



Rain Bird Sprinkler System Manual PDF: ESP-ME3 Controller User Guide

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The Rain Bird ESP-ME3 Controller User Manual is a comprehensive guide to installing and operating the ESP-ME3 controller for your Rain Bird sprinkler system. This manual provides step-by-step instructions for installing and configuring the controller, including connecting valves, master valve or pump start relay, rain or freeze sensor, and flow sensor. The manual also includes information on the controller's features, such as maximum stations, start times, programs, program cycles, and manual watering run. Additionally, the manual provides safety instructions and hazard warnings to ensure safe installation and operation. For technical support, Rain Bird offers a toll-free number for customers in the USA and Canada. The ESP-ME3 controller is designed to use water efficiently and is equipped with an LNK WiFi module for remote connection to the controller using an Apple iOS or Android compatible smart device. With this manual, users can easily install and operate the ESP-ME3 controller to maintain a healthy and vibrant lawn while conserving water.



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RAIN BIRD ESP-ME3 Controller



Hazardous Warnings



WARNING

Indicates a hazardous situation that, if not avoided, could result in death or serious injury.



CAUTION

Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

SAFETY INSTRUCTIONS

Specific safety-related instructions or procedures are described.

Symbols & User Operation

1. NUMBERS define a series of steps for the user to follow in order to operate the controller.



NOTE: Notifies the user of important operating instructions related to controller functionality, installation, or maintenance.



REPEAT: Indicates that a repetition of previous steps or actions may be required for further operation, or to complete a process.

Technical Support

Questions?

Call Rain Bird toll free Technical Support at
1-800-724-6247 (USA and Canada only)

Introduction

Welcome to Rain Bird®



Thank you for choosing Rain Bird's ESP-ME3 controller.
In this manual are step-by-step instructions for how to install and operate the ESP-ME3.

The Intelligent Use of Water®

We believe it is our responsibility at Rain Bird to develop products that use water efficiently.

ESP-ME3 Controller Features

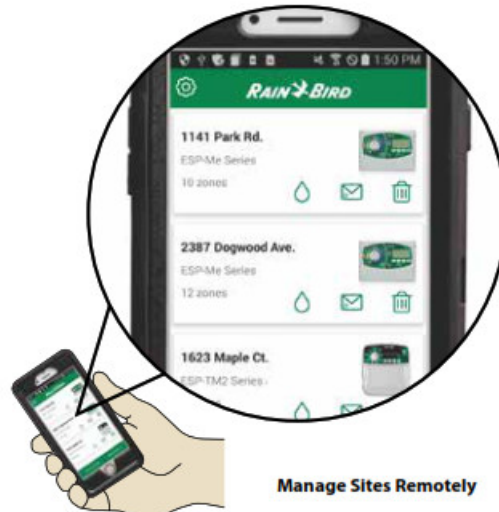
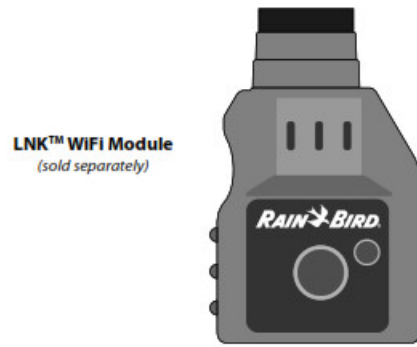
| Feature | Description |
|----------------------------------|---|
| Maximum Stations | 22 (with optional Station Modules) |
| Master Valve or Pump Start Relay | Supported |
| Start Times | 6 |
| Programs | 4 |
| Program Cycles | Custom Days, Odd, Even, and Cyclic |
| Permanent Days Off | By program |
| Master Valve Control | On/Off per station |
| Rain Delay | Supported |
| Rain/Freeze Sensor | Supported |
| Rain Sensor Control | Global or by station |
| Seasonal Adjust | Global or by program |
| Manual Watering Run | Yes |
| Manual Program Run | Yes |
| Manual Test All Stations | Yes |
| Short Detect | Yes |
| Delay Between Stations | Set by program |
| Accessory Port | Yes (5 pins) |
| Save & Restore Programming | Yes |
| Station Advance | Yes |
| LNK'WiFi Module | Supported |
| Flow Sensor | Supported |
| Cycle~Soak™ | Supported in Rain Bird App via LNK" WiFi Module |

WiFi Enabled

The LNK™ WiFi Module allows remote connection to a Rain Bird ESP-ME3 Controller using an Apple® iOS® or Android™ a compatible smart device. The mobile application allows remote access and configuration of one or more irrigation controllers.

* Apple is a trademark of Apple Inc, IOS is a trademark of Cisco Systems Inc, and Android is a trademark of Google LLC.

For more information on the LNK TM WiFi Module and the value this product can provide for your ESP-ME3 controller, please visit: <http://wifi-pro.rainbird.com>

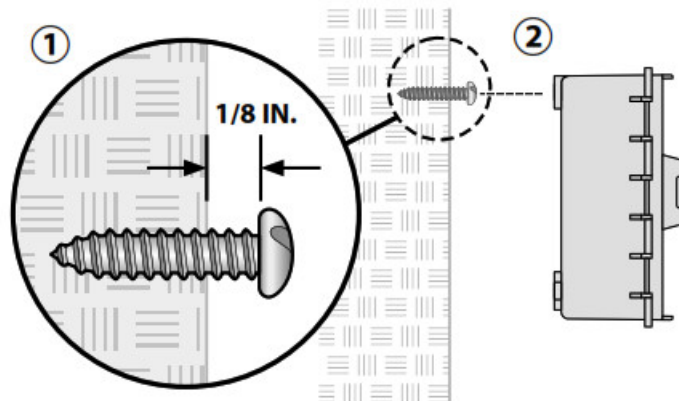


Installation

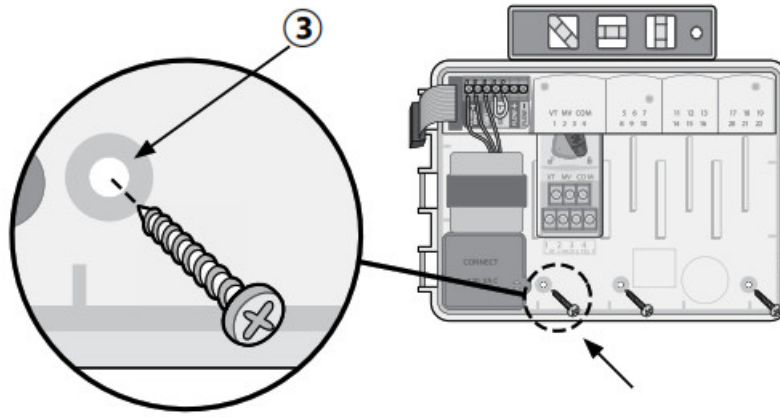
Mount Controller

NOTE: Choose a suitable mounting location close to a 120VAC wall outlet.

1. Drive a mounting screw into the wall, leaving a 1/8 inch gap between the screw head and the wall surface (use the supplied wall anchors if necessary), as shown.
2. Locate the keyhole slot on the back of the controller unit and hang it securely on the mounting screw.



3. Open the front panel, and drive three additional screws through the open holes inside the controller and into the wall, as shown.



Connect Valves

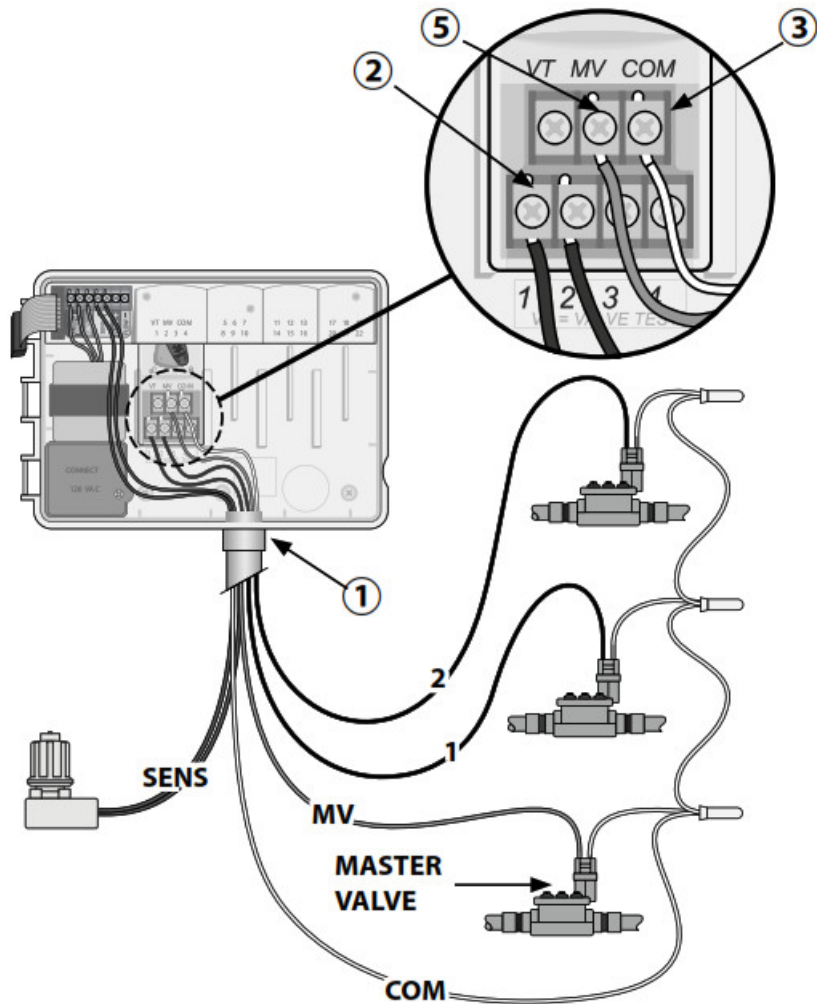
1. Route all field wires through the opening at the bottom or back of the unit. Attach conduit if desired, as shown.



WARNING

Do not route valve wires through the same opening as power wires.

2. Connect one wire from each valve to the terminal on the Base Module or Station Module that corresponds to the desired station number (1-22).
3. Connect a field common wire to the COM (common) terminal on the Base Module. Then connect the remaining wire from each valve to the field common wire, as shown.
4. To perform a Valve Test, connect the common wire to the COM terminal and the power wire to the VT terminal. This will immediately turn the valve ON. Connect Master Valve (optional)
5. Connect a wire from the master valve to the MV (master valve) terminal on the Base Module. Then connect the remaining wire from the master valve to the field common wire, as shown.



Connect Pump Start Relay (optional)

1. Connect a wire from the PSR (pump start relay) to the MV (master valve) terminal on the Base Module. Then connect another wire from the pump start relay to the field common wire, as shown.
2. To avoid the possibility of damage to the pump, connect a short jumper wire from any unused terminal(s) to the nearest terminal in use, as shown.

NOTICE

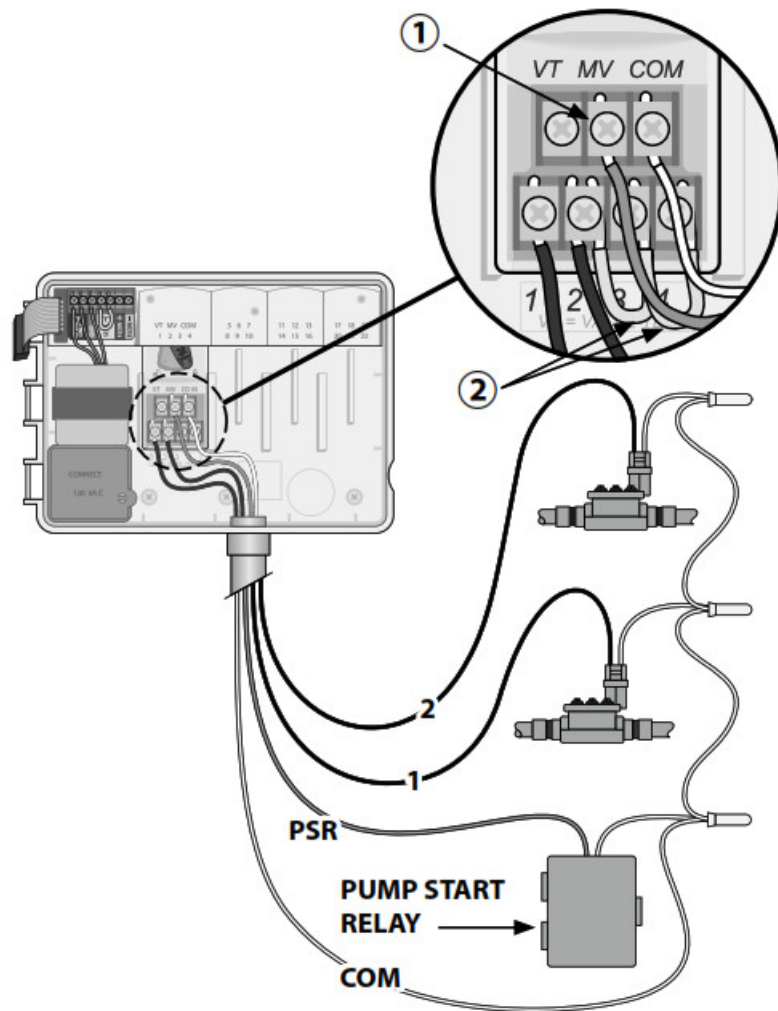
The ESP-ME3 controller DOES NOT provide power for a pump. The relay must be wired according to manufacturer instructions.

Only the following Rain Bird pump start relay models are compatible with the ESP-ME3:

| Description | Note | Model No. |
|----------------------|---------------|-----------|
| Universal Pump Relay | 110 volt only | PSR110IC |
| Universal Pump Relay | 220 volt only | PSR220IC |



NOTE: Connection to pump and external power not shown. Refer to pump installation instructions.



Connect Flow Sensor (optional)



NOTE: Install the flow sensor in the field according to the manufacturer's instructions.

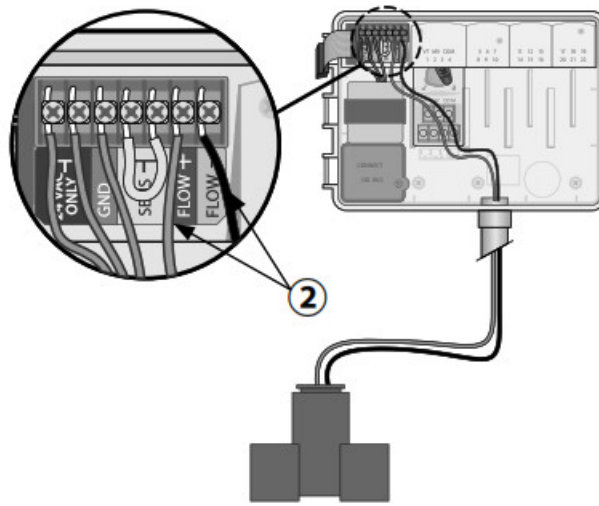
1. Run the flow sensor wires to the controller.



WARNING

Do not route valve wires through the same opening as power wires.

2. Connect both flow sensor wires to the Flow terminals, as shown. Be sure to connect the positive (sometimes red) sensor wire to the red (+) terminal and the negative (sometimes black) sensor wire to the grey (-) terminal.



Flow Sensor Settings

Set the controller to obey or ignore a flow sensor. When set to Sensor ON, automatic irrigation will be suspended per station if the detected flow exceeds learned flow by more than 30%. When set to Sensor OFF, all stations will ignore the flow sensor.



Turn the dial to Flow Sensor.

Press – or + to select SENS ON (sensor on) or SENS OFF (sensor off).



Sensor ON



Sensor OFF



**Flow detected
(flashing)**



NOTE: When switching from Sensor OFF to Sensor ON, the controller will begin to LEARN FLOW. It will run each station for short period to set the expected station flow.



NOTE: See the Troubleshooting section of the Appendix for Flow Alarms information.

Connect Weather Sensor (optional)

1. Remove the yellow jumper wire from the SENSOR terminals on the controller.

NOTICE

Do not remove the yellow jumper wire unless connecting a rain sensor.

2. Connect both rain sensor wires to the SENSOR terminals as shown.



WARNING

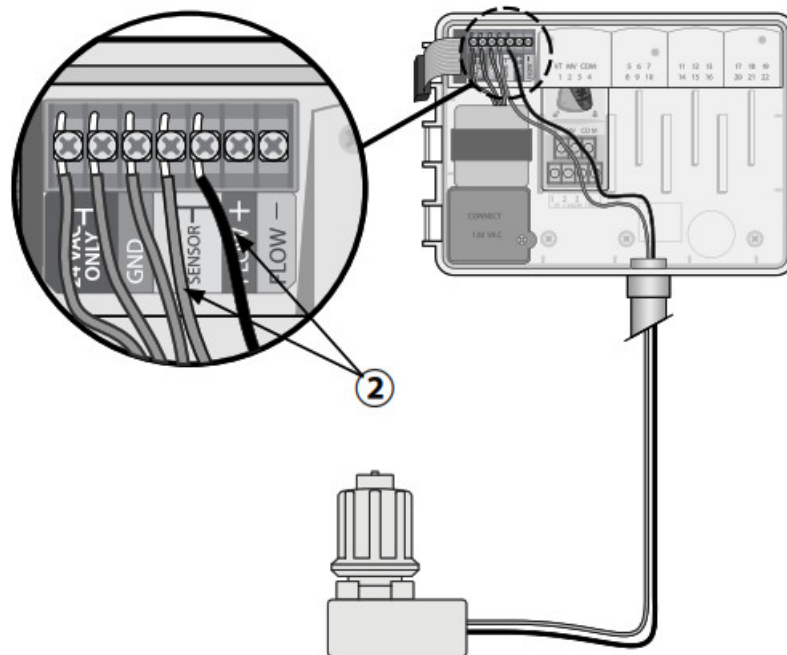
Do not route the rain sensor wires through the same opening as the power wiring



NOTE: Rain Bird ESP-ME3 controllers are only compatible with normally closed rain sensors.



NOTE: For wireless rain/freeze sensors, refer to the sensor installation instructions.



Weather Sensor Settings

Set the controller to obey or ignore a weather sensor.

When set to Sensor ON, automatic irrigation will be suspended if rainfall is detected. When set to Sensor OFF all stations will ignore the rain sensor.



Turn the dial to Weather Sensors.

Press – or + to select SENS ON (sensor on) or SENS OFF (sensor off).



Sensor ON



Sensor OFF



**Rain detected
(flashing)**

Connect Power

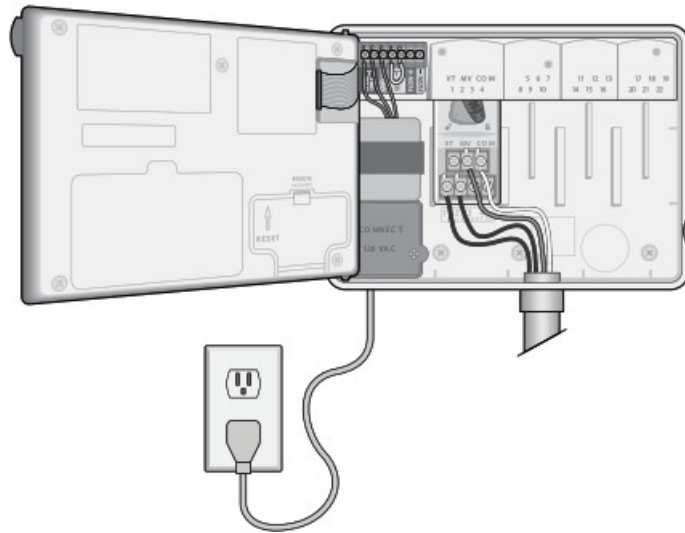


WARNING

DO NOT plug in the transformer or connect external power until you have completed and checked all wiring connections.

Installation with Pre-attached Cord

- Plug the attached power cord into a nearby 120VAC electrical outlet.



Outdoor Installation with Direct Wiring



WARNING

Electric shock can cause severe injury or death. Make sure the power supply is turned OFF before connecting power wires.

POWER WIRING CONNECTIONS 120VAC

Black supply wire (hot) to the black transformer wire

White supply wire (neutral) to the white transformer wire

Green supply wire (ground) to the green transformer wire

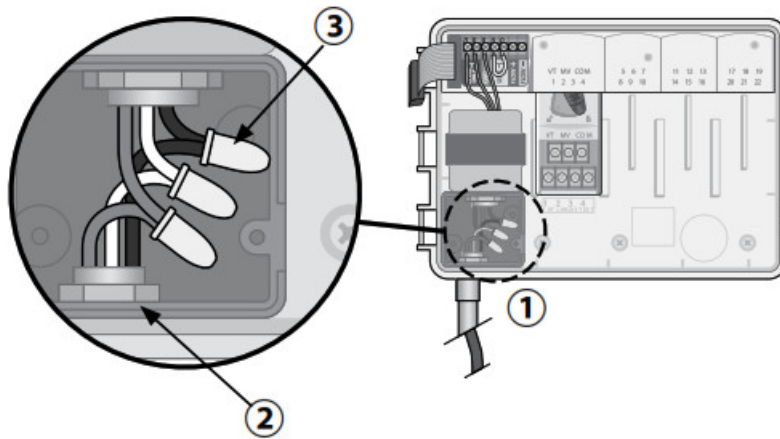
1. Locate the transformer wiring compartment in the lower-left corner of the controller unit. Use a screwdriver to remove the cover and expose the transformer connection wires.
2. Route the three external power source wires through the conduit opening at the bottom of the unit and into the wiring compartment.
3. Using the provided wire nuts, connect the external power source wires (two power and one ground) to the transformer connection wires inside the wiring compartment.



WARNING

The ground wire must be connected to provide electrical surge protection. Permanently mounted conduit shall be used for connecting the main voltage to the controller

4. Verify that all wiring connections are secure, then replace the wiring compartment cover and secure it with the screw.



Station Expansion Modules

Optional Station Modules can be installed in the empty slots to the right of the Base Module to increase the station capacity up to 22 stations.



NOTE: 6-Station Modules are compatible with ESP-ME3 and ESP-Me. They are not backward compatible with the ESP-M vintage controller.

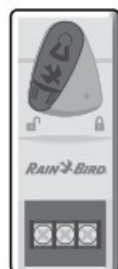


NOTE: For ideal station sequencing, insert a 3-Station module after inserting all 6-station modules. For more details see the Station Numbering section.

Base Module (included)



Expansion Modules (sold separately)



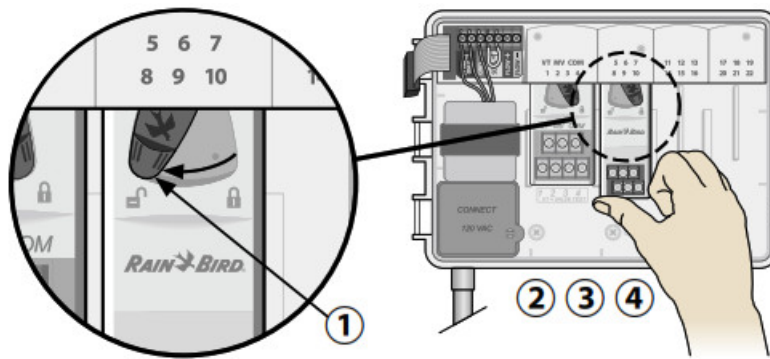
**3-STATION
(ESPSM3)**



**6-STATION
(ESPSM6)**

Install Modules

1. Verify the securing lever on the module is in the unlocked position (slide to the left).
2. Place the module under the desired slot between the plastic rails.
3. Push the module up into the slot until secure.
4. Slide the securing lever to the locked position (slide to the right).



REPEAT for additional modules.



NOTE: Modules can be installed or removed with OR without AC power connected. They are considered “hot-swappable”.

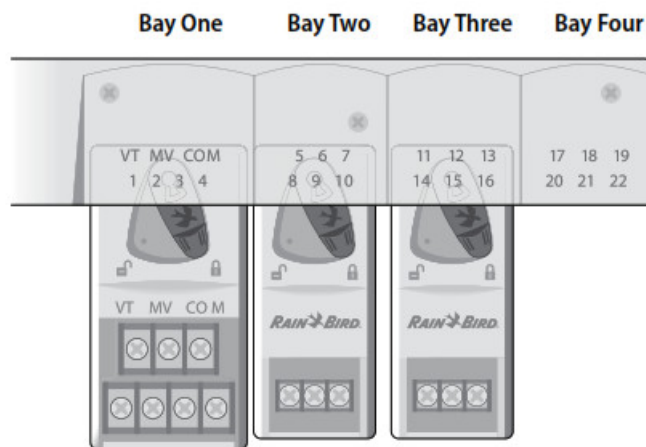


NOTE: It takes about 30 seconds for stations to become available for configuration after installing a new module.

Station Numbering

The controller is configured with “fixed station numbering”, meaning that Bays Two, Three and Four can accept either a 3 or a 6-Station Module. If a 6-Station Module is NOT installed then the unused stations are reserved for future use.

Example of Station Numbering when using two 3-Station Modules. A total of 10 stations are installed.



- The Base Module is installed in Bay One and uses Stations 1 through 4.
- A 3-Station Module is installed in Bay Two and uses stations 5 through 7. Stations 8 through 10 are skipped and will be unavailable.
- A 3-Station Module is installed in Bay Three and uses stations 11 through 13.

During programming, the controller will skip any unused stations, creating a gap in station numbering. The unused stations will show on the display as 8SKIP, 9SKIP, etc.



If the screen displays 20NOMOD where the 20 is flashing, then there is no module installed for that station number.

Complete Controller Installation

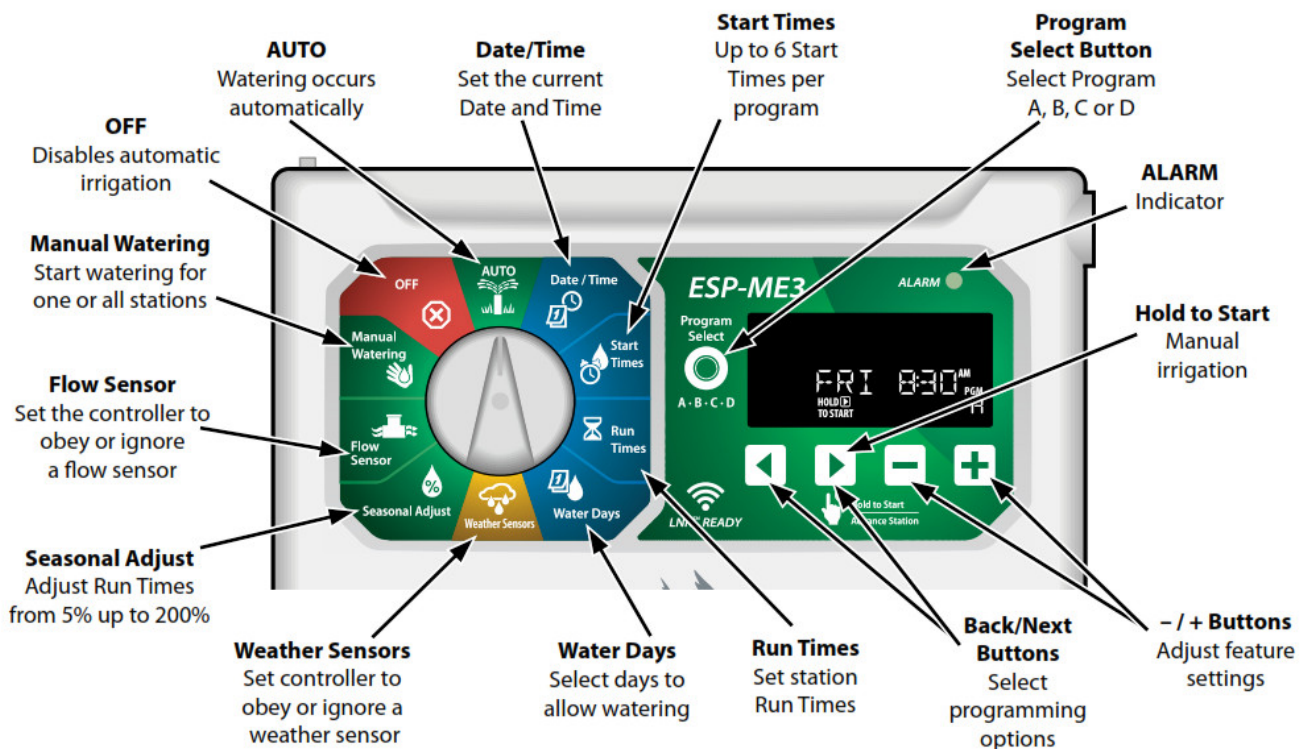
1. Reinstall and reconnect the front panel.
2. Apply power to the controller and test the system.



NOTE: The electrical connections can be checked even if water is not available. If water is available and you would like to test some or all of your stations, use the Test All Stations feature of the controller.

Normal Operation

Controls and Features



AUTO

AUTO is the normal operating mode. Return the dial to AUTO when programming is complete.

During Watering:

The display shows a blinking sprinkler symbol, the active Station Number or Program, and the Remaining Run

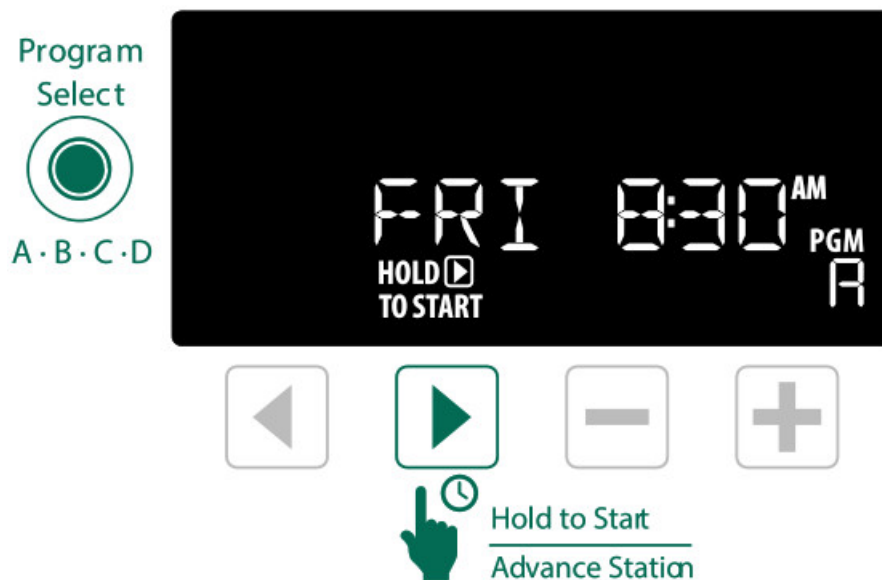
Time.



- To cancel watering, turn the dial to OFF for three seconds until the screen shows OFF.

To Manually Start a Program:

1. Press the Program Select button to select a program.
2. Press and hold the Hold to Start button to immediately start manual watering for the selected program.



OFF

Turn the dial to OFF to stop automatic irrigation or to cancel all active watering immediately.

NOTICE

Watering will NOT occur if the controller remains in the OFF position.



NOTE: Manual watering can be started using mobile apps or LIMR when the dial is in the OFF position.

Display Indicators

| Display | Function | Description |
|----------|----------|---|
| ALL | ALL | All stations |
| CLEARED | CLEARED | Programming was cleared |
| CYCLIC | CYCLIC | Watering occurs at specific intervals, such as every 2 days |
| DELAY | DELAY | Delay Watering Active |
| EVEN | EVEN | Even days watering |
| FLOW | FLOW | Flow Sensor |
| MV ON | MV ON | Master or Pump-start relay is active |
| NOMOD | NOMOD | No station modules installed for that station |
| ODD | ODD | Odd days watering |
| OFF | OFF | Controller will not water |
| PERMOFF | PERMOFF | Permanent days off for Odd, Even, Cyclic watering |
| RAIN | RAIN | Rain Sensor |
| RESTORED | RESTORED | Programming restored |
| SAVED | SAVED | Save programming |
| SENS ON | SENS ON | Sensor will function if wired |
| SEN OFF | SEN OFF | Sensor is ignored even if wired |
| SKIP | SKIP | Station not used due to station module configuration |
| SOAK | SOAK | Soak time between watering times - supported through the Rain Bird app. |

Basic Programming

1. Set Date and Time



Turn the dial to Date / Time

1. Press ◀ or ▶ to select the setting to change.
2. Press – or + to change the setting value.
3. Press and hold – or + to accelerate adjustments.
To change the time format (12 hours or 24 hours):
4. With Day of Month blinking, press ▶.
5. Press or to select the desired time format, then press to return to the time setting.

2. Set Watering Start Times

Up to six Start Times are available for each program.



Turn the dial to Start Times

1. Press Program Select to choose the desired Program (if necessary).
2. Press ◀ or ▶ to select an available Start Time.
3. Press – or + to set the selected Start Time (ensure the AM/PM setting is correct).
4. Press ▶ to set additional Start Times.
5. To turn off a start time press- until 12:00 AM (00:00 in 24 HR), then press- one more time for OFF.



NOTE: The OFF Position for any start time is between 11:45 PM and 12:00 AM.

3. Set Station Run Times

Run Times can be set from one minute up to six hours.



Turn the dial to Run Times

1. Press Program Select to choose the desired Program (if necessary).
2. Press ◀ or ▶ to select a Station.
3. Press – or + to set the Run Time for the selected Station.
4. Press ▶ to set additional Station Run Times.



NOTE: Only assign Run Times in a Program for stations you want to water. If you do not want a specific station to run in a selected program then set the Run Time to zero.



NOTE: Rain Bird recommends that the maximum irrigation station cycle time be less than the time required for runoff to begin and that there be adequate soak time before the next irrigation cycle of that same station begins again.

4. Set Water Days

Custom Days of the Week

Set watering to occur on specific days of the week.

Turn the dial to Water Days

1. Press Program Select to choose the desired Program (if necessary).
2. Press – or + to set the selected (blinking) day as either ON or OFF, and to automatically move to the next day.
3. Press ◀ or ▶ at any time to move the cursor to the previous or next day.



NOTE: With Sunday selected, press the button to enter and activate Cyclic Watering (see the Advanced Programming section). If this is not desired, press the button to return to watering by Custom Days.

Program-Based Scheduling

The ESP-ME3 uses a program-based scheduling method to create irrigation schedules. This means all stations with a run time on the program will run in numerical order.

Common Programming Error

The most common programming error for any program-based controller is to set multiple Program Start Times that cause watering cycles to repeat. As an example: Program A has a 1st Start Time set to run at 8:00 AM. But then a 2nd Start Time has mistakenly been set for 8:15 AM, which means that all stations would water a 2nd time. In this example, a 3rd Start Time has mistakenly been set for 8:30 AM. This means all stations would water a 3rd time. The desired watering time was 45 minutes or 15 minutes per station. The actual is 2 hours and 15 minutes, which is excessive watering!

Incorrect: Multiple Start Times set by mistake

| Program Letter | Program Watering Time | Program Start Time | Station Number | Station Watering Duration |
|----------------|-----------------------|--------------------|----------------|---------------------------|
| A | 1st | 8:00 AM | 1 | 15 MIN |
| | | | 2 | 15 MIN |
| | | | 3 | 15 MIN |
| A | 2nd | 8:15 AM | 1 | 15 MIN |
| | | | 2 | 15 MIN |
| | | | 3 | 15 MIN |
| A | 3rd | 8:30 AM | 1 | 15 MIN |
| | | | 2 | 15 MIN |
| | | | 3 | 15 MIN |

Correct: Only one Start Time


| Program Letter | Program Watering Time | Program Start Time | Station Number | Station Watering Duration |
|----------------|-----------------------|--------------------|----------------|---------------------------|
| A | 1st | 8:00 AM | 1 | 15 MIN |
| | | | 2 | 15 MIN |
| | | | 3 | 15 MIN |
| | | | 4 | 15 MIN |

Manual Watering Options

Test All Stations

Start watering immediately for all programmed stations.

Turn the dial to Manual Watering

1. Press – or + set a Run Time.
2. Press the Hold to Start  button.
3. Turn the dial to AUTO after the display shows STARTED.

During Testing:

The display shows a blinking sprinkler symbol, the active Station Number and the remaining Run Time.



4. To cancel the test, turn the dial to OFF for three seconds until the screen shows OFF.

Run a Single Station

Start watering a single station, or set multiple stations to water in order.



Turn the dial to Manual Watering

1. Press ◀ or ▶ to select the desired station.
2. Press – or + to set a Run Time.
3. Press the Hold to Start ▶ button.
4. Irrigation will begin and STARTED will appear on the display.
5. Turn the dial back to AUTO



REPEAT process as desired to add more stations to the queue. When one station finishes watering then the next station will start.



NOTE: Manual Watering (Test All, Run Single Station and Manual Program) will start even when a weather sensor is set to SENS ON (sensor on).

Run a Single Program

Start watering immediately for one program.



Turn the dial to AUTO.

1. Press Program Select to choose the desired Program (if necessary).
2. Press the Hold to Start button ▶ to begin watering the selected Program.
3. Irrigation will begin and STARTED will appear on the display.
4. Press the Advance Station button to advance to the next station if desired.
5. NOTE: A maximum of 88 stations can be queued across all four programs.

During Manual Watering (Single-station or Single-program):

The display shows a blinking sprinkler symbol, the active Station Number, and the remaining Run Time.



- To cancel manual watering, turn the dial to OFF for three seconds until the screen shows OFF.

To add additional programs to the manual watering queue:



Turn the dial to Manual Watering

- Press and hold Program Select to show the program letter on the display.
- Press Program Select to choose the desired program (if necessary).
- Press the Hold to Start button to begin watering the selected program.
- Turn the dial to AUTO

Advanced Programming

Odd or Even Calendar Days

Set watering to occur on all ODD or EVEN calendar days.



Turn the dial to Water Days



1. Press Program Select to choose the desired Program (if necessary).
2. Press and hold until ODD or EVEN is displayed.

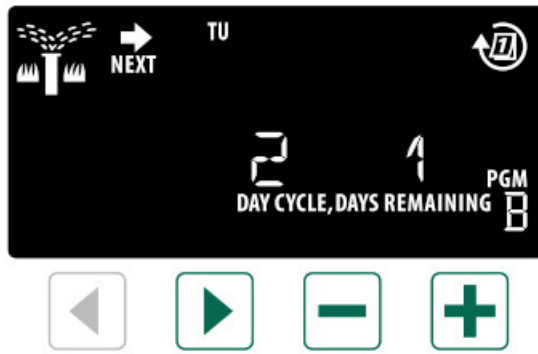
Cyclic Days

Set watering to occur at specific intervals, such as every 2 days, or every 3 days, etc.



Turn the dial to Water Days

1. Press Program Select to choose the desired Program (if necessary).
2. On the Custom Days of the Week screen, press  until the Cyclic screen is displayed (after SUN).
3. Press – or + to set the desired DAY CYCLE, then press .
4. Press – or + to set the DAYS REMAINING before the cycle begins. The NEXT watering day updates on the display to indicate the day that watering will start as shown.



NOTE: See Special Features to set Rain Sensor ON by Station.

Seasonal Adjust

Increase or decrease program run times by a selected percentage (5% to 200%). As an example: If the Seasonal Adjust is set to 00% and the station Run Time is programmed for 10 minutes, the station will run for 10 minutes. If the Seasonal Adjust is set to 50%, the station will run for 5 minutes.



Turn the dial to Seasonal Adjust.

1. Press or to increase or decrease Seasonal Adjust for all Programs.
2. To adjust an individual Program, press Program Select to choose the desired Program (if necessary). Press or to increase or decrease Seasonal Adjust for all Programs.

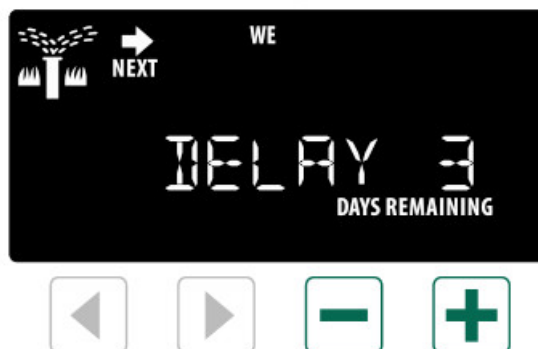
Delay Watering

Suspend watering for up to 14 days.



Turn the dial to AUTO.

1. Press and hold the button to enter the Rain Delay screen.
2. Press or to set the DAYS REMAINING. The NEXT watering day will update on the display to indicate when watering will resume.



3. To cancel a Rain Delay, set the DAYS REMAINING back to 0.



NOTE: When the delay expires, automatic irrigation resumes as scheduled.

Permanent Days Off

Prevent watering on selected days of the week (for Odd, Even or Cyclic programming only).



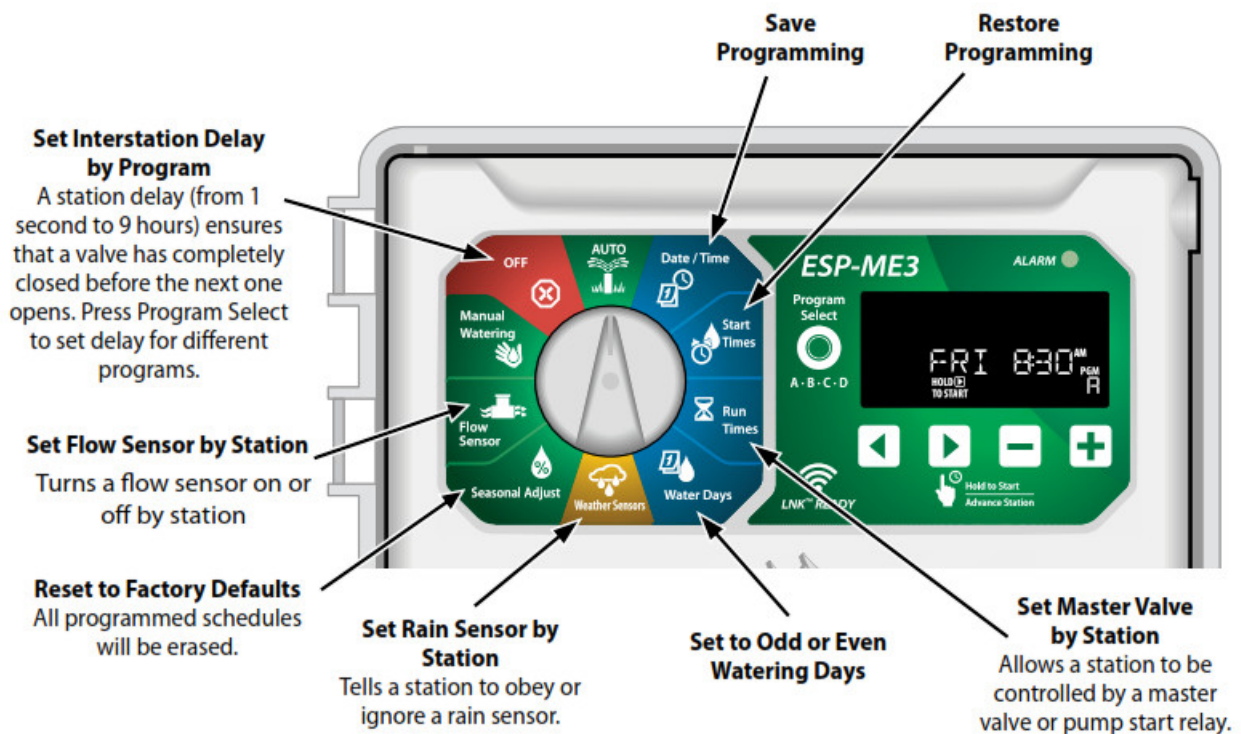
Turn the dial to Water Days

1. Press Program Select to choose the desired Program (if necessary).
2. Press and hold Program Select, then press to set the selected (blinking) day as a Permanent Day Off or press to leave the day ON.



Special Features

1. Turn the dial to the desired position indicated below for each Special Feature.
2. Press and hold ◀ and ▶ at the same time.

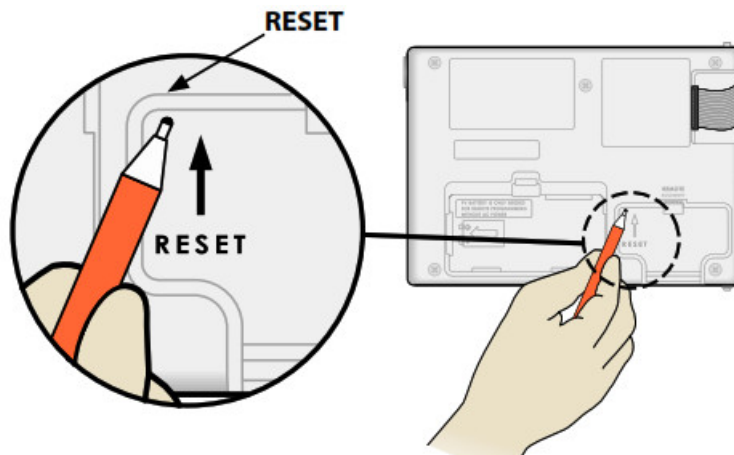


Options

Reset Button

If the controller is not working properly, you can try pressing RESET.

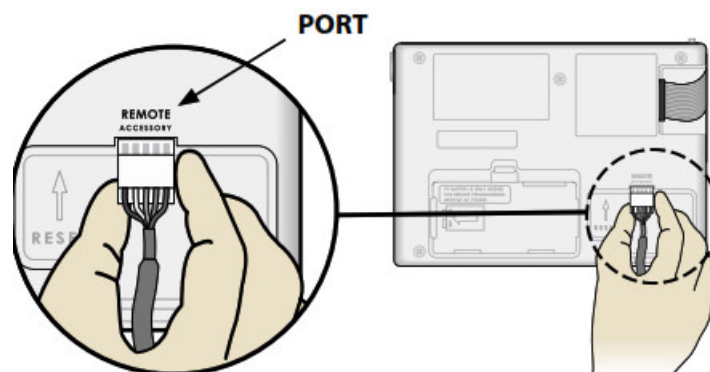
- Insert a small tool such as a paper clip, into the access hole and press until the controller is reset. All previously programmed watering schedules will remain stored in memory.



Remote Accessories

A 5 pin accessory port is available for Rain Bird approved external devices, including:

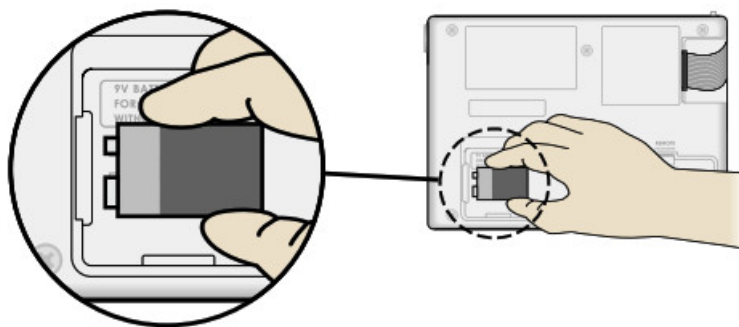
- LNK™ WiFi Module
- LIMR Receiver Quick Connect harness



Detached Programming

Program the front panel remotely on battery power. The front panel can be removed from the controller and programmed remotely using a 9-volt battery for power. Settings can be programmed for all 22 stations regardless of which Station Modules are installed in the controller.

1. Remove the front panel.
2. Install a 9V battery in the battery compartment.
3. Program the controller.



NOTE: Program information is stored in nonvolatile memory so it is never lost if the front panel loses power.

4. Replace the front panel (refer to Complete Installation in the Installation section).



NOTE: After the front panel is re-installed, any station that does not have a corresponding Station Module installed will function as though the run time is zero.

Battery Life

If the display repeatedly shows “— — — — —”, or there is no display when using a 9V battery for remote programming, replace the battery.

Appendix

Troubleshooting

Error Detection

The ESP-ME3 controller has built-in error detection that can automatically generate an ALARM caused by an essential programming error or if an electrical short condition is detected.

The ALARM LED light on the ESP-ME3 controller front panel will light up to indicate an alarm condition:

Programming Errors (blinking LED)

| Error | ALARM LED | Error Message On Display |
|------------------------|-----------|--------------------------|
| No Start Times are set | BLINK | NO START TIMES |
| No Run Times are set | BLINK | NO RUN TIMES |
| No Water Days are set | BLINK | NO WATER DAYS |

The error will go away when the station is successfully run after the condition is corrected.



NOTE: The dial must be in the AUTO position for an ALARM message to appear on the display.

Electrical Errors (non-blinking LED)

| Error | ALARM LED | Error Message On Display |
|--------------------|-----------|--------------------------------------|
| Master Valve short | SOLID | MASTER VALVE SHORTED OR HIGH CURRENT |
| Station short | SOLID | STATION "X" WIRE SHORTED |

When an electrical error is detected, irrigation for the affected station is canceled and watering advances to the next operable station in the program. The controller will attempt to water the affected station again at the next scheduled watering. Completion of a successful watering will clear the error condition associated with that station.

Flow Alarms

| Error | ALARM LED | Error Message On Display |
|----------------------------------|-----------|--------------------------------|
| Flow Sensor -High Flow Condition | Solid | HIGH FLOW ALARM STATION "X" |
| Flow Sensor -Low Flow Condition | Solid | LOW FLOW ALARM STATION "X" |

When a flow sensor is in use the ESP-ME3 monitors for a High Flow of 130% above regular learned flow. This percent limit can be adjusted in the Rain Bird App when used with LNK TM WiFi Module. If a High Flow condition is detected, a "High Flow Alarm" is shown at the display and the red alarm LED comes on. To clear the alarm press the "Hold to Start" right arrow button during the alarm message.

Low Flow conditions are also monitored. The limit for Low Flow is 70% below the learned flow unless changed in the Rain Bird App. A Low Flow alarm is shown at the controller display and the red alarm LED comes on. To clear the alarm press the "Hold to Start" right arrow button during the alarm message.



NOTE: Turning the flow sensor feature off and then back on will cause the controller to learn new flow levels and ignore previous error conditions.



NOTE: If the flow sensor measures flow when the controller is not scheduled for watering, a "HIGH FLOW ZONE" alarm is shown on the display and the red alarm LED comes on. To clear the alarm press the "Hold to Start" right arrow button during the alarm message.

Watering Issues

| Problem | Possible Cause | Possible Solution |
|---|---|--|
| The display shows a program is active, but the system isn't watering. | Water source not supplying water. | Verify there is no disruption to the main water line and that all other water supply lines are open and functioning properly. |
| | Wiring is loose or not properly connected. | Check that field wiring and master valve or pump start relay wiring is securely connected at the controller and in the field. |
| | Field wires are corroded or damaged. | Check field wiring for damage and replace if necessary. Check wiring connections and replace them with watertight splice connectors if needed. |
| | Loss of AC power. | When there is a power loss and a 9 volt battery is installed, the system does not irrigate but programs show as remaining active. |
| NO AC message on display. | No Power was detected. | Check the circuit breaker and that unit is plugged into a socket or properly connected to a power source. |
| | The controller may be plugged into a GFCI outlet or an outlet that is wired to a GFCI outlet. | Check power to the outlet or reset the circuit breaker. |
| It just rained and the alarm light is not illuminated, why? | This is a normal operation. The ESP-ME3 does not consider the interruption of irrigation due to rainfall as an alarm condition. | This is a normal operation. |

| | | |
|------------------------------------|--|---|
| Programmed schedules do not start. | A connected rain sensor may be activated. | Set Rain Sensor to Sensor OFF to ignore the rain sensor. If watering resumes, the sensor is operating properly and no further correction is needed. |
| | A connected rain sensor may not be operating properly. | Let the rain sensor dry out, or disconnect it from the controller terminal strip and replace it with a jumper wire connecting the two SENS terminals, or set to Sensor OFF. |
| | If no rain sensor is connected, the jumper wire connecting the two SENS terminals on the terminal strip may be missing or damaged. | Move dial position to Weather Sensors and set to Sensor OFF. |
| Too much irrigation | Multiple Start Times in the same program. | Separate start times are not required for each valve. A program only requires a single start time in order to run all stations in that program. |
| | Multiple programs are running at the same time. | Review programming to assure that the same Station is not active in multiple Programs. |
| | Valve is malfunctioning. | Check to see if the ALARM light on the controller is lit solid, then repair or replace the valve if necessary. |
| | The Seasonal Adjust setting is too high. | Set Seasonal Adjust to 100%. |

Electrical Issues (solid LED illuminated)

| Problem | Possible Cause | Possible Solution |
|--|--|---|
| The display is blank or frozen, the controller will not accept programming or is operating abnormally. | Power not reaching the controller. | Verify the main AC power supply is securely plugged in or connected and working properly. |
| | The controller needs to be reset. | Press the Reset Button. For details see the “Reset Button” section. |
| | An electrical surge may have interfered with the controller- let's electronics. | Unplug the controller for 2 minutes, then plug it back in. If there is no permanent damage, the controller should accept programming and resume normal operation. |
| Automatic error detection indicates a problem by ALARM LED and an error message on display. | Short circuit or overload condition in valve, master valve or pump start relay wiring. | Identify and repair the fault in the wiring. Refer to compatible pump start relays. For details see the “Connect Pump Start Relay” section. |
| LED is flashing or solidly illuminated but I see no message on the LCD. | Dial not in AUTORUN position. | Turn dial to AUTORUN position. Push the Reset button or power cycle the controller. |

Certifications

Supplier's Declaration of Conformity

47 CFR § 2.1077 Compliance Information

Unique Identifier: ESP-ME3 (ESP4ME3)

Responsible Party – U.S. Contact Information

Rain Bird Corporation

9491 Ridgehaven Court

San Diego, CA

92123

Ph. (858) 268-2650

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications not expressly approved by Rain Bird could void the user's authority to operate the equipment.

Safety Information



WARNING

Special precautions must be taken when valve wires (also known as station or solenoid wires) are located adjacent to, or share a conduit with other wires, such as those used for landscape lighting, other “low voltage” systems or other “high voltage” power. Separate and insulate all conductors carefully, taking care not to damage wire insulation during installation. An electrical “short” (contact) between the valve wires and another power source can damage the controller and create a fire hazard.

All electrical connections and wiring runs must comply with local building codes. Some local codes require that only a licensed or certified electrician can install power. Only professional personnel should install the controller. Check your local building codes for guidance. The outdoor controller shall be permanently connected to fixed wiring by a flexible cord, and have a cord anchorage. The cord anchorage shall relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.



CAUTION Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.

This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. For controllers not provided with supply cords, the fixed installation must include a disconnecting device for all three poles suitable for overvoltage category III protection.

NOTICE

Use only Rain Bird-approved accessory devices. Unapproved devices may damage the controller and void the warranty. For a list of compatible devices go to: www.rainbird.com Changes or modifications not expressly approved by Rain Bird could void the user's authority to operate the equipment. Date and time are retained by a lithium battery which must be disposed of in accordance with local regulations.

SPECIFICATION

| Feature | Description |
|----------------------------------|---|
| Maximum Stations | 22 (with optional Station Modules) |
| Master Valve or Pump Start Relay | Supported |
| Start Times | 6 |
| Programs | 4 |
| Program Cycles | Custom Days, Odd, Even, and Cyclic |
| Permanent Days Off | By program |
| Master Valve Control | On/Off per station |
| Rain Delay | Supported |
| Rain/Freeze Sensor | Supported |
| Rain Sensor Control | Global or by station |
| Seasonal Adjust | Global or by program |
| Manual Watering Run | Yes |
| Manual Program Run | Yes |
| Manual Test All Stations | Yes |
| Short Detect | Yes |
| Delay Between Stations | Set by program |
| Accessory Port | Yes (5 pins) |
| Save & Restore Programming | Yes |
| Station Advance | Yes |
| LNK'WiFi Module | Supported |
| Flow Sensor | Supported |
| Cycle-Soak™ | Supported in Rain Bird App via LNK" WiFi Module |

FAQS

What unit can I purchase, without add ons, to get six zones? All other models from other companies offer at least six.

The Rain Bird ESP4ME3 will cover up to ten zones and doesn't require any additional equipment unless you want to add WiFi capability which is very nice and all functions and programming can be done from a smartphone. I am not knowledgeable about other brand controllers, only the Rain Bird.

What are the advantages of this me3 model over the less costly tm2?

Easier manual programming, number of zones total, and appearance. However TM2 can handle, I think, 8 zones out of the box. I also added the Rain Sensor, which is fantastic.

I have a 13 year old esp-modular controller. what can replace this unit (or augment it) to enable wifi control? what about alexa enabled?

This ESPMe3 is the perfect replacement for the old modular timer. Add the Lnk-WiFi Module to it for WiFi / Internet accessibility.

If you have existing modules you can reuse them however if you have more than 7 zones, you may want to buy the 6 zone modules.

The base unit comes with 4 zones, not 3 as suggested in another answer

Can I start and stop a station real time with this unit (with WiFi module installed) from the app?

Yes from your mobile app

Is the rainbird wr2 rain sensor the only compatible sensor for esp4me3? or, will other brand rain sensors work too?

Any brand of Rain Sensor should work, Hunter, Rain Bird

Is this the latest version esp4me or the earlier espme

This is the latest version

Does this physically spray the grass? Does it have sprayers for the yard? Where is a link to buy the actual things that connect to this?

This is just the controller to control an irrigation system valves/zones. You may contact one of our sales team members for more assistance on the components you may need for your system such as pipe, fittings, valves, spray heads and rotors.

Does this come with installation instructions?

Yes it does. I purchased this unit to replace another rain bird controller that I installed a few years ago so I didn't have to use the installation instructions.

Is the wi-fi included?

No you will need to purchase the wi-fi module separately as well as additional zone modules if needing more zones.

Can I program this to run 2 different times of the day?

Yes. In program A I have every zone running at 12:00 am and 4:30 am. You can also set 4 different programs which means you can set 4 different sets of times with various zones per day. Example: I have one program for everything, Zones 1 thru 6. Zone 4 is our drip system for flowers. I set up Program B to also have this run a short session every day at 3:00 o'clock. In summary. It is very flexible. Go for it

This box doesn't appear to be 10x 11 what are the actual box measurements?

It's closer to about 11" x 7.5"

Can I order 220v international version?

Yes but not through this listing

What is the difference between this model (esp4me3) and esp4mei. can anyone comment which one is better

The ESP4me3 is for indoor or outdoor use. This is the unit I own. you will have to purchase your modules separately, and the wifi module separately. The ESP4mei is a more automated unit and probably comes with the modules and wifi module. The unit I have is a 10 zone unit. each of my zones has from four to 12 sprinkler/rotor/misters. I only use nine of the ten zones for a quarter-acre lot. Hope this helps. Just read the description carefully to make sure it fits your needs.

Q: What is the maximum number of stations that can be supported by the Rain Bird ESP-ME3 controller?

A: The maximum number of stations that can be supported by the Rain Bird ESP-ME3 controller is 22 with optional Station Modules.

Q: Is the Rain Bird ESP-ME3 controller equipped with an LNK WiFi module for remote connection?

A: Yes, the Rain Bird ESP-ME3 controller is equipped with an LNK WiFi module for remote connection to the controller using an Apple iOS or Android-compatible smart device.

Q: How many start times does the Rain Bird ESP-ME3 controller support?

A: The Rain Bird ESP-ME3 controller supports 6 start times.

Q: Can the Rain Bird ESP-ME3 controller support a rain or freeze sensor?

A: Yes, the Rain Bird ESP-ME3 controller supports a rain or freeze sensor.

Q: Does the Rain Bird ESP-ME3 controller provide power for a pump?

A: No, the Rain Bird ESP-ME3 controller does not provide power for a pump. The relay must be wired according to manufacturer instructions.

Q: What is the purpose of the yellow jumper wire on the SENSOR terminals of the Rain Bird ESP-ME3 controller?

A: The yellow jumper wire on the SENSOR terminals of the Rain Bird ESP-ME3 controller is used to connect a normally closed rain sensor.

Q: How can I expand the station capacity of my Rain Bird ESP-ME3 controller?

A: Optional Station Modules can be installed in the empty slots to the right of the Base Module to increase the station capacity up to 22 stations.

Q: Is the Rain Bird ESP-ME3 controller compatible with wireless rain/freeze sensors?

A: For wireless rain/freeze sensors, refer to the sensor installation instructions.



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[LEADERSHIP4](https://www.rainbird.com/cent/uploads/2021/12/RAIN-BIRD-ESP-ME3-LEADERSHIP4) EDUCATION · PARTNERSHIPS · PRODUCTS

At Rain Bird, we believe it is our responsibility to develop products and technologies that use water efficiently. Our commitment also extends to education, training, and services for our industry and community. The need to conserve water has never been greater. We want to do even more and with your help, we can. Visit www.rainbird.com for more information about The Intelligent Use of Water®.

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|---|---|
|  | <p>RAIN BIRD ESP-ME3 Controller [pdf] User Manual</p> <p>RAIN BIRD, ESP-ME3, Controller</p> |
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