



# WARNING!

**DO NOT CONNECT DIRECTLY TO HIGH VOLTAGE POWER!**

Read all warnings and installation instructions thoroughly.

## SAFETY & WARNINGS

1. Install in accordance with the national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Only install with a Class 2 DC Constant Voltage LED driver. This product has not been evaluated for use when connected to an LED driver that does not comply with Class 2 voltage and energy limited supplies.
4. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
5. Inadequate wire installation could overheat wires, and cause a fire.

6. Fixture, attached wire leads, and additional extension cables, connectors, etc., *are not* rated for in-wall installation unless otherwise noted. Tape light and attached wire leads are field-cutttable.
7. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
8. Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient Temperature note below.

## QUICK SPECS

<b>Input Voltage</b>	See product label on LED Tape Light lead wires
<b>Power Consumption</b>	
<b>Maximum Run</b>	

<b>Ambient Temperature †</b>	-4° ~ 122°F (-20° ~ 50°C)
<b>Environment</b>	Indoor / damp location

† Do not install product in an environment outside the listed ambient temperature.

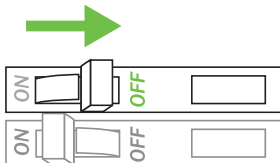
## INSTALLATION

Prior to installation, verify all components (LED Tape, Driver, Control, & Accessories) are compatible. Configure and pre-test your LED system prior to installation to ensure all components are operating correctly.

### 1 TURN POWER OFF AT CIRCUIT BREAKER.

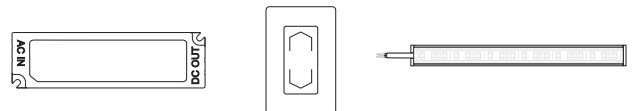


**SHOCK HAZARD! May result in serious injury or death.**  
Turn power OFF at circuit breaker prior to installation.



### 2 DETERMINE LOCATION TO INSTALL COMPONENTS.

Refer to **SYSTEM DIAGRAMS**.



1) Class 2 Driver

2) Control

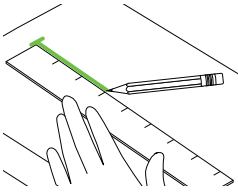
3) Fixture

### WIRE GAUGE & VOLTAGE DROP

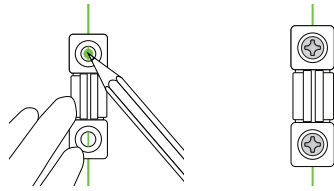
Ensure applicable wire is installed between driver, fixture, and any controls in between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.)

## INSTALLATION

### 3 DRAW GUIDE LINE & FASTEN MOUNTING CLIPS.



a. Draw guiding line with a ruler and pencil.



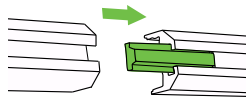
b. Mark holes. Use a minimum of one clip for every foot of channel. Fasten with applicable screws w/ screwdriver or drill. *Not all clip types are pictured above.*

**Note:** Mount SLIM Channels with SLIM Clips or 3M™ Mounting Tape.

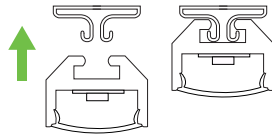
#### MOUNTING VERTICALLY?

See the CHROMAPATH Vertical Mounting Bracket Installation Guide at [www.DiodeLED.com](http://www.DiodeLED.com). Not compatible with SLIM Channels.

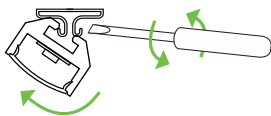
### 4 MOUNT CHROMAPATH FIXTURE.



a. Use End-to-end Interconnectors to seamlessly align multiple channels together. *Does not fit DUO or SLIM.*



b. Firmly press channel into mounting clip.

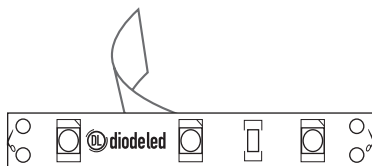


c. Use flathead screwdriver to remove. Wrap tip with masking tape to prevent scratching channel surface.

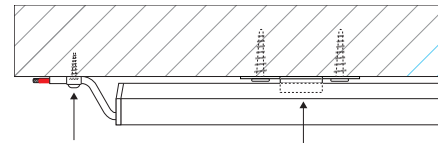
**Note:** Mount SLIM Channels with SLIM clips or 3M™ Mounting Tape.

#### INSTALLING YOUR OWN TAPE LIGHT?

See the CHROMAPATH Aluminum Channel Installation Guide at [www.DiodeLED.com](http://www.DiodeLED.com) for installing tape light and building your CHROMAPATH fixture. See the Low Voltage Tape Light Installation Guide for additional information.



### 5 INSTALL WIRING HARNESS TO SECURE WIRES.



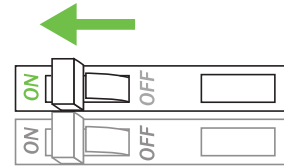
Wiring Harness

Mounting Clip

### 6 ATTACH DRIVER AND LIGHTING CONTROL.

**ONLY USE COPPER WIRING.** See **SYSTEM DIAGRAMS** on pages 6-7. Verify a compatible driver and control are installed. REVIEW FULL SYSTEM and ensure all polarities are correct and connections are secure.

### 7 TURN POWER ON AT CIRCUIT BREAKER.



#### SYSTEM WORKING IMPROPERLY?

Turn power OFF at circuit breaker and verify all connections. Review **SYSTEM DIAGRAMS** and **TROUBLESHOOTING** or call Diode LED Technical Support at 877.817.6028.

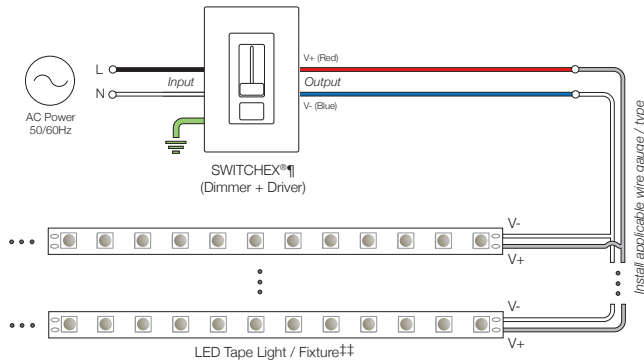
## TROUBLESHOOTING

Symptom	Common Cause
Fixture does not illuminate	<ul style="list-style-type: none"> <li>• Circuit breaker is OFF or tripped.</li> <li>• Driver with manual breaker is off or tripped.</li> <li>• Incorrect wiring. Polarity of Low Voltage V+ and V- are reversed. Check connection at every connection point to ensure polarity is not reversed.</li> <li>• Incorrect voltage pairing of LED driver and fixture. 12V driver models will not power a fixture with a higher voltage rating.</li> </ul>
Fixture flickers randomly, may shut off	<ul style="list-style-type: none"> <li>• Loose connection. Check all connections. Check solder connection at tape light to ensure connection is secure.</li> </ul>
Fixture turns on/off repeatedly	<ul style="list-style-type: none"> <li>• Driver is overloaded or overheated. An overloaded/overheated driver will trip the internal auto-reset (of driver) repeatedly, turning the system on/off.</li> </ul>
Fixture Overheats	<ul style="list-style-type: none"> <li>• Note: VALENT® X fixtures will have a warmer case temperature than other fixtures. This is normal.</li> <li>• Incorrect voltage pairing of LED driver and fixture. Ensure 12V tape light models are not paired with a driver with higher voltage.</li> <li>• Incorrect ambient temperature. Ensure tape light is installed in environment -4° ~ 122°F (-20° ~ 50°C).</li> </ul>

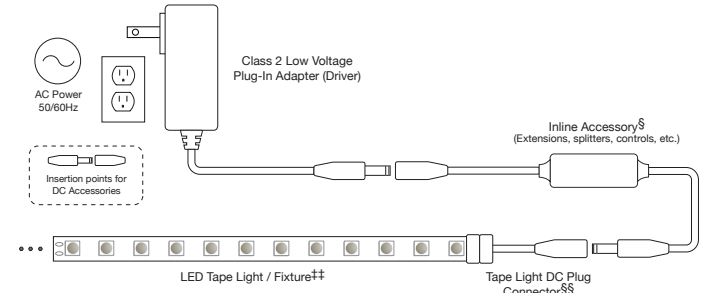
# SYSTEM DIAGRAMS

The following diagrams are provided as example system designs. Install in accordance with The NEC and local regulations.

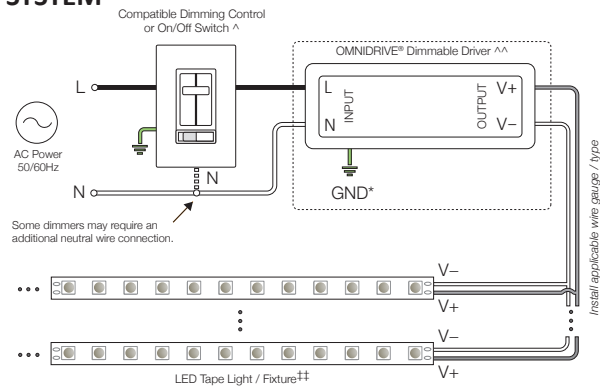
## SWITCHEX® DIMMER+DRIVER SYSTEM



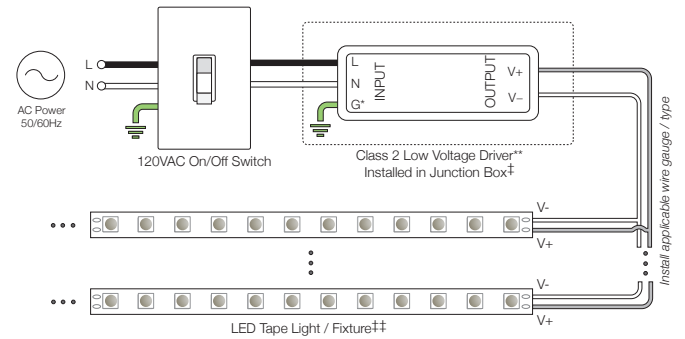
## PLUG-IN ADAPTER SYSTEM



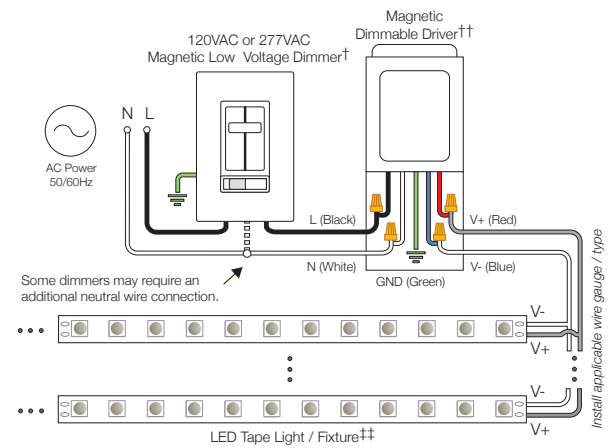
## OMNIDRIVE® & OMNIDRIVE®2 DIMMABLE DRIVER SYSTEM



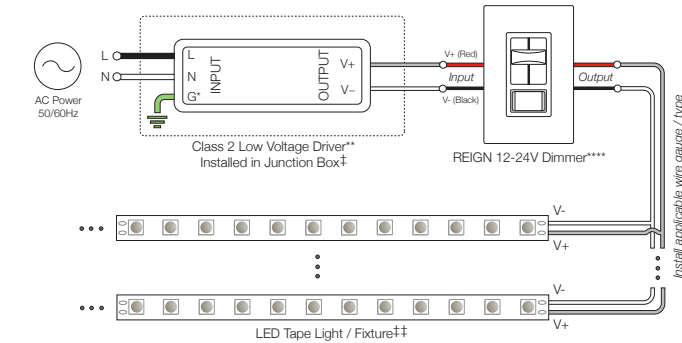
## TRADITIONAL ON/OFF SYSTEM



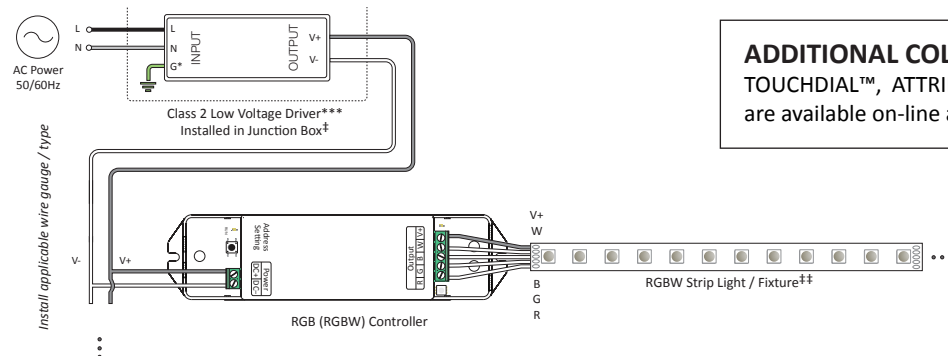
## MAGNETIC DIMMABLE DRIVER SYSTEM



## REIGN® 12-24V DIMMER SYSTEM



## RGB/RGBW COLOR CONTROL SYSTEM



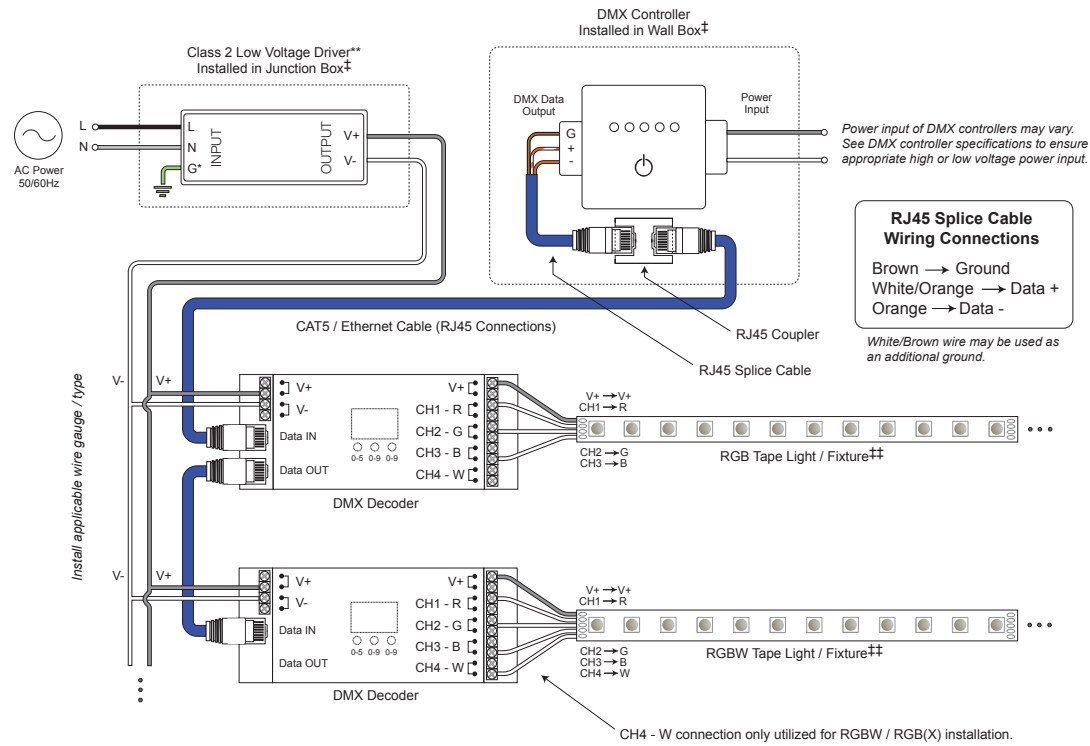
**ADDITIONAL COLOR CONTROL SYSTEMS**  
TOUCHDIAL™, ATTRIBUTE™, and other control system diagrams are available on-line at [www.DiodeLED.com](http://www.DiodeLED.com).

See page 4 for footnote references.

# SYSTEM DIAGRAMS CONT.

The following diagrams are provided as example system designs. Install in accordance with The NEC and local regulations.

## DMX CONTROL 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. Only one control can be attached to a single output of the driver.

^ Install a compatible dimming control or switch. See the 'OMNIDRIVE® 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 dimming installations (required for OMNIDRIVE® dimmable installations only. Does not apply to OMNIDRIVE® 2).

¶ Unlike traditional dimming controls, SWITCHEX requires unique wiring steps. Read all warnings and installation instructions thoroughly.

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

‡ Always load the driver a minimum of 60% the labeled load if not using a dimmer or damage to the driver and/or fixture may occur.

‡ 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.



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