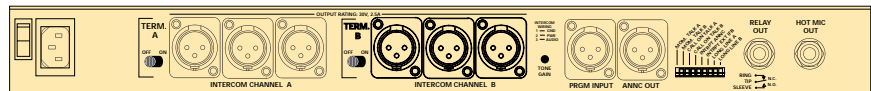




MS-232 Front Panel



MS-232 Rear Panel

FEATURES

- Supports up to 60 headset stations or 20 speaker stations on two channels
- Separate short-circuit protection for each channel
- Dual-action electronic momentary/latching "talk" buttons
- Program feed to both channels, with selectable "Program Interrupt" (IFB)
- "Call" signal buttons for each channel
- Global "Remote Mic Kill"
- Announce output with relay
- Microphone limiting
- Volume controls for each channel
- Visual and audible "Tone Alert" signaling
- Channels A & B "Link" switch
- Built-in speaker
- Optional gooseneck mic
- External switchable line termination on each channel
- Universal voltage power supply for 90-240 VAC operation

DESCRIPTION

The MS-232 is a one-rack-space, two-channel main station with a regulated 2-amp "fail-safe" power supply, individual channel short-circuit protection, and a versatile intercom monitoring system. It supports two intercom channels with up to 60 headset stations or 20 speaker stations. It features Clear-Com's excellent speech intelligibility in both high- and low-noise environments.

MONITORING SYSTEM

The MS-232 can monitor intercom activity on one or both channels with individual listen-level controls. Monitoring intercom activity is possible through a headset or the internal loudspeaker. The headset amplifier can drive a standard Clear-Com headset to levels greater than 110 dB SPL. The high-sensitivity internal speaker provides intelligible communication in the typical active production environment.

TALK SELECTION

The MS-232 contains mic preamps with limiters, and speech-shaping circuits for enhanced intelligibility. An individual electronic momentary/latching talk button is provided for each channel. These buttons light dimly when latched. The channels may be accessed separately or simultaneously without tying them together. To combine both channels for rehearsals, a "Link" switch is provided on the front panel. An optional gooseneck mic is available.

ANNOUNCE OUTPUT

For paging applications, the MS-232 provides a balanced, line-level output signal to a 1/4-inch TRS connector on the rear panel. The front panel "Announce" button activates the output and the Announce relay. The relay circuit, on a separate 1/4-inch TRS connector, is typically used to mute control-room monitors during live announcements.

VISUAL AND AUDIBLE SIGNALING

Visual "call" signaling attracts the attention of operators who have removed their headsets or turned off their speakers. Call buttons for each channel signal all stations on that party line.

When a remote station operator sends a Call signal, the MS-232's associated Talk button flashes brightly. Along with the visual signal, the station's speaker will emit an audible signal if the remote station operator holds the Call button for more than two seconds. The level of this signal is independently adjustable and defeatable.

PLpro[®]

PROFESSIONAL INTERCOM PRODUCTS

by Clear-Com

Two-Channel Main Station

SPECIFICATIONS

HEADSET MICROPHONE PRE-AMP

Input Type: Dynamic
Impedance: 1 k Ω
Input Level: -55 dBV nominal; -10 dBV max.
Gain from headset mic to intercom line: +41 dB

PANEL MICROPHONE PRE-AMP

Input Type: Electret
Input Level: -45 dBV nominal
Gain from panel mic to intercom line: +31 dB

PRE-AMP RESPONSE CURVE

Frequency Response: 250 Hz - 12 kHz,
contoured for intelligibility
Limiter Range: 20 dB

HEADPHONE/SPEAKER AMPLIFIER

Load Impedance Range: 50 Ω - 2 k Ω
Output Level: at least +20 dBV across 600 Ω
Distortion: <0.2% THD @ 1 kHz
Frequency Response: 200 Hz - 18 kHz, ± 2 dB
Gain from intercom line: +37 dB
Power output: 110 dB SPL

PROGRAM AMPLIFIER

(Transformerless, balanced differential input)
Input Level: -20 dBV
Input impedance: >100 k Ω
Frequency response: 150 Hz - 18 kHz, ± 2 dB

TERMINATION IMPEDANCE

Impedance: 200 Ω , switchable

REAR CONTROLS & CONNECTORS

XLR-F program input; XLR-M announce out;
1/4" phone jack relay out; tone gain control;
1/4" phone jack hot mic out; three (3) parallel
XLR-M intercom outputs, with on/off
termination switches, per channel.
Option Switches: Momentary Talk; Call on
Talk; Announce Interrupt; IFB Interrupt

POWER SUPPLY

Type: Switching, with reset circuitry for
each channel

Output Voltage: 30 volts DC

Output Current: 2.0 amps max, Channel A;
1.75 amps max, Channel B

Short Circuit Reset Time: <7 sec.

Hum & Noise: <-80 dBV

STATION CAPACITY

Capacity: 60 headset stations or 20 speaker
stations, distributed over both channels

DIMENSIONS:

19" W x 1.75" H x 6.5" D
(483mm x 44mm x 165mm)

WEIGHT

5.0 lbs (2.75 kg)

*All specifications are subject to change without
notice.*

The Visual Signal circuit may also be used to activate the optional remote page feature on certain properly equipped Clear-Com speaker stations.

REMOTE MIC KILL (RMK)

The MS-232 is equipped with a global RMK button. It will turn off the microphone talk circuits of all Clear-Com beltpacks in the system, eliminating extraneous noise from the "open" headset microphones.

PROGRAM INPUT

The MS-232 accepts a line-level external program input for monitoring in the headset and speaker, and/or mixing with intercom audio on either or both channels. A local program-level control and individual channel program-level controls are provided. Program On/Off/Interrupt switches for each channel route the program signal. When Interrupt is selected, the program signal is interrupted when the Talk button is pressed.

POWER SUPPLY & SYSTEM PROTECTION

The MS-232 provides visual indication of power supply conditions. In the event of a short circuit or current overload on a channel, that channel will shut down while the other one continues to operate. As soon as the fault condition is removed, the "auto-reset" circuitry will restore power to that channel - even under full load conditions. There is no need to disconnect stations to allow the power supply to reset.

To increase system capacity, one or more power supplies can be connected in parallel with the MS-232.

SIMPLE SET-UP

The MS-232 connects to remote stations with standard, two-conductor shielded mic cable. User-selectable setup dip switches are provided on the rear panel.

The MS-232 conforms to the highest standards of reliability and performance, providing trouble-free service over a wide range of environmental conditions.

MS-232 BLOCK DIAGRAM

