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# PRODUCT INFORMATION BULLETIN

## AIR-EAGLE® XLT PLUS High Power RF Receiver MODEL 46-2000PI-TPA

### DESCRIPTION

The AIR-EAGLE XLT PLUS is one of a series of RF systems designed for long-range wireless remote control in a variety of industrial applications. This model is specifically designed to control lightning warning beacons at airports. Integral high current relays can be directly interfaced with the customer's equipment or P.L.C.. Capable of receiving remote signals transmitted from several miles away, the model 46-2000PI-TPA now incorporates a signal strength indicator to provide assurance of your communications link. The Air-Eagle XLT Plus utilizes spread-spectrum technology and offers the utmost security and reliability in even the noisiest RF environments.

### INSTALLATION

DISCONNECT AC Power from all equipment before installation.

1. Mount the AIR-EAGLE XLT UNIT in a convenient location.
2. Install antenna. The unit has an antenna connector located on the right side on the enclosure. Attach the coax cable from the external FM antenna to this connector.
3. Connect AC power and control to the proper terminals in your control circuit.

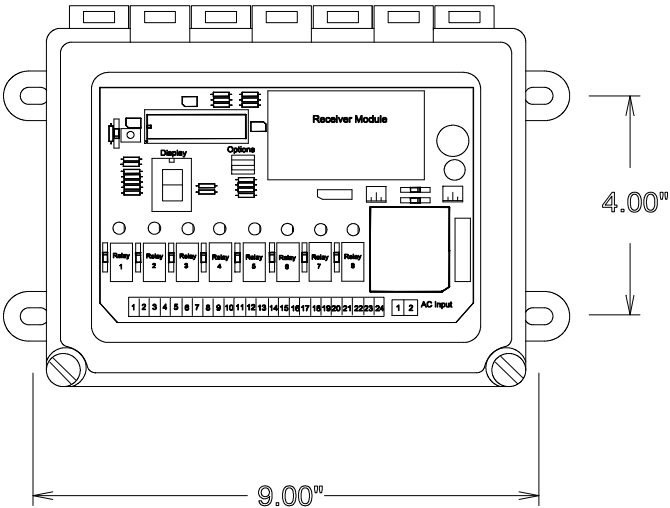
### TERMINAL STRIP WIRING

1	N/O Relay #1	10	N/O Relay #4	19	N/O Relay #7
2	C Relay #1	11	C Relay #4	20	C Relay #7
3	N/C Relay #1	12	N/C Relay #4	21	N/C Relay #7
4	N/O Relay #2	13	N/O Relay #5	22	N/O Relay #8
5	C Relay #2	14	C Relay #5	23	C Relay #8
6	N/C Relay #2	15	N/C Relay #5	24	N/C Relay #8
7	N/O Relay #3	16	N/O Relay #6		
8	C Relay #3	17	C Relay #6		
9	N/C Relay #3	18	N/C Relay #6		

AC INPUT	
Terminal #1	120 VAC - (Hot)
Terminal #2	120 VAC - (Neutral)



### DIMENSIONS



Enclosure height equals 4.25 inches.

# AIR-EAGLE<sup>®</sup> XLT PLUS

## High Power RF Receiver

### MODEL 46-2000PI-TPA



## CONTROLS AND INDICATORS

CONTROL / INDICATOR	FUNCTION		
RECEIVER MODULE	RF module that receives data from the remote transmitter		
DISPLAY	7-Segment LED displays a number corresponding to the relay command being received <b>or</b> signal strength		
SEL1 CONFIGURATION OPTIONS	SW #	OPEN	CLOSED
	SW1	Network 1	Network 2
	SW2	Future Option	Future Option
	SW3	Future Option	Future Option
	SW4	Normal Operation	Signal Strength Indicator
RELAYS	Eight SPDT output control relays		

## SPECIFICATIONS

AC Input Models	120 VAC, 16 W, 50/60 Hz
Fuse Protected	1 amp
Transceiver Frequency	900 MHz Spread Spectrum
Relay Contacts	SPDT 4 amp @ 120 VAC / 30 VDC per channel
Receiver Range	Approximately 2/3 mile (up to 25 miles with external antennas - see accessories)
Enclosure	Hinged fiberglass with window / NEMA 4, 4x, 12 + 13

## REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	46-2002PI-TPA
Air-Eagle XLT Transmitter (Contact Input)	46-1000PI-TPA
Replacement Transceiver Antennas:	
900MHz TNC Portable Antenna (For Distances Of Up To 2 Miles *)	49-1103
900MHz Omni Directional Base Antenna (For Distances Of Up To 10 Miles *)	49-3101
900MHz Yagii Directional Base Antenna (For Distances Of Up To 25 Miles *)	49-3102
* = Line of Sight	

## GENERAL OPERATION

Upon receiving a channel #1 "ON" code from the transmitter, Relays #1 and #2 will immediately energize. Relays #3 and #4 will energize and de-energize at a one second rate for approximately 14 seconds. When a channel #1 "OFF" code is received, relays #1 and #2 will de-energize and relays #3 and #4 will energize for 15 seconds and then de-energize until the next alarm condition is sent to the receiver. The channel #3 test signal will only operate when there are no alarm conditions being received.

NUMERIC DISPLAY	SEL1-#4 OPEN (NORMAL OPERATION)	SEL1-#4 CLOSED (SIGNAL STRENGTH INDICATION)
"0" (ZERO)	Power on / No Relays energized	Power on / No Signal being received
"1" (ONE)	Relay #1 and Relay #2 are energized	Signal Strength "1" received (weakest)
	Relay #3 and Relay #4 will toggle on and off at a one second rate for horn annunciation.	Signal Strength "2" received
"3" (THREE)	Relay #5 is energized	Signal Strength "3" received
"4" (FOUR)	Not Used On This Model	Signal Strength "4" received
"5" (FIVE)	Not Used On This Model	Signal Strength "5" received
"6" (SIX)	Not Used On This Model	Signal Strength "6" received
"7" (SEVEN)	Not Used On This Model	Signal Strength "7" received
"8" (EIGHT)	Not Used On This Model	Signal Strength "8" received
"9" (NINE)	N/A	Signal Strength "9" received (strongest)

## LIMITED WARRANTY STATEMENT

BWI Eagle Inc. warrants the Air-Eagle XLT 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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