



# 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.

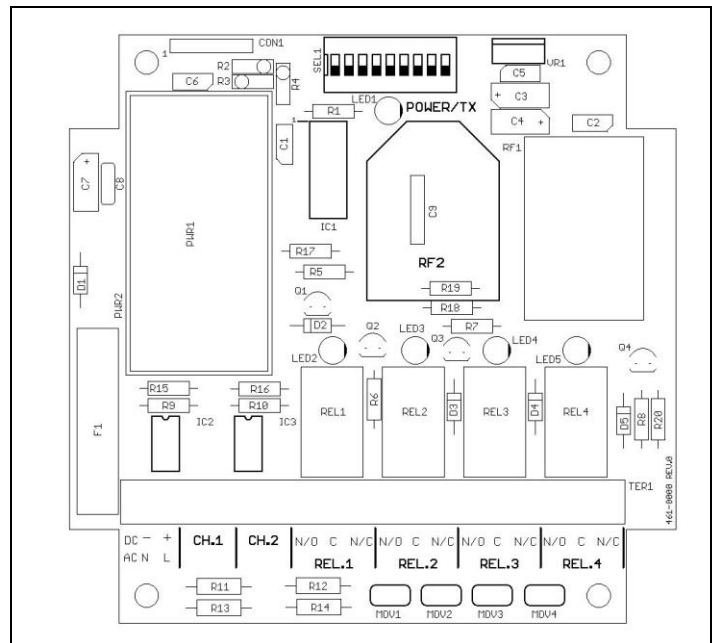
1. Mount the AIR-EAGLE XLT PLUS REPEATER in a convenient location.
2. Attach rubber duck antenna or coax from external antenna to connector on side of enclosure.
3. Connect supplied power input to your external power source.

### 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

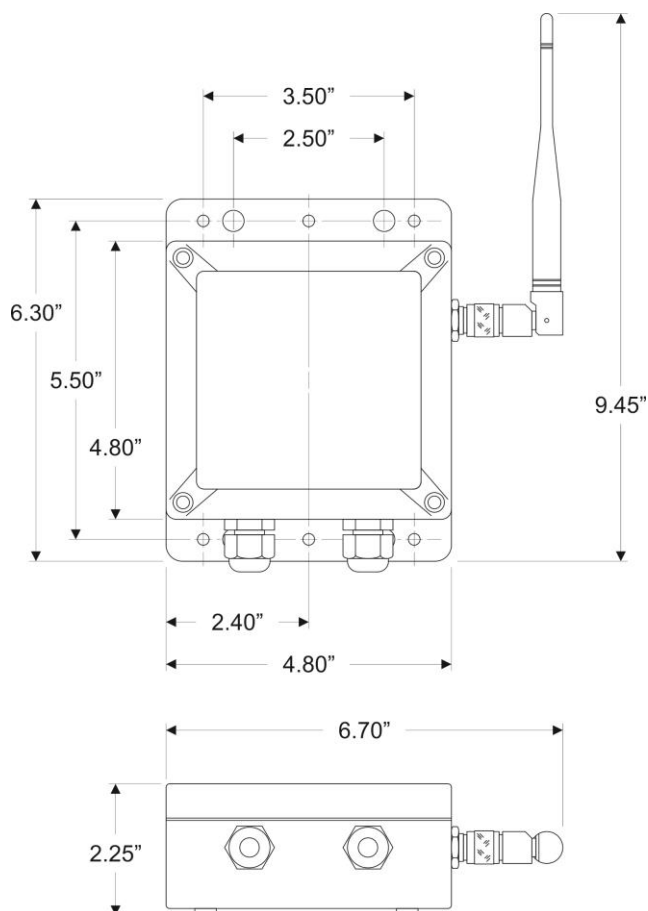
This unit is shipped from the factory with SEL1 switches in the open positions and is operating on frequency #1. If you wish to change the default frequency setting, follow the instructions below:

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

FREQUENCY SELECTION				
	Network Frequency	SW5	SW6	SW7
SEL 1 (SW5, 6 & 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
	#8	CLOSED	CLOSED	CLOSED

Note – Switches 1, 2, 3, 4, 8 & 9 are not used on this model. Leave in OPEN position

## DIMENSIONS



## SPECIFICATIONS

Power Supply	9-36 VDC, 5W
Fuse Protected	2 amp
Frequency	900MHz Spread Spectrum
RF Networks	Eight Independent Network Frequencies
RF Output Power	1W
Transmit Range	Up to 1 Mile with Rubber Duck Antenna / Up to 10 Miles with External Antenna
<small>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</small>	
Transmitter Data	Repeater
Enclosure	Polycarbonate, IP66 (NEMA 4)
Operating Temp	-40° F - +185° F

## 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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