

AIR-EAGLE SR PLUS

36-FOB-4

2.4 GHz RF Transmitter



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Product Rev: 0

BWI Eagle, Inc.
105 Bonnie Dr.
Butler, PA 16002
724-283-4681
724-283-5939 (fax)
www.bwieagle.com
sales@bwieagle.com



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.

SIGNAL RANGE

Max range statements are estimates based on a clear line of sight with few interferences. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting and receiving antennas, weather conditions, electronic interference, terrain, and physical obstacles, including but not limited to; walls, building structures, trees (foliage), metal objects, and landscape (hills, mountains).



WIRELESS STOP, ASTOP, and E-STOP SYSTEMS

Wireless E-STOP systems should never be considered a primary life-saving device. At least one hard-wired switch must be available in the event the wireless system is not operational. Failure to comply may result in serious injury or death to personnel and damage to equipment.



Wireless STOP and ASTOP transmitters are not failsafe emergency stop controls. They are NOT to be used as a life-saving device. They are designed for wireless control of equipment or vehicle remote operation. Failure to use as intended may result in serious injury or death to personnel and damage to equipment.



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INTRODUCTION



The Air-Eagle SR Plus is an RF system designed for short range wireless remote control of electrical apparatus in a variety of industrial applications. Systems can consist of any number of receivers and handheld or contact input transmitters working together to create a short to medium range radio frequency system that operates hazardous or hard-to-reach equipment from safe, convenient locations.

The key fob transmitter can be used as an alternative to the 4-button handheld unit in many Air-Eagle SR Plus systems (see comparison chart below). Like the original handheld unit (36-HH-4), the key fob (36-FOB-4) is equipped to send four unique digital commands to an Air-Eagle SR Plus receiver.

The key fob will automatically go into “sleep” mode when not in use to dramatically extend battery life. Eight user selectable frequencies allow multiple systems to be used in the same area without interference. Like all Air-Eagle SR Plus transmitters, the key fob utilizes spread-spectrum technology and provides the utmost in security and reliability.

Key Fob vs Handheld Comparison

The key fob transmits the identical RF codes as the handheld transmitter. But, there are differences between the two models to consider.

	Key Fob	Handheld
Operating Range	Up to 250 ft. Reduced power. Smaller enclosure facilitates smaller battery (CR2032)	Up to 600 ft. Full power. Larger enclosure facilitates high capacity AAA batteries
Transmitting Mode	Momentary (One-Shot). Transmits RF code once when button is pressed. Does not transmit again until button is released and pressed again.	Maintained Momentary. Transmits RF code repeatedly as long as button is held. Continues to transmit until button is released.
Size	 Smaller size, similar to an automobile key fob. Easily fits in pocket or attaches to key ring.	 Larger size. Comfortably fits in hand. Includes belt clip for carrying.

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INITIAL OPERATION SET-UP

This transmitter comes ready to operate with batteries installed. factory set to frequency 1 and power level 2 (max range of 250 feet). To change the default settings, see FREQUENCY PROGRAMMING and POWER LEVEL PROGRAMMING sections.

CONTROLS & INDICATORS

TX LED	LED illuminates RED when button is pressed, then blinks slowly (approximately once per second) until button is released. When this LED blinks rapidly (approximately 4 times per second) during or after a button is pressed, the battery needs to be replaced. *
Buttons 1 - 4	Transmits single (one-shot) individual button RF codes to the receiver.
<p>*Note: The low battery notification signals have been improved to provide more noticeable indications to the user. When a low battery is first detected, the TX LED will blink rapidly several times after any button is released. If it is possible to replace the batteries now, please do so. If not, the operator has approximately 15 more button activations. After that, the TX LED will blink RED/GREEN rapidly. No RF transmissions are being sent at this point. The battery must be replaced to resume normal operation.</p>	

SPECIFICATIONS

Keypad	Durable Sealed Micro Switch Keypad – Eliminates dust, dirt and moisture failures
Enclosure	ABS UL94 HB / TPE (blue) Designed to meet the specifications of IP67
Power Requirements	3.0 VDC
Battery Type	(1) CR2032 lithium button cell. *See note below.
Battery Life (Active Usage)	Up to 3 months
Battery Life (Sleep Mode)	Up to 1 Year
Transmit Frequency	2.4GHz Spread Spectrum
RF Networks	Eight Independent Network Frequencies
RF Output Power	User selectable from 2mW or 6.4 mW
Transmit Range	User selectable from 75 Feet or 250 Feet **See note below.
Operating Temperature	-40° F to +185° F
<p>*Note: Current frequency setting is maintained in flash memory during battery replacement. No reprogramming of frequency setting is necessary.</p>	
<p>**Note: Range statements are estimates based on a clear line of sight with few interferences. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting and receiving antennas, weather conditions, electronic interference, terrain, and physical obstacles, including but not limited to; walls, building structures, trees (foliage), metal objects, and landscape (hills, mountains).</p>	

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FREQUENCY PROGRAMMING

Read instructions completely before beginning programming procedure.

Transmitters are shipped from the factory set to Frequency 1 by default. The frequency can be changed at any time by following the procedure below. Once changed, it is recommended to label the transmitter with the selected frequency number.

*Note: Current frequency setting is maintained in flash memory during battery replacement. No reprogramming of frequency setting is necessary after battery change.

To Check Current Frequency:

1. Press Buttons 3 & 4 simultaneously for approximately 4 seconds until the TX LED illuminates RED.
2. Release all buttons. Watch while TX LED begins to blink.
3. The TX LED will blink RED one, two, three, or four times for frequencies 1, 2, 3, or 4, or will blink GREEN one, two, three, or four times for frequencies 5, 6, 7, or 8. See table below for clarification.

Operating Frequency	TX LED Flashes
Frequency 1	1 RED flash
Frequency 2	2 RED flashes
Frequency 3	3 RED flashes
Frequency 4	4 RED flashes
Frequency 5	1 GREEN flash
Frequency 6	2 GREEN flashes
Frequency 7	3 GREEN flashes
Frequency 8	4 GREEN flashes

To Select Frequency 1 - 4:

1. Press Buttons 3 & 4 simultaneously for approximately 4 seconds until the TX LED illuminates RED.
2. Release all buttons. While TX LED is still RED press Button 1 to select Frequency 1, Button 2 to select Frequency 2, etc.
3. The TX LED will blink to confirm the frequency selection has been accepted. It will blink RED once to confirm Frequency 1, blink twice to confirm Frequency 2, etc.

Note - If the TX LED goes out before a frequency is selected, the setting will not change, and the LED will blink corresponding to the current frequency setting. To change the frequency, start again at step 1.

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FREQUENCY PROGRAMMING (Continued)

To Select Frequency 5 - 8:

1. Press Buttons 3 & 4 simultaneously for approximately 7 seconds until the TX LED illuminates GREEN.
2. Release Buttons 3 & 4. While TX LED is still GREEN press Button 1 to select Frequency 5, Button 2 to select Frequency 6, etc.
3. The TX LED will blink to confirm the frequency selection has been accepted. It will blink GREEN once to confirm Frequency 5, blink twice to confirm Frequency 6, etc.

Note - If the TX LED goes out before a frequency is selected, the setting will not change, and the LED will blink corresponding to the current frequency setting. To change the frequency, start again at step 1.

Programming is now complete. Repeat the above procedure to change the frequency at any time.

POWER LEVEL PROGRAMMING

Read instructions completely before beginning programming procedure.

Transmitters are shipped from the factory set to Power Level 2 (max range 250 ft) by default. The power level can be changed at any time by following the procedure below.

*Note: Current power level setting is maintained in flash memory during battery replacement. No reprogramming of power level setting is necessary after battery change.

To Check Current Power Level:

1. Press Buttons 3 & 4 simultaneously for approximately 11 seconds until the TX LED blinks GREEN.
2. Release all buttons. Watch while TX LED continues to blink for 10 seconds, goes out, then begins to blink again.
3. The TX LED will blink GREEN one or two times corresponding to the power level setting. See table below for clarification.

Power Level	TX LED Flashes
Power Level 1 – Approx. 75' Range	1 GREEN flash
Power Level 2 – Approx. 250' Range	2 GREEN flashes

To Select Power Level 1 or 2:

1. Press Buttons 3 & 4 simultaneously for approximately 11 seconds until the TX LED blinks GREEN.
2. Release all buttons. While the TX LED is still blinking GREEN press Button 1 to select Power Level 1, Button 2 to select Power Level 2.

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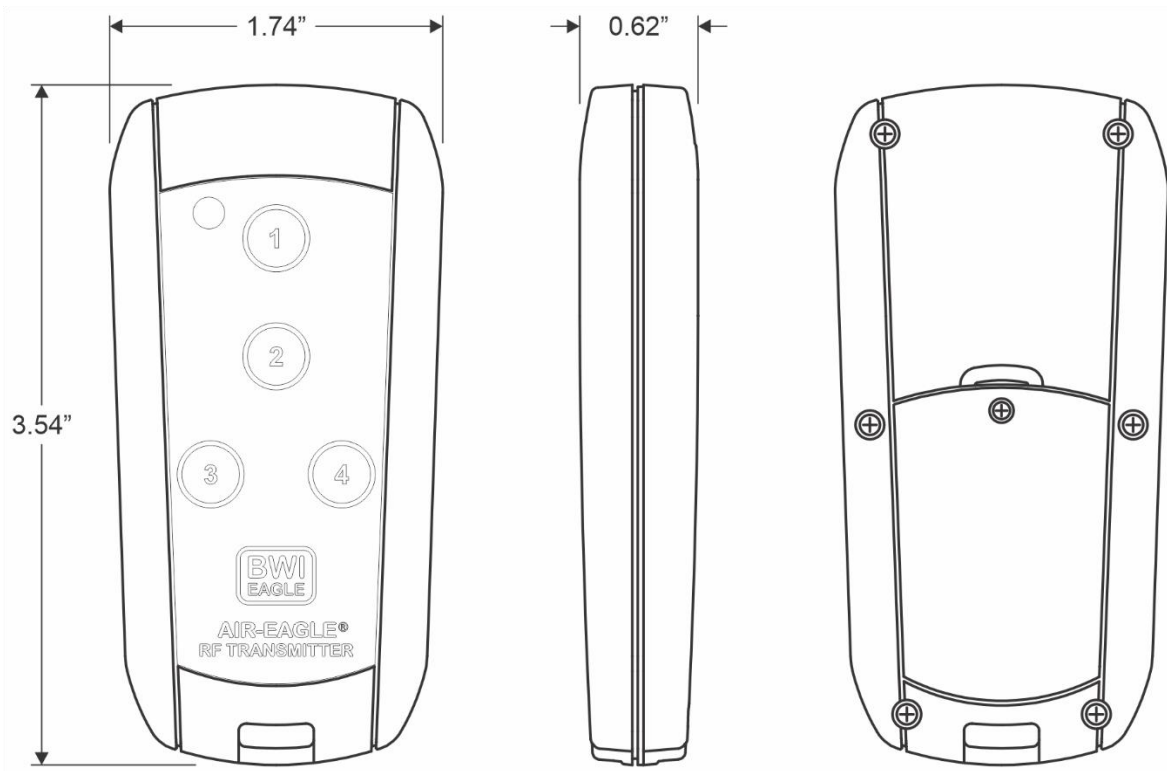
POWER LEVEL PROGRAMMING (Continued)

- The TX LED will blink to confirm the power level selection has been accepted. It will blink GREEN once to confirm power level 1, blink twice to confirm power level 2.

Note - If the TX LED goes out before a power level is selected, the setting will not change, and the LED will blink corresponding to the current power level setting. To change the power level, start again at step 1.

Programming is now complete. Repeat the above procedure to change the power level at any time.

DIMENSIONS



APPROVALS

United States (FCC)	MCQ-XBEE3
Canada (IC)	1846A-XBEE3
Europe (CE)	ETSI
Australia	RCM
Brazil	ANATEL 06329-18-01209