

WIRELESS

BAPI WIRELESS UNIVERSAL TRANSMITTERS

BA/WAI SERIES, BA/WDI, BA/WTS

DESCRIPTION

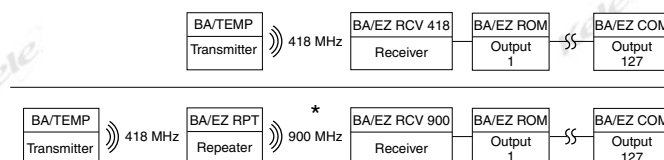
The **BAPI BA/W Series wireless universal input transmitters** are designed to monitor 0-5VDC, 0-10VDC or 4-20 mA signals and transmit that analog value to a receiver. The digital input version monitors any dry contact status input and transmits that On/Off status to the receiver. The thermistor temperature input version takes any 10K Type 2 thermistor sensor and transmits it to any BAPI receiver. All models transmit their data every 10-17 seconds. The units are battery operated and only require wiring from the remote input sensor.

FEATURES

- **Two Year Battery Powered with Replaceable Battery**
- **0-5, 0-10 and 4-20mA Analog Input Models**
- **Digital Input (dry contact) Model**
- **Thermistor Temperature Input Model**
- **100' open air range, 1,000' range with a Repeater**
- **Transmission Interval from 20 seconds**
- **Easy Two-Wire Termination and Easy Setup Mode**



SYSTEM LAYOUT



* The transmission range from repeater to receiver is 1000 feet.

SPECIFICATIONS

DEVICE OPERATION

| | |
|-------------------------|--|
| Supply Voltage | 3.6 VDC, Battery power only |
| Batteries | Two AA 3.6V lithium batteries (Included) |
| Battery Life | 8 years @20 second intervals |
| Sensor Type | Order sensor separately |
| WTS | Any Temperature, 10K-2 thermistor |
| WDI | Dry Contact, <10Ω closed, >250Ω open (Held for 20 seconds) |
| WAI-(05,10) | Voltage input (0-5V or 0-10V), >30KΩ |
| WAI-420 | Current input (4-20mA), 100Ω Imp. |
| Transmitted Range Value | |
| Temperature | -40° to 185°F (-40° to 85°C) |
| Digital Input | Open and Closed |
| WAI-(05,10) | Mimics input 0-5V or 0-10V |
| WAI-420 | Mimics input 4-20mA |
| Output | Output modules used with these transmitters (BA/RCV req.) |
| WTS | BA/(ROM,VOM,COM) (temperature range) |
| WDI | BA/RYOL-NO-EZ, (Output Mimics Input) |
| WAI-(05,10) | BA/VOM-(05,10), (Output Mimics Input) |
| WAI-420 | BA/COM, VOM, (Output Mimics Input) |
| Accuracy | Thermistor, 10K type 2, ±0.5°F (±0.32°C) Analog limited to A/D resolution |
| Indication | LED on Transmit |
| A/D resolution | 10 bit (1024 counts) |
| Mounting | Four corner mounting feet |
| Wiring | Two input terminals, 22-16 AWG |
| Operating Temperature | 32° to 140°F (0° to 60°C) |
| Operating Humidity | 5 to 95% RH, Non-condensing |
| Construction | UV-Resistant Polycarbonate, UL94 V-0 |
| Enclosure Rating | IP-66 |
| Dimensions | 4.1"H x 5.0"W x 2.5"D (10.4 x 12.7 x 6.4 cm) |
| Weight | 1.0 lb (0.45 Kg) |
| Warranty | 2 year |

RADIO TRANSMITTER

| | |
|-----------------------|--|
| Protocol | Proprietary (Point Six) |
| Frequency | 418 MHz |
| Modulation | Frequency Modulation |
| Transmit Power | 1mW (0 dBm) |
| Open Air Range | 100 ft (30m) |
| Transmission time | 20ms |
| Transmission Interval | 20 seconds standard (Can be factory programmed 10-300 s) |
| Antenna | Internal |
| Channels | One |
| Device Addresses | 100 transmitters within 100' |
| Programming | Push button in field |
| Repeater Capable | Yes, (can increase open air range x10) |
| Compliance | RoHS, FCC ID# T4F060811TEMP |

WIRING

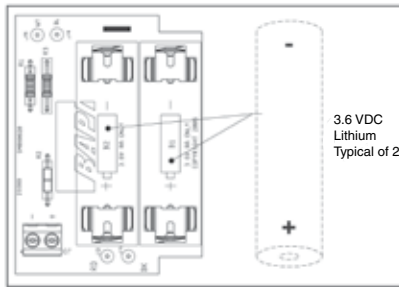


Fig. 1: Battery Installation

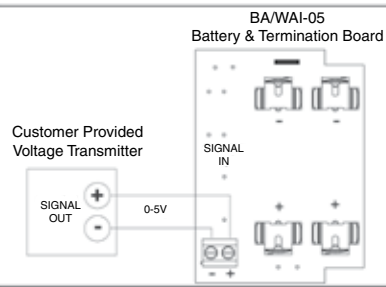


Fig. 2a: 0-5V Transmitter Termination

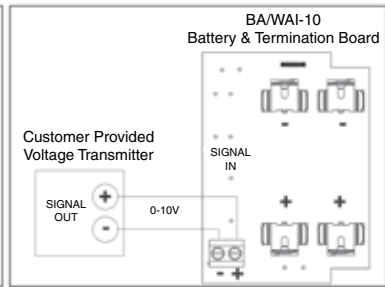


Fig. 2b: 0-10V Transmitter Termination

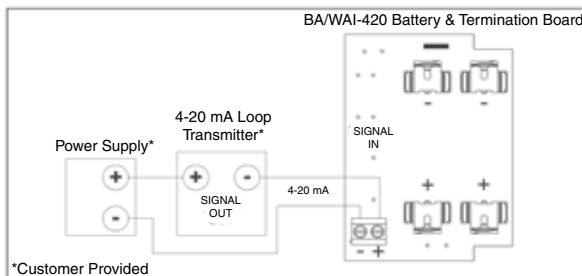


Fig. 3: 4-20 mA Loop Powered Transmitter Termination

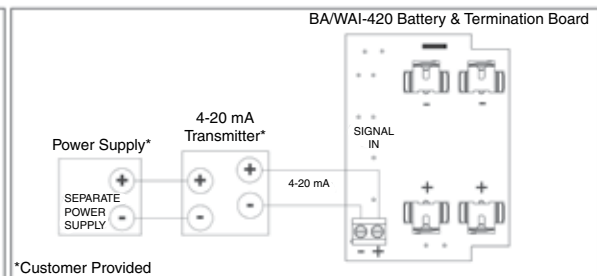


Fig. 4: 4-20 mA 4-wire Transmitter Termination

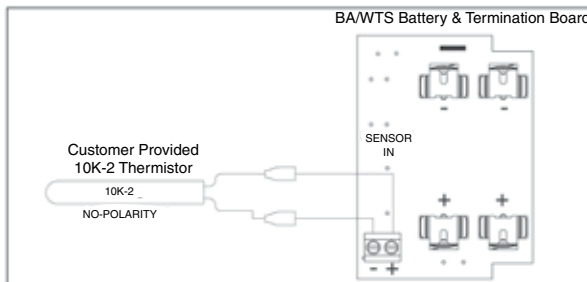


Fig. 5: 10K-2 Thermistor Termination

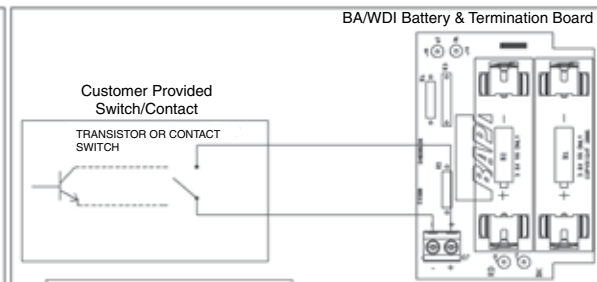


Fig. 6: Digital Input (DI) Termination

ORDERING INFORMATION

| MODEL | DESCRIPTION |
|------------|--|
| BA/WAI-05 | 0-5VDC Analog Input Transmitter, 418 MHz |
| BA/WAI-10 | 0-10VDC Analog Input Transmitter, 418 MHz |
| BA/WAI-420 | 4-20 mA Analog Input Transmitter, 418 MHz |
| BA/WDI | Digital Input Transmitter, 418 MHz |
| BA/WTS | Thermistor Sensor Transmitter, 418 MHz (any 10K-2 thermistor purchased separately) |