## **CertainTeed Machine Works**

## FALCON PRO WIRELESS CONTROL SYSTEM



## INSTALLATION AND OPERATION GUIDE

Version 2.6
Provided by:
Nichols Electronics, Inc.

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RFHERO<sup>TM</sup>
Industrial Controls

# Falcon Pro System Remote Control Installation/Setup

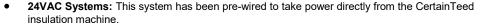
#### **General Information:**

The radio remote control that you are installing can be used for most electrical switching and control applications. Before beginning the installation and testing you should check that each item listed below is available and in good condition.

Antenna: Magnetic mount antenna with 15ft of cable.
 Receiver: Pre-wired for CertainTeed insulation machines.
 Transmitter: Hand-held controller with pushbuttons & switchguards

4. Batteries: (2) Two AA Batteries

5. Holster & Belt: CertainTeed Blue Holster & Belt



CertainTeed

- Orange Control Cable Power: Green is 24VAC control, Black wire with lug is machine ground.
- Orange Control Cable Control: White is the Air (Blower) feed and the Black wire is the Material

### Remote Beacon Feature:

Your new transmitter (the hand held pendant with buttons) is equipped with the REMOTE BEACON. This beacon is used to find the transmitter when misplaced or lost.

When the transmitter is first powered on (i.e. putting in a fresh set of batteries) or awakened from it's sleep state (i.e. pressing any button when "asleep"), it will emit a series of audible beeps to alert the operator that the Remote Beacon feature is activated. The remote will function normally until one of the two following events occur:

- The operator puts the remote to "sleep". To disable the Remote Beacon feature, simply hold the OFF button down for about six (6) seconds. The remote will respond with a series of beeps, release the OFF button as soon as the beeping begins. If you do not release OFF button quick enough, the remote will alert you that it is still "awake" with another series of beeps a few seconds after the first series ends. If this occurs, repeat the process and release the OFF button as soon as the beeping starts.
- The Remote Beacon feature self-activates. After approximately 60 minutes of inactivity (i.e. after the last button press that was not a "go-to-sleep command"), the transmitter will emit a series of loud beeps at approx 1 minute intervals. This "Beacon" alarm will continue for approximately 24 hours or until a button is pressed on the transmitter (during a silent period, not when the alarm is going off). The action of pressing a button resets the 1 hour timer and the remote will function normally again until it is "put to sleep" or 1 hour of inactivity occurs again.

Please remember to put your Transmitter "to sleep" after your job is complete to avoid an unwanted alarm trigger and to preserve battery life (or remove batteries).

#### **Maintenance Notes**

- The receiver box should be kept dry and should be periodically dusted off.
- Check the transmitter's batteries weekly. Only use two (2) AA alkaline or equivalent rechargeable
  batteries. When the batteries are weak the Transmitter's LED will light on and off slowly and you
  may notice some reduced operating range.
- Clean the antenna periodically with mild soap and water; do not immerse in water. Allow to dry
  completely before use.
- If unit is to be returned for service, please dust clean the transmitter and the receiver before sending it back.
- It is recommended to test the unit daily for operation prior to use. Most faults or issues are easily handled when they first appear.

#### NORTH AMERICA

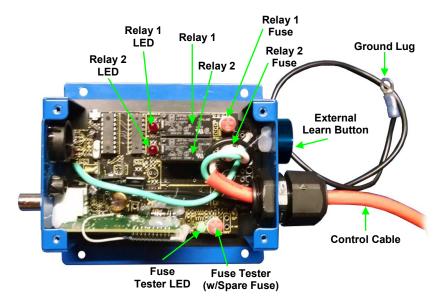
Contains FCC ID: MCQ-XB900HP or Contains FCC ID: OUR-XBEEPRO

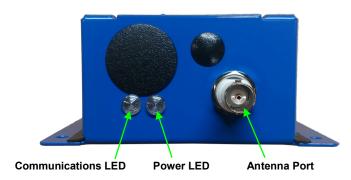
IC: 4214A-XB900HP or IC: 4214A-XBEEPRO

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i) this device may not cause harmful interference and (ii) this device must accept any interference received, including interference that may cause undesired operation.

Hereby, Digi declares that the radio equipment type 2.4 GHz XBee-Pro is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <a href="www.digi.com">www.digi.com</a>

## Falcon Pro Receiver





#### **Operating Instructions**

- Place two (2) AA batteries in the transmitter. The LED on top will flash red and "chirp" a few times.
   Once this stops, pressing any button on the transmitter will cause the LED on top to rapidly flash
   green and then red and chirp if it has no paired receiver in range.
- Ensure the Falcon Pro receiver is properly wired into your insulation machine's power. When your machine is powered, also ensure the red power LED on the Falcon Pro receiver is on.
- 3. Once powered up, after a few seconds the Communications LED on the control box should flash green three (3) times for a 3 button insulation machine. If it flashes any other number of times, then the mode is wrong. Please follow the directions on the next page titled, "Setting the Falcon Pro receiver's Mode".
- 4. Pressing a button on the transmitter will cause the LED on the top of the transmitter to flash green to indicate that the signal has been sent. The corresponding relay will engage.
- The Communications LED on the receiver will flash green to indicate a valid message has been received from the transmitter. You may also be able to hear the relay click inside the receiver.
- 6. Your system is now operational and ready for use!

For help with installation or service Phone: (724) 610-5256
Web: www.rfhero.com
Email: remotes@rfhero.com



## Setting the Falcon Pro Receiver's Mode



## **ATTENTION!**

This section contains the instructions for changing the mode on a Falcon Pro receiver. These steps should only be followed when the receiver is not set to the proper mode (see Step 3 in the "Operating Instructions" section found on the previous page). Your new receiver should already have the proper mode programmed into it from the factory.

- 1. Press and hold the External Learn button on the Falcon Pro receiver.
- 2. While still holding the Learn button down, power the Falcon Pro receiver.
- 3. Count the number of times the Communications LED flashes green.
- 4. If the LED flashes green three (3) times, the Falcon Pro receiver is in the proper mode.
- 5. If the LED does not flash green three (3) times, power down the Falcon Pro receiver.
- 6. Repeat steps 1-4 until the proper mode is set.

## Pairing the Falcon Pro Receiver and Transmitter (Learn Mode)



## **ATTENTION!**

This section contains the pairing instructions for <u>REPLACING</u> or <u>ADDING</u> an additional remote transmitter. Your new transmitter and receiver are already paired from the factory and this procedure is unnecessary for a new Falcon Pro kit.

- On the previous page follow steps 1 & 2 in the section titled, "Operating Instructions". You have 60 seconds to complete the Learn Mode procedure.
- After the Communications LED flashes three (3) times, press and hold the Off button on the transmitter.
- 3. Press and hold the Learn button on the Falcon Pro receiver.
- 4. Release the Off button on the transmitter for five (5) seconds.
- 5. Press the Off button on the transmitter again.
- 6. Release the Off button on the transmitter and the Learn button on the Falcon Pro receiver.
- The Communications LED on the Falcon Pro receiver should now flash green when a button on the transmitter is pressed.
- 8. The transmitter and Falcon Pro receiver are now paired together.

#### **Basic Troubleshooting**

- If the transmitter's LED flashes slowly along with an audible tone, several times then stops, the batteries should be replaced.
- Make sure that the red Power LED on the receiver is lit when your Insulation Machine is turned on.
- Check the antenna for fraying or loose connection.
- Verify that the Falcon Pro receiver is in the proper mode and is paired with the transmitter. (See the "Operating Instructions" section on the previous page).
- Please visit <a href="http://www.rfhero.com/">http://www.rfhero.com/</a> and click on the Troubleshooting link for more help.
- Contact us for more troubleshooting help. Should the unit need to be sent in for service we can
  arrange a return for you.



## This System Qualifies for Manufacturer Support

www.rfhero.net/support Email: service@rfhero.com Phone: (724) 610-5256