PURE EDGE
LIGHTING

1718 W. Fullerton Chicago, IL 60614
Ph: 773.770.1195 ● Fax: 773.935.5613
www.PureEdgeLighting.com ● info@PureEdgeLighting.com
© 2016 PureEdge Lighting. All Rights Reserved.

Installation Instructions for **TruLine 1A Channel and Lens**

ETL Intertek

TL1A-CHLN-_

IMPORTANT INFORMATION
- This instruction must be used concurrently with other TruLine 1A BIY installation instructions.
- This product is wall or ceiling mount.
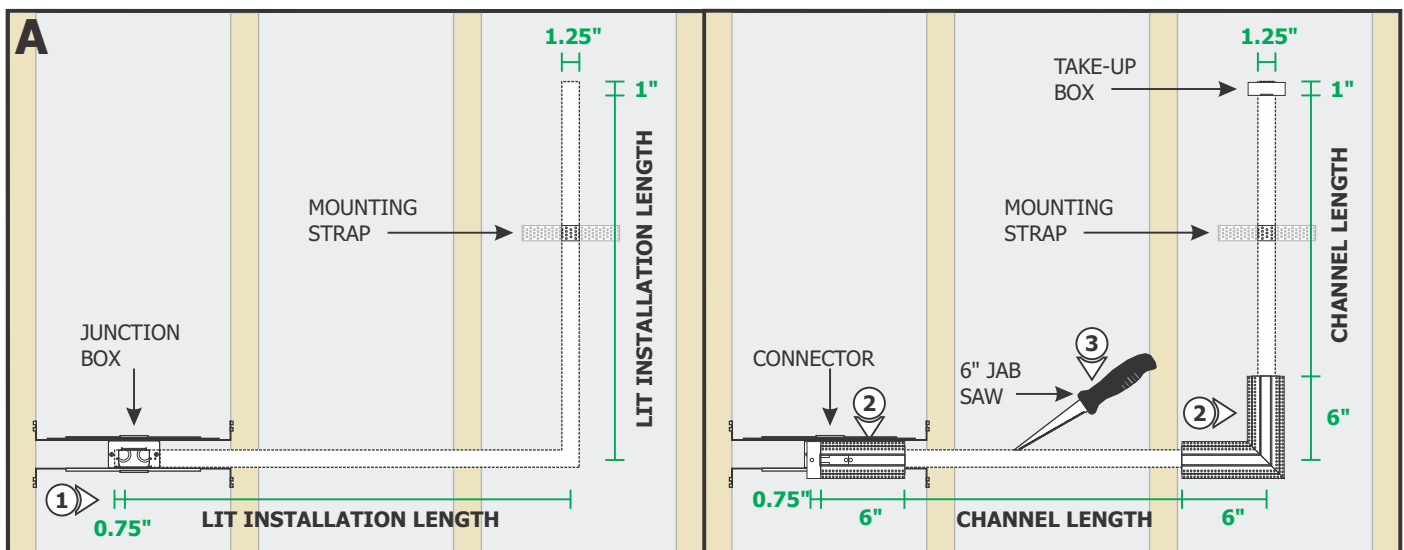- This instruction shows a typical installation.

**SAVE THESE INSTRUCTIONS!**

INSTALLATION VIDEO

Scan with your mobile device to watch a typical installation video or visit https://www.pureedgelighting.com/pure/pure-videos/truline_5a_picture_frame/index.php

Section One: Prepare and Cut the Channel

NOTE: Refer to the instructions provided with any of the TL1A Power Feed Channel Connectors or the TL1A Plenum Power Feed Channel Connectors to install the junction box.

1: Mark the area where the installation will be located on the drywall using the junction box opening as a guide (MIN 1.25"). Allow for 0.75" extra space at junction box for power end caps (if any) and 1" at the end of the installation for the Take-Up Box.

2: Place the desired BIY Channel Connectors against the wall. Ensure the connector is aligned with the installation location. Mark the location of each BIY Channel Connector to determine the cut length of the channel and lens.

3: Cut out the marked area using a "Dremel Multi-Max" or a 6" Fixed Jab Saw. Mark the location of the studs on the drywall.

B

MOUNTING STRAP

DRYWALL SCREW
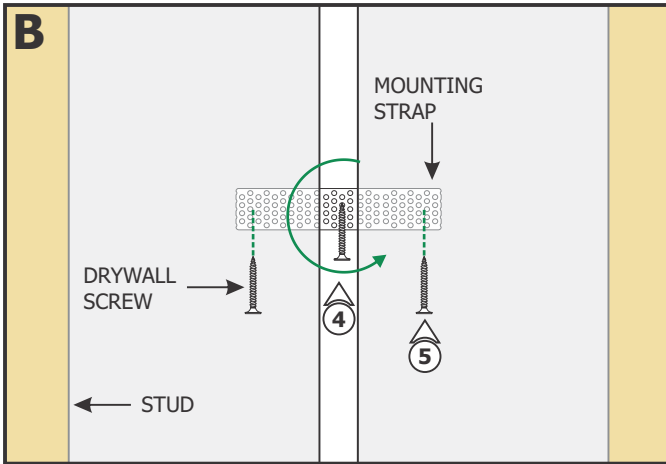
STUD

NOTE: To install the channel in a wall without standard-spaced studs, install perforated mounting straps every 32" behind drywall.

NOTE: For areas with lots of vibrations, it is suggest to install 2X4 support braces (suggested spacing is every 32") before installing and finishing drywall to avoid cracking of plaster. Refer to step 6.

4: Thread a drywall screw into the perforated material. Place the mounting strap behind the drywall and rotate into place using the drywall screw.

5: Secure the mounting strap to the drywall using two drywall screws. Mark the location on of the mounting strap on the drywall.

C

SUPPORT BRACE

STUD
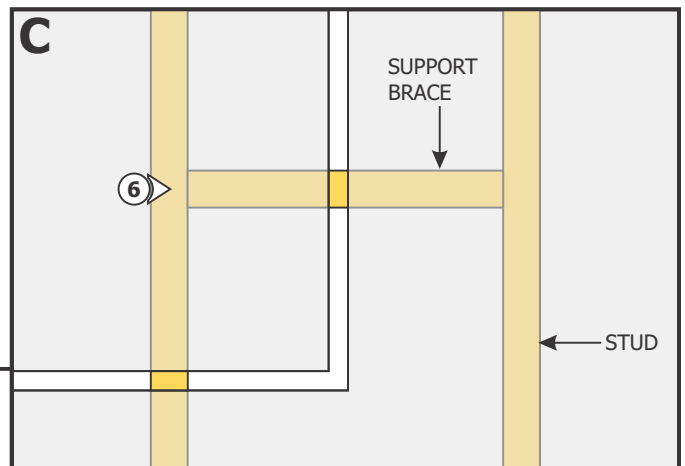
ALTERNATE INSTALLATION OPTION:
6: Install 2x4 support braces (suggested spacing is every 32") before installing and finishing drywall.

D

LENS

CHANNEL

WHOLE LENS
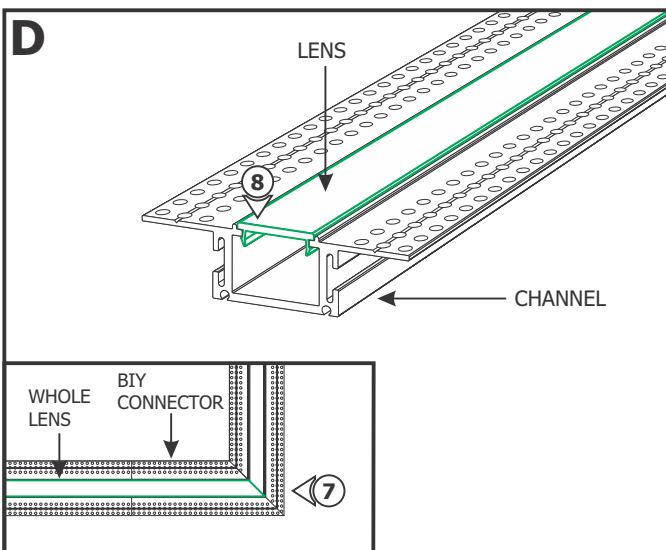
BIY CONNECTOR

7: If necessary, consider attaching the BIY connectors to the channel before cutting to length.

**8:** Snap the whole lens into the channel, and BIY connectors, **BEFORE** cutting to length. This ensures a proper fit after installation.

E

CHANNEL

LENS

CUT

INSTALLATION LENGTH
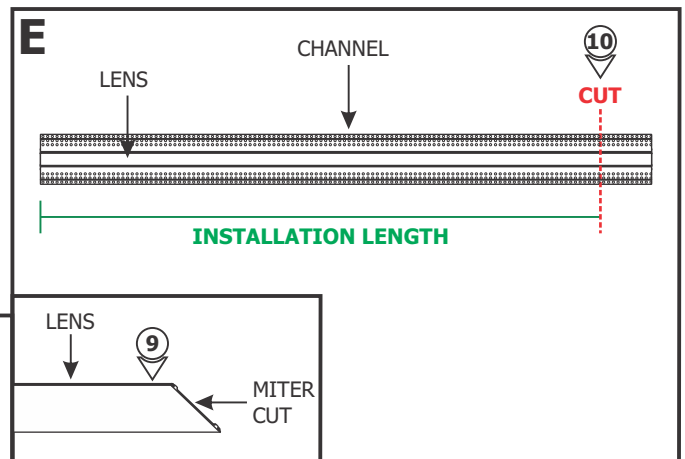
LENS

MITER CUT

9: Depending on the design, use the precut lenses provided with the BIY connectors as a guide to miter cut the lenses. Discard the precut lens.

10: Cut the channel and lens to match the installation length.

Section Two: Install Channels and Connectors

F

L-PICTURE FRAME CONNECTOR

CHANNEL

JOINER BAR

①
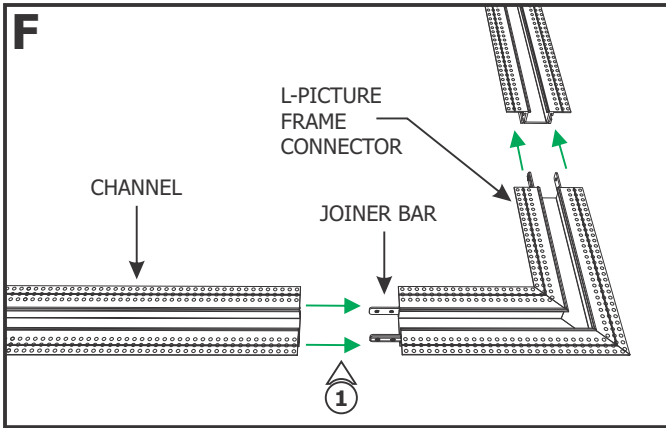
NOTE: TL1A L-Picture Frame connector is shown for demonstration purposes.

NOTE: If using the TL1A Power Feed Channel Connectors with Chicago Plenum Rated Junction Box, fill the connecting seams with plenum rated sealants.

1: Install channel connector(s) to the channels. Refer to the instructions provided with the desired BIY connectors.

G

CHANNEL

③

②

M3 SET SCREW

TAKE-UP BOX

2: Loosen (**Do Not Remove**) the two M3 set screws on the Take-Up Box using a 1.5mm Allen wrench.

3: Install the Take-Up Box at the end of an installation run. Slide the Take-Up Box into the channel and tighten the two M3 set screws using a 1.5mm Allen wrench to secure in place.

H

#4-40 SCREW

⑤

#4-40 SCREW

④
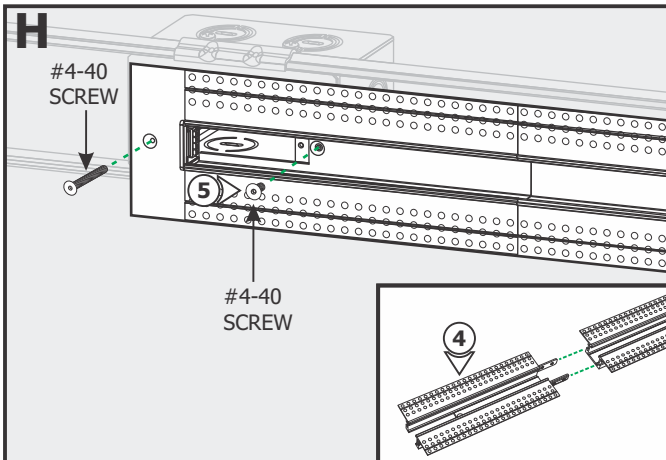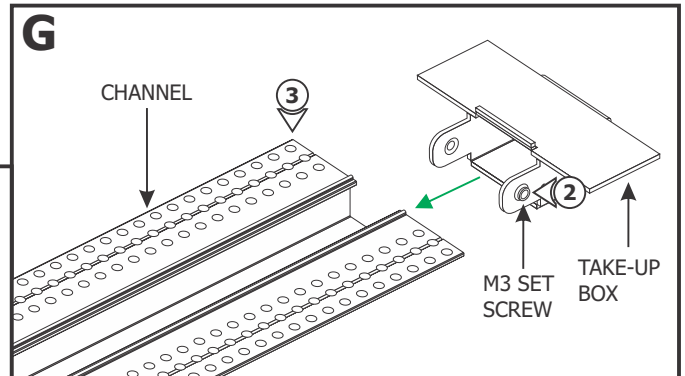
4: Refer to the instructions provided with the BIY Power Feed Connectors to connect the channels.

5: Secure the assembled BIY Power Feed Connectors to the junction box with the provided screw.

Section Three: Tape and Plaster

I

CHANNEL

①

CHANNEL GROOVE

CHANNEL

DRILL BIT

①

DRYWALL

CHANNEL

①
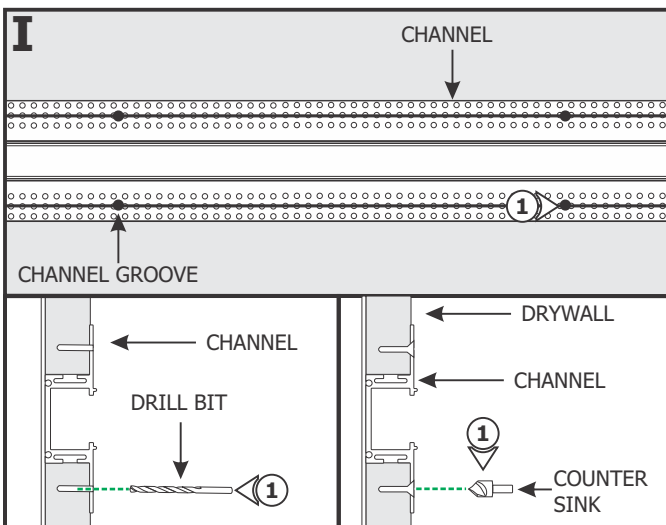
COUNTER SINK

1: Using the marked locations on the drywall, drill and countersink the channel using the provided square drill with countersink bit.

J

STUD →

SCREW → ②
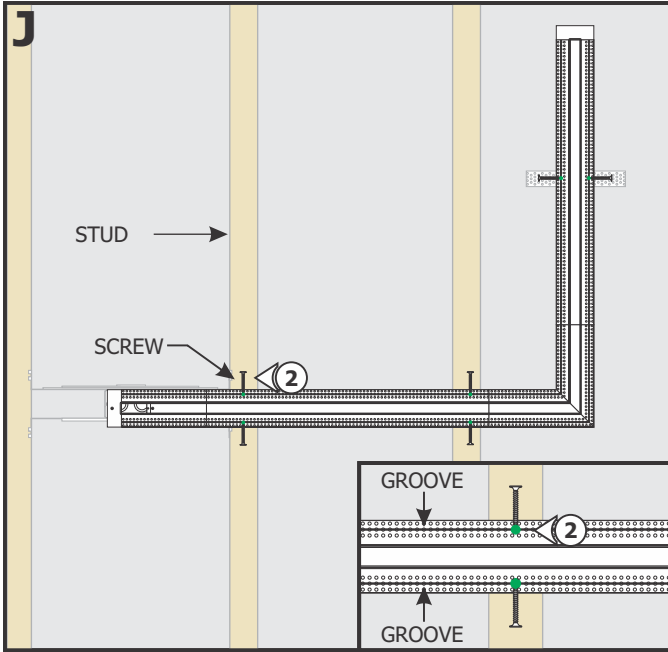
GROOVE ②

GROOVE

**2:** Add screws along the groove lines of the channels to secure the channels in place.

NOTE: Cover the channel opening with blue contractor's tape before plastering.

NOTE: For areas with lots of vibration, it is suggested to use Durabond to avoid cracking of plaster.

NOTE: Do Not use premixed joint compound "Soft Mud." No use compuesto para juntas premezclado "Soft Mud."

NOTE: Recommended plaster method: 1st Coat - Durabond 45 with 8" Blade, 2nd Coat - Easy Sand 45 with 10" Blade, 3rd Coat with 12" Blade

3: Must apply drywall tape (Ultra-Thin drywall tape suggested) along edges of channel to prevent cracking of plaster after installation. DO NOT overlap strips of drywall tape.
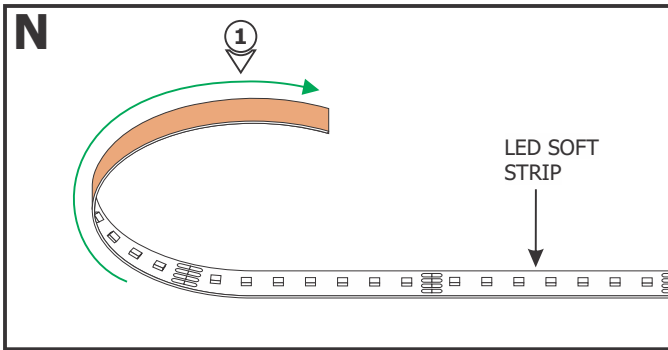
K

DRYWALL TAPE

CONTRACTOR'S TAPE

③
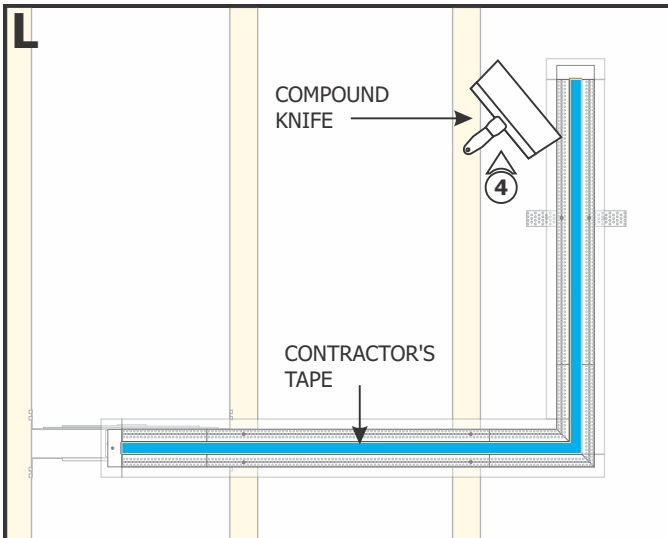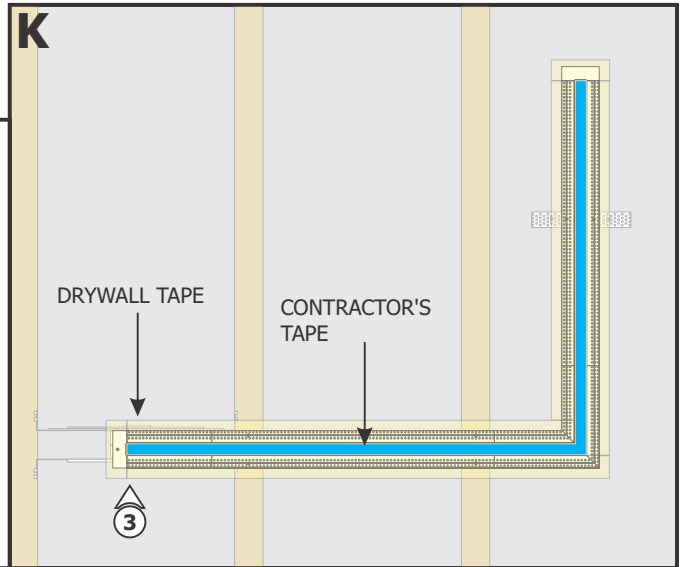
4: Use a compound knife for a smooth compound spread. Sand, paint, and finish the plaster and drywall before removing the blue contractor's tape.

L

COMPOUND KNIFE →

④

CONTRACTOR'S TAPE →

4

M
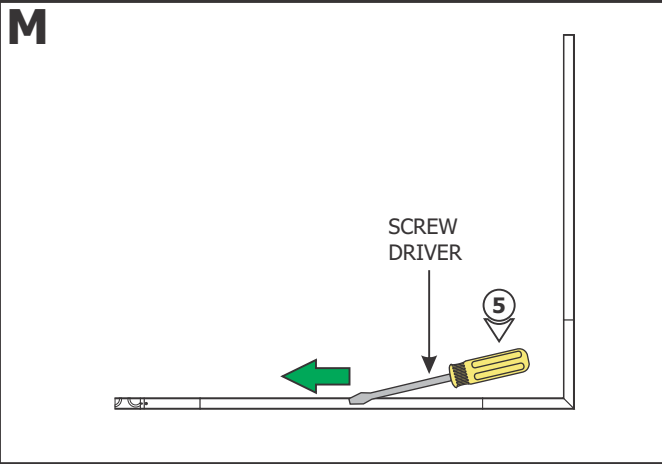
SCREW
DRIVER

5: Carefully use a flathead screwdriver to remove excess drywall from the internal bevel/edge.

Section Four: Install LED Soft Strip

N

LED SOFT
STRIP

NOTE: If installation requires RGB, RGB+W, or Tunable White, refer to wiring diagrams on pages 8-10.
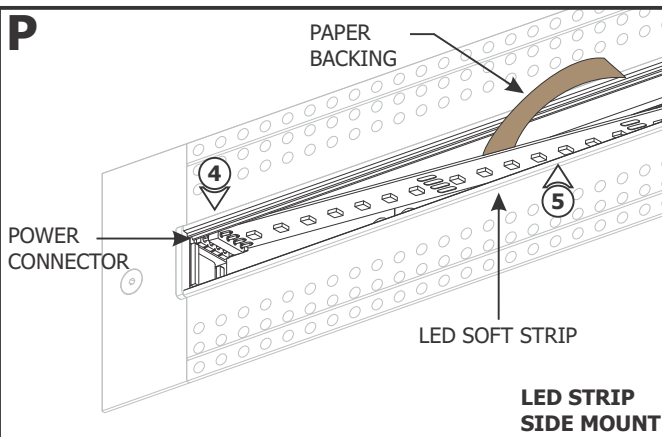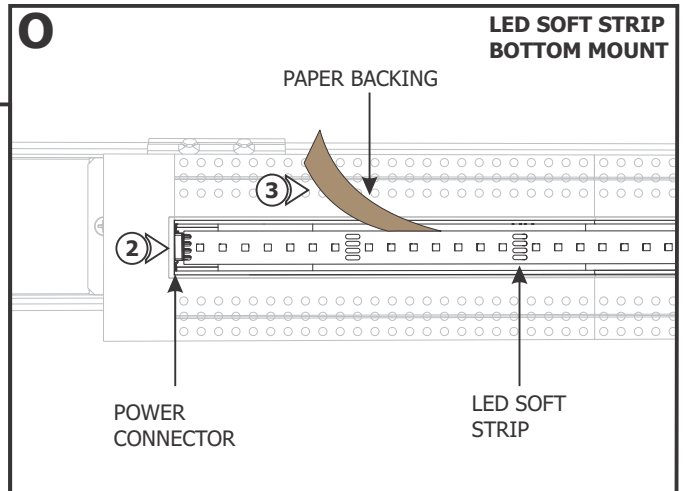
1: Gently uncoil the LED Soft Strip before applying to the channel otherwise the strip may lift off of the surface.

Power Feed Installation: Bottom Mount

2: Connect the LED Soft Strip to the power connector. Refer to instructions provided with the BIY Power Connectors to connect the LED Soft Strip to the power connector(s).

3: Carefully remove the backing from the LED Soft Strip, making sure not to remove the tape. Firmly press down the adhesive portion of the LED Soft Strip onto the channel surface while removing the rest of the backing, making sure there are no air bubbles that can cause surface irregularities.

NOTE: Refer to page 7 for important information regarding installation and rework of the LED Soft Strip.

O

LED SOFT STRIP
BOTTOM MOUNT

PAPER BACKING

POWER
CONNECTOR

LED SOFT
STRIP

P

PAPER
BACKING

POWER
CONNECTOR

LED SOFT STRIP

**LED STRIP
SIDE MOUNT**

Alternate Power Feed Installation: Side Mount
4: Connect the LED Soft Strip to the power connector.

5: Repeat step 3 to properly install the LED Soft Strip on the side of the channel.

Q

LED SOFT STRIP BOTTOM MOUNT
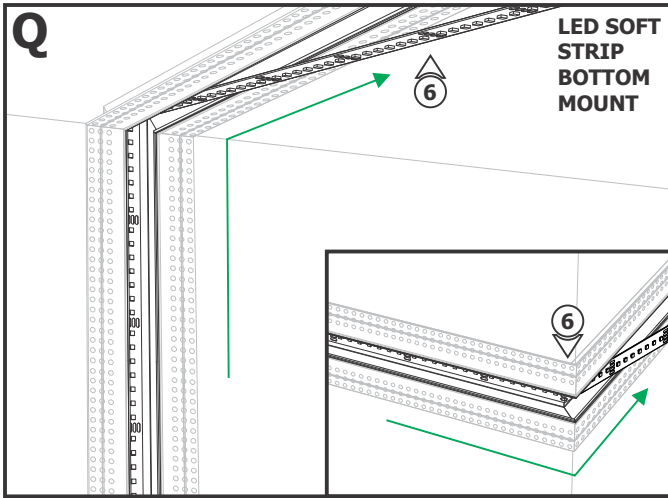
6: For Room Wrapping configurations, bend the LED Soft Strip 90° on the **bottom** of the channel to match the corners.

R

LED SOFT STRIP

7: For Picture Frame configurations, bend the LED Soft Strip 90° on the **side** of the channel to match the installation corner.
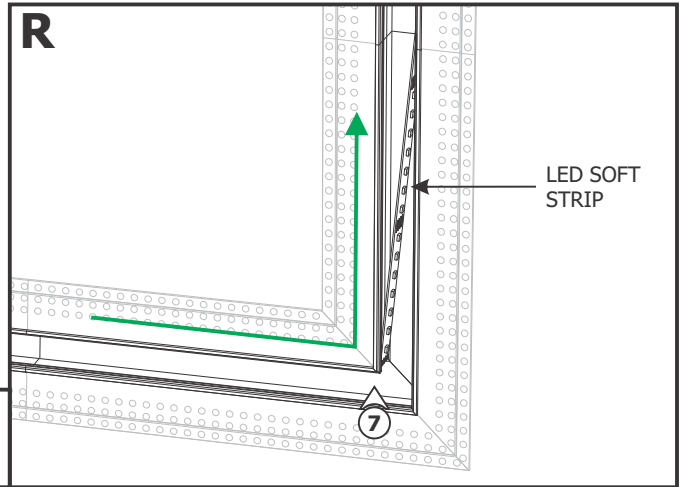
S

EXCESS LED SOFT STRIP

TAKE-UP BOX

TAKE-UP BOX

EXCESS LED SOFT STRIP
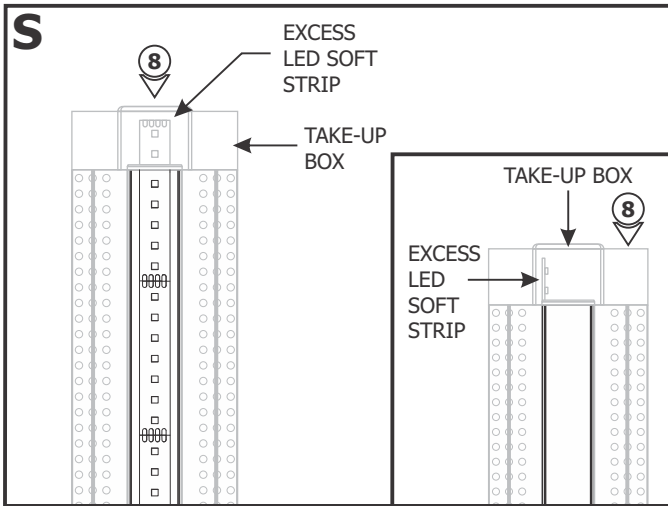
8: If required, trim the LED Soft Strip on the dashed cuttable section and place the excess LED Soft Strip inside the Take-Up Box. Ensure the entire length of the channel is covered with LED Soft Strips to avoid unlit areas.

T

LENS

LENS

LENS FULLY SEATED
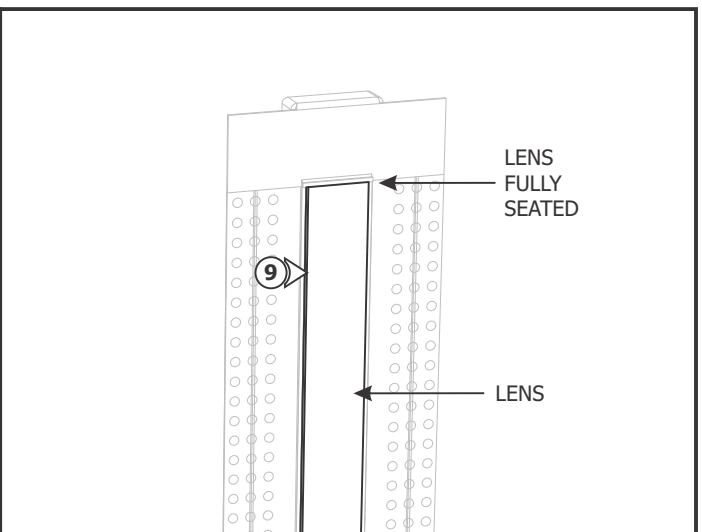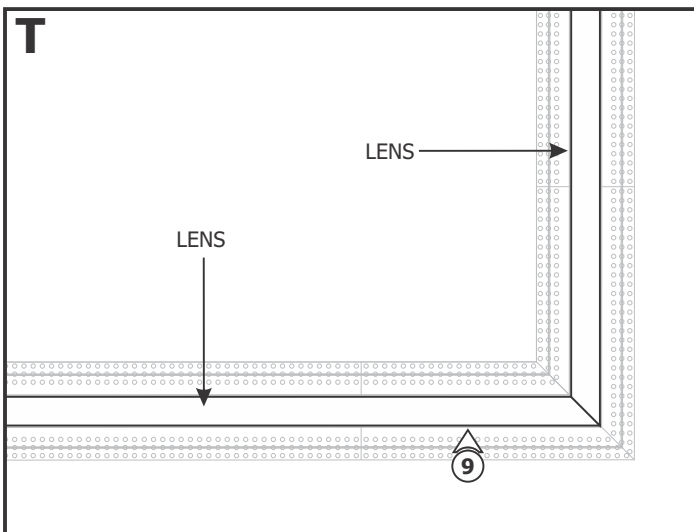
LENS

9: To avoid seams and light leaks, use the whole lens to cover the power connectors and the rest of the installed channels. Snap the lens onto the channel and connectors. Ensure the lenses are fully seated.

IMPORTANT INFORMATION REGARDING INSTALLATION AND REWORK OF SOFT STRIP LED

DO gently pull up and away from the soft strip if removing to reposition. This avoids damaging the strip.

DO NOT pull the strip back towards itself. Doing so risks damaging the strip and making it not function.

DO only ever use fingers to gently install soft strip to a surface **AFTER** cleaning the surface with alcohol.

DO NOT use any tool to install soft strip to a surface. This will damage the soft strip component.

Section Five: Relocating Soft Strip (Optional)

U

REMOVE SOFT STRIP TO RELOCATE

SOFT STRIP

ADHESIVE TAPE

ADHESIVE TAPE

APPLY ADHESIVE REMOVER AND THEN BUFF OFF

①

ADHESIVE

②

ADHESIVE BACKING

BACK SIDE OF SOFT STRIP

NOTE: If relocating the installed soft strip, make sure that the adhesive tape on back of the soft strip covers the entire strip. The adhesive tape isolates the strip from the installation surface. Damaged or inconsistent adhesive tape may cause the contacts on the back of the strip to come in contact with the condu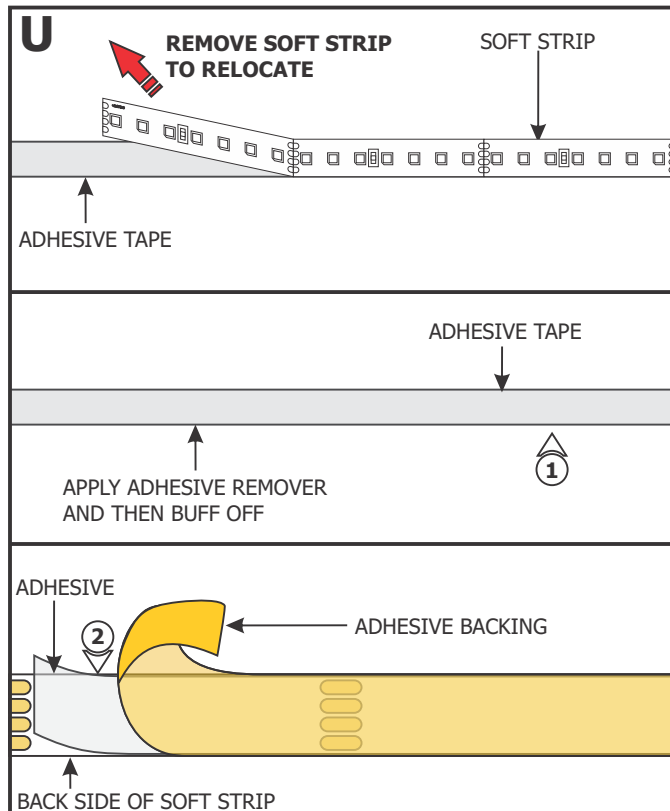ctive heat sink which will cause the strip to short and burn. Call Edge Lighting to get replacement adhesive tape and/or optional aluminum heat sink tape (SS-HR-F).

1: To remove tape residue from back of the strip, apply WD-40, Goo Gone, or a mixture of warm water and lemon oil to the corner of a clean, dry towel. Gently buff the area containing the adhesive residue until it is completely removed.

2: Gently remove a few inches from one side of the tape backing. Attach the adhesive tape to the back of the soft strip and apply moderate pressure to affix the tape. Continue this step a few inches at the time until the entire adhesive tape is attached to back of the soft strip.

3: Refer to Section Four to reinstall the LED soft strip.

General Wiring Diagrams

24VDC Configuration

WHITE (NEUTRAL)

INPUT
120VAC

GND

BLACK (HOT)

ELV DIMMER

BLACK (HOT)

POWER SUPPLY

24V LED SOFT STRIP/ FIXTURE
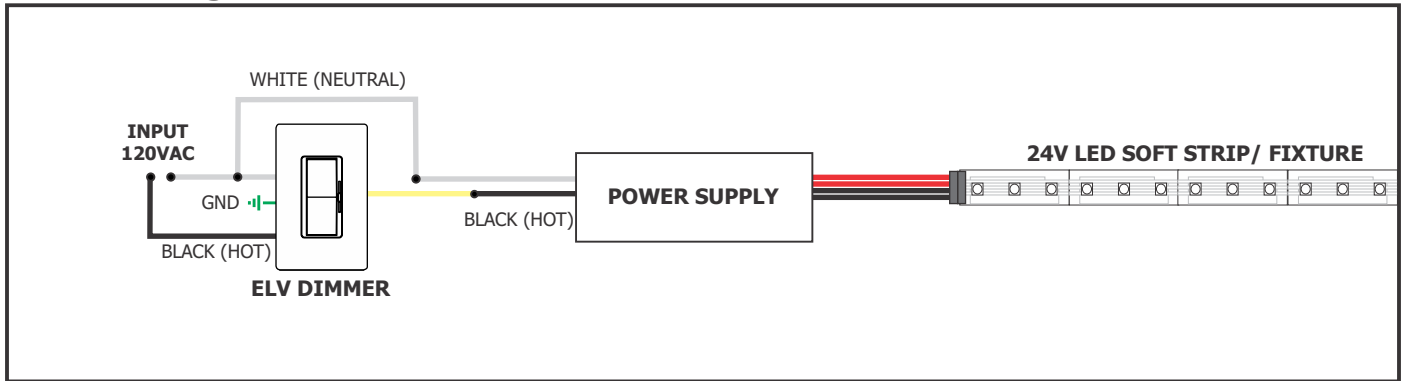
Standard RGB Configuration

Using LED Power Supply with RGB Soft Strip & CDP, CTP or CDMX Control

CDP
CONTROLLER

24VDC
+ -

CONTROLLER
POWER SUPPLY

N L
LINE

L

N

GND

POWER SUPPLY

VDC+
VDC-

Ext in-
Ext in+
DMX in +
DMX in -
DMX in shield
LedSync thru+
LedSync thru-
LedSync shield

LED supply +
Group 1 -
Group 2 -
Group 3 -
Group 4 -

DMX CABLE

M   I   +

DVR-RGB

RGB LED
SOFT STRIP/ FIXTURE

RGB+W Configuration

Using LED Power Supply with RGB+W Soft Strip & CDP, CTP or CDMX Control

CDP CONTROLLER

24VDC + -

CONTROLLER POWER SUPPLY

N L LINE

L

N

GND

POWER SUPPLY

VDC+
VDC-

Ext in-
Ext in+
DMX in +
DMX in -
DMX in shield
LedSync thru+
LedSync thru-
LedSync shield

LED supply +
Group 1 -
Group 2 -
Group 3 -
Group 4 -

DMX CABLE

DVR-RGB

RGB+W LED SOFT STRIP/ FIXTURE

Tunable White Configuration

Dual Power Supplies Controlled Via Individual ELV Dimmers

ELV DIMMER
WHITE (NEUTRAL)

INPUT 120VAC

GND

BLACK (HOT)

HOT

POWER SUPPLY

+24VDC RED

-24VDC BLACK

WHITE (NEUTRAL)

INPUT 120VAC

GND

BLACK (HOT)

ELV DIMMER

HOT

POWER SUPPLY

+24VDC RED

-24VDC BLACK

TUNABLE WHITE LED SOFT STRIP/ FIXTURE

Tunable White Configuration

CDMX1-2XK

CONTROLLER POWER ADAPTER (INCLUDED)

FITS IN A 2.5" DEEP SINGLE GANG BOX

DMX CABLE (BELDEN #9841)

PSB-100W-24VDC-2XK

N
L

POWER SUPPLY

-24VDC
+24VDC

GND

DRIVER

TUNABLE WHITE SOFT STRIP/FIXTURE