

LED Tube Installation Guide

WARNING: Rewiring of a fluorescent fixture for use with LED tubes should be performed by individuals who have been properly trained to perform basic electrical maintenance and repair. Please read through these instructions thoroughly before proceeding!

NOTE: Unlike traditional fluorescent tubes, LED tubes do not use ballasts or starters. These LED tubes are energized on one *single end* OR *end to end*. **Please check the label to verify termination type and voltage before proceeding.**

Before opening and disassembling your fixture, ensure that the power has been turned off at the main circuit breaker or unplugged from its power source and the fluorescent lamps have been removed.

SINGLE END -X1

- If your fixture has shunted (single wire) sockets or tombstones, you will need to replace these with nonshunted (two wire) sockets or tombstones before continuing. These LED tubes require Line (L) and Neutral (N) to be supplied to the individual pins on the energized end of the tube.
- 2. Remove or disconnect the starter and ballast. When removing or cutting the wires from the socket at the "dead" end of the fixture, make sure they are tight in the fixture and will hold that end of the tube in the socket.
- 3. Replace any broken sockets or tombstones if necessary. If you choose to leave the starter, ballast, or cut wiring in the fixture (or if it cannot be easily removed) make sure that all unused lead wires are covered with wire nuts, rolled up, and secured out of the way.
- 4. Connect the line and neutral wires to the proper sides of the sockets at the "live" energized end of the fixture as shown below. Make sure any wire connections are secured with wire nuts and wrapped with electrical tape. Make sure the fixture is properly grounded before reassembling the fixture.
- 5. Install the new LED tubes in the fixture.

END TO END -X2

- These LED tubes will work with shunted (single wire) sockets or tombstones. A single Line (L) and Neutral (N) wire is supplied at each end of the tube.
- 2. Remove or disconnect the starter and ballast.
- 3. Replace any broken sockets or tombstones if necessary. If you choose to leave the starter, ballast, or cut wiring in the fixture (or if it cannot be easily removed) make sure that all unused lead wires covered with wire nuts, rolled up, and secured out of the way.
- 4. Connect the line and neutral wires to the proper sides of the fixture as shown below. Make sure any wire connections are secured with wire nuts and wrapped with electrical tape. Make sure the fixture is properly grounded before reassembling the fixture.
- 5. Install the new LED tubes in the fixture.



