



105 Bonnie Drive  
Butler, PA 16002  
724-283-4681  
724-283-5939 (fax)  
www.bwieagle.com

## PRODUCT INFORMATION BULLETIN

### AIR-EAGLE® XLT PLUS

High Power 900MHz RF Transceiver  
THREE CONTACT INPUT / OUTPUT  
**MODEL 461-6000-DC**

#### DESCRIPTION

The Air-Eagle XLT PLUS RF TRANSCEIVER provides two-way wireless control of electronic equipment and apparatus at distances up to 1 mile (\*). This model comes equipped with three dry contact inputs and three relay outputs. This allows the user to not only transmit information out, but receive a confirming signal back that the operation was performed. The Air-Eagle XLT TRX is user-programmable for up seven network frequencies to allow multiple systems to operate simultaneously in the same area.

(\*) - Longer distances can be achieved by using external antennas)

#### APPROVALS

United States (FCC)	MCQ-XBPSX
Canada (IC)	1846A-XBPSX

#### INSTALLATION

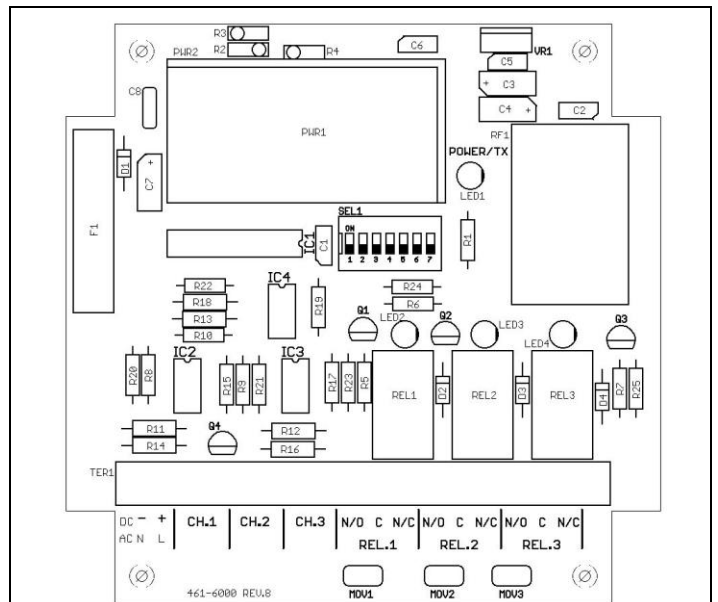
1. Mount the AIR-EAGLE XLT PLUS TRANSCEIVER in a convenient location.
2. Install transmit control and relay wiring to terminal strip.
3. Attach rubber duck antenna or coax from external antenna to connector on side of enclosure.
4. Connect DC power to the proper terminals in your control circuit.

#### PC BOARD SET-UP INFORMATION

TERMINAL STRIP WIRING (TER1)	
Terminal 1	Negative (-) 9-36VDC INPUT
Terminal 2	Positive (+) 9-36VDC INPUT
Terminal 3	CH1 Dry Contact Input (Common)
Terminal 4	CH1 Dry Contact Input
Terminal 5	CH2 Dry Contact Input (Common)
Terminal 6	CH2 Dry Contact Input
Terminal 7	CH3 Dry Contact Input (Common)
Terminal 8	CH3 Dry Contact Input
Terminal 9	CH1 Relay N/O
Terminal 10	CH1 Relay C
Terminal 11	CH1 Relay N/C
Terminal 12	CH2 Relay N/O
Terminal 13	CH2 Relay C
Terminal 14	CH2 Relay N/C
Terminal 15	N/O Relay 3
Terminal 16	C Relay 3
Terminal 17	N/C Relay 3
Terminal 18	Not Used



#### CONTROLS & INDICATORS



POWER/TX  
LED1

Dual color LED. Illuminates red while receiver is booting up; changes to green when boot-up is successful and unit is ready to operate. **If this LED fails to turn green, power unit off for 15-20 seconds, then reapply power.**

CH1 – CH3 Dry  
Contact Inputs

Transmit individual RF codes to the remote transceiver

LED2

Illuminates green while relay 1 is energized

LED3

Illuminates green while relay 2 is energized

LED4

Illuminates green while relay 3 is energized

REL1, REL2, REL3

Three SPDT output control relays

RF1

RF Module that transmits/receives data

# AIR-EAGLE® XLT PLUS

## High Power 900MHz RF Transceiver

### DUAL CONTACT INPUT / OUTPUT

## MODEL 461-6000-DC

### RELAY OPERATION

TX Signal Received	Relay Function
Input 1 Closed	Relay 1 energizes, maintained momentary
Input 2 Closed	Relay 2 energizes, maintained momentary
Input 3 Closed	Relay 3 energizes, maintained momentary

### FREQUENCY & OPTIONS SET-UP

This unit is shipped from the factory with SEL1 switches in the open positions. The safety off-delay on all relays is 5 seconds and the unit is operating on frequency #1. If you wish to change the default setting, follow the instructions below:

- 1) Remove power from unit and remove top cover.
- 2) Select desired safety off-delay time and network frequency using table below.
- 3) Reattach cover and apply power. Programming is now complete.

#### FREQUENCY SELECTION

	Network Frequency	SW1	SW2	SW3
SEL 1 (SW1, 2 & 3):	#1 (default)	OPEN	OPEN	OPEN
	#2	CLOSED	OPEN	OPEN
	#3	OPEN	CLOSED	OPEN
	#4	CLOSED	CLOSED	OPEN
	#5	OPEN	OPEN	CLOSED
	#6	CLOSED	OPEN	CLOSED
	#7	OPEN	CLOSED	CLOSED

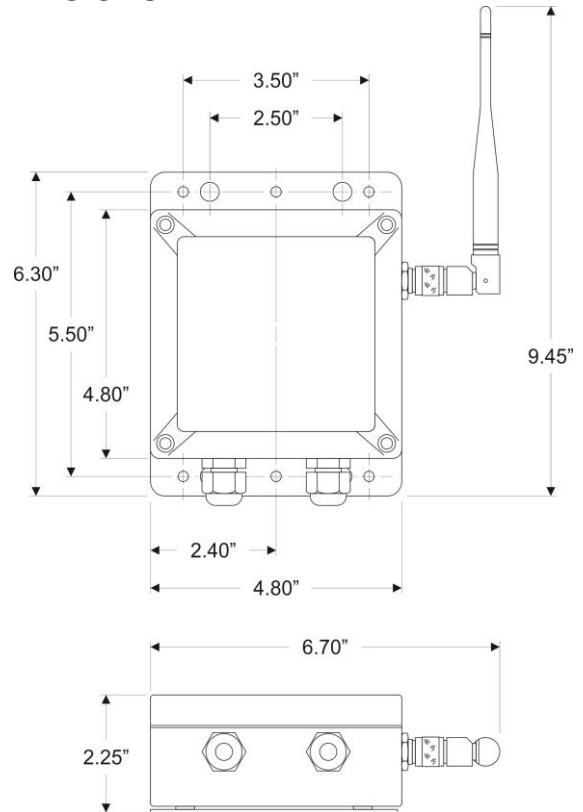
#### SAFETY OFF-DELAY SELECTION

	Off-Delay	SW4	SW5
SEL 1 (SW4 & 5):	5 Seconds (default)	OPEN	OPEN
	30 Seconds	CLOSED	OPEN
	1 Minute	OPEN	CLOSED
	1 ½ Minutes	CLOSED	CLOSED
SEL1 (SW6-7)	Not used on this model		

### SPECIFICATIONS

Power Supply	9-36 VDC, 5 W
Fuse Protected	2 amp
Frequency	900MHz Spread Spectrum
RF Networks	Seven Independent Network Frequencies
RF Output Power	1W
Transceiver Range	Approximately 1 Mile (Up to 10 miles with external antenna - see accessories)
Transmitter Data	Dry Contact Input
Relay Contacts	SPDT 5 amp @120VAC or 30VDC per channel
Enclosure	Polycarbonate, IP66 (NEMA 4)
Operating Temp	-40° F - +185° F

### DIMENSIONS



### REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	461-6002-DC
Standard Antenna (Included):	
900MHz Portable Antenna (For distances up to 1 Mile*)	49-1103
Optional Antennas and Accessories:	
900MHz Omni Directional Antenna (For distances up to 5 miles*)	49-3101
900MHz 13dB Yagi Antenna Long Range Operation (For distances up to 10 miles*)	49-3102
Flex Coax Cable w/Connectors	49-4000-XX (XX = # of Feet)
* = Line of Sight	

### LIMITED WARRANTY STATEMENT

BWI Eagle Inc. warrants the Air-Eagle Remote Control System, if properly used and installed, will be free from defects in material and workmanship for a period of **1 year** after date of purchase. Said warranty to include the repair or replacement of defective equipment. This warranty does not cover damage due to external causes, including accident, problems with electrical power, usage not in accordance with product instructions, misuse, neglect, alteration, repair, improper installation, or improper testing. This limited warranty, and any implied warranties that may exist under state law, apply only to the original purchaser of the equipment, and last only for as long as such purchaser continues to own the equipment. This warranty replaces all other warranties, express or implied including, but not limited to, the implied warranties or merchantability and fitness for a particular purpose. BWI Eagle makes no express warranties beyond those stated here. BWI disclaims without limitation, implied warranties of merchantability and fitness for a particular purpose. Some jurisdictions do not allow the exclusion of implied warranties so this limitation may not apply to you. To obtain warranty service, contact BWI Eagle for a return material authorization. When returning equipment to BWI Eagle, the customer assumes the risk of damage or loss during shipping and is responsible for the shipping costs incurred.