

# Clear-Com Encore™

## CS-702 Two-Channel Main Station



CS-702 Front Panel

### Monitoring System

The station can monitor intercom activity on one or both channels with individual Listen Level controls. Monitoring intercom activity is possible through a headset, or external earphone or speaker.

### Talk Selection

The station contains a mic preamp with limiter and proprietary speech-shaping circuits for enhanced intelligibility. An individual electronic momentary/latching talk button is provided for each channel. These buttons light dimly when latched.

### Signalling

The station provides individual Call buttons for each channel to signal all stations on the channel(s). When a remote station operator sends a Call signal, the CS-702's associated Talk button lights brightly, attracting the attention of an operator who have removed their headsets or turned off their speakers.

### Remote Mic Kill (RMK)

Pressing the RMK button will turn off the microphone talk circuits of all Clear-Com beltpacks eliminating annoying noise from the open headset microphones.

### Sidetone

Sidetone control allows the operator to vary the level of his or her own voice as heard in the headset. The CS-702 provides individual sidetone adjustment for each channel.

### Program Input

The station accepts a balanced, mic- or line-level program signal for monitoring in the headset and/or mixing the intercom audio on either or both channels. The front panel provides a local Program Monitor volume control and individual Program Send level controls. It also provides a Program Send on/off/interrupt switch for each channel. When interrupt is selected, program is interrupted when the Talk button is pressed.

### Power Supply and Supply System Protection

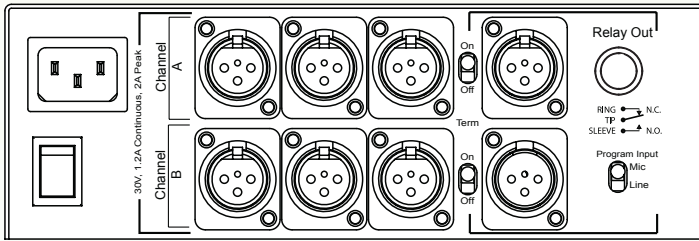
The CS-702 provides visual indication of power supply conditions. In the event of a DC short circuit or current overload, the station's electronic overload protection circuit will shut down the DC output to avoid damage. As soon as the fault condition is removed, the auto-reset circuitry will automatically restore system power – even under full load conditions. There is no need to disconnect stations to allow the power supply to reset.

### Features:

- Supports up to 40 beltpacks or 7 speaker stations on 2 channels
- Automatic short-circuit protection and reset with LED indicators
- Dual-action electronic momentary/latching "Talk" buttons
- Mic- or line-level program with selectable "Program Interrupt"
- "Remote Mic Kill"
- Stage announce with relay
- Individual volume controls for each channel
- Front-panel headphone connector
- Channel A & B "Link" switch to operate as a one-channel system
- Front-panel speaker output
- UL approved
- LED buttons for talk, call, announce, link, all talk, or mic on.

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CS-702 Back Panel

### Technical Specifications:

dBu is an absolute measurement. 0 dBu is referenced to 0.775 volts RMS

#### Headset Microphone Input

Input Type:	Dynamic
Input Impedance:	$\geq 1K\Omega$
Mic Limiter Threshold:	0dBu $\pm$ 3dB
Mic Limiter Range:	$\geq 15$ dB

#### Program Line Input

Maximum Level before Clipping:	$\geq 20$ dBu
Input Impedance:	$\geq 5K\Omega$

#### Program Mic Input

Maximum Level before Clipping :	$\geq -35$ dB
Input Impedance:	$\geq 1K\Omega$

#### Headset Output

Load Impedance:	$\geq 8\Omega$
Output Impedance:	$\leq 25\Omega$
Output Limiter Threshold:	+5dBu $\pm$ 3dB
Maximum Output Level before Distortion:	$\geq 17$ dBu

#### Party Line Output

Off Noise :	$< -74$ dBu
Output Impedance :	$> 10K\Omega$

#### Party Line Input

Crosstalk:	$< -60$ dB
Max level before Clipping:	$\geq 12$ dBu
Sidetone Null Capability:	$> 25$ dB

#### Stage Announce/Balanced Line Out

Type:	Balanced
Output Impedance:	$\geq 200\Omega$
Load Impedance:	$\geq 600\Omega$

#### Frequency Response

Headset Mic - Party Line :	200 - 18KHz $\pm$ 3dB
Headset Mic - Line Out:	200 - 18KHz $\pm$ 3dB
Program Input - Party Line:	200 - 20KHz $\pm$ 3dB
Program Input - Headset Out :	200 - 18KHz $\pm$ 3dB
Party Line - Headset Out :	200 - 18KHz $\pm$ 3dB

#### Max Distortion

Headset Mic - Party Line:	$\leq 0.5\%$
Headset Mic - Line Out:	$\leq 0.5\%$
Program Input - Party Line:	$\leq 0.2\%$
Program Input - Headset Out:	$\leq 0.2\%$
Party Line - Headset Out:	$\leq 0.2\%$

#### Noise

Headset Mic - Party Line:	$< -70$ dBu
Program Input - Party Line:	$< -85$ dBu
Program Mic - Party Line:	$< -70$ dBu
Program Input - Headset Out:	$< -60$ dBu
Program Mic - Headset Out:	$< -40$ dBu
Party Line - Headset Out:	$< -50$ dBu

#### Max Gain

Headset Mic - Party Line:	41dB $\pm$ 2dB
Headset Mic - Announce Out:	55dB $\pm$ 3dB
Program Input - Party Line:	$\geq -16$ dB
Program Mic - Party Line:	41dB $\pm$ 2dB
Program Input - Headset Out:	$\geq 18$ dB
Program Mic - Headset Out:	$\geq 70$ dB
Party Line - Headset Out:	$\geq 34$ dB

#### Mains Power

Input Voltage Range:	100 - 240 VAC
Input Frequency Range:	50 - 60 Hz
Output Power:	$\leq 60$ VAC
Output Voltage:	30 VDC $\pm$ 0.5V
Output Current per Channel (Continuous):	1.2 A

#### Output Current per Channel (Peak):

2 A (Do not exceed the 1.2A rating for more than 2 seconds per 1 minute period)

Short Circuit Recovery Time (1st short):  $\leq 0.5$  sec

Short Circuit Recovery Time  $\geq 20$  shorts in 20sec):  $\leq 20$  sec

Rear Panel Connectors	(6) XLR-3M (3 per channel)
Intercom:	(1) XLR-3M (audio)
	(1) 1/4 in. (0.64 cm) phone jack (relay)
	(1) XLR-3F
Program:	IEC 320 connector
AC Power:	

#### Rear Panel Controls

- (2) Termination On-Off switches
- (1) Power switch
- (1) Program input Mic/Line switch

#### Front Panel Connectors

Panel Mic: (1) 3.5mm earphone jack  
Headset: (1) XLR-4M

#### Front Panel Controls & Indicators

- (1) Announce button
- (1) Party line link button
- (2) Program ON-OFF-INTERRUPT switches
- (2) Program level controls
- (2) Sidetone controls
- (2) Talk buttons
- (2) Call buttons
- (1) RMK button
- (1) Program volume control
- (2) Listen controls
- (2) Short LEDs

#### Environmental

32 - 122°F (0 - 50°C)

#### Dimensions

8.5 in. W x 3.0 in. H x 10.0in. D  
(216 mm x 76 mm x 254 mm)

#### Weight

5.02 lbs. (2.28kg)

#### Notice About Specifications

While Clear-Com makes every attempt to maintain the accuracy of the information contained in its product manuals, that information is subject to change without notice. Performance specifications included in this manual are design-center specifications and are included for customer guidance and to facilitate system installation. Actual operating performance may vary.

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