



238 Pillow Street
Butler, PA 16001
724-283-4681
724-283-5939 (fax)
www.bwieagle.com

PRODUCT INFORMATION BULLETIN

AIR-EAGLE® GOLD PLUS REMOTE STOP SWITCH 900 MHz RF Receiver MODEL 48-5240

DESCRIPTION

The AIR-EAGLE GOLD PLUS RX is an RF receiver designed to communicate with the AIR-EAGLE GOLD TX in applications where a wireless stop switch is required. Integral high current relays can be directly interfaced with the customer's equipment. This unit will receive remote signals transmitted from ¼ mile or more. Our 900 MHz receiver has the capability of simultaneously networking with up to 4 transmitters in the direct vicinity. This model includes four dedicated log-in relays for individual transmitter log-in confirmation. The auto-scan feature "locks" the unit onto a clear frequency without user intervention. Incorporating spread-spectrum technology, this model provides the utmost security and reliability. The full-duplex communication capability allows for a maintained fail-safe communications link while on board LEDs provide visual indication that communication is established and sustained.

INSTALLATION

DISCONNECT AC Power from all equipment before installation.

1. Mount the AIR-EAGLE Gold RF RECEIVER 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		

* Note #1 – Relays #1 thru 4 utilize a fail-safe relay configuration. The relay contacts are shown above in their de-energized state. Ex: The normally closed contacts would be open during normal operation.

* Note #2 – Relays #5 thru #8 will be energized only while their corresponding transmitter(s) is logged into the system

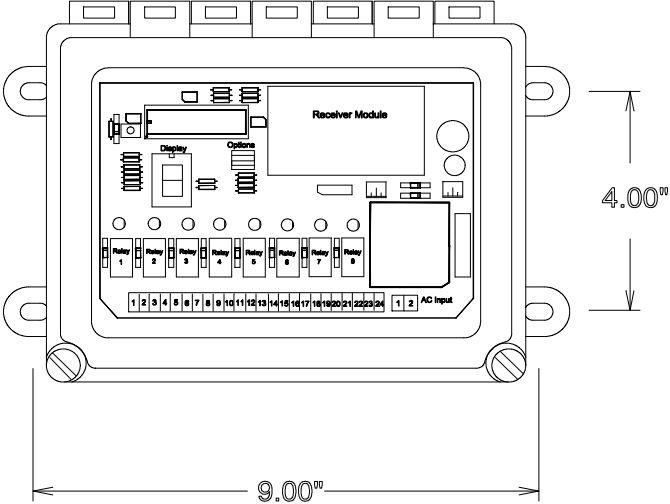
AC INPUT	
Terminal #1	120 VAC - (Hot)
Terminal #2	120 VAC - (Neutral)

New and Improved Performance!

The Air-Eagle Gold Plus provides the same protection as the original Air-Eagle Gold but with enhanced output power. This allows for a 50% increase in overall range, while improving signal strength through and around buildings and other obstacles. These combine to maintain an even stronger "link" between transmitter and receiver.



DIMENSIONS



Enclosure height equals 4 inches.

AIR-EAGLE® GOLD PLUS

REMOTE STOP SWITCH RF Receiver

MODEL 48-5240



CONTROLS AND INDICATORS

CONTROL / INDICATOR	FUNCTION		
RECEIVER MODULE	RF module that receives data from the remote transmitter(s)		
DISPLAY	7-Segment LED displays a number corresponding to the remote transmitter code being received.		
SEL1 CONFIGURATION OPTIONS	SW #	OPEN	CLOSED
	SW1	Network #1 (default)	Network #2
	SW2	Not Used	Not Used
	SW3	Not Used	Not Used
RELAYS	Eight SPDT output control relays		

GENERAL OPERATION

When the unit is installed and electric power is applied, relays #1 thru #4 will energize and the 7-segment display will show a "0". Once the first transmitter has logged into the system, relay #5 will energize. When the second transmitter logs in, relay #6 will energize. When the third transmitter logs in, relay #7 will energize. And when the fourth transmitter has logged in, relay #8 will energize. These relays will remain energized until their corresponding transmitter has logged out of the system. During this time, the display will be alternating through the active transmitters logged in. Example: "0,1,2,0,1,2," will be displayed when 2 remotes are logged into the system. Up to 4 remote transmitters can communicate simultaneously with this receiver. Note – The receiver will automatically assign a number to a remote during log in. This assignment will be the same until the operator "logs out" from this receiver.

DISPLAY VIEW	INDICATES
"0" (ZERO)	Power on / Not Linked to any Remote Transmitters
"1" (ONE)	The first remote has logged into the system and Relay #5 has energized
"2" (TWO)	The second remote has logged into the system and Relay #6 has energized
"3" (THREE)	The third remote has logged into the system and Relay #7 has energized
"4" (FOUR)	The fourth remote has logged into the system and Relay #8 has energized

SPECIFICATIONS

AC Input Models	120 VAC, 16 W, 50/60 Hz
Fuse Protected	1 amp
Transceiver Frequency	900 MHz 74 Channel Auto-Select
Receiver Range	Approximately 1 mile (up to 10 miles with external antennas - see accessories)
Enclosure	Hinged fiberglass with window / NEMA 4, 4x, 12 + 13

REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	48-5242
Air-Eagle Gold TX	48-5100
Replacement Antennas:	
Medium Range Operation - External (Greater than 2/3 mile / Less than 2 miles) *	49-3101
Long Range Operation - External (Greater than 2 miles / Up to 10 miles) *	49-3102
* = 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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MODEL 48-5240 - RELAY LOGIC

ACTION TAKEN	DISPLAY	RELAY 1	RELAY 2	RELAY 3	RELAY 4	RELAY 5	RELAY 6	RELAY 7	RELAY 8
POWER UP	0	ON	ON	ON	ON	OFF	OFF	OFF	OFF
TX 1 LOG-IN	1	ON	ON	ON	ON	ON	N/A	N/A	N/A
TX 1 STOP SWITCH ACTIVATED	1	OFF	ON	ON	ON	ON	N/A	N/A	N/A
TX 1 STOP SWITCH RELEASED	1	ON	ON	ON	ON	ON	N/A	N/A	N/A
TX 1 LOSS OF SIGNAL	0	LATCHING OFF	ON	ON	ON	OFF	N/A	N/A	N/A
TX 1 LOG-OUT	0	ON	ON	ON	ON	OFF	N/A	N/A	N/A
TX 2 LOG-IN	2	ON	ON	ON	ON	N/A	ON	N/A	N/A
TX 2 STOP SWITCH ACTIVATED	2	ON	OFF	ON	ON	N/A	ON	N/A	N/A
TX 2 STOP SWITCH RELEASED	2	ON	ON	ON	ON	N/A	ON	N/A	N/A
TX 2 LOSS OF SIGNAL	0	ON	LATCHING OFF	ON	ON	N/A	OFF	N/A	N/A
TX 2 LOG-OUT	0	ON	ON	ON	ON	N/A	OFF	N/A	N/A
TX 3 LOG-IN	3	ON	ON	ON	ON	N/A	N/A	ON	N/A
TX 3 STOP SWITCH ACTIVATED	3	ON	ON	OFF	ON	N/A	N/A	ON	N/A
TX 3 STOP SWITCH RELEASED	3	ON	ON	ON	ON	N/A	N/A	ON	N/A
TX 3 LOSS OF SIGNAL	0	ON	ON	LATCHING OFF	ON	N/A	N/A	OFF	N/A
TX 3 LOG-OUT	0	ON	ON	ON	ON	N/A	N/A	OFF	N/A
TX 4 LOG-IN	4	ON	ON	ON	ON	N/A	N/A	N/A	ON
TX 4 STOP SWITCH ACTIVATED	4	ON	ON	ON	OFF	N/A	N/A	N/A	ON
TX 4 STOP SWITCH RELEASED	4	ON	ON	ON	ON	N/A	N/A	N/A	ON
TX 4 LOSS OF SIGNAL	0	ON	ON	ON	LATCHING OFF	N/A	N/A	N/A	OFF
TX 4 LOG-OUT	0	ON	ON	ON	ON	N/A	N/A	N/A	OFF

Latching Off – Power must be removed and reapplied to reset the relays from a latching condition