

# Landscape Irrigation & Maintenance Remote System

Quick Start Guide 4.00

#### System Components

- 1 Transmitter (TX)
- 2 Receiver (RX)
- 3 Quick Connect (QC)
  - 6-Pin Quick Connect (QC) for use with ESP-Modular and ESP-LX Series controllers.
  - 5-Pin Quick Connect (QC) for use with ESP-SMT, STP Series, ESP-ME and ESP-RZX controllers.

#### Supported Languages

- English 
   French
- Spanish Portuguese

#### Overview of the Hand Held Transmitter (TX)

- 4 Antenna
- **5** Information Display
- 6 Signal Transmit Indicator
- **7** General Information
- 8 User Entry Prompt (Flashing Text)
- 9 Action Selections
- 10 Action Buttons
- 1 Numeric Entry Buttons
- 12 Power Button
- Emergency Stop Button
- Battery Cap





# Installing the QC

15 Locate the remote port on your controller and identify which QC to use:

Controller	Location	QC Type
ESP-Modular	Front Panel	6 pin
ESP-LX-ME / LX-D	Back Plane	6 pin
ESP-SMT Series	Front Panel	5 pin
STP Series	Wire Bay	5 pin
ESP-LX +	Front Panel	6 pin
ESP-ME	Front Panel	5 pin
ESP-RZX	Front Panel	5 pin



**16** Route cable through controller case (if applicable).

Plug the QC connector into the remote port on the controller.



# Installing the Receiver (RX) onto the QC

- B Mount the QC on the wall beside or above the controller.
  - Allow adequate clearance above the QC for vertical installation of the Receiver (RX) unit onto the QC.
  - The curved surface should be facing up with the QC cover hanging down away from the QC.
  - Fold the QC cover up and over the QC body to protect the contacts from the elements if you are not going to use the QC at this time.
  - NOTE: Rain Bird does not recommend mounting the QC below the controller. Interference from the controller power transformer could impair the remote operating distance.
- 19 Remove the QC cover and let it hang down.
- 20 With the antenna pointing upward, position the RX above the QC with the Rain Bird Logo facing you and align the opening in the bottom of the RX with the QC body. Lower the RX onto the QC until it hits a hard stop.
- 21 The Power Led should now be on or blinking, indicating it has detected a controller.

#### To Remove the Receiver (RX):

- 22 Slide the RX vertically upward and off the QC.
- 23 Re-install protective cover on QC face.



## Handheld Transmitter (TX) Startup and System Home Screen

1 Turn on Hand Held Transmitter Power by pressing the power button on the lower left of the keypad.

To turn the transmitter off, press and hold the power button for .25 seconds and release, or do not press any buttons for 3 minutes and the handheld transmitter will shut itself off.

2 Upon Startup of an idle system the "SYSTEM HOME" screen will be shown on the LCD Display. The SYSTEM HOME screen allows you to:

- Establish (Link) communication between a Transmitter (TX) and a Receiver (RX).
- Modify System Options
- Select Irrigation Options

**NOTE:** If the Transmitter is powered on when a system is remotely activated, the system status will automatically display on the LCD after a 3 second pause at the SYSTEM HOME screen.



## Connecting a Transmitter (TX) to Receiver (RX) (1st time)

- 1 From the Transmitter SYSTEM HOME screen select the "LINK" action button
- 2 Follow on screen instructions pressing the appropriate Action Buttons.
- 3 Press the "LINK" button on the front of the Receiver.



4 Enter a Receiver reference number between 1 - 128, using the numeric keypad.

5 If you enter an incorrect number before pressing "ENTER", continue entering numbers until you reach the 4th digit to clear the display then enter your correct number.

6 Determine if you would like to assign the Receiver a custom name that is easy for you to remember, covered in advanced setup. (the Transmitter will save up to 20 unique text names)



# Connecting a Transmitter (TX) to Previously Stored Receiver (RX)

Using a Transmitter with a Receiver that has already been stored is extremely simple. Three scenarios (A, B and C as shown below) are presented to connect to a previously stored Receiver:



**1** A - The Transmitter will always start up expecting to communicate with the last Receiver it operated with. If this is the Receiver you want to use, no action is required, go directly to the irrigation menu.

**2** B - If you want to use a different Receiver and you know the Receiver number, press LINK from SYSTEM HOME screen and then follow the onscreen instructions shown below:

Enter the Receiver number using the keypad and press ENTER as the last step. B



4 - 9 C - If you don't remember the Receiver number but gave it a name, follow the on screen instructions shown below starting from the SYSTEM HOME screen:

① On the list of Receivers screen use the up and down buttons to scroll to the Receiver you named and press select.



# Manual Irrigation Zone ON / OFF

- 1 From the SYSTEM HOME screen select the "ZONE" action button to get to the irrigation menu.
- 2 From the irrigation menu select "ZONE" action button to enter manual operation.
- 3 Enter Zone number using the keypad then press the "ON" action button.

**NOTE:** When in manual zone operation the system will activate for a default 5 minutes of run time. This default run time can be adjusted in the options menu.



• System Status provides you feedback on what Zone is active and the opportunity to shut that zone off and skip to another zone. Pressing ENTER will turn off zone #1 and turn on zone #2.

NOTE: To activate a lower or higher zone, enter the desired zone number on the keypad and press ENTER. This turns off the currently active zone and turn on the desired zone.

**5** Pressing "OFF" will turn off the active zone and return you to the Irrigation Menu.



# System Test

1 Starting from the Irrigation Menu press "TEST" to enter the System Test mode.

2 Enter Test Run Time (1-30 minutes) using the keypad or use the 2 minute default then press NEXT. **NOTE:** default test time can be modified in the Options Menu.

3 Enter Starting Zone number using the keypad then press the "NEXT" action button.



4 Enter highest zone number used on the connected controller then press the "START" action button.

System Status provides information on what Zone is active and the duration of test time remaining. **NOTE:** One minute of time will be added or removed with each press of the +TIME or –TIME action buttons. Pressing NEXT will advance the test to completion in 1 minute and provide options to select the next zone to activate or end testing.

6 The system will automatically advance the test to the next zone if no action is taken. To activate a different zone, you must enter that zone number using the keypad and press the ENTER action button. Select "OFF" to end the System Test.



#### Run an Irrigation Program

**NOTE:** This menu is only enabled for ESP-Modular and ESP-LX Series controllers that use the 6 pin connector.

1 Starting from the Irrigation Menu, select "PROG".

2 Choose the controller program you want to run by highlighting the selected program using the right arrow action button. When the correct program is highlighted, press the ENTER action button. (If you pass the correct program, keep pressing the right arrow action key and the cursor will wrap around to the start)

3 Status will not be provided on the progress of the test. The program will be activated by the remote but no system status or confirmation from the controller is provided.



- 4 Selecting "Advance Zone" will advance the program to the next available zone in the program.
- Selecting "OFF" will end the program immediately.

6 Selecting "HOME" will return you to the Irrigation Menu but the program will not be stopped.

# **Options Menu**

1 The options menu provides the ability to modify the system options and is available from the SYSTEM HOME screen.

2 Follow the on screen instructions to customize the remote to meet your preferences.





## **Advanced Features Setup**

Adding an 8 character name you can easily remember to a Receiver is an advanced feature in this remote system. The Transmitter will store up to 20 unique 8 character names for Receivers.

1 When linking the Receiver and Transmitter you are given the option to assign a name, from this screen select YES.

2 Using the keypad repeatedly press the button associated with the letter you desire to use. The number is shown first, then the letter sequence. When you have successfully selected a letter, press ENTER to advance to the next character.



3 Repeat the step shown above until all 8 characters have been entered. (It is acceptable to leave one or more characters as blank.)

- You can backspace on your characters using the left arrow action button.
- **5** Selecting BACK will take you back to the previous menu.

#### **Miscellaneous Screens**

The following screens may appear from time to time alerting you to system issues. Follow the onscreen instructions to resolve the issue.



# **Troubleshooting Guides**

#### **Receiver (RX)**

Problem Description	Solution
Receiver (RX) LED does not illuminate.	• Make sure you are using the correct QC on your controller and verify that the QC cable is fully engaged on the controller connector. (some controllers require that the QC cable connector to be inserted inside the controller plastic housing).
	<ul> <li>Make sure your controller is plugged in and has power.</li> </ul>
	Remove and reinstall the RX on the QC.
Cannot "link" a new Receiver (RX) with my Transmitter (TX).	<ul> <li>Make sure the LED on the RX is flashing.</li> <li>Follow the on-screen instructions on the TX.</li> <li>Be sure to press the "LINK" button on the Receiver (RX) then press the "LINK" button on the Transmitter TX.</li> </ul>
Cannot find a previously used Receiver (RX) with my Transmitter (TX).	Follow the on screen Transmitter (TX) instructions to "Link" a new Receiver.
Controller display shows "System Test" unexpectedly.	• Attempting to run an irrigation program that is not available on the controller and pressing the "Advance" button on the remote will activate a controller system test. Press "stop" to end the test.

#### Quick Connect (QC)

Problem Description	Solution
The QC cable is damaged.	Visit your distributor to purchase a replacement QC cable.
The QC cable is too short to reach from the outside of the building to my controller location.	• Visit your distributor to purchase a 30 foot QC cable or visit our website for instructions on how to extend cable length.

#### Transmitter (TX)

Problem Description	Solution
TX keeps turning off by itself.	• To extend battery life, the TX is designed to turn off automatically after 3 minutes if no buttons are being pressed. Follow the following button path through the Options menu to modify the default Sleep time:
	OPTN – SYS – DFLT – SLEEP
	If irrigation is active, system status will display Miscelleanous screen 4.
The TX will not power on.	Check to make sure three (3) fresh AA batteries are installed.
	Verify that the batteries are installed correctly.
Cannot "link" a new Receiver (RX) with my Transmitter (TX).	• Make sure the LED on the RX is flashing.
	Follow the on-screen instructions on the TX.
	<ul> <li>Be sure to press the "LINK" button on the Receiver (RX) then press the "LINK" button on the Transmitter TX.</li> </ul>
	<ul> <li>The system uses two-way radios with a maximum operating distance of 1.5 miles in line of sight. Building structures, vehicles, hardscape, landscaping or high voltage sources may reduce the operating distance.</li> </ul>
Cannot find a previously used Receiver (RX) with my Transmitter (TX).	Follow the on screen Transmitter (TX) instructions to "Link" a new Receiver.
I don't have a "HOME" action button at the bottom of the screen but want to go to the "HOME" menu.	• Press and hold the "0" key with the house icon for .75 seconds.
Handheld Transmitter indicates zone is active but no irrigation is occurring. I know the zone is properly wired.	• Check your rain sensor or moisture sensor and make sure it is not breaking the common wire connection. If it is, disable the rain sensor or moisture sensor during remote operation.
The remote system tells me I have a zone active that is not installed.	• Controllers that use the 6 pin connector are not designed to provide status back to the remote system. Use the OFF command to turn the zone off.
l received a message that said, " <b>Not Confirmed</b> , Out of Range or Zone not Available".	<ul> <li>Your transmitter did not receive a command confirmation from the receiver because:</li> </ul>
	1. You may be out of operating range.
	2. You may be too close to the receiver.
	<b>3.</b> If using a 5 pin QC on your controller the zone you requested is not supported by that controller.
l received a message that said, " <b>Signal Lost</b> ".	• You are out of the operating range of the remote. This may be due to excessive distance between RX and TX or landscape / hardscape materials blocking radio communications.

Problem Description	Solution
I don't like the 2 minute default test time, how do I change it?	<ul> <li>Follow the following button path through the Options menu to modify the default test run time:</li> </ul>
	OPTN – SYS – DFLT – Z/TS - TRT
l don't like the 13 zone default maximum zone number for testing, how do l change it?	<ul> <li>Follow the following button path through the Options menu to modify the default maximum zone number:</li> </ul>
	OPTN – SYS – DFLT – Z/TS - LTZ
I don't like the 5 minute default run time for manual zone activation, how do I change it?	<ul> <li>Follow the following button path through the Options menu to modify the default run time for manual zone activation:</li> </ul>
	OPTN – SYS – DFLT – Z/TS – ZRT
My Transmitter (TX) seems to be locked up and I cannot send commands or receive status updates.	• Turn the TX off using the power button and then turn it back on.
My TX does not turn off when I press and release the power button.	• The power button must be pressed for .25 seconds before release to power the Transmitter (TX) off. This prevents you from accidentally turning the power off if the button is pressed during use.
l entered a zone number or run time in a flashing screen that I don't want, how do I clear it?	• Keep pressing the numeric keys until the flashing screen clears and shows 000, at that time you can enter the correct zone number or run time.
My TX does not send an OFF command when I press and release the Emergency STOP button.	• The Emergency STOP button must be pressed for .75 seconds before it will send an OFF command. This operation prevents you from turning the irrigation off if the button is accidentally pressed during use.

#### **REGULATORY INFORMATION**

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.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. The internal wireless radio complies with RSS 210 and RSS GEN of Industry Canada.



RAIN BIRD CORPORATION 6991 E. Southpoint Road Tucson, AZ 85756

© 2012 Rain Bird Corporation <sup>®</sup> Registered trademark of Rain Bird Corporation www.rainbird.com