

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 441-10100-120I-AC

#### **DESCRIPTION**

The AIR-EAGLE XLT TX is an R.F. transmitter capable of sending a single 120VAC input command to an Air-Eagle XLT Receiver located up to 2500 feet away (longer ranges can be achieved using external 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. Eight user-selectable frequencies allow multiple systems to operate simultaneously in the same area without interference.

#### **APPROVALS**

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

#### **INSTALLATION**

DISCONNECT AC Power from all equipment before installation.

- 1. Mount the AIR-EAGLE XLT TRANSMITTER in a convenient location.
- 2. Install wiring to input terminal strip
- 3. Make desired channel code, repeater mode and frequency selections using instructions on page 2.
- 4. Install antenna onto connector located on the top on the enclosure.
- 5. Connect supplied power input cable to your external power source.

#### **TERMINAL STRIP WIRING**

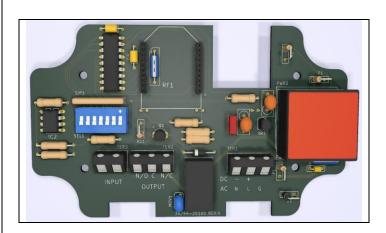
TER 3 VOLTAGE INPUT		REL	TER 2 ELAY OUTPUT		TER 1 AC/DC POWER INPUT	
1	120VAC N	1	Not Used	1	100-250 VAC	
2	120VAC H	2	Not Used	2	100-250 VAC	
		3	Not Used	3	Ground	

#### **GENERAL OPERATION**

When 120VAC appears on the input the unit transmits to energize relay 1 (or another relay as selected by the channel code transmitted) in any receiver within transmit range. The signal transmits continuously as long as the voltage is present and ceases when voltage is removed.



#### **CONTROLS AND INDICATORS**



Power – LED1	Illuminates green when unit is powered
TX – LED2	Illuminates red when unit is transmitting
Relay – LED3	Not used on this model
RF1	RF module that sends data to the remote receiver
SEL1	Seven dip switches for selecting options and network frequency
TER3	120VAC input
TER2	Relay output
TER1	Power Input

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### CHANNEL CODE, REPEATER MODE & FREQUENCY SET-UP

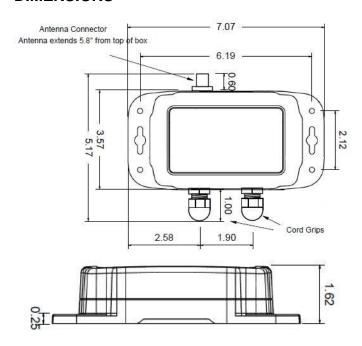
The unit is shipped from the factory with all SEL1 switches in the open positions. By default, it is transmitting Channel #1 code, the command transmitted will not be repeated by the receivers, and it is operating on Frequency #1. If you wish to transmit a different channel code, set the unit to transmit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

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

ວ)	Programming is now complete.					
CHANNEL SELECTION SET-UP						
	Channel Code To I Transmitte	-	SW1	SW2		SW3
-3)	1 (defau	lt)	OPEN	OPEN		OPEN
(SW1-3)	2		CLOSED	OPEN		OPEN
<u>(N</u>	3		OPEN	CLOSED		OPEN
SEL1	4		CLOSED	CLOSED		OPEN
	5		OPEN	OPEN		CLOSED
0)	6		CLOSED	OPEN		CLOSED
	7		OPEN	CLOSED		CLOSED
	8		CLOSED	CLOSED		CLOSED
REPEATER MODE						
SI	SEL1 WITCH JMBER	OPEN CLOSED		CLOSED		

SW4	Repeater Mod	e OFF (default	Repeater	Repeater Mode ON		
FREQUENCY SET-UP						
	Network Frequency	SW5	SW6	SW7		
	1 (default)	OPEN	OPEN	OPEN		
	2	CLOSED	OPEN	OPEN		
SEL1	3	OPEN	CLOSED	OPEN		
(SW5-7)	4	CLOSED	CLOSED	OPEN		
	5	OPEN	OPEN	CLOSED		
	6	CLOSED	OPEN	CLOSED		
	7	OPEN	CLOSED	CLOSED		
	8	CLOSED	CLOSED	CLOSED		

#### **DIMENSIONS**



#### **SPECIFICATIONS**

AC Input	100-250 VAC, 5 W, 50/60 Hz	
Transmitter Frequency	900 MHz Spread Spectrum	
RF Output Power	250 mW	
Transmit Range	Up to 2500 Feet w/Standard Antenna	
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		
Transmit Data	120VAC Input	
RF Networks	Eight Independent Frequencies	
Antenna Connection	TNC Female Connector	
Operating Temperature	-40° F to +185° F	
Enclosure	Polycarbonate NEMA 4, 12, 13 – IP66	
Weight	Approx 2 lbs.	

#### **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					
	000-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-IS (X = # of Feet					

# AIR-EAGLE® XLT 900 MHz RF Transmitter MODEL 441-10100-120I-AC

#### 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 DATE: 07/22/2021 / PRODUCT REV. 6



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