

Smart gardening controller for smart gardeners Quick User Manual version 4.21



Powered By:

Gamla offers professional solutions for gardening irrigation control, innovative styling, hardware and software new technology design, flexibility, extensions, professional features, user friendly device, reliability and level technical support.

Include: Network Settings for full irrigation area suitability.

2 program modes: Per valve or per Program.

4 start time with unique water dosage, Daily, Weekly or Monthly cycle, Alarm list, Callender irrigation presentation. Support up to 6 irrigation valves.

In addition, special output for mail valve.

3 special inputs: Flow switch, Rain sensor and Panic button.

Low energy consumption.

Setup the Gamla Controller

Install the "Gamla By Talgil & Guttis" application in the App Store or Google Play.

1. Open the application and Tap on the Gamla icon.

2. Click on the Start scan button The scanning results will appear on the Scanning screen. Scanning screen will display a list of the controller that has been discovered in the vicinity.

3. Choose your controller from the Discovered controllers.

4. At the first connection, the application will ask for the Parity code. The default Parity code is "1234".

5. The application will do an initial configuration read of the controller, this can take up to 50 seconds (Depending on phone model).The next Connections will be immediate and should take only a few seconds.

6. Now you can setup your irrigation system.

Connect 2 wires 12V DC Latch solenoids to the controller according to appropriate colors on the output wire color table. All the black wires arecommon. The user can use any common wire for every output

Index	Color	Color	Output	QTY
	name			
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 "Gamla" controller 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 act as normally closed, therefore, if there is no rain sensor, the Rain input should be closed (Shorted) as you see at the image. The second image describes the wiring of these digital inputs.

Power Supply

To energize the "Gamla" controller, use two alkaline batteries 1.5V size AA as seen in theimage. The current consumption of the controller on sleep mode is 30 microamperes. When the user connects to the controller, the current will rise up to 5 milliamps. Make sure that the battery polarity is in the right direction.

1. Device name-Enable to grant a friendly name to the controller.

2. Change password-Allows the user to change the Parity 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 Hours.

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 open 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 Bluetooth connection. In addition, it make a special sound when 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 the controller firmware.

18. Version- Display the smartphone application version.

Program Mode - By Valve

The "Gamla" includes two Program modes.

The first is called **By Valve**: Program mode By valve displays a list of all the irrigation valves on the Irrigation screen. (image 11)

Every valve has 4 start. (image 12)

The user can select between **Dosage mode per valve** and **Dosage mode per start.**

Image 12 describes the Dosage mode per start. The **By Valve** method enables both Parallel and Serial irrigation. (image 13)

Example 1, Parallel irrigation - all the six valves start at 01:00 and the irrigationduration is one hour. Example 2, Serial irrigation valve 1 starts at 18:00 for one hour, valve 2 startsat 19:00, valve 3 starts at 20:00 ... valve 6 starts at 23:00

Program mode - By Program (ABC)

The second **Program mode** called **By Program** or **ABC**:

This method includes three irrigation programs **A**, **B**, and **C**. There are four start times per **program**. (Image 14)

Each program includes all the irrigation valves with one water dosage per valve.

When a program start time arrives, it will open the first valve with a waterdosage, when it's finished it will open the next valve with a water dosage then the next valve, until all the valves with water dosage will finish irrigating. Image 15 describes the schedule of program A on the Calendar screen.Program A starts at 02:00 and opens valve A-1 (Valve 1 on program A). Valve A-2 will open after A-1 Finally, valve A-6 will open after valve 5

Failures screen

The Failures screen displays a list of Events and Failures that have been detected.

The list includes the Time, Date, and Description of the Event or Failure. For example, on May 1, 2020, at 11:18, the controller mentioned a "Start of water leakage detection" event.

At 11:19, "End of water leakage detection".

The user can clear the Failures list. To clear the list, tap the CLEAR HISTORY button.

Outstanding system alarms

The "Gamla" can detect Failures and special events and raises an appropriate Alarm.

The Failures and Events include Disconnected valve, No flow, Water leakage, Rain, and Low battery voltage.

The Alarms appear in three different places:

At the top of the application screen. The symbols are Rain, Water leakage, and Alarms. When the Alarm symbol appears, tap on it and see the alarms list (Image 18).

The application adds a special symbol to the problematic irrigation valve. When there is an exclamation mark on a valve, tap on it and the application will display the Alarms list of this irrigation valve (Image 19).

The FAILURES screen display events and alarms that have were detected in the past (Page 14, image 16).

Troubleshooting

Failure	Description	Suggested Solution
Cannot access to the	Forgot the parity code.	To get a new code, Contact your
controller		supplier.
Cannot access to the	Bad Bluetooth signal.	Make sure there is a line of sight. Install
controller		the controller in
		a high place.
The Irrigation programsdo not	There are start timeand	Make sure the rain sensor input is
start	irrigation days	shorted as describedin Page 4 Image 2.
The Irrigation programsdo not	There are start timeand	Navigate to Failures screen
start	irrigation days	and find out why ithappened.
The irrigation duration is		Make sure that the BUDGET
too long or too short.		is 100%
Irrigation programs start		Batteries' voltage is too low.
too early or too late		Replace the batteries

Downloading the "Gamla" Application

For Android users link from "Google Play": <u>https://play.google.com/store/apps/details?id=com."Gamla</u>"

For IOS users link from "App Store": <u>https://apps.apple.com/il/app/gamla/id1558721413</u>

You can find the application by type in the search "Gamla"

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