

### Multi-function Remote Control System

Offers reliable battery-operated communication with Rain Bird remote compatible controllers from anywhere on the job site to allow the operator to activate watering stations for specified run times as well as to activate watering programs.

#### Uses for the system include:

- 1. Installation and Start-up** - During new installations debris is flushed out by advancing through the watering stations, letting the water run for 1 to 2 minutes with the lowest heads uncovered. In addition, specific watering stations are often turned on for new system operational testing and start-up.
- 2. Customer Walk-through** - Starting and advancing through the scheduled programs can be used to demonstrate the system for the customer prior to final sign-off.
- 3. System Maintenance** - As part of routine landscape maintenance, specific watering stations are turned on to make adjustments and identify potential problems.
- 4. Winterization** - In regions subject to freezing temperatures the water is blown out prior to the winter by advancing through the watering stations while compressed air is pumped through the system.
- 5. Spot Watering** - In zones where the landscape may be stressed a little extra watering may be applied by turning on the proper watering station.

#### Features

- Sequencing Command advances through all watering stations for common sequencing applications such as Installation and Start-up, Customer Walk Through, System Maintenance, Winterization, and Spot Watering.
- Remotely start or stop any station without sequencing for direct station access
- Selectable station remote run times, up to 99 minutes, in one minute increments provides greater control and versatility
- Remotely start or stop any watering program, including the test program, for remote program control
- Remote sequencing through stations in watering programs for easy program check-out
- Quick-Stop Command terminates any watering or program in progress.
- Mounting bracket designed for quick installation, easy connection, and receiver portability.
- Pre-programmed for rapid set-up.

- Transmitter turns itself off when not in use to extend battery life
- Sequencing button for quick advance to the next watering station in the program
- STX™ communication protocol ensures correct command recognition for maximum security
- Keypad Transmitter provides 999 user-programmable access codes for even greater security control
- Rain Bird's RM-1 One Button Transmitter, with over 1 million randomly assigned transmitter codes, reduces the likelihood of a conflict with a second system (sold separately)
- Receivers can be programmed to recognize up to 16 different One-Button or Keypad transmitter access codes for expanded versatility
- Receiver mounts indoor or outdoor, up to 30 feet (9 meters) from the controller, for a greater choice of installation options
- Sturdy water-resistant transmitter housing offers protection from the harsh outdoor elements
- Belt pocket for Keypad Transmitter is available as an accessory (sold separately)
- Sensor bypass allows watering by remote access even when an active sensor has suspended automatic irrigation (with ESP-LX+ only)
- Quarter wave antenna design ensures reliable range of a distance up to 700 feet (213 meters)

#### Operating Specifications

- Default station run time: Fixed 10 minutes for Sequencing Command; 30 minutes for Station Starts (selectable to 99 minutes)
- Receiver mounting options: Indoor or Outdoor, Permanent or Removable
- Multi-Function Receiver power: 12VDC from the controller
- One-Button Sequencing Transmitter power: Two 3V lithium cells (new battery life averages 3 years or more)
- Keypad Transmitter power: 9-volt alkaline battery (new battery life averages 2 years or more)
- Surge protection: MOVs protect incoming data
- RF Range: Up to 700 feet (213 meters)
- RF Frequency: 315 Mhz
- Compatible controllers: Rain Bird ESP-Si, ESP, E Class, and ESP-LX+ (Sequencing and Quick-Stop functions only on ESP-Si and ESP)
- CUL and ECO Certified
- UL, CUL listed; FCC, DOC, C-Tick approved.



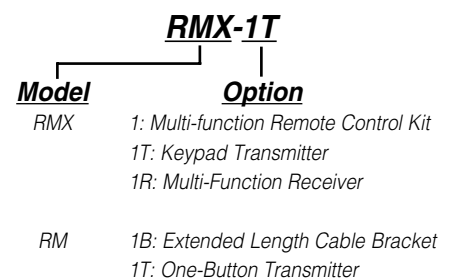
#### Optional Features

- Maximize reception range and placement in a secure location
- Extended length cable bracket - allows receiver placement up to 30 feet (9 meters) from the controller
  - Extended range antenna - improves reception range and can be placed up to 25 feet (7.5 meters) from receiver

#### Models

- RMX-1: Multi-function Remote Control System
- #### System Components
- RMX-1T: Keypad Transmitter
  - RMX-1R: Multi-function Receiver
- #### Optional Accessories
- RMX-1TBP: Keypad Transmitter Belt Pouch
  - RM-1B: Extended length cable bracket
  - RM-1T: One-Button Transmitter

#### How to Specify





## Specifications

The RMX-1 Multi-function Remote Control System shall consist of an RMX-1T Keypad Transmitter and an RMX-1R Multi-function Receiver. The RMX-1R Multi-function Receiver shall also work with the RM-1T One-Button Transmitter (sold separately.) Receivers and transmitters shall be non-pair specific (i.e. any RMX-1R Receiver shall work with any RM-1T or RMX-1T Transmitter.) The RMX-1 Remote Control System shall work with Rain Bird remote ready ESP-LX+ and ESP-Si controllers.

Multi-Function remote system functionality shall be restricted to Sequencing and Quick-Stop features when used with the ESP-Si and/or RM-1T transmitter.

The system "operating range" shall be up to 700 feet (213 meters). The operating range is defined as the maximum distance where consistent communication is achieved between the transmitter and receiver in a "noisy" and "obstructed" environment. Noisy is defined as an incidence of spurious radio and/or electromagnetic signals similar to that encountered in a normal urban residential area. Obstructions include impairments to line of sight such as trees, automobiles and buildings.

Receivers and transmitters shall meet or exceed all applicable FCC standards and shall be licensed or approved as required for sale.

The remote system shall override the controller's off mode and work with the controller dial in any position. The remote system shall override an active sensor wired to the controller's internal sensor terminals (Remote ready ESP-LX+ only).

The RMX-1 Multi-function Remote Control System shall recognize the following commands:

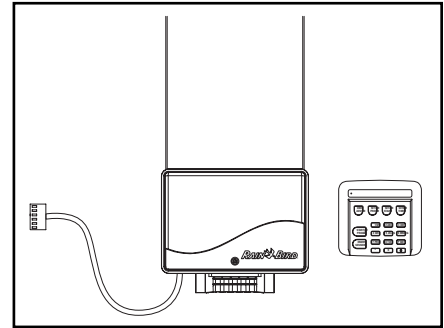
**Quick-Stop:** The Quick-Stop Command shall terminate any active irrigation, regardless of whether it was started remotely, manually or automatically.

**Sequencing:** The Sequencing Command shall have two modes of operation depending on whether or not irrigation is active when the remote routine is initiated.

**Mode 1:** If no program is active when the remote routine is initiated, the Sequencing Command shall advance the controller from one watering station to the next. Only watering stations with a scheduled run time in any of the controller programs are activated. As with the controller's test mode, any watering station without a scheduled run time in any of the controller programs shall be skipped. The advance sequence shall commence with the lowest numbered station and advance in ascending order through the remaining stations. If an active watering station is not manually advanced to the next, then the station's maximum run time shall be 10 minutes and upon completion shall automatically advance to the next watering station.

**Mode 2:** If any program or the controller's standard test program is already active, regardless of whether it was started manually or automatically, the Sequencing Command shall advance the controller through all the watering stations in the active program. The run time for each watering station shall be as scheduled in the active program. If an active watering station is not manually advanced to the next, then the station shall complete its scheduled run time and upon completion shall automatically advance to the next watering station in the active program.

**Station Start:** The Station Start Command shall start any watering station, in any order (i.e. without sequencing), regardless of whether or not it has run time scheduled in any program. The default station watering run time for a station start shall be 30 minutes. The watering run time may be varied from 0 to 99 minutes, in one-minute increments, but the default run time shall remain unchanged.



**Program Start Function:** The Program Start Function shall initiate any program including the controller's Test program. The station run time shall be as scheduled in the selected program. The operator shall be able to advance through the program using the Sequencing Command.

**Program's Station Run Time Change:** The Program's Station Run Time Change Command shall set the station watering run time in the specified program (i.e. A, B, C or D) to a value from 0 to 99 minutes, selectable in one-minute increments. Any previously programmed watering run time for the station shall be replaced with the new specified run time.

Controllers shall disregard commands and characters that exceed the capability of the controller. Example: an ESP-16LX+ shall ignore any command to start station 20 or likewise initiate program F.

The controller shall start the master valve each time it starts a watering station unless the master valve has been disabled for the active station in the controller program.

Upon completion of any remote command or remotely initiated routine or watering program, the controller shall return to the mode it was in prior to activation by the remote to await its next scheduled automatic start.

The controller shall be as manufactured by Rain Bird Sprinkler Mfg. Corp., Glendora, California.

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