

PHILIPS IMH-100-D-BLS

PHILIPS Advance e-Vision IMH-100-D-BLS 100 Watt Pulse Start Metal Halide Ballast Instruction Manual

Model: IMH-100-D-BLS

1. INTRODUCTION

This manual provides essential instructions for the safe and efficient installation, operation, and maintenance of the PHILIPS Advance e-Vision IMH-100-D-BLS 100 Watt Pulse Start Metal Halide Ballast. Please read this manual thoroughly before proceeding with any installation or operation.

2. SAFETY INFORMATION

WARNING: Risk of electric shock. Disconnect power before servicing.

- Always disconnect line voltage before installing, replacing, or servicing the ballast.
- Power must be reset after replacing the lamp.
- Ensure proper grounding by connecting the green wire or through the ballast enclosure.
- This ballast is suitable for recessed use.
- Do not install insulation above or within 3 inches of the ballast sides to prevent overheating.
- Use only 4.0kV pulse rated lampholders for screw base lamps.
- Do not connect the RED or BLUE lead to neutral.
- Installation should be performed by a qualified electrician in accordance with national and local electrical codes.

3. PRODUCT OVERVIEW

The PHILIPS Advance e-Vision IMH-100-D-BLS is an electronic ballast designed for (1) 100W Metal Halide lamp. It features IntelliVolt® technology, allowing operation on 120V to 277V, 50/60Hz input. Key features include Lamp End-of-life (EOL) Detection, high power factor, and thermal protection.



Figure 1: PHILIPS Advance e-Vision IMH-100-D-BLS Ballast. This image displays the ballast unit with its label, detailing electrical specifications, safety warnings, and basic wiring diagrams for 100W lamp operation.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of the ballast:

- Power Disconnection:** Ensure that the main power supply to the circuit is completely disconnected before beginning installation.
- Mounting:** Securely mount the ballast in a suitable location, ensuring adequate ventilation. Maintain a minimum clearance of 3 inches from any insulation.
- Wiring Connections:** Refer to the wiring diagrams below for correct connections.
 - Connect the RED lead to the center terminal of the lamp (for screw base lamps).
 - Do not connect the RED or BLUE lead to neutral.
 - Ensure proper grounding using the green wire or by grounding through the ballast enclosure.
- Lamp Installation:** Install a 100W Metal Halide lamp (ANSI M90 or M140) into a 4.0kV pulse rated lampholder.
- Power Restoration:** Once all connections are secure and verified, restore power to the circuit.

Wiring Diagrams

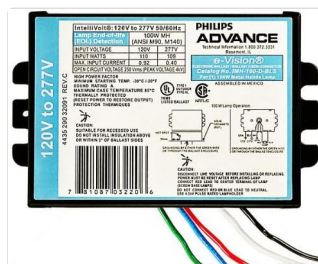


Figure 2: General wiring diagram for 100W lamp operation, showing connections for input power and lamp output. Note the grounding options.

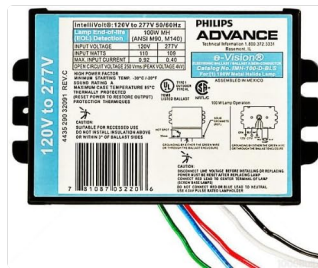


Figure 3: Detailed diagram illustrating the connection of the red lead to the center terminal of a screw base lamp, and the importance of not connecting red or blue leads to neutral.

5. OPERATING INSTRUCTIONS

The PHILIPS Advance e-Vision IMH-100-D-BLS ballast is designed for automatic operation. Once properly installed and powered, it will ignite and operate the 100W Metal Halide lamp. The IntelliVolt® feature automatically adjusts to input voltages between 120V and 277V.

- **Lamp End-of-Life (EOL) Detection:** The ballast is equipped with EOL detection to safely shut down the lamp when it reaches the end of its operational life, preventing potential hazards.
- **Minimum Starting Temperature:** The ballast is designed to start lamps reliably down to -30°C (-20°F).

6. MAINTENANCE

Minimal maintenance is required for the ballast itself. Regular inspection of the lighting system is recommended.

- **Cleaning:** Keep the ballast and surrounding area free from dust and debris to ensure proper heat dissipation.
- **Lamp Replacement:** When replacing a lamp, always disconnect power first. After installing a new lamp, power must be reset to restore output.
- **Thermal Protection:** The ballast is thermally protected. If it shuts down due to overheating, allow it to cool down and ensure proper ventilation before resetting power.

7. TROUBLESHOOTING

If the lamp fails to operate, consider the following:

- **No Light:**
 - Check if the power supply is connected and active.
 - Verify all wiring connections are secure and correct according to the diagrams.
 - Inspect the lamp for damage or if it has reached its end-of-life. Replace if necessary and reset power.
 - Ensure the lampholder is rated for 4.0kV pulse.
- **Intermittent Operation:**
 - Check for loose connections.
 - Ensure the ballast is not overheating due to insufficient ventilation or high ambient temperatures.
- **Lamp Cycling:** This may indicate a lamp nearing its end-of-life or an issue with the ballast's EOL detection. Replace the lamp first. If the issue persists, consult technical support.

8. SPECIFICATIONS

Electrical Data

Parameter	120V Input	277V Input
Input Voltage	120V	277V
Input Watts	110W	109W
Max. Input Current	0.92A	0.40A
Open Circuit Voltage	250 Vrms (Peak Voltage 4KV)	

General Specifications

- **Model Number:** IMH-100-D-BLS
- **Lamp Type:** (1) 100W Metal Halide (ANSI M90 or M140)
- **Input Voltage:** IntelliVolt® 120V to 277V, 50/60Hz
- **Power Factor:** High Power Factor (90% minimum)
- **Minimum Starting Temperature:** -30°C (-20°F)
- **Sound Rating:** A
- **Maximum Case Temperature:** 85°C (185°F)
- **Protection:** Thermally Protected, Lamp End-of-life (EOL) Detection
- **Certification:** UL Listed Ballast, NRTL/C, CSA
- **Assembly:** Assembled in Mexico
- **Material:** Metal
- **Item Weight:** Approximately 0.01 ounces (Note: This weight seems unusually low and may be a data entry error. Refer to product packaging for accurate weight.)

9. WARRANTY INFORMATION

For warranty details regarding your PHILIPS Advance e-Vision IMH-100-D-BLS ballast, please refer to the documentation included with your purchase or visit the official PHILIPS website. Warranty terms typically cover defects in materials and workmanship under normal use and service.

10. SUPPORT

If you require technical assistance or have questions not covered in this manual, please contact PHILIPS Advance technical support:

- **Technical Information Line:** 1-800-372-3331
- **Location:** Rosemont, IL

Please have your model number (IMH-100-D-BLS) available when contacting support.

