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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT PLUS High Power 900 MHz RF Transmitter DUAL CONTACT INPUT MODEL 461-1000-120I-AC

DESCRIPTION

The AIR-EAGLE XLT PLUS TX is an R.F. transmitter capable of sending three 120VAC input commands to an Air-Eagle XLT PLUS Receiver located up to a mile away (longer ranges can be achieved with external antennas). Any number of transmitters and receivers can be combined to create a long range radio frequency system that operates hazardous or hard-to-reach electrical apparatus from safe, convenient locations. Eight user-selectable frequencies allow multiple systems to operate simultaneously in the same area without interference.

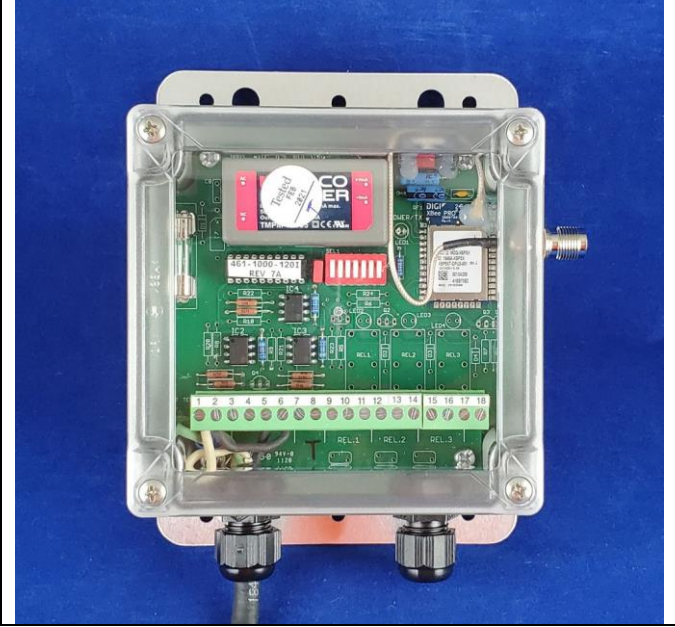
INSTALLATION

1. Mount the AIR-EAGLE XLT PLUS TRANSMITTER in a convenient location.
2. Install transmit wiring to input terminal strip.
3. Attach rubber duck antenna or coax from external antenna to connector on side of enclosure.
4. Connect supplied power input cable to your external power source.

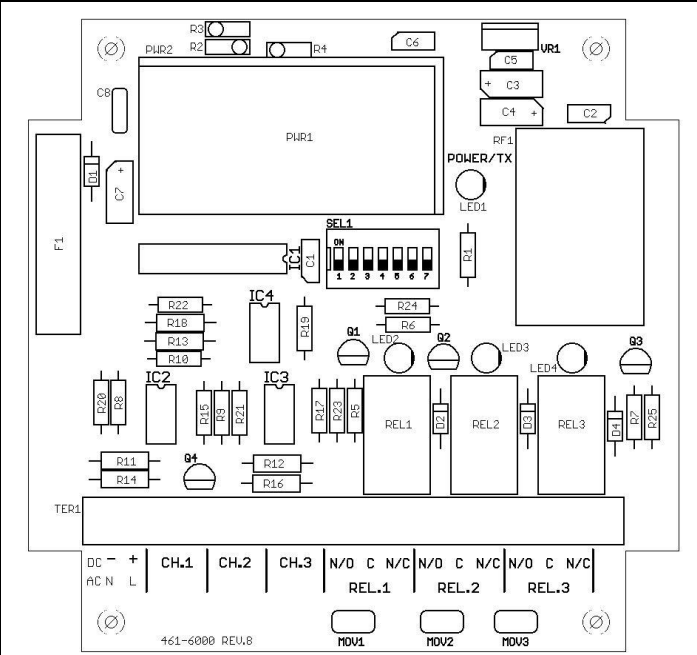
PC BOARD SET-UP INFORMATION

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

| TERMINAL STRIP WIRING (TER1) | |
|------------------------------|----------------------------|
| Terminal 1 | 100-250 VAC Power Input |
| Terminal 2 | 100-250 VAC Power Input |
| Terminal 3 | Input 1 – 120VAC (Neutral) |
| Terminal 4 | Input 1 – 120VAC (Hot) |
| Terminal 5 | Input 2 – 120VAC (Neutral) |
| Terminal 6 | Input 2 – 120VAC (Hot) |
| Terminal 7 | Input 3 – 120VAC (Neutral) |
| Terminal 8 | Input 3 – 120VAC (Hot) |
| Terminal 9 | Not Used |
| Terminal 10 | Not Used |
| Terminal 11 | Not Used |
| Terminal 12 | Not Used |
| Terminal 13 | Not Used |
| Terminal 14 | Not Used |
| Terminal 15 | Not Used |
| Terminal 16 | Not Used |
| Terminal 17 | Not Used |
| Terminal 18 | Not Used |



CONTROLS & INDICATORS



| | |
|-------------------|--|
| PWR/TX LED | Illuminates Green when power is applied, changes to Red when transmitting. |
| LED 1, 2 & 3 | Not used on this model |
| CH1 – CH3 Voltage | Transmit individual RF codes to the remote receiver |
| REL1, REL2, REL3 | Not used on this model |
| RF1 | RF Module that transmits/receives data |

AIR-EAGLE® XLT PLUS

High Power 900 MHz RF Transmitter
DUAL CONTACT INPUT

MODEL 461-1000-120I-AC

GENERAL OPERATION

Applying 120VAC on each input transmits to energize the corresponding relay in any receiver within transmit range. The signal transmits continuously as long as the voltage is present.

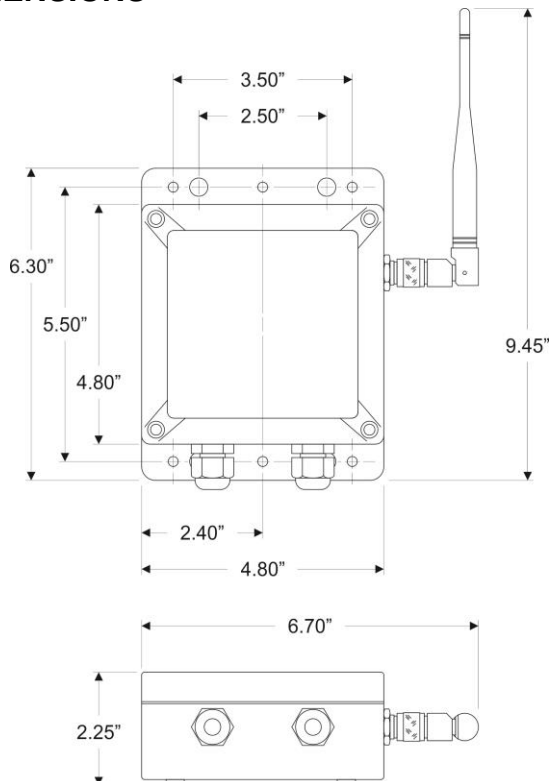
FREQUENCY SET-UP

The unit is shipped from the factory with all SEL1 switches in the open positions. By default, it is operating on Frequency #1. If you wish to change the frequency, follow the instructions on the table below.

- 1) Remove power from unit.
- 2) Remove top cover.
- 3) Select desired network frequency using table below.
- 4) Reattach cover and apply power.
- 5) Programming is now complete.

| SEL 1 (SW 1-3): <i>(NETWORK FREQUENCY)</i> | Network Address | SW1 | SW2 | SW3 |
|---|-------------------------|--------|--------|--------|
| | 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 |
| | 8 | CLOSED | CLOSED | CLOSED |
| SEL 1 (SW4-7) | Reserved for future use | | | |

DIMENSIONS



SPECIFICATIONS

| | |
|---|---|
| Power Supply | 100-250 VAC, 5 W, 50/60 Hz |
| Fuse Protected | 2 amp |
| Transmitter Data | Three 120VAC Inputs |
| Transmit Frequency | 900MHz Spread Spectrum |
| RF Networks | Eight Independent Network Frequencies |
| RF Output Power | 1 Watt |
| Transmit Range | Up to 1 Mile with Rubber Duck Antenna / Up to 10 Miles with External Antenna |
| <i>Note: Max range figures are estimates, based on free-air terrain with limited sources of interference. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting antenna, height of receiving antenna, weather conditions, interference sources in the area, and terrain between receiver and transmitter, including, but not limited to, indoor and outdoor structures such as walls, metal objects, trees, buildings, hills, and mountains</i> | |
| Enclosure | Polycarbonate, IP66 (NEMA 4) |
| Operating Temp | -40° F - +185° F |

APPROVALS

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

ACCESSORIES

| Standard Antenna (Included): | |
|--|----------------------------------|
| 900MHz TNC "Rubber Duck" Antenna | 49-1103 |
| Mobile/Base Antennas – Used to help achieve max range in both non line of sight and line of sight applications. - Contact BWI Eagle for recommendations | |
| 900MHz Thru-Hole Mount Mobile Antenna | 49-2101 |
| 900MHz Magnet Mount Mobile Antenna | 49-2102 |
| 900MHz Omni Directional Base Antenna | 49-3101 |
| 900MHz Yagi Directional Base Antenna | 49-3102 |
| High Quality Coax Cables – Used to connect external high gain antennas to control unit | |
| Flex Coax Cable w/Connectors – Available in 5', 15', 25', 30', 40', 60', 80', 100' Lengths | 49-4000-XX (XX = # of Feet) |
| Bulkhead Extensions – Used to provide an external antenna connection when mounting control unit inside another enclosure | |
| TNC Male to TNC Bulkhead Cable Assembly - Available in 2', 4', 7' Lengths | 49-5004-X-ISO (X = # of Feet) |

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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