ADVANCE

ELECTRONIC HID

e-Vision®

Reduced-Profile Electronic Ballasts for 70-Watt and 100-Watt Metal Halide Lamps

PRODUCT OVERVIEW:

Advance's e-Vision® reduced-profile electronic ballasts for 70-watt and 100-watt metal halide lamps represent the utmost in high performance, energy-efficiency, and design flexibility. Ideally suited to a variety of settings involving downlighting and accent lighting, these ballasts bring the comprehensive benefits of electronic HID technology to a broader range of market applications than ever before. A full 24% smaller and 10% more efficient than Advance's previous 70-watt and 100-watt offerings, these next-generation ballasts feature IntelliVolt® multiple-voltage technology and deliver high performance and superior lamp wattage regulation as well as significant energy savings over incandescent and magnetic HID alternatives.

Complete with enhanced safety features such as automatic lamp power control and lamp monitoring, Advance's e-Vision reduced-profile electronic ballasts for 70-watt and 100-watt metal halide lamps offer an optimized lighting solution for the market's wide range of retail, institutional, office, and outdoor venues.

DESIGN HIGHLIGHTS:

- Compact and lightweight housing measuring 24% smaller than Advance's previous 70-Watt and 100-Watt offerings
  - ❍ Promotes enhanced design flexibility
- Models share a common footprint with Advance's 2 X 42-Watt SmartMate® ballasts for compact fluorescent lamps
  - ❍ Offers fixture manufacturers, specifiers, and end users a heightened degree of design flexibility and freedom of choice
  - ❍ Enables a broader spectrum of application for electronic HID technology
- 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 lamp 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
- End-of-lamp life (EOL) protection
  - ❍ Safely removes power from the lamp at its end of life, helping to prevent lamp overheating
- 85°C maximum case temperature rating
  - ❍ Ensures long life in demanding applications

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

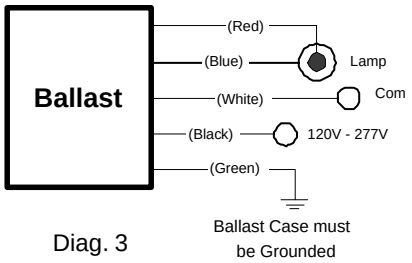
1. Red lead must be connected to center terminal of lamp (for Edison. screw base lamps). Do not connect red or blue lead to neutral or ground.
2. Use 4.0 kV pulse rated lamp holder.
3. Maximum ballast-to-lamp distance is 5 ft. using typical wiring methods and materials. Additional distance up to 15 ft. 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							
70 Watt Lamp, ANSI Code M98 or M143 or M139, Minimum Starting Temp. -30°C/-20°F												
1	70	120	IMH-70-D-LF (Leads exit either end)	✓	✓	0.67	80	85°C	3	D	1.6	5
		277	IMH-70-D-BLS (Leads exit bottom end)	✓	✓	0.29	79					
100 Watt Lamp, ANSI Code M90 or M140, Minimum Starting Temp. -30°C/-20°F												
1	100	120	IMH-100-D-LF (Leads exit either end)	✓	✓	0.92	110	85°C	3	D	1.6	5
		277	IMH-100-D-BLS (Leads exit bottom end)	✓	✓	0.40	109					

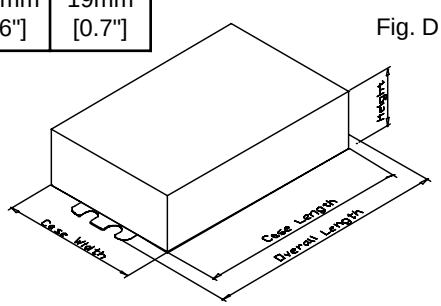
Case Figure	Overall Length	Case Length	Case Width	Height	Mounting Length	Mounting Width
D	128mm [5.0"]	108mm [4.3"]	77mm [3.0"]	38mm [1.5"]	118mm [4.6"]	19mm [0.7"]

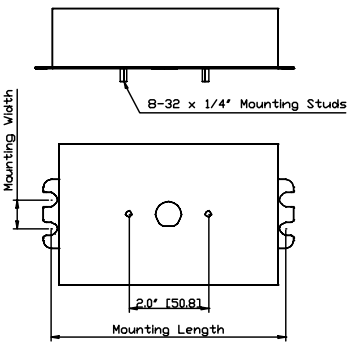


Diag. 3

Ballast Case must be Grounded

Fig. D





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