



RM-702 Front Panel

The RM-702 is one of a series of professional remote intercom stations. The remote speaker/headset station allows two-channel selectable talk and listen in one rack space. The operator can talk and listen on either channel separately or talk to both channels simultaneously without tying the two channels together. Specially contoured audio response provides excellent speech intelligibility, even in high-noise environments.

The RM-702 can monitor intercom activity on one or both channels with individual Listen Level controls. Monitor intercom activity through a headset, the internal speaker, or both at once. The 4-watt output amplifier can drive the wide-response speaker or Clear-Com headset to very high output levels - more than enough volume for the noisiest environment. A "speaker dipping" circuit helps to reduce feedback when stations are placed in close proximity to each other.

The station has a convenient speaker "on/off" switch when private conversation via the headset is desired. The station accepts dynamic headsets or optional plug-in gooseneck mic.

Talk Selection

The operator can talk on either of the channels separately or on both at once. A proprietary contoured frequency response in the mic pre-amp enhances speech intelligibility in high-noise environments. Illuminated dual-action talk buttons are electronic momentary or latching; blue-color LED while in stand-by, and amber-color LED when latched. The latching feature may be disabled if desired. The station also features a headset or microphone selector switch. The talk buttons can also be remote controlled with a footswitch.

Signaling

The RM-702 features individual call buttons and visual call signaling to attract the attention of operators who have removed their headsets or turned off their speakers. The visual signaling flashes the illuminated talk button when a call is received. The call-signaling feature can be programmed to the talk buttons.

AUX. Audio Input and Program Interrupt (IFB)

The station can accept either a balanced or unbalanced line-level audio input through the DB-15 connector on the rear panel. The program can be monitored at the station or fed into channel B, where it can also be set up for IFB/Program interrupt from this or any other Encore station.

Additional Features

Each channel has its own sidetone control. This allows the operator to vary the level of their own voice as heard in the headset. When the announce button is pressed, the microphone signal is routed to a connector on the back panel. Relay contacts are also available for muting speakers or turning on a signal light. The station accepts Clear-Com's 9" or 18" gooseneck microphone.

Features:

- Selectable one- or two-channel communication
- Individual listen volume controls
- Momentary/latching talk buttons
- Individual call buttons
- Visual call signaling
- Balanced audio input with program interrupt (IFB)
- "Hot mic" and line-level outputs
- Studio announce output with relay
- Optional plug-in gooseneck mic
- Wide-range high-output speaker
- One rack space
- LED buttons for talk, call, announce, link, all talk, and mic on

Applications

- ENG and EFP trucks
- Production studio consoles
- Single-channel program interrupt system "IFB" for talent cueing
- Portable sound system equipment racks
- Low-profile "top of console" locations
- Any 2-channel intercom requirement where rack space is at a premium

Technical Specifications:

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

Panel Microphone Input

Input Type: Electret
Input Impedance: $\geq 2K\Omega$
Mic Limiter Threshold: 0dBu ± 3 dB
Mic Limiter Range: ≥ 20 dB

Headset Microphone Input

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

Program Line Input

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

Headset Output

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

Speaker Output

Load Impedance: $\geq 4\Omega$
Max Output Level before 1% Distortion: 20dBu ± 2 dBu

Party Line Output

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

Party Line Input

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

Stage Announce/Balanced Line Out

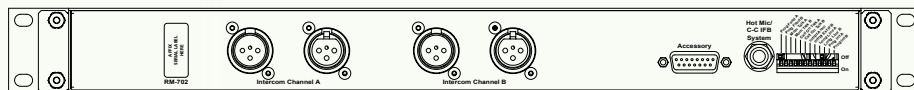
Type: Balanced
Output Impedance: $\geq 200\Omega$
Load Impedance: $\geq 600\Omega$

IFB/Hot Mic

Type: Unbalanced
Output Impedance: 180 Ω
Load Impedance: $\geq 600\Omega$

Frequency Response

Panel Mic - Party Line: 600 - 10KHz ± 3 dB
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: 300 - 10KHz ± 3 dB
Party Line - Headset Out: 200 - 10KHz ± 3 dB
Party Line - Speaker Out: 300 - 10KHz ± 3 dB



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Max Distortion

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

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

Max Gain

Panel Mic - Party Line: ≥ 37 dB
Headset Mic - Party Line: 41dB ± 2 dB
Headset Mic - Hot Mic Out: 55dB ± 3 dB
Headset Mic - Announce Out: 55dB ± 3 dB
Program Input - Party Line: ≥ -16 dB
Program Input - Headset Out: ≥ 18 dB
Program Input - Speaker Out: ≥ 24 dB
Party Line - Headset Out: ≥ 34 dB
Party Line - Speaker Out: ≥ 40 dB

Min Gain

Panel Mic - Party Line: ≤ 25 dB

Power

Input Voltage Range: 20-30 VDC
Input Current (Idle): ≤ 90 mA
Input Current (Max): ≤ 110 mA

Rear Panel Connectors

Intercom: (2) XLR-3M (1 per channel)
(2) XLR-3F (1 per channel)
Hot Mic / IFB Interface: (1) 1/4 in. (0.64 cm) phone jack
Accessory: (1) DB-15F

Rear Panel Controls

(12) Option switches

Front Panel Connectors

Panel Mic: (1) 1/4 in. (0.64 cm) panel mounting jack
Headset: (1) XLR-4M

Front Panel Controls & Indicators

(1) Panel / headset mic switch
(1) Announce button
(2) Program send level controls
(1) Program monitor level control
(2) Listen controls
(2) Sidetone null controls
(2) Talk buttons
(2) Call buttons
(1) Speaker ON-OFF switch

Environmental

32 - 122°F (0 - 50°C)

Dimensions

19 in. W x 1.75 in. H x 7.0 in. D
(483 mm x 44.5 mm x 178 mm)

Weight

5.2 lbs. (2.36 Kg)

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.