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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT 900MHz RF Transceiver

MODEL 461-40400-120VAC

DESCRIPTION

The AIR-EAGLE XLT PLUS RF TRANSCEIVER provides two-way wireless control of electronic equipment and apparatus at distances up to 1 mile (*). This model comes equipped with four dry contact inputs and four relay outputs. This allows the user to not only transmit information out, but receive a confirming signal back that the operation was performed. A terminal strip has been provided for interfacing with external dry contact inputs as well as dry contact relay outputs. The Air-Eagle XLT TRX is user-programmable for up seven network frequencies to allow multiple systems to operate simultaneously in the same area.
(*) - Longer distances can be achieved by using external antennas)

INSTALLATION

DISCONNECT Power from all equipment before installation.

1. Mount the AIR-EAGLE XLT PLUS TRANSCEIVER in a convenient location.
2. Install input & output wiring to the terminal strip (Note – terminal strip header lifts off base for easy wiring)
3. Install antenna to TNC connector on the right side of the enclosure.
4. 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 Unit 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

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900MHz RF Transceiver

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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
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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

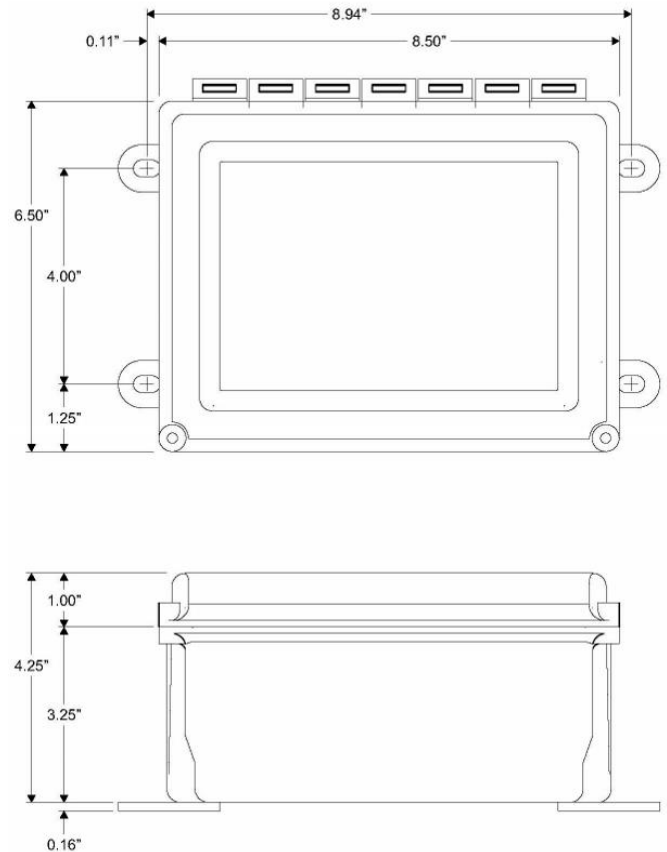
SPECIFICATIONS

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	1 Watt
Transceiver Range	Approximately 1 Mile (Up to 10 miles with external antenna - see accessories)
RF Channels	Seven independent network frequencies
Enclosure	Hinged fiberglass with window / NEMA 3, 3R, 4, 12, 13
Operating Temp	-40° F to +185° F

APPROVALS

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

DIMENSIONS



REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	44-40402-120VAC
Standard Antenna (Included):	
900MHz Portable Antenna (For distances up to 1 Mile*)	49-1103
Optional Antennas and Accessories:	
900MHz Omni Directional Antenna (For distances up to 5 miles*)	49-3101
900MHz 13dB Yagi Antenna Long Range Operation (For distances up to 10 miles*)	49-3102
Flex Coax Cable w/Connectors	49-4000-XX (XX = # of Feet)
* = Line of Sight	

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