

## Installation Instructions: T-Lite LED Signage Tube Lamps










T-Lite LED Signage Tube Lamp





### Installation Notes & Precautions:

- *Read all precautions, warnings, instructions contained in this document.*
- These instructions can be used to retrofit T-Lite LED signage tube lamps into a properly wired HO-series fixture with G13 or R17d sockets and a minimum lamp-to-lamp spacing of 6.3 inches (160 mm).
- Before installing lamps, verify that socket spacing matches the T-Lite base-to-base lamp length.
- Installation should be performed by a qualified electrician or installer.
- Operating voltages: 120–277VAC
- 2', 3', 4' and 5' T-Lite tubes are powered from one end (SEP); the other end is NOT live and only serves to secure and mount the LED tube in the socket. 6' & 8' T-Lite tubes are wired SEP at both ends (DSEP). Verify that luminaire is properly set up for each style of LED tube before installing (modify luminaire if necessary).
- *WARNING: Do not use shunted lamp sockets when rewiring fixture for SEP or DSEP 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.
- Lampholder contacts must be electrically open internally for proper wiring of SEP or DSEP LED tubes. Refer to installation diagrams.
- This light source is not intended as an emergency exit fixture or light.
- "Luminaire Power Source Socket" and "Retrofitted Luminaire" labels are included with your T-Lite tube. These decals must be placed in the luminaire as described in the instructions below.
- Always connect ground lead to fixture when applicable.
- The T-Lite LED tube fits into any T-series (T8/T10/T12) medium-bi-pin G13 socket or R17d HO socket, using the included R17d end-cap adapter.
- Lampholder sockets do not need to be replaced unless they are shunted, damaged, or missing.
- The T-Lite LED tube lamp is not for use in luminaires controlled by a dimmer.

### 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.**
-  **WARNING – A luminaire modified to function with SEP or DSEP LED tube lamps cannot be used with the originally intended fluorescent lamps.**

### 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.**
-  **CAUTION – Do not remove existing wires from socket terminals. Make new connections to existing socket lead wires using appropriate wire nuts/connectors instead.**

## Contents:

Carefully open the box and check contents. Contact Revolution Lighting if any items are missing.		
Qty. #	T-LITE LED SIGNAGE TUBE LAMP(S) [SKU #: (as ordered)]	T-Lite LED Signage Tube Lamp(s)
Qty. 2	“LUMINAIRE POWER SOURCE SOCKET” LABEL	Place this decal at the base of any powered socket on the luminaire so that the arrow points toward the powered socket and is visible when replacing an LED tube. Use only one label for SEP-modified fixtures and two for DSEP-modified fixtures. (See Step 3 below.)
Qty. 1	“RETROFITTED LUMINAIRE” LABEL	This decal must be placed in a prominent location of the modified luminaire so that it is visible when replacing an LED tube. (See Step 3 below.)
Qty. 1	T-LITE LED SIGNAGE TUBE LAMP INSTALLATION INSTRUCTIONS (IN061)	Provides information necessary to retrofit an existing HO fluorescent luminaire with SEP T-Lite LED tube lamps.

## T-Lite LED Signage Tube Lamp Installation Instructions

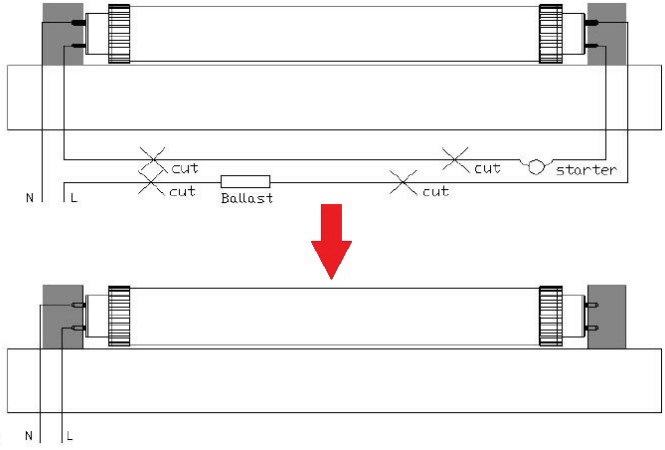
**STEP 1**



- Disconnect power to installation site.  
**WARNING: Ensure that all power is off using a voltmeter or other method.**

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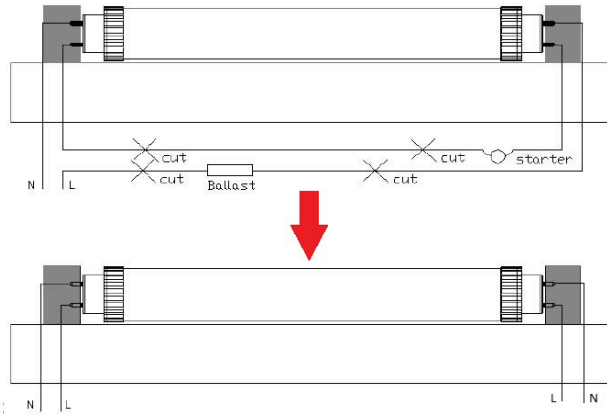
**STEP 2 (Ballast/Starter Bypass)**



**Single-End-Power (SEP) Bypass  
(For 2', 3', 4' & 5' T-Lite Lamps Only)**

- Open fixture and remove existing fluorescent tube lamps by rotating one quarter turn and sliding each lamp out.
- Remove any wire or ballast covers to access ballast and all wiring.
- To bypass ballast and starter (if applicable), cut all ballast wires as close to ballast as possible, as shown in the upper diagram.
- Cut all wires leading from the sockets at ONE END of luminaire. (Only one side of luminaire needs wired sockets for SEP installation.)
- Sockets at the other end of the luminaire remained wired, as shown in the lower diagram.
- If existing sockets are shorted with a jumper, remove jumper wire.
- If existing sockets are internally shunted, replace with new, un-shunted sockets.

### STEP 2 (Cont'd)



*Ballast/Starter Bypass*

#### Double Single-End-Power (DSEP) Bypass (For 6' & 8' T-Lite Lamps Only)

- Open fixture and remove existing fluorescent tube lamps by rotating one quarter turn and sliding each lamp out.
- Remove any wire or ballast covers to access ballast and all wiring.
- To bypass ballast and starter (if applicable), cut all ballast wires as close to ballast as possible, as shown in the upper diagram.
- Leave all wires leading from sockets at both ends of luminaire connected, as shown in the lower diagram.
- If existing sockets are shorted with a jumper, remove jumper wire.
- If existing sockets are internally shunted, replace with new, un-shunted sockets.

### STEP 3 (SEP & DSEP Wiring)



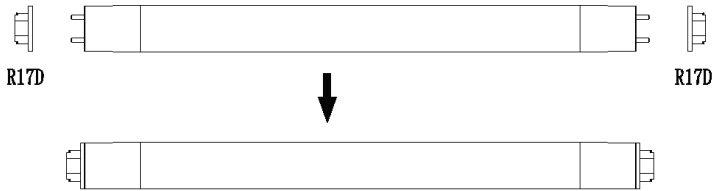
*SEP Wiring Diagram (2', 3', 4' & 5' T-Lites only)*



*DSEP Wiring Diagram (6' & 8' T-Lites only)*

- Ensure that powered sockets are wired according to the diagrams labeled either "SEP Wiring Diagram" or "DSEP Wiring Diagram," which depict 4-tube wiring configurations.
- Cut and strip approximately 1/2" of insulation from the free ends of the hot (black) and neutral (white) socket wires.
- Splice the hot and neutral incoming power leads with the corresponding hot and neutral socket wires using the appropriate wire nuts.
- Secure all fasteners, clips and wires (use electrical tape if necessary) and replace ballast cover and all socket or wire covers.
- Apply supplied "Luminaire Power Source Socket" label with the arrow pointing to wired luminaire sockets, indicating modified power sockets. Place only one label near the powered end of an SEP-modified fixture or each of two labels near the powered ends of a DSEP-modified fixture.
- Apply "Retrofitted Luminaire" label 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



*Secure R17d Adapters & Install Lamps*

- If applicable, secure R17d adapters to the G13 medium bi-pin end caps of each tube lamp.
- For 2', 3', 4', and 5' SEP T-Lites, read the label on the tube lamp to ensure that the powered end of the tube is aligned with the powered luminaire socket, then insert single-end-powered LED lamp into sockets in the normal way. LED lamp is now fully installed.
- Repeat above steps for all T-Lite LED tube lamps.
- Reassemble luminaire.

#### STEP 5



- Switch power back on.