BWI EAGLE

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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT
900 MHz RF Transmitter
MODEL 441-HH-4-VBR

DESCRIPTION

The AIR-EAGLE XLTTX IS a handheld R.F. transmitter capable of sending up to four unique digital commands to any Air-Eagle XLT Receiver. This model is equipped with a vibrating feedback that confirms to the user that the transmitted signal has reached the receiver. Any number of transmitters and receivers can be combined 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. Eight user-programmable frequencies allow multiple transmitters and receivers to operate simultaneously in the same area without interference.

INITIAL OPERATION SET-UP

This transmitter comes ready to operate, with batteries installed, and factory programmed to Frequency #1. No setup is necessary unless you wish to change frequency or transmit mode. (See FREQUENCY PROGRAMMING AND TRANSMITTING MODE SETUP on pages 2).

SPECIFICATIONS

Keypad	Durable Sealed Membrane Keypad – Eliminates Dust, Dirt and Moisture Failures	
Enclosure	ABS UL94 HB	Enclosure with ring is rated IP54 *Not Waterproof
Protective Ring	SEBS (TPE)	
Power Requirements	3.0 VDC	
Battery Type	(2) 1.5V lithium each, size AAA, to equal 3.0VDC nominal.	
*Note: Current frequency settings are maintained in flash memory during battery replacement. No reprogramming of frequency settings is necessary!		
Battery Life (Active Usage)	Up to 3 months	
Battery Life (Sleep Mode)	Up to 6 months	
Transmit Frequency	900 MHz Spread Spectrum	
RF Output Power	250 mW	
RF Networks	Eight Independent Frequencies	
Transmit Range	Up to 2500 Feet	
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.		
Operating Temperature	-40º F to +185º F	

Dimensions – 4.25" L x 2.68" W x .91" D
(note: belt clip adds .43" to depth)

CONTROLS & INDICATORS

TX LED	Illuminates **RED** when transmitting in standard mode or **GREEN** in repeater mode. When this LED blinks **RED** during or following a transmission, the battery needs to be replaced. See Note #1
Note #1 – The low battery notification signals have been improved to provide more noticeable indications and to safely disable communications BEFORE a low battery condition can corrupt internal memory causing device failure. When a low battery is first detected, the TX LED will blink several times after all buttons are released. If it is possible to replace the batteries now, please do so. If not, the operator has approximately 15 more button activations. During this time, when a button is depressed and held, the TX LED will blink SLOWLY. The slow blinking will continue several more times after all buttons are released. Transmissions are still being sent to the receiver during this time. When a button is depressed and the TX LED is RAPIDLY blinking, the RF output is disabled and NO signal will reach the receiver. The batteries MUST NOW BE REPLACED to resume normal functions.	
Pushbuttons 1 thru 4	Transmits individual button RF codes to the receiver
Vibrate Alert	Vibration confirming that signal has been transmitted successfully

APPROVALS

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

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FREQUENCY PROGRAMMING

Please read through these instructions completely before beginning programming procedure!

At any time, you can check the current frequency setting by depressing Buttons 3 & 4 simultaneously, for approximately 5 seconds, until the TX LED is illuminated **RED**. *Then release all buttons and wait ten seconds for the LED to turn off. The TX LED will blink* **RED** *one, two, three or four times for Frequencies 1 thru 4, or will blink* **GREEN** *one, two, three or four times for Frequencies 5 thru 8 accordingly. See table below for clarification.*

LED Flashes:	Indicates Unit is Operating On:
RED – one time	**Frequency 1**
RED – two times	**Frequency 2**
RED – three times	**Frequency 3**
RED – four times	**Frequency 4**
GREEN – one time	**Frequency 5**
GREEN – two times	**Frequency 6**
GREEN – three times	**Frequency 7**
GREEN – four times	**Frequency 8**

To change the setting, follow these steps:

To select from Frequencies 1 thru 4:

1. Depress Buttons 3 & 4 simultaneously until the TX LED is illuminated **RED**. (Approximately 5 seconds)

2. Release Buttons 3 & 4, then while the TX LED is still illuminated **RED**, depress any of the buttons 1 through 4 to select frequency 1 through 4. The LED will blink according to which frequency has been selected. If no button is pressed for 10 seconds, then the transmitter will blink back the current frequency according to the chart above.

To select from Frequencies 5 thru 8:

1. Depress Buttons 3 & 4 simultaneously until the TX LED is illuminated **GREEN**. (Approximately 8 seconds)

2. Release Buttons 3 & 4, then while the TX LED is still illuminated **GREEN**, depress any of the buttons 1 through 3 to select frequency 5 through 7. The LED will blink according to which frequency has been selected. If no button is pressed for 10 seconds, then the transmitter will blink back the current frequency according to the chart above.

Programming is now complete, and the transmitter is active for normal operation.

You may repeat the above procedure if you wish to change the frequency at any time. See note* in SPECIFICATIONS.

TRANSMITTING MODE SETUP

The transmitter can be set to be in a standard transmission mode or in a repeater mode where all receivers will repeat the transmission.

To select transmission mode:

1. Remove one battery from the transmitter
2. Press and hold button 4 while inserting the battery
3. Continue holding button 4 for 10 seconds until the LED starts flashing **GREEN**/**RED** quickly.
4. Press button 1 for standard mode or button 2 for repeating mode.
5. LED will turn **RED** if standard mode selected or **GREEN** if repeater mode selected.
6. If no button is pressed for 10 seconds, the LED will illuminate to show the current transmission mode.

Once the transmission mode has been selected, the LED will continue to illuminate **RED** (standard mode) or **GREEN** (repeater mode) during all future transmissions.

NOTES ON TRANSMISSION MODE

The standard transmission mode is best for situations where quick button response is needed. This type of transmission is typically used when you'll be watching what you're controlling, so repeating is not necessary.

For repeating mode there is a short delay added to the button commands to allow the system to repeat between multiple receivers without collision. This type of system is usually something where many units spread out over a large area need to be controlled simultaneously and response speed isn't a priority.

Both types of transmission can be used simultaneously in the same system although repeating transmissions could cause some lag in the standard transmissions.

LIMITED WARRANTY STATEMENT

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