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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT PLUS 900 MHz RF Transmitter MODEL 461-HHEB-4

DESCRIPTION

The AIR-EAGLE XLT PLUS TX is a handheld R.F. transmitter capable of sending unique digital commands to an Air-Eagle XLT PLUS Receiver located up to 5000 feet away. This transmitter has been designed to link to receiver model 461P-5-ESTOP for failsafe operation.

INITIAL SET-UP

This transmitter comes ready to operate, with batteries installed, and factory programmed to Frequency #1. The beacon transmission time has been factory set to 0.5 seconds which will drop the linking relays out at 1.5 seconds. If you wish to change the default beacon transmit time, follow the instructions below. **Please note – if changing the beacon transmit time, the link-loss shut-down time on the receiver must be adjusted accordingly. Also, the more frequent the transmission, the lower the battery life.**

BEACON TRANSMISSION OPTIONS

NOTE – THIS PROCEDURE SHOULD BE DONE WHEN THE TRANSMITTER IS POWERED OFF.

Depress and hold buttons 2 & 4 simultaneously until the TX LED begins to blink **GREEN** - approximately 5 seconds.

Release buttons 2 & 4 and select based on the following:

BUTTON #	BEACON TRANSMITS:	USE WITH RECEIVER LINK LOSS OPTION:
1	0.5 Seconds (default)	1.5 Seconds Link Loss (default)
2	0.13 Seconds	0.5 Second Link Loss
3	0.26 Seconds	1 Second Link Loss
4	1 Second	3.0 Seconds Link Loss

After making your selection, or after 10 seconds of no input, the TX LED will blink **RED** the number of the current selection

SYSTEM ON/OFF

Turn System On:

Step #1 – Depress and hold buttons 3 & 4 simultaneously until the TX LED comes on solid **GREEN** – approximately 2 seconds.

Step #2 – Release buttons 3 & 4. The TX LED will begin to blink **GREEN** at the rate of the beacon transmission as selected above. This shows the operator that the unit is powered up and sending beacon signal to receiver.

Turn System Off:

Step #1 – Depress and hold buttons 3 & 4 simultaneously for approximately 2 seconds. The TX LED will come on solid **GREEN** and a STOP signal is transmitted to the receiver. After 2 seconds, the transmitter powers OFF and the TX LED will extinguish.



Dimensions – 4.0" L x 4.0" W x .1.6" D
(note: Stop button and belt clip adds 1.15" to depth)

CONTROLS & INDICATORS

TX LED	The TX LED guides the On/Off procedure as detailed in INITIAL SET-UP. Once powered on, this LED will blink GREEN at the rate of the beacon transmission as selected to indicate unit is powered up and sending beacon signal to the receiver. LED changes to solid GREEN when transmitting a button command. When this LED turns RED during normal operation, the battery needs to be replaced.
Single Button Commands:	
E-Stop Button	Transmits E-stop command to immediately de-energize all four relays in the receiver
Note – Keypad buttons 1 thru 4 do not perform any individual functions. They are only used for the dual button command functions listed below.	
Dual Button Commands:	
Keypad Buttons 1 & 2	Change frequency (See FREQUENCY PROGRAMMING)
Keypad Buttons 2 & 4	Change beacon transmit times (See BEACON TRANSMISSION OPTIONS)
Keypad Buttons 3 & 4	Turn system On/Off (See SYSTEM ON/OFF)

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900 MHz RF Transmitter

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FREQUENCY PROGRAMMING

Note – This procedure should be done when the transmitter is powered OFF. Please read through these instructions completely before beginning programming procedure!

At any time, you can check the current frequency setting by depressing Buttons 1 & 2 simultaneously, for approximately 5 seconds, until the TX LED is illuminated "RED". Then release the buttons 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
GREEN – four times	Frequency 8

To change the setting, follow these steps:

To select from Frequencies 1 thru 4:

1. Depress Buttons 1 & 2 simultaneously until the TX LED is illuminated "RED". (Approximately 5 seconds)
2. Release Buttons 1 & 2, 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 #4, the TX LED blinks "RED" *four times* to confirm.

To select from Frequencies 5 thru 8:

1. Depress Buttons 1 & 2 simultaneously until the TX LED is illuminated "GREEN". (Approximately 7 seconds)
2. Release Buttons 1 & 2, then while the TX LED is still illuminated "GREEN", depress button #1 to select "Frequency 5" or button #2 to select "Frequency 6" 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 #5, the TX LED will blink "GREEN" *once* to confirm. If you have selected Frequency #6, the TX LED blinks "GREEN" *two times* to confirm.

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.

SPECIFICATIONS

Keypad	Durable Sealed Membrane Keypad – Eliminates Dust, Dirt and Moisture Failures	
Enclosure	Aluminum AlMgSi	Enclosure w/Ring is Rated IP40 *Not Waterproof
Protective Ring	ASA+PC-FR (UL 94V-0)	
Power Requirements	6.0 VDC	
Battery Type	(4) 1.5V Alkaline each, size AA to equal 6.0VDC nominal. ***ONLY use Alkaline Batteries	
*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 1 week	
Battery Life(Sleep Mode)	Up to 1 Year	
Transmit Frequency	900MHz Spread Spectrum	
RF Output Power	1 W	
RF Networks	Eight Independent Network Frequencies	
Transmit Range	Up to 5000 Feet	
<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	
Approximate Weight	0.6 lbs (with belt clip)	

APPROVALS

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

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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