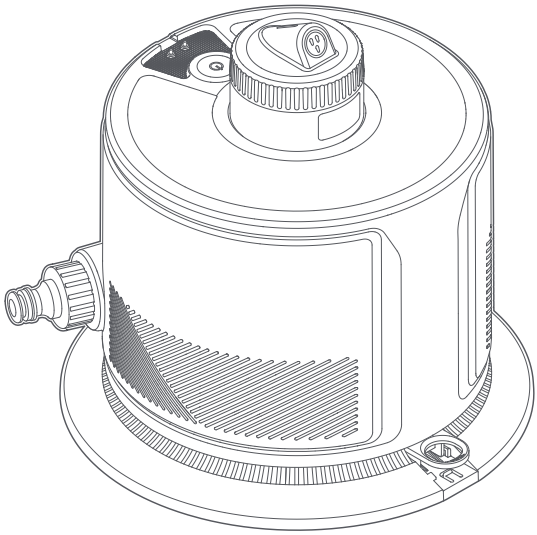
MOVA



Smart Lawn Sprinkler

MOVA L10

User Manual

The illustrations in this manual are for reference only. Please refer to the actual product for accuracy.

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Original Instructions

1. Safety Instructions

1.1 Safety Regulations

- **READ AND FOLLOW ALL INSTRUCTIONS.**
- **SAVE THESE INSTRUCTIONS.**
- This device can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the device in a safe way and understand the hazards involved.
- This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the device by a person responsible for their safety.
- Children shall not play with the device. This device shall not be used by children. Cleaning and user maintenance shall not be carried out by children.
- Ensure that children do not attempt to touch the device while it is operating.
- Don't allow children to ride the device under any circumstance.
- Do not operate the device with people or animals on the lawns.
- While in operation, do not place your hands into any part of the device as this may result in injury.
- Do not leave or operate the device in freezing temperatures.
- Before connecting the charger to the device, make sure both connectors are completely dry. Moisture between connectors during charging can cause pin corrosion and breakage.
- Keep the charging port cover closed when not in use. Leaving the pins exposed to water may cause irreversible power damage. The device must only be supplied at MOVA.
- WARNING: To reduce the risk of electric shock, replace the damaged cord immediately.

- If the power cord is damaged, it must be replaced or repaired by a qualified electrician or the official customer care to avoid any hazards. The power supply is not to be repaired or used any longer if it is damaged or defective.
- Use only brass or plastic couplings. Do not connect the device to aluminium or steel hose ends (will cause corrosion).
- The new hose-sets supplied with the device are to be used and the old hose-sets should not be reused.
- A pressurised hose may burst in high heat. Do not leave your hose pressurised and exposed to the sun.
- Only certified professionals should disassemble the sealed drive kit of your device.
- Always secure the device with the provided locator to prevent it from tipping over or causing inaccuracies in the designated map. Please note that any damage caused by dropping the device is not covered by warranty.
- Do not drop, pierce the shell, or intentionally damage the device in any way, as this may void your warranty.
- To prevent RF exposure, a separation of 20 cm/7.87 in or more is recommended between the persons operating the device and the device itself. Operation at closer distances is not recommended. The antenna used for this device's transmission must not be co-located with any other antenna or transmitter.
- When not using the charging cable for a long period of time, please unplug it.
- To prevent contamination of your drinking water, ensure that the faucet connected to the device is equipped with a check valve.
- Government regulations determine the specific type and maintenance requirements of the check valve needed when connecting a device like MOVA to the water supply. Regulations may vary by municipality, so it's essential to install and maintain the appropriate check valve for your area. MOVA is not liable for any damage or harm resulting from failure to comply with these requirements.

- Ensure the device is turned off while not in use or while performing maintenance.
- When not in use, store the device indoors, in a cool, well-ventilated area.
- CAUTION:

  1.FOR USE WITH LAWNS ONLY.

  2.FOR OUTDOOR USE ONLY.

  3.KEEP FROM FREEZING.

  4.ONLY USE BRASS OR PLASTIC HOSE-ENDS. OTHER METALS WILL CORRODE AND FUSE TO DEVICE.

  5.FOR USE ONLY WITH AUTHORIZED MOVA CHARGING CABLE.

1.2 Battery Safety Instructions

- The device has a lithium-ion battery, which is automatically charged via an integrated solar cell. Check that the solar cell is not dirty. This will ensure that the battery charges continuously.
- Irrigation cannot take place if the battery has run out of charge.
- If the device is operated with an upstream valve/controller and is only used for irrigation, the valve will close as soon as the battery has run out of charge.
- To operate independently, the location should be exposed to about 1-2 hours of direct sunlight (trickle charging). Alternatively, the battery can also be charged via the USB port.
- Fully charge the battery before storing it for winter. The battery should be charged via the USB port every six months (spring and autumn).
- Fully charge the battery before storing it for winter. The battery should be charged via the USB port every six months (spring and autumn).
- Close the USB port cover after charging via the USB port. Otherwise water may enter the device.

- Only charge the device indoors. This protects the USB port from moisture.
- Charge the battery on a fireproof surface. The battery may become hot during charging and cause a fire hazard.
- Only use original MOVA spare parts. Spare parts that have not been tested by MOVA may cause an increased risk of fire or defective products.
- Do not charge the battery outside of the device. This reduces the risk of fire.
- When replacing the battery, handle the spare battery with care and have the replacement performed by a qualified professional. A damaged battery may cause a fire hazard.

1.3 Correct Disposal of this Product

This marking indicates that this product should not be disposed of with other household waste throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To recycle your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can safely recycle this product.



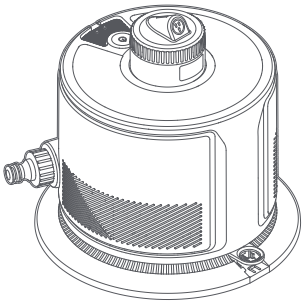
The remote surveillance is for the absolute private use of non-public, privately owned places for pure self-protection and single control intended only. Please be aware of the local data protection based legal obligations in case of use. No surveillance of public places, especially with clandestine intent and on the part of the employer without justified reasons. Such not justified use is in the risk and responsibility of the user only.

1.4 Symbols and Decals

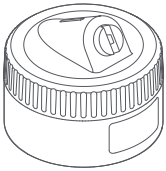
	Before charging, read the instructions.
	Class III
	Direct current
	Alternating current
IPX6	Ingress Protection
	**WARNING –** It is not permitted to dispose of this product as normal household waste. Ensure that the product is recycled in accordance with local legal requirements.

2. Product Introduction

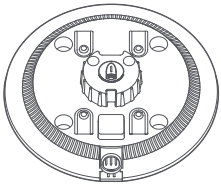
2.1 What's in the Box



L10 Sprinkler



Misting Sprinkler Head



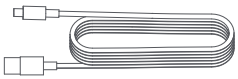
Base Plate



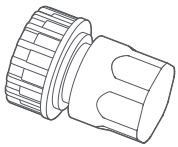
Hex Key



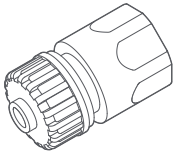
Garden Peg * 8



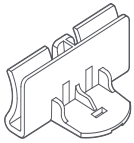
USB-C Cable



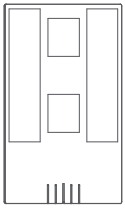
19 mm (3/4 in) GHT



12.7 mm (1/2 in) GHT



Positioning Board Holder

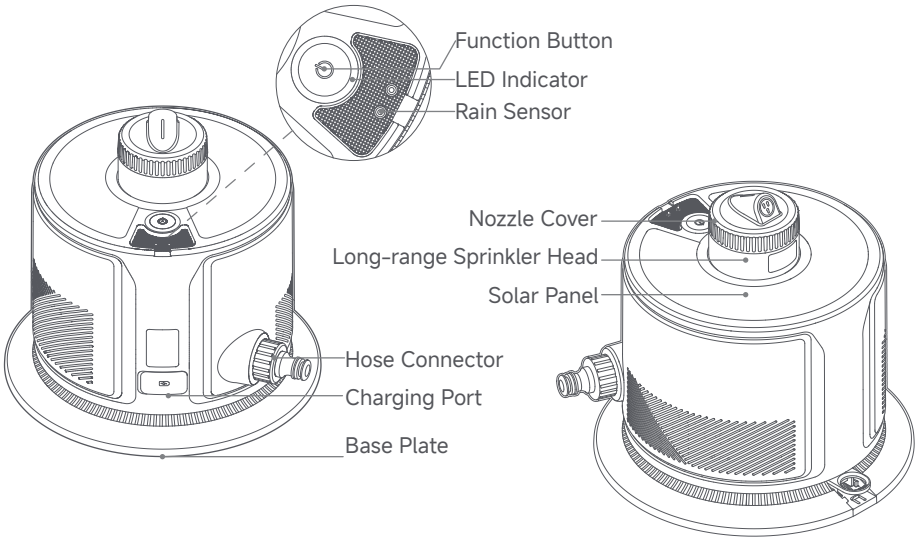


QR Code Positioning Board



User Manual & Quick Start Guide

2.2 Product Structure



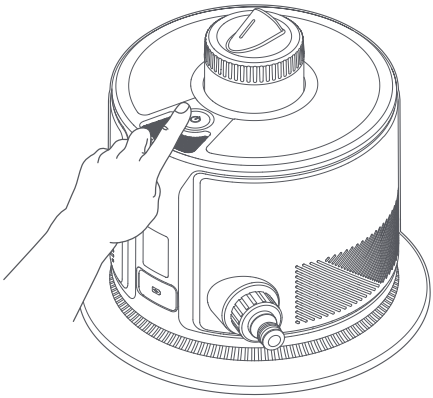
2.3 Button Description

Turn on/off the device: Long-press ⏻ for 3s to turn the device on, and long-press the ⏻ for about 10s to turn the device off.

Start/end irrigation: After turning the device on, press the ⏻ twice to start irrigation. When the device is in operation, press the ⏻ twice to end the current task.

Network setup: Long-press the ⏻ for about 5s to connect the device to the App.

Factory reset: Quick-press ⏻ 5 times to restore factory settings.



2.4 LED Status Indicator

Light Effect	Device Status
Green Light	Sufficient battery level.
Orange Light	Low battery level.
Blinking Blue	Network setup.
Blinking Red	An error has occurred.
Blinking White	Restoring factory settings.
Blinking Purple	OTA update in progress.

3. Operations

3.1 Operating Conditions

The smart lawn sprinkler is designed for outdoor garden irrigation only. Damage resulting from use outside the conditions will not be covered under warranty.

Hose	Use a high-quality hose with an inner diameter of 19 mm (3/4 in) or 12.7 mm (1/2 in). Do not use telescopic pipes.
Input Water Pressure	3-6 bar(44-87 psi).

Notes:

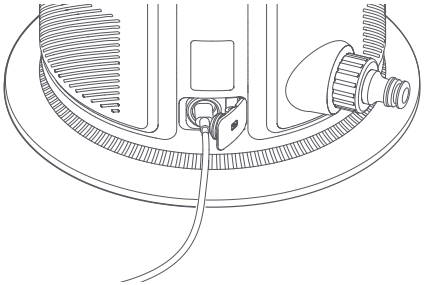
- Avoid using the device in a windy environment, as this can reduce the irrigation efficiency.
- Avoid exposing the device or the hose to freezing temperatures.

3.2 Charging

It is recommended to fully charge the device before use.

1. Open the cover from the charging port. Connect the charging cable to the charging port and plug the charger (not included) into an electrical outlet.
2. After the charging is complete, firmly close the charging port cover. Irrigation is not possible while charging via the USB-C cable, and the programmed watering cycles are skipped.

Caution: Before charging, check if there is any residual water in the charging port. If so, wipe the charging port dry first.

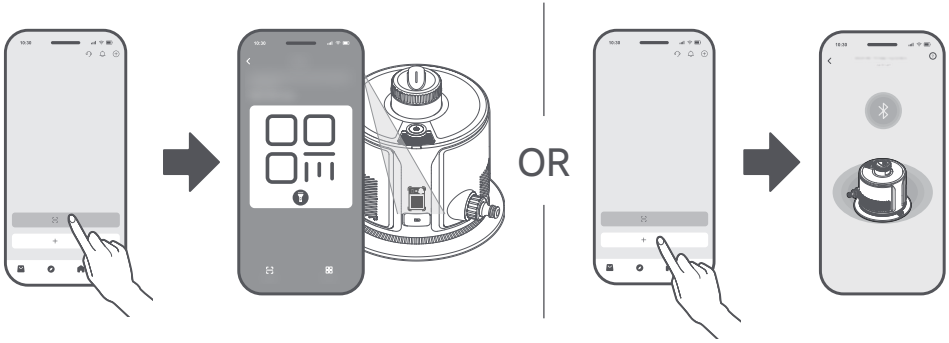


3.3 Connect to the MOVAhome App

The MOVAhome App is more than a remote control. There are many things you can do via the App: reviewing work logs, editing the irrigation map freely and adjusting irrigation schedules.

1. Scan the QR code to download the App, or search for "MOVAhome" in the App Store or Google Play. After installation is complete, please create an account and log in.

2. Turn on the device, then long-press the ⏻ for 5s to start the network setup. A blinking blue light indicates that the device is ready for connection.
3. Before setting up the network, please check the following:
   - Ensure that both your mobile phone and the device are within the same Wi-Fi network coverage range with a strong signal.
   - Ensure the current Wi-Fi network is a single-band network of 2.4 GHz frequency or 5 GHz frequency.
   - Ensure the Bluetooth function on your mobile device is enabled.
   - Bring the phone close to the device (within 1m / 3ft).
4. Open the App. You can add your device in one of the following ways:
   - **Scan QR code to connect:** Navigate to the **Device** page and tap **Scan to connect.** Scan the QR code on the device. Follow the onscreen instructions to complete the connection.
   - **Add manually:** Go to the **Device** page and tap **Add**. Select your device model. Follow the onscreen instructions to complete the connection.

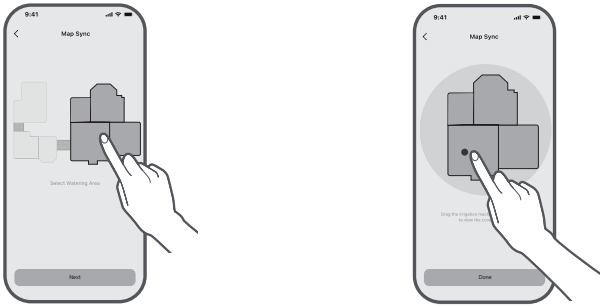


Note: The App development team will continuously conduct OTA (over-the-air) updates and maintenance on the firmware and App. Please check for update notifications to keep the firmware and App up-to-date to enjoy more features.

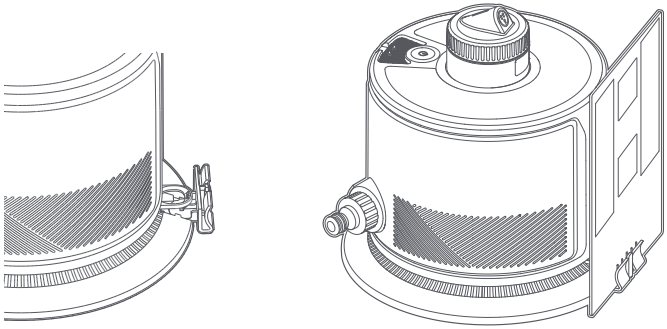
3.4 Mower-assisted Locating and Mapping

If you are a user of the MOVA robotic lawn mower and there is a lawn map, it is recommended to use the mower to help with the location selection and the mapping:

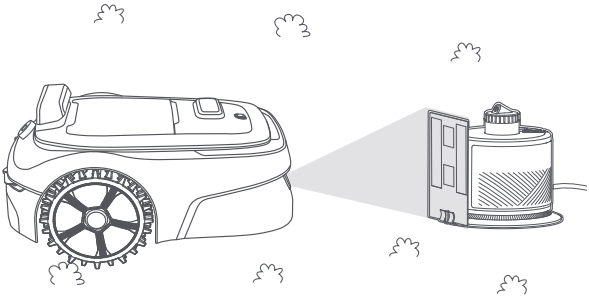
1. Open the App to start synchronizing the lawn map from the mower.
2. Follow the App instructions to place the device and adjust the irrigation direction.



3. Install the positioning board holder and the positioning board as illustrated.



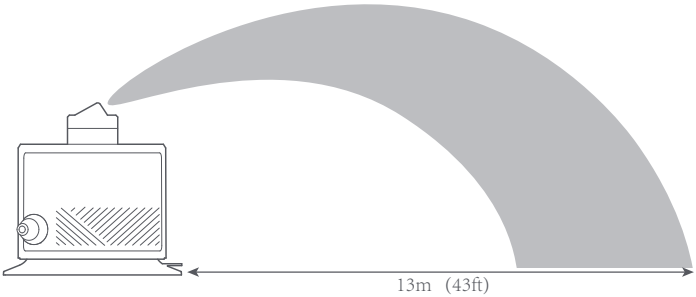
4. Once the mower detects the irrigation device, it will synchronize the lawn map to the irrigation device.



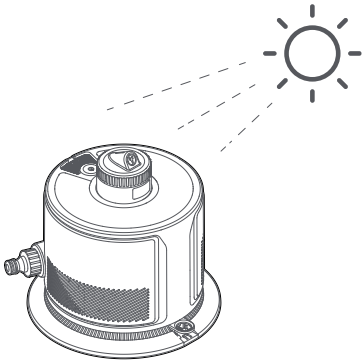
If you are not one of the users of the MOVA robotic lawn mower, please follow the instructions below to set up your device manually.

3.5 Select the Location

1. You should first select the right location for maximum coverage. The maximum spray distance is 13 m (43 ft). Therefore, no contour point may be further than 13 m (43 ft) away from the device.



2. Place the device in direct sunlight, and it will automatically begin charging. The solar cell must receive enough direct sunlight. Obstacles (e.g. trees) must not block out sunlight.



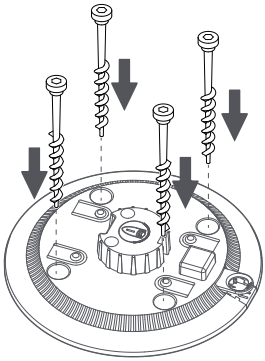
For better irrigation results, please check the following:

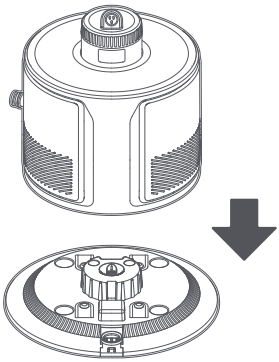
- Use as short a hose as possible for maximum spray distance.
- Ensure the installation surface is flat and stable so the device is firmly secured and does not wobble.
- Ensure there are no direct obstructions (walls or plants) between the device and the areas that need to be watered.
- Place the device in an area with good Wi-Fi signals to keep a stable connection between the device and the App.

3.6 Install the Device

Install the base plate: After the location is selected, place the base plate at the selected position. Then, insert the 4 garden pegs in the holes of the base plate and screw them into the ground.

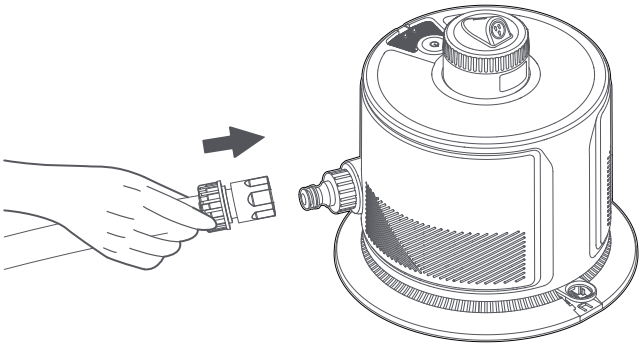
Place the device: Place the device on the base plate to secure it. You'll hear a "click" when the device is secured in place.





Connect the hose: Connect the device to a hose with the included quick connectors.

Note: After the connection, turn on the tap to its maximum flow to ensure that the hose is connected smoothly without leakage.

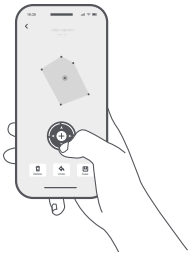


3.7 Map Your Lawn

After the device is connected to the App, follow the App's instructions to create the map.

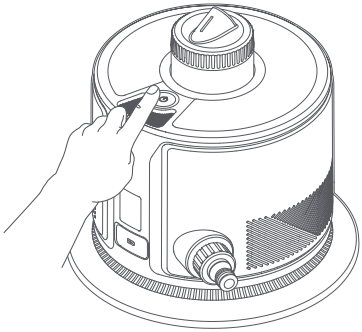
Notes:

- Avoid abrupt changes between the contour points, as gentle and large angles describe the contour more accurately.
- Irrigation tasks can only be performed when an irrigation map is created.



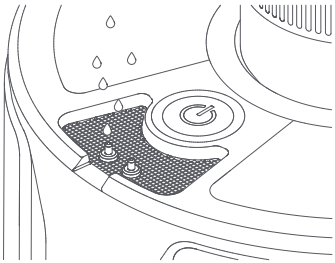
3.8 Start Irrigation

1. Press the ⏻ twice to start irrigation. Alternatively, you can start the irrigation task via the App.
2. When the device is in operation, press the ⏻ twice to stop the current irrigation task.



3.9 Weather Adaptation

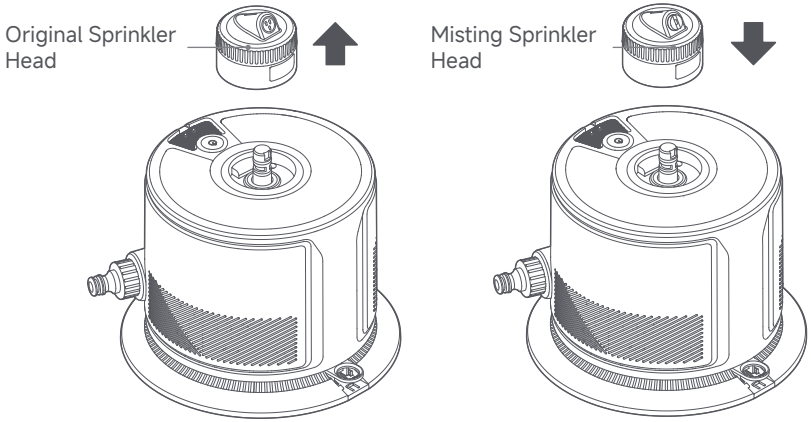
The device will automatically end the irrigation task when the rain sensor detects rainfall.



3.10 Misting Sprinkler Head

The device comes with a misting sprinkler head, which is designed to produce a soft, ultra-fine mist, ideal for watering delicate plants, seedlings, and shaded garden areas. Follow the instructions below to change the spray head:

1. Press the release button on the original sprinkler head and pull the sprinkler head upwards at the same time to detach it.
2. Attach the misting sprinkler head by placing it on the device and pressing the release button at the same time.

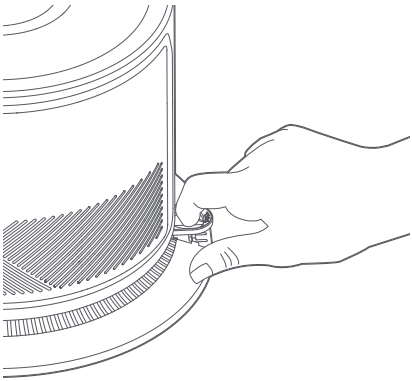


4. Maintenance

Warning: Please turn the device off before maintenance to prevent injury.

4.1 Remove the Device

Pull the locking mechanism on the base plate outward to release the device, then remove the device from the base plate.

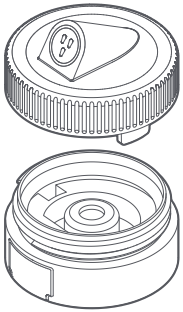


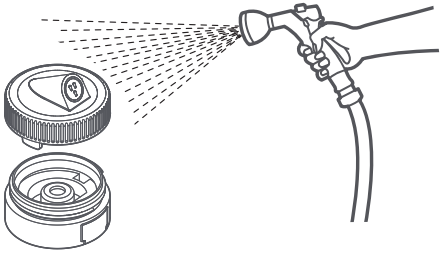
4.2 Clean the Sprinkler Head

It is recommended to clean the sprinkler head on a regular basis to ensure an even irrigation pattern.

1. Press the release button on the sprinkler head and pull the sprinkler head upwards at the same time to detach it.
2. Unscrew the nozzle cover from the sprinkler head.
3. Rinse the nozzle cover and the sprinkler head with water.
4. Reinstall the nozzle cover and the sprinkler head by following the above steps in reverse order.

Caution: Do not remove the nozzle cover while the sprinkler head is attached to the device, as this may damage the sprinkler head and the device.





4.3 Storage

1. Turn the device off and unplug the charging cable before storage.
2. Disconnect the hose and all the connectors from the device.
3. Remove the device from the base plate.
4. Store the device at room temperature. For long-term storage, ensure the following conditions are met:

- Store the device indoors in a cool, dry location, protected away from frost.
- Keep the device away from extreme temperatures, flames, and areas accessible to children.
- Recharge the device at least every six months to maintain battery health.

5. Troubleshooting

Problem	Possible Causes	Solutions
The device doesn't turn on.	1. The battery is depleted. 2. The protective panel of the solar cell is dirty or covered.	1. Charge the battery via the USB port. 2. Clean the protective panel or ensure sufficient sunlight.
The device can't reach the maximum irrigation distance.	1. Water pressure is too low. 2. Insufficient inner diameter of the hose. 3. The sprinkler head is dirty. 4. Multiple devices share the same tap and are set to operate at the same time. 5. The filter is clogged.	1. Increase the water pressure/ water supply. 2. Use a 19 mm (3/4 in) garden hose. Ensure that there are no foreign objects in the hose. 3. Clean the sprinkler head. 4. Stagger the operating times for devices sharing the same tap. 5. Unscrew the hose connector and wash the filter.
Irrigation pattern is uneven.	The sprinkler head is dirty or damaged.	1. Remove and clean the sprinkler head. 2. If the issue persists, contact the after-sales service.
Water leakage.	Galvanic corrosion from using galvanized connectors.	Use brass or plastic connectors instead.
Irrigation deviates from the irrigation map.	1. Weather conditions vary widely. 2. Fluctuating water pressure from the water source. 3. The sprinkler head is clogged or worn out. 4. The device has been moved. 5. The contour points are insufficient.	1. Complete the map setting in a windless environment. 2. Reset the map when the water pressure is relatively steady. 3. Clean or replace the sprinkler head. 4. Reinstall the device and set the map. 5. Reset the map and add more contour points.
No irrigation, the schedule is not being carried out.	1. The battery is depleted. 2. No water is flowing.	1. Charge the battery via the USB port. 2. Turn on the water flow.

6. Specifications

Product Name	Smart Lawn Sprinkler
Product Model	LIX1511
Water Pressure Range	3-6 bar(44-87 psi)
Irrigation Range at 3 bar	13 m (43 ft)
Irrigation Area at 3 bar	500 m^2 (5400 sq.ft)
Lithium-ion battery	7800 mAh
Rated Input	5 V ⎓ 2 A
Ingress Protection	IPX6
Working Temperature	5-50 °C (41-122 °F)
Bluetooth Frequency Range	2402 MHz-2480 MHz
Wi-Fi Frequency Range	2412-2484 MHz; 5180-5885 MHz

*The specifications are subject to change as we continually improve the product. For the latest information, please visit our website at https://www.mova.tech

MOVA

Manufacturer: Wavefuture Robotics Technology (Suzhou) Co., Ltd.

Address: 1/F, Building B, No. 7 Qian Zhu Road, Taihu Street,
Wuzhong District, Suzhou, Jiangsu Province, P.R.China
MADE IN CHINA