ADVANCE

ELECTRONIC HID

# e-Vision®

## Compact Electronic Ballast for 150-Watt Metal Halide Lamps

## PRODUCT OVERVIEW:

Advance's compact e-Vision® electronic ballast for 150-watt metal halide lamps delivers enhanced versatility and design flexibility and currently represents the smallest 150-watt electronic HID ballast [incorporating multiple-voltage technology InteliVolt®] on the market. A full 20% smaller and 3% more efficient than Advance's previous 150-watt offering, this next-generation ballast measures only 6.3" x 3.6" x 1.5" and represents a smaller option supporting 150-watt applications. In addition to driving superior lamp wattage regulation and significant energy savings over incandescent and magnetic HID alternatives, this ballast additionally offers a range of protective features to enhance safety and minimize maintenance concerns.

High-performing, long-lasting, and energy-efficient, Advance's compact e-Vision electronic ballast for 150-watt metal halide lamps delivers an optimized lighting solution for the market's broad range of retail, institutional, office, and outdoor settings.

## DESIGN HIGHLIGHTS:

- Compact and lightweight housing measuring 20% smaller than Advance's previous 150-watt offering
  - ❍ Promotes enhanced versatility and design flexibility
- IntelliVolt® multiple-voltage technology (operates 120 to 277 volts, 50/60 Hz)
  - ❍ Enhances accuracy and ease of ordering and reduces stocking/SKU requirements
- Superior lamp wattage regulation
  - ❍ Optimizes color quality over life
  - ❍ Reduces lamp-to-lamp variations
- Electronic circuitry
  - ❍ Drives significant energy savings relative to incandescent and magnetic HID alternatives
  - ❍ Enables ballasts to run cooler and operate quieter than many magnetic HID alternatives
  - ❍ Maximizes lamp life and minimizes re-lamping requirements, thereby reducing total cost of ownership relative to incandescent and magnetic HID alternatives
  - ❍ Further reduces material and labor costs by enabling the installation of up to 3½ more fixtures per circuit
- Enhanced safety features include automatic lamp power control and lamp monitoring
  - ❍ Prevents lamp overpowering/thermal stress and ensures that the system shuts down should the lamp fail to ignite or cycle off at the end of life
- 85°C maximum case temperature rating
  - ❍ Ensures long life in demanding applications
- Cold-start capability down to -20°F
  - ❍ Ensures reliable operation in a wide range of extreme conditions

## APPLICATIONS:

■ ***Retail*** ■ ***Institutional*** ■ ***Office***

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**Section 1 - Physical Characteristics**

1.0 The electronic ballast shall be furnished with integral, color-coded leads.

**Section II - Performance Requirements**

2.0 The electronic ballast shall be IntelliVolt® and operate from a nominal line voltage range of 120-277 volts, +/-10%, 50/60 Hz.

2.1 The electronic ballast input current shall have Total Harmonic Distortion (THD) of less than 15%.

2.2 The electronic ballast shall have a Power Factor greater than 90%.

2.3 The electronic ballast shall have a lamp end-of-life detection and shutdown circuit.

2.4 The electronic ballast shall be Sound Rated A.

2.5 The electronic ballast output frequency to the lamps shall be less than 200 Hz to prevent acoustic resonance inside the lamp arc tube and to minimize visible flicker.

2.6 The electronic ballast shall provide a "Lamp Current Crest Factor" of less than 1.5.

2.7 The electronic ballast shall be thermally protected to shut off when operating temperatures reach unacceptable levels.

**Section III - Regulatory Requirements**

3.0 The electronic ballast shall meet the requirements of the Federal Communications Commission rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.

3.1 The electronic ballast shall be Underwriters Laboratories (UL) Listed and CSA Certified where applicable.

**Section IV - Other**

4.0 The electronic ballast shall not contain Polychlorinated Biphenyl (PCB's).

4.1 The electronic ballast shall carry a three-year warranty from the date of manufacture for operation at marked maximum case temperature or less.

4.2 The manufacturer shall have a twenty-five year history of producing HID lamp ballasts for the North American market.

4.3 The electronic ballast shall be produced in a factory certified to ISO 9002 Quality System Standards.

## Installation Notes

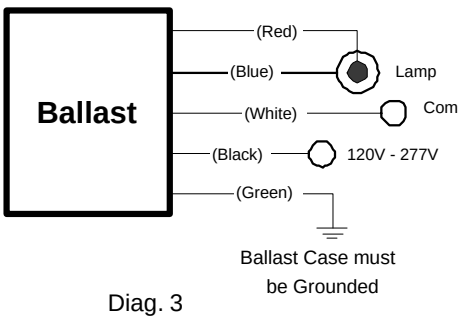
1. Red lead must be connected to center terminal of lamp (for Edison. screw base lamps). Do not connect red or blue lead to neutral or ground.
2. Use 4.0 kV pulse rated lamp holder.
3. Maximum ballast-to-lamp distance is 5 ft. using typical wiring methods and materials. Additional distance up to 15 ft. may be possible using wire between lamp and ballast with a total measured capacitance of 100 picofarads or less. Consult Advance for application assistance.
4. Power mains must be cycled off and then on to reset ballast after failed lamps are replaced.

## Ballast Hot Spot Location

Hot spot locations differ with each ballast model and are designated on the individual ballast labels. Consult ballast labels and ballast specification sheets for Hot Spot locations.

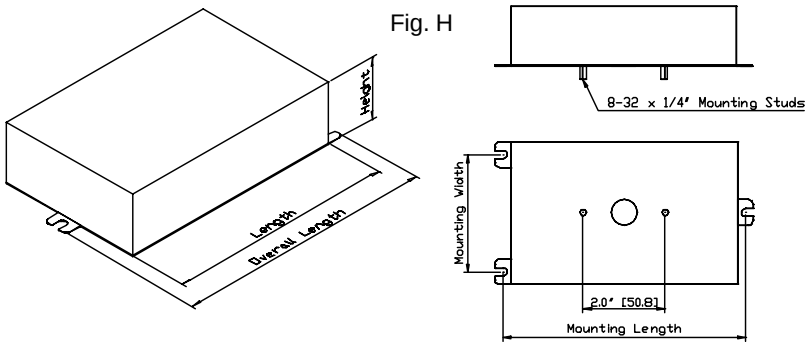
| Lamp Data | | Input Volts | Catalog Number | Certifications | | Line Current (Amps) | Input Power ANSI (Watts) | Max. Case Temp. | Wiring Diag. | Fig. | Weight (lb) | Max. Distance to Lamp (ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number | Watts | | | UL | CSA | | | | | | | |
| **150 Watt Lamp, ANSI Code M102 or M142, Minimum Starting Temp. -30°C/-20°F** | | | | | | | | | | | | |
| 1 | 150 | 120 | IMH-150-H-LF (Leads exit either end) | ✓ | ✓ | 1.4 | 165 | 85°C | 3 | H | 1.9 | 5 |
| | | 277 | IMH-150-H-BLS (Leads exit bottom end) | ✓ | ✓ | 0.6 | 161 | | | | | |

| Case Figure | Overall Length | Case Length | Case Width | Height | Mounting Length | Mounting Width |
|---|---|---|---|---|---|---|
| H | 161mm [6.3"] | 144mm [5.7"] | 92mm [3.6"] | 38mm [1.5"] | 152mm [6.0"] | 73mm [2.9"] |




Diag. 3

Fig. H

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