

Bodine B90

# Bodine B90 Emergency Linear Fluorescent Ballast Instruction Manual

Model: B90

## 1. PRODUCT OVERVIEW

The Bodine B90 Emergency Linear Fluorescent Ballast is designed to provide emergency illumination for fluorescent lighting fixtures. This unit ensures that your lighting remains operational for a minimum of 90 minutes during power outages, enhancing safety and compliance with emergency lighting regulations. It features End-of-Life (EOL) protection to prevent premature lamp failure during brief power fluctuations and includes flexible wiring conduits for versatile installation options.



Figure 1: Bodine B90 Emergency Linear Fluorescent Ballast. This image shows the compact red casing of the ballast with its identifying labels and wiring connections.

## 2. TECHNICAL SPECIFICATIONS

Feature	Specification
Model	B90
Brand	Bodine (Philips)

Light Type Compatibility	Fluorescent
Emergency Operation Time	90 minutes minimum
Lumen Output (Emergency)	500-600 lumens
Input Voltage	120V / 277V
Recharge Time	24 hours
Battery Type	NiCAD (Replaceable 1.4V Battery)
Operating Temperature	41°F to 122°F (5°C to 50°C)
Special Features	EOL Protection, LED Charging Indicator, Single Pole Test Switch, Flexible Wiring Conduits
Certifications	UL 924 Listed
Dimensions	8 x 2 x 1.3 inches
Weight	2 pounds

### 3. INSTALLATION INSTRUCTIONS

**Safety First:** Before beginning installation, ensure that power to the fixture and circuit is turned OFF at the breaker panel. Installation should be performed by a qualified electrician in accordance with national and local electrical codes.

1. **Mounting:** The B90 ballast can be mounted inside or on top of the fluorescent fixture. Utilize the flexible wiring conduits to allow for remote installation up to 2 feet away from the lighting fixture if necessary. Secure the ballast firmly using appropriate fasteners.
2. **Wiring:** Connect the ballast to the unswitched AC power supply (120V or 277V) and to the fluorescent lamp(s) according to the wiring diagram provided with the product packaging. Ensure all connections are secure and insulated. The ballast is designed to work with specific fluorescent lamp types; refer to the product's detailed wiring diagram for compatibility.
3. **Test Switch Installation:** Install the single pole test switch in an accessible location, typically on the fixture or a nearby wall plate. This switch allows for manual testing of the emergency function.
4. **Charging Indicator:** Install the LED charging indicator light in a visible location on the fixture or adjacent to it. This indicator will confirm that the battery is charging.
5. **Initial Charge:** After installation, restore AC power to the circuit. The ballast battery will begin charging. Allow a minimum of 24 hours for the battery to achieve a full charge before conducting the first operational test.

The B90 features End-of-Life (EOL) protection, which helps prevent premature lamp burnout during minor power fluctuations, extending the life of your fluorescent lamps.

### 4. OPERATING INSTRUCTIONS

The Bodine B90 operates automatically to provide emergency lighting when AC power is interrupted.

- **Normal Operation:** When AC power is present, the fluorescent fixture operates normally. The B90 ballast's battery charges, indicated by the illuminated LED charging indicator.
- **Emergency Mode:** Upon an interruption of normal AC power, the B90 automatically switches to emergency mode, illuminating the connected fluorescent lamp(s) for a minimum of 90 minutes. The LED charging indicator will turn off during emergency operation.
- **Testing:** To manually test the emergency function, press and hold the single pole test switch. This simulates a power outage, and the fixture should switch to emergency mode. Release the switch to return to normal operation (if AC power is present).
- **Recharge:** After an emergency discharge or manual test, the battery requires approximately 24 hours to fully recharge. Ensure AC power is restored during this period.

## 5. MAINTENANCE

Regular maintenance ensures the reliable operation of your emergency lighting system.

- **Monthly Testing:** Conduct a monthly functional test by pressing the test switch for at least 30 seconds. Verify that the emergency lamps illuminate.
- **Annual Testing:** Perform an annual full discharge test. Interrupt AC power to the ballast for 90 minutes. Ensure the emergency lamps remain illuminated for the entire duration. After the test, restore AC power and allow 24 hours for the battery to fully recharge.
- **Battery Replacement:** The B90 uses a replaceable NiCAD battery. If the unit fails to maintain emergency illumination for the required 90 minutes during an annual test, the battery may need replacement. Contact a qualified technician for battery replacement. Dispose of old batteries according to local regulations.
- **Cleaning:** Keep the ballast and surrounding fixture clean and free from dust and debris to ensure proper heat dissipation.

## 6. TROUBLESHOOTING

If your Bodine B90 emergency ballast is not functioning as expected, refer to the following common issues and solutions:

Problem	Possible Cause	Solution
Emergency lamps do not illuminate during a power outage or test.	<ul style="list-style-type: none"><li>• No AC power to the ballast.</li><li>• Battery not fully charged.</li><li>• Faulty battery.</li><li>• Incorrect wiring.</li><li>• Faulty lamp(s).</li></ul>	<ul style="list-style-type: none"><li>• Check circuit breaker and AC power supply.</li><li>• Allow 24 hours for initial charge or recharge.</li><li>• Replace battery if it fails annual test.</li><li>• Verify wiring against diagram.</li><li>• Replace fluorescent lamp(s).</li></ul>

LED charging indicator is off when AC power is present.	<ul style="list-style-type: none"> <li>• No AC power to the ballast.</li> <li>• Faulty LED indicator.</li> <li>• Battery fully charged (less likely if recently discharged).</li> </ul>	<ul style="list-style-type: none"> <li>• Check AC power supply.</li> <li>• Contact customer support for replacement.</li> <li>• Perform a test to confirm emergency function.</li> </ul>
Emergency lamps do not stay on for 90 minutes.	<ul style="list-style-type: none"> <li>• Battery not fully charged.</li> <li>• Aging or faulty battery.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure 24-hour recharge time.</li> <li>• Replace the NiCAD battery.</li> </ul>

If problems persist after attempting these solutions, contact customer support or a qualified electrician.

## 7. WARRANTY INFORMATION

Please note that this product is sold without an explicit warranty. For any concerns regarding product defects upon receipt, please contact your point of purchase immediately.

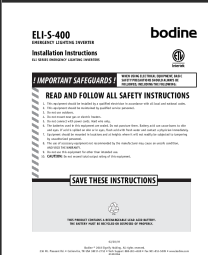
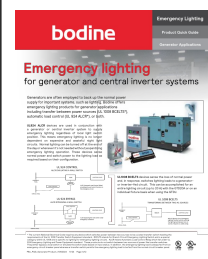
## 8. CUSTOMER SUPPORT





For further assistance, technical inquiries, or to report issues not covered in this manual, please contact Bodine customer support or your authorized distributor. Ensure you have your product model number (B90) and purchase details available when contacting support.

You may also visit the [Philips Store on Amazon](#) for additional product information, though direct support for Bodine products may be handled separately.

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## Related Documents - B90

	<p><a href="#">Bodine ELI-S-400 Emergency Lighting Inverter Installation Instructions</a></p> <p>Comprehensive installation, operation, and troubleshooting guide for the Bodine ELI-S-400 Emergency Lighting Inverter. Includes essential safety precautions, detailed wiring diagrams for 120V and 277V systems, and fault indication explanations.</p>
	<p><a href="#">Bodine Emergency Lighting for Generator and Central Inverter Systems - Product Quick Guide</a></p> <p>A quick guide to Bodine emergency lighting products designed for generator and central inverter systems, including UL 1008 BCELTS and UL 924 ALCR devices for reliable power backup.</p>

	<p><a href="#">Bodine BSL06T3FL &amp; BSL10T4FL Installation Instructions: FirstLink Connected Emergency LED Drivers</a></p> <p>Detailed installation instructions for Bodine BSL06T3FL and BSL10T4FL FirstLink Connected Emergency LED Drivers. Covers safety precautions, suitability checks, installation steps, wiring, maintenance, and troubleshooting.</p>
	<p><a href="#">Bodine BSL06T3FL &amp; BSL10T4FL Installation Instructions - FirstLink Emergency LED Drivers</a></p> <p>Detailed installation guide for Bodine BSL06T3FL and BSL10T4FL FirstLink Connected Emergency LED Drivers. Covers safety, installation steps, wiring, operation, maintenance, and troubleshooting for reliable emergency lighting.</p>
	<p><a href="#">Bodine ELI-S-400 CEC SineWave Inverter: Installation and Operation Instructions</a></p> <p>Comprehensive installation and operation guide for the Bodine ELI-S-400 CEC SineWave Inverter, an emergency lighting inverter. Covers safety precautions, installation steps, operation, maintenance, and troubleshooting for commercial and industrial applications.</p>
	<p><a href="#">Bodine BSL310C Emergency LED Driver - 10W, Class 2 Output, UL Listed</a></p> <p>Detailed specifications and features for the Bodine BSL310C emergency LED driver. This 10W, Class 2 driver offers reliable emergency lighting for factory or field installations, compatible with various LED loads.</p>