Tech Spec



ESP-ME3 Modular Controller

ESP-ME3 Series Controllers

America's favorite modular controller, the ESP-Modular is now WiFi and flow sensor compatible with new design and an enhanced feature set to provide contractors with the industry's most flexible irrigation controller solution. The ESP-ME3 Controller supports up to 22 stations, 4 programs and 6 start times.

Applications

The ESP-ME3 WiFi Compatible Controller provides flexible scheduling features that make the controller ideal for all your irrigation controller needs.

Easy to Use

The ESP-ME3 WiFi Compatible Controller was designed with ease of use in mind. The controller boasts the industry's largest back-lit LCD screen for its class and also incorporates universal icons on both the controller overlay and the LCD.

Easy to Install

The ESP-ME3 WiFi Compatible 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
- 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: 230VAC ± 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, FCC Part 15b
- IP24
- WaterSense© certified with up to 30% water savings when installed with Rain Bird LNKTM
 WiFi Module and WR2 Rain Sensor. Meets
 EPA criteria for highperforming, waterefficient products.



Dimensions

ESPSM6

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

How to specify your model:

ESP-ME3 WiFi Compatible Controller

120V 4 station base controller

Indoor/Outdoor	ESP4ME3
230V (available in outdoor models only)	
IESP4ME3EUR	230V for Europe
IESP4ME3CSA	230V Central & South America
IESP4ME3AMC	230V Africa, Middle East, China
IESP4ME3AUS	230V Australia
Expansion Modules for all models	
ESPSM3	3 station expansion module

6 station expansion module



The controller shall display on the LCD the

present).

message NO AC to indicate to the user when

The controller shall be compatible with Rain

The controller shall be compatible with Flow

give alerts and skip automatically scheduled

The controller shall provide a method for the

The controller shall provide a method for the

installer to restore the schedule to the factory

fresh condition in order to start programming

The controller shall provide a method to wire

conduit fitting to allow for a more professional

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

LNK WiFi Module (wireless connectivity)

Suggested accessories for use with this

the controller through a 1/2", 3/4" and 1" wire

installer to save the irrigation schedule into non-

volatile memory for easy recall later if unwanted

Sensors, allowing for flow monitoring which can

Bird's LNK WiFi Module, allowing wireless

connectivity to the controller.

irrigation for problem stations.

schedule changes are made.

from a "blank" state.

installation.

station modules.

controller:

AC Power is not present (only if 9 volt battery is

Specifications

The ESP-ME3 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 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± 10% at 60Hz (230VAC ± 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.

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 or flow detection, 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 or flow 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
- Flow 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

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.

Rain Bird International, Inc.

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The Intelligent Use of Water™ www.rainbird.com

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Rain Bird Technical Services

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Specification Hotline

1-800-458-3005 (U.S. and Canada)

RSD Series Wired Rain Sensors

WR2 Series Wireless Rain Sensors

drip products

All Rain Bird rotors, valves, nozzles, sprays and

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