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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT
900 MHz RF Transmitter
MODEL 441U-HH-9

DESCRIPTION

The AIR-EAGLE XLT TX is a handheld rechargeable** R.F. transmitter capable of sending up to 16 unique digital commands to an Air-Eagle XLT Receiver located up to 2500 feet away. Any number of transmitters and receivers can be combined to create a medium range radio frequency system that operates hazardous or hard-to-reach equipment from safe, convenient locations. Seven user-programmable frequencies allow multiple systems to operate simultaneously in the same area without interference. This transmitter will automatically go into "sleep" mode when no buttons are being depressed on the unit to dramatically extend battery life.

INITIAL SET-UP

This transmitter comes ready to operate and factory programmed to Frequency #1. No setup is necessary unless you wish to change frequency.

For example, if you are setting up this transmitter to use with an existing system that is operating on Frequency #1, no change in this setting is necessary. However, if you wish to operate this unit with a receiver on another network, follow the programming procedure on the next page to change the frequency setting appropriately. Charging of the battery can be done by plugging in a micro USB connector into the side port. The LED will blink RED while charging and blink GREEN when fully charged.

GENERAL OPERATION

This transmitter sends up to 16 independent commands. Each button sends an RF Code for that channel. Button 1 transmits channel 1 commands, button 2 transmits channel 2 commands etc. To send commands 9 thru 16, the P/Shift button must be used. As noted under CONTROLS & INDICATORS, the P/Shift button serves three purposes. As the "P" button, it allows you to program the transmitter to operate on a different frequency and/or digital address. As the "Shift" button, it allows you to send commands 9 thru 16 to the receiver.

To use as the "P" button, you must press and hold the button to enter programming mode. (See FREQUENCY & ADDRESS PROGRAMMING sections for more details).

To use as the "Shift" button, press the P/Shift button momentarily. The TX LED will begin to flash rapidly indicating you're in the Shift mode. While in shift mode pressing buttons 1 thru 8 transmit the higher numbered code for that button. The transmitter will stay in the Shift mode as long as buttons are being depressed within 10 seconds of one another. During this time, the TX LED gives visual confirmation that you're in Shift mode by continuously flashing GREEN/RED rapidly. After 10 seconds has elapsed with no buttons depressed, the transmitter will revert back to standard mode and the TX LED will extinguish. If, while in Shift mode, you wish to transmit a button 1 thru 8 command and don't want to wait for the Shift mode to time out, you can simply press the P/Shift button momentarily to revert back to the standard mode.

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Dimensions – 6.71" H x 3.27" W x 1.32" D

CONTROLS & INDICATORS

TX LED	LED illuminates "**RED**" continuously while button is depressed and unit is transmitting. When this LED blinks during a transmission, the battery needs to be recharged.
Keypad Pushbuttons 1 thru 8	Transmit CH.1 thru 8 individual button RF codes to the receiver
Pushbutton P/Shift	The P/Shift button performs three functions: 1. If button is depressed momentarily and another button is then pressed within 10 seconds, the higher code for that button is transmitted. This allows for transmission of pushbutton codes 9 thru 16. 2. If button is depressed for longer than 5 seconds, the transmitter will enter "programming" mode. See PROGRAMMING section. 3. See "**Battery Charge Status**" for using P/shift to see battery level.
Keypad Pushbuttons 9 thru 16	Transmit CH. 9 thru 16 individual button RF codes to the receiver

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 the P/Shift button, for approximately 5 seconds, until the TX LED is illuminated "**RED**". Then release the P/Shift button and watch until the TX LED begins to blink. 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

To change the FREQUENCY setting, follow these steps:

To select from Frequencies 1 thru 8:

1. Depress the P/Shift button until the TX LED is illuminated "**RED**". (Approximately 5 seconds)
2. Release the P/Shift button, then while the TX LED is still illuminated "**RED**", depress button #1 to select "Frequency 1" or button #2 to select "Frequency 2" etc. If the transmit LED goes out before you have selected a network, no settings will have changed, ***and*** the LED will blink corresponding to the frequency that the TX is currently set to. You must then begin again at step 1 if you wish to change the current setting.
3. The TX LED will blink to confirm that your frequency selection has been accepted, and then will go out. For instance, if you have selected Frequency #1, the TX LED will blink "**RED**" *once* to confirm. If you have selected Frequency #6, the TX LED blinks "**GREEN**" two *times* to confirm.

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

BATTERY CHARGE STATUS

Press and hold the P/shift button and then press the 1 button. Release both buttons and the LED will blink GREEN quickly 5 times (**NOTE: Don't hold the P/shift button for more than 5 seconds)**.

After a short pause the LED will blink back the charge level as follows:

LED Flashes	Battery Level
GREEN – Four Times	76 – 100%
GREEN – Three Times	51 – 75%
GREEN – Two Times	26 – 50%
RED – One Time	0 – 25%

If the battery level goes below 10% the TX LED will blink RED while a transmit button is being held and will blink red 10 times after a button is released.

REPEATER MODE

Hold the P/Shift button for 5 seconds. The LED will turn RED for frequency programming. Keep holding for 3 more seconds and the LED will start blinking GREEN. At this point you can press either button 1 for standard mode or button 2 for repeater mode. If button 1 is pressed the LED will turn RED then extinguish. If button 2 is pressed the LED will turn GREEN then extinguish. If no button is pressed for 10 seconds the LED will extinguish then blink back the mode that is set. It will blink RED for standard mode and GREEN for repeater mode.

Repeater mode transmits at a slower rate to allow receivers in the area to repeat the transmissions. This allows the signal to propagate over a wide area if many receivers are in use. The button OFF codes are slightly delayed in repeater mode so as not to flood the network too quickly. This slows down relay response in repeater mode. Use standard mode for quicker response when no repeating is necessary.

NOTE: Always use standard mode if only one receiver is in use or multiple receivers are all within the transmission range.

SPECIFICATIONS

Keypad	Durable Sealed Microswitch Keypad – Eliminates Dust, Dirt and Moisture Failures
Enclosure	ASA/Polycarb Blend – IP54 – *Not Water Proof!*
Power Requirements	Charging cable (included) Micro USB connector to USB A type – 5 volts 1 amp
Battery Type	Internal Sealed Lithium Rechargeable. Capacity 3.7V 2000mAh
Battery Life (Active Usage)	Up to 2 Weeks
Battery Life (Sleep Mode)	Approximately 45 Days
Battery Recharge Time	Approximately 3 to 4 Hours
Transmit Frequency	900 MHz Spread Spectrum
RF Output Power	250 mW
Transmit Channels	Seven Independent Network Frequencies
Transmit Range	Up to 2500 Feet (Line of Sight)
Note: 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	-40° F to +185° F

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 warranty also does not cover water damage to any handheld transmitter. 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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