Explosion Proof C1D2 Dimmable LED Fixture
4 foot, 2 T-Style LED Lamps - Emergency Ballast
Instruction Manual

Do not attempt installation until you are familiar with all warnings, precautions, and procedures outlined within this instruction sheet.

INSTALLATION PRECAUTIONS

- Do not install fixture in any classified location where the marked operating temperature exceeds the ignition temperature of the hazardous atmospheres. Consult fixture nameplate for the suitability ambient temperature shown on the nameplate. Refer to fixture nameplate for minimum supply wire temperature rating.
- Verify that the supply voltage agrees with fixture rating as indicated on nameplate. All local and national electrical/building codes must be followed when installing this lighting fixture. For code interpretation, consult your local authority. Product must be used only with lens intact and all cap threads fully engaged. Do not use if lens is cracked or damaged.

Caution: Only use lamp size, type and /or wattage as shown on fixture nameplate.

INSTALLATION

We strongly recommend that only a licensed electrician install this product.

WARNING: Make sure that the power is disconnected before installing. This fixture is heavy and must be mounted to a surface that can structurally support the load.

WARNING: *Do not let fixture hang on one bracket at any time. Failing to comply can result in breakage of and end casting or mounting bracket allowing the fixture to fall which can cause serious injury or death.*

- The mounting brackets are shipped installed on the fixture.
- Install the brackets to wall or ceiling with two 3/8'' bolts (not supplied) at center measurements.
- Fixture is now ready for mounting.

It is strongly suggested to use two licensed electricians to proceed with the final mounting of the fixture to avoid any possible personnel injury or damage, and the fixture may be slightly awkward to hold in position and attach to brackets mounted on wall or ceiling. Depending on mounting height and scaffolding, a hydraulic man–lift or two good quality ladders should be used.

Each L bracket is cinched to the bracket mounting peg on each side of the light. The angle of the bracket is set by tightening two cap screws on either side of the bracket. The cap screws act as a set screw. The bracket itself is mounted via a single bolt hole at the top the bracket. There are two brackets, one on each end of the light. Once the brackets are mounted to a surface (ceiling, floor or wall), the light fixture can be removed from the brackets by loosening the cap screws that hold the bracket to the mounting peg. Mounting brackets are removable. A single through hole enables the operator to install the light to any surface.

WIRING

- Reveal wiring on end of fixture for power.
- Install approved cable connector or conduit fitting into NPT hub on field wiring compartment.
- Install a three conductor cable into the connector, allowing 3 inches of wire inside compartment for connection.
- Using approved wire connectors, splice wires as per color codes: black to black (line) white to white (common) and green to green (ground). See wiring diagram for emergency ballast wiring.
- Replace conduit, making sure there are no wires protruding that maybe pinched causing a possible short circuit.

WARNING: *Fixture must be grounded as required per paragraph 410-21 and article 250 of the National Electric Code and/or rule 30-500. Failure to properly ground this fixture will create and electrical shock, which can cause serious injury or death.*

THESE INSTRUCTIONS MAY NOT COVER ALL DETAILS OR VARIATIONS OF THIS PRODUCT FOR YOUR EQUIPMENT OR INSTALLATION REQUIREMENTS. SHOULD FURTHER INFORMATION NOT COVERED BY THESE INSTRUCTIONS BE REQUIRED, PLEASE CONTACT LARSON ELECTRONICS BY EMAIL AT SALES@LARSONELECTRONICS.COM OR BY PHONE AT 1-800-369-6671 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR **WARRANTY** AND **RETURN** INFORMATION.

OPERATION

During normal operation, AC power is supplied to the AC ballast/driver through the backup micro inverter and the inverter charges the battery. Connecting the inverter connector wires (red and white) enables the emergency circuit and supplies power to the control/monitor circuit. The backup micro inverter detects AC input line voltage (120/277) and automatically sets the output voltage during emergency mode.

When AC power fails, the backup micro inverter automatically switches to emergency mode, keeping the load illuminated for a minimum of 90 minutes. When AC power is restored, the backup micro inverter returns to charging mode. The backup micro inverter consists of a low-battery voltage disconnect which is reset when AC power is restored. The unit can also detect an abnormal load condition (open or shorted load) during emergency mode operation and will protect the inverter from damage.

MAINTENANCE

Although no routine maintenance is required to keep the backup micro inverter functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

1. Visually inspect the charging indicator light monthly. It should be illuminated.
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. The lamp should operate at full illumination.
3. Conduct a 90-minute discharge test once a year. The lamp should operate at full illumination for at least 90 minutes.

! REFER ANY SERVICING INDICATED BY THESE CHECKS TO QUALIFIED PERSONNEL !

BACKUP MICRO INVERTER AND AC BALLAST/DRIVER MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

WIRING DIAGRAM

