

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.

This luminaire is an enclosed, gasketed fixture. The enclosure rating is only maintained if the gasket, diffuser, and all latches or fasteners are fully and evenly seated on reassembly. Do not substitute or omit the gasket, and do not install a fixture with a damaged or contaminated gasket surface.

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.
- Confirm the location suits the enclosure rating. Verify the gasket and diffuser are intact and clean before installing, and that any fittings used are listed for a wet or damp location.
- 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
Flanged (recessed into a finished ceiling)	Sheetrock, plaster, and concealed-Z 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 mount in T-Bar applications. Integral earthquake clips for additional support. Actual overall lengths: 1x4 nominal = 47.5 in. x 11.9 in, 2x2 nominal = 23.77 in. x 23.77 in, 2x2 High Output nominal = 23.77 in. x 23.77 in, 2x4 nominal = 47.5 in. x 23.7 in, 2x4 High Output nominal = 47.5 in. x 23.7 in. Available in 1X4, 2X2 and 2x4.

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 sheetrock or plaster ceilings, cut the opening and confirm framing or blocking is in place to receive the mounting hardware.
4. In grid ceilings, remove the ceiling tile and confirm the T-bar opening is the correct module. Do not remove main-runner support.
5. 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.
6. 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

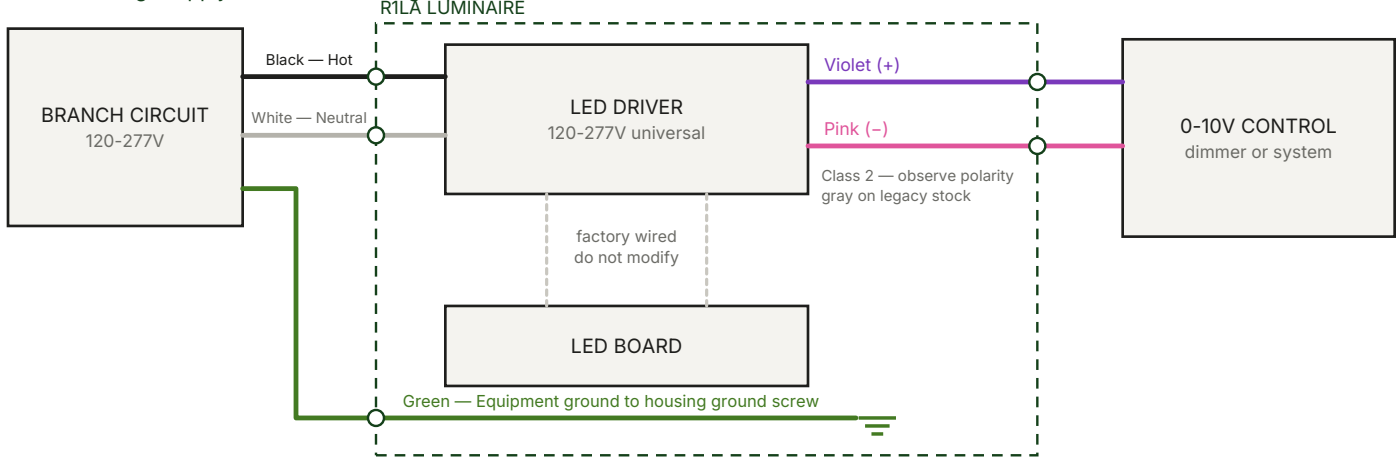
1. Confirm power is off and locked out.
2. Open the fixture for access per its construction, retaining all fasteners. Note how the diffuser and gasket seat so they can be restored exactly.
3. Select the entry closest to the incoming feed. Use only the provided entries — do not drill the housing.

4. Install a fitting listed for a wet or damp location in the entry and seal it per the fitting instructions. Any unused entry must be closed with a listed seal or plug or the enclosure rating is lost.
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.

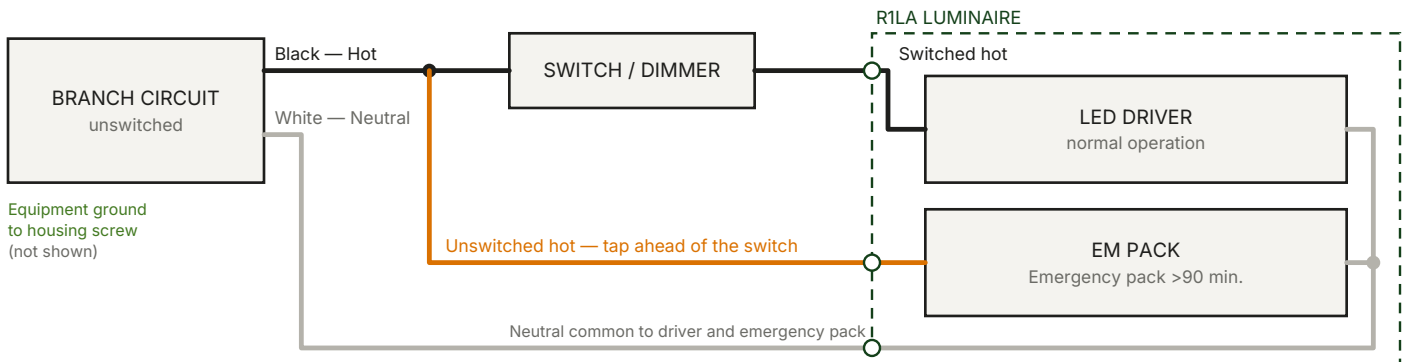
4. Wiring Diagrams

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)



B. Emergency pack connection (options EM)



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.

Conductor	Color	Notes
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
Unswitched hot (EM)	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

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. Flanged (recessed into a finished ceiling)

1. Lift the housing into the prepared opening.
2. Secure the housing to the ceiling framing or blocking using the supplied mounting hardware. Fasteners are selected by the installer to suit the substrate and must be adequate for the fixture weight.
3. Level the housing and confirm the flange sits flat and tight against the finished ceiling with no gap or rocking.
4. Set any adjustable end flange trims to close the end gap. In continuous rows, adjust the trims so joints between fixtures align and read as one line.
5. For a concealed "Z" ceiling, coordinate the housing position with the Z channel so the flange lands on the finished plane.

5C. 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, Gasket and Covers

1. Confirm the gasket is clean, undamaged, correctly seated in its channel, and free of debris. A gasket that is pinched, twisted, or contaminated will not seal.
2. Reinstall the diffuser and close the latches or fasteners evenly, working in an alternating pattern so the gasket compresses uniformly along its full length.
3. Verify every latch or fastener is fully engaged and that the diffuser beds evenly with no visible gap. The enclosure rating depends on this.
4. Confirm all unused entries are closed with listed seals or plugs.
5. Remove any protective film and clean fingerprints before closing out the ceiling.

7. Controls and Optional Equipment

Option	Installation requirement
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.
Option	Installation requirement
W	6ft Whip (Dimming and/or EM leads included when necessary). 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.
FK14	1x4 Flange Kit for gypsum ceilings. 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.
FK22	2x2 Flange Kit for gypsum ceilings. 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.

Option	Installation requirement
FK24	2x4 Flange Kit for gypsum ceilings. 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.
SK14	1x4 Surface mount Kit for gypsum ceilings. 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.
SK22	2x2 Surface mount Kit for gypsum ceilings. 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.
SK24	2x4 Surface mount Kit for gypsum ceilings. 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. 0-10V dimming standard. Adjustable CCT (3500K, 4000K, 5000K) via dipswitch on driver. Adjustable lumen output (3 levels) via slide switch. 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.
- Inspect the gasket seal and latch engagement one final time. Where a washdown is expected, confirm the seal before the area is first cleaned.
- 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 for details). Listings and ratings as published: All fixtures are U.L./C.U.L. Certified for insulated ceilings, Suitable for damp locations.

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.