

Cal TR-60

Cal TR-60 80W 12V Electronic Halogen Transformer User Manual

Model: TR-60

INTRODUCTION

This manual provides essential information for the safe and efficient operation of your Cal TR-60 Electronic Transformer. This device is designed to convert standard 120V AC household current to 12V AC, specifically for use with halogen lamps up to a maximum of 80 watts. Please read these instructions thoroughly before installation and use.

SAFETY INFORMATION

- **Electrical Hazard:** Installation should be performed by a qualified electrician or a knowledgeable individual familiar with electrical wiring. Ensure power is disconnected at the circuit breaker before installation.
- **Compatibility:** This transformer is designed for **halogen lamps only**. Do not use with LED, incandescent, or other lamp types unless explicitly stated as compatible by the lamp manufacturer.
- **Wattage Limit:** Do not exceed the maximum output of 80 watts. Overloading the transformer can cause damage and create a fire hazard.
- **Protection Features:** The unit is equipped with short circuit and overload protection for enhanced safety. However, proper installation and adherence to wattage limits are crucial.
- **Indoor Use Only:** This transformer is intended for indoor, dry location use. Do not expose to moisture or extreme temperatures.
- **Ventilation:** Ensure adequate ventilation around the transformer to prevent overheating. Do not enclose in airtight spaces.
- **UL Listed:** This product is UL listed, indicating compliance with safety standards.

PRODUCT OVERVIEW

The Cal TR-60 is a compact electronic transformer designed for low-voltage halogen lighting systems. It features a durable black casing and pre-attached wiring for both input and output connections.



Image 1: Cal TR-60 Electronic Transformer. This image displays the black rectangular transformer unit with its white label clearly visible. The label details the model number T-D12080A, input (PRI: 120V-50-60Hz 0.67A), and output (SEC: 12V-80W Max.) specifications, along with UL certification marks and short circuit/overload protection information. White and black wires extend from one end of the unit for electrical connections.

Key Features:

- 120V AC Input, 12V AC Output
- Maximum 80W output for halogen lamps
- Short Circuit & Overload Protected
- Class 2 rated
- Compact design (approximately 4 x 2 x 1.5 inches)

SETUP AND INSTALLATION

Before beginning installation, ensure all power to the circuit is turned off at the main breaker. Incorrect wiring can lead to electrical shock or fire.

1. **Disconnect Power:** Locate the circuit breaker controlling the lighting fixture and switch it to the OFF position. Verify power is off using a voltage tester.
2. **Identify Wiring:** The transformer has two sets of wires:
 - **Primary (Input) Wires:** These connect to your 120V AC power supply. Typically, these are black (hot) and white (neutral).
 - **Secondary (Output) Wires:** These connect to your 12V halogen lamp(s).
3. **Connect Primary Wires:** Connect the 120V AC input wires from your power source to the transformer's primary wires. Use appropriate wire connectors (e.g., wire nuts) and ensure secure connections.
 - Connect the **Hot (Live)** wire from the power source to the transformer's **Hot (Live)** input wire.
 - Connect the **Neutral** wire from the power source to the transformer's **Neutral** input wire.
4. **Connect Secondary Wires:** Connect the transformer's 12V output wires to your halogen lamp fixture. Ensure the total wattage of all connected lamps does not exceed 80W.
5. **Secure Transformer:** Mount the transformer in a suitable, well-ventilated location, away from direct heat sources or moisture. Ensure it is securely fastened to prevent movement.

6. **Restore Power:** Once all connections are secure and the transformer is mounted, restore power at the circuit breaker.

OPERATING INSTRUCTIONS

The Cal TR-60 Electronic Transformer operates automatically once properly installed and powered. It requires no user interaction for its primary function.

- **Power On:** After installation, turn on the power at the circuit breaker and then activate the light switch connected to the fixture.
- **Lamp Operation:** The transformer will supply the necessary 12V AC power to the connected halogen lamps, allowing them to illuminate.
- **Dimming:** If using with a dimmer switch, ensure the dimmer is compatible with electronic low-voltage transformers and halogen loads. Incompatible dimmers can cause flickering or damage to the transformer/lamps.

MAINTENANCE

The Cal TR-60 Electronic Transformer is designed for maintenance-free operation. However, periodic checks can help ensure longevity and safety.

- **Cleaning:** Ensure the transformer remains free of dust and debris. If cleaning is necessary, disconnect power and wipe with a dry, soft cloth. Do not use liquid cleaners.
- **Ventilation:** Periodically check that the area around the transformer remains clear and well-ventilated.
- **Wiring Inspection:** Annually, or if issues arise, inspect wiring connections for any signs of loosening, corrosion, or damage. Disconnect power before inspection.
- **Lamp Replacement:** When replacing halogen lamps, ensure the new lamps do not exceed the transformer's 80W maximum output.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Lamps do not light up.	• No power to the transformer. • Loose wiring connections. • Faulty lamp(s). • Transformer overload protection activated. • Faulty transformer.	• Check circuit breaker and light switch. • Turn off power, check all wiring connections. • Test lamps in another fixture or replace. • Reduce total wattage of connected lamps. Disconnect power, wait a few minutes, then restore. • If all else fails, the transformer may need replacement.
Lamps flicker or dim inconsistently.	• Incompatible dimmer switch. • Loose connections. • Transformer operating near maximum load.	• Ensure dimmer is rated for electronic low-voltage transformers. • Turn off power, check all wiring connections. • Reduce total wattage of connected lamps.

Problem	Possible Cause	Solution
Transformer makes humming noise.	• Normal operation (slight hum). • Overload or faulty lamp.	• A slight hum is normal for some electronic transformers. • Check total wattage of lamps. Replace any faulty lamps.

SPECIFICATIONS

Model Number	TR-60 (Also T-D12080A on label)
Input Voltage	120V AC, 50/60Hz, 0.67A
Output Voltage	12V AC
Maximum Output Wattage	80W (for Halogen Lamps Only)
Protection	Short Circuit & Overload Protected
Class Rating	Class 2
Dimensions (L x W x H)	Approximately 4 x 2 x 1.5 inches
Weight	Approximately 3.84 ounces
Certifications	UL Listed (E252929)
Material	Metal casing

WARRANTY INFORMATION

This Cal TR-60 Electronic Transformer is covered by a one-year warranty from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage resulting from improper installation, misuse, abuse, or unauthorized modifications. Please retain your proof of purchase for warranty claims.

SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Cal Lighting customer support. Refer to your product packaging or the Cal Lighting official website for current contact information.

Manufacturer: Cal Lighting
UPC: 020193600177

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question