

Stop Watering

1. Set the *Function Switch* to OFF. After 3 seconds, all watering stops .

- Suspends but does not erase programs.
- The display flashes “OFF”.

Note: Watering remains off in this *Function Switch* position. Set the *Function Switch* to RUN to resume all automatic schedules.

What the Display Means

Information Displayed When Changing Settings

With the *Function Switch* set to SET PROGRAM, each Dial position shows:

Time

Displays the current time in hours and minutes, and indicates AM or PM.



Date

Displays the current date as year, month (JAN - DEC), or date.



Valve Run Times

The selected watering time is displayed in minutes, e.g., 10 MIN, or in hours, e.g., 1.9 HR (the same as 1 hour and 54 minutes). If no watering time is programmed for the valve, “OFF” is displayed.



Start Times

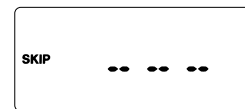
The selected start time is displayed in hours, minutes and AM/PM. If a start time has not been selected or is removed, “OFF” is displayed.



What the Display Means continued...

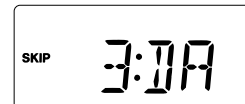
Daily Schedule

Each day of the week dial position displays either “ON” or “OFF”. If “SKIP DAYS” has been selected, the word “SKIP” followed by three dashes is displayed for each of the 7 watering day settings. If an odd or even schedule is in effect, “ODD” or “EVN” is displayed.



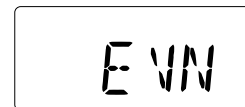
Skip Days Schedule

“Skip” is displayed along with a number from 01 to 15 which establishes the watering day interval. When NEXT is pressed, the current DAY within the selected interval is displayed with “:DA”. This number automatically increases by one each day. A watering day occurs when the DAY and SKIP numbers are equal. If a DAILY schedule has been selected, “OFF” is displayed.



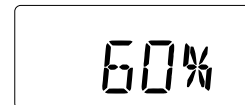
Odd/Even Schedule

“ODD” or “EVN” is displayed. If a DAILY or a SKIP DAYS schedule has been selected, “OFF” is displayed.



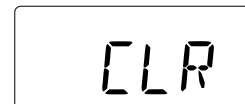
% Water Budget

The current water budget percentage is displayed for the selected program. If water budget has been set to 0%, “OFF” flashes to alert you that no watering will occur.



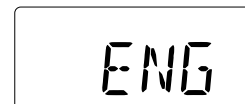
Special Features: Clear a Program

“CLR” is displayed. When the clear process is started, as a safeguard, “OK?” is displayed. Pressing the + or - button clears the program and “CLR” is displayed again.



Special Features: Language

The available languages are displayed in order. English, Spanish, French, German and Italian, are displayed as “ENG”, “ESP”, “FRA”, “DEU” and “ITA”.



What the Display Means continued...

Information Displayed When Operating

With the *Function Switch* set to RUN, each *Dial* setting shows:

No Program Running – Automatic Mode

The current time with a flashing colon (:) is displayed. If the entire display is flashing, the controller has just been plugged in or there has been a power outage and no battery power was available during the outage. To stop the flashing, press the + or - *Buttons*. If the colon is steady and not flashing, the controller is using battery power.

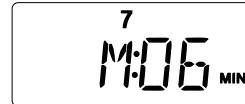


Program Running – Automatic Mode or Manual Program Start shows the current time and all active valves running. Turn the *Dial* to an active valve to display the Program which activated the valve, and the remaining run time. If you turn the *Dial* to a valve that is not running, it will show “OFF” even though time may be scheduled on a program.

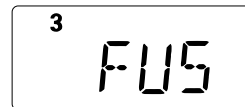


Manual Valve Running

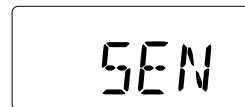
With the *Dial* pointing to the appropriate valve, the display shows “M” for MANUAL, the valve number, and the time remaining for the valve to run.



Short Circuit – Your Rain Dial Plus controller will detect a short or an excessive total electrical load, automatically advancing to the next valve with scheduled run time. When the cycle is over, the display flashes “FUS” and shows the valve number.

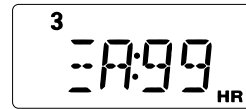


Rain Sensor – If automatic operation is suspended by the rain sensor, “SEN” will flash on the display in all dial positions. The “SEN” display can be disabled for two minutes by pressing the + or - Button, however this will not allow automatic watering operation. Manual operation is not inhibited by the rain sensor. When the sensor is no longer activated and automatic operation has resumed, “SEN” will no longer be displayed.



What the Display Means continued...

Water Budget Adjustments – The run time you set is multiplied by the Water Budget value. If this exceeds 9.9 hours, the display shows one, two, or three bars before the program letter to advise that more time, up to 11.8 hours, is scheduled but cannot be displayed.





Documenting Your Watering Schedules

Complete the watering schedule details found on the back side of the Quick Reference Guide card hanging inside the door of your Rain Dial Plus controller. Update the schedule and chart whenever you make changes to your landscaping that will affect the amount of water you wish to apply.

Testing for Valve Short Circuits

Rain Dial Plus controllers can detect and identify any valve with an electrical wiring short circuit.

To test a valve:

1. Set the Function Switch to **Run** .
2. Turn the DIAL to the valve number you want to test.
3. Press the +/- Buttons to display one or two minutes of run time.
4. Press the **Semi-Auto Manual**  Button to start. If the valve does not begin to operate and the display flashes “FUS”, that particular valve has an electrical short, or other problem. The valve solenoid and wire connections should be inspected.
5. To clear the display, press the + or - Button.

⚠ CAUTION: Do not test the valves by touching the wire ends to the terminal screws. Serious controller damage may result.






Troubleshooting the System

PROBLEM	POSSIBLE CAUSE	CORRECTION
Some valves don't operate	Solenoid defective Loose wire connection.	Test & replace as required. Secure wire connections. Check for continuity.
No valves operate	<i>Function Switch</i> Off Ⓔ.	Set switch to Run Ⓕ.
	Solenoid defective.	Test & replace as required.
	Loose wire connection.	Secure wire connections.
	Day set to "OFF."	Check current day in display. Set dial to correct day and check setting.
	"SKIP DAYS" incorrectly set.	Check and reprogram. See pages 14 & 15.
Watering at wrong times	"Start Times" set to "OFF."	Reprogram "Start Times".
	"Current Time" of day incorrectly set.	Check and reset "Current Time", note AM or PM.
Program values won't display	"Start Times" incorrectly set.	Check & reset all "Start Times". See page 14.
	Wrong function setting.	<i>Function Switch</i> must be in Run Ⓕ position.
Controller is in watering cycle.	Controller is in watering cycle.	Check or change program with <i>Function Switch</i> in Set Program Ⓖ position.
	Battery is weak or missing.	Remove AC power and battery for 1 minute. Replace battery, restore power and repeat steps on page 14.
Incorrect display following a power outage after being plugged in.	Battery is weak or missing.	Remove AC power and battery for 1 minute. Replace battery, restore power and repeat steps on page 14.
Display blank	No power.	Check circuit breaker panel.
	Transformer unplugged.	Plug in transformer.
	2-amp fuse blown.	Replace fuse.



Troubleshooting the System continued...

PROBLEM	POSSIBLE CAUSE	CORRECTION
Waters on wrong days	Weekly or "SKIP DAYS" schedule incorrectly set.	See pages 14 & 15.
"Current Time" is wrong and flashing	Power outage occurred with no battery or weak battery in controller.	Replace battery and reset "Current Time."
Display is flashing "FUS"	Excessive load.	Check max. ratings, see pg. 7.
	Shorted solenoid or field wires.	Check solenoids and wiring. See page 21.
Display is flashing "SEN" with no rainfall	Rain Sensor operation	Check wiring and connections on rain sensor. If a sensor is not connected, place sensor switch to BYPASS. See page 20.
Valve won't turn off (Function Switch Off )	Valve malfunction.	Check valve for leaks and/or internal debris.
Display is flashing "OFF"	This is a reminder the Function Switch is in the Off  position.	Use Dial to review settings or switch to Run  to begin watering.

Replacing the Fuse



WARNING: The fuse protects the transformer from overload due to a short circuit condition. For continued protection against risk of fire, replace only with the same type and rating of fuse. Ensure power to the controller is off prior to removing or installing fuse.

1. Disconnect power to the controller.
2. Locate the fuse and carefully remove it from the retaining clips.
Refer to **Figure 3** for fuse location.
3. Install a new fuse of the same type and rating. See Warning above.
4. Restore power to the controller.



Electromagnetic Compatibility

Domestic: This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a FCC Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the irrigation controller with respect to the receiver.
- Move the irrigation controller away from the receiver.
- Plug the irrigation controller into a different outlet so that the irrigation controller and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio - TV Interference Problems".

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4.

International: This is a CISPR 22 Class B product.

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