



RM-220 Front Panel  
shown with optional gooseneck mic

## 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 hi-output speaker**
- **One rack space**

## 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**



RM-220 Back Panel

## DESCRIPTION

The RM-220 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-220 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. 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.

**PLpro**<sup>®</sup>

PROFESSIONAL INTERCOM PRODUCTS

by Clear-Com

**SIGNALING**

The RM-220 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 PL-Pro-series 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.

**SPECIFICATIONS****CONTROL SYSTEM**

CMOS digital logic

**AUDIO OUTPUTS**

Announce Output: 0 dB, 600  $\Omega$

transformer balanced

Hot Mic Output: 0 dB, 100  $\Omega$  unbalanced

**MIC PREAMP**

Adjustable gain with limiter

Frequency Response: 250 Hz - 12 kHz, contoured for maximum intelligibility

Limiter Range: 20 dB

Mic Pre-Amp Gain: +41 dB

**HEADPHONE AMPLIFIER**

Output: Load 50 - 2,000  $\Omega$

Level: +20 dBv @ 600  $\Omega$

Distortion: <0.2% THD @ 1 kHz

Frequency Response: 200 Hz - 18 kHz

Gain from intercom line: +37dB

**SPEAKER AMPLIFIER**

8 watts

**EXTERNAL AUDIO PROGRAM**

Electronically balanced

Input Level: -10 dBv

Impedance: 40K, bridging

Frequency Response: 150 Hz - 15 kHz

**HEADSET TYPE**

Microphone: Dynamic

Level: -55 dB

Impedance: 200  $\Omega$

Headphone: Impedance: 50 - 2,000  $\Omega$

**MICROPHONE INPUT**

Electret with proprietary speech shaping circuit

Plug-in 9" or 18" gooseneck mic, optional

**INTERCOM LINE DRIVE/RECEIVE CIRCUITS**

Bridging Impedance: >10K  $\Omega$

Intercom Line Level: -9 dBv; + 5 dBv max.

Sidetone Null: >25 dB

**SYSTEM SPECIFICATIONS**

Intercom Line Length: 5,000 ft. max., 1 channel

Intercom line length: 1,000 ft. for <50 dB crosstalk, 2 channels

**RELAY**

Announce: SPDT

Contact rating: 24 Volts DC @ 1 amp

**TALK REMOTE CONTROL**

Two logic inputs

**REAR PANEL CONNECTORS**

(2) XLR-3: Channel A

(2) XLR-3: Channel B

1/4" Phone Jack: Hot Mic Out

Female DB-25:

AudioProgram Input

Announce Relay Contacts

Announce Output

Footswitch contacts

**DIMENSIONS & WEIGHT**

1.75" H (1 RU) x 19" W x 6.5" D

(44 x 483 x 165mm)

Depth not including rear panel connectors.

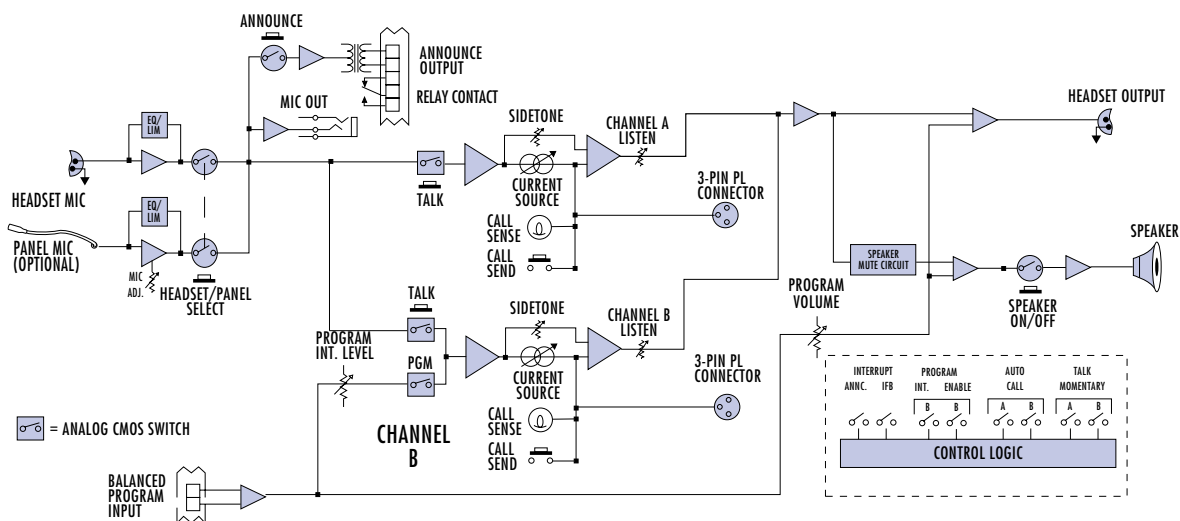
Weight: 7.5 lbs (3.4 kg)

**POWER**

100 mA average, from intercom line

0 dBv is referenced to 0.775 volts RMS

All specifications are subject to change without notice.

**RM-220 BLOCK DIAGRAM**

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