Installation Guide:

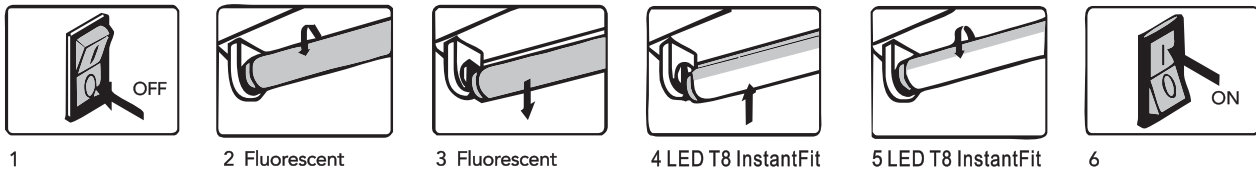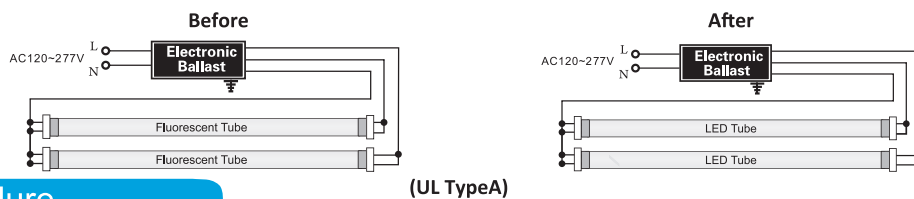| 1 | 2 Fluorescent | 3 Fluorescent | 4 LED T8 InstantFit | 5 LED T8 InstantFit | 6 |

"Plug and Play" Procedure

1. Turn off the power.
2. Remove diffuser (if provided).
3. Remove the fluorescent tubes. Please dispose of these items properly as they contain mercury.
4. Select the appropriate CCT, then put led tube in the lighting fixture.
5. Install the LED tubes, close the diffuser (if provided).
6. Turn on the power.

⚠ **Ballast Compatibility List must be checked prior to installation. See www.comm-led.com for ballast compatibility on model.**

Before

AC120~277V

Electronic Ballast

Fluorescent Tube

Fluorescent Tube

After

AC120~277V

Electronic Ballast

LED Tube

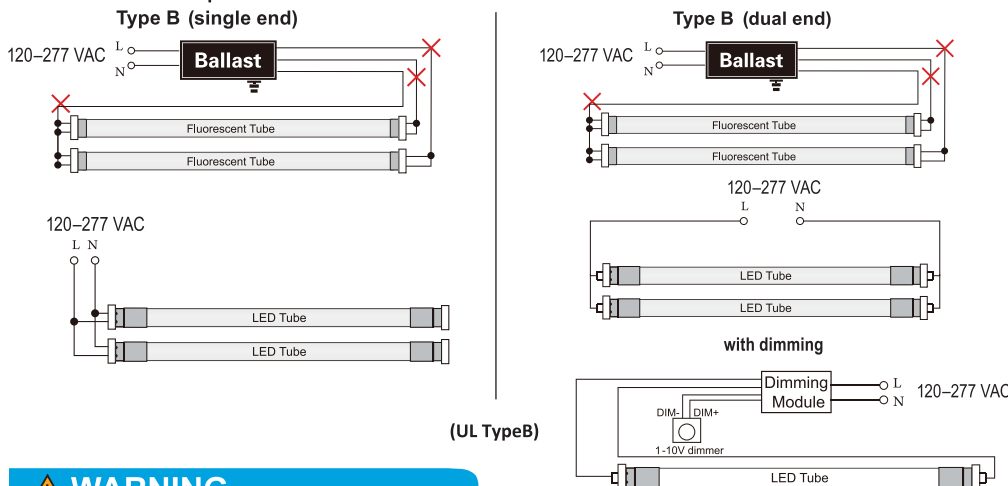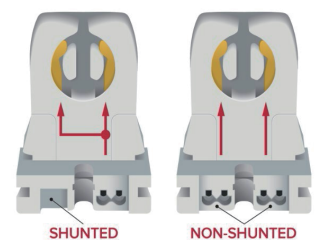LED Tube

(UL TypeA)

Retrofit Procedure

1. Turn off the power.
2. Remove diffuser (if provided).
3. Remove the fluorescent tubes. Please dispose of these items properly as they contain mercury.
4. Cut the wires as shown in the diagram.
5. Make the new wire connect to branch circuit as shown.
6. Replace the cover over the wiring channel.
7. Install the LED tubes, close the diffuser.
8. Turn on the power.

Type B (single end)

120–277 VAC

Ballast

Fluorescent Tube

Fluorescent Tube

120–277 VAC

L N

LED Tube

LED Tube

(UL TypeB)

Type B (dual end)

120–277 VAC

Ballast

Fluorescent Tube

Fluorescent Tube

120–277 VAC

L N

LED Tube

LED Tube

with dimming

Dimming Module

DIM- DIM+

1-10V dimmer

L N 120–277 VAC

LED Tube

Shunted vs. non-shunted sockets

Path of electrical current in red

SHUNTED   NON-SHUNTED

Shunted socket is required in double end mode

⚠ WARNING

1. These lamps should be installed by a licensed electrician.
2. These lamps should be used indoors(damp or dry locations only).Not suitable for wet location.
3. Make sure tombstones/lamp holders are still in good condition and not defected before installation.
4. Ensure the brand and model no. of the ballast of replacement tube are in our compatible ballast list.
5. Make sure the ballast is working and still under warranty before installation.
6. Put LED tubes/G13 pins into right position of the socket, install properly.
7. This device is not suitable for using with emergency exits.
8. Do not install these lamps in enclosed fixtures.
9. Do not use with magnetic ballasts.
10. Do not use with dimmers.Dimmable when used with compatible dimming ballast (UL Type A) or compatible dimming module (UL Type B).

Commercial LED is not responsible for products damaged by improper installation or operation.

CLT94 BALLAST LIST FOR T8 LED TUBE

1. Our tubes can be compatible with the ballasts listed below, if you intend to install ballast compatible tube with ballasts not be listed below,risk of damage or losses may occur. We disclaim liability for any damage or losses by not following the instructions in this document.

2. We are testing more and more ballasts and will update this list all the time.If you do not see your ballast on this list, please contact us.

⚠ Ballast Compatibility List must be checked prior to installation. See www.comm-led.com for ballast compatibility on model.

Non-Dimming Ballast Compatability List

ADVANCE	
1	IOPA-4P32-LW-N

GE	
1	GE232MAX-L/Ultra
2	GE332MAX-N/Ultra
3	GE232MAX347-N
4	GE432MAX347-N
5	GE232-MVPS-N
6	GE332-MVPS-N
7	GE432-MVPS-N
8	GE432-120RESDIYB
9	GE-240-RS-MV-N
10	GE232-N-347

OSRAM	
1	QHE 2x32T8/UNV ISN-SC
2	QHE 3x32T8/UNV ISN-SC
3	QHE 3x32T8/UNV PSN-SC

TRIAD	
1	B232IUNVHP-N
2	B332IUNVHP-A
3	B432IUNVHP-A
4	B232IUNVHP-B

PHILIPS	
1	ICN-2P32-N
2	ICN-3P32-N
3	IOP-4P32-LW-N
4	IOPA-1P32-N
5	IOPA-4P32-N
6	IOPA-2P32-LW-N
7	IOP-3P32-N

SYLVANIA	
1	QHE 1x32T8/UNV ISN-SC
2	QHE 3x32T8/UNV ISL-SC
3	QTP 2x32T8/UNV ISL-SC
4	QTP 2x32T8/UNV ISN-SC
5	QT 4X32/120 LP
6	QT 2x32 T8/347 ISL-SC
7	QHE 4x32T8/347 ISN-SC
8	QHE 4x32T8/347 ISL-SC

UNIVERSAL	
1	B332IUNVHE-A
2	B432IUNVHE-A
3	B232IUNVEL-N
4	B332IUNVEL-A
5	B232IUNVHEH-A
6	B332PUNVHE-A
7	B4321UNVEL-A

Dimming Ballast Compatability List

GE	
1	GE232MAX90-S6
2	GE232MAX90-S60 NNB
3	GE332MAX90-V60