Rain Pro
Battery Operated Controller

Instruction Manual

English

November 27, 2012

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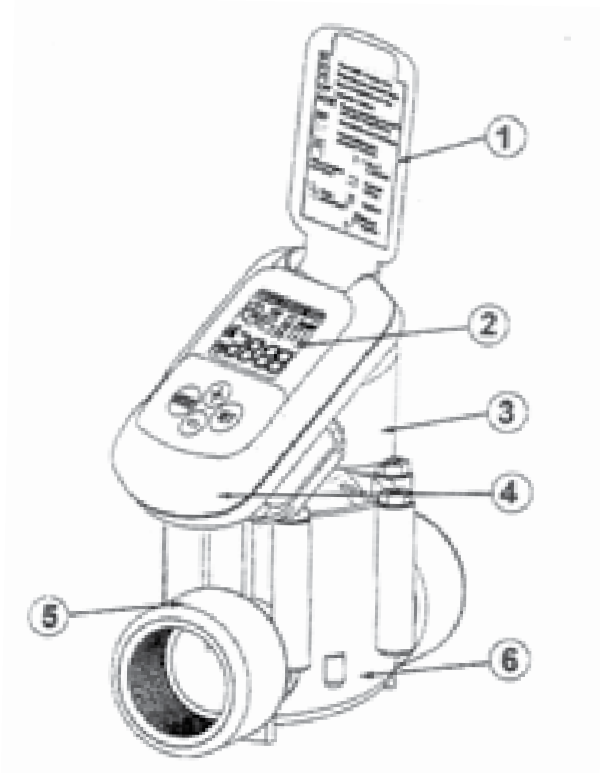
Getting Started

Feature

- Up to three operations per day
- Battery powered; no need for electrical hookup
- Easy installation
- Waterproof and weather resistant
- Easy programming

Parts Identification



1. Top Cover
2. Controller Display
3. Solenoid
4. Controller
5. Water Flow Direction Arrow
6. Hydraulic Value

Basic Controller Functions

This section gives a brief description of the Controller buttons. See the following sections for further details.

MODE Button: Quick presses of the **MODE** button turns the controller off, or turns on a specific program (P1, P2, P3). Longer presses of the **MODE** button puts the Controller in the programming mode.

SET Button: Press the **SET** button to set and advance functions.

+ - Buttons: Use the plus/minus buttons to increase and decrease schedule functions.

Installation

1. Turn off the water supply.
2. Install the valve in the irrigation system. Be sure the arrow on the valve is pointing in the direction of the water flow. The solenoid sleeve on back of the controller may be adjusted to ease installation.
3. Occasionally the valve opens in transit. To ensure that the valve is closed before you open the water supply, first make sure that the Controller is not set to OFF (If it is set to OFF, press briefly on the **MODE** button and turn it on). Then press **+** and **SET** simultaneously to open, and press **-** and **SET** simultaneously to close. You are now ready to program the Controller.
4. Turn on the water supply.

Manual Operation

To manually open the valve, make sure that the Controller is not set to OFF (If it is set to OFF, press briefly on the **MODE** button), then press **+** and **SET** simultaneously. This will open the valve.

The irrigation will continue until the set run time has passed. If the irrigation duration has been set to zero, the valve will close after one minute. To STOP irrigating, press **-** and **SET** simultaneously. This will close the valve.

Programming Overview

This Controller offers 3 different Programs P1, P2, and P3.

Program 1:
Allows 1 Run Time from 1 minute to 11 hours 59 minutes with 1 Start Time, watering every day.

Program 2:
Allows 1 Run Time, one Start Time (the same as P1) but allows the capability of selecting of Day or Days of the week to irrigate.

Program 3:
Allows 1 Run Time with up to 3 start times per day and the capability of selecting the Day or Days of the week to irrigate.

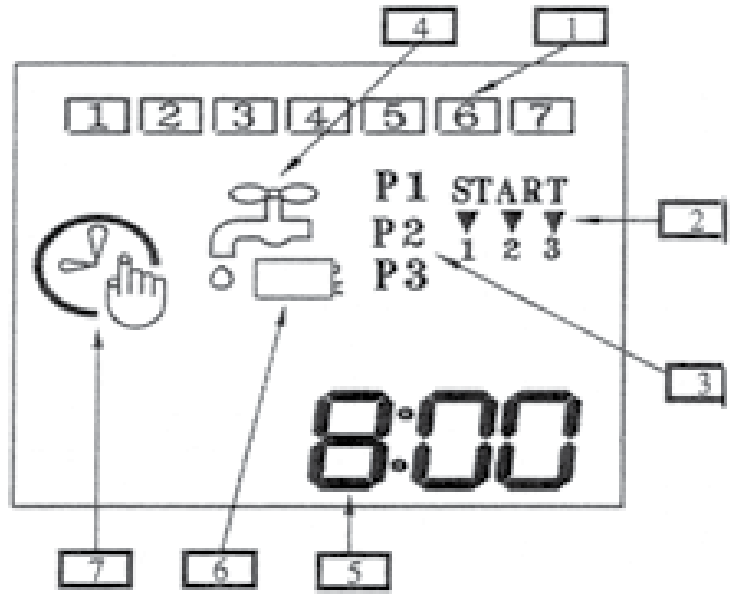
- The Run Time is common for all 3 Programs
- The Start Time is common for P1 and P2
- P3 requires the Start Times to be set. The controller will operate with only 2 Start Times set if desired.
- The controller has 4 **MODES**, P1, P2, P3 or OFF. The **MODE** will be displayed along with the time and day of the week.
- Be sure the **MODE** you want the controller to Run.
- See “Programming the Controller” instructions in this manual for step by step programming instructions.

Programming the Controller

Meaning of Controller Icons

Note: Quick presses of the **MODE** button turns the Controller off, or turns on the specific program (P1, P2 or P3). Longer presses of the **MODE** button put the Controller in programming mode.

1. Irrigating days of the week
2. Program starts
3. Program #
4. Irrigation
5. Clock or Run Times
6. Low battery
7. Time adjustment



Note: You cannot program the controller if it is set to manual operation or if it is set to “OFF”. To release from manual operation press **-** and **SET** simultaneously. To release from OFF press briefly on the **MODE** button.

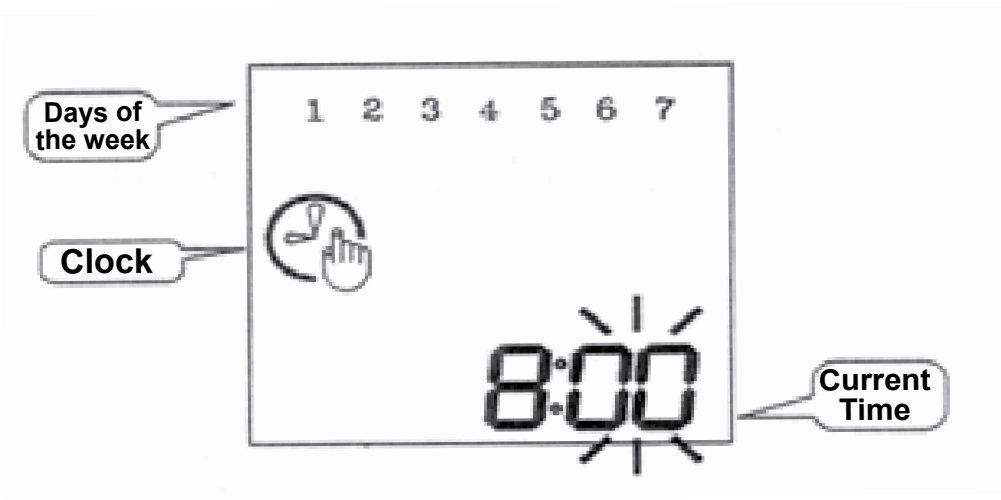
Controller will revert to operating mode after 30 seconds if no buttons are pressed.

Setting the Clock

If screen is blank, press **MODE** to activate.

The Clock must be set before programming the Controller.

1. Press **MODE** for several seconds until the time adjustment icon appears (the minutes will be flashing):



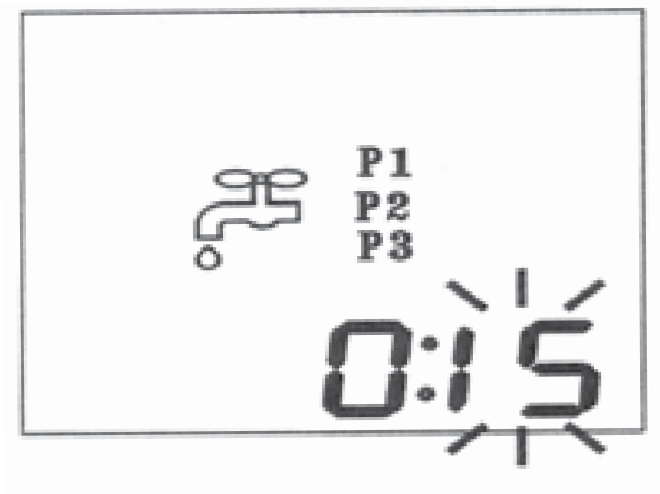
On this screen the numbers represent the current time. This is a 24 hour clock. No A.M. or P.M. is shown.

2. Use the **+** and the **-** buttons to adjust the minutes.
3. Press **SET** to continue.
4. Use the **+** and the **-** buttons to adjust the hours.
5. Press **SET** to continue.
6. Use the **+** and the **-** buttons to select the current day of the week. The selected day will flash.
7. Press **SET** to return to operating mode.

Setting the Irrigation Run Time

To set duration of all irrigations, you must be in an operating mode (P1, P2, or P3).

1. Press the **MODE** button until the clock setting screen appears, then press **MODE** again until the following screen appears (the minutes will be flashing).



On this screen, the clock numbers refer to the amount of time you wish irrigation to continue. Minimum time is 1 minute. Maximum time is 11 hours 59 minutes in 1 minute increments.

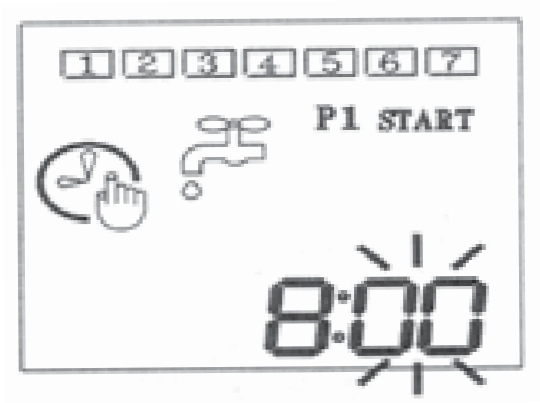
2. Use the **+** and the **-** buttons to adjust the minutes.
3. Press **SET** to continue.
4. Use the **+** and the **-** buttons to adjust the hours.
5. Press **SET** to continue.

Watering Every Day at a Set Time (P1)

If you would like to irrigate every day at the same time use the program P1:

Setting the Start Time

After setting the irrigation run time, the following screen appears:



On this screen, the clock numbers refer to the time you wish irrigation to begin.

1. Use the **+** and the **-** buttons to adjust the minutes.
2. Press **SET** to continue.
3. Use the **+** and the **-** buttons to adjust the hours.
4. Press **SET** to return to operating mode (P1 programming is now complete).

Example

If you wish to irrigate every day at 9:00 in the morning, for 20 minutes: Make sure the clock is set, and you are in an operating mode. Press **MODE** twice to get to the Duration Time (with the “tap” icon). Set the Duration Time to 0:20. Then set the clock (on the following screen with the “clock face” icon and “tap” icon) to 9:00.

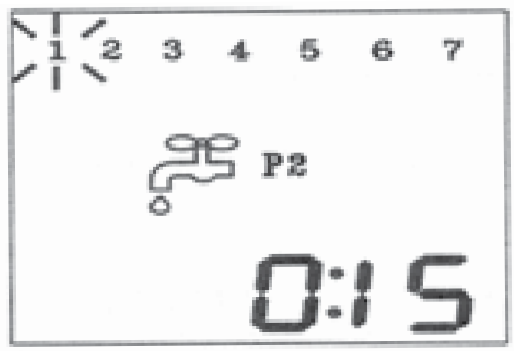
Watering on Selected Days (P2)

If you would like to irrigate on specific days at the same time use P2 program:

Note: Irrigation duration must be set first. **P2** takes the start time directly from **P1**. For instructions on how to set **P1**, see previous instructions.

Setting the Days

1. To set the days, Press **MODE** until the Clock Setting screen appears, then press **MODE** again until the Duration Time (with “tap” icon) appears, then press **MODE** again until the P1 screen appears, and press once again until the following screen appears:



2. Press **SET** to reach the day you wish to irrigate. The number (corresponding to the day of the week) will flash.
3. Press **+** to select that day (the square which appears indicates day is selected).
4. Press **-** to deselect a day.
5. Press **SET** until all days are programmed as desired. Current day continues flashing.
6. Press **SET** to return to operating mode.

Example

If you wish to irrigate Sunday, Tuesday, Thursday and Saturday at 9:00 in the morning, for 20 minutes; Make sure the clock is set, and you are in an operating mode. Then press **MODE** twice to get to the Duration Time (with “tap” icon). Set the duration time at 0:20. Then set the clock (on the following screen with the “clock face” icon and “tap” icon) to 9:00. Press **MODE** to get to the P2 screen, and then select days 1, 3, 5 and 7.

Watering Up-To Three Times a Day on Selected Days (P3)

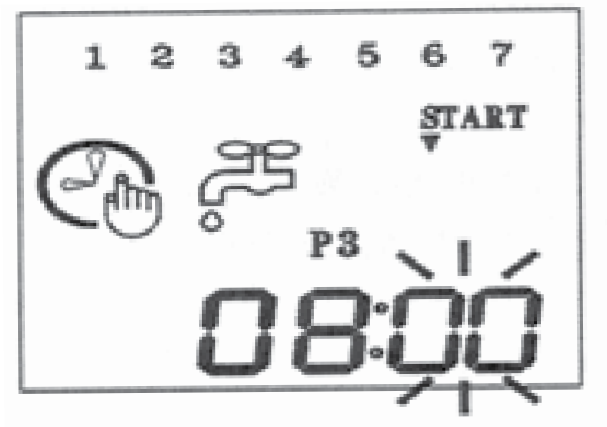
If you need to water more, up-to three times a day, on specific days, use the P3 program.

Note: Run Time must be programmed first.

Setting the Start Times

To set start times, you must be in an operating mode (P1, P2, or P3)

1. Press **MODE** until the clock setting screen appears, press **MODE** again until the Run Time (with “tap” icon) screen appears, press **MODE** a third time until the P1 screen appears, press again until P2 appears, then press again until P3 screens appears (The minutes will be flashing).



On this screen, the clock numbers refer to the time you wish the first irrigation (START 1) to begin. The three arrows under START indicate the three different irrigations. As each arrow appears you may program the start time for that particular irrigation.

2. Use the **+** and the **-** buttons to adjust the minutes.
3. Press **SET** to continue.
4. Use the **+** and the **-** buttons to adjust the hours.
5. Press **SET** to continue programming. The arrow now appears under START 2.

Setting up a Second and Third Daily Irrigation

Repeat the above steps for setting, the start times of the second and third daily irrigations. After completing setting the start times, the number 1 in the upper left corner will flash indicating that you are now ready to choose the days you wish to irrigate.

Choosing the Days

1. Press **SET** to move through the days, and reach the day you wish to irrigate. The number (corresponding to the day of the week) will flash.
2. Press **+** to select that day (the square around the day which appears indicates day is selected).
3. Press **-** to deselect a day (no square showing).
4. Continue through all the days until day 7 is flashing, then either press **SET** to return to operating mode or press **+** to select 7 (if desired) and then press **SET**.

Example

If you wish to irrigate Sunday, Tuesday, Thursday and Friday at 9:00 in the morning, and at noon, and at 14:00 (2 p.m.) in the afternoon for 30 minutes each time, first make sure the clock is set, and run time is set to 0:30. Then press **MODE** until the clock setting screen appears, press **MODE** a third time until the P1 screen appears, press again until P2 appears, then press again until the P3 screen appears.

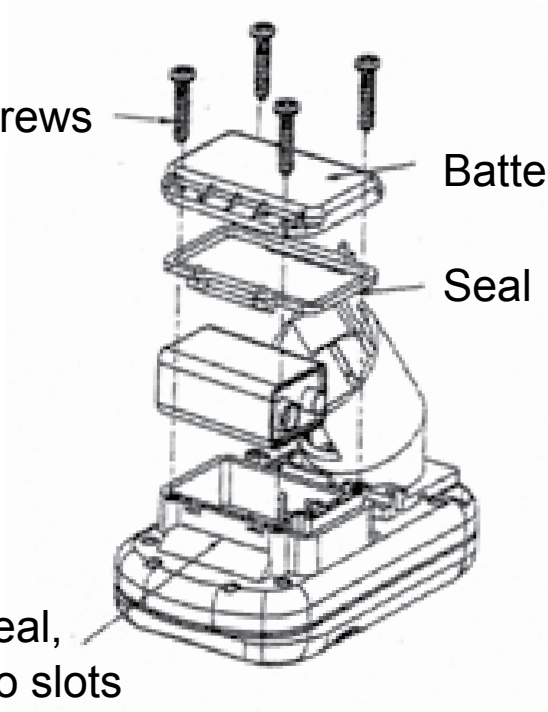
(with the “clock face” icon and “tap” icon). Set 1 to 9:00, Start 2 to 12:00, and Start 3 to 14:00. After setting the irrigation start times, the days at the top of the screen will flash. Set 1, 3, 5 and 6, then press **SET** when your reach day 7. Make sure a square is around 1, 3, 5 and 6. The square indicated days to run.

Maintenance and Troubleshooting

Battery Installation

Replace the battery at the start of each irrigation season and when the low battery icon appears.

1. Using a Phillips screwdriver, remove the four battery cover screws.
2. Remove the battery cover seal.
3. Replace the battery. Make sure **+** and **-** terminals match controller markings.
4. After re-attaching the seal, put the cover back, and secure with four screws. Make sure the seal is clean and the screws are evenly tightened.



Off Season

During the season when you do not need to irrigate, press the **MODE** button quickly until OFF is displayed. DO NOT remove the battery. The Controller is equipped with a back-up battery, and removing the main battery for long periods will cause the back-up battery to discharge.

Troubleshooting

PROBLEM	CAUSE	SOLUTION
Controller does not irrigate as desired	Water at main water supply is shut off	Check main supply valve
	Hose cut or blocked	Replaced damaged section
	Battery dead	Replace battery
	Controller set on OFF	Set controller to desired program
	Controller improperly programmed	Check program and clock settings
Blank display	Battery dead	Replace battery
	Controller in sleep mode	Press MODE to activate screen
Water does not turn off	Valve blocked by dirt or scale	Repair valve
	Valve installed backwards	Install valve so that the arrow points in the direction of the water flow