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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® SR 2.4 GHz RF Receiver MODEL 38HC-2000

DESCRIPTION

The Air-Eagle SR is an RF system designed for short to medium range wireless remote control of electrical apparatus in a variety of industrial applications. Systems can consist of any number of receivers and handheld or contact input transmitters working together. This receiver is equipped with 3 independent relays that are capable of switching up to 20 amps @120VAC or 30VDC or 16 amps at 220VAC. The relays are user programmable for momentary or toggle/latching operation and can be directly interfaced with the customer's equipment or P.L.C. Eight user selectable frequencies allow multiple systems to be used in the same area. Capable of receiving remote signals transmitted from up to 100 feet away (with the SR transmitter) or up to 600 feet away (with the SR PLUS transmitter), the Air-Eagle SR Receiver utilizes spread-spectrum technology and provides the utmost security and reliability even in the noisiest RF environments.

APPROVALS

United States (FCC)	OUR-XBEEPRO
Canada (IC)	4214A-XBEEPRO
Europe (CE)	ETSI

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.

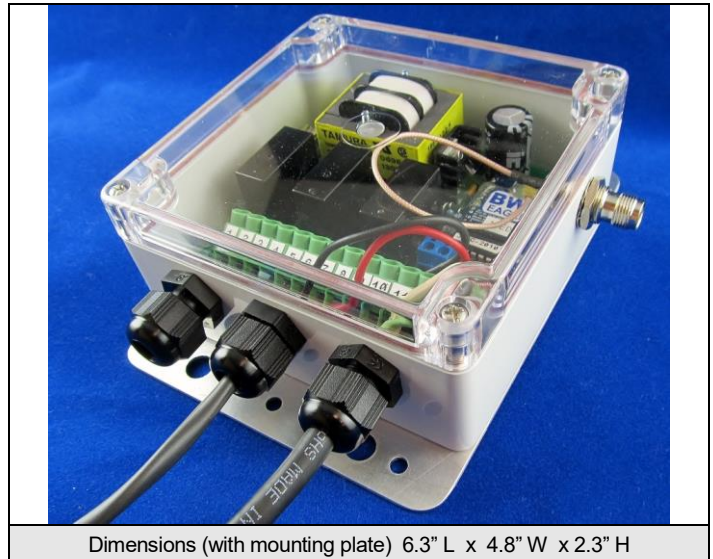
INSTALLATION

DISCONNECT AC Power from all equipment before installation.

1. Mount the Air-Eagle SR 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.

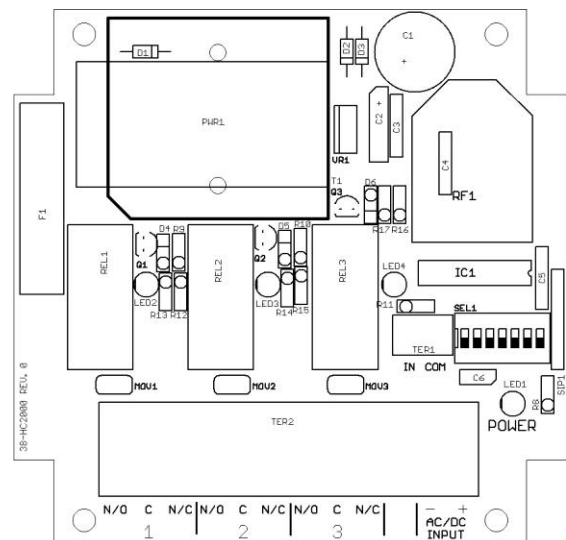
TERMINAL STRIP WIRING

1	2	3	4	5	6	7	8	9	10	11	12
N/O Relay #1	C Relay #1	N/C Relay #1	N/O Relay #2	C Relay #2	N/C Relay #2	N/O Relay #3	C Relay #3	N/C Relay #3	Not Used	120VAC (Neutral)	120VAC (Hot)



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

CONTROLS AND INDICATORS



POWER LED	Illuminates while receiver is powered on
LED2	Illuminates when relay #1 is energized
LED3	Illuminates when relay #2 is energized
LED4	Illuminates when relay #3 is energized
RF1	RF module that receives data from the remote transmitter
REL1 thru REL3	High current SPDT output control relays
SEL1	Seven dip switches for selecting relay options and operating frequency

AIR-EAGLE® SR

2.4 GHz RF Receiver

MODEL 38HC-2000

RELAY & FREQUENCY SET-UP

The unit is shipped from the factory with SEL1 switches in the open positions. All three 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 relay operation 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
SW1	Relay #1 momentary (default)	Relay #1 toggle/latch
SW2	Relay #2 momentary (default)	Relay #2 toggle/latch
SW3	Relay #3 momentary (default)	Relay #3 toggle/latch
Maintained Momentary – Relay mimics button or input – when depressed or closed, relay will be energized; when released, relay de-energizes Toggle Latch – Relay changes (and holds) its state each time the corresponding button or input is depressed or closed.		
SW4	NOT USED	

FREQUENCY SET-UP

	Network Frequency	SW5	SW6	SW7
SEL1 (SW5-7)	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

SPECIFICATIONS

AC Input	120 VAC, 16 W, 50/60 Hz
Relay Contacts	SPDT 20 amp @ 120VAC or 30VDC SPDT 16 amp @ 220VAC
Fuse Protected	1 amp
Receiver Frequency	2.4 GHz Spread Spectrum
Receiver Range – Dependant upon transmitter – see below:	
Using SR Series TX	Approximately 100 feet
Using SR+ Series TX	Approximately 600 feet
Receiver Channels	Eight independent network frequencies
Operating Temperature	-40° F to +185° F
Enclosure	Polycarbonate, IP66 (NEMA 4)
Weight	Approx 2 lbs.

REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	38HC-2002
Standard Antenna (Included):	
2.4GHz TNC Portable Antenna (For distances up to 1200 feet*)	49-1201
Optional Antennas and Accessories – Used to increase range in both non line of sight and line of sight applications. - Contact BWI Eagle for recommendations	
2.4GHz Thru-Hole Mount Mobile Antenna	49-2201
2.4GHz Magnetic Mount Mobile Antenna	49-2202
2.4GHz Omni Directional Antenna	49-3201
2.4GHz 13dB Yagi Antenna	49-3202
Flex Coax Cable w/Connectors – Connects external antenna(s) to base unit(s).	49-4000-XX (XX = # of Feet)
Inline Lightning 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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