

SCADALink

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SCADALink SR-900T / SR-900R

SCADALink Sensor Radio SR-900T / SR900R



Wireless Simplex I/O Controller

User Manual

Version V1.00 for SCADALink SR-900T / SR-900R

BENTEK SYSTEMS LTD

504 - 42 Ave S.E. Calgary, Alberta, Canada T2G 1Y6 Ph: (403) 243-5135 Fax: (403) 243-5165

SR-900T Transmitter

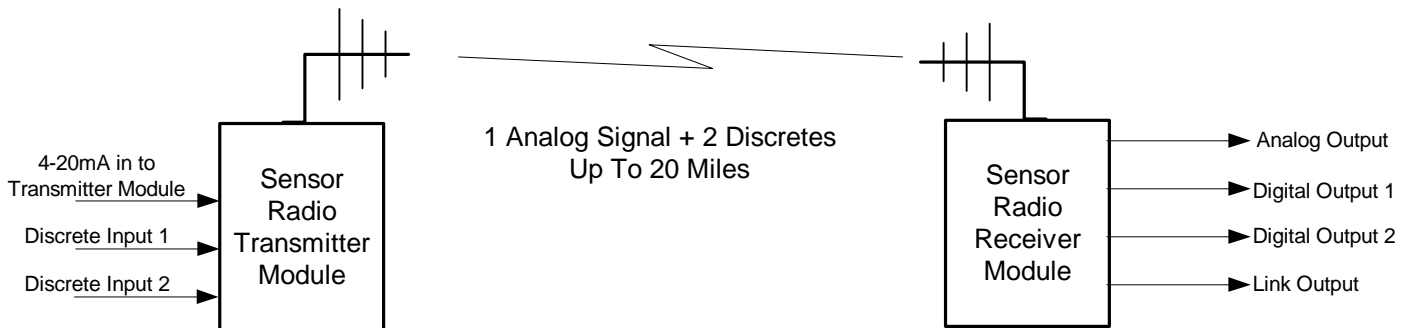
Transmit Power.....1 Watt
 Range.....4-5 Miles (Omni) , >15 Miles
 Yagi (L.O.S.)
 Frequency.....902 - 928 MHz
 Technology.....Frequency Hopping Spread
 Spectrum
 Input Power.....12VDC to 30VDC (Regulated)
 Power Consumption...3 Watts (125mA @ 24VDC)
 Temp Range.....-40C to 70C (-40F to 158F)
 Inputs.....1 x 4-20mA analog (250 ohm
 input impedance)
 2 x +5 to +30VDC Digital
 Dimensions.....4" x 4.5" x 0.7"
 Mounting.....Din Rail
 Environmental.....NEMA1
 Approvals.....Class 1 Div 2

SR-900R Receiver

Frequency.....902 - 928 MHz
 Technology.....Frequency Hopping Spread
 Spectrum
 Input Power.....12VDC to 30VDC (Regulated)
 Power Consumption...8.4 Watts Peak, 1.8Watts
 Average (350mA@24VDC
 Peak, 75mA @ 24VDC Average)
 Temp Range.....-40C to 70C (-40F to 158F)
 Outputs.....1 x 4-20mA analog (12 Bit
 Resollution)
 2 x Dry Contact Output 0.5A,
 120VAC Max
 Max Loop Impedance..450 to 1350 ohms for power
 supply voltages of 12VDC to
 30VDC
 Dimensions.....4" x 4.5" x 0.7"
 Mounting.....Din Rail
 Environmental.....NEMA1
 Approvals.....Class 1 Div 2

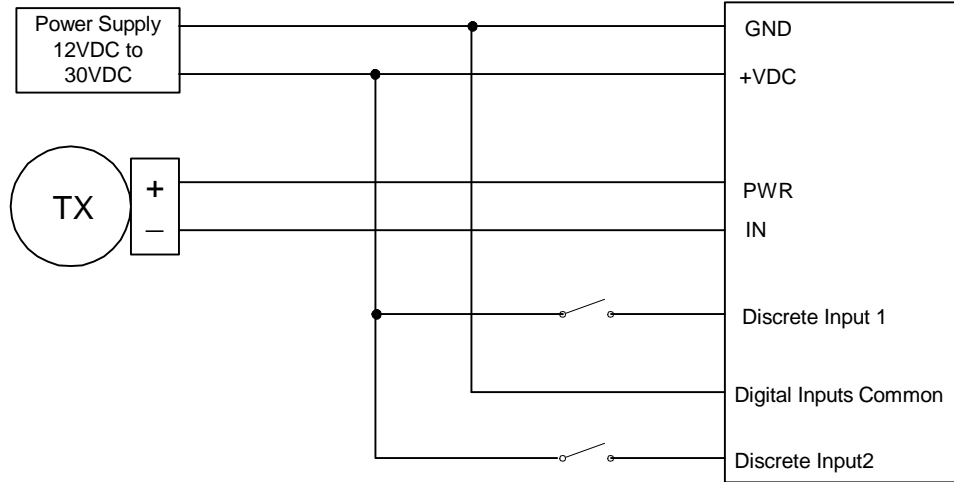
Description Of Operation:

The SCADALink Sensor Radio SR-900T and SR-900R are a matching Transmitter / Receiver Pair with one built in analog and two built in discrete inputs. Inputs on the transmitter are replicated as outputs on the receiver. There is also a "Link" output on the receiver, which is linked to communication status. If communication fails, the Link output goes off. The transmitter can also "broadcast" to multiple receivers, where the input on the transmitter is replicated at all the receivers. This requires special factory configuration. Simple Setup and wiring of this device allows fast and easy implementation. For detailed wiring information, refer to pages 3 and 4 of this manual.



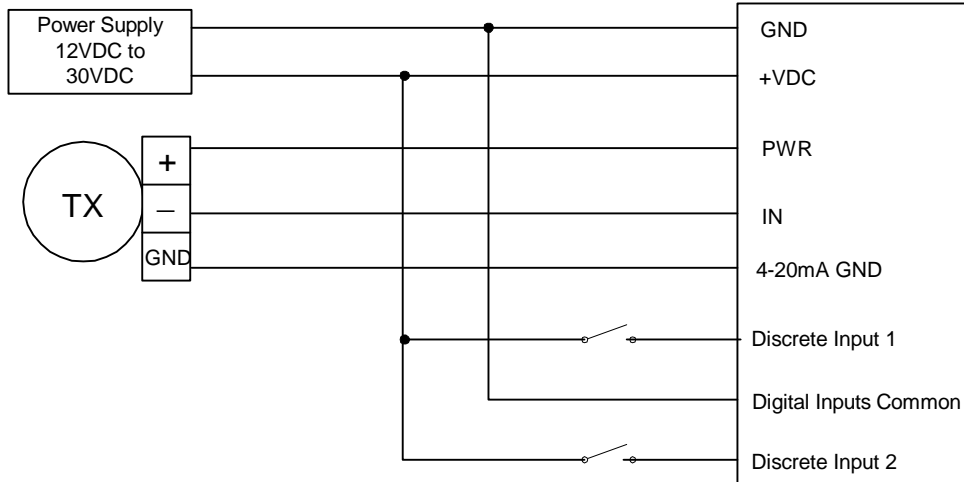
SR-900T Radio Transmitter Wiring Diagrams

**Two Wire Loop
Powered
Transmitter**



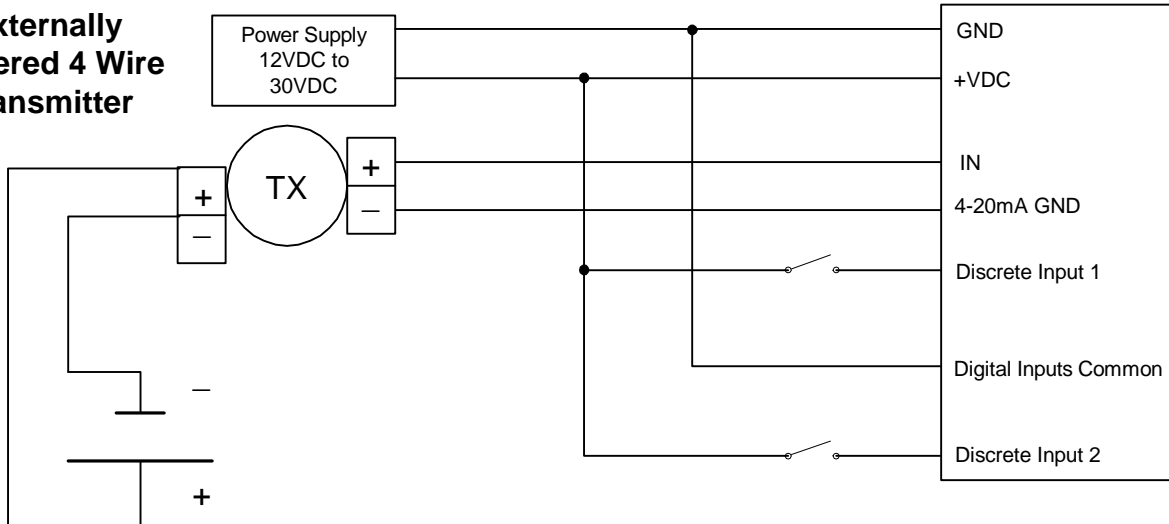
SR-900T
Transmitter

**Three Wire
Transmitter**



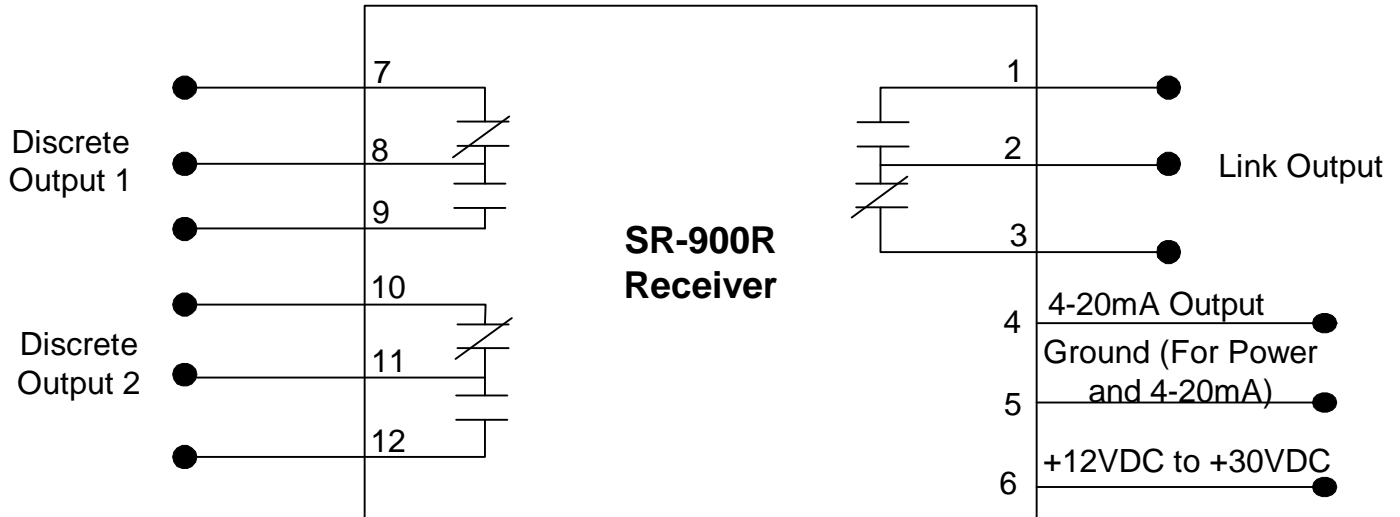
SR-900T
Transmitter

**Externally
Powered 4 Wire
Transmitter**



SR-900T
Transmitter

SR-900T Radio Receiver Wiring Diagram



SR-900T Transmitter LED's

RF LED: Solid Green when functioning normally.

LED's 1 and 2 show status of digital inputs 1 & 2. Solid Green = ON.

SR-900R Receiver LED's

RF LED Blinks once every 2 seconds when transmitter is OFF or out of range.

RF LED Blinks rapidly when marginal signal is being received.

RF LED is solid when a secure link is established.

LED's 1 & 2 show status of digital inputs 1 & 2. Solid Green = ON.

FCC: This device complies with Part 15 of the FCC rules. Operation is subject to the following 2 conditions:

1. This device may not cause harmful interference.
2. This device must accept interference received, including interference that may cause undesired operation.

Changes or modifications not expressly authorized by Bentek Systems Ltd. could void the user's authority to use the equipment. The system integrator may only use antennas that have been tested and approved with this radio to maintain the FCC approval. If a system integrator uses non-approved antenna they are responsible for obtaining their own FCC certification.

WARNING: EXPLOSION HAZARD

Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.