

## IMPORTANT SAFEGUARDS

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

When using electrical equipment, basic safety precautions should always be followed including the following:

- **DISCONNECT AC POWER SUPPLY BEFORE SERVICING.**
- Installation and servicing of this equipment should be performed by qualified service personnel only.
- Ensure the electricity connections conform to the National Electrical Code and local regulations if applicable.
- Do not mount near gas or electrical heaters.
- Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition. Any modification or use of non-original components will void the warranty and product liability.
- Do not use this equipment for other than intended use.

## SAVE THESE INSTRUCTIONS!

The Growlite 315W Electronic Ballast is highly efficient and energy-saving with a high power factor, high luminous efficacy, as well as lower THD. It fires both SE and DE CMH 315W lamps, operates with 120/208/240/277VAC inputs (95-305v). This ballast is built with LED Status Display so that the user can understand it's working conditions and protections:

- Normal operation (Display shows Input Voltage and Wattage)
- Short circuit protection (Display shows "I--I")
- Open circuit protection (Display shows "-I I-")
- Under voltage protection (Display shows "LU(V)" & Input Voltage)
- Over voltage protection (Display shows "HU(V)" & Input Voltage)
- Thermal protection (Display shows Inner Ballast Temperature and Wattage)
- Ignition failure protection
- End of lamp life (EOL) protection technology

**It is strongly recommended you read all details below**

### 1. Pre-Use Procedures

- a. The 315W Electronic Ballast (120V/277V) is able to work within the range of 95V to 305V. Please confirm the input power cord before use
- b. Operating temperature range: -13°F ~ +122°F (-25°C ~ +50°C), Max case temperature (TC): 185°F (85°C)
- c. Ensure the lamp power and lamp voltage match the specifications of 315W Electronic Ballast
- d. Never unplug the power plug or detach the lamp cord from the lamp socket without turn the power supply off first
- e. Mounting Location
  - i. Do not install ballasts in areas of extremely high temperature such as an attic or a closed closet
  - ii. Do not mount the ballast to the reflector or blow exhaust air over the ballast
  - iii. Do not stack ballast on top of each other
  - iv. Do not allow contact with water
  - v. Mount unit at least 6" (15cm) apart
- f. If a unit ever leaks resin, please turn off power supply, and allow it to cool down, relocate to cooler area or install a fan near the ballast for cooling

### 2. Operating Procedures

- a. Connect output wires to lamp socket or as instructed by the lamp fixture's manufacturer
- b. Ensure bulb is installed into fixture properly
- c. Plug the power connection into the power supply socket

### 3. Specifications

- a. Input Voltage: 120/208/240/277VAC (95-305VAC)
- b. Strike Voltage:  $\geq 3.5$ kV
- c. Required Lamp Voltage: 110v
- d. Input Frequency: 50/60Hz
- e. Power Factor(PF):  $>0.99$
- f. Crest Factor(CF):  $<1.7$
- g. Total Harmonic Distortion (THD):  $<10\%$
- h. Operation Temperature:  $-13^{\circ}\text{F} \sim +122^{\circ}\text{F}$  ( $-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$ )
- i. Sealed Ballast, quiet operation
- j. Size: 9-7/8" x 5" x 3.5" (250mm x 129mm x 89mm)

### 4. Instructions for LED Status Display

- a. Normal Operating: Indicates input voltage and ballast wattage, lamp ON
- b. High Voltage: Indicates "HU(V)" and input voltage when input voltage is more than 305VAC, lamp OFF
- c. Low Voltage: Indicates "LU(V)" and input voltage when input voltage is lower than 85VAC, lamp OFF. Indicates input voltage and ballast wattage (reduced) when input voltage in the range of 95~105VAC, lamp DIMMED
- d. Short Circuit: Indicates "I-I", lamp OFF
- e. Open Circuit: Indicates "-I I-", lamp OFF
- f. Thermal Protection: Indicate Inner Ballast Temperature and Ballast Power when the temperature inside of ballast is higher than  $221^{\circ}\text{F}$  ( $105^{\circ}\text{C}$ ), and dims the ballast power to 80%

### 5. Notes

- a. Switching power supply voltage. If you use a voltage regulator or transformer, please switch power supply slowly. If you want to change 120V to 240V or 277V quickly, please unplug 120V cord, and then plug into 240V or 277V power receptacle
- b. If you fail to comply, the Digital Electronic Ballast could fail and warranty will be voided

### 6. Safety

- a. Do not alter or modify the Digital Electronic Ballast in any way. It may cause bodily injury or death as this is a high power electrical device
- b. Do not use with splitters to power multiple lamps simultaneously
- c. Do not submerge in water or splash water on the unit
- d. Do not plug or unplug the lamp cord while the Digital Electronic Ballast is plugged into power supply
- e. Failure to observe the following safety warnings may result in serious injury or death
- f. Failure to observe these safety warnings will result in a waiver of all liabilities and will void all warranty

### 7. Warnings

- a. Do not connect input and output together; the lighting fixture should be grounded correctly through the power connection; Improper wiring of output connection will permanently damage the ballast
- b. If the exterior of the lamp is damaged, don't attempt to use, replace lamp immediately
- c. When re-installing lamp, make sure lamp has time to cool before touching
- d. Make sure power supply and lamp cable are connected properly
- e. Always disconnect power supply before reinstalling the lamp
- f. Do not hang or lift the ballast by the power or the lamp cord
- g. Do not touch the interior of the socket while power is on
- h. Do not operate electronic ballast in extremely high humidity or damp locations
- i. Do not plug electronic ballast into wrong power supply
- j. Do not attempt to open the casing/housing of the Digital Electronic Ballast, it will void your warranty
- k. Do not put the Electronic Ballast in an airtight environment
- l. Keep away from children