Tech Spec



ESP-Me Controller

ESP-Me Series Controllers

America's favorite modular controller, the ESP-Modular, has an all new design and an enhanced feature set to provide contractors with the industry's most flexible irrigation controller solution. The ESP-Me Controller supports up to 22 stations, 4 programs and 6 start times.

Applications

The ESP-Me provides flexible scheduling features that make the controller ideal for all your irrigation controller needs.

Easy to Use

The ESP-Me Controller was designed with ease of use in mind. The controller boasts the industry's largest LCD screen for its class and also incorporates universal icons on both the controller overlay and the LCD.

Easy to Install

The ESP-Me Controller mounts with as few as two mounting screws. A guide for ½"or ¾" conduit fittings allows for professional installation of field wires into the cabinet. For larger field wire needs, remove the knockout for a 1" diameter opening.

Controller Hardware

- Plastic wall-mount case with door
- 4 station base module
- Mounting Screws
- Wire nuts for outdoor models

Controller Features

- Large LCD display with easy to navigate user interface
- Rain Sensor input with override capability
- Master valve/pump start circuit
- Non-Volatile (100 year) storage memory
- Remotely Programmable under 9V battery power (not included)

Scheduling Features

- Program based scheduling allows 4 individual programs with 6 independent start times per program for 24 total start times
- Watering schedule options: By days of week, ODD calendar days, EVEN calendar days, or Cyclic (every 1 – 30 days)

Advanced Features

- Advanced diagnostics and short detection with LED alert
- Contractor Default[™] Program Save/ Restore saved program(s)
- Rain Sensor bypass by Station
- Total Run Time Calculator by program
- One Touch manual watering
- Delay Watering up to 14 days (applies only to stations not set to ignore Rain Sensor)
- Manual Watering option by program or station
- Seasonal Adjust applied to all programs or individual program
- Adjustable delay between valves (default set to 0)
- Master Valve on/off by station

Operating Specifications

- Station timing: 1 minute to 6 hours
- Seasonal Adjust: 5% to 200%
- Max operating temperature: 149°F (65°C)

Electrical Specifications

- Input required: 120VAC ± 10%, 60Hz (International models: 230/240VAC ± 10%, 50/60Hz)
- Output: 25.5VAC 1A
- Master Valve/Pump Start Relay Operating Voltage: 24VAC 50/60Hz Max Coil Inrush: 11VA Max Coil Holding: 5VA
- Idle/Off power draw 0.06 amps at 120VAC
- Power back-up not required. Nonvolatile memory permanently saves the current programming and a 10 year life lithium battery maintains the controllers time and date during power outages.



Certifications

- UL, cUL, CE, CSA, C-Tick, FCC Part 15b, WEEE, S-Mark,
- IP24

Dimensions

- Width: 10.7 in. (27,2 cm)
- Height: 7.7 in. (19,5 cm)
- Depth: 4.4 in. (11,2 cm)

North America Models (120VAC)

- ESP4MEI: 4 station indoor model
- ESP4ME: 4 station outdoor model*
- ESPSM3: 3 station module
- ESPSM6: 6 station module

*Also available in 230VAC and 240VAC models

How to specify your model:

ESP-Me Controller

120V 4 station base controller

Indoor	ESP4MEI
Outdoor	ESP4ME

230V & 240V

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Available in outdoor models only

IESP4MEEUR	230V for Europe
IESP4MECSA	230V Central & South America
IESP4MEAMC	230V Africa, Middle East, China
IESP4MEAUS	230/240V Australia

Expansion Modules for all models

SPSM3	3 station expansion module
SPSM6	6 station expansion module**

**6 station module compatible with ESP4ME series controllers only. Not backward compatible with prior models.



Specifications

The ESP-Me Controller shall be 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 outdoor or indoor installation.

The controller shall include a base unit module with 4 stations as well as three expansion slots capable of receiving expansion station modules of either three or six stations to achieve total station capacity of up to 22 stations. The controller shall accept the modules in any configuration and shall not require the installation of a three station module in order to install a 6 station module.

Station run times shall range from 1 minute to 6 hours. The controller shall be set with a factory default start time of 8 AM and default run time of 10 minutes for the first 4 stations for Program A only.

The controller shall have a Seasonal Adjust feature to adjust the run time for all stations from 5% to +200% in 5% increments. Seasonal Adjust can be applied to all programs simultaneously or individually.

The controller shall have 4 independent programs that can have 6 different start times. The controller shall stack multiple start times in sequence to prevent hydraulic overload. All programs run consecutively.

The controller shall be capable of operating two 24VAC solenoid valves per station plus a master valve or remote pump start relay. The controller shall operate on $120VAC \pm 10\%$ at 60Hz (230/240VAC $\pm 10\%$ at 50Hz for international models). A master valve or pump start relay shall operate on 24VAC at 50/60Hz, Max Coil Inrush of 11VA and Max Coil Holding of 5VA.

Watering day cycles shall be: By Day of the week, Odd, Even and Cyclic (Every # day). Odd, Even, and Cyclic shall support permanent days off. A day set to "Permanent Off" shall override the normal repeating schedule and when the dial is turned to the day of the week position, the display shall display the program type (odd, even, or cyclic) and the water drop below the day will show with a line through the droplet.

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. When an electrical condition exists that is preventing normal operation the red LED shall illuminate continuously and scroll a message across the LCD as to what the problem is. When an alert condition is present that is related to programming errors the red LED shall continuously blink and scroll a message.

The controller shall have a 12-hour AM/PM or 24 hour military (for 50Hz models) clock with a midnight day change over. The clock shall default to the time format based upon the power detected. The controller shall have a 365-day calendar backed up against power interruptions by an internal lithium battery that will maintain date and time for approximately 10 years.

The controller shall provide the user the ability to bypass the Rain Sensor for each station independently.

The controller shall be equipped with a variety of Special Features (SF) that can be accessed by turning to the appropriate dial position and pressing and holding the two arrow keys simultaneously for 3 seconds.

Special Features include:

- Rain Sensor Bypass by Station
- Permanent Days Off (Odd, Even, Cyclic only)
- Store/Restore Saved Programs
- Reset to Factory Defaults
- Set Inter-station Delay timing
- Set Master Valve operation by Station
- Total Run Time Calculator by program

The features above will be included on a Special Features Card included with every controller.

The controller shall offer manual watering of ALL stations or ONE station 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 display on the LCD the message NO AC to indicate to the user when AC Power is not present (only if 9 volt battery is present).

The controller shall be compatible with Rain Bird's LIMR (Landscape Irrigation Maintenance 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 $\frac{1}{2}$, $\frac{3}{4}$ " and 1" wire conduit fitting to allow for a more professional installation.

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 of power to the power supply.

The controller shall be upgradable to an EPA WaterSense approved smart controller without having to replace the cabinet, nor disconnect station modules.

Suggested accessories for use with this controller:

- RSD Series Wired Rain Sensors
- WR2 Series Wireless Rain Sensors
- LIMR Series Wireless Remote (Available in USA/Canada Only)
- All Rain Bird rotors, valves, nozzles, sprays and drip products

The controller shall be manufactured by Rain Bird Corporation in a NAFTA member country.

Rain Bird Corporation

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