BWI EAGLE

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

PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT
900MHz RF Transceiver
MODEL 44-40400-DC

DESCRIPTION

The AIR-EAGLE XLT RF TRANSCEIVER is a four I/O unit designed to transmit and receive unique signals from one or more transceivers located up to 2500 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 XLT TRX is user-programmable for up seven 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

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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	

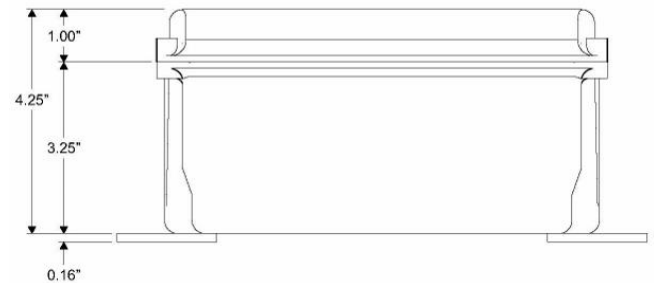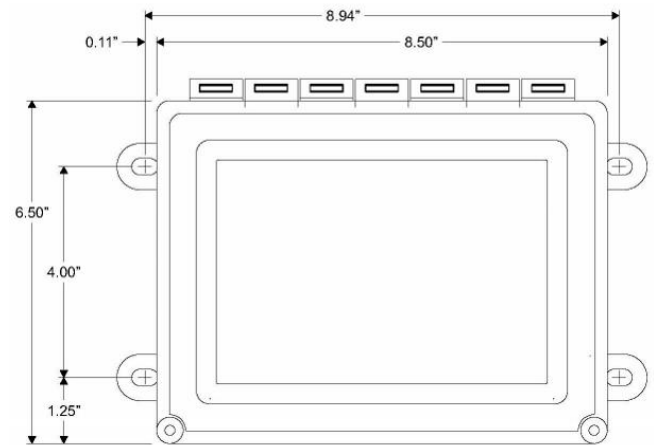| FREQUENCY SET-UP				
SEL1	Network Frequency	SW5	SW6	SW7
(SW5-7)	1 (default)	OPEN	OPEN	OPEN
	2	CLOSED	OPEN	OPEN
	3	OPEN	CLOSED	OPEN
	4	CLOSED	CLOSED	OPEN
	5	OPEN	OPEN	CLOSED
	6	CLOSED	OPEN	CLOSED
	7	OPEN	CLOSED	CLOSED

SPECIFICATIONS

DC Input	9 - 36 VDC @ 10 Watts
Fuse Protected	1 amp
Frequency	900MHz Spread Spectrum
Relay Contacts	SPDT 5 amp @ 120VAC or 30VDC per channel
Transmitter Data	Four Dry Contact Inputs
RF Output Power	250 mW
Transceiver Range	Approximately 2500 feet w/standard antenna
RF Channels	Seven 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)	MCQ-XB900HP
Canada (IC)	1846A-XB900HP

DIMENSIONS

REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	44-40402-DC
Standard Antenna (Included):	
900MHz Portable Antenna (For distances up to 2500 Ft.)	49-1103
Optional Antennas and Accessories:	
900MHz Omni Directional Antenna (For distances up to 2 miles*)	49-3101
900MHz 13dB Yagi Antenna Long Range Operation (For distances up to 4 miles*)	49-3102
Flex Coax Cable w/Connectors	49-4000-XX (XX = # of Feet)
* = Line of Sight	

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