Irritrol RS1000

Irritrol RS1000 Wireless Rain Sensor Instruction Manual

Detailed instructions for the installation, operation, and maintenance of your Irritrol RS1000 Wireless Rain Sensor.

Introduction

The Irritrol RS1000 Wireless Rain Sensor is designed to conserve water by preventing irrigation during or after sufficient rainfall. This device ensures your irrigation system operates efficiently, avoiding unnecessary watering and contributing to water conservation efforts. It communicates wirelessly with your irrigation controller, providing real-time wet/dry status updates.

Product Components

The Irritrol RS1000 Wireless Rain Sensor system consists of two primary units:

1. Wireless Rain Sensor Transmitter (Outdoor Unit)

This unit is installed outdoors and contains the rain-sensing mechanism. It detects rainfall and wirelessly transmits the "wet" or "dry" status to the receiver. It features adjustable settings for rain accumulation and evaporation rate, and is labeled with "Irritrol" and includes the sensing discs.

2. Wireless Rain Sensor Receiver (Indoor Unit)

This unit is installed indoors, typically near your irrigation controller. It receives signals from the outdoor transmitter and communicates with the controller to pause or resume irrigation based on the rain status. It features indicator lights for "Sensor Rain Status" (blinking - bypass on), "Signal", and "Power" (blinking - attn. reqd.), along with a "Smart Bypass" button. The model number "RS 1000" is also visible on the unit.

Image: The complete Irritrol RS1000 Wireless Rain Sensor kit, including the outdoor rain sensor transmitter, the indoor receiver unit with wiring, and the mounting bracket.

Key Features

- **Constant Communication:** Ensures the controller is continually updated with the sensor's "wet" or "dry" status, even after a controller power outage.
- **Versatile Mounting Options:** Includes a Quick-Clip gutter bracket and a 1/2" conduit adapter, requiring no special tools for installation.
- **Signal Strength Indicator:** Provides visual confirmation of correct installation, communication link, and signal integrity (for wireless models).

- **Patented Wireless Technology:** Offers reliable and efficient wireless operation.

Setup and Installation

Receiver Installation (Indoor Unit)

1. **Mounting:** Mount the receiver unit indoors, close to your irrigation controller. Ensure it is in a location where it can receive a strong wireless signal from the outdoor transmitter.
2. **Wiring:** The receiver typically has five wires. Two wires connect to your 24 VAC power lines on the irrigation controller. The remaining three wires are for the switch: one common ("Break Valve Common") and two for Normally Open (NO) and Normally Closed (NC) connections. Most systems use the Normally Closed (NC) connection. Refer to your irrigation controller's manual for specific sensor hook-up instructions. If your system has a jumper connecting two sensor connections, remove it before connecting the sensor.
3. **Power On:** Once wired, the receiver's power indicator light should illuminate.

Transmitter Installation (Outdoor Unit)

1. **Location Selection:** Choose an outdoor location that is exposed to unobstructed rainfall. Avoid areas under eaves, trees, or other overhangs that might block rain from reaching the sensor. Ensure the sensor is pointing upwards.
2. **Mounting:** Use the provided Quick-Clip gutter bracket or 1/2" conduit adapter to securely mount the transmitter. Ensure it is level and stable.
3. **Antenna:** Ensure the antenna wire is extended for optimal signal transmission to the indoor receiver.
4. **Clearance:** Trim any nearby trees or foliage that could obstruct rainfall from reaching the sensor or interfere with its operation.

Operating the Rain Sensor

Adjusting Rain Sensitivity

The outdoor transmitter contains water-absorbent rings that expand when wet and contract when dry. You can adjust the amount of rainfall required to activate the sensor (e.g., 1/8", 1/4", 1/2", 3/4") by rotating the top cap of the sensor. A higher setting requires more rain to trigger the sensor. There is also a twist ring to control the evaporation rate, which determines how quickly the rings dry out and allow irrigation to resume. Adjust this based on your local climate and soil type.

Smart Bypass Function

The indoor receiver unit features a "Smart Bypass" button. Pressing this button allows you to temporarily override the rain sensor and run your irrigation system even if rain is detected. The signal light on the receiver may go out when bypass is active but will automatically reset within approximately one hour after the bypass is turned off.

Maintenance

Battery Replacement

The outdoor transmitter unit is powered by a battery, typically located underneath the unit. While batteries are designed for long life (e.g., up to five years), they will eventually need replacement. Refer to the specific instructions

provided with your sensor for the correct battery type and replacement procedure. Regular battery checks are recommended.

Cleaning the Sensing Mechanism

Periodically inspect the water-absorbent rings inside the outdoor transmitter for any debris, dirt, or insect nests that might obstruct their movement. The rings can be removed for cleaning if necessary. Ensure they are reinstalled correctly after cleaning.

Troubleshooting

Problem	Possible Cause	Solution
Irrigation system runs during rain.	Sensor not detecting rain; communication issue; bypass active.	Check outdoor sensor for obstructions. Verify receiver's "Sensor Rain Status" light. Ensure Smart Bypass is not active. Check wiring to controller.
Irrigation system does not run when dry.	Sensor still detecting "wet" status; low battery in transmitter; communication issue.	Check outdoor sensor for proper drying (adjust evaporation ring). Replace transmitter battery. Verify receiver's "Signal" light.
Receiver "Power" light blinking.	Attention required (e.g., low battery, communication loss).	Check transmitter battery. Ensure transmitter is within range and unobstructed.

Specifications

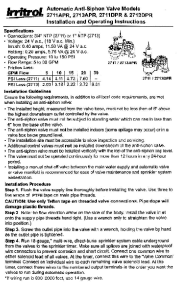
- **Product Dimensions:** 1.5 x 3.75 x 1.75 inches
- **Item Weight:** 9.1 ounces
- **Model Number:** RS1000
- **Manufacturer:** Irritrol

Warranty and Support

For detailed warranty information, technical support, or to purchase replacement parts, please refer to the official Irritrol website or contact their customer service directly. Keep your purchase receipt for warranty claims.

Related Documents - RS1000

	Irritrol Rain Dial Plus Irrigation System Controller User's Guide User's guide for the Irritrol Rain Dial Plus irrigation system controller, covering installation, programming, operation, troubleshooting, and specifications for 6, 9, and 12 station indoor and outdoor models.

	[Irritrol Rain Dial-R Irrigation System Controller User's Guide] Comprehensive user's guide for the Irritrol Rain Dial-R Irrigation System Controller, covering setup, installation, programming, operation, troubleshooting, and specifications for 6-, 9-, and 12-station models.
	[Irritrol Total Control-R Series Irrigation Controllers: Features, Specifications, and Models] Detailed overview of the Irritrol Total Control-R Series irrigation controllers, covering features, specifications, model options, and compatible accessories for residential and commercial use.
	[Irritrol CMR-KIT Contractor Maintenance Remote System] The Irritrol CMR-KIT is a portable remote control system designed for efficient irrigation system maintenance and troubleshooting. It offers a long-range capability of up to 1.5 miles, a 1-person operation design, and compatibility with various Irritrol and Toro controllers. The kit includes a transmitter, receiver, necessary cables, and a charger, all housed in a convenient carrying case.
	[Irritrol Anti-Siphon Valve Models 2711APR, 2713APR, 2711DPR & 2713DPR Installation and Operating Instructions] This document provides installation and operating instructions for Irritrol's Automatic Anti-Siphon Valve Models 2711APR, 2713APR, 2711DPR, and 2713DPR. It includes specifications, installation guidelines, manual operation details, flow control adjustment, winterization tips, and warranty information.
	[Irritrol Total Control-R Series Irrigation Controllers | Features, Specs, Models] Explore the Irritrol Total Control-R Series irrigation controllers. Learn about features like Climate Logic compatibility, flexible programming, multiple station options, and durable designs. Find model specifications and accessories.