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# PRODUCT INFORMATION BULLETIN

## AIR-EAGLE® XLT 900 MHz RF Transmitter MODEL 441AN-1000-DC

### DESCRIPTION

The AIR-EAGLE XLT, MODEL 441AN-1000-DC is an RF transmitter capable of sending two 4-20mA or 0-5VDC inputs to a remote receiver. Transmitters and receiver can be combined in any quantity to create a long range radio frequency system that monitors electrical apparatus from safe, convenient locations of up to 2500 feet away. (Or longer with optional antennas) This unit is user-programmable for up to seven network frequencies to allow multiple systems to operate simultaneously in the same area without interference.

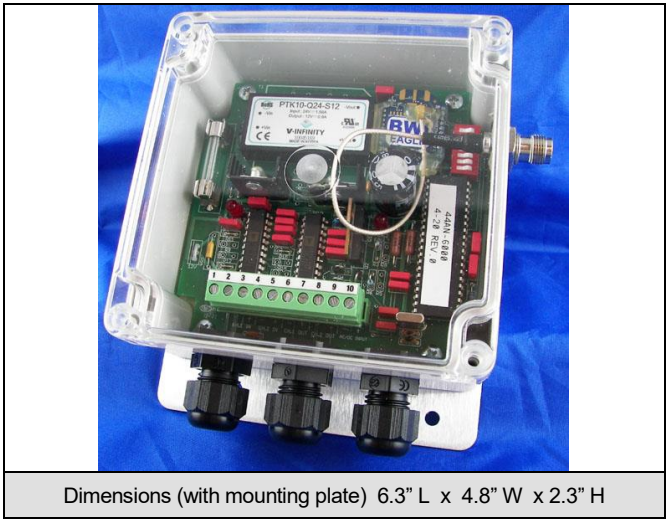
### INSTALLATION

1. Mount the AIR-EAGLE XLT TRANSMITTER in a convenient location
2. Install wiring to input terminal strip.
3. Install antenna onto TNC connector on right side of unit.
4. Connect DC power to the proper terminals in your control circuit.

### INPUT OPTIONS & FREQUENCY SET-UP

This transmitter is factory set for 4-20mA input, 4mA link loss and to operate on frequency #1. If you wish to change the default settings, follow the instructions using the table below:

<ol style="list-style-type: none"> <li>1) Remove power from unit</li> <li>2) Remove top cover.</li> <li>3) Select desired input options and/or frequency using table below.</li> <li>4) Reattach cover and apply power.</li> <li>5) Programming is now complete.</li> </ol>				
INPUT CONFIGURATION				
SEL1 SWITCH NUMBER	OPEN	CLOSED		
SW1	4-20mA Input (default)	0-5VDC Input		
SW2	Link Loss 4mA (default)	Link Loss 20mA		
SW3 & 4	Reserved for future use			
FREQUENCY SET-UP				
SEL1 (SW5-7)	Network Frequency	SW5	SW6	SW7
	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

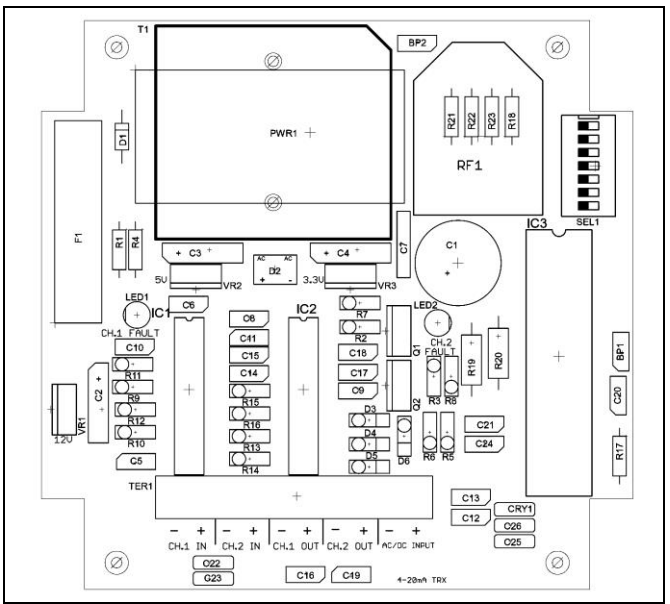


Dimensions (with mounting plate) 6.3" L x 4.8" W x 2.3" H

### TERMINAL STRIP WIRING

1	2	3	4	5	6	7	8	9	10
Input 1 4-20mA (-)	Input 1 4-20mA (+)	Input 2 4-20mA (-)	Input 2 4-20mA (+)	Note Used	Note Used	Note Used	Note Used	(-) 9-36VDC input	(+) 9-36VDC input

### PCB LAYOUT



# AIR-EAGLE® XLT

900 MHz RF Transmitter

**MODEL 441AN-1000-DC**

## APPROVALS

United States (FCC)	MCQ-XBPS3B
Canada (IC)	1846A-XBPS3B

## SPECIFICATIONS

Inputs	Two 4-20mA (or) 0-5VDC
Outputs	Not Used
Safety Timer	15 seconds
Update Time	4 samples / second
DC Input	9 – 36 VDC @ 10 Watts Fuse Protected – 1A Slo-Blo
Enclosure	Polycarbonate NEMA 4 (IP66)
Transmit Frequency	900MHz Spread Spectrum
Transmitter Channels	7 Independent Network Frequencies
RF Output Power	250 mW
Transmit Range	Approximately 2500 Feet w/standard antenna
Operating Temperature	-40° F to +185° F

## REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	441AN-1002-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

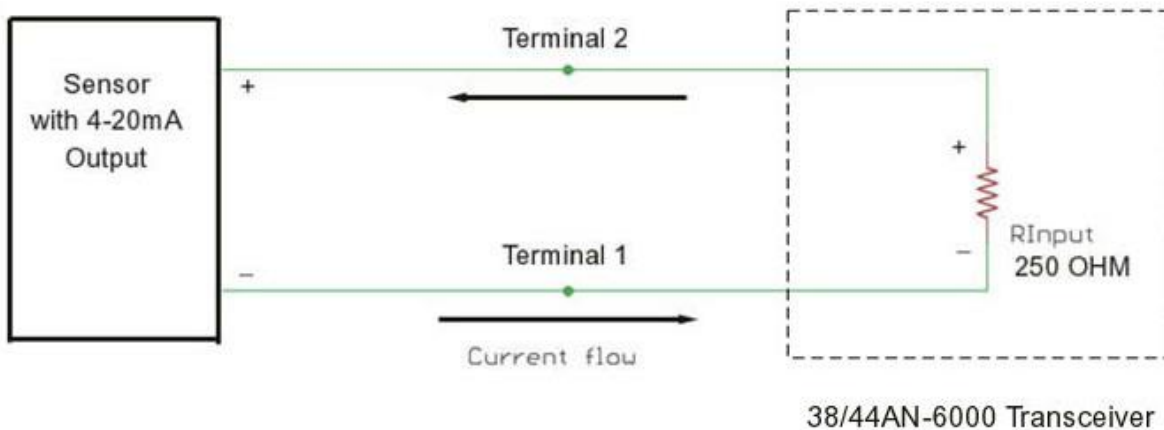
BWI Eagle Inc. warrants the Air-Eagle Remote Control System, if properly used and installed, will be free from defects in material and workmanship for a period of 1 year after date of purchase. Said warranty to include the repair or replacement of defective equipment. This warranty does not cover damage 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.

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## 441AN-1000-DC 4-20mA Installation



The above diagram shows a 4-20mA sensor hooked to channel 1 input. The 250 Ohm input resistor will drop a voltage of 1 Volt at 4mA and 5 Volts at 20mA. The sensor may be of any type and voltage that has a 4-20mA output. Even if the sensor runs on a voltage higher than 5 volts the current is still maintained between 4 and 20 milliamps so that the voltage drop on the resistor is always between 1 and 5 volts. Remaining voltage is dropped internally in the sensor. Loop powered sensors are not able to be used on this particular unit.