



Bramal LED T-10 Luminaire Installation Instructions for LED Retrofit Luminaire Conversion Kit –

Model BRAMAL LED T10 RLCK 4FT

NOTE:

This **installation** guide is to explain the steps necessary to use the specified **LED retrofit luminaire conversion kit**. Its intended use is for reference only, by a fully qualified electrician or technician. This document should never be considered as a substitute for any provision of a regulation or state and/or local code. Please read this entire manual to fully understand and safely use this product. Specifications are subject to change without notice. To insure latest up to date info, visit our website at www.bramalled.com

Items Included in Box

- 1x Bramal-LED-T10-4FT Tube Lamp
- 1x Installation Instructions for a BRAMAL LED Retrofit Luminaire Conversion Kit

“LED Retrofit Luminaire Conversion Kit, Model BRAMAL LED T10 RLCK 4FT is intended to retrofit a UL Listed permanently connected, Type IC or Type Non-IC, recess-mounted or surface-mounted fluorescent luminaire that use straight tubular lamps; maximum four (4) lamps when luminaire is provided with a diffuser cover or maximum six (6) lamps when luminaire not provided with a diffuser cover. The minimum lamp compartment dimensions and minimum lamp-to-lamp spacing are tabulated below:

LED RETROFIT KIT MODEL NUMBER	MINIMUM LAMP-TO-LAMP SPACING <i>(measured center to center)</i>	MINIMUM LUMINAIRE DIMENSIONS
BRAMAL-LED-T10-RLCK-4FT	5-1/4 in (133.4 mm)	<i>LED RECESSED LUMINAIRE WITH DIFFUSER COVER: Length: 48 in Width: 22-1/2 in Height: 3 in</i>
	2-1/2 in (63.5 mm)	<i>LED RECESSED LUMINAIRE WITHOUT DIFFUSER COVER: Length: 48 in; Width: 15-3/4 in Height: 3-1/2 in</i>

Unpacking

- 1) Unpack and carefully examine the product. Avoid the use of a razor knife.
- 2) Report any damage and save all packing materials if any part is damaged during transport.
- 3) Do not attempt to use this apparatus if it is damaged.

Warnings:

- 1) **Risk of electric shock. Ensure that the power is off when installing the lamps or luminaire.**
- 2) **The device should be installed by a qualified electrician or technician in accordance to relevant local codes.**
- 3) **Do not attempt to connect the device until you read and understand the installation instructions.**

WARNING - Risk of fire or 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 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.

WARNING - Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

WARNING - 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-holder terminals to make new connections at lamp-holder terminals. Instead installers should cut existing lamp-holder leads away from the lamp-holder and make new electrical connections to lamp-holder lead wires by employing applicable connectors.

This luminaire has been modified and can no longer operate the originally intended lamp. "This luminaire has been modified to operate LED lamps".
Do not attempt to install or operate FLUORESCENT LAMPS T12, T8, T5, in this luminaire,"

LED retrofit kit installers shall examine all parts of the luminaire. Parts which are not intended to be replaced by the retrofit kit shall be inspected for signs of damage or wear. Replace any damaged parts prior to installation of the retrofit kit.

WARNING – RISK OF FIRE OR ELECTRIC SHOCK. NOT FOR DIRECT REPLACEMENT OF FLUORESCENT LAMPS. USE ONLY WITH [BRAMAL] [T-10] POWER SUPPLY. SEE INSTRUCTIONS.

This retrofit kit is accepted as a component of a luminaire where the suitability of the combination shall be determined by authorities having jurisdiction

User Responsibilities:

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate the Product in such a manner as to comply with all state / provincial and local laws, ordinances, and regulations.

Note:

The instructions and precautions set forth in this user guide are not necessarily all-inclusive, all conceivable, or relevant to all applications, as Bramal LED cannot anticipate all conceivable or unique situations.

RETROFIT INSTALLATION INSTRUCTIONS

- Turn off all electrical voltage to the luminaire (fixture).
- Inspect the luminaire for damaged lamp-holders, wiring and electrical connections. Replace if necessary.
- Verify that electrical wiring is safely connected to lamp-holders.
- Disconnect wiring to ballast and remove.
- Connect line voltage to one lamp-holder(s) and neutral wire to opposing lamp-holder(s).
- All lamp-holders have two electrical socket contacts which will connect to the two pins on each end of a lamp.
- Lamp-holders are either single wire (shunted) connectors, or two wire connectors. Two wire lamp-holders must have their contacts connected together. The two wires are thus connected together.
- Install Bramal T-10 lamp.
- Turn on AC voltage and verify lamp operation.

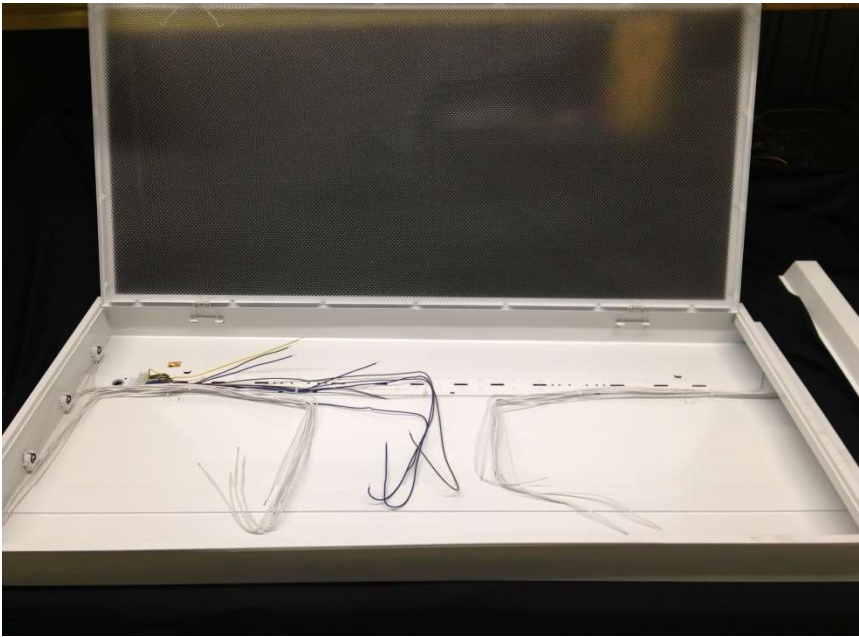


FIGURE 1

Above in FIG 1 is a typical fixture, with a cover, before retrofit installation.

INSTRUCTIONS:

INSTRUCTION 1: Verify that electrical voltage (power) has been removed from luminaire.
Shut power off at electrical breaker panel.



FIGURE 2

INSTRUCTION 2: Inspect all wiring as per Fig 2. Verify that wiring insulation is not frayed, broken or in disrepair. Inspect lamp-holders and verify that lamp-holders are not cracked, broken or loose in fixture. Replace or repair any damaged wires or lamp-holders.



FIGURE 3

INSTRUCTION 3: If a ballast is in the fixture, cut ballast wiring close to ballast as per Fig 3. If desired, remove old ballast from luminaire.



FIGURE 4A - Single Wire Lamp-holder (Shunted Type)

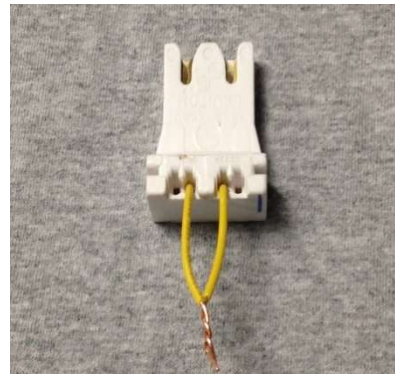


FIGURE 4B - Dual Wire Type Lamp-holder

INSTRUCTION 4: Verify if lamp-holders are single wire (shunted type) as in figure 4A or dual wire type as in figure 4B.

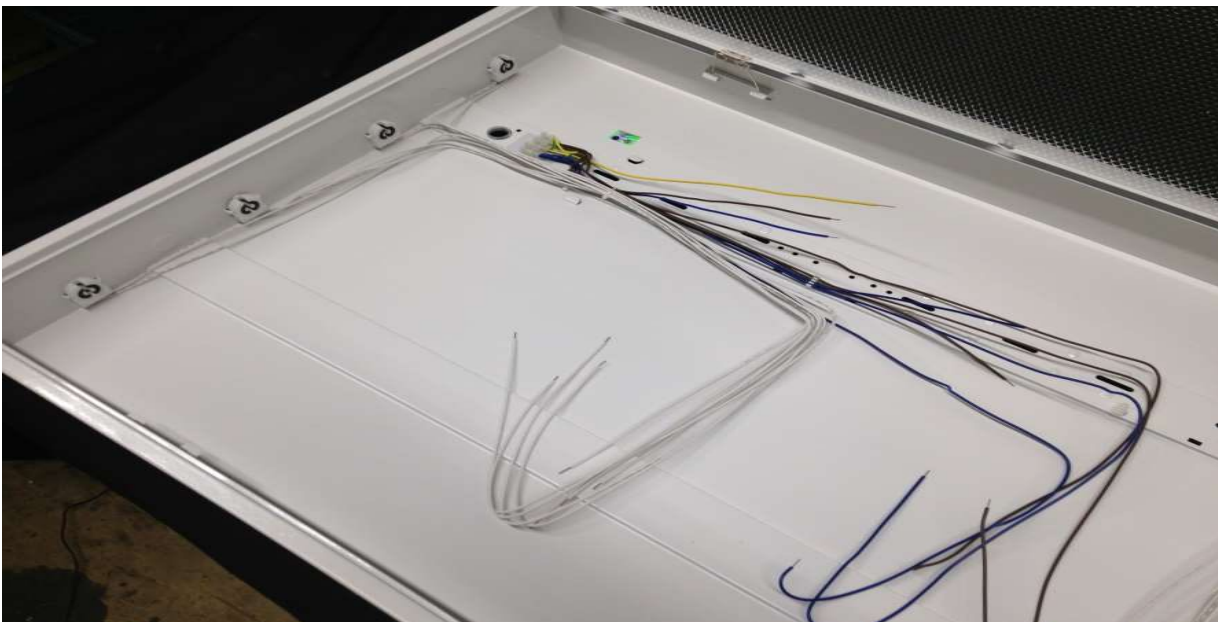


FIGURE 4C

Note that two wires go to each lamp-holder connector as per FIG 4C and FIG 5A.

All of the lamp-holder wires are to be joined into one connection for each end of the fixture as per FIG 5C. This allows line voltage on lamp-holders at one end of the fixture and neutral voltage on lamp-holders at the other end of the fixture. If Single Wire lamp-holders are used, wire the lamp-holders as per FIG 5B.

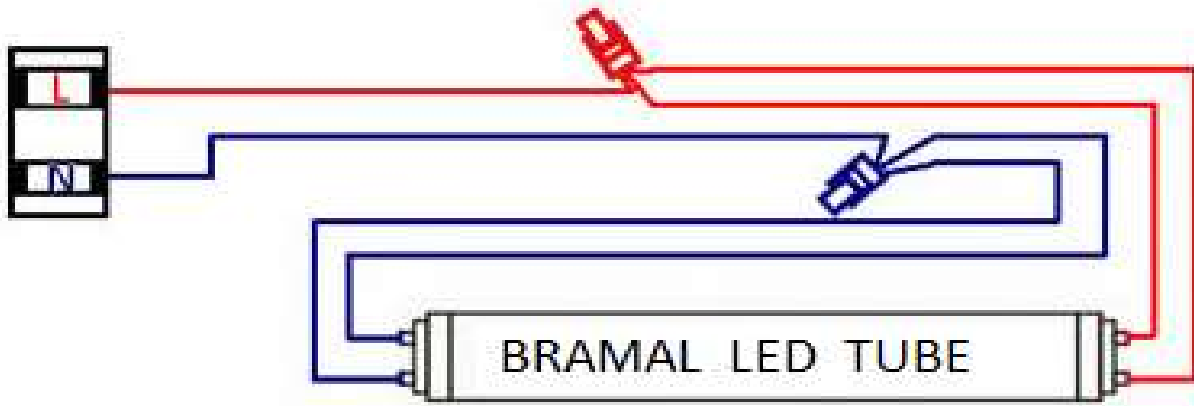


FIGURE 5A – Wiring Diagram for Dual Wire Type Lamp-holder

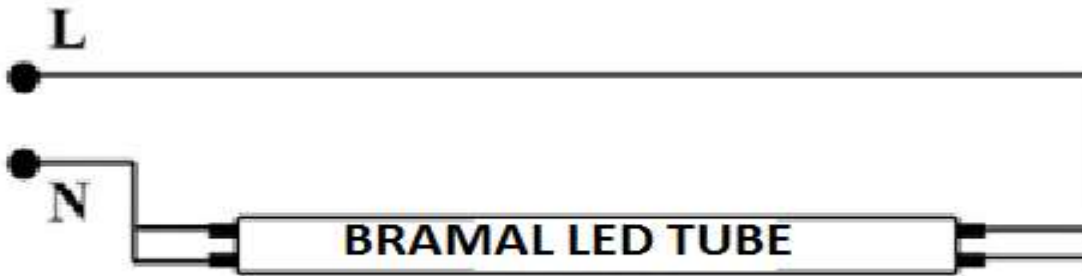


FIGURE 5B Wiring Diagram for Single Wire Type Lamp-holder

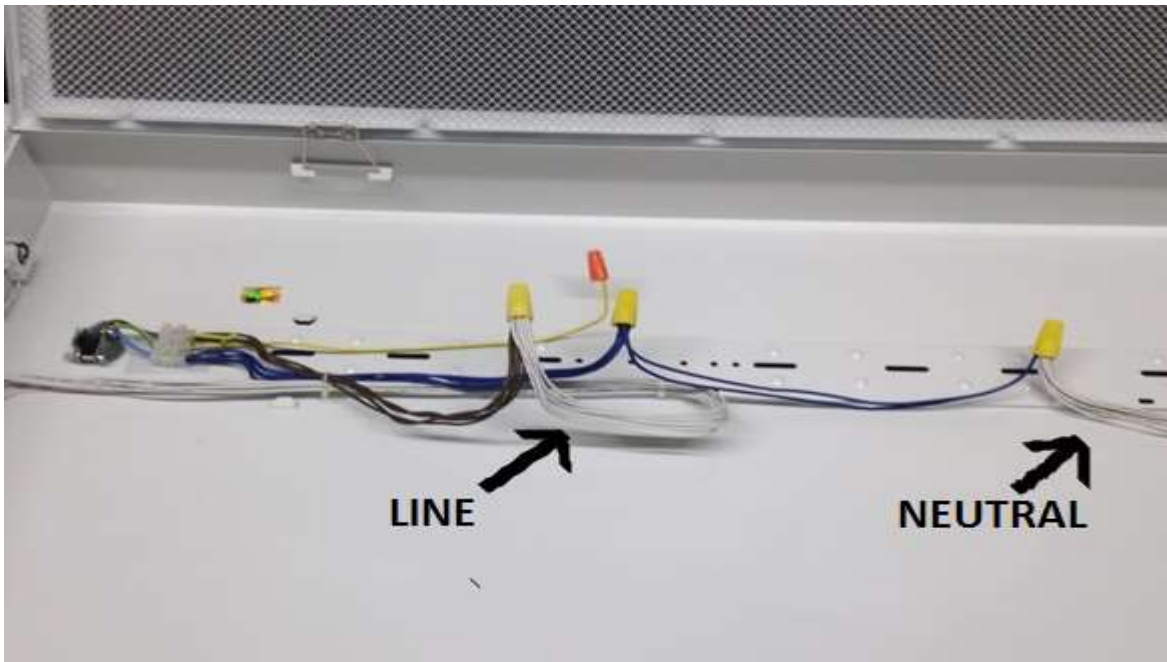


FIGURE 5C

INSTRUCTION 5: Connect the A.C. external voltage (120VAC-347VAC) to the lamp-holder wiring as per FIG 5A. Connect the A.C. neutral to lamp-holder(s) at one end of the luminaire and the A.C. mains to the opposing A.C. lamp-holder(s) as per FIG 5A. All wiring must be properly routed and suitably enclosed.

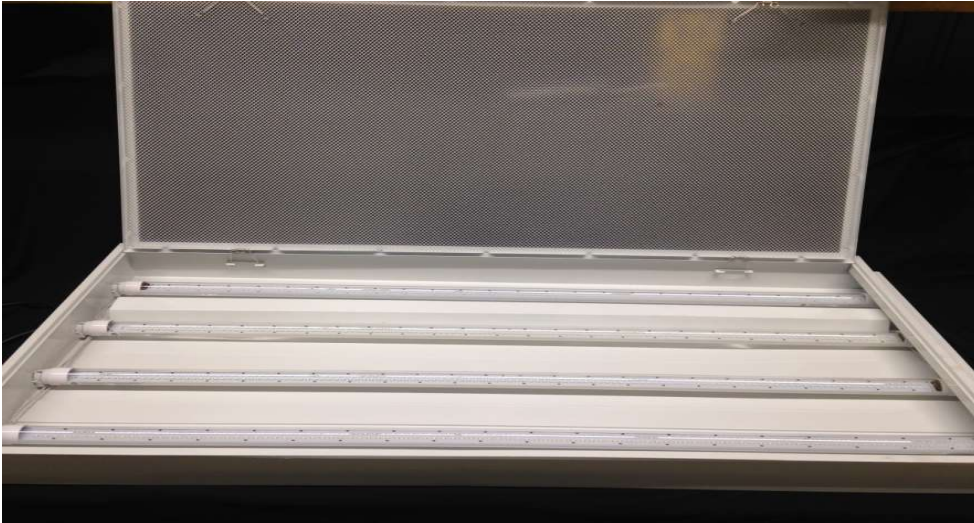


FIGURE 6.

INSTRUCTION 6: Install Bramal T-10 lamp(s) as per FIG 6. Turn on AC voltage and verify lamp operation.

Bramal LED T-10 Light Specifications

Input Voltage – AC: 80Vrms - 347Vrms (120/208/240/347 VAC)

Maximum Current: 200mA @ 120 VAC

Input Frequency: 0Hz – 200 KHz

Power Factor: >0.90

THD: <10%

Color: White

Lumens: >1900 lm (4100K model)

Max Power Consumption: 18W

Standard Power Consumption: 15-16W

Beam Angle: 120 degree

Length: ~1200mm (3.94 ft)

Work Environment: Indoor use / Outdoor use, applicable for dry / damp environment

QUALITY WARRANTY

This product is sold pursuant to Bramal LED Standard Terms and Conditions which can be found at www.bramalled.com and which contain important provisions, including, among others, Quality Warranty, exclusions and limitations on Bramal LED liability for damages, and restrictions on the remedies that are available to you.

CLEANING PROCEDURE

It is recommended that this product only be cleaned using a dry tact style cloth as required. Do not clean electronics with wet or damp clothes/rags nor any product containing solvents, as this is a shock and/or fire hazard.



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