

REIGN™ 12–24V TOUCH DIMMER SWITCH

www.elementalled.com answers@elementalled.com 877.564.5051

INSTALLATION GUIDE

DO NOT CONNECT DIRECTLY TO HIGH VOLTAGE POWER!

Read all warnings and installation instructions thoroughly.

Safety & Warnings

- Install in accordance with the National Electric Code, and local regulations.
- This product is intended to be installed and serviced by a qualified, licensed electrician.
- DO NOT connect directly to high voltage power. Install with a compatible Class 2 constant voltage LED driver (power supply).
- Only install compatible LED drivers and fixtures. Contact technical support or visit the product page for compatible products.
- This product is rated for indoor installation and is not protected against moisture.
- Proper heat dissipation will prolong the working lifespan of this product. Install in a well-ventilated area free from explosive gases and vapors.
- 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 overhead wires, and cause a fire.
- Do not modify or disassemble this product beyond instructions or the warranty will be void.



Quick Specs

Input / Output Voltage	12-24VDC Constant Voltage
Ambient Temperature †	-40°F ~ 140°F (-40°C ~ 60°C)
Minimum Load	See driver specs for min load.
Maximum Load	100W (12V & 24V)

Included Models

REIGN-TD-**

- + Do not install product in an environment outside the listed ambient temperature.
- ** Indicates color finish.

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 the NEC and local regulations.



controls in between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.).



Wire REIGN Dimmer Between Driver and Fixture. Only Use Copper Wiring. DO NOT CONNECT TO HIGH VOLTAGE POWER.

- Attach INPUT of dimmer to driver.
- Attach OUTPUT of dimmer to LED fixture.

See 'Wiring Connections' below & 'System Diagram.'

Wiring Connections



IG022614-1.0



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Replace wiring back into wall box. Break off appropriate fins when ganging multiple dimmers. Screw dimmer and faceplate to wall box.



Never install low and high voltage wiring in the same wall box. A physical divider must exist when ganging low voltage and high voltage controls.

To detach a fin, grip with pliers and bend back/forth until it detaches. Unlike high voltage dimmers, **de-rating the dimmer maximum load is not required** when ganging low voltage controls.

System Diagram

The following diagram is provided as an example system design. Class 2 compliance requires a Class 2 driver per REIGN dimmer (e.g. 60W @ 12V, 96W @ 24V). Install in accordance with the NEC, and local regulations.



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

*** Install a Class 2 constant voltage driver compatible with a low voltage PWM controller.

**** No more than one PWM controller/dimmer switch can be attached to a single output of the driver.

‡ Refer to driver specifications for a compatible junction box.‡‡ See fixture specifications for maximum series run limits.

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

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OFF OFF	
OFF ON	

If system remains unresponsive or is working improperly, turn OFF main power at breaker and verify all connections. Review the 'Wiring Connections', 'System Diagrams', and dimming control installation guides.



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Operation

On/Off	Tap the (+) or (–) pad and lights will fade On/Off.
Increase Brightness	Hold finger to (+) pad until brightness meets desired level. If dimmer is off, hold (+) pad and lights will begin increasing from previous set brightness.
Decrease Brightness	Hold finger to (–) pad until brightness meets desired level. If dimmer is off, hold (–) pad and lights will begin decreasing from previous set brightness.



Troubleshooting

Prior to troubleshooting, ensure a compatible system is installed. Verify compatible fixtures, drivers, controls and additional components were specified correctly.

Fixture does not illuminate	 Verify the system is wired correctly & ensure polarities are correct. Ensure the driver and fixture have the same voltage specifiations (12V & 12V, or 24V & 24V).
Fixture illuminates, dimmer controls are unresponsive	• Verify the following connections &ensure polarities are correct: Driver Output is connected to Dimmer Input ; Dimmer Output is connected to LED Load. If the driver is connected to the Dimmer Input than the dimmer controls will not function properly.
Fixture is <u>consistently</u> flashing or flickering	 Ensure no more than a single dimmer is attached to each driver output. Verify a compatible constant voltage driver is installed. Ensure a compatible constant voltage dimmable fixture is installed.
Fixture is inconsistently flashing or flickering	• Verify all connections are properly secured. Ensure all accessories are properly connected.
Fixture is slowly flashing	• Ensure driver is not overloaded. An overloaded driver will cause the internal auto-reset of the driver to trip repeatedly.
Shift in brightness of fixture array	 Verify the appropriate size wire gauge (AWG) has been installed. See the 'Tools & Resources' page at www.DiodeLED.com for Voltage Drop Charts. Ensure fixture length is not exceeding maximum run limit.
Driver is buzzing	• Verify the constant voltage driver is compatible with compatible with PWM controls. See the driver specification sheet and check the 'Dimmability' specification.

Additional Resources

Visit the online product page at www.DiodeLED.com for additional product specifications & warranty information.

- **REIGN Touch Dimmer Specification Sheet** For full specifications.
- Voltage Drop Charts

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



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.