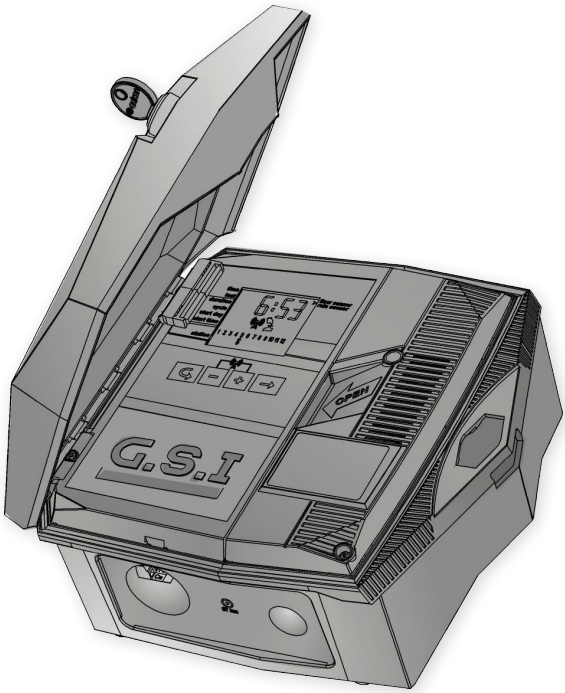
G.S.I
DC Controller

Installation & User Guide



January 2015

galcon

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1 Introduction

The Galcon G.S.I Controller commands the irrigation valves in the field. It is connected wirelessly to the G.S.I web application that enables programming the controller remotely.

Creating irrigation programs for the G.S.I Controller is primarily done from the G.S.I web application. However, you can also create a simple irrigation program directly on the controller even before setting up the web application. You can also perform manual irrigation directly from the controller.

This manual describes how to install the G.S.I Controller, test to verify successful installation, perform basic, initial irrigation programming, and perform manual valve irrigation. For information on using the G.S.I web application, see the G.S.I web application online help available at: www.gsi.galconc.com enter with your user name and password and click the Help icon.

G.S.I Controller Models

There are two models of the G.S.I Controller, based on the type of power supply used:

- DC unit (pre-installed with a Lithium pack 14.4 V) or rechargeable batteries.
- AC unit.

This document describes the DC unit type.

2 Setting Up the G.S.I Controller

Setting up the G.S.I Controller system includes the following tasks:

- Installing the Controller (see below)
- Establishing the Electrical Connections (see page 12)

Installing the Controller

The controller is designed to withstand outdoor installation conditions (at a rating of IP64). However it is preferable to provide additional protection from the climate by installing it in a sheltered position. Appropriate installation of the controller will ensure dependable operation throughout the years.

The controller can be installed in two ways:

- Installation on a wall or in a control cupboard.
- Installation on a metal pole of 1¼" to 1½" diameter.

Installing on a Wall or in a Control Cupboard

To install the controller on a wall or in a control cupboard:

1. Unlock and open the controller cover (Figure 1).
2. Swing out the control panel (Figure 2).

3. For the internal casing on the right side, unscrew the two screws and open the casing (Figure 3). Mount the controller to the wall or to the control cupboard through the marked holes (Figure 4 and Figure 5) with the aid of three screws. Close the screws by hand only.

4. Close the internal casing and fasten its screws.

5. Swing the control panel back into place.

6. Close and lock the controller cover.

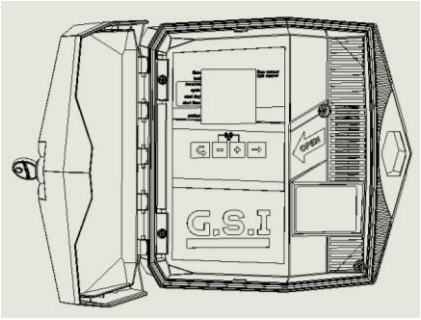


Figure 6: Open Controller Cover

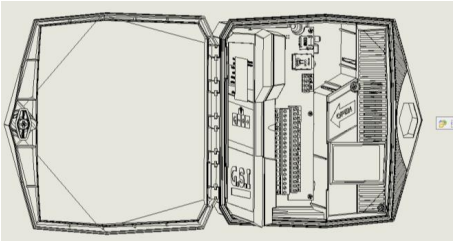
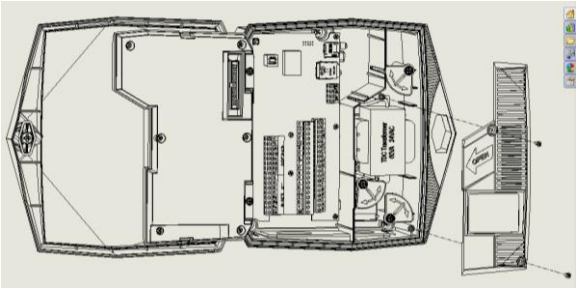


Figure 7: Control Panel Swung Outward



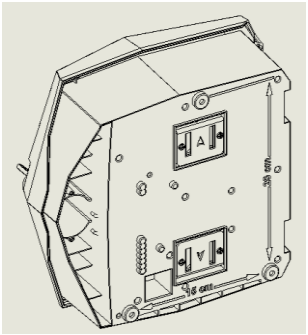


Figure 8: Opening the Internal Casing

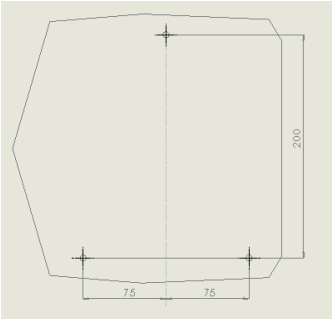


Figure 10: Mounting Screw Holes Dimensions

Figure 9: Mounting Screw Holes on Back of Unit

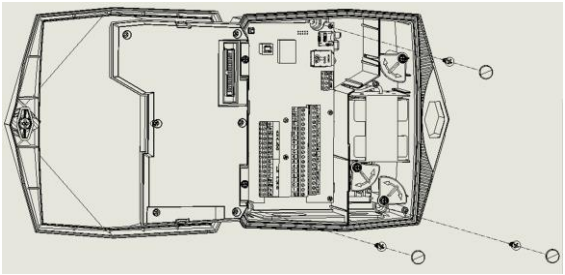


Figure 11: Inserting the Mounting Screws

Installing on a Pole

To install the controller on a pole:

1. While maintaining their current orientation in space, remove the screws and the two brackets on the back of the controller.

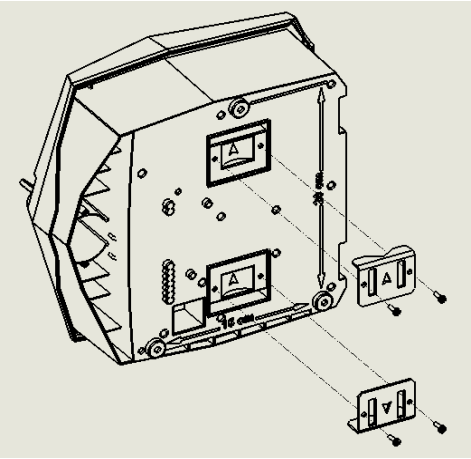


Figure 12: Removing the Pole Mounting Brackets

2. Rotate the upper bracket 180 degrees around its vertical axis, and reconnect it to the back of the controller using the supplied screws.

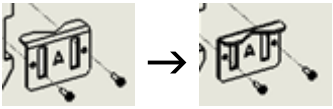


Figure 13: Upper Bracket Reorientation

3. Rotate the lower bracket 180 degrees around its horizontal axis. Then reconnect it to the back of the controller using the supplied screws.

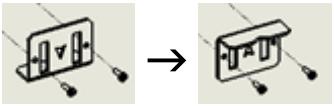


Figure 14: Lower Bracket Reorientation

Note: If the two brackets are correctly oriented, their small flaps will be facing outward and the arrow icons on both will point upwards (see Figure 15).

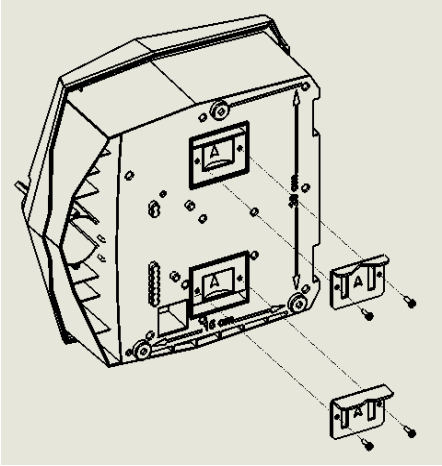


Figure 15: Correctly Oriented Pole Mounting Brackets

4. For each bracket, take one of the pole mounting bands and insert it through the two slots in the bracket.

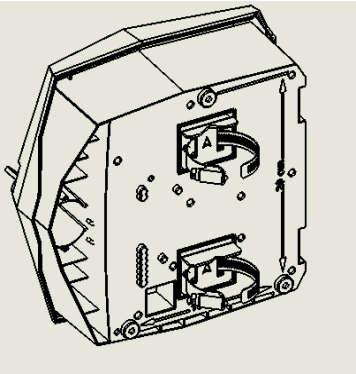


Figure 16: Pole Mounting Bands Inserted in Brackets

5. Position the unit on the pole and affix it in place by fastening the mounting bands around the pole.

Establishing the Electrical Connections

The G.S.I DC Controller has the following output connectors:

- 12 irrigation valves
- Master valve

The G.S.I Controller has the following inputs:

- Rain sensor
- Water meter
- Fertilizer meter

Connecting the Solenoids to the Controller (Outputs)

To connect the solenoids to the controller:

1. Insert the solenoid wires through the cable gland at the bottom of the controller.

2. Connect the wires to the corresponding connectors according to wire color, that is, connect the black wire to the connector labeled **B**, and the red wire to the connector labeled **R**.

3. Connect the wires coming from the Master valve to the connector marked **M**.

4. To connect a fertilizer, **always** connect the wires from the fertilizer to the connector marked **12**.

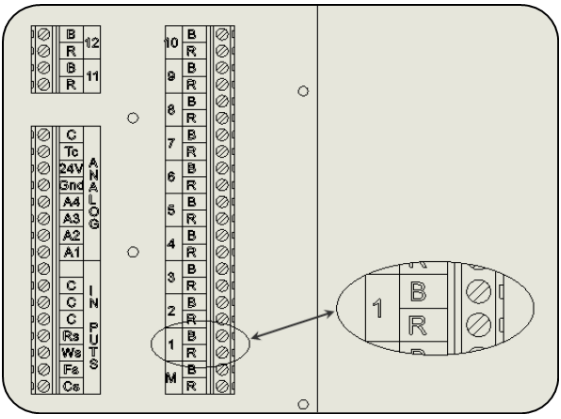


Figure 17: Output Connectors Labeled B and R

Note: It is highly recommended that you label the output wires, by function, for future reference.

Inserting Batteries

The G.S.I DC Controller comes pre-installed from Galcon with a pack of four Lithium batteries (3.6 V each battery and 14.4 V in total).

If you need to replace the Lithium pack, contact your Galcon distributor. **Alternatively**, if you are unable to find a Lithium pack of four 3.6 W batteries, you can insert four D-size alkaline batteries.

To insert batteries:

1. Unlock and open the controller cover (Figure 18).

2. Swing out the control panel (Figure 19).

3. For the internal casing on the right side, unscrew the two screws and open the casing (Figure 20).

4. Turn the battery compartment latch by 90 degrees and pull out the battery compartment (Figure 21).

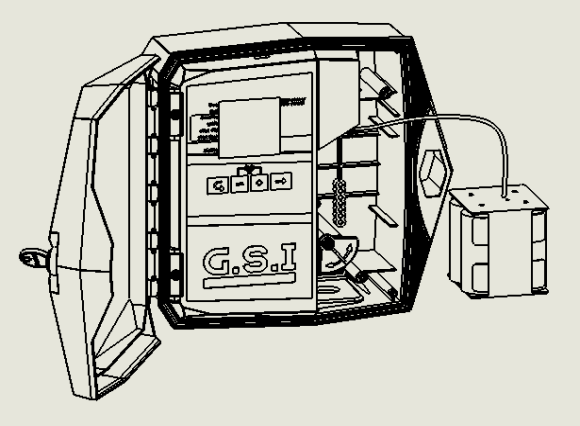


Figure 21: Battery Compartment Removed

5. Make sure that the wires of the battery compartment are well connected to the power inlet on the G.S.I card.

6. Insert four Lithium batteries 3.6 V size D. If you cannot obtain Lithium batteries, use four alkaline D-size batteries.

   Make sure to insert the batteries at the right direction.

7. Return the battery compartment to its place and lock it in place by turning the latch back until it clicks.

8. Close the internal casing and gently fasten its screws.

9. Swing the control panel back into place.

10. Close and lock the controller cover.

Pay Attention:

Do not use sharp objects to remove or insert batteries.

Do not mix between Lithium batteries and alkaline batteries.

Make sure the exposed tips of the battery compartment wires do not touch to avoid short circuit.

Safety Precautions:

Warning Danger! Mishandling of the batteries may cause explosion.

Replace batteries only with similar batteries or equivalent power.

Do not expose the batteries or the pack to direct sunlight, heat, or fire.

Do not use harmed or bruised batteries.

Do not get the batteries wet. Water can cause the batteries to overheat.

Dispose of the batteries only in battery recycling facilities.

Connecting a Rain Sensor, Flow Meter, and Fertilizer Meter

The GSI unit supports the following input devices:

- Rain sensor
- Flow meter (pulse type)
- Fertilizer meter

To connect the input wires:

- Rain sensor – Connect one of the rain sensor wires to the connector labeled **Rs**, and connect the second sensor wire to one of the connectors labeled **C** on the **INPUT** line. The polarity of the wires is not important.
- Flow meter – Connect one of the flow meter wires to the connector labeled **Ws**, and connect the second wire to one of the connectors labeled **C** on the **INPUT** line. The polarity of the wires is not important.
- Fertilizer meter – Connect one of the fertilizer meter wires to the connector labeled **Fs**, and connect the second wire to one of the connectors labeled **C** on the **INPUT** line.

See Figure 12 (example only. Different models may vary).

Note: You must define the rain sensor, flow meter, and fertilizer meter in the G.S.I web application before you can use them.

Inserting a SIM Card

The SIM card case is located on the upper left side of the controller board.

Note: Your SIM card definitions should already have been set by the manufacturer. If you are inserting an independent SIM card and you need to set its definitions yourself, refer to the document SIM Card Definitions provided by Galcon.

To insert a SIM card:

1. Unlock and open the controller cover (Figure 22).
2. Swing out the control panel (Figure 23).
3. Locate the SIM card case.

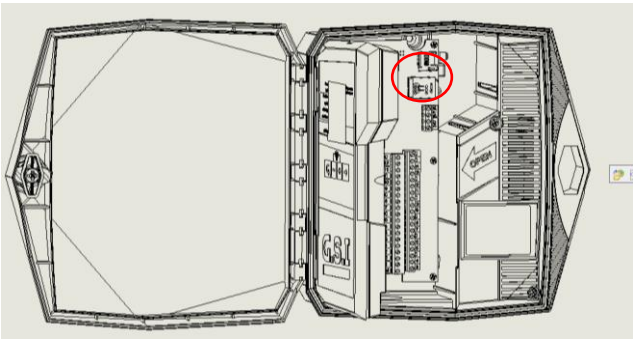


Figure 24: SIM Card Case

4. Slide the SIM card case cover to the side to open it, as indicated by the arrow labeled OPEN (see Figure 26).
5. Open the cover and slide the SIM card into the grooves located on the inner part of the case cover. Make sure that you have oriented the SIM card correctly.

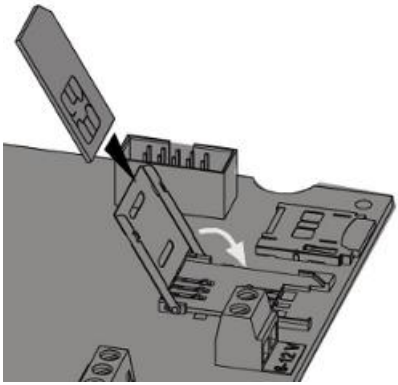


Figure 25: SIM Card Insertion Orientation

6. Close the case cover.

7. Hold the SIM card case cover down while you slide the cover to the side, as indicated by the arrow labeled LOCK (Figure 26).

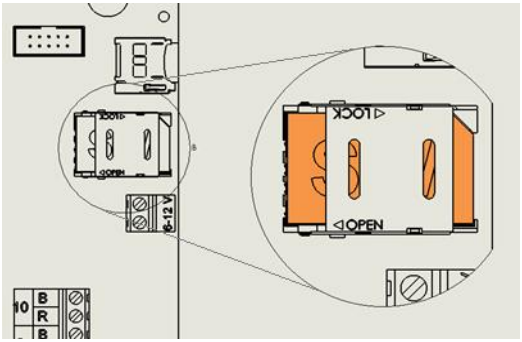


Figure 26: Correctly Inserted SIM Card

8. Swing the control panel back into place.

9. Close and lock the controller cover.

3 On-Site Controller Operation

The Galcon G.S.I Controller is designed to run irrigation programs created using the online G.S.I Web User Interface. In addition, however, the G.S.I Controller includes a control panel which enables basic, initial program creation.

The following sections outline how to set up the G.S.I Controller, create a basic irrigation program, and perform other irrigation and troubleshooting tasks.

Note: A program defined from the G.S.I Controller control panel continues to operate until you explicitly deactivate it from the G.S.I Web User Interface application, even if you upload a different program from the application.

Main Screen Features

You can view information and monitor irrigation processes directly from the G.S.I Controller Main screen.

Note: The G.S.I Controller is designed to save energy. By default, the screen turns off if no buttons have been pressed for two minutes. Before performing any procedure, press any button to activate the screen and view the Main screen.

The screen turning off does not affect the currently running program.

The following image displays the main screen icons and their meaning:

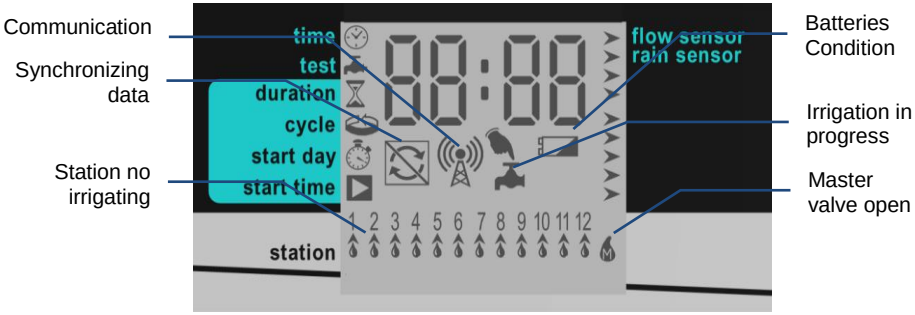


Figure 27: Main Screen

Press ➡ to cycle through the following information displays on the Main screen:

- Current time (hh:mm format)
- Flow value currently detected by the flow sensor (in m^3/hr).

Notes:

- Until the flow sensor is defined using the G.S.I Web User Interface, this screen does not display actual data.
- When there is no water flow, the flow value should be zero. If it is not, contact Galcon Support.

- Current voltage of the controller's battery
- Last four digits of the controller unit's 16-digit serial number
- Current firmware version number

The Main screen is the launching point for all other G.S.I. controller operations. It displays the following information depending on the circumstances:

- By default – Displays the current time (hh:mm format) and a list indicating the number of irrigation stations which are currently connected to the controller.
- During irrigation – Displays a ♦ icon below the station which is currently irrigating, as well as the amount of time remaining until that irrigation finishes.

  If more than one station is currently irrigating, the ♦ icon is displayed for each of them. In addition, a ⮝ icon is displayed below one of those stations and the time displayed applies for that station.

  Optionally press ➡ to cycle through the following information:

  - Current program number
  - Current water flow
  - Current time
  - Fertilizer meter
  - Batteries status

  Press ➡ again to return to the main irrigation screen which displays the current irrigation program countdown.

In addition, on the left side of the screen, an icon indicates which screen you are currently viewing according to the list of screens printed on the unit.

Establishing Communication with the Server

To conserve battery power, the DC unit is not constantly in communication with the server. Communication must be established to download programs or upload data logs. Establishing communication with the server automatically sets the controller clock.

Note: While communication is established, the controller's buttons are disabled.

To constantly communicate with the server (online) with the DC unit, it is possible to connect a solar panel or a transformer.

To establish communication:

- Press **+** and **−** simultaneously. The icon flashes on the screen while the unit synchronizes with the server. After the unit is synchronized, the and icons flash alternatively as long as the controller is in communication mode.

  When the upload/ download session is complete, the controller automatically ends communication and the controller display returns to the Main screen. The letter **R** appears alongside numbers representing reception percentage. 30% and up is considered good reception.

Figure 28: Reception Test Screen

To end communication manually:

- Press + and − simultaneously. Communication immediately ends. The controller display returns to the Main screen.

Manually Setting the Controller Clock

In order for the controller to correctly operate the irrigation system at the desired times, the controller clock must first be set correctly. The controller clock is automatically updated every time the controller performs communication with the server.

However, if necessary, you can also manually set the time.

To manually set the controller time:

1. Press and hold + until the hour and minutes values in the displayed time start running. This indicates that the clock is in time-setting mode. Set the current time using the + and − buttons.

2. Press ↵ to exit time-setting mode, and press ↵ repeatedly until the Main screen is displayed. Verify that the time you set is correctly displayed.

Testing Station Operation

The station operation test is intended to verify that all of the solenoids have been correctly installed. As you perform the test for each station, verify that water is flowing by checking the controller, the flow sensor, or even by visually inspecting the sprinklers to check that water is flowing from them.

To test station operation:

1. Press ↪ until the Test screen is displayed (Figure 29).

2. Press and hold + until the Test Sequence screen is displayed (Figure 30). The controller automatically begins operating the master station and each of the stations in sequence, for 60 seconds each. The currently operating station is marked with the icon, and the screen displays the number of seconds remaining for that station's operation test.

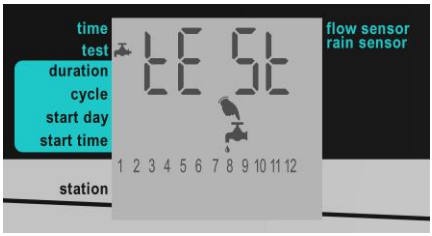


Figure 29: Test Screen

Figure 30: Test Sequence Screen

You can optionally extend or shorten a station operation test as follows:

- To extend or to shorten the operation test time of the current station, press + or − respectively.
- To close an operating station before its test time has elapsed and move to the next station, press ➡. The icon moves according to your selection.
- To end the test sequence completely, press + and ➡ simultaneously. The controller closes all the stations and displays the Main screen.

Figure 31: Stop Test Sequence Screen

To test the fertilizer:

Press mode ↵ and – at the same time to open the fertilizer for 15 seconds.

Figure 32: Fertilizer Test Screen

To test the Master valve:

1. Press ↵ until the Test screen is displayed (Figure 29).
2. Press – to open the Master valve for 30 seconds.

Creating an Irrigation Program

Notes:

When locally creating the irrigation program:

- Stations always run in the order of their numbers.
- You can set a different duration for each station. The cycle time, start day, and start time apply for the first station in the sequence. As one station's irrigation duration ends, the next station automatically begins.
- Locally created irrigation programs continue operating even after you upload a detailed program from the G.S.I Web User Interface – they will both operate simultaneously. If you want to end the locally created program, you must cancel it in the G.S.I controller.

Setting Irrigation Program Durations

Irrigation program duration, also known as the run time, can be defined for each station.

To set the irrigation program duration:

1. Press ↪ until the Duration screen is displayed (Figure 33).

2. Press ➡ to move the cursor and select the station for which you want to define the irrigation duration.

3. Press + and − to set the irrigation duration for the selected station.

   In Figure 33, the duration is set for 2 hours and 40 minutes for station 3. Duration of 0:00 sets the station to never open its valves (and therefore the sequence skips to the next station immediately).

Figure 33: Duration Screen Example

Setting the Irrigation Cycle Time

You can set an irrigation program to occur one time only, or to occur repeatedly according to a cycle.

When setting a recurring cycle, the cycle value you set defines the length of time (in days) which passes between irrigations program start times.

To set a one-time irrigation program:

1. Press ↵ until the Cycle screen appears (Figure 34). The message "ON CE" is displayed by default, indicating that the cycle pattern is set to one time only.

   If a cycle value other than "ON CE" was previously set for the system, press **–** repeatedly until the message "ON CE" appears.

2. Press ↵ to progress to the next screen, which automatically saves the change.

Figure 34: Cycle Screen

To set cyclical irrigation programs:

1. Press ↻ until the Cycle screen appears (Figure 34).

2. Press **+** once. The display changes from “ON CE” to “h 00”, indicating zero hours.

3. Press **+** and **−** to increase and decrease the number of hours.

Figure 35: Twelve Hour Cycle Setting Example

If you increase past 24 hours, the display changes to “d 01”, indicating one day. You can continue to press **+** to increase the number of days.

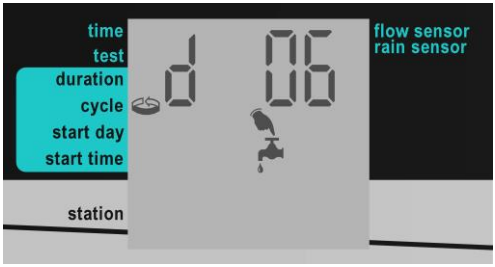


Figure 36: Six Day Cycle Setting Example

4. After setting the desired cycle length, press ↵ to progress to the next screen, which automatically saves the change.

Setting the Irrigation Start Day and Time

The start day is the number of days between the day you define an irrigation program (today) and the day the program actually begins operating. The start time is the time of day the program begins.

To set the start day and time:

1. From the Main screen, press ↵ until the Start Day screen appears (Figure 37).

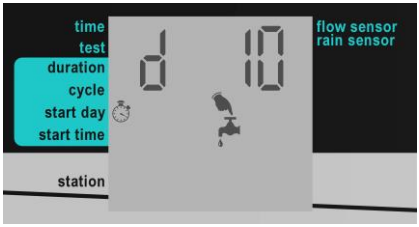


Figure 37: Start Day Screen Example

The default display is **d 00** which indicates zero days. If you set this value for the start day, the irrigation program will start on the current day at the defined start time. If that time has already

passed for the current day, the program starts at that time the next day.

2. Press + and − to increase and decrease the number of days. In Figure 37, the value is set to 10 days. The maximum supported value is 30 days.

3. Press ↵ to save the defined start day and continue to define the start time in the Start Time screen. The default setting is **OFF**, which means that the irrigation program never starts.

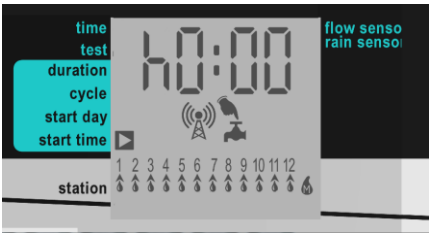


Figure 38: Start Time Screen

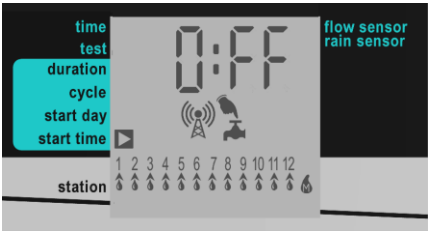


Figure 39: OFF Screen

4. Press + and − to set the start time. The possible range of values is 0:00 to 23:59. Alternatively, you can cycle through the time settings until reaching the **OPEN** option. Setting the start time to **OPEN** causes the irrigation cycle to start immediately after you save the start time setting (overriding the defined start day).

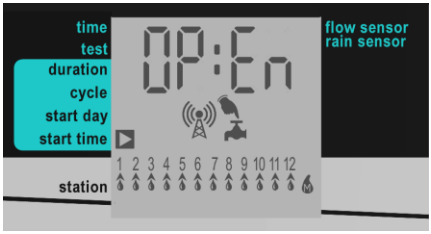


Figure 40: OPEN Screen – immediate cycle start

5. Press ↵ to progress to the next screen, which automatically saves the change.

Cancelling an Irrigation Program Start

To cancel an irrigation program start:

1. From the Main screen, press ↵ until the Start Time screen appears.

2. Press − until the start time is set to "Off". This defines that the irrigation program will never start.

3. Press ↵ to progress to the next screen, which automatically saves the change.

Initiating Manual Irrigation for a Station

In addition to defining an irrigation program, you can manually initiate any station to begin irrigating. The irrigation is performed for the amount of time defined for that station's duration in the irrigation program you created using the controller's direct interface. This is true even if you have already uploaded a different program from the G.S.I Web User Interface. If no duration has been defined, the duration used is one minute.

To initiate manual irrigation for a station:

1. From the Main screen, press ↻ until the Start Time screen appears.

2. Press ➡ to select a station.

3. Press ✚. The station immediately starts irrigating for the length of its defined duration.

Figure 41: Manual Irrigation Screen

4. Optionally, press ✚ or ━ to increase or decrease the duration of the current irrigation.

Resetting the Controller

If a technical problem occurs, you may want to reset your G.S.I Controller.

To reset the controller:

- Press the **Reset** button, located in the top-left corner of the G.S.I Controller's circuit board. The reset process clears the controller's RAM, and performs the flowing sequence of operations:

  a. All the screen icons appear simultaneously on the screen and gradually disappear after a few minutes.

  b. The screen displays the controller's serial number followed by the current firmware version on the controller.

  c. The screen displays the numbers of the valves connected to the controller. The controller starts closing the valves one by one; as each valve is closed, its number disappears from the screen and the CL OS message is displayed. Optionally press ➡ to abort this process and skip to the next operation.

  d. The controller establishes communication with the server; the icon flashes on the screen as long as the controller is in communication mode.

  e. The controller ends communication and resumes normal operation.

Note: Resetting the controller does not delete or cancel the locally created irrigation program.

Pausing and Resuming Irrigation from the Controller

The controller enables you to pause irrigation. While a pause is in effect, all irrigation programs currently in progress are paused, and any new irrigation programs which were scheduled to start are not started.

While irrigation is paused in this way, you can still perform station operation tests and establish communication with the server.

When the pause is ended and irrigation is resumed, all irrigation programs continue according to the following rules:

- While paused, programs are delayed until midnight. If the pause has ended before midnight, the programs resume where they left off.
- If the system pause ended after midnight, the programs are resumed according to that latter time instead. If an irrigation program was scheduled to end during that time, it is not resumed after the pause ends. Similarly, a new irrigation program scheduled to begin during the paused period does not start and waits for its next schedule.

To pause an irrigation program:

- Press **–** continuously until the message “PA US” is displayed on the screen. This indicates that the irrigation is now paused. The “PA US” message flashes on the screen until you resume irrigation.

To resume irrigation:

- Press **–** continuously until the Main screen is displayed.

Fault Indication

If a fault occurs in the system, the controller screen displays the message “FLt” or “FL” and a fault number.

Fault Numbers and Definitions

Fault Indication Message	Description
FLt 0	Low flow.
FLt 1	High flow.
FLt 2	No water flow.
FLt 3	Unexpected flow start.
Flt 4	No fertilizer flow.
Flt 5	Unexpected fertilizer flow – unit suspended!
Flt 7	Low battery voltage.
Flt 8	Empty batteries.
FLt 9	Capacitor charging.
FL 10	Solenoid/wiring.
FL 13	Controller memory.

To remove a fault message from the screen:

Press **–** and ➡ simultaneously.

Locking and Unlocking the Screen

The G.S.I Controller enables you to lock the screen, preventing people from editing the unit's programming until the screen is unlocked.

To lock the screen:

- Press ↵, ✚ and ➡ at the same time. The screen is locked and displays "= = = =".

To unlock the screen:

- Press ↵, ✚ and ➡ at the same time. The screen is unlocked and the unit can be programmed.

4 Technical Specifications

- Outputs:
  - 12 field valves, 1 fertilizer (**out of** the 12 valves), 1 master
  - Operates 2 wires DC latching solenoids only
  - Output pulse voltage 17 V DC
  - Pulse length 200 milliseconds
- Inputs:
  - Rain switch Normally Open or Normally Closed
  - Pulse water meter
  - Pulse fertilizer meter
- Power source :
  - 4 X 3.6 V Lithium batteries
  - 4 X 1.5 V D-size batteries
  - 7.2 V rechargeable battery
  - 12 V external battery optional
- Cellular modem: Quad band GSM modem integrated (GPRS class 10) for operating in all GSM operators globally.
- Dimensions: 10.5x24.5x25.5 cm
- Operating ambient temperature: -10°C to 60°C, 14°F to 140°F
- Maximum wire run from G.S.I DC controller to Galcon solenoids:

DC Wire Run Lengths

Wire Size	Maximum Distance	
AWG	Feet	Meters
18	425	130
16	700	215
14	1110	340
12	1700	520

LIMITED WARRANTY CERTIFICATE AND TERMS OF SERVICE FOR "GSI"

1. Galcon sells the "GSI" irrigation controller ("the product") and provide associated product software ("the Product Software") and certain services ("the Services") through Galcon's Web Site (gsi.galconc.com) ("the Site"). This Limited Warranty Certificate and Terms of service ("these Terms") constitute a legal agreement between Galcon and the original purchaser of the Product ("the Customer"), and shall govern the Customer's access and use of the Services and the Product. By accessing the Site and/or by using the Services and/or the Product, the Customer agrees that he has read, understood, accept and agree to be bound by these Terms. If the Customer does not agree with any of the provisions of these Terms, the Customer must not access or use the Services and/or the Product.
2. Galcon shall, for a limited period of 24 months from the retail purchase date of the original (first) purchaser ("the Warranty Period"), provide limited warranty for the Product(s) and the Services, as provided for and subject to the provisions and limitations of these Terms. Without derogating from the foregoing, Galcon does not take any obligation to provide the Services (or any part therefrom) beyond the Warranty Period.
3. Galcon's Warranty for the Product and/or the Services only extends to the Customer who, upon requesting warranty service, must present Galcon with a valid and dully signed contract with Galcon (or any of its authorized dealers) together with a valid purchase receipt. Failure to produce the said documentation will result in the request for warranty being null and void.
4. Galcon warrants to the Customer that the Product shall materially conform to the description in Galcon's documentation and shall be free from defects in material and workmanship. Accordingly, Customer's sole and exclusive remedy under this warranty is the repair or – to Galcon's sole discretion – the replacement of the Product or any part\s according to the terms of this Warranty, and no other remedy shall be available. Therefore, if - within the Warranty Period - the Product is proven to be defective by reason of faulty workmanship or materials by Galcon, Galcon undertakes, with reasonable promptness, to have the defective Product (or any part/s thereof) repaired, or at Galcon's discretion, replaced; All subject to the terms and conditions of these Terms.
5. Galcon's warranty for the Product and/or the Services and/or otherwise, shall not apply to any of the following: (i) any conduct (by act or omission) not by Galcon, including any misuse/abuse of any Product and/or the Services (or part/s thereof), and/or any failure to install and/or use any Product in full compliance with Galcon's instructions; (ii) other systems/components/devices/technologies and/or the integration/interface thereof with any Product.; (iii) any part/component which has been included/installed in any Product not at Galcon's approval and/or other than by Galcon; (iv) any actual or attempted change/repair/interference of/with any Product (including any use/handling of, and/or interference/dealing with, any code of any software included/used in the Product) other than by Galcon; (v) any data/information/content which has been inserted/included in a Product and/or the Services; (vi) malfunction or damage resulting from accidents, which occur during transit and/or handling, and/or malfunction or damage due to fire, earthquake, flood, lightning and/or any other external disaster; (vii) unforeseen accidents, wear and tear, or any other external factors beyond Galcon's reasonable control, or to any Product installed, repaired, adjusted, rebuilt, modified, changed or converted by any person (including the Customer) other than Galcon;
6. In addition and without derogating from the provisions of these Terms, Galcon's warranty and the Customer's rights to use/access the Services and/or the Site, is conditioned upon the all of following Customer's undertakings taking place: (i) Customer's operating and maintaining the Product and/or the Services in accordance with Galcon's instructions; (ii) Customer's not being in default of any payment obligation to the Galcon (or its authorized dealer, as relevant); (iii) the Customer shall not license, sell, rent, lease, transfer, assign, distribute, host, or otherwise commercially exploit the Services; (iv) the Customer shall not to modify, make derivative works of, disassemble, reverse compile, or reverse engineer any part of the Services; (v) the Customer shall not to access the Services and/or the Site in order to build a similar or competitive service; (vi) except as expressly stated herein, no part of the Services may be copied, reproduced, distributed, republished, downloaded, displayed, posted, or transmitted in any form or by any means; (vii) the Customer shall not upload, transmit, or distribute any computer viruses, worms, or any software intended to damage or alter a computer or communication network, computer, handheld mobile device, data, the Services, the Product, the Product Software, or any other system, device or property; (viii) the Customer shall not interfere with, disrupt, or attempt to gain unauthorized access to, the Site, the servers or networks connected to the Services or violate the regulations, policies, or procedures of such networks; (ix) the Customer shall not access (or attempt to access) any of the Services by means other than through the interface that is provided by Galcon; (x) the Customer shall not remove, obscure or alter any proprietary rights notices (including copyrights and trademark notices) which may be contained in or displayed in connection with the Services; (xi) any use or access by anyone under the age of 18 is prohibited.
7. Subject to these Terms, as well as additional guidelines, terms, or rules referred to in this document and incorporated by reference into these Terms, Galcon grants the Customer a non-transferable, non-exclusive, limited right (without the right to sublicense) to use the Services for the Warranty Period only and solely for the purpose of controlling and monitoring the Product installed on Customer's property.
8. Galcon does not give any warranty or guarantee whatsoever in respect of any Product or Services (or any part/s thereof) which has not been manufactured and distributed by Galcon and which has not been purchased from Galcon or any of its authorized dealers, whether such products are branded with any trademarks similar to any trademark belonging to or used by Galcon.
9. After replacement or repair of the Product, the Warranty for the new or repaired Product shall be valid only for the non-expired period of the original Warranty Period. Any defective Products or part/s, which has been replaced, shall become Galcon's property.
10. Galcon reserves the right to charge the Customer if any warranty service is requested and carried out but no fault is found in the Product or if such defect/fault is not under Galcon's Warranty.
11. Notwithstanding anything to the contrary, Galcon shall not be responsible and/or liable, under any circumstances and in any way, for any loss, damage, costs, expenses, expenditures, responsibility and/or liability (including of Customer and/or any third party) – including (without limitation) direct and/or indirect (including incidental and/or special and/or consequential), however arising, including in respect of damages to or loss of property and/or equipment, loss of profit, loss of use, loss of revenue or damages to business or reputation, whether or not based on breach of contract, tort (including negligence), product liability or otherwise - arising from the performance or non-performance of any aspect of the Services and/or the Product and/or access to Site or any part thereof; All of the above, whether or not Galcon and/or the Customer shall have been made aware of the possibility of such loss.
12. In any event, any liability which Galcon may have in connection with the Product and/or the Services and/or access to Site and/or these Terms, including (without limitation) in connection with and/or resulting from the Product (or any part thereof) and the use thereof and/or the Services, shall be limited to a total amount (for all damages, claims and causes of action in the aggregate) equal to the consideration actually received by Galcon from the Customer for the Product. The limitations shall apply whether the liability is based on contract, tort, strict liability or any other theory.

13. The Customer warrants and agrees, that Galcon owns and shall continue to own all title, rights and other interests (including all intellectual property rights) in connection with the Product, the Site, the Services, and all content available through the Site, including any and all trademarks, service marks, and logos contained therein. The provision of the Product, the Product Software, and/or the Services does not transfer to the Customer or any third party any rights, title, or interest in or to such intellectual property rights. The Customer may not copy, further develop, reproduce, republish, modify, alter, download, post, broadcast, transmit, or otherwise any material made available in the Site or the Services.
14. The customer creates data when he uses the service that is related to programming the product. The customer hereby provides Galcon with a license to use, upload, display, copy, manipulate, and store any data that the Customer shall create/insert when he uses the Services and/or the Product. The customer acknowledges and agrees that he shall always remain solely responsible and liable for its said data.
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16. The Customer warrants and agrees, that the Provision of Services is dependent upon the receipt of information from a variety of third party sources, including with respect to weather data and therefore cannot guarantee the accuracy of such information. The site and services are provided on an AS IS and on available basis without warranties of any kind from Galcon. The use of the Site, the Product and/or the Services is at the Customer sole risk.
17. Galcon is not responsible for any problems or technical malfunction of any telephone network or lines, wireless network of any kind (Wifi, Cellular, Bluetooth or other) computer online systems, servers or providers, computer equipment, or software due to technical problems or traffic congestion on the internet or on the Services and/or the Site. Under no circumstances shall Galcon be responsible for any loss or damage resulting from use of the Product, Site and/or the Services.
18. Galcon may suspend or terminate the Services and/or the Customer's account at any time upon written notice to the Customer that the Customer breaches these Terms and, to the extent that the breach can be cured, the Customer does not cure that breach within 14 (fourteen) days.
19. This Warranty and the remedies set forth herein are exclusive and in lieu of all other warranties, remedies and conditions, whether oral, written, statutory, express or implied. Galcon specifically disclaims any and all statutory or implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose and warranties against hidden or latent defects.
20. The Customer shall be solely responsible for the selection, use, efficiency and suitability of the Product(s).
21. The provisions of this Limited Warranty Certificate shall be interpreted and governed, solely and exclusively, pursuant to the laws of the State of Israel, and no other law shall apply. Any and all legal actions shall be litigated within the jurisdiction of the courts of Israel, and no other jurisdiction shall apply.

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