



PRODUCT INFORMATION BULLETIN

AIR-EAGLE® SR Plus 2.4GHz RF Transceiver MODEL 36-40800-DC

DESCRIPTION

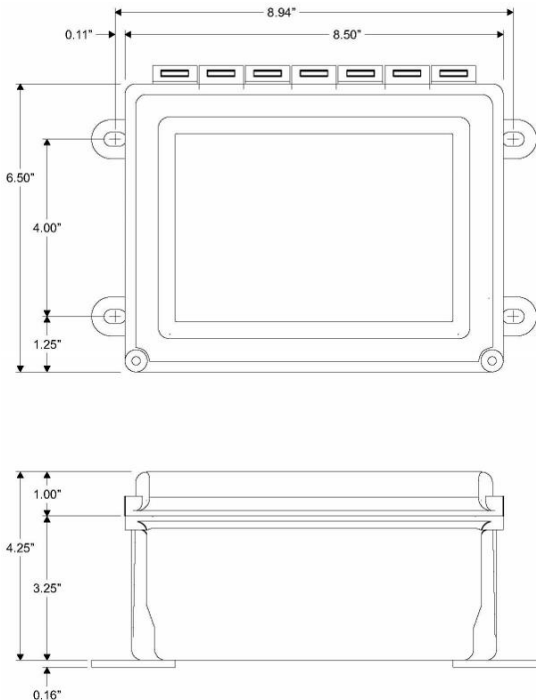
The AIR-EAGLE SR PLUS TRX is an R.F. transceiver capable of transmitting and receiving commands from up to 600 feet away. This model comes equipped with eight dry contact inputs and eight 5amp relay outputs. When combined with another transceiver this allows the user to transmit information out and receive a confirming signal back that the operation was performed. This unit has eight user-selectable network frequencies to allow multiple systems to operate simultaneously in the same area without interference.

INSTALLATION

DISCONNECT AC Power from all equipment before installation.

1. Mount the AIR-EAGLE SR PLUS TRANSCEIVER in a convenient location.
2. Install input and output wiring to terminal strip.
3. Install antenna onto connector located on the right side on the enclosure.
4. Connect supplied power input cable to your external power source.

DIMENSIONS



TERMINAL STRIP WIRING

RELAY OUTPUTS					
1	N/O Relay #1	10	N/O Relay #4	19	N/O Relay #7
2	C Relay #1	11	C Relay #4	20	C Relay #7
3	N/C Relay #1	12	N/C Relay #4	21	N/C Relay #7
4	N/O Relay #2	13	N/O Relay #5	22	N/O Relay #8
5	C Relay #2	14	C Relay #5	23	C Relay #8
6	N/C Relay #2	15	N/C Relay #5	24	N/C Relay #8
7	N/O Relay #3	16	N/O Relay #6		
8	C Relay #3	17	C Relay #6		
9	N/C Relay #3	18	N/C Relay #6		
CONTACT INPUTS					
1	Common Input 1	10	Input 5		
2	Input 1	11	Common Input 6		
3	Common Input 2	12	Input 6		
4	Input 2	13	Common Input 7		
5	Common Input 3	14	Input 7		
6	Input 3	15	Common Input 8		
7	Common Input 4	16	Input 8		
8	Input 4	17	Not Used		
9	Common Input 5	18	Not Used		
DC INPUT					
Terminal #1		(-) 9-36VDC Input			
Terminal #2		(+) 9-36VDC Input			

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APPROVALS

United States (FCC)	MCQ-XBEE3
Canada (IC)	1846A-XBEE3
Europe (CE)	ETSI

GENERAL OPERATION

Contact closures on inputs 1 thru 8 in the control transceiver transmit to activate relays #1 thru #8 in the remote transceiver. Inputs from the remote equipment provide closures to remote transceiver that transmit to energize relays 1 thru 8 in the control transceiver.

INPUT ACTIVATED	ACTION
"1"	Transmits channel 1 command to remote unit
"2"	Transmits channel 2 command to remote unit
"3"	Transmits channel 3 command to remote unit
"4"	Transmits channel 4 command to remote unit
"5"	Transmits channel 5 command to remote unit
"6"	Transmits channel 6 command to remote unit
"7"	Transmits channel 7 command to remote unit
"8"	Transmits channel 8 command to remote unit
INPUT CODE RECEIVED	ACTION
"1"	Relay #1 energizes, maintained momentary
"2"	Relay #2 energizes, maintained momentary
"3"	Relay #3 energizes, maintained momentary
"4"	Relay #4 energizes, maintained momentary
"5"	Relay #5 energizes, maintained momentary
"6"	Relay #6 energizes, maintained momentary
"7"	Relay #7 energizes, maintained momentary
"8"	Relay #8 energizes, maintained momentary

SPECIFICATIONS

Power Input	9 - 36 VDC @ 10 Watts
Fuse Protected	1 amp
Frequency	2.4GHz Spread Spectrum
Relay Contacts	SPDT 5 amp @ 120VAC or 30VDC per channel
Transmitter Data	Eight Dry Contact Inputs
RF Output Power	60 mW
Transceiver Range	Up to 600 Feet
<p><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></p>	
RF Networks	Eight Independent Frequencies
Enclosure	Hinged fiberglass with window / NEMA 3, 3R, 4, 12, 13
Operating Temp	-40° F to +185° F

RELAY & FREQUENCY SET-UP

This unit is shipped from the factory with the SEL1 switches in the open positions. All eight relays will operate in a maintained momentary manner, and unit is receiving commands on frequency one. If you wish to change these default settings, follow the instructions on the table below.

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

RELAY CONFIGURATION				
SEL1 SWITCH NUMBER	OPEN	CLOSED		
SW1	Relays #1 thru #8 maintained momentary (default)	Relays #1 thru #8 toggle/latch		
<p>Maintained Momentary – Relay mimics button or input – when depressed or closed, relay will be energized; when released, relay de-energizes</p> <p>Toggle Latch – Relay changes (and holds) its state each time the corresponding button or input is depressed or closed momentarily</p>				
SW2-4	Not used on this model			
FREQUENCY SET-UP				
SEL1	Network Freq#	SW5	SW6	SW7
(SW5-7)	1 (default)	OPEN	OPEN	OPEN
	2	CLOSED	OPEN	OPEN
	3	OPEN	CLOSED	OPEN
	4	CLOSED	CLOSED	OPEN
	5	OPEN	OPEN	CLOSED
	6	CLOSED	OPEN	CLOSED
	7	OPEN	CLOSED	CLOSED
	8	CLOSED	CLOSED	CLOSED

ACCESSORIES

Standard Antenna (Included):	
2.4GHz TNC "Rubber Duck" Antenna	49-1201
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	
2.4GHz Thru-Hole Mount Mobile Antenna	49-2201
2.4GHz Magnet Mount Mobile Antenna	49-2202
2.4GHz Omni Directional Base Antenna	49-3201
2.4GHz Yagi Directional Base Antenna	49-3202
High Quality Coax Cables – Used to connect external high gain antennas to control unit	
Flex Coax Cable w/Connectors – Available in 5',15',25',30',40',60',80',100' Lengths	49-4000-XX (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-ISO (X = # of Feet)

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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 of 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.