

# R E M O T E   S T A T I O N



## RS-201 BELT-PACK

### F E A T U R E S

- Two channels plus program input
- Separate intercom and program volume controls
- Easy interconnection
- Low current drain and high impedance bridging
- Operates with portable battery pack or Main Station/Power Supply
- Ultra-stable sidetone balance
- Mic limiter
- Functions as split-feed Talent Receiver in IFB (Program Interrupt) System with PIC-4 Program Controller
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### D E S C R I P T I O N

The RS-201 is a broadcast-standard, two-channel remote station designed as a belt-pack. The unit is housed in a rugged, "no-glare" black aluminum chassis that attaches to the operator's belt with a sturdy spring clip.

The RS-201 allows talking/listening on two separate channels and program monitoring on another listen-only "channel." Separate volume controls and mic on/off switches allow the desired talk/listen set-up at the ideal audio level. The program and intercom signals are mixed together, and the RS-201 feeds the combined signal to a binaural headset. The operator hears a different intercom channel in each side of the headset. As an option, the RS-201 is available for use with a monaural headset (single-or double-muff style); audio signals are mixed together and fed to a 4-pin headset connector instead of a 6-pin.

When used in the standard binaural mode, the RS-201 works with a double-muff "stereo" headset that receives a different intercom channel in each earpiece (such as Clear-Com's DT-109/6 Binaural Headset by Beyer). Program is mixed with the intercom audio and heard in both ears.

The RS-201 is ideal for Clear-Com's Program Interrupt (IFB) System, when it is necessary for talent to monitor two separate

programs or hear continuous program in one ear and interrupted program with cues in the other ear ("split feed;" requires connection to PIC-4 Program Controller).

The RS-201 includes recessed sidetone level controls, one for each intercom channel. This lets the operator vary the level of his/her own voice as heard in the headset, allowing up to 25 dB of acoustical pick-up.

The RS-201 features Clear-Com's excellent speech intelligibility in high- and low-noise environments. The program input is bridging, transformer-balanced, spanning a wide frequency response with extremely low distortion.

The RS-201 features automatic headset detection, which mutes the mic preamp when the headset is unplugged. Therefore background noise is not increased by an unused yet on-line belt-pack. Improved circuitry virtually eliminates all hum and noise pick-up from SCR dimmers, TV sync, and AC power sources. Clearly the ideal intercom for professionals, the RS-201 has an extended power supply range so it may be used in ENG/EPF applications where power is supplied by a 12-volt battery pack.

Low current drain and high impedance bridging allow up to 50 RS-201 belt-packs to be connected in a system with one Main Station/Power Supply. Audio and

continued

sidetone levels never fluctuate, even when other stations join or leave the system.

The RS-201 provides two 6-pin, XLR connectors for input and extension of the intercom channels and program. Shielded 3-pair cable is used to interconnect. Clear-Com offers an accessory device (Model EC-6) that lets you use standard mic cable to input all signals to the belt-pack.

### ACCESSORIES

#### BP-10 BATTERY PACK

A portable, belt-worn power pack that operates two Remote Stations for over ten hours. Includes three 9V batteries, on/off switch, and termination switch. Provides 2' mic cable with 3-pin connector for output to remote station. Perfect for ENG, EFP, and other remote applications.

#### EC-6 DISTRIBUTION BOX

An interconnect device that lets you use standard mic cable for sending two channels plus program signal to RS-201. Accepts 3-pin inputs and provides a multi-pair cable with 6-pin connector for output to beltpack.

#### IC-25/6 INTERCONNECT CABLE

Superflexible, 25-foot, 3-pair cable with 6-pin XLR connectors for input/extension of two intercom channels.

## SPECIFICATIONS ARCH/ENG SPECS

### AMPLIFIERS

Solid state, integrated circuit amplifiers on a plug-in P.C. Board. Current limited and short circuit proof with reverse polarity protection.

### MIC PREAMP

Frequency Response: 200Hz-12kHz with contoured response to enhance voice intelligibility.  
Mic Input: 200Ω to 1kΩ  
Mic Preamp Gain: 37dB  
Maximum Input Before Clipping: -30dBV\*

### HEADPHONE AMPLIFIER (Channel A and Channel B)

Frequency Response: 150Hz-18kHz (±2dB)  
Output Impedance Range: 150-600Ω  
Amplifier Output: ±20dBm, 26 volts p-p at 600Ω  
Distortion: 0.1% THD at 1kHz  
Headphone Amplifier Gain: 36dB

### PROGRAM INPUT

Frequency Response: 50Hz-18kHz ±1dB  
Input Impedance: 15kΩ bridging  
Channel A: Transformer Isolated  
Level: -8 dB for max output

### GENERAL

Sidetone Adjustment: 25dB null to full on, 2 channels  
Signal-to-Noise: 75dB  
Equivalent Input Noise: -118dB  
Line Impedance: 15kΩ bridging 200Ω  
Line Level: -15dBV nominal  
Maximum Line Level: -1dBV  
Power Requirements: 15 ma quiescent; 40 ma short circuit  
Voltage Range: 12-32 volts (28 volts nominal)  
Dimensions: 5¼" x 3¾" x 1½"  
133mm x 95mm x 38mm

Specifications subject to change without notice  
\*0 dBV is referenced to 0.775 volts rms.

The remote intercom station shall be of the solid-state portable type. It shall accept two discrete intercom channels and one program channel (listen-only). It shall have an individual volume control for each intercom channel and a volume control for the program channel. It shall provide a separate mic ON/OFF toggle switch for each intercom channel. The remote station shall be supplied with a Switchcraft D6M connector for interconnect with the headset. Two 6-pin XLR connectors shall be provided for connecting the station to the system. The program shall be fed to both earpieces of the headset. Intercom Channel A shall be fed to the left earpiece and Channel B shall be fed to the right earpiece. The program input shall be fully balanced and transformer-isolated. The program input shall be 15kΩ bridging. Intercom Channels A and B shall be 15kΩ bridging. The intercom station electronics shall consist of a mic preamplifier, two power amplifiers, and a program amplifier. It shall be current-limited and short circuit-protected and shall have reverse polarity protection. It shall be field-serviceable and replaceable. The station shall contain two separately adjustable sidetone circuits. The intercom bridging impedance shall be greater than 15kΩ, over a frequency response of 10kHz. The bridging circuit shall use no transformers. The program input shall have a frequency response of 50Hz-18kHz with a THD of less than 0.1%. The intercom shall have an overall response of 200Hz-12kHz, contoured to enhance vocal intelligibility. The mic preamplifier shall accept a dynamic mic of nominal 200Ω impedance at a -50dB level. The signal-to-noise shall be a minimum of 75dB. The remote station shall operate from a power source of 12-32 volts and shall draw no more than 15 ma. The station shall be constructed of .062" aluminum, with a .090" aluminum cover. The remote station shall have a three-inch stainless-steel belt clip. The dimensions shall not exceed 5¼" by 3¾" by 1½". The weight shall be 1½ pounds. It shall be called a Clear-Com RS-201.

## RS-201 BLOCK DIAGRAM

