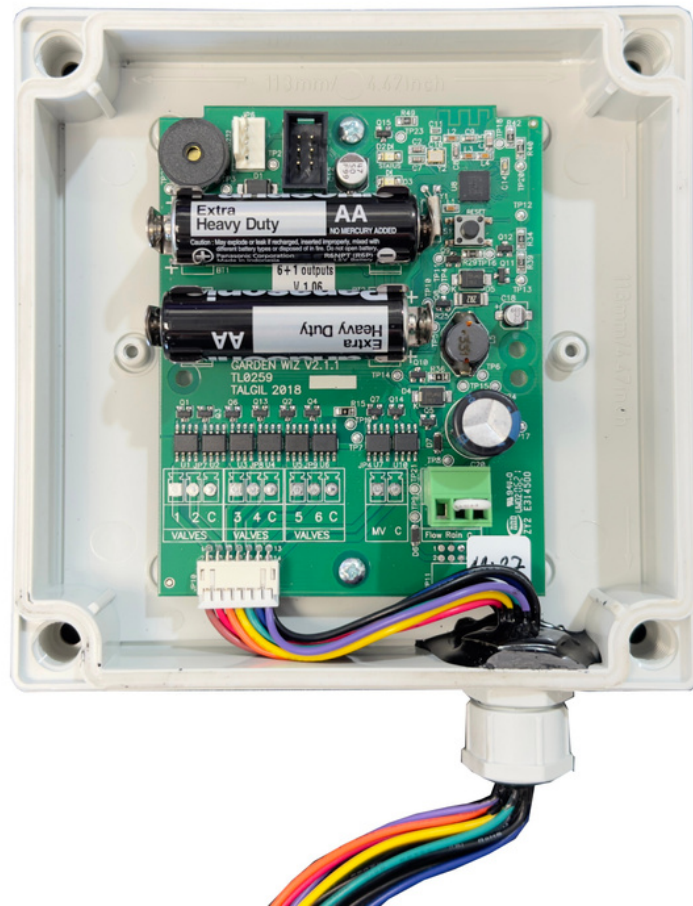




# IOM

## Garden Wiz - Bluetooth Gardening Controller



## Wiring of Outputs









The GardenWiz supports up to six irrigation valves and one output for the main valve. The controller has a modular design that enables the user to define the quantity of the irrigation valves. The irrigation valves quantity can be changed to 1, 2, 3, 4, 5, and 6 outputs.

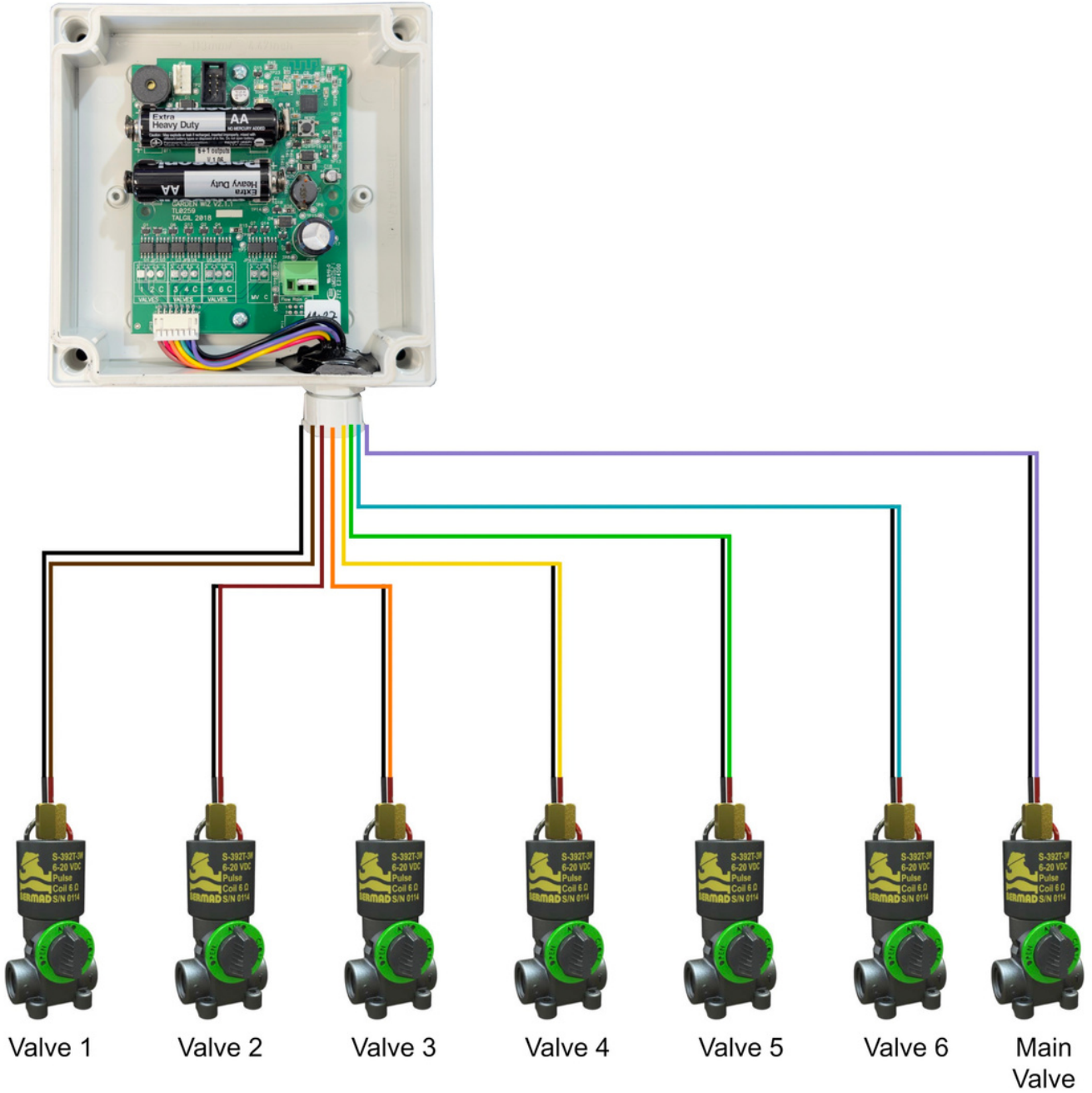
The number of outputs is not expandable.

Connect 2 wires - 12V DC Latch solenoids to the controller according to the appropriate colours on the output wire colour table.

All black wires are common.

The user can use any common wire for every output.

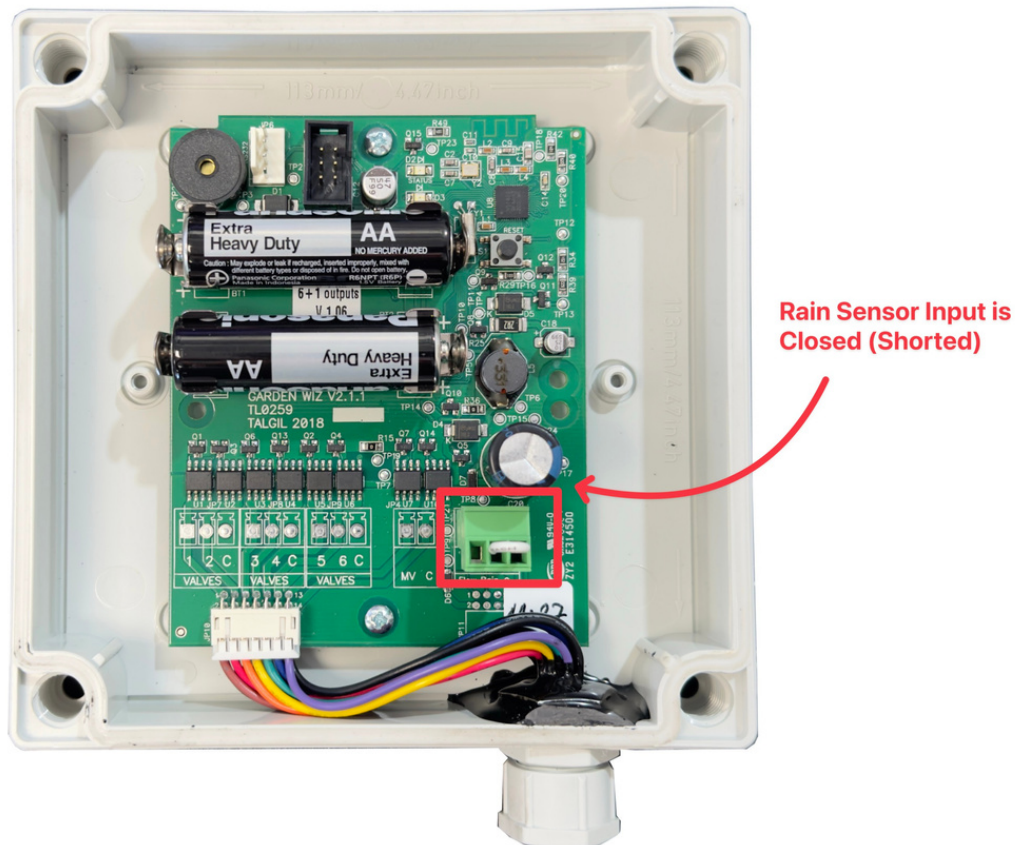
Index	Color name	Color	Output	Quantity
1	Brown		Valve 1	1
2	Red		Valve 2	1
3	Orange		Valve 3	1
4	Yellow		Valve 4	1
5	Green		Valve 5	1
6	Blue		Valve 6	1
7	Violet		Main valve	1
8	Black		Common	7



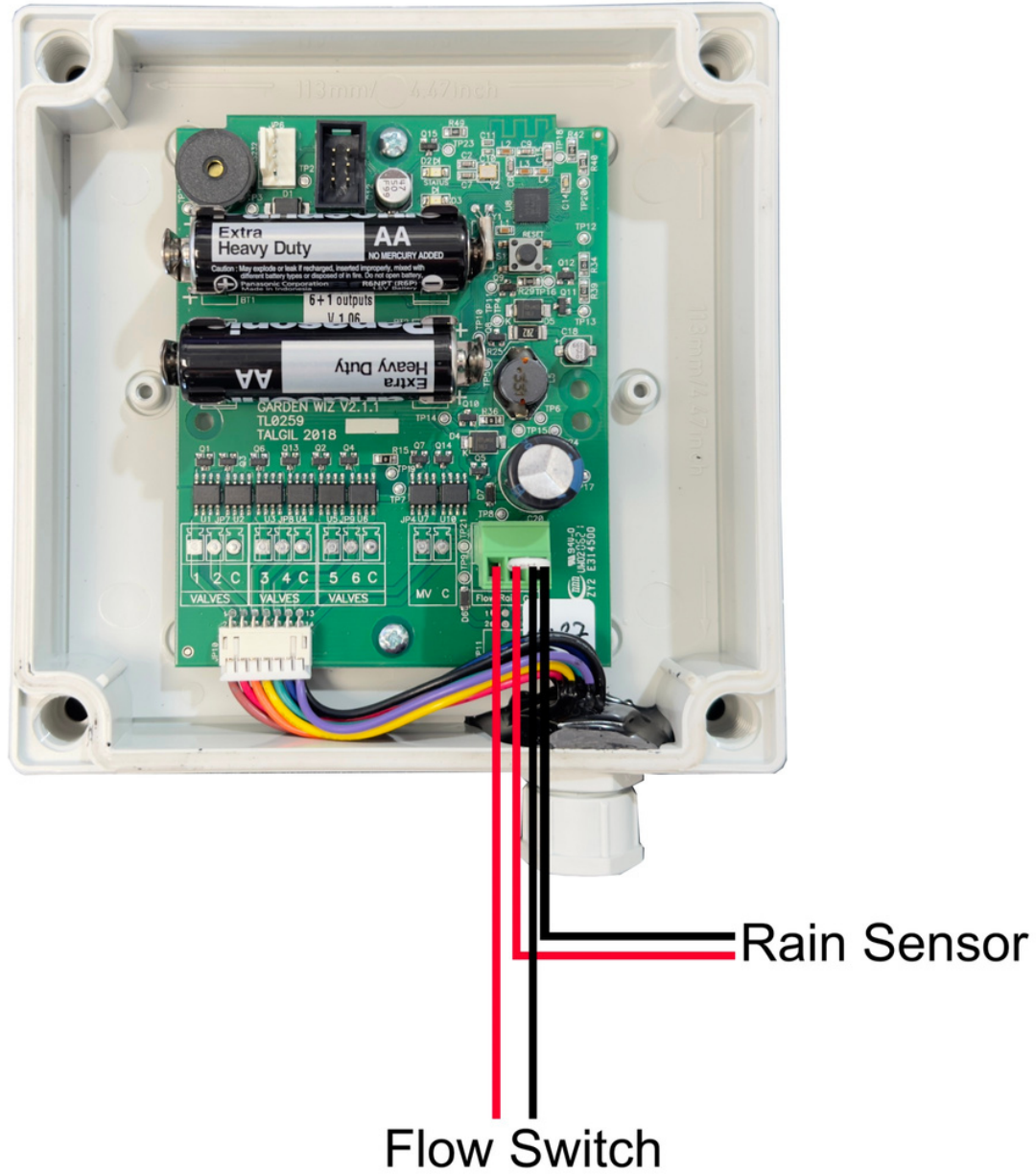
## Wiring of Inputs

The Garden Wiz Includes two digital inputs.

1. Flow Switch - Indicates if there is a flow during the irrigation or detects water leakage if there is no irrigation.
2. Rain Sensor - Detects rain and does not allow planned irrigation programs to start. The rain input acts as normally closed; therefore, if there is no rain sensor, the input should be closed (shorted) - as per the image below.



## Wiring of Inputs



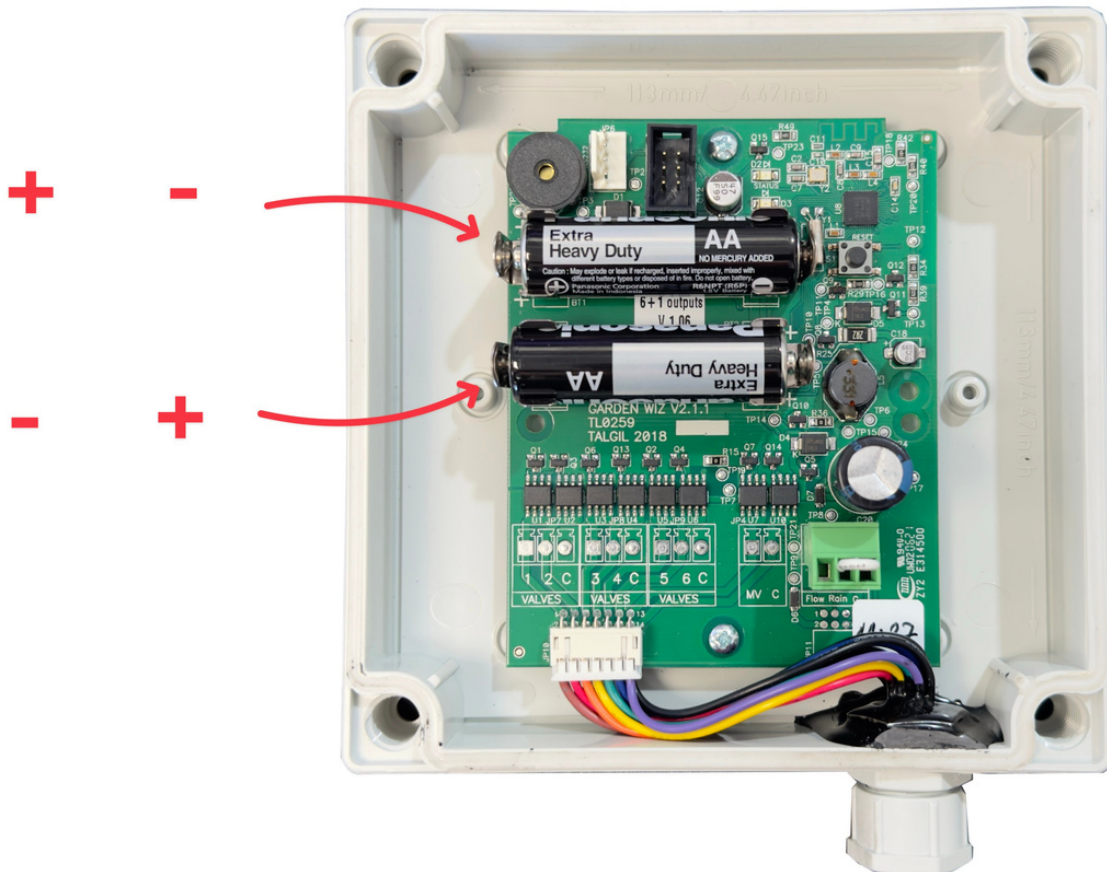
## Power Supply

To energize the Garden Wiz Controller, use two alkaline batteries - 1.5V size AA.

The current consumption of the controller in sleep mode is 30uA.

When the user connects to the controller, the current will rise up to 5mA.

Battery Polarity is important!





## Smartphone Applications

The Garden Wiz Controller doesn't have an LCD or Keyboard. The programming process is done via Bluetooth communication between the user's smartphone and the controller.

## Smartphone Applications - Download



GET IT ON  
**Google Play**

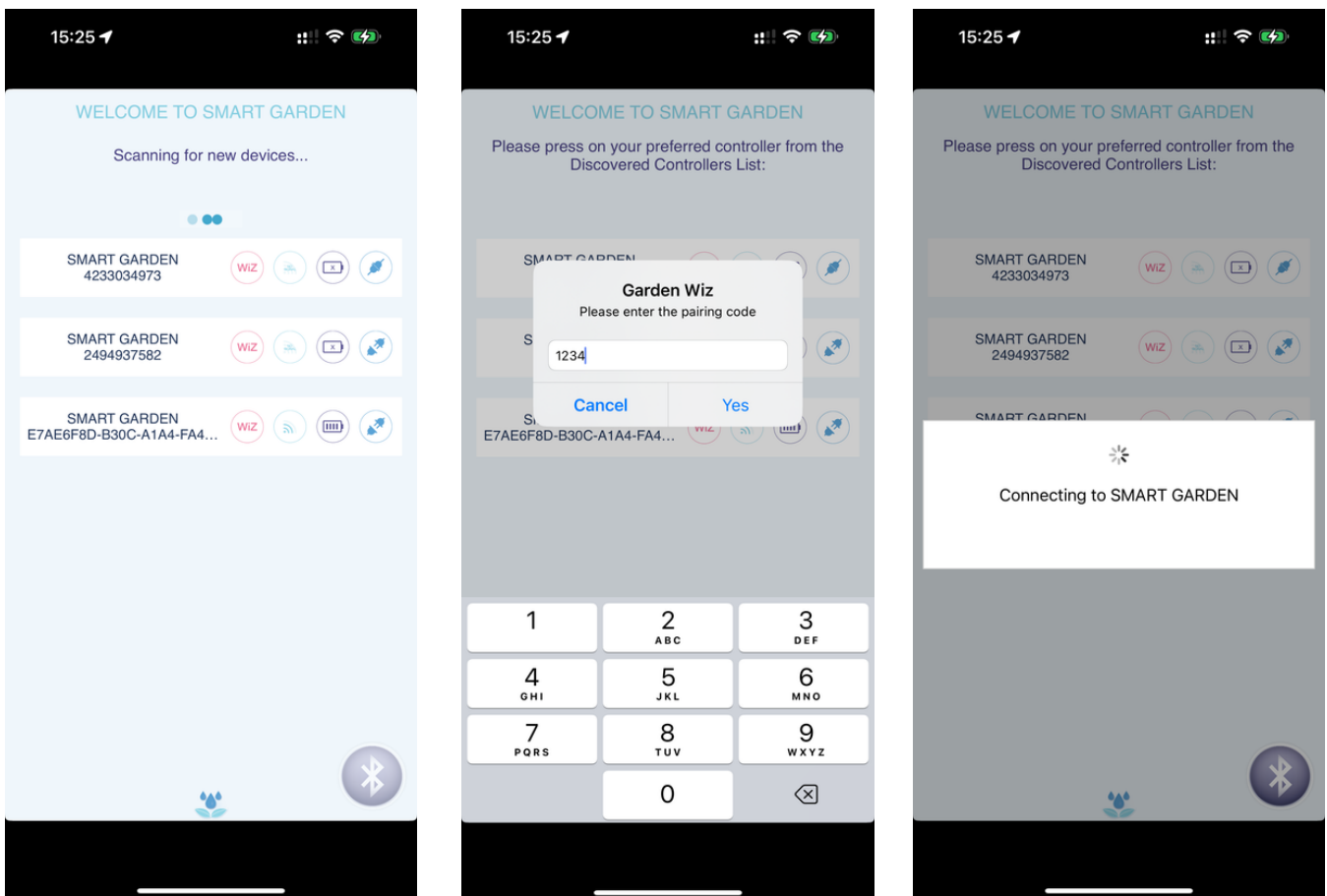


Download on the  
**App Store**

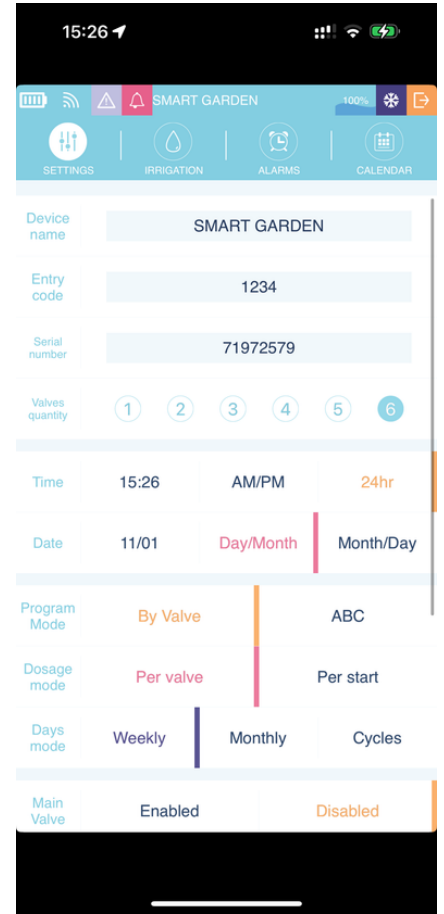
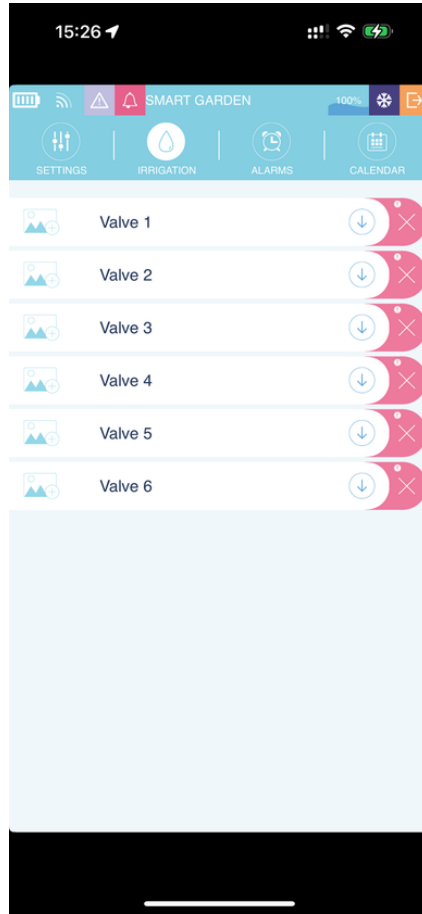
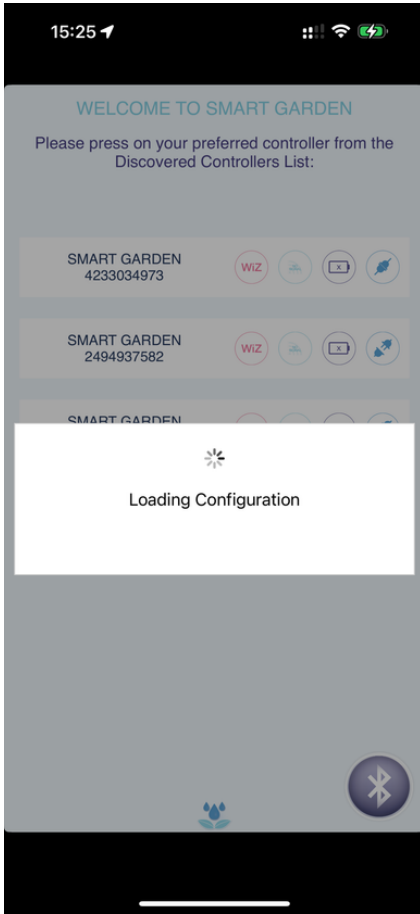
## Communication with the Garden Wiz Controller

1. Open the Garden Wiz Application
2. Click on the Start Scan Button - The scanning result will appear.
3. Choose your controller from the discovered list.
4. At the first connection, the application will ask you for the Pair Code.  
**The default pair code is "1234".**
5. The application will do an initial configuration read of the controller. This can take up to 30 seconds (Depending on your phone).

The next connection will be immediate and should take only a few seconds.









## Application Overview

- 1. Device Name** - Enable to grant a friendly name to the controller.
- 2. Change Password** - Allows the user to change the pair code.
- 3. Serial Number** - Display the controller unique ID.
- 4. Number of Valves** - Define the number of irrigation valves to operate.
- 5. Time** - Select your preferred time format. (AM/PM or 24/12).
- 6. Date** - Select your preferred date format. (Day/Month or Month/Day).
- 7. Program Mode** - Select the preferred program mode. By valve or by program (ABC).
- 8. Dosage Mode** - Select the preferred dosage mode. Dosage mode per valve (one water dosage) or Dosage mode per start time (four water dosages).  
Appears only when Program Mode is by Valve.
- 9. Irrigation days mode** - Select the preferred irrigation days mode.  
By Run list, Even/Odd days or by Cycles.
- 10. Main Valve** - Specify if the irrigation system includes Main valve.
- 11. MV Delay** - Set the mode of opening.
  - None - No delay
  - MV>VLV - The main valve opens first.
  - VLV>MV - The secondary valves opens first.
- 12. MV Delay** - The Delay before opening the Main valve and secondary valves.
- 13. Buzzer** - When the Buzzer is On, the controller will make sound when there is a Bluetooth connection. In addition, it make a special sound where there is an alarm.
- 14. Flow Switch** - Specify if the irrigation system includes Flow switch.  
The Flow switch helps to detect No flow alarm during irrigation or Detects Water leakage if there is no irrigation.
- 15. Leakage detection delay** - The Delay for Water leakage detection.
- 16. Factory reset** - Reset the controller settings and the irrigation details.
- 17. Update** - Display and update the control firmware.
- 18. Version** - Display the app version.

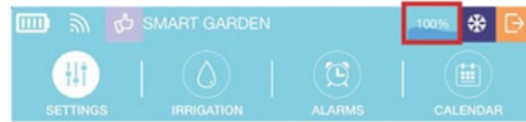


## Control Panel

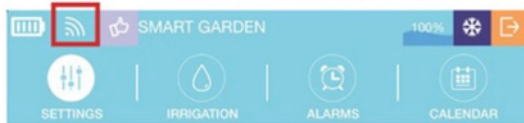
Battery Level



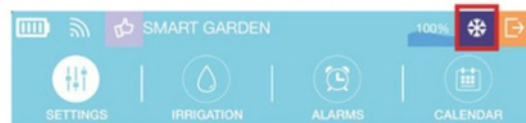
Water Dosage - Budget



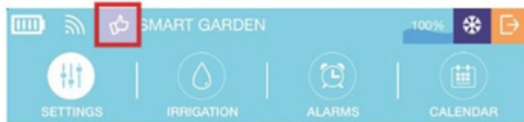
Connection Status



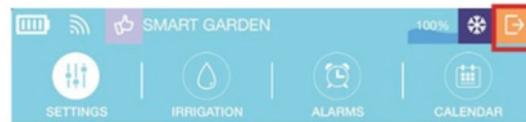
Freeze / Pause Controller



Alarm Status



Log Out



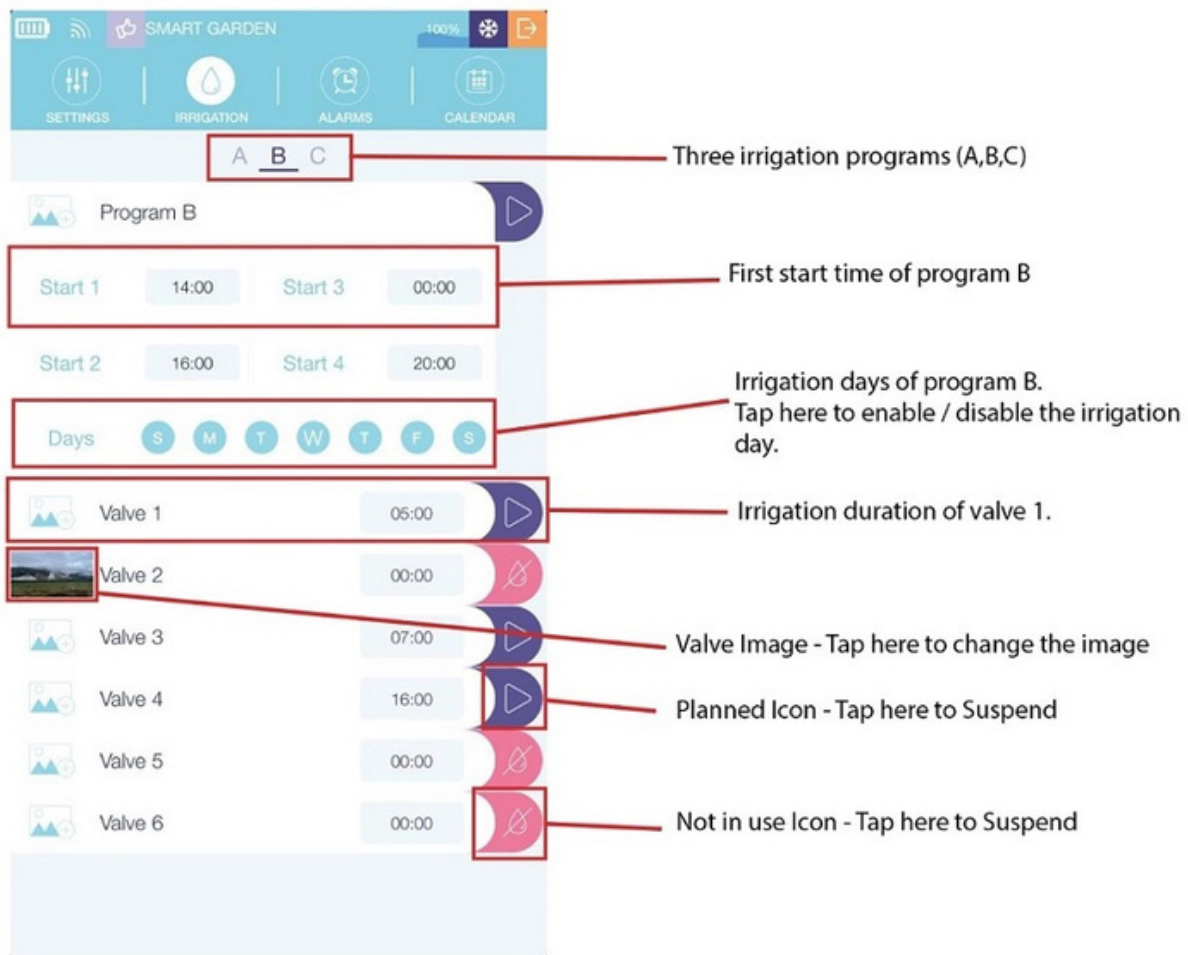
Controller Name



## ABC Programming Type

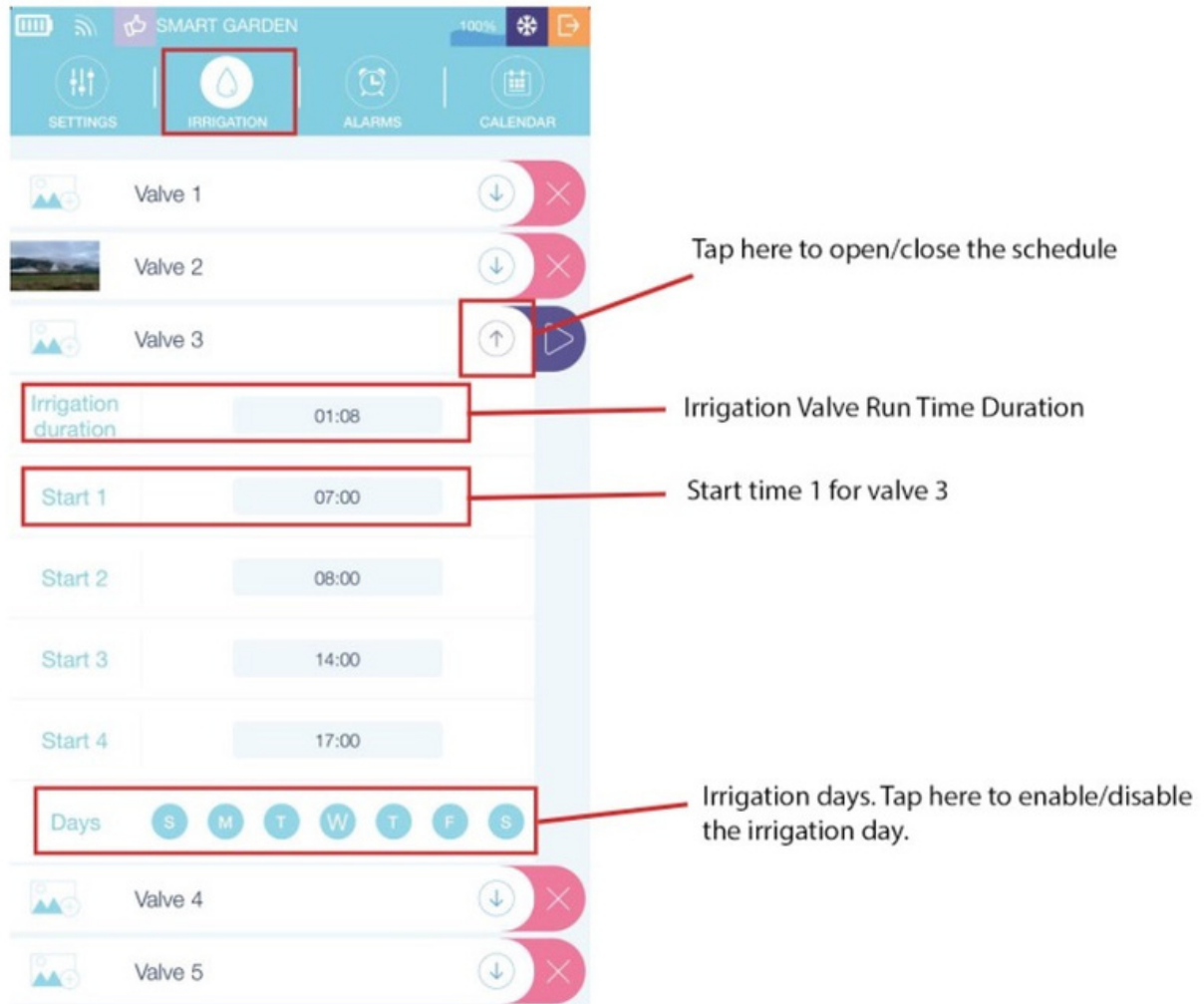
The App provides two different methods of irrigation programming.

The first one is called ABC. This mode accepts three different programs, with four start times per program. Each valve will be set with its duration. At the start time of the irrigation cycle, the controller will open the first solenoid valve for its duration set. The second valve will start opening after the first one will stop, and so on for the following valves.



## Programming by Valve

The second program method is called - By Valve. This mode permits you to program four different start times per valve, independently from the others.



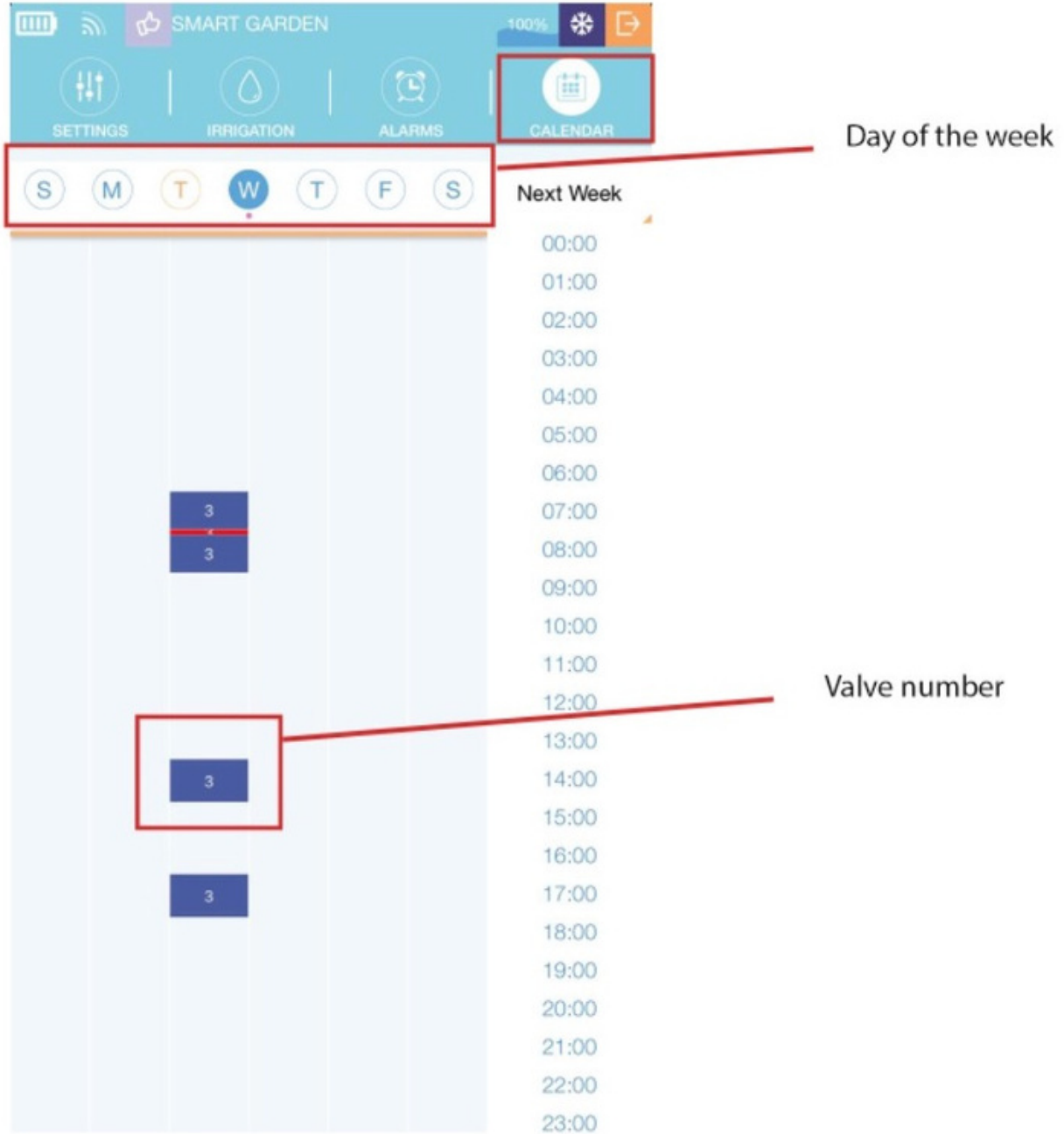
The screenshot shows the 'SMART GARDEN' app interface. The top navigation bar includes 'SETTINGS', 'IRRIGATION' (selected), 'ALARMS', and 'CALENDAR'. Below this, there is a list of valves: Valve 1, Valve 2, Valve 3, Valve 4, and Valve 5. Each valve has a dropdown arrow and a close button. The 'IRRIGATION' menu is expanded for Valve 3, showing the following details:

- Irrigation duration:** 01:08
- Start 1:** 07:00
- Start 2:** 08:00
- Start 3:** 14:00
- Start 4:** 17:00
- Days:** S, M, T, W, T, F, S (all days are selected)

Callouts in the image point to specific elements:

- Tap here to open/close the schedule:** Points to the dropdown arrow next to Valve 3.
- Irrigation Valve Run Time Duration:** Points to the '01:08' value.
- Start time 1 for valve 3:** Points to the '07:00' value.
- Irrigation days. Tap here to enable/disable the irrigation day:** Points to the 'Days' row with the day selection buttons.

## Calendar Tab



SMART GARDEN 100%

SETTINGS IRRIGATION ALARMS CALENDAR

S M T W T F S

Next Week

00:00  
01:00  
02:00  
03:00  
04:00  
05:00  
06:00  
07:00  
08:00  
09:00  
10:00  
11:00  
12:00  
13:00  
14:00  
15:00  
16:00  
17:00  
18:00  
19:00  
20:00  
21:00  
22:00  
23:00

Day of the week

Valve number



## Alarms

The controller is able to identify system problems and consequently stop the solenoid valves. Depending on the level of Alarm. The alarms can be of two types:

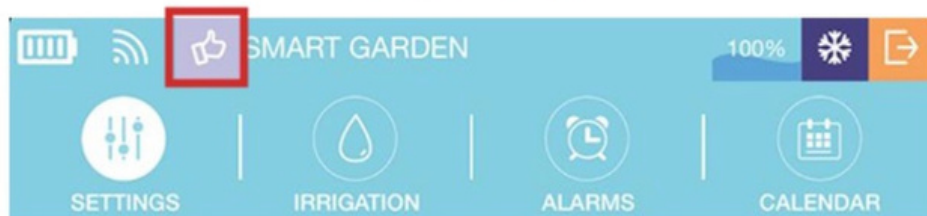
**WARNING:** Irrigation has been interrupted or suspended temporarily for some light issues.

**PROBLEMS:** Irrigation did not occur due to series system malfunction. By clicking on the icons on the App screen, it will be possible to find out type and details of any warning or problem detected.

Note: To preview or clear the alarm - Tap on the Alarm Icon

Note 2: For Irrigation Programs - The alarm is shown next to the Program Name

### Alarm Status





## Troubleshooting

### **Cannot Access the Controller - Forgot the Pair Code**

- To get a new code, contact Deeco.

### **Cannot Access the Controller - Bad Bluetooth Signal**

- Make sure there is a line of sight. Install the controller in a high place.

### **The Irrigation Programs do not Start - Start time and irrigation days are set.**

- Make sure the rain sensor input is shorted - as described under Input.

### **The Irrigation Programs do not Start - Start time and irrigation days are set.**

- Navigate to the Failures screen and see the error.

### **The irrigation duration is too long or too short.**

- Make sure that the BUDGET is 100%

### **Irrigation programs start too early or too late.**

- Batteries's voltage is too low. Replace the batteries.





## Technical Details

**Energy:** 2x 1.5V AA Batteries

**Power Supply:** During Bluetooth communication 5mA. In Sleeping mode 30uA

**Communication:** BLE - Bluetooth Low Energy

**7 Outputs:** 6x Irrigation Valve + 1x Main Valve. Output type: 12V DC Latch.

**2 Digital Inputs:** 1x Flow Switch, 1x Rain Sensor.

**Operating Temperature and Humidity:** 0-60 C, 0-90%

## Advices

**Do not expose the controller to freezing. Store the device in a sheltered place during the winter period.**

**It is recommended to replace both batteries at the beginning of the irrigation season.**