

Low Voltage LED Blaster Light (LB40)

Preparation

Before beginning assembly, installation or operation of product, make sure all parts are present. Compare parts with the package contents list and diagram. If any part is missing or damaged, do not attempt to assemble, install or operate the product. Contact customer service at 800.653.8568.



Prevent Electrical Shock: Carefully Read All Warnings and Instructions First. Check that the unit has not been damaged during transport.

Safety Information Read carefully for your protection.

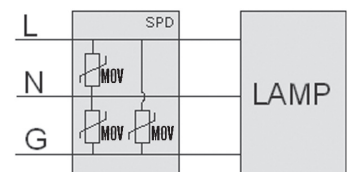
- LM80 tested; waterproof; ETL-rated IP65 waterproof rating for “Wet Locations”.
- **WARNING:** Although fixture is waterproof, it is not designed or intended to be submerged.
- **WARNING:** Connect fixture to 110-277V AC, 60Hz power source for Line Voltage and 12-28V AC/DC for Low Voltage (any other connection may void warranty).
- **WARNING:** Keep away from flammable objects. Do not position fixture within one inch of any combustible materials.
- **WARNING:** *A qualified electrician or persons with experience in household or marine wiring should install this fixture. The electrical system and the method of electricity connecting this fixture to it must be in accordance with the National Electrical Code and local building codes as well as ABYC marine industry standards.*
- **WARNING:** Mount fixture to a grounded junction box marked for use in wet locations.
- **WARNING:** Your light fixture is pre-wired for easy installation.
- **WARNING:** There are no user-replaceable bulbs.
- **WARNING:** Disassembling/opening your fixture will void the manufacturer’s 5-year warranty.
- **WARNING:** For supply connections, use wire rated at least 90°C or marine grade comparable size wire and connectors.
- **WARNING:** In the event of breakage, your unit may no longer be waterproof and should be replaced. You may contact your supplier or Taco Marine directly for ordering assistance.
- **WARNING:** To avoid hazard to children, account for all parts and destroy packing materials.

Addendum:

Taco Marine equipment that is directly connected to AC mains (e.g. 120/220/277VAC) can be damaged by short circuit and overload conditions. In addition, lightning surges or load switching transients (originating outside the bulb) can create voltage spikes or ring waves that can stress and ultimately damage components and render the fixture inoperable. Given that the value proposition for LED bulbs is not only lower energy usage, but longer lifetimes, it will be crucial that transient voltage protection is taken into account to eliminate field failures driven by the electrical environment.

Ensure the following steps are taken to decrease the chance of damage from short circuits and overload conditions:

1. Do not use mechanical timers or contactors to switch on the lamp. These contacts are known to produce voltage spikes which are detrimental to the circuitry of the lamp. It is recommended to use a solid state relay to provide power to the fixture.
2. Replace old circuit breakers, as corroded contacts on both the bus bar and internal contacts of the breaker can cause destructive electrical spikes.
3. Use a surge protection device (SPD) spanning both Line, Neutral and Ground. These devices contain MOV’s (a metal oxide varistor) which can help protect the LED bulb from overvoltage surges and ring-wave effects by clamping short-duration voltage impulses as shown in drawing.



Tools Required

Make sure you have these items for fixture installation.

- Phillips screwdriver
- Adjustable pliers

Required Items (Purchase separately):

- Silicone caulking
- (3) Wire nuts or marine grade connectors
- Marine grade switch & separate fuse/breakers

Accessories

- Color-change kits available.

Follow instructions carefully!



Wiring Instructions

Note: Always hire a licensed electrician for proper installation. Always mount this fixture to a grounded junction/ breaker box or marine grade electrical assembly.

Caution:

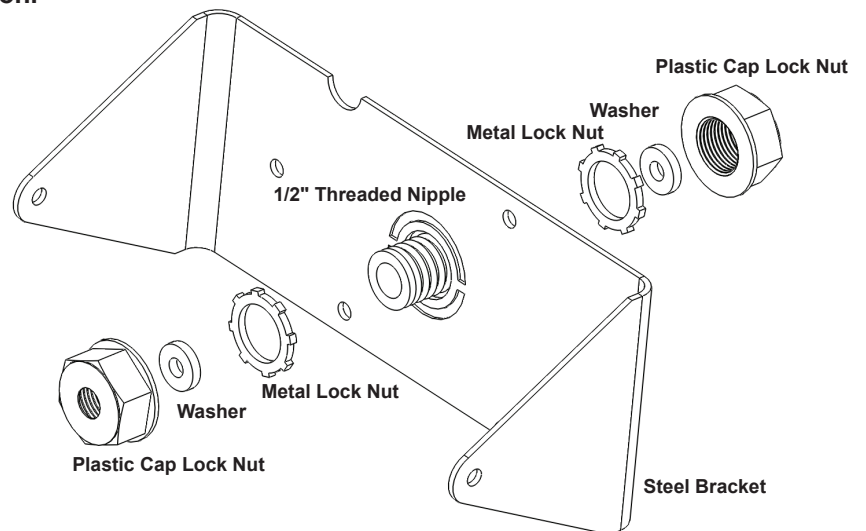
- Risk of Fire/Electrical Shock. If not qualified, consult an electrician.
- Disconnect power at fuse or circuit breaker before installing or servicing.
- Edges may cut. Handle with care.

- 1) **WARNING:** Turn off the power at the main fuse or breaker box.
- 2) Thread fixture wires through cover plate gasket and threaded nipple.
- 3) Attach the ground wire from the fixture to the ground wire in the electrical box. If no ground is available attach fixture ground wire to the junction box.
- 4) All power connections should use approved marine grade wire nuts for the wire size. (We recommend using a good marine grade electrical tape to insulate the wire nut connections or marine grade heat shrink connectors before sealing the box.)
- 5)
 - **110-120V AC** wiring attach the Black wire from the fixture to the Black (Hot) wire in the box attach the White wire from the fixture to the White (Neutral) in the box.
 - **220-240V AC** installations attach the Black wire from the fixture to the one of the Black (Hot) leads in the box and then attach the fixtures White lead to the other Black (Hot) wire in the box.
 - **277V AC** Attach the Black lead from the fixture to the 277V (Hot) lead in the box and the White lead from the fixture to the Neutral lead in the box.

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- **12-28V DC** attach the Black lead from the fixture to the ground and the White lead from the fixture to the Switch + (Positive) lead using marine grade connectors.
 - **12-28V AC** Attach the Black lead to either of the two (2) incoming leads from the transformer and the White to the other lead using marine grade connectors. Polarity is not a factor in this installation.
- 6) Attach fixture to the junction box with two screws. Either (2) #6-32 or (2) #8-32 screws will work with most standard junction boxes. If not mounting to a box, two holes are provided to flush mount to a smooth surface.
 - 7) Apply silicone caulk around the edge of the cover plate to provide a water tight seal from rain and moisture.
 - 8) Turn on power at main fuse or breaker box.

Package Content List Diagram



Troubleshooting

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Light does not come on	No power to the fixture Wiring to the unit is loose	Check if circuit breaker is tripped Confirm fixture is properly grounded