

# 900 MHz RF Repeater



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Product Rev: 0

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#### 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.

#### SIGNAL RANGE

Max range statements are estimates based on a clear line of sight with few interferences. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting and receiving antennas, weather conditions, electronic interference, terrain, and physical obstacles, including but not limited to; walls, building structures, trees (foliage), metal objects, and landscape (hills, mountains).



#### **WIRELESS STOP, ASTOP, and E-STOP SYSTEMS**

Wireless E-STOP systems should never be considered a primary life-saving device. At least one hard-wired switch must be available in the event the wireless system is not operational. Failure to comply may result in serious injury or death to personnel and damage to equipment.



Wireless STOP and ASTOP transmitters are not failsafe emergency stop controls. They are NOT to be used as a life-saving device. They are designed for wireless control of equipment or vehicle remote operation. Failure to use as intended may result in serious injury or death to personnel and damage to equipment.







## INTRODUCTION

The Air-Eagle XLT RF Repeater is designed to retransmit an RF signal from any Air-Eagle XLT Transmitter. When placed in an area where the signal is weak, this unit will pick up the weak signal and retransmit it at full power facilitating greater distances and allowing the RF signal to reach around corners, through tunnels, over hills, and through valleys.

# INSTALLATION

- 1. DISCONNECT power from all equipment before proceeding with installation.
- 2. Mount the repeater in a convenient location.
- 3. Attach rubber duck antenna or coax from external antenna to connector on side of enclosure.
- 4. Connect supplied power input cable to external power source.

### **APPROVALS**

United States (FCC)	MCQ-XB900HP
Canada (IC)	1846A-XB900HP
Australia	RCM
Brazil	ANATEL 3727-12-1209

## TERMINAL STRIP WIRING

Terminal 1	100-250 VAC Power Input	
Terminal 2	100-250 VAC Power Input	
Terminal 3		
Terminal 4		
Terminal 5		
Terminal 6		
Terminal 7		
Terminal 8		
Terminal 9		
Terminal 10	Not used on this model.	
Terminal 11		
Terminal 12		
Terminal 13		
Terminal 14		
Terminal 15		
Terminal 16		
Terminal 17		
Terminal 18		

# FREQUENCY SETUP

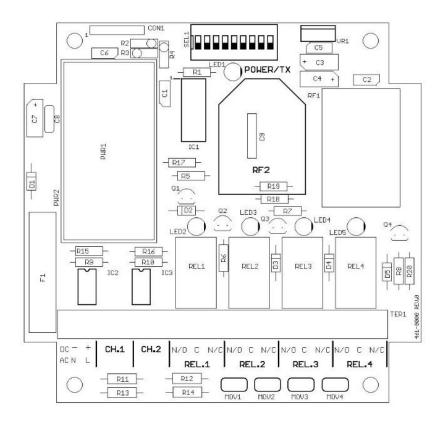
The unit is shipped from the factory with SEL1 switches in the open positions. The unit is operating on frequency 1. To change default setting, follow the instructions below:

- 1. \*IMPORTANT\*
  Disconnect power from unit.
- 2. Remove top cover.
- 3. Select desired frequency using the table.
- 4. Reattach cover.
- 5. Reconnect power to unit.
- 6. Programming is complete.

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
8	CLOSED	CLOSED	CLOSED

Note: SW1, SW2, SW3, SW4, SW8, and SW9 are not used on this model. Leave in the OPEN position.

# **CONTROLS & INDICATORS**



RX LED	Yellow LED illuminates while remote signals are being received.	
POWER LED	Green LED illuminates while power is applied.	
TX LED	Red LED illuminates while remote signals are being re-transmitted.	
RF1	RF Module that transmits/receives data	
SEL1	Used to set frequency	

# **SPECIFICATIONS**

Power Supply	100-250 VAC, 5 W, 50/60 Hz	
Fuse Protected	2 amp	
Receiver Frequency	900 MHz Spread Spectrum	
Receiver Range	Up to 2500 feet *	
RF Networks	Eight Independent Network Frequencies	
RF Output Power	250mW	
Operating Temperature	-40° F to +185° F	
Enclosure	Polycarbonate, IP66 (NEMA 4)	

<sup>\*</sup>Note: Max range statements are estimates based on a clear line of sight with few interferences. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting and receiving antennas, weather conditions, electronic interference, terrain, and physical obstacles, including but not limited to; walls, building structures, trees (foliage), metal objects, and landscape (hills, mountains).

# **ACCESSORIES**

STANDARD ANTENNA (INCLUDED)			
900MHz TNC Portable "Rubber Duck" Antenna	49-1103		
MOBILE/BASE ANTENNAS (OPTIONAL) Used to help achieve max range in non-line-of-sight and line-of-sight applications. Contact BWI Eagle for recommendations.			
900MHz Thru-Hole/Bracket 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 CABLE Used to connect external antennas to control unit.			
Flex Coax Cable w/Connectors (Available in 5', 15', 25', 30', 40', 60', 80', and 100' lengths)	49-4000-XX (XX = length in feet)		
BULKHEAD EXTENSION 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', and 7' lengths)	49-5004-X-ISO (X = length in feet)		

# **DIMENSIONS**

