1. Introduction
Thank you for purchasing the Gavita Pro 1000 DE EU. Please read and understand this manual completely before using the product. Only use the product as specified in this manual.

1.1. Used symbols

- **Warning!** A warning indicates severe damage to the user and/or product may occur when a procedure is not carried out as described.
- **Caution!** A caution sign indicates problems may occur if a procedure is not carried out as described. It may also serve as a reminder to the user.
- **Note:** A note gives additional information, e.g. for a procedure.

This symbol indicates that the reflector and lamp can reach very high temperatures (>85 °Celsius). Mind a cool down period before performing maintenance.

With this symbol Gavita declares that this product complies with legal European requirements.

The symbol on the material, accessories or packaging indicates that this product may not be discarded as household waste. Dispose of the equipment through a recycling centre that handles electronics and electrical appliances within the EU and in other European countries which use separate collection systems for used electronics and electrical appliances. By disposing of the equipment in the proper way, you will be helping to prevent possible risks to the environment and public health, which might otherwise be caused by improper handling of the discarded equipment. Recycling of materials contributes to the conservation of natural resources. Therefore, please do not dispose of your old electronics and electrical appliances via household waste.

This symbol indicates the minimum distance (B) between the fixture type (A) and the lid surface.

2. Product description
The Gavita Pro 1000 DE EU is an adjustable horticultural fixture. The Gavita Pro 1000 DE EU can be used to drive a double ended 1000 W 400 V high frequency (electronic) high pressure sodium lamp.

The output power can be controlled manually. The fixture can be switched on and off by conventional timers in combination with a contactor.
In this manual, the Gavita Pro 1000 DE EU will be referred to as: “the fixture”.
### 3. Product information and specifications

#### 3.1. General product information

<table>
<thead>
<tr>
<th>Product name</th>
<th>Pro 1000 DE EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Gavita Holland bv</td>
</tr>
<tr>
<td>Version</td>
<td>EU</td>
</tr>
<tr>
<td>EAN Code</td>
<td>8718403052299</td>
</tr>
<tr>
<td>Part number</td>
<td>18.61.11.24.15</td>
</tr>
<tr>
<td>Plug type</td>
<td>EU plug 230 V</td>
</tr>
</tbody>
</table>

#### 3.2. Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product weight</td>
<td>6.35 kg</td>
</tr>
<tr>
<td>Dimensions (L<em>W</em>H)</td>
<td>56.6x24x34 cm (height excl. mounting hooks)</td>
</tr>
<tr>
<td>Temperature case</td>
<td>75 °Celsius</td>
</tr>
<tr>
<td>Temperature ambient</td>
<td>0 ~ 35 °Celsius</td>
</tr>
<tr>
<td>Input voltage +/-10%</td>
<td>240 V AC</td>
</tr>
<tr>
<td>Input current at 100%</td>
<td>4.5 A</td>
</tr>
<tr>
<td>Input current at 110/115%</td>
<td>5.3 A</td>
</tr>
<tr>
<td>Input power at 100%</td>
<td>1060 W</td>
</tr>
<tr>
<td>Input power at 110/115%</td>
<td>1220 W</td>
</tr>
<tr>
<td>Power factor</td>
<td>0.95 - 0.98</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>Frequency</td>
<td>50 - 60 Hz</td>
</tr>
<tr>
<td>Certification</td>
<td>CE</td>
</tr>
<tr>
<td>Insulation</td>
<td>Class 1 - requires an earth connection</td>
</tr>
<tr>
<td>Power inlet</td>
<td>IEC C14</td>
</tr>
<tr>
<td>Power output settings</td>
<td>600/660/750/825/1000/1150 Watt</td>
</tr>
<tr>
<td>Ignition voltage</td>
<td>5 kV / 600 ms</td>
</tr>
<tr>
<td>Inrush current</td>
<td>&lt; 50 Amps</td>
</tr>
</tbody>
</table>

#### 3.3. Compatible products and accessories

<table>
<thead>
<tr>
<th>Product name</th>
<th>Gavita part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement reflector</td>
<td>HR96 1000 DE</td>
</tr>
<tr>
<td>Compatible lamps</td>
<td>Gavita Pro 1000 W EL DE HPS</td>
</tr>
<tr>
<td></td>
<td>Gavita Pro Plus 1000 W EL DE HPS</td>
</tr>
<tr>
<td>Compatible power cords</td>
<td>Power cord EU, 5 meter</td>
</tr>
<tr>
<td></td>
<td>Power cord EU, 2.5 meter</td>
</tr>
<tr>
<td></td>
<td>Power cord CH, 5 meter</td>
</tr>
<tr>
<td></td>
<td>Power cord CH, 2.5 meter</td>
</tr>
<tr>
<td></td>
<td>Power cord UK, 5 meter</td>
</tr>
<tr>
<td></td>
<td>Power cord UK, 2.5 meter</td>
</tr>
</tbody>
</table>

#### 3.4. Environment

The product is meant for use in climate rooms. The product may be used in damp environments. The product may not be used in wet environments or outdoors. The Gavita Pro Plus 1000 W lamps function optimal when the ambient temperature is between 20 ~ 30 °Celsius.

#### 3.5. Legislation

4. Safety recommendations and warnings

⚠ Warning! Carefully read the warnings below before using or working with the product!

- Always adhere to the local rules and regulations when installing or using the fixture.
- This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz.
- Do not use the fixture when either its lamp or its power cord is damaged. Replace the lamp only with lamps specified by Gavita (see paragraph 3.3). Contact your local reseller if the power cord is damaged.
- The use of other lamps may damage the product and lamp and will void the warranty.
- Modifications to the cords can lead to unwanted electromagnetic effects, which makes the product not comply with legal requirements.
- Do not expose the fixture to:
  - condensing humidity, heavy mist, fog or direct spray;
  - (ambient) temperatures outside the specified range;
  - dust and contamination;
  - direct sunlight during use or HID light that could heat up the ballast.
- Always disconnect the fixture from mains before performing any maintenance.
- Always allow for a cool down period of at least 30 minutes before touching the lamp or reflector. Touching the lamp or the reflector when the lamp is lit or immediately afterwards will result in severe burns!
- Never touch the lamp with bare hands as this will cause damage to the lamp.
- Do not use the fixture near flammable, explosive or reactive substances. The lamp and the reflector of the fixture reach temperatures of >85 °Celsius.
- Do not use sulfur vaporizers or water misters. Sulfur and calcium deposits on your reflector will decrease its efficiency.
- The installation and use of the fixture is the responsibility of the end user. Incorrect use or installation can lead to failure and damage to the fixture. Damage to the fixture and electronic circuitry as a result of incorrect installation and use revokes the warranty.

5. Contents [1]

A. Pro 1000 DE fixture
   1. Electronic ballast
   2. Pro-line bracket
   3. Lever to unlatch reflector
   4. Lamp sockets
   5. Reflector HR96 1000 DE
   6. Mounting points
B. Gavita Pro Plus 1000 W EL DE HPS lamp
C. Local power cord

6. Controls, connections and indications [2]

A. Power output selector knob
B. IEC connector for power cord
7. Installing the fixture

⚠️ Warning! Avoid coiled cords. Coiled cords may lead to electromagnetic interference.

⚠️ Warning! Always install the lamp before connecting the fixture to the mains.

⚠️ Warning! When connecting the fixture to the controller it may ignite. Make sure either power is disconnected or the controller is switched off.

⚠️ Warning! Ensure the local cabling can support the voltage and current requirements of the fixture.

7.1. Preparing the fixture for use

- Switch off mains power.
- If not done already, install the lamp in the fixture (see paragraph 9.1).
- If not done already, screw the mounting point into the fixture (3).
- Hang the lamp by its two mounting points (4). The two mounting point are spaced 300 - 320 mm apart.

7.2. Connecting the fixture to the mains

⚠️ Warning! Ensure the power cord is not coiled and does not touch any hot surfaces, including the reflector.

⚠️ Warning! If external switching gear is used to switch the fixture, ensure it can cope with the inrush current of the fixture (see paragraph 3.2). Always use a double throw contactor suitable of switching a capacitive load. Never use household timers to switch the fixture!

- Plug the power cord into the IEC C14 connector.
- Plug the other end of the power cord into the mains.
- Switch on mains power.

8. Product use

⚠️ Warning! Never use the fixture without a lamp or reflector!

8.1. Adjusting the output of the lamp manually

**Note:** Adjustment occurs gradually (60 seconds per step) to increase the lifespan of the lamp.

- Turn the output control knob to adjust the output of the lamp [5]:
  - Pro 1000 DE: 600/660/750/825/1000/1150 Watt.
9. **Inspection, maintenance and repair**

- **Warning!** Disconnect the product from mains before performing any maintenance or repairs.
- **Warning!** Do not open or disassemble the fixture, it contains no servicable parts inside. Opening the fixture can be dangerous and will void the warranty.
- **Warning!** Always allow for a cool down period of at least 30 minutes before touching the lamp or reflector.
- **Caution!** Do not clean the fixture with detergents, abrasives or other aggressive substances.
- **Caution!** Do not touch the inside of the reflector during installation and do not use water, abrasives or detergents to clean it. This will damage the reflective surface.
- **Caution!** Wait 20 minutes before activating the fixture after maintenance work has been conducted.

- Regularly check the fixture for dust or dirt buildup. Clean if necessary. Contamination may cause overheating and decreased performance.
  - Clean the inside of the reflector only with a soft, dry cloth;
  - Clean the electronic ballast and the outside of the fixture using a dry or damp cloth.
- Check the lamp monthly for discolorations or black markings. Always replace a damaged lamp.

**Note:** Before initial use, the lamp could have black markings. This will disappear when the lamp runs on full power. If not, replace the lamp.

- Regularly check the wiring of the product to ensure it is undamaged.

9.1. **Placement and replacement of the lamp**

- **Caution!** Do not touch the lamp with bare hands as this will damage the lamp. Always use a fabric glove to handle the lamp.
- **Caution!** Only use lamps specified by Gavita (see paragraph 3.3).

**Note:** The lamp must be replaced every year or after 5000 lighting hours, whichever one comes first.

- Switch off mains power.
- Hold the lamp with a fabric glove to prevent it from falling. Use a protective glove if the lamp is damaged.
- Open the lamp holders by sliding them outwards (6).
- Carefully take the lamp out of the fixture (7).
- Install the new lamp with the getter (A) near the ballast (8), with the glass vacuum seal pointed sideways.
- Use a fabric glove to carefully press the lamp in the fitting until the metal springs hold the lamp.
- Close the lamp holders by sliding them inwards (9).
- Switch on mains power.
9.2. Placement and replacement of the reflector

Note: Gavita recommends replacing the reflector after 5000 lighting hours. Depending on the environment and contamination levels the reflector will degrade. The vega/Miro™ aluminum can not be cleaned without damage. Therefore we recommend to change the reflector once every year. Also replace the lamp when replacing the reflector.

- Switch off mains power.
- Remove the lamp from the fixture (see paragraph 9.1).
- Support the reflector on the side of the reflector lever to prevent it from falling (10).
- Move the reflector lever up to retract the two pins holding the reflector in place (11).
- Remove the reflector (12).
- Place the new reflector. Ensure the reflector lever is in the opened position to allow the reflector to pass.
- Ensure the holes in the reflector are aligned with the pins in the fixture (13).
- Release the reflector lever so its two pins hold the reflector in place.
- Insert the lamp in the lamp holder (see paragraph 9.1).
- Switch on mains power.
10. Storage and disposal
- Store the fixture in a dry and clean environment, with an ambient temperature of -20 ~ 85 °Celsius.
- The product must not be discarded as unsorted municipal waste, but must be collected separately for the purpose of treatment, recovery and environmentally sound disposal.

⚠️ Caution! The lamps are chemical hazardous waste and must be delivered to the designated authorities.

⚠️ Caution! The lamp contains mercury.

11. Warranty
Gavita Holland warrants the mechanical and electronic components of their 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 fixture to your shop with the original sales receipt.