- If any part of the lamp is damaged, replace lamp immediately.
- Disconnect the unit from a power source before replacing lamps or any other parts.
- When replacing lamps, make sure the lamp has had time to cool before touching.
- Make sure power cord and lamp cord are connected securely to the unit.
- These products operate at very high temperatures. Keep away from children.
- Glass is required for reflectors using metal halide (MH) lamps for UL listing to apply. Glass is not required for high pressure sodium (HPS) lamps to be UI listed
- Always use a three prong timer rated for 15 amps or more with light systems.
- Do not operate lamps that are a different wattage than the ballast specifies.
- Read all instructions completely before attempting to power on unit. Failure
 to follow the warnings and instructions for use may result in serious injury or
 death, for which the manufacturer and resellers expressly disclaim any and
 all liability.

Operating Instructions:

- 1. Make sure the power supply cord and lamp end are properly connected.
- Ensure the bulb is properly seated in the socket assembly. It should be tight, but not stressed.
- Always use a bulb centric to the highest output of the ballast (e.g.630W bulb/630W ballast).
- 4. Confirm the ballast is not near any source of moisture or standing water.
- 5. Plug the power supply cord into an appropriate power supply.
- 6. After ignition, give your lamp a minimum of 30 seconds to reach full power.
- Always allow the bulb to cool before re-striking the ballast; we recommend 15 minutes.
- 8. Ballast can be cleaned using a clean, dry towel. Should the ballast somehow become wet, turn off main power supply and unplug the unit before attending to it.

Remember, safety first! Although incredibly rewarding, indoor growing can present dangerous situations. Never allow standing water to be present, never hang a ballast from either the power or lamp cord, and always make sure your equipment is fastened safely and securely. Your ballast does not require any switches or re-wiring to change voltage or bulb spectrum. Simply turn off and unplug the unit and allow bulb to cool before changing cords or bulbs, respectively.

2 Year Limited Warranty Service

If the product will not work after you have read the troubleshooting guide and practiced the troubleshooting options, you are advised to return the light system to the retailer you purchased it from. The dealer will be able to examine the light and test its components. If they are not able to repair the light, they will return it to us for examination and repair/replacement. Do not attempt to repair any product on your own, as serious injury or death may result. If the retailer is not able to help you and the light is still under manufacturer's warranty, you may contact us for technical support. In some cases, you will be issued an RMA# (return merchandise authorization number) to return the unit for factory repair. Complete the warranty form below and return the light with all original packaging, your receipt of purchase, and a valid RMA# to the address below. Please pack and ship the light in its original packaging. If it is damaged in shipment we cannot be responsible and the warranty may be voided. Once we receive RMA package, it will be repaired or replaced and shipped back to you. Please note if an additional warranty was purchased and include the extended warranty sales receipt with your return.

RETURN FORM

Include the following if returning:

- √ Proof of purchase
- \checkmark This completed form
- √ RMA# on the outside of the box
- √ Extended warranty receipt

Return Merchandise Authorization Number (Required):		
Contact Name:		
Address:		
Phone #:		
Email Address:		
Please give a brief description of your technical issue:		

SEND TO: RMA Dept. 20651 Golden Spring Drive Suite 115 Walnut, CA 91789 714-516-8176

<u>IMPORTANT!</u>

The following pages contain important safety and operating instructions. Please read and follow all instruction in this manual. Carefully read and review all safety instructions, warnings and cautions contained in this manual. Failure to read and follow these instructions, warnings and cautionary statements may result in severe injury or death to persons and pets or damage to personal property.

Do not dispose product or any other part of it as unsorted municipal waste – insteadit shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment

Digital Ballast 630W 120-240V

User Manual





All our ballasts are compatible with Safe Grow Hydroponic Smart System.

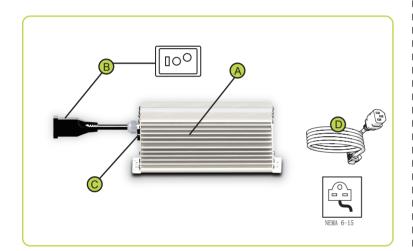
1.Introduction

Thank you for purchasing our Digital Ballast. Please review the following instructions to ensure you receive the best performance. Each ballast uses a high temperature, resin-sealed component board for completely silent operation without a fan. Each unit is burned-in at the factory for approximately twelve hours to ensure maximum reliability.

Our Digital Ballast uses a mirco-processor similar to your home computer. To ensure safe operation, it is programmed or a "soft-start" and does not require an initial surge of power to light the lamp. This increases the lamp life and allows the end user to start multiple ballasts at the same time without tripping breakers. In case of auto-shut off, please disconnect from the power supply, remove the faulty lamp or check for wiring problems, then restart your ballast.

2. Controls, Connections and Indications

- A.Digital ballast
- B. Output plug
- C.IEC connector for power cord
- D Power cord with NEMA 6-15 plug



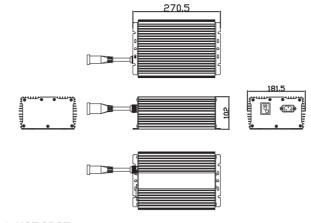
3. Product Information

3.1. Technical specifications

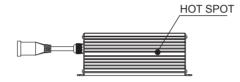
Version	630W	
Product weight	3.5kg/7.72lb	
Dimensions (L*W*H)	270.5mmx181.5mmx102mm	
Temperature case	75 °Celsius / 167 °Fahrenheit	
Temperature ambient	-20 ~ 40 °Celsius / -4 ~ 104 °Fahrenheit	
Input voltage +/-10%	120V	240V
Input current at 100%	5.78A	2.86A
Input power at 100%	686W	
Power factor	>0.95	
Total Harmonic Distortion	< 15%	
Frequency	50-60Hz	
Power inlet	IEC C14	
Ignition voltage:	5 kV	
Inrush current:	≤50 Amps	
Plug type:	Nema 6-15	

USER MANUAL

3.2. Main Dimension



3.3. HOT SPOT Tcase max=75°C

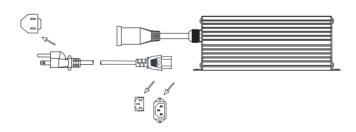


3.4 Environment

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 630W Doubled Ended CMH Lamp functions optimal when the ambient temperature is between $-20 \sim 40^{\circ}$ Celsius / $-4 \sim 104^{\circ}$ Fahrenheit.

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 damage the lamp. As a safety feature, the Soft-Start technology also reduces ballast damage caused by a bulb failure. In case of an unexpected shut-off, please disconnect from the power supply, remove the faulty lamp, check for wiring problems, then plug-in the ballast power cord.

USER MANUAL

7.Disclaimer

Any of the following circumstances will not be warrantied:

- Product damaged due to incorrect installation of the product without following the wiring diagram.
- Damaged by improper use or submerging in water and not following the manual instruction.
- 3. Install or use of the product without following local laws and regulations.
- 4. Damage due to maintenance or repair of the product by an unauthorized technician.
- 5. Use in an environment that does not meet the provisions indicated in the manual.
- Damaged by mishandling, abnormal voltage, earthquake, flood, fire, transportation accidents, etc.

IMPORTANT PRODUCT INFORMATION READ IMMEDIATELY

SAFETY FIRST!

Failure to observe the following safety warnings may result in serious injury or death. Use all products only as directed. Failure to observe these safety warnings will result in a waiver of any and all liability on the part of its manufacturer, and resellers, and will void all warranties to the extent permitted by law.

WARNINGS AND INSTRUCTIONS

FOR USE:

- Disconnect power before re-lamping.
- When re-lamping, make sure lamp has time to cool before touching.
- · Make sure power cord is connected properly.
- DO NOT hang ballast by power cord or lamp cord.
- DO NOT make contact with the interior of the socket while the power is on.
- DO NOT plug or unplug a lamp cord while the ballast is turned on.
- ALWAYS unplug the ballast from the power source before connecting or disconnecting any lighting device to ballast, moving ballast, or otherwise touching or handling ballast or its components.
- DO NOT use with generators. Warranty will be voided.
- · NEVER stand beneath the ballast.
- NEVER put hands or any other objects in the interior of the ballast.
- DO NOT operate this or any lighting system in wet areas.
- NEVER get the ballast wet or allow it to come into contact with water or any other liquids.
- NEVER drop, shake or jostle the ballast.
- NEVER attempt to insulate or otherwise cover the ballast, as it releases a
 great deal of heat and may cause a fire or other damage. Ballasts should
 always have plenty of room to breathe and good ventilation around them.
- DO NOT plug this system into a supply voltage other than what is instructed on your fixture.
- DO NOT attempt open or rewire the components of the light system. It will void the warranty and may cause serious injury or death.
- NEVER attempt to rewire or alter any internal or external mechanisms or components on the ballast. This includes trying to cut and/or rewire the cords.