

Gavita HortiStar 1000 DE US reflector

◆ PLEASE READ THESE INSTRUCTIONS FIRST BEFORE INSTALLATION

Congratulations on your purchase of the Gavita HortiStar 1000 DE reflector. We have done everything to insure a long life and safe operation, but the installation and use of the reflector is the responsibility of the user. Incorrect use or installation can lead to failure and damage to your equipment. Damage to the reflector and attached ballasts as a result of incorrect installation and use revokes your warranty, so we recommend you read this manual carefully before installing your reflector.



◆ Product description

The Gavita HortiStar 1000 DE is a state of the art adjustable horticultural reflector. It is designed to hold the professional 1000W 400V EL **Double Ended** electronic high frequency HPS lamps. The lamp shape and double lamp holder assure optimal positioning within the precision hand-made HR96 reflector, guaranteeing you the optimal light reflection and uniformity.

The Miro Aluminum high efficiency reflector (HortiStar HR 96 1000 DE) is replaceable without tools. Due to the double ended nature of the lamp it must be removed before replacing the reflector.

The high quality of the used materials and precision of manufacturing result in 96% reflector effectiveness, which means that 96% of all light exiting the fitted lamp will reach your crop.

The US version comes with a fitted 13 ft. lamp cord and an industry standard XR601 connector for plug and play use.

◆ Scope of use

The Gavita HortiStar 1000 DE is designed to drive 1000W double ended 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.

◆ Installation

Be sure to comply to local installation regulations.

These reflectors are suitable for a damp indoor location. Do not install your reflectors in a wet environment / outdoor.

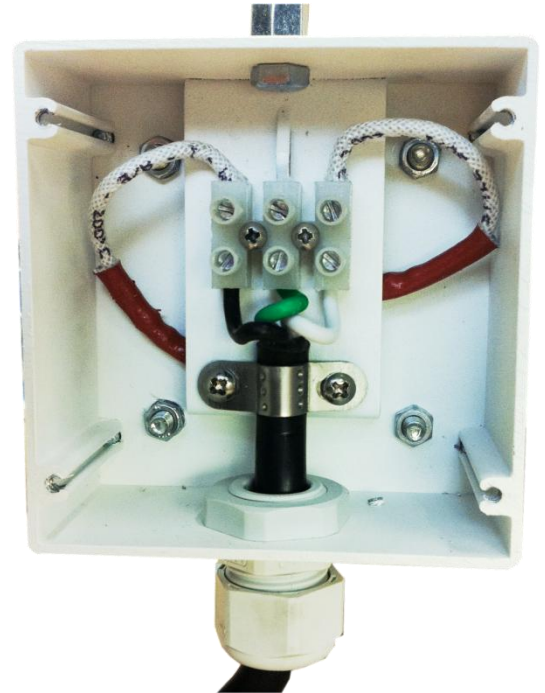
Do not operate these reflectors close to combustible materials. The lamp and the reflector will get hot during operation, do not touch the reflector and/or lamp during, or right after operation. **Make sure that the lamp cord does not touch any hot parts of the reflector.** Make sure the lamp is clean and inserted correctly. Use sufficiently strong and durable light hangers and make sure they are well secured.

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■ Preventing EMI and shortening the lamp cord

To prevent EMI we recommend to never run lamp cords parallel to power cords and keep the lamp cords as short as possible. The connection box where the cable enters the reflector is easy to open with a normal Philips screwdriver. You can shorten the lamp cord at the reflector side and reconnect it according to these instructions:

- Open the connection box by unscrewing the four little crews of the cap. You will see a blank metal spot on the cap under one of the screws: this is to ensure a good ground connection between the metal cap and the rest of the reflector. This is the outer side of the cap.
- Loosen the grey cable gland
- Unscrew the metal strain relief
- Loosen the three lower screws of the connection terminal
- Take out the cable and shorten it to fit
- Use a cable stripper and wire stripper to strip the cable according to the original cable
- **Attach cable end sleeves** to the stripped wires to prevent the wire strands from being damaged in the connection terminal, causing overheating, internal melting and possible shortcut of your ballast. **Always use cable end sleeves** when connecting the wires to the connection terminal.
- Insert the cable in the connection box through the cable gland
- Insert the wires into the correct terminals: the ground lead (green or yellow/green) goes into the middle connector. For the other two wires there is no preferred connection, every which way is correct. Make sure the cable is in the metal part of the connector when you tighten the screws. Check if the wire is correctly mounted.
- After the three wires are connected and all screws are tightened one last time to check replace the metal strain relief and crew it to tightly hold the cable
- Tighten the grey cable gland
- Replace metal cap (remember that the side with the blank metal spot is the outer side)



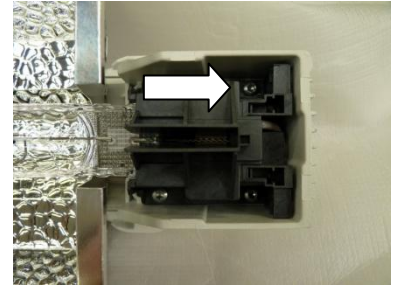
■ Lamp replacement and hot restrike

- Always install the lamp before connecting your ballast to mains.
- Always be sure to connect your lamp cord to the ballast before switching it on
- Allow a lamp to cool for 20-30 minutes before restarting (hot restrike)
- When changing the lamp always disconnect the ballast 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 from an electronic ballast the new lamp may not start: disconnecting the power will in most cases reset the electronic ballast safety circuitry.

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To take out a lamp:

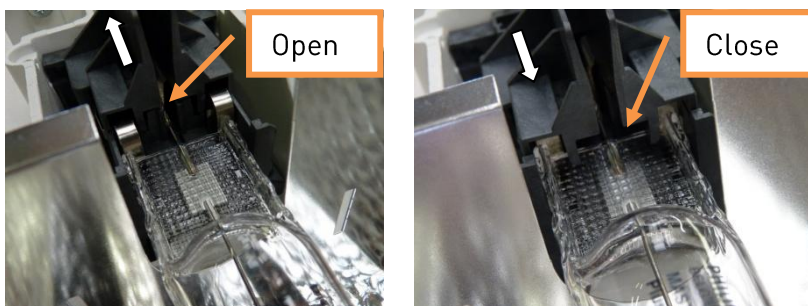
- **DISCONNECT THE BALLAST FIRST**
- Open the lamp holders by sliding them outward. The lamp is now held by a metal spring at each side, though it is recommended to hold the lamp while opening the lamp holders to prevent the lamp from falling.
- Take the lamp out



To install a new lamp:

- **DISCONNECT THE BALLAST 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

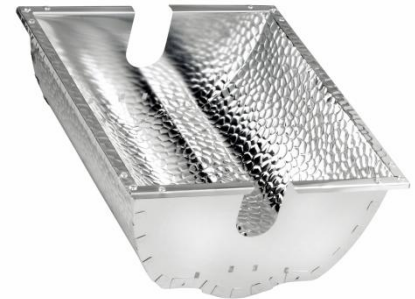
Be sure not to touch the reflective material of the reflector with your bare hands.



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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 HortiStar 1000 DE reflector is designed for 1000W (electronic) HPS double ended lamps. Only use lamps that have been rated safe for open fixture use.

■ Maintenance

Keep the bracket clean from dust and dirt with a dry or damp cloth. 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.

The Miro aluminum reflector should not be cleaned with any detergent or water, use a soft dry soft cloth to avoid scratching the material. Do not touch the reflective material. Replace the Miro reflector each year together with your lamp. Do not use sulfur vaporizers when lamps are operating and do not use sulfur vaporizers or water misters close to your reflectors. Sulfur and calcium deposit will damage your reflector and decrease the efficiency of your reflector.

You can not clean the reflector without damaging it. Wiping it carefully with a soft cloth is the best you can do. Never use polishes, detergents, sprays or normal tap water when wiping your reflector. If you need a damp cloth, use a completely clean soft cloth with demi water only, or pure alcohol.

We recommend to change your reflector once a year, together with the lamp.

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■ Troubleshooting

If your lamp does not fire up first check if the lamp is inserted correctly before restarting. Then check all wires and connector. If all connections are correct and the lamp still does not start check the ballast or replace the lamp.

■ Technical specifications

Dimensions : 20.1" / 511 mm (length) x 9.6" / 244 mm (width) x 7.6" / 193 mm (height)
Lamp holder : Vossloh Schwabe k12 x 30s
Reflector : Gavita HortiStar HR 96 1000 DE Miro aluminium reflector
Lamp cord : 13' cord with plug & play XR601 plug
Ambient temp. : 32° - 95° Fahrenheit

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



■ 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