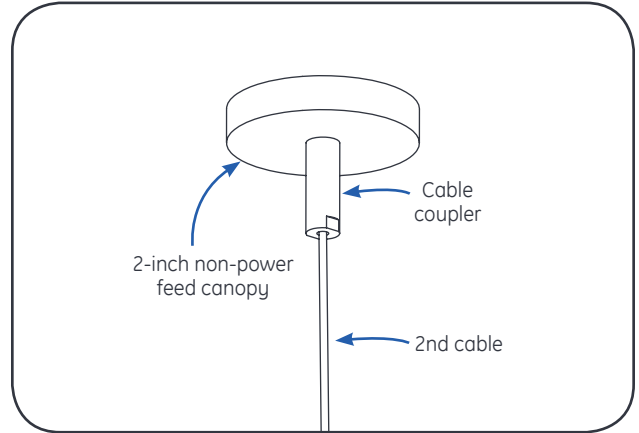
**3** Mark distance between canopy sets on ceiling based on the size fixture being installed (see **Planning** section).



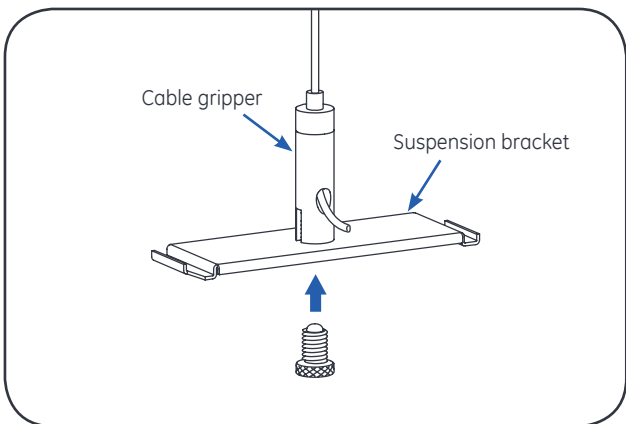
**4** Attach crossbar to junction box in ceiling with two #8 screws (provided).



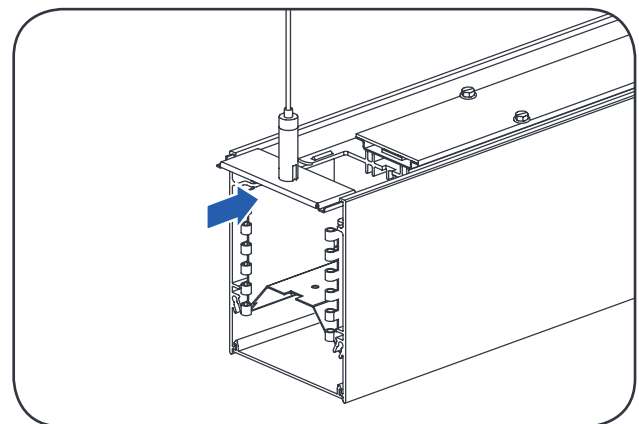
**5** Pass cable through cable coupler and screw onto stud. Pass cable through canopy and slip ring (power canopy shown).



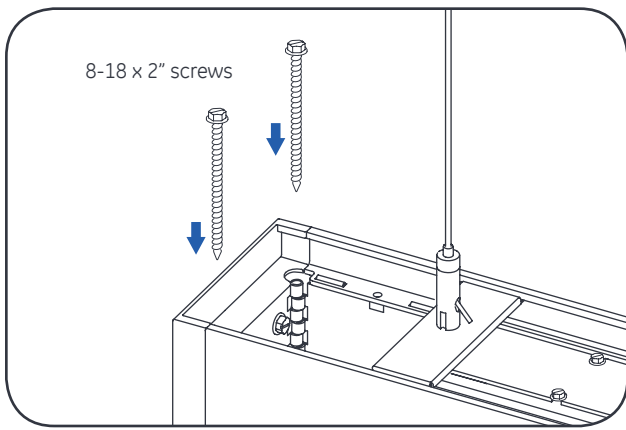
**6** Hang second cable to a structural ceiling member capable of supporting the weight of the fixture and cover with non-power feed canopy.



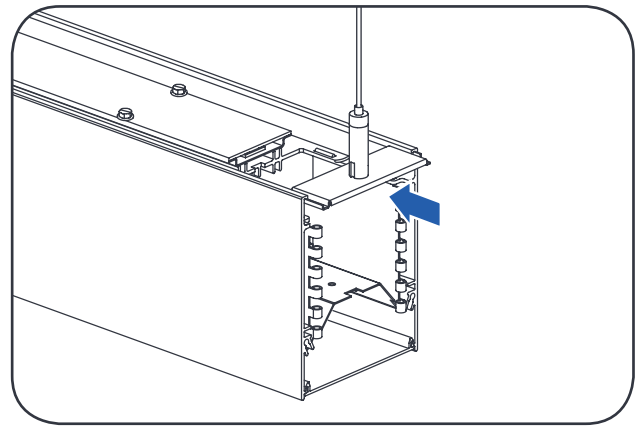
**7** Connect cable gripper to suspension bracket using provided screw. Feed cable into top of cable gripper and pull through.



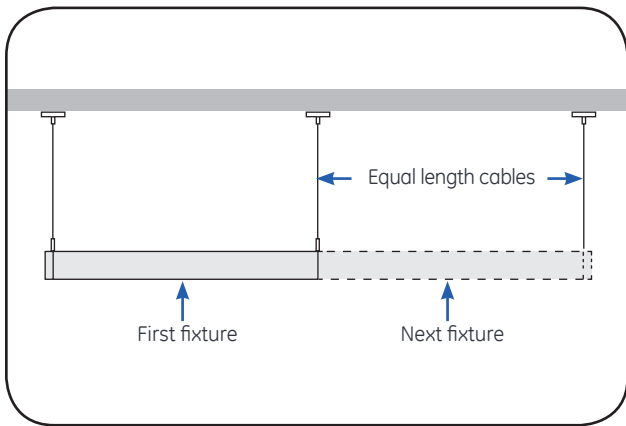
**8** Slide suspension bracket into housing.



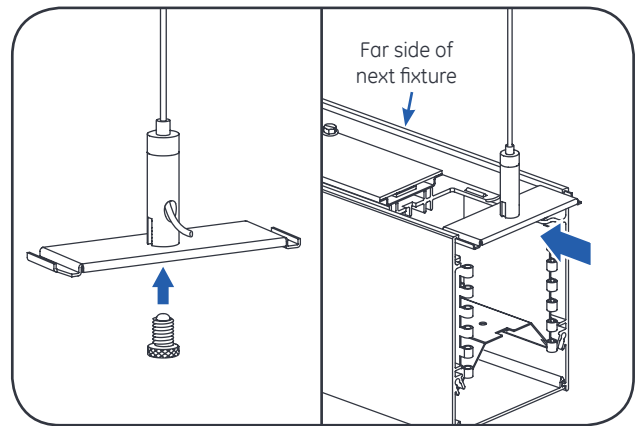
**9** Attach first endcap using provided hardware from starter kit.



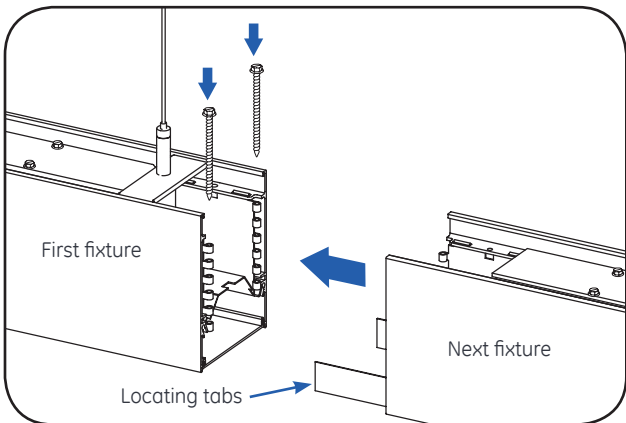
**10** Slide second suspension bracket into far side of fixture and level fixture. If no additional fixtures will be attached go to Step 16.



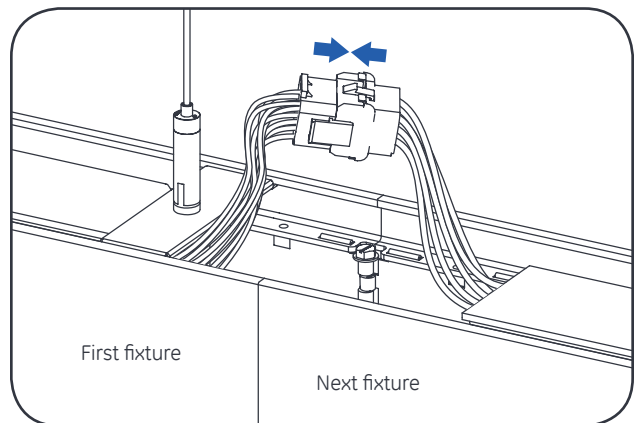
**11** Measure suspension cable for next fixture and ensure it is the same length as the first fixture.



**12** Connect cable gripper to suspension bracket and slide suspension bracket into far side of next fixture.

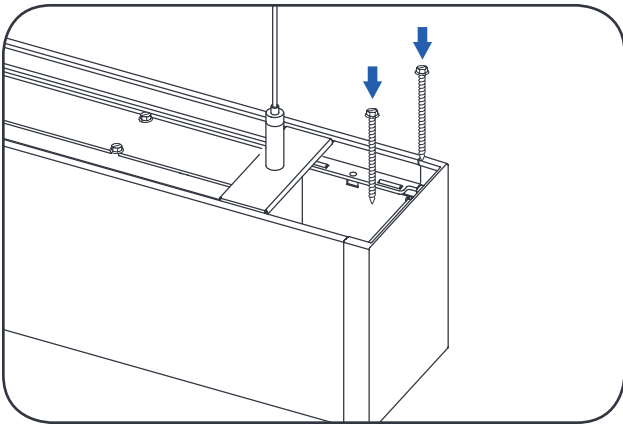


**13** Install the locating tabs provided with the fixture. Slide fixtures together. Secure the fixtures together by installing the 2" screws provided with fixture.

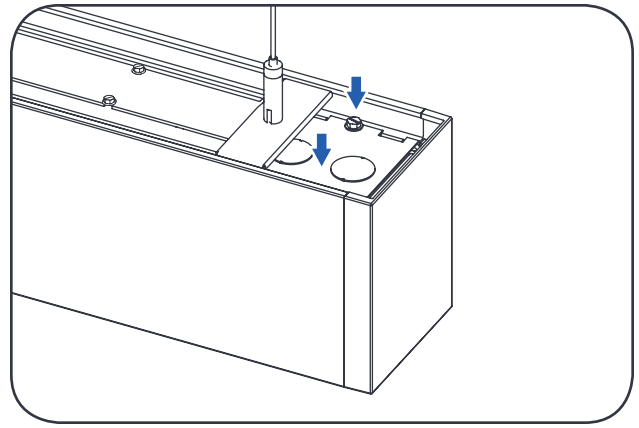


**14** Connect wires between adjacent fixtures and place them back inside.

**15** Repeat Steps 11-14 for any additional fixtures.



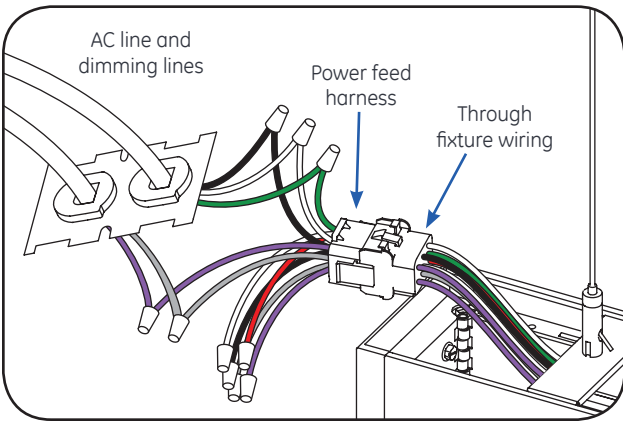
**16** Attach second endcap to final fixture.



**17** Secure knockout plates to fixture(s) with supplied hardware.

**18** Follow steps in *LALS Series Wiring* section below.

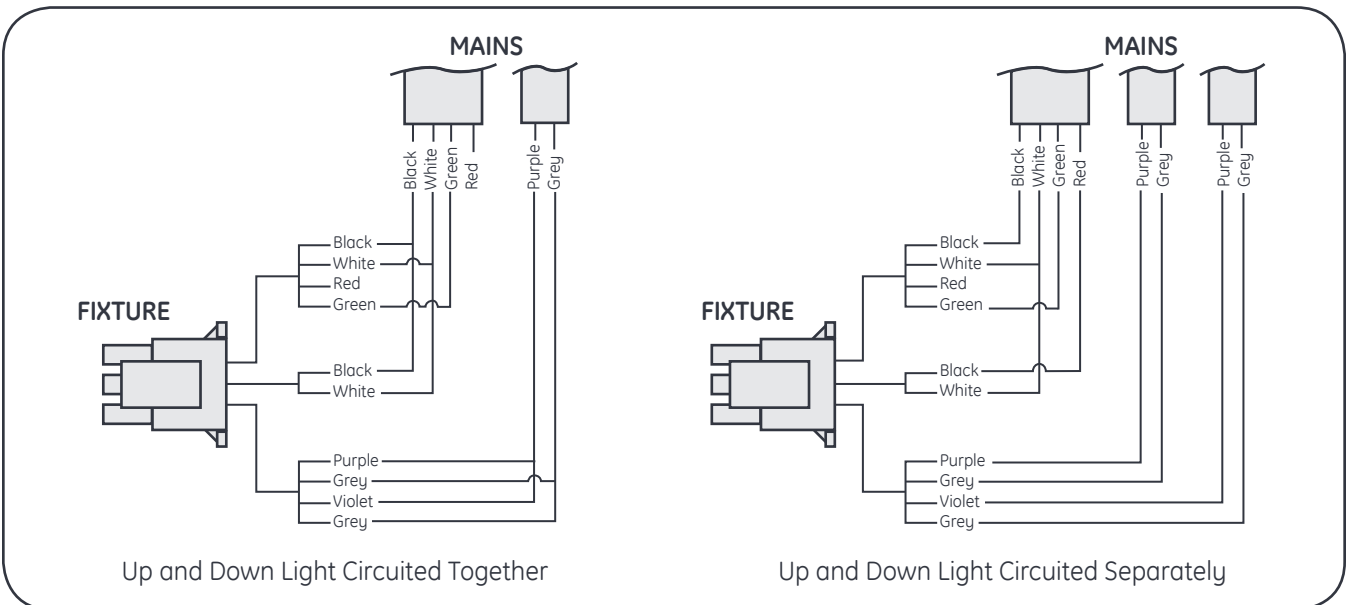
## LALS Series Wiring



Route power feed cables through knock out plate and connect to provided harness. Use grommet on power feed. Then snap power feed harness into through fixture wiring. Cap any unused wires. Secure powerfeed to suspension cable with provided zip ties.

**NOTE:** Verify that incoming power is supplied by a single branch circuit.

**NOTE:** Fixtures intended for central emergency circuit must be connected with separate feed. Do not connect internal harness.

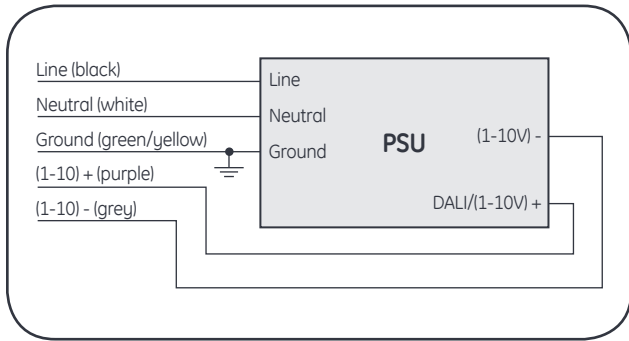


## Optional Installation: 1-10 Volt Dimming or DALI Lighting Controller

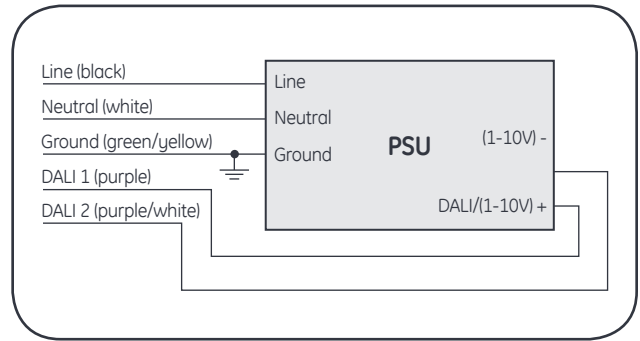
Follow diagram A for 1-10V, diagram B for DALI or diagram C for 347VAC.

At output side of LED driver, make appropriate connections using twist-on wire connectors.

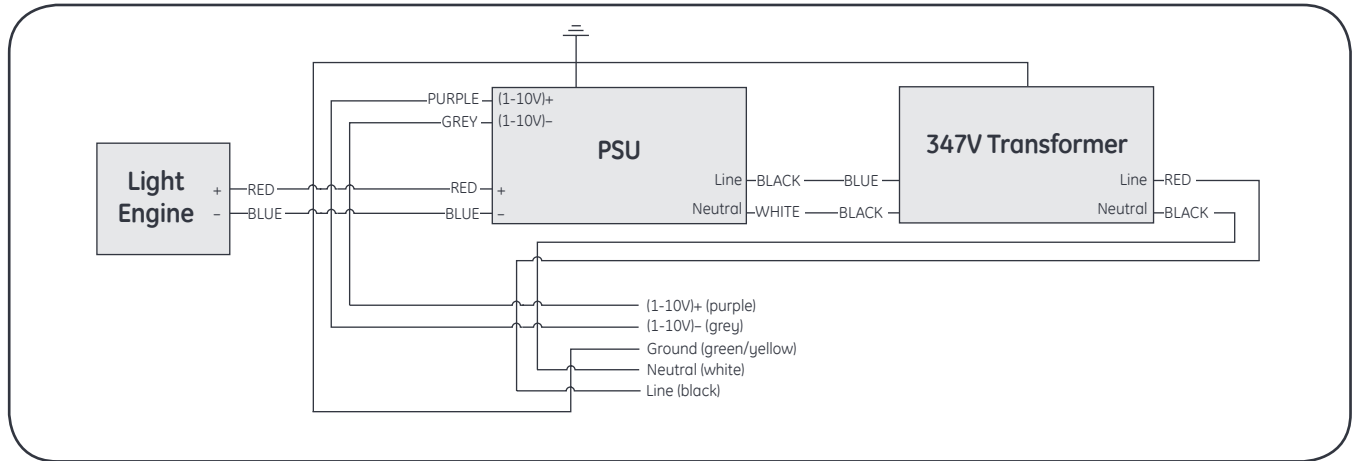
Follow lighting controller installation instructions.



**A** 1-10V Standard wiring diagram

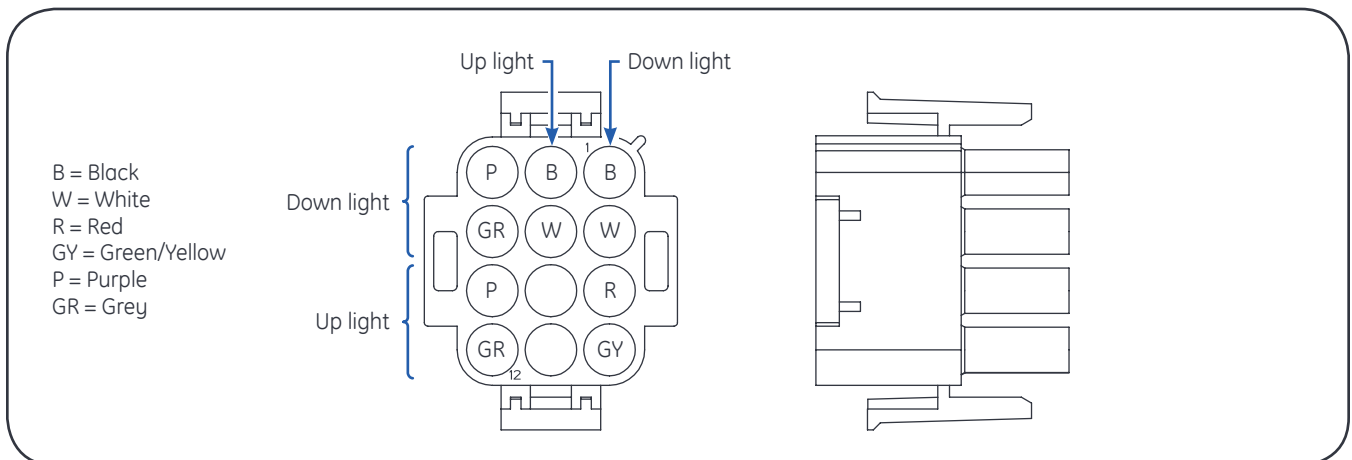


**B** DALI Standard wiring diagram

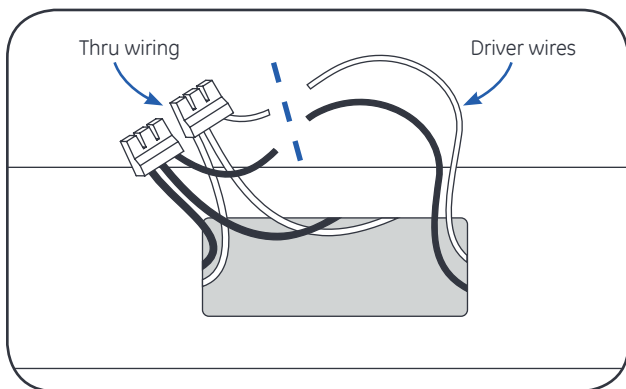
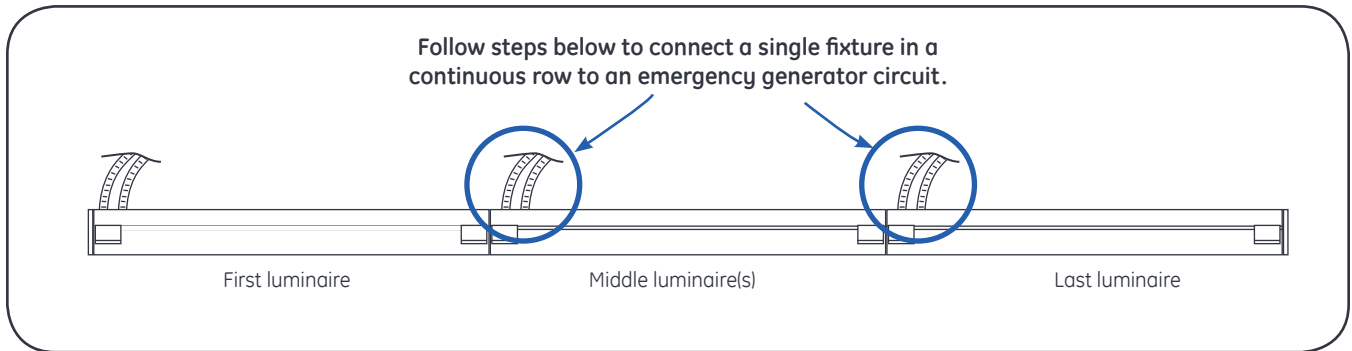


**C** 1-10V 347V wiring diagram

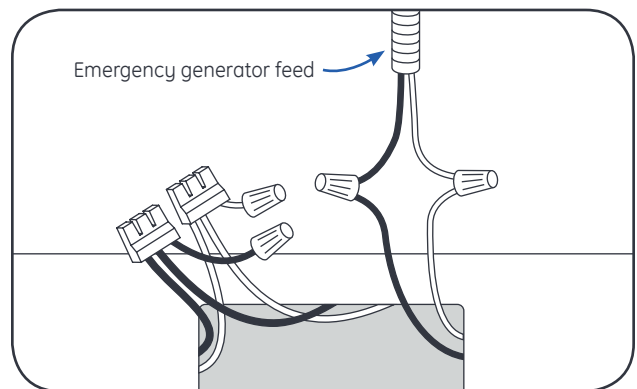
## Wiring Harness



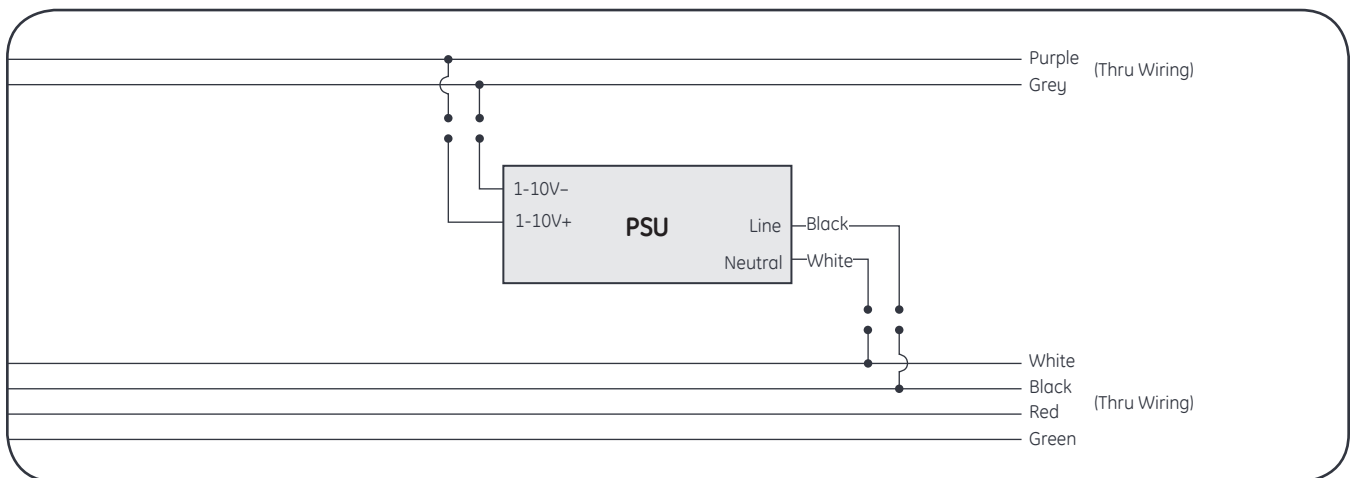
## Connecting a Single Fixture in a Continuous Row to an Emergency Generator Circuit



**1** Ensure power to luminaire is disconnected. Cut the two 18AWG black and white wires from the driver.



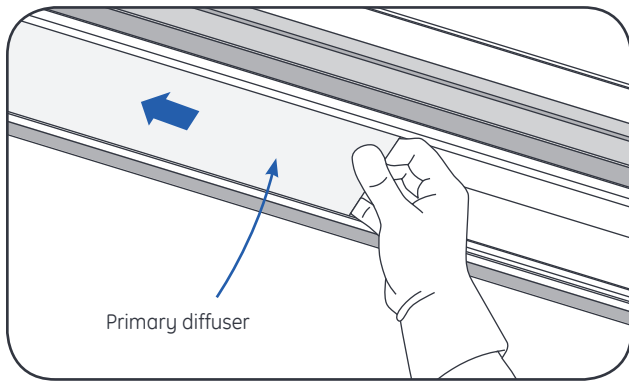
**2** Connect the emergency generator feed to the driver (black to black and white to white). Cap any unused wires. Ensure ground connection.



### NOTES

1. Follow all applicable codes and requirements.
2. For rows with multiple feed locations, ensure that luminaire sections connected to separate power sources are not connected to the internal wiring.
3. For rows with external 0-10V dimming connections, separate dimming for separately powered luminaire segments if required by code to ensure proper operation in every intended mode of operation.
4. For rows requiring multiple feed locations that have internal controls, contact manufacturer.

## Diffuser Installation



**Option - one diffuser (primary):** If diffusers were removed prior to installation then re-install diffusers into base of luminaires. Line up diffuser with fixture and snap in lens.

## Troubleshooting

Symptom	Solution
Fixture does not light	<ul style="list-style-type: none"> <li>• Check input voltage and check power supply input/output.</li> <li>• Check circuit breaker.</li> </ul>
Fixture is dim	<ul style="list-style-type: none"> <li>• Dimming wire connection shall be checked and if connection is not proper, reconnect it. If wire is harmed, replace it with an intact one. Also check that dimming wires are not in short circuit.</li> </ul>
Fixture is blinking	<ul style="list-style-type: none"> <li>• Ensure power supply temperature does not exceed its maximum rating.</li> <li>• Refer to the tc point located on power supply.</li> </ul>
Fixture does not dim	<ul style="list-style-type: none"> <li>• Check dimming wire connection.</li> </ul>
Suspension method won't engage with fixture	<ul style="list-style-type: none"> <li>• Check that the suspension method is one of the approved types in the installation instruction.</li> <li>• Check if the steps for suspension were properly followed.</li> </ul>
Gap in lens	<ul style="list-style-type: none"> <li>• Ensure lens has not been installed too far into endcap.</li> <li>• Slide lens to close gap.</li> </ul>

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. CAN ICES-005 (A) /NMB-005 (A) .

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**NOTE:** LAL28A0WAMA with emergency battery option is limited to 25°C ambient temperature.

**current**  
powered by GE

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