A4大小/70g双胶纸/双面/单黑印刷/单张

LIGHTING SPOT26

Installation Guide – Hybrid LED T8
UL Type A+B Lamps

T8 Lamps for use with select T8 electronic ballasts or ballast bypass directly connected to line voltage

PLEASE READ ALL INSTRUCTIONS BEFORE ATTEMPTING INSTALLATION

This product complies with Part 18 of the FCC rules but may cause interference to radios, televisions, wireless telephones, and remote controls. If interference occurs, move the product away from these devices or plug it into a different outlet (or fixture). Do not install this product near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.15-30MHZ.

All lamps have been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interfer -ence to radio or television reception, which can be determined by turning the equipment off and on, the user is encour -aged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-005.

Parts/Components included:

- Installation Manual
- LED T8 UL Type A+B Lamp
- Luminaire marking labels to be used when lamp is installed as a Type B, directly to line voltage.
  - Type A+B lamps are shipped with Type A installation instructions. Type B instructions are also been included, visible by the end-user during re-lamping. **Please retain stickers if installing as Type A for future use if ballast fails and lamp installation is converted to Type B.**

Safety Precautions:

Important:
Read carefully before installing the fixture. Retain for future reference.

General:

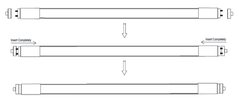
- Upon receipt of the lamp, thoroughly inspect for any freight damage which should be brought to the attention of the delivery carrier.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during installation
- To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

⚠ WARNING

- To avoid personal injury and/or possible product damage, the following cautions must be followed:
- Read all safety information and instructions before installation.
- Risk of electrical shock. Disconnect power at fuse or circuit breaker before installing or servicing.
- Suitable for damp locations -Not for use where directly exposed to water.
- Caution: Do not use with dimmers. This device is not intended for use with emergency exits.
- Do not use in hazardous or wet locations. Lamps may be installed in operating environments ranging between: -20°C and +45°C (-4°F and +113°F).
- DIRECT REPLACEMENT FOR THE FOLLOWING LAMPS ONLY:
  - 8ft Fa8 59W/96T8 Single-Pin Recessed Double contact 86W/96T8HO/FLUORESCENT LAMPS.
- WARNING-Risk of electric shock. LED Retrofit Kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
- WARNING-Risk of fire or electric shock. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and/or drawings and where the input rating of the retrofit kit does not exceed the input rating of the luminaire
- Before installing the lamp in a fixture with an electronic compatible electronics ballast, please check the compatible list first. This lamp is not compatible with magnetic ballast. If you do not find your ballast on the list, then please bypass the fixture as a Type B installation or contact us for support. Do not install the LED tube with the ballast which not on the ballast compatible list.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
  - Installers should not disconnect existing wires from lamp socket terminals to make new connections at lamp socket terminals. Instead, installer should cut existing lamp socket leads away from the lamp socket and make new electrical connections to lamp socket lead wires by employing applicable connectors.
- LED RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR SAFE INSTALLATION OF LAMPS.
- Examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.
- If the tube is installed as Type B, the luminaire, once modified as retrofit fixture, will no longer operate fluorescent lamps.
- For a linear tubular LED lamp conversion, there shall be text or a diagram showing how the supply connections were made to the lampholders so the correct connections will be made to the lamp when the lamp is installed or replaced.

T8 8FT LED TUBE – ASSEMBLY INSTRUCTION:

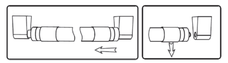
The lamp comes with Fa8 base. The base is not changeable.
The lamp can be used with Fa8 base.



UL Type A – Installation Guide (Plug & Play, Ballast Compatible):

Before installation, please check specifications for the most current ballast compatibility list, if no match, please install led tubes according to below UL Type B installation instructions.

1. Switch-off power to the luminaire.
2. Remove the existing fluorescent lamps from the luminaire.
   a. Remove diffuser/troffer lens (if provided).
   b. Remove the existing fluorescent lamps as below

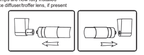


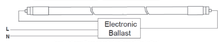
c. Remove ballast cover (Cover may be secured with screws or tabs) to verify the ballast compatibility

UL Type A – Installation Guide (Plug & Play, Ballast Compatible) contd…:

3. Select the CCT (If the lamp is not CCT selectable, go to step 4)
Select the color temperature through the CCT switch on the LED lamp's base
• Using the color (CCT) selector switch on the base, select the desired color temperature (3000K, 4000K, 5000K or 6500K)
• To prevent damage to lamp, lamp must not be energized when color (CCT) selector switch is changed.

4. Install the LED tube lamp.
a. Replace the ballast cover
b. Insert LED lamp in the normal way by sliding pins into sockets until LED tube locks in place as below
c. LED lamps are now fully installed
d. Replace diffuser/troffer lens, if present





Input Voltage: Base on rated voltage of the ballast.

5. RESTORE THE POWER OF LUMINAIRE: Make sure the lamps have the proper connections before restoring the power. Restore power to circuit/luminaire and test light. If necessary, adjust position of LED tube, and enjoy your new LED tube light!

T8 2.4M TYPE A+B DL7A2W Ballast Compatibility Testing
Power Supply Parameter Testing Report

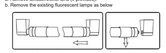
No.	Ballast Brand	Ballast No.	Ballast Type	Input Voltage	Input Current (A)							
					1 lamp				2 lamps			
					100%	50%	75%	100%	100%	50%	75%	100%
1	Lithonia Lighting	IBE232MVOLT	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
2	OSRAM	QT-2S32/120-277	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
3	Sylvania Ultravitalux	2S1-MBO/U	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
4	Philips	EM-2S32/277	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
5	GE	2S1-MBO/U	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
6	GE	2S32/EM/277	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
7	Philips	EM-2S32/277	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
8	GE	2S32/EM/277-U-N	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
9	GE	2S1-MBO/U	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
10	GE	2S32/EM/277-U-N	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
11	Philips	EM-2S32/277	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
12	Lithonia Lighting	IBE232MVOLT	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
13	Sylvania Ultravitalux	2S1-MBO/U	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41
14	OSRAM	QT-2S32/120-277	Instant Start	120	0.21	0.12	0.16	0.21	0.41	0.23	0.31	0.41

Type B-Installation Instructions (DIRECT WIRE, Ballast-Free):

Please completely comply with these instructions and notes to ensure that the product is operated in a safe condition. Important safety information - read all instructions before installation.

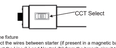
Instructions

1. Disconnect power of luminaire: Disconnect power to luminaire or circuit (if possible). Ensure all power is off by using a voltmeter or other method to confirm
2. Remove Existing tube lamp(s):
   a. Remove diffuser/troffer lens (if provided).
   b. Remove the existing fluorescent lamps as below

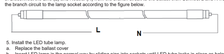


c. Remove ballast cover (Cover may be secured with screws or tabs)

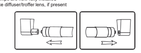
3. Select the CCT (If the lamp is not CCT selectable, go to step 4)
Select the color temperature through the CCT switch on the LED lamp's base
• Using the color (CCT) selector switch on the base, select the desired color temperature (3000K, 4000K, 5000K or 6500K)
• To prevent damage to lamp, lamp must not be energized when color (CCT) selector switch is changed.



4. Rewire the fixture
a. Disconnect the wires between starter (if present in a magnetic ballast) and ballast.
b. Disconnect the Line (L) and Neutral (N) from the branch circuit to the ballast then Connect L and N from the branch circuit to the lamp socket according to the figure below.



5. Install the LED tube lamp.
a. Replace the ballast cover
b. Insert LED lamp in the normal way by sliding pins into sockets until LED tube locks in place as below
c. LED lamps are now fully installed
d. Replace diffuser/troffer lens, if present



6. RESTORE THE POWER OF LUMINAIRE: Make sure the lamps have the proper connections before restoring the power. Restore power to circuit/luminaire and test light. If necessary, adjust position of LED tube, and enjoy your new LED tube light!