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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT 900 MHz RF Transmitter MODEL 441AN-1000-120VAC

DESCRIPTION

The AIR-EAGLE XLT, MODEL 441AN-1000-120VAC 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 eight network frequencies to allow multiple systems to operate simultaneously in the same area without interference.

INSTALLATION

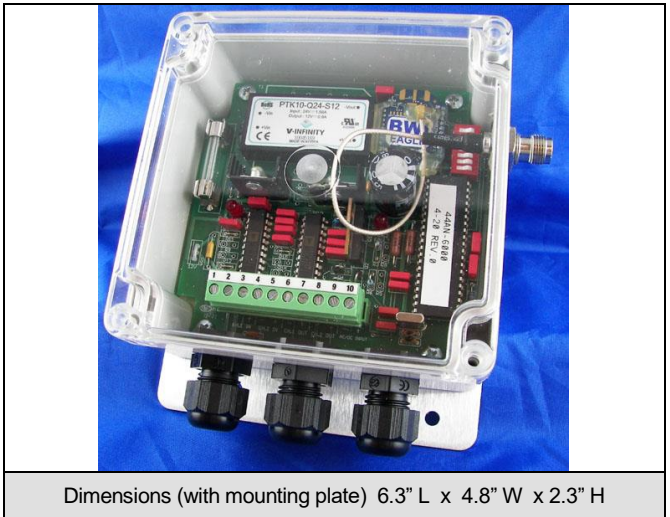
1. Mount the AIR-EAGLE XLT TRANSMITTER in a convenient location
2. Install wiring to input terminal strip.
3. Install antenna onto TNC connector on side of unit.
4. Plug supplied AC wall plug adapter into 110VAC outlet.

INPUT OPTIONS & FREQUENCY SET-UP

This transmitter is factory set for 4-20mA input, 0.262 transmit speed, and to operate on frequency #1. If you wish to change the default settings, follow the instructions using the table below:

- 1) Remove power from unit
- 2) Remove top cover.
- 3) Select desired input options and/or frequency using table below.
- 4) Reattach cover and apply power.
- 5) Programming is now complete.

INPUT CONFIGURATION				
SEL1 SWITCH NUMBER	OPEN	CLOSED		
SW1	4-20mA Input (default)	0-5VDC Input		
SW2	Transmit Speed 0.262 Seconds (default)	Transmit Speed 0.131 Seconds		
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
8	CLOSED	CLOSED	CLOSED	

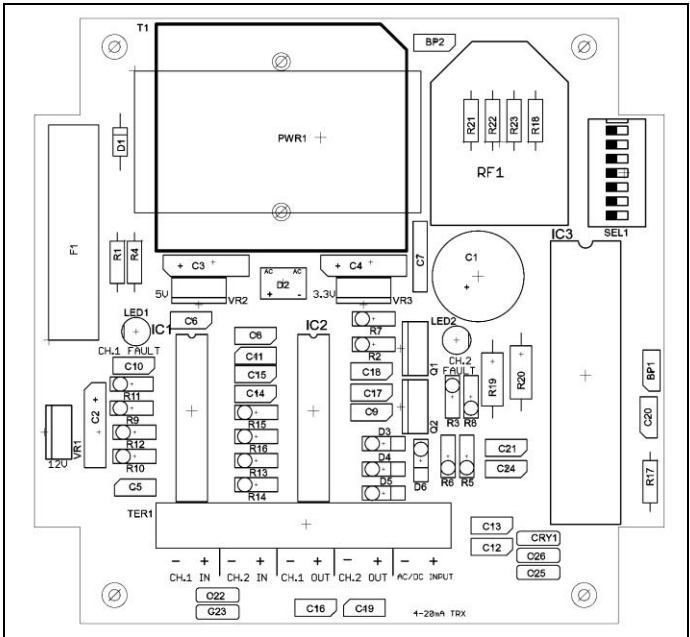


Dimensions (with mounting plate) 6.3" L x 4.8" W x 2.3" H

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 (+)	Not Used	Not Used	Not Used	Not Used	(-) 12VDC input from included AC wall adapter	(+) 12VDC input from included AC wall adapter

PCB LAYOUT



AIR-EAGLE® XLT

900 MHz RF Transmitter

MODEL 441AN-1000-120VAC

APPROVALS

United States (FCC)	MCQ-XB900HP
Canada (IC)	1846A-XB900HP
Australia	RCM
Brazil	ANATEL 3727-12-1209

SPECIFICATIONS

Inputs	Two 4-20mA (or) 0-5VDC
Outputs	Not used
Safety Timer	15 seconds
Update Time	4 samples / second
AC Input	100-240 VAC, 16 W, 50/60 Hz from supplied wall adapter
Enclosure	Polycarbonate NEMA 4 (IP66)
Transmit Frequency	900MHz Spread Spectrum
RF Networks	8 Independent Network Frequencies
RF Output Power	250 mW
Transmit Range	Up to 2500 Feet w/Standard Antenna
<small>Note: Max 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</small>	
Operating Temperature	-40° F to +185° F

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

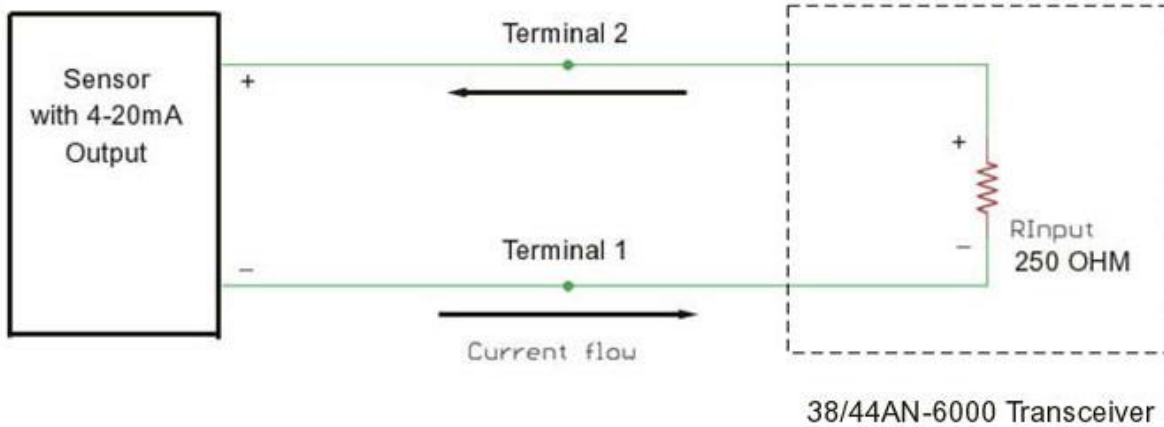
BWI Eagle Inc. warrants the Air-Eagle Remote Control System, if properly used and installed, will be free from defects in material and workmanship for a period of 1 year after date of purchase. Said warranty to include the repair or replacement of defective equipment. This warranty does not cover damage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

DOCUMENT DATE: 07/23/2021 / PRODUCT REV. 3



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441AN-1000-120VAC 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.