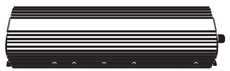
Electronic Ballast USER MANUAL

for 400W/600W/1000W Metal Halide or High Pressure Sodium Lamps



Ballast

Product Advantage

Generator ready
Runs MH or HPS lamps
High efficiency electronic ballast
No acoustic reasonance
Lower harmonic distrotion
High output and improved spectrum
Driver efficiency at full power: 95-96%
Light-weight and high energy-efficient.

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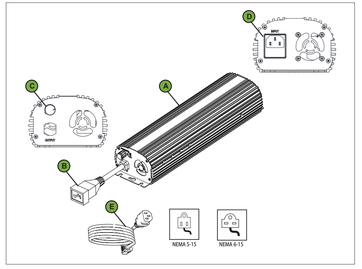
1.Introduction

Thank you for purchasing Efinity Electronic Ballast. Please review the following instructions to ensure you receive the best perfor mance. Each ballast uses a high temperature,resin-sealed compo nent board for completely silent operation. Each unit is burned-in at the factory for approximately twelve hours to ensure maximum reliability.

E-Ballasts use a micro-processor similar to your home computer. This micro-processor allows the E-Ballast to run halide or sodium lamps. It is programmed for a "soft-start" and does not require an initial surge of power to light the lamp. This increase the lamp life and allows the end user to start multiple ballasts ballasts at the same time without tripping breakers. To ensure safe operation, this Programmed for a "soft-start" and does not require an initial surge of power to light or missing lamp.In case of auto-shutoff, please disconnect from the power supply, remove the faulty lamp or check for wiring problems,wait for some minutes then restart your ballast.

2.Controls, connections and indications

A. Electronic ballast
B. Output connector
C. Power output selector knob
D. IEC connector for power cord
E. Power cord with either NEMA 5-15 or NEMA 6-15 plug



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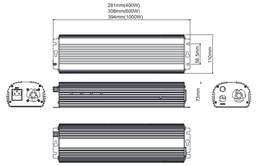
3.Product information

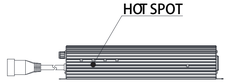
3.1. Technical specifications

Version	1000W 120V/240V		600W 120V/240V		400W 120V/240V	
Product weight	3.8kg/8.82lb		3.8kg/8.82lb		3.8kg/8.82lb	
Dimensions (L*W*H)	394mmx110mm x73mm		308mmx110mm x73mm		281mmx110mm x73mm	
Temperature case	75 ℃ / 167°F					
Temperature ambient	-20 ~ 40 ℃/ -4 ~ 104 °F					
Input voltage +/-10%	120 V	240 V	120 V	240 V	120 V	240 V
Input current at 100%	8.60 A	4.30 A	5.60 A	2.80 A	3.59A	180 A
Input power at 100%	1085 W	1055 W	655 W	645 W	430 W	430W
Power factor	>0.99					
Total Harmonic Distortion	< 10%					
Frequency	50 - 60 Hz					
Power inlet	IEC C14					
Power output settings	50%/75%/100%					
Ignition voltage:	5 kV					
Inrush current:	<37.5 Amps	<50 Amps	<37.5 Amps	<50 Amps	<37.5 Amps	<50 Amps
Plug type:	Nema 5-15	Nema 6-15	Nema 5-15	Nema 6-15	Nema 5-15	Nema 6-15

3.2. Main Dimension



3.3. HOT SPOT
Tcase max=60°C/140°F



3.4 Environment

The product is meant for use in climate rooms. The product may be used in damp environments. The product may not be used in wet environments or outdoors. The 1000 W lamps function optimal when the ambient temperature is between -20 ~ 40℃ / -4 ~ 104 °F.

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4.Wiring Diagram

-Ballast Case must be Grounded

5.Protections

1.End of Lamp Life(EOL)Protection
2.Short circuit protection
3.Open circuit protection
4.Ignition failure protection
5.Thermal protection

6.Warning

Power surge,power outage,outage overloading may stress or damagethe lamp.As a safety feature,this Soft-Start technology also reduces ballast damage caused by a bulb failure.In case of an unexpected chut-off,please disconnect from the power supply, remove the faultylamp,check for wiring problems,then plug-in the ballast power cord.

NOTE: This device complies with Part 18 of the FCC Rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45–30 MHz. If this occurs, please change outlet or move the lamp far away from other appliance.

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(a) **The interference potential of device or system:**
"Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."
(b) **Simple measures that can be taken by the user to correct interference:**
"NOTE: This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help."

7.Disclaimer

Any of following circumstances, will not be Efinity's warranty:

1.Install the product without following the wiring diagram in this manual and cause the product damage.
2.Damaged by human reason (like product is soaked in water) or caused by not following the manual instructions.
3.Install or use the product without following the local laws and regula tions.
4.Cover the warrant logo personally, or the client /the third party tries to maintain, repair, change the product and cause the damage.
5.Use of the environment does not meet the provisions of this manual.
6.Damaged by force majeure, like abnormal voltage, earthquake, flood, fire, thunderstroke, transpor tation accidents, etc.
7.Man-made damage during carrying, transportation.
8.Damaged by unstable match from other company' (not Efinity's) poor design or defective quality products.(like luminaire).
9.Beyond the warranty period

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