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#### INTRODUCTION

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. Winterization can be done quickly and easily with one worker instead of two. No more going back to the garage to start or stop a manual irrigation cycle.

Hunter is pleased to offer the ROAM XL Remote Control System for use on Hunter controllers equipped with a SmartPort® connection. The ROAM XL can offer you features other remotes can't, at a price you can afford.

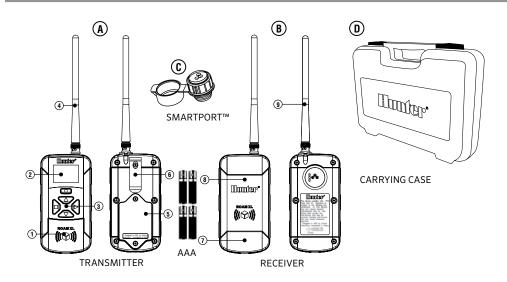
The ROAM XL transmitter is made of sturdy die cast aluminum and outdoor grade plastic. It features a large LCD and simple push button operation. Don't let its size fool you. While it's small enough to fit in your pocket, it has an open field range of up to 2 miles (3 km).

The large LCD display and simple five-button control make the ROAM XL 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 ROAM XL. After several minutes of inactivity the unit turns itself off to extend battery life. The unit can be turned back on by touching any button. Four AAA alkaline batteries will last an entire season for a contractor, and years for a homeowner.

We believe the ROAM XL 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!

# **ROAM XL COMPONENTS**



#### **ROAM XL COMPONENTS**

This section will give you a brief description of the components that make up the ROAM XL. 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.
- Transmit Indicates that the transmitter is transmitting the programmed data to the receiver.
- Max Station Number Indicates station number (1-48 Residential, 1-240 Commercial).

**On** – Indicates Transmitter is turning on the selected station or program.

**Off** - Indicates transmitter is turning off any running station or program.

PA, PB, PC - Indicates program selected. P1, P2... - Demonstrates differences between residential programs and commercial programs.

- 4. Om Address Indicates that a new address for transmitting between the Transmitter and the Receiver is being set.
- Battery Indicates how much battery power is left.

#### **B. Control Buttons**

- **6.** Increases the selected functions.

#### **ROAM XL COMPONENTS**

- 8. 

   Turns on the selected functions.
- Turns off the selected functions.
- Scrolls between functions, or access address screen.

#### Other

**11. Battery Cover** – Covers compartment for four AAA alkaline batteries.

#### **RECEIVER**

- SmartPort® Outlet (Male) Outlet on back of Receiver that plugs into the SmartPort® harness.
- **13. Antenna** Receives signals from Transmitter from up to 2 miles (3 km).

#### **SmartPort®**

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



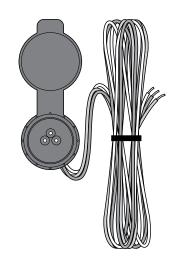
NOTE: ROAM XL Transmitters may also be used with existing Hunter ICR-R receivers.

#### WIRING HARNESS/SMARTPORT® CONNECTION KIT

To use the ROAM XL Remote Control System, your controller must be equipped with the SmartPort® wiring/harness connection kit. This wiring harness provides the connection port where the ROAM XL receiver is attached.

The SmartPort® wiring harness is included with the purchase of the ROAM XL. Additional SmartPort wiring harnesses may be purchased separately to allow you to use the transmitter and receiver with additional Hunter controllers.

The SmartPort Wiring Harness is not required with Hunter ACC and I-Core and ICC 2 commercial controllers. These units are pre-wired with a SmartPort connector already installed.



# **INSTALLING THE ROAM XL REMOTE WIRING HARNESS**

- Install a ½" (13mm) female threaded "Tee" in the field wiring conduit approximately 12" (30 cm) from the controller.
- 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.



NOTE: While the SmartPort® has a protective cover to allow for outdoor installation, the ROAM XL Receiver should only be used outdoors on a temporary basis. The Receiver is not designed for permanent outdoor mounting!

 Screw the SmartPort® housing into the "Tee" (or other fitting) as shown in Figure 1.

#### **INSTALLING THE ROAM XL REMOTE WIRING HARNESS**

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).

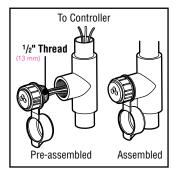


Figure 1.

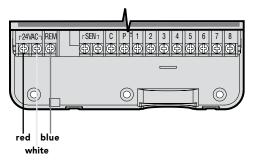


NOTE: Turn controller power off first, before wiring the harness.

# WIRING THE SMARTPORT® TO HUNTER CONTROLLERS

#### X-Core Controller SmartPort Installation

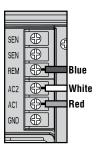
Access the terminal strip area and attach the red wire to the left side "24 VAC" slot, attach the white wire to the right "24 VAC" slot and attach the blue wire to the screw slot marked "REM".



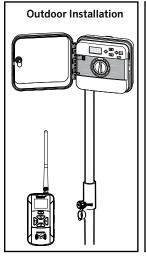
### WIRING THE SMARTPORT® TO HUNTER CONTROLLERS

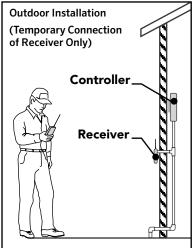
#### **Pro-C Controller SmartPort Installation**

Access the terminal strip area on the main module and attach the red wire to the bottommost **AC** screw slot, attach the white wire to the upper **AC** screw slot and attach the blue wire to the screw slot marked "**REM**".



### **TYPICAL INSTALLATIONS**



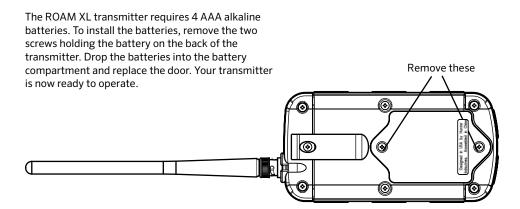


#### **EXTENDING WIRING ON SMARTPORT® HARNESS**

Use a special shielded cable to connect the SmartPort® to the controller if installing the connector more than 2 m (6 ft.) of wire from the controller. The use of shielded cable will reduce the potential for radio and electrical interference. The SmartPort should never be installed more than 15 m (50 ft.) metres away from the controller.

For easiest installation, order a Hunter ROAM-SCWH SmartPort® wiring harness with a full 7.6 m (25 ft.) of shielded cable.

#### **INSTALLING THE TRANSMITTER BATTERIES**



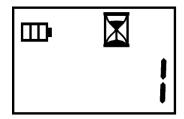
# CHANGING THE REMOTE ACTIVATED STATION RUN TIME

Adjust the amount of time that a station will run before it has been turned on by your ROAM XL System. This does not affect the run time programmed into your controller. There are 10 preset run times: 1 minute to 90 minutes.

#### To change the Remote Activated Station Run Time:

- If the unit is off (no display), power the transmitter up by pressing and holding any button for 5 seconds. The transmitter will first display the active station.
- 2. Press the Mode button twice and the Run Time icon will be displayed (default is 1 minutes). If more than 5 seconds go by without a button being pressed, the Transmitter will revert to displaying the active station.

 Use the and buttons to change the Run Time to any of the 10 settings ranging from 1 to 90 minutes. Then do not touch any of the buttons for 5 seconds and the display will return to the active station.



# CHANGING THE MAXIMUM NUMBER OF STATIONS

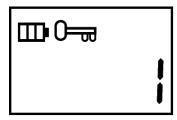
Both the ROAM XL Transmitter and Receiver have an "address" that they use when communicating. If the addresses do not match, the receiver will ignore the transmission

Your ROAM XL comes from the factory with both the Transmitter and the Receiver address set to 1. 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's address, follow the steps below:

 If the unit is off (no display), power the transmitter up by pressing and holding any button until the active station appears.

- 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 return back to the active station.



# CHANGING THE MAXIMUM NUMBER OF STATIONS

Your ROAM XL transmitter has two operating modes, Residential and Commercial (for ACC controllers). These settings determine which controllers the remote will work with, as well as the maximum possible station size.

The ROAM XL transmitter comes from the factory set to Residential mode, with the maximum number of stations set to 15. You should set the maximum number of stations for the number of stations your controller actually has.

Residential mode will operate a maximum of 48 stations. This setting is used with, X-Core, Pro-C, ICC, or I-Core (including Dual) controllers.

Utilize the commercial mode to control ACC by switching to 240. This setting is required to operate with Hunter ACC controllers and ICC2 when expanded further than 48 stations.

It is possible to switch the tranmitter between modes, to operate residential controllers on certain sites, and ACC controllers on others.

# Switching Between Residential and Commercial Modes

- Press add hold the Mode button until the key icon is displayed.
- Press the right arrow button once. An rE (Residential Mode) or Co (Commercial Mode) will be displayed.
- 3. Use the Up arrow button 👁 to change modes.

# CHANGING THE MAXIMUM NUMBER OF STATIONS

#### Set the maximum station number as follows:

- If the unit is off (no display), power the transmitter up by pressing and holding any button until the display appears.
- Press the Mode button 

   three times, until the Station icon 

   is displayed.
- Use the and buttons to change the maximum station number. Then, do not press any buttons for 5 seconds and the display will return to the active station number.

#### X-Core/Pro-C/ICC/I-Core/ I-Core Dual Controllers

In residential mode, the maximum number of stations is from 1 to 48. The ROAM XL also provides the user with the ability to operate programs (A, B, C, D).

#### ACC/ACC Decoder Controllers

In commercial mode, the maximum station number 240 allows the user to control up to 240 stations and 15 programs (programs are displayed with a P and program number ex: P5).



NOTE: When the ROAM XL transmitter is set in the Commercial Mode, the ROAM XL will only communicate with

> ACC. To operate other Hunter controllers X-Core, Pro-C, ICC, and I-Core) with your remote, change the transmitter back to Residential Mode.

#### PREPARING THE RECEIVER FOR USE

Your ROAM XL System is pre-addressed to work right out of the box. However, if you changed the Transmitter address as described in the section, Preparing the Transmitter For Use", you must allow the Receiver to learn the new address.

This can be done by performing the simple steps on the next page.



NOTE: Once a new address is learned, the only way to remove the address from the Receiver memory is to repeat the steps, to learn a different address.



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



#### CHANGING THE RECEIVER ADDRESS

- Before setting the receiver address, make sure that the transmitter address is set to the address you would like to use.
- Plug the receiver into a SmartPort® connected to a powered controller. When this is done, the receiver will beep 4 times.
- 3. Once the receiver beeps 4 times, you have approximately 7 seconds to send the new address to the receiver. Press either the 

  or 
  button on your transmitter to connect.
- 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. If 8 seconds expire before the or button is pressed, the receiver will beep twice and retain its original address.



The ROAM XL transmitter may also be used with existing ICR-R receivers, if they are addressed to work with one another.

Hold the green button on the ICR-R receiver, while plugging it into the SmartPort.

Immediately after it beeps 4 times, transmit with the ROAM XL to set the new address.

#### **ACTIVATING A STATION WITH THE ROAM XL REMOTE SYSTEM**

The ROAM XL System will allow you to remotely turn on and off any station on your Hunter controller with the press of a button. Once on, the station will run for the run time you have designated in the transmitter. To remotely activate a station or program:

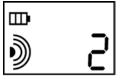
- Plug the receiver into a SmartPort<sup>®</sup> that is connected to a powered controller. The receiver will beep 4 times followed by a 8-second pause and two beeps.
- If your transmitter is not on (no display), wake it up by pressing and holding any button until the display appears. The Transmitter will start up, and then display the active station.
- Use the and buttons to display the station you would like to start, or press the Mode button once to display programs.

- 4. Press the button to start the station or program. The Transmitter will display the Transmit icon ■. If you are near the receiver, you will hear it beep two times. The Transmitter display will alternate between "On" and the selected Station or Program. This indicates that the Receiver has received the command.
- 5. Press the button to turn off ALL stations or programs that are on, including stations or programs that were turned on by the controller. The display will show the Transmit icon and the receiver will beep again twice. The Transmitter display will alternate between "OFF" and the selected Station or Program. The ROAM XL 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 (does not apply to the I-Core or ACC).

# **ACTIVATING A PROGRAM WITH THE ROAM XL REMOTE SYSTEM**



NOTE: ROAM XL can activate any station on the residential controllers, regardless of whether the dial is in the SYSTEM OFF, RUN, or RUN/BYPASS SENSOR modes. If a sensor is connected and active, ROAM XL will not operate stations until the BYPASS SENSOR switch is selected. The remote will operate ACC and I-Core controllers in any dial position, regardless of sensor state.



#### Activating a Program with the ROAM XL

You can maunally start a complete program in your controller by selecting the applicable Program. In the Residential mode, the ROAM XL can operate Programs A, B, C, or D. In the Commercial mode, the ROAM XL can operate Programs 1–15. Programs 1 through 6 would activate Programs A through F in the ACC controller.

To start a Program manually from the remote, the controller must already have a Program set up with run times.

- Press and hold the Mode button until the station number appears.
- Press the Mode button again and Programs will be displayed.

# **ACTIVATING A STATION WITH THE ROAM XL REMOTE SYSTEM**

- 3. Use the and arrows to select the program you would like to start manually.
- 4. Press the button to send the signal to turn the controller On

The receiver will beep twice, and the Transmitter display will alternate between "On" and the selected Program letter or number.

#### **OPERATING RANGE**

ROAM XL has a maximum effective operating range of approximately 2 miles/3 km.

"Maximum effective range" assumes level ground and clear terrain. No guarantee is made that this range is achievable on any given site.

ROAM XL has the maximum permissible operating power allowed by the United States Federal Communications Commission (FCC). However, the actual range on any given installation will be determined by the characteristics of the site.

Hills, buildings, and other obstructions will reduce the operating range of the remote. Brick, stone, or metal buildings will reduce range more than lighter residential structures.

#### To ensure optimum radio coverage:

- Do not install the SmartPort® in a basement or under ground 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). The receiver should NOT be mounted horizontally.
- When operating transmitter, hold the transmitter as vertical as possible and face in the direction of the receiver, especially if it is several hundred meters away.
- Locating receiver outside and as high up as possible will result in best performance. Install the ROAMSCWH for relocation of up to 25' (7.6m) with shielded wires.

# **OPERATING RANGE**

ROAM XL has been carefully designed to provide the best remote coverage possible within the regulations that govern wireless devices.

# TROUBLESHOOTING GUIDE

PROBLEM	CAUSES	SOLUTIONS
Transmitter display is blank.	Transmitter is Off.	Press the MODE button for 5 seconds.
	Battery is dead.	Replace battery.
Can't access all the desired stations on the transmitter.	Maximum station number is set wrong.	See "Changing the Maximum Station."
Receiver doesn't beep 4 times after plugging it into the SmartPort®.	SmartPort is not connected properly.	Recheck SmartPort® wiring.
plugging it into the smart of t	Controller has no power.	Check controller power.
Receiver won't respond to Transmitter.	Receiver and Transmitter addresses 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 electrical or radio interference.	Replace lengthened wire with shielded cable to reduce radio interference. Use Hunter SRR-SCWH. See "Extending Wiring on SmartPort® Harness."
Receiver does not receive signal from remote held at close range.	Mismatch of addresses in transmitter and receiver.	Reset address of receiver.
Remote has short range.	Check for interference causes.	See "Maximizing Operating Range."

#### **SPECIFICATIONS**

#### **Operating Specifications**

- Address Range: 0-127
- Maximum stations supported: 48 Residential Protocol, 240 Commercial Protocol
- Run Time: 10 settings from 1-90 minutes
- Range: up to 2 miles\* (3 Km)

#### **Electrical Specifications**

- Power Source Transmitter: 4 AAA alkaline **batteries**
- System Operating Frequency: 27 MHz band

#### **Default Settings**

- Address: 1
- Number of Stations: 15 (may be varied from 1-240)
- Run Time: 1 minutes

#### Dimensions

Transmitter (w/o antenna): Height: 7" (17.8 cm)

Width: 21/4" (5.71 cm) Depth: 11/4" (3.17 cm)

Receiver (w/o antenna): Height: 7" (17.8 cm)

Width: 21/4" (5.71 cm)

Depth: 1" (2.54 cm)

<sup>\*</sup>See "Operating Range" for more information.

# **NOTES**

# Hunter

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