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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT 900 MHz RF Receiver Latching Relays MODEL 44-8050-CFB-DC

DESCRIPTION

The AIR-EAGLE XLT is an RF system designed for long range wireless remote control of electrical apparatus in a variety of industrial applications. The model 44-8050-CFB was designed specifically to work with an Air-Eagle Transceiver having LED feedback indicators. This unit will send a confirmation signal back to the transceiver when the transmission is received. This unit provides latching relays that can be directly interfaced with the customer's equipment or P.L.C., and has seven user-programmable frequencies to allow multiple systems to operate in the same area. Capable of receiving remote signals transmitted from up to 2500 feet away (or more with external antennas), the model 44-8050-CFB utilizes spread-spectrum technology and provides the utmost security and reliability even in the noisiest RF environments.

APPROVALS

United States (FCC)	MCQ-XBEEEXSC
Canada (IC)	1846A-XBEEEXSC

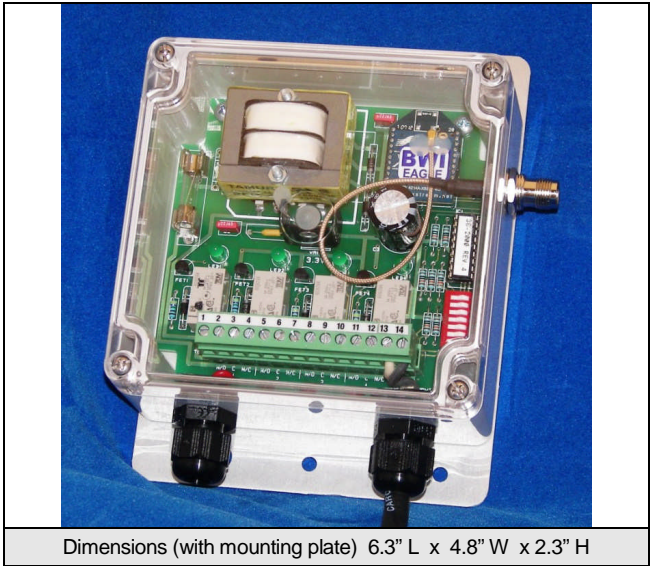
INSTALLATION

DISCONNECT DC Power from all equipment before installation.

1. Mount the AIR-EAGLE XLT RECEIVER in a convenient location.
2. Install antenna. The unit has an antenna connector located on the right side on the enclosure. Attach the supplied portable antenna to this connector.
3. Connect DC power and control to the proper terminals in your control circuit.

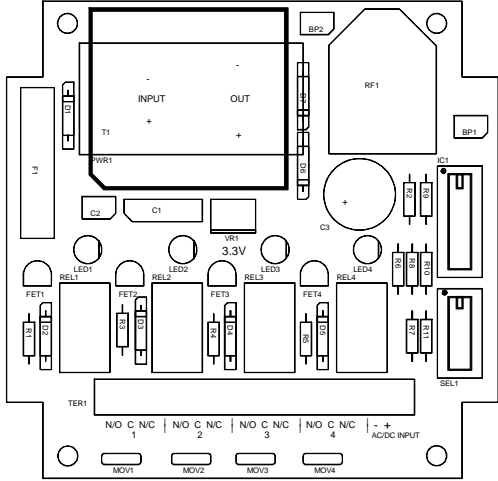
TERMINAL STRIP WIRING

1	N/O Relay #1	7	N/O Relay #3	13	(-) 9-36VDC INPUT
2	C Relay #1	8	C Relay #3	14	(+) 9-36VDC INPUT
3	N/C Relay #1	9	N/C Relay #3		
4	N/O Relay #2	10	N/O Relay #4		
5	C Relay #2	11	C Relay #4		
6	N/C Relay #2	12	N/C Relay #4		



Dimensions (with mounting plate) 6.3" L x 4.8" W x 2.3" H

CONTROLS AND INDICATORS



LED1	Illuminates when relay #1 is energized
LED2	Illuminates when relay #2 is energized
LED3	Illuminates when relay #3 is energized
LED4	Illuminates when relay #4 is energized
RF1	RF module that receives data from the remote transmitter
REL1 thru REL4	Four SPDT output control relays
SEL1	Seven dip switches for selecting relay options and operating frequency

AIR-EAGLE® XLT

900 MHz RF Receiver

Latching Relays

MODEL 44-8050-CFB-DC

RELAY OPERATION

Relays energize and de-energize based on commands received from the transmitter. See table below for relay mode configuration for this receiver:

BUTTON OR INPUT SIGNAL RECEIVED	RELAY OPERATED – MODE
1	Relay #1 Energizes – Latching
2	Relay #1 De-Energizes
3	Relay #2 Energizes – Latching
4	Relay #2 De-Energizes
5	Relay #3 Energizes – Latching
6	Relay #3 De-Energizes
7	Relay #4 Energizes – Latching
8	Relay #4 De-Energizes

RELAY & FREQUENCY SET-UP

The unit is shipped from the factory with SEL1 switches in the open positions and should not be changed for the above relay operation. If you wish to change the Network Frequency default settings, follow the instructions for Frequency Set-Up on the table below.

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

RELAY CONFIGURATION

SEL1 SWITCH NUMBER	OPEN	CLOSED
"1"	N/A	N/A
"2"	N/A	N/A
"3"	N/A	N/A
"4"	N/A	N/A

FREQUENCY SET-UP

SEL1 (SW4-6)	Network Address	SW4	SW5	SW6
	1	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

OTHER

SEL1 (SW7)	Reserved for future use
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SPECIFICATIONS

DC Input	9-36VDC @ 10 WATTS
Relay Contacts	SPDT 5 amp @ 120VAC or 50VDC
Fuse Protected	1 amp
Receiver Range	Approximately 2500 feet (Up to 4 miles with external antenna - see accessories)
Receiver Frequency	900 MHz Spread Spectrum
Receiver Channels	Seven independent network frequencies
Operating Temperature	-40° F to +185° F
Enclosure	ABS Plastic, NEMA 3, 3R, 4, 4X, 12, 13
Weight	Approx 2 lbs.

REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	44-8052-DC
Standard Antenna (Included):	
900MHz Portable Antenna (For distances up to 2500 feet*)	49-1103
Optional Antennas and Accessories – Used to increase range in both non line of sight and line of sight applications. - Contact BWI Eagle for recommendations	
900MHz Omni Directional Antenna (For distances up to 2 miles*)	49-3101
900MHz 13dB Yagi Antenna Long Range Operation (For distances up to 4 miles*)	49-3102
Flex Coax Cable w/Connectors	49-4000-XX (XX = # of Feet)
Inline Lightening Arrestor	49-5002
2 Ft. Bulkhead Assembly (Used when mounting receiver inside another enclosure)	49-5004
* = Line of Sight	

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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