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# PRODUCT INFORMATION BULLETIN

## AIR-EAGLE® XLT 900MHz RF Transceiver MODEL 441-40400-120VAC

### 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.

### APPROVALS

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

### INSTALLATION

DISCONNECT AC Power from all equipment before installation.

1. Mount the AIR-EAGLE XLT TRANSCEIVER in a convenient location.
2. Select relay options, channel codes and frequency if desired (see page 2)
3. Install input & output wiring to the terminal strip
4. Install antenna to TNC connector on the right side of the enclosure.
5. Connect AC 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				

AC INPUT	
Terminal #1	120 VAC - (Neutral)
Terminal #2	120 VAC - (Hot)



\*Note – DC powered version pictured

### 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® XLT

900MHz RF Transceiver

**MODEL 441-40400-120VAC**

## RELAY, CHANNEL CODES & FREQUENCY SETTINGS

The unit is shipped from the factory with SEL1 switches in the open positions. The relays will operate as maintained momentary, the unit is transmitting & receiving channel 1 thru 4 commands, and it is operating on frequency 1. 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, channel codes 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	Relay #1 momentary (default)	Relay #1 toggle/latch
SW2	Relay #2 momentary (default)	Relay #2 toggle/latch
SW3	Relay #3 momentary (default)	Relay #3 toggle/latch

NOTE – Relay 4 is not configurable – it will operate as momentary

**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

### CHANNEL CODE SET-UP

SEL1 SWITCH NUMBER	OPEN	CLOSED
SW4	Transmitting & Receiving Channel Codes 1 thru 4 (default)	Transmitting & Receiving Channel Codes 5 thru 8

### 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

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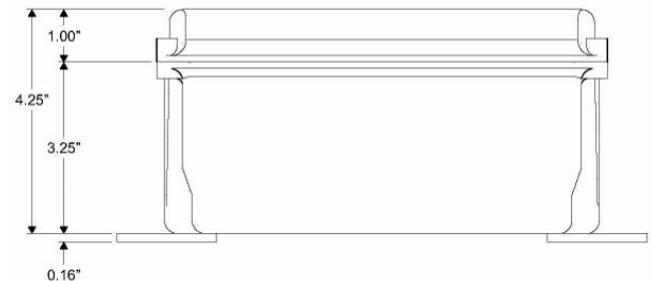
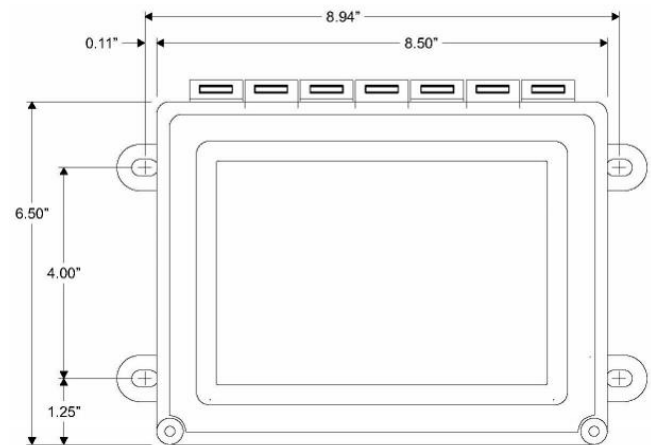


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## SPECIFICATIONS

AC Input	120 VAC, 16 W, 50/60 Hz
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	-40° F to +185° F

## DIMENSIONS



## REPLACEMENT PARTS & ACCESSORIES

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	