



MH / HPS Grow Light System Instructions

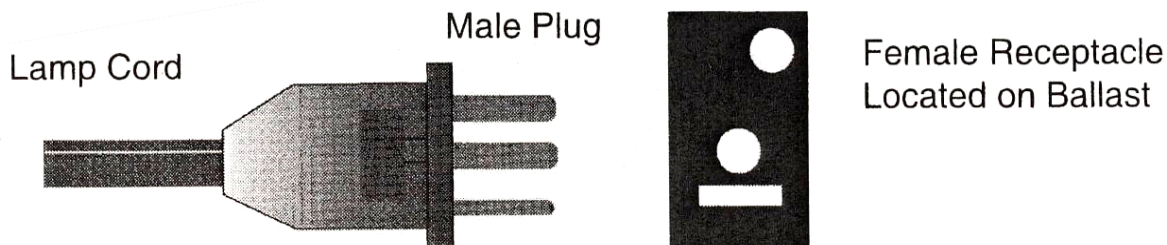
SAFETY FIRST!

Failure to observe the following safety warnings may result in serious injury and will void all warranties.

- If the exterior of the lamp cracks, punctures, or breaks, turn off the unit immediately. The bulb may still work, but **DO NOT** use it.
- Functioning (and recently functioning) lamps are very hot; allow time to cool before attempting to touch. Hot lamps may shatter or crack upon contact with water. Use caution when removing lamps around water.
- **DO NOT** remove or insert lamps while the power is on.
- Use a properly grounded timer and a 3 prong plug when using a timer with this fixture.
- **DO NOT** hang the fixture by its power cords. Use the supplied hanging hardware to hang the fixture.
- **DO NOT** attempt to modify or rewire any light system.
- **DO NOT** touch the socket while the power is on (with or without the lamp inserted).
- **DO NOT** energize this light with any voltage other than what the unit is made for.
- Make sure the lamp cord is plugged all the way into the female receptacle on the ballast.

SYSTEM SETUP


1. Make sure the unit is unplugged.
2. Attach the eye-bolts or hooks in a **CEILING STUD** where the reflector is to be hung. Note: A strong cord or chain may be used to hang the reflector from the ceiling hook if extended length is required, and will allow for raising and lowering of the assembly as necessary.
3. Insert the socket assembly into the reflector (if it is not already permanently attached).
4. Carefully screw the bulb into the socket until it is snug. **DO NOT** over tighten.
5. Spread the hangers and insert them into the holes on top of the light fixture, and hang the fixture from both ends to a strong cord or chain.
6. Mount the ballast to a wall by securing it through the holes at each end to the wall studs.
7. Route the lamp cord up and away from the light to another hook and down the wall to the ballast location.
8. Plug the male plug on the lamp cord into the female receptacle on the ballast (shown below). **IMPORTANT:** Plug the lamp cord into the ballast **BEFORE** plugging the power cord into an outlet.
9. Plug the power cord on the ballast into a properly rated, grounded outlet or a heavy-duty grounded timer.





HOW MH AND HPS BULBS FUNCTION


- Small pieces of glass or metal inside your lamp are common.
- It may take your bulb 10 to 15 minutes to reach full brightness.
- If the bulb is shut off after reaching full intensity, it can take approximately 10 to 20 minutes to restart.
- During the first few hours of use, the light from the bulb will oscillate.
- The light output will decrease in intensity during the life of the bulb.
- In the first few hours of operation, the intensity of the light may fluctuate somewhat which is normal. After 100 hours of burn-in time, the bulb will burn evenly.
- Average life of an MH bulb is 10,000 to 15,000 hours. The average rated life of an HPS bulb is 20,000 to 24,000 hours. Most users choose to replace bulbs before the stop operating because of light loss and/or spectral shift.

GROW LIGHT TIPS & RECOMMENDATIONS

 **Hanging height:** Due to the heat that is emitted from these types of fixtures, you should hang them according to size. Smaller wattage systems (100 and 250) should be hung about 2 to 3 feet from the top of the plants. Medium wattage systems (400 and 600) should be hung around 4 feet from the top of the plants. High wattage systems (1000 and up) should be placed at least 4 to 6 feet from the plant tops.

 **How long should lights run?** This depends on the type of plant. Most plants and vegetables need about 10 to 12 hours of light to promote growth. Plants that produce fruits or flowers will show improvement with up to 16 hours a day of supplemental light.

 **Providing air circulation:** MH & HPS grow light bulbs and ballasts emit a lot of heat. That is why it is important to provide plenty of air circulation over the equipment to prevent overheating and/or premature failure.

 **Moving plants under HID lights:** Use caution when moving plants from lower light situations (windows or fluorescent lights) to a high intensity MH or HPS light, because they can get sunburned. Keep the light an extra foot away and increase the number of hours of exposure over a couple of days.

TROUBLESHOOTING

If your light system does not work:

1. CHECK THE ELECTRICAL SOURCE – Make sure the unit is plugged properly and that the breaker is not tripped or fuse blown.
2. CHECK THE TIMER/CONTROL - Remove any timer or other controls that the ballast is plugged into. Plug the ballast directly into the outlet.
3. CHECK THE LAMP – make sure your lamp is screwed all the way into the socket.

Problem: My ballast is getting power but the light is not coming on.

Solution: 1. The lamp may not be screwed in tight enough. 2. The system was cut off before the lamp ignited. It can take 5 to 10 minutes for lamps to initially ignite. 3. The lamp or ballast is defective. Contact us for help.

Problem: Every time I turn on the light system the circuit breaker trips.

Solution: You may have too many appliances on this circuit. A normal home's circuit has only 15 amps available. These HID lights use up to 10 amps each. Check the amperage draw of each device on the circuit and make sure you are not overloading the circuit with too many appliances and/or lights.

Problem: I turned off my HID light, and it won't come back on.

Solution: MH & HPS light systems need to cool off before restarting. The bulb may take up to 20 minutes to cool down before it can be fired up again. These lights are designed to run for several hours at the time. Repeatedly cutting the system on and off in a short period of time will shorten the life of the ballast and bulb.

Problem: My bulb has small pieces of glass inside of it.

Solution: It is common for small pieces of glass to break loose inside of the bulb. This will not affect the lamp's output or life. If there is a crack or hole in the outer glass, the bulb should be replaced.

IF NONE OF THE PROCEDURES ABOVE FIX YOUR PROBLEM, PLEASE CONTACT ACF GREENHOUSES TECHNICAL SUPPORT AT 888-888-9050 X 227 OR HELP@LITTLEGREENHOUSE.COM.

WARRANTY

Ballasts = Warranty varies with each manufacturer. (See Manufacturer's Warranty)

HID Fixtures = 5 Year Warranty

MH & HPS Bulbs = 1 Year Warranty

GALAXY™
ELECTRONIC BALLAST

WARRANTY

This unit, when properly used will provide you with years of service. It is covered under a 5 year warranty. The first 3 years are a full rebuild or replace warranty. The final 2 years are pro-rated from the purchase date if the return is accompanied by a receipt. What this means is that at 3 years 60% of the warranty is gone. We will pro-rate the remaining 40% over the final 24 months. Any credit due will be applied to cost of freight, parts and labor to repair the unit or at manufacturers sole discretion may be applied toward the purchase price of a replacement unit. Monetary refunds on the remaining prorated warranty will not be given. This warranty will be voided if the unit is mis-used, 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.

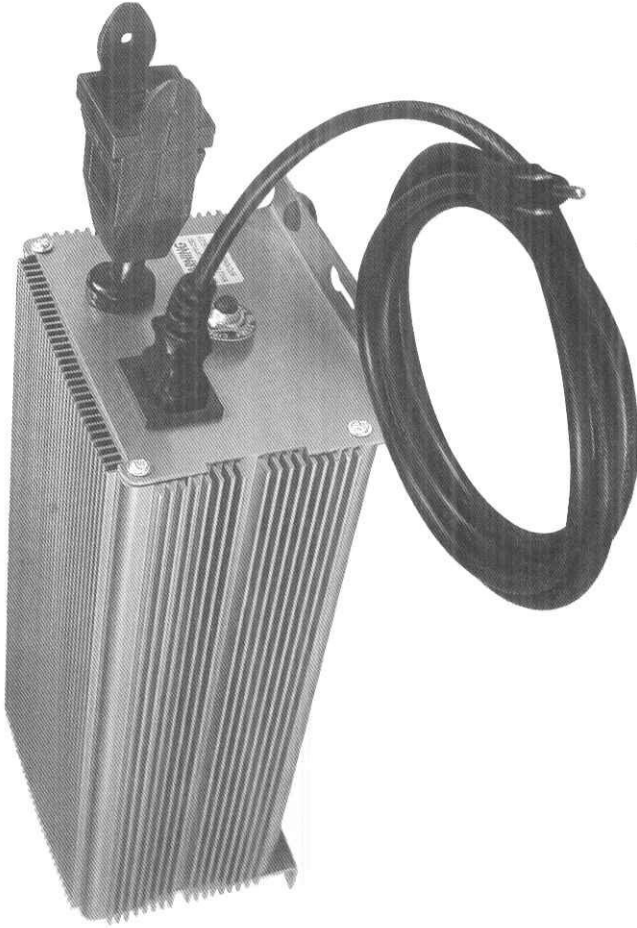
5 YEAR WARRANTY ON THE GALAXY™

For Technical Support call your nearest distribution center:

Vancouver, WA (360) 883-8846
Ontario, CA (909) 930-1990
Nashville, TN (615) 622-8200
Pompano Beach, FL (954) 633-2725

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INSTALLATION
OPERATING INSTRUCTIONS

IMPORTANT PRODUCT INFORMATION

READ IMMEDIATELY

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 this system into a supply voltage other than what is instructed on the ballast.
- ⚠ **DO NOT** attempt to rewire or reconfigure your system, it will void the 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.

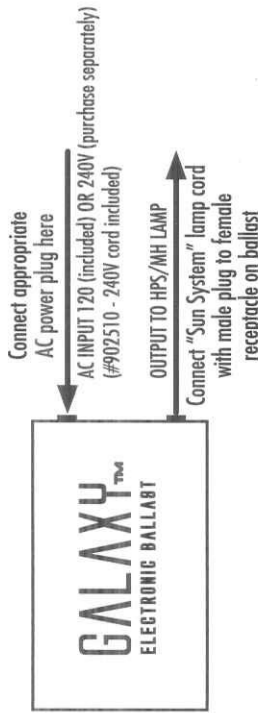
These high performance **Electronic Ballasts** are also extremely efficient. They have a high power factor as well as high luminous efficacy. It's stable performance creates constant power output even when power fluctuates (power surge). It is incorporated with a short circuit protection technology that prevents damage to the lamp and other ballasts connected in the same circuit.

Please read all details stated before initial use:

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.

⚠ The rated power of the lamp must match the rated power of this electronic ballast.



These ballasts offer our exclusive Smart Volt™ feature — They are "smart" ballasts — They will operate on either 120 or 240 volt power (except *Galaxy™ 1000 watt 240 volt only ballast, part #902510*) by simply plugging in the appropriate power cord. There is no further modification necessary. It comes with a 120 volt power cord. If you wish to run this ballast on 240 volt, you must purchase the 240 volt power cord separately (*part #903082 six foot or #903084 twenty foot*).

The Galaxy 1000 watt 240 volt only ballast, part #902510, is a designated voltage electronic ballast. This ballast cannot be run with any other voltage other than 240 volts.

2. SPECIFICATIONS

- Rated voltage range: 120-240 Volts (#902510-240V only)
- Total Harmonic Distortion: (THD): < 10.0%
- Power source frequency: 50/60Hz
- Ambient Temperature: 50°F to 120°F
- Power Factor (cosφ): > 0.99
- Crest Factor: < 1.5
- Acoustic Resonance: none

3. NOTES

- The Galaxy™ 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 protection.
- The Digital Fusion™ needs to be actively air-cooled with a fan.

RETURNING UNITS

Please contact your retail store for returns.

See back page for important warranty information

Galaxy Select-a-Watt Ballast Info Sheet (902518)

400-600-1000 watt + Turbo Charge

This state-of-the-art ballast is manufactured to provide today's serious grower with maximum flexibility & performance. There are three ways to use the Select-a-Watt feature:

- It will properly drive a 400, 600 or 1000 watt lamp to ANSI specifications. For example -set the switch to 400 watts, insert a 400 watt lamp into your socket and the ballast will operate the 400 watt lamp. The ballast will similarly operate 600 or 1000 watt lamps.
- The second option for this ballast is dimming a 1000 watt lamp. Adjust the switch to 400 or 600 watts and the ballast will dim the 1000 watt lamp by 40 or 60%.
- The Turbo Charge feature will increase the output of a 1000 watt lamp (only) by approximately 10%. You will achieve peak performance, but this may decrease your lamp life.

Lamps are only dimmable on wattages lower than the specified lamp wattage. A 1000 watt lamp can be dimmed down to 600 watt or 400 watt. A 600 watt lamp can be dimmed down to 400 watt, but CANNOT be over-driven to 1000 watts.

Turbo Charge is designed for 1000 watt lamps only. DO NOT use with 400 watt or 600 watt lamps. This can be hazardous.

Ballast should be turned off before changing any setting on the ballast.

Ballast needs to stay off for 5 minutes between setting changes. This allows the ballast to reset itself internally.