Manuals+ — User Manuals Simplified.

RAIN BIRD RC2, ARC8 Series WiFi Smart Controller User Manual

Contents

RAIN BIRD RC2, ARC8 Series WiFi Smart Controller

Product Information

The RC2-230V, RC2-AUS, ARC8-230V, and ARC8-AUS are WiFi Smart Controllers that allow for the control of up to 8 zones with 3 automatic programs and custom run days. The controller features master valve control, rain delay, rain/freeze sensor control, and seasonal adjustments. Additionally, the controller includes manual zone run, manual program run, manual test all zones, and zone advance features. The controller also has a built-in WiFi AP hotspot.

Product Usage Instructions

Product Installation

If You're Replacing an Existing Controller

1. Take a photo of the wiring details for reference when installing the new controller.
2. Unplug the power cord from the AC power outlet and disconnect the wires from the controller.

Mount New Controller

1. Choose a mounting location on a wall at least 4.5 m away from major appliances or air conditioners. Ensure an AC power outlet is within close proximity to the mounting location.
2. Install the controller with the power supply cord exit side pointing downwards to avoid ingress of water.
3. Drive a mounting screw into the wall, leaving a 3.2 mm gap between the screw head and the wall surface (use supplied wall anchors if necessary).
4. Locate the keyhole slot on the back of the controller and hang it securely on the mounting screw.
5. Remove the wire bay cover on the lower part of the controller and drive a second screw through the open hole and into the wall (use supplied wall anchors if necessary).

Connect Valve Wiring

1. With the wire bay cover removed, route all field wires through the opening at the bottom of the controller.
2. Connect a field common wire to the common terminal (C) on the controller.
3. For connection of optional accessories (rain or rain/freeze sensor, master valve, pump start relay), refer to the appropriate section within this manual.

Connect Fixed Wiring

1. For model RC2-AUS, ARC8-AUS and ARC8-230V: If desired, the provided power cord can be removed and replaced with custom wiring.
2. Remove the wire bay cover on the lower part of the controller.
3. Locate the transformer box in the left-hand corner of the wire bay and unscrew the wiring compartment cover.
4. For model RC2-AUS, ARC8-AUS and ARC8-230V: Unscrew the terminal block connecting the AC power cord and the transformer wires. Remove the power cord wires from the transformer box.
5. For model RC2-AUS, ARC8-AUS and ARC8-230V: Remove the factory-installed power cord by loosening the liquid tight cord connector.
6. Route the three wires from an external power source into the wiring compartment.
7. Connect the external power supply wires using the terminal block and resecure the liquid tight cord connector or a means of strain-relief of connections.

WiFi Smart Controller User Manual

Installation

Feature	Description
Maximum zones	8
Automatic programs	3
Start times per program	4
Custom run days	Yes
Master valve control	Yes
Rain delay	Yes
Rain/freeze sensor control	Yes
Seasonal adjust	Yes
Manual zone run	Yes
Manual program run	Yes
Manual test all zones	Yes
Zone advance	Yes
Built-in WiFi	Yes
AP Hotspot	Yes

If You're Replacing an Existing Controller

1. Take a photo of the wiring details, which will be useful to reference when installing the new controller.
2. Unplug the power cord from the AC power outlet and disconnect wires from the controller.

Mount New Controller

1. Choose a mounting location on a wall at least 4.5 m away from major appliances or air conditioners. Ensure an AC power outlet is within close proximity to mounting location.
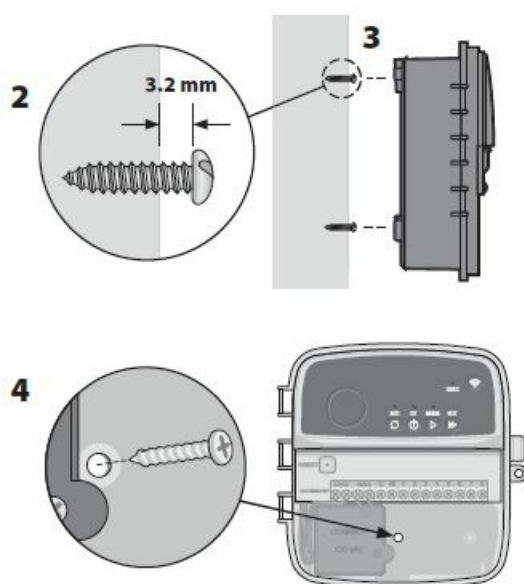
   WARNING

   Install the controller with the power supply cord exit side pointing downwards to avoid ingress of water.

2. Drive a mounting screw into the wall, leaving a 3.2 mm gap between the screw head and the wall surface (use supplied wall anchors if necessary).

3. Locate the keyhole slot on back of the controller and hang it securely on the mounting screw.

4. Remove the wire bay cover on the lower part of the controller and drive a second screw through the open hole and into the wall (use supplied wall anchors if necessary).

Connect Valve Wiring

1. With the wire bay cover removed, route all field wires through the opening at the bottom of the controller.
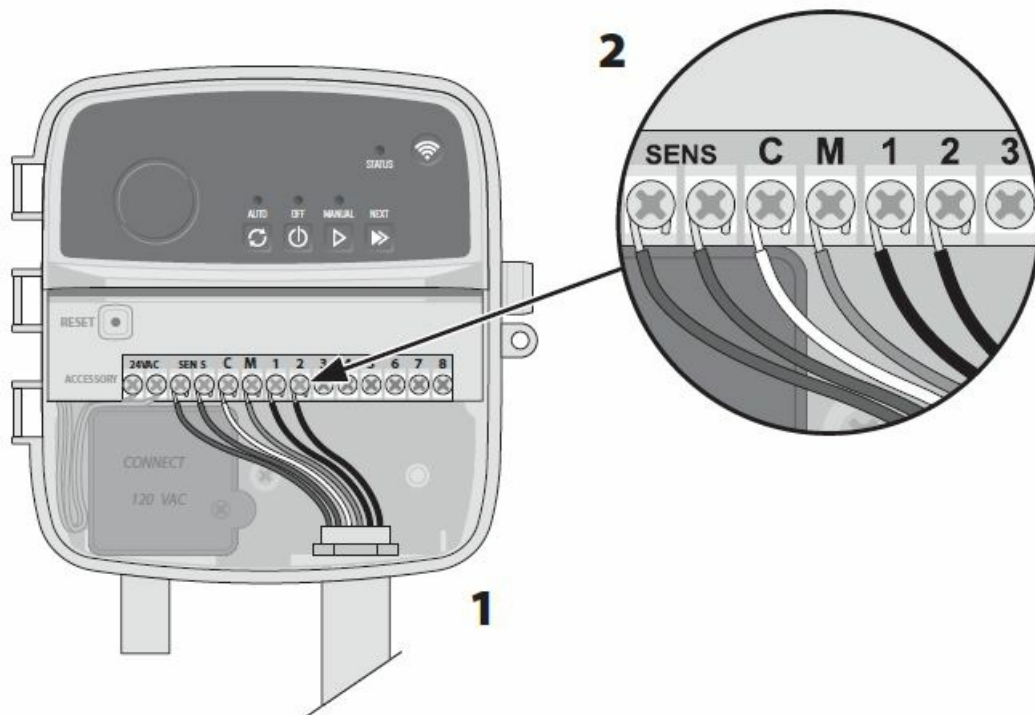

   WARNING

   DO NOT route valve wires through the same opening as power wires.

2. Connect one wire from each valve to one of the numbered zone terminals (1–8) on the controller.

   NOTICE

   DO NOT connect more than one valve to the same zone terminal (1– 8).

3. Connect a field common wire to the common terminal (C) on the controller.

4. For connection of optional accessories (rain or rain/freeze sensor, master valve, pump start relay), refer to the appropriate section within this manual.

Connect Fixed Wiring

WARNING

- Ensure that AC power is disconnected before replacing wiring.
- The installation must prevent the connection to be strained.
- When using fixed wiring to main supply, the installation must incorporate a disconnection device.
- DO NOT apply power until you have completed and checked all wiring connections.
- DO NOT attempt to link two or more controllers together using a single transformer.

1. FOR MODEL RC2-AUS, ARC8-AUS and ARC8-230V: If desired, the provided power cord can be removed and replaced with custom wiring.
2. Remove the wire bay cover on the lower part of the controller.
3. Locate the transformer box in the left-hand corner of the wire bay and unscrew the wiring compartment cover.
4. FOR MODEL RC2-AUS, ARC8-AUS and ARC8-230V: Unscrew the terminal block connecting the AC power cord and the transformer wires. Remove the power cord wires from the transformer box.
5. FOR MODEL RC2-AUS, ARC8-AUS and ARC8-230V: Remove the factory installed power cord by loosening the liquid tight cord connector.
6. Route the three wires from an external power source into the wiring compartment.
7. Connect the external power supply wires using the terminal block and resecure the liquid tight cord connector or a means of strain-relief of connections.
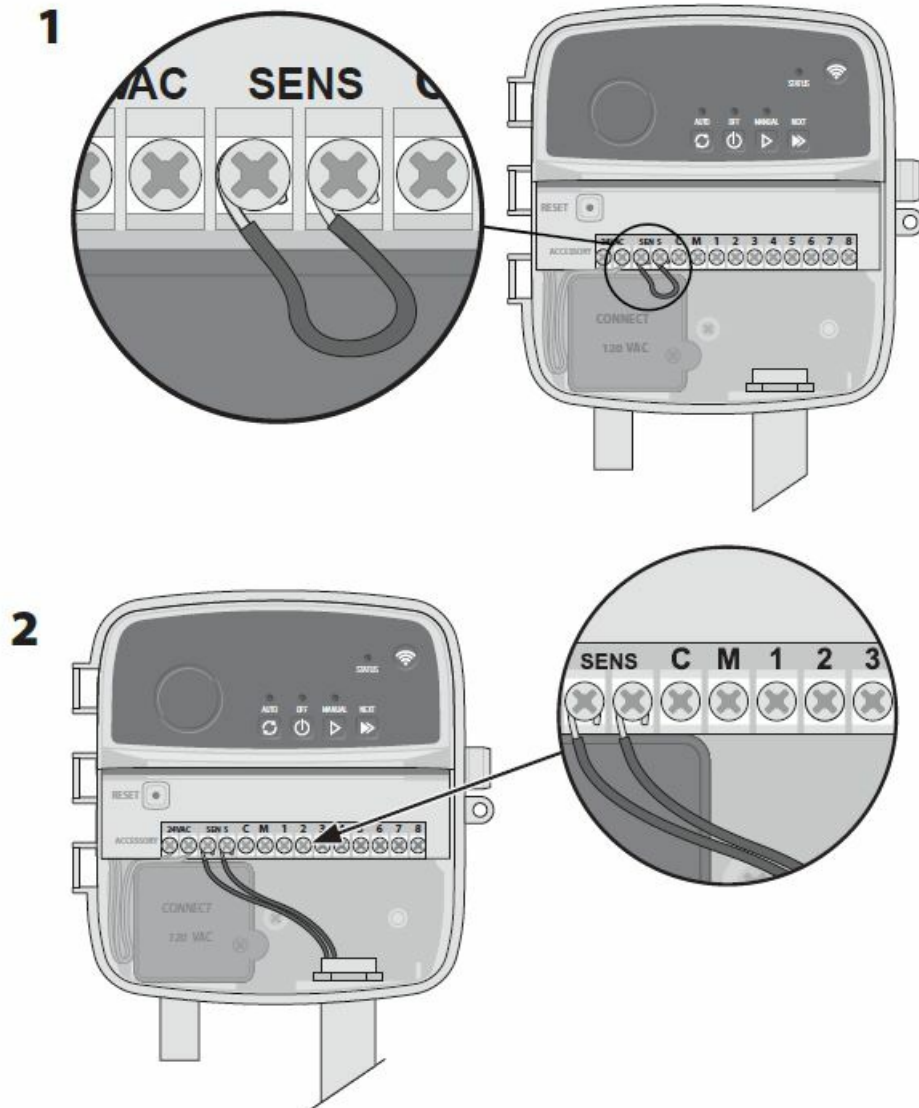
Power Wiring Connections 230 V∿

- Brown supply wire (live) to the brown transformer wire.
- Blue supply wire (neutral) to the blue transformer wire.
- Green/yellow supply wire (ground) to green/yellow transformer wire.

Connect Rain/Freeze Sensor (optional)

NOTICE

- DO NOT remove the jumper wire unless connecting a rain or rain/freeze sensor. The controller will not function if the jumper wire is removed and a rain or rain/freeze sensor is not connected.
- Rain Bird controllers are only compatible with normally closed rain or rain/freeze sensors.
- Check local and/or state regulations to determine if a rain or rain/freeze sensor is required.

1. Remove the yellow jumper wire from the SENS terminals on the controller.
2. Connect both rain or rain/freeze sensor wires to the SENS terminals.
3. For detailed installation and operation of rain or rain/freeze sensor, refer to sensor manufacturer's installation instructions. Connect Master Valve (optional)
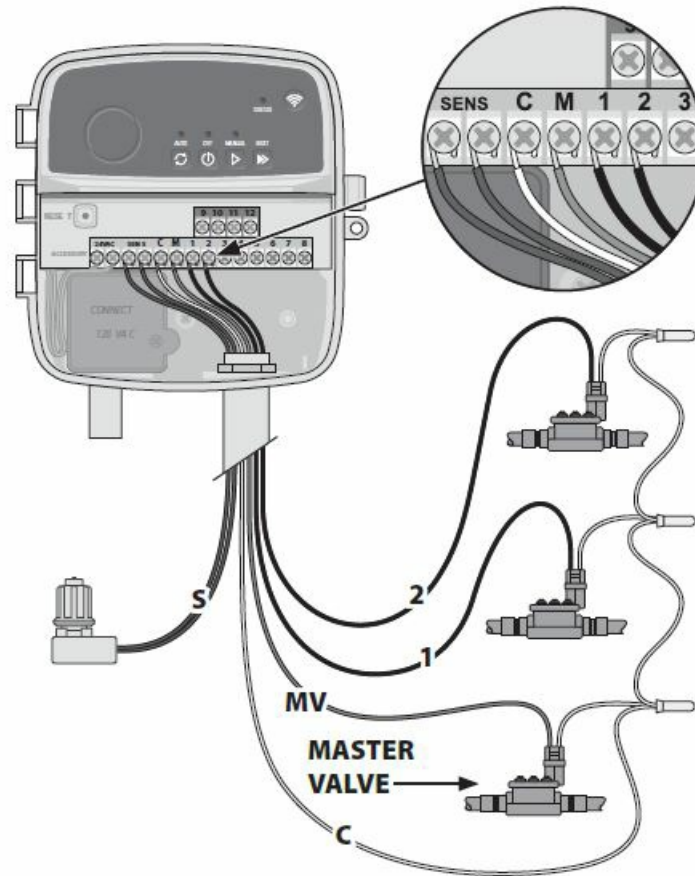
WARNING
DO NOT route the master valve wires through the same opening as the power wires.

1. Using a direct burial cable, connect one of the wires from the master valve to the master valve terminal (M).

   NOTICE

DO NOT connect more than one valve to the master valve terminal (M).

2. Connect the remaining wire from the master valve to the common terminal (C).

Connect Pump Start Relay (optional)

WARNING
DO NOT route the pump start relay wires through the same opening as the power wires.

NOTICE

- A pump start relay connects to the controller in the same way as a master valve, but connects differently at the water source.
- This controller DOES NOT provide power for a pump. A relay must be wired according to pump manufacturer's installation instructions.

1. Using a direct burial cable, connect one of the wires from the pump start relay to the master valve terminal (M).
2. Connect the remaining wire from the pump start relay to the common terminal (C).
3. To avoid possible pump damage in the event run times are assigned to unused zones, connect a short jumper wire from all unused zone terminals to the nearest zone terminal in use.
4. For detailed installation and operation of pump start relay, refer to pump manufacturer's installation instructions.

Connect Power

- The controller can be installed indoors or outdoors (if plugged into a weatherproof external outlet).

- The controller has an internal transformer that reduces supply voltage from 230 V∿ to 24 V∿. You will need to connect power supply wires to the transformer's three wires (live, neutral, ground). Refer to "Connect Fixed Wiring" section for installation details.

WARNING

- Electric shock can cause severe injury or death. Ensure power supply is turned OFF before connecting power wires.
- DO NOT plug in or apply power to the controller until you have completed and checked all wiring connections.
- Disconnect or turn off the external power source before connecting or disconnecting wires to the controller.

Programming

Add a New Controller to the Rain Bird App

1. Before mounting new controller, check the WiFi signal at controller.
   - Verify minimum signal strength of two bars at controller.
   - Mount controller closer to router or add signal booster if needed.
2. Download and launch the Rain Bird App.

3. Select "Add Controller" to begin the set-up wizard.

Set Date and Time

- When the controller is connected to WiFi, it will automatically set the date and time according to the local WiFi network settings. In the event of a power outage, the date and time will default to the local WiFi network settings.
- If a local WiFi network is not available at setup and the controller is connected to the Rain Bird App in AP Hotspot mode, the controller will default to the date and time in the mobile device settings. In the event of a power outage, the date and time will need to be manually reset by reconnecting the controller to your mobile device through AP Hotspot mode.

Create a Watering Schedule

ADD PROGRAM(S)
This controller is scheduled using up to three programs (A, B and C). Basic programs include instructions on watering days, start times and durations. In the Rain Bird App, add a new program by selecting + PGM and an available program.
NOTICE

- The first time you connect to the controller, the Rain Bird App will reflect the default program assigned to the controller. You can choose to retain, change, or set up a new program.
- Programming is stored in non-volatile memory and will remain in the controller in the event of a power outage.

SET PROGRAM START TIME(S)
This controller is scheduled using up to four independent start times per program. The start time(s) is the time of day at which the program will begin. Each start time will run every zone for its scheduled duration within that program.

- In the Rain Bird App, add a program start time by selecting the + icon.
- Set the zone(s) and watering duration(s) associated with the start time by selecting the + icon.

NOTICE
Start times apply to the entire program, not individual zones. Depending on landscaping needs, multiple start times may be assigned for that program. Once the start time is set, the controller begins the watering cycle with the first zone; the other zones in the program follow in sequence.

SET PROGRAM RUN DAYS: Run days are the specific days of the week in which watering occurs. In the Rain Bird App, set the watering frequency by selecting Odd (days of the week), Even (days of the week), Custom or Cyclic (specific intervals).

NOTICE
Watering days apply to the entire program, not the individual zones.

SEASONAL ADJUST
changes the watering duration (as a percent) for all zones associated with run times in an individual program. This may be manually adjusted in the Rain Bird App using the slider in the program settings.

NOTICE

- The controller must be connected to WiFi to make automatic adjustments.
- An adjustment value of 100% is representative of irrigation during the average hottest time of year, so even if you're experiencing warm weather on a summer day, you may not see an adjustment above 100%.

RAIN DELAY:

In the Rain Bird App, manually turn off automatic watering for a fixed number of days when it rains even without a rain sensor.

- Suspend watering for up to 14 days by selecting ☁ the icon in the controller settings.
- Slide the bar to the desired number of days to delay automatic watering.
- Select "Save" to store the setting.

NOTICE
The maximum numbers of days to delay watering is 14. After the days expire, automatic irrigation will begin again according to the programmed schedule.

Manual Watering

ON THE CONTROLLER

- To start manual watering, press the button.
- As a default, each zone will run for 10 minutes; you can choose to retain or change the watering duration in the Rain Bird App.
- The blinking LED will give an indication of which zone is active.
- To advance to the next zone, press the ▸▸ button.
- To stop manual watering on the controller, press the ⏻ button.

IN RAIN BIRD APP

- To start manual watering, select the 🜄 icon and select manual watering preferences.
- To advance to the next zone, select the ▷| icon.
- To stop manual watering in the Rain Bird App, select the ■ icon.

Automatic Watering

ON THE CONTROLLER

NOTICE
When operating in automatic mode, each program will run according to the start times, run days, and run times for each zone in sequence until all scheduled watering has been run.

- Press ↻ to start automatic watering according to the scheduled program(s).
- The blinking LED will give indication for which zone is active.
- To advance to the next zone, press the ▸▸ button.
- To stop automatic watering on the controller, press the ⏻ button.

IN RAIN BIRD APP
The Rain Bird App offers a toggle to switch between automatic watering and off status. Apple and Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc. Google Play is a trademark of Google Inc.

Rain Bird Corporation
6991 East Southpoint Road Tucson, AZ 85756 USA Tel: (520) 741-6100

Documents / Resources

RAIN BIRD RC2, ARC8 Series WiFi Smart Controller [pdf] User Manual
RC2-230V, RC2-AUS, ARC8-230V, ARC8-AUS, RC2 ARC8 Series WiFi Smart Controller, RC2 Series WiFi Smart Controller, ARC8 Series WiFi Smart Controller, WiFi Smart Controller, WiFi Controller, Smart Controller, Controller

References

- ✈ **Home - AU | Rain Bird**
- ▶ **Anatel — Agência Nacional de Telecomunicações**
- ✈ **Rain Bird | A Global Irrigation Company**
- ✈ **Página Inicial | Rain Bird**
- ✈ **Home - AU | Rain Bird**
- ✈ **Home - EUR | Rain Bird**
- ✈ **Home - EUR | Rain Bird**
- ✈ **Home - EUR | Rain Bird**
- ✈ **Home - EUR | Rain Bird**
- ✈ **Home - EUR | Rain Bird**
- ✈ **Product Regulatory Compliance | Rain Bird**