

## 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.
- 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                                 |
|-----------------|-----------------------------------------------------|
| Wall Mounted    | Direct wall mount                                   |
| Corner Mounted  | Wall-to-ceiling or wall-to-wall corner applications |

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: Wall/Corner mount individually or in continuous rows (must specify). Available in 2', 4' and 8' lengths (nominal).

## 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. Route branch-circuit conductors to each fixture location, leaving 6–8 in. of free conductor. Support the whip or conduit independently of the luminaire.

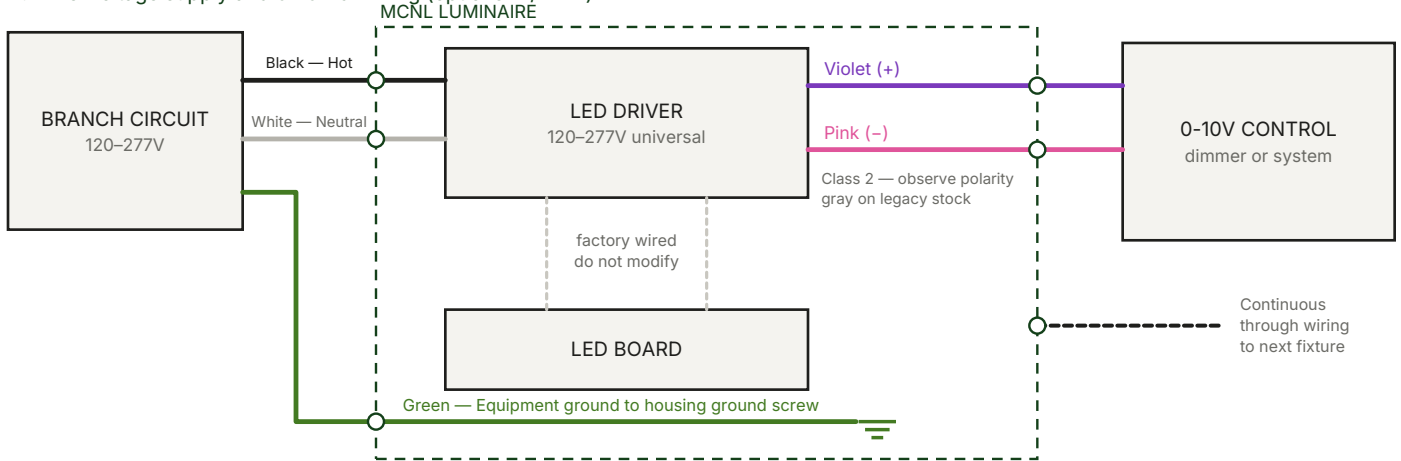
## 3. Electrical Connection

1. Confirm power is off and locked out.
2. Open the fixture for access per its construction and retain all fasteners.
3. Select the knockout closest to the incoming feed. Knockouts are provided to suit the approach and to allow continuous through wiring in rows.
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.

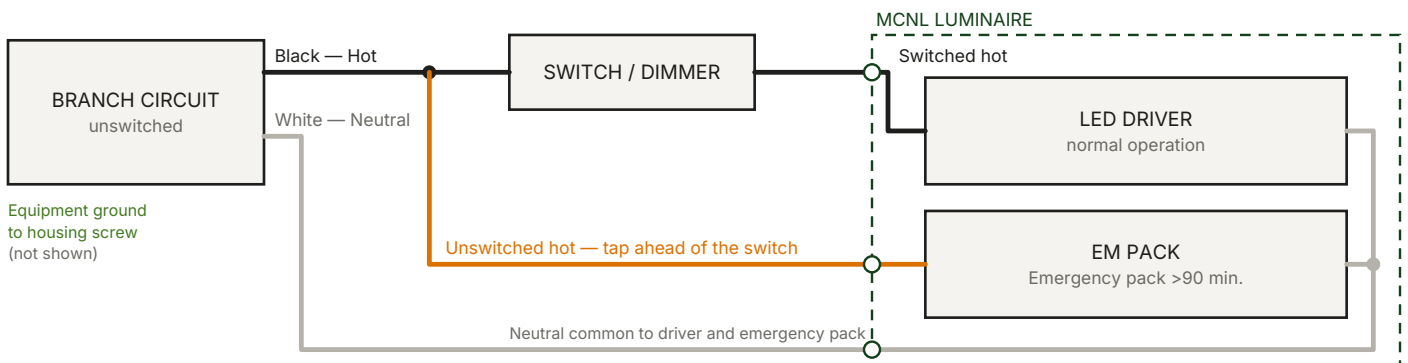
## 4. Wiring Diagrams

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 / DTD)



### B. Emergency pack connection (options EM / EMH / EMB)



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> |
| Lutron EcoSystem digital link   | Purple and purple/white (E1, E2) | Polarity-free. Confirm against the Lutron driver label and the controls submittal. <sup>3</sup>                                                                                                                                                                        |
| Unswitched hot (EM / EMH / EMB) | 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/news/inside-lighting-2020-nec-wiring-changes)

3. Lutron. "LED Driver Installation Best Practices Guide" (041827) — [assets.lutron.com](https://assets.lutron.com)

## 5. Mounting

### 5A. Wall Mounted

1. Establish the mounting height and a level line for the run. In continuous runs, strike one line across the full length so fixtures align end to end.
2. Locate studs or install blocking or an approved anchor suited to the wall construction. The fixture must be supported by structure, not by the wall 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 to the wall, then confirm it is level and tight with no gap at the wall surface.
5. Where the fixture is mounted within reach, confirm the location does not conflict with doors, equipment, or traffic.

### 5B. Corner Mounted

1. Confirm the corner is square and continuous along the full run before setting any fixture.
2. Establish a level line along the corner. In continuous runs, work from one line so the fixtures read as an unbroken source.
3. Locate framing or install blocking suited to the construction on the mounting face.
4. Bring the branch circuit into the housing through the knockout nearest the feed, using a listed connector or fitting.
5. Fasten the housing into the corner, confirming it beds evenly on both faces with no twist along the run.

## 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                                                                                                                                                                                                                                                                                              |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D — 0-10V dimming<br>DTD — 0-10V dimming | Land the violet (+) and pink (–) control leads on the 0-10V control circuit, observing polarity — see Diagram A. Verify the leads against the driver label: legacy stock may have a gray lead in place of pink, and gray must be re-identified with pink tape or paint. Do not connect control leads to line voltage. |
| Option                                   | Installation requirement                                                                                                                                                                                                                                                                                              |
| LDH — Lutron EcoSystem dimming           | Wire the EcoSystem digital link per the Lutron system drawings. The link is polarity-free but must be run as a Class 1 or Class 2 circuit per the controls submittal.                                                                                                                                                 |
| EM — 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.                                                                                              |
| EMH — emergency pack                     | Emergency pack >90 min., >1400 lumens (4ft & 8ft only). 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.                                                                            |
| EMB — emergency pack                     | BABA Compliant 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.                                                                               |
| HF — sensor                              | High frequency occupancy sensor on/off (internal). Factory-set standby level. Confirm the setting matches the project requirements and walk-test the fixture before close-out. Change settings only by the method described in the sensor documentation supplied with the fixture.                                    |
| HFAS — sensor                            | User selectable 10, 20, 30 or 50% adjustable standby. Factory-set standby level. Confirm the setting matches the project requirements and walk-test the fixture before close-out. Change settings only by the method described in the sensor documentation supplied with the fixture.                                 |
| BOR                                      | Beginning of run (1 finished end - 8' only). Run-position configuration. The fixture is built for this position in a continuous row and cannot be changed in the field — set the row out in order and verify each housing against the submittal before fastening anything.                                            |
| INT                                      | Intermediate (0 finished ends - 8' only). Run-position configuration. The fixture is built for this position in a continuous row and cannot be changed in the field — set the row out in order and verify each housing against the submittal before fastening anything.                                               |

| Option | Installation requirement                                                                                                                                                                                                                                                 |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EOR    | End of run (1 finished end - all lengths). Run-position configuration. The fixture is built for this position in a continuous row and cannot be changed in the field — set the row out in order and verify each housing against the submittal before fastening anything. |

Universal voltage 120-277V standard. Custom driver tuning available for specific lumen requirements. 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.
- Verify sensor coverage and walk-test each sensor. Confirm time delay and sensitivity settings match the project requirements, and that nothing obstructs the sensor.
- 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 terms & conditions at [www.lamarled.com](http://www.lamarled.com)). Listings and ratings as published: All electrical components are U.L. listed or recognized, U.L. Certified, Union made in USA, Meets Buy America Act (BAA), BABA Compliant.

### 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.