LED TUBE LIGHT RETROFIT KIT FOR GL-T8A-4FT20 CM(D)
INSTALLATION INFORMATION & INSTRUCTIONS

INSTALLATION INFORMATION:

⚠️ Danger-Disconnect Power to Ballast and fixture before installing ⚠️

<table>
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<tr>
<th>FEATURES</th>
<th>WARNINGS</th>
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<tbody>
<tr>
<td>● Highest quality materials used in manufacturing of LED Tube light.</td>
<td>➠ Always make absolutely sure the power is OFF when performing the fixture modification steps below! During installation power to the fixture must be disconnected at all times.</td>
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<td>● No UV light emitted or RF interference.</td>
<td>➠ Installation of LED Tube Light Retrofit Kit should be performed only by qualified personnel.</td>
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<td>● No Ballast required with wide voltage range and constant current.</td>
<td>➠ Always strictly follow applicable National Electrical Code (NEMA), State/Municipal Codes and the specific U.L. Safety Standards for LED Tube Light Retrofit Kit. NEMA codes provide information on proper procedures and safety guidelines specifying proper tools, connection methods and materials. Failure to install LED Tube Light Retrofit Kit in conformance with NEMA Codes, applicable State/Municipal Codes and specific UL Safety Standards for the intended working environment may cause serious personal injury, death, and/or property damage.</td>
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<td>● Maintenance-free service life.</td>
<td>➠ LED Green Light International, LLC cannot and will not be liable for any modification or results of modifications to electrical devices or fixtures. 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. Electrical modification and installation should be performed only by a licensed electrician.</td>
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<td>● &gt;50% energy conservation.</td>
<td>➠ CAUTIONS</td>
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<td>● RoHS, CE and UL8750</td>
<td>➠ DO NOT install a LED Tube into a fluorescent fixture containing a BALLAST and/or STARTER. The BALLAST and/or STARTER must be removed prior to installation of LED Tube into fixture. Do not connect or apply any line voltage to the fixtures tombstones. The LED Tube Retrofit Kit does not power the LED Tube Light using the tombstones.</td>
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<tr>
<td>● UL Class2 LED Driver</td>
<td>➠ Never apply both HOT (typically BLACK) and NEUTRAL (typically WHITE) wires to the same end of the LED Tube. The two (2) pins at each end of the LED Tube are used only to support the LED Tube using the fixtures existing Tombstone and are not part of the circuit. No electrical power is to be applied to the fixtures tombstones.</td>
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NOTES

● The LED Tube driver operates using any voltage from 108VAC through 305VAC to 24 VDC.

● The two (2) pins at each end of the LED Tube are used only to support the LED Tube in the fixture. Line voltage must not be connected or applied to either one pin or both pins.

● The LED Tube fits in any T-Series Medium Bi-Pin (T8/T10/T12) socket. Lamp holder sockets function only to support LED Tube in fixture and do not need to be replaced unless damaged, missing or unable to support LED Tube in fixture.

For assistance or additional information call 208-888-7181.

LED Green Light International, LLC
910 E. Franklin Street, Suite 105, Meridian, ID 83642

Revision effective date: 7/1/2012
INSTALLATION INSTRUCTIONS:

⚠️ Danger-Disconnect Power to Ballast and fixture before installing ⚠️

STEP 1: TURN OFF POWER
Turn power OFF for fixture and/or circuit. Use a voltage detector or other method to ensure power is OFF at fixture.

STEP 2: REMOVE EXISTING FLUORESCENT TUBE
Remove all fixture components and covers necessary to permit complete access to fluorescent tube light, as applicable. Remove the existing conventional T8 fluorescent tube light from the fixture socket by rotating 45 degrees and sliding tube out. If fixture is equipped with a Starter, remove Starter. Existing fluorescent lights and Starter are not needed and should be disposed or recycled as appropriate.

STEP 3: EXPOSE BALLAST
Remove fixture metal cover in order to expose the ballast(s). Cover may be secured with screws or tabs.

STEP 4: INSPECT WIRING
Check existing wiring in fixture to make certain all line-voltage leads are free, in good condition and not pinched in the lighting unit.

STEP 5: INSPECT LAMP SOCKETS
Check lamp sockets holders for cracks, breaks or signs of oxidation [dark or black discoloration] in terminals, replacing were necessary. Socket holders must securely grasp LED Tube bi-pins and be firmly retained in place at end of fixture. Verify that proper lamp sockets are being used. T8 LED Tube lights require bi-pin sockets to properly receive and support the LED Tube to operate.

STEP 6: MODIFY EXISTING FIXTURE
Cut the wire coming from [ballast top] the ballast as close to the ballast as possible. Please refer to picture below.

EXAMPLE

Strip approximately 5/8’ of insulation from lead wires which previously powered the distal socket of the tombstone. One lead wire is connected to only one socket (tombstone). If fixture contains multiple fluorescent lights, which were powered by the ballast, combine the stripped ends of the wires and twist together as shown in the above picture. Using an appropriate size UL-approved WIRE NUT, secure the wires together. These wires which serviced the tombstones are no longer used or required, but must be secured and electrically isolated to prevent electrical hazard. If desired or necessary you may completely remove the wires connecting the ballast and the tombstones.
Again, cut the wire(s) from the bottom of the ballast as shown in below picture (2). Strip approximately 5/8’ of insulation from lead wires which power the proximal socket of the tombstone. If fixture contains multiple fluorescent lights, which were powered by the ballast, combine the stripped ends of the wires and twist together as previously indicated. Using an appropriate size UL-approved WIRE NUT, secure these wires together. These wires which service the tombstones are no longer used or required, but must be secured and electrically isolated to prevent electrical hazard. If desired or necessary you may completely remove the wires connecting the ballast and the tombstones.

EXAMPLE

Cut or unwrap if connected using WIRE NUT the power input wires to the ballast to expose the bare wires, usually the Black and White wires. Remove the ballast from the fixture by unscrewing the fastening screws.

Install the supplied LED Tube External Power Driver in place of the Ballast. LED Tube External Power Driver is required to power LED Tube[s]. Secure the small External Power Driver using a metal screw to the fixture, close to the fixtures Power-Feed input wires. If multiple LED Tubes are required, locate Power Driver close to LED Tube’s power input jack in order to safely connect to the Power Feed wires from LED Driver.

After properly securing the External Power Driver[s] to the fixture, connect the bare black and white power cables to the appropriate labeled UL Listed QUICK DISCONNECT port connected to the LED Driver as shown in the following figure.
External Power Driver wires to the fixtures Power-Feed wire supply as described below. Attach bare end wire to UL listed QUICK DISCONNECT connector attached to LED Driver [supplied].

- Power Feed/Supply BLACK to BLACK LED External Power Driver(s)
- Power Feed/Supply WHITE to WHITE LED External Power Driver(s).

Ensure that all connectors are secure.

Next you will begin the process of connecting the LED Tube Power Driver cables to the LED Tube Light by connecting the power connector cable from the LED Lamp to the LED Driver. Multiple LED Tube Lights can be powered from a single LED Driver by daisy-chaining the power cables from lamp-to-lamp as shown in the figure below. This figure demonstrates the basic wiring configuration which will be located in the troffer. The next section describes installation of LED tubes and connecting power cables from LED Driver to LED tubes.

Refer to above photo diagram for additional assistance or call 208-888-7181 if you have any questions or need additional assistance.

**STEP 7: INSERT LED TUBE**

The LED Driver is connected to the LED tubes using the polarity-free cable as seen in the following figures.
Secure all fasteners, clips, and wires inside fixture, and replace "ballast cover". Next insert LED Tube(s) into socket fixture by sliding pins in sockets and rotating 45 degrees until LED Tube locks in place. Connect the LED Drivers power cable to the LED tubes power port. Each tube has two power ports located directly across the center of the tube. You can use any port on the tube since the system is polarity-free connection. After connecting the LED tube to the LED Driver, use the supplied power cable to connect power to the next LED tube. Repeat connecting using the supplied power cables connecting the LED tube in a daisy-chain fashion until all tubes in the fixture have been connected to power. The supplied LED driver is intended to power a maximum of 4-22W LED tubes for maximum efficiency. Refer to the following figure as an example of a typical wiring pattern you should emulate.

STEP 8: INSTALL LED-ONLY FIXTURE LABEL
Install supplied warning label “LED-only warning label on fixture. See example of label on page 6. This is important since these lamps will last for 7 years of service life.

STEP 9: TURN ON FIXTURE POWER & TEST
Replace any fixture components and turn power ON for fixture and/or circuit to test lights. If necessary, adjust angle position of LED Tube in fixture to achieve desired illumination.

For assistance or additional information call 208-888-7181.
Or Email info@ledgreenlightint.com

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Please retain this information for any issues concerning future service or warranty. This LED Lamp is provided with a 7 year warranty. Please contact us first if you have any questions by telephone 208-888-7181 or email at INFO at http://www.ledgreenlightint.com. You can review our warranty on our website.
LUMINAIRE CONVERSION, RETROFIT
RISK OF FIRE
FOR USE ONLY WITH LED TUBE LIGHT
CONTROL NO.