

## T8U - LED T8 U-bend Universal (2 ft)

<b>WARNING/ADVERTENCIA/AVERTISSEMENT</b>		
<p>To reduce the risk of electrical shock, fire, or injury to persons; read and follow all warnings and installation instructions before installing. All installation should be performed by a qualified electrician.</p> <p><b>Risk of Electric Shock</b> Ensure power is off before installation or inspection. All wirings are performed in accordance with Electrical Code and local electrical code.</p> <p><b>Risk of Fire</b> Fixtures are rated for use with electronic ballast and 90°C rated supply wire.</p>	<p>Para reducir el riesgo de descarga eléctrica, incendio o lesiones a personas, lea y siga todas las advertencias e instrucciones de instalación antes de realizarla. Toda instalación debe ser efectuada por un electricista cualificado.</p> <p><b>Riesgo de descarga eléctrica</b> Asegúrese de desconectar la corriente antes de la instalación o inspección. Todos los cableados se realizan de acuerdo con el Código Eléctrico y el código eléctrico local.</p> <p><b>Riesgo de incendio</b> Las luminarias están clasificadas para uso con balasto electrónico y alambre nominal de alimentación de 90° C.</p>	<p>Lisez et suivez les instructions d'installation et les avertissements avant l'installation. Toute l'installation doit être exécutée par un électricien qualifié, pour réduire les risques de choc électrique, de feu ou de blessures corporelles.</p> <p><b>Risque de choc électrique</b> Assurez-vous que le courant soit coupé avant l'installation ou l'inspection et que tout le câblage soit effectué en conformité avec le code d'électricité et le code local d'électricité.</p> <p><b>Risque de feu</b> Les appareils sont conçus pour une utilisation avec ballaste électronique et avec un fil d'alimentation nominale de 90° C.</p>
<p><b>FOR YOUR SAFETY</b> While performing installations described, gloves, safety glasses or goggles should be worn.</p>	<p><b>PARA SU SEGURIDAD</b> Mientras realice las instalaciones descritas, se recomienda el uso de guantes y gafas de seguridad.</p>	<p><b>POUR VOTRE SÉCURITÉ</b> Vous devriez porter des gants et des verres de protection lors des installations détaillées.</p>

<p>Install this LED Tube only in the luminaire that have the construction features and dimensions shown in the photographs and/or drawings. Do not make or alter any open holes in an enclosure of wiring or electrical components during the installation.</p> <p>To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.</p> <p>Do not alter, relocate, or remove wiring, lampholders, power supply, or any other electrical component.</p> <p><b>THIS RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY UL OR AUTHORITIES HAVING JURISDICTION.</b></p> <p><b>THERE ARE LED TUBE, OPERATION INSTRUCTION AND FILED APPLIED LABEL IN THIS RETROFIT KIT.</b></p>	<p>Instale este kit solo en la luminaria que tiene las características de construcción y dimensiones que aparecen en las fotografías y/o dibujos. No realice ni altere los agujeros abiertos en un recinto de cableado ni en cualquier componente eléctrico durante la instalación del kit.</p> <p>Para evitar daños en el cableado o abrasiones, no exponga el cableado a hojas de metal laminado u otros objetos cortopunzantes.</p> <p>No altere, reubique o elimine cables, portalámparas, tomacorriente o cualquier otro componente eléctrico.</p> <p><b>ESTE EQUIPO DE RETROFIT SE ACEPTA COMO UN COMPONENTE DE UNA LUMINARIA DONDE LA IDONEIDAD DE LA COMBINACIÓN DEBERÁ SER DETERMINADA POR LAS AUTORIDADES QUE TIENEN JURISDICCIÓN.</b></p> <p><b>HAY TUBO LED, INSTRUCCIÓN DE FUNCIONAMIENTO Y ETIQUETA APLICADA EN CAMPO EN ESTE EQUIPO DE RETROFIT.</b></p>	<p>Installez cet ensemble seulement dans un luminaire qui possède les caractéristiques de construction et les dimensions telles que démontrées sur les photographies et/ou dessins. Ne pas percer de trous ou modifier les trous existants dans un boîtier ou des composants électriques durant l'installation de l'ensemble.</p> <p>Pour prévenir les dommages ou l'abrasion, ne pas mettre en contact le câblage avec des bords de plaques de metal ou tout autre objet coupant.</p> <p>Ne pas modifier, délocaliser ou enlever du câblage, des supports de lampes, une source d'alimentation ou tout autre composant électrique.</p> <p><b>CE KIT DE RETROFIT EST ACCEPTÉ COMME COMPOSANT D'UN LUMINAIRE O WH L'ADÉQUATION DE LA COMBINAISON EST DÉTERMINÉE PAR LES AUTORITÉS COMPÉTENTES.</b></p> <p><b>IL Y A LED TUBE, INSTRUCTIONS DE FONCTIONNEMENT ET ÉTIQUETTE APPLIQUÉE SUR LE TERRAIN DANS CE KIT RETROFIT.</b></p>
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The units covered by this report were intended to retrofit surface mount, Type IC or non-IC recessed mount Listed fluorescent luminaires that use maximum four tubular lamps, the minimum lamp compartment dimensions are tabulated below.

<b>Model Number</b>		LED15SWT8U/24FR22/8CCT5AB/UNV	
<b>Min. Lamp compartment of Luminaire, overall dimensions, mm</b>	<b>Length</b>		<b>1210</b>
	<b>Width</b>		<b>530</b>
	<b>Height</b>		<b>100</b>
<b>Maximum LED Lamp Quantity in Luminaire</b>			<b>4</b>

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## T8U - LED T8 U-bend Universal (2 ft)

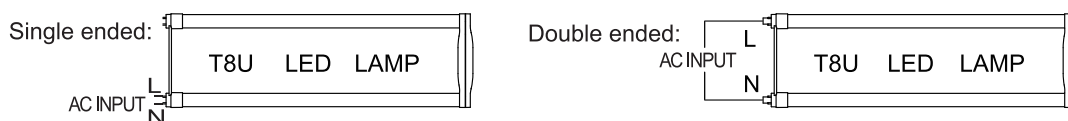
# Operation Instruction

## — Dual Mode (Direct Replacement & Single ended By Pass & Double ended By Pass)

Input Voltage: Determined by fluorescent ballast (Direct Replacement mode)  
120-277VAC 50/60Hz (By Pass Mode)

### 1. Product Features:

- UL certified
- Full glass housing: No Aging, Yellowing, Bending.
- Two operation models:
  - Direct Replacement Mode (Mode I)
  - Plug-n-Play replacement
  - Compatible with instant start electronic ballast
  - By Pass Mode (Mode II)
  - Direct connect with the mains: 120–277VAC 50/60Hz (universal voltage input)



### 2. Products Applications:

Widely used in residential buildings, offices, shopping malls, supermarkets, hospitals, assembly lines, warehouses, etc. for energy saving illumination.

### 3. Installation Instructions:

Please completely comply with these instructions and notes, to ensure that the product is operated in a safe condition.

### 4. Safety Information:

- 1). Check the lamp before installation, if there is any damage caused during transportation, do not install.
- 2). Maintenance should be carried out by technical personnel only.
- 3). Do not stare at the light source with bare eyes for a long time, or beam to others' eyes.
- 4). Do not place any objects on the lamp.
- 5). Keep the lamp away from flame or high temperature objects.
- 6). Only replace with same type of LED tube! Risk of electrical shock!
- 7). If the glass lamp tube is broken, the lamp must be disposed of immediately!

### 5. Maintenance Notes:

- 1). Disconnect lamp from power supply before any maintenance.
- 2). Clean luminaire with dry cloth.
- 3). Do not clean the lamp with corrosive chemicals.

### ⚠ Safety Precautions :

**For your and others' safety, please read the precaution carefully before installation.**

#### **For Direct Replacement Mode (Mode I)**

- 1). WARNING: Risk of shock. Disconnect power before installation.
- 2). WARNING: Risk of fire, use only in place of fluorescent lamps specified on label. Risk of electric shock. Suitable for damp locations.
- 3). LED T8 U-Bend for use only with products described and installed in accordance with product specifications. LED T8 U-Bend to be operated with fluorescent electronic ballast.
- 4). Not for emergency lighting.
- 5). This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30 MHz.

#### **For By Pass Mode (Mode II)**

- 1). Product should be installed by qualified electrician.
- 2). Switch off the power supply before commencing work, make sure correct connection before power on.
- 3). Not for emergency lighting.
- 4). This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- 5). Only use the control provided with or specified by these instructions to control this lamp. This lamp will not operate properly when connected to a standard (incandescent) dimmer or dimming control. Only operate with specific dimmer MEX\_G1\_NA\_45W.

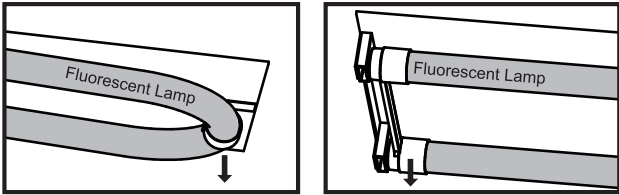
Please check [www.naturalLED.com](http://www.naturalLED.com) for product information

**T8U - LED T8 U-bend Universal (2 ft)**

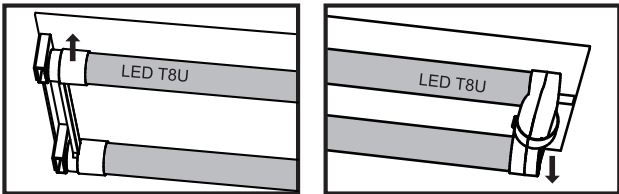
**DIRECT REPLACEMENT Mode (Mode I)**

**INSTALLATION INSTRUCTIONS**

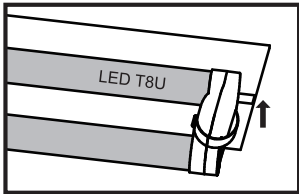
- 1) Make Sure Power is OFF.
- 2) Remove lens or diffuser (if applicable)
- 3) Remove existing fluorescent lamps from the luminaire.



- 4) Bring LED lamp to luminaire, ensure that the LED lamp front points away from the back of the luminaire and insert lamp pins into luminaire lamp holders.



- 5) Insert lamp holder that on the other side of lamp pins into metal hook of the luminaire.



- 6) Place lens or diffuser back in place (if applicable)
- 7) Power ON.

**DO NOT INSTALL THIS LAMP IN A PRE - HEAT LUMINAIRE.**  
**N'INSTALLEZ PAS CETTE LAMPE DANS UN APPAREIL D'ÉCLAIRAGE DE PRÉCHAUFFAGE.**  
**THIS LAMP ONLY OPERATES ON ELECTRONIC BALLASTS. IF LAMP DOES NOT LIGHT WHEN THE LUMINAIRE IS ENERGIZED, REMOVE LAMP FROM LUMINAIRE AND CONTACT LAMP MANUFACTURER OR QUALIFIED ELECTRICIAN.**  
**CETTE LAMPE OPERE SEULEMENT AVEC LE BALLAST ELECTRONIQUE. SI LA LAMPE NE S'ALLUME PAS QUAND L'APPAREIL D'ECLAIRAGE ACTIVE, ENLEVEZ LA LAMPE DE L'APPAREIL D'ECLAIRAGE ET CONTACTEZ LE FABRICANT DE LAMPE OU UN ELECTRICIEN QUALIFIE.**  
**CAUTION RISK OF FIRE - IF THE LAMP OR LUMINAIRE EXHIBITS UNDESIRABLE OPERATION (BUZZING, FLICKERING, ETC.), IMMEDIATELY TURN OFF POWER, REMOVE LAMP FROM LUMINAIRE AND CONTACT MANUFACTURER.**  
**ATTENTION RISQUE DE FEU - SI LA LAMPE OU LE LUMINAIRE MONTRE DES SIGNES D'OPERATION INDESIRABLE (BRUIT, VIBRATION, CLIGNOTEMENT, ETC.), ALORS COUPER IMMÉDIATEMENT LE COURANT ET ENLÈVER LA LAMPE DE L'APPAREIL D'ÉCLAIRAGE ENTRER EN CONTACT AVEC LE FABRICANT.**  
**Type A LAMP – intended for direct substitution of a fluorescent lamp and operation from the integral ballast without any modifications to the fluorescent luminaire.**

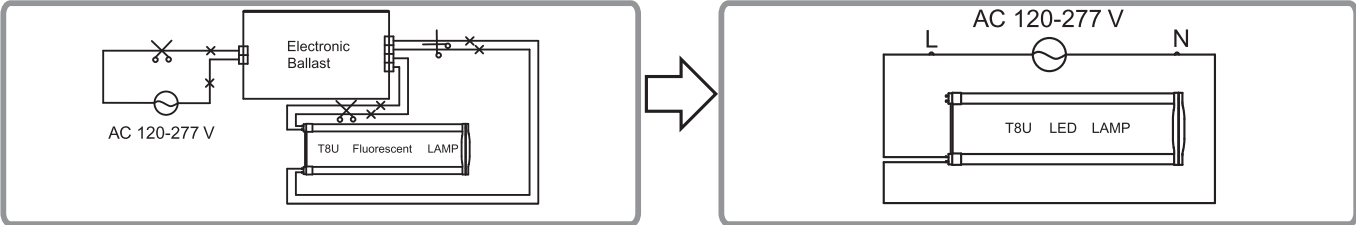
# T8U - LED T8 U-bend Universal (2 ft)

## BY PASS Mode (Mode II)

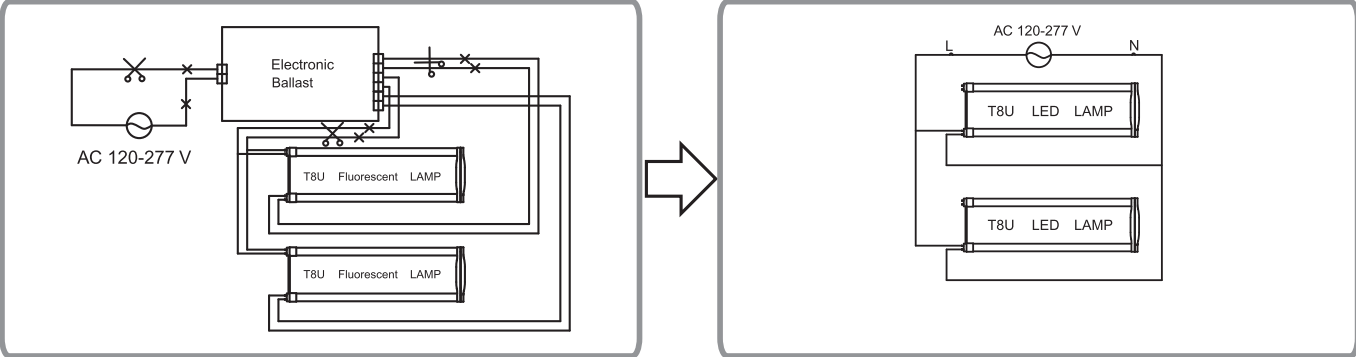
⚠ The below ballast wiring represents typical configuration. The actual ballast wiring varies according to ballast model. The socket should be non-shunted.

### Single Ended Wiring Instruction

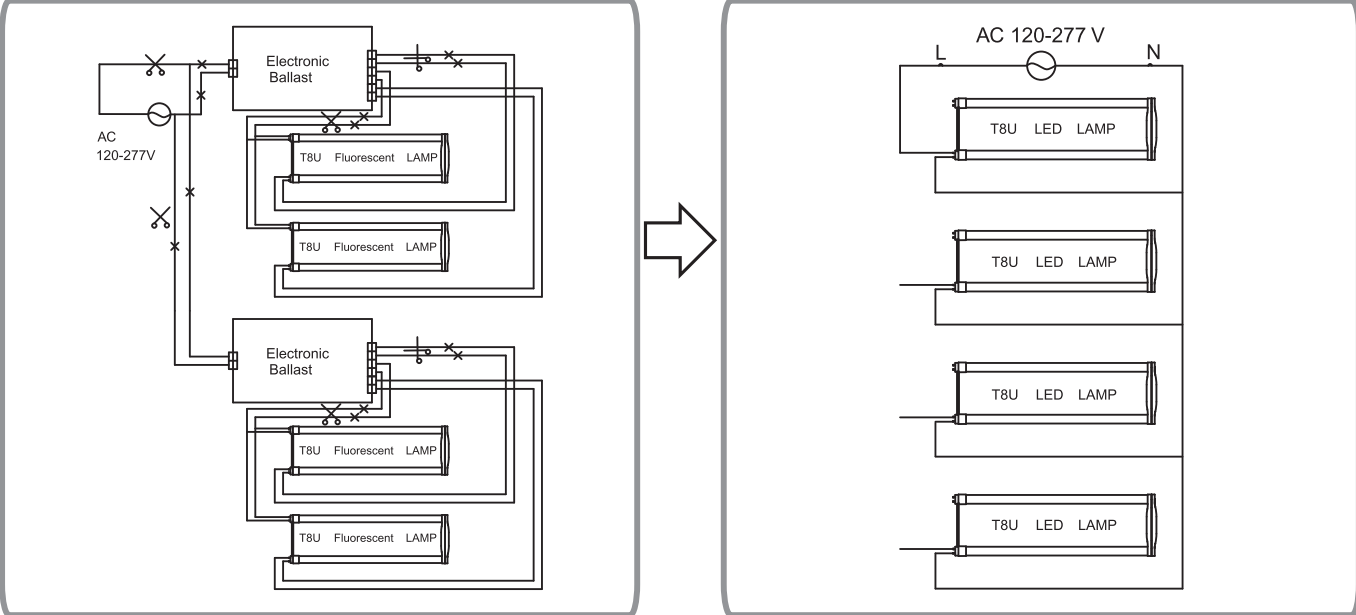
#### Retrofit luminaire with 1 lamp



#### Retrofit luminaire with 2 lamps



#### Retrofit luminaire with 4 lamps

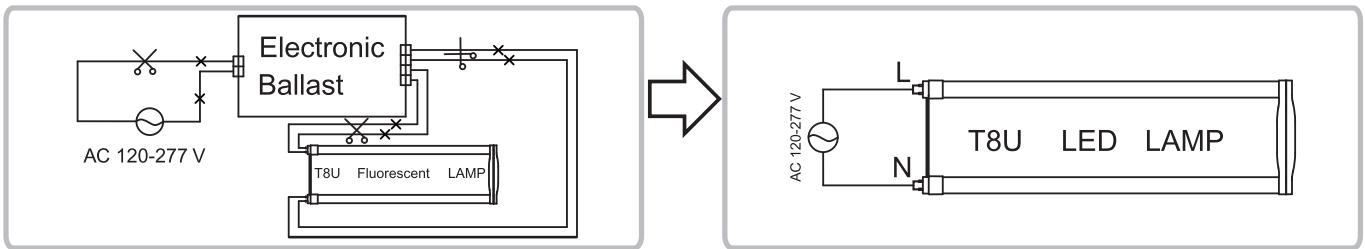


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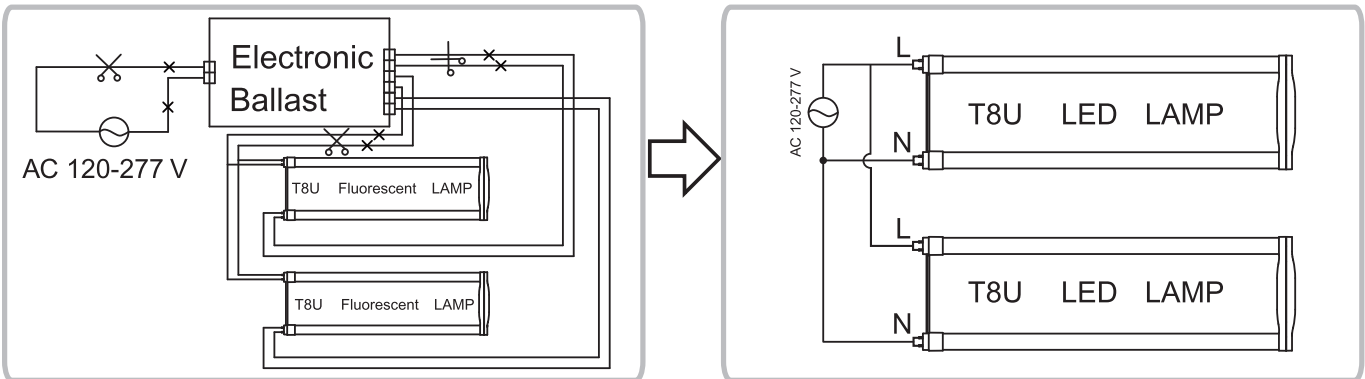
**⚠ The below ballast wiring represents typical configuration. The actual ballast wiring varies according to ballast model. It is not needed to change socket (if in good condition) to operate double ended lamps, regardless the type of sockets. Please make sure one side of fixture is connected to Live (L) and the other side to Neutral (N).**

### Double Ended Wiring Instruction

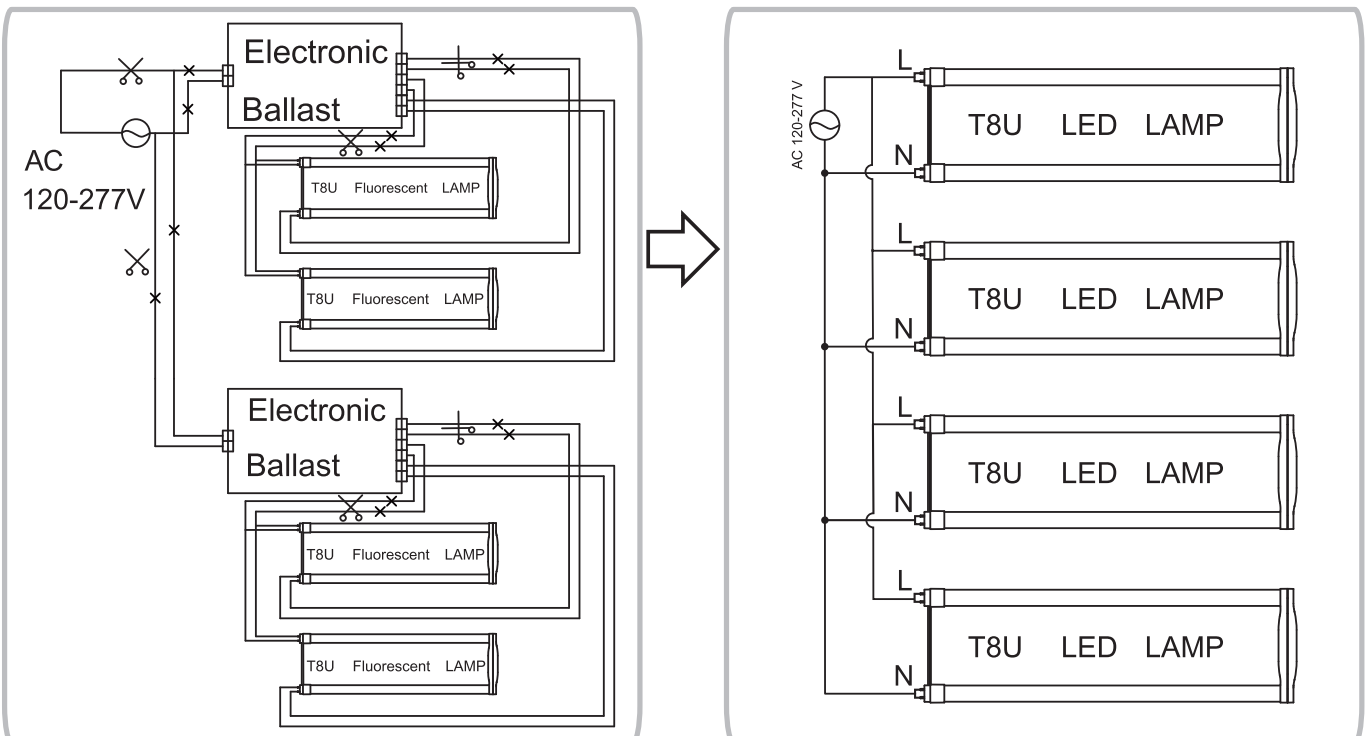
#### Retrofit luminaire with 1 lamp



#### Retrofit luminaire with 2 lamps



#### Retrofit luminaire with 4 lamps



**T8U - LED T8 U-bend Universal (2 ft)**

**WARNING - Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.**

**AVERTISSEMENT - Risque d'incendie ou de choc électrique. Installation du kit de Retrofit LED exige une connaissance des systèmes électriques luminaires. Si vous n'êtes pas qualifié, ne tentez pas de l'installation. 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. Installez ce kit dans les luminaires qui ont les caractéristiques de construction et les dimensions indiquées dans les photographies et / ou dessins et où la cote d'entrée du kit de modification ne dépasse pas la capacité d'entrée du luminaire.**

**WARNING -To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.**

**AVERTISSEMENT - Pour éviter d'endommager le câblage ou à l'abrasion, ne pas exposer le câblage aux bords de tôle ou d'autres objets pointus.**

**WARNING: To avoid potential fire or shock hazard, do not use this retrofit kit in luminaires employing shunted bi-pin lampholders. Note: Shunted lamp holders 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: Pour éviter tout incendie potentiel ou tout risque de choc, ne pas utiliser ce kit de rénovation dans les luminaires utilisant des douilles shuntées à deux broches. Remarque: les supports de lampe shunté ne se trouvent que sur les luminaires fluorescents avec ballasts et à allumage instantané. Les ballastes à allumage instantané peuvent être identifiés par les mots "Démarrage instantané" ou "I.S" sur la ballaste. Cette désignation peut être présentée sous la forme d'une déclaration relatives au ballast lui-même, ou peut être combinée avec le marquage pour les lampes dont le ballast est destiné à être utilisé, par exemple le modèle F40T12 / EST. Pour plus d'informations, contactez le fabricant du kit de rénovation de luminaire LED.**

**CAUTION - RISK OF ELECTRIC SHOCK. Do not use if outer lamp envelope is damaged or broken. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.**

**Installers should not disconnect existing wires from lampholder terminals to make new connections at lampholder terminals. Instead installers should cut existing lampholder leads away from the lampholder and make new electrical connections to lampholder lead wires by employing applicable connectors.**

**THIS 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.**

**THERE ARE TUBE, OPERATION INSTRUCTION AND FILED THE DOUBLE-ENDED OR SINGLE-ENDED APPLICATION LABEL IN THIS RETROFIT KIT.**

**Type B LAMP – intended for operation in luminaires with traditional fluorescent-type lampholders wired directly to the branch circuit. This includes both factory-wired luminaires as well as those converted for this purpose under a retrofit program. 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.**