SINCE 1945 KEYSTONE LIGHT MADE EASY®

DIRECTDRIVE LED
LINE VOLTAGE T8 TUBES

INSTALLATION AND OPERATING INSTRUCTIONS

KT-LED12T8-36GC-8XX-D-VDIM

INSTALLATION

Product includes the following components:

PARTS	QUANTITY (Distributor Pack)	QUANTITY (Carton Pack)
LED Tube	1	25 pcs/box
Installation Instruction Sheet	1	1

CAUTION: Before installing, make certain the AC power to the fixture is off.

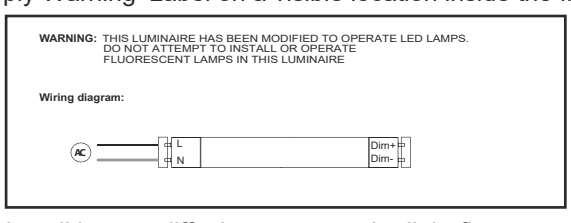
CAUTION: The electrical rating of this product is 120-277V. Installer must confirm that there is 120-277V at the fixture before installation.

CAUTION: LEDs are extremely bright. Do not look directly at the LED light source for extended time as over-exposure may cause harm to the eyes.

CAUTION: Not rated for use in Vapor Tight style fixtures. Do not install in vapor tight style fixtures. Doing so will void the warranty.

Installation Instructions (Single-Ended without dimmer)

1. Make sure the circuit breaker that supplies the power to the fixture is turned off.
2. Remove lens or diffuser cover (if applicable) and existing fluorescent lamps.
3. Open/Remove ballast wiring compartment cover.
4. Check if there is a ballast in the fixture, if not, please go to step 7.
5. Identify the line and neutral wires running from the breaker box to the ballast and confirm the power is off using a voltmeter.
6. Cut all wires connected to ballast, and remove ballast (and starter if present). Dispose of removed ballast and fluorescent lamps in accordance with government regulations in your area.
7. Identify what type of lampholders are in fixture **(Figure 1)**, If exsiting lampholder is internally shunted, then replace with new non-shunted lampholder. If lampholder is shunted with a jumper wire**(Figure 2),**remove wire to convert into non-shunted.
8. Wire using appropriate wiring diagram. (**Figure 3**、**4**).
9. Reinstall the ballast cover to hide all wires.
10. Install your new LED T8 replacement lamp.
11. Apply Warning Label on a visible location inside the fixture.



12. Reinstall lens or diffusion cover on the light fixture.
13. Turn power on at the breaker box.
14. Turn on the lights.

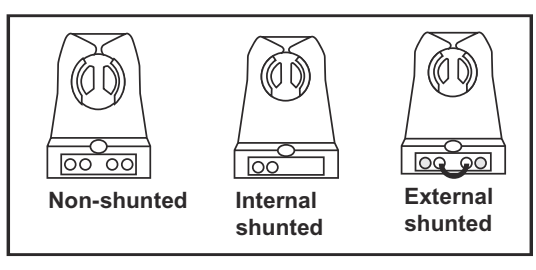


Figure 1.-Lampholder Type

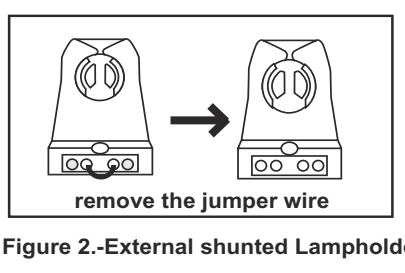


Figure 2.-External shunted Lampholder



Figure 3. - Single lamp wiring

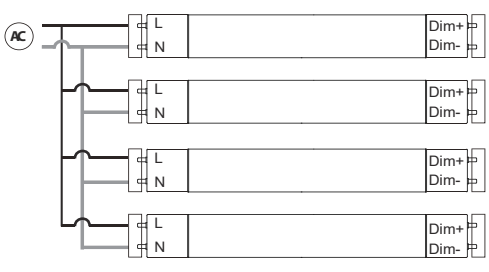


Figure 4. - Multiple lamps wiring

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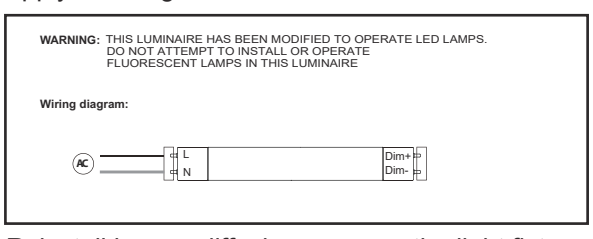
Installation Instructions (Single-Ended with dimmer)

Please refer to the dimmer's instructions for max number of bulbs and run length per circuit

1. Make sure the circuit breaker that supplies the power to the fixture is turned off.
2. Remove lens or diffuser cover (if applicable) and existing fluorescent lamps.
3. Open/Remove ballast wiring compartment cover.
4. Check if there is a ballast in the fixture, if not, please go to step 7.
5. Identify the line and neutral wires running from the breaker box to the ballast and confirm the power is off using a voltmeter.
6. Cut all wires connected to ballast, and remove ballast (and starter if present). Dispose of removed ballast and fluorescent lamps in accordance with government regulations in your area.
7. Identify what type of lampholders are in fixture **(Figure 1)**, If exsiting lampholder is internally shunted, then replace with new non-shunted lampholder If lampholder is shunted with a jumper wire**(Figure 2),**remove wire to convert into non-shunted.
8. Wire using appropriate wiring diagram. (**Figure 3**、**4**).
9. Reinstall the ballast cover to hide all wires.
10. Install your new LED T8 replacement lamp.
11. Apply Warning Label on a visible location inside the fixture



12. Reinstall lens or diffusion cover on the light fixture.
13. Turn power on at the breaker box.
14. Turn on the lights.

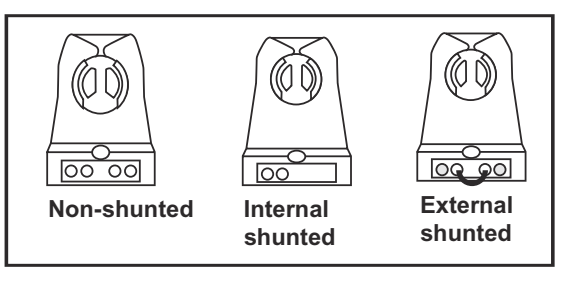


Figure 1.-Lampholder Type

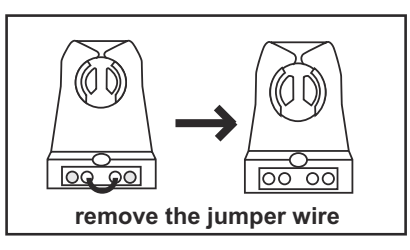


Figure 2.-External shunted Lampholder

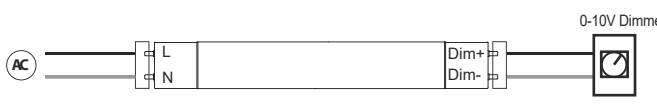


Figure 3. - Single lamp wiring

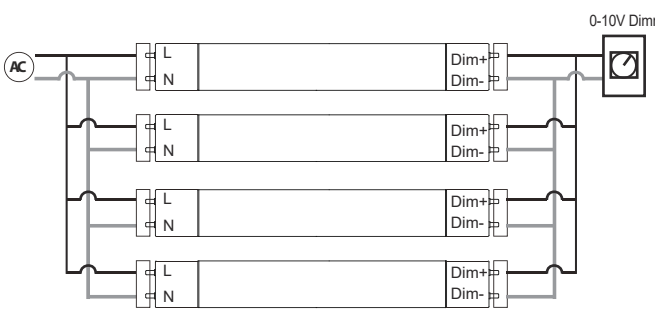


Figure 4. - Multiple lamps wiring

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To comply with the published safety standards, the following must be observed when using this LED tube:

LED TUBE MODEL NO.	INPUT VOLTAGE	INPUT FREQUENCY	INPUT CURRENT	INPUT WATTAGE	TUBE LENGTH
KT-LED12T8-36GC-8XX-D-VDIM	120-277V	50-60 Hz	123mA	12W	35.78 inches

WARNINGS

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.

AVERTISSEMENT - RISQUE D'INCENDIE ET DE DÉCHARGE ÉLECTRIQUE.L'INSTALLATION D'UN SYSTÈME DEL NÉCESSITE UNE CONNAISSANCE DES SYSTÈME ÉLECTRIQUES POUR LUMINAIRES. N'ENTREPRENEZ AUCUNE INSTALLATION SI VOUS N'ÊTES PAS QUALIFIÉ.CONTACTEZ UN ÉLECTRICIEN QUALIFIÉ.

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.

AVERTISSEMENT - RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE. INSTALLER CE KIT SEULEMENT DANS DES LUMINAIRES QUI AYANT LES CARACTÉRISTIQUES DE CONSTRUCTION ET LES DIMENSIONS MENTIONNÉES DANS LES PHOTOGRAPHIES ET / OU LES DESSINS ET OÙLA VÉRIFICATION D'ENTRÉE DU KIT RETROFIT NE DÉPLACE PAS LA VALEUR D'ENTRÉE DU LUMINAIRE.

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.

AVERTISSEMENT - AFIN D'ÉVITER TOUT DOMMAGE OU ABRASION AU SYTÈME DE CÂBLES, NE PAS EXPOSER CE DERNIER À DES BORDS DE PLAQUES EN MÉTAL OU À DES OBJETS TRANCHANTS.

WARNING: TO AVOID POTENTIAL FIRE OR SHOCK HAZARD, DO NOT USE THIS RETROFIT KIT IN LUMINAIRES EMPLOYING SHUNTED BI-PIN LAMPHOLDERS. NOTE: SHUNTED LAMPHOLDERS ARE FOUND ONLY IN FLUORESCENT LUMINAIRES WITH INSTANT-START BALLASTS. INSTANT-START BALLASTS CAN BE IDENTIFIED BY THE WORDS "INSTANT START" OR "I.S." MARKED ON THE BALLAST. THIS DESIGNATION MAY BE IN THE FORM OF A STATEMENT PERTAINING TO THE BALLAST ITSELF, OR MAY BE COMBINED WITH THE MARKING FOR THE LAMPS WITH WHICH THE BALLAST IS INTENDED TO BE USED, FOR EXAMPLE F40T12/IS. FOR MORE INFORMATION, CONTACT THE LED LUMINAIRE RETROFIT KIT MANUFACTURER.

AVERTISSEMENT - AFIN D'ÉVITER TOUT RISQUE D'INCENDIE OU DE DÉCHARGE, NE PAS UTILISER CE SYSTÈME POUR DES LUMINAIRES UTILISANT DES DOUILLES DE LAMPE BI-CONTACTS COURT-CIRCUITÉES.NOTE : LES DOUILLES DE LAMPE BI-CONTACTS COURT-CIRCUITÉES SE TROUVENT GÉNÉRALEMENT DANS LES LUMINAIRES FLUORESCENTS AVEC BALLASTS À ALLUMAGE INSTANTANNÉ. CES DERNIERS S'IDENTIFIENT PAR LES TERMES « INSTANT START » OU « I.S. ». CES TERMES PRENNENT LA FORME D'UN ÉNONCÉ RELATIF AU BALLAST MÊME OU PEUVENT ÊTRE AJOUTÉS AUX INDICATIONS CONCERNANT LES LAMPES AVEC LESQUELLES LES BALLASTS DOIVENT ÊTRE UTILISÉS (PAR EXEMPLE, F40T12/IS). POUR DE PLUS AMPLES RENSEIGNEMENTS, VEUILLEZ COMMUNIQUER AVEC LE FABRICANT DU SYSTÈME DE LUMINAIRE DEL.

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.

THE 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 ELECTRICAL INSTALLATIONS.

LUMINAIRE LORSQUE LA PERTINENCE DE LA COMBINAISON DOIT êTRE DéTERMINéE PAR LES AUTORITéS COMPéTENTES. CE PRODUIT DOIT êTRE MIS EN PLACE PAR UN éLECTRICIEN QUALIFIé CONFORMéMENT AUX CODES éLECTRIQUES APPROPRIéS APPLICABLES. LE GUIDE D'INSTALLATION NE SUPPLANTE PAS LES RèGLEMENTS LOCAUX OU NATIONAUX EN MATIèRE D'INSTALLATIONS éLECTRIQUES.

"INSTALLERS SHOULD 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."