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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT

900MHz RF Transceiver

MODEL 44-40800-DC

DESCRIPTION

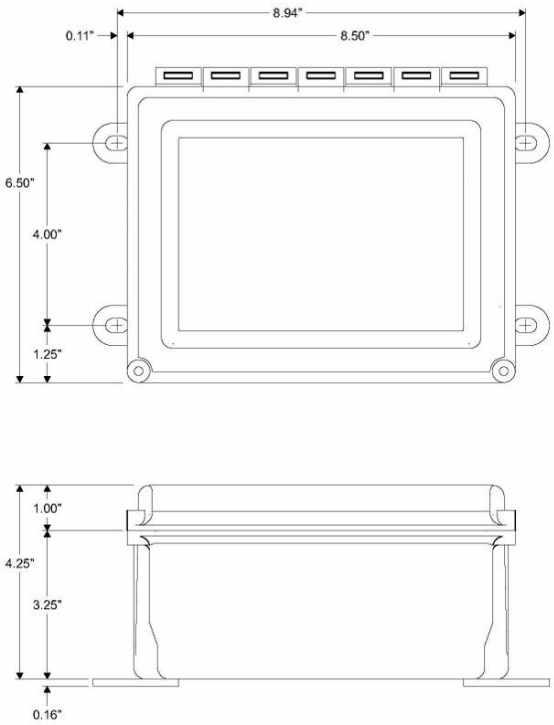
The AIR-EAGLE XLT is one of a series of RF systems designed for long-range wireless remote control in a variety of industrial applications. Systems can consist of any number of transmitters, transceivers and receivers and can be configured to remotely control pumps, lights, conveyors, gates and other electrical apparatus. This model comes equipped with eight dry contact inputs and eight independent SPDT control relays that can be directly interfaced with the customer's equipment or PLC. The Air-Eagle XLT is capable of receiving remote signals transmitted from several miles away and utilizes spread-spectrum technology to provide the utmost security and reliability even in the noisiest RF environments.

INSTALLATION

DISCONNECT DC Power from all equipment before installation.

1. Mount the AIR-EAGLE XLT 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 DC power to the proper terminals in your control circuit.

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	Negative (-) 9-36VDC INPUT
Terminal #2	Positive (+) 9-36VDC INPUT

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APPROVALS

United States (FCC)	MCQ-XB900HP
Canada (IC)	1846A-XB900HP

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

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	Eight 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	-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 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 #8 maintained momentary (default)	Relays #1 thru #8 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

REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	44-40802-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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