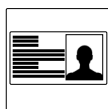


SAFETY & WARNINGS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Do not modify or disassemble this product beyond instructions or the warranty will be void.
4. Do not use if there is any damage to the fixture or wiring. Inspect periodically.
5. Do not submerge Strip Light in liquids or use the product in the vicinity of standing water or other liquids.
6. Do not install near areas with exposure to salt water or chlorinated water.
7. Do not install in direct sunlight or damage to the LED phosphor will occur.
8. Do not attempt to fix this product in the field.
9. Failure to follow safety warnings, and installation instructions will void the warranty for this product.



QUICK SPECS / MODELS

Input	24VDC Constant Voltage
Power	1.2w/ft. / 2.7w/ft. / 4.4w/ft.
Ambient Temp †	-4° - 122°F (-20° - 50°C)
Environment	Indoor/Outdoor/IP65

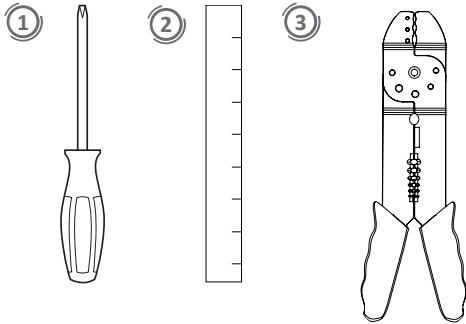
† Do not install product in environment outside listed temperature.

***NOT FOR USE IN SUBMERSIBLE APPLICATIONS, OR WITHIN 5 FEET OF A SWIMMING POOL.**

BLAZE™ NEON 24V LED Strip Light

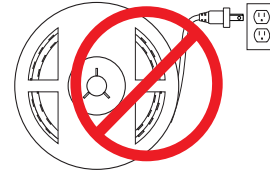
INSTALLATION GUIDE

REQUIRED TOOLS

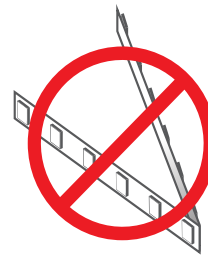


1. Phillips-head Screwdriver
2. Ruler (Recommended)
3. Wire Stripper (Recommended)

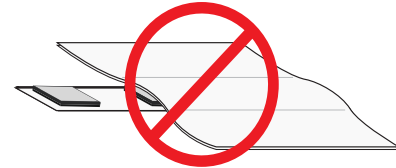
HANDLE PRODUCT WITH CARE!



DO NOT POWER STRIP LIGHT WHILE ATTACHED TO SPOOL OR TIGHTLY COILED.

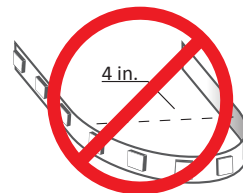


DO NOT FOLD, CREASE, OR TWIST LED STRIP LIGHT.

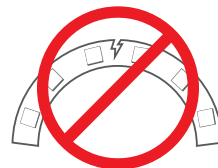


DO NOT COVER STRIP LIGHT WITH ANY MATERIALS.

TOP EMITTING BLAZE™ NEON LED Strip Light

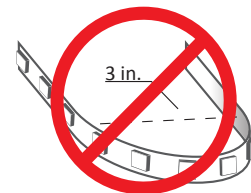


DO NOT BEND LED STRIP LIGHT TO A DIAMETER LESS THAN 4 INCHES.

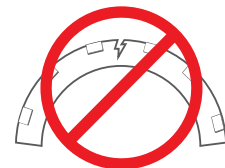


DO NOT BEND LED STRIP LIGHT ON A HORIZONTAL PLANE.

SIDE EMITTING BLAZE™ NEON LED Strip Light



DO NOT BEND LED STRIP LIGHT TO A DIAMETER LESS THAN 3 INCHES.



DO NOT BEND LED STRIP LIGHT ON A VERTICAL PLANE.

BLAZE™ NEON 24V LED Strip Light

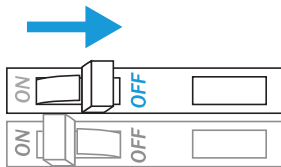
INSTALLATION GUIDE

INSTALLATION

1 TURN POWER OFF AT CIRCUIT BREAKER

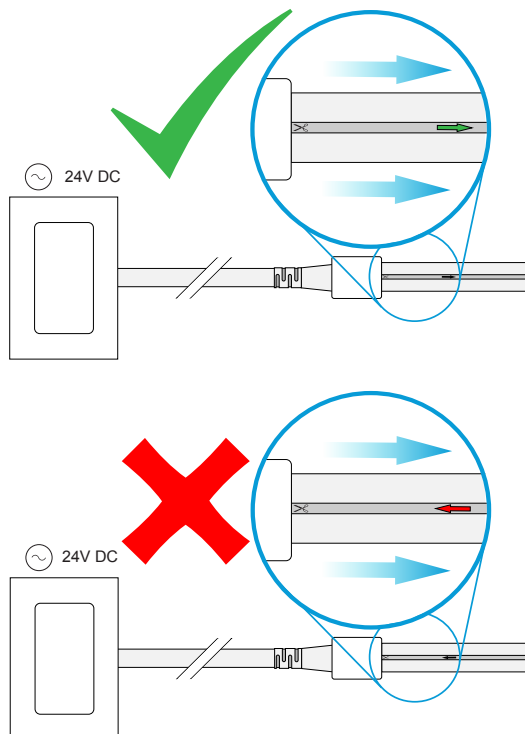


SHOCK HAZARD! May result in serious injury or death. Turn power OFF at circuit breaker prior to installation.

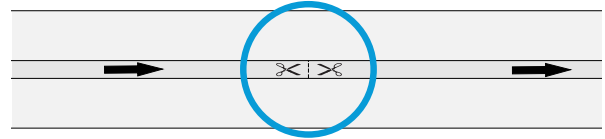


2 PREPARE BLAZE™ NEON LED STRIP FOR INSTALLATION

2.1 Before cutting or attaching connectors, ensure that the arrows on the underside of the Strip Light point away from initial connection.

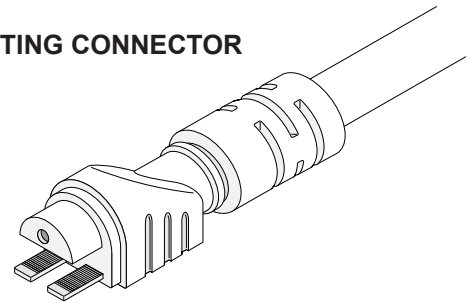


2.2 Ensure to cut the Strip Light at the designated cut points only. Cutting anywhere else will cause damage to the Strip Light.

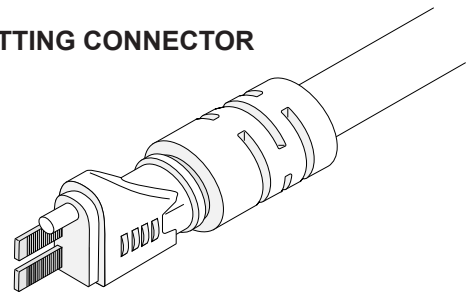


3 CREATE CONNECTION

TOP EMITTING CONNECTOR

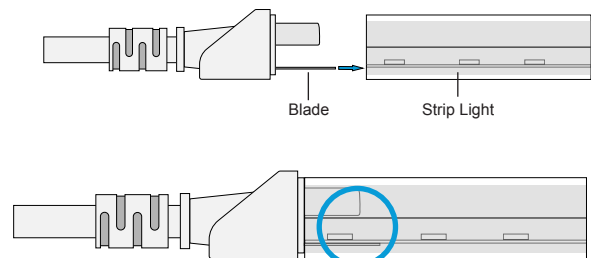


SIDE EMITTING CONNECTOR



3.1 INSERT CONNECTOR

Slide blades directly under LED Strip Light and press firmly.



**Top emitting BLAZE™ NEON LED Strip Light shown.*

BLAZE™ NEON 24V LED Strip Light

INSTALLATION GUIDE

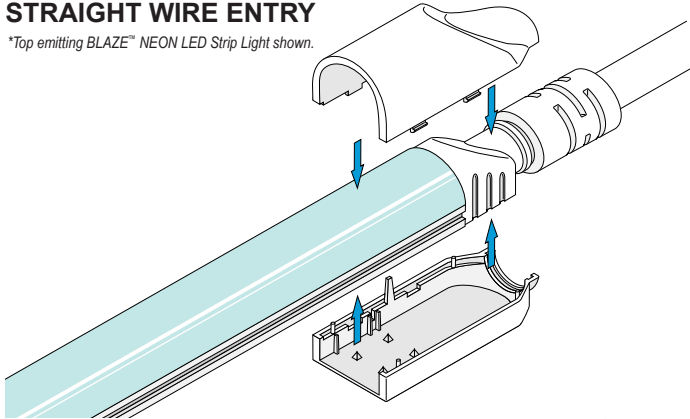
INSTALLATION (CONT.)

3.2 COVER CONNECTOR

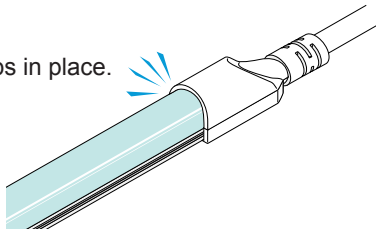
Connect top and bottom halves of connector cover together completely surrounding connection point.

STRAIGHT WIRE ENTRY

**Top emitting BLAZE™ NEON LED Strip Light shown.*

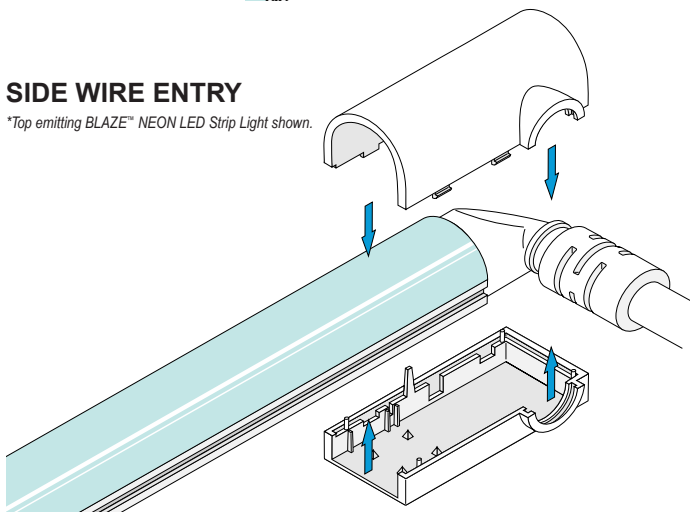


Press until cover snaps in place.

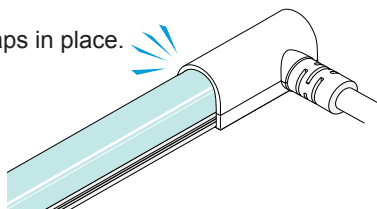


SIDE WIRE ENTRY

**Top emitting BLAZE™ NEON LED Strip Light shown.*

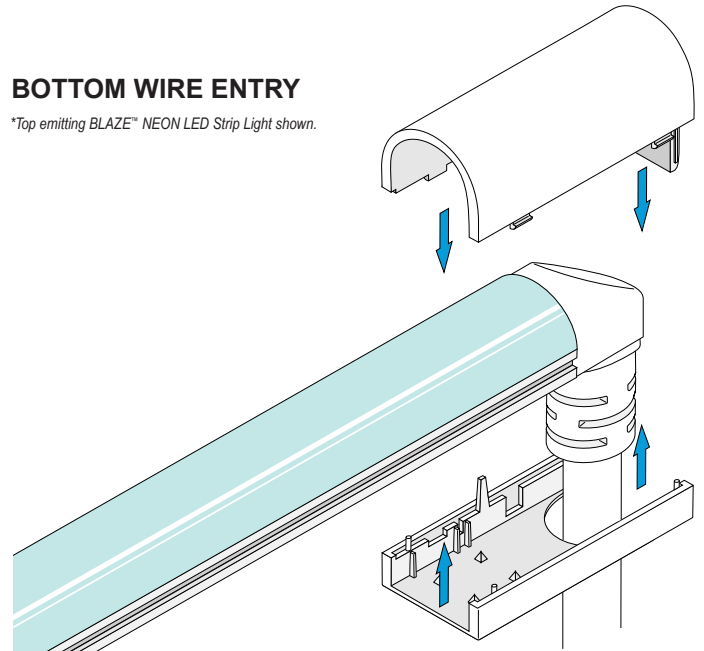


Press until cover snaps in place.

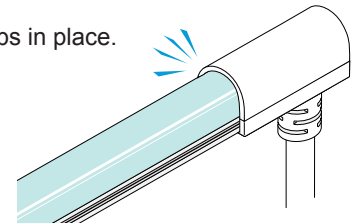


BOTTOM WIRE ENTRY

**Top emitting BLAZE™ NEON LED Strip Light shown.*

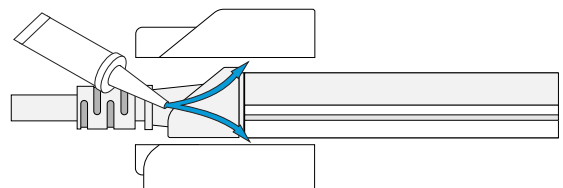


Press until cover snaps in place.



OPTIONAL: Cutting BLAZE™ NEON LED Strip Light will void the IP rating. Adding silicone sealant within the connector cover before assembling may keep the Strip Light sealed from outside elements.

Note: Using silicone sealant with the BLAZE™ NEON LED Strip Light is still not a guaranteed moisture barrier. Use at your own risk.



BLAZE™ NEON 24V LED Strip Light

INSTALLATION GUIDE

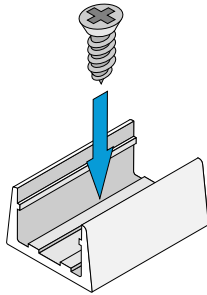
INSTALLATION (CONT.)

4 MOUNT BLAZE™ NEON LED STRIP LIGHT

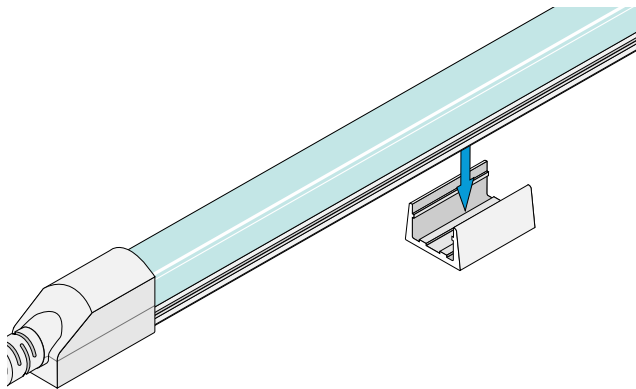
Option A: Bottom U-Clips

- a Screw bottom u-clips to surface.

Note: It is recommended to use two bottom u-clips for every foot of BLAZE™ NEON LED Strip Light.



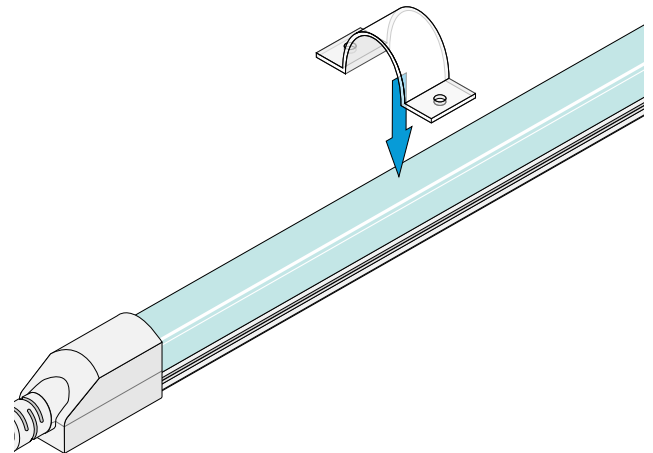
Insert BLAZE™ NEON LED Strip Light into bottom u-clip.



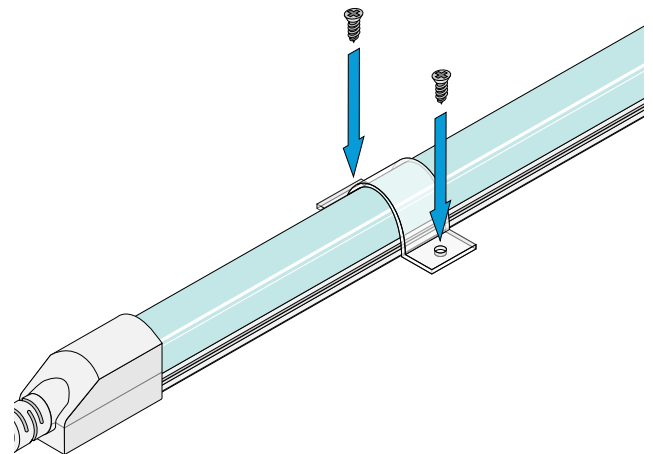
Option B: Top U-Clips

- b Place BLAZE NEON LED Strip Light on surface, then place clear top u-clip over Strip Light.

Note: It is recommended to use two clear top u-clips for every foot of BLAZE™ NEON LED Strip Light.



Screw top u-clip to surface.



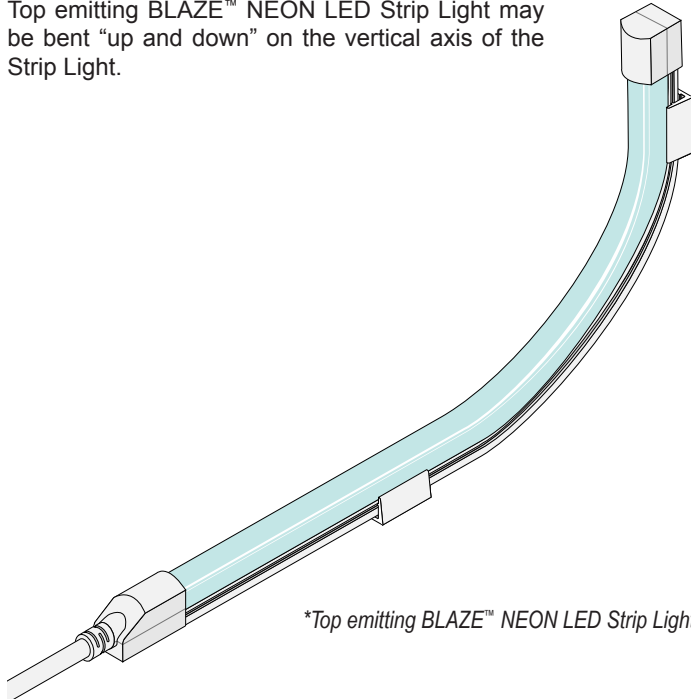
BLAZE™ NEON 24V LED Strip Light

INSTALLATION GUIDE

INSTALLATION (CONT.)

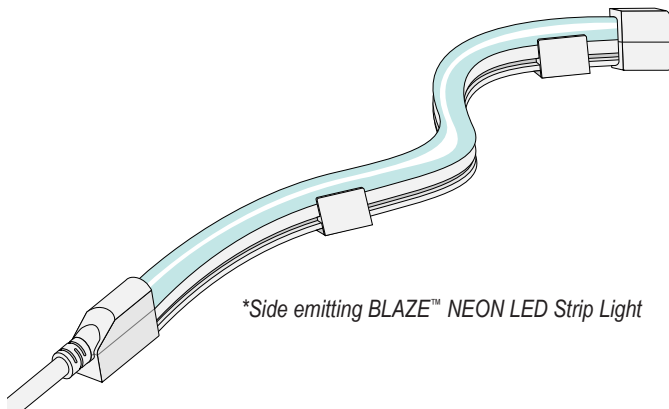
BLAZE™ NEON LED Strip Light may be bent to resemble neon lighting. Examples below:

Top emitting BLAZE™ NEON LED Strip Light may be bent “up and down” on the vertical axis of the Strip Light.



**Top emitting BLAZE™ NEON LED Strip Light*

Side emitting BLAZE™ NEON LED Strip Light may be bent “Left and Right” on the horizontal axis of the Strip Light.

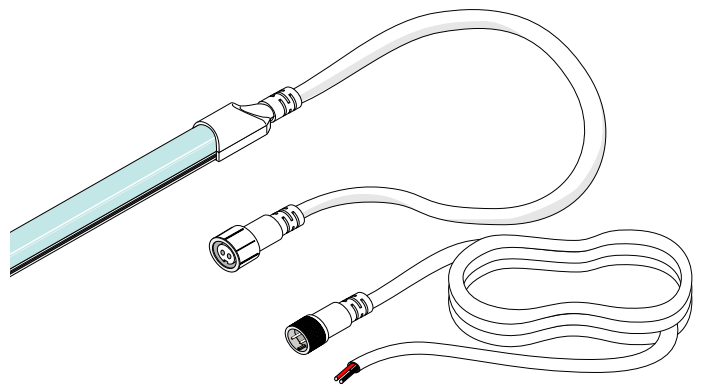


**Side emitting BLAZE™ NEON LED Strip Light*

5 CONNECT TO 96” SPLICE CABLE

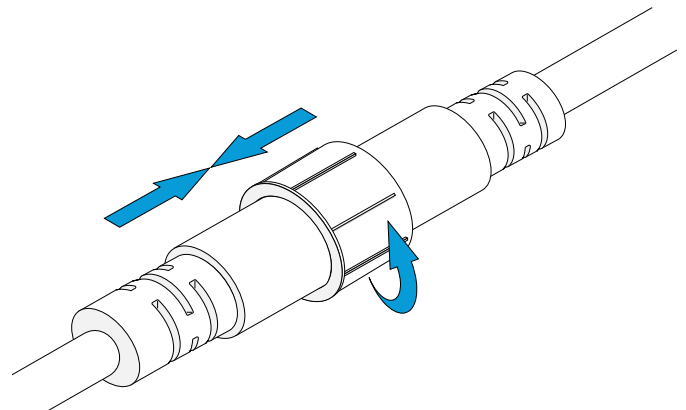
Top emitting and side emitting connector will have wet location rated plug connector (female) on opposite end.

96” BLAZE™ NEON Splice cable will have wet location rated plug connector (male) on opposite end of splice connection.



BLAZE™ NEON Extension Cable.

Screw connector cap onto Splice cable securely.



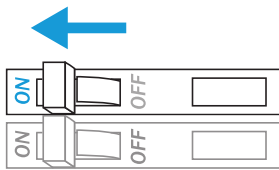
BLAZE™ NEON 24V LED Strip Light

INSTALLATION GUIDE

6 ATTACH DRIVER AND LIGHTING CONTROL.

Verify a compatible driver is installed. Utilize applicable wiring when installing outdoors. (Use of wet location-rated junction box recommended)

7 TURN POWER ON AT CIRCUIT BREAKER



TROUBLESHOOTING

Shift in brightness and/or kelvin	<ul style="list-style-type: none">• Ensure an appropriate gauge of wire is installed between strip light and LED driver. See VOLTAGE DROP CHARTS.
Some LEDs are not functional	<ul style="list-style-type: none">• Ensure strip light has not been bent excessively, which could damage circuitry.• Ensure strip light has not been submerged in any liquid for any amount of time.
Lights are flickering	<ul style="list-style-type: none">• Ensure a compatible driver and/or dimming control is installed. Check for loose connections.
Lights are turning on/off repeatedly	<ul style="list-style-type: none">• Ensure driver is not overloaded. An overloaded driver will trip the internal auto-reset (of driver) repeatedly, turning the system on/off.

TOOLS & RESOURCES

BLAZE™ NEON SPECIFICATION SHEET

For full specifications.

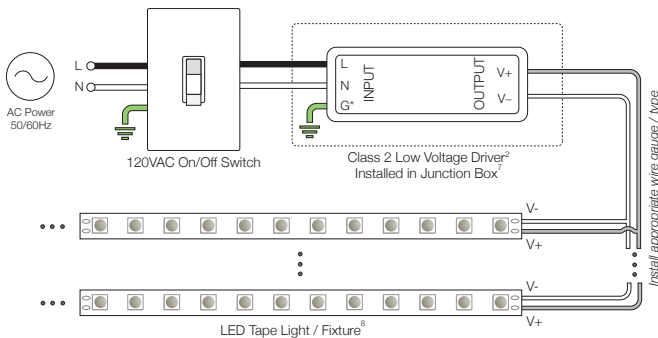
BLAZE™ NEON 24V LED Strip Light

INSTALLATION GUIDE

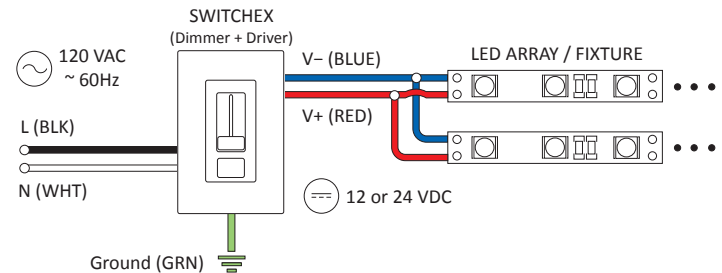
SYSTEM DIAGRAMS

The following diagrams are provided as example system designs. For information regarding larger systems or systems not pictured below, please see our web page or contact technical support. Always review each component installation guide for detailed and up-to-date wiring instructions. Install in accordance with national and local electrical codes.

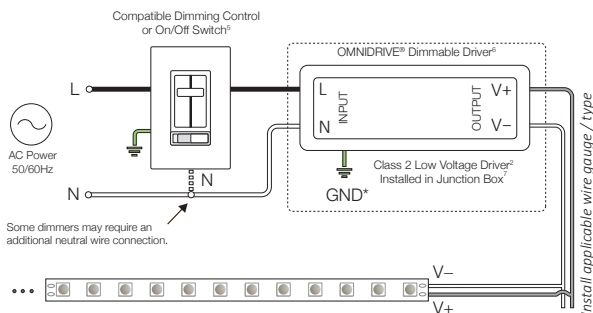
Traditional ON/OFF Switch System



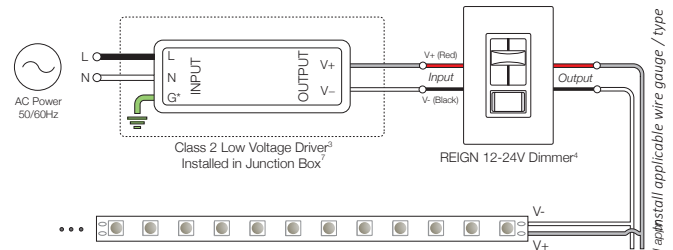
SWITCHEX® Dimmer/Driver System



OMNIDRIVE® Electronic Dimmable Driver System



REIGN® 24V Dimmer System



1. Driver may not require a fault ground connection. Refer to driver specifications for additional information.
2. Install a compatible Class 2 constant voltage driver. Refer to each driver specification sheet for full power ratings & load deratings.
3. Install a Class 2 constant voltage driver compatible with a low voltage PWM controller/dimmer switch. Refer to each driver specification sheet for full power ratings & load deratings.
4. Determine the number of low voltage outputs of the driver when installing multiple PWM controllers/dimmer switches. No more than one PWM controller/dimmer switch can be attached to a single output of the driver.
5. Install a compatible dimming control or switch. See the 'Electronic Dimmable Driver / Dimmer Compatibility List' for compatible dimming controls. See the dimming control manufacturer installation guide for complete wiring instructions.
6. Ensure to load the driver at least 60% of the labeled load for proper dimming performance (required for dimmable installations only).
7. Refer to driver or controller specifications for a compatible junction box.
8. See fixture specifications for maximum series run limits.

BLAZE™ NEON 24V LED Strip Light

INSTALLATION GUIDE

VOLTAGE DROP CHARTS

For best performance and lumen output, ensure proper wire gauge is installed to compensate for voltage drop of low voltage circuits.

Example: 24V Voltage Drop & Wire Length Distance Chart

Wire Gauge	10 W .42 A	20 W .83 A	30 W 1.3 A	40 W 1.7 A	50 W 2.1 A	60 W 2.5 A
18 AWG	134 ft.	68 ft.	45 ft.	33 ft.	27 ft.	22 ft.
16 AWG	215 ft.	109 ft.	72 ft.	54 ft.	43 ft.	36 ft.
14 AWG	345 ft.	174 ft.	115 ft.	86 ft.	69 ft.	57 ft.
12 AWG	539 ft.	272 ft.	181 ft.	135 ft.	108 ft.	90 ft.
10 AWG	784 ft.	397 ft.	263 ft.	197 ft.	158 ft.	131 ft.

① Determine load size. Let's assume load is 55 W. Round up to nearest load.

② Determine distance from driver to load. Let's assume the distance is 90 ft.

③ It is recommended to install 12 AWG to eliminate excess voltage drop.

24V Voltage Drop & Wire Length Distance Chart

Wire Gauge	10 W .42 A	20 W .83 A	30 W 1.3 A	40 W 1.7 A	50 W 2.1 A	60 W 2.5 A	70 W 2.9 A	80 W 3.3 A	100 W 4.2 A
18 AWG	134 ft.	68 ft.	45 ft.	33 ft.	27 ft.	22 ft.	19 ft.	17 ft.	14 ft.
16 AWG	215 ft.	109 ft.	72 ft.	54 ft.	43 ft.	36 ft.	31 ft.	27 ft.	22 ft.
14 AWG	345 ft.	174 ft.	115 ft.	86 ft.	69 ft.	57 ft.	49 ft.	43 ft.	36 ft.
12 AWG	539 ft.	272 ft.	181 ft.	135 ft.	108 ft.	90 ft.	77 ft.	68 ft.	56 ft.
10 AWG	784 ft.	397 ft.	263 ft.	197 ft.	158 ft.	131 ft.	112 ft.	98 ft.	82 ft.



Toll Free: 877.817.6028 | Fax: 415.592.1596 | www.DiodeLED.com | info@DiodeLED.com
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