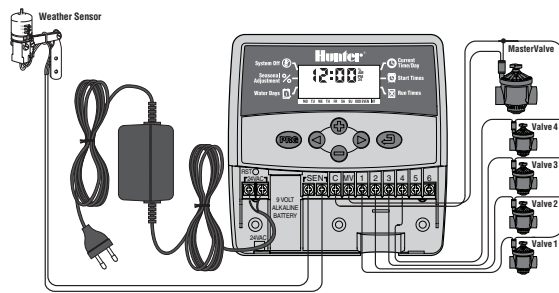


Owners Manual and Programming Instructions

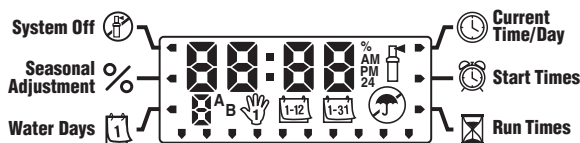


Installation Instructions

Remove lower access cover. Place a screw into the wall and hang the controller from the keyhole on the back. Secure the controller using one or more screws below the terminal strip. One wire from each solenoid should be connected to the C terminal (common wire). The other wire from each solenoid to its respective number on the terminal strip. Connect the transformer wires to the 24 VAC terminal strip. Attach the two sensor wires (if needed) to the SEN terminals. Connect a 9-volt alkaline battery (not included) to the battery wire clip. Plug the transformer into a nearby power outlet.

Main Display

- Current Time/Day** – Set current day and time.
- Start Times** – Set 1 to 4 start times for each program.
- Run Times** – Set each valve station run time from 1 min. to 4 hrs.
- Water Days** – Select specific days to water, odd/even days, or a selected number of days between waterings (interval).
- Seasonal Adjustment** – Make run time changes according to the seasons without reprogramming the controller.
- System Off** – Stops all automatic watering.
- Program Designator** – identifies program in use (A or B).
- Flashing Sprinkler** – indicates that watering is occurring.
- Umbrella** – indicates rain sensor is suspending irrigation.
- Crossed Umbrella** – Indicates rain sensor has been manually bypassed.
- identifies month when programming current date.
- identifies day when programming current date.
- Manual Single Station** – indicates the one time watering of a single valve station.
- Manual All Station** – indicates the one time watering of all valve stations or selected stations.



Control Buttons

- Button** – increases displayed item.
- Button** – decreases the displayed item.
- Button** – advances to the next item.
- Button** – advances to the previous item.
- Button** – Select program A or B for different watering requirements.
- Mode Button** – Advanced through programming functions.

Programming the Controller

An irrigation program consists of three parameters:

1) A program start time, 2) watering duration for each station and 3) days to water. A program will run all stations assigned to it in sequential order. Programs are independent and stations can be assigned to both programs.

Setting the Current Date and Time

1. Press the Mode button until the arrow is pointing at the Current Time/Day position.
2. The year will be flashing. Use the or buttons to change the year. Press the button to proceed to setting the month.
3. The month will be flashing and the icon will be displayed. Use the or buttons to change the month. Press the button to proceed to setting the day.
4. The day will be flashing and the icon will be displayed. Use the or buttons to change the day. Press the button to proceed to setting the time.
5. The time will be displayed. Use the and buttons to select AM, PM, or 24 hour. Press the button to set the hour.

6. Hours will be flashing. Use the and buttons to change the hour shown. Press the button to move to minutes.
7. Use the and buttons to change the minutes shown. The date, day and time have now been set.

Setting the Program Start Time(s)



NOTE: One start time will activate all stations sequentially in that program. This eliminates the need to enter each station's start time. Multiple start times in a program can be used for separate morning, afternoon, or evening watering cycles.

1. Press the Mode button until the arrow is pointing at Start Times .
2. Program A will be displayed. (If Program B is desired, press the .
3. Use the or buttons to change the start time.
4. Press the button to add an additional start time, or for the next program.

Eliminating a Program Start Time

With the arrow pointing at the Start Times position, press the or buttons until you reach 12:00 AM. Push the button once to reach the OFF position.

Setting Station Run Times

1. Press the Mode button until the arrow is pointing at Run Times .
2. Use the button to select a program (A or B).
3. Press the or buttons to change the station run time from 1 minute to 4 hours. Press the button to advance to the next station.

Setting Days to Water

1. Press the Mode button until the arrow is pointing at Water Days .
2. Use the button to select the desired program.
3. Arrows point at the specific days of the week in which watering is to occur. Press the button to activate that day or the button to cancel watering for that day.

Selecting Odd or Even Days to Water

This feature is used to use numbered days of the month for watering instead of specific days of the week (Odd days 1st, 3rd, 5th, etc.; Even days 2nd, 4th, 6th, etc.).

1. When in the Water Days mode, press the button until the cursor is above either ODD or EVEN on the display.
2. Press the button to select, or the button to cancel either ODD or EVEN days to water.

Selecting Interval Watering

You can select interval watering from 1 to 31 days.

1. When in the Water Days mode, press the button until the cursor is over INT. Press the button and the interval watering icon will be displayed and a 1 will be flashing.
2. Press the or button to select the number of days between watering days (1 to 31 days). This is called the interval.

The controller will water the selected program at the next start time and will then water at the interval programmed.

Seasonal Adjustment %

Seasonal Adjustment is used to make global run time changes without re-programming the entire controller.

1. Press the Mode button until the arrow is pointing at Seasonal Adjustment .
2. Press the or buttons to adjust the percentage of the seasonal adjustment from 10% to 150%.



NOTE: The controller should always be initially programmed in the 100% position.

System Off


To turn your controller off, press the Mode button until the arrow is pointing at the System Off . Wait 2 seconds and the display will read OFF. Valves currently watering will be shut off. All active programs will be discontinued and watering stopped. To return the controller to normal automatic operation, simply press the Mode button once. The current time and day will be displayed.

Programmable Off

This feature will stop all programmed waterings for a designated period of time from 1 to 7 days. After the programmed off period, the controller will automatically resume programmed watering.







1. Press the Mode button until the arrow is positioned next to the System Off function.
2. Wait 2 seconds until OFF is displayed.
3. Press the button to set the number of days off (up to 7 days).

Automatic Watering

After all programming has been completed, press the  Mode button until the time of day is displayed. This will enable automatic execution of all selected watering programs and start times.

Manual Run – All Stations

Manual All Stations allows the operation of valves assigned to a program in sequential order.

1. Press and hold the  button for three seconds. The  will be displayed, along with the program letter. A station number will also be displayed.
2. Select program by pressing the .
3. Use the  or  buttons to select the amount of time for the station to water if different from the run time displayed.
4. Use the  button to move to the next station.
5. Repeat steps 3 and 4 until you reach the station at which you want watering to begin.





After 2 seconds of inactivity, manual watering will begin and sequence through each valve of the entire program. Once manual watering has been completed, the controller will automatically return to the automatic mode with no change in the previously set program.

Manual Run – Single Station

Manual Single Station function allows the for operation of a single valve.







Sensor Bypass

The sensor can be bypassed to allow manual operation when the sensor has deactivated the system.

1. Press the  button for two seconds ON  will be displayed.
2. Press the  button to bypass the rain sensor. OFF  will be displayed.






Clearing the Controller's Memory/Resetting the Controller

If you feel that you have misprogrammed your controller, there is a process that will reset the memory to the factory defaults and erase all programs and data that have been entered into the controller.

1. Press and hold the , , and  buttons.
2. Press and release the reset button located in the lower wiring compartment.
3. Wait 2 seconds and release the , , and  buttons. The display should now show 12:00 am. All programmed data has been cleared from memory and the controller can now be reprogrammed.







Hunter Quick Check Diagnostics

This feature allows you to quickly diagnose wiring problems with your controller.

1. Press the , , ,  buttons simultaneously. In the standby mode, the LCD will display all segments.
2. Press the  button once to begin the Quick Check procedure. Within seconds the system searches all stations, detecting any circuit problems. When a field wiring short is detected, an ERR symbol preceded by the station number will flash momentarily on the display.

Normal/Limited Program Mode

Your controller can be programmed to increase or decrease the watering program capability.

1. Press and hold the  button. Press the .
2. Release the  and the .
3. Use the  or  button to change program modes:
 - Normal Mode (2 programs/4 start times)
 - Limited Mode (1 program/1 start time)
 - Advanced (3 programs/4 start times)

Operating Specifications

- 2 Independent Watering Programs
- Station Run Time: 0 to 4 hours in 1-minute increments
- Start Times: 4 per day, per program, for up to 12 daily starts
- Watering Schedule: 365-day calendar, odd/even, or interval (1 to 31 days).
- Simple manual operation
- Seasonal adjustment (10% to 150%)
- Programmable rain delay (1 to 7 days)

Electrical Specifications

- Transformer input 230VAC 50/60 Hz
- Transformer output: 24VAC .625 amp.
- Station Output: .56 amp.
- Battery 9-volt (not included) for backup timekeeping
- Electronic short circuit protection
- Non-volatile memory for program data
- CE approved

Certificate of Conformity to European Directives

Hunter Industries declares that the irrigation controller Eco-Logic complies with the standards of the European Directives of "electromagnetic compatibility" 87/336/EEC and "low voltage" 73/23/EEC.


Project Engineer



Troubleshooting Guide

PROBLEM	CAUSES	SOLUTIONS
Display indicates watering but none is occurring.	Faulty or miswired valve. Faulty pump or pump relay. No water pressure to system.	Check valve and valve wiring. Check pump and pump relay. Replace if defective. Turn on main system water supply.
Time of day display is blinking.	Unit has just been powered up for the first time. Extended power outage has occurred that has drained backup battery.	Set time/date. Replace battery and reprogram controller.
Valve will not turn on.	Short in wire connections. Bad solenoid.	Check wiring for short or faulty wire connections. Replace solenoid.
Display shows "ERR" with a number (1-6).	Short in valve wiring circuit; or a faulty solenoid on the station number indicated.	Check wire circuit or solenoid for the valve number indicated. Repair short or replace solenoid. Press any button to clear "ERR" display.
Display shows "P ERR".	Faulty pump relay or master valve wiring. Incompatible or defective pump relay.	Check wiring to relay or master valve solenoid. Press any button to clear "P ERR" from the display. Check electrical specifications of pump relay. Replace if defective.
The display reads "No AC".	There is no AC power present.	Check to make sure power is on. Check to see if transformer is properly installed.
Rain Sensor does not suspend irrigation.	Rain sensor is defective or miswired. Jumper not removed.	Verify operation of sensor and proper wiring. Remove jumper.
Frozen Display, or display showing incorrect information.	Power surge.	Reset controller per "Clearing Controllers Memory/Resetting the Controller".
Automatic irrigation does not start at start time and controller is not in the system off mode.	AM/PM of time of day not set correctly. AM/PM of start time not set correctly. Start time is disabled (Set for Off). Controller is not receiving AC power.	Correct AM/PM of time of day. Correct AM/PM of start time. Set start time. See "Setting Watering Start Times". Check AC connections.
Controller waters the same area more than one time/Controller cycles continuously.	Too many start times entered in program (user error).	One start time activates a complete cycle. See "Setting Watering Start Times".



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