

OSRAM OT 55W/UNV/1A2 CS DIM L (57438)

OSRAM OPTOTRONIC OT 55W/UNV/1A2 CS DIM L LED Driver Instruction Manual

Model: 57438

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the OSRAM OPTOTRONIC OT 55W/UNV/1A2 CS DIM L LED Driver. This is a 55W constant current, 0-10V dimmable LED driver designed for universal input voltage (120-277V AC) applications. Please read this manual thoroughly before installation and retain it for future reference.

2. SAFETY INFORMATION

WARNING: Risk of electric shock. Installation and servicing should only be performed by qualified personnel. Disconnect power before installation or servicing.

- Ensure all wiring complies with national and local electrical codes.
- Do not exceed the specified input voltage or output current/voltage ratings.
- This device is designed for dry and damp locations. Do not expose to direct water spray or immersion.
- The driver features UL Class 2 output for safe operation and is Class P rated.
- Verify proper grounding to prevent electrical hazards.

3. SETUP AND INSTALLATION

Follow these steps for proper installation of the LED driver:

1. **Power Disconnection:** Ensure the main power supply to the installation area is turned off at the circuit breaker before beginning any wiring.
2. **Mounting:** Securely mount the LED driver in a suitable enclosure or fixture, ensuring adequate ventilation. The product dimensions are approximately 11.00" L x 1.14" W x 1.00" H.
3. **Input Wiring (AC):** Connect the AC input wires to the driver's input terminals. The driver accepts a universal input voltage of 120-277V AC, 50/60Hz. Refer to the wiring diagram below for terminal identification.



Image: Input terminals for AC power connection. Black wire for Line, White wire for Neutral.

- 4. Output Wiring (DC):** Connect the LED load to the driver's DC output terminals. The output voltage range is 20-46V DC. The output current can be set to 800mA, 1000mA, or 1200mA. Ensure the LED load's voltage and current requirements match the driver's output.



Image: Output terminals for DC LED load connection. Red wire for positive (+), Blue wire for negative (-).

- Dimming Control Wiring (0-10V):** Connect the 0-10V dimming control wires to the dedicated dimming terminals. The dimming input is isolated and can use Class 2 or non-Class 2 wiring. The dimming range is 10-100%.



Image: Comprehensive wiring diagram for the OSRAM OPTOTRONIC LED Driver, illustrating connections for AC input (Black/White), DC output (Red/Blue), and 0-10V dimming (Purple/Gray).

- Current Selection:** The driver features an external current set. Consult the product datasheet or specific fixture instructions for how to select the desired output current (800mA, 1000mA, or 1200mA) if applicable.
- Power Restoration:** Once all connections are secure and verified, restore power to the circuit.

4. OPERATING INSTRUCTIONS

The OSRAM OPTOTRONIC LED driver operates automatically once properly installed and powered.

- Power On/Off:** The LED load will illuminate when AC power is supplied to the driver.
- Dimming:** Use a compatible 0-10V dimming control system to adjust the light output. The driver supports dimming from 10% to 100% of its maximum output.
- Current Output:** The driver provides a constant current output, which is pre-set or externally selectable (800mA,

1000mA, or 1200mA) to match the requirements of the connected LED module.

5. MAINTENANCE

The OSRAM OPTOTRONIC LED driver is designed for long-term, maintenance-free operation.

- **Cleaning:** Ensure the driver remains free of dust and debris to maintain optimal thermal performance. Disconnect power before cleaning. Use a dry, soft cloth.
- **No User-Serviceable Parts:** The driver contains no user-serviceable parts. Do not attempt to open or repair the unit. Doing so will void the warranty and may pose a safety risk.
- **Inspection:** Periodically inspect wiring for any signs of damage or loose connections.

6. TROUBLESHOOTING

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

- **No Light Output:**
 - Verify that AC input power is supplied to the driver.
 - Check all wiring connections (input, output, dimming) for proper contact and polarity.
 - Ensure the LED load is correctly connected and not faulty.
 - Confirm the output current setting matches the LED load requirements.
- **Flickering or Unstable Light:**
 - Check for loose wiring connections.
 - Verify the dimming control signal is stable and within the 0-10V range.
 - Ensure the LED load is compatible with the driver's output specifications.
- **Dimming Not Working:**
 - Confirm the 0-10V dimming wires are correctly connected to the driver's dimming terminals.
 - Check the functionality of the 0-10V dimming controller.
 - Ensure the dimming range (10-100%) is being respected by the controller.

If problems persist after performing these checks, contact a qualified electrician or OSRAM technical support.

7. SPECIFICATIONS

Feature	Specification
Model Number	57438 (OT 55W/UNV/1A2 CS DIM L)
Input Voltage	120-277V AC (Universal), 50/60 Hz
Max. Output Power	55W
Output Voltage	20-46V DC
Output Current	800mA / 1000mA / 1200mA (Selectable)
Dimming Control	0-10V (Isolated, Class 2 or non-Class 2 wiring)

Feature	Specification
Dimming Range	10-100%
Product Dimensions (L x W x H)	11.00" x 1.14" x 1.00"
Weight	Approximately 8.4 ounces
UL Environmental Rating	Dry & Damp
Safety Compliance	UL Class 2 output, Class P

8. WARRANTY AND SUPPORT

For warranty information, technical support, or further product documentation, please refer to the official OSRAM website or contact your local distributor.

- Official OSRAM Product Information: www.osram.us/ds
- For eldoLED products (related to Acuity Brands integration): www.eldoLED.com