

# MVBC WATERING SYSTEM

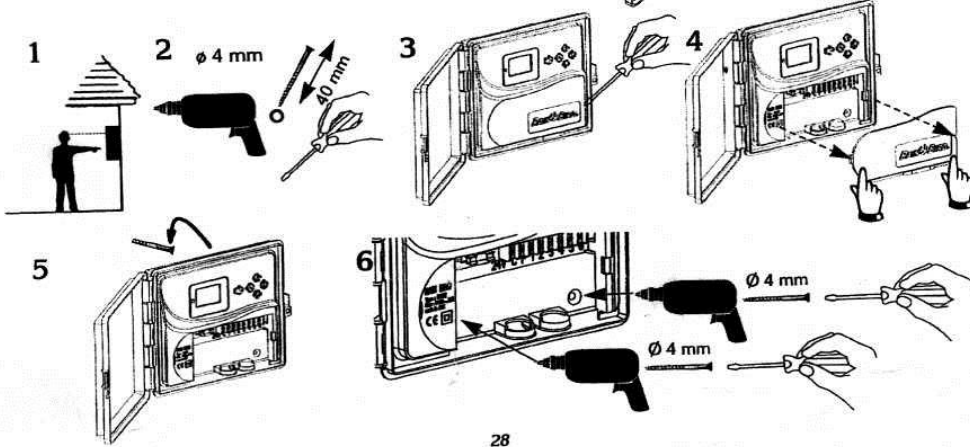
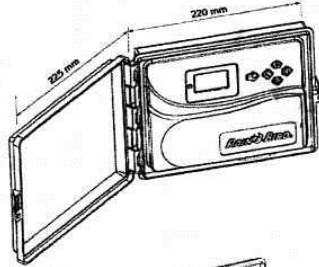
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INDOOR WALL MOUNT

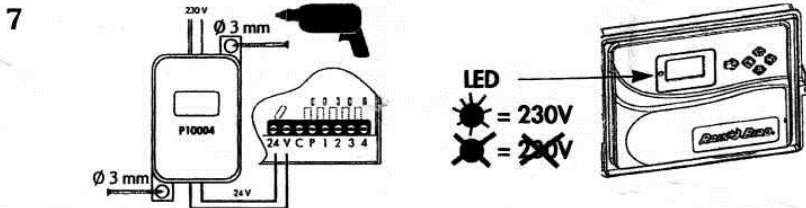
## Image

Locate the controller near a 230 V, 50 Hz power source. The controller must be connected to an electrical installation that conforms to standards and is protected by a fuse in the electrical panel.



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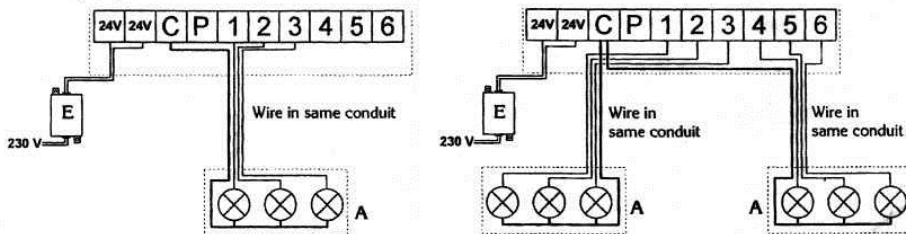
### Wiring to the electric valves

Multi-valve station capacity : 1 RAIN BIRD valve per station plus a master valve or pump start relay. Make sure all wire from the controller to the valves is code-approved for underground low voltage use.

Select the suitable wire size. All connections to the valve leads and any wire splices in the field must be watertight. Use Rain Bird Quick Connect connectors : DBY, DBR, DBM, KING.

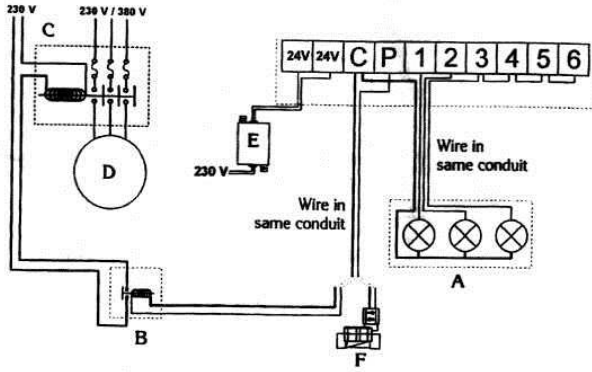
See wiring diagrams.

- A = VALVE BOX
- B = PUMP START RELAY
- C = POWER RELAY
- D = PUMP
- E = POWER SUPPLY MODULE P10004
- F = MASTER VALVE



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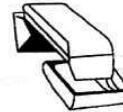
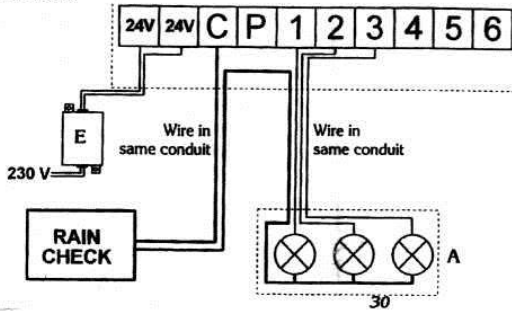
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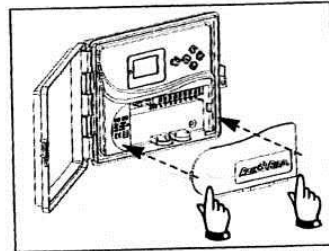
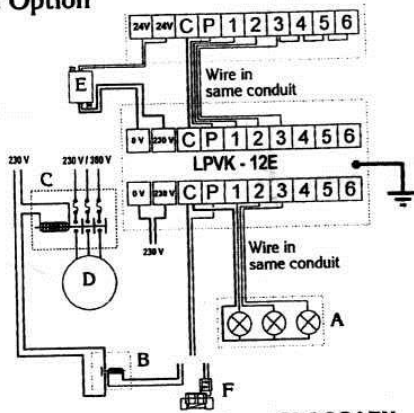
**Pump Start or Master Valve**  
 The terminal marked "P" is used to automatically start a pump with a relay or to open a master valve. The "P" terminal provides power only when one of the stations is operating. Recommended relays: FINDER 55-1, HAGER E123-01 or equivalent.

**CAUTION**  
 If all the stations are not used and a pump start relay is connected to the controller, the unused stations must be jumpered (cross-connected) to a station being used. If unused stations are not jumpered and the controller reverts to the default program after a lengthy power outage, the pump will operate with no flow (deadhead). Serious pump damage will occur.

**RAIN CHECK™ Option**



**LPVK - 12E Option**



Now snap the front panel on the cabinet

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**GLOSSARY**

**CONTROLLER**  
 Device used to automatically open and close electric irrigation valves

**STATION**  
 A numbered terminal on the controller terminal strip. An electric valve is wired to the terminal

**ELECTRIC VALVE**  
 A device which opens or closes the water passage to the sprinklers based on what has been programmed

**PROGRAM**  
 A weekly watering plan including watering days and watering start times

**WATERING DAYS**  
 The days of the week on which you choose to water

**CYCLE**  
 A group of stations operating sequentially (one after the other)

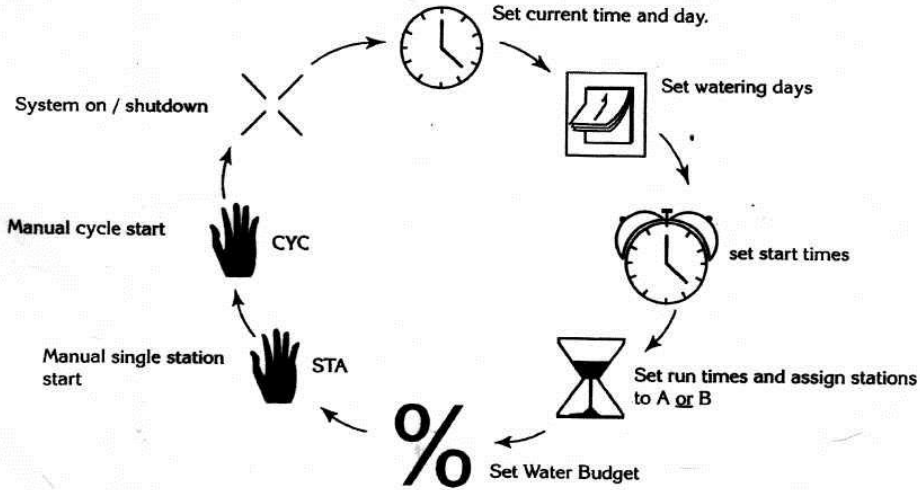
**START TIME**  
 The time of day when you want an irrigation cycle to start. If you enter several start times, the cycle will start several times

**DUAL PROGRAM (A/B)**  
 Used to manage 2 different irrigation frequencies. Example: Program A for lawns watering every Monday, Thursday and Saturday at 22:00. Program B for flowers watering every day at 9:00. A station is assigned to either program A or to program B.

**PROGRAMMING**

- The IMAGE has a circular menu. Repeatedly pressing the → key will display the 8 screens in the menu.
- The programming data you enter is automatically stored when you move from one screen to the next by pressing →.

- Icons symbolize the various functions and indicate which part of the irrigation schedule you are programming. To call up a specific function, repeatedly press → until the desired function icon appears in the display.



**I - Set clock**

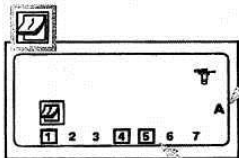
**A - Set current time of day**  
 Use the +/On and -/Off keys.  
 The +/On key increases the setting.  
 The -/Off key decreases the setting.  
 Holding down either key for over 2 seconds will cause the time setting to change rapidly.



**B - Set current day for 7-day cycle.**

Press → to move the square cursor through the days of the week numbered 1 to 7 (1 = Monday, 2 = Tuesday, etc.). Place the cursor on the current day of the week = today.

Example : Today is Wednesday. Place the cursor on "3".

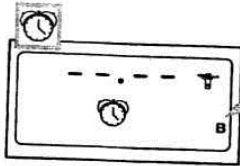


**II - Set days of the week to water for each program (7-day cycle)**

Select the desired program by pressing the A/B key. Use the → key to move the cursor through the days of the week (1 to 7, 1 = Monday). The +/On and -/Off keys are used to set or cancel water days. The -/Off key cancels watering days and the square disappears.

To set a water day, place the cursor on the corresponding day number and press +/On. Repeat the above procedure for the other program.

In this example, Monday, Thursday and Friday are watering days in program A.



**III - Set time of day to start watering**

You can start a watering cycle up to 8 times per day if you prefer several short waterings. At each start time, all the stations in the same program will operate in sequential order for the length of time you program in step IV. Now set the start times.

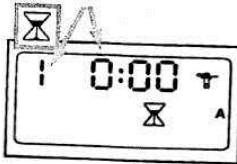
Select the desired program with the A/B key. Use the +/On and -/Off keys to set the first start time. Then press the ↻ key to move to the next start time. Repeat above procedure.

Press the → key to validate and move to the next function.

NOTE: It is not necessary to use all 8 start times!

The IMAGE will automatically file your start times in chronological order from 00:00 to 23:59.

To cancel a start time: press the ↻ key to display the start times. When you see the start time you want to cancel, hold down the ↻ key for at least 2 seconds.



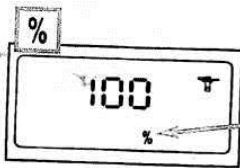
**IV - Set the length of watering time per station**

Each station must be assigned to a program. Assign the stations to program A or B using the A/B key. Press the ↻ key to move to the next station.

Use the +/On and -/Off keys to set the station watering time from 1 minute to 4 hours in 1-minute increments.

The station watering time appears in hours and minutes.

NOTE: If programs overlap with a 2nd watering set to start before the 1st has finished, the controller will "stack" the 2nd start and delay it until the previous cycle is completed.



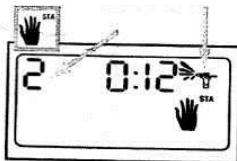
**V - Water Budget**

The controller has a Water Budget function used to adjust watering time for both programs from 0 to 200% without re-setting the run time for each station. A setting of 100% means that all stations will run according to their programmed watering time. The Water Budget feature can be useful for cutting back watering during cool winter months, or for increasing watering during periods of unusual heat.

Use the +/On and -/Off keys to increase or decrease the watering time in 10% increments.

Example: '80' in the display means you have reduced watering time by 20% on all stations. An initial duration of 10 minutes which you previously programmed will be cut to 8 minutes. The increased or decreased run time will not appear in the Step IV ⌘ display. However, the Step I ⌚ display shows the % icon to indicate that the Water Budget is being used. Keep in mind that the percentage you set applies to all stations on both programs.

• To turn off the Water Budget, call up the % display and set the percentage to 100.



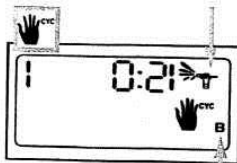
**VI - Manual single station start**

The station number appears in the upper left hand corner (example: station 2).

Use the ↻ key to display the other stations.

Example: to manually start station 2, press the ↻ key until number 2 appears. Then press +/On. Watering starts and is indicated on the screen by a blinking sprinkler stream. The display counts down the remaining programmed watering time (example: 12 minutes) in 1-minute increments. If you wish to stop watering before the programmed time is completed, press the -/Off key. The blinking stream disappears.

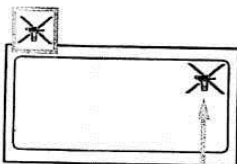
NOTE: Water Budgeting does not operate in the manual single station start mode.



**VII - Manual cycle start**

A cycle consists of the sequential operation of all stations assigned to the same program. Use the A/B key to select the program. Then press the +/On key to start the cycle. The sprinkler stream will blink. The 1st station number in the program appears and the remaining water time for the station is counted down. The rest of the stations will appear in sequence. If the Water Budget function is used, the % icon will appear next to 'A' or 'B'. The increased or decreased watering time will also appear in the display. To stop watering before the cycle is completed, press the -/Off key. The controller will revert to the time of day display.

NOTE: If the controller is in the Off mode (a non-blinking cross on the sprinkler), no manual or automatic watering will occur. See Step VIII.



**VIII - System On/Shutdown**

The default mode is "On" which allows programmed watering to take place.

You can prevent watering (rainy weather shutdown) without changing the scheduled watering programs.

Call up the display with the blinking cross on the sprinkler. To prevent watering, press -/Off. The cross stops blinking. If you move through the menu by pressing the → key, you will see that the non-blinking cross appears in all the displays except one. No watering, either automatic or manual, will take place. To return to the watering mode, press the → key until the blinking cross display appears. Now press the +/On key. The cross disappears.

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#### ACTION AFTER POWER OUTAGE

If the LED is out, the LCD is blank. There is no 230 V power input. No irrigation will take place. However, the Image has an electronic memory safeguard component that will maintain the irrigation programs for at least 24 hours. If the power outage lasts longer, the programs are lost. A default program will cause each station to revert to program 'A' and to water for 10 minutes a day beginning 8 hours after power is restored. It is then necessary to reprogram the controller.

#### DECLARATION OF CONFORMITY TO EUROPEAN DIRECTIVES

I declare that the IMAGE device, an irrigation controller, conforms to the 73/23/CEE and 93/68 European Directives for electrical safety and to 89/336/CEE, 93/31/CEE and 93/68/CEE concerning electromagnetic compatibility.

The applicable standards in accordance with the technical file are :  
EN 60065 for electrical safety,  
EN 50081-1 ed 92 and EN 50082-1 ed 92 for interference and for interference resistance.  
General information about your Image controller is located at the left of the terminal strip.

The IMAGE type device is powered by 230 V~, 50 Hz, single phase.

*Handwritten signature*

Aix en Provence, 13/09/2000  
General Manager  
RAIN BIRD EUROPE