

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 ceiling support. The luminaire must be independently supported by the building structure where required by code — grid ceilings require seismic or safety wires per local requirements.
- Tools required. Power driver with the appropriate bit, wire strippers, listed wire connectors, tape measure, level, drywall saw or grid cutters, and an appropriate ladder or lift.

Mounting method	Typical application
T-bar or Grid Ceiling	Suspended T-bar / grid ceilings
Surface Mounted to Ceiling	Direct ceiling mount on a finished or structural surface

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: Recessed grid mount. Accessory Surface Mount Kit available - see back. Actual overall lengths: 2x2 nominal = 23.750 in. x 23.750 in, 2x4 nominal = 47.750 in. x 23.750 in. Available in 2x2 and 2x4 sizes.

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. Size the opening to the actual fixture length, not the nominal length (see the note above). For continuous rows, verify cumulative dimensions across the full run.
3. In grid ceilings, remove the ceiling tile and confirm the T-bar opening is the correct module. Do not remove main-runner support.
4. 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.
5. Route branch-circuit conductors to each fixture location, leaving 6–8 in. of free conductor. Support the whip or conduit independently of the luminaire.

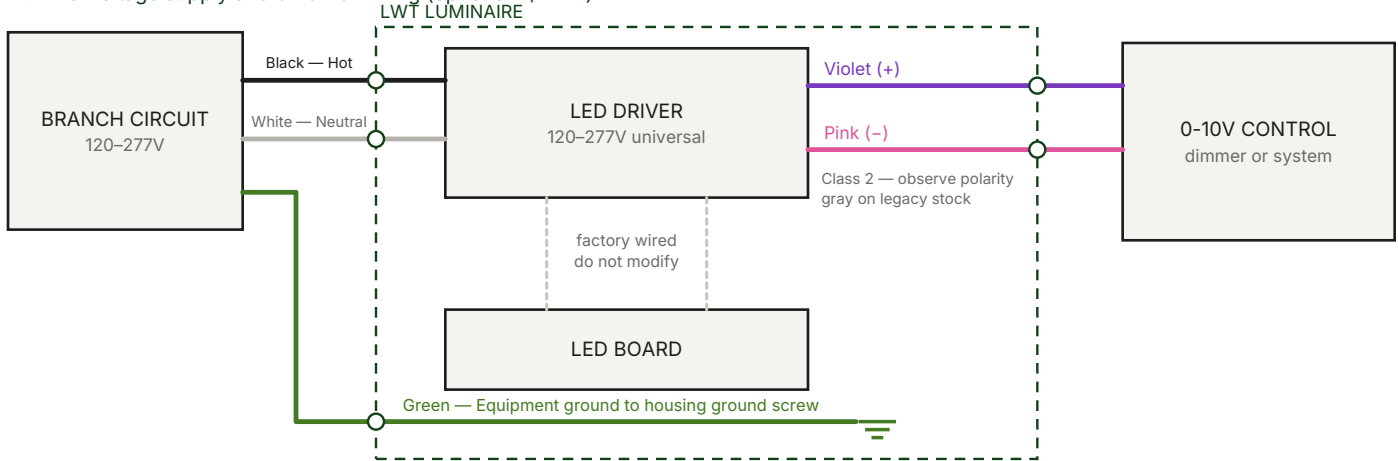
3. Electrical Connection

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.

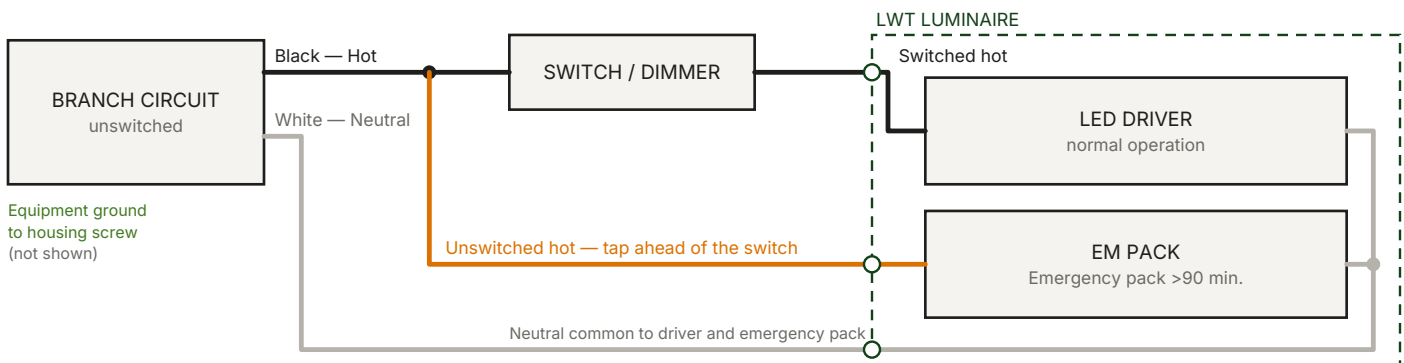
4. Wiring Diagrams

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.¹ NEMA Publication 100-2021 adopted pink in place of gray, making violet (+) and pink (-) the compliant 0-10V pair.² 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 / 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 gray on legacy stock	Pink replaces gray per NEMA Publication 100-2021. ² 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. ¹
Lutron EcoSystem digital link	Purple and purple/white (E1, E2)	Polarity-free. Confirm against the Lutron driver label and the controls submittal. ³
Unswitched hot (EM / 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

2. Inside Lighting, "No More Gray: Low Voltage Wiring Changes" — inside.lighting

3. Lutron, "LED Driver Installation Best Practices Guide" (041827) — assets.lutron.com

5. Mounting

5A. T-bar or Grid Ceiling

1. Confirm the grid opening matches the fixture module and that main runners and cross tees are level and locked.
2. Lift the housing into the opening and lower it onto the T-bar so the grid clips engage the grid flange on both sides.
3. Verify every clip is fully seated. The clips are what hold the fixture to the grid — do not leave a clip partially engaged.
4. Install seismic restraint or safety wires to the building structure where required by local code. Do not rely on the grid alone if code requires independent support.
5. Confirm the fixture sits flat in the grid with no rocking and that the lens plane is flush with the adjacent ceiling.

5B. 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.

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 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 (higher output & run time available - consult factory). 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.
FK2X2	Flange kit (2x2) for dry-wall installation. 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.
FK2X4	Flange kit (2x4) for dry-wall installation. 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.
LWT-2X2-SBK-G2	2x2 surface box kit (accessory surface mount kit). 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.
LWT-2X4-SBK-G2	2x4 surface box kit (accessory surface mount kit). 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. Custom tuning 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.
- 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). 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. Due to the rapid advancements in LED technology, please consult our website for the most current technical data.