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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® XLT 900 MHz RF Receiver MODEL 44-5000-120VAC

DESCRIPTION

The AIR-EAGLE XLT is an RF system designed for medium to long range wireless remote control of electrical apparatus in a variety of industrial applications. Each system consists of a 2-relay receiver and handheld or contact input transmitter. The integral high current relays in the receiver are user-programmable for momentary or latching operation. This model also has up to seven user-programmable frequencies and can be directly interfaced with the customer's equipment or P.L.C. Capable of receiving remote signals transmitted from up to 2500 feet away (with the handheld transmitter) or up to 4 miles away (with the contact input transmitter), the model 44-5000 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 |

APPLICATIONS

Doors, gates, barriers, tail gates, electrically controlled hydraulic valves, propane shut off controls, winches, anchor lifts, lights, sprinkling systems, movie screens, curtains, news weather screens, alarm systems, skeet throwers, saw mill applications, grain or aggregate chutes, conveyor belts, boat lifts, and more.

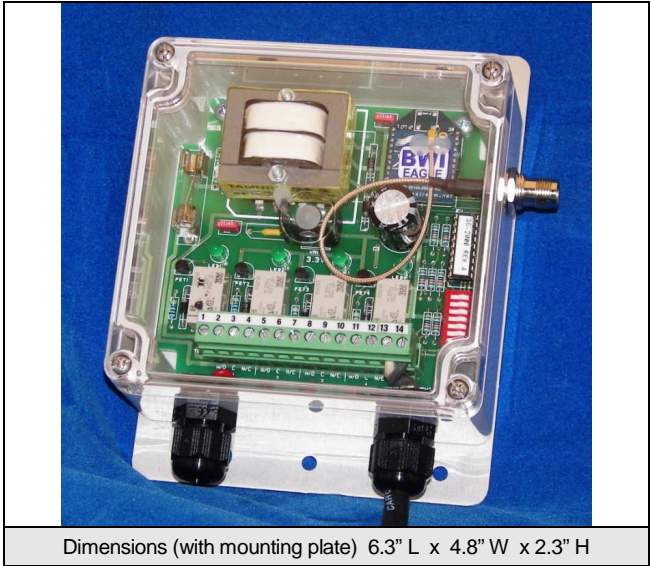
INSTALLATION

DISCONNECT AC 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 AC power and control to the proper terminals in your control circuit.

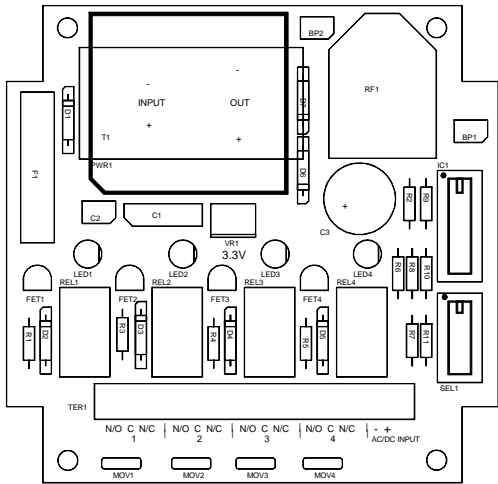
TERMINAL STRIP WIRING

| | | | | | |
|---|--------------|----|-----|----|---------------------|
| 1 | N/O Relay #1 | 7 | N/A | 13 | 120 VAC - (Neutral) |
| 2 | C Relay #1 | 8 | N/A | 14 | 120 VAC - (Hot) |
| 3 | N/C Relay #1 | 9 | N/A | | |
| 4 | N/O Relay #2 | 10 | N/A | | |
| 5 | C Relay #2 | 11 | N/A | | |
| 6 | N/C Relay #2 | 12 | N/A | | |



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 |
| RF1 | RF module that receives data from the remote transmitter |
| REL1 and REL2 | Two SPDT output control relays |
| SEL1 | Seven dip switches for selecting relay options and operating frequency |

AIR-EAGLE® XLT MINI

900 MHz RF Receiver

MODEL 44-5000-120VAC

RELAY & FREQUENCY SET-UP

The unit is shipped from the factory with SEL1 switches in the open positions. Both relays will operate as maintained momentary and unit is receiving commands on frequency one. If you wish to change these default settings, follow the instructions 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" | Relay #1 momentary | Relay #1 toggle/latch |
| | Relay #2 momentary | Relay #2 toggle/latch |
| "2" | N/A | N/A |
| | N/A | N/A |
| "3" | Reserved for future use | |

FREQUENCY SET-UP

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

SPECIFICATIONS

| | |
|-----------------------|---|
| AC Input | 120 VAC, 16 W, 50/60 Hz |
| 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) | 44-5002 |
| 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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