The **MS-702** is a one-rack-space, two-channel main station with a regulated 1.2-amp “fail-safe” power supply, individual channel short-circuit protection, and a versatile intercom monitoring system. It supports two intercom channels with up to 40 beltpacks or 10 speaker stations. It features Clear-Com’s excellent speech intelligibility in both high- and low-noise environments.

### Power Supply & System Protection
The MS-702 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.

### Simple Set-Up
The MS-702 connects to remote stations with standard, two-conductor shielded mic cable. User-selectable setup dip switches are provided on the rear panel.

### Features:
- Supports up to 40 beltpacks or 10 speaker stations on two channels and 12 headsets
- 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 100-240 VAC operation
Technical Specifications:

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

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

**Program Line Input**
- Maximum Level before Clipping: >= 20 dBu
- Input Impedance: >= 5KΩ

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

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

**Party Line Output**
- Off Noise: <= -74 dBu
- Output Impedance: > 10 KΩ

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

**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 - Party Line: 600 - 10KHz ± 3dB
- Headset Mic - Party Line: 200 - 12KHz ± 3 dB
- Headset Mic - Line Out: 200 - 12KHz ± 3 dB
- Program Input - Party Line: 100 17KHz ± 3 dB
- Program Input - Headset Out: 200 - 10KHz ± 3 dB
- Program Input - Speaker Out: 200 - 10KHz ± 3 dB
- Party Line - Headset Out: 200 - 10KHz ± 3 dB
- Party Line - Speaker Out: 200 - 10KHz ± 3 dB

**Max Distortion**
- Panel Mic - Party Line: <= 0.5%
- Headset Mic - Party Line: <= 0.5%
- Headset Mic - Line Out: <= 0.5%
- Program Input - Party Line: <= 0.2%
- Program Input - Headset Out: <= 0.5%
- Program Input - Speaker Out: <= 0.5%
- Party Line - Headset Out: <= 0.2%
- Party Line - Speaker Out: <= 0.5%

**Noise**
- Panel Mic - Party Line: <= -65 dBu
- Headset Mic - Party Line: <= -70 dBu
- Headset Mic - Line Out: <= -55 dBu
- Program Input - Party Line: <= -85 dBu
- Program Input - Headset Out: <= -60 dBu
- Program Input - Speaker Out: <= -60 dBu
- Party Line - Headset Out: <= -50 dBu
- Party Line - Speaker Out: <= -50 dBu

**Min Gain**
- Panel Mic - Party Line" >= 37 dB
- Headset Mic - Party Line: 41 dB ± 2 dB
- Headset Mic - Hot Mic Out: 55 dB ± 3 dB
- Headset Mic - Announce Out: 55 dB ± 3 dB
- Program Input - Party Line: <= -16 dB
- Program Input - Headset Out: <= 24 dB
- Program Input - Speaker Out: <= 24 dB
- Party Line - Headset Out: <= 34 dB
- Party Line - Speaker Out: <= 40 dB

**Max Gain**
- Panel Mic - Party Line: <= -50 dBu
- Headset Mic - Party Line: <= -50 dBu
- Headset Mic - Hot Mic Out: <= -60 dBu
- Headset Mic - Announce Out: <= -70 dBu
- Program Input - Party Line: <= -85 dBu
- Program Input - Headset Out: <= -70 dBu
- Program Input - Speaker Out: <= -70 dBu
- Party Line - Headset Out: <= -70 dBu
- Party Line - Speaker Out: <= -70 dBu

**Mains Power**
- Input Voltage Range: 100 - 240 VAC
- Input Frequency Range: 50 - 60 Hz
- Input Power: <= 60 VAC
- Output Voltage: 30 VDC ± 0.5V
- Output Current per Channel (Continuous): 2 A
- Output Current per Channel (Peak): 1.2 A
- Short Circuit Recovery Time (1st short): <= 0.5 sec
- Short Circuit Recovery Time: <= 0.5 sec

**Station Capacity**
- Up to 40 RS-601 beltpacks or 10 speaker stations or 12 headset stations distributed over both channels

**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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