

# **Autodrip**

**For Drip Irrigation**



**LOW COST  
AUTOMATION  
KIT FOR  
DRIP  
IRRIGATION**

-  Solenoid Valve
-  Pump Start Relay
-  Flow Sensor
-  Rain Sensor
-  Water Proof Connectors

## **Autodrip** 4 Station Controller

Welcome to the world of Smart Irrigation!

This Manual explains in easy steps the setting up of your Autodrip Controller. For convenience, it has been divided into two parts namely :

1. **Initial Set-up:** A one-time setting of the Date & Time and the Pump programming (Page 2 & 3).
2. **Operation Mode:** This explains the entire Irrigation & Fertigation process (Page 4 & 5).

## Initial Set-up

Welcome/Starting Screen		
Screen1	AUTOMAT INDUSTRIES	Welcome screen
Screen 2	AUTODRIP -45 CONTROLLER	Product name display
Date & Time Setting (One time Setting)		
Step	Picture	Remark
Step - 1	PROGRAMMING NOT DONE	Press Menu/Enter & Up Button Simultaneously to Select the Programming Mode.
Step - 2	PLEASE WAIT...	Please Wait For Programming Mode
Step - 3	SELECT MODE: :DATE & TIME	Press Up Button and Select the DATE AND TIME Mode by pressing Menu/Enter button.
Step - 4	SET YEAR: 22	Press Up & Down Button to Set the Current Year then press Menu/Enter button.
Step - 5	SET MONTH: JANUARY	Press Up & Down Button to Set the Current Month then press Menu/Enter button.
Step - 6	SET DATE: 3	Press Up & Down Button to Set the Current Date then press Menu/Enter button.
Step - 7	SET TIME: 0 HRS	Press Up & Down Button to Set the Current Time (Hours) then press Menu/Enter button.
Step - 8	SET TIME: 0 MINS	Press Up & Down Button to Set the Current Time (Minutes) then press Menu/Enter button.
Step - 9	SET DAY: MONDAY	Press Up & Down Button to Set the Current Day then press Menu/Enter button to Save the Time & Date Setting.
Step - 10	SAVING DATA DATA SAVED	Wait for a Moment while Data is Saving

## Pump Programming (One time Setting)

<b>Step - 1</b>	PROGRAMMING NOT DONE	Press Menu/Enter & Up Button Simultaneously to Select the Programming Mode.
<b>Step - 2</b>	PLEASE WAIT...	Please Wait For Programming Mode
<b>Step - 3</b>	SELECT MODE: : PROGRAMMING	Press Up Button to Select the Pump Setting Mode by Pressing Menu/Enter Button.
<b>Step - 4</b>	SELECT MODE: : PUMP SETTING	Press Up and Down Button in the Pump Setting and Select Pump Status.
<b>Step - 5</b>	PUMP ON (Y/N)? STATUS: YES	Select YES to Run the Pump during the program otherwise select No .
<b>Step - 6</b>	PUMP INIT TIME : 0 SECS	Press Up & Down Button to Feed the Time for pump initiation (in Seconds) then press Menu/Enter button for save the data.
<b>Step - 7</b>	RECHARGING TIME: 00 HRS:00 MINS	Press Up & Down Button to Feed the Time for Pump Recharging (in Hours & Minutes) then press Menu/Enter button for save the data.
<b>Step - 8</b>	SAVING DATA DATA SAVED	Wait for a Moment while Data is Saving

**Note:** Whenever any program starts, the Pump initiation is active for duration programmed as above. In case flow sensor sense the water flow through it, the irrigation programm will continue. if the flow sensor does not sense any water flow after pump initiation duration, the controller will give the command to hold the program and allow the pump to go in rechargable mode. This process will be continued 2 times and even then if there is no flow sensed by flow sensor, The Controller will stop the Pump and will show the display of low flow RT on the LCD Screen.

SYS STOP      WED  
LOW FLOW 2ND   RT



## Operation Mode

Irrigation Programming		
Step - 1	PROGRAMMING NOT DONE	Press Menu/Enter & Up Button simultaneously to Select the Programming Mode.
Step - 2	PLEASE WAIT...	Please Wait For Programming Mode
Step - 3	SELECT MODE: : PROGRAMMING	Press Menu/Enter to Select the Programming Mode.
Step - 4	VALID FROM TODAY YES	Select YES for considering Irrigation Programming from Today otherwise Select NO.
Step - 5	PGM-A / B / EXIT SELECT: PGM-A	Select Program A or B by Press Up & Down Then Press Menu/Enter.
Step - 6	MODE SELECTION: IRRIGATION	Select the IRRIGATION MODE by Press Up & Down Button.
Step - 7	SOLENOID V1 DUR: 01 HRS:00 MINS	Press Up & Down Button to Feed the Time for Solenoid Valve in Hours then Press Menu/Enter.
Step - 8	SOLENOID V1 DUR: 01 HRS:10 MINS	Press Up & Down Button to Feed the Time for Solenoid Valve in Minutes then Press Menu/Enter. & Repeat the Same for other Valves (Valve no 2 to Valve no 4)
Step - 9	START1 15:46 00 HRS:00 MINS	Press Up & Down Button to Feed the Start Time 1 of Irrigation and Press Menu/Enter to Save.
Step - 10	START2 15:46 00 HRS:01 MINS	Press Up & Down Button to Feed the Start Time 2 of Irrigation and Press Menu/Enter to Save. (Note: Valves will run for same duration during Start Time 1 and Start Time 2 if programmed)
Step - 11	WKDAYS:ALL (Y/N) STATUS: YES	In Case All Days in Week (Daily) Irrigation Required Please Select Status YES & Press Menu/Enter.
Step - 12	SEL WEEKDAY:MON STATUS: NO	In Case any Alternate days in week Irrigation required Please Select NO and then select Each day Status by YES & NO by Press Up & Down Button
Step - 13	PGM-A / B / EXIT SELECT: PGM-A	Select PGM B for Programming and repeat the above programming steps as stated for PGM A. Start Time of Program PGM B should be greater than Program PGM B
Step - 14	ERR START CNF: RE-ENTER ST CNF:	On getting such Error Display... Please Check for Start Time ST1 and ST2 for PGM A & PGM B.
Step - 15	PGM-A / B / EXIT SELECT: EXIT	After Saving Program select Exit by pressing Up or Down button and press Menu/Enter button to Exit from Menu .
Step - 16	SAVING DATA DATA SAVED	Wait for a Moment while Data is Saving

Fertigation Programming		
Step - 1	PROGRAMMING NOT DONE	Press Menu/Enter & Up Button simultaneously to Select the Programming Mode.
Step - 2	PLEASE WAIT...	Please Wait For Programming Mode
Step - 3	SELECT MODE: : PROGRAMMING	Press Menu/Enter to Select the Programming Mode.
Step - 4	MODE SELECTION: FERTIGATION	Then Press Up & Down Button to Select Fertigation Mode by Menu/Enter Button.
Step - 5	SOLENOID VI DUR: 00 HRS:00 MINS	Press Up & Down Button to Feed the Start Time 1 of Fertigation and Press Menu/Enter to Save.
Step - 6	VALVE 1 DUR-0:01 PREWET DUR 00:00	Feed Prewet Time in Every Valve in FERTIGATION MODE by Press Up & Down Button then Press Menu/Enter.
Step - 7	VALVE 1 DUR-0:01 FERTG DUR 00:00	Press Up & Down Button to Feed the Duration of Fertigation for every Solenoid Valve 1, 2, 3, 4 (in Hours & Minutes).
Step - 8	VALVE 1 DUR-0:01 FLUSH DUR 00:00	Press Up & Down Button to Feed the Duration of Flushing after Fertigation for every Solenoid Valve 1, 2, 3, 4 (in Hours & Minutes).
Step - 9	PGM-A / B / EXIT SELECT: EXIT	After Saving Program select Exit by pressing Up or Down button and press Menu/Enter button to Exit from Menu .
Step - 10	SAVING DATA DATA SAVED	Wait for a Moment while Data is Saving
<b>Pre Wet Time:</b>	Duration time of irrigation before the start of fertigation time	
<b>Fertigation Duration :</b>	Duration for which fertilizer to be applied	
<b>Flushing Time :</b>	Time to flush the lateral to remove residual of fertilizer if any after Fertigation process.	
<b>Note :</b> Prewet Time + Fertigation Time + Flushing Time = Valve duration of particular valve in Fertigation Mode		

To Clear/Delete the Existing Program		
Step - 1	SELECT MODE: : PROGRAMMING	Press Menu/Enter & Up Button Simultaneously to Select the Programming Mode.
Step - 2	SELECT MODE: : CLEAR PROGRAM	Press Up Button and Select the CLEAR PROGRAM & Press the Menu/Enter Button.
Step - 3	DELETING DATA PLEASE WAIT...	Deleting Data Please Wait.
Step - 4	PROGRAM CLEARED...	Program Cleared.
Display of Pending Program of Previous Day		
	V2 B ST2 10:26 PENDG IRRG **TUE	In case the irrigation program scheduled for particular day is not being completed due to erratic electricity, then program will continue on next day by showing PENDG IRRG **
Display of Rain Shut off		
	DATE: 16/03/2022 RAIN SHUT OFF	In case of rain exceeding 4 - 5 mm at Field, the system will automatically stop and RAIN SHUT OFF will be displayed.

## Troubleshooting

Problem	Possible Cause	Solutions
<b>Irrigation system is not functioning</b>	1. No power supply.	1.a) Restore the power supply. b) Check the Fuse and if blown off, replace with new one. c) Check the Adopter supply to controller.
	2. In case, input supply is OK; check the display on the screen by pressing/touching any key:	
	a) If Rechargeable Time 1 Or Rechargeable Time 2 is displayed	a) Check the water level in reservoir or wait for recharging time programmed during pump programming steps.
	b) If LOW FLOW RT2 is displayed	b) Well is not recharged properly even after pump has gone in recharging for 2 times. RESET the Programme by pressing RESET key and Re program the controller and check again. If it still not initiates the program contact the nearest approved service dealer.
	c) Rain Shut OFF	c) Check the water level in rain sensor cup. If the cup is filled with water, empty the cup.
	d) In the event of 2-phase supply, pump will not operate due to single phase preventer.	d) Pump will operate as soon as 3-phase supply is restored.

<b>Problem</b>	<b>Possible Cause</b>	<b>Solutions</b>
<b>No Display on LCD Screen</b>	1. Controller in Sleep Mode.	1. Press any Key and Display will turn on with current status.
	2. The battery is drained due to long power outage.	2. Once electricity restores, display will be there and battery will also start recharging. For full battery recharging, it requires 4-5 hrs continuous electric supply
<b>Program is not functioning</b>	1. Error in Programming	1. Repeat the programming steps
	2. After Programming EXIT button may not be selected.	2. Always select EXIT in programming step and press Menu/Enter button for Saving the programmed data.
	3. Display hung-up	3. Press Back & Exit button to refresh the Controller
<b>Solenoid Valve is not functioning</b>	1. Wire connections may not be proper.	1. Ensure proper connections at Controller as well as Solenoid coil end.
	2. The supply of electricity at coil.	2. The supply of electricity at coil should be 22-24 VAC.
	3. No Wire continuity due to any external damage to cables.	3. Check and fix any wire breakage.
	4. Length of cable between controller and solenoid valve exceeds the prescribed length for that particular size of wire and results in more voltage drop.	4. Replace the cable with higher size to reduce voltage drop.
<b>Solenoid Valves remain always open</b>	Solenoid Valve Manual bleed will be in ON mode	Turn the Manual bleed lever in OFF position.
	Solenoid Coil is not properly tightened	Twist the latch gently till last thread.
	Stone or Debris stuck under diaphragm of valve	Switch Off/Stop the system and service the valve by opening it and remove the stone or debris stuck.



## Our range of Smart irrigation products:



Sand Media Filter



Automatic Screen Filter



Control Valves



Automation System