



## ELECTRONIC BALLAST



**Master Green™**  
**Electronic Ballast Models:**  
902519 - 1000 WATT / 120–240 VOLT

## Installation/Operating Instructions

**READ THESE INSTRUCTIONS BEFORE FIRING UP YOUR BALLAST**

**KEEP ORIGINAL PACKAGING**— all returns need to be in the original packaging in order to avoid product damage during shipping. Any damage to products not in their original packaging will not be covered under warranty.

**SAFETY FIRST!** Failure to observe the following safety warnings may result in serious injury. In addition, failure to observe these safety warnings will result in a waiver of all liabilities and will void all warranties.

### **WARNING**

- If the exterior of the lamp is damaged, replace lamp immediately.
- When re-lamping, make sure lamp has time to cool before touching.
- Make sure power cord and lamp cord are connected properly.
- Disconnect power before re-lamping.
- **DO NOT** hang by power or lamp cord.
- **DO NOT** make contact with the interior of the socket while power is on.
- **DO NOT** operate light systems in wet locations.
- **DO NOT** plug system into supply voltage other than what is designated on ballast.
- **DO NOT** attempt to rewire or reconfigure your system, it will void warranty and could cause serious safety hazards (i.e. power cord, lamp cord, lamp socket or ballast).
- Keep away from children.

## SAFETY FIRST!

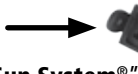
- **DO NOT** alter or modify this unit in any way. It may cause bodily injury or death as this is a high power electrical device.
- **DO NOT** submerge in water or splash water on the unit.
- **DO NOT** plug or unplug the lamp cord while the ballast is energized.

These high performance Electronic Ballasts are extremely efficient. They have a high power factor and high luminous efficacy. It's stable performance creates constant power output even when power fluctuates (power surge). Short circuit protection technology prevents damage to the lamp and other ballasts connected to the same circuit.

## 1. INSTALLATION PROCEDURE

- **DO NOT** alter or modify the electronic ballast in any way. Not only may it damage the unit, it will void the warranty.
- Lamp power rating must match electronic ballast power rating.

### OUTPUT TO HPS/MH LAMP



Connect "Sun System" lamp cord with male plug to female receptacle on ballast.



CONNECT APPROPRIATE AC POWER PLUG HERE

Includes Convertible Smart Volt™ dual ferrite power cord that easily converts to either 120 or 208/240 volt power.



This ballast includes a 6 1/2 ft convertible Smart Volt™ dual ferrite power cord that converts into either 120 or 240 volt with interchangeable plugs.

## 2. SPECIFICATIONS

- 120-240 Volts
- Power source frequency: 50/60Hz
- Power Factor (cos $\phi$ ): > 0.99
- Ambient Temp: 50° F to 120° F
- Crest Factor: < 1.5
- Acoustic Resonance: none
- Total Harmonic Distortion: (THD): < 10.0%

## 3. NOTES

- Master Green™ Electronic Ballasts will operate with Metal Halide lamps and High Pressure Sodium lamps that are rated at the proper wattage.
- This unit offers short-circuit and power fluctuation.

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**240V WIRING - VERY IMPORTANT!** All digital ballasts may malfunction if the 240V circuit has a neutral. The input for the ballast is 2 HOT WIRES and 1 GROUND WIRE. If you are using a light controller ONLY bring a ground wire and two hot leads from your electrical panels.

**HOT RESTRIKE** - It is **VERY IMPORTANT** that the lamp is given adequate time to cool down before it is reignited. You should allow a hot lamp to cool for 20-30 minutes before you try to restrike it. Hot restrikes cause permanent lamp failure and lumen output degradation. Additionally, the lamp should never be turned off before the lamp reaches full intensity.

**LAMP REPLACEMENT** - Be sure to disconnect the power source before changing lamps. Always use the specified wattage lamp. (A 600 watt lamp should not be used on a 60%, 70%, 100% or 110% setting).

**MOUNTING LOCATION - DO NOT** install ballasts in areas of high heat, such as an attic or a closed closet. **DO NOT** mount the ballast to the reflector or blow exhaust air over them. **DO NOT** stack ballasts on top of each other. **DO NOT** allow contact with water. Mount units at least six inches apart. If a unit has any leaking resin, please relocate to a cooler area or place a fan near the ballasts.

**TIMER BOX** - If you are connecting a 240V ballast to a timer box, please make sure that it cuts off both legs when timer is switched off. If you continue to supply 120V to your ballast when the timer is switched off, it may damage your ballast.

**HPS/MH** - The ballasts operate both metal halide and high pressure sodium lamps. They will not light mercury vapor lamps.

**LAMP RECOMMENDATIONS** - The ballasts are designed to provide superior performance with several lamps manufactured to American specifications. There are several brands of lamps available for the U.S. market that were made according to European specifications. We do not recommend using these types of lamps, since they will provide inconsistent performance with your ballast.

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## TROUBLESHOOTING GUIDE

Follow the troubleshooting tips below. If troubleshooting techniques fail, bring ballast back to your place of purchase to request warranty service.

POSSIBLE CAUSES	CORRECTIVE MAINTENANCE
<b>LAMP LOOSE IN SOCKET</b>	Screw lamp firmly into socket. Make sure tab inside the socket makes proper contact with the base of the lamp. If lamp will not seat properly replace lamp.
<b>INCORRECT VOLTAGE</b>	Make sure you are using the correct input voltage with ballast. If using incorrect voltage, disconnect the ballast from the power source immediately.
<b>DEFECTIVE OR IMPROPER WIRING</b>	Examine wiring to ensure it agrees with wiring diagrams on ballast label. Check connections to see that they are secure. If wiring a 240V ballast, DO NOT use a neutral. The correct wiring is two hot wires and a ground.
<b>POOR ELECTRICAL CONNECTIONS</b>	Check wiring and lamp contact with socket. Make sure the lamp cord is firmly seated in output receptacle.
<b>INCORRECT LAMP</b>	Verify that you are using the proper wattage lamp with ballast. DO NOT use a lamp manufactured according to European or Asian specifications as they will not provide consistent performance.
<b>LAMP DAMAGE</b>	Investigate possibility of outer bulb damage, particularly where glass meets base. Lamps may have been twisted to firmly into socket. Look for broken tubes or loose metal parts. Replace lamp.

**RETURNING UNITS** Please contact your retail store for returns.

**WARRANTY** This unit, when properly used will provide you with years of service. It is covered under a 2 year warranty. This warranty will be voided if the unit is misused, abused or altered. Warranty repair or replacement will be at the sole discretion of the manufacturer. Defective units need to be returned to the place of purchase with proof of purchase/receipt.

This warranty is expressly in lieu of all other warranties, expressed or implied, including the warranties of merchantability and fitness for use and of all other obligations or liabilities on the part of the seller. This warranty shall not apply to this product or any part thereof which has been damaged by accident, abuse, misuse, modification, negligence, alteration or misapplication. Manufacturer makes no warranty whatsoever in respect to accessories or parts not supplied by manufacturer. This warranty shall apply only to the United States, including Alaska, Hawaii and territories of the United States and Canada. This warranty does not cover labor, materials, travel time, equipment, etc. to de-install and install any lighting fixtures or other equipment.

<b>Advisory statement</b>	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.
<b>The interference potential of the device or system</b>	The interference potential of the device or system is the operating frequency; 105 kHz.
<b>Maintenance of the system</b>	Unplug the unit, wait 30 seconds, and plug the unit back in.
<b>Simple measures that can be taken by the user to correct interference</b>	Move the unit away from any radio device.

- This product contains delicate electronic components. This means that if it is placed near an object that transmits radio signals, it could cause interference. This could be, for example, mobile telephones, walkie talkies, CB radios, remote controls and microwaves. If interference occurs, move such objects away from the appliance.