RM-704 Four-Channel Remote Station

Analog Partyline Solutions



Key Features

- Four-channel remote station
- Dual-action electronic momentary/ latching Talk buttons
- Individual listen volume controls
- Balanced audio input with program interrupt (IFB)
- Call signal buttons for each channel
- Microphone limiting
- Volume controls for each channel
- Visual and audible Tone Alert signaling
- Hot mic and line-level outputs
- · Built-in speaker
- External switchable line termination on each channel

Encore[™] is a 2-wire analog partyline system with intuitive plug-and-play design and superior "Clear-Com Sound" audio quality.

Description

The RM-704 is a 2RU four-channel remote station with programmable front panel buttons and individual channel volume control. The RM-704 is powered directly from the intercom line and requires no external AC power. Unlike the MS-704, the RM-704 has no power supply, circuit breaker or linking function.

Monitoring System

The RM-704 can monitor intercom activity on one or all channels with individual volume level controls. Monitoring intercom activity is possible through a headset or the internal high sensitivity loudspeaker.

Talk Selection

The RM-704 has mic pre-amps with limiters. 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 RM-704 provides a balanced, line-level output signal to a $\frac{1}{4}$ -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 $\frac{1}{4}$ -inch TRS connector, is typically used to mute monitors.

Call Signaling

The RM-704 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.



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Program Interrupt (IFB)

The RM-704 accepts 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 another channel where it can also be set up for IFB/Program Interrupt from this or any other station.

Configuration Panel

The RM-704 has a removable front panel for easy access to the station's configuration switches and trim pots. Clearly labeled and easy to adjust, these controls allow the RM-704 to be configured quickly. When configuration is complete, the front panel can be reattached so it shows only the needed controls.

Technical Specifications

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

Panel Microphone Input

Input Type: Electret
Input Impedance: >=2K

Mic Limiter Threshold: 0dBu ±3dB Mic Limiter Range: >= 17dB

Program Line Input

Maximum Level before Clipping: >= 20dBu

Input Impedance: >= 5K

Headset Output

Load Impedance: >= 8 Output

Impedance: <= 25

Output Limiter Threshold: +5dBu ± 3dB Maximum Output Level before Distortion:

>= 17dBu

Speaker Output

Load Impedance: >= 4

Max Output Level before 1% Distortion:

20dBu ± 2 dBu

Party Line Output

Output Noise: < -74dBu Output Impedance: >10K

Partyline Input

Crosstalk: < -60dB

Max level before Clipping: >= 12dBu Sidetone Null Capability: > 25dB

Stage Announce/Balanced Line Out

Type: Balanced

Output Impedance: >= 200 Load Impedance: >= 600

IFB/Hot Mic

Type: Unbalanced
Output Impedance: 150
Impedance: >= 600

Frequency Response

Panel Mic - Partyline: $600 - 10 \text{KHz} \pm 3 \text{dB}$ Headset Mic - Partyline: $200 - 12 \text{KHz} \pm 3 \text{dB}$ Headset Mic - Line Out: $200 - 12 \text{KHz} \pm 3 \text{dB}$ Program Input - Partyline: $100 - 17 \text{KHz} \pm 3 \text{dB}$

Program Input - Headset Out:

200 - 10KHz ± 3dB

Program Input - Speaker Out: $300 - 10KHz \pm 3dB$

Partyline - Headset Out: 200 - 10KHz ± 3 dB Partyline - Speaker Out: 300 - 10KHz ± 3 dB

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: >= 37dBHeadset Mic - Partyline: $41dB \pm 2dB$ Headset Mic - Hot Mic Out: $55dB \pm 3dB$ Headset Mic - Announce Out: $55dB \pm 3dB$ Program Input - Partyline: >= -16dBProgram Input - Headset Out: >= 18dBProgram Input - Speaker Out: >= 24dBPartyline - Headset Out: >= 34dBPartyline - Speaker Out: >= 40dB

Min Gain

Panel Mic - Partyline: <= 25dB

DC Power

Input Voltage Range: 20-30 VDC Input Current (Idle): <=165 mA Input Current (Max): <=195 mA

Environmental

32 - 122°F (0 - 50°C)

Dimensions

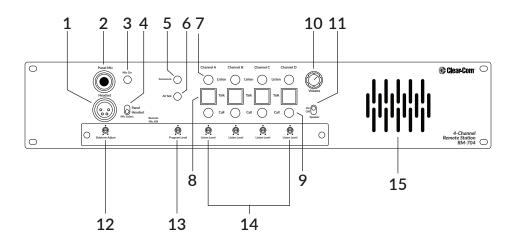
3.5 x 19 x 10.5 in (HxWxD) (88 x 483 x 267 mm)

Weight

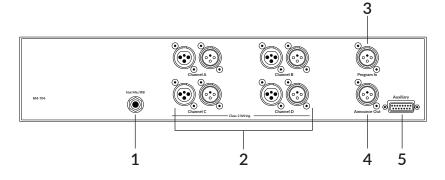
10.9 lbs (4.9 kg)



RM-704 Front Panel



RM-704 Rear Panel



Legend

Front Panel

- 1. XLR-4M Headset connector
- 2. Mic connector
- 3. Mic On switch
- 4. Mic Select switch
- 5. Announce button
- 6. All Talk buttons
- 7. Listen buttons
- 8. Talk buttons
- 9. Call buttons
- 10. Volume control
- 11. Speaker On/Off switch
- 12. Side Tone Adjust
- 13. Program Level
- 14. Listen Level
- 15. Loudspeaker

Back Panel

- 1. Hot Mic/IFB Output
- 2. Channel Intercom connectors
- 3. Program In
- 4. Announce Out
- 5. AUX connector

Order Code

RM-704