Instruction Manual

i.t.
irrigation systems ltd.

itec DC 4,6,8 station Multi Program
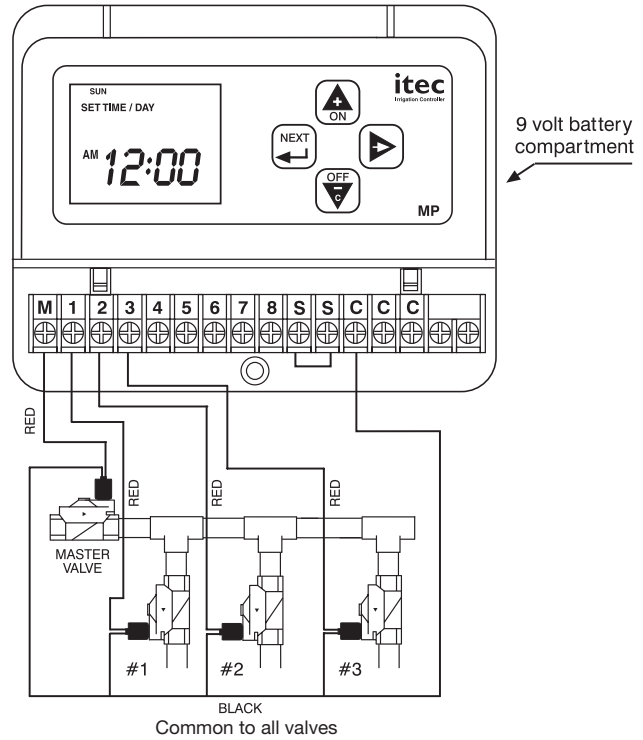
INSTALLATION INSTRUCTIONS

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.
Black wire from each solenoid should be connected to C-Common. The Red wire from each solenoid to its respective number on the terminal block.

Only after all your wiring is done and checked, connect the 9 volt alkaline battery. The controller checks the valves to make sure they are all in close position!
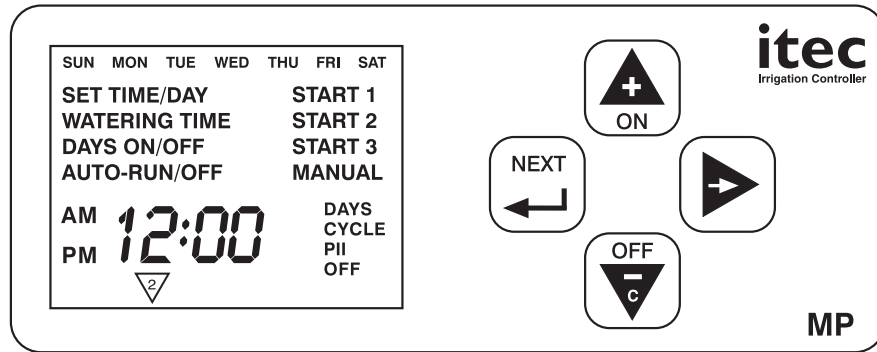
The 9 volt alkaline battery supplies the energy to run the controller.

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.

To get to **Manual** mode from any position, press [NEXT] continuously.

MASTER VALVE
#1   #2   #3
BLACK
Common to all valves
9 volt battery compartment

THE CONTROL PANEL

THE CONTROL BUTTONS

[NEXT] NEXT STEP Advance to next programming step.

[+ ON] Increase TIME & Watering Time. Used also as ON for Days ON & Manual ON.

[▶] Advance Days & station No. In Watering Time position Will lead you to % scaling.

[OFF C] 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

▽² - Station No. Icon

IRRIGATION PROGRAM

This controller allows you to have an independent program for each station.
Irrigation program consists of 3 parameters:

1 WATERING TIME Watering duration for each station **2** IRRIGATION DAYS Weekly calander 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 ▽2▽ will be flashing throughout all programming steps of that station.

PROGRAMMING STEPS

NOTE If you press /+\ or ▽c▽ 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 current day is displayed. (Observe the days on the top of the display).

Press /+\ or ▽c▽ to set current time AM or PM.

Please remmember to use the fast advance mode.

1 Press ⏎ to enter the watering time step.

WATERING TIME Station #1 Icon is flashing and "OFF" is displyed = 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.

Press /+\ or ▽c▽ to set the watering time.

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

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

To reset watering time back to "OFF", press both /+\ and ▽c▽ until "OFF" is displyed.

2 Press ⏎ to advance to next programming step.

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

DAYS OF THE WEEK "SUN" is flashing. Press /+\ if you wish to irrigate on SUN. Press ▽c▽ 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.

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 /+\/▽c▽ to select your DAYS CYCLE   "1" - Irrigation every day.
"2" - Irrigation every 2nd day.
"3" - Irrigation every 3rd day.

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.

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 $\boxed{2}$ is flashing.

To set START 1, Press $\boxed{+}$ or $\boxed{c}$.

TO RESET START 1 BACK TO "OFF"

Press $\boxed{+}$ and $\boxed{c}$ at the same time until "OFF" is displayed.

Press $\boxed{\text{NEXT}}$ to advance to START 2.

START 2

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

Press $\boxed{\text{NEXT}}$ to advance to START 3.

NOTE   It is necessary to enter at least one start time for the station to operate fully automatic. If more then 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 $\boxed{\text{NEXT}}$.

Now the next station Icon is flashing and "WATERING TIME" is the current programming step.

If you wish to skip to another station, Press $\boxed{\rightarrow}$.

WAITING LIST CONCEPT

The controller will allow only 2 stations + master valve to be ON at the same time. If more then 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.

THE COPY BUTTON

The "COPY" button can be used after the 1st station has been programmed. (Only in first programming)

The $\boxed{c}$ 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 $\boxed{+}$ or $\boxed{c}$.

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 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 $\boxed{\rightarrow}$ until you pass all station # Icons and 100 appears on the display.

Press $\boxed{+}$ to increase watering time by percentage scaling.

Press $\boxed{c}$ to decrease watering time by percentage scaling.

Press $\boxed{\text{NEXT}}$ to advance to "MANUAL OPERATION"

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 [NEXT] continuously until "MANUAL"

Press [+] to turn ON and [c] to turn it OFF.

Press [→] to advance to next station.

Press [NEXT] to sdvance to SEMI-AUTO operation.

SEMI-AUTO

Display show SEq = Sequencial operation of ALL PROGRAMMED STATIONS

Press [+] to start the sequence. Press [c] if you wish to terminate it.

Press [NEXT] 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 [c] to enter "RAIN OFF" mode. Notice the "OFF" Icon.

Press [+] to resume irrigation. The "OFF" Icon will disappear.

NOTE Do not disconnect the short wire on the sensor connection.

ALL PROGRAM ERASE - TOTAL RESET

In AUTO-RUN/OFF position Press ALL 4 keys [ON] [NEXT] [▶] [OFF] simultanuously.

After 2 seconds, all disply 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.

IMPORTANT INFORMATION

BATTERY REPLACEMENT

It is recommended to replace the 9 volt Alkaline battery every year, at the begining of the irrigation season.
Open the battery compartment and replace the battery.
You have approx. 30 seconds to do it without loosing the time and program.