



FEATURES:

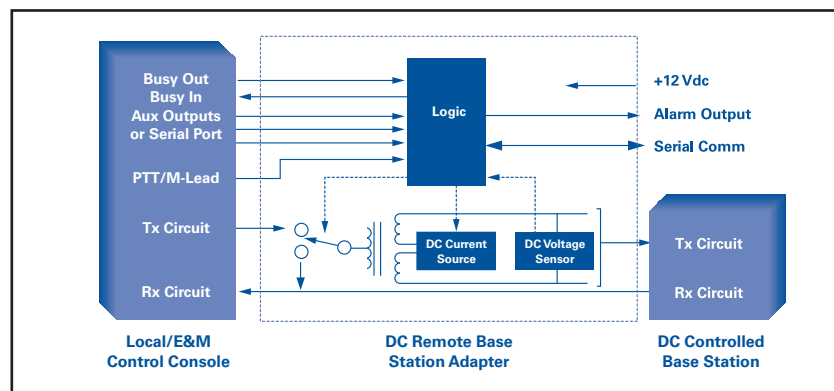
- Adds DC Remote Control capability to any 2 or 4-wire Local/E&M radio circuit.
- Works with Zetron's Model 250 to convert Tone Remote Control to DC Remote Control.
- Supports 2-wire to 2-wire, 4-wire to 4-wire, or 4-wire console to 2-wire base station.
- Uses serial port or external contact closures (e.g. PTT relay, M-lead) to select up to 15 programmable currents between 0 and 15.5 mA, positive or negative.
- Configure DC current levels using dumb terminal emulation.
- Drives line to up to 125 V sufficient for 8000 ohm loop resistance.
- Operates from 10.8 to 16 Volts DC.
- Busy output relay activates with DC voltage across the TX pair. Can be used to cross-busy parallel consoles.
- Alarm output activates for out-of-range voltages.

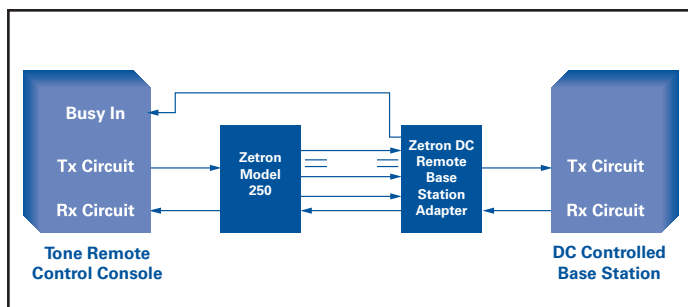
OVERVIEW

DC remote control of radio is becoming rare, and few, if any, of the new radio control equipment is capable of supporting DC remote control circuits. But there remains a large installed base of DC remote radio base stations. The Zetron DC Remote Base Station Adapter provides the bridge needed to adapt the new generation equipment to your legacy DC controlled radios, thus allowing you to retain your radio infrastructure investment.

Zetron's DC Remote Base Station Adapter is used to convert a Local or E&M 2 or 4-wire analog circuit to a DC remote control circuit. The Adapter's Local/E&M port faces the radio remote control equipment (desktop remote, or console) and the DC port faces a DC controlled radio base station. In addition to working with 2 or 4 wire circuits the Adapter will also convert a 4-wire console circuit to a 2-wire base station circuit.

The DC control current is determined either by serial port or 4 binary inputs – selecting one of up to 15 programmable currents. For single-current applications (keying current) use of a console's PTT or M-lead signal is sufficient. If additional currents are needed a console's serial port or auxiliary output relays may be used to select the currents. The DC current levels are programmed using the Adapter's 9-pin front panel serial port and a dumb terminal (or Microsoft Windows™ Hyperterminal).





The DC Remote Base Station Adapter may also be used to convert Tone Remote Control (TRC) to DC Remote Control when used with the Zetron Model 250 TRC Termination Panel.

Provisions exist to allow the Adapter to parallel other Adapters or existing DC control equipment so that multiple devices can control a single DC base station. The multi-drop impedance of the control equipment is passed through the Adapter, and the Adapter will sense DC voltage across the base station's TX pair and activate a Busy LED and relay which can indicate to a console when the circuit is in use (a.k.a. Line Operated Transmit Light – LOTL).

The Adapter runs from 12 Vdc and generates up to 125 Vdc on the DC circuit's Tx pair, making it capable of handling loops up to 8000 ohms resistance. The Adapter continually monitors its input and output voltages and if they fall too low, a Fault LED and Alarm output are activated, ensuring that you are aware of situations that could affect your ability to communicate.

The Adapter comes ready to sit on any flat surface, or optionally, up to two Adapters may be mounted in a 1.75" high, 19" rack panel.

PRODUCT SPECIFICATIONS

Power:	10.8 to 16 Vdc, 520 mA max (250 mA typical idle)
Temperature:	32 to 140 degrees F (0 to 60 degrees C), operational.
Size:	5.5" (140 mm) W x 8.25" (210 mm) D x 1.75" (45 mm) H
Weight:	1.4 lb (0.63 kg)

Control Circuits:

Input voltage:	500 ohms or less to ground or +12 Vdc will activate. Input range is 0 to +15 Vdc. +5 Vdc open circuit voltage.
Input current:	< 1 mA is inactive. > 3 mA is active. 40 mA max.
Busy Output:	Contact closure to ground, +5 Vdc or +12 Vdc, jumper selectable.
Alarm Output:	Contact closure to ground.
Serial Ports:	EIA/TIA-574 9-pin female connector with RS-232 signals used for configuration. A second serial port may be used for real-time control by an attached console.

Audio Circuits:

Isolation:	Adapter logic/ground-to-Base station line - 2500 Vrms. Console Tx line-to-Base station Tx line - 1200 Vrms Console Rx line-to-Base station Rx line - no isolation.
Impedance:	600 ohms nominal.
Insertion Loss:	2-wire/4-wire Tx – 2 dB max. 4-wire Rx – 0.2 dB max. 200 to 4000 Hz, -30 to + 10 dBm
Distortion:	0.5% maximum, 300 to 3000 Hz, 0 to 15 mA.
DC Loop resistance:	0 to 8000 ohms.
DC Loop current range:	0 to +/- 15.5 mA in 0.5 mA steps.
DC Loop current accuracy:	3% or better.
DC Line voltage:	As required to maintain programmed current, up to 150 Vdc max.
Alarm Thresholds:	DC voltage input – approx 9.7 Vdc. Internal DC voltage output – approx 116 Vdc.

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