

# RAIN BIRD®

## Simple-To-Set Smart Controller Operation Manual



**Welcome and thank you for purchasing the Rain Bird SST Smart Controller!** In the following pages, you will find step by step instructions on how to use every function included in your Controller. If at any time you have trouble understanding how to setup your controller, please call Rain Bird Technical Support at 1.800.Rain Bird and let us guide you through the setup process. Thanks again and we hope you enjoy your new controller.

## Smart Logic

Read below to understand how the controller automatically adjusts watering times.

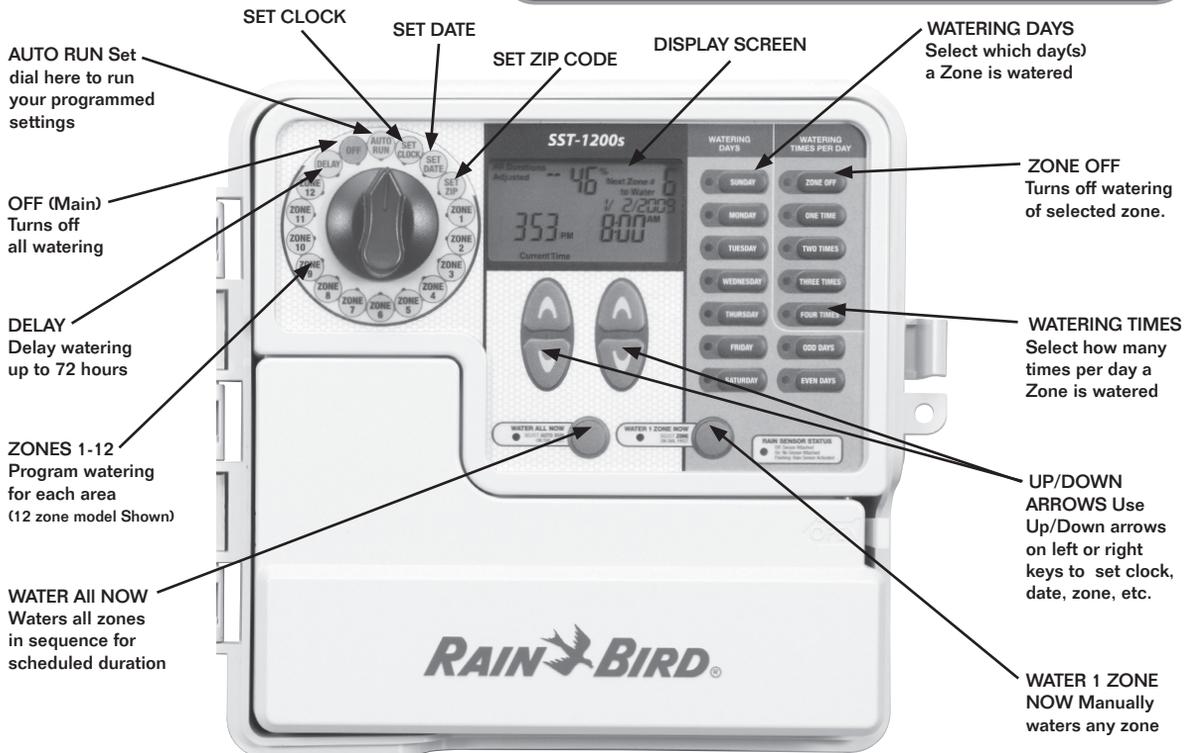
This controller automatically adjusts its watering time based on an internally stored database of historic weather conditions for your area, as well as current weather conditions. Create an automatic watering schedule **by setting watering times for the hottest period of the year** in your area (most likely July or August) and by entering your zip code. Once setup, the controller will use its internal weather database in combination with weather sensors to automatically adjust watering amounts.

The controller will adjust each zones watering duration up or down by a certain percentage of the scheduled amount. The adjustment percentages are shown in the upper left corner of the screen. In this example, all watering durations have been reduced by 20%. If that zone had been scheduled to water for 10 minutes, watering time is now automatically reduced to 8 minutes.



# Getting Started

Below is a diagram that shows all of the controls and displays for your controller. Use this diagram to become familiar with the controller functions.



**USER TIP:** Always begin by turning the dial to the area you want to make a change to and make your changes using the options and information displayed to the right and below the dial. For instance, if you want to set a schedule for Zone 1 in your yard, first turn the dial to "Zone 1" and then make your changes using the buttons to the right of the dial.

## Setting Clock

To Set Clock:

The first thing you will want to do before setting up your watering schedule is to put the correct time into the controller . Follow the steps below.

### Step 1

Turn dial to Set Clock

### Step 2

Use left Up/ Down arrow keys to choose current time



**STOP** **IMPORTANT:**  
Reset dial to Auto Run after making any adjustments to the programming

## Setting Date

The next thing you will want to do before setting up your watering schedule is to put the correct date into the controller. Follow the steps below.

To Set Date:

**Step 1**

Turn dial to Set Date

**Step 2**

Use left and right Up/Down arrow keys to choose current date



**STOP IMPORTANT:**  
Reset dial to Auto Run after making any adjustments to the programming

## Setting Zip Code

The last thing you will want to do before setting up your watering schedule is to put your zip code into the controller. Follow the steps below.

To Set Zip:

**Step 1**

Turn dial to Set Zip

**Step 2**

Use left and right Up/Down arrow keys to choose your zip code



**EXAMPLE:**  
If you have Zone 1 scheduled to water for 15 minutes on the hottest time of the year, it will adjust accordingly to the temperature that day.

**STOP IMPORTANT:**  
Reset dial to Auto Run after making any adjustments to the programming

**USER TIP:** The Simple-To-Set Smart Controller automatically adjusts your watering schedule to take into account both the seasons and weather conditions. This allows the controller to optimally water plants year round without the need for the homeowner to constantly reprogram the controller throughout the year.

# Scheduled Watering

This section shows you how to set up a watering schedule for each Zone in your yard.



**USER TIP:** You will set up each Zone on its own schedule simply by repeating the steps below for each Zone you want to schedule.

### Step 1

Turn dial to the Zone you wish to schedule

Zone to water

### Step 6

Turn dial to next Zone and repeat Steps 2-5

### Step 5

Use Up/Down arrow keys to select start time to water\*

\*If you selected more than one watering time per day in Step 3, then you will be asked to input the FIRST watering start time. All subsequent start times are at fixed intervals that cannot be changed and are noted in text above the Start Time. The fixed intervals are:

#### Watering Times per Day Options

- 2 times per day
- 3 times per day
- 4 times per day

#### Hours from First Start Time For Additional Watering Times

- 6 hours
- 4 and 8 hours
- 3, 6, and 9 hours

Select the day(s) of the week or odd/even days you wish to water

### Step 2

### Step 3

Select number of times per day to water\*\*;  
default is once per day  
\*\*If you have trouble with water puddling or running off, you might consider watering more than once per day—but for less time each time you water. This will give the water a better chance of soaking into the soil and not running off into the street.

### Step 4

Use Up/Down arrow keys to select how many minutes to water

**NOTE:** Remember to set your watering time to be what you will need during the hottest period of the year. The Smart features in the controller will adjust watering times to account for all the periods of the year requiring less water.



### IMPORTANT:

Reset dial to Auto Run after making any adjustments to the programming

# Water 1 Zone Now

This option allows you to water any single Zone on demand instead of waiting for the programmed schedule.

**USER TIP:** Any watering you do with this function will not affect your normal schedule.

## Water 1 Zone Now

**Step 1**  
Turn the dial to the Zone you wish to water and press "Water 1 Zone Now"

**Step 2**  
The Zone will start watering for a default of 10 minutes

Current watering zone



**Step 3**  
Use the Up/Down arrows to adjust the number of minutes

**Step 4**  
To stop watering before the time is up, return dial to "Auto Run"

**STOP IMPORTANT:**  
Reset dial to Auto Run after making any adjustments to the programming

# Water All Now

This option allows you to water all Zones in sequence instead of waiting for the programmed schedule.

**USER TIP:** Any watering you do with this function will not affect your normal schedule.

## Water All Now

- Step 1**  
Turn the dial to Auto Run and press "Water All Now"
- Step 2**  
The controller will water each zone in sequence for its scheduled duration
- Step 3**  
To stop watering before the time is up, turn the dial to "Off" for a few seconds

Current watering zone



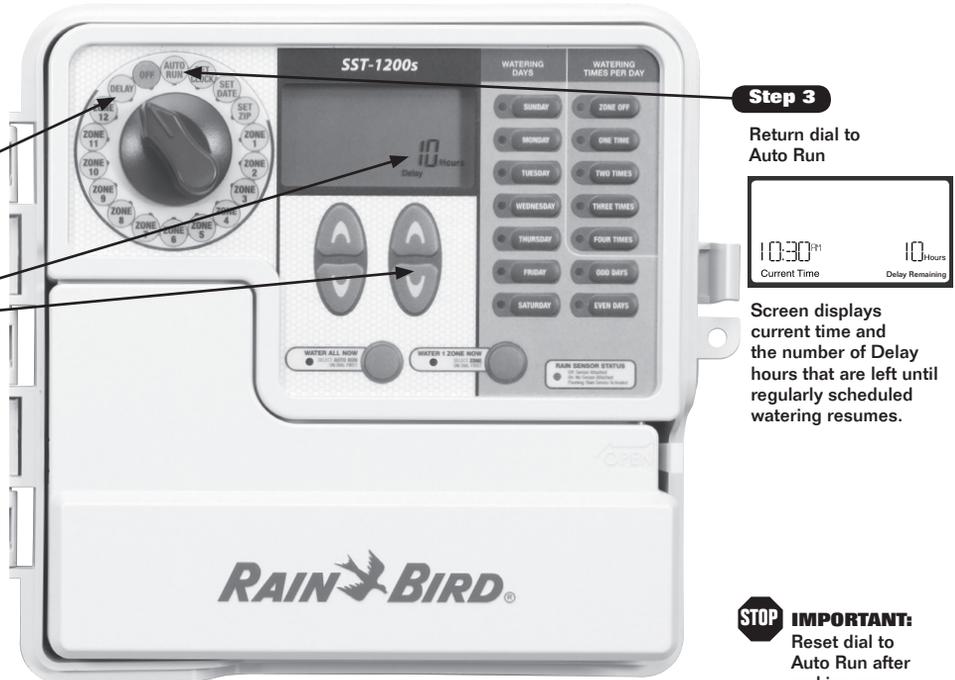
**STOP IMPORTANT:**  
 Reset dial to Auto Run after making any adjustments to the programming

# Rain Delay

Use this function to suspend watering for up to 3 days due to weather or other reasons.



**USER TIP:** Once the controller has waited the amount of time you select for Delay, it will resume normal scheduled watering. Any scheduled watering that falls into the delay period will not occur.



## Rain Delay

### Step 1

Turn the dial to Delay

### Step 2

Use the right Up/Down arrows to adjust the amount of delay time

### Step 3

Return dial to Auto Run

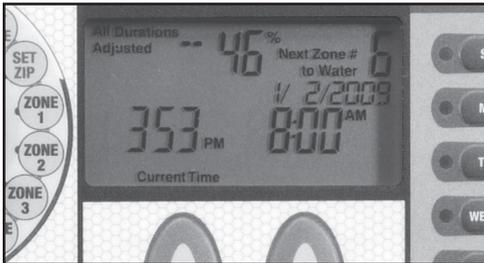


Screen displays current time and the number of Delay hours that are left until regularly scheduled watering resumes.

### STOP IMPORTANT:

Reset dial to Auto Run after making any adjustments to the programming

## Normal Operation



### Normal Operation

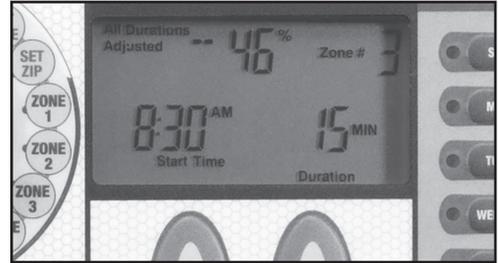
Screen displays current time, the zone that is scheduled to be watered next, and the date and time it will be watered. In the upper left corner the percent of watering time adjustment calculated by the controller is shown.



### With Rain Delay

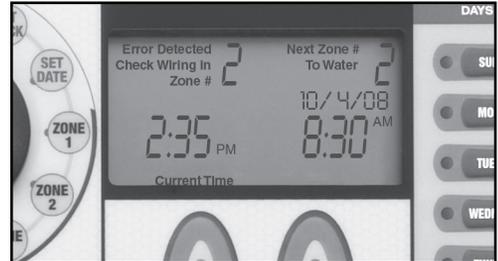
Screen displays current time and the number of Rain Delay hours that are left until regularly scheduled watering resumes.

Below are different screens your controller might display while in Auto Run mode.



### Watering All Now

Screen displays current time, which zone is currently being watered, and the number of minutes remaining in the cycle for that zone.



### Valve Short

The upper left corner of the display shows that the controller has detected a fault in the wiring for zone #2. It is likely to be a short circuit or a defective valve solenoid.

# Troubleshooting

## Watering Issues

<b>Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
Automatic and Manual cycles do not begin watering.	Water source not supplying water.	Make sure the main water line and all supply lines are open and operating properly.
	Wires not properly connected.	Make sure all field wires and master valve/pump start relay wiring is connected properly.
	Wires loose or cut; corroded connections.	Check field wiring for broken, cut, or "skinned" wires and replace if necessary. Check all wire connections and replace with watertight splice connectors as needed.
	Dial not set to AUTO RUN.	Make sure the dial is on AUTO RUN—not any other dial position.
	The Rain Sensor may be activated.	Check the status of the red light on the lower right corner of the controller face for status of the rain sensor. The display will also show an "All Durations Adjusted" level of -100%. You can either wait until the Rain Sensor dries out, or disconnect the Rain Sensor from the yellow terminals on the controller.
	The controller has determined that watering is not required.	Check the display and determine if the "All Durations Adjusted" level is between -70% and -100%. If so, the controller has determined that weather conditions are such that watering is not required. You can wait until the controller decides it's time to water, or you can water now by using the "Water All" feature.
	An electrical surge may have damaged the controller's electronics.	Press the reset button under the wiring cover. If there is no permanent damage, the controller should resume normal operation. You will need to input the correct time and date, but your watering schedule should remain intact.

## Electrical Issues

<b>Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
LCD Display is blank.	Power cord not plugged in.	Make sure the two-prong connector is connected and the power cord is securely plugged in.
	Wall socket not supplying power.	Make sure the main AC power supply is working properly.
LCD Display is "frozen" and the controller will not accept programming.	An electrical surge may have damaged the controller's electronics.	Unplug the controller for 3 minutes. Plug the controller back in. If there is no permanent damage, the controller will accept programming and resume normal operation.





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