



# GrowSphere™ **ECO**

Control and Monitoring unit

## Quick Setup Guide

Beta version | May 2024



Precision  
Agriculture





Technical Resources

## Technical specifications

Solar panel	5.5 Watt
Battery rechargeable li-ion pack	3.7V 5200mAh
Optional operation	via external source
Outdoor installation	IP65, UV protected
Standard compliance	CE & FCC*

\* Certification in process

## Environmental specifications

- Working temperature -10°C to 55°C (14°F to 131°F)
- Storage temperature -20°C to 60°C (-4°F to 140°F)
- Air humidity 0% to 95%

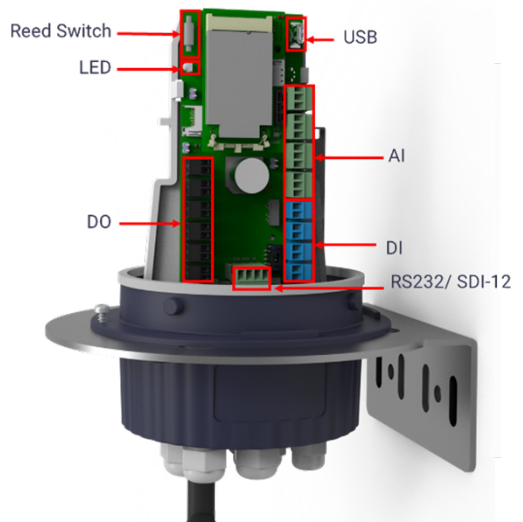
## Supported devices

### 6 DC Latch Outputs –

- Output pulse voltage max 15V
- Operates two wires DC latching solenoids, latch relay

### 1 Digital Input

- Pulse water meter



## Three configurations available:

1



**GrowSphere™ ECO**  
integrated solar panel

2



**GrowSphere™ ECO**  
external solar panel

3



**GrowSphere™ ECO**  
power grid

# What's in the box

		GrowSphere™ ECO integrated solar panel	GrowSphere™ ECO external solar panel	GrowSphere™ ECO power grid
	ECO Control and Monitoring unit + bracket		✓	
	ECO Control and Monitoring unit	✓		✓
	External solar panel 5.5W + 5m extension cable		✓	
	Integrated solar panel 5.5W	✓		
	Metal bracket			✓
	Antenna	✓	✓	✓
	Charging cable	✓	✓	✓
	Base plate	✓	✓	
	Bird spikes	✓	✓	
	Metal cable ties	✓	✓	✓
	Plastic bands	✓	✓	✓
	Magnetic screwdriver 2.0 x 50mm	✓	✓	✓
	Activation magnet	✓	✓	✓
	Technician USB cable	✓	✓	✓

## Initial setup

### 1 GrowSphere™ ECO integrated solar panel

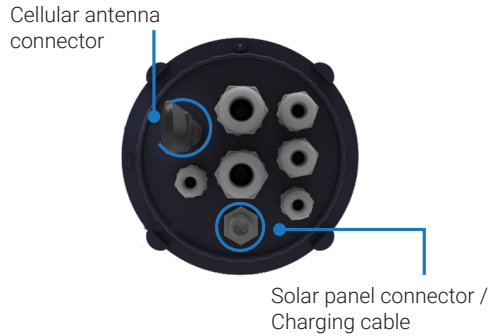
**A**

Connect the unit to the panel



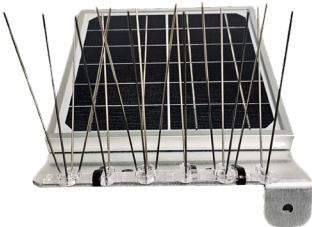
**B**

Connect the antenna and solar panel to the **ECO** unit



**C**

Connect the bird spikes to the solar panel if required



## 2 GrowSphere™ ECO external solar panel

A

Connect the antenna and solar panel to the **ECO** unit

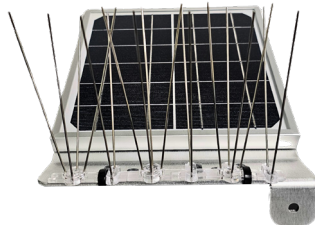
Cellular antenna connector



Solar panel connector /  
Charging cable

B

Connect the bird spikes to the solar panel if required



## 3 GrowSphere™ ECO power grid

A

Attach the bracket to the unit.



B

Connect the unit's antenna and the solar panel / external power source 5v, Max 1A.

Cellular antenna connector



Solar panel connector /  
Charging cable

## Prior to configuration



- 1 Ensure the unit is charged for a minimum of 5 hours, by using the provided charging cable (as demonstrated in the diagram above).



- 2 A blue led will indicate battery charging.  
After charging, disconnect the cable and connect the solar-panel cable instead.

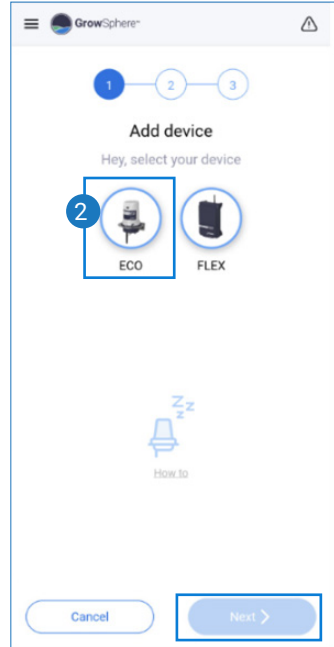
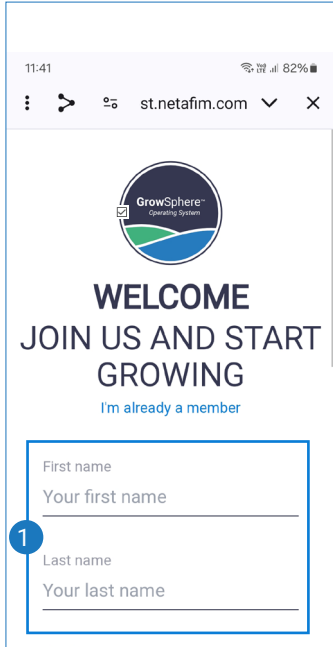


## Configuring your unit, and adding it to your farm:

Download the **GrowSphere™** App

1. Login or create a new user

2. Add device (choose the ECO)



## Add device:

GrowSphere™

1 — 2 — 3

### Add device

Hey, wake up your new controller

Enter the serial number, or scan the QR code from the package.

MAC address

0 0 - 0 0 - 0 0 - 0 0

Scan QR code

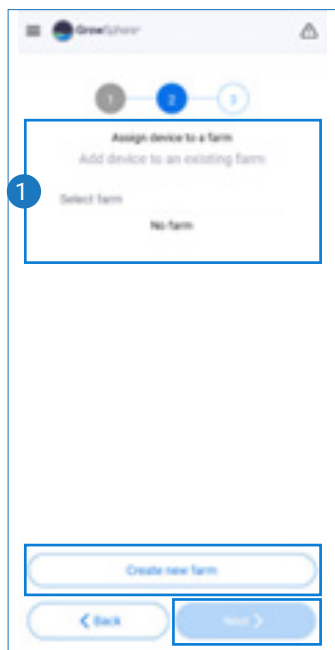
Cancel Next >



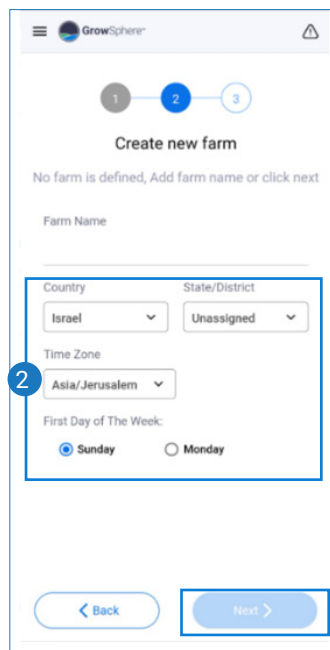
Scan or type MAC ID

## Assign a device to a farm:

1. Add your device to an existing farm, by selecting the farm from a list.



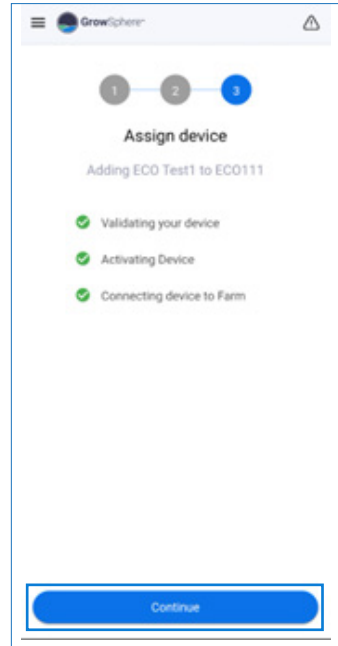
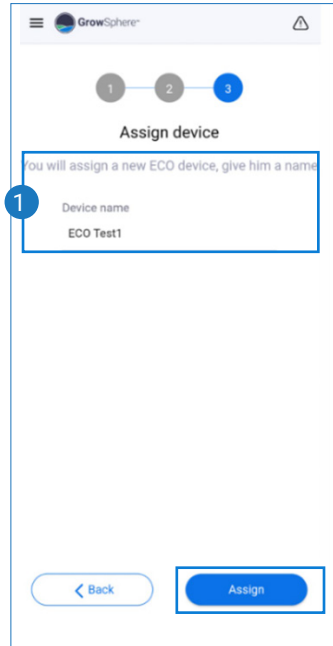
2. Or create a new one, by clicking on the “Create new farm” button and follow the steps:



## Assign device:

Name the device

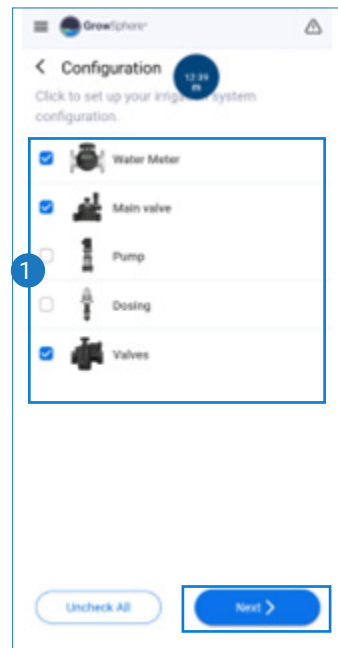
\*Validation screen\*



## Configuration:

Choose your configuration.

Please note – you cannot define both main valve and pump.

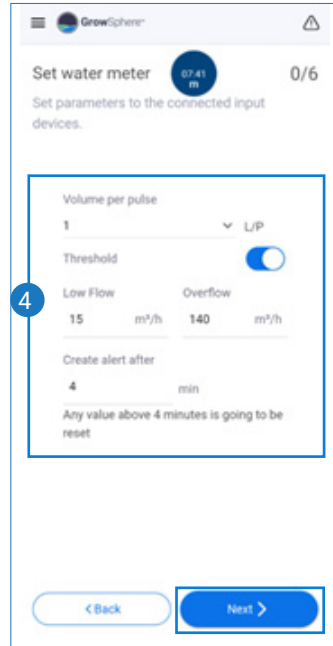
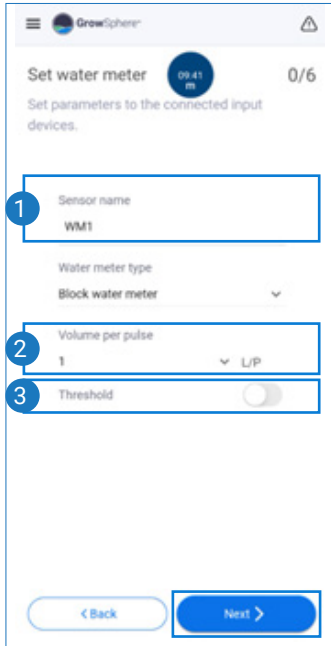


Set parameters according to your definition:

Please note – if you have only 1 valve, it cannot be defined as the main valve.

Each valve will create an irrigation block in the **GrowSphere™** web application.

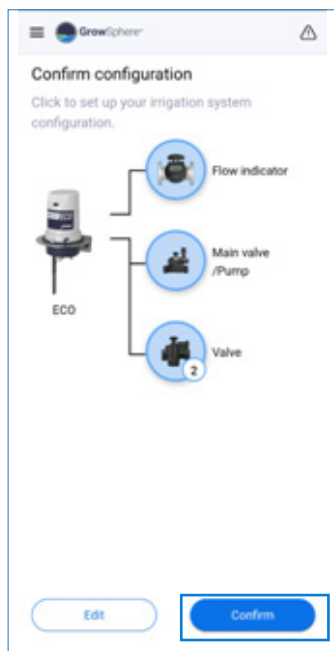
If you wish - set alarm threshold:



### Example for water meter setting

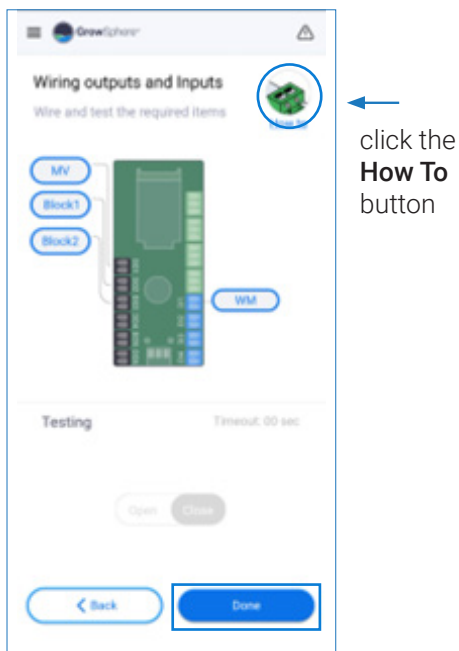
Set the rest of the devices parameter according to your configuration.

## Confirm configuration:



## Wiring outputs and inputs:

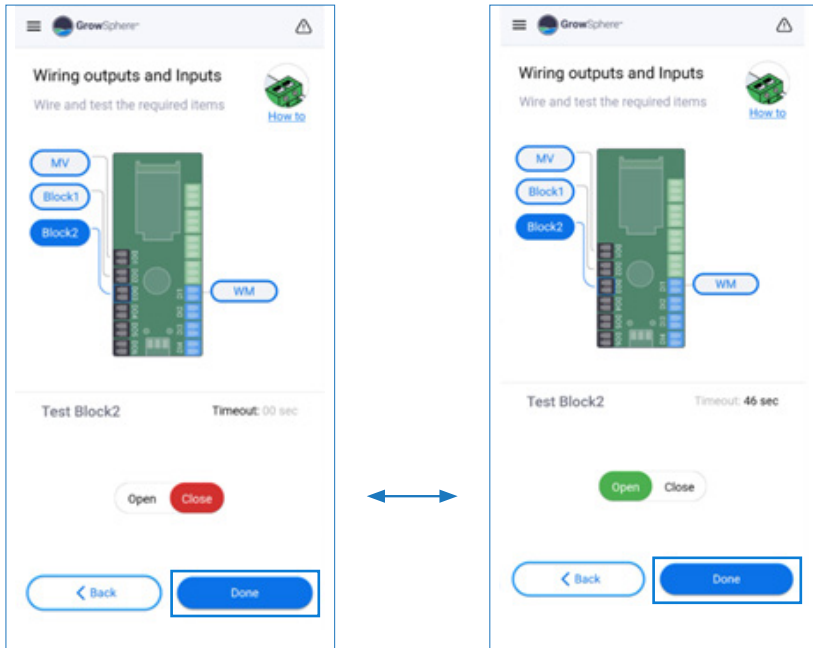
Wire your devices according to the scheme



It is recommended to test the wired outputs.

Choose output and click on "Open".

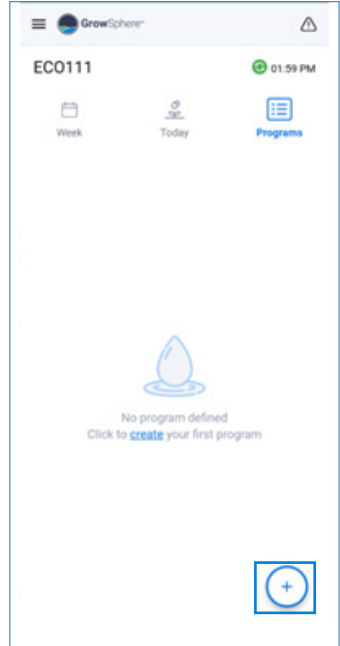
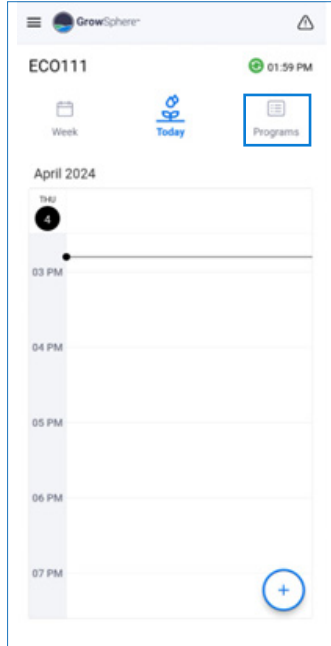
The test will run for one minute unless you click "Close", in which case it will shut down immediately.



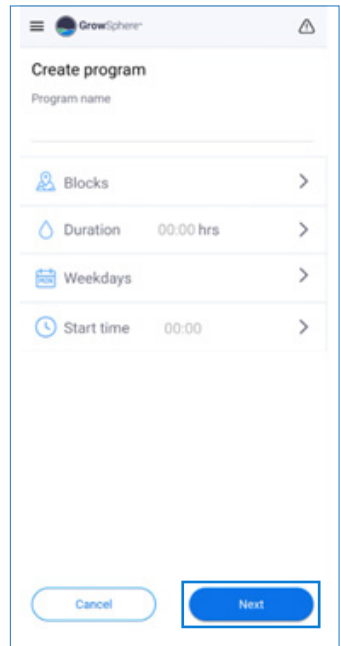
- End of configuration process -

## Create program:

Click on "Programs"  
and go to 

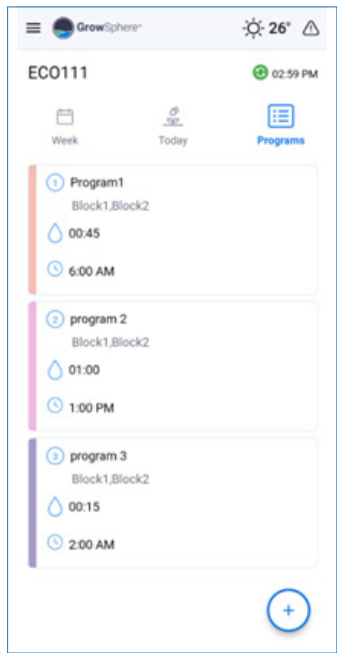
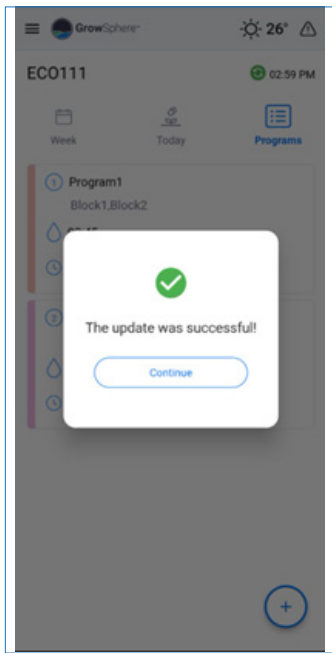
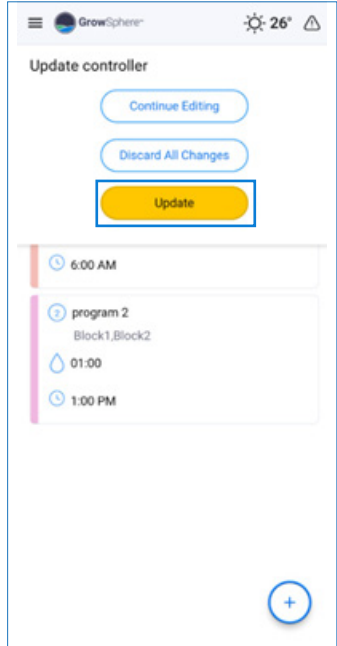
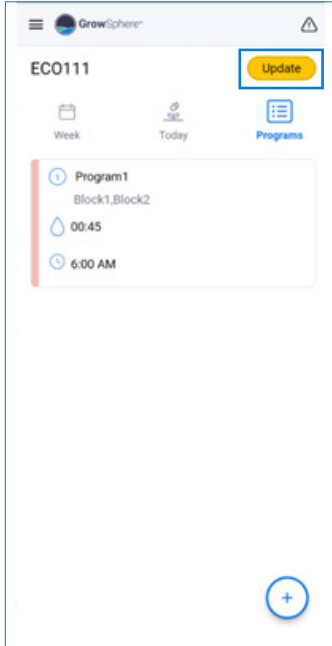


Every step of the setup  
process will be highlight in  
**red**



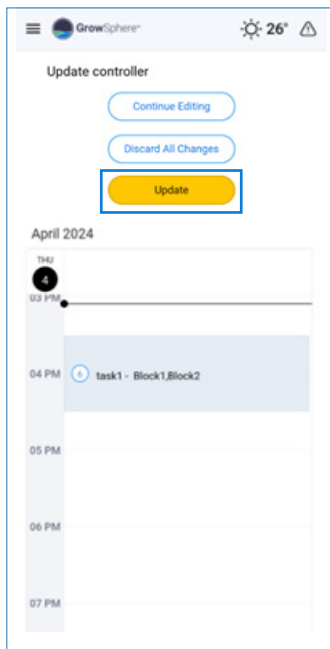
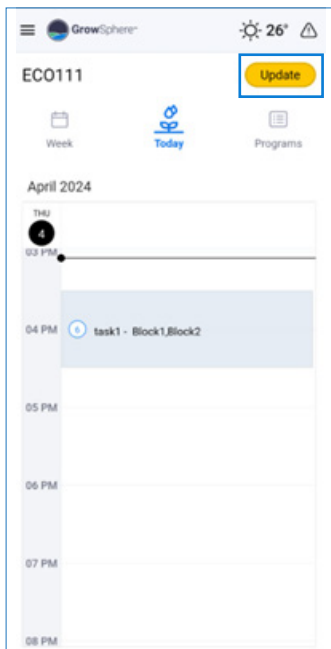
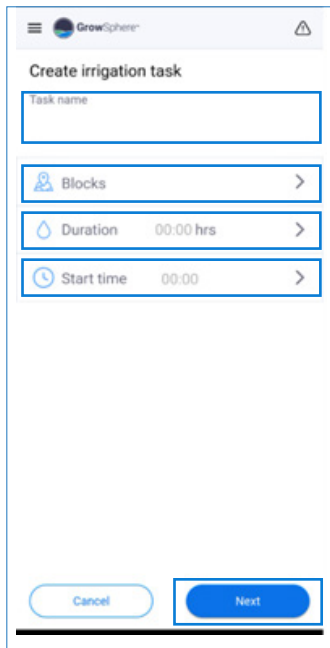
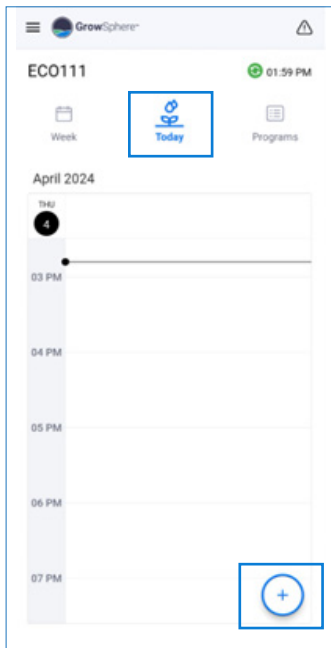


Click on the UPDATES button when you finish creating your programs, to send all updates to the controller.



## Create irrigation task:

Click on "Today" and go to (+) :



For further settings click on triple bar.



Contact for support - [cmt.support@netafim.com](mailto:cmt.support@netafim.com)



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