

STOP – BEFORE YOU BEGIN

READ THESE INSTRUCTIONS COMPLETELY AND CAREFULLY

WARNING Risk of fire or electrical shock. LED retrofit installations require knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

WARNING Risk of fire or electrical shock. Install this retrofit kit only in luminaires that have the construction features or dimensions in the photographs and /or drawings.

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

WARNING Do not make or alter holes in an enclosure of wiring or electrical components during retrofit installation.

WARNING Risk of personal injury. The equipment in this retrofit kit is being installed in may have sharp edges, wear gloves to prevent cuts or abrasions.

WARNING This retrofit kit is to be used and powered only with a class 2 LED Driver

WARNING The Retrofit Kit is accepted as a component of a luminaire where the suitability of the combination shall be determined by CSA or Authorities Having Jurisdiction.

WARNING Risk of fire or electrical shock. Luminaire wiring, LED Driver or other electrical parts may be damaged when installing the retrofit kit. Inspect wiring and components for damage.

WARNING Risk of fire or electrical shock. Not for direct replacement of Fluorescent Lamps. Use Only With Power Supplies under page 5 of the instructions.

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

WARNING “NOT FOR USE WITH DIMMERS”

SUITABLE FOR DRY/DAMP LOCATIONS ONLY

SUITABLE FOR USE IN NON-ENCLOSED, SURFACE-MOUNTED AND RECESSED TYPE IC OR TYPE NON-IC LUMINAIRES.

Electrical Ratings:

Maximum 5 AMP's for luminaires/tubular lamps.

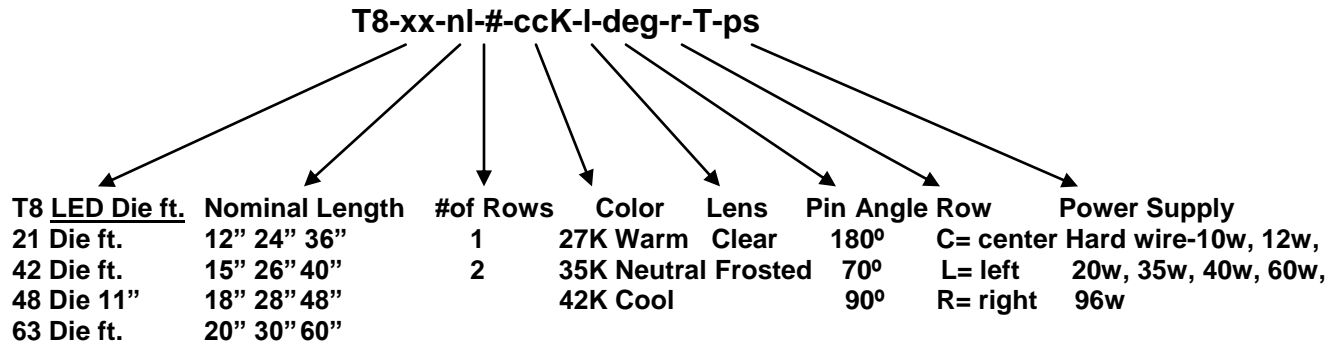
Input in Volts – 90/264Vac, 100/277Vac, 120/277Vac See page 5

Hertz (50/60Hz)

See pages 2, 3, & 4 for tubular lamp ratings

Retrofit Kit Contents

LEDingEDGE T8 Model Part Number System



Replace "xx" with "21" or "42" or "63" LED Die per foot.

Replace "nl" with Nominal Length in inches.

Replace "#" with Number of rows

Replace "cc" with Color in Kelvin Temperature

Replace "l" with "C" for Clear Lens or "F" for Frosted into lens

Replace "deg" with Row Angle 70°, 90°, or 180°

Replace "r" (right side) or "L" (left side) row location looking into lens with + on top

Replace "ps" with recommended LED Driver

HOW TO ORDER KIT'S

1. Choose your brightness intensity –
 - General Purpose – 505 Lumens-72.7 Lumens/Watt
 - Super Bright – 732 Lumens-52.2 Lumens/Watt
 - Ultra Bright – 1,316 Lumens=74.4 Lumens/Watt
2. Choose the number of luminaires needed.
3. Calculate the total wattage of all luminaires.
4. Choose the correct LED Driver that will provide the low voltage power to all luminaires.
5. Use the contents charts on the following pages to identify the items in the kit. (All LED Drivers come with 5 Wire Nuts)

LEDingEDGE T8 One Row Model Description

| T8-xx-nl-#-cc-r-l-deg-T Model Numbers | Nominal Length | Volts | Hertz | Total LED Die | Watts |
|--|---------------------------|--------------|--------------|--------------------------|--------------|
| T8-21-12-1-ccK-l-deg-r-T | 12" | 12v or 24v | 50/60 | 18 | 1.44w |
| T8-42-12-1-ccK-l-deg-r-T | 12" | 12v or 24v | 50/60 | 36 | 2.88w |
| T8-48-12-1-ccK-l-deg-r-T | 12" | 12v or 24v | 50/60 | 48 | 3.84w |
| T8-63-12-1-ccK-l-deg-r-T | 12" | 12v or 24v | 50/60 | 54 | 4.32w |
| T8-21-15-1-ccK-l-deg-r-T | 15" | 12v or 24v | 50/60 | 24 | 1.92w |
| T8-42-15-1-ccK-l-deg-r-T | 15" | 12v or 24v | 50/60 | 48 | 3.84w |
| T8-48-15-1-ccK-l-deg-r-T | 15" | 12v or 24v | 50/60 | NA | |
| T8-63-15-1-ccK-l-deg-r-T | 15" | 12v or 24v | 50/60 | 72 | 5.76w |
| T8-21-18-1-ccK-l-deg-r-T | 18" | 12v or 24v | 50/60 | 27 | 2.16w |
| T8-42-18-1-ccK-l-deg-r-T | 18" | 12v or 24v | 50/60 | 54 | 4.32w |
| T8-48-18-1-ccK-l-deg-r-T | 18" | 12v or 24v | 50/60 | NA | |
| T8-63-18-1-ccK-l-deg-r-T | 18" | 12v or 24v | 50/60 | 81 | 6.48w |
| T8-21-20-1-ccK-l-deg-r-T | 20" | 12v or 24v | 50/60 | 30 | 2.40w |
| T8-42-20-1-ccK-l-deg-r-T | 20" | 12v or 24v | 50/60 | 60 | 4.80w |
| T8-48-20-1-ccK-l-deg-r-T | 20" | 12v or 24v | 50/60 | NA | |
| T8-63-20-1-ccK-l-deg-r-T | 20" | 12v or 24v | 50/60 | 90 | 7.20w |
| T8-21-24-1-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 36 | 2.88w |
| T8-42-24-1-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 72 | 5.76w |
| T8-48-24-1-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 96 | 7.68w |
| T8-63-24-1-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 108 | 8.64w |
| T8-21-26-1-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 42 | 3.36w |
| T8-42-26-1-ccK-l-deg-r-T | 26" | 12v or 24v | 50/60 | 84 | 6.72w |
| T8-48-26-1-ccK-l-deg-r-T | 26" | 12v or 24v | 50/60 | NA | |
| T8-63-26-1-ccK-l-deg-r-T | 26" | 12v or 24v | 50/60 | 126 | 10.08w |
| T8-21-28-1-ccK-l-deg-r-T | 28" | 12v or 24v | 50/60 | 45 | 3.60w |
| T8-42-28-1-ccK-l-deg-r-T | 28" | 12v or 24v | 50/60 | 90 | 7.20w |
| T8-48-28-1-ccK-l-deg-r-T | 28" | 12v or 24v | 50/60 | NA | |
| T8-63-28-1-ccK-l-deg-r-T | 28" | 12v or 24v | 50/60 | 135 | 10.80w |
| T8-21-30-1-ccK-l-deg-r-T | 30" | 12v or 24v | 50/60 | 48 | 3.84w |
| T8-42-30-1-ccK-l-deg-r-T | 30" | 12v or 24v | 50/60 | 96 | 7.68w |
| T8-48-30-1-ccK-l-deg-r-T | 30" | 12v or 24v | 50/60 | NA | |
| T8-63-30-1-ccK-l-deg-r-T | 30" | 12v or 24v | 50/60 | 144 | 11.52w |
| T8-21-36-1-ccK-l-dge-r-T | 36" | 12v or 24v | 50/60 | 57 | 4.56w |
| T8-42-36-1-ccK-l-deg-r-T | 36" | 12v or 24v | 50/60 | 114 | 9.12w |
| T8-48-36-1-ccK-l-deg-r-T | 36" | 12v or 24v | 50/60 | 144 | 11.52w |
| T8-63-36-1-ccK-l-deg-r-T | 36" | 12v or 24v | 50/60 | 171 | 13.68w |
| T8-21-40-1-ccK-l-deg-r-T | 40" | 12v or 24v | 50/60 | 66 | 5.28w |
| T8-42-40-1-ccK-l-deg-r-T | 40" | 12v or 24v | 50/60 | 132 | 10.56w |
| T8-48-40-1-ccK-l-deg-r-T | 40" | 12v or 24v | 50/60 | NA | |
| T8-63-40-1-ccK-l-deg-r-T | 40" | 12v or 24v | 50/60 | 198 | 15.84w |
| T8-21-48-1-ccK-l-deg-r-T | 48" | 12v or 24v | 50/60 | 78 | 6.24w |
| T8-42-48-1-ccK-l-deg-r-T | 48" | 12v or 24v | 50/60 | 156 | 12.48w |
| T8-48-48-1-ccK-l-deg-r-T | 48" | 12v or 24v | 50/60 | 192 | 15.36w |
| T8-63-48-1-ccK-l-deg-r-T | 48" | 12v or 24v | 50/60 | 234 | 18.72w |
| T8-21-60-1-ccK-l-deg-r-T | 60" | 12v or 24v | 50/60 | 99 | 7.92w |
| T8-42-60-1-ccK-l-deg-r-T | 60" | 12v or 24v | 50/60 | 198 | 15.84w |
| T8-48-60-1-ccK-l-deg-r-T | 60" | 12v or 24v | 50/60 | 240 | 19.20w |
| T8-63-60-1-ccK-l-deg-r-T | 60" | 12v or 24v | 50/60 | 297 | 23.76w |

| T8-xx-nl-#-cc-r-l-deg-T Model Numbers | Nominal Length | T8 Two Row | | Total LED Die | Watts |
|--|-------------------|------------|-------|------------------|--------|
| | | Volts | Hertz | | |
| T8-21-12-2-ccK-l-deg-r-T | 12" | 12v or 24v | 50/60 | 36 | 2.88w |
| T8-42-12-2-ccK-l-deg-r-T | 12" | 12v or 24v | 50/60 | 72 | 5.76w |
| T8-48-12-2-ccK-l-deg-r-T | 12" | 12v or 24v | 50/60 | 96 | 7.68w |
| T8-63-12-2-ccK-l-deg-r-T | 12" | 12v or 24v | 50/60 | 108 | 8.64w |
| T8-21-15-2-ccK-l-deg-r-T | 15" | 12v or 24v | 50/60 | 48 | 3.84w |
| T8-42-15-2-ccK-l-deg-r-T | 15" | 12v or 24v | 50/60 | 96 | 7.68w |
| T8-48-15-2-ccK-l-deg-r-T | 15" | 12v or 24v | 50/60 | NA | |
| T8-63-15-2-ccK-l-deg-r-T | 15" | 12v or 24v | 50/60 | 144 | 11.52w |
| T8-21-18-2-ccK-l-deg-r-T | 18" | 12v or 24v | 50/60 | 54 | 4.32w |
| T8-42-18-2-ccK-l-deg-r-T | 18" | 12v or 24v | 50/60 | 108 | 8.64w |
| T8-48-18-2-ccK-l-deg-r-T | 18" | 12v or 24v | 50/60 | NA | |
| T8-63-18-2-ccK-l-deg-r-T | 18" | 12v or 24v | 50/60 | 162 | 12.96w |
| T8-21-20-2-ccK-l-deg-r-T | 20" | 12v or 24v | 50/60 | 60 | 4.80w |
| T8-42-20-2-ccK-l-deg-r-T | 20" | 12v or 24v | 50/60 | 120 | 9.60w |
| T8-48-20-2-ccK-l-deg-r-T | 20" | 12v or 24v | 50/60 | NA | |
| T8-63-20-2-ccK-l-deg-r-T | 20" | 12v or 24v | 50/60 | 180 | 14.10w |
| T8-21-24-2-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 72 | 5.76w |
| T8-42-24-2-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 144 | 11.52w |
| T8-48-24-2-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 192 | 15.36w |
| T8-63-24-2-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 216 | 17.28w |
| T8-21-26-2-ccK-l-deg-r-T | 24" | 12v or 24v | 50/60 | 84 | 6.27w |
| T8-42-26-2-ccK-l-deg-r-T | 26" | 12v or 24v | 50/60 | 168 | 13.44w |
| T8-48-26-2-ccK-l-deg-r-T | 26" | 12v or 24v | 50/60 | NA | |
| T8-63-26-2-ccK-l-deg-r-T | 26" | 12v or 24v | 50/60 | 252 | 20.16w |
| T8-21-28-2-ccK-l-deg-r-T | 28" | 12v or 24v | 50/60 | 90 | 7.20w |
| T8-42-28-2-ccK-l-deg-r-T | 28" | 12v or 24v | 50/60 | 180 | 14.40w |
| T8-48-28-2-ccK-l-deg-r-T | 28" | 12v or 24v | 50/60 | NA | |
| T8-63-28-2-ccK-l-deg-r-T | 28" | 12v or 24v | 50/60 | 270 | 21.60w |
| T8-21-30-2-ccK-l-deg-r-T | 30" | 12v or 24v | 50/60 | 96 | 7.68w |
| T8-42-30-2-ccK-l-deg-r-T | 30" | 12v or 24v | 50/60 | 192 | 15.36w |
| T8-48-30-2-ccK-l-deg-r-T | 30" | 12v or 24v | 50/60 | NA | |
| T8-63-30-2-ccK-l-deg-r-T | 30" | 12v or 24v | 50/60 | 288 | 23.04w |
| T8-21-36-2-ccK-l-deg-r-T | 36" | 12v or 24v | 50/60 | 114 | 9.12w |
| T8-42-36-2-ccK-l-deg-r-T | 36" | 12v or 24v | 50/60 | 228 | 18.24w |
| T8-48-36-2-ccK-l-deg-r-T | 36" | 12v or 24v | 50/60 | 288 | 23,04w |
| T8-63-36-2-ccK-l-deg-r-T | 36" | 12v or 24v | 50/60 | 342 | 27.36w |
| T8-21-40-2-ccK-l-deg-r-T | 40" | 12v or 24v | 50/60 | 132 | 10.56w |
| T8-42-40-2-ccK-l-deg-r-T | 40" | 12v or 24v | 50/60 | 264 | 21.12w |
| T8-48-40-2-ccK-l-deg-r-T | 40" | 12v or 24v | 50/60 | NA | |
| T8-63-40-2-ccK-l-deg-r-T | 40" | 12v or 24v | 50/60 | 396 | 31.68w |
| T8-21-48-2-ccK-l-deg-r-T | 48" | 12v or 24v | 50/60 | 156 | 12.48w |
| T8-42-48-2-ccK-l-deg-r-T | 48" | 12v or 24v | 50/60 | 312 | 24.96w |
| T8-48-48-2-ccK-l-deg-r-T | 48" | 12v or 24v | 50/60 | 384 | 30.72w |
| T8-63-48-2-ccK-l-deg-r-T | 48" | 12v or 24v | 50/60 | 468 | 37.44w |
| T8-21-60-2-ccK-l-deg-r-T | 60" | 12v or 24v | 50/60 | 198 | 15.84w |
| T8-42-60-2-ccK-l-deg-r-T | 60" | 12v or 24v | 50/60 | 396 | 31.68w |
| T8-48-60-2-ccK-l-deg-r-T | 60" | 12v or 24v | 50/60 | 480 | 38.40w |
| T8-63-60-2-ccK-l-deg-r-T | 60" | 12v or 24v | 50/60 | 594 | 47.52w |



Class 2 LED Power Supply (LED Drivers)

| Class 2 LED Power Supply Manufacturers | Models | Volts | Hertz | AC Input Range | Watts | UL Listings |
|--|------------------|-------|-------|----------------|-------|-------------|
| HIGH PERFECTION | | | | | | |
| HARD WIRE CLASS 2 | LP1013-12 | 12v | 50/60 | 100/264Vac | 12w | Recognized |
| HARD WIRE CLASS 2 | LP1017-12 | 12v | 50/60 | 90/264Vac | 18w | Recognized |
| HARD WIRE CLASS 2 | LP1020-12 | 12v | 50/60 | 100/304Vac | 20w | Recognized |
| HARD WIRE CLASS 2 | LP1025-12 | 12v | 50/60 | 90/264Vac | 25w | Recognized |
| HARD WIRE CLASS 2 | LP1040-12 | 12v | 50/60 | 90/264Vac | 40w | Recognized |
| HARD WIRE CLASS 2 | LP1060-12-GG-170 | 12v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | LP1060-12-TT-170 | 12v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | LP4240-12-YZ | 12v | 50/60 | 90/264Vac | 4/60w | Recognized |
| HARD WIRE CLASS 2 | LP1013-24 | 24v | 50/60 | 100/264Vac | 12w | Recognized |
| HARD WIRE CLASS 2 | LP1017-24 | 24v | 50/60 | 90/264Vac | 17w | Recognized |
| HARD WIRE CLASS 2 | LP1020-24 | 24v | 50/60 | 100/304Vac | 20w | Recognized |
| HARD WIRE CLASS 2 | LP1025-24 | 24v | 50/60 | 90/264Vac | 25w | Recognized |
| HARD WIRE CLASS 2 | ESL1025-24 | 24v | 50/60 | 110/304Vac | 25w | Recognized |
| HARD WIRE CLASS 2 | LP1040-24 | 24v | 50/60 | 90/264Vac | 40w | Recognized |
| HARD WIRE CLASS 2 | ESL1048-24 | 24V | 50/60 | 110/304Vac | 48w | Recognized |
| HARD WIRE CLASS 2 | LP1060-24-GG-170 | 24v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | LP1060-24-TT-170 | 24v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | LP1090-24-YZ-240 | 24v | 50/60 | 90/264Vac | 96w | Recognized |
| HARD WIRE CLASS 2 | LP4240-24-YZ | 24v | 50/60 | 90/264Vac | 4/60w | Recognized |
| MEAN WELL USA, INC. | | | | | | |
| HARD WIRE CLASS 2 | APV-12-12 | 12v | 50/60 | 90/264Vac | 12w | Recognized |
| HARD WIRE CLASS 2 | APV-16-12 | 12v | 50/60 | 90/264Vac | 15w | Recognized |
| HARD WIRE CLASS 2 | LPV-20-12 | 12v | 50/60 | 90/264Vac | 20w | Recognized |
| HARD WIRE CLASS 2 | LPV-35-12 | 12v | 50/60 | 90/264Vac | 35w | Recognized |
| HARD WIRE CLASS 2 | LPV-60-12 | 12v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | PLC-30-12 | 12v | 50/60 | 90/264Vac | 30w | Recognized |
| HARD WIRE CLASS 2 | PLC-45-12 | 12v | 50/60 | 90/264Vac | 45w | Recognized |
| HARD WIRE CLASS 2 | PLC-60-12 | 12v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | PLC-100-12 | 12v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | APV-12-24 | 24v | 50/60 | 90/264Vac | 12w | Recognized |
| HARD WIRE CLASS 2 | APV-16-24 | 24v | 50/60 | 90/264Vac | 16w | Recognized |
| HARD WIRE CLASS 2 | LPV-20-24 | 24v | 50/60 | 90/264Vac | 20w | Recognized |
| HARD WIRE CLASS 2 | LPV-35-24 | 24v | 50/60 | 90/264Vac | 35w | Recognized |
| HARD WIRE CLASS 2 | LPV-60-24 | 24v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | PLC-30-24 | 24v | 50/60 | 90/264Vac | 30w | Recognized |
| HARD WIRE CLASS 2 | PLC-45-24 | 24v | 50/60 | 90/264Vac | 45w | Recognized |
| HARD WIRE CLASS 2 | PLC-60-24 | 24v | 50/60 | 90/264Vac | 60w | Recognized |
| HARD WIRE CLASS 2 | PLC-100-24 | 24v | 50/60 | 90/264Vac | 96w | Recognized |



T8 Kit Installation Instructions

ENTER Number of T8's by brightness and calculate total wattage

T8 LED Tube Part Number T8-xx-nl-#-ccK-r-l-deg-T

| | | | | | |
|-------------------------------|----------------------|--------------|----------------------|---------------|----------------------|
| General Purpose Qty | <input type="text"/> | x Watts Each | <input type="text"/> | = Total Watts | <input type="text"/> |
| Super Bright Qty | <input type="text"/> | x Watts Each | <input type="text"/> | = Total Watts | <input type="text"/> |
| Super Bright + (30/20) Qty | <input type="text"/> | x Watts Each | <input type="text"/> | = Total Watts | <input type="text"/> |
| Ultra Bright Qty | <input type="text"/> | x Watts Each | <input type="text"/> | = Total Watts | <input type="text"/> |

ENTER Number of LED Drivers required by calculating the total wattage and retrofit location of existing Ballast.

We recommend replacing the ballast with the LED Drivers in the same location as the existing ballast which will not require any re-wiring.

Hard Wire LED Drivers Class II

| | | | | | | | |
|---------|----------------------|----------|----------------------|---------|----------------------|---------|----------------------|
| 3 Watt | <input type="text"/> | 12 Watt | <input type="text"/> | 15 Watt | <input type="text"/> | 17 Watt | <input type="text"/> |
| 20 Watt | <input type="text"/> | 25 Watt | <input type="text"/> | 35 Watt | <input type="text"/> | 40 Watt | <input type="text"/> |
| 60 Watt | <input type="text"/> | 100 Watt | <input type="text"/> | | | | |



Installation guide and instruction manual

General Information

LEDingEDGE LED retrofit lighting systems are intended for use in all areas where fluorescent tubes are installed including inside of commercial refrigerated cases for food, splash, and non-food zones only.

LEDingEDGE LED lighting systems are Class 2 low voltage luminaires intended to be used with fluorescent lamp holders **after the ballasts have been replaced with the recommended 12 VDC or 24 VDC Class 2 LED Driver.**

WARNING – Not for direct replacement of fluorescent Lamps with Ballasts.

Use only with recommended LED Drivers listed on page 5.

Tools and connectors required: gloves, safety glasses, flat head and Phillips head screwdrivers, wire strippers, UL listed twist-on (wire nuts) or insulated butt splice connectors, tie-wraps.

Do not remove existing wiring!! The existing wiring will be used with this LEDingEDGE retrofit kit.

Marking at the Luminaire:

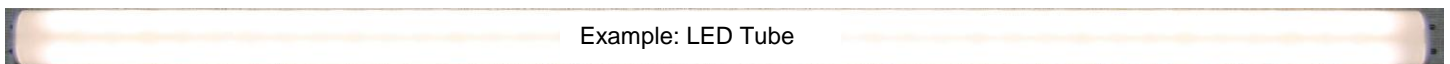
- This luminaire has been retrofitted with low voltage LED lamps and can no longer be used in its original hi-voltage operation. Our retrofit LED replacement lamp will be identified with a label which will be readily visible by the user during normal maintenance including re-lamping.
- LED Lamp Replacement Marking – Identification of our replacement LED lamp type/model, manufacturer and ordering information.
- A set of labels are included in the packaging and must be installed in/on the luminaires once the installation is completed. All labels must be applied in compliance with UL standards.

Products Provided:

1. LED Tube Lamp or Lamps. “For replacement lamp part numbers see pages 2, 3, & 4”.
2. Class 2 Low Voltage LED Driver. “For replacement LED Driver part numbers see page 5”.

TO PURCHASE REPLACEMENT LED TUBES OR LED DRIVERS CONTACT FACTORY:

LEDingEDGE Lighting, Inc.
759 Flynn Road
Camarillo, CA 93021
Phone 805-383-8493 or orders@ledingedge.com

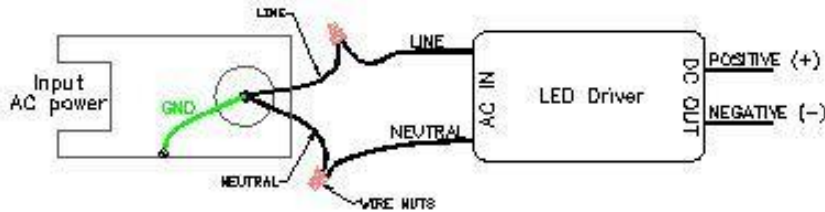


Example: LED Driver



Retrofit Installation Guide:

1. Read all warnings on page 1 before proceeding.
2. Check kit against parts list
3. **Important “Disconnect Power to Luminaire”**
4. When necessary remove Mullion or fixture’s diffuser cover.
5. Remove Fluorescent tube or tubes. (**Dispose of tubes in hazardous material container**)
6. Locate and remove fluorescent ballast.
7. Install LED Driver where ballast was previously located. Secure the LED Driver with self-tapping screws in holes located on the LED Driver. Power tools should not be required.



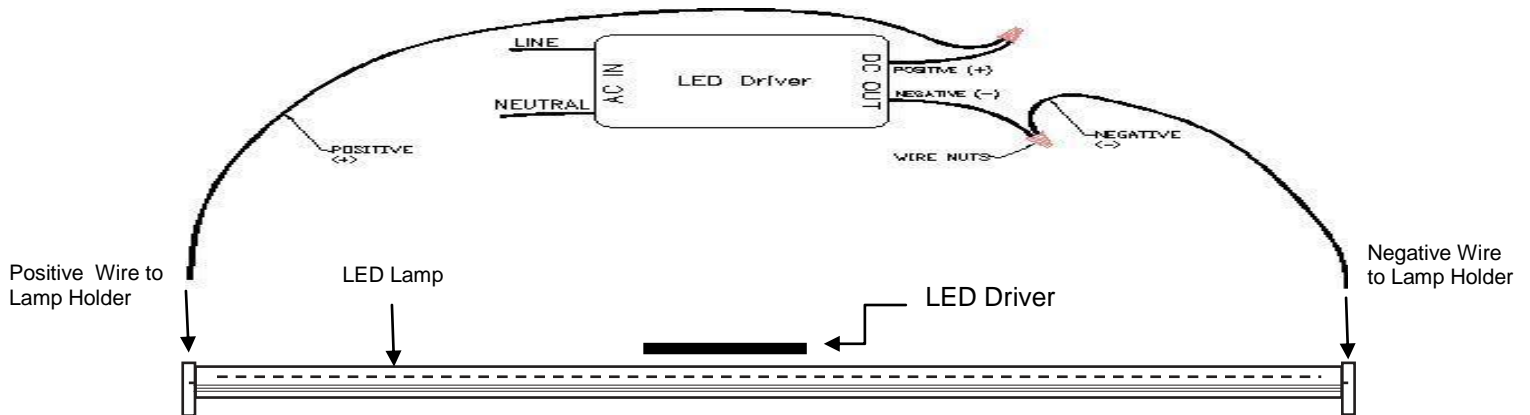
Make input connections using wire nuts or insulated butt splices

AC out – “Black” Line to AC in Line

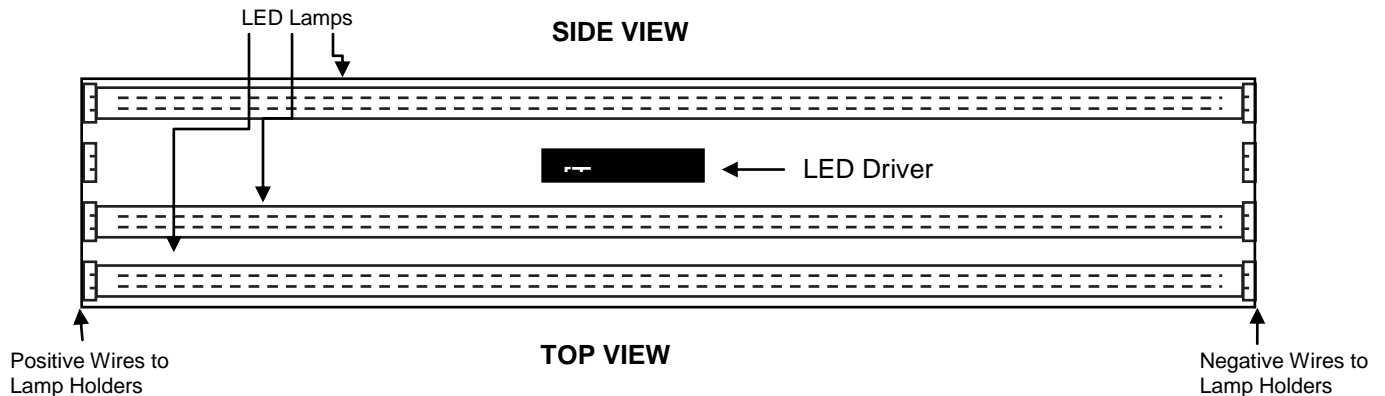
AC out – “White” Neutral to AC in Neutral

Connect Ground wire to Ground “Green” wire or direct to Ground.

8. Connect LED Driver 12VDC or 24 VDC output wires direct to lamp holder wires or to harness wires.



SIDE VIEW



TOP VIEW

Make output connections using wire nuts or insulated butt splices

DC output + Positive to Positive Lamp Holder wire or Harness wire).

DC output – Negative to Negative Lamp Holder wire or Harness wire).

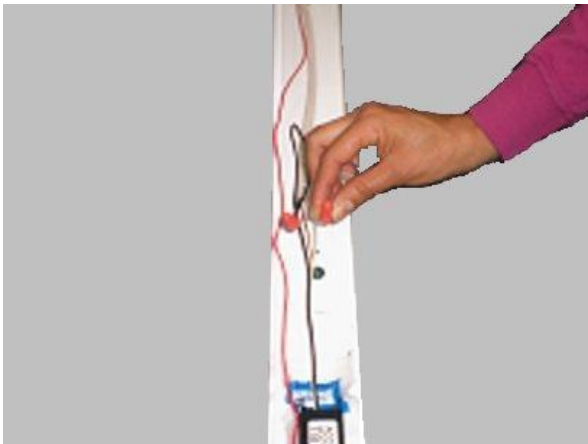
STEP 1



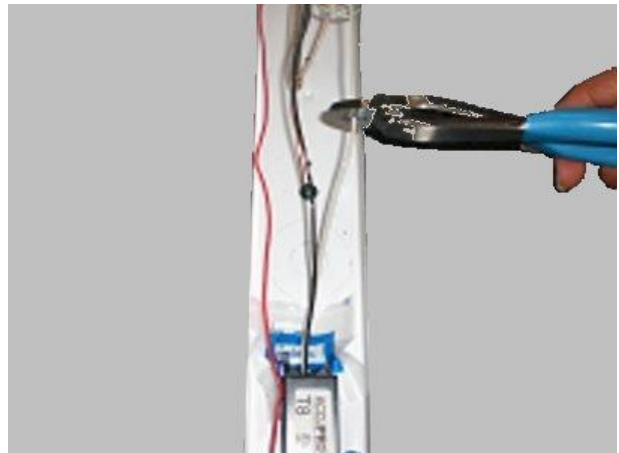
1a Remove fluorescent tubes



1b Remove metal cover



1c Remove wire nuts or cut wires coming from "branch/building wiring" and going to fluorescent tubes

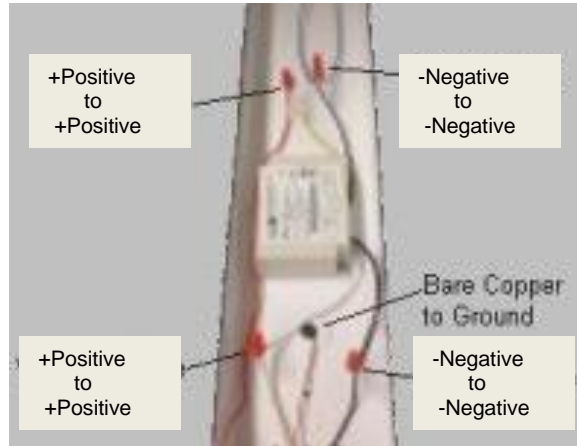


1d Remove Ballast

STEP 2



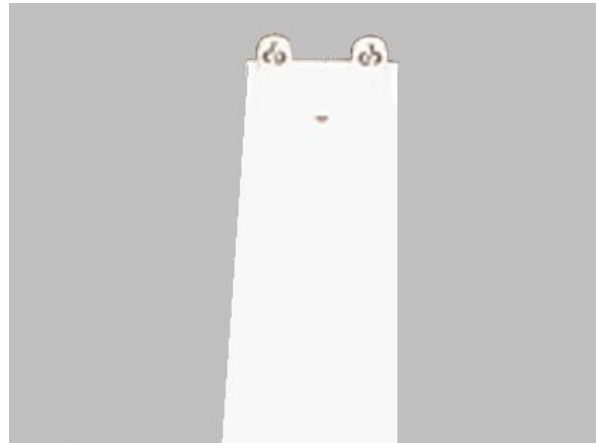
2a Mount LED Driver securely
(with peel off tape or sheet metal screws)



2b Connect AC input and DC output wires
(use RED insulated wire nuts or butt splices)
****See wiring instructions on page 8****



2c Inspect Lamp holders and replace if needed



2d Replace metal cover



Install LED Tubes

Reach-In Case Retrofit Installation Guide:

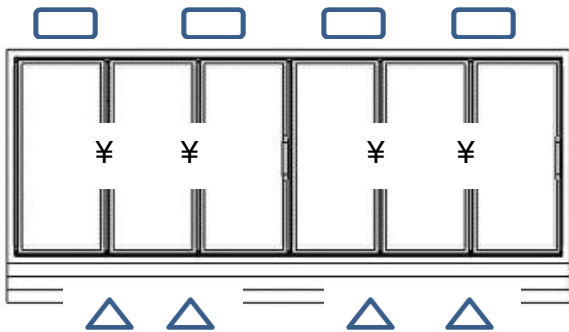
9. Read all warnings on page 1 before proceeding.
10. Check kit against parts list
11. **Important “Disconnect Power to Fluorescent Tubes”**
12. When necessary remove Mullion or fixture’s diffuser cover.
13. Remove Fluorescent tube or tubes. (**Dispose tubes in hazardous material container**)
14. Locate and remove fluorescent ballast.
15. Install LED Driver where ballast was previously located. (When necessary use a screwdriver to secure the LED Driver with self –tapping screws in holes located on the LED Driver) Should not require any power tools.
****SEE PAGE 8 FOR WIRING INSTRUCTIONS****

****Tube Lamps are located at the end of each case and in all door dividers (Mullions)****

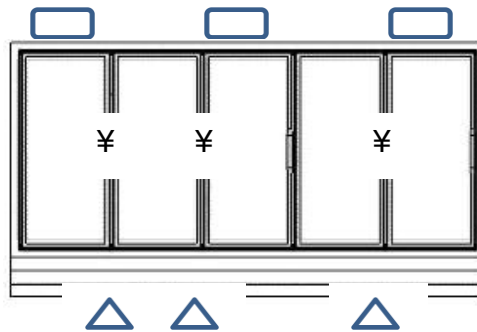
LED Driver Common Locations

On Top of Canopy
 ¥ In Mullion
 ▲ In Kick Plate

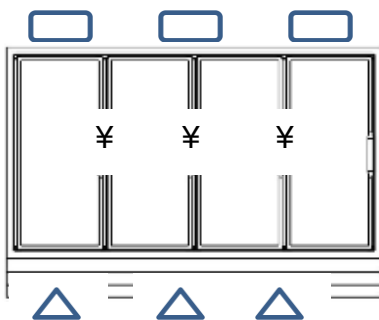
6 Door Case



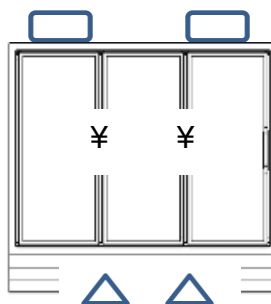
5 Door Case



4 Door Case



3 Door Case



2 Door Case

