

Installation Instructions: External-Driver SEP T8 LED Tube Lamp









External-Driver SEP T8 LED Tube Lamp




Installation Notes & Precautions:

- *Read all precautions, warnings, instructions contained in this document.*
- These instructions can be used to install up to four lightweight, all-plastic External-Driver SEP T8 LED tube lamps into a properly wired luminaire/troffer.
- Before installing lamps, verify that luminaire tombstone spacing matches the base-to-base lamp length.
- Installation should be performed by a qualified electrician or installer.
- Operating voltages: 120VAC to 277VAC
CAUTION: Wire the fixture as shown in Step 3 below.
- LED tube is powered from one end (SEP); the other end is NOT live and only serves to secure and mount the LED tube in the socket. Verify that the luminaire is properly set up for this style of LED Tube before inserting into luminaire (modify luminaire if necessary).
- *WARNING: Do not use shunted lamp sockets when rewiring fixture for SEP LED tube lamps.*
- Shunted lamp sockets are found only in fluorescent luminaires with Instant-Start ballasts. These ballasts are labeled “Instant Start” or “I.S.” or designated as “IS” on the ballast markings, for example F40T12/IS. For more information, contact your Revolution Lighting representative.
- Operating temperature range: -4 °F to 113 °F
- This light source is not intended as an emergency exit fixture or light.
- A “Retrofitted Luminaire” label is included with your LED tube. This decal must be placed in a prominent location on the luminaire so that it is visible when replacing an LED tube. If the luminaire is already modified for LED tube use and has a label, the new label may be discarded.
- The LED tube fits into any T-Series Medium Bi-Pin (T8/T10/T12) socket. Lampholder sockets do not need to be replaced unless they are shunted, damaged, or missing. Lampholders must be separated internally for proper wiring of the LED tube. Refer to installation diagrams.
- The LED tube may be used in open or enclosed surface or recessed (Type-IC) luminaires.
- If retrofitting an existing luminaire with LED tube(s), the initial luminaire retrofit wiring changes shall be performed by a qualified electrician.

Warnings:

-  **WARNING – Risk of fire or electric shock. Do not use this retrofit kit in luminaires employing shunted bi-pin lampholders.**
-  **WARNING – Risk of fire or electric shock. Do not alter, relocate, or remove wiring, lampholders, ballasts or any other electrical component. If necessary, contact a qualified electrician for assistance.**
-  **WARNING – To prevent wiring damage or abrasion, do not expose wiring to exposed edges of sheet metal or other sharp objects.**
-  **WARNING – Always disconnect power for your safety when performing the luminaire modification steps below! In some cases, it may be necessary to test the power feed with the power connected. Only connect the power when doing the testing, then disconnect the power from the luminaire when performing the steps below.**
-  **WARNING – Always follow local and regional NEMA Electrical codes. NEMA codes provide information on proper procedures, safety guidelines, proper tools, connection methods, and specifications on materials.**
-  **WARNING – Revolution Lighting Technologies, Inc. cannot and will not be liable for any modifications or results of modifications to electrical devices or luminaires. These instructions are provided as a reference. By using the included instructions, you are solely responsible for following all applicable electrical safety procedures, codes, methods, and materials. If you are unsure about any electrical modification or installation, please consult a licensed electrician or electrical contractor in your area.**


Cautions:

-  **CAUTION – Risk of Shock. Use in Dry or Damp Locations Only.**
-  **CAUTION – Do NOT install an LED tube into a fluorescent luminaire containing a ballast and/or starter. The ballast and/or starter must be removed prior to installation.**
-  **CAUTION – Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.**

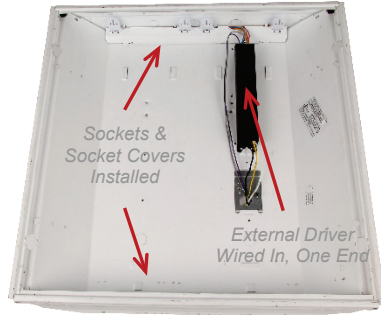
Contents:

Carefully open the box and check contents. Contact Revolution Lighting if any items are missing.		
Qty. #	EXTERNAL-DRIVER SEP T8 LED TUBE LAMP(S) [SKU #: (as ordered)]	Lightweight, All-Plastic, External-Driver SEP T8 LED Tube Lamp(s)
Qty. 1	EXTERNAL LED DRIVER [SKU #: (as ordered)]	External driver for powering 1, 2, 3, or 4 LED tubes, as ordered
Qty. 1	TOMBSTONE SOCKET KIT [SKU #: (Not included. Must purchase separately)]	Tombstone socket kit for 1-, 2-, 3-, or 4-tube fixture installations that includes 2, 4, 6, or 8 sockets, respectively
Qty. 1	“LUMINAIRE POWER SOURCE SOCKET” LABEL [SKU #: 300004]	This decal must be placed at the base of the powered LED tube socket on the LED-modified luminaire so that it is visible when replacing an LED tube. The arrow should point in the direction of the powered socket (only one label per retrofitted luminaire required at powered end).
Qty. 1	“RETROFITTED LIGHT LUMINAIRE” LABEL [SKU #: 300223]	This decal must be placed in a prominent location on the LED-modified luminaire so that it is visible when replacing an LED tube (only one label per retrofitted luminaire required).
Qty. 1	EXTERNAL-DRIVER SEP T8 LED TUBE INSTALLATION INSTRUCTIONS [SKU #: 300553_v01]	Provides information necessary to retrofit a luminaire with externally powered SEP LED tube lamps.

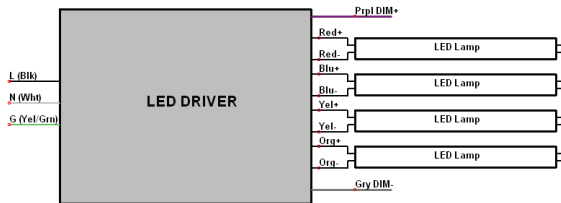
External-Driver SEP T8 LED Tube Lamp Installation Instructions:

<p>STEP 1</p> 	<ul style="list-style-type: none"> Disconnect power to installation site. WARNING: Ensure that all power is off using a voltmeter or other method.
<p>STEP 2 (Fixture Preparation)</p>  <p><i>Fixture Stripped of Lamps, Ballast, Wiring & Sockets.</i></p>	<ul style="list-style-type: none"> Remove troffer lens, if present. Remove existing fluorescent tube lamps by rotating one quarter turn and sliding each lamp out. Dispose of them per job/company site rules and regulations. Remove ballast cover. (Cover may be secured with screws or tabs.) Remove existing fluorescent ballast as well as all existing wiring, socket covers, and sockets. Bare fixture is now ready for external-driver retrofit installation.

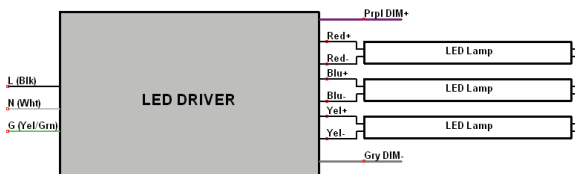
STEP 3 (Installation/Wiring of SEP External Driver)



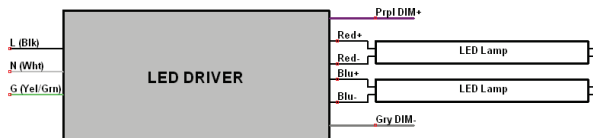
4-Lamp 2' x 2' Fixture with LED Driver & Sockets Installed



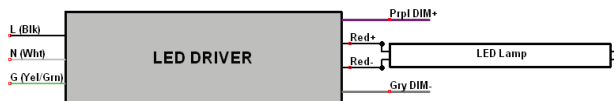
4-Lamp Wiring After Retrofit



3-Lamp Wiring After Retrofit



2-Lamp Wiring After Retrofit



1-Lamp Wiring After Retrofit

- Snap the included, non-shunted sockets onto the mating notches of both socket covers.
- Install the included SEP external LED driver where the previous fluorescent ballast was. (Use appropriate self-tapping screws, if necessary.)
- Connect the low-voltage plus (+) and minus (-) power leads from the LED driver to each non-shunted socket as depicted in the adjacent wiring diagrams. (Diagrams show the wiring for 4-, 3-, 2-, and 1-tube fixtures.)
- Polarity is unimportant. Simply confirm that each socket has the same colored wire connected to it. (For example, the sockets of a four-tube fixture would be red-red, blue-blue, yellow-yellow, and orange-orange).
- Wire the socket(s) on one side of the fixture only. Sockets on the opposite side of the fixture serve only as lamp supports and are not powered.
- Using appropriate wire nuts, splice the hot (black), neutral (white), and ground (green/yellow) incoming power leads with the corresponding hot, neutral, and ground wires of the LED driver.
- **OPTIONAL:** To activate 0-10V dimming, splice purple (+) and gray (-) wires from LED driver to the incoming dimming control wires. (See dimming wires indicated in wiring diagrams. Cap-off dimming wires if not used for optional 0-10V dimming.)
- Secure all fasteners, clips and wires (use electrical tape if necessary) and re-secure the socket covers at both ends of the fixture.
- Apply supplied label SKU #300004 with arrow pointing to the wired sockets of fixture, indicating modified power socket(s).
- Apply Retrofitted Luminaire Label SKU #300223 on inside of luminaire housing near one end of housing, next to powered sockets. Ensure that the label will not be covered by any cover pieces, trim pieces, or other items. If necessary, clean the area where label will be placed before affixing the self-adhesive label.

STEP 4 (Lamp Installation, etc.)



Finished External-Driver SEP Tube-Lamp Retrofit

- Read label on the included LED tube lamp to ensure that powered end of the tube is aligned with the powered luminaire socket, then insert single-end-powered LED lamp in the normal way by sliding the pins into tombstone sockets and gently rotating a quarter turn until LED tube locks in place. LED lamp is now fully installed.
- Repeat above step for all LED tube lamps.
- Replace ballast cover.
- Replace troffer lens, if present.

STEP 5



- Switch power back on.