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PRODUCT INFORMATION BULLETIN

AIR-EAGLE® SR PLUS Analog & Digital 2.4 GHz RF Transmitter MODEL 36AN/D-1000-120VAC

DESCRIPTION

The AIR-EAGLE SR PLUS, MODEL 36AN/D-1000-120VAC is an RF transmitter capable of transmitting one analog or voltage input and one dry-contact input signal to an analog / dry-contact relay output receiver. The transmitter and receiver combine to create a medium range radio frequency system that monitors and operates hazardous or hard-to-reach electrical apparatus from safe, convenient locations of up to 600 feet away. This unit is user-programmable for up to eight network frequencies to allow multiple systems to operate simultaneously in the same area without interference.

INSTALLATION

1. Mount the AIR-EAGLE SR PLUS TRANSMITTER in a convenient location
2. Install wiring to input terminal strip and select input type by setting dip switches 1 and 2 on SEL1 (see INPUT OPTIONS)
3. Install antenna onto TNC connector on side of unit.
4. Plug supplied AC wall plug adapter into 110VAC outlet.

TERMINAL STRIP WIRING

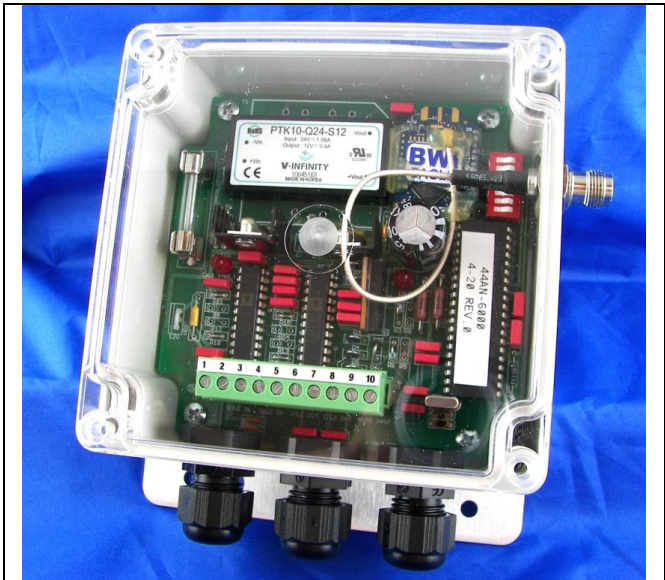
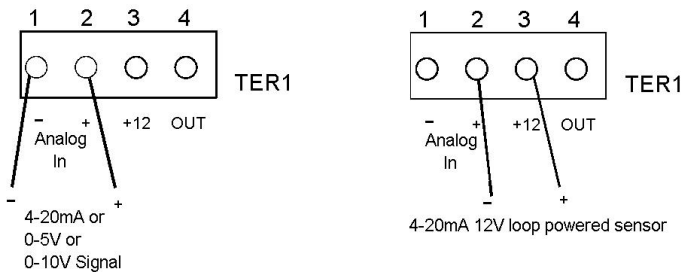
| TER2 (LEFT BLOCK) | | | |
|----------------------|-------------------|---|---|
| 1 | 2 | 3 | 4 |
| Dry-Contact – Common | Dry-Contact – N/O | (-) 12VDC input from included AC wall adapter | (+) 12VDC input from included AC wall adapter |

| TER1 (RIGHT BLOCK) | | | |
|--------------------|---------------|-----------|------------------------------|
| 1 | 2 | 3 | 4 |
| Analog In (-) | Analog In (+) | (+) 12VDC | Open Drain Output (not used) |

Note #1 – **Input type MUST be selected** for the terminal strip wiring to take effect! (See INPUT OPTIONS & FREQUENCY SET-UP)

Note #2 – When using in 4-20mA mode or voltage mode connect input to TER1, Pins 1 and 2 – be sure to observe polarity

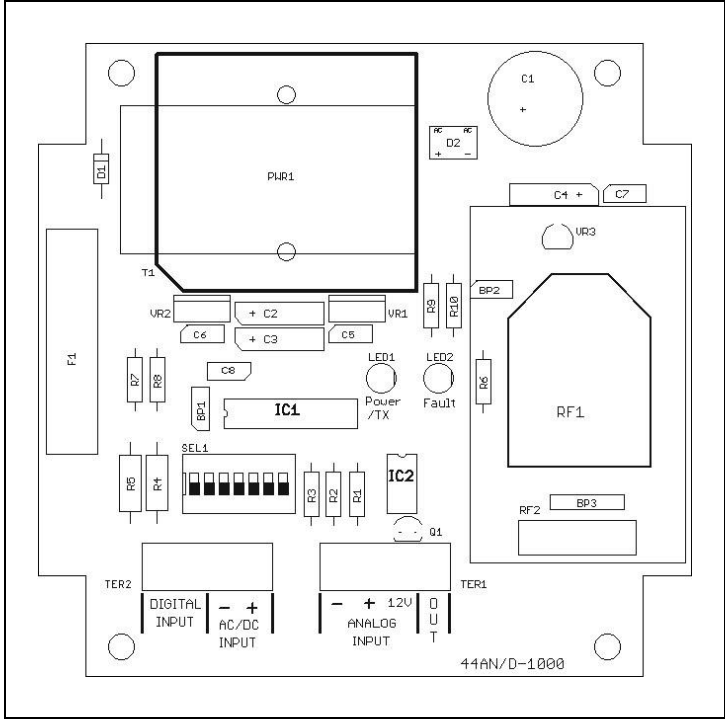
Note #3 – You can use a 12V loop powered 4-20mA sensor by connecting the (-) side to TER1, Pin 2 and (+) side to TER1, Pin 3. (use 12V powered sensor only – see wiring picture)



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

CONTROLS & INDICATORS

| | |
|------------------------|---|
| POWER/TX LED | Illuminates GREEN when powered on – Changes to RED when transmitting digital data |
| INPUT FAULT LED | Used in 4-20mA mode only – Illuminates RED when current loop open |



AIR-EAGLE® SR PLUS

Analog & Digital 2.4 GHz RF Transmitter

MODEL 36AN/D-1000-120VAC

INPUT OPTIONS & FREQUENCY SET-UP

This transmitter is factory set with no input type selected and to operate on frequency #1. If you wish to change the default settings, follow the instructions using the table below:

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

| INPUT CONFIGURATION | | | | | |
|---------------------|--|---|--------|--------|--------|
| | | INPUT TYPE | SW1 | SW2 | |
| SEL1 SW1 & 2 | | No Input Selected (default) | OPEN | OPEN | |
| | | 4-20mA Input | CLOSED | OPEN | |
| | | 0-5VDC Input | CLOSED | CLOSED | |
| | | 0-10VDC Input | OPEN | CLOSED | |
| SW3 & 4 | | Reserved for future use | | | |
| 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

| | |
|---|--|
| Inputs | One 4-20mA or voltage input (0-5 or 0-10VDC) One dry-contact input |
| Fuse Protected | 2 amp slow-blow |
| Update Time | 4 samples / second |
| AC Input | 100-240 VAC, 16 W, 50/60 Hz from supplied wall adapter |
| Enclosure | Polycarbonate NEMA 4 (IP66) |
| Frequency | 2.4 GHz Spread Spectrum 8 Independent Networks |
| RF Output Power | 60 mW |
| Transmit Range | Up to 600 Feet |
| Note: Max range figures are estimates, based on free-air terrain with limited sources of interference. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting antenna, height of receiving antenna, weather conditions, interference sources in the area, and terrain between receiver and transmitter, including, but not limited to, indoor and outdoor structures such as walls, metal objects, trees, buildings, hills, and mountains. | |
| Operating Temperature | -40° F to +185° F |

APPROVALS

| | |
|---------------------|------------------------|
| United States (FCC) | MCQ-XBEE3 |
| Canada (IC) | 1846A-XBEE3 |
| Europe (CE) | ETSI |
| Australia | RCM |
| Brazil | ANATEL 06329-18- 01209 |

ACCESSORIES

| Standard Antenna (Included): | |
|--|----------------------------------|
| 2.4GHz TNC "Rubber Duck" Antenna | 49-1201 |
| Mobile/Base Antennas – Used to help achieve max 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 Magnet Mount Mobile Antenna | 49-2202 |
| 2.4GHz Omni Directional Base Antenna | 49-3201 |
| 2.4GHz Yagi Directional Base Antenna | 49-3202 |
| High Quality Coax Cables – Used to connect external high gain antennas to control unit | |
| Flex Coax Cable w/Connectors – Available in 5', 15', 25', 30', 40', 60', 80', 100' Lengths | 49-4000-XX (XX = # of Feet) |
| Bulkhead Extensions – Used to provide an external antenna connection when mounting control unit inside another enclosure | |
| TNC Male to TNC Bulkhead Cable Assembly - Available in 2', 4', 7' Lengths | 49-5004-X-ISO (X = # of Feet) |

LIMITED WARRANTY STATEMENT

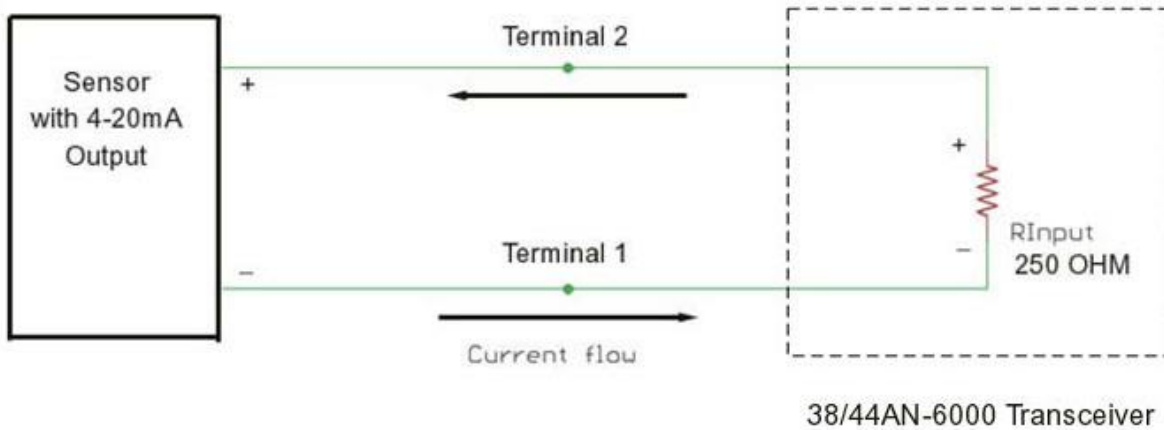
BWI Eagle Inc. warrants the Air-Eagle Remote Control System, if properly used and installed, will be free from defects in material and workmanship for a period of 1 year after date of purchase. Said warranty to include the repair or replacement of defective equipment. This warranty does not cover damage 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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36AN-1000-120VAC 4-20mA Installation



The above diagram shows a 4-20mA sensor hooked to channel 1 input. The 250 Ohm input resistor will drop a voltage of 1 Volt at 4mA and 5 Volts at 20mA. The sensor may be of any type and voltage that has a 4-20mA output. Even if the sensor runs on a voltage higher than 5 volts the current is still maintained between 4 and 20 milliamps so that the voltage drop on the resistor is always between 1 and 5 volts. Remaining voltage is dropped internally in the sensor. Loop powered sensors are not able to be used on this particular unit.