105 Bonnie Drive
Butler, PA 16002
724-283-4681
724-283-5939 (fax)
www.bwieagle.com

PRODUCT INFORMATION BULLETIN

AIR-EAGLE® SR PLUS

2.4GHz 20 Dry Contact Input Transmitter

MODEL 36-12000-120VAC

DESCRIPTION

The AIR-EAGLE SR PLUS, MODEL 36-12000-120VAC RF TRANSMITTER IS a dry contact input transmitter designed to send up to twenty independent commands to an Air-Eagle Receiver(s) that can be located up to 600 feet away. Any number of transmitters and receivers can be combined to create a system. The Air-Eagle SR PLUS TX is user-programmable for up to eight network frequencies to allow multiple systems to operate simultaneously in the same area. Utilizing spread-spectrum technology this unit provides the utmost security and reliability even in the noisiest RF environments.

INSTALLATION

DISCONNECT AC Power from all equipment before installation.

1. Mount the AIR-EAGLE SR PLUS TRANSMITTER in a convenient location.
2. Install antenna. The unit has an antenna connector located on the right side on the enclosure. Attach the coax from the external antenna to this connector.
3. Connect dry contact inputs from external equipment to the proper terminals on the PCB (see below)
4. Connect AC power to the supplied AC power input cable.

DIGITAL FREQUENCY SET-UP

This transmitter is factory programmed to Frequency #1.This setting can be changed by the user at any time ***but must match the corresponding receiver(s).***

1) Remove power from unit
2) Open hinged cover.
3) Select desired network frequency using table below.
4) Reattach cover and apply power.
5) Programming is now complete.

SEL1 (SW 1-4)	Not used on this model			
SEL 1 (SW 5-7): *(NETWORK FREQUENCY)*	Network Frequency	SW5	SW6	SW7
	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

Dimensions 8" L x 6" W x 4" H

TERMINAL STRIP WIRING

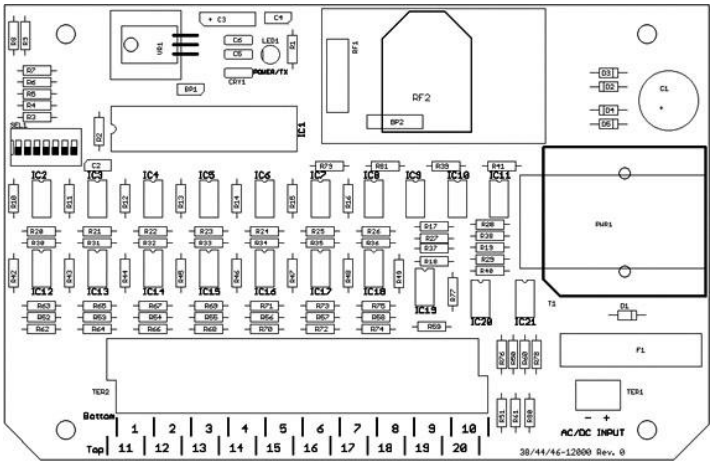
BOTTOM TERMINAL BLOCK			
1	C Input #1	11	C Input #6
2	Input #1	12	Input #6
3	C Input #2	13	C Input #7
4	Input #2	14	Input #7
5	C Input #3	15	C Input #8
6	Input #3	16	Input #8
7	C Input #4	17	C Input #9
8	Input #4	18	Input #9
9	C Input #5	19	C Input #10
10	N/O Input #5	20	N/O Input #10
TOP TERMINAL BLOCK			
1	C Input #11	11	C Input #16
2	Input #11	12	Input #16
3	C Input #12	13	C Input #17
4	Input #12	14	Input #17
5	C Input #13	15	C Input #18
6	Input #13	16	Input #18
7	C Input #14	17	C Input #19
8	Input #14	18	Input #19
9	C Input #15	19	C Input #20
10	Input #15	20	Input #20
AC INPUT TERMINAL BLOCK			
1	120 VAC Neutral	2	120 VAC Hot

AIR-EAGLE® SR PLUS

2.4 GHz 8 Input RF Transmitter

MODEL 36-12000-120VAC

CONTROLS AND INDICATORS



LED1	Illuminated green when power is applied. Changes to red when transmitting data.
Inputs 1 thru 20	Twenty normally open dry contact inputs

APPROVALS

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

SPECIFICATIONS

AC Input	120 VAC, 16 W, 50/60 Hz
Fuse Protected	1 amp
RF Frequency	2.4 GHz Spread Spectrum
Input Channels	20 Dry Contact Inputs
RF Output Power	60 mW
Transmitter Range	Approximately 600 feet
Transmitter Frequencies	8 Independent Network Frequencies
Antenna Connection	TNC Bulkhead
Enclosure	Fiberglass / NEMA 4, 4x, 12 + 13
Operating Temperature	-40° F to +185° F

REPLACEMENT PARTS & ACCESSORIES

PC Board (Main)	36-12002-120VAC
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 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 Lightening Arrestor	49-5002
* = 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.

DOCUMENT DATE: 03/01/2019 / PRODUCT REV. 1

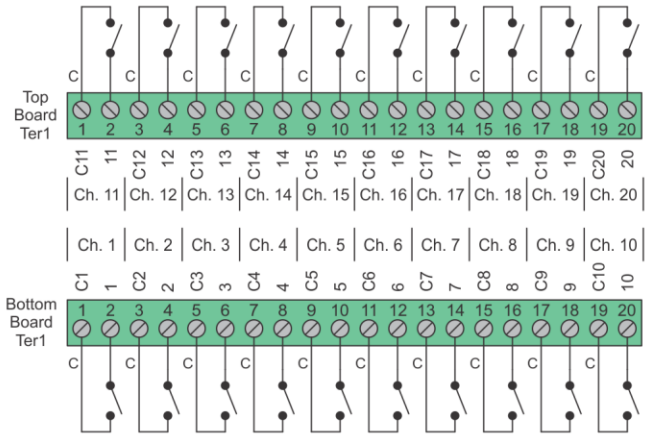
BWI EAGLE
105 Bonnie Drive
Butler, PA 16002
(724) 283-4681
Fax (724) 283-5939
www.bwieagle.com

BWI EAGLE
105 Bonnie Drive
Butler, PA 16002
724-283-4681
724-283-5939 (fax)
www.bwieagle.com

DRY CONTACT INPUT WIRING
20-Input Transmitter

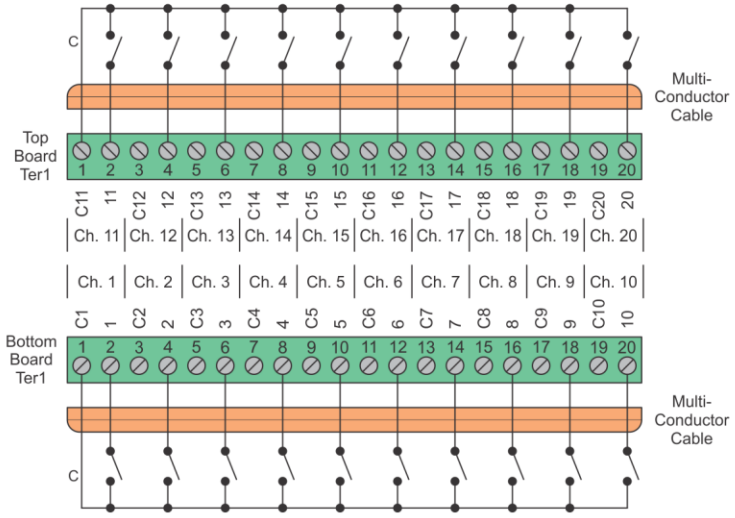
Standard wiring of a dry contact input transmitter

Shorting together the contacts of the respective channel will cause it to transmit. This can be done with any type of manual or automatic switch.



Standard Wiring for Common Ground Applications

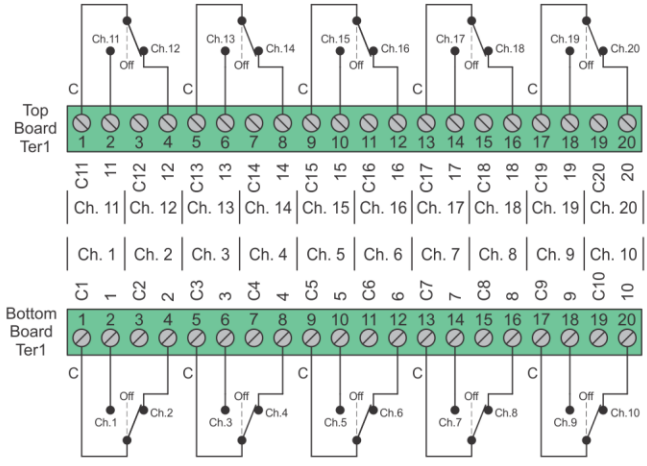
Because each channel shares a common (C) terminal, inputs can be wired as shown to allow for fewer conductors to be run to the transmitter.



SPDT Switches

The common (C) terminal of the switch only needs to be connected to one of the channels ground terminal. In this configuration ten channels would be transmitting all the time. A switch with a center “off” position would allow transmitting to stop.

In this example channels 2, 4, 6, 8, 10, 12, 14, 16, 18, and 20 are transmitting.



Wiring configurations shown here are examples. The wiring for your application may differ.
Call BWI Eagle for assistance or consult an electrician.

Updated: 5/16/2019