Rain Bird ESP-SM6

Rain Bird ESP-SM6 6-Station Extension Module User Manual

Model: ESP-SM6

1. Introduction

This user manual provides detailed instructions for the installation, operation, and maintenance of the Rain Bird ESP-SM6 6-Station Extension Module. This module is designed to expand the zone capacity of compatible Rain Bird ESP-Me and ESP-SMTe Irrigation Controllers, allowing for the management of additional irrigation zones. Please read this manual thoroughly before installation and operation to ensure proper functionality and safety.

2. Safety Information

Always observe the following safety precautions to prevent personal injury or damage to the product.

- **Disconnect Power:** Always disconnect power to the main irrigation controller before installing, removing, or servicing the extension module. Failure to do so may result in electrical shock.
- **Qualified Personnel:** Installation and wiring should be performed by qualified personnel familiar with electrical systems and irrigation controllers.
- **Indoor Use Only:** This module is designed for indoor use within the main controller enclosure. Do not expose it to outdoor elements or excessive moisture.
- **Proper Wiring:** Ensure all wiring connections are secure and comply with local electrical codes.
- **Compatibility:** Use this module only with compatible Rain Bird ESP-Me and ESP-SMTe controllers.

3. Product Overview

The Rain Bird ESP-SM6 is a 6-station extension module that seamlessly integrates with your existing Rain Bird ESP-Me or ESP-SMTe irrigation controller. It provides an additional six zones for your irrigation system, allowing for greater flexibility and control over larger landscapes or new additions. The module features a simple plug-and-play design for easy installation into an available slot on the main controller.


RAIN BIRD.

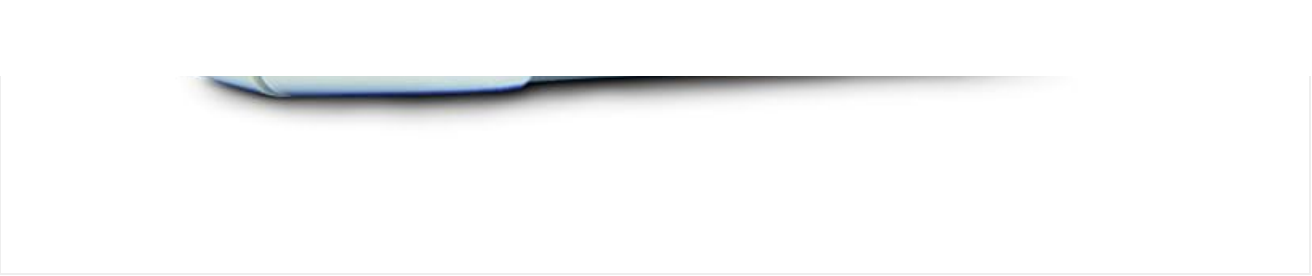


Figure 3.1: Rain Bird ESP-SM6 6-Station Extension Module. This image shows the front view of the module, highlighting its compact design and the terminal block for wiring connections at the bottom. The Rain Bird logo is visible on the module's casing.



Figure 3.2: Rain Bird ESP-SM6 Dimensions. This image illustrates the physical dimensions of the module, showing a length of 5.91 inches

and a width/depth of 1.97 inches, providing a clear understanding of its size for installation planning.

4. Setup and Installation

Follow these steps to properly install your ESP-SM6 extension module into a compatible Rain Bird controller.

1. **Power Off Controller:** Before beginning, ensure the main Rain Bird ESP-Me or ESP-SMTe controller is completely powered off. Disconnect it from the electrical outlet.
2. **Open Controller Door:** Open the front door of your main irrigation controller to access the module slots.
3. **Locate Available Slot:** Identify an empty module slot within the controller. These slots are typically labeled and designed for easy insertion. Note that the ESP-SM6 cannot be installed in the first slot, which is reserved for the base module.
4. **Insert Module:** Align the ESP-SM6 module with the chosen slot. Gently slide the module into the slot until it clicks securely into place. Ensure the locking tab (if present on your controller model) is engaged.
5. **Connect Zone Wires:** Connect the wires from your new irrigation zones to the corresponding terminals on the ESP-SM6 module. Each terminal is typically labeled for easy identification (e.g., Zone 7, Zone 8, etc., depending on the base controller's existing zones). Ensure wires are stripped appropriately and securely fastened under the screw terminals.
6. **Connect Common Wire:** If adding new zones, ensure your common wire is properly connected to the common terminal on the main controller or an existing common terminal block.
7. **Close Controller Door:** Once all connections are made and secure, close the controller door.
8. **Restore Power:** Reconnect power to the main irrigation controller. The controller should automatically detect the new module.

5. Operating the Module

The ESP-SM6 module operates as an integrated part of your Rain Bird ESP-Me or ESP-SMTe controller. Once installed, the controller's software will automatically recognize the additional zones provided by the module.

- **Zone Recognition:** Upon power-up, the controller will scan for connected modules. The new zones (e.g., 7-12 for a 6-station module) will become available for programming.
- **Programming:** Refer to your main Rain Bird ESP-Me or ESP-SMTe controller's user manual for detailed instructions on how to program the newly added zones. This includes setting start times, run times, and watering days for each zone.
- **Manual Operation:** The new zones can be manually operated directly from the main controller's interface, just like the original zones.

6. Maintenance

The Rain Bird ESP-SM6 module requires minimal maintenance.

- **Keep Clean:** Periodically inspect the module and its connections for dust or debris. Gently wipe with a dry, soft cloth if necessary.
- **Check Connections:** Annually, or if issues arise, power off the controller and check that all wire connections to the module's terminals are secure.
- **Environmental Conditions:** Ensure the controller and module are kept in a dry, temperature-controlled environment, away from direct sunlight or extreme temperatures.

7. Troubleshooting

If you encounter issues with your ESP-SM6 module, refer to the following common problems and solutions. For more complex issues, consult your main controller's manual or contact Rain Bird support.

Problem	Possible Cause	Solution
Module not recognized by controller.	Module not fully seated; power not cycled; incompatible controller.	Ensure module is firmly inserted into the slot. Disconnect and reconnect controller power. Verify controller model is ESP-Me or ESP-SMTe.
New zones do not water.	Wiring issue; zone not programmed; valve problem.	Check wire connections at the module and valve. Ensure zones are programmed with run times and start times. Test the valve manually.
Error message related to module.	Faulty module; wiring short.	Power off and re-seat the module. Inspect wiring for shorts. If problem persists, the module may be faulty.

8. Specifications

Feature	Detail
Model Number	ESP-SM6
Number of Stations	6
Compatibility	Rain Bird ESP-Me and ESP-SMTe Controllers
Dimensions (L x W x H)	5.91" x 1.97" x 1.97" (15.01 cm x 5.00 cm x 5.00 cm)
Weight	3.52 ounces (0.1 kg)
Material	Plastic
Color	Black
Voltage	12 Volts (DC) - *Operates via main controller's power supply*

9. Warranty and Support

For detailed warranty information regarding your Rain Bird ESP-SM6 6-Station Extension Module, please refer to the official Rain Bird website or the warranty documentation included with your main Rain Bird ESP-Me or ESP-SMTe controller.
For technical support, troubleshooting assistance, or to inquire about replacement parts, please contact Rain Bird Customer Service. Contact information can typically be found on the Rain Bird website (www.rainbird.com) or in the documentation provided with your product.

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