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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT 900 MHz RF Transceiver MODEL 44-6000-DC

DESCRIPTION

The AIR-EAGLE XLT RF TRANSCEIVER IS a dual I/O unit designed to transmit and receive unique signals from an identical unit located up to 2500 feet away. This model comes equipped with two dry contact inputs and two 5 amp 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 to seven network frequencies to allow multiple systems to operate simultaneously in the same area and utilizes spread-spectrum technology and provides the utmost security and reliability even in the noisiest RF environments.

APPROVALS

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

INSTALLATION

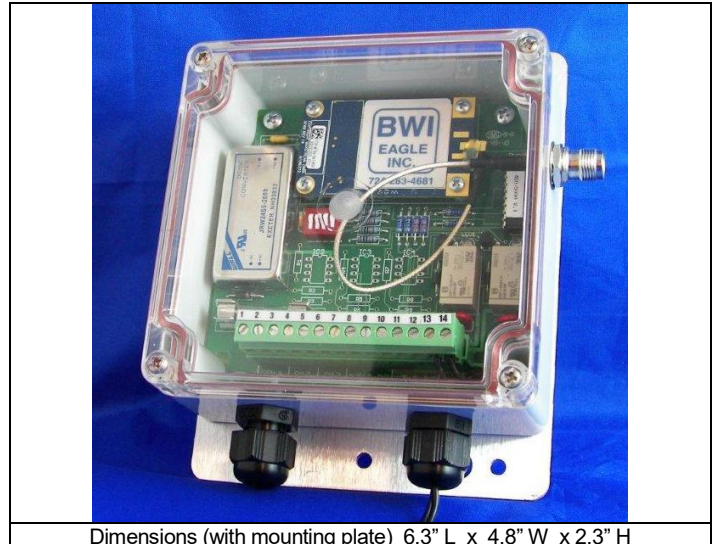
DISCONNECT Power from all equipment before installation.

1. Mount the AIR-EAGLE XLT TRANSCEIVER in a convenient location.
2. Install input and output wiring to terminal strip.
3. Make desired relay, channel code and frequency selections using instructions on page 2.
4. Install antenna onto connector located on the right side on the enclosure.
5. Connect DC power to the proper terminals in your control circuit.

PC BOARD SET-UP INFORMATION

Make the following connections on the PC Board Terminal Strip (TER1)

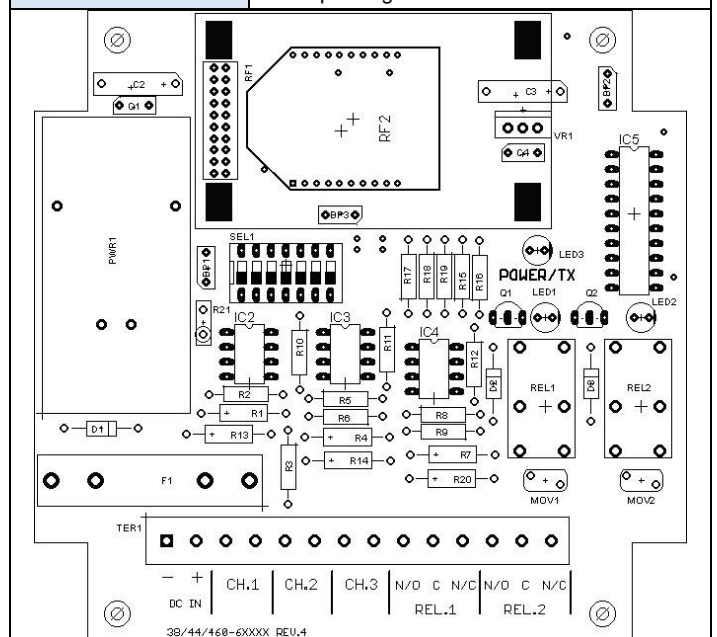
| TERMINAL STRIP WIRING (TER1) | |
|------------------------------|--------------------------------|
| Terminal 1 | Negative (-) 9-36VDC |
| Terminal 2 | Positive (+) 9-36VDC |
| Terminal 3 | CH1 Dry Contact Input (Common) |
| Terminal 4 | CH1 Dry Contact Input |
| Terminal 5 | CH2 Dry Contact Input (Common) |
| Terminal 6 | CH2 Dry Contact Input |
| Terminal 7 | CH3 Dry Contact Input (Common) |
| Terminal 8 | CH3 Dry Contact Input |
| Terminal 9 | CH1 Relay N/O |
| Terminal 10 | CH1 Relay C |
| Terminal 11 | CH1 Relay N/C |
| Terminal 12 | CH2 Relay N/O |
| Terminal 13 | CH2 Relay C |
| Terminal 14 | CH2 Relay N/C |



Dimensions (with mounting plate) 6.3" L x 4.8" W x 2.3" H

CONTROLS & INDICATORS

| | |
|--------------------|--|
| POWER/TX LED | Illuminates Green when power is applied, changes to Red when transmitting. |
| LED1 | Green LED illuminates continuously while relay #1 is energized |
| LED2 | Green LED illuminates continuously while relay #2 is energized |
| Dry Contact Inputs | Transmit individual RF codes to the remote transceiver |
| REL1 & REL2 | Two SPDT output control relays |
| RF1 | RF Module that transmits/receives data for corresponding unit |



AIR-EAGLE® XLT

900 MHz RF Transceiver

MODEL 44-6000-DC

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 & 2 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 to be sent & received and 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 |

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.

CHANNEL CODE SET-UP

| SEL1 (SW3-4) | Channel Codes To Be Transmitted & Received | SW3 | SW4 |
|--------------|--|--------|--------|
| | 1 & 2 (default) | OPEN | OPEN |
| | 3 & 4 | CLOSED | OPEN |
| | 5 & 6 | OPEN | CLOSED |
| | 7 & 8 | CLOSED | CLOSED |

FREQUENCY SET-UP

| SEL1 (SW5-7) | Network Frequency | SW5 | SW6 | SW7 |
|--------------|-------------------|--------|--------|--------|
| | 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 |
| Relay Contacts | SPDT 5 amp @ 120VAC or 30VDC per channel |
| Fuse Protected | 1 amp |
| Transceiver Frequency | 900 MHz Spread Spectrum |
| RF Output Power | 250 mW |
| Transceiver Range | Approximately 2500 feet w/standard antenna |
| Transceiver Channels | 7 Independent Network Frequencies |
| Antenna Connection | TNC Bulkhead |
| Operating Temperature | -40° F to +185° F |
| Enclosure | Polycarbonate, IP66 (NEMA 4) |
| Weight | Approx 2 lbs. |

REPLACEMENT PARTS & ACCESSORIES

| | |
|--|-----------------------------|
| PC Board (Main) | 44-6002-DC |
| Standard Antenna (Included): | |
| 900MHz Portable Antenna (For distances up to 2500 feet*) | 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) |
| 2 Ft. Bulkhead Assembly (Used when mounting receiver inside another enclosure) | 49-5004-2-ISO |
| * = Line of Sight | |

LIMITED WARRANTY STATEMENT

BWI Eagle Inc. warrants the Air-Eagle Remote Control System, if properly used and installed, will be free from defects in material and workmanship for a period of 1 year after date of purchase. Said warranty to include the repair or replacement of defective equipment. This warranty does not cover damage due to external causes, including accident, problems with electrical power, usage not in accordance with product instructions, misuse, neglect, alteration, repair, improper installation, or improper testing. This limited warranty, and any implied warranties that may exist under state law, apply only to the original purchaser of the equipment, and last only for as long as such purchaser continues to own the equipment. This warranty replaces all other warranties, express or implied including, but not limited to, the implied warranties or merchantability and fitness for a particular purpose. BWI Eagle makes no express warranties beyond those stated here. BWI disclaims without limitation, implied warranties of merchantability and fitness for a particular purpose. Some jurisdictions do not allow the exclusion of implied warranties so this limitation may not apply to you. To obtain warranty service, contact BWI Eagle for a return material authorization. When returning equipment to BWI Eagle, the customer assumes the risk of damage or loss during shipping and is responsible for the shipping costs incurred.

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