

Wireless Rain Sensor Family

Primary Application

The Rain Bird Wireless Rain Sensor (WRS) family consists of the Wireless Rain Sensor and Wireless Rain/Freeze Sensor products. The WRS products conserve water by disabling a 24 VAC sprinkler system when rain is detected or a freezing condition (3°C/37°F) is approaching. The WRS product consists of two (2) main components: a rain collector unit (the "Transmitter") which senses rainfall and temperature and a receiver unit (the "Receiver") which is wired into the irrigation controller. The Transmitter sends its signal wirelessly to the Receiver, eliminating the need for wiring. The user may adjust the sensitivity of the rain collector to rainfall levels between 1/8 inch and 3/4 inch. The freezing temperature for the Wireless Rain/Freeze Sensor is set at 3°C/37°F.

Features

- Wireless connection between the Transmitter and Receiver enables fast, easy, and attractive installations.
- Three LEDs on the Receiver display the sensor state (Watering Suspended; Low Battery; No Signal) or mode (Sensor Bypass; Test Mode; Program Mode).
- Additional Transmitters and Receivers can be programmed to work together by the installer. This allows multiple Transmitters to work with a single Receiver or one Transmitter to work with multiple Receivers.
- Low Transmitter battery indicator on the Receiver.
- Loss of signal indicator informs user when two consecutive hourly transmissions have been missed.
- Integrated bypass switch and status indication on the receiver.
- Program Mode enables up to five (5) transmitters to work with one Wireless Sensor Receiver.
- Test Mode allows a single installer to validate installation with a two and a half (2 1/2) minute test signal at low power.
- Compatible with virtually all 24 VAC controllers.
- Interchangeable and programmable receiver/transmitter pairs.
- Aluminum gutter clip, wall bracket and 6 inch extension.

Models

WRC: Wireless Rain Sensor Combo
 WSR: Wireless Rain Sensor Receiver
 WRT: Wireless Rain Sensor Transmitter
 WRFC: Wireless Rain and Freeze Sensor Combo
 WRFT: Wireless Rain and Freeze Sensor Transmitter

Electrical Specifications

Operational voltage:
 20 VAC – 28 VAC
 Freeze temperature: 3°C/37°F

Specifications

WRS products must be capable of up to 500 foot communication between Transmitter and Receiver (if line-of-site)*.

Transmitter must be battery powered and capable of lasting three (3) years without replacement.

Transmitter must allow battery to be replaced without breaking the waterproof integrity of the electronics.

WRS products must be water-tight and capable of outdoor installation.

Receiver must be able to receive signals from multiple Transmitters.

Receiver must have Sensor Bypass mechanism.

WRS products must be able to sense rain and interrupt the 24 VAC irrigation schedules based on a user-selectable sensitivity to rain quantity.

Wireless Rain/Freeze Sensor must interrupt the 24 VAC irrigation schedules when temperature drops below 3°C/37°F.

WRS products must periodically test the signal from the Transmitter.

The Transmitters must be interchangeable. Any Transmitter must work with any Receiver from Rain Bird Corporation.

The Rain Bird Wireless Rain/Freeze Sensor shall be manufactured by Rain Bird Corporation, Glendora, California.



How to Specify/Order:

WRC Models

WRC: Wireless Rain Sensor Combo
 WSR: Wireless Rain Sensor Receiver
 WRT: Wireless Rain Sensor Transmitter
 WRFC: Wireless Rain and Freeze Sensor Combo
 WRFT: Wireless Rain and Freeze Sensor Transmitter

* Wireless devices using radio frequency communications are affected by location-specific conditions. The reported distance is based on ideal line-of-sight testing. Actual range may vary due to atmospheric conditions, terrain, or other forms of interference.



Concept of Operation

The transmitter is mounted in an area most likely to receive representative rainfall or temperature without running a wire back to the controller.

WRS sensitivity is adjusted to user-desired system responsiveness to rainfall.

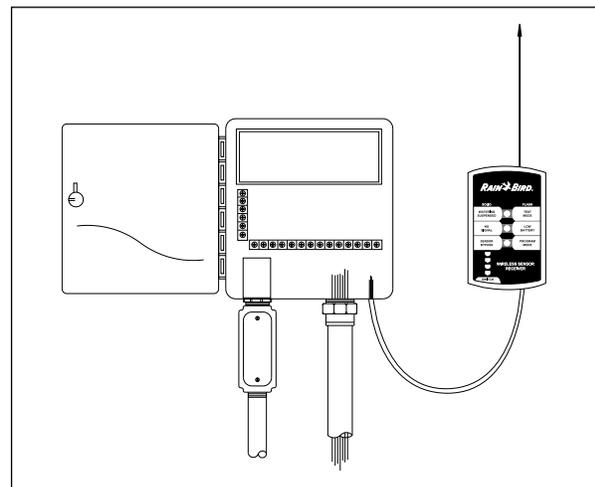
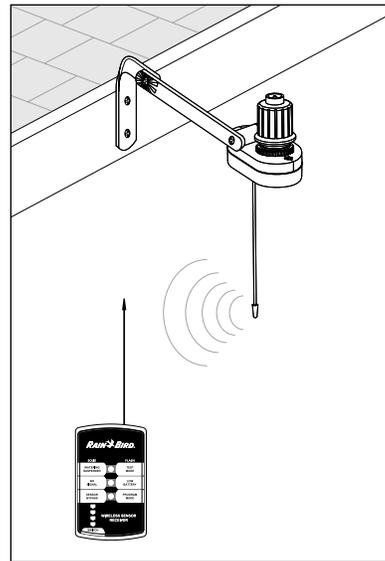
For Wireless Rain/Freeze Sensor, freezing temperature is set at 3°C/37°F.

An RF signal is sent from the Transmitter to the Receiver every hour or when the user-selected rainfall has been received. After the Transmitter dries, a signal is sent that allows the resumption of irrigation if necessary.

Receiver disables watering system through the Irrigation Controller's "sensor" connections or by interrupting the valve common.

The receiver can be programmed to receive up to five (5) wireless sensors.

Simple to install and test by one installer. Test Mode sends a low-power signal for two and a half (2 1/2) minutes, allowing installer to return to Receiver and verify proper operation.



Rain Bird Corporation
Contractor Division
970 West Sierra Madre Avenue, Azusa, CA 91702
Phone: (626) 963-9311 Fax: (626) 812-3411

Rain Bird Corporation
Commercial Division
6991 East Southpoint Road, Tucson, AZ 85706
Phone: (520) 741-6100 Fax: (520) 741-6522

Rain Bird International, Inc.
145 North Grand Avenue, Glendora, CA 91741
Phone: (626) 963-9311 Fax: (626) 963-4287

Rain Bird Technical Services
(800) 247-3782 (U.S. only)

Specification Hotline
800-458-3005 (U.S. only)

www.rainbird.com

The Intelligent Use of Water™ –Visit www.rainbird.com to learn about our efforts.

® Registered Trademark of Rain Bird Corporation
© 2004 Rain Bird Corporation 5/04