MS-702 Two-Channel Main Station

Analog Partyline Solutions

Linking People Together

MS-702

Key Features

- Supports up to 55 beltpacks or 10 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
- 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
- External switchable line termination on each channel
- Universal voltage power supply

Clear-Com Encore® is a 2-wire analog partyline system with intuitive plug-and-play design and superior "Clear-Com Sound."

Description

The MS-702 is a 1RU two-channel main station with programmable front panel buttons, individual channel short-circuit protection, individual channel volume control, and a regulated fail-safe power supply. The MS-702 supports up to 55 beltpacks or 10 speaker stations.

Monitoring System

The MS-702 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.

Talk Selection

The MS-702 has mic pre-amps with limiters and speech-shaping circuits. An individual electronic momentary/latching Talk button is available for each channel. Illuminated dual-action Talk buttons light an LED dimly when latched: blue-color while in standby, amber-color when latched. The latching feature can be disabled. The channels can be accessed separately or simultaneously without tying them together. A selector switch toggles between the headset or microphone. The Talk buttons can also be controlled with a footswitch.

Announce Output

For paging, the MS-702 provides a balanced, line-level output signal to a ¼-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 ¼-inch TRS connector, is typically used to mute monitors.

Call Signaling

The MS-702 has individual Call buttons with visual call signaling for each channel on the partyline. The visual signal will flash brightly and will emit an audible signal if the remote station operator holds the Call button for more than 2 seconds. The call signaling feature can be programmed to the Talk buttons.

Remote Mic Kill (RMK)

The MS-702 has a global Remote Mic Kill button. It will turn off the microphone talk circuits of all beltpacks on the system, eliminating extraneous noise from the open headset microphones.

Clear-Com® AN HME COMPANY

Program Input and Interrupt (IFB)

The MS-702 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. When Interrupt is selected, the program signal is interrupted when the Talk button is pressed.

Power

The MS-702 has a 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

Technical Specifications

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

Panel Microphone Input

Input Type: Electret
Input Impedance: >=2KΩ
Mic Limiter Threshold: 0dBu ±3dB
Mic Limiter Range: >= 20dB

Headset Microphone Input

Input Type: Dynamic
Input Impedance: >= 1KΩ
Mic Limiter Threshold: 0dBu ± 3dB
Mic Limiter Range: >= 15dB

Program Line Input

Maximum Level before Clipping: >= 20dBu
Input Impedance: >= 5KΩ

Headset Output

Load Impedance: >= 8Ω
Output Impedance: <= 25Ω
Output Limiter Threshold: +5dBu ± 3dB
Maximum Output Level before Distortion: >= 17dBu

Speaker Output

Load Impedance: >= 4Ω
Max Output Level before 1% Distortion: 20dBu ± 2dBu

Partyline Output

O Noise: < -74dBu
Output Impedance: >10KΩ

Partyline Input

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

Stage Announce/Balanced Line Out

Type: Balanced
Output Impedance: >= 200Ω
Load Impedance: >= 600Ω

IFB/Hot Mic

Type : Unbalanced
Output Impedance: 180Ω
Load Impedance: >= 600Ω

Frequency Response

Panel Mic - Partyline: 600 - 10kHz ± 3dB
Headset Mic - Partyline: 200 - 12kHz ± 3dB
Headset Mic - Line Out: 200 - 12kHz ± 3dB
Program Input - Partyline: 100 17kHz ± 3dB
Program Input - Headset Out: 200 - 10kHz ± 3dB
Program Input - Speaker Out: 300 - 10kHz ± 3dB
Partyline - Headset Out: 200 - 10kHz ± 3dB
Partyline - Speaker Out: 300 - 10kHz ± 3dB

Max Distortion

Panel Mic - Partyline: <= 0.5%
Headset Mic - Partyline: <= 0.5%
Headset Mic - Line Out: <= 0.5%
Program Input - Partyline: <= 0.2%
Program Input - Headset Out: <= 0.2%
Program Input - Speaker Out: <= 0.5%
Partyline - Headset Out: <= 0.2%
Partyline - Speaker Out: <= 0.5%

Noise

Panel Mic - Partyline: < -65dBu
Headset Mic - Partyline: < -70dBu
Headset Mic - Line Out: < -55dBu
Program Input - Partyline: < -85dBu
Program Input - Headset Out: < -60dBu
Program Input - Speaker Out: < -60dBu
Partyline - Headset Out: < -50dBu
Partyline - Speaker Out: < -50dBu

Max Gain

Panel Mic - Partyline: >= 37dB
Headset Mic - Partyline: 41dB ± 2dB
Headset Mic - Hot Mic Out: 55dB ± 3dB
Headset Mic - Announce Out: 55dB ± 3dB
Program Input - Partyline: >= -16dB
Program Input - Headset Out: >= 18dB
Program Input - Speaker Out: >= 24dB
Partyline - Headset Out: >= 34dB
Partyline - Speaker Out: >= 40dB

Min Gain

Panel Mic - Partyline: <= 25dB

Mains Power

Input Voltage Range: 100 - 240V AC
Input Frequency Range: 50 - 60Hz
Input Power: <= 60VA
Output Voltage : 30V DC ± 0.5V
Output Current per Channel (Continuous): 1.2A
Output Current per Channel (Peak): 2A (Do not exceed the 1.2A rating for more than 2 seconds per 1 minute period)
Short Circuit Recovery Time (1st short): <= 0.5 sec
Short Circuit Recovery Time >= 20 shorts in 20sec: <= 20 sec

Station Capacity

Up to 55 RS-701 beltpacks or 10 speaker stations or 12 headset stations distributed over both channels

Environmental

32° - 122°F (0° - 50°C)

Dimensions

1.75 x 19 x 6.5in (HxWxD)
(44 x 483 x 165mm)

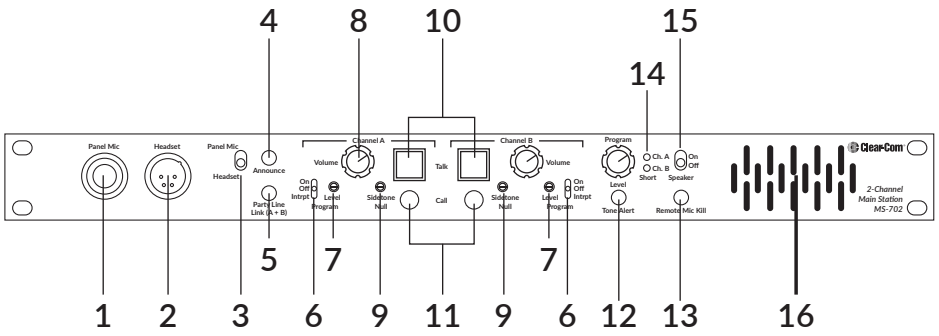
Weight

6.1lbs (2.8kg)

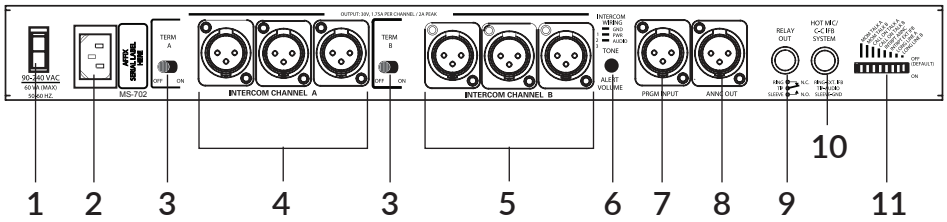
MS-702 Two-Channel Main Station

Analog Partyline Solutions

MS-702 Front Panel



MS-702 Back Panel



Legend

Front Panel

1. Microphone connector
2. XLR-4M Headset connector
3. Mic Select Switch
4. Announce button
5. Partyline Link button
6. Program ON/OFF/INTERRUPT switch
7. Program Level control
8. Volume control
9. Sidetone Null control
10. Talk button
11. Call button
12. Tone Alert button
13. Remote Mic Kill button
14. Short LED
15. Speaker ON/OFF switch
16. Speaker

Back Panel

1. Power ON/OFF switch
2. Power connector
3. Termination ON/OFF switch
4. Channel A XLR-3M intercom connectors
5. Channel B XLR-3M intercom connectors
6. Tone Alert Volume control
7. Program Input
8. Announce Out
9. Relay Out
10. Hot Mic / IFB Interface
11. Dip switch options

Order Code

MS-702

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

WARNING: Cancer and Reproductive Harm - **www.P65Warnings.CA.Gov**

Rev. Sept./2023