

WARNING DO NOT CONNECT DIRECTLY TO HIGH VOLTAGE POWER! Read all warnings and installation instructions thoroughly.

SAFETY & WARNINGS

- Install in accordance with national and local electrical code regulations.
- This product is intended to be installed and serviced by a qualified, licensed electrician.
- This product must be powered with a compatible Class 2 DC Constant Voltage LED driver (power supply).
- DO NOT power tape light while attached to plastic spool or tightly coiled. Excess heat may melt the spool and/or cause damage to the fixture.
- DO NOT install in location where LED chips are exposed to direct sunlight or damage to the phosphor will occur.
- Ensure applicable wire is installed between driver, fixture, and any controls in between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause a fire.
- Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
- Connectors have a Class 2 amp limit unless otherwise noted.
- Each tape light has a different power consumption rating and maximum run length that must be individually wired to a compatible low voltage (PWM) control or LED driver. Refer to tape light package label or spec sheet for more information.
- Only wet location tape light models are rated for outdoor / wet locations. See package label for environment ratings.
- Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.



QUICK SPECS

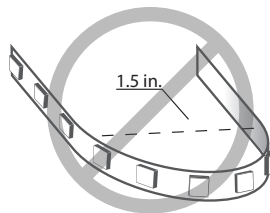
Input Voltage	See package label
Power Consumption	
Maximum Run	

Included Model(s)	DI-12V-**, DI-24V-**
Ambient Temperature †	-4° ~ 122°F (-20° ~ 50°C)
Environment	Dry / wet location (model dependant)

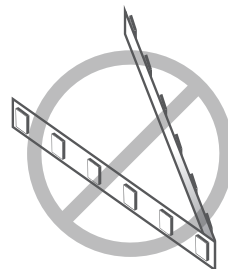
† Do not install product in an environment outside the listed ambient temperature. Ensure adequate airflow and heatsinking is considered when mounting/installing.

** indicates luminaire family, CCT, CRI, length. Does not include K-RANGE® or DAZZLE™ tape light models. Refer to product spec sheet for full specifications.

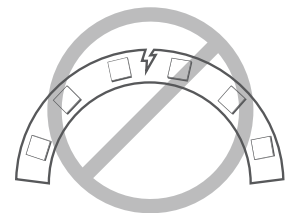
TAPE LIGHT HANDLING



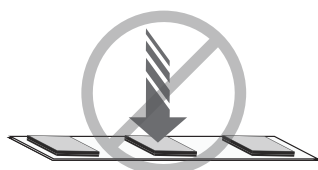
Do not bend LED strip light to a diameter less than 1.5 inches.



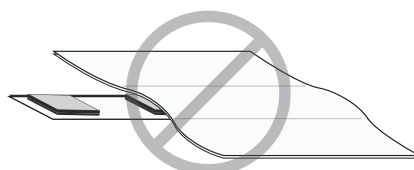
Do not fold or crease LED strip light.



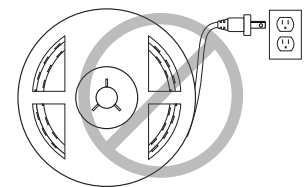
Do not bend LED strip light on a horizontal plane.



Do not put excessive pressure on surface of strip light (e.g. glass/acrylic panes etc.).



Do not cover strip light with any materials.



Do not power strip light while attached to spool or tightly coiled.

SOLID COLOR LED TAPE LIGHT

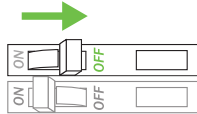
INSTALLATION GUIDE

INSTALLATION

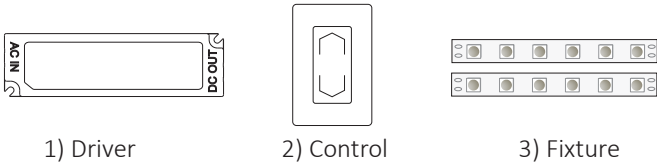
Prior to installation, verify all components are a compatible system. Configure and pre-test your LED system prior to permanent installation to ensure all components are operating correctly. Install in accordance with national and local electrical codes.

- 1 Turn OFF High Voltage AC Power at the main breaker.

WARNING Shock Hazard. May result in serious injury or death. Turn off power at circuit breaker before installing this product.



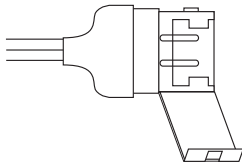
- 2 Determine Locations to Install 3 Main Components. Refer to the 'System Diagrams.'



WIRE GAUGE & VOLTAGE DROP

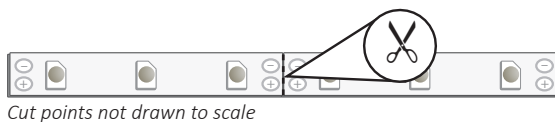
Ensure applicable wire is installed between driver, fixture, and any controls in between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.).

- 3 Prior to cutting tape light, refer to 'CLICKTIGHT® Connectors' on page 3 for connection information. (Does not apply to wet location models.)

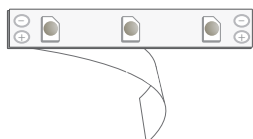


- 4 Mount tape to desired surface. Steps A-D pertain to dry location applications. Steps E-G pertain to wet location strip installations.

A. Cut the tape at the line indicated with the scissors icon.

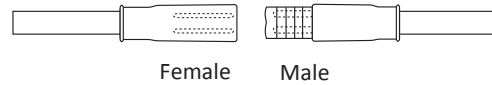


- B. Determine a finished, smooth surface, away from direct sunlight for mounting. Clean surface and let dry.
- C. Remove adhesive paper from the tape light to expose 3M™ adhesive. Ensure ambient temp is minimum 50°F (10°C) or tape will not adhere properly.

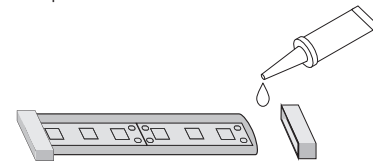


- D. Adhere tape to surface, working one end to the other to prevent air pockets and raised sections. Utilize a clean rag between skin and tape to resist oil transfer from skin to LEDs. Skip steps E-G as they pertain to wet location installations.

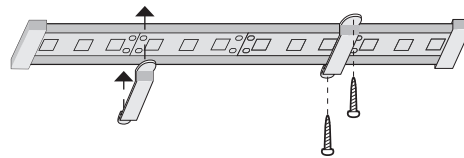
- E. Utilize female and male wet location connectors to attach cut sections of wet location tape in series.



- F. All cut points must be sealed with silicone adhesive (not included), and wet location end caps.



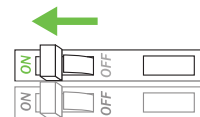
- G. Mount with included mounting clips and screws. Silicone adhesive can also be utilized to mount tape to surfaces.



- 5 Attach Control and Driver. Only use copper wiring. Reference 'Wiring Connections' located further in guide for visual. Verify a compatible constant voltage driver is installed.

- 6 Review the full system. Ensure all polarities are correct and connections are secured.

- 7 Install Additional Components, Verify Connections, and Turn Main Power ON at Breaker.



SYSTEM WORKING IMPROPERLY?

Turn OFF main power at breaker and verify all connections. Review the 'Wiring Connections', 'System Diagrams', and dimming control installation guides.

CLICKTIGHT® CONNECTORS

Cutting Tape Light

Utilizing CLICKTIGHT connectors requires specific cutting instructions for high density solid color tape light to achieve a proper connection. See options A or B (does not apply to RGB tape light). Never cut tape attached to a live circuit. DO NOT solder CLICKTIGHT connectors to tape light.



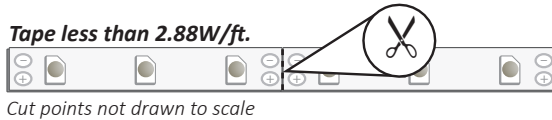
OR



Cutting tape light densities lower than 2.88W/ft.:

Cut the tape at the cut line indicated with the scissors icon.

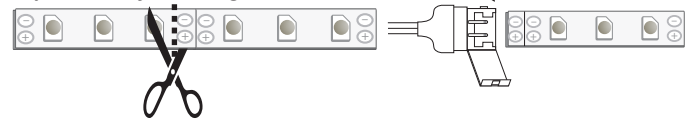
Tape less than 2.88W/ft.



Cutting tape light densities higher than 2.88W/ft.:

DO NOT cut at the scissors icon. Instead, cut the tape along the outside edge of the LED chip closest to the scissors icon so four contact/solder points remain intact to the tape. This will ensure the latch of the CLICKTIGHT connector closes properly.

Tape 2.88W/ft. and higher

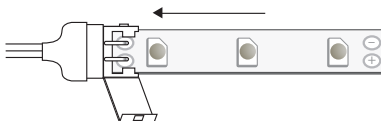


Attaching CLICKTIGHT Connectors

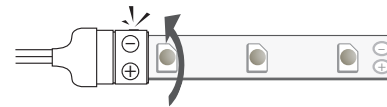
- 1 Open the CLICKTIGHT latch and note the +/- polarity markings.



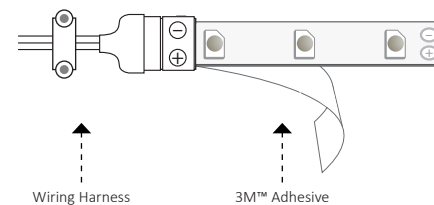
- 2 Firmly insert the tape light into the connector tray with the 3M™ adhesive backing still intact to the tape. Ensure the contact/solder points of the tape are directly underneath the metal placement tabs of the connector.



- 3 Close the CLICKTIGHT latch to ensure connection.



- 4 When ready for mounting, peel off the 3M™ adhesive backing of the tape and tear off along the connector tray edge. Mount tape light and utilize a wiring harness to secure lead wires.



NOTE: CLASS 2

All CLICKTIGHT™ accessories have a Class 2 amperage limit: 60W/5A @ 12VDC; 96W/4A @ 24VDC. CLICKTIGHT connectors are not compatible with wet location tape light. See 'Troubleshooting' for tape light connector issues.

CLICKTIGHT™ CONNECTIVITY TIP

If connection is not secure, pull tape out from the CLICKTIGHT™ connector and trim any excess tape so the outer edges of contact/solder points are flush with the end of the tape. Insert trimmed end back into CLICKTIGHT™ connector with the 3M™ adhesive backing still in tact to tape.



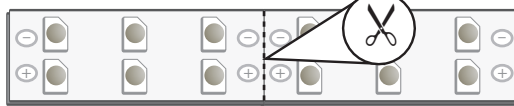
SOLID COLOR LED TAPE LIGHT

INSTALLATION GUIDE

DOUBLE BLAZE™ CONNECTORS

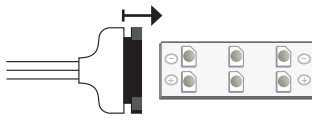
These instructions apply only to Double LED Tray Connectors. Never cut tape attached to a live circuit.

- 1** Cut the tape at the line indicated with the scissors icon.

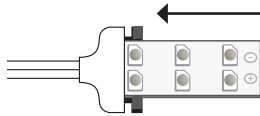


Cut points not drawn to scale

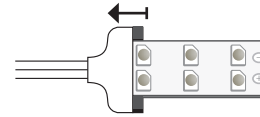
- 2** Gently pull out the black tab 1-2mm. Note the +/- polarity markings of the tape light.



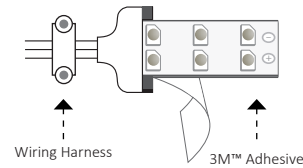
- 3** Firmly insert the tape light into the connector tray with the 3M™ adhesive backing still intact to the tape. Ensure the contact/solder points of the tape are completely covered by the contact sheath.



- 4** Squeeze the connector tray firmly with fingers or pliers to ensure connection.



- 5** When ready for mounting, peel off the 3M™ adhesive backing of the tape and tear off along the connector tray edge. Mount tape light and utilize a wiring harness to secure lead wires.



NOTE: CLASS 2

All tape light connector accessories have a Class 2 amperage limit: 60W/5A @ 12VDC; 96W/4A @ 24VDC. See 'Troubleshooting' for tape light connector issue.

TROUBLESHOOTING

Prior to troubleshooting, ensure all items are a compatible system and main power is turned ON.

Shift in brightness and/or kelvin	<ul style="list-style-type: none"> Review maximum series run limits. Exceeding these limits will cause excess voltage drop, decreasing brightness and/or kelvin as the run is extended.
Some LEDs are not functional	<ul style="list-style-type: none"> Ensure all connections have been properly attached. Ensure fixture has not been bent excessively, which may cause components and solder to detach from the circuit board.
Lights are flickering	<ul style="list-style-type: none"> Ensure a compatible driver is installed. Ensure the pre-set mode of the controller is not on a dynamic mode. Ensure Data +/- connections of DMX systems are not reversed. If lights continue to flicker, check for loose connections. Ensure tape light connectors are properly attached.
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.
CLICKTIGHT Connector Troubleshooting	<ul style="list-style-type: none"> Ensure compatible CLICKTIGHT models are attached. Tape lights vary in width and require specific connectors. Contact your supplier for additional information. Tape light is polarity sensitive. Ensure the +/- markings of the CLICKTIGHT connector is aligned with the +/- markings of the tape. If polarity is backwards, reverse the lead wire connection or detach tape from CLICKTIGHT connector and reattach opposing end of tape to connector.

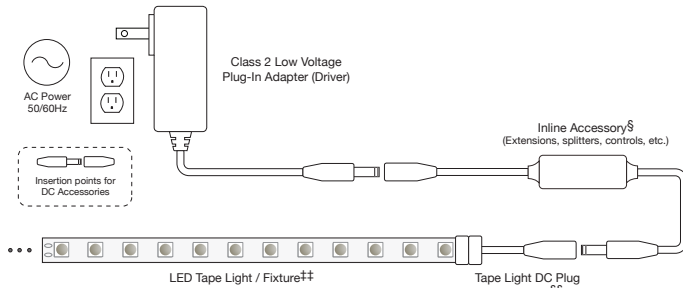
SOLID COLOR LED TAPE LIGHT

INSTALLATION GUIDE

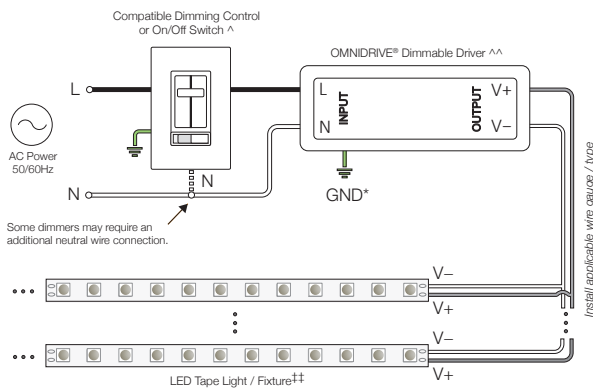
SYSTEM DIAGRAMS

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 NEC and local regulations.

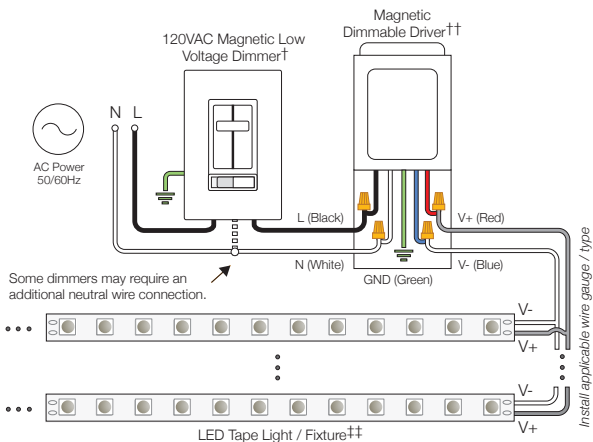
PLUG-IN ADAPTER SYSTEM



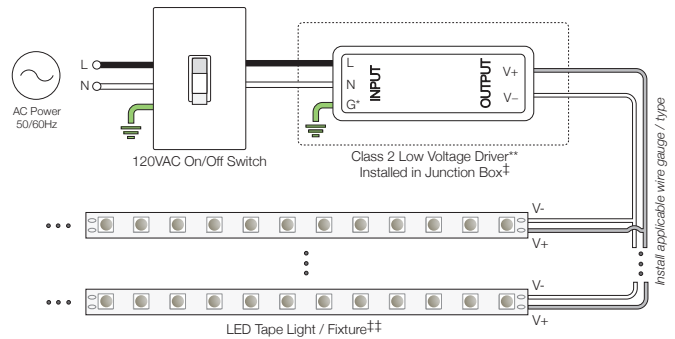
OMNIDRIVE™ ELECTRONIC DIMMABLE DRIVER SYSTEM



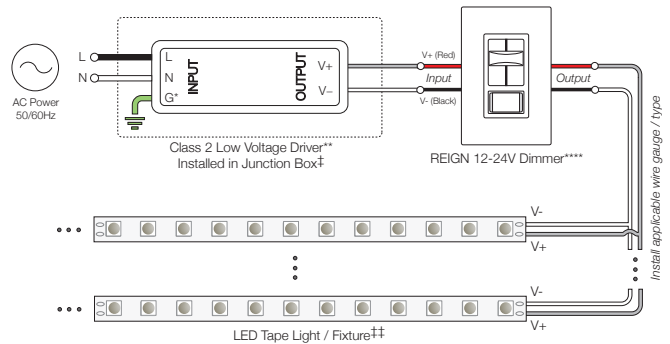
MAGNETIC DIMMABLE DRIVER SYSTEM



TRADITIONAL ON/OFF SYSTEM



REIGN™ 12-24V DIMMER SYSTEM



* Driver may not require a fault ground connection. Refer to driver specifications for additional information.

** Install a compatible Class 2 constant voltage driver. Refer to each driver specification sheet for full power ratings & load deratings.

*** 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.

**** 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.

^ 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.

^^ Ensure to load the driver at least 60% the labeled load for proper dimming performance (required for dimmable installations only).

† Install a compatible magnetic low voltage dimmer switch. See the MFG installation guide for complete wiring instructions.

†† Dimmable drivers may require a compatible magnetic low voltage dimmer switch to supply the driver and fixture with appropriate input voltage. Do not test or install directly connected to an AC power source or to an On/Off switch. Refer to each driver specification sheet for full power ratings & load deratings. See spec sheet for potential updated information. See dimmer switch manufacturer specifications for minimum load recommendations.

‡ Refer to driver or controller specifications for a compatible junction box.

‡‡ See fixture specifications for maximum series run limits.

§ See in-line accessories specifications for maximum amperage ratings.

§§ See fixture accessories for a compatible adapter connector.

IG040115-2.8

ADDITIONAL RESOURCES

Visit the online product page at www.DiodeLED.com for additional product specifications & warranty information. *This installation guide includes but is not limited to the products below:*

- AVENUE 24™ 24V PREMIUM LED TAPE LIGHT SPECIFICATION SHEET
- BLAZE™ 12V LED TAPE LIGHT SPECIFICATION SHEET
- BLAZE™ 12V WET LOCATION LED STRIP LIGHT SPECIFICATION SHEET
- DOUBLE BLAZE™ 12V LED TAPE LIGHT SPECIFICATION SHEET
- FLUID VIEW® 12V LED TAPE LIGHT SPECIFICATION SHEET
- FLUID VIEW® 12V WET LOCATION LED STRIP LIGHT SPECIFICATION SHEET
- SIDEWINDER™ 12V LED TAPE LIGHT SPECIFICATION SHEET
- ULTRA BLAZE™ 12V LED TAPE LIGHT SPECIFICATION SHEET
- ULTRA BLAZE™ 24V LED TAPE LIGHT SPECIFICATION SHEET
- VALENT® 12V PREMIUM LED TAPE LIGHT SPECIFICATION SHEET
- VOLTAGE DROP CHARTS

Use to specify appropriate wire gauge for installation. Available at the 'Tools & Resources' page at www.DiodeLED.com.

QUESTIONS?

Visit www.DiodeLED.com or contact Customer Support at info@DiodeLED.com or 1.877.817.6028 Monday through Friday, 7:00am- 5:00pm PST.