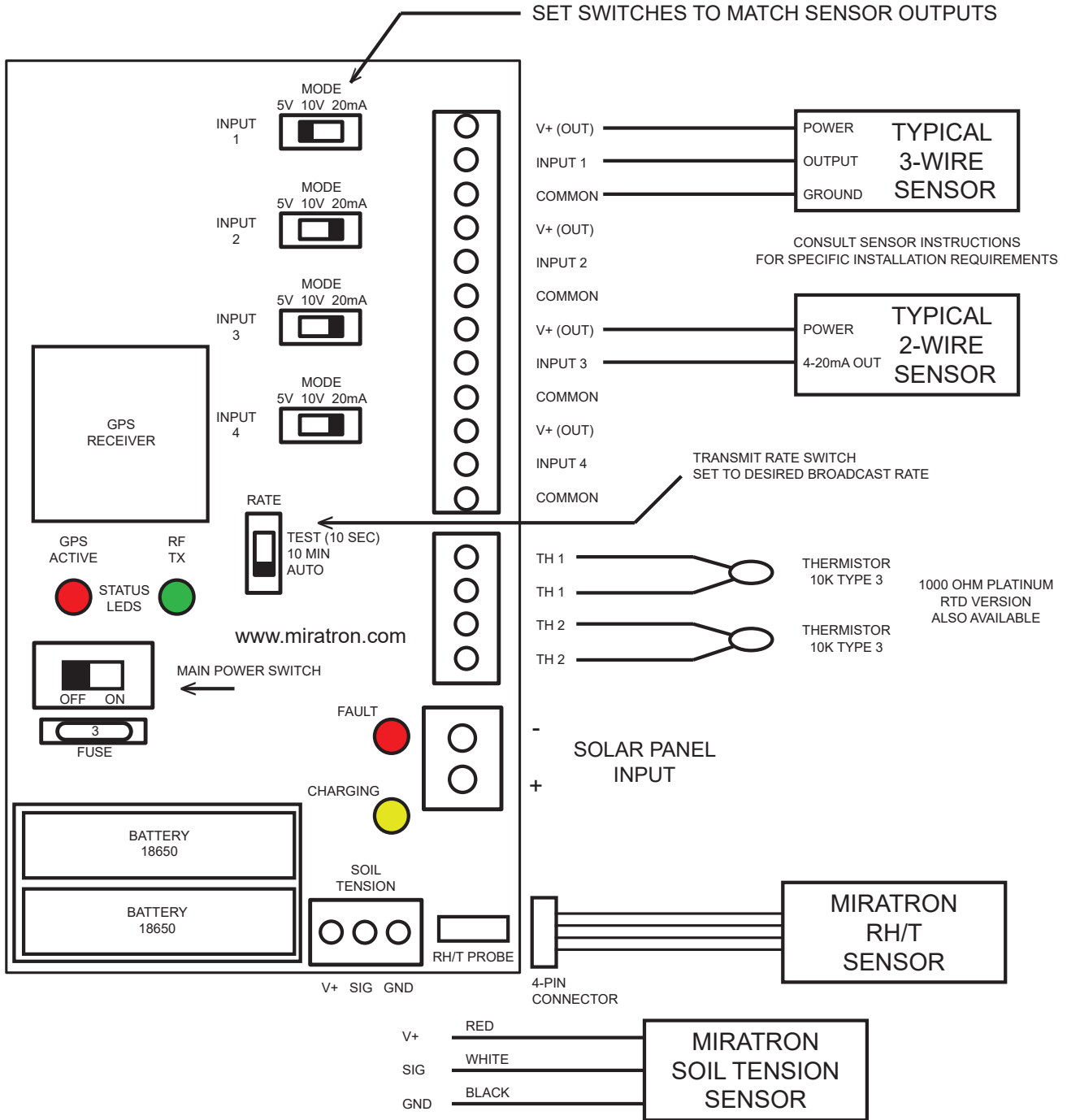




INSTALLATION MANUAL - T8-DLX

Deluxe environmental data radio transmitter station

WIRING/CONFIGURATION



OPERATION

Configuration settings:

Rate switch - Set for desired transmit rate. 10 SEC mode transmits every 10 seconds for setup and troubleshooting. 10 MIN mode transmits every 10 minutes for improved battery life. Auto mode can be factory configured or user programmable via serial receiver to transmit on programmed interval or on alarm event. Refer to receiver point-map document for details on programmable rate feature.

Integrated options:

SOL: Solar panel with built-in automatic charger. Install transmitter and adjust solar panel to maximize exposure to sunlight.

4AI: Analog inputs. Wire external sensors as shown in diagram. Consult sensor manufacturers instructions. Set input scaling switches to match sensor output type (0-5v, 0-10v, or 4-20mA)

2T3: Thermistor inputs. Connect external 10k type III thermistors to inputs as shown in diagram.

RH/T: Integrated air RH/T sensor probe is factory installed. Sensing element is field replaceable. Compact probe design features solar shield and sintered metal media filter. Polymer sensing element is factory calibrated and recovers from saturation. No service is required under normal operating conditions.

GPS: Integrated GPS receiver reports global position data. LED's indicate GPS activity.

Accessory options:

T8-VAC: Soil tensiometer - Dedicated input for use with Miratron vacuum transducer. Input is configured and scaled for use with Miratron sensor only. Model T8-VAC includes sensor, armored cable, and plumbing for use with popular soil tensiometer tubes. Consult factory for other options. Connect to 3-position terminal block as shown in diagram.

T8-IMM: Immersion temperature probe with armored cable and potted 10k type III thermistor. Connect to either thermistor input.

T8-ANE: Pulse to analog converter for use with Met One Instruments 014MINI cup anemometer. Connect to any unused analog input set to 0-5v scaling.

Antennas:

Standard SMA connector is provided for use with factory approved antennas. A variety of antenna options are available, including a directional Yagi, and omni-directional whip types. Models with integrated GPS receivers feature a factory installed GPS antenna.

Battery and charging:

Transmitters are equipped with a Li-Ion rechargeable battery pack and automatic charger. Batteries may be recharged by the integrated solar panel (SOL option) or manually charged by applying a 12vdc power supply to the solar panel input terminals. Use only provided power system components. Consult factory for alternate power supply or solar charging options.

SPECIFICATIONS

| | | |
|----------------------------|---------------|---|
| Power | Power Supply | Internal (2 x 18650) rechargeable battery with solar charging |
| Inputs | | 4 x general purpose analog signal input 2 x temperature input, 10k-ohm thermistor, type 3 1x Serial interface for Miratron integrated RH/T sensor probe option 1 x Serial interface for Miratron integrated GPS receiver option 1 x Vacuum sensor input factory scaled for soil tensiometer |
| Configuration/Setup | Power | On/Off switch and 3-amp replaceable fuse |
| | Transmit rate | Switch selectable, 10 sec/10 minute/ automatic interval* |
| | Analog input | 4 x Switch selectable 0-5v, 0-10v, or 4-20mA |
| | Status | Internal status LED |
| Radio | Frequency | 902-928MHz, Unlicensed ISM band, FHSS direct FM |
| | Range | Up to 3 miles outdoor line-of-sight |
| Enclosure | | Coated steel, NEMA 4, 12" x 9" x 4-1/2", panel or pole mount |