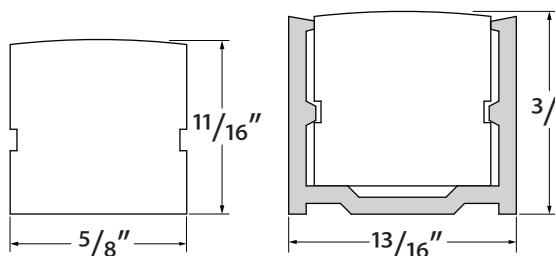


**Profiles:**



TRACE™ Vertical

TRACE™ is an indoor/outdoor low voltage lighting system used primarily for direct or indirect lighting designs.

**Please verify the contents of the packages!**

**Please read instructions entirely before starting installation**

**Be sure power is turned off before installing the system**

**Call Tivoli, LLC tech support with questions**

**Caution:** TRACE™ RGB is designed to work with listed Class 2 24V DC transformers only. Use of any other power source will cause damage, shorten the life of the fixture and will void the warranty.

**Consult** any and all applicable local and national codes for installation.

**Do not** conceal or extend exposed conductors through a building wall as per local electrical code.

**Warning:** With any luminaire for any application, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injuries. This lighting system should be installed by a certified professional.

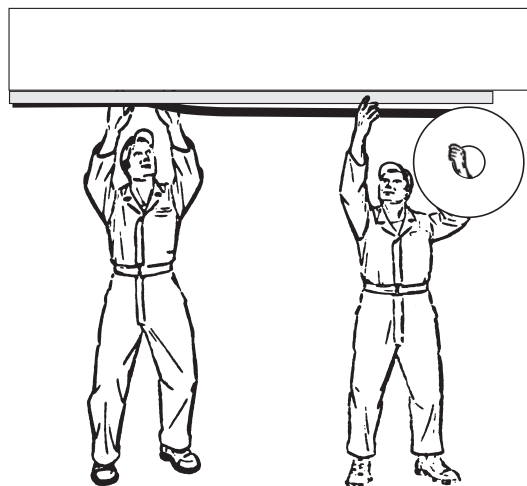
**WARNINGS**



**TRACE™ RGB MAY BE EASILY DAMAGED!** The reliability of the product can only be ensured if these warnings and cautions are complied with faithfully. Keep these instructions for future maintenance work.

**WARNING!** Risk of product damage. Longer runs of Trace™ lighting strands must be installed by at least two people.

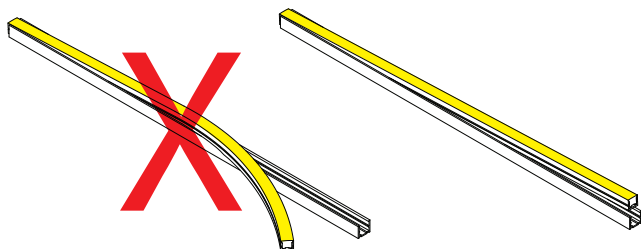
**IMPORTANT!** The Trace™ RGB luminaire must not be allowed to bend or hang down. That way, the bending limit will not be inadvertently exceeded, resulting in product damage.



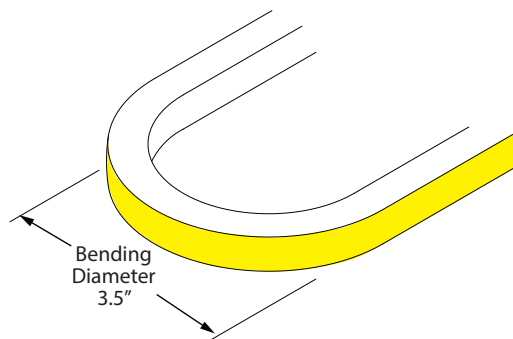
Keep Trace™ from twisting or bending in the wrong direction. Two person installation.

**Warning!** Risk of product damage. Trace™ RGB Vertical must not be bent at less than 3.5" diameter or damage will result. Do not allow Trace™ to twist or bend in the wrong direction.

**WARNING!** Risk of Damage. Insert Trace™ RGB Vertical into channel evenly and gradually to keep twisting and bending to a minimum.



TRACE™ VERTICAL  
Do not allow to twist or bend in the wrong direction.



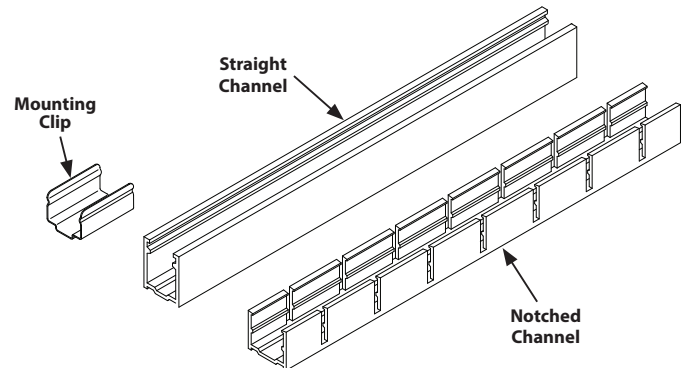
## Overview: Read Before Installing Luminaire

### Installation Notes:

**Step 1:** Measure run area where Trace™ is to be installed. Locate power feed end at highest point of the run to minimize exposure to water run off.

**Step 2:** A Mounting Channel is recommended for outdoor applications. Lay channel along desired area and attach with screws (by others) every 18 to 24 inches. If the design requires creating bends and arcs, it is recommended that the Vertical Notched Channels are used. Mounting Clips are for use on indoor applications only.

**Note:** Minimum bending diameter for the notched channel is 11". Trace™ lighting strand must not be bent at less than 3.5" diameter or damage will result.



**Step 3:** Trace™ must be installed with two people. One to press the luminaire into the channel and the other to hold the spool and unroll it while keeping the Trace™ flex body straight.

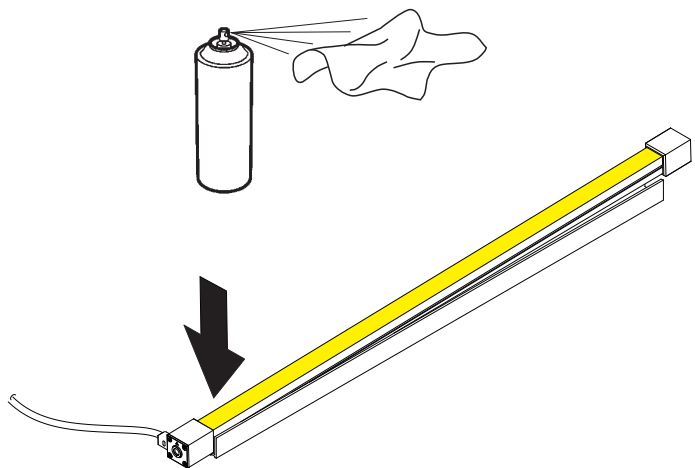
**Warning:** Risk of Product damage. Do not stretch, pull, or yank. Doing so can damage the Trace™ internal connections and void the warranty.

**Step 4:** Insert Trace™ into mounted channel starting from power connector end. The End Cap and Power Feed Connector do not fit within the channel, so cut the Mounting Channel so that connectors and End Caps will overhang outside the ends of the Channel. Trace™ should be pressed into the channel carefully and gradually, without excessive bending or damage will result.

**Note:** We recommend using a dry spray lubricant, such as 3M Spray Lubricant or WD-40 Specialist for all Trace™ installations to insure the luminaire fits into the channel without damage. Additionally, when installing with Mounting Clips, Silicone Sealant (FLXD-SIL-GE-10) may be applied to the inside bottom surface.

**Step 5:** Secure power connection to building with use of C-clamp (by others) or mount connection inside J-Box.

Connect to 24V DC power supply according to supplied wiring diagrams.



## Trace™ RGB Mounting Options

### Trace™ RGB Vertical with Mounting Clips

**Warning:** Risk of Product Damage.

Only bend the Trace™ Vertical so the lens bends up or down. See diagram below.

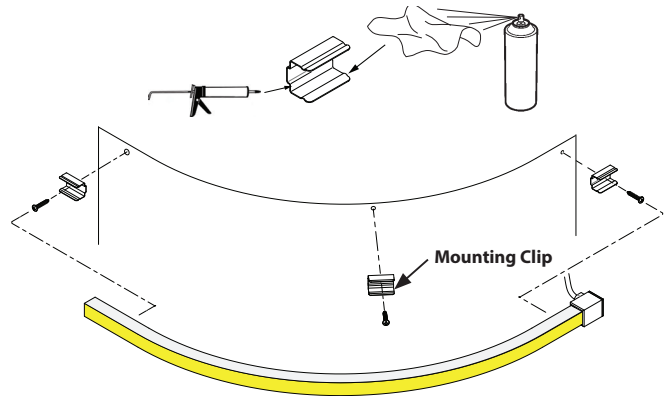
**Note:** Minimum bending diameter for Trace™ Vertical is 3.5" in the vertical direction only.

**Step 1:** Determine where the Mounting Clips will need to be installed to achieve the desired shape.

**Step 2:** Position the Mounting Clips and attach with screws (Included).

**Step 3:** Lay a bead of Silicone Adhesive (**LFXD-SIL-GE-10**) to the inside bottom surfaces of the Mounting Clips, as shown.

**Step 4:** Spray Dry Lubricant on a rag and wipe the inside upper surfaces of the mounting clips, as shown, to allow the Trace™ fixture to slide more easily into the mounting clip. 3M Spray Lubricant or WD-40 Specialist is recommended.



**Warning!** Risk of Product Damage.

Regular WD40 490002 will stress craze, crack or swell the Trace™ Silicone covering. Do not use!

**Step 5:** Trace™ must be installed with two people. One to press the luminaire into the channel and the other to hold the spool and unroll it while keeping the Trace™ flex body straight.

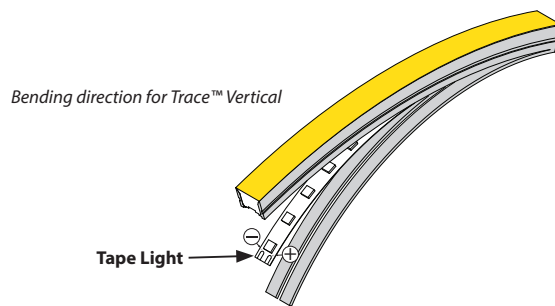
**Step 6:** Press the Trace™ into the Mounting Clips.

**Step 7:** Connect to power.

### Bending Limitations

**Warning!** Risk of Product Damage.

Trace™ RGB Vertical can only be bent in the direction that does not twist the Tape Light.



## Trace RGB Mounting Options (Continued)

### Install Trace™ RGB Vertical in Notched Mounting Channel

**Warning:** Risk of Product Damage.  
Only bend the Trace™ Vertical so the lens bends up or down so as not to twist the Tape Light. See diagrams.

**Note:** Minimum bending diameter for the notched channel is 11". However, the minimum bending diameter for Trace Vertical is 3.5" in the vertical direction only.

**Step 1:** Determine Channel mounting Location.

**Step 2:** Drill a hole 3" from each end of the Channel and 18"-24" along length of Channel.

**Step 3:** Position the Notched Channel and attach with screws (Included).

**Step 4:** Spray dry lubricant on a rag and wipe along the inside upper surfaces of the extrusion. We recommend using a dry spray lubricant, such as 3M Spray Lubricant or WD-40 Specialist for all Trace™ installations to insure the luminaire fits into the channel without damage.

**Step 5:** Trace™ must be installed with two people. One to press the luminaire into the channel and the other to hold the spool and unroll it while keeping the Trace™ flex body straight.

**Step 6:** Start by orienting the Trace™ with the Lens facing away from the Channel, as shown.

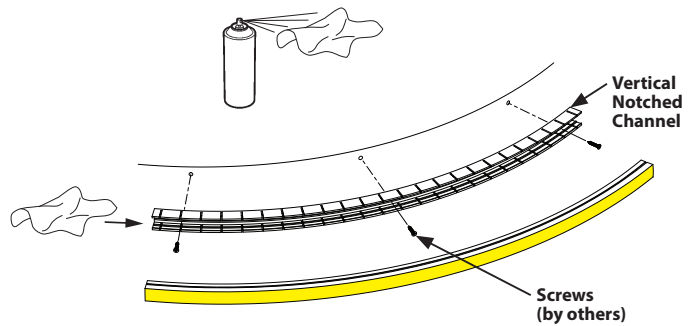
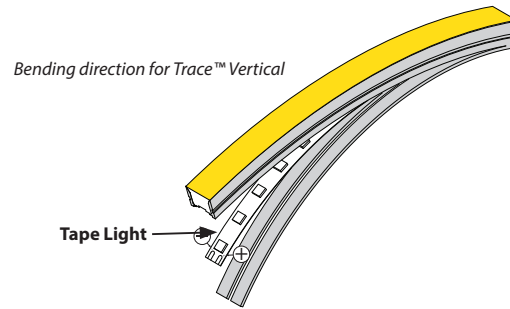
**Step 7:** Insert the Trace™ body into the Channel one flex section at a time. Start at one end and press it down carefully and gradually, working along the Channel, inserting the Trace™ body into each section until the entire Trace™ fixture is securely mounted in the channel.

**WARNING!** Risk of Product Damage.  
Do not hammer or pound the luminaire into the channel. Once inserted, do not pull or yank on the fixture. Trace™ will be damaged unless it is handled carefully.

**Step 8:** Connect to power.

### Bending Limitations

**Warning!** Risk of Product Damage.  
Trace™ RGB Vertical can only be bent in the direction that does not twist the Tape Light.



## Trace™ RGB Mounting Options (Continued)

### Straight Channel for Trace™ RGB Vertical Installation

**Step 1:** Prepare Straight Mounting Channel for installation cutting it to the correct length, keeping in mind that the End Caps will not fit inside the Channel, and by drilling screw holes 3" from each end and additional holes approximately every 18" along the channel.

**Step 2:** Place Straight Channel on the mounting surface and mark the hole locations.

**Step 3:** Remove the Channel and drill pilot holes at all hole locations.

**Step 4:** Place the Channel into position and secure with screws (not included).

**Note:** Screws (by others) should be appropriate for the mounting location. (ie: wood screws for wood, etc.)

**Step 5:** Spray dry lubricant on a rag and wipe along the inside upper surfaces of the extrusion. We recommend using a dry spray lubricant, such as 3M Spray Lubricant or WD-40 Specialist for all Trace™ installations to insure the luminaire fits into the channel without damage.

**Step 6:** Trace™ must be installed with two people. One to press the luminaire into the channel and the other to hold the spool and unroll it while keeping the Trace™ flex body straight.

**Step 7:** Start by orienting the Trace™ with the Lens facing away from the Channel, as shown.

**Step 8: IMPORTANT!** Insert the Trace™ body into the Channel. Start at one end and press it down carefully and gradually, working along the Channel, inserting the Trace™ body along the channel until the entire Trace™ fixture is securely mounted in the channel.

**WARNING!** Risk of Product Damage.

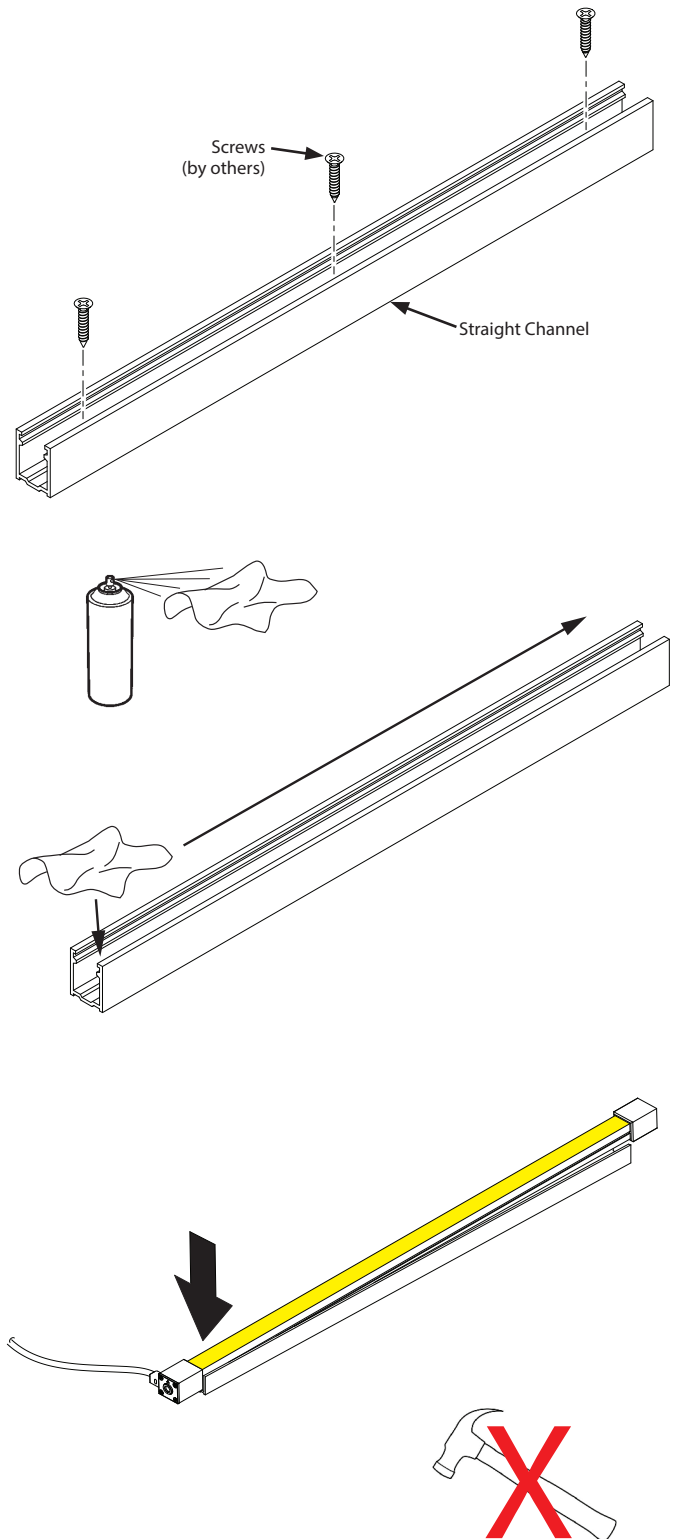
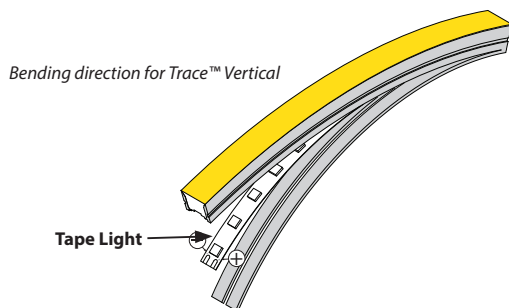
Do not hammer or pound the luminaire into the channel. Once inserted, do not pull or yank on the fixture. Trace™ will be damaged unless it is handled carefully.

**Step 9:** Connect to power.

### Bending Limitations

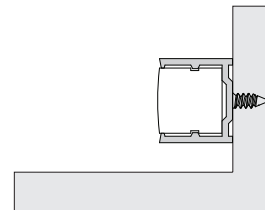
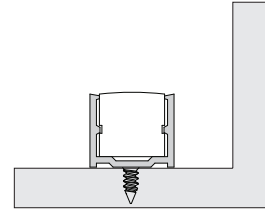
**Warning!** Risk of Product Damage.

Trace™ RGB Vertical can only be bent in the direction that does not twist the Tape Light.



Trace™ RGB Mounting Options (Continued)

**Note:** Trace™ Mounting Channel can be mounted on horizontal or vertical surfaces.



**Product Specification Guide**

LUMINAIRE	POWER CONSUMPTION	MAX RUN LENGTH*
Trace RGB, Low Output	1.5W	58'
Trace RGB, Standard	3W	29'
Trace RGB, High Output	4.5W	19'

## Trace™ RGB Basic Wiring Diagram

### Electrical Connections for Trace™ RGB

**Step 1:** Turn power off before beginning electrical installation.

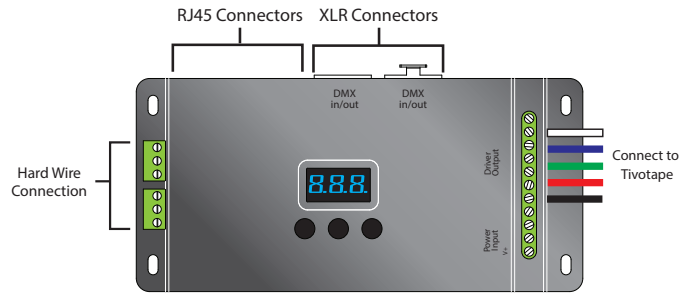
**Note:** Contacting hot wires against the Trace™ leads may damage the product and void the warranty.

**Step 2:** Connect Trace™ lead wires to RGB-Sub-Controller, or if using our ADUL-DIN series transformers, connect to pre-wired connectors which are found inside the power supply box. Refer to diagram below and on Page. Make sure each lead wire is connected to the correct terminal, as follows:

LEAD WIRE COLOR	SUB-CONTROLLER TERMINAL OR ADUL-DIN CONNECTOR WIRE COLOR
Black	Black (+)
White	Blue
Red	Red
Green	Green
White	Not used for RGB

**Step 3:** Connect to a listed Class 2, 24V DC transformer only. See list of approved transformers.

**Step 4:** Optionally, Trace™ RGB may be dimmed using an MLV or ELV dimmer that is suitable for the power supply. Please contact our technical support staff for more information.

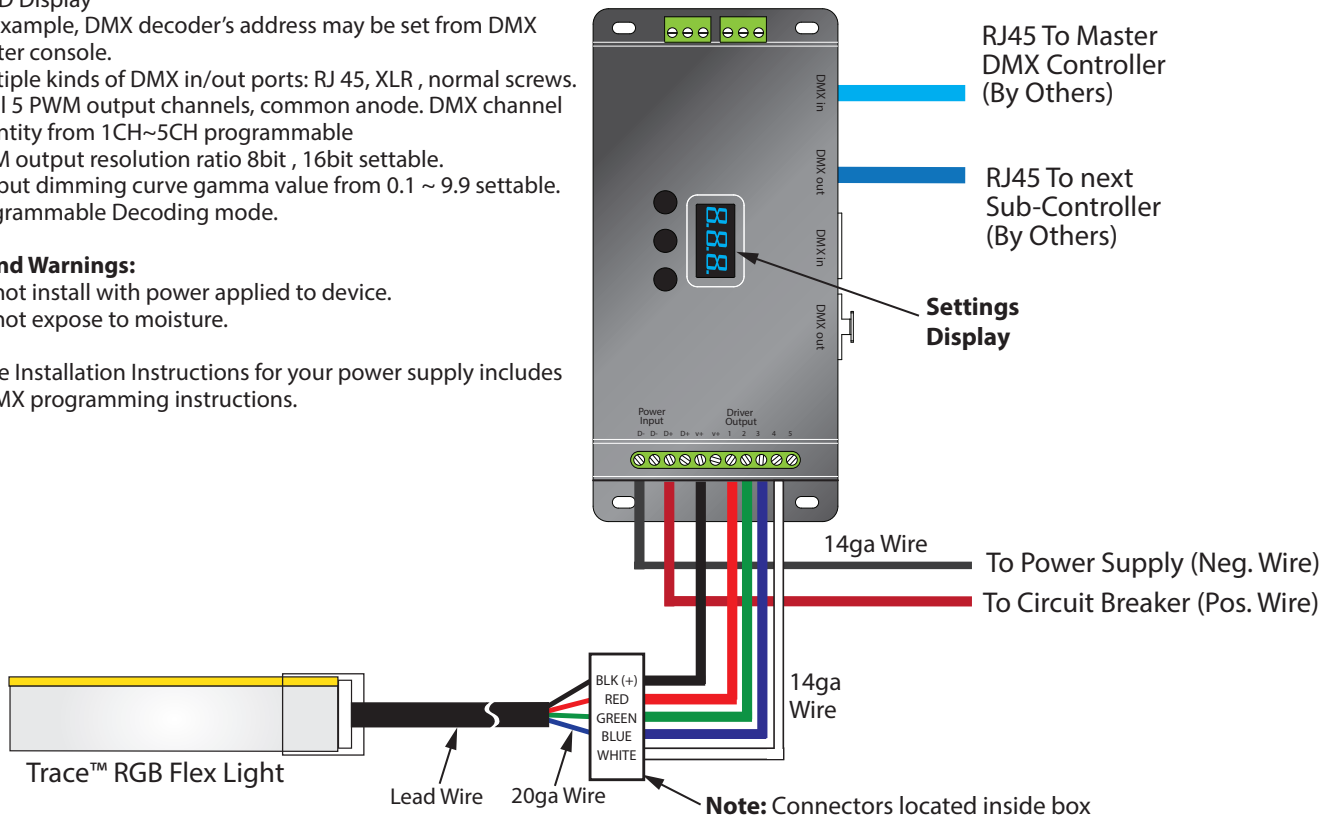


- DMX512 RDM decoder, RDM function can provide the interface between DMX master and decoder.
- OLED Display for example, DMX decoder's address may be set from DMX master console.
- Multiple kinds of DMX in/out ports: RJ 45, XLR, normal screws.
- Total 5 PWM output channels, common anode. DMX channel quantity from 1CH~5CH programmable
- PWM output resolution ratio 8bit, 16bit settable.
- Output dimming curve gamma value from 0.1 ~ 9.9 settable.
- Programmable Decoding mode.

### Safety and Warnings:

- Do not install with power applied to device.
- Do not expose to moisture.

**Note:** The Installation Instructions for your power supply includes DMX programming instructions.



## Power Supply with Sub-Controller Sample Wiring Diagram

There are many possible options for dimming Trace™ RGB. See the specification Sheet for more information. The following wiring diagram is for reference only. Please refer to the Installation Instruction for the Power Supply you choose for detailed wiring instructions.

