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## Lutron FDB-4827-120-1

# Lutron Hi-Lume Electronic Fluorescent Dimming Ballast FDB-4827-120-1 User Manual

Model: FDB-4827-120-1

## INTRODUCTION

The Lutron Hi-Lume FDB-4827-120-1 is an electronic fluorescent dimming ballast designed to meet demanding lighting requirements. It provides industry-leading performance with true full-range 100% to 1% fluorescent dimming, enabling the creation of an ideal visual environment for various applications.

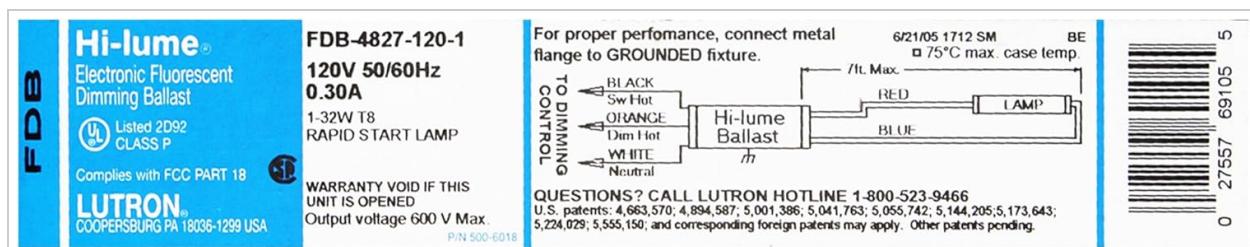
Key features include continuous, flicker-free dimming, standard 3-wire line-voltage phase-control technology for consistent fixture-to-fixture dimming, and a programmed rapid start design that preheats lamp cathodes before applying full arc voltage. This ballast operates a single 32-Watt T8 lamp at 120-Volt AC and is engineered to ensure its operating frequency does not interfere with infrared devices operating between 38 and 42 kHz.

## SETUP AND INSTALLATION

**Safety First:** Always ensure power is disconnected at the circuit breaker before beginning any installation or wiring work.

For proper performance and safety, connect the metal flange of the ballast to a **GROUNDED** fixture. This ballast is designed for 120V, 50/60Hz electrical systems and operates a single 1-32W T8 Rapid Start Lamp.

## Wiring Diagram



This image displays the product label for the Lutron Hi-Lume FDB-4827-120-1 ballast, detailing electrical specifications and a wiring diagram for installation. The diagram shows connections for power (Black, Orange, White) and to the lamp (Red, Blue), along with grounding instructions.

Refer to the wiring diagram on the product label for specific connections. The control side typically involves:

- **BLACK:** Switched Hot
- **ORANGE:** Dim Hot
- **WHITE:** Neutral

The lamp side connections are typically:

- **RED:** To Lamp
- **BLUE:** To Lamp

Ensure all connections are secure and comply with local electrical codes. The maximum case temperature for operation is 75°C.

## OPERATING INSTRUCTIONS

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The Lutron Hi-Lume ballast provides continuous, flicker-free dimming for fluorescent lamps from 100% down to 1%. Once properly installed and powered, the ballast will automatically preheat the lamp cathodes before applying full arc voltage, ensuring a rapid and smooth start.

Control the dimming level using a compatible 3-wire line-voltage phase-control dimmer connected to the 'Dim Hot' (Orange) wire. Adjust the dimmer to achieve the desired light output.

## MAINTENANCE

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This electronic ballast is designed for maintenance-free operation. There are no user-serviceable parts inside. To ensure continued safe and proper operation, do not attempt to open or repair the unit. **Opening the unit will void the warranty.**

Periodically inspect the wiring connections for any signs of wear or damage. Ensure the fixture remains properly grounded.

## TROUBLESHOOTING

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If the lamp does not illuminate or dim properly, consider the following:

- **No Light:** Check the power supply to the fixture and ensure all wiring connections are secure according to the diagram. Verify the lamp is correctly installed and not faulty.
- **Improper Dimming:** Confirm that the dimmer switch is compatible with 3-wire line-voltage phase-control ballasts and is functioning correctly. Check the 'Dim Hot' (Orange) wire connection.
- **Flickering:** While the ballast is designed for flicker-free operation, ensure stable power supply and proper grounding.

If issues persist after checking these points, contact Lutron customer support for assistance.

## SPECIFICATIONS

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Model Number	FDB-4827-120-1
Input Voltage	120V AC
Frequency	50/60 Hz

<b>Input Current</b>	0.30A
<b>Lamp Type</b>	1-32W T8 Rapid Start Fluorescent Lamp
<b>Dimming Range</b>	100% to 1%
<b>Max Case Temperature</b>	75°C
<b>Output Voltage</b>	600 V Max.
<b>Dimensions</b>	8.4 x 2.5 x 1.4 inches
<b>Item Weight</b>	1.4 pounds
<b>Manufacturer</b>	Lutron
<b>Special Features</b>	Flicker-Free
<b>Compliance</b>	UL Listed 2D92, CLASS P, FCC PART 18

## WARRANTY INFORMATION

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The warranty for this unit is **VOID IF THE UNIT IS OPENED**. This product is designed for sealed operation and contains no user-serviceable parts. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact Lutron customer support.

## SUPPORT

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For any questions, technical assistance, or support regarding your Lutron Hi-Lume Electronic Fluorescent Dimming Ballast, please contact the Lutron Hotline:

**1-800-523-9466**

You can also visit the official Lutron website for additional resources and product information.