Rain Bird SST400IN

Rain Bird SST400IN Simple-to-Set Indoor Sprinkler/Irrigation System Timer/Controller User Manual

Model: SST400IN | Brand: Rain Bird

1. Introduction and Overview

The Rain Bird SST400IN Simple-to-Set Indoor Sprinkler/Irrigation System Timer/Controller is designed for intuitive and efficient management of your lawn and garden watering needs. This indoor-mounted timer, an improved model replacing the SST400I, offers enhanced features and programming options for up to 4 zones.

Its user-friendly interface allows for simple zone-by-zone settings, enabling customized watering schedules tailored to specific areas of your yard. This ensures optimal hydration, promoting healthier landscapes while conserving water. The controller supports watering times from 0 to 240 minutes per zone and allows for up to four custom watering times per day, ideal for managing different soil types and preventing runoff.

Key features include an LCD screen for reviewing settings, LED indicator lights, Seasonal Adjust for adapting to weather changes, Rain Delay for temporary suspension, and manual watering options for individual or all zones. Built-in surge protection safeguards the unit, and settings are retained indefinitely in memory during power outages. The sealed case provides protection against moisture, insects, and grime, making it suitable for indoor installation in a garage, home, or waterproof shed. It is compatible with most 24 VAC irrigation valves and supports a master valve or pump start relay, as well as a rain sensor.

2. Features

- **Simple Programming:** Designed for ease of use, minimizing the need for complex instructions.
- **Zone-by-Zone Customization:** Allows for tailored watering schedules for each area of your yard.
- **Indoor Installation:** Suitable for installation within a garage, home, or waterproof shed.
- **Seasonal Adjust:** One-touch adjustment to increase watering time by up to +100% in hot/dry periods or reduce by up to -90% in cool/rainy periods.
- **Rain Delay:** Suspends watering for up to 72 hours, with automatic resumption once the delay ends.
- **Durable Design:** Features superior long-lasting durability and built-in surge protection.

- **Sealed Case:** Protects internal components from moisture, insects, and grime.
- **Enhanced Model:** This SST400IN timer is a new and improved version, replacing the obsolete SST400I.

3. Installation (Setup)

The Rain Bird SST400IN controller is designed for straightforward indoor installation. Ensure the chosen location is within a garage, home, or waterproof shed to protect the unit from outdoor elements.



Figure 3.1: Front view of the Rain Bird SST400IN controller, showing the dial and display.

3.1 Mounting the Controller

1. Select a suitable indoor location that is protected from direct weather exposure.
2. Mount the controller securely to a wall using appropriate fasteners. Ensure it is level and easily accessible for programming and wiring.

3.2 Electrical Connection

1. Connect the included transformer power plug to the controller and then to a standard 120 VAC/60Hz electrical outlet. The cord length is 6 feet.
2. Ensure the power supply is stable and meets the controller's requirements (Input: 120 VAC/0.17 AMP/60Hz; Output: 25.5 VAC/0.65 AMP/60Hz).

3.3 Valve and Accessory Wiring

1. Connect your 24 VAC irrigation valves to the corresponding zone terminals on the controller. The SST400IN supports up to 4 zones.
2. If using a master valve or pump start relay, connect it to the designated terminal.
3. For rain sensor integration, connect the sensor to the appropriate terminals. The controller will automatically suspend watering when rain is detected.

4. Operation (Programming)

The SST400IN is designed for simple, intuitive programming. Use the large dial and clear LCD display to navigate through settings and customize your watering schedules.



Figure 4.1: Main control panel of the Rain Bird SST400IN, showing the dial, LCD screen, and programming buttons.



Figure 4.2: Detailed view of the programming dial and zone selection buttons, highlighting the intuitive interface.

4.1 Setting Watering Schedules (Zone-by-Zone)

1. Turn the main dial to the desired zone (1-4) you wish to program.
2. Use the **Run Days** buttons to select specific days of the week, odd/even days, or a cycle number of days for that zone.
3. Use the **Times Per Day** buttons (1st Time, 2nd Time, 3rd Time, 4th Time) to set up to four start times for watering each day. This is useful for deep watering or managing runoff on slopes.
4. Adjust the **Run Time** for each start time, ranging from 0 to 240 minutes.
5. Repeat for all other zones as needed.

4.2 Special Features

- **Seasonal Adjust:** Use this feature to quickly increase or decrease watering duration across all zones based on seasonal needs. Turn the dial to 'Seasonal Adjust' and use the arrow buttons to modify the percentage (e.g., +100% for hot summer, -90% for cool periods).
- **Rain Delay:** To temporarily suspend watering due to rain, turn the dial to 'Rain Delay'. Use the arrow buttons to set the delay duration (up to 72 hours). Watering will automatically resume after the set delay.
- **Manual Watering:**
  - **Water 1 Zone Now:** Press the 'Water 1 Zone Now' button to manually run a single zone for up to 180 minutes.
  - **Water All Zones Now:** Press the 'Water All Zones Now' button to manually run all programmed zones for the duration of their first programmed time.

5. Maintenance

The Rain Bird SST400IN is designed for durability and minimal maintenance. Its sealed case helps protect against moisture, insects, and grime, ensuring long-term performance.

5.1 General Care

- Keep the controller clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Ensure the installation area remains dry and protected from extreme temperatures.

5.2 Battery Replacement

The controller uses a CR2032 lithium ion battery for backup, which retains settings during power outages. While settings are stored indefinitely in memory, the battery may need replacement over time to ensure proper function of certain features or the clock during extended power loss.

1. **Disconnect Power:** Before attempting battery replacement, disconnect the controller from its power source and all connected wiring.
2. **Access Battery Compartment:** Depending on the specific unit, accessing the CR2032 battery may require opening the controller's casing. Refer to the detailed installation guide for precise instructions on opening the unit.
3. **Replace Battery:** Carefully remove the old CR2032 battery and insert a new one, ensuring correct polarity.
4. **Reassemble and Reconnect:** Securely reassemble the controller and reconnect all wiring and power.

6. Troubleshooting

This section provides solutions to common issues you might encounter with your Rain Bird SST400IN controller.

Problem	Possible Cause	Solution
Controller not powering on	No power to outlet; faulty transformer; internal issue.	Check outlet with another device. Ensure transformer is securely plugged in. Verify power supply specifications.
Zone not watering	Zone not programmed; valve issue; wiring fault; rain sensor active.	Verify programming for the specific zone. Check valve operation manually. Inspect wiring for breaks or shorts. Check if rain sensor is activated.
Error message displayed (e.g., short detected)	Short circuit in valve wiring.	The controller automatically suspends watering to the affected zone and displays a warning. Inspect the wiring for the indicated zone for any damage or short circuits. Repair or replace faulty wiring/valve.
Incorrect watering times/days	Incorrect programming; Seasonal Adjust active.	Review and re-program the watering schedules for each zone. Check the Seasonal Adjust setting and reset if necessary.

7. Specifications

Attribute	Detail

Attribute	Detail
Model Number	SST400IN (Item model number: C50407)
Brand	Rain Bird
Product Dimensions	1.95 x 7.63 x 6.75 inches; 1 Pounds (Unit) / 19.25"L x 19.25"W x 2.5"H (Packaging)
Color	Gray/Green
Material	Plastic
Voltage	120 VAC
Electrical Input	120 VAC / 0.17 AMP / 60Hz
Electrical Output	25.5 VAC / 0.65 AMP / 60Hz
Certifications	UL, cUL certified
Zones/Stations	4-Zone/Station
Watering Times	0-240 minutes per zone
Custom Watering Times	Up to four per day
Memory Retention	Indefinite storage of settings during power outage

8. What's in the Box

- Rain Bird SST400IN Timer
- CR2032 lithium ion backup battery
- User manual (printed guide)

9. Warranty and Support

For detailed warranty information, please refer to the warranty card or documentation included with your product at the time of purchase. Rain Bird stands behind the quality of its products.

Should you require further assistance or have questions not covered in this manual, please visit the official Rain Bird website or contact their customer support. An electronic version of the user manual is also available for download at https://manuals.plus/m/1bcf7e8adba1a22828b8f31e56c9dd9b2844b4e7786afdfd2c478d740b096f6e.

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