

Miracle DC



Miracle 9 DC



Installation Programming & Operating Instructions



SPECIFICATIONS

Transformer: External AC to DC transformer. Plug in, class 2, UL listed, 120 VAC, 60 Hz or 220–240 VAC 50 Hz to: 9 VDC @ 200 mA.

Ambient Operating Temperature Range: 20°F to 122°F (–10°C to 50°C).

Battery for operation and backup: HIGH QUALITY 9 V Alkaline, like "DURACELL, MN 1604, 6LR61, 9.0V" or 9V lithium.

Sensor Type: 1 Dry contact type (close \Rightarrow $\leq 3K\Omega$, open \Rightarrow $\geq 100K\Omega$).

Operating solenoids/relays: 12 V DC latch, 2 wires.

Activated by discharge of 4700 μ F capacitor from 13.5V.

NOTE: Due to continuing product improvements, all features and specifications are subject to change without notice.

This controller generates radio frequency energy and may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J or Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- move the controller away from the receiver
- plug the controller into a different outlet so that controller and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

“How to Identify and Resolve Radio-TV Interference Problems”

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

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Introduction

The Miracle DC is a professional level irrigation controller, that makes your home landscape irrigation easy and fun. When programming the Miracle DC wisely, your garden will flourish beautifully, and your water budget will go down.

The Miracle DC is a battery operated irrigation controller. Although it may be connected to an external AC to DC transformer, the Miracle DC is fully operational (including valves operation) with batteries.

Three types of Miracle DC are available: 6*, 9**, and 12***, for the various number of valves in your garden. Three separate irrigation programs are available to enable irrigation of different groups of plants such as lawn, shrubs, trees etc. Each program has many programmable features for optimal results. A built in alarm feature enables quick problem spotting in your irrigation system, which in turn enables quick trouble shooting.

The Miracle DC has special "sleep" mode to reduce power consumption. 5 min. from user's last touch the display will turn OFF. All operations will continue automatically. Touching any button or the dial will bring the display back to life.

The Miracle DC is easy to install and use. Note that although it is possible to install and program the Miracle DC with little or no instructions, it is highly recommended that you read the entire manual first.

* Miracle DC with 6 valve outputs + main valve

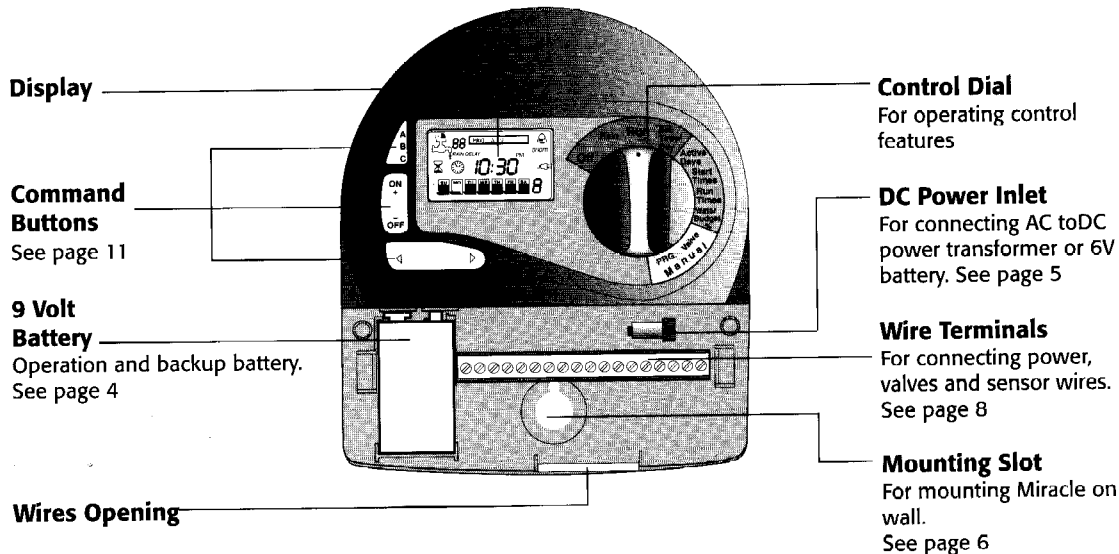
** Miracle DC with 9 valve outputs + main valve

*** Miracle DC with 12 valve outputs + main valve

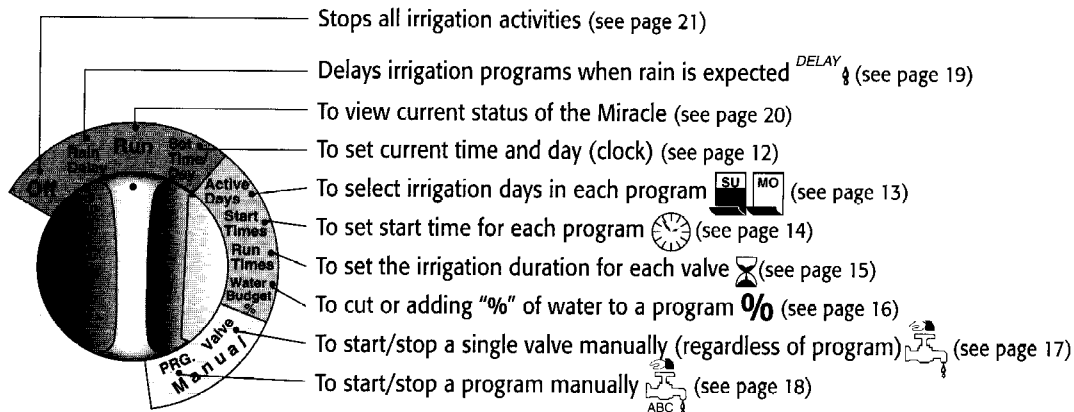
NOTE: All Miracle types (6, 9 or 12 valve outputs) have the same hardware and operational features.

GENERAL DESCRIPTION

Miracle DC Components



Control Dial Options



INSTALLING THE MIRACLE



Energy Source Installation (see Figure 1a)

The Miracle DC has three points for power connection:

1. Internal 9V Alkaline/Lithium battery point of connection.
2. External 6V battery (optional).
3. External AC to DC transformer.

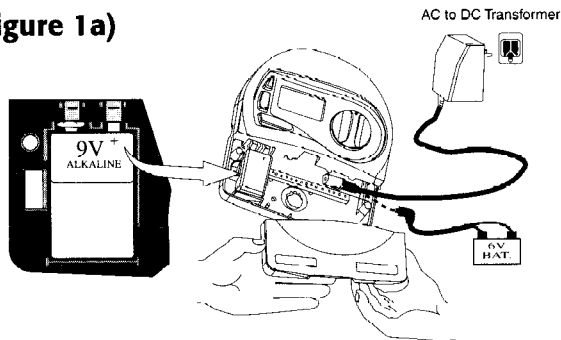


Figure 1a



INSTALLING THE MIRACLE

Installing the internal 9V battery: Remove the battery cover and place battery as shown in Figure 1a. Note the polarity of the battery. Once the battery is installed the Miracle DC will perform a self-Test procedure. The Miracle will not react to any key, and all valves will be given a Close command. The screen should display as shown in Figure 1b. (The word START and the Tap Symbol should flash, while the Valve No. Indicator should increase to the maximum capacity of the Miracle's model (6, 9, 12 Valves).

The 9V battery will supply all energy needed to operate the controller and irrigation valves.

Installing the external Transformer: After connecting the 9V battery you may connect the external AC to DC transformer. Connect first the controller end and only then the Main Power end. The Main Power symbol will show on the screen.

IMPORTANT: Use only AC to DC transformer for 9V. 200 mA.

IMPORTANT: When using the external transformer the Miracle DC will not operate without the 9V battery.

The energy to operate the controller and valves will be taken from the transformer and the 9V battery will be used as a backup during power failures, to fully operate the controller, including valves operation.

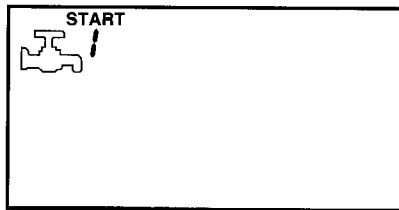


Figure 1b

INSTALLING THE MIRACLE



Installing the external 6V battery: Remove the battery cover and connect the external battery cable to the point of connection as shown in Figure 1a.

Once the battery is installed the Miracle DC will perform a self-Test procedure. The Miracle will not react to any key, and all valves will be given a close command. The screen should display as shown in Figure 1b. (The word START and the Tap Symbol should flash, while the Valve No. Indicator shows to the maximum capacity of the Miracle's model (6, 9, 12 valves).

The 6V battery will supply all energy needed to operate the controller and irrigation valves.

NOTE:

No need to connect the internal 9V battery when using the external 6V battery!

Danger: It is highly recommended to perform all wires installation to Miracle prior to power connection to prevent injury and or damage to the Miracle.

NOTES:

- Always use fresh batteries in order to increase performance capacity.
- Before replacing an old battery see instructions on page 5 in order to maintain all programming information in Miracle's memory.



INSTALLING THE MIRACLE

Replacing the battery

1. **Using the internal 9V battery** – Set the Control Dial to **off** position, all open valves will close, the display will show **OFF** blinking for few seconds, and then will turn blank. This is the time to replace the battery. **YOU HAVE 30 SECONDS TO REPLACE THE BATTERY** without the Miracle losing its memory. Turn the Dial back to **RUN**.
2. **Using the external 6V battery** – There are two ways to replace the battery:
 - A. Set the Control Dial to **off** position, all open valves will close, the display will show **OFF** blinking for few seconds, and then will turn blank. This is the time to replace the battery. **YOU HAVE 30 SECONDS TO REPLACE THE BATTERY** without the Miracle losing its memory. Turn the Dial back to **RUN**.
 - B. Connecting the internal 9V battery – Remove the battery cover and place a 9V battery as shown in Figure 1a. Note the polarity of the battery.

The 9V battery will supply all energy needed to operate the controller and irrigation valves.

Now replace the external 6V battery. You have all the time you need to do so, since the 9V battery is connected.

After replacing the external 6V battery, disconnect the 9V battery and place the battery cover back to its place.

INSTALLING THE MIRACLE

Mounting the Miracle to the Wall (see Figure 2)

1. Select a suitable indoor location for Miracle (within reach of an electrical power outlet in case the optional external AC to DC transformer is in use). Make sure valves and sensor wires reach Miracle location.
2. Place Miracle installation template (template is supplied on back cover page of manual) against wall, aligning top edge at about eye level. Mark upper side of mounting slots(1), on top and bottom of template (see markings on template).
3. Drill two holes in places marked, insert screw anchors(2) and drive two screws(3). Make sure to leave a little over 1/12" (2 mm) between screws head and wall.
4. Align mounting slots on back of Miracle with screw heads and lower the Miracle to rest on screws. Make sure the Miracle is properly secured, before releasing it.

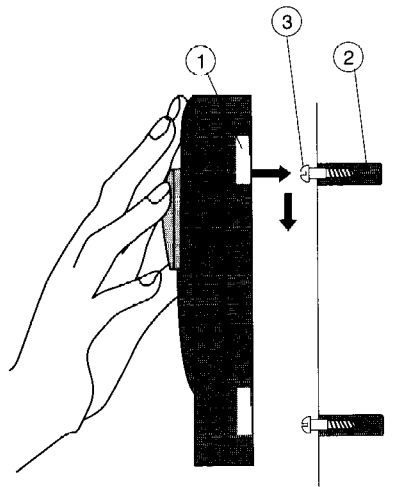


Figure 2

Wiring (see Figure 3)

Remove the battery cover (as shown in Figure 1) and perform the following sections in the order described in the next page (page 7).



INSTALLING THE MIRACLE

Connecting the Main Valve (MV) or Pump

Connect one of the **MV** solenoid wires to the wire terminal marked **MV**, and the remaining wire to the terminal marked **COM**. If pump is used instead of a **MV**, connect one of the relay wires to the terminal marked **MV**, and the remaining wire to wire terminal marked **COM**.

CAUTION: Do not connect **MV** output directly to pump – The Miracle can be damaged.

NOTE: Use only 9 – 12V DC latch 2 wires solenoid/pump relay, with maximum holding current draw of 200 mA.

Connecting the Station Valves

Route a common wire, from the wire terminal marked **COM**, to all the stations, and connect it to black wire in each valve. Connect the remaining red wire of each valve, separately, to terminals marked 1 to 12.

NOTE: Use only 12V DC latch 2 wires solenoid.

CAUTION!

The solenoid's 2 wires are color coded:

Red – to hot.

Black – to common.

Connecting the Input Sensor (such as rain gauge, moisture sensor, etc.)

This option can be used to stop irrigation activities when it is raining or the ground is saturated with water. Any dry contact (on/off) sensor can be used. Route a two wire cable from the Sensor to wire terminal marked **SENS** (polarity of wires is not important). When sensor is contacted, programs A and B stop, closing all their assigned valves. Program C is not influenced by the sensor and is suitable for patio irrigation. When sensor contacts are open again, the next Start Time assigned for programs A or B begins.

INSTALLING THE MIRACLE

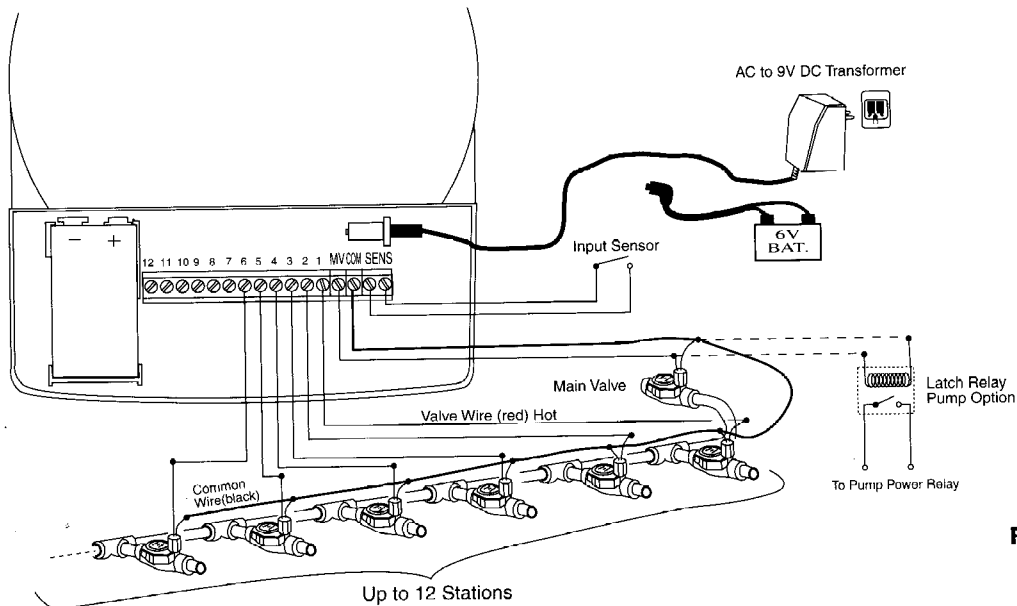


Figure 3



PROGRAMMING THE MIRACLE

What Does a Program Do ?

A program is set for irrigating a certain type or group of plants located in your garden (such as flowers, trees, lawn, shrubs etc.). The Miracle offers you 3 separate and independent programs (A, B and C). All programs can run at the same time. The Miracle can monitor 6, 9 or 12 station valves (depending on your Miracle model), that can be divided among the programs, according to your needs. A station can be assigned to more than one program. Each program has several basic parameters that have to be entered before operation, such as: Which days to irrigate – **Active Days**, When to start irrigation cycles – **Start Times**, duration of irrigation – **Run Times**. On "Active Day" when "Start Time" arrives the program accomplishes each valve's Run Time in sequence, beginning from the lower numbered valve.

Example: (See Figure 4 +)

Program A (Irrigates the lawn zone): **Active Days** – Monday, Wednesday and Friday / **Start Times** – 6:00 am and 6:30 pm/ **Run Times** – Valve 1 for 25 minutes (min) and Valve 2 for 30 min. Every Monday, Wednesday and Friday at 6:00 am, valve 1 opens for 25 min (until 6:25 am), and then at 6:25 am valve 2 opens for 30 min (until 6:55 am). At 6:30 pm, valve 1 opens again for 25 min (until 6:55 pm), and then at 6:55 pm, valve 2 opens for 30 min (until 7:25 pm).

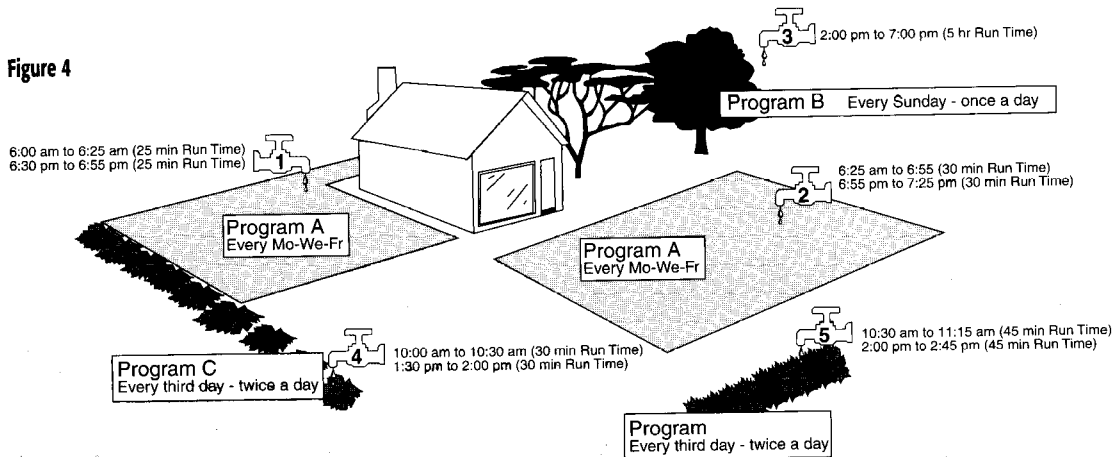
Program B (irrigates the tree zone): **Active Days** – Sunday/ **Start Time** – 2:00 pm/ **Run Time** – Valve 3 opens for 5 hours. Every Sunday at 2:00 pm valve 3 opens for 5 hours.

Program C (irrigates the shrub zone): **Active Days** – Every third day, starting from Monday/ **Start Time** – 10:00 am and 1:30 pm/ **Run Times** – Valve 4 for 30 min and Valve 5 for 45 min. Starting from Monday, every third day at 10:00 am, station 4 opens for 30 min (until 10:30 am) and then at 10:30 station 5 opens for 45 min (until 11:15 am). At 01:30 pm, valve 4 opens again for 30 min (until 2:00 pm) and then at 2:00 pm valve 5 opens for 45 min (until 2:45 pm). For programming and additional features, refer to the following programming pages.

PROGRAMMING THE MIRACLE



Figure 4












PROGRAMMING THE MIRACLE

Program Planner Table

Before starting to program the Miracle, use the Program Planner Table to record your programs. Recording your programs assists you in programming the Miracle, and is useful as a quick reference in the future. To demonstrate, the contents of the table shown on this page relates to the example described on page 8.

Basic Functions for Easy Programming

- Turn Control Dial to desired function option.
- Press  button to select a program to be set (A, B or C).
- Press  button to move to next/previous field on screen. A selected field **blinks**.
- Press  button to set values or activate/deactivate functions.

PROGRAM	ACTIVE DAYS		START TIMES 		STATION RUN TIME 	
A	SU <input type="checkbox"/> MO <input checked="" type="checkbox"/> TU <input type="checkbox"/> WE <input checked="" type="checkbox"/> TH <input type="checkbox"/> FR <input checked="" type="checkbox"/> SA <input type="checkbox"/>	<input checked="" type="checkbox"/> IC or <input type="checkbox"/> INTERVAL 1 2 3 4 5 6 7	1 6:00 am	1 00:25	5 : : 9 : :	
	2 6:30 pm		2 00:30	6 : : 10 : :		
	3 : : :		3 : : :	7 : : 11 : :		
	4 : : :		4 : : :	8 : : 12 : :		
B	SU <input checked="" type="checkbox"/> MO <input type="checkbox"/> TU <input type="checkbox"/> WE <input type="checkbox"/> TH <input type="checkbox"/> FR <input type="checkbox"/> SA <input type="checkbox"/>	<input checked="" type="checkbox"/> IC or <input type="checkbox"/> INTERVAL 1 2 3 4 5 6 7	1 2:00 pm	1 : : :	5 : : 9 : :	
	2 : : :		2 : : :	6 : : 10 : :		
	3 : : :		3 5:00	7 : : 11 : :		
	4 : : :		4 : : :	8 : : 12 : :		
C	SU <input type="checkbox"/> MO <input checked="" type="checkbox"/> TU <input type="checkbox"/> WE <input type="checkbox"/> TH <input type="checkbox"/> FR <input type="checkbox"/> SA <input type="checkbox"/>	<input type="checkbox"/> IC or <input checked="" type="checkbox"/> INTERVAL 1 2 3 4 5 6 7	1 10:00 am	1 : : :	5 00:45	9 : : :
	2 1:30 pm		2 : : :	6 : : 10 : :		
	3 : : :		3 : : :	7 : : 11 : :		
	4 : : :		4 00:30	8 : : 12 : :		

- NOTES:**
- Turning the Control Dial to next function option will automatically save your previous settings in memory.
 - When programming is done, leave the Control Dial on **RUN**, to view the current status of the Miracle.
 - **To clear all information from Miracle (RESET)** – disconnect all energy sources connected to the Miracle (internal 9V battery and/or AC to DC transformer, or the external 6V battery). After waiting few seconds connect the energy source again. All programming information will be erased from the Miracle's memory.

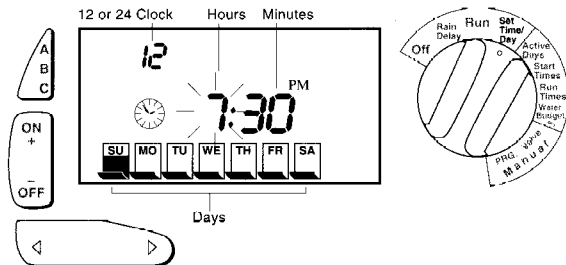
PROGRAMMING THE MIRACLE



Setting Time and Day (Miracle's Clock)

Perform the following steps to set the present time and day:

1. Turn Control Dial to **Set Time/Day**.
2. Press **ON+ OFF-** button to set hour.
3. Press ◀ ▶ button to move to minutes field, and use **ON+ OFF-** button to set minutes.
4. Press ◀ ▶ button to move to days field, until the current day blinks, and press **ON+** to set current day (selected day will turn black).



NOTE: Press **ABC** button to select between 24 and 12 hour clock system



PROGRAMMING THE MIRACLE

Active Days (Selecting the Irrigation Days for a Program)

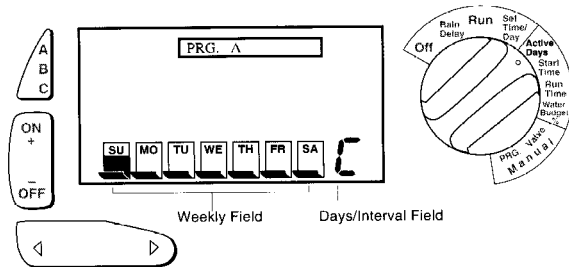
An Active Day is a program's irrigation day. There are two ways of setting the Active Days:

According to a Weekly 7 Day Calendar

1. Turn Control Dial to **Active Days**.
2. Press **ABC** button to select a program (A, B or C).

NOTE: The **C** shown on the right side of the weekly field, indicates a Weekly 7 Day Calendar mode. If **C** is not shown, press ◀ ▶ button to move to the right side of the "weekly" field and press the **ON+** button until **C** is shown.

3. Press ◀ ▶ button to move to the days of the week field. Press the **ON+** button to set the day to active (day icon turns black when set) or **OFF-** for non active day.



According to day interval between watering days

1. Turn Control Dial to **Active Days**.
2. Press **ABC** button to select a program (A, B or C).
3. Press ◀ ▶ button to move to Days/Interval field and use **ON+ OFF-** button to set interval days (up to 7 days).
4. Press ◀ ▶ button to move to Days field and press **ON+** to select the first day of the interval (day icon turns black when selected).

PROGRAMMING THE MIRACLE



Setting Start Times For Program

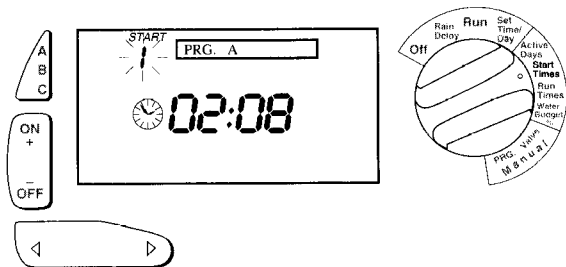
Each of the Miracle programs (A, B or C), has 4 irrigation cycles available per active day. Start Time is when each irrigation cycle begins.

On an Active-Day, when Start-Time arrives, the Program will start it's irrigation cycle. Each valve will operate for the Run-Time duration in sequence, starting from the lowest valve No.

NOTE: Start-Time is set for the Program and not for the individual Valve.

To set the Start Times, perform the following:

1. Turn the Control Dial to **Start Times**.
2. Press **ABC** button to select a program (A, B or C).
3. Press **ON+ OFF-** button to select Start Time number (1, 2, 3 or 4).
4. Press **◀ ▶** button to move to hour field and use **ON+ OFF-** button to set the Start Time in hours.
5. Press **◀ ▶** button to move to minutes field and use **ON+ OFF-** button to set Start Time in minutes.



NOTES:

- The word **OFF** will be shown in the center of the screen when Start Time is not set.
- To clear a Start Time, set the hours and minutes to **00:00** - **OFF** will be shown.



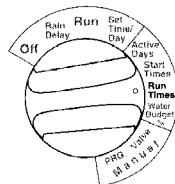
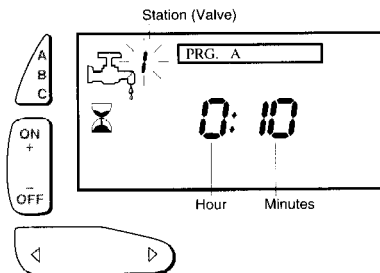
PROGRAMMING THE MIRACLE

Setting the Run Times (Irrigation Duration of Each Valve)

Each valve can be set to run (open) from 1 minute to 9 hours and 59 minutes. To set Run Time, perform the following:

1. Turn Control Dial to **Run Times**.
2. Press **ABC** button to select a program (A, B or C).
3. Press **ON+ OFF-** button to select a valve (1 to 12).
4. Press ◀ ▶ button to move to hour field and use **ON+ OFF-** button to set hour.
5. Press ◀ ▶ button to move to minutes field and use **ON+ OFF-** button to set minutes.
6. Press ◀ ▶ button to move to the valve's number field and repeat steps 3 to 5 to set the next valve's Run Time.

NOTE: When setting the Run Time to **00:00** the word **OFF** is shown - valve is not in use in this program.



PROGRAMMING THE MIRACLE



Setting the Water Budget % (Weather adjustments)

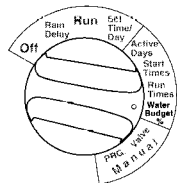
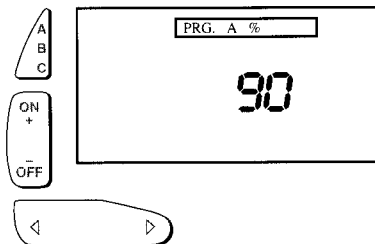
The water budget enables you to increase (up to 200%) /decrease (down to 10%) the irrigation Run Time of a program.

This option is useful during seasonal changes (when it is getting warm increase %, and when cold decrease %).

When the Water Budget is other than 100%, the % sign is shown in the PRG . window.

To set Water Budget % perform the following:

1. Turn Control Dial to **Water Budget %**.
2. Press **ABC** button to select a program (A, B or C).
3. Press **ON+ OFF-** button to increase/decrease %





PROGRAMMING THE MIRACLE

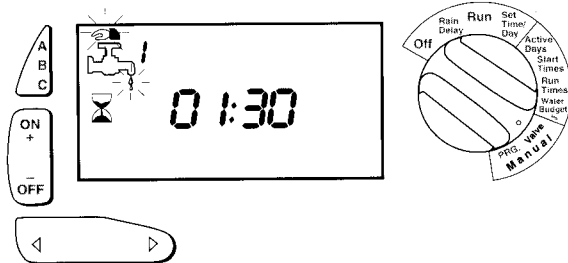
Manual Operation of a Single Valve

Each valve can be opened or closed manually. The Miracle offers you two ways of using this mode:

1. Turn Control Dial to **Manual Valve**.
2. Press on right side of ◀ ▶ button to move to valve field and use ON+ OFF- button to select station (1 of 12).

Opening a valve for default Run Time – Press on ◀ ▶ button until the hand sign field blinks, and press ON+ to open the valve for 10 minutes.

Opening a valve for any Run Time – Press on ◀ ▶ button to move to hour field and use ON+ OFF- button to set run time in hours. Press on ◀ ▶ button to move to minutes field and use ON+ OFF- button to set Run Time in minutes. Press on ◀ ▶ button to move to hand sign field and press ON+ button to open valve. Note that the “drops” sign blinks when a valve is open, and the display shows the remaining Run Time. To close a running valve press on OFF-.



NOTES:

- No more than 3 valves can run at the same time.
- After pressing the ON+OFF- button to open/close a valve, the Hand and the Tap symbols are blinking, as the Miracle makes necessary preparations before the operation.
- When **SHORT** is displayed on the right side of the screen, refer to Alarms section on page 22.

PROGRAMMING THE MIRACLE

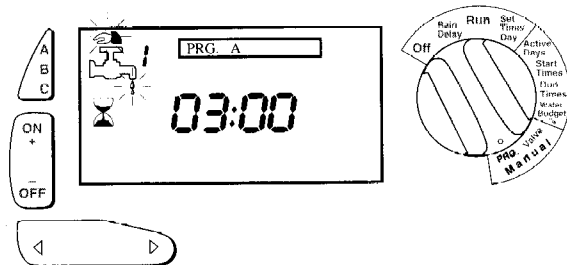


Manual Operation of a Program

A single irrigation cycle of any program (A, B or C) can be started/stopped manually, by the user. To run a program manually perform the following:

1. Turn Control Dial to **Manual Prg.** (note that hand sign blinks).
2. Press **ABC** button to select program (A, B or C).
3. Press **ON+ OFF-** button to start/stop program. When a program is irrigating, the drops sign blinks, and the remaining Run Time of the current running station is displayed.

NOTE: No more than 3 valves can run at the same time.





PROGRAMMING THE MIRACLE

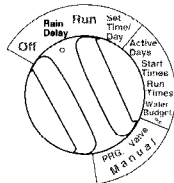
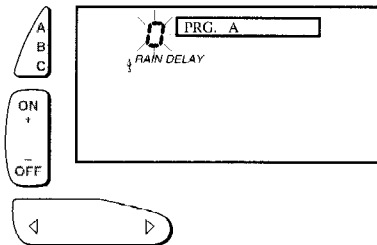
Setting Rain Delay

When rainy days are expected, you might prefer to delay an irrigation program until the rain is over (up to 99 delayed days). After setting the delay, the program stops immediately, and resumes when the delayed days are over. To set the Rain Delay, perform the following:

1. Turn Control Dial to Rain Delay.
2. Press **ABC** button for selecting program to delay (A, B or C).
3. Press **ON+ OFF-** button to select number of days to delay

NOTES:

- Valves can be opened manually although Rain Delay is set.
- To cancel the delay, set Rain Delay back to 0.
- Each time the clock passes through midnight the Rain Delay No. is decreased by one day.



PROGRAMMING THE MIRACLE



Run (Viewing Current Status of the Miracle)

It is highly recommended to turn the Control Dial back to **RUN** when programming is done. The RUN mode enables you to view the condition of the Miracle as follows:

• **When currently not irrigating (screen A):** The screen shows the current time and day.

NOTE: When a restart occurs, the time field blinks. Re-enter all the programming information, starting from the beginning (see page 9).

• **When currently watering (screen B):** The screen shows the active program (A, B or C), open valve number and the remaining run time.

- When a valve is opened manually, the hand sign displays on top of the tab sign.
- When more than one valve are currently open, the screen switches from one station to another.
- When % sign is displayed next to the active program – budget is set to that program.

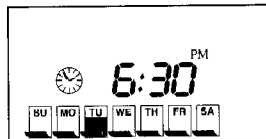
• **When input sensor is active:** The display shows **SE** and irrigation programs A and B stop (program C is not influenced by the input sensor).

NOTE: Manual operation of a valve or program is not influenced by the input sensor.

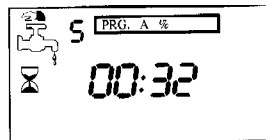
• **When rain delay is set (screen C):** The display shows the number of remaining rain delay days.

• **When there is an alarm (screen D):** The Miracle can display several types of alarm. A bell sign is shown when a new alarm occurs (see Alarms Display and What to Do, page 22).

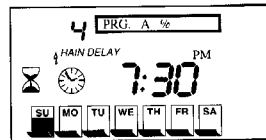
A



B



C



D





PROGRAMMING THE MIRACLE

Off (For stopping all irrigation activities or replacing the battery)

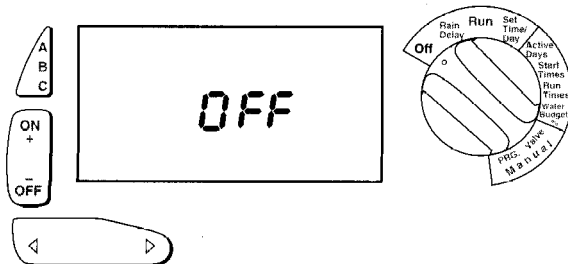
The off position serves two purposes:

- To stop all irrigation activities

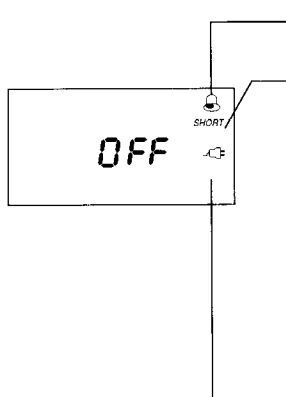
Set the Control Dial to **Off**, to stop all irrigation activities. All open valves will close and will never open until the Dial is set out from this position. When the Control Dial is set to **Off**, the display will show **OFF** blinking for a few seconds, and then will turn blank. All currently open valves will close.

- To replace the battery

Set the control Dial to **Off** when you need to replace the battery – see page 5, replacing the battery.



ALARMS DISPLAY AND WHAT TO DO



New Alarm Symbol: Blinks when new alarm occurs in the system (see following alarms below).

SHORT: Shown when the Miracle detects a shorted valve. A shorted valve is automatically turned off. To detect the malfunctioning valve, turn the Control Dial to Manual Valve mode, and review the valves – the malfunctioning valve displays **SHORT**. When the short is fixed, press on the left side of the ◀ ▶ button to move to hand sign field and use **ON+** button to reset the valve.

NOTE: When **SHORT** is detected for the Main Valve (or pump), the display shows **OFF** and does not operate until the problem is fixed. When the problem is fixed turn the Control Dial to Manual Valve and press the **ON+** button to reset the station.

Main Power Symbol: The Main Power symbol is on when the external AC to DC transformer is connected, in addition to the internal 9V battery. When the transformer is not connected, this symbol is off. This is not an alarm, because the Miracle DC is fully operational with the 9V internal battery.



ALARMS DISPLAY AND WHAT TO DO

Lo
bAtt

Low Battery: While in the Run mode this message will display when the battery voltage is low.

Whether you are using the internal 9V battery or an external 6V battery, this message indicates that the battery is weak. The Miracle will continue functioning until No Batt. Message will display. Low batt. Will start to display after approximately 80% usage of battery power of the 9V internal battery, and after approximately 90% of the external 6V battery. This gives you some indication of how much time you still have before battery is "dead". (According to the irrigation programs currently loaded into the Miracle).

If you wish to change the battery now, see "Replacing the battery" on page 5.

no
bAtt

No Battery: While in the Run mode this message will display when the battery voltage is very low!

Battery may be still connected but it's power is so low, that the Miracle prompts you like it doesn't exist.

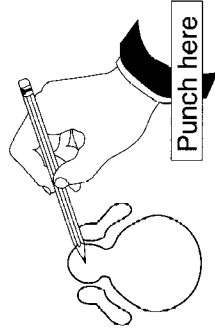
NOTE: When using the external AC to DC transformer it is necessary to install also the internal 9V battery (the Miracle will not work without it). If the 9V battery is not connected you will see **NO BATT** message as well.

In the No batt. Mode the Miracle will not perform any irrigation cycles and it will hold the programs in memory as long as it can, ***this is the time to replace the battery!!***

TROUBLE SHOOTING



SYMPTOMS AND PROBLEMS	REMEDY
No Display: ♦ Dead battery.	✓ Press any key, if doesn't help replace the battery.
Display shows SHORT:	✓ Fix exposed wires which touch each other, either in Miracle terminals or on valve site. / ✓ Clean dirt or water on exposed wires.
Clock blinks in Run mode: ♦ Battery is weak or dead.	✓ Replace battery. ✓ Set the current time and day and reprogram the Miracle.
Valves open at wrong Start Times.	✓ Check and reset the current time and day. ✓ Check if by mistake more than one start-time was assigned to the program.
Program does not start ♦ Programming error or conflict. ♦ Control Dial is turned OFF. ♦ Rain Delay is set. ♦ Rain gauge makes contact.	✓ No more then 3 valves can run at the same time. ✓ Turn Control Dial to RUN . ✓ Set Rain Delay to 0. ✓ It's raining! / fix short in rain gauge or it's wiring.



← Allow 6 1/2" (17 cm) for Miracle installation →

