

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 frame, driver, LED boards, 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 fixture to the approved submittal — series, size and options (for example BLP22A-D).
- Verify supply voltage. The standard driver is universal input 120–277V. Confirm branch-circuit voltage falls within this range.
- Check the location. The BLP is U.L./C.U.L. Certified for dry and damp locations and is IC rated. Operating temperature range is -20°C/-4°F to 40°C/104°F.
- Inspect the shipment. Check the aluminum frame and lens for shipping damage. Report freight damage before installing.
- Confirm the mounting method matches the ceiling (see table below), and that any flange kit, surface mount kit or cable-hanging kit required was supplied.
- Verify ceiling support. Grid ceilings require seismic or safety wires to building structure where required by local code.
- Tools required. Power driver with the appropriate bit, wire strippers, listed wire connectors, tape measure, level, drywall saw, and an appropriate ladder or lift.

Mounting method	Typical application
Recessed T-bar / grid	Lay-in mounting in a T-bar grid ceiling (standard)
Flange kit (FK14, FK22, FK24)	Recessed mounting in a gypsum ceiling
Surface mount kit (BLP-SK14, BLP-SK22, BLP-SK24)	Surface mounting on a gypsum ceiling
Cable-hanging kit (BLP-ACKIT)	Suspended mounting from building structure

Sizes and actual dimensions:

Size	Nominal — actual L × W × H
14A-D	1' × 4' — 47.80 in. × 11.81 in. × 1.47 in.
22A-D	2' × 2' — 23.74 in. × 23.74 in. × 1.47 in.
24A-D	2' × 4' — 47.71 in. × 23.74 in. × 1.47 in.
24HA-D	2' × 4' high output — 47.71 in. × 23.74 in. × 1.37 in.

Each mounting method is detailed in Section 5. The BLP-SK surface mount kits are 3.14 in. deep.

2. Prepare the Location

1. Lay out fixture locations from the reflected ceiling plan and confirm the layout is square to the grid or ceiling.
2. In grid ceilings, remove the ceiling tile and confirm the T-bar opening is the correct module (1×4, 2×2 or 2×4). Do not remove main-runner support.
3. In gypsum ceilings using a flange kit, cut the opening to the size required by the kit supplied. For surface or suspended mounting, locate framing or install blocking so every support point lands on structure.
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 driver compartment 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 frame or driver housing.
4. Install a listed connector or fitting in the knockout and bring conductors into the wiring compartment. 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 fixture ground screw.
6. For control wiring, keep low-voltage dimming conductors separated from line-voltage conductors per NEC Class 1 / Class 2 requirements. See Section 4.
7. Dress all conductors neatly so nothing is pinched when the compartment is closed.

4. Wiring and Field Settings

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.

4A. Line-voltage supply and 0-10V dimming

1. Connect the branch-circuit hot (black), neutral (white) and equipment ground (green) as described in Section 3.
2. Connect the driver's violet (+) and pink (–) leads to the 0-10V dimmer or control system. Observe polarity. Where no dimming control is used, cap each control lead individually; the fixture then runs at the selected power.

4B. Emergency pack (options EM5 / EM12)

1. Connect the emergency pack to an unswitched hot tapped ahead of any switch or dimmer, so the pack senses loss of normal power. The neutral is common to the driver and the pack.
2. Connect the switched hot to the driver for normal operation.

4C. Field-selectable CCT and power

Before energizing, set the CCT dipswitch (COLOR SELECT) and the power slide switch (POWER SELECT) on the driver to the values called for on the drawings. Fixtures ship preset to 5000K. Make selections with power disconnected, and set every fixture in the same space to the same values.

Setting	Selectable values as published
COLOR SELECT (CCT)	3500K, 4000K or 5000K (2×4 and 2×4 high output lumen tables list 3000K, 4000K or 5000K). Use the values marked on the driver supplied.
POWER SELECT — 1×4 (14A-D)	20W, 30W or 35W
POWER SELECT — 2×2 (22A-D)	20W, 30W or 35W
POWER SELECT — 2×4 (24A-D)	30W, 35W or 45W
POWER SELECT — 2×4 HO (24HA-D)	40W, 50W or 60W

Wire color reference:

Conductor	Color and 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 fixture 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). Verify against the label on the driver supplied. A gray control lead must be re-identified with pink tape or paint where visible and accessible. ¹
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
2. Inside Lighting, "No More Gray: Low Voltage Wiring Changes" — inside.lighting

5. Mounting

5A. Recessed in a 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. Complete the electrical connections in Sections 3 and 4, and set the CCT and power switches, before lowering the fixture into place.
3. Tilt the panel through the opening and lower it onto the T-bar so the frame rests evenly on the grid flange on all sides.
4. Engage the integral earthquake clips on the grid for additional support. Install seismic restraint or safety wires to the building structure where required by local code.
5. Confirm the panel sits flat in the grid with no rocking.

5B. Recessed in a gypsum ceiling (flange kit FK14, FK22, FK24)

1. Use the flange kit that matches the fixture size: FK14 (1×4), FK22 (2×2) or FK24 (2×4).
2. Install the flange kit in the ceiling opening per the instructions supplied with the kit, supported by framing or blocking as required.
3. Make the electrical connections, set the switches, then seat the panel in the flange kit and confirm it sits flat and tight to the ceiling.

5C. Surface mounted on a gypsum ceiling (BLP-SK14, BLP-SK22, BLP-SK24)

1. Use the surface mount kit that matches the fixture size: BLP-SK14 (1×4), BLP-SK22 (2×2) or BLP-SK24 (2×4).
2. Mark the kit position and fastening points from the reflected ceiling plan, then fasten the kit frame to framing, blocking or an approved anchor suited to the ceiling. The kit must be supported by structure, not by the gypsum alone.
3. Bring the branch circuit in through a listed connector or fitting, make the connections in Section 4, and set the switches.
4. Install the panel in the kit frame per the kit instructions and confirm it is level, tight to the ceiling and does not rock.

5D. Suspended (cable-hanging kit BLP-ACKIT)

1. Confirm the finished mounting height. Anchor each cable to building structure adequate for the fixture weight.
2. Attach the BLP-ACKIT cables to the structure and to the panel per the hardware supplied, and close all clips fully.
3. Suspend the panel from all support points before making any electrical connection, then level it in both directions.
4. Confirm the supply conductors carry no load and are protected where they enter the driver compartment.

6. Lens and Covers

1. Close the driver compartment with the original fasteners. Confirm no conductor is pinched and the cover is fully seated.
2. Handle the panel by its frame; do not press on or flex the lens.
3. Remove any protective film and clean fingerprints before closing out the ceiling.

7. Options and Accessories

Option	Installation requirement
EM5 — emergency pack	5W emergency pack >90 min., >500 lumens. Connect to an unswitched source — see 4B. Allow a full 24-hour charge before testing.
EM12 — emergency pack	12W emergency pack >90 min., >1200 lumens. Wire as EM5.
FK14 / FK22 / FK24	Flange kits (1×4, 2×2, 2×4) for gypsum ceilings. See 5B.
BLP-SK14 / BLP-SK22 / BLP-SK24	Surface mount kits (1×4, 2×2, 2×4) for gypsum ceilings. See 5C.
BLP-ACKIT	Cable-hanging kit. See 5D.

Universal voltage 120-277V standard, 0-10V dimming standard. Consult the factory for options not shown or listed.

8. Start-Up Check and Maintenance

- Restore power and confirm every fixture energizes at the selected power.
- Confirm the CCT setting is uniform across every fixture in the space.
- Operate the 0-10V control through its full range and confirm the fixtures dim smoothly and together.

- 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.
- No routine relamping is required — the LED boards 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.
- Warranty: 5 years, part replacement only (see the terms and conditions at www.lamarled.com). Listings and ratings as published: U.L./C.U.L. Certified for dry/damp locations, IC rated, Design Lights Consortium (DLC) qualified.

QUESTIONS OR APPLICATIONS NOT COVERED HERE

Contact LAMAR LED at 631.777.7700 or sales@lamarled.com, or visit www.lamarled.com.