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# PRODUCT INFORMATION BULLETIN

## AIR-EAGLE® XLT PLUS High Power 900MHz RF Repeater MODEL 461-4500-DC

### DESCRIPTION

The AIR-EAGLE XLT PLUS RF REPEATER IS designed to retransmit an RF signal from any Air-Eagle XLT PLUS Transmitter. When placed in an area where the signal is weak, this unit will then re-transmit at full strength facilitating greater distances and allowing the RF signal to reach around corners, through tunnels, over hills and through valleys.

### APPROVALS

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

### INSTALLATION

DISCONNECT Power from all equipment before installation.

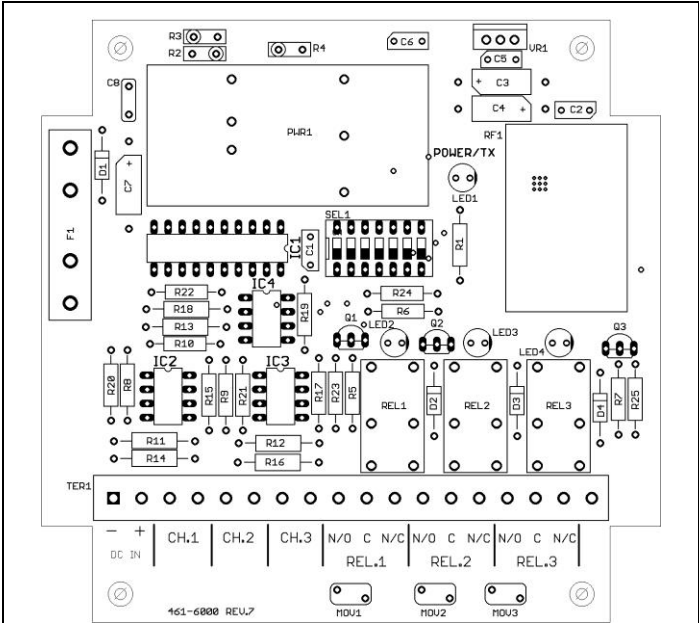
1. Mount the AIR-EAGLE XLT PLUS REPEATER in a convenient location.
2. Attach rubber duck antenna or coax from external antenna to connector on side of enclosure.
3. Connect DC power to the proper terminals in your control circuit.

### TERMINAL STRIP WIRING

| TERMINAL STRIP WIRING (TER1) |                      |
|------------------------------|----------------------|
| Terminal 1                   | Negative (-) 9-36VDC |
| Terminal 2                   | Positive (+) 9-36VDC |
| Terminal 3                   | Not Used             |
| Terminal 4                   | Not Used             |
| Terminal 5                   | Not Used             |
| Terminal 6                   | Not Used             |
| Terminal 7                   | Not Used             |
| Terminal 8                   | Not Used             |
| 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



|           |  |
|-----------|--|
| RX LED    | Yellow LED illuminates as remote signals are being received by the repeater    |
| POWER LED | Green LED is illuminated while power is applied to the repeater                |
| TX LED    | Red LED illuminates as remote signals are being re-transmitted by the repeater |
| RF1       | RF module that receives data from the remote transmitter                       |
| SEL1      | Used to set frequency  |

# AIR-EAGLE® XLT PLUS

High Power 900MHz RF Repeater

**MODEL 461-4500-DC**

## FREQUENCY SET-UP

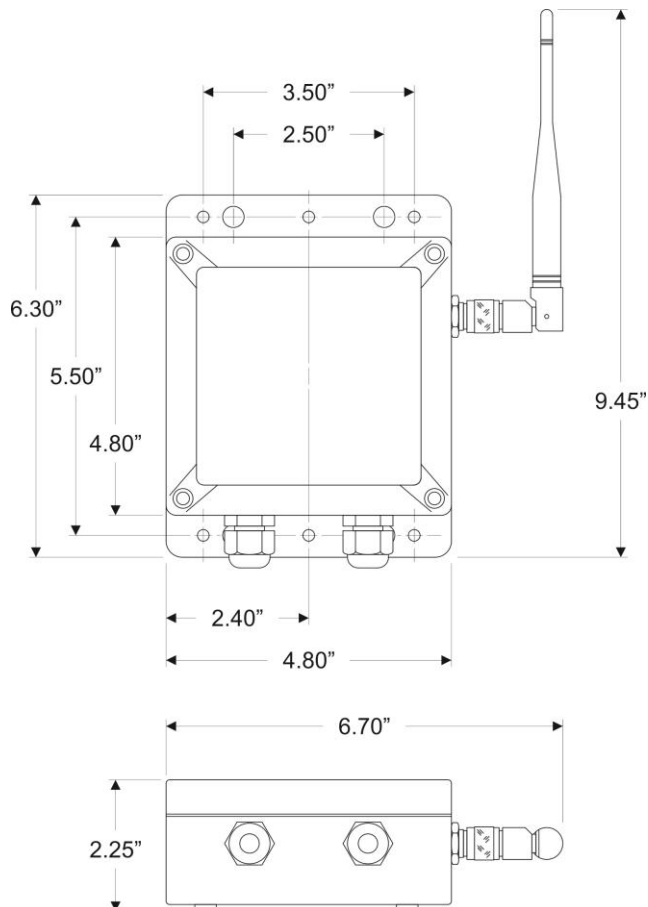
This unit is shipped from the factory with SEL1 switches in the open positions and is operating on frequency #1. If you wish to change the default frequency setting, follow the instructions below:

- 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.

### FREQUENCY SELECTION

|                        | Network Frequency      | SW1    | SW2    | SW3    |
|------------------------|------------------------|--------|--------|--------|
| SEL 1<br>(SW1, 2 & 3): | #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 |
| SEL1<br>(SW4-7)        | Not used on this model |        |        |        |

## DIMENSIONS



## SPECIFICATIONS

|                  |   |
|------------------|---|
| Power Supply     | 9-36 VDC, 16 W, 50/60 Hz  |
| Fuse Protected   | 2 amp   |
| Frequency        | 900MHz Spread Spectrum  |
| RF Channels      | Seven independent network frequencies   |
| RF Output Power  | 1W  |
| Transmit Range   | Approximately 1 Mile (Up to 10 miles with external antenna - see accessories) |
| Transmitter Data | Repeater  |
| Enclosure        | Polycarbonate, IP66 (NEMA 4)  |
| Operating Temp   | -40° F - +185° F  |

## REPLACEMENT PARTS & ACCESSORIES

|   |                                |
|---|--------------------------------|
| PC Board (Main)   | 461-4502                       |
| 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<br>(XX = # of Feet) |
| * = Line of Sight   |                                |

## LIMITED WARRANTY STATEMENT

BW1 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. BW1 Eagle makes no express warranties beyond those stated here. BW1 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 BW1 Eagle for a return material authorization. When returning equipment to BW1 Eagle, the customer assumes the risk of damage or loss during shipping and is responsible for the shipping costs incurred.

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