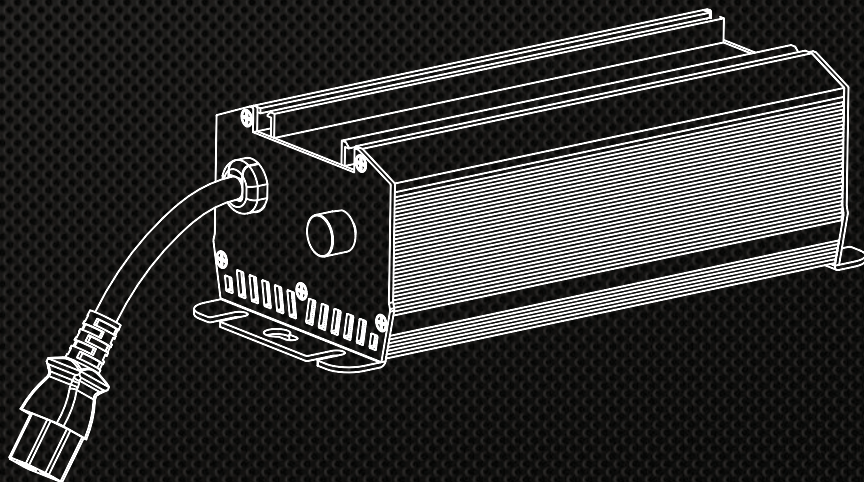


# 4SEASONS

COMMERCIAL GROW LIGHTS

## 400W & 600W DIMMABLE DIGITAL BALLAST



## OPERATING MANUAL



The temperature of the electronics is the most important parameter for lifetime and reliability. A normal operating environment temperature should be below 122°F . Exceeding the maximum environment temperature will stress the electronic components, which will lead to shorter lifetime and decreased reliability.

*Should you have any questions or concerns about installing new ballast, please contact your shop or a professional electrician.*

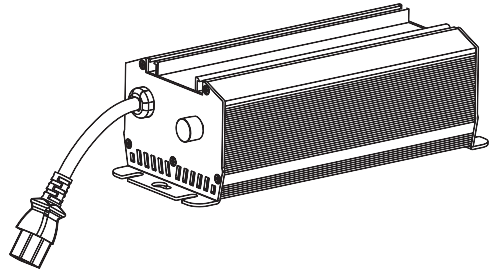
## SUITABLE LAMPS

The 400W ballast is designed and tested to drive 400W HPS/MH lamps. The 600W ballast is designed and tested to drive 600W HPS/MH lamps. Using other lamps can cause damage to your ballast and lamp.

### Lamp Replacement Instructions for Ballast

- Always install the lamp lead before connecting your ballasts and mains.
- Always connect the ground wire to the reflector if it is not a double insulated type.
- Never disconnect a lamp by pulling the lamp cord out of a live ballast.
- Allow lamp to cool 30 minutes before restarting (hot restrike).
- When changing a lamp, first

disconnect the ballast from mains by removing the plug. Let the lamp and reflector cool down for 30 minutes before changing as they can be very hot. When replacing a defective lamp without disconnecting mains, the lamp will not start.



## PLEASE READ THESE INSTRUCTIONS FIRST BEFORE INSTALLATION

*Congratulations on the purchase of your new ballast. We have done everything to ensure a long life and safe operation of your new product, but the installation and use of the ballast is at the responsibility of the user. Incorrect use or installation can lead to failure and damage to the ballast. Damage to the ballast and electronic circuitry as a result of incorrect installation or use revokes your warranty. Read this manual carefully before installing your ballast.*

## TECHNICAL SPECIFICATION

Model	HPS/MH 400W	HPS/MH 600W
Input Voltage	AC220V/230V/240V	AC220V/230V/240V
Output Voltage	96-144V	96-144V
Input Frequency	50/60Hz	50/60Hz
Output Power	400W Max	600W Max
Power Factor	≥0.97	≥0.97
Crest Factor	≤1.7	≤1.7
THD	≤10%	≤10%
Dimming	200W-300W-400W-SUPER LUMEN	250W-400W-600W-SUPER LUMEN
Strike Lamp	400W HPS/MH Lamp	600W HPS/MH Lamp
Protection Function	Open Circuit Protection	Open Circuit Protection
Size (L*W*H)	220*108*89 mm / 8.7*4.3*3.5 inch	253*108*89 mm / 10*4.3*3.5 inch
Weight	1.2 kgs / 2.6 lbs	1.7 kgs / 3.7 lbs

## PRODUCT DESCRIPTION

HPS/MH 400W & 600W ballast takes the regular ballast in a less-expensive without compromising on quality. It supports a high efficiency resonant and soft switching topology made to excellent value for money with outstanding performance and reliability. Where four different output levels can be switched with a dimming selector illuminating your grow. It also ships with multi protection features to ensure a long life and safe operation. Professional electronic HPS/MH lamps operate at very high frequency

to prevent acoustic resonance and to optimize lamp life. The fanless ballast can prevent any dust or moisture from entering the housing.

## SCOPE OF USE

The ballast is for plant cultivation, it is intended for climate room use, where it can be mounted in the climate room, or outside the climate room on a suitable non-compostable surface. It is suitable for a damp location but should not be used in wet environments or outdoors. **FOR INDOOR USE ONLY.**

## INSTALLATION AND OPERATING PROCEDURES

*Be sure to comply with local installation and regulations.*

Always install electronic ballasts vertically, so the air can rise through the cooling ribs for optimal cooling. The lamp and reflector will be hot during operation, do not touch the reflector or lamp during or right after operation. Make sure the power cord does not touch any hot part of the ballast.

- Only mount ballasts on a non-combustible material.
- Make sure your lamp is inserted properly and reflector is hung at the correct height.
- Connect the power cable (that is provided) to an electrical outlet. Keep distance between your ballast to insure free air flow.
- Reflectors are made from a high grade pure aluminum, which will oxidize and degrade over time. This results in lower reflectivity and reduced efficiency, and over 10% light loss at the canopy. It is recommended that you mark the installation date on the outside of reflector with a permanent marker, and replace reflectors once a year.

## WARRANTY

We warrant the mechanical and electronic components of this product to be free of defects in material and workmanship if used under normal operating conditions for a period of one (1) year from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use, we shall, at our discretion, either replace or repair the product using suitable new or refurbished parts. In case we decide to replace the entire product, this limited warranty shall apply to the replacement ballast for the remaining initial warranty period, i.e. one (1) year from the date of purchase of the original product. For service return the ballast to your shop with the **original sales receipt.**



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