BWI EAGLE

105 Bonnie Drive
Butler, PA 16002
724-283-4681
724-283-5939 (fax)
www.bwieagle.com

PRODUCT INFORMATION BULLETIN

AIR-EAGLE® SR PLUS
2.4GHz RF Transceiver
MODEL 36-40400-DC

DESCRIPTION

The AIR-EAGLE SR PLUS RF TRANSCEIVER IS a four I/O unit designed to transmit and receive unique signals from one or more transceivers located up to 600 feet (or more) away. This model comes equipped with four contact inputs and four 5amp SPDT relay outputs. This allows the user to not only transmit information out but receive a confirming signal back that the operation was performed. The Air-Eagle SR PLUS TRX is user-programmable for up eight network frequencies to allow multiple systems to operate simultaneously in the same area and utilizes spread-spectrum technology to provide the utmost security and reliability even in the noisiest RF environments. A terminal strip has been provided for interfacing with external dry contact inputs as well as dry contact relay outputs. This unit can operate remote machinery such as pumps, gates, chutes etc.
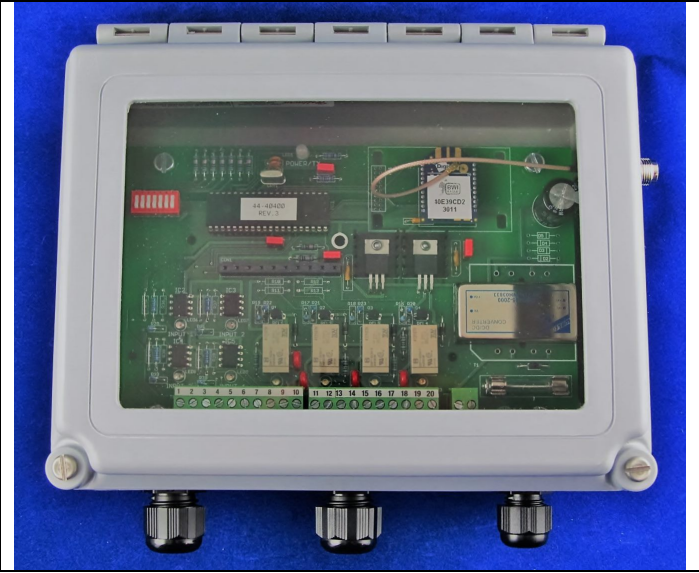
INSTALLATION

DISCONNECT DC Power from all equipment before installation.

1. Mount the AIR-EAGLE XLT TRANSCEIVER in a convenient location.
2. Install input & output wiring to the terminal strip (Note – terminal strip header lifts up off base for easy wiring)
3. Install antenna to TNC connector on the right side of the enclosure.
4. Connect DC power to the proper terminals in your control circuit.

TERMINAL STRIP WIRING

INPUTS		OUTPUTS			
1	Common Input 1	9	N/O Relay #1	15	N/O Relay #3
2	Input 1	10	C Relay #1	16	C Relay #3
3	Common Input 2	11	N/C Relay #1	17	N/C Relay #3
4	Input 2	12	N/O Relay #2	18	N/O Relay #4
5	Common Input 3	13	C Relay #2	19	C Relay #4
6	Input 3	14	N/C Relay #2	20	N/C Relay #4
7	Common Input 4				
8	Input 4				

DC INPUT	
Terminal #1	(-) 9-36VDC Input
Terminal #2	(+) 9-36VDC Input

GENERAL OPERATION

Contact closures on inputs 1 thru 4 in the control transceiver transmit to activate relay #1 thru #4 in the remote transceiver. Inputs from the remote equipment provide closures to remote transceiver that transmit to energize relays #1 thru #4 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
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

AIR-EAGLE® SR PLUS
2.4GHz RF Transceiver
MODEL 36-40400-DC

RELAY & FREQUENCY SET-UP

This unit is shipped from the factory with SEL1 switches #1 thru #7 in the open positions. All four relays will operate in a maintained momentary manor, 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 #4 maintained momentary (default)	Relays #1 thru #4 toggle/latch
Maintained Momentary – Relay mimics button or input – when depressed or closed, relay will be energized; when released, relay de-energizes **Toggle Latch** – Relay changes (and holds) its state each time the corresponding button or input is depressed or closed momentarily		
SW2-4	Not used on this model	

FREQUENCY SET-UP

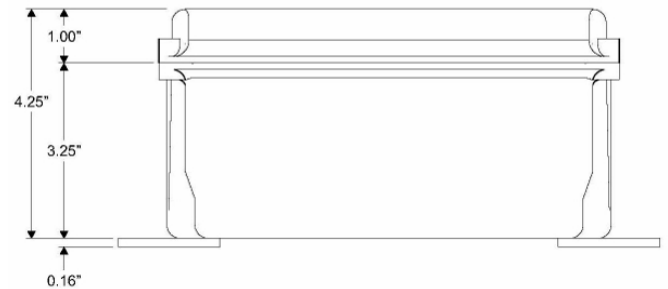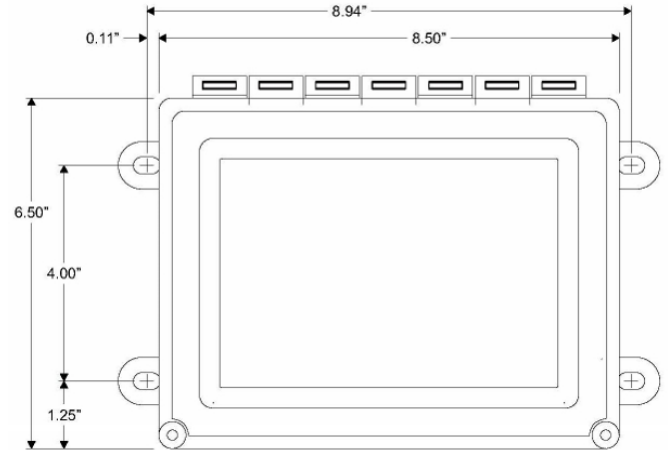| SEL1	Network Frequency	SW5	SW6	SW7
(SW5-7)	1 (default)	OPEN	OPEN	OPEN
	2	CLOSED	OPEN	OPEN
	3	OPEN	CLOSED	OPEN
	4	CLOSED	CLOSED	OPEN
	5	OPEN	OPEN	CLOSED
	6	CLOSED	OPEN	CLOSED
	7	OPEN	CLOSED	CLOSED
	8	CLOSED	CLOSED	CLOSED

SPECIFICATIONS

DC 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	Four Dry Contact Inputs
RF Output Power	60 mW
Transceiver Range	Approximately 600 feet
RF Channels	Eight independent network frequencies
Enclosure	Hinged fiberglass with window / NEMA 3, 3R, 4, 12, 13
Operating Temp	-40º F to +185º F

APPROVALS

United States (FCC)	OUR-XBEEPRO
Canada (IC)	4214A-XBEEPRO
Europe (CE)	ETSI

DIMENSIONS

REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	36-40402-DC
Standard Antenna (Included):	
2.4GHz TNC Portable Antenna (For distances up to 600 feet*)	49-1201
Optional Antennas and Accessories – Used to increase 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 Magnetic Mount Mobile Antenna	49-2202
2.4GHz Omni Directional Antenna	49-3201
2.4GHz 13dB Yagi Antenna	49-3202
Flex Coax Cable w/Connectors – Connects external antenna(s) to base unit(s).	49-4000-XX (XX = # of Feet)
* = Line of Sight	

DOCUMENT DATE: 4/9/18 / PRODUCT REV.0