

velleman WMS103 Automatic Watering and Moisture Measurement Kit User Guide

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velleman WMS103 Automatic Watering and Moisture Measurement



Product Specifications

- **Model:** WMS103
- **Function:** Maintains ideal humidity level for plants
- **Components:** Soil moisture sensor, peristaltic pump, Arduino Uno, OLED screen, relay, jumper cables, 9V battery

Product Usage Instructions

Assembly:

1. Unbox all components.
2. Connect sensors, OLED screen, relay, and peristaltic pump using jumper cables.
3. Connect the 9V battery to the Arduino Uno.

Placement of Sensors:

- Place Moisture sensor in the soil of a plant or flower.
- Place Water level sensor in a container with water.

Connecting the Peristaltic Pump:

- Connect the suction hose to the container with water and the other hose of the peristaltic pump to the plant.

Manual Operation:

- You can manually operate the peristaltic pump by pressing the tactile switch. Ensure there is enough water in the container for manual operation.

Automatic Operation:

- The peristaltic pump will operate automatically if the moisture level of the plant's soil is below 400. You can modify these values in the source code on GitHub.

Product Information

- The WMS103 This kit ensures that your plant maintains the ideal humidity level by means of a soil moisture sensor. If the humidity is too low, it will operate a (peristaltic) pump, which in turn pumps water to water a plant.
- The Arduino is already preprogrammed with our code, but you can modify and download the Arduino source code on our GitHub page using the QR code below.

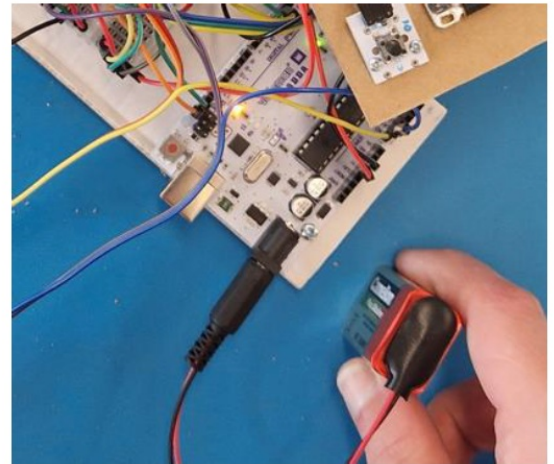
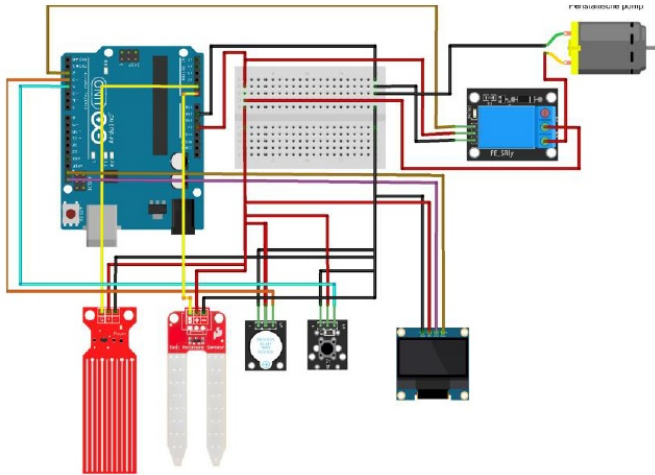


- For a more detailed version of the assembly instructions and explanation how it works, you can follow our tutorial video using the QR code below.

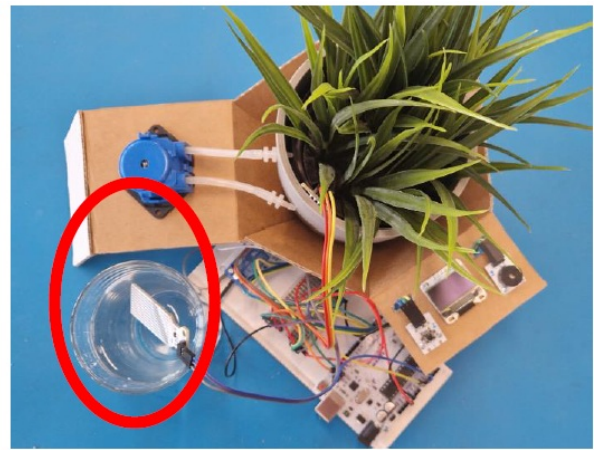
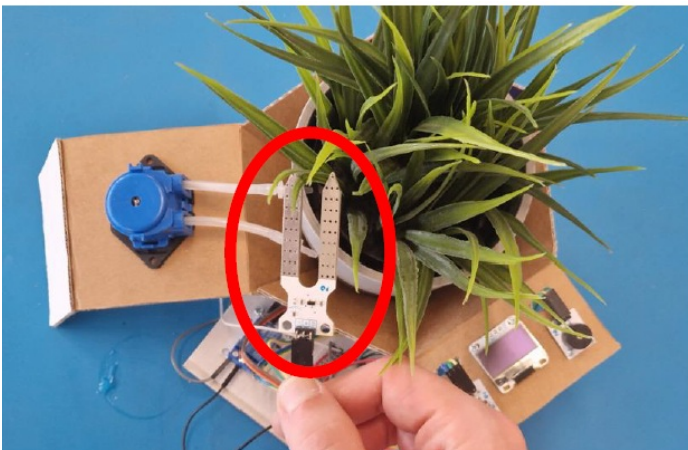


Operating Instructions

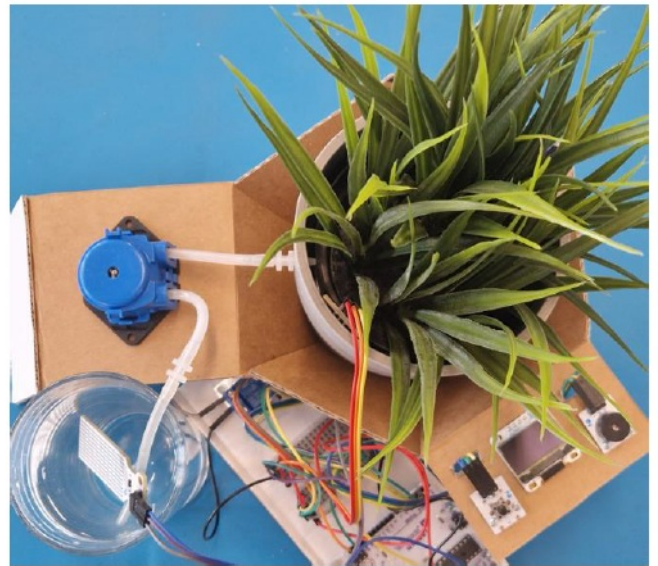
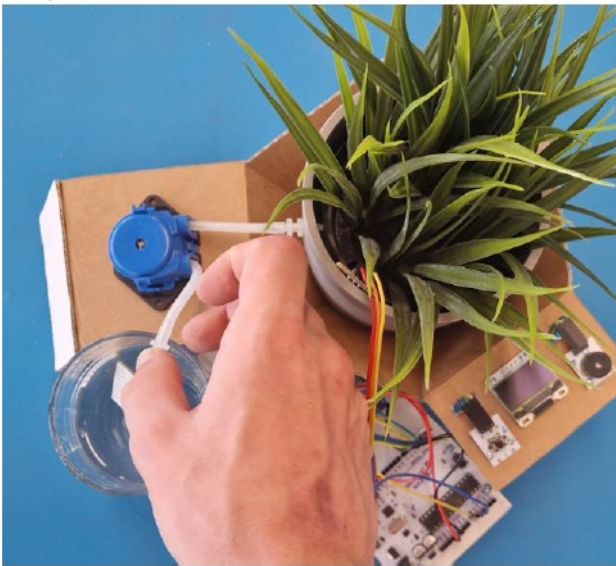
- Now unbox everything and connect all the sensors, Oled screen, relay and peristaltic pump by using the jumper cables that are delivered in the box. Also connect the 9V battery to the Arduino Uno.



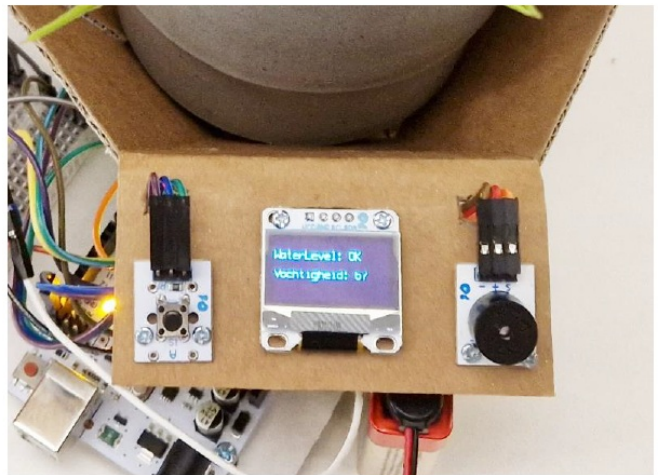
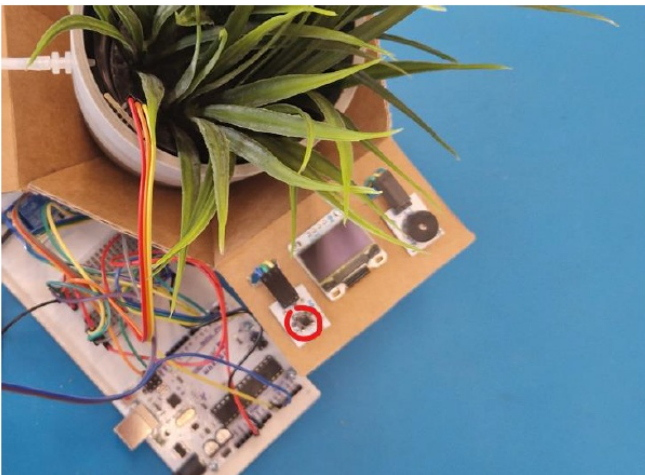
- There will be different values displayed on the OLED screen. Place the Moisture sensor in the soil of a plant or flower. Place the Water level sensor in a container with water.



- Place the suction hose in the container with water and the other hose of the peristaltic pump to the plant.



- You can manually operate the peristaltic pump by pressing the tactile switch. This will only work when there is enough water in the container.
- The Buzzer will sound when the Water level is too low. The Oled will display if the water Level is OK or too Low. You will also get a reading from the moisture level of the plants soil.
- The peristaltic pump will operate automatically if the value is below 400. You can change these values by modifying the source code on the GitHub page (QR code on top).



Finish



USE THE QR CODE AT THE TOP TO ALSO MAKE A HOUSING OUT OF THE PACKAGING!

FAQs

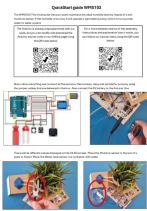
Q: How can I customize the operation of the peristaltic pump?

- A: You can modify the threshold values for automatic operation by changing the source code on our GitHub page.

Q: What should I do if the Water level is too low?

- A: The Buzzer will sound to alert you if the Water level is too low. Refill the water container to ensure proper operation.

Documents / Resources

	<p>velleman WMS103 Automatic Watering and Moisture Measurement Kit [pdf] User Guide WMS103 Automatic Watering and Moisture Measurement Kit, WMS103, Automatic Watering and Moisture Measurement Kit, Moisture Measurement Kit</p>
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References

- [User Manual](#)

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