

TripleStar 600



PLEASE READ THESE INSTRUCTIONS FIRST BEFORE INSTALLATION

The TripleStar 600 is a highly efficient, adjustable reflector for HPS/MH lamps ranging from 400-750W which are rated to use with an open reflector. The throw of the light is adjustable by manipulating the side reflectors, to a wide, medium and deep position. This enables you to get the light where you want it: on your plants and not on your walls.



Unpacking

The TripleStar is available with and without lamp cord. Please consult your box label to see which version you have purchased. For local markets there are different ballast plugs available. In the box you find a plastic bag containing two eyebolts with a locking nut.

Attaching the eyebolts

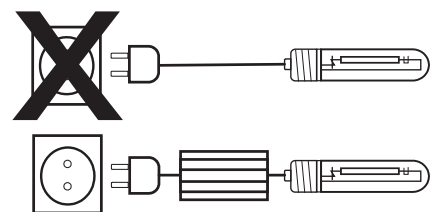
1. Move the locking nut to its highest position close to the eye
2. Screw in the eyebolt as deep as it can go, then turn it back to its desired position
3. Holding the base with a spanner or the eye with a screwdriver tighten the locking bolt with another spanner



Wiring the reflector

HID lamps can not be used without an appropriate ballast. Never try to connect a HID lamp directly to mains.

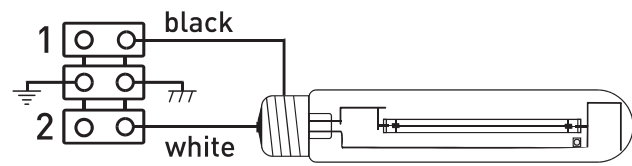
When wiring HID lamps make sure that the lamp cord you use is tested and approved for high voltage (5 kV) ignition pulses and high temperature. Always use stranded wired and use cable end sleeves to protect the strands in the screw terminals.



Do NOT connect any of the ballast outputs to the middle (ground) terminal. Connecting the ground wire to the center terminal only provides protection when the ballast is also plugged into a grounded receptacle with a grounded cord and plug. This is the recommended way of installation.

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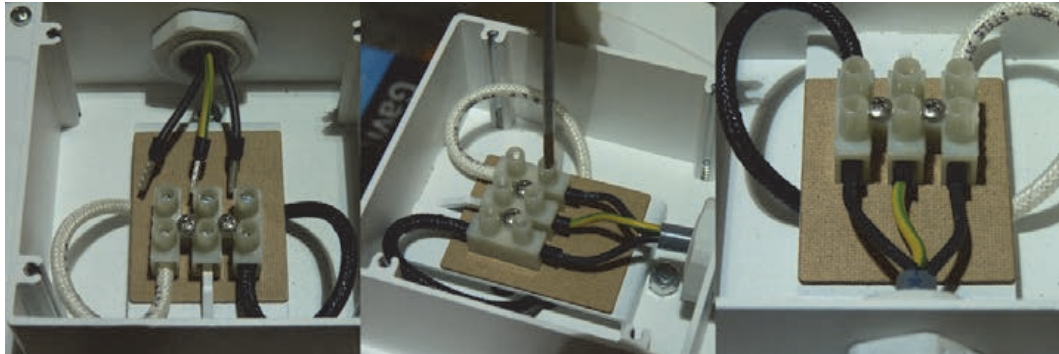
The white terminal wire is connected to the center contact of the lamp holder, the black terminal wire is connected to its thread.



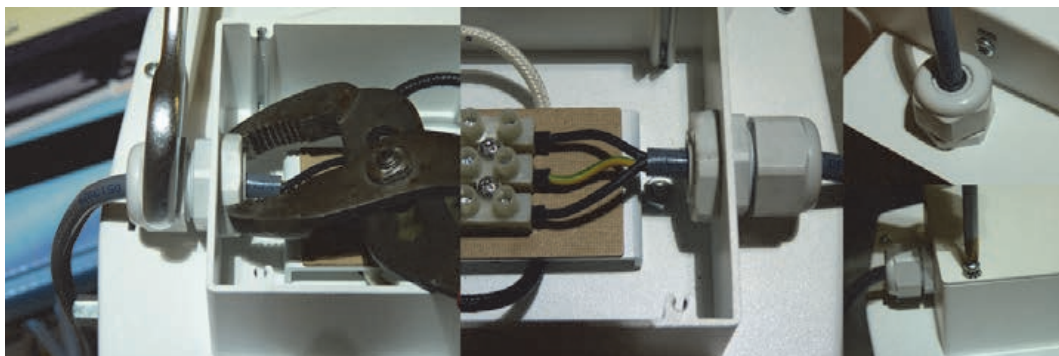
If you have an electronic ballast there is normally no phase or neutral wire, so the way you connect the two live wires to the outer terminals makes no difference. Our DigiStar models for example have two black wires in the lamp cord. For fixed mounted magnetic ballasts it is advised to connect the phase wire to the center connection of the lamp holder, so to the screw terminal with the white wire.



1. Locate the cover plate of the screw terminal and **remove the 4 screws**. One of the screws has a tooth lock washer to make sure that the housing and the plate are electrically connected.



2. **Feed the lamp cord through the opened cable gland**. Do **not** tighten the cable gland yet.
3. Make sure the screw terminals are open and **insert the cable ends completely into the screw terminals**, tightening them with a screwdriver. Connect the yellow/green ground wire to the **middle terminal** which is connected to the metal housing, the other two wires to the outer terminals.



4. Before you replace the terminal cover you must **tighten the cable gland first** now. Failing to do this now may rotate the cable inside the connection box, which can lead to loose contacts, malfunctions and sparks. Hold the inner washer with a spanner or pliers to prevent it from turning when fastening the cable gland. Make sure that the cable gland is as tight as possible, providing strain relief for the cable, while the wires are not twisted.
5. Only then **replace the terminal cover** and make sure you place the tooth lock washer at the same spot.

■ Installing the reflector and lamp

Be sure to comply to the local installation regulations. This reflector should be used below 2000 m above sea level.

The coverage of your reflector depends on the light levels you want to achieve and the output of your lamp. With a 600W 1000- 1100 $\mu\text{mol s}^{-1}$ lamp you can cover an area of almost 1 square meter (~11 square feet) with 900-1000 $\mu\text{mol s}^{-1} \text{m}^{-2}$ average. The reflector has a rectangular (wide) throw.



Warning: Keep your reflector away from combustible materials at all sides. Minimum distance from the lamp to lighted object is 75 cm for a 750W lamp. Use reliable mounting materials and keep your lamp cords away from the direct heat from the lamp and the reflectors. Use light hangers or small chains to hang the reflectors at the correct height.

The recommended distance to a crop:

250W lamp – 30 cm

400W lamp – 40 cm

600W lamp – 60 cm

750W lamp – 75 cm



Warning: Only relamp with lamps that are suitable for an open reflector. When using MH lamps, use self shielding lamps. **Let the reflector cool down and disconnect the ballast from mains when replacing a lamp.** Use gloves to keep the lamp clean, as the lamp surface becomes very hot. Screw in the lamp firm, but not too tight to prevent breaking the lamp. Always check the center contact for damage when replacing a lamp.

EU reflectors are equipped with an E40 lamp holder. US reflectors are equipped with an E39 lamp holder. Use the appropriate lamps for the lamp holder. Consult the label on the reflector to see which lamp holder is installed.

■ Maintenance

Every crop cycle open the terminal cover to check the screw terminal. Tighten all 6 terminal screws at least every 4 months, as heat can cause terminals to become less tight over time.

Do not touch the reflective material, as this high grade reflective material can not be cleaned. The reflective upper layer is only microns thick and you will damage it when you wipe or polish it. A soft cloth to remove dust is basically all the maintenance you can do to your reflector. Keep the housing clean with a damp cloth, but never clean the housing when the reflector is in use or just after use.

The reflector plates can be renewed, a reflector plate kit is available (3 new plates). We recommend to replace the reflector plates every year or two years, depending on the amount of deposits on the reflector. Replacing the reflector requires the end plate and the side reflectors to be removed, detailed instructions are included in the replacement kit.

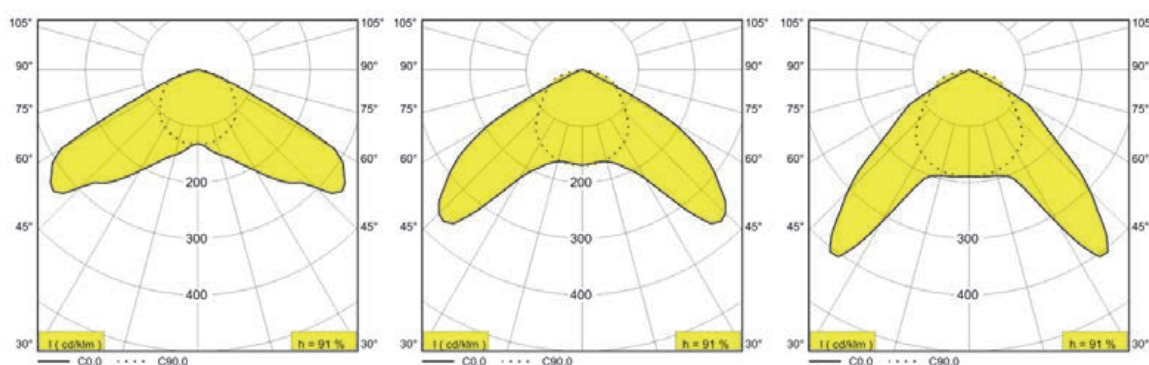
Adjusting the reflector

The reflector has two independently adjustable side reflectors which change the throw of the reflector to wide, medium or deep. Not only can you use this feature to change the throw of your reflector, but in multi-reflector installations you can use it to create overlap (and uniformity) between the lamps, while keeping the light of your walls at the sides and compensating the light intensity.

The side reflectors throw the light to the opposite side of the reflector, so you need to adjust the reflector on the opposite side of where you want to adjust the throw.



Warning: The reflector plates become very hot (>85° Celsius). We recommend to adjust the reflector when the reflector is still cool (within 5 minutes after ignition) and only touch the adjustment handles which are insulated from the reflector plates to prevent possible skin burn.



To adjust the side reflectors depress the latch at the side reflectors, move the reflector inward or outward and release the latch in one of the three positions.



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.