

## ESP-MC Series Controllers

### Maxicom<sup>2</sup>® Compatible

The power of an advanced water-management tool in an easy-to-use package. The ESP-MC is a commercial-duty controller for the basic or sophisticated user. Four programs, a real-time calendar, Rain Bird's exclusive Cycle+Soak™ water management software, and the best customer satisfaction program in the industry, helping you conserve both water and money.

### Features

- 12-hour watering duration for any or all stations to aid in drip compatibility
- Four independent programs with eight start times each allow mixed irrigation applications in a single controller
- Two master valve terminals, one programmable by station, to provide better irrigation control
- Programs can overlap to maximize hydraulic efficiency and minimize watering time
- 365-day calendar with leap year intelligence for one-time date and time setting
- Event day off
- Programmable rain delay enables system to stay off for up to 99 days with auto-restart
- Upgradeable to Maxicom<sup>2</sup> satellite
- Independent day cycle by program
- Water budget by program provides adjustments from 0-300% in 1% increments
- Cycle+Soak by station allows total irrigation run time to be split into usable cycles, minimizing runoff
- Cycle & Clean™ - Apply the ESP-MC's Cycle+Soak and Program Overlap features for automatic flushing of Rain Bird's Automatic Filter Kit
- Programmable delay between stations provides time for water well recovery or slow closing valves
- Manual watering by station or program
- Sensor inputs and override switch with LED to indicate when irrigation is suspended by the sensor
- Nonvolatile memory maintains the irrigation schedule for up to 100 years during a power outage
- Lithium battery maintains the time and date for over 10 years during a power outage
- Diagnostic circuit breaker identifies electrical shorts, skips shorted station, and continues watering remaining program

- Quick connect terminal strip for fast installation
- Universal remote ready — pre-installed connectors for addition of remote products
- Heavy-duty transformer for simultaneous operation of up to nine 24 VAC, 7VA solenoids
- Contamination resistant design for reliable performance
- Battery-programmable controller allows for programming prior to installation
- Available in 2 enclosures:
  - Powder coated wall-mount steel cabinet
  - Stainless Steel Pedestal

### Operating Specifications

- Station timing: A, B, C, D - 0 to 2 hours in 1-minute increments; - 2 to 12 hours in 10-minute increments
- Automatic starts: 32 starts total, eight per program per day
- Programming schedule: 1. ODD day watering, 2. EVEN day watering, 3. Variable day cycle from 1 to 99 days by program, 4. Custom day-of-the-week by program
- Test program: Variable 1 to 99 minutes
- Rain Shutdown: programmable 1 to 99 days

### Electrical Specifications

- Input required: 117 VAC ± 10%, 60 Hz (International models: 220 VAC, 50 Hz)
- Output 26.5 VAC, 3A
- Station load capacity: Up to two 24 VAC, 7VA solenoid valves per station plus a master valve or pump start relay
- Diagnostic circuit breaker skips and indicates stations with overloaded circuits
- Power supply overload, backup fuse: 3A
- Battery backup: 9VDC, NiCad rechargeable for programming under battery power and for maintaining active program-in-progress during a power outage
- Heavy-duty electrical surge protection for input and output

### Dimensions

#### Steel Wall-mount

- Width: 11<sup>5</sup>/<sub>16</sub>" (28,7 cm)
- Height: 11<sup>1</sup>/<sub>2</sub>" (29,2 cm)
- Depth: 6<sup>1</sup>/<sub>2</sub>" (16,5 cm)



### Stainless Steel Pedestal

- Width: 11<sup>1</sup>/<sub>2</sub>" (29,2 cm)
- Height: 30" (76,2 cm)
- Depth: 11<sup>1</sup>/<sub>2</sub>" (29,2 cm)

### Optional Features

- Pedestal Mount (PED-DD16)

### How To Specify

#### ESP - 24MC - SS

Model  
ESP

Mounting  
Blank: Steel Cabinet  
SS: Stainless Steel Pedestal

Number of Stations  
12MC: 12 stations  
24MC: 24 stations

## Specifications

The irrigation system controller shall be of a hybrid type that combines electro-mechanical and microprocessor-based circuitry capable of fully automatic and manual operation.

The controller shall operate on a 117 VAC  $\pm$  10% power input and be capable of actuating up to two 24 VAC, 7VA solenoid valves per station plus a master valve or pump start relay. The controller shall be capable of operating four stations plus the master valve simultaneously. Controller output shall be protected against severe electrical surge.

The controller shall have four separate irrigation programs (A, B, C, & D) which can have different start times, watering days, day cycles, and station timing. Each program shall have eight start times per day.

The controller shall have \_\_\_\_\_ stations, with each station capable of an operating time of 0 to 2 hours in one-minute increments and 2 to 12 hours in 10-minute increments. Controller station operation shall be of automatic sequential stacking to avoid overlapping operation unless programmed to overlap.

The controller shall have a 365-day calendar with day-of-the-month OFF feature. Programs will run on an ODD/EVEN day cycle, day-of-the-week ON/OFF cycle, or in cycles from 1 to 99 days. In addition, the controller shall have a programmable rain shut-down from 1 to 99 days.

The controller shall have two master valve/remote pump start circuits for use with a master valve to pressurize the system when the irrigation cycle starts or to activate a remote pump start relay to run the pump during the irrigation cycle. One master valve/pump start circuit shall be programmable by station; the other shall function whenever a station is active.

The controller shall be capable of being operated manually at any time. A manual single station, a group of stations, or a program can be selected to run for the programmed time without affecting the normal program. This controller shall be capable of running a variable system test program without affecting the normal program.

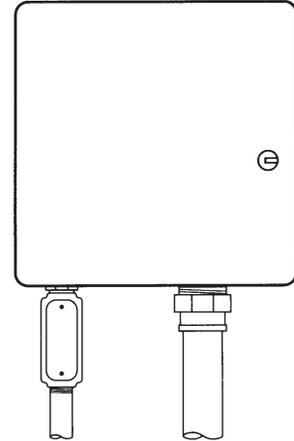
The controller shall be upgradeable by use of a Maxicom<sup>2</sup>® Interface Board.

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 and puddling. The maximum cycle time shall not be extended by water budgeting.

The controller shall include a feature that allows the setting of a delay between station operation. This delay shall be set by program. This delay must be able to be set from 0 seconds to 9 hours.

The controller shall have an internal non-volatile memory which will retain the irrigation schedule for a minimum of 100 years without power. A 9VDC rechargeable battery and recharging circuit shall also be included for counting down the program-in-progress during a power outage and shall allow programming of the controller when it is disconnected from the main power supply.

There shall be a station status indicator light and a master valve status indicator light. These lights will indicate station operation and circuit integrity. An indicator for sensor status will be found on the front panel along with a switch to suspend sensor operation.



This indicator and override will work with a sensor wired to the controller's sensor terminals.

The controller shall be available in a 16-gauge seamless steel cabinet suitable for wall-mounting or a stainless steel pedestal mounting.

The controller shall be as manufactured by Rain Bird Corporation, Azusa, California.

### Rain Bird Corporation

6991 E. Southpoint Road  
Tucson, AZ 85756  
Phone: (520) 741-6100  
Fax: (520) 741-6522

### Rain Bird Technical Services

(800) RAINBIRD (1-800-724-6247)  
(U.S. and Canada)

### Rain Bird Corporation

970 West Sierra Madre Avenue  
Azusa, CA 91702  
Phone: (626) 812-3400  
Fax: (626) 812-3411

### Specification Hotline

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

### Rain Bird International, Inc.

1000 West Sierra Madre Ave.  
Azusa, CA 91702  
Phone: (626) 963-9311  
Fax: (626) 852-7343

The Intelligent Use of Water™  
[www.rainbird.com](http://www.rainbird.com)