Gavita Pro 1000 US remote electronic ballast

■ PLEASE READ THESE INSTRUCTIONS FIRST BEFORE INSTALLATION
Congratulations on your purchase of the Gavita Pro Electronic ballast. We have done everything to insure a long life and safe operation, but the installation and use of the ballast is 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 and use revokes your warranty, so we recommend you read this manual carefully before installing your electronic ballast.

■ Product description
The Gavita Pro 1000 remote ballast is a state of the art adjustable horticultural quality electronic ballast. It is designed to drive the professional 1000W 400V EL electronic high frequency HPS lamps. Professional electronic HPS lamps operate at very high frequencies to prevent acoustic resonance and to optimize lamp life.

The ballast output can be adjusted to 600-660-750-825-1000-1150W and is equipped with soft-dim. Soft dim is a feature that gradually changes the output to the new setting when you select a different output level. The gradual adjustment takes 60 seconds per step. This is a feature to improve lamp life. The ballast output power can be switched while the lamp is on. The gradual shift to the new output level happens so gradually that your eyes can hardly register it happening as your eyes adjust quickly. Rest assured, the ballast will actually adjust.

The input connector is an IP54 sealed IEC connector. The ballast housing is sealed. In the front plate a Gore-Tex membrane is used to allow warm air to exit the housing, cool air to enter the housing when cooling down and to prevent dust and moisture from entering the ballast.

In the middle you find the power adjustment. This ballast is capable of adjusting a 1000W EL lamp from 600 to 1150W, which is a 15% boost.

The output connector on the right is an industry standard XR 505 type. Always use connectors and lamp cords that have been approved and certified to withstand the 5 kV ignition pulse.

■ Scope of use
The Gavita Pro 1000 is designed to drive horticultural high frequency HPS lamps for plant cultivation. It is intended for climate room use, where it can be mounted in the climate room near the lamp (but not in the light of the lamp) due to the low heat dissipation, or outside the climate room on a suitable non combustible surface. It should not be used in wet environments or outdoor.

High Intensity Discharge lamps generate intense heat. Installation of HID lamps should be carried out according to local installation and safety regulations.
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- Installation

Be sure to comply to local installation regulations.

Always install your electronic ballast vertically, so the air can rise through the cooling ribs for optimal cooling. Our ballasts do not get very warm at all but a cool ballast is a happy ballast!

Keep distance between your ballasts to insure a free air flow. Keep at least 5 cm distance between individual ballasts. Mount ballasts on a non-combustible material.

These ballasts are suitable for a damp location. Do not install your ballasts in a wet environment / outdoor. Though the ballasts are sealed to prevent dust and humidity from entering the ballast we recommend to install this ballast in an environment with temperatures below 104 °Fahrenheit and below 70% RH.

If your lamp cord is too long, shorten it to the correct length (see EMI prevention on next page) and use cable end sleeves before connecting the stranded wire to your reflector terminals. Do NOT roll up excess lamp cord!

The temperature of the electronics is in practice the most important parameter for lifetime and reliability. A normal operating environment temperature should be below 104 °Fahrenheit. Exceeding the maximum environment temperature will stress the electronic components, which will lead to shorter lifetime and decreased reliability.

If you install your ballasts in a closed cabinet make sure you have enough active cooling, with the air stream going up. We recommend active cooling on the bottom air inlet of your cabinet to ensure a cool air flow through your installation cabinet. Make sure you keep your ballast clean of dust to guarantee optimal cooling.

- Switching gear

We recommend to use two pole contactors. Be advised that all electronic ballasts have an inrush current so appropriate switching gear is recommended. Do not use household timers to switch electronic ballasts.

- Lamp connection, replacement and hot restrike
  - Always install the lamp lead and lamp before connecting your ballast to mains.
  - When connecting a lamp lead to a reflector make sure that the wire ends are tightly secured in their terminals and a strain relief is in place. For stranded wire always use cable end sleeves.
  - 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 a lamp to cool for 20-30 minutes before or restarting (hot restrike)
  - When changing the lamp first disconnect the ballast from mains by removing the 230 V plug. Let the lamp and reflector cool down for 10 minutes before changing as they can be very hot. When replacing a defect lamp without disconnecting mains the lamp will not start.
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▶ Preventing EMI and mains pollution
The Gavita Pro 1000 ballast is tested for EMI (Electro Magnetic Interference) and has met the highest standards. Incorrect installation however can cause unnecessary mains pollution and EMI. Therefore please follow these guidelines for correct wiring:
1. Do not coil your excess wiring, especially not for the lamp lead. Rather shorten your leads to the lamp to meet the required length. Use cable end sleeves to protect the stranded wire.
2. Mount your ballasts as close to your reflectors as possible. The shorter the lead to the lamp the less chance of EMI. Do not mount your ballast in the direct light of the lamp to prevent overheating.
3. Keep your mains leads and lamp leads separated. Keeping your mains leads and lamp leads in one bundle or running parallel can cause interference signals on the power grid and can cause damaging high frequency feedback in your ballast.

▶ Suitable lamps
The Gavita Pro 1000 ballast is designed and tested to drive professional High Pressure Sodium (HPS) 400V Electronic lamps. The Gavita Pro ballasts are not suitable for regular HPS lamps. Using regular 1000W HPS lamps can cause damage to your ballast and lamp.

▶ Maintenance
There are no serviceable parts inside the ballast. Opening the ballast will void the warranty. Keep the housing clean from dust and dirt with a dry or damp cloth to ensure optimal cooling. When using a damp cloth please disconnect the power first. We recommend you check your electrical connections regularly: check if the plugs are inserted completely and don’t show any [contact] damage, check if the wiring is undamaged and that the wire ends connected to the reflector are tightly secured in their terminals. For stranded wire always use cable end sleeves.

▶ Troubleshooting
Your Gavita Pro 1000 is equipped with a professional Gavita electronic ballast. There are no serviceable parts inside the ballast and opening it will void the warranty. The ballast is internally fused but the fuses can not be changed manually. The internal fuse will only fail when there is a malfunction in the ballast. In that case you should return the ballast for service.

The soft dim time is 60 seconds per step. It might look as if your lamp is not adjusting at all but that is due to the fast adjustment of the eye. You can easily check the correct functioning of the adjustment circuitry with a lux meter.
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- **Technical specifications**

  - **Article no**: 19.30.11.24.20
  - **P mains 100%**: 1060W typical
  - **V mains**: 240 V AC ±10%
  - **I mains 100%**: 4.5 A typical
  - **PF**: 0.95 – 0.98
  - **Frequency**: 50-60 Hz
  - **Inrush**: < 50 A
  - **Dimensions**: (lxwtxh) 13.4 x 6.2 x 4.4 inch
  - **Weight**: 8.2 lbs
  - **Lamp specs**: 1000W 400V EL HPS - use 400V EL lamps only!
  - **Mains cord**: EC C14, 16’ power cable with 240V NEMA 6-15 (included)
  - **Lamp cord**: XR505 plug, 5 kV rated cord (NOT included)

  Made in the European Union according to EN 60598-2-1

  This device complies with Part 18 of the FCC Rules.

- **Warranty**

  GAVITA Holland warrants 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 three (3) years 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 GAVITA Holland shall, at its discretion, either replace or repair the product using suitable new or reconditioned products or parts. In case GAVITA Holland decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e. three (3) years from the date of purchase of the original product. For service return the ballast to your shop with the original sales receipt.

  For more information about electronic ballasts please visit our website [www.gavita-holland.com](http://www.gavita-holland.com)