

Tech Spec

ESP-LX Basic Controller

ESP-LX Series Controllers

The ESP-LX Basic joins Rain Bird's popular ESP-LX Series of commercial controllers. The ESP-LX Basic is a simple-to-use, entry level commercial controller, with only the features you need, including modular station capacity up to a maximum of 48 stations using 4-, 8- and 12-station modules.

Applications

The ESP-LX Basic provides flexible features and modular options that make the controller ideal for a wide variety of applications including lightcommercial, commercial, and industrial irrigation systems. Modular options include modular station capacity, metal case and pedestal. These options are field installed and can upgrade and enhance the ESP-LX Basic at any time in the future.

Easy to Use

The ESP-LX Basic Controller utilizes the Rain Bird ESP Extra-Simple Programming user interface. The dial, switches, and buttons interface which Rain Bird first introduced in the early 1990's is easy to learn and use and has become a standard controller interface for the irrigation industry. The large LCD display incorporates softkey text labels for the button functions rather than dedicated buttons.

Dual language support allows the end-user or maintenance personnel to interface with the controller in English or Spanish. A simple turn of the dial changes the language: the right side being English and the left side Spanish. Date, time and unit formats are also configurable.

Easy to Install

The ESP-LX Basic Controller has a spacious case and quick-connect terminals making installation fast and easy. Multiple size wiring knockouts are provided on the bottom and back side of the case to adapt to a wide variety of wiring applications. The door and front panel are removable so the case can be easily mounted to the wall.

Controller Hardware

- Plastic, locking, UV resistant, wall-mount case
- Optional Metal Case & Pedestal
- 12-station base unit expandable to 48 stations with 4-, 8-, & 12-Station Modules

Controller Features

- Large LCD display with easy to navigate softkey user interface
- Hot-swappable modules, no need to power down the controller to add/remove modules



113

- Dynamic station numbering eliminates station
 numbering gaps
- Weather Sensor input with override switch
- Master valve/pump start circuit
- English or Spanish language with a simple turn of the dial
- Non-Volatile (100- year) program memory
- Standard 10kV surge protection
- Front panel is removable and programmable under battery power
- Compatible with Rain Bird Landscape Irrigation
 and Maintenance Remote

Water Management Features

- SimulStations[™] are programmable to allow up to 2 stations to operate at the same time
- Water Windows by program
- Cycle+Soak[™] by station
- Rain Delay
- Programmable Station Delay by program
- Normally Closed Master Valve programmable by station
- Weather Sensor programmable by station to prevent or pause watering
- Program Seasonal Adjust
- Global Monthly Seasonal Adjust

Diagnostic Features

- Alarm light with external case lens
- · Electronic diagnostic circuit breaker
- Program summary and review
- Variable test program
 RASTER[™] station wiring test

Operating Specifications

- Station timing: 0 min to 12 hrs
- Seasonal Adjust; 0% to 300% (16 hrs maximum station run time)
- 4 independent programs (ABCD)
- ABCD programs can overlap

• 8 start times per program

ESP-LX Box

- Program Day Cycles include Custom days of the week, Odd, Odd31, Even, & Cyclical dates
- Manual station, program, test program

Electrical Specifications

- Input required: $120 \text{ VAC} \pm 10\%$, 60 Hz
- Output: 26.5 VAC 1.9A
- Power back-up: Lithium coin-cell battery maintains time and date while nonvolatile memory maintains the programming
- Multi-valve capacity: Maximum five 24 VAC, 7VA solenoid valves simultaneous operation including the master valve, maximum two solenoid valves per station

Certifications

• UL, CUL, CE, CSA, C-Tick, FCC Part 15

Dimensions

- Width: 14.32 in. (36,4 cm)
- Height:12.69 in. (32,2 cm)
- Depth: 5.50 in. (14,0 cm)

How To Specify

ESP-12LXBASIC ESPLXMSM4

Base Controller ESP-12LXBASIC: 12-station base Station Modules ESPLXMSM4: 4-Station Module ESPLXMSM8: 8-Station Module ESPLXMSM12: 12-Station Module



Specifications

The ESP-LX Basic Controller shall be of a hybrid type that combines electro-mechanical and microelectronic circuitry capable of fully automatic or manual operation. The controller shall be housed in a wallmountable, weather-resistant plastic cabinet with a key-locking cabinet door suitable for either indoor or outdoor installation. The controller shall have the ability to be programmed and operated in English or Spanish. Language can be changed on the fly without altering controller settings. A simple turn of the dial to the right sets the language to English. Turning the dial to the left side sets the language to Spanish. The display shall show programming options and operating instructions in the chosen language without altering the programming or operation information.

The controller shall have a base station capacity of 12 stations as well as 3 expansion slots capable of receiving station modules of 4, 8, or 12 stations to create a controller capacity of up to 48 stations. All stations shall have the capability of independently obeying or ignoring the weather sensor as well as using or not using the master valve. Station timing shall be from 0 minutes to 12 hours. The controller shall have a Seasonal Adjustment by program which adjusts the station run time from 0 to 300% in 1% increments. The controller shall also have a Monthly Seasonal Adjustment of 0 to 300% by month. Station timing with Seasonal Adjustment shall be from 1 second to 16 hours.

The controller shall have 4 separate and independent programs which can have different start times, start day cycles, and station run times. Each program shall have up to 8 start times per day for a total of 32 possible start times per day. The 4 programs shall be allowed to overlap operation based on user defined settings which control the number of simultaneous stations per program and total for the controller. The controller shall allow up to 2 valves to operate simultaneously per program plus one master valve/pump start circuit for a total of three for the controller. The controller shall have an electronic, diagnostic circuit breaker that shall sense a station with an electrical overload or short circuit and shall bypass that station and continue to operate all other stations. The controller shall have a feature that allows a day(s) of the week to be turned off on any user selected program day cycle. (Custom, Even, Odd, Odd31, & Cyclical). Days set to Permanent Day Off shall override the normal repeating schedule and not water on the specified day(s) of the week. The controller shall incorporate a Rain Delay feature allowing the user to set the number of days the controller should remain off before automatically returning to the auto mode.

The controller shall have Cycle+Soak water management feature which is capable of operating each station for a maximum cycle time and a minimum soak time to reduce water run-off. The maximum cycle time shall not extended by Seasonal Adjustment.

The controller shall offer Water Windows for each program. This function sets the allowed start and stop time where watering is allowed. If the watering cannot be completed by the time the Water Window closes, the stations with remaining run time are paused and watering automatically resumes when the Water Window opens the next time.

The controller shall have an alarm indicator light on the front panel visible through the outer door with the door closed and locked. The alarm light shall prompt the user to select the alarm softkey to review the alarm condition(s).

The controller shall offer an optional metal cabinet and pedestal.

The controller shall be manufactured by Rain Bird Corporation.

Rain Bird Corporation

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