

R E M O T E S T A T I O N



CP-300 BELT-PACK F E A T U R E S

- **Switch-selectable compatibility with Clear-Com and RTS-type systems**
- **Single- or two-channel operation**
- **Operates with dynamic or carbon headset**
- **Headset volume control**
- **Channel-Select and locking/momentary "Mic-On" rocker switches**
- **Mic limiter**
- **Visual Call Signalling available as an option**
- **Easy interconnection**
- **Input and extension connectors for convenient loop-through set-up**
- **Super-rugged and lightweight**



D E S C R I P T I O N

The CP-300 is an extremely versatile remote station designed as a belt-pack. Housed in an aluminum chassis backed with a sturdy spring clip, the CP-300 allows switch-selectable, 1- or 2-channel operation within:

- the Clear-Com System (one channel on one mic cable)
- any two-wire intercom system such as RTS (two channels on one mic cable) or
- a Clear-Com System that includes the TW-12 Interface (two channels on one mic cable).

The broadcast-standard CP-300 allows selectable talking and/or listening on one or two separate channels. Compatible with all Clear-Com and two-wire type intercom systems such as the RTS "TW" System, the CP-300 features Clear-Com's excellent speech intelligibility in all high- and low-noise environments. It has the same pin-to-pin connections as RTS intercoms, with **better** performance.

Designed specifically for camera operators and other teleproduction personnel, the CP-300 operates with a carbon headset or a dynamic headset. It drives a standard Clear-Com headset to levels greater than 110 dB SPL, and can support two dynamic headsets at once if connected with a Y-cord.

The CP-300 features "automatic headset detection," which mutes the mic preamp when the headset is not plugged in. Therefore, an unused yet on-line belt-pack does not increase background noise. The CP-300 also provides a recessed sidetone control that adjusts the operator's voice level (from full null to at least 25dB) as heard in his or her headset.

As an option, the CP-300 includes Visual Call Signalling. Call signalling attracts the attention of operators who have removed their headsets or turned off their speakers. The belt-pack's Call button activates the signal circuit at all stations using the same channel(s). This Call button glows brightly when another operator activates the signal circuit.

Whether you need one or two channels, standard 2-conductor shielded mic cable connects the CP-300 to the intercom system. The belt-pack provides two 3-pin, XLR connectors for input and loop-through extension of the intercom line.

Bidirectional current sourcing and low current drain allow as many as 100 CP-300 Belt-Packs (powered by the suitable Clear-Com Main Station/Power Supply) to operate along one mile of wire with no significant loading effects. The belt-pack has an extended

continued

power supply range, so it may be powered by a portable 12-volt battery pack (ideal for ENG/EFP and other remote production applications). CP-300 audio and sidetone levels never fluctuate, even when other stations join or leave the intercom line. High-performance circuitry virtually eliminates all hum and noise pick-up from SCR dimmers and AC power sources.

ACCESSORY

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.

OPTION

VISUAL CALL SIGNALLING

SPECIFICATIONS

Note: When 2 figures are separated by a slash (/), the first is for RTS type mode, the second for standard Clear-Com.

Circuit Design: IC amplifiers. Current limited with reverse polarity protection

MICROPHONE PREAMP

Input: Low impedance ($>1k\Omega$) for 200 Ω nominal dynamic type element. Also accepts a carbon mic.
Input Level: -55dBv nominal, -19dBv max before clipping*
Limiter Compression Range: +50/37dB before limiting

HEADPHONE AMPLIFIER

Output: Drives any headset load $\geq 50\Omega$ to full output before clipping (+15dBv)
Gain From Intercom: +24/+37dB
Frequency Response: 200Hz-12kHz
Distortion: <.3%

SIGNALLING (OPTIONAL)

Clear-Com Mode: 4VDC minimum call light sensitivity, 11 VDC maximum signalling voltage output
Tone Mode: -30dBv maximum call light sensitivity, -10dBv minimum signalling output.
Frequency Tolerance: ± 100 Hz on output, ± 500 Hz receiving

OPERATING CONDITIONS

Line Level, Nominal: 5/-15dBv
Signal to Noise: 60/75dB
Sidetone: 35dB null to full on
Station Bridging Impedance: $>20k\Omega$
Power Requirements: 12-32V at 25-40mA, +30ma signalling

CONNECTORS

Headset: 4-pin male XLR
Intercom Lines: Two 3-pin XLR, 1 male and 1 female for loop through
Carbon Headset: 1/4" dual circuit phone jack

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

ARCH/ENG SPECS

The remote station shall be a compact, portable, belt-pack-type. It shall have two separate intercom channels using a single standard two-conductor mic cable. It shall accept a dynamic or carbon mic headset. It shall have a mic on/off switch with a momentary position, a channel select switch, and a headphone volume control, all positioned for easy operation. The signalling option shall be provided by a separate module and a combined call lamp/pushbutton. A single screwdriver-actuated mode switch shall permit selection of Clear-Com or TW type operation. A screwdriver-adjust trimpot shall vary the sidetone from 35dB null to fully on. For reliable communications in any environment, the microphone preamp shall have a contoured response from 200Hz-12kHz and shall maintain nominal line level within 10dB over a 25dB input range. The circuitry shall be current limited and short-circuit proof, with integral reverse polarity protection. It shall be field serviceable and replaceable, with socketed ICs. The impedance isolator shall maintain a high impedance ($\pm 10k\Omega$) on the powered channel across the whole audio band with a minimal voltage drop ($\sim 6V$), regardless of current consumption. It shall be compatible in operation with all Clear-Com and TW type systems and shall be called a CP-300.

CP-300 BLOCK DIAGRAM

