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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT
900 MHz RF Transmitter
MODEL 44-1400-DCI-DC

DESCRIPTION

The AIR-EAGLE XLT TX IS an R.F. transmitter capable of sending four 5-24VDC input commands to an Air-Eagle XLT Receiver located up to 2500 feet away (longer ranges can be achieved with external high gain antennas) Any number of transmitters and receivers can be combined to create a medium range radio frequency system that operates hazardous or hard-to-reach electrical apparatus from safe, convenient locations. Seven user-selectable frequencies and sixteen user-selectable digital addresses allow multiple systems to operate simultaneously in the same area without interference.

APPROVALS

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

INSTALLATION

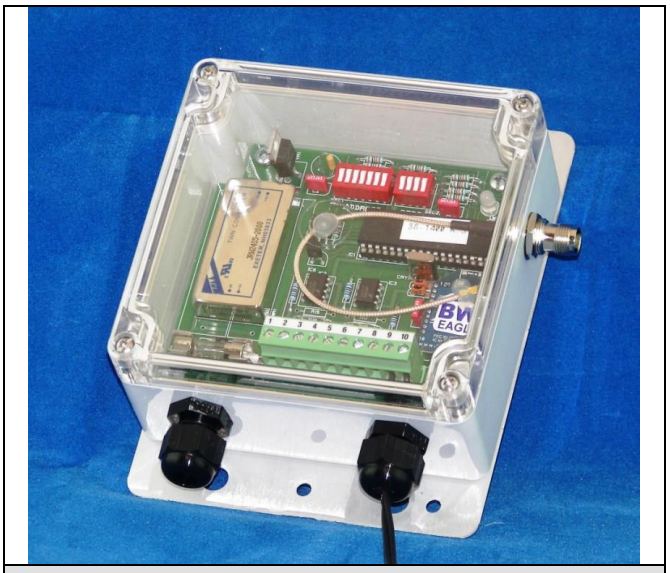
1. Mount the AIR-EAGLE XLT TRANSMITTER in a convenient location.
2. Install wiring to input terminal strip (Note – the terminal block header lifts up off the base for easy wiring)
3. Attach supplied antenna to connector on right side of unit.
4. Connect DC power to the proper terminals in your control circuit

TERMINAL STRIP WIRING

Wire as shown based on number of contact inputs									
1	2	3	4	5	6	7	8	9	10
Ch.1 Input 5-24VDC (-)	Ch.1 Input 5-24VDC (+)	Ch.2 Input 5-24VDC (-)	Ch.2 Input 5-24VDC (+)	Ch.3 Input 5-24VDC (-)	Ch.3 Input 5-24VDC (+)	Ch.4 Input 5-24VDC (-)	Ch.4 Input 5-24VDC (+)	(-) 9-36VDC input	(+) 9-36VDC input

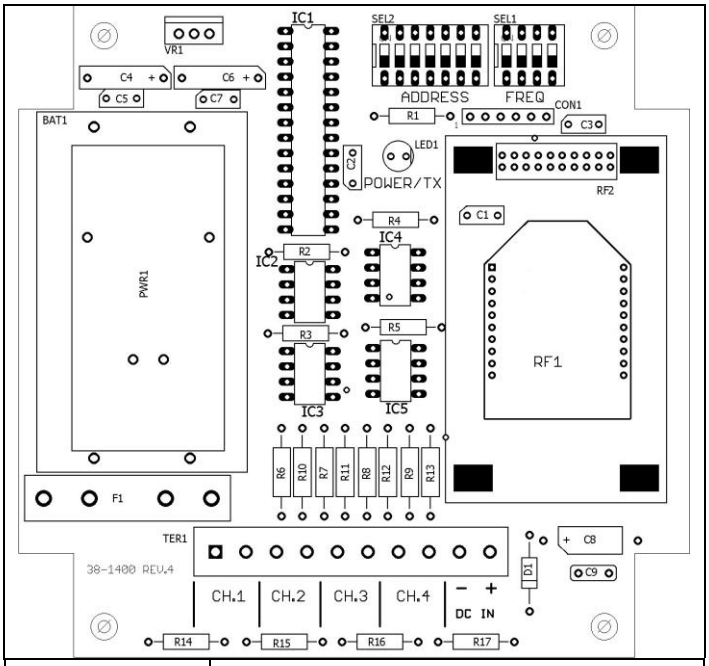
GENERAL OPERATION

Transmission occurs when 5-24VDC is applied to the input. Transmission continues while 15-24VDC is present and ceases when 5-24VDC is removed.



Dimensions (with mounting plate) 6.3" L x 4.8" W x 2.3" H

CONTROLS & INDICATORS



TX LED	Illuminates green when power is applied. Changes to red while any contact input is closed, and unit is transmitting.
Voltage Inputs	Transmits individual RF codes to the receiver
SEL2	Dip switch bank for digital address selection
SEL1	Dip switch bank for frequency selection

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DIGITAL ADDRESS & FREQUENCY SET-UP

This transmitter is factory programmed to Digital Address "1" and Frequency "1". These settings can be changed by the user in any combination ***but must match the receiver that is set up to communicate with this transmitter.*** **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.
2) Remove top cover.
3) Select desired digital address and/or network frequency using table below.
4) Reattach cover and apply power.
5) Programming is now complete.

DIGITAL ADDRESS SET-UP

SEL2 (SW1 – 4)

SEL2 (SW1-4) Digital Address	SW1	SW2	SW3	SW4
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)

SEL1 (SW1-3) Network Frequency	SW1	SW2	SW3
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

SEL1 (SW4) – Not used on this model

SPECIFICATIONS

DC Input	9 - 36 VDC @ 10 Watts
Transmit Data	Four 5-24VDC Inputs
Transmit Frequency	900MHz Spread Spectrum
RF Output Power	250 mW
Transmit Range	Approximately 2500 Feet w/standard antenna
Transmitter Channels	7 Independent Network Frequencies
Enclosure	Polycarbonate, IP66 (NEMA 4)
Operating Temperature	-40° F to +185° F

REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	44-1402-DCI-DC
Standard Antenna (Included):	
900MHz Portable Antenna (For distances up to 2500 feet*)	49-1103
Optional Antennas and Accessories:	
900MHz Omni Directional Antenna (For distances up to 2 miles*)	49-3101
900MHz 13dB Yagi Antenna Long Range Operation (For distances up to 4 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.

DOCUMENT REV. DATE: 1/17/19 / PRODUCT REV.4

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Dry Contact Input Wiring - (Four Input Model Shown)

Figure 1 shows 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.

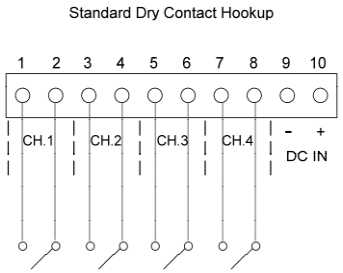

Figure 1

Figure 2 shows how the circuit board is laid out. The odd numbered terminals are all at DC Ground potential. **NOTE**: On 8 channel transmitters, channels 5 through 8 are configured the same way.

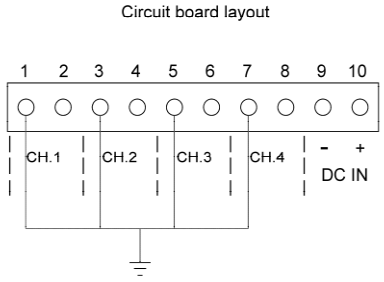

Figure 2

Because each channel shares a common terminal, you can wire the inputs as in Figure 3, allowing for fewer conductors to have to be run to the transmitter

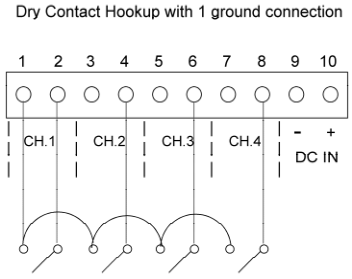

Figure 3

Figure 4 shows 2 SPDT switches wired to all 4 channels. Note that the common terminal of the switch only needs to be connected to one of the channels ground terminals. In this configuration you would be transmitting 2 channels all the time. A switch with a center “off” position would allow you to quit transmitting.

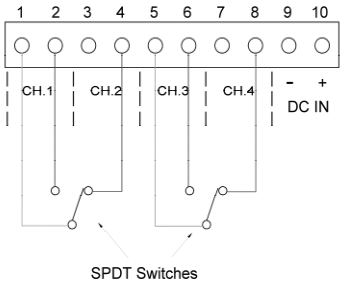

Figure 4