

Diode LED DI-TD-12V-30W

Diode LED DI-TD-12V-30W 30 Watt Omnidrive Electronic Dimmable LED Driver 12V DC User Manual

1. PRODUCT OVERVIEW

The Diode LED DI-TD-12V-30W Omnidrive Electronic Dimmable LED Driver is designed to provide reliable power for LED lighting applications. This driver offers superior dimming performance across a wide range of dimmer switches, ensuring smooth and flicker-free operation from 100% down to 10% light output. It is compatible with TRIAC, magnetic low voltage (MLV), electronic low voltage (ELV), and incandescent/halogen dimmer switches, as well as standard 3-way, 4-way, 5-way, and on/off switching.

Key Features:

- Smooth, flicker-free dimming capability.
- Versatile compatibility with various dimmer types.
- Designed for indoor use.



Image 1.1: The Diode LED DI-TD-12V-30W 30 Watt Omnidrive Electronic Dimmable LED Driver. This image displays the compact, rectangular form factor of the LED driver, typically used for converting AC power to a stable 12V DC output for LED lighting systems.

2. SAFETY INFORMATION

Please read all instructions carefully before installation and use. Failure to follow these instructions may result in electrical shock, fire, or other hazards, and will void the product warranty. This product should be installed by a qualified electrician in accordance with all applicable national and local electrical codes.

- **Risk of Electric Shock:** Disconnect power at the circuit breaker or fuse box before installation or servicing.
- **Risk of Fire:** Ensure all wiring connections are secure and properly insulated. Do not exceed the maximum wattage rating of the driver (30W).
- **Indoor Use Only:** This driver is rated for indoor, dry location use only. Do not expose to moisture or direct water.
- **Ventilation:** Ensure adequate ventilation around the driver to prevent overheating. Do not cover the driver or install it in an enclosed space without proper airflow.
- **Compatibility:** Use only with compatible 12V DC LED fixtures.

3. SETUP AND INSTALLATION

Installation should be performed by a licensed electrician. Ensure power is disconnected before beginning installation.

Installation Steps:

1. **Mounting:** Securely mount the LED driver in a suitable indoor location using the integrated mounting tabs. Ensure the mounting surface is stable and can support the weight of the driver.
2. **Input Wiring (AC):** Connect the AC input wires from your power source to the driver's input terminals. Typically, this involves connecting the Line (black), Neutral (white), and Ground (green/bare copper) wires. Refer to the wiring diagram on the driver label for specific connections.
3. **Output Wiring (DC):** Connect the 12V DC output wires from the driver to your LED fixtures. Ensure correct polarity: positive (+) to positive and negative (-) to negative.
4. **Dimmer Connection:** If using a dimmer, ensure it is compatible with the Omnidrive Electronic Dimmable LED Driver (TRIAC, MLV, ELV, incandescent/halogen). Connect the dimmer according to its manufacturer's instructions and integrate it into the AC input circuit of the driver.
5. **Verify Connections:** Double-check all wiring connections for security and proper insulation.
6. **Restore Power:** Once all connections are verified and secure, restore power at the circuit breaker.

4. OPERATING INSTRUCTIONS

Once properly installed and powered, the Diode LED DI-TD-12V-30W driver will provide a stable 12V DC output to your connected LED fixtures. The primary operation involves controlling the light output via a compatible dimmer switch.

- **On/Off Functionality:** Use your wall switch or dimmer's on/off function to control the power to the LED fixtures.
- **Dimming:** Adjust the compatible dimmer switch to achieve the desired light intensity. The driver supports smooth dimming from 100% down to 10% of the light output.
- **Compatibility:** For optimal performance, ensure your dimmer is one of the compatible types: TRIAC, magnetic low voltage (MLV), electronic low voltage (ELV), or incandescent/halogen dimmer switches.

5. MAINTENANCE

The Diode LED DI-TD-12V-30W LED driver is designed for long-term, maintenance-free operation. However, periodic checks can help ensure continued performance and safety.

- **Cleaning:** Ensure the driver remains free of dust and debris. If cleaning is necessary, disconnect power and gently wipe the exterior with a dry, soft cloth. Do not use liquid cleaners.
- **Inspection:** Periodically inspect the wiring connections for any signs of wear, damage, or loose connections. Address any issues promptly.
- **Ventilation:** Confirm that the area around the driver remains clear and allows for adequate airflow to prevent overheating.

6. TROUBLESHOOTING

If you experience issues with your LED driver, refer to the following troubleshooting guide:

- **No Light Output:**
 - Check if the power supply to the driver is active.
 - Verify all wiring connections (AC input and DC output) are secure and correct.

- Ensure the total wattage of connected LED fixtures does not exceed the driver's 30W capacity.
- Test the LED fixtures with a known working power source if possible.

- **Flickering or Inconsistent Dimming:**

- Confirm that the dimmer switch is compatible with electronic dimmable LED drivers (TRIAC, MLV, ELV).
- Ensure the dimmer is properly installed and wired according to its manufacturer's instructions.
- Check for loose connections in the dimming circuit.

- **Overheating:**

- Ensure the driver has adequate ventilation and is not covered or enclosed without proper airflow.
- Verify that the total load on the driver does not exceed 30W.

If problems persist after attempting these steps, contact a qualified electrician or Diode LED customer support for assistance.

7. SPECIFICATIONS

| Specification | Detail |
|----------------------|--------------------|
| Model Number | DI-TD-12V-30W |
| Brand | Diode LED |
| Power Source | DC Power Supply |
| Output Voltage | 12V DC |
| Maximum Wattage | 30 Watts |
| Mounting Type | Surface Mount |
| Product Dimensions | 4 x 1 x 2 inches |
| Manufacturer | Elemental LED |
| ASIN | B075ZRRPL7 |
| UPC | 848333002694 |
| Date First Available | September 28, 2017 |

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Diode LED website or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

It is recommended to register your product upon purchase to facilitate any future support needs.

