PURE EDGE
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Installation Instructions for **Flex Neon LRF5 24VDC Indoor Seamless, Tunable White**
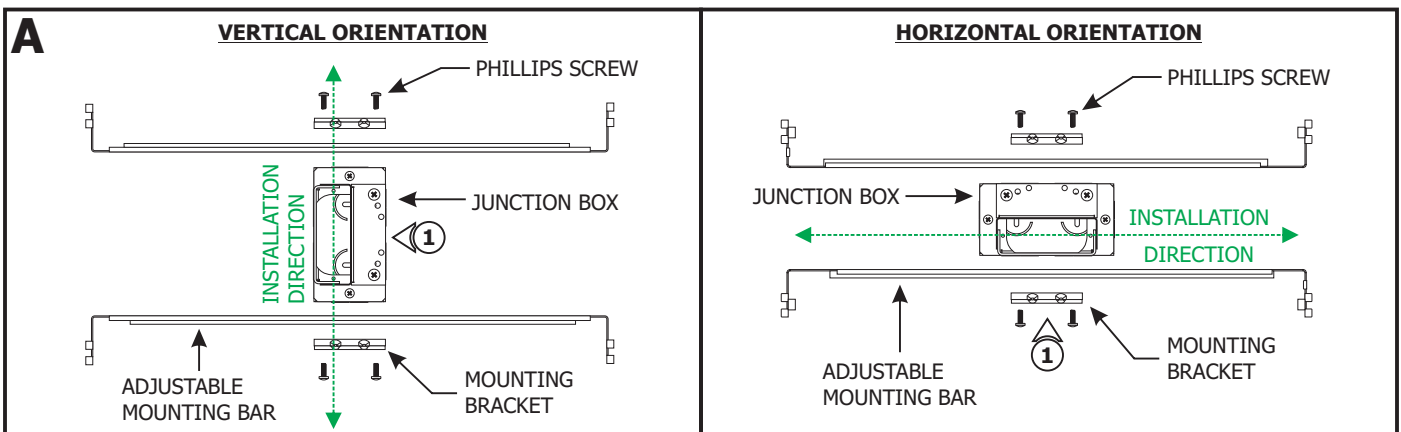
FN-LRF5-_____

IMPORTANT INFORMATION
- This instruction shows a typical installation.
- The Seamless Flex Neon is rated for Indoor Damp Locations **ONLY** and uses class 2 bare wire connectors.
- This product bends right to left or left to right.

SAVE THESE INSTRUCTIONS!

END (E)

LEFT (L)

BOTTOM (B)
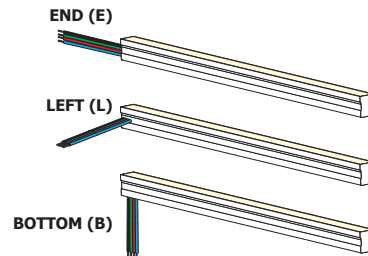
Section One: Install the 1" Rectangle Junction Box (Optional)

A

VERTICAL ORIENTATION

PHILLIPS SCREW

INSTALLATION DIRECTION

JUNCTION BOX

①

ADJUSTABLE MOUNTING BAR

MOUNTING BRACKET

HORIZONTAL ORIENTATION

PHILLIPS SCREW

JUNCTION BOX

INSTALLATION DIRECTION

ADJUSTABLE MOUNTING BAR

①

MOUNTING BRACKET

NOTE: Before beginning any electrical work, ensure that the power to the junction box is off.

1: Mount each adjustable mounting bar to one side of the junction box (mounts to any side of the housing depending on the orientation of the fixture) and secure them with the mounting brackets and two Phillips screws provided.

B

JUNCTION BOX

③

#8 SCREW

②

ADJUSTABLE MOUNTING BAR
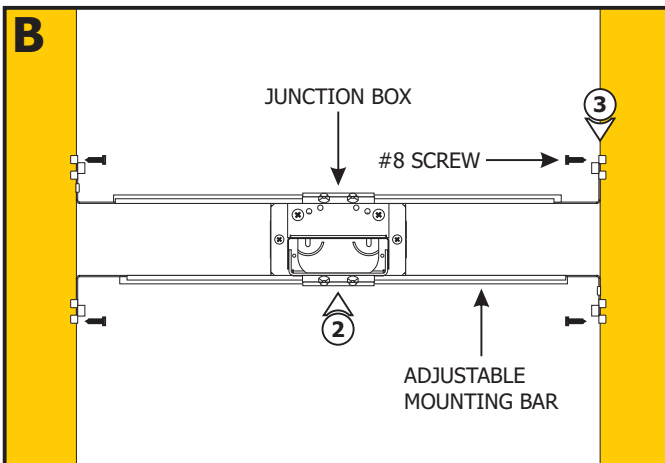
NOTE: The adjustable mounting bars mount to studs/joists that are spaced 15"-24" apart. If the span needs to be shorter than 15", then break the bar arms from dedicated lines.

NOTE: Ensure the opening of the junction box is aligned with the center of the desired fixture location. If necessary, adjust the junction box location by loosening the screws and sliding the junction box to the proper location. Tighten the Phillips screws after adjusting.

2: Select the location between two studs/joists to mount the junction box.

3: Place the lips of the adjustable mounting bar tabs against the studs/joists. Secure the adjustable bars to the studs/joists with the #8 screws.

C
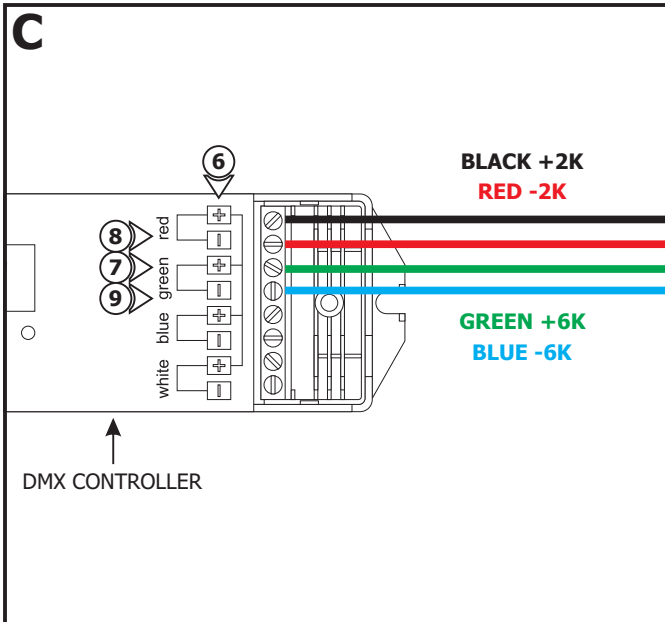
NOTE: Omit steps 4 through 9 if using two channel controls. Refer to wiring diagram on page 7.

BLACK +2K
RED -2K

GREEN +6K
BLUE -6K

red
green
blue
white

DMX CONTROLLER

4: Use the "Low Voltage Wire Size Chart" on page 6 to determine proper wire size connecting to the DMX controller terminals.

5: Run the proper size black, green, red and blue wires from the power supply enclosure to the fixture.

6: Connect the black fixture wire to the red "+" DMX terminal and tighten the screw.

7: Connect the green fixture wire to the green "+" DMX terminal and tighten the screw.

8: Connect the red fixture wire to the red "-" DMX terminal and tighten the screw.

9: Connect the blue fixture wire to the green "-" DMX terminal and tighten the screw.

D

JUNCTION BOX

CONDUIT

10: Remove a knockout to install a conduit into the junction box. Install conduit(s) (if required by local electrical code).

11: Run the wires coming from the power supply to the junction box.

NOTE: Ensure remote power supply wires are present in the junction box. Refer to instructions provided with the power supply.

E

DRYWALL

RECTANGLE OPENING

DREMEL MULTI-MAX

WOOD & DRYWALL CUTTING BIT
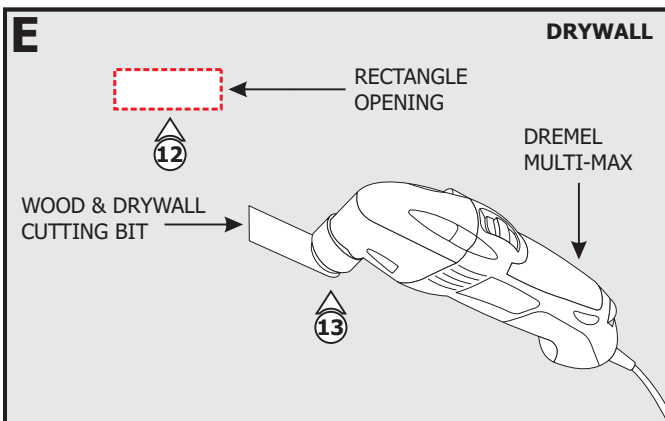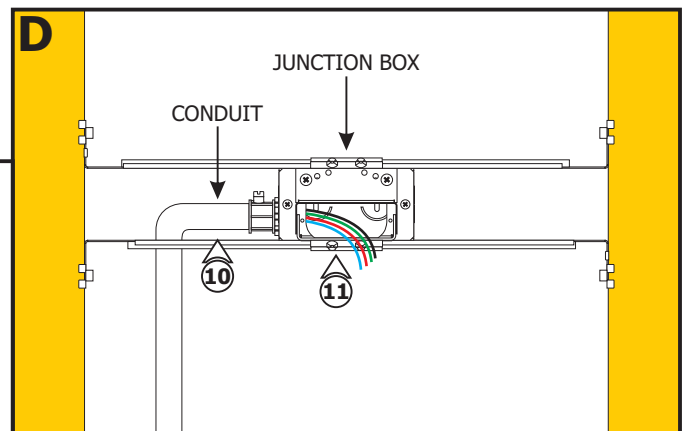
12: Mark a rectangle shape on the drywall where the junction box opening will be located depending on selected position.

13: Cut out the marked rectangle opening, using a "Dremel Multi-Max" with the "wood & drywall" cutting bit.

14: Install & finish drywall.

F

PLASTER THE EDGE OF THE JUNCTION BOX

JUNCTION BOX OPENING EDGE

GOOF PLATE
(ONLY USE IF JAGGED PLASTER EDGE, PAINT TO MATCH)

SCREW

15: Optional: Use the Goof Plate if the junction box opening has imperfection/ jagged edges. Install the provided goof plate (paint to match prior) with the two screws.
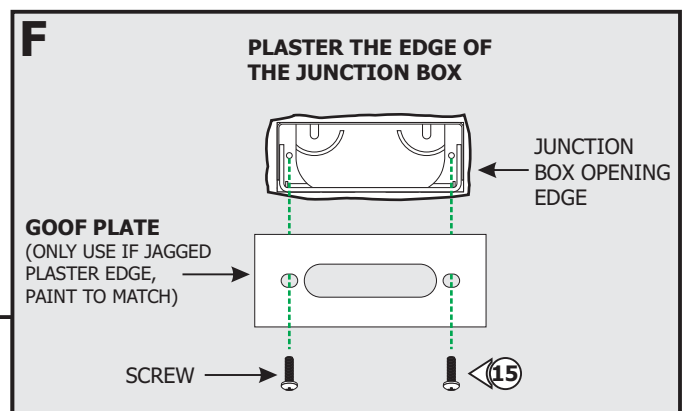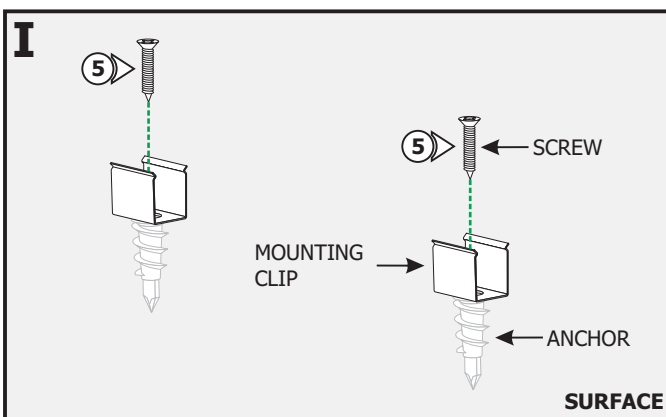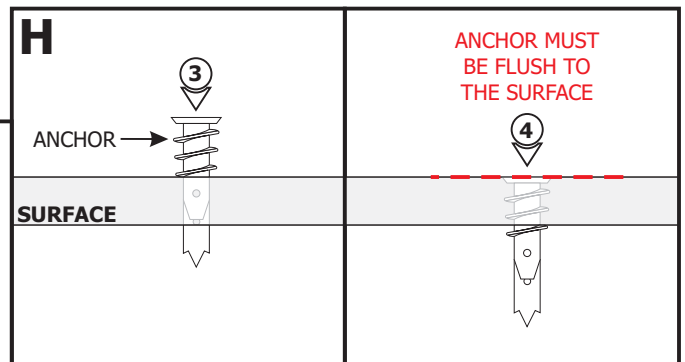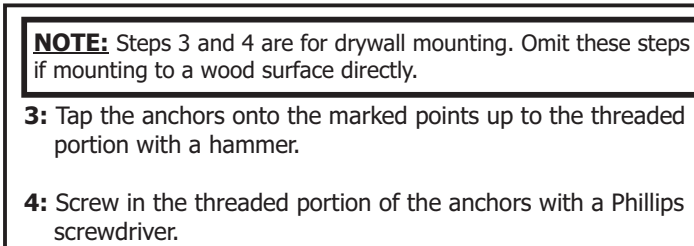
Section Two: Install the Flex Neon

G

SURFACE

MOUNTING CLIP

②

|← **MAX 12"** →|
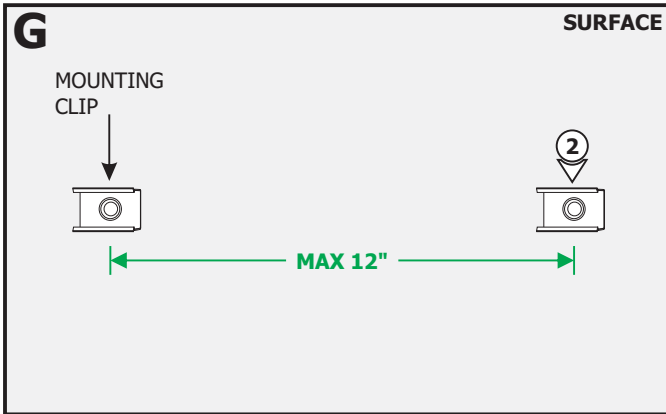
NOTE: If using 1RE Junction Box, the Flex Neon must pass through the center of the junction box.

NOTE: Omit this Section if using the Flexible Aluminum Channel. Refer to Section Three.

**1:** Determine the location for the Flex Neon.

2: Mark the location of the mounting clips. Mounting clips must be maximum 12" apart from each other (measure from the center of the mounting clip).

H

③

ANCHOR →

SURFACE

ANCHOR MUST BE FLUSH TO THE SURFACE

④

NOTE: Steps 3 and 4 are for drywall mounting. Omit these steps if mounting to a wood surface directly.

3: Tap the anchors onto the marked points up to the threaded portion with a hammer.

4: Screw in the threaded portion of the anchors with a Phillips screwdriver.

I

⑤

⑤ ← SCREW

MOUNTING CLIP →

← ANCHOR

SURFACE

5: Line up the mounting clips to the anchors and secure it to the anchors by tightening the two #8-32 screws to each clip.

J

FLEX NEON →

⑥

LEFT   RIGHT

6: If necessary, bend the Flex Neon **ONLY** right to left or left to right.

K

FLEX NEON
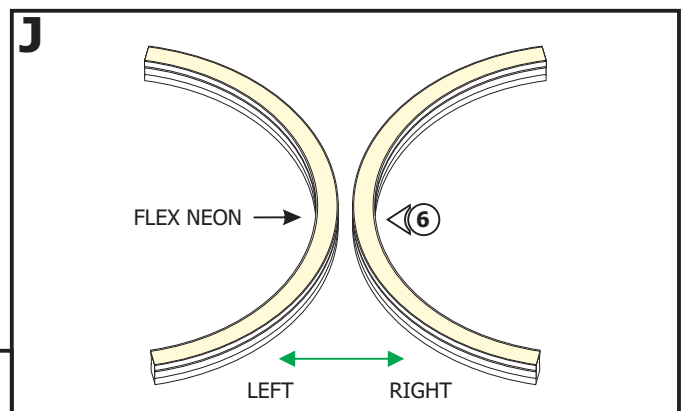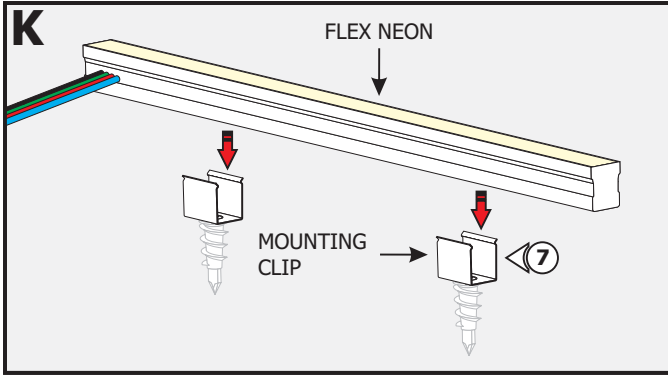
MOUNTING CLIP → ⑦

7: Insert the Flex Neon into each mounting clip.

L

⑧

FLEX NEON →

8: Strip the wire ends to connect to the power supply.

9: Follow the instructions provided with the power supply to power up the Flex Neon.

10: If using 1RE Junction box, place all wire nut connections inside the junction box.

M

ADDITIONAL FLEX NEON

⑪

FLEX NEON
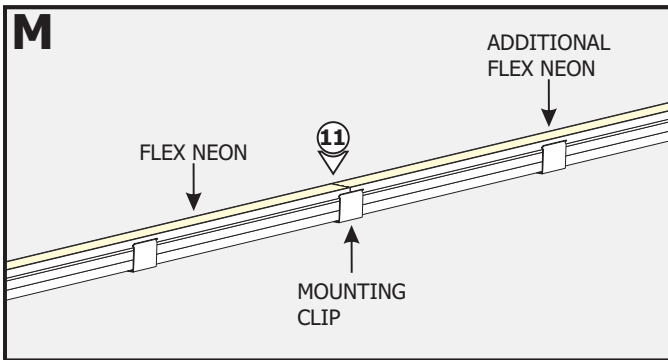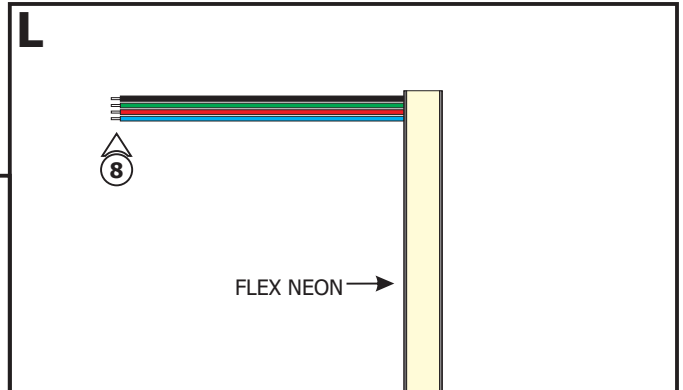
MOUNTING CLIP

11: For seamless continuous runs, place a second seamless Flex Neon at one end of the first Flex Neon. Ensure that a mounting clip is in the center where the fixtures meet together.

NOTE: Ensure that additional Flex Neon are properly supported and powered.

Section Three: Install the Flex Neon with Flexible Aluminum Channel

N

FLEXIBLE ALUMINUM CHANNEL

①

CUT
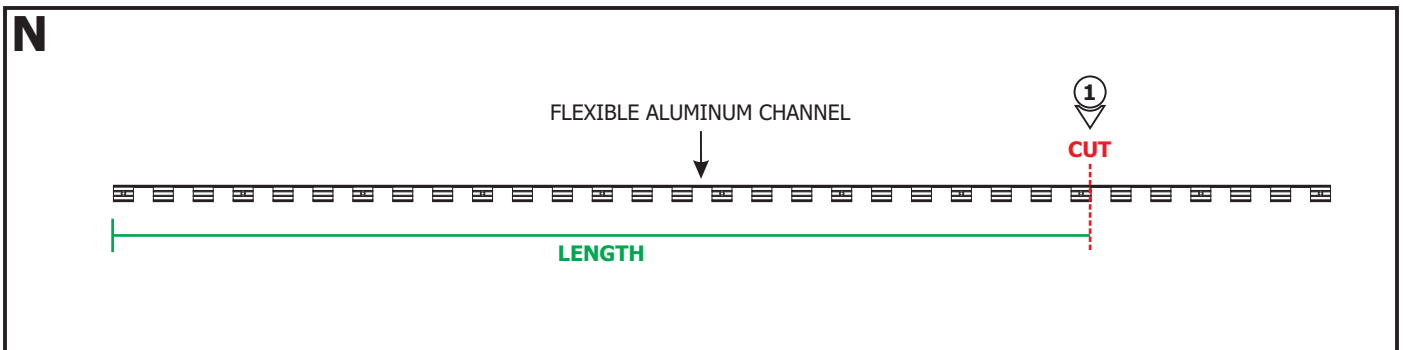
LENGTH

NOTE: Omit this section if using Left (L) Input/Output wire leads.

NOTE: Bottom (B) Input/Output is shown for demonstration purposes.

1: If necessary measure and cut the Flexible Aluminum Channel to length.

4

O

JUNCTION BOX

SCREW HOLE

BEND

TAB
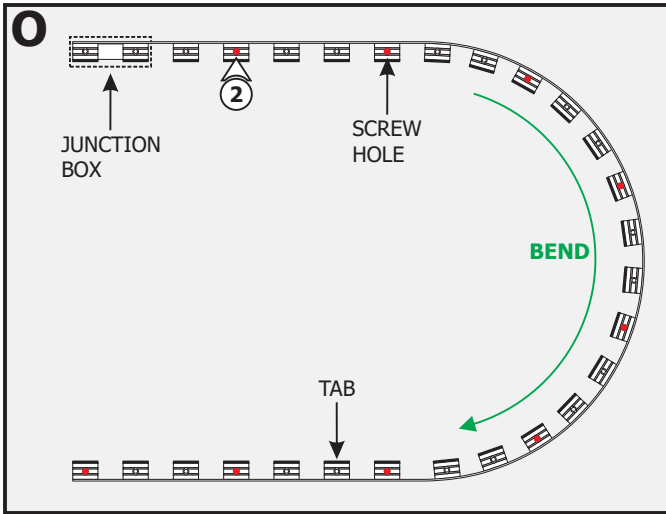
NOTE: If using 1RE Junction Box, the channel must pass through the center of the junction box.

2: Determine the location of the Flexible Aluminum Channel and mark every fourth tab screw hole.

NOTE: The Flexible Aluminum Channel bends in both directions. For simple curves or circles, it is recommended to bend the channel toward the tabs.

P

ANCHOR

SURFACE

ANCHOR MUST BE FLUSH TO THE SURFACE

NOTE: Steps 3 and 4 are for drywall mounting. Omit these steps if mounting to a wood surface directly.

3: Anchors are not provided. Tap the anchors onto the marked points up to the threaded portion with a hammer.

4: Screw in the threaded portion of the anchors with a Phillips screwdriver.

Q

FLEXIBLE ALUMINUM CHANNEL
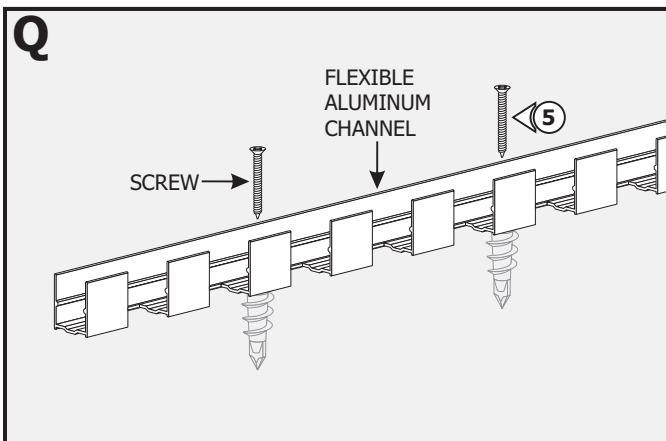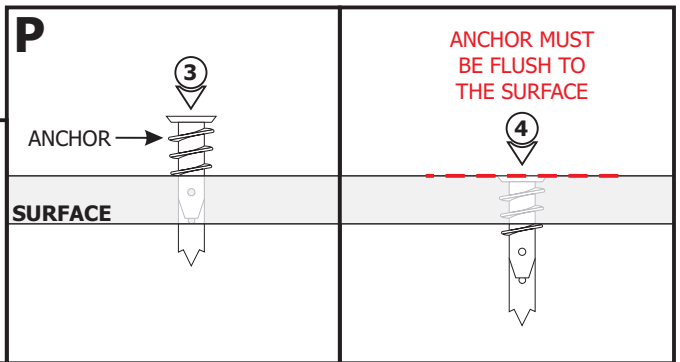
SCREW

5: Secure the Flexible Aluminum Channel to the anchors using screws.

R

FLEX NEON

POWER WIRES

FLEXIBLE ALUMINUM CHANNEL

6: Feed the power wires through the open space on the Flexible Aluminum Channel.

7: Carefully push the Flex Neon completely inside the Flexible Aluminum Channel.

S

TAB ⑧ COVER
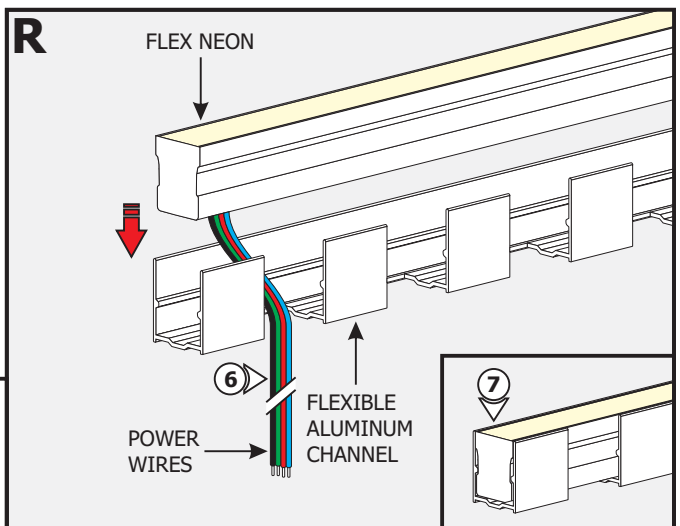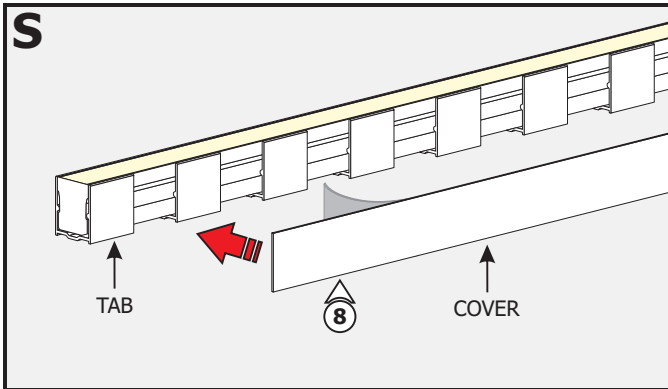
8: Remove the backing from the channel cover. Firmly press down on the Flexible Aluminum Channel tabs while removing the rest of the backing.
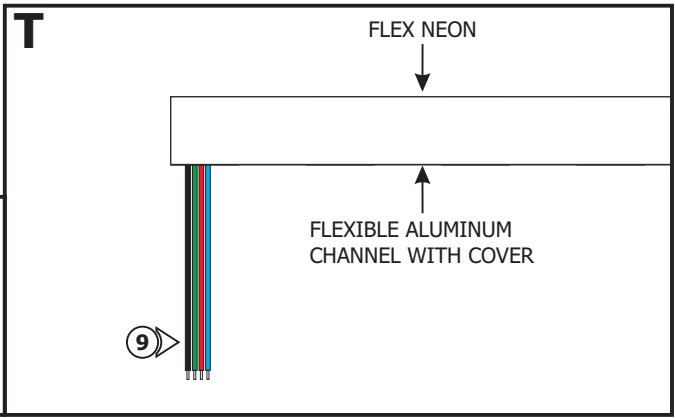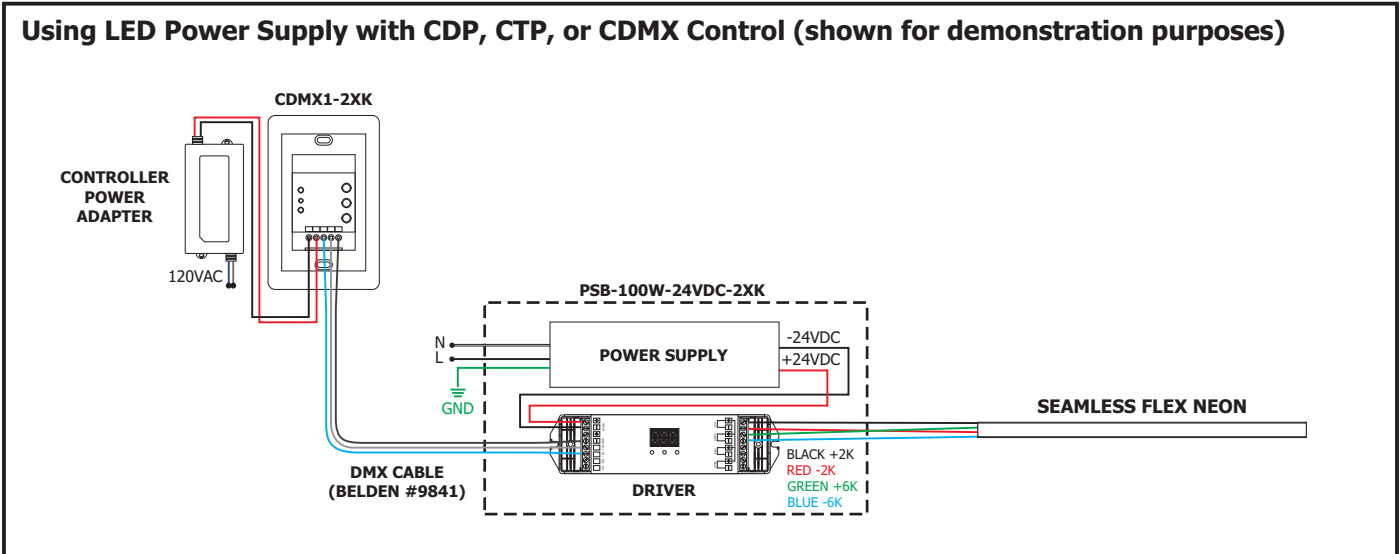
T

FLEX NEON

FLEXIBLE ALUMINUM CHANNEL WITH COVER

⑨

9: Strip the wire ends to connect to the power supply.

10: Follow the instructions provided with the power supply to power up the Flex Neon.

11: If using 1RE Junction box, place all wire nut connections inside the junction box.

100W, 24VAC LOW VOLTAGE WIRE SIZE CHART					
3% VOLTAGE DROP	**WIRE LENGTH IN FT**	**UP TO 31FT**	**32FT-49FT**	**50FT-81FT**	**82FT-124FT**
	WIRE SIZE	14 AWG	12 AWG	10 AWG	8 AWG
	VOLTAGE AT END OF THE WIRE	23.28 VAC	23.29 VAC	23.28 VAC	23.28 VAC

General Wiring Diagrams

Using LED Power Supply with CDP, CTP, or CDMX Control (shown for demonstration purposes)

CDMX1-2XK

CONTROLLER POWER ADAPTER

120VAC

PSB-100W-24VDC-2XK

N
L
GND

POWER SUPPLY

-24VDC
+24VDC

SEAMLESS FLEX NEON

DMX CABLE (BELDEN #9841)

DRIVER

BLACK +2K
RED -2K
GREEN +6K
BLUE -6K

Tunable White: LED Power Supply with two Channel Controls, for Intensity and Color Temperature

BLACK +2K RED -2K BLUE -6K GREEN +6K

-24VDC
+24VDC

WARM+ YELLOW
VTIN1+ RED
VTIN1- BLACK
WARM- BLUE
COOL- BLUE
VTIN2- BLACK
VTIN2+ RED
COOL+ YELLOW

DIMMING MODULE

COLOR TEMP — PUR + / GY -
INTENSITY — GY - / PUR +

24VDC+
24VDC-
24V POWER SUPPLY
LOAD
N
GND

SEAMLESS FLEX NEON

COLOR TEMP — PUR + / GY -
INTENSITY — GY - / PUR +

24VDC+
24VDC-
24V POWER SUPPLY
LOAD
N
GND

PSB-96W-010-24VDC-2XK

INPUT: 120-277VAC   LINE

TO POWER SUPPLY   LOAD

0-10V CONTROLLER
CONTROL INPUT 1
(DIMMING INTENSITY)

0-10V CONTROLLER
CONTROL INPUT 2
(DIMMING COLOR TEMP)

7