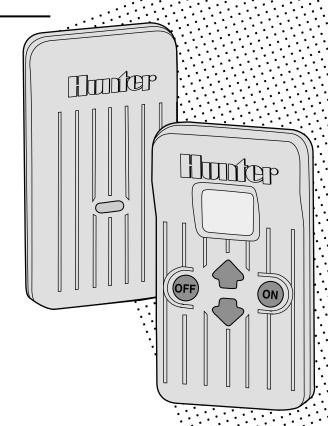
SRR

Remote Control System

Owner's Manual and Installation Instructions



Hunter[®]

TABLE OF CONTENTS	
INTRODUCTION AND INSTALLATION	
Introduction	1
SRR Components	2
Wiring Harness/SmartPort™ Connection Kit	4
Installing the SRR Remote Wiring Harness	5
Typical Installation	
Receiver Mounted Indoors	6
Connection of Receiver on a Temporary Basis from Outside of a Garage or Building	6
Maximizing Operating Range	7
Extending Wiring on SmartPort™ Harness	7
PREPARING TRANSMITTER AND RECEIVER FOR USE	
Preparing the Transmitter For Use	8
Installing the Transmitter Battery	9
Changing the Remote Activated Station Run Time	10
Changing the Transmitter Address	11
Changing the Maximum Station Number	12
Preparing the Receiver For Use	13
Changing the Receiver Address	14
TRANSMITTER AND RECEIVER OPERATION	
Activating a Station with The SRR Remote Control System	15
A Word About Range	16

TABLE OF CONTENTS (continued)				
TROUBLESHOOTING AND SPECIFICATIONS				
Troubleshooting Guide	17			
Specifications	18			
FCC Compliance Notice	Back Cover			

INTRODUCTION

Finally, there's no need to walk back to the controller to start and stop a manual watering cycle when doing maintenance or repair work on your irrigation system. Finally, winterization can be done quickly and easily with one worker instead of two. Finally no more going back to the garage to start or stop a manual irrigation cycle.

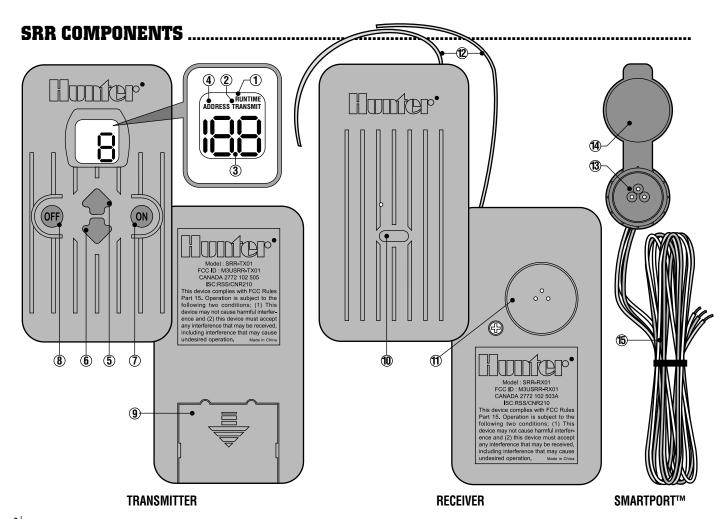
Hunter is pleased to introduce the SRR – A Simple and Reliable Remote Control System for use with our SRC, ICC, and future controllers. The SRR can offer you features other remotes can't, at a price you can afford.

The SRR transmitter is made of sturdy ABS and has no external antenna to get in the way. It features a large LCD and four-button operation. Don't let its size fool you – while it's small enough to fit in your shirt pocket, it has an open field range of up to 450 feet.

The large LCD display and simple four-button control make the SRR a snap to use. Simply press the ♠ or ♠ keys to display the station or program you want to turn on or off, then press the ♠ or ♠ button – what could be easier? Don't worry about forgetting to turn off the SRR. After several minutes of inactivity the unit turns itself off to extend battery life. Then, the unit can be turned back on by touching any button. A standard 9-volt alkaline battery will last an entire season for a contractor, and years for a homeowner.

We believe the SRR is the simplest remote control available. It is so easy to use that you will need this booklet very little after installation. If you do have a question, keep this in a safe place for easy reference.

Congratulations – your life just got a little easier!



This section will give you a brief description of the components of the SRR. Each item will be discussed in further detail later, however this section can be helpful in getting acquainted with the Transmitter, Receiver, and SmartPort™.

TRANSMITTER

A. LCD Display

- Run Time Indicates the Station Run Time is being set when flashing.
- 2. Transmit Indicates that the Transmitter is transmitting the programmed data to the receiver.
- 3. Main Display Indicates various times and values.

Number – Indicates either Station Run Time (1 to 30) or Station number (1 to 48).

- **On** Indicates Transmitter is turning on a particular station.
- **Off** Indicates Transmitter is turning off a particular station.

Program (A, B, C) – Indicates program selected.

 Address – Indicates that a new address for transmitting between the Transmitter and the Receiver is being set.

B. Control Buttons

- **5.** ◆ Increases the selected flashing display.
- **6.** ◆ Decreases the selected flashing display.
- 7. Selects the selected flashing display.
- 8. Cancels the selected flashing display.

C. Other

9. Battery Cover - Covers compartment for 9-volt alkaline battery.

RECEIVER

- 10. Control Button Hold button down when plugging Receiver into SmartPort™ when programming a new address.
- 11. SmartPort™ Outlet (Male) Outlet on back of Receiver that plugs into the SmartPort™ harness.
- 12. Antenna Receives signals from Transmitter from up to 450'.

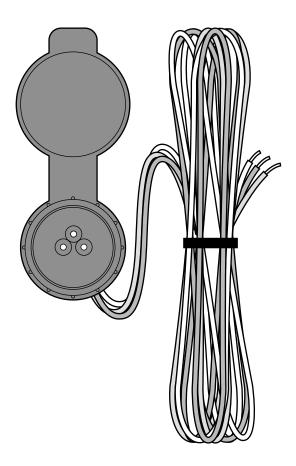
SMARTPORT™

- 13. SmartPort™ Outlet (Female) Outlet on front of SmartPort™ that plugs into the SRR Receiver or other Hunter product.
- 14. Rubber Cover Protects SmartPort™ from dirt and weather.
- **15. Control Wires** Red, white, and blue wires that connect to the terminal strip area of the controller.

WIRING HARNESS/SMARTPORT™ CONNECTION KIT

To utilize the SRR Remote Control System, your controller must be equipped with the SmartPort™ wiring/harness connection kit. This wiring harness provides the connection port where the SRR receiver is attached.

The SmartPort[™] wiring harness is included with the purchase of the SRR. Additional SmartPorts may be purchased separately to allow you to utilize the transmitter and receiver with additional Hunter controllers. New systems like the SRP (Simple Reliable Programmer, for use with your PC) can also be connected to the SmartPort[™] wiring harness.



INSTALLING THE SRR REMOTE WIRING HARNESS.



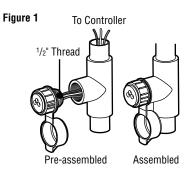
NOTE: Any extension of the wires provided with the standard wiring harness may result in an error message on the controller display and possible malfunction of the remote due to radio interference. In some situations, lengthening of the standard harness may work fine, in others it may not work at all (it is site specific). In either case, it is recommended that installations where the SmartPort™ outlet will be located more than 5 feet from the controller that the installation be done using the shielded cable wiring harness (SRR-SCWH) to minimize the possible effects of electrical noise. See page 7 for information.

 Install a 1/2" female threaded "Tee" in the field wiring conduit approximately 12" from the SRC, ICC, or other Hunter controller.



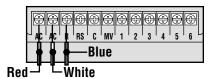
NOTE: While the SmartPortTM has a protective cover to allow for outdoor installation, the SRR Receiver should only be used on a temporary basis, as the Receiver is not designated for permanent outdoor mounting.

- Feed the red, white, and blue wires of the SmartPort[™] through the base of the "Tee" and into the controller wiring compartment as shown in Figure 1.
- Screw the SmartPort[™] housing into the "Tee" (or other fitting) as shown in Figure 1.



- 4. Route wiring harness into controller housing. Attach the red wire to the first AC screw slot. Attach the white wire to the other AC screw slot, and attach the blue wire to the R (or REM on some controllers) as shown in Figure 2.
- The wiring harness' 1/2" male thread has a 90° ratcheting mechanism to allow the receiver to be set in a vertical position for the best reception.

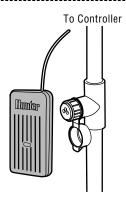
Figure 2



TYPICAL INSTALLATION.

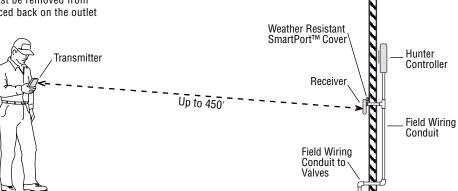
Receiver Mounted Indoors

This installation is ideal for situations when the SRR system will be left permanently connected to the controller in an indoor area.



Connection of Receiver on a Temporary Basis from Outside of a Garage or Building

This installation is ideal for situations where a contractor desires the ability to access and operate a controller from outside of a locked building or garage. However, the SRR receiver must be removed from the SmartPort™ and the weather resistant cap placed back on the outlet after each use.



MAXIMIZING OPERATING RANGE

There are many factors which influence operating range. Listed below are a few things you can do to assure that you get maximum range possible.

- Do not install SmartPort™ near large sources of metal such as power meters, water pipes, and aluminum siding.
- Do not install SmartPort™ in a basement or underground location. The higher the location the better chance of strong reception.
- For maximum range in all directions, the receiver should be pointed straight up (vertically). If receiver is mounted with its antenna oriented horizontally, reception will be very good if transmitter is on either side of the antenna, but very poor if it is facing either end of the receiver antenna.

When operating transmitter, hold the transmitter as vertical as
possible and face in the direction of the receiver, especially if it is
several hundred feet away.

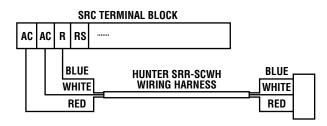


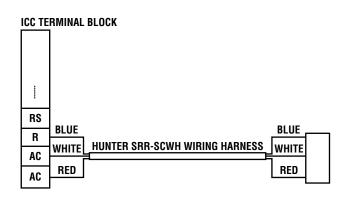
NOTE: Remote is designed for residential and small commercial sites. Large projects such as cemeteries and golf courses will require a long-range remote.

EXTENDING WIRING ON SMARTPORT™ HARNESS

Use shielded cable to connect the SmartPort[™] to the controller if installing the connector more than 2 meters of wiring length from the controller. The use of shielded cable will eliminate the potential for radio interference by preventing the wire as acting as an antenna. At no time should the SmartPort[™] be installed more than 15 meters away from the controller.

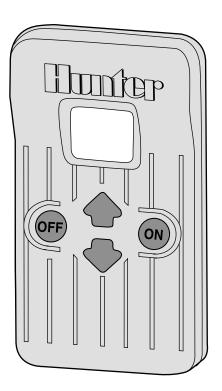
For easiest installation, order a Hunter **SRS-SCWH** SmartPort™ wiring harness with a full 7.6 meters of shielded cable.





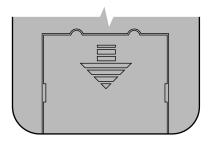
PREPARING THE TRANSMITTER FOR USE.

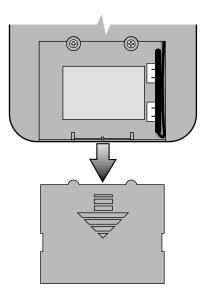
Your SRR System is designed to work right out of the box. This means that other than installing the battery, you may choose to skip this entire section. However, we recommend you read it because with a few simple steps you can customize your SRR to add functionality and security to your system. Be aware that if you change your transmitter address or maximum station number as described on the following pages, you should make a note of the settings, since when the battery is removed and a new one is installed, the transmitter will revert back to the original settings.



INSTALLING THE TRANSMITTER BATTERY.

Your SRR Transmitter requires a 9-volt alkaline battery. To install the battery, slide open the battery door on the back of the transmitter. Attach the battery to the clip, insert the battery into the compartment, and slide the battery door shut. When changing the battery, push the battery down in the case to reveal the battery clip before attempting to remove the battery from the case.





CHANGING THE REMOTE ACTIVATED STATION RUN TIME

You have the ability to adjust the amount of time that a station will run once it has been turned on by your SRR System. This does not affect the run time programmed into your controller. This adjustment is made using the transmitter as described below.

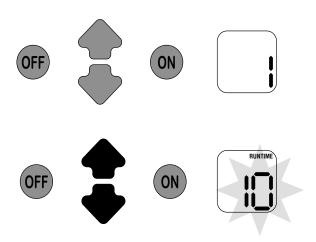
To change the Remote Activated Station Run Time follow the steps below:

- If the unit is off (no display), power the transmitter up by pressing or any of the buttons for at least 1 second and then releasing the button. The transmitter will first illuminate the entire display for 1 second then display the active station.
- Press the ◆ and ◆ buttons simultaneously, until the word "RUN TIME" along with the current Run Time is displayed (default is 10 minutes). The display will be blinking at this point. If more than 5 seconds go by without a button being pressed, the Transmitter will revert back to displaying the active station.
- Use the

 and

 buttons to change the Run Time to any of the 8 settings ranging from 1 to 30 minutes. Then do not touch any of the buttons for 5 seconds and the display will stop blinking, and return back to the active station.

NOTE: Black buttons indicate what is to be pushed.



CHANGING THE TRANSMITTER ADDRESS.

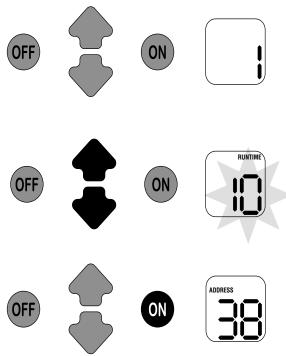
Both the SRR Transmitter and Receiver have an "address" that they use when communicating. If the addresses do not match, the receiver will ignore the transmission.

Your SRR comes from the factory with both the Transmitter and the Receiver address set to 0. You may change the address to any value from 0 through 127 for added security. Note that if you change the Transmitter address, the Receiver must "learn" the new address as described in "Preparing the Receiver for Use" section.

To change the Transmitter address follow the steps below:

- If the unit is off (no display), power the Transmitter up by pressing any of the buttons for at least 1 second then releasing the button. The Transmitter will first illuminate the entire display for 1 second then display the active station.
- Press the ◆ and ◆ buttons simultaneously, until the word "RUN TIME" along with the current Station Run Time is displayed. The display will be blinking at this point.
- 3. While the display is blinking and showing the current Run Time, Press the button. The word "ADDRESS" will now illuminate and the current address will be blinking. Note that if more than 5 seconds go by without a button being pressed, the Transmitter will revert back to displaying the active station.
- 4. Use the ♠ and ♠ buttons to change the address to any value between 0 and 127. Then do not touch any of the buttons for 5 seconds and the display will stop blinking, and return back to the active station.

NOTE: Black buttons indicate what is to be pushed.



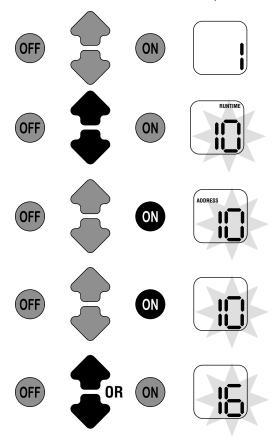
CHANGING THE MAXIMUM STATION NUMBER

Your SRR Transmitter comes from the factory with the maximum station number set to 9. This means that when you use the ♠ and ♥ buttons to change the station, you may change it to any number between 1 and 9. However if you only have a 6-station controller, you will never need to access stations 7 through 9. Likewise, perhaps you will own a Hunter controller like the ICC which can have up to 48 stations. In this case you would want to access the stations above 9.

The SRR Transmitter allows you to set the maximum station number as follows:

- If the unit is off (no display), power the Transmitter up by pressing any of the buttons for at least 1 second then releasing the button. The Transmitter will first illuminate the entire display for 1 second then display the active station.
- Press the ◆ and ◆ buttons simultaneously, until the word "RUN TIME" along with the current Run Time is displayed. The display will be blinking at this point.
- While the display is blinking and showing the current address, press the button. The display will continue to blink, but the word "ADDRESS" will be illuminated
- Press the button again. The display will continue to blink, but the word "ADDRESS" will no longer be illuminated.
- Use the ♠ and ♠ buttons to change the maximum station number to the value you desire. Then, do not press any buttons for 5 seconds and the display will stop blinking and return to the active station number
- You may now change the active setting to any station in the new station range.

NOTE: Black buttons indicate what is to be pushed.

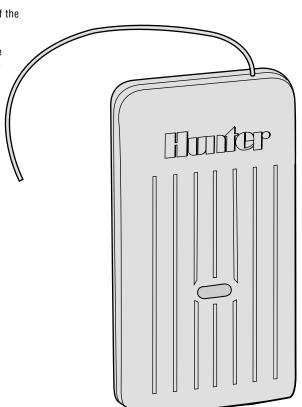


PREPARING THE RECEIVER FOR USE.

As stated earlier, your SRR System is designed to work right out of the box. If you have decided to change your Transmitter address as described in the previous section, you must allow the Receiver to "learn" this new address. Once learned, the only way to remove the address from Receiver memory is to learn a different address. This can be done by following the simple steps outlined below.

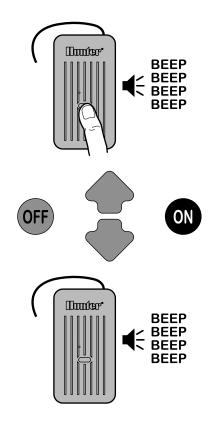


NOTE: The SRR remote receiver should not be permanently installed in an outdoor or unsheltered location.



CHANGING THE RECEIVER ADDRESS..

- Hold down the single button on the face of your Receiver while you
 plug it into a SmartPort™ that is connected to a powered controller.
 When this is done, the Receiver will beep 4 times.
- 2. After the Receiver starts to beep, release the button.
- 3. Press either the or button of your transmitter.
- 4. The Receiver will beep 4 additional times indicating that it has learned the new Transmitter address and will respond only to that address from this point on.



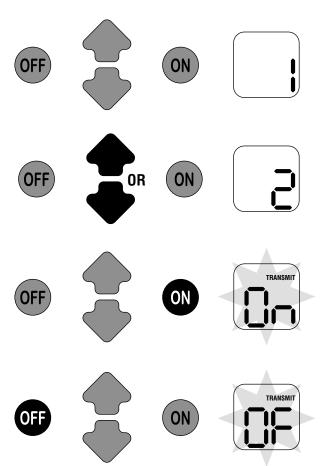
ACTIVATING A STATION WITH THE SRR REMOTE CONTROL SYSTEM.

The SRR System will allow you to remotely turn on and off any station on your SRC, ICC, or future Hunter controller with the press of a button. Once on, the station will run for the run time you have designated in the remote. To remotely activate a station or program follow the steps below:

- Plug the Receiver into a SmartPort™ that is connected to a powered controller and wait for two beeps indicating that the Receiver is ready.
- If your Transmitter is not on (no display), press any button for at least one second and release. The Transmitter will first illuminate the entire display, then display the active station.
- Use the ◆ and ◆ buttons to display the station or program you would like to start.
- 4. Press the button to start the station or program. The Transmitter will display the word "TRANSMIT" and the letters "On". Both will flash for about 4 seconds indicating that it is sending the command to the receiver. If you are near the Receiver, you will here it beep 2 times. This indicates that the Receiver has received the command.
- 5. Press the button to turn off any station that is on. The display will read "TRANSMIT" and the letters "Of". Both will flash for about 4 seconds, and the Receiver will beep again twice. The SRR System is designed to turn on one station at a time (unless you activate a program). Therefore, turning a station on while another station is operating will cause the operating station to turn off.



NOTE: The SRR remote can activate any station on the controller whether the controller dial is in the "SYSTEM OFF", "RUN" or "RUN/BYPASS SENSOR" modes. If a sensor device has been wired to the controller, the SRR remote will NOT override the sensor for manual operation.



A WORD ABOUT RANGE

There are many claims being made about the range of various remote control systems, whether they be for auto alarms, garage doors, or irrigation systems for that matter. The published range for the SRR System is up to 450 feet. Most users will achieve this range or more, but a few may not. It is the attempt of this section to educate the user about those factors that influence operating range. We believe that we have achieved the maximum performance available on this frequency. Here's why...

The range of any remote control system is dependent on many factors. These include the terrain at a particular site, obstructions such as buildings and walls, the strength of the various interfering signals, the sensitivity of the Receiver, the ability of the Receiver to reject "unwanted" signals, and the strength of the Transmitter. Since it is impossible to control the obstructions, terrain at a site, and the strength of interfering signals, it is impossible to guarantee an operating range under all conditions. However, we have done everything under our control to maximize the operating range of this system.

The SRR Transmitter has been designed to transmit the maximum power allowed by the FCC. Furthermore, it has special circuitry to assure that this maximum output power is maintained until just before the battery goes dead. Other transmitters emit less and less power as the battery wears down. And our special SmartPort™ wiring harness is designed to keep interfering signals at a minimum, especially with the addition of Hunter shielded cable. The Receiver employs a reception method far superior to that used in a typical garage door opener or car alarm

The SRR has been designed to give you simple, reliable operation for many years.

TROUBLESHOOTING GUIDE

PROBLEM	CAUSES	SOLUTIONS
Transmitter display is blank.	Transmitter is off. Battery is dead.	Press any button for 1 second. Replace battery.
Can't access all the desired stations on the Transmitter.	Maximum station number is set wrong.	See "Changing the Maximum Station Number" on page 12.
Receiver doesn't beep two times after plugging it in.	SmartPort™ is not connected properly. Controller has no power.	Recheck SmartPort™ wiring. Check controller power.
Receiver beeps twice after plugging it in, but won't respond to Transmitter.	Receiver and Transmitter address don't match.	Relearn address at receiver.
Transmitter display stays on.	Transmitter will turn off automatically.	Wait approximately 5 minutes without pressing any buttons. Transmitter will "fall asleep."
"ERR" message in controller display when controller is in the run position.	SmartPort™ wiring leads have been extended and are receiving radio interference.	Replace lengthened wire with shielded cable to prohibit radio interference. Use Hunter SRR-SCWH. See "Extending Wiring on SmartPort™ Harness" on page 7.
Receiver does not receive signal from remote held at close range.	Mismatch of addresses in transmitter and receiver.	Reset address of receiver. See page 14.
Remote has short range (i.e. less than 100 feet).	Check for interference causes.	See "Maximizing Operating Range" on page 7.

SPECIFICATIONS

Operating Specifications

Address range: 0-127

Maximum stations supported: 48

• Run Time: 8 settings from 1-30 minutes

· Range: up to 450 feet*

Electrical Specifications

Power Source Transmitter: 9-Volt Alkaline Battery

Power Source Receiver: 24VAC, 0.010 Amps (from SRC)

Transmitter type: SAW Stabilized

Receiver type: Superheterodyne

• System Operating frequency: 315MHZ

Default Settings

Address = 0 (may be varied from 0-127)

Number of stations = 9 (may be varied from 1-48)

Run Time: 10 minutes

Dimensions

Transmitter:

Height: 4 ³/₄"

Width: 2 ¹/₂"

Depth: 1 ¹/₄"

Receiver:

Height: 4 ³/₄"
 Width: 2 ¹/₂"

• Depth: 1"

*See "A Word About Range" on page 14 for more information.

IFORMATION ABOUT YOUR SPRINKLER SYSTEM
te of Installation:
ntractor Installing System:
dress:
one:
cation of Control Valves:
cation of Weather Sensor:
cation of Main Water Supply Shutoff:
outon of main valor cappy chaton.

FCC COMPLIANCE NOTICE

This device complies with FCC rules Part 15. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and
- (2) This device must accept any interference that may be received, including interference that may cause undesired operation.

Transmitter: FCC ID: M3USRR-TX01 Receiver: FCC ID: M3USRR-RX01

Hunter Industries Incorporated • The Irrigation Innovators