

sub 1,2,4 Station DC Multi Program Waterproof Controller

INSTALLATION INSTRUCTIONS

Mount the controller on the wall, using the wall mount bracket or on the valve, using the valve mounting bracket.

Connect the solenoid wires to the controller.

Each cable coming out from the controller is marked with a station number.

Connect RED from solenoid to RED from controller and the same for the BLACK wire.

Use the WaterProof Crimp Connectors to make the connections.

Unused wires should be taped to prevent short circuit.

Connect the wires **FIRST** before installing the battery!

When battery is connected the controller checks the valves position to make sure they are closed!

9 VOLT VALVE

A 9 volt, pulse operated solenoid must be used with this controller.

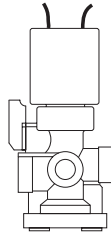
It is also refer to as:

9 volt Latching solenoid

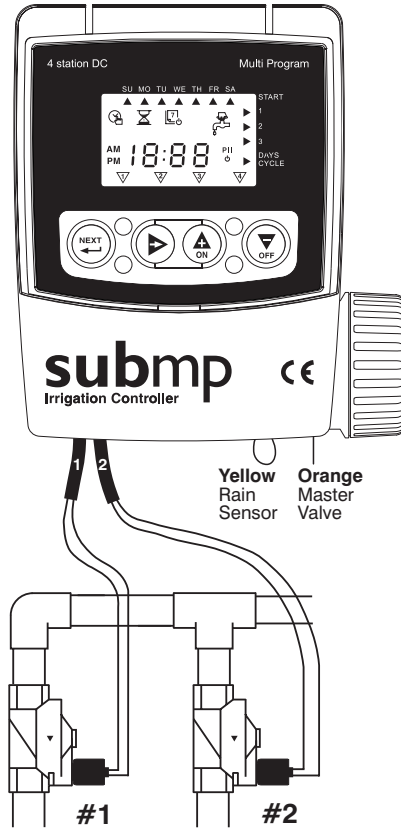
The solenoid could be

2 ways or 3 ways, with

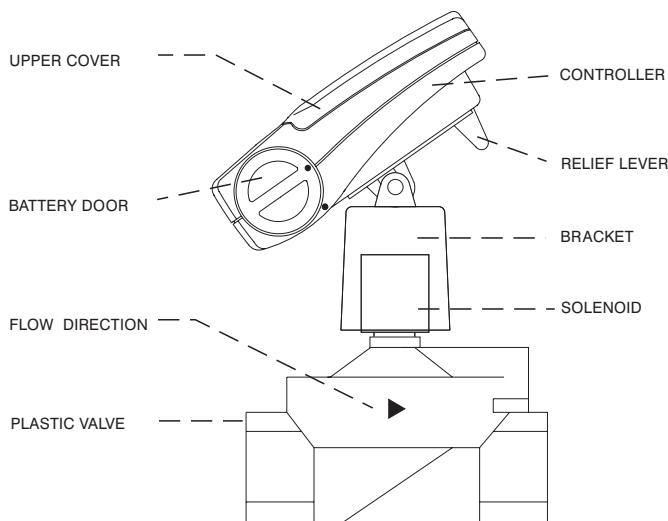
2 wires with different colors (like Red & Black)



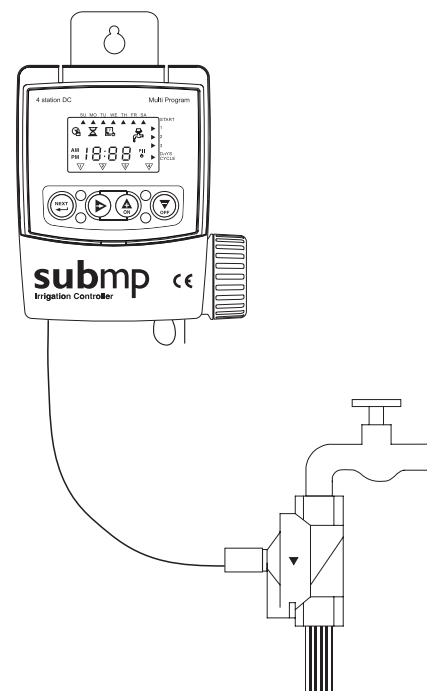
3 WAYS SOLENOID



CONTROLLER MOUNTED ON THE VALVE







CONTROLLER MOUNTED ON THE WALL











THE CONTROL PANEL



THE CONTROL BUTTONS

-  "NEXT STEP"-Advance to next programming step.
-  Advance Days & Station No. In watering time position will lead you to % scaling.
-  Increase TIME & Watering Time. Used also as "ON" for Days ON and Manual ON.
-  Decrease TIME & Watering Time. Time. Used also as "OFF" for Days OFF & Manual OFF. Copy program from previous valve.

DISPLAY ICONS

-  Set current TIME & DAY
-  Watering duration time
-  Irrigation Days ON / OFF
-  Manual or Semi-Auto
- AUTO** Automatic operation
-  Rain Sensor
-  RAIN OFF - no watering
-  Station No. Icon
-  Low Battery (flashing)

BATTERY CONNECTION

Please make sure that your 9 volt battery is an ALKALINE battery of good quality.

Under normal use, the battery should last for one irrigation season.

Low battery indication will start flashing when battery is low. Replace battery.

STEP 1

Turn the battery cover counterclockwise



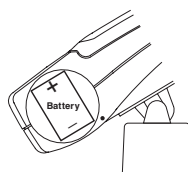
STEP 2

Pull the battery cover



STEP 3

Insert a 9 volt ALKALINE battery with + facing the front panel




STEP 4

Close the battery cover back to it's position. Turn clockwise to it's original position

IRRIGATION PROGRAM

Irrigation program consists of 3 parameters for each valve:

- 1 Watering duration for each station
- 2 Irrigation Days
- 3 Program Start Time

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..

PROGRAMMING STEPS


NOTE If you press  or  continuously, the digits will advance quickly.

SET TIME/DAY

After connecting the battery, the controller should display the "SET TIME/DAY" Icon.



If not, Press  until it is displayed.

Press  until arrow points to current day.

Press  or  to set current time AM or PM.

Press  to enter the watering time.



1

WATERING TIME

Enter Watering Time to station 1.
(Each station can be programmed to have different Watering Time.)



PI
PII

Press  or  to set the watering time.

2


DAYS ON/OFF

You can either select the days of the week you wish to water or select days cycle.
Arrow under SU is flashing.



PI
PII


Press  for the days you wish to water.



Press  for the days you wish to skip irrigation.

OR

DAYS CYCLE

To set the number of days between watering

Press  until arrow points to days cycle.

Press  or  to select your days cycle.


Notice that two sets of digits are displayed (0 0).

The right digit will display the selected days cycle while the left digit will display the remaining days to irrigation.
If 1 is selected =Every day, 2 = Every other day, 3 = once every 3 days and so on.


3

START 1

To set watering Start Time(s).

Press  if you wish to return to "days of the week".



Press  to program the start time.

Press  or  to set the time. (Notice the AM & PM)

Press  to set next (2nd) start time and again for (3rd) start time.

At the time you selected, the 1st station of program 1 will start watering.
Other stations will operate according to program.
One after the other, automatically.

To enter valve 2 Press  and repeat from 1 to 3 and so on for the rest of the valves.

To skip valve, Press  continuously until you reach  MANUAL.

NOTE A delay of 2-3 sec. between pressing ON and OFF to the actual response of the valve was design to save energy.


NOTE To get to MANUAL mode from any position, Press  continuously.

MANUAL




Two MANUAL modes are available:

Manual start per station (Only that station)

Press  to open the station. (Station icon will stop flashing)

Press  to turn off the station.

Press  to select your next station. (IT 2,4 DC-WP)

If you leave the station ON, it will close after it's programmed watering time.

First priority is watering time 1, 2nd priority is watering time, next valve, and if no watering time was programmed, will open for 2 minutes.

After the station is closed, the controller will skip to AUTO mode.

Press  to select next manual mode.

Manual start per program - Semi-Auto

In this step, you can turn on all the stations programmed.


The valves will open in sequence.

The 1st programmed station in this program will flash.

Press  to start the cycle and  to terminate it.

Press  to advance to AUTO RUN mode.

Will display Time & Day, open station, power failure and OFF

Press  in AUTO mode to stop irrigation.

Press  in AUTO mode to resume irrigation.

AUTO

(OFF)



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 and display show 100 and the active stations in that program are flashing.

Press  to increase and  to decrease the percentage.

EX: If stations in PI are set to 10 minutes runtime and you increase percentage to 150%, they will now run 15 minutes each. (The new 100%)

Press  to skip to MANUAL mode.

IMPORTANT INFORMATION

- The  button leads you through the programming steps.
- Auto Return: If within 3 minutes you do not touch any button, the controller will automatically return to Auto mode except from MANUAL mode.
- Quick Digit advance: If you Press  or  continuously, the digits will advance quickly.
- Reset display back to OFF: If you press  and  simultaneously and hold for few seconds, the digits displayed will reset back to OFF.
- Program Erase - Total Reser: In Auto Run mode, press all 4 buttons, simultaneously until all elements of the display will appear.

COPYRIGHT AND TRADEMARKS

The copyright in this document is held by I.T. Irrigation Systems Ltd. All material provided on this documents protected under United States copyright laws and international copyright laws and treaty provisions. Except as expressly provided herein, none of the materials provided on this documents may be copied, distributed, republished, reproduced, downloaded, displayed or transmitted in any form for commercial use without the prior written permission of I.T. Irrigation Systems Ltd. Individual visitors of this document permitted to download or print one copy solely for their personal, non-commercial use, provided that they do not modify the materials and that they retain all copyright and other proprietary notices contained in the materials. This permission terminates automatically if you breach any of the terms and conditions contained herein. I.T. Irrigation Systems Ltd. does not grant any express or implied right to you under any patents, trademarks, copyrights or trade secret laws. The trademarks, logos and service marks (collectively referred to as "Trademarks") displayed on this document are registered and unregistered Trademarks of I.T. Irrigation Systems Ltd. and no trademark license either express or implied is granted by I.T Irrigation Systems Ltd. You do not have any right to use any Trademark displayed on this document without prior written permission of I.T. Irrigation Systems Ltd. Trademarks are one of our most valuable business assets. In the event of unauthorized use or misuse of its Trademarks I.T. Irrigation Systems Ltd. will pursue its legal remedies without delay.