The ESP-LX Modular Controller
One Controller. Any Installation.

A member of the popular ESP family of controllers, the ESP-LX Modular can fit the specification from a high-end residential installation to a commercial installation. The large display and intuitive programming sequence make this the most user-friendly controller in its class. The spacious cabinet and quick-connect terminal locations make installation a snap. Features like the Contractor Default™ program with restore timer and hot-swappable modules (that's right, no need to power down!) make service calls more efficient and earn you more money by taking less time!

Features

- Eight station base model with the capacity to expand up to 32 stations in increments of 4 or 8 stations.
- Hot swappable modules can be installed in any position while the controller is in operation.
- ESP Programming: Extra-Simple Programming with self-prompting large alphanumeric dot matrix display makes this controller easy to program, read, and understand.
- Spacious heavy-duty key-locking cabinet (NEMA 3R rated) with internal junction box provides lots of room for wiring for a clean and professional looking installation.
- Removable, battery-programmable panel for the convenience of both programming instruction and programming prior to installation.
- Four independent programs (A, B, C, and D-drip), with eight start times each allow mixed irrigation applications in a single controller.
- D-drip program can run simultaneously with program A, B, or C to maximize hydraulic capacity and minimize watering time.
- 365-day calendar with leap year intelligence for one-time date and time setting.
- Five cycle modes (CUSTOM, CYCLICAL, ODD, ODD31, or EVEN) selectable by program for maximum flexibility and watering restriction compliance.
- Calendar-Day-Off option to set any day of the month as a non-watering day for all programs (in any cycle mode) accommodates special occasions and unique watering ordinances.

- Contractor Default™ function to save a a customized default program which can be easily accessed at a later date. Delayed recall feature to set the day (up to 90 days later) on which the controller will automatically restore the saved program. This is useful in reloading a schedule that has been altered or in replacing a temporary schedule for new seed or sod.
- User-selectable languages: English, Spanish, French, German, Italian, Portuguese, and Chinese (optional).
- Seasonal adjustment available by program and by month, up to 300%.
- Programmable rain delay enables system to stay off for a specified period with an auto-restart.
- Readily accessible manual watering function (right on the dial!) to operate a single valve, several valves, or an entire program. Manual watering operation will not alter the programmed watering schedule.
- Programmable Valve Delay to allow for water well recovery or time for slow-closing valves to turn off.
- Cycle+Soak™ by station allows total irrigation time to be split into usable cycles, minimizing runoff.
- Master valve/pump start circuit, programmable by station, for optimal irrigation control.
- Dedicated sensor terminals allow the user to easily connect a sensor to the controller for maximum water efficiency.
- Sensor bypass switch allows the user to override an active sensor.
- Sensor override function allows the user to override an active sensor by station.
- Built-in diagnostic functions let you confirm program information, calculate total program and valve run times, and run a test program that operates all system valves in sequence.
- Diagnostic self-setting circuit breaker identifies a valve or wire fault and continues to water operable stations.
- Enhanced Diagnostic Feedback™ alerts the user to programming errors and other conditions that may render a schedule inoperable. Externally visible light is illuminated and an appropriate text message is displayed.
- RASTER™ Wiring Test diagnoses field wiring and solenoid problems quickly and easily.
- Lithium battery maintains date and time during a power outage for ten years.

- Non-volatile program memory (100 year life) maintains user's program during a power outage independent of the battery backup.
- Compatible with the Rain Bird IQ™ Central Control system.

Operating Specs

- Station timing: 0 to 12 hours for all stations (0 to 120 minutes selectable in 1-minute increments; above 120 minutes selectable in 10-minute increments).
- Automatic Starts: 8 start times per program on the quarter hour for up to a total of 32 start times per day if using all four programs.
- Independent programming schedule options variable per program: CUSTOM day-of-the-week, ODD day watering, EVEN day watering, and variable day cycle from 1 to 31 days.

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

ESPLXM ESPLXMSM4

Controller Base Model (8 station)

ESPLXMI: Indoor
ESPLXM: Outdoor
IESPLXM: International
IESPLXMAUS: Australia
IESPLXMCHI: China
IESPLXMEUR: Europe

Modules

ESPLXMSM4: 4-Station Module

ESPLXMSM8: 8-Station Module

RAIN BIRD

Electrical Specifications

- Input required: 120 VAC ± 10%, 60Hz (International models: 230 VAC ± 10%, 50Hz; Australian Models: 240 VAC ± 10%, 50Hz)
- Output: 26.5 VAC 1.9A
- Power back-up: Lithium coin-cell battery maintains time and date while non-volatile memory maintains the schedule
- Multi-valve station capacity: Up to two 24 VAC, 7VA solenoid valves per station plus a master valve

Specifications

The 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 wall-mountable, weather-resistant plastic cabinet with a key-locking cabinet door (outdoor models only) suitable for either indoor or outdoor installation. The controller shall have the ability to display six languages: English, Spanish, French, Portuguese, German, and Italian.

The controller shall have a Rapid Station Test Routine (RASTER), which enables the controller to diagnose field wiring and solenoid problems.

The controller shall have a base unit with 8 stations as well as three expansion slots capable of receiving station modules of either four or eight stations each to create a controller of up to 32 stations. All stations shall have the capability of independently bypassing an active rain sensor or of functioning as a normal station output. Station timing shall be from 0 minutes to 12 hours. Run time resolution shall be in 1-minute increments from 0 to 2 hours and 10 minute increments from 2 to 12 hours. The diplay shall show "No Run Times" or equivalent icon for 230 VAC models if no run time has been entered for any station in any program.

The controller shall have four separate and independent programs which can have different start times, station timing and watering days. Each program shall have up to 8 start times available. The controller shall stack multiple start times in sequence to prevent hydraulic overload. The controller shall allow simultaneous or overlapping of program D with any other program. The controller shall be capable of operating two 24 VAC solenoid valves per station plus a master valve or remote pump start relay. 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 operating all other stations.

The controller shall have a 365-day calendar with a permanent day off feature that allows a day(s) of the week to be turned OFF on any cycle (odd/even/1-31day cycle). A day set to "Permanent Off" shall override the normal repeating schedule and shall display the words "Day Always Off/Day Off" in the LCD screen. The controller shall have a seasonal adjust feature adjustable from 0% to 300% of the actual run time selected in increments of 10%. Seasonal adjust can effect all programs simultaneously, or can be applied to only to all programs set to run within a particular month.

The controller shall have Cycle+Soak™ water management software 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 be extended by water budgeting.

The controller shall have a 12-hour AM/PM or 24 hour military (for 230VAC and 240VAC models) clock with a midnight day change over. The controller shall have a sensor circuit for connection to a rain sensor or to an underground moisture sensor system that will interrupt a scheduled watering under "wet" or "moist" conditions. The controller shall have an indicator on the display and one externally visible alarm light to indicate that a sensor is connected and active and that watering has been temporarily disabled.

The controller shall have access to a variety of advanced features. These features shall include: save a custom default program, retrieve a custom default program immediately, retrieve a custom default program at a specified date up to 90 days in the future, set a valve or rain delay, clear memory, set a day as "Permanently Off", confirm programming.

The controller shall have the following manual operations and manual advances for semi-automatic control: run a single valve, run multiple manually stacked valves, run a semi-automatic program, run a test on all valves (all stations with any time assigned regardless of the program) from 1 to 10 minutes.

The controller shall have a removable, 9V battery programmable front panel. The controller shall have a non-volatile memory, independent of the 9V backup battery.

The controller shall have the capacity for the program to be erased allowing the user to start programming with a blank controller. The controller shall have a reset button to reset the controller in the case of micro-controller "lock-up" due to power surges or frequent interruption to the power supply.

Compatible with the Rain Bird IQ™ Central Control system.

The controller shall be as manufactured by Rain Bird Corporation.