

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 **DIY or Completed 45 Degree Light Channel, Tunable White**





### **IMPORTANT INFORMATION**

- This instruction shows a typical installation.
- This product must be installed by a qualified electrician and in accordance with local electrical codes.



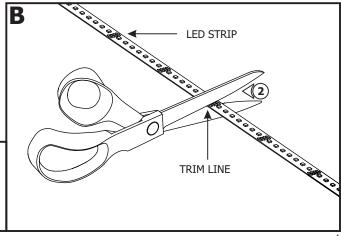
# **Section One: Assemble the Light Channel**

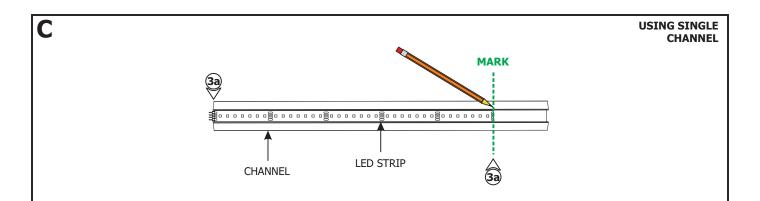
A	WATTAGE	MAX STRIP LENGTH IN INCHES		
	2.5 WATTS	480		
	5 WATTS	240		
	7.5 WATTS	144		

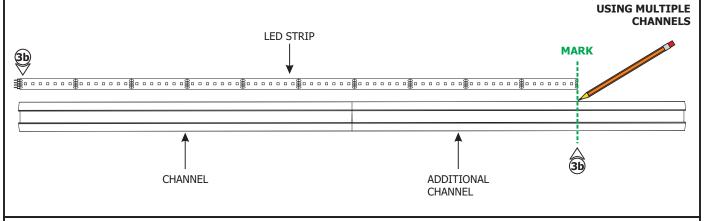
1: The maximum length of channel is 120". Use the chart to determine the number of channels needed based on the LED strip wattage. If the amount of LED Strip needed is greater than 120", two or more channels should be used.

**NOTE:** Do not trim the strip at unmarked sections which may cause that section of the strip to not light up.

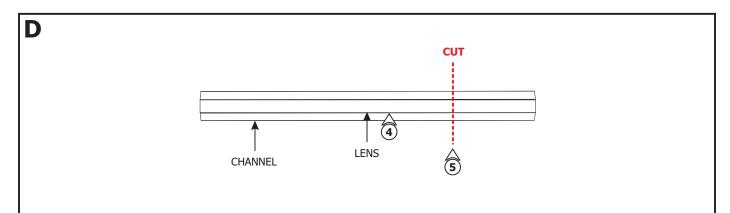
2: Determine the amount of LED Strip needed. Trim the LED Strip at the marked line above the contacts with a sharp scissor.





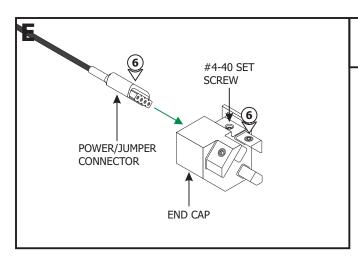


- **3a:** If using a single channel, lay the LED Strip inside the single channel flush to one end and mark the length of the LED Strip on the channel.
- **3b:** For multiple channels, put the channels next to each other from one end to another. Lay the LED Strip inside both channels flush to one end and mark the length of the LED Strip on the channel.

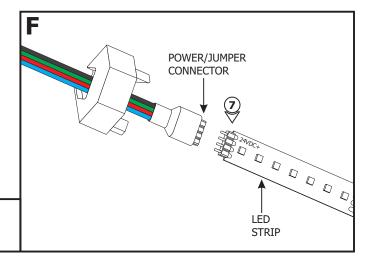


- 4: Remove the LED Strip and snap the lens on the channel **BEFORE** cutting to length. This ensures a proper fit after installation.
- **5:** To match the LED Strip length, cut the channel and lens with a hack or chop saw.

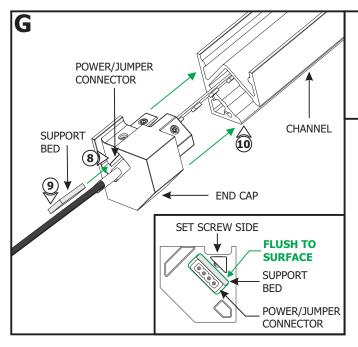
**NOTE:** Clean the burs at the end with sandpapers.



**6:** Loosen (**Do Not Remove**) the two #4-40 set screws on the end cap using a 0.05" Allen wrench. Insert the Power/ Jumper Connector through the end cap.

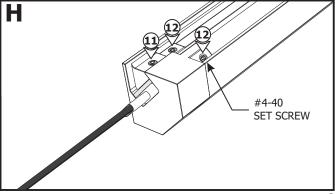


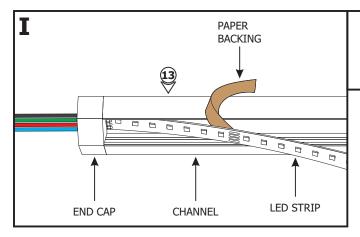
**7:** Align the 24VDC+ marking of the LED strip with the "+" black wire of the Power/Jumper connector. Push the LED strip into the Power/Jumper connector.



- 8: Insert the Power/Jumper connector inside the end cap.
- **9:** Insert the support bed on the set screw side of the end cap. Ensure the support bed and power connector are flush to the surface of the end cap.
- 10: Place the end cap into the channel.

- **11:** Secure the support bed and power connector to the end cap by tightening the #4-40 set screw with a 0.05" Allen wrench.
- **12:** Secure the end cap to the channel by tightening the two #4-40 set screws using a 0.05" Allen wrench.

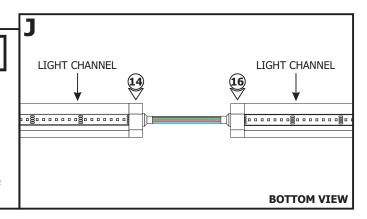


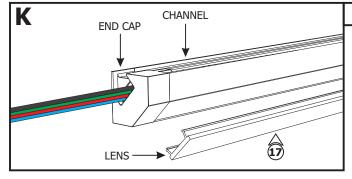


13: Carefully remove the backing from the LED strip, make sure not to remove the tape from the strip. Firmly press down the adhesive portion of the strip onto the channel surface while removing the rest of the backing, making sure there are no air bubbles that can cause surface irregularities.

**NOTE:** Omit steps 14 through 16 for DIY fixtures that LED Strip are modified and cut in field.

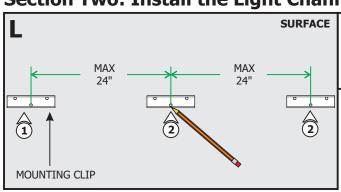
- **14:** Align the "+" black wires of the Power/Jumper connector with the 24VDC+ marking of the LED strip. Push the Power/Jumper connector into the LED Strip.
- **15:** Secure the Power/Jumper connector and support bed to the end cap by tightening the set screws.
- **16:** Repeat steps 6 through 13 to connect the other end of the Power/Jumper connector to the next Light Channel.



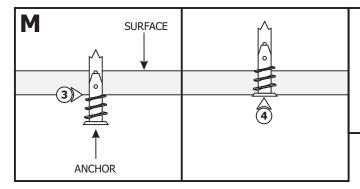


17: Snap the lens(es) to the assembled channel(s).

# **Section Two: Install the Light Channel**

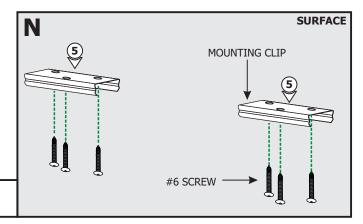


- 1: Determine the location of the 45 Degree Light Channel.
- **2:** Mark the location of the mounting clips evenly on a straight line. Mounting clips must be maximum 24" apart from each other.

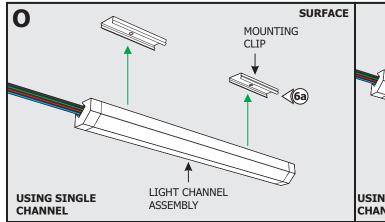


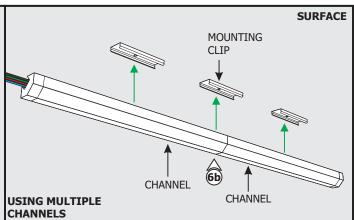
**NOTE:** Steps 3 and 4 are for drywall mounting. Omit these steps if mounting to a wood surface directly.

- **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.



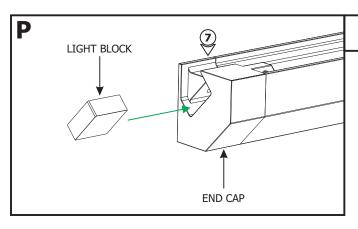
**5:** Line up the mounting clips to the anchors and secure them to the anchors by tightening the three #6 screws.



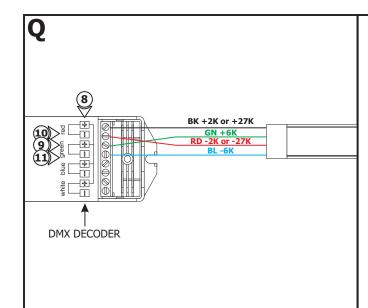


**6a:** Snap the light channel assembly to the mounting clips.

**6b:** For multiple channels, ensure that a mounting clip is in the center where the channels meet together.



**7:** Insert the light block into the end cap. Secure the light block by tightening the #4-40 set screw using a 0.05" Allen wrench.



**NOTE:** Steps 8 through 11 are for DMX Controls. If using two channel controls refer to steps 12 through 15 or Pure Smart Controls refer to steps 16 through 22.

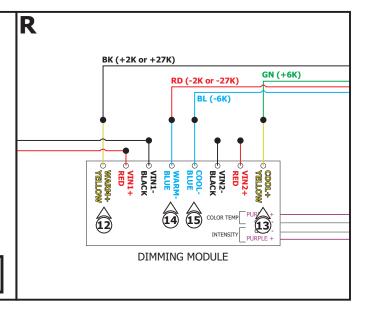
### **Tunable White with DMX Controls:**

- **8:** Connect the black +2000K or +2700K wire of the Power/Jumper connector to the red "+" DMX terminal and tighten the screw.
- **9:** Connect the green +6500K wire of the Power/Jumper connector to the green "+" DMX terminal and tighten the screw.
- **10:** Connect the red -2000K or -2700K wire of the Power/ Jumper connector to the red "-" DMX terminal and tighten the screw.
- **11:** Connect the blue -6500K wire of the Power/Jumper connector to the green "-" DMX terminal and tighten the screw.

#### **Tunable White with Two Channel Controls:**

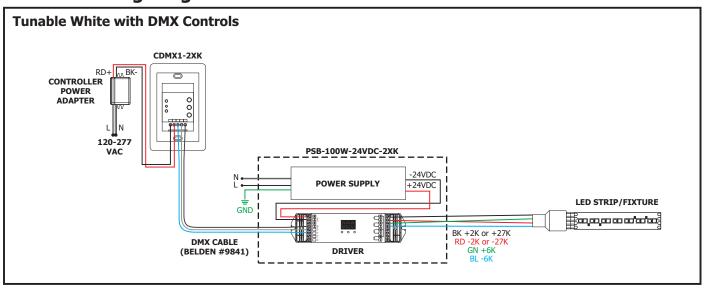
- **12:** Connect the black +2000K or +2700K wire of the Power/ Jumper connector to the Warm+ Yellow dimming module wire using a wire nut.
- **13:** Connect the green +6500K wire of the Power/Jumper connector to the Cool+ Yellow dimming module wire using a wire nut.
- **14:** Connect the red -2000K or -2700K wire of the Power/ Jumper connector to the Warm- Blue dimming module wire using a wire nut.
- **15:** Connect the blue -6500K wire of the Power/Jumper connector to the Cool- Blue dimming module wire using a wire nut.

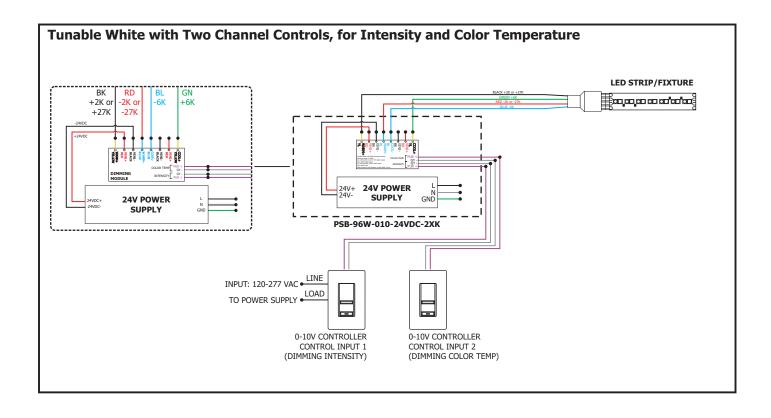
**NOTE:** Refer to the instructions provided with the power supply and controller to power the light channel.

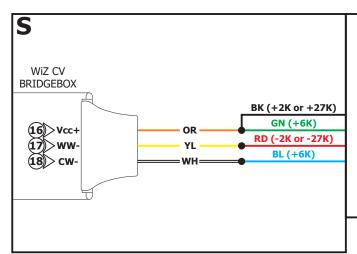


100W, 24VAC LOW VOLTAGE WIRE SIZE CHART							
3% VOLTAGE DROP	WIRE LENGTH IN FT	UP TO 31FT	32FT-49FT	50FT-81FT	82FT-124FT		
	WIRE SIZE	14 AWG	12 AWG	10 AWG	8 AWG		
	VOLTAGE AT END OF THE WIRE	23.28 VAC	23.29 VAC	23.28 VAC	23.28 VAC		

# **General Wiring Diagrams**





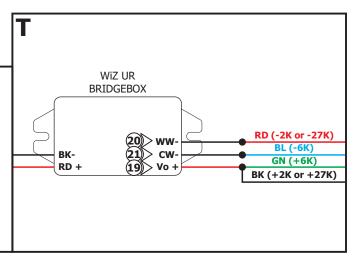


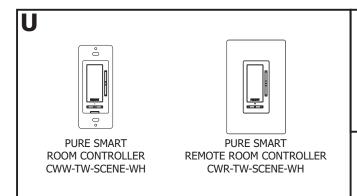
### **Tunable White with Pure Smart Controls - CV Bridgebox**

- **16:** Connect the black +2000K or +2700K wire and green +6500K wire of the Power/Jumper connector to the Vcc+ orange wire of the WiZ CV Bridgebox using a wire nut.
- 17: Connect the red -2000K or -2700K wire of the Power/ Jumper connector to the WW- yellow wire of the WiZ CV Bridgebox using a wire nut.
- **18:** Connect the blue -6500K wire of the Power/Jumper connector to the CW- white wire of the WiZ CV Bridgebox using a wire nut.

### **Tunable White with Pure Smart Controls - UR Bridgebox**

- **19:** Connect the black +2000K or +2700K wire and green +6500K wire of the Power/Jumper connector to the "Vo+" red wire of the UR Bridgebox using a wire nut.
- **20:** Connect the red -2000K or -2700K wire of the Power/ Jumper connector to the "WW-" black wire of the UR Bridgebox using a wire nut.
- **21:** Connect the blue -6500K wire of the Power/Jumper connector to the "CW-" black wire of the UR Bridgebox using a wire nut.

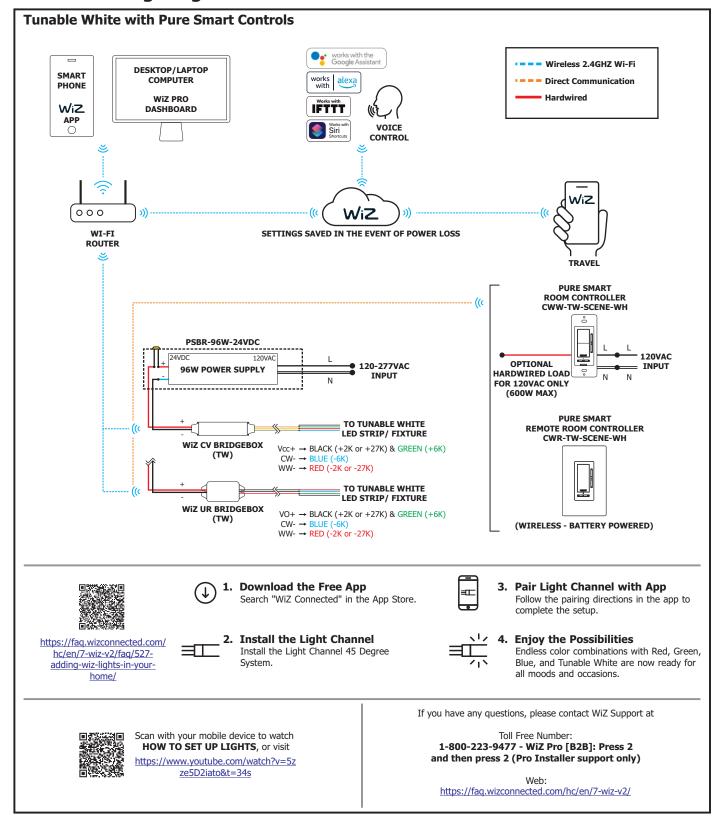




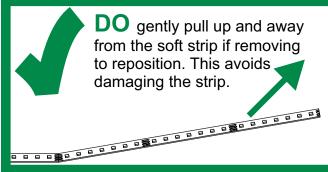


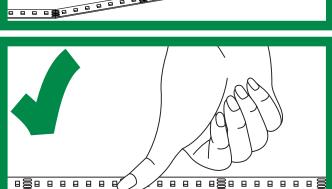
**22:** Refer to the instructions provided with the optional controller and the WiZ App for complete setup.

### **General Wiring Diagram**



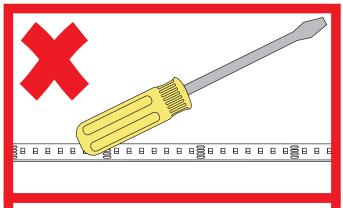
### IMPORTANT INFORMATION REGARDING INSTALLATION AND REWORK OF SOFT STRIP LED





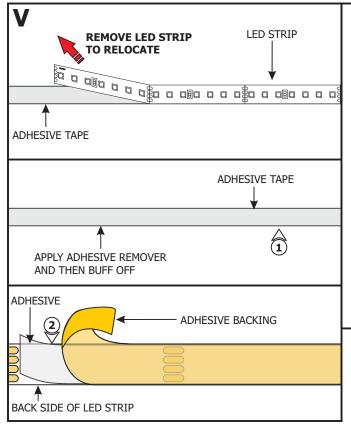
**DO** only ever use fingers to gently install soft strip to a surface **AFTER** cleaning the surface with alcohol.





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

# **Relocating LED Strip (Optional)**



**NOTE:** If relocating the installed LED strip, make sure that the adhesive tape on back of the LED 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 conductive heat sink which will cause the strip to short and burn. Call PureEdge 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 LED strip and apply moderate pressure to affix the tape. Continue this step a few inches at a time until the entire adhesive tape is attached to the back of the LED strip.
- **3:** Refer to steps 7 through 13 in Section One to reinstall the LED strip.