



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

PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT 900 MHz RF Transmitter MODEL 441-1200-BAT

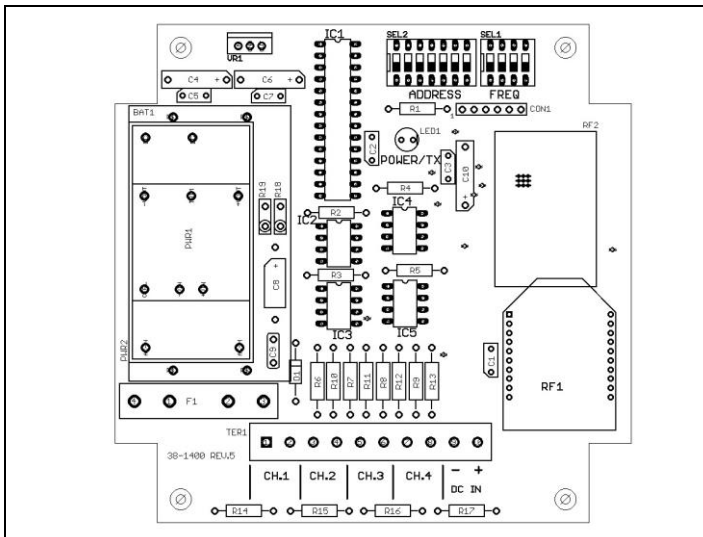
DESCRIPTION

The AIR-EAGLE XLT TX is an R.F. transmitter designed to send a single stop command to any Air-Eagle XLT Receiver. The TX and RX combine to create a long-range radio frequency system that operates hazardous or hard-to-reach electrical apparatus from safe, convenient locations of up to 2500 feet away (longer ranges can be achieved using external antennas). This unit is user-programmable for up eight network frequencies to allow multiple transmitters and receivers to operate simultaneously in the same area without interference. Note: This product is not designed for use in life-saving applications.

INSTALLATION

1. Mount the AIR-EAGLE XLT TRANSMITTER in a convenient location where the operator will have easy access to the stop button.
2. Install Ch. 2-4 wiring to contact input terminal strip if desired.
3. Install the 2 AA Lithium batteries that were provided.
4. Install antenna onto connector on the right side of the enclosure.

TERMINAL STRIP WIRING



Wire as shown based on number of contact inputs

	1	2	3	4	5	6	7	8	9	10
Stop Button Pre-Wired to Input 1										
C Input 2										
Input 2										
C Input 3										
Input 3										
C Input 4										
Input 4										
Not Used										
Not Used										



Dimensions (with mounting plate) 6.3" L x 4.8" W x 4.3" H

CONTROLS & INDICATORS

PWR/TX LED	Illuminates red when transmitting data.
STOP Pushbutton	Transmits CH1 RF "STOP" code to receiver
Inputs 2, 3 and 4	Independently transmit CH2, CH3 and CH4 codes to receiver

SPECIFICATIONS

Power Requirements	3.0 VDC
Battery Type	(2) 1.5V lithium or alkaline each, size AA, to equal 3.0VDC nominal.
Battery Life (Active Usage)	Approximately 3 months
Battery Life (Idle)	Up to 1 Year
Transmit Data Channels	Four Dry Contact Input
RF Output Power	250 mW
Transmit Range	Up to 2500 Feet w/Standard Antenna
<p>Note: Range figures are estimates, based on free-air terrain with limited sources of interference. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting antenna, height of receiving antenna, weather conditions, interference sources in the area, and terrain between receiver and transmitter, including, but not limited to, indoor and outdoor structures such as walls, metal objects, trees, buildings, hills, and mountains</p>	
Transmit Frequency	900MHz Spread Spectrum
RF Networks	Eight Independent Frequencies
Enclosure	Polycarbonate, IP66 (NEMA 4)
Antenna Connection	TNC Female
Operating Temperature	-40° F to +185° F

AIR-EAGLE® XLT

900 MHz RF Transmitter

MODEL 441-1200-BAT

DIGITAL ADDRESS, FREQUENCY & REPEATER MODE SET-UP

The unit is shipped from the factory with all SEL1 and SEL2 switches in the open positions. By default it is operating on Digital Address #1, Frequency #1 and the command transmitted will not be repeated by the receivers. If you wish to transmit on a different address and/or frequency, and/or set the unit to transmit a repeating packet, follow the instructions on the table below.

Note – only change digital address if using with a digitally addressable receiver. Otherwise, the digital address must be kept at the default of Digital Address “1”.

- 1) Remove power from unit and remove top cover.
- 2) Select desired digital address, network frequency and repeater mode using tables below.
- 3) Reattach cover and apply power. Programming is now complete.

DIGITAL ADDRESS SET-UP

SEL2 (SW1 – 4)

	Digital Address	SW1	SW2	SW3	SW4
SEL2 (SW1-4)	1 (default)	OPEN	OPEN	OPEN	OPEN
	2	CLOSED	OPEN	OPEN	OPEN
	3	OPEN	CLOSED	OPEN	OPEN
	4	CLOSED	CLOSED	OPEN	OPEN
	5	OPEN	OPEN	CLOSED	OPEN
	6	CLOSED	OPEN	CLOSED	OPEN
	7	OPEN	CLOSED	CLOSED	OPEN
	8	CLOSED	CLOSED	CLOSED	OPEN
	9	OPEN	OPEN	OPEN	CLOSED
	10	CLOSED	OPEN	OPEN	CLOSED
	11	OPEN	CLOSED	OPEN	CLOSED
	12	CLOSED	CLOSED	OPEN	CLOSED
	13	OPEN	OPEN	CLOSED	CLOSED
	14	CLOSED	OPEN	CLOSED	CLOSED
	15	OPEN	CLOSED	CLOSED	CLOSED
	16	CLOSED	CLOSED	CLOSED	CLOSED

SEL2 (SW5-7) – Leave in OPEN position!!

FREQUENCY SET-UP

SEL1 (SW1-3)

	Network Frequency	SW1	SW2	SW3
SEL1 (SW1-3)	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
	8	CLOSED	CLOSED	CLOSED

REPEATER MODE

SEL1 SWITCH NUMBER	OPEN	CLOSED
SW4	Repeater Mode OFF (default)	Repeater Mode ON

APPROVALS

United States (FCC)	MCQ-XB900HP
Canada (IC)	1846A-XB900HP

ACCESSORIES

Standard Antenna (Included):	
900MHz TNC “Rubber Duck” Antenna	49-1103
Mobile/Base Antennas – Used to help achieve max range in both non line of sight and line of sight applications. - Contact BWI Eagle for recommendations	
900MHz Thru-Hole Mount Mobile Antenna	49-2101
900MHz Magnet Mount Mobile Antenna	49-2102
900MHz Omni Directional Base Antenna	49-3101
900MHz Yagi Directional Base Antenna	49-3102
High Quality Coax Cables – Used to connect external high gain antennas to control unit	
Flex Coax Cable w/Connectors – Available in 5', 15', 25', 30', 40', 60', 80', 100' Lengths	49-4000-XX (XX = # of Feet)
Bulkhead Extensions – Used to provide an external antenna connection when mounting control unit inside another enclosure	
TNC Male to TNC Bulkhead Cable Assembly – Available in 2', 4', 7' Lengths	49-5004-X-ISO (X = # of Feet)

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 of 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.

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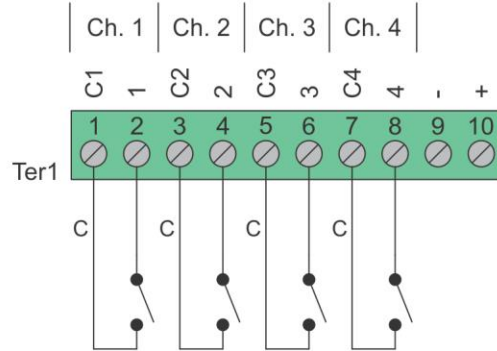


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DRY CONTACT INPUT WIRING 4-Input Transmitter

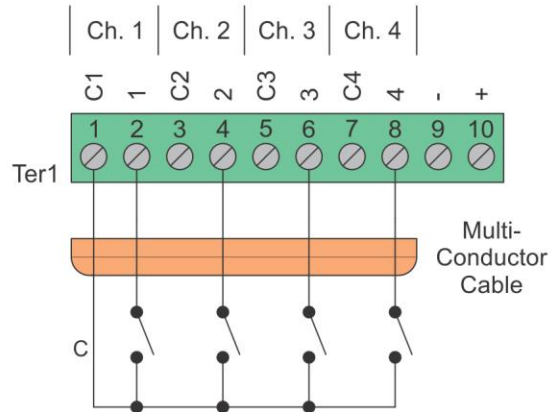
Standard wiring of a dry contact input transmitter

Shorting together the contacts of the respective channel will cause it to transmit. This can be done with any type of manual or automatic switch.



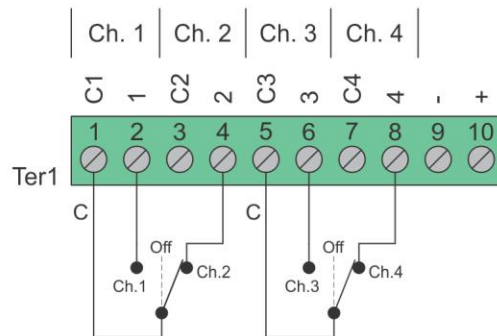
Standard Wiring for Common Ground Applications

Because each channel shares a common (C) terminal, inputs can be wired as shown to allow for fewer conductors to be run to the transmitter.



SPDT Switches

The common (C) terminal of the switch only needs to be connected to one of the channels ground terminal. In this configuration two channels would be transmitting all the time. A switch with a center "off" position would allow transmitting to stop. In this example channels 2 and 4 are transmitting.



Wiring configurations shown here are examples. The wiring for your application may differ.
Call BWI Eagle for assistance or consult an electrician.