TORCHSTAR 45972

TORCHSTAR 0-10V LED Dimming Switch

Model: 45972 | Brand: TORCHSTAR

Introduction

This instruction manual provides detailed information for the safe installation, operation, and maintenance of your TORCHSTAR 0-10V LED Dimming Switch. Please read this manual thoroughly before installation and keep it for future reference.
The TORCHSTAR 0-10V Dimming Switch is designed to provide smooth and flicker-free dimming for compatible 0-10V LED fixtures. It supports both single-pole and 3-way wiring configurations and operates within a voltage range of 120-277V.

Product Features

- **Wide Compatibility:** Suitable for incandescent lamps up to 600W and LED or fluorescent lamps up to 200W. Designed to eliminate flicker and noise, ensuring a harmonious lighting environment.
- **Smooth Dimming:** Achieves full-range smooth dimming from 100% down to 10%. Note that 10/0V represents the dimmest setting but does not turn off the light; 100/10V is the brightest.
- **Adjustable Wheel:** Features an adjustable wheel on the left side to fine-tune the maximum dimming range under various conditions.
- **3-Way Dimming Support:** Compatible with 3-way wiring, allowing for multiple control points. This enables connection of one 3-way dimming switch with a common 3-way switch for combined dimming effects.
- **ETL Certified:** Ensures product safety and quality standards.

Safety Information

WARNING: RISK OF ELECTRIC SHOCK. Improper installation can result in serious injury or death. Always turn off power at the circuit breaker before installation or servicing.

- This device must be installed by a qualified electrician in accordance with all national and local electrical codes.
- Do not use with non-dimmable fixtures or lamps.

- Ensure the total wattage of connected lights does not exceed the dimmer's maximum load capacity (600W incandescent, 200W LED/fluorescent).
- Only use with 0-10V dimmable LED lights.
- Verify correct wiring connections before restoring power.

Setup and Installation

Before beginning, ensure the power is OFF at the circuit breaker.

1. Wiring Diagram

Refer to the diagram below for proper wiring connections. This switch supports both single-pole and 3-way configurations. Ensure all wire nuts are securely fastened.



Image Description: A detailed wiring diagram for the TORCHSTAR 0-10V Dimming Switch. It illustrates connections for the 'HOT' (black), 'GROUND' (green), '0-10V DIMMING (+)' (purple), '0-10V DIMMING (-)' (pink), 'LOAD' (red), and '3-WAY' (red) wires. The image also

shows included accessories like wire nuts and screws.

- **HOT:** Connect to the incoming hot wire from the circuit breaker.
- **GROUND:** Connect to the bare copper or green ground wire.
- **0-10V DIMMING (+):** Connect to the positive dimming control wire of your 0-10V dimmable fixture.
- **0-10V DIMMING (-):** Connect to the negative dimming control wire of your 0-10V dimmable fixture.
- **LOAD:** Connect to the hot wire going to your light fixture.
- **3-WAY:** For 3-way installations, connect to the traveler wire from the other 3-way switch. For single-pole installations, cap this wire.

2. Mounting

Once wired, carefully push the switch into the wall box. Secure it with the provided screws. Install a standard wall plate (not included) over the switch.



Image Description: An image displaying the dimensions of the TORCHSTAR 0-10V Dimming Switch. Key measurements are highlighted:

1.73 inches (width), 4.13 inches (height), and 2.52 inches (depth). The image indicates that the switch is suitable for most general switch panels.



Image Description: A side-by-side comparison illustrating the slim design of the TORCHSTAR 0-10V Dimming Switch. It shows a depth of 0.87 inches (22mm) for the TORCHSTAR switch, contrasted with a thicker generic switch, emphasizing its thinner and easier installation.

3. Applications

This dimmer is versatile and can be used in various settings, including residential, office, container spaces, and sports grounds, provided compatible 0-10V dimmable fixtures are used.



Image Description: This image showcases the broad applicability of the TORCHSTAR 0-10V Dimmer Switch across different environments. It features examples such as a residential living room, a modern office space, a container storage area, and a sports gymnasium, illustrating its suitability for various lighting needs.

Operating Instructions

After successful installation and power restoration:

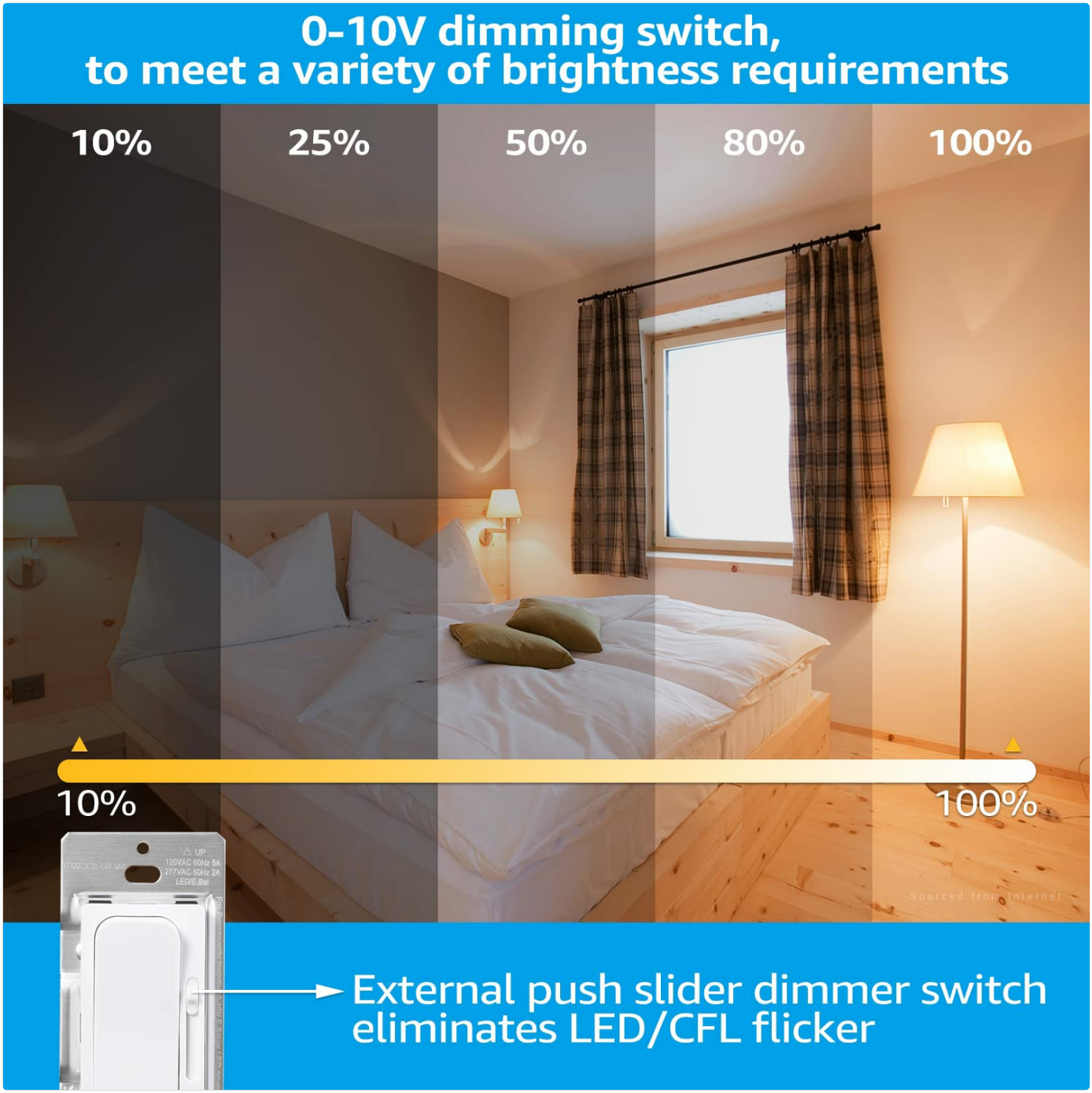


Image Description: An illustration demonstrating the dimming capabilities of the TORCHSTAR 0-10V switch. It shows a bedroom scene with varying light levels from 10% to 100%, controlled by the dimmer. The image highlights the external push slider, which helps eliminate LED/CFL flicker.

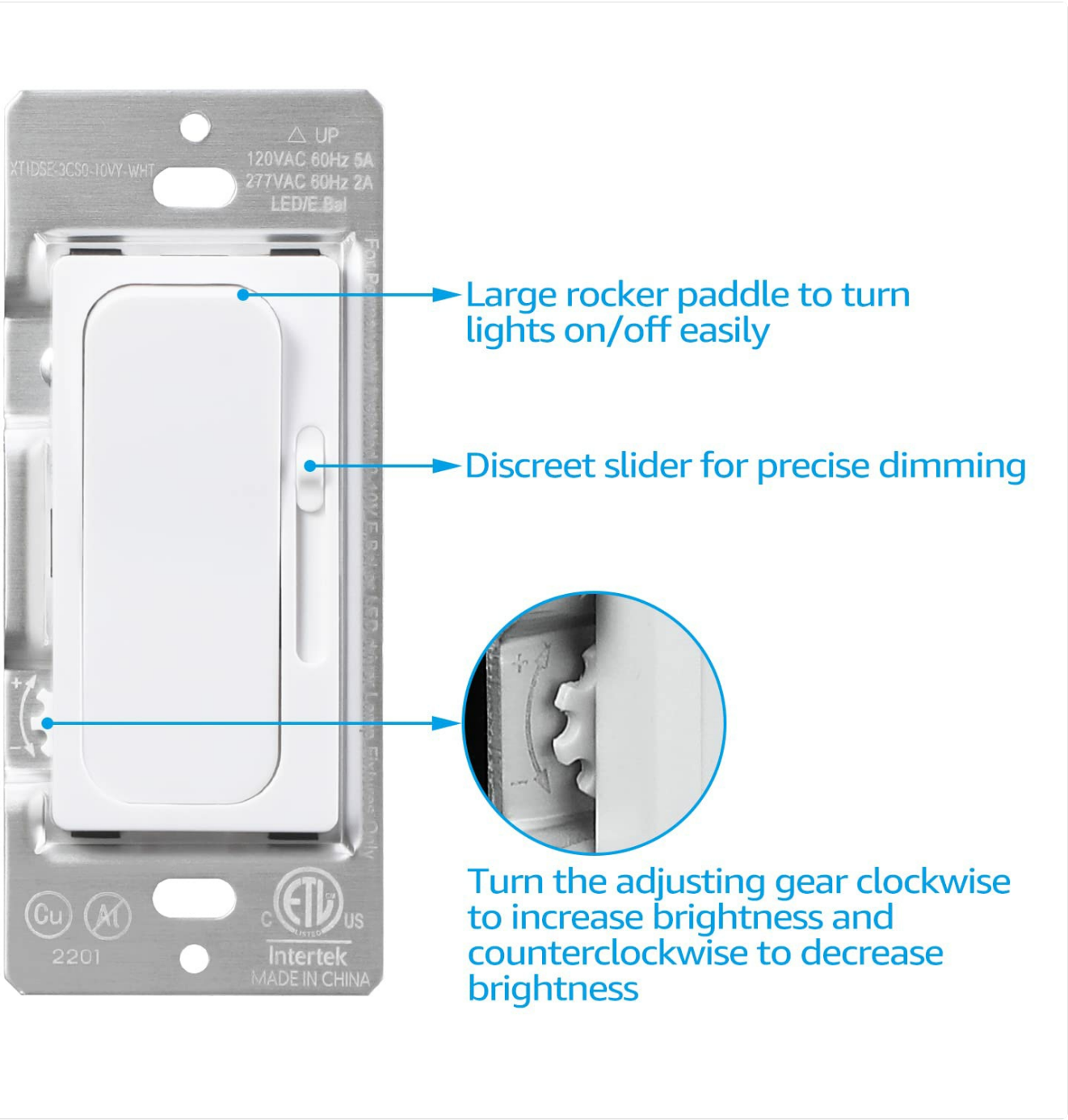


Image Description: A detailed view of the TORCHSTAR 0-10V Dimming Switch. It points out the large rocker paddle for easy on/off operation, a discreet slider for precise brightness adjustment, and an adjusting gear (wheel) that can be turned clockwise to increase brightness or counter-clockwise to decrease brightness, typically used for setting the minimum dimming level.

- **Turn On/Off:** Press the large rocker paddle to turn the connected lights on or off.
- **Adjust Brightness:** Use the discreet slider located on the right side of the paddle to adjust the light intensity. Slide up for brighter light, and down for dimmer light.
- **Adjust Minimum Brightness:** On the left side of the switch, there is an adjustable wheel. Turn this wheel clockwise to increase the minimum brightness level or counter-clockwise to decrease it. This allows you to set the lowest dimming point for your specific fixtures.

Maintenance

- **Cleaning:** To clean the dimmer switch, wipe it with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure power is off before cleaning.
- **Inspection:** Periodically check the switch for any signs of damage or loose connections. If any issues are found,

turn off power at the circuit breaker and consult a qualified electrician.

- This product requires no user-serviceable parts. Do not attempt to open or repair the unit.

Troubleshooting

Problem	Possible Cause	Solution
Lights do not turn on.	No power to the switch; Incorrect wiring; Faulty bulb/fixture.	Check circuit breaker; Verify wiring connections; Test with a known working bulb/fixture.
Lights do not dim or flicker.	Non-dimmable lights; Incorrect 0-10V wiring; Incompatible fixture.	Ensure lights are 0-10V dimmable; Check 0-10V control wire connections; Consult fixture manufacturer for compatibility.
Dimming range is not optimal.	Minimum brightness wheel not adjusted.	Adjust the minimum brightness wheel on the left side of the switch.
Switch is hot to the touch.	Overload; Poor ventilation.	Reduce connected load; Ensure proper air circulation around the switch. If problem persists, discontinue use and consult an electrician.

Specifications

Feature	Detail
Brand	TORCHSTAR
Model Number	45972
Operating Voltage	120-277V
Dimming Type	0-10V
Switch Type	Dimmer Switch
Circuit Type	Single-Pole or 3-Way
Operation Mode	ON-OFF-ON
Material	Polycarbonate
Color	White
Product Dimensions (LxWxH)	11.4 x 8.6 x 5.6 cm (4.49 x 3.39 x 2.2 inches)
Mounting Type	Wall Mount
International Protection Rating	IP54

Feature	Detail
Max Power Consumption (Incandescent)	600W
Max Power Consumption (LED/Fluorescent)	200W
Control Method	Rocker Paddle / Slider
Connectivity Protocol	X-10 (if applicable, verify compatibility)
Certifications	ETL
Units per pack	2

Warranty and Support

This TORCHSTAR product comes with a**2-year warranty** from the date of purchase, covering defects in materials and workmanship under normal use. This warranty ensures your rights and benefits as a customer.
If you encounter any issues or have questions regarding the installation, operation, or performance of your dimming switch, please do not hesitate to contact TORCHSTAR customer support. Our team is ready to assist you.
For support, please visit our official website or refer to the contact information provided with your product packaging.

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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.

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