

## Lutron NF-10-277-WH

# Lutron NF-10-277-WH Fluorescent Dimmer Instruction Manual

Model: NF-10-277-WH

## 1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Lutron NF-10-277-WH Fluorescent Dimmer. This device is designed for manual control of fluorescent lighting fixtures operating at 277 VAC. Please read this manual thoroughly before installation and use to ensure proper function and safety.

## 2. SAFETY INFORMATION

**WARNING: Risk of Electric Shock.** Improper installation can result in serious injury or death. Always turn off power at the circuit breaker or fuse box before installing or servicing this device. This product must be installed by a qualified electrician in accordance with all local and national electrical codes.

- Do not use with incandescent, LED, or low-voltage lighting unless specifically rated for those types. This dimmer is for fluorescent lighting only.
- Ensure the supply voltage is 277 VAC, 60 Hz. Connecting to an incorrect voltage may damage the dimmer and connected fixtures.
- Do not install if the product appears damaged.
- For indoor use only.

## 3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Lutron NF-10-277-WH Fluorescent Dimmer
- Mounting Screws (typically included, verify upon opening)
- Wire Connectors (typically included, verify upon opening)

## 4. SETUP AND INSTALLATION

Follow these steps carefully for proper installation:

1. **Turn Off Power:** Locate the circuit breaker or fuse that supplies power to the switch box where you intend to install the dimmer. Turn off the power completely. Verify power is off using a voltage tester.

2. **Remove Existing Switch:** Carefully remove the wall plate and unscrew the existing switch from the wall box. Disconnect the wires from the old switch.
3. **Identify Wires:** In a 1-pole installation with neutral, you will typically find:
  - One hot (line) wire (usually black)
  - One load wire (to the light fixture, usually black)
  - One neutral wire (usually white)
  - One ground wire (bare copper or green)
4. **Wire the Dimmer:** Connect the wires from the wall box to the dimmer's screw terminals as follows. Refer to the wiring diagram on the dimmer itself or the image below.
  - Connect the **hot (line)** wire to the dimmer's **line terminal**.
  - Connect the **load** wire to the dimmer's **load terminal**.
  - Connect the **neutral** wire to the dimmer's **neutral terminal**.
  - Connect the **ground** wire to the dimmer's **ground screw**.



Image 1: Back view of the Lutron NF-10-277-WH dimmer, illustrating the wiring terminals and product label with specifications. This view helps identify where line, load, neutral, and ground wires should be connected.

5. **Mount the Dimmer:** Carefully fold the wires into the wall box. Secure the dimmer to the wall box using the provided mounting screws.
6. **Install Wall Plate:** Attach the decorative wall plate over the dimmer.
7. **Restore Power:** Turn the power back on at the circuit breaker or fuse box.

## 5. OPERATING INSTRUCTIONS

The Lutron NF-10-277-WH is a manual slide dimmer designed for straightforward control of your fluorescent lighting.



Image 2: Front view of the Lutron NF-10-277-WH dimmer, showcasing its white finish and the vertical slide control for adjusting light levels.

- **Turn On/Off:** The dimmer typically has a small toggle or push button at the bottom of the slide for ON/OFF functionality. Press or toggle this button to turn the lights on or off.
- **Adjust Brightness:** Use the vertical slide control to adjust the brightness of your fluorescent lights. Slide the control upwards to increase brightness and downwards to decrease brightness.

## 6. MAINTENANCE

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The Lutron NF-10-277-WH dimmer requires minimal maintenance.

- **Cleaning:** To clean the dimmer, wipe it with a soft, damp cloth. Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the finish or internal components.
- **No User-Serviceable Parts:** There are no user-serviceable parts inside the dimmer. Do not attempt to open or repair the unit.

## 7. TROUBLESHOOTING

If you experience issues with your dimmer, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Lights do not turn on.	<ul style="list-style-type: none"><li>No power to the dimmer.</li><li>Incorrect wiring.</li><li>Bulbs are faulty or loose.</li></ul>	<ul style="list-style-type: none"><li>Check circuit breaker/fuse.</li><li>Verify wiring connections (refer to Section 4).</li><li>Replace or tighten bulbs.</li></ul>
Lights flicker or hum.	<ul style="list-style-type: none"><li>Incompatible fluorescent ballast.</li><li>Loose wiring connection.</li><li>Overloaded circuit.</li></ul>	<ul style="list-style-type: none"><li>Ensure fluorescent fixtures have dimmable ballasts compatible with 277V dimmers.</li><li>Check all wiring connections.</li><li>Reduce the total wattage of connected fixtures.</li></ul>
Dimmer is warm to the touch.	Normal operation.	Some warmth is normal during operation, especially under heavy load. If it's excessively hot or emits smoke/odor, turn off power immediately and consult a qualified electrician.

If the problem persists after attempting these solutions, contact Lutron customer support or a qualified electrician.

## 8. SPECIFICATIONS

Feature	Detail
Model Number	NF-10-277-WH
Operation Mode	Manual
Operating Voltage	277 Volts AC, 60 Hz
Circuit Type	1-way (Single-Pole with Neutral)
Actuator Type	Slide
Control Method	Touch
Connector Type	Screw Terminals
Contact Material	Metal
Finish	White
Dimensions (L x W x H)	7 x 7 x 7 inches (Product)
Weight	1 pound
Approvals	UL 1472, CSA, NOM (as per product description)

## 9. WARRANTY AND SUPPORT

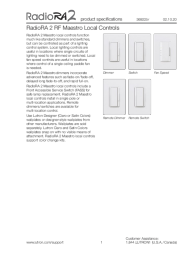
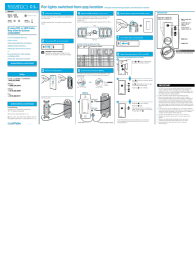
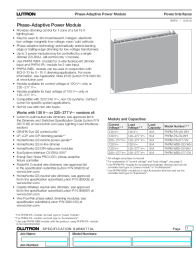
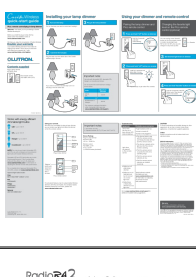
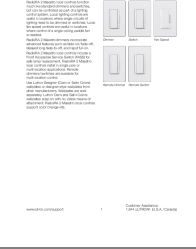
For warranty information and technical support, please contact Lutron customer service directly. Details regarding specific warranty periods and terms are typically provided with the product packaging or can be found on the official Lutron website.

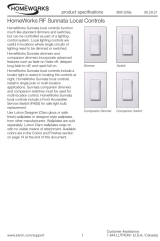
**Manufacturer:** Lutron

For further assistance, visit the [Lutron Store on Amazon](#) or the official Lutron website.



### Related Documents - NF-10-277-WH

	<p><a href="#">Lutron RadioRA 2 RF Maestro Local Controls: Features, Specifications, and Wiring</a></p> <p>Comprehensive guide to Lutron RadioRA 2 RF Maestro local controls, including dimmers, switches, and fan speed controls. Details features, model numbers, specifications, load capacities, ganging, derating, and wiring diagrams for single and multi-location installations.</p>
	<p><a href="#">Lutron Maestro C.L MACL-153M Dimmer Installation Guide</a></p> <p>Comprehensive installation guide for the Lutron Maestro C.L MACL-153M dimmer, covering single-location and multi-location wiring, setup, operation, and compatibility for LED, CFL, halogen, and incandescent bulbs. Includes safety warnings and troubleshooting tips.</p>
	<p><a href="#">Lutron Phase-Adaptive Power Module Specifications and Wiring</a></p> <p>Comprehensive guide to Lutron's Phase-Adaptive Power Module (PHPM-PA, PHPM-WBX), detailing its features, specifications, dimensions, mounting, and wiring configurations for various lighting control systems.</p>
	<p><a href="#">Lutron Caséta Wireless Plug-in Lamp Dimmer &amp; Pico Remote Quick Start Guide</a></p> <p>Quick start guide for installing and using the Lutron Caséta Wireless plug-in lamp dimmer (PD-3PCL-WH) and Pico remote control (PJ2-3BRL-WH-L01R), covering setup, pairing, troubleshooting, and specifications.</p>
	<p><a href="#">Lutron RadioRA 2 RF Maestro Local Controls: Product Specifications and Features</a></p> <p>Detailed product specifications, model numbers, features, wiring diagrams, and color options for Lutron RadioRA 2 RF Maestro Local Controls, designed for advanced residential lighting and fan speed control.</p>



[Lutron HomeWorks RF Sunnata Local Controls: Smart Dimmers and Switches](#)

Explore Lutron's HomeWorks RF Sunnata Local Controls, a line of advanced smart dimmers and switches designed for sophisticated home lighting systems. This document details product specifications, key features like fade-on/off and locator lights, operation, wiring, and available finishes.