

Gavita Pro 1000 DE US complete fixture

PLEASE READ THESE INSTRUCTIONS FIRST BEFORE INSTALLATION

Congratulations on your purchase of the Gavita Pro Electronic luminaire. We have done everything to insure a long life and safe operation, but the installation and use of the luminaire is the responsibility of the user. Incorrect use or installation can lead to failure and damage to the ballast. Damage to the luminaire 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 DE EU is a state of the art adjustable horticultural quality electronic luminaire. It is designed to drive the professional 1000W 400V EL **Double Ended** electronic high frequency HPS lamps. Professional electronic HPS lamps operate at very high frequencies to prevent acoustic resonance and to optimize lamp life.

The luminaire 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 luminaire 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 luminaire will actually adjust.



The luminaire housing is sealed. In the housing 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 housing.

The Miro Aluminum high efficiency reflector reflector (HortiStar HR96 1000) is replaceable without tools. Due to the double ended lamp the lamp must be removed before removing the reflector.

The input connector on the housing is a sealed IEC connector. A power cord is provided.



Scope of use

The Gavita Pro 1000 DE EU is designed to drive horticultural high frequency HPS lamps for plant cultivation. It is intended for climate room use. It is suitable for a damp location but 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.

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

Do not operate the luminaries close to combustible materials. The lamp and the reflector will get hot during operation, do not touch the reflector and/or lamp during, or right after operation. **Make sure that the power cord does not touch any hot parts of the luminaire.** Make sure the lamp is clean and inserted correctly.

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.

■ 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.

■ Preventing EMI

The Gavita Pro 1000 DE EU is tested for EMI (Electro Magnetic Interference) and has met the highest standards. Using an integrated fixture such as the Gavita Pro 1000 DE EU is your best insurance against electromagnetic interference as all leads are shielded inside the housing and the reflector bracket. Greenhouses operate thousands of this type of luminaries in one location without causing EMI.

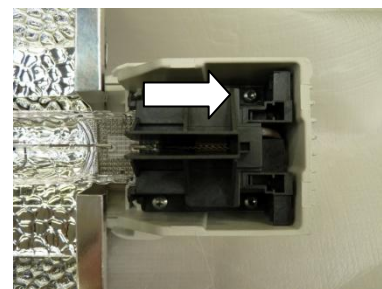
■ Lamp replacement and hot restrike

- Always install the lamp before connecting your luminaire to mains.
- Allow a lamp to cool for 20-30 minutes before restarting (hot restrike)
- When changing the lamp always disconnect the luminaire from mains by removing the mains plug. Let the lamp and reflector cool down for 20 minutes before changing as they can be very hot. When replacing a defect lamp without disconnecting mains the lamp will not start: disconnecting the power will reset the ballast.

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To take out a lamp:

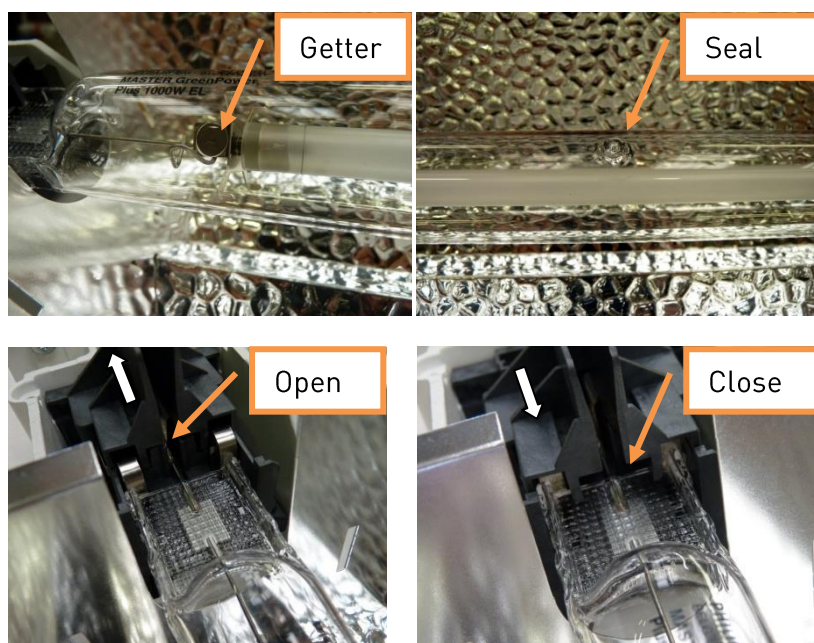
- **DISCONNECT THE MAINS FIRST**
- Open the lamp holders by sliding them outward. The lamp is now held by a metal spring at each side, though it is recommended to hold the lamp while opening the lamp holders to prevent the lamp from falling.
- Take the lamp out



To install a new lamp:

- **DISCONNECT THE MAINS FIRST**
- Make sure the lamp is clean, wear cotton gloves and clean the lamp after installation with a dry soft cloth. Never use detergents to clean a lamp, use pure alcohol and/or wipe with a dry clean soft cloth.
- Make sure the **end wires are straight**
- Open the lamp holders by sliding them outward
- Install the lamp with the getter (see illustration) at the side of the ballast, with the glass vacuum seal pointed downward. Press the lamp in the fitting until the metal springs hold the lamp.
- Close the lamp holders by sliding them inward
- Wipe the lamp with a clean soft cloth

Be sure not to touch the reflective material of the reflector with your bare hands.

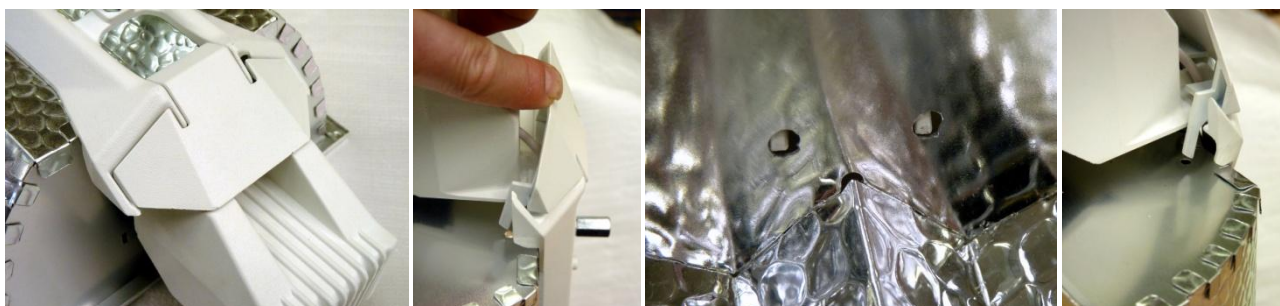


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Reflector replacement

The HortiStar HR96 reflector is a precision high efficiency reflector that should be handled with care. If it is damaged or deformed you should replace it. We recommend to change the reflector every year for optimal results. Replacement reflectors are available from your Gavita reseller.

To replace the reflector remove the lamp first. Pull up the lever at the end of the reflector bracket while holding the reflector at that end. The reflector will unlatch and can be removed now. When inserting the new reflector make sure the notches are in the appropriate holes. **Always let your lamp and reflector cool down first before changing the reflector to prevent injuries.**



Using the lever to unlatch the reflector, aligning the notches with the reflector holes

Suitable lamps

The Gavita Pro 1000 DE EU luminaire 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 luminaire. Opening the luminaire 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 luminaire and opening it will void the warranty. The luminaire 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 luminaire 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	: 18.30.11.24.20
P mains 100%	: 1060 W typical
V mains	: 240 V AC $\pm 10\%$
I mains 100%	: 4,5 A typical
PF	: 0.95 – 0.98
Frequency	: 50-60 Hz
Inrush	: < 50 A
Dimensions	: (lxwxh) 22.3 x 9.5 x 13.4 inch
Weight	: 10.6 lbs
Lamp specs	: 1000W 400V EL Double ended HPS - use 400V EL lamps only!
Reflector	: HortiStar HR96 1000 – Miro Aluminum 96% reflector efficiency (article number 30.46.13.00)
Mains cord	: EC C14, 16' power cable with 240V NEMA 6-15 (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. For HPS lamps the warranty period is one (1) year from the original date of purchase. 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 luminaire to your shop **with the original sales receipt**.

For more information about electronic ballasts please visit our website www.gavita-holland.com

