RC2 Smart Controller

Technical Specifications

This smart, WiFi-enabled controller allows the user to manage irrigation remotely from anywhere in the world. RC2 accommodates up to 8 stations, a master valve, and a local weather sensor. The controller is suitable for indoor/outdoor installation and is managed via the mobile app, which can be used with or without WiFi. RC2 is WaterSense-certified and comes complete with water-conserving features right out of the box.

CONTROLLER FEATURES:

- Easy installation requiring only 2 screws for wall mounting
- A guide for ½" or ¾" conduit to run field wires into the unit
- Factory-installed 6' pigtail offers a plug and play solution out of the box
- LED indications at the controller give the user quick indication of status
- Rain Sensor input with bypass capability
- Master valve/pump start circuit
- Nonvolatile (100 year) storage memory
- Electronic diagnostic circuit breaker
- Automatic short detect with station specific alarm messages
- Allows for Auto, Off Status or Manual run of each station for a duration of 10 minutes, plus advance station in the run queue

UNLOCK POWERFUL FEATURES WITH RAIN BIRD 2.0 APP, AVAILABLE ON APPLE AND ANDROID

- The fastest WiFi communications protocols
- Secure login with account recovery on any device
- Industry-leading controller access sharing capability
- Flexible weather data options
- Automatically apply Rain Delay based on weather forecast
- Time-saving features like Schedule Templates
- Operate without WiFi in Guest Mode

OPERATING SPECIFICATIONS

Station timing
1 minute to 6 hours

Seasonal Adjust
5% to 200%

Max operating temperature
149°F (65°C)

CONTROLLER HARDWARE:

- Plastic wall-mount cabinet with door
- Robust set screw terminals to accommodate up to 8 stations plus master valve
- Mounting screws with anchor shields
- Factory installed pigtail

ELECTRICAL SPECIFICATION

Input required
120VAC (±10%) @ 60Hz

Output
Nominal: 0.68A at 24VAC
Maximum: 1.0A at 24VAC

- Master Valve/Pump Start Relay
- External battery back-up not required Nonvolatile memory permanently saves the current programming

DIMENSIONS

Width: 7.92 in. (20.1 cm)
Height: 7.86 in. (20.0 cm)
Depth: 3.51 in. (9.0 cm)

CERTIFICATIONS

- cULus, FCC, ISED, IFETEL - Radio, NYCE - NOM
- IP24
- WaterSense certified
- Meets EPA criteria for high-performing, water-efficient products

COMPATIBLE DEVICES

- Rain Bird RSD Series Rain Sensors
- Rain Bird WR2 Rain/Freeze Sensors
- All Rain Bird residential and commercial rotors, valves, nozzles, sprays and drip products
- Flume Smart Home Water Monitor

FLEXIBLE, EASY SCHEDULING

- 3 individual programs and 4 independent start times per program for 12 total start times. All programs run consecutively. (Firmware programming automatically stacks multiple start times in sequence to prevent hydraulic overload)
- Watering schedule options: Custom days of the week, ODD or even calendar days, or Cyclic (every 1-30 days, such as every 2 days, every 3 days, etc.), and station run times range from 1 minute to 6 hours
- Manual watering option for all stations, a single station, or an individual program. When Manual watering is triggered, the unit ignores the status of a rain sensor (if connected) and re-enable the sensor when manual watering is completed
- 3 Program Templates available to save, copy/paste for the fastest and most efficient programming experience

QUICK SETUP EVEN WITH NO WI-FI AVAILABLE

Guest Mode: Press and hold the Start Button to enable the controller to pair directly to a mobile device for easy setup and programming without local WiFi.

ADVANCED, WEATHER-RESPONSIVE FEATURES SAVE UP TO 50% IN WATER USAGE

- EPA WaterSense-approved without requiring additional accessories
- Delay Watering: Manually override and suspend programmed watering for up to 14 days
- Individual Cycle and Soak values per station to prevent water runoff and maximize infiltration
- When connected to WiFi, the user can unlock these water saving features:
  - Seasonal Adjust: Intelligently adapts watering schedules to save water while protecting plant health. Adjusts the run time from 5% to 200% in 5% increments. Apply Seasonal Adjust to all programs simultaneously or to individual programs
  - Predictive weather delays based on forecasted weather to prevent irrigation when rain, freezing temperatures and/or wind are in the forecast for the user location

COMPLETE CONTROL WITH INTEGRATED IQ SITE MANAGEMENT

The IQ software solution is designed for irrigation professionals who manage multiple irrigation systems. RC2 can be accessed by irrigation professionals through the IQ platform and managed remotely from the App or from the PC dashboard to enable:

- Remote Management: Remotely manage multiple irrigation systems accounts to make adjustments, schedule watering times and monitor the system performance
- Sharing
- Dynamic and Interactive Mapping: Allows for placing controller locations in the map or use the map to understand watered areas per station and the location of every system component.
- Multiple users in a single account
- Access your RC2 from any device with a web browser
- Organize Controllers into Sites for easy group management
- Batch Editing and other efficiency tools for easier management for professionals

ADDITIONAL DETAILS

- Capable of operating one 24VAC solenoid valve per station plus a separate master valve or remote pump start relay
- Operates on 120VAC (+-10%) at 60 Hz. If connected, a master valve or pump start shall operate on 24VAC at 60Hz
- The controller has an electronic diagnostic circuit breaker that can detect if station has an electrical overload or short circuit condition. The controller then bypasses the error detected station while continuing to operate all other stations

For Additional Support Visit: wifi.rainbird.com

SPECIFICATIONS:

The RC2 Controller is designed to provide the user with a mobile-first interface that can be programmed through the Rain Bird mobile app with or without WiFi available on-site. The controller shall be capable of fully automatic or manual operation. The controller shall be housed in a wall-mountable, weather resistant plastic cabinet with lockable door (lock not included).

The controller shall have 3 independent programs that allow 4 different start times per program. Firmware programming shall automatically stack multiple start times in sequence to prevent hydraulic overload. All programs shall run consecutively.

Watering day schedules shall be: Custom Days of the Week, Odd or Even calendar days and Cyclic (such as every 2 days, or every 3 days, etc.) Station run times shall range from 1 minute to 6 hours.

The controller shall automatically synchronize the date and time based on the user location.

The controller shall offer Manual Watering locally at the controller by pressing the Manual button. The mobile app shall offer Manual Watering options including all stations, individual stations or individual programs. When manual watering is triggered, the unit shall ignore the status of a rain sensor (if connected) and re-enable the sensor when manual watering is completed.

The controller shall have a Seasonal Adjust feature to adjust the run time from 5% to 200% in 5% increments. Seasonal Adjust shall be capable of being applied to all programs simultaneously or to individual programs.

The controller shall have a Delay Watering feature that can override and suspend programmed watering for up to 14 days.

The controller shall provide the ability to clear all programming and reset to factory default settings if desired.

The controller shall provide a method for the operator to save an irrigation schedule into nonvolatile memory.

The controller shall be capable of operating one 24VAC solenoid valve per station plus a separate master valve or remote pump start relay.

The controller shall operate on 120VAC (±10%) at 60Hz.
If connected, a master valve or pump start shall operate on 24VAC at 60Hz.

The controller shall have an electronic diagnostic circuit breaker that can detect if a station has an electrical overload or short circuit condition. The controller shall then bypass the error detected station while continuing to operate all other stations.

The controller shall have a reset button to re-boot the factory default firmware, in case of controller interface “freezing” due to a power surge or interruption of power to the power supply.

The controller shall be an EPA WaterSense approved smart controller without requiring additional accessories.

The controller shall provide an option for the installer to run field wires through a 1/2” or 3/4” wire conduit fitting, allowing for a clean, professional installation.

The RC2 controller shall be manufactured by Rain Bird Corporation in a NAFTA member country.

At the controller interface the customer shall have the ability to set the controller in either Auto or Off status, manually run each station for a duration of 10 minutes, and advance stations in the run queue.

The controller shall be capable of transitioning from WiFi connection to AP Hotspot to access controller programming and features.

The user shall have the ability through the compatible mobile app to set the controller in either Auto or Off status.

When connected to WiFi, the controller shall provide predictive weather delays to prevent irrigation when rain, freezing temperatures and/or wind are in the forecast.

Rain Bird Corporation
6991 E. Southpoint Road
Tucson, Arizona 85756
Phone: (520) 741-6100
Fax: (520) 741-6522

Rain Bird Corporation
970 West Sierra Madre Avenue
Azusa, California 91702
Phone: (626) 812-3400
Fax: (626) 812-3411