

# **PAR+ES Controller**

The easy-to-program, central control-ready Rain Bird® PAR+ES Controller features 72-Station capability, unlimited programs with central control, standard premium surge protection, as many programs as extensive diagnostics and a best-in-class pedestal enclosure.

## FEATURES AND BENEFITS

Communication: Standalone, two-wire and LINK.

**Central Control Ready** — Works with any Rain Bird Central Control System. End-user can access controller via cellular phone (MI Series Mobile Controller\*) or UHF radio (FREEDOM System).

- 💸 » Dynamic Flo-Manager®
- 상 » Smart Pump™
- 🞸 » Smart Sensor™
- 💸 » Smart Weather™

Pedestal Colors — Available in gray.

Easy Programming — Large, raised control buttons with clear, descriptive icons and a high-contrast Liquid Crystal Display (LCD) panel make programming easy — even for the novice. Lights indicate active schedules and central control status, while unique Copy/Paste function speeds programming process. An angled keypad aids visibility as well as water drainage, and makes the PAR+ES controller extremely easy to use.

**Greater Water Precision** — The PAR+ES controller allows you to program six (6) automatic and two (2) manual schedules. It allows you to turn on a maximum of 16 valves at 60 Hz and 12 valves at 50 Hz, and features four (4) control modes — giving you ample programming and operating control.

Modular Configuration Allows Easy Expansion — The PAR+ES is available in 16 to 32- and 56-station base configurations and can be easily upgraded in 8-station increments. By simply plugging in an eight-station Output Station Module (OSM) you can expand your PAR+ES controller capabilities to accommodate 24, 40, 48, 64 or 72 stations.

Multi Manual with Station and Program Stacking — Perfect for syringing or putting down fertilizer, multi manual allows to manually launch up to 16 stations at one time. Split second delayed start prevents water hammer and high inrush current.

Multiple Schedule Operation — No schedule limit when operated with Rain Bird Central Control Systems. Six (6) automatic (with 12 start times each) and two (2) manual schedules available for standalone operation.

Universal Performance Simplifies Installation and Operation — The intuitive PAR+ES Controller reduces installation and training hassles with its many universal features. For quick electrical hookups, the system automatically senses and adjusts for either a 50 or 60 Hz current; while one (1) transformer accommodates 100 V/120 V, 220 V or 230 V/240 V with the flip of a switch. The PAR+ES Controller also displays system activities and accepts user input in eight (8) different languages. The icon-driven controls and multilingual display eliminate confusion and translation problems.



Mix and Match — Mix and match with any other Rain Bird Controller and with any Rain Bird Central Control System.

**Easy to Use**—Large buttons with clear, descriptive icons make programming easy.

**Enclosed Electronics** — Provides the best protection against the elements.

**16-Solenoid Simultaneous Operation** — Heavy-duty transformer permits simultaneous operation of up to 16 solenoids (12 at 50 Hz).

Irrigation Control — Variable or weekday programming, for weekday cycle or for irrigation every other day, every three (3) days or up to every nine (9) days.

Water Budget— Increase or decrease run times on a schedule in 10% increments from 0 to 200%.

**Simplified Installation** — One (1) transformer accommodates various power inputs.

Front Panel Lighting — LEDs and backlit Liquid Crystal Display (LCD) make programming easy even in poor lighting.

Large Capacity Terminal Strip — Accepts up to two (2) 14-gauge wires per station.

**Standard Station Lights** — OSM lights provide easy identification of active stations.

Standard Station Switches — Turn stations on or off quickly for easy operation and troubleshooting.

**Premium Surge Protection** — Premium surge protection included in all models.

Sensor Response — Sensor activation cancels irrigation at controller.

Master Valve Activation — Activate master valve output with station activation.

Available PAR+ES Retro Kit — Extends the useful life of older control systems by converting to PAR+ES water-saving technology (see page 25).

The flexible PAR+ES can be ordered in the following configurations:

- PAR+ES standalone controller in a plastic pedestal.
- PAR+ES satellite with two-wire module in a plastic pedestal.
- PAR+ES satellite with LINK (wireless) module in a plastic pedestal.

All configurations are offered with a weather proof and impact-resistant plastic pedestal.

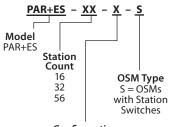
Buy only the control you need today and increase your operating capabilities or change your communication method at any time.

\*Software required



PAR+ES

## HOW TO SPECIFY



Configuration Blank = Standalone 2 = Two-wire L = LINK

Note: Expandable up to 72-Station count by adding OSMs.



## **SPECIFICATIONS**

Station Capacity: 72 stations, up to 16 solenoids operating simultaneously (60 Hz)

Electrical Input: (50/60 Hz) 117 VAC Nominal 98 to 132 VAC 220 VAC Nominal 208 to 232 VAC 240 VAC Nominal 225 to 255 VAC

Electrical Output: 26.5 VAC, 5.25 AMP

Station Load Capacity: Up to four (4) 24 VAC, seven (7) VA solenoids per station

Plastic Pedestal Dimensions: Width: 17" (43.2 cm)

Height: 34 <sup>3</sup>/<sub>4</sub>" (88 cm)

Depth: 21" (53.4 cm)

**Programs:** As many programs as possible with Rain Bird Central Control Systems or six (6) automatic (12 start times each) and two (2) manual in standalone mode

Water Budget: 0 to 200% in 10% increments

Station Runtimes: One (1) to 120 minutes, in one (1) minute increments

Languages: English, French, German, Italian, Japanese, Portuguese, Spanish and Dutch

Grounding Requirements: Less than 10 ohms

Compliance: UL & C-UL Listed, CE approved, C-Tick Compliant and FCC



## **PAR+ES Retro Kit**

The PAR+ES Retro Kit is the perfect controller upgrade for low budget upgrade to extend the life of your irrigation system.

#### **FEATURES**

**Installation** — Installs in any Rain Bird small plastic or stainless steel pedestal as well as several other competitors' pedestal — with additional hardware required.

**Versatile Configurations** — Available as standalone, hardwired<sup>1</sup> or wireless<sup>1,2</sup>. Hardwired and wireless configurations have real-time two-way communication with central control. In wireless mode, up to four controllers can share a single radio.

**Expandable** — 16-station configuration up to 48-station using plug-in 8-station output station modules with switches and station LED.

<sup>1</sup>Requires interface module not included. <sup>2</sup>Requires additional transformer. Easy Programming — Large, raised control buttons with clear, descriptive icons and a high-contrast Liquid Crystal Display (LCD) panel make programming easy. Lights indicate active schedules and central control status, while unique Copy/Paste function speeds programming process.

Central Control Ready — Works with any Rain Bird Central Control System. Compatible with Flo-Manager,<sup>®</sup> Smart Weather,<sup>™</sup> RainWatch<sup>™</sup> and Smart Pump<sup>™</sup> modules. Factory-configured to receive commands via cellular phone (MI Series Mobile Controller\*) or UHF radio (The FREEDOM System<sup>™</sup>).

Multiple Schedule Operation — No schedule limit when operated with Rain Bird Central Control Systems. Six (6) automatic (with 12 start times each) and two (2) manual schedules available for standalone operation.

Multi Manual with Station and Program Stacking — Perfect for syringing or putting down fertilizer, multi manual allows to manually launch as many stations as necessary. Split-second delayed start prevents water hammer and high inrush current.

#### SPECIFICATIONS

- Water Budget: 0 to 200% in 10% increments
- Station Runtimes: One (1) to 120 minutes, in one (1) minute increments

Configurations: Standalone, hardwired and wireless

- **Programs:** No limit with Rain Bird Central Control Systems. Six (6) automatic (12 start times each) and two (2) manual programs
- Schedule: Variable day watering (up to nine (9) days), custom day-of-the-week by program

Electrical Input:

117 VAC ±10% (60 Hz) 220 VAC (50 Hz)

Electrical Output: 26.5 VAC, 3 AMP

- Station Load Capacity: Up to four (4) 24 VAC, seven (7) VA solenoids per station
- Languages: English, French, German, Italian, Japanese, Portuguese, Spanish and Dutch



## PAR+ES Sat Decoder

The PAR+ES Sat Decoder combines the features and benefits of a controller system with those of a decoder system. The resulting advantages for the user include:

- Easy Installation
- Reduced Installation Costs
- Easy Expansion

### The idea is simple:

- 1. Install the controller.
- 2. Install a single two-wire path to control all the sprinklers.
- 3. Install decoder between wire path and each sprinkler head.
  - » Uses up to 90 percent fewer wires than conventional hardwire systems
  - » Built-in diagnostic tools
  - » Compatible with all Rain Bird Golf Decoders (FD-101, FD-102, FD-202, FD-401 and FD-601)
  - » Simply attach new decoder to the wire path
  - » Operates as a standalone controller or add a Rain Bird<sup>®</sup> Central Control System for greater control
  - » Operates up to 72 decoder addresses
- 4. Program controller with decoder address.

## **SPECIFICATIONS**

- Station Capacity: 72 decoder addresses, up to 16 solenoids operating simultaneously (60 Hz)
- **Configurations:** Standalone, two-wire, LINK and LINK with Radio
- Electrical Input: (50/60 Hz) 115 VAC Nominal 98 – 132 VAC 220 VAC Nominal 208 – 232 VAC 240 VAC Nominal 225 – 255 VAC

#### Electrical Output: 26.5 VAC, 5.25 AMP

- Station Load Capacity: Up to two (2) 24 VAC, seven (7) VA solenoids per station depending on decoder type
- Plastic Pedestal Dimensions: Width: 17" (43.2 cm)
  - Height: 34¾" (88 cm)

Depth: 21" (53.4 cm)

**Programs:** As many programs as possible with Rain Bird Central Control Systems or six (6) automatic (12 start times each) and two (2) manual in standalone mode

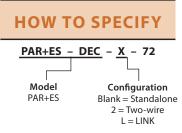
Water Budget: 0 – 200% in 10% increments

- Station Runtimes: One (1) 120 minutes, in one (1) minute increments
- Languages: English, French, German, Italian, Japanese, Portuguese, Spanish and Dutch

Grounding Requirements: Less than 10 ohms

- Compliance: UL & C-UL Listed, CE approved, C-Tick Compliant and FCC
- Maximum Wire Length Between Controller and Decoder: #12 AWG: Star Design: 3.8 miles (6.1 km) Loop Design: 15.2 miles (24.4 km)
  - **#14 AWG** Star Design: 2.4 miles (3.8 km) Loop Design: 9.6 miles (15.2 km)
- Maximum Wire Length Between Decoder and Rotor: 456 ft (#14 AWG)
- Maximum Wire Paths: Four (4), plus multiple branches per wire path

### PAR+ES Decoder Controller







**Decoder Controller** 

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