



LIGHTWEIGHT, ALL-PLASTIC G3 SEP LED TUBE LAMP INSTALLATION INFORMATION & INSTRUCTIONS

RETROFIT/INSTALLATION INFORMATION









INSTALLATION NOTES




- These instructions can be used to install 2, 3, or 4 lightweight, all-plastic G3 SEP LED tube lamps into a properly wired luminaire/troffer.
- LED Tube operates using voltages from 120VAC to 277VAC.
- LED Tube is not intended for use with emergency exit fixtures, emergency exit lights or battery backup devices.
- 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).
- 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 in any T-Series Medium Bi-Pin (T8/T10/T12) socket. Lamp holder sockets do not need to be replaced unless damaged or missing. Lamp holders must be separated internally for proper wiring of the LED Tube. Refer to installation diagrams below.
- 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.
- Shunted lamp holders 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 Seesmart representative.
- The LED Tube is not for use in luminaires controlled by a dimmer.

SAFETY INFORMATION (READ CAREFULLY)

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 National Electrical Codes (NEC). NEC provides information on proper procedures, safety guidelines, proper tools, connection methods and specifications on materials.**
-  **Seesmart, 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 'instructions' included, 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 Locations Only.**
-  **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.**
-  **Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.**

LIGHTWEIGHT ALL-PLASTIC G3 SEP LED TUBE LAMP RETROFIT KIT CONTENTS

Check contents upon opening Retrofit Kit. Contact Seesmart, Inc. if an item is missing.

| | | |
|--------------|--|--|
| Qty. Up to 4 | LIGHTWEIGHT ALL-PLASTIC G3 SEP LED TUBE LAMP(S) [SKU #: (as ordered)] | Lightweight, All-Plastic G3 SEP LED Tube Lamp(s) with clear or milky lens. Available in 2- or 4-foot lengths and color temperatures of warm white (2700-3200K & 3300-3800K), natural white (4000-4500K), and day white (5500-6000K). |
| Qty. 1 | "LUMINAIRE POWER SOURCE SOCKET" LABEL [SKU #: 300003] | 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 #: 300220] | 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 | G3 LED TUBE INSTALLATION INSTRUCTIONS [SKU #: 300536] | Provides information necessary to retrofit a luminaire for a non-rotatable SEP LED Tube or replace an SEP LED Tube in an existing retrofitted luminaire. |

LIGHTWEIGHT ALL-PLASTIC G3 SEP LED TUBE LAMP RETROFIT KIT OR LAMP-ONLY INSTALLATION INSTRUCTIONS

STEP 1 – DISCONNECT POWER TO LUMINAIRE

- Disconnect power to luminaire or circuit (if possible). Ensure all power is off using a voltmeter or other method.

STEP 2 – REMOVE EXISTING TUBE LAMPS

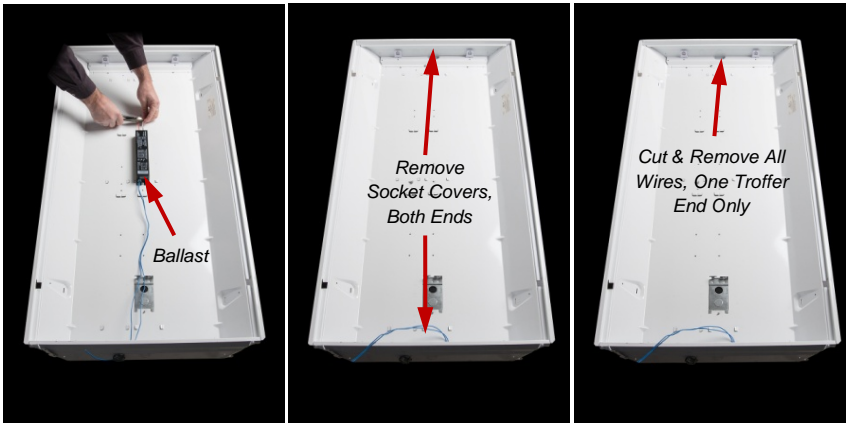


a) Remove Lens b) Tube Lamps Removed c) Remove Ballast Cover

- Remove troffer lens, if present.
- Remove existing fluorescent or LED tube lamps by rotating one quarter turn and sliding each lamp out.
- Remove ballast cover. (Cover may be secured with screws or tabs.)

NOTE: When installing these LED tube lamp(s) in a previously retrofitted luminaire with a single-end power source, do not remove ballast cover and skip to STEP 4 below.

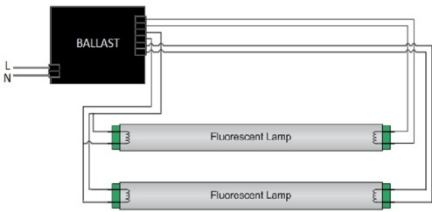
STEP 3 – MODIFY EXISTING FLUORESCENT LUMINAIRE



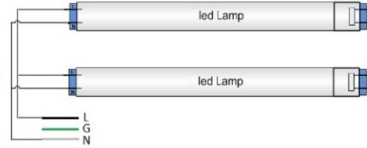
a) Cut Ballast Wires b) Remove Socket Covers c) Remove Wires, One End

- Cut all ballast wires as close to ballast as possible, and then choose one of the following options:
 - Unscrew screw(s) and remove ballast from luminaire. Then reinsert original screw(s) into ballast mounting hole(s).
 - OR**
 - Abandon and leave ballast in its original mounting location.
- Remove lamp-holder (socket/tombstone) covers from both ends of luminaire. (Covers may be secured with screws or tabs.)
- Cut and remove all wires from the sockets at ONE END of luminaire. (Only one side of luminaire needs wired sockets.)

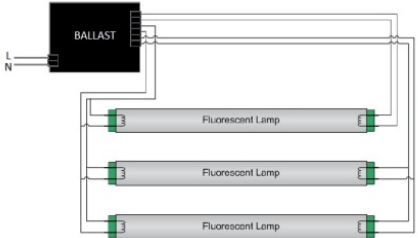
STEP 3 (CON'T) – MODIFY EXISTING FLUORESCENT LUMINAIRE



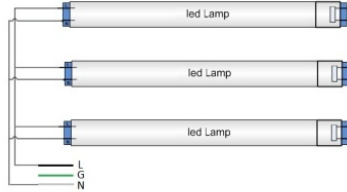
d) Typical Wiring Before Retrofit



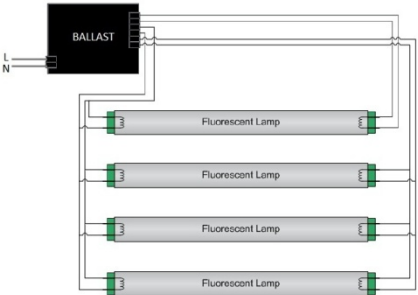
e) Wiring After Retrofit



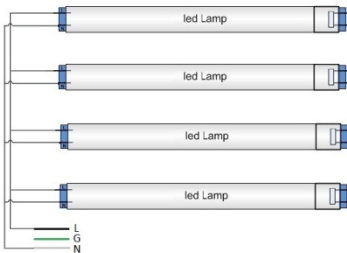
d) Typical Wiring Before Retrofit



e) Wiring After Retrofit

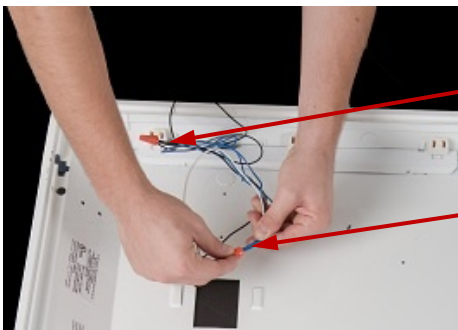


d) Typical Wiring Before Retrofit



e) Wiring After Retrofit

- d) If you have ordered one of Seesmart's SEP Socket Retrofit Kits, remove existing powered tombstones and install kit per instructions.
- e) Ensure that powered sockets are wired according to diagrams e) "Wiring After Retrofit," which depict 2-, 3-, and 4-tube SEP configurations.
- f) Cut and strip approximately 1/2" of insulation from the free ends of the hot (black) and neutral (white) socket wires.
- g) Splice the hot and neutral incoming power leads with the corresponding hot and neutral socket wires using the appropriate wire nuts. See Photo f) "Splicing Wires" below.
- CAUTION: Make sure that hot and neutral wires are correctly identified.**
- h) Secure all fasteners, clips and wires (use electrical tape if necessary) and reinstall socket covers at both ends of troffer.
- i) Apply supplied label SKU #300003 with arrow pointing to wired sockets of troffer, indicating modified power socket.
- j) Apply Retrofitted Luminaire Label SKU #300220 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.



*L = Load Wires
(Typically Black)*

*N = Neutral Wires
(Typically White)*

f) Splicing Wires

STEP 4 – INSTALL LED TUBE(S)

a) Install LED Tube Lamps

b) Replace Ballast Cover

c) Replace Troffer Lens

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

STEP 5 – RESTORE POWER TO LUMINAIRE & TEST

- Restore power to circuit/luminaire and test light. If necessary, adjust position of LED tubes, and enjoy your new Seesmart LED Tube Lights!