Instruction Manual

i.t.
irrigation systems ltd.

sub 1,2,4 Station Dual Program Waterproof Controller
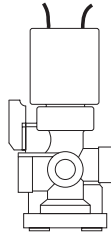
INSTALLATION INSTRUCTIONS

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!

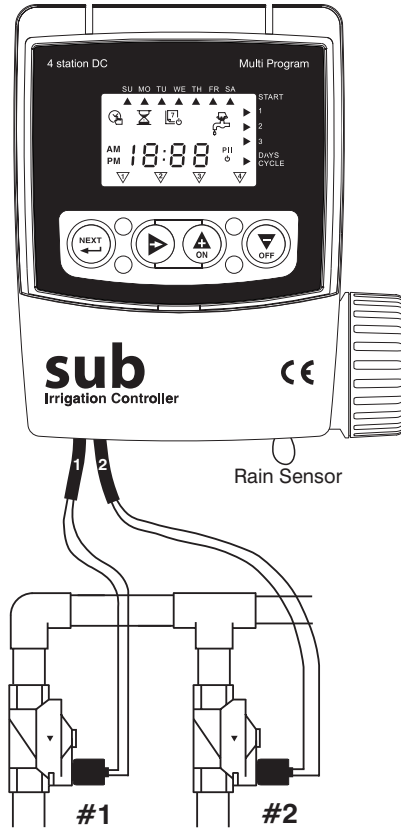When battery is connected the controller checks the valves position
to make sure they are closed!
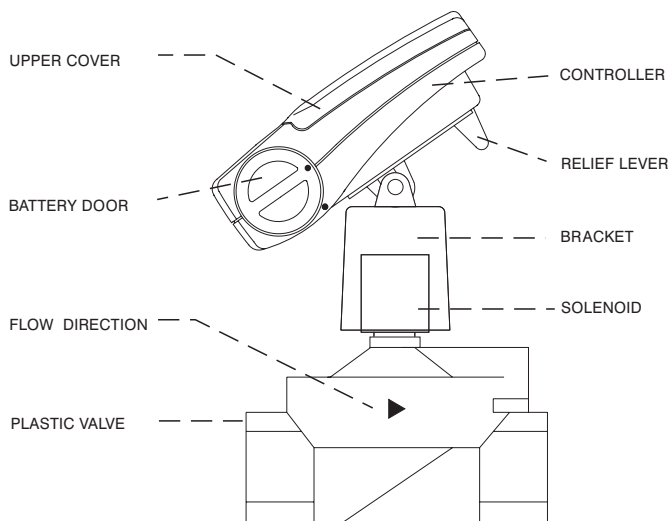

Rain Sensor

#1   #2

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
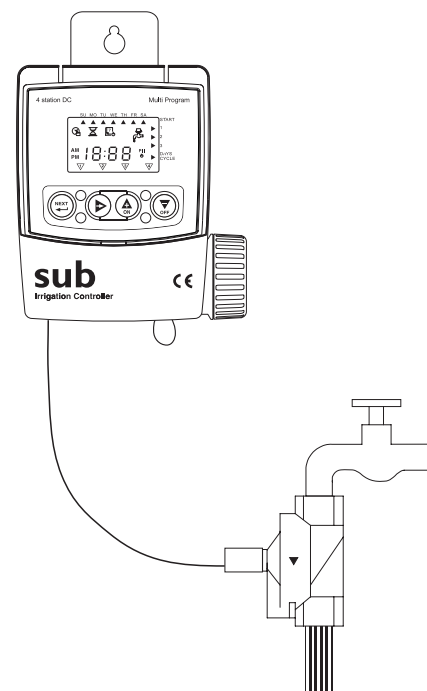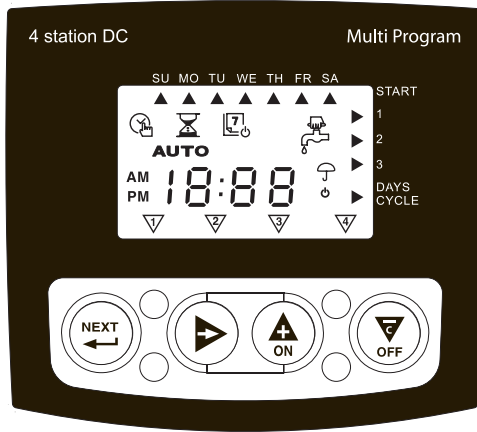2 wires with different
colors (like Red & Black)

3 WAYS SOLENOID

CONTROLLER MOUNTED ON THE VALVE

UPPER COVER

CONTROLLER

RELIEF LEVER

BATTERY DOOR

BRACKET

SOLENOID

FLOW DIRECTION

PLASTIC VALVE

CONTROLLER MOUNTED ON THE WALL

THE CONTROL PANEL

```
4 station DC                    Multi Program

        SU MO TU WE TH FR SA
        ▲  ▲  ▲  ▲  ▲  ▲  ▲      START
                                    1 ▶
                                    2 ▶
        AUTO                        3 ▶
        AM                      DAYS ▶
        PM  18:88               CYCLE
         ▽    ▽    ▽    ▽
         1    2    3    4

        NEXT    ▶    +    ▽
                     ON   OFF
```

THE CONTROL BUTTONS

NEXT "NEXT STEP"-Advance to next programming step.

▶ Advance Days & Station No. In watering time position will lead you to % scaling.

+ ON Increase TIME & Watering Time. Used also as "ON" for Days ON and Manual ON.

▽ OFF 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.
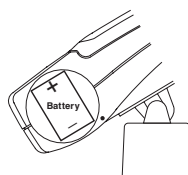
STEP 1
Turn the battery cover counterclockwise

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:

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

Each station can be assigned to a program by entering Water Time in that program.
Stations can be assigned to both programs.

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 (NEXT) until it is displayed.

Press |➤ until arrow points to current day.

Press △+ or ▽− to set current time.

Press (NEXT) to enter the watering time.

1

WATERING TIME

PI
PII

Enter Watering Time to all stations you wish to assign to this program.
Each station can be programmed to have different Watering Time.

Press △+ or ▽− to set the watering time.

Press |➤ to select your next station in this program. (sub 2,4)

Repeat for all the stations.

Press (NEXT) to advance to next programming step.

2

DAYS ON/OFF

PI
PII

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

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.

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

3

START 1
To set watering
Start Time(s).

PI
PII

Press (NEXT) to program the start time.

Press △+ or ▽− to set the time. (Notice the AM & PM)

Press (NEXT) to set next (2nd) start time.

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

To enter program 2 (PII) Press (NEXT) and repeat from **1** to **3** .

To skip program 2, Press (NEXT) continuously until you rach 🚰 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 (NEXT) continuously.

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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 program 1, 2nd priority is watering time program 2, 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 (NEXT) to select next manual mode.

Manual start per program - Semi-Auto

In this step, you can turn on all the stations programmed in program 1 or program 2.
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 (NEXT) to select program 2, repeat as in prog.1.

Press (NEXT) to advance to AUTO RUN mode.

AUTO
(OFF)

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

Press ▽− in AUTO mode to stop irrigation.

Press △+ in AUTO mode to resume irrigation.

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.

PI
PII

Your current setting of WATERING TIME represent 100%.
You can increase your watering time in increments of 10%, ie, 110%, 120% and up tp 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 precentage.

EX: If stations in PI are set to 10 minutes runtime and you increase percentage to150%, they will now run 15 minutes each. (The new 100%)

Press (NEXT) to skip to MANUAL mode.

IMPORTANT INFORMATION

- The (NEXT) 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.

- Rain Sensor - Wire (yellow) - Do not cut the loop unless you connect it to a Rain Sensor.

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