



## **Tech Spec**

# ESP-RZX Fixed Station Controller

**ESP-RZX Series Controllers** 

The popular Rain Bird ESP Series of controllers has been expanded to provide a contractor grade fixed station irrigation controller for residential and light commercial applications.

The ESP-RZX Controller provides zone based set up that is easier to understand by untrained users. 4, 6 and 8 zone models are available.

## Applications

The ESP-RZX provides flexible scheduling features that make the controller ideal for a wide variety of applications including residential and light-commercial irrigation systems.

## Easy to Use

The ESP-RZX Controller was designed with ease of use in mind. Zone-based scheduling allows every valve to be scheduled independently; no more explaining "programs" to end users, virtually eliminating call-backs. The large LCD display shows all of the programming for each zone at the same time.

Simple graphic based user interface is easy to explain and presents every controller feature at your fingertips.

## **Easy to Install**

The ESP-RZX Controller requires only two mounting screws. A guide for ½" or ¾" conduit allows for professional installation of field wires into the cabinet.

## **Controller Hardware**

- Plastic wall-mount case
- 2 x AAA batteries for time and date backup
- Wire nuts for outdoor models

## **Controller Features**

- Large LCD display with easy to navigate user interface
- Weather Sensor input with software
  override
- Master valve/pump start circuit
- Non-Volatile (100- year) program memory
- Programmable under battery power

## **Scheduling Features**

- Zone based scheduling, allows for independent schedules assigned to each zone. (Run times, Start Times and Watering Days are customizable by zone)
- Contractor Rapid Programming<sup>™</sup> automatically copies the Start Times and Watering Days from zone 1 to all remaining zones at initial set up
- 6 independent Start Times per zone
- 4 Watering Days options by zone: Custom days of week, ODD calendar days, EVEN calendar days, Cyclic (every 1 – 14 days)
- Manually water ALL zones or SINGLE zone on demand

#### **Advanced Features**

- Electronic diagnostic circuit breaker
- Contractor Rapid Programming<sup>™</sup> and "Copy previous Zone" for faster initial set up
- Contractor DefaultTM Save / Restore
- Rain Sensor bypass
- Rain Sensor bypass by Zone
- Manual water SINGLE zone
- Manual water ALL zones

## **Operating Specifications**

- Zone timing: 0 to 199 min
- Seasonal Adjust; -90% to +100%
- Independent schedule per zone
- 6 Start Times per zone
- Program Day Cycles include Custom days of the week, Odd, Even, & Cyclical dates



Indoor Model



Outdoor Model

## How To Specify:

#### **ESP-RZX Indoor Models**

| RZX4i-120V   | Indoor 4 STA ESP-RZX – 120 V  |  |
|--|---|--|
| RZX6i-120V   | Indoor 6 STA ESP-RZX – 120 V  |  |
| RZX8i-120V   | Indoor 8 STA ESP-RZX – 120 V  |  |
| RZX4i-230V   | Indoor 4 STA ESP-RZX – 230 V  |  |
| RZX6i-230V   | Indoor 6 STA ESP-RZX – 230 V  |  |
| RZX8i-230V   | Indoor 8 STA ESP-RZX – 230 V  |  |
| RZX4i-ARG  | Indoor 4 STA ESP-RZX – ARG  |  |
| RZX6i-ARG  | Indoor 6 STA ESP-RZX – ARG  |  |
| RZX8i-ARG  | Indoor 8 STA ESP-RZX – ARG  |  |
| ESP-RZX Outdoor Models   |   |  |
| LJF-NZX Out  | addi models   |  |
| RZX4-120V  | Outdoor 4 STA ESP-RZX – 120 V   |  |
|  |   |  |
| RZX4-120V  | Outdoor 4 STA ESP-RZX – 120 V   |  |
| RZX4-120V<br>RZX6-120V   | Outdoor 4 STA ESP-RZX – 120 V<br>Outdoor 6 STA ESP-RZX – 120 V  |  |
| RZX4-120V<br>RZX6-120V<br>RZX8-120V  | Outdoor 4 STA ESP-RZX – 120 V<br>Outdoor 6 STA ESP-RZX – 120 V<br>Outdoor 8 STA ESP-RZX – 120 V   |  |
| RZX4-120V<br>RZX6-120V<br>RZX8-120V<br>RZX4-230V                                       | Outdoor 4 STA ESP-RZX – 120 V<br>Outdoor 6 STA ESP-RZX – 120 V<br>Outdoor 8 STA ESP-RZX – 120 V<br>Outdoor 4 STA ESP-RZX – 230 V  |  |
| RZX4-120V<br>RZX6-120V<br>RZX8-120V<br>RZX4-230V<br>RZX6-230V                          | Outdoor 4 STA ESP-RZX – 120 V<br>Outdoor 6 STA ESP-RZX – 120 V<br>Outdoor 8 STA ESP-RZX – 120 V<br>Outdoor 4 STA ESP-RZX – 230 V<br>Outdoor 6 STA ESP-RZX – 230 V   |  |
| RZX4-120V<br>RZX6-120V<br>RZX8-120V<br>RZX4-230V<br>RZX6-230V<br>RZX8-230V             | Outdoor 4 STA ESP-RZX – 120 V<br>Outdoor 6 STA ESP-RZX – 120 V<br>Outdoor 8 STA ESP-RZX – 120 V<br>Outdoor 4 STA ESP-RZX – 230 V<br>Outdoor 6 STA ESP-RZX – 230 V<br>Outdoor 8 STA ESP-RZX – 230 V                                |  |
| RZX4-120V<br>RZX6-120V<br>RZX8-120V<br>RZX4-230V<br>RZX6-230V<br>RZX8-230V<br>RZX4-AUS | Outdoor 4 STA ESP-RZX – 120 V<br>Outdoor 6 STA ESP-RZX – 120 V<br>Outdoor 8 STA ESP-RZX – 120 V<br>Outdoor 4 STA ESP-RZX – 230 V<br>Outdoor 6 STA ESP-RZX – 230 V<br>Outdoor 8 STA ESP-RZX – 230 V<br>Outdoor 4 STA ESP-RZX – AUS |  |





## **Electrical Specifications**

- Input required: 120 VAC ± 10%, 60Hz
- International models; 230 VAC ± 10%, 50Hz
- Output: 24 VAC 650mA
- Power back-up: 2 x AAA batteries maintain time and date while nonvolatile memory maintains the programming

### Certifications

• UL, cUL, CE, C-Tick, FCC Part 15, Industry Canada ICES-03, IRAM S-Mark

#### **Dimensions**

Indoor Model:

- Width: 6.65 in. (16,9 cm)
- Height: 5.90 in. (15,0 cm)
- Depth: 1.54 in. (3,9 cm)

Outdoor Model:

- Width: 7.92 in. (20,1 cm)
- Height: 7.83 in. (19,9 cm)
- Depth: 1.54 in. (3,9 cm)

#### **Specifications**

 The ESP-RZX Controller shall be of a hybrid type that combines electromechanical and microelectronic circuitry capable of fully automatic or manual operation. The controller shall be housed in a wall-mountable, plastic cabinet.

- The controller shall have a fixed zone capacity of 4, 6 or 8 zones depending on the model. All zones shall have the capability of independently obeying or ignoring the weather sensor. Zone timing shall be from 0 to 199 minutes per start time. The controller shall have a Seasonal Adjustment which adjusts the Run Time for all zones from -90% to +100% in 10% increments.
- The controller shall have independent zone schedules which can have different Start Times, Watering Day cycles, and zone Run Times. Each zone shall have up to 6 Start Times per day that are independent from each other. Available day cycles shall be: By Custom days of the week, Odd, Even and 1-14 days (Cyclic).
- The controller shall have an LCD display that is capable of displaying each zone's irrigation scheduled Watering Days, Start Times and Run Times in the same screen.
- The controller shall have an electronic diagnostic circuit breaker that shall sense a zone with an electrical overload or short circuit and shall bypass that zone and continue to operate all other zones.
- The controller shall have a 365-day calendar backed up against power interruptions by two user replaceable AAA batteries.
- The controller shall provide the user the ability to bypass the weather sensor for ALL zones or each zone independently.
- The controller shall offer manual watering of ALL zones sequentially or ONE zone at a time, when manual

watering is triggered; the unit shall ignore the status of the weather sensor (if connected) and re-enable the sensor when manual watering is completed.

- The controller shall allow the user to copy the programming from the previous zone to allow for faster and more reliable programming.
- The controller shall automatically copy the Start Times and Watering Days from zone 1 to all remaining zones of the controller at initial start-up to allow for faster initial set-up of the controller.
- The controller shall have a mechanism to indicate to the user when AC-Power is not present (if running on batteries).
- The controller shall be compatible with Rain Bird's LIMR (Landscape Irrigation Management Remote) and have a mechanism to communicate with future expansion accessories.
- The controller shall provide a method for the installer to save the irrigation schedule into non-volatile memory for easy recall later if unwanted schedule changes are made.
- The controller shall provide a method for the installer to restore the schedule to the factory fresh condition in order to start programming from a "blank" state.
- The controller shall provide a method to wire the controller through a ½" or ¾" wire conduit to allow for a more professional installation.
- The controller shall be manufactured by Rain Bird Corporation in a NAFTA member country.

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