



## T8 LED Xcaliber

### ByPass Single&Double-Ended Tube

(TGL-VBP4FT-9.8W)

#### Installation Instructions

“THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS”

“**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 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 OÙ LA 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 SYSTÈME DE CÂBLES, NE PAS EXPOSER CE DERNIER À DES BORDS DE PLAQUES EN MÉTAL OU À DES OBJETS TRANCHANTS.

“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.

LE NÉCESSAIRE DE MODERNISATION EST ACCEPTÉ à TITRE DE COMPOSANT D'UN 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 .

“Not for use with light dimmers”

“THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS”

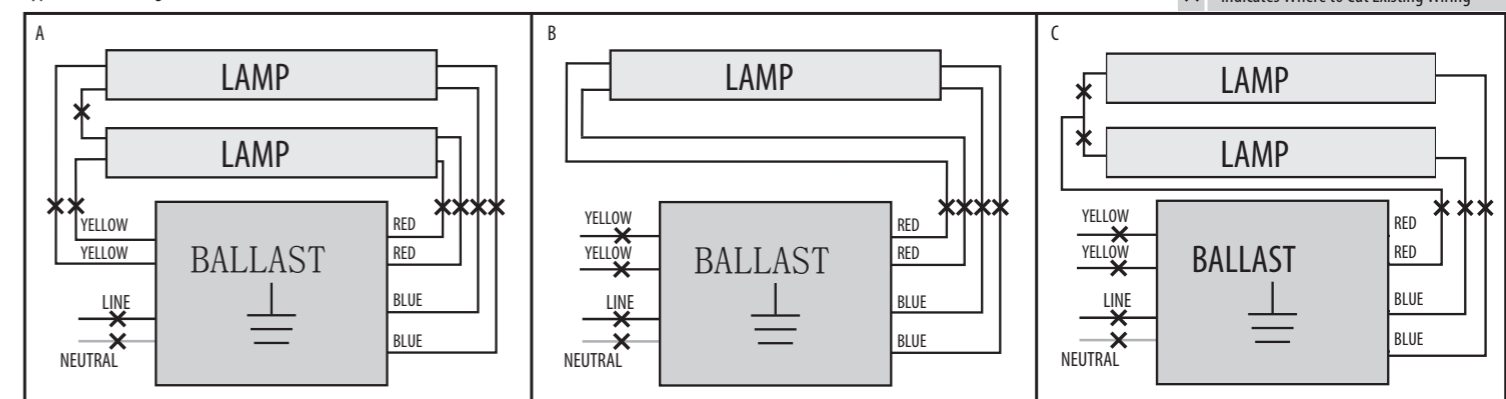
“Installers should not disconnect existing wires from lamp holder terminals to make new connections at lamp holder terminals. Instead installers should cut existing lamp holder leads away from the lamp holder and make new electrical connections to lamp holder lead wires by

“**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.

Typical Ballast Configurations



#### Removing Existing Fluorescent System

1. Disconnect power from fixture.
2. Remove fluorescent lamp(s).
3. Remove lens and wiring compartment, if applicable.
4. Cut all wires connected to the ballast as shown in Diagrams A, B, and C.
5. Identify what type of lampholders are in fixture. Double-Ended wiring installations can be used with shunted G13 or nonshunted G13 lampholders (with instructions to externally shunt). See Figures 1 and 2.

#### Installing the Lamps-Double Ended

- I. Confirm that power is still disconnected from fixture.
- II. Make sure fixture is properly grounded.
- III. Follow step 1 for single lamp application or steps 2 & 3 for multiple lamp application, based on the number of lamps in the fixture:

##### Single Lamp

1. From AC wires, connect line (L) to Side A lampholder and neutral (N) to Side B lampholder. If only one lamp is being installed, proceed to step 4.

##### Multiple Lamps

2. Follow the steps above for single lamp connection to connect the first lamp.
3. Connect the terminals from the first lamp to the matching terminals on the lampholder of the second lamp with line and neutral wires as shown below. Continue daisy-chain connection for each additional lamp.
4. Complete all electrical connections with appropriate connectors/wire nuts as needed, per all local and national electrical codes.

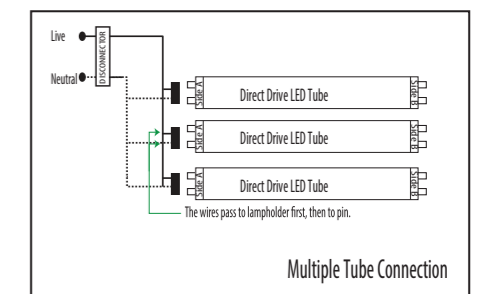
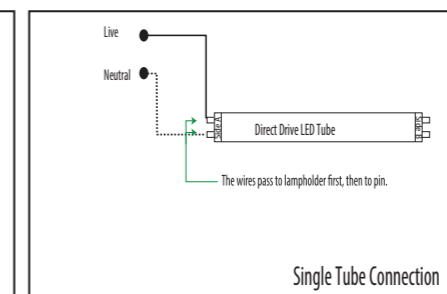
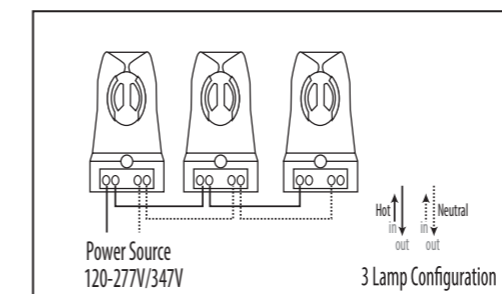
**NOTE:** There should not be any exposed wires from sockets left unconnected.

5. Replace wiring compartment cover.
6. Install all tubes.
7. Install LED tubes so that the LEDs are pointed in the proper direction for illumination, and install any lens or diffuser as applicable.
7. Apply power to fixture and check for illumination.

#### Installing the Lamps-Single Ended (Non-Shunted)

1. Read all WARNING/CAUTIONS before continuing this section.
2. Disconnect power at the source.
3. Remove lens if applicable, remove cover and fluorescent tubes.
4. Cut all wires that connect ballast. Properly discard ballast or cap off wires.
5. Replace lamp holders at power end with supplied non-shunted lamp holders.
6. Connect hot wire from power source into supplied non-shunted Lamp Holder “Hot In”.
7. Connect neutral wire from power source into supplied non-shunted Lamp Holder “Neutral In”.
8. If installing multiple lamps, continue reading. Otherwise skip to section 14.
9. Connect separate hot wire into “Hot Out” from primary source lamp holder and connect that wire into “Hot In” on the adjacent tube.

10. Connect separate neutral wire into “Neutral Out” from primary source lamp holder and connect that wire into “Neutral In” on the adjacent tube.
11. Continue this process for additional lamps.
12. Do not wire opposite end of lamp holder.
13. Install lamp with the (driver side) into the wired end.
14. Visibly affix “Modification Sticker” and reinstall housing cover and lens if applicable.
15. Return power back to source and installation is now completed.



Note: The luminaire shall only mount max. 4 tubes.