

## WARNING — RISK OF ELECTRIC SHOCK

Disconnect power at the circuit breaker and verify the circuit is de-energized before installing or servicing this luminaire. Lock out and tag the circuit.

Installation must be performed by a qualified electrician in accordance with the National Electrical Code (NEC), NFPA 70, and all applicable state and local codes.

Before installation, consult your local ordinances and building codes for compliance. LAMAR LED assumes no responsibility for misapplication of fixtures.

Do not install a damaged luminaire. Do not modify the housing, driver, LED board, or factory wiring — doing so voids the UL certification and the warranty.

## 1. Before You Begin

Confirm the following before opening the ceiling or pulling wire. The catalog number on the fixture label is the authority for what was supplied.

- Match the catalog number. Compare the label on the housing to the approved submittal — series, size, power, lens, CCT and options.
- Verify supply voltage. The standard driver is universal input 120–277V. Confirm branch-circuit voltage falls within this range.
- Inspect the shipment. Check the housing, lens, and trims for shipping damage. Report freight damage before installing.
- Confirm the mounting method matches the structure (see table below). Verify the fixture as supplied is configured for the mounting condition on site.
- Verify the supporting structure. Every suspension point must be anchored to building structure adequate for the fixture weight. Confirm the finished mounting height before hanging anything.
- Tools required. Power driver with the appropriate bit, wire strippers, listed wire connectors, tape measure, level, and an appropriate ladder or lift.

| Mounting method            | Typical application                                      |
|----------------------------|----------------------------------------------------------|
| Surface Mounted to Ceiling | Direct ceiling mount on a finished or structural surface |
| Stem or Pendant Mounted    | Stem-hung applications where a fixed drop is required    |

Each method is detailed in Section 5. Confirm which configuration was supplied before starting — mounting styles are not interchangeable in the field.

Mounting options as published: Surface or pendant mount. Actual overall lengths: 4' nominal = 46 in. Available in 4' length (nominal); 9.7 in. wide x 3.4 in. high.

## 2. Prepare the Location

1. Lay out fixture locations from the reflected ceiling plan. Snap lines and confirm the run is square and level before cutting or drilling.
2. On surface-mounted runs, locate framing or install blocking so every fixture lands on structure. Mark mounting holes from the fixture itself rather than from the drawing.
3. For suspended runs, mark and verify every support point against building structure, and confirm the drop height clears doors, equipment, and traffic.
4. Route branch-circuit conductors to each fixture location, leaving 6–8 in. of free conductor. Support the whip or conduit independently of the luminaire.

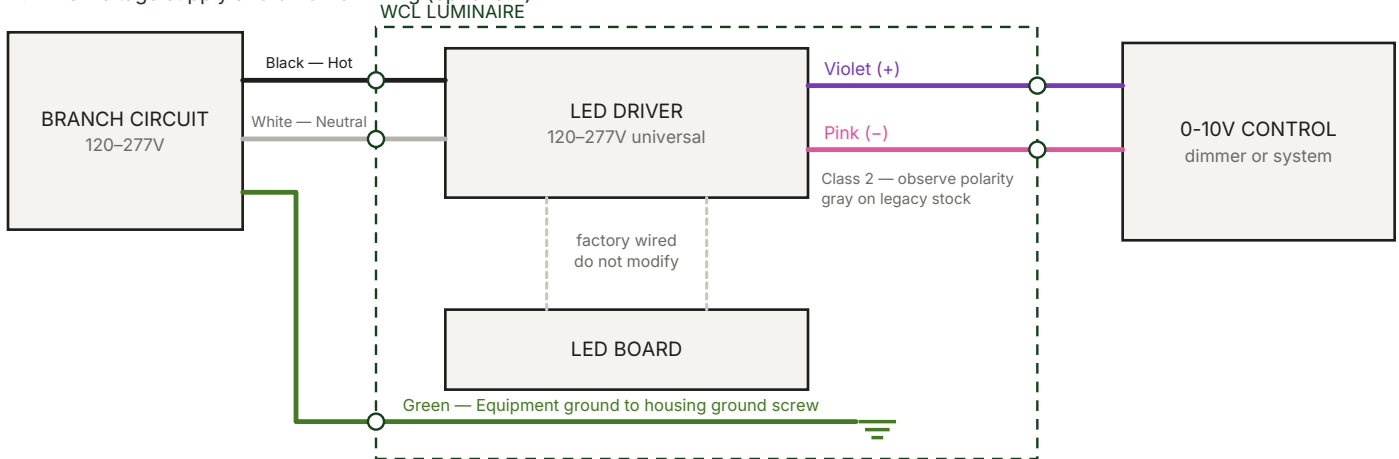
## 3. Electrical Connection

1. Confirm power is off and locked out.
2. Open the fixture for access per its construction and retain all fasteners.
3. Select the entry closest to the incoming feed. Use only the provided entries — do not drill the housing.
4. Install a listed connector or fitting in the knockout and bring conductors into the wireway. Protect conductors from the knockout edge.
5. Connect line, neutral, and ground to the corresponding fixture leads using listed wire connectors. Bond the equipment ground to the housing ground screw.
6. For control wiring, keep low-voltage dimming conductors separated from line-voltage conductors per NEC Class 1 / Class 2 requirements. See Sections 4 and 7.
7. Dress all conductors neatly inside the housing so nothing is pinched when the cover is reinstalled.

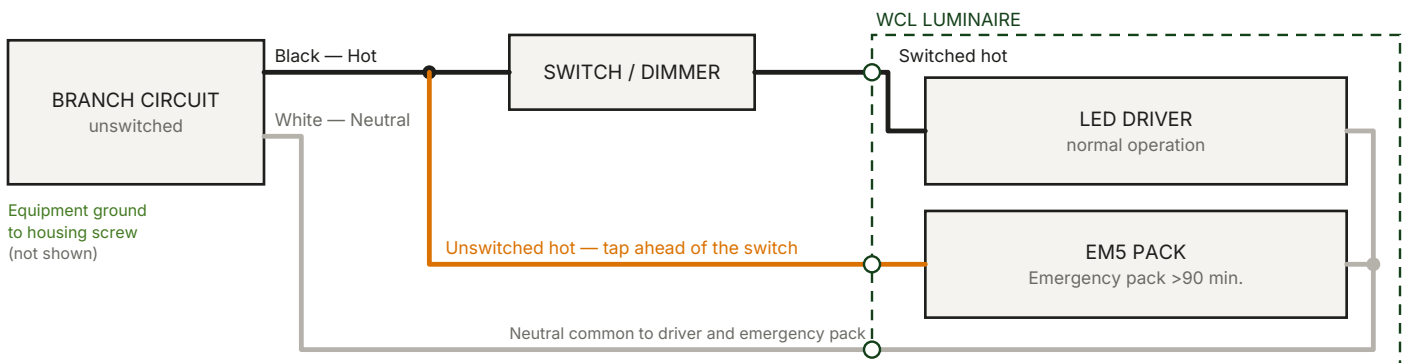
## 4. Wiring Diagrams

0-10V control conductor colors have changed. Effective January 1, 2022, NEC 2020 Article 410.69 prohibits colors reserved for the grounded conductor (white or gray) and the equipment grounding conductor (green) on field-connected control conductors.<sup>1</sup> NEMA Publication 100-2021 adopted pink in place of gray, making violet (+) and pink (-) the compliant 0-10V pair.<sup>2</sup> Legacy stock may still have a gray lead — see the wire color reference below.

### A. Line-voltage supply and 0-10V dimming (options D)



### B. Emergency pack connection (options EM5 / EM12)



Schematic; field connections only. Circles mark housing knockouts, each of which needs a listed connector or fitting.

### Wire color reference

| Conductor                   | Color                        | Notes                                                                                                                                                                                                                                                                  |
|-----------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Line / hot                  | Black                        | Branch circuit, 120-277V. Switched hot where a switch or dimmer is used.                                                                                                                                                                                               |
| Neutral                     | White                        | Grounded conductor. Reserved color — never use for control conductors.                                                                                                                                                                                                 |
| Equipment ground            | Green or green/yellow        | Bond to the housing ground screw. Reserved color — never use for control conductors.                                                                                                                                                                                   |
| 0-10V control (+)           | Violet                       | Class 2 low voltage. Observe polarity.                                                                                                                                                                                                                                 |
| 0-10V control (-)           | Pink<br>gray on legacy stock | Pink replaces gray per NEMA Publication 100-2021. <sup>2</sup> Verify against the label on the driver supplied — legacy stock may still have a gray lead. A gray control lead must be re-identified with pink tape or paint where visible and accessible. <sup>1</sup> |
| Unswitched hot (EM5 / EM12) | Per project drawings         | Tap ahead of the switch and dimmer so the pack senses loss of normal power.                                                                                                                                                                                            |

1. Electrical Contractor Magazine, "Color Coding Changes: NEC 2020 impacts 0-10V control wiring" — [ecmag.com](https://www.ecmag.com)

2. Inside Lighting, "No More Gray: Low Voltage Wiring Changes" — [inside.lighting](https://www.inside.lighting)

## 5. Mounting

### 5A. Surface Mounted to Ceiling

1. Mark the fixture position and the mounting-hole locations from the reflected ceiling plan.
2. Locate structural framing, or install blocking or an approved anchor suited to the ceiling construction. The fixture must be supported by structure, not by the ceiling finish alone.
3. Bring the branch circuit into the housing through the knockout nearest the feed, using a listed connector or fitting.
4. Fasten the housing tight to the ceiling with fasteners appropriate to the substrate, then confirm it is level and does not rock.

### 5B. Stem or Pendant Mounted

1. Confirm the finished mounting height and the stem length required, and verify the drop clears equipment, doors, and traffic.
2. Locate structure at each stem point. Each support point must be anchored to building structure and adequate for the fixture weight.
3. Install the stems and canopies, then bring the branch circuit down through the stem or canopy as the assembly is designed for.
4. Hang the fixture, then level it along both axes. Sight the full run and adjust the stems until the run is level and consistent in height.
5. Confirm no conductor is under tension or bearing the fixture weight — the stems carry the load, not the wiring.

## 6. Lens and Covers

1. Reinstall the wireway cover or access plate with the original fasteners. Confirm no conductor is pinched and the cover is fully seated.
2. Install or reseal the lens or diffuser as supplied. Handle acrylic and polycarbonate by the edges; do not force, flex sharply, or over-tighten against the lens.
3. Remove any protective film and clean fingerprints before closing out the ceiling.

## 7. Controls and Optional Equipment

| Option                | Installation requirement                                                                                                                                                                                                                                         |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EM5 — emergency pack  | Emergency pack >90 min., >500 lumens. Connect the pack to an unswitched line-voltage source ahead of any switch or dimmer so it senses loss of normal power — see Diagram B. Allow a full 24-hour charge before testing.                                         |
| Option                | Installation requirement                                                                                                                                                                                                                                         |
| EM12 — emergency pack | Emergency pack >90 min., >1400 lumens. Connect the pack to an unswitched line-voltage source ahead of any switch or dimmer so it senses loss of normal power — see Diagram B. Allow a full 24-hour charge before testing.                                        |
| A                     | Adjustable CCT (3500, 4000 or 5000K) and adjustable power (18, 28 or 44W). Factory-supplied configuration. Verify the fixture as supplied matches the approved submittal, and confirm nothing interferes with the lens, gasket, or lens retention on reassembly. |

Universal voltage 120-277V standard (18, 28 or 44W field adjustable). Field adjustable CCT (3500K-5000K) and lumen output (3 levels). Tuned fixtures are factory-set and must not be adjusted in the field. Contact the factory for options not shown.

## 8. Start-Up Check and Maintenance

- Restore power and confirm the fixture energizes at full output.
- Sweep the dimming control from 100% to minimum and back; confirm smooth, flicker-free response with no dropout across the run.
- Allow a full 24-hour charge, then test emergency units by interrupting normal power and confirming transfer to the emergency pack for the rated duration.
- Sight the finished run for level, alignment, and consistent lens appearance; confirm color temperature is uniform across all fixtures.
- No routine relamping is required — the LED board and driver are the serviceable components. Disconnect power before any service.
- Clean the lens with a soft cloth and mild soapy water only. Do not use ammonia, solvents, or abrasive cleaners on acrylic or polycarbonate.
- Warranty: 5 years - part replacement only (see our terms & conditions page at [www.lamarled.com](http://www.lamarled.com) for details). Listings and ratings as published: All electrical components are U.L. listed or recognized, U.L. Certified.

### QUESTIONS OR APPLICATIONS NOT COVERED HERE

Contact LAMAR LED at 631.777.7700 or visit [www.lamarled.com](http://www.lamarled.com). Due to the rapid advancements in LED technology, please consult our website for the most current technical data.