

IMPORTANT

- Be sure to carefully read this manual before using the product and fully understand the correct method of use. Do not use the product under any circumstances if you are unsure how to operate it correctly. Improper use may result in fire, electric shock, burns, or other serious accidents.
- After reading, keep this manual in a safe place for future reference.
- Failure to follow these precautions may result in damage or accidents caused by improper handling, for which the manufacturer assumes no responsibility.
- Product specifications are subject to change without notice. Please check our website for the latest information.

● Safety Instruction

※Please read carefully.

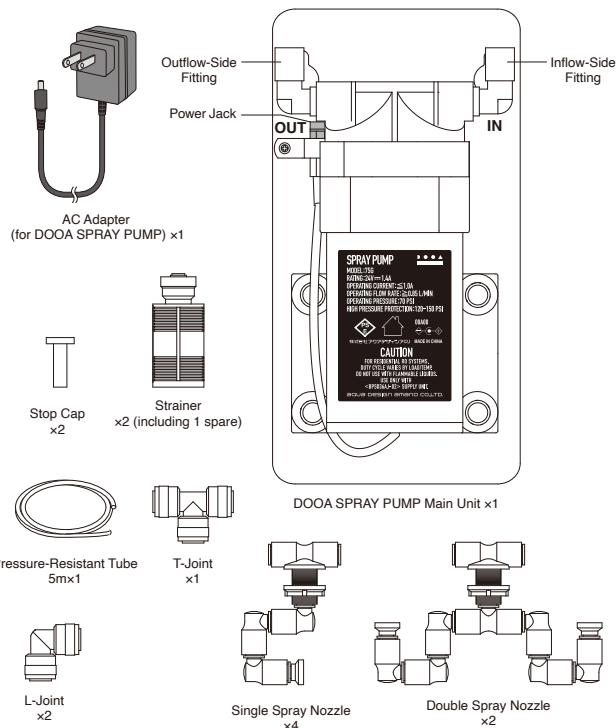
- Keep the AC adapter, plugs, jacks, and power outlet free from water.
- Never handle the power plug with wet hands.
- Do NOT disassemble or modify the product.
- Do NOT use the product if it has been dropped or damaged by impact.
- Operate only within the specified temperature range of 0–35°C.
- Do NOT excessively bend, twist, or pull the power cord.
- Do NOT use the product if the power cord is damaged.
- KEEP OUT OF REACH OF CHILDREN during both use and storage.

1. Features of DOOA SPRAY PUMP

DOOA SPRAY PUMP is a quiet-operation spray pump designed to help maintain suitable humidity conditions in paludariums and terrariums. It produces a fine, even mist that provides moisture to plants. Designed with safety and ease of use in mind, it is ideally suited for use with DOOA paludarium products.

2. Designation of Parts

*Before installation, be sure to check that all parts are included.



3. Usage

① Preparing the Water Supply

The **DOOA SPRAY PUMP** is a spray pump that uses a separately prepared water reservoir.

Please prepare a water reservoir in advance.

1. Fill the water reservoir with clean water.
2. Be sure to attach the supplied strainer to the tip of the inflow (IN) tubing.
3. Always operate the pump with the strainer fully submerged in water.

*Use water only.

*Do not use chemicals, liquid fertilizers, hot water, or any other liquids, as doing so may cause malfunction.

*Operating the pump without the strainer may allow debris to enter the pump or cause dry running, which may result in malfunction.

② Connecting the Pressure-Resistant Tube

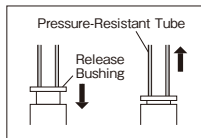
*When viewed from the front of the pump (logo side), the right side is the inflow (IN) and the left side is the outflow (OUT). An arrow indicating the direction of water flow is engraved on the top of the pump body; please refer to this as well.

1. Be sure to use only the supplied pressure-resistant tube.
2. Cut the end of the tube straight and square. Cutting the tube at an angle may cause water leakage.
3. Firmly insert the pressure-resistant tube all the way into the inflow (right side) and outflow (left side) fittings, ensuring it is securely fixed.

*If the connection is insufficient, the tubing may come loose or water leakage may occur during operation.

Removing the Tube

While pressing the release bushing on the fitting, pull the pressure-resistant tube out.



③ Installing the Spray Nozzles

1. Connect the desired spray nozzle to the tube.
 2. Use the supplied T-Joint, L-Joint, and Stop Cap to create the required layout.
 3. Adjust nozzle positions to provide even coverage throughout the enclosure.
 4. Avoid directing spray onto glass surfaces or electrical equipment.
- *Install the supplied Stop Cap on any unused fitting.

④ Installation

1. Place the pump on a stable, level surface.
2. Do not position the water reservoir significantly below the pump, as this may prevent proper water supply, cause dry running, or place excessive load on the pump.
3. Ensure tubing is free from sharp bends and excessive strain.

⑤ Operation

1. Connect the power plug of the AC adapter to the power jack of the DOOA SPRAY PUMP.
 2. Plug the AC adapter into a power outlet. Once power is supplied, the pump will start operating and spray water.
 3. Adjust the misting duration and frequency using a digital timer or similar device.
- *Excessive misting may cause excessive water accumulation.
*Adjust the misting amount appropriately while checking the growing area and the condition of the plants.
*Misting before the lighting turns on is effective for supplying moisture to plants before photosynthesis begins.

⑥ Adjustment & Maintenance

1. The spray nozzle (single) and spray nozzle (double) fittings are removable. By adjusting the number of L-joints attached to the spray nozzle, the spray angle can be adjusted to suit the desired spray direction.
 2. The nozzle tip can be removed by turning it counterclockwise. If the spray becomes unstable or if water stains or dirt accumulate, remove the nozzle tip and clean it.
- *Do not disassemble any parts other than the nozzle tip and fittings, as this may cause malfunction.
*After cleaning, be sure to securely reattach all parts before use.

4. Precautions for use

- A water reservoir is required but not included with this product. Use a stable container and install it securely to prevent tipping or water leakage.
- The pump may become warm during operation; this is not a malfunction. As the system is water-cooled, the water temperature may rise depending on usage conditions.
- Do not touch the spray outlets or the pump body while the product is operating. Internal pressure is present during operation, and doing so may cause injury or malfunction.
- We accept no responsibility for the death of living organisms or the withering of plants.
- This product is designed exclusively for paludarium use. Do not use it for any other purpose.

5. Specification

Pump Flow Rate: 0.85 L/min

Rated Voltage: DC 24 V

Power Consumption: Approx. 24 W (Max. approx. 34 W)

Operating Pressure: 70 PSI

Operating Temperature: 0 - 35°C