

## "Electronic Fuse"

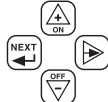
### Automatic short circuit detection and override

The controller detects a short circuit caused by defective solenoid or a short caused by the wires connecting the solenoid to the controller. As soon as the short is detected, that station only is turned off and the station # Icon together with "OFF" Icon will start flashing.

If the short is in the master valve then only "OFF" Icon will start flashing.

Verification of short circuit can be done in "MANUAL" mode. Press NEXT continuously to get to MANUAL. Here again the station Icon and "OFF" are flashing. Press ▶ to get to this station. Press ▼ to stop the flashing. Press ▲ to start that station again. If the flashing appears once again, check your wiring to this station and if wire connection is fine, the cause of the short is the solenoid which should be replaced.

### All Program Erase - Total Reset

In AUTO-RUN/OFF position Press ALL 4 keys  simultaneously.

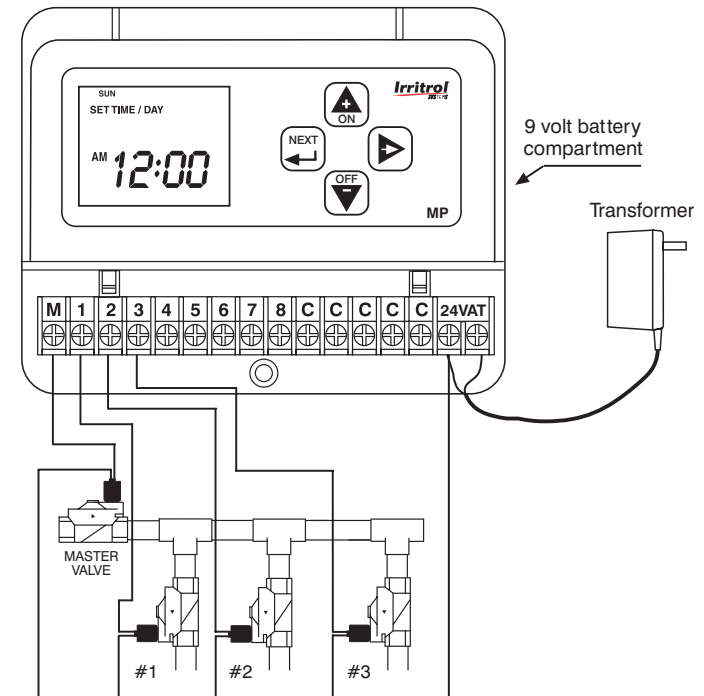
After 2 seconds, all display elements will appear. You can now release the keys. The entire irrigation program is now erased and the clock is reset to AM12:00 and SUN.

## Instruction Manual

### **Irritrol** 2,4,6,8 station AC Multi Program SYSTEMS

### Installation instructions:

Remove the lower cover. Place the unit on the wall using one slot and one fixed hole under the terminal. Connect the solenoid wires to the terminal block. One wire from each solenoid should be connected to C-Common. The other wire from each solenoid to its respective number on the terminal block. Connect the transformer wire to the terminal block marked 24VAC. **Only after all your wiring is done and checked, connect the 9 volt alkaline battery.**



The 9 volt alkaline battery supplies the energy to run the "LOGIC" part of the circuit. During power failure, the program and the clock will continue to operate.

Plug the transformer into a power outlet.

You are now ready to program!

## The "WAITING LIST" CONCEPT -

The controller will allow only 2 stations + master valve to be ON at the same time. If more than 2 stations were programmed to start at the same time, the 1st two will start and the others will be placed in the "WAITING LIST".

As soon as one of the operating stations shut off, a station from the waiting list will start working until the end of the list.

## How to use the "COPY" button :

The "COPY" button can be used after the 1st station has been programmed.

The  button is used for this purpose.

When you enter "WATERING TIME" of station # 2, you can copy the watering time of station # 1.

When you enter "DAYS ON/OFF" of station # 2, you can copy the days of the week you selected for station # 1. Same for "DAYS CYCLE".

When you enter "START 1" of station # 2, you can copy the start 1 from station # 1 and the same for start 2 & start 3.

You can always change the copied number by using  or .

## Water Budget

When you wish to either increase or decrease watering time for ALL Programmed stations you can do it by using the Percentage Scaling method.

Your current setting of WATERING TIME represent 100%.

You can increase your watering time in increments of 10%, ie, 110%, 120% and up to 200%.

200% will double your current watering time.

You can decrease your watering time in increments of 10%, ie, 90%, 80% and down to 10%.

50% will reduce by half your current watering time.

You can get to WATER BUDGET position from any "WATERING TIME" -

Press  until you pass all station # icons and **100** appears on the display.

Press  to increase watering time by percentage scaling.

Press  to decrease watering time by percentage scaling.

Press  to advance to "MANUAL OPERATION"

## 3 min. Automatic return to Auto-Run:



If for 3 min. the buttons are not pressed, the controller will return by itself to "AUTO-RUN/OFF" position.

No Automatic return from "MANUAL" position.

## How to skip to MANUAL:

FROM ANY PROGRAMMING MODE, Press continuously on .

## Fast advance of digits:

If you press on  or , continuously for more than 2 seconds the digits on the display will advance faster.


## Programming steps -

This controller allows you to have an independent program for each station.

Irrigation program consist of 3 basic parameters: 1. "WATERING TIME"

2. Irrigation Days (Weekly calendar or Days Cycle) 3. "START TIMES"

You can program up to 3 starts per day.


If you wish to review all programming steps, simply press . This will



take you from one step to the next one and from one station to the next.

The station # icon will be flashing throughout all programming steps of that station.


## Set TIME / DAY:

After the battery is connected, the controller will be set at this step.

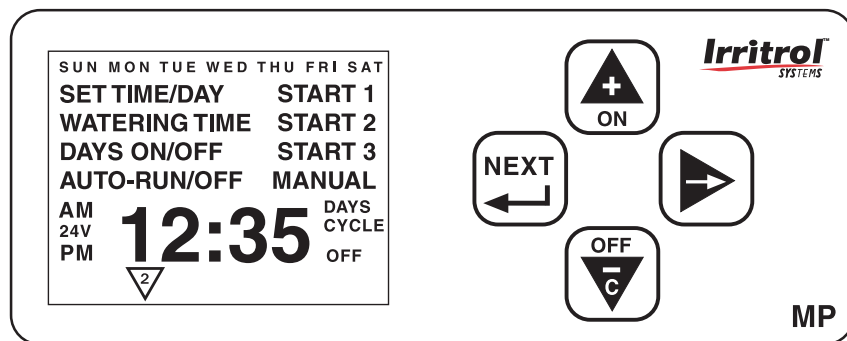
Press  to select the current day. (observe the days on the top of the display).

Press  or  to set the current time.





Please remember to use the fast advance mode.

Press  to advance to next programming step.


## The control panel:



### The control buttons:

-  "NEXT STEP" Advance to next programming step.
-  Increase TIME & Watering Time. Used also as "ON" for Days ON & Manual ON.
-  Advance Days & station No.
-  "COPY" from previous station. Decrease TIME & Watering Time. Used also as "OFF" for Days OFF & Manual OFF.

### Display Icons:

- "Days of the week" - upper line
- "Programming Steps" - Watering Time, Days On/Off, 3 start times Manual and Auto Run.
- "24V" - Will flash if command to turn on the station was given during Power Failure.
- "Days Cycle" - Will be ON when programming Days Cycle
- "OFF" - RAIN OFF Icon
-  - Station Icon
- "OFF" Flashing - Indication for a short circuit in one of the stations or in master valve.



## MANUAL OPERATION:

Please Note ! Only stations with programmed WATERING TIME can operate in manual or automatic modes.


### Single Station Manual -

You can turn on or shut off any selected station. When a station is ON, the station # Icon will be steady. If a station is left ON, it will shut off after it's set Watering Time.

From any programming position Press  continuously until "MANUAL"

Press  to turn ON and  to turn it OFF.

Press  to advance to next station.

Press  to advance to SEMI-AUTO operation.

### Semi-Auto -

Display show **Seq** = Sequential operation of ALL PROGRAMMED STATIONS

Press  to start the sequence. Press  if you wish to terminate it.

Press  to advance to AUTO-RUN/OFF position.

If the sequence is still running it will continue in the AUTO-RUN/OFF position.

Station # Icon will be displayed showing the current ON station.

### AUTO-RUN/OFF:


In AUTO-RUN/OFF position the current TIME and DAY will be displayed.

If any station is ON, it's Icon will be displayed as well.

### Rain-Off -

Rain-Off feature allows you to stop irrigation without changing the program. It applies to both Automatic operation as well as manual and semi-manual. You can at any desired time resume irrigation as was programmed. In AUTO-RUN/OFF position:

Press  to enter "RAIN OFF" mode. Notice the "OFF" Icon.

Press  to resume irrigation. The "OFF" Icon will disappear.

## Set WATERING TIME:

Station #1 Icon is flashing and "OFF" is displayed = No Watering Time. At this point you can enter the watering time or go to next station.


To select another station press  and follow the station # Icon.

To enter watering time press  or .

If you press  you start from 00:1 and going up.

If you press  you start from 9:59 and going down.

To reset watering time back to "OFF", press both  and  until "OFF" is displayed.


Press  to advance to next programming step.

## Set IRRIGATION DAYS:

You can select the days of the week or Days Cycle, from 1 = every day, to 30 = once every 30 days.


### How to select DAYS OF THE WEEK:

"SUN" is flashing. Press  if you wish to irrigate on SUN.

Press  if you wish to skip SUN.

Once a button was pressed, "MON" will start flashing. Repeat the selection as above.

The selected Irrigation Days will be displayed.

Press  to advance to next programming step.



### How to select DAYS CYCLE:

"SUN" or any other day is flashing.

Press  until display show "DAYS CYCLE" and "0 0".

The right digit will show the selected DAYS CYCLE.

The left digit will show the remaining days until the Irrigation Day.


Press  to select your DAYS CYCLE.    
"1" - Irrigation every day.   
"2" - Irrigation every 2nd day.   
"3" - Irrigation every 3rd day.

## PLEASE NOTE !

The 1st day the controller will operate is the day you enter your program provided the selected start time was set to be after programming was completed.

Selecting DAYS CYCLE will cancel any previous DAYS OF THE WEEK programming and vice versa.

If for example "2" was selected as DAYS CYCLE, the display will show "2 2" and at midnight it will change to "1 2" showing one day left. Above "19" the display will show remaining days as flashing "19".

Press  to advance to next programming step.

## How to set START TIME:

Each station can be set to start 3 times per day. Make sure not to overlap one start with the next one as the controller will ignore it. It is recommended to plan your irrigation schedule ahead of time.

### START 1 -

Display show "OFF" = No start time. The station # Icon is flashing.

To set START 1, Press  or .

### TO RESET START 1 BACK TO "OFF"

Press  and  at the same time until "OFF" is displayed.

Press  to advance to START 2.


### START 2 -

Display show "OFF" = No start time. To enter the time repeat as above.

Press  to advance to START 3.

Please Note! It is necessary to enter at least one start time for the station to operate fully automatic. If more than one start is not necessary, other two should remain in "OFF".

The programming of the flashing station is completed after start 3. To advance

to NEXT STATION Press . Now the next station Icon is flashing and

"WATERING TIME" is the current programming step. If you wish to skip to

another station, Press .

# MP - The Multi-Program Controller

## Features:

- Individual station programming.
- Automatic short circuit detection and override
- Water budgeting from 10% to 200%
- Manual operation per station or Semi-Auto of all programmed stations.
- "COPY" feature allow quick copy of data from previous station.
- 3 start times per day per station
- Watering time from 1 min. to 599 min.
- Weekly calendar or Days Cycle program
- Master valve/ pump start circuit.
- On/Off Rain Switch
- Power failure indication.

## Important information:

### Battery replacement -

It is recommended to replace the 9 volt **Alkaline** battery every year, at the beginning of the irrigation season.  
Open the battery compartment and replace the battery.  
You have approx. 15 seconds to do it without losing the time and program.

**MAKE SURE YOU DISCONNECT THE TRANSFORMER BEFORE REPLACING THE BATTERY. CONNECT IT AGAIN AFTER THE NEW BATTERY WAS CONNECTED.**

### Power Failure Indication -

If a station is due to turn on during a power failure the "24V" icon will start flashing.  
The "24V" will flash until next attempt, by any station, to turn on.  
If power is resumed by then, the flashing will stop.

### Pump Start Connection:

It is recommended that the pump start connection will be done by licenced electrician. The Relay can be used to switch other things like Lights for example.

