



PIC-4704 Front Panel

The Clear-Com program interrupt/IFB system is designed for all broadcast and teleproduction applications. It may be used as a stand-alone system or be fully integrated into an intercom network. Clear-Com's IFB system allows talent to monitor the ongoing program, while permitting directors and producers to interrupt or dip the program audio to address them.

PIC-4704 IFB Controller

Each IFB Controller handles up to four talent receivers with inputs for two program sources. It contains the circuitry for selecting one of the two program sources, sending the program to the IFB channels, and interrupting it – with variable attenuation - via the talent access stations. Its four separate outputs provide discrete, interruptible IFB lines to TR-50 talent receivers.

Talent Access Stations

Each talent access station contains four momentary pushbuttons, each of which is associated with a separate talent output from a PIC-4704 Controller. All pushbuttons contain "tally" lamps to indicate IFB channels in use. An optional rack-mount kit holds up to three access stations, providing control of 12 IFB channels in one rack space.

MA-704 Master Control/Talent Access Stations

The master control access station provides individual access to four talent channels, and "ALL IFB" access to all the IFB channels in the system. It contains the audio line-driver circuits. One MA-704 is required at each talent access control location. It is designed for stand-alone operation or for direct console mounting.

AX-704 Access Expansion Station

The expansion station connects to either a MA-4 or MA-4N station, expanding the IFB channel selection capabilities by four additional channels per AX-704. Multiple AX-704's may be linked together to control a maximum of 96 talent channels.

TR-50 Talent Receiver

The small, portable unit contains an amplifier with volume control to power the talent's earphone.



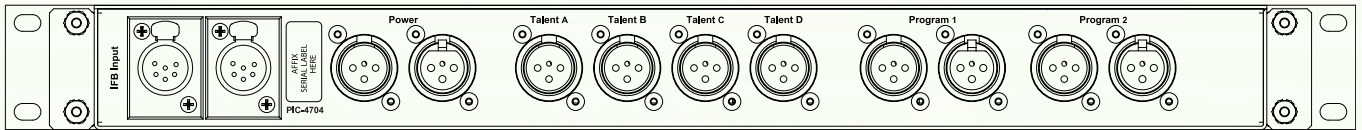
AX-704 Front Panel



MA-704 Front Panel

Features:

- Works as stand-alone system, or can be integrated with Clear-Com intercom stations
- Large system capacity – up to 96 Talent Receivers accessible from up to 50 locations
- Provides split program feeds for binaural headsets on a single mic cable
- Two separate program inputs and individual program level controls on IFB Controller
- Program feeds are selectable for "interrupt" or "non-interrupt"
- Amount of interrupt attenuation individually adjustable for each talent output
- Modular Access Stations expandable in groups of four
- Up to 12 talent access buttons in one rack space (1.75")
- "Tally" lights indicate IFB channels in use
- "All IFB" button simultaneously accesses all IFB channels
- Easy to install and operate
- Compatible with all Clear-Com main and remote stations



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Technical Specifications:

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

Panel Microphone Input (MA-704)

Input Type: Electret
 Input Impedance: $\geq 2K\Omega$
 Mic Limiter Threshold: 0dB \pm 3dB
 Mic Limiter Range: ≥ 15 dB

Program Line Input

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

Frequency Response

Panel Mic - Talent (MA-704 only): 200 - 18KHz \pm 3dB
 Program Input - Talent: 200 - 18KHz \pm 3dB
 Extension Line - Talent: 200 - 18KHz \pm 3dB

Max Distortion

Panel Mic - Talent (MA-704 only): $\leq 0.5\%$
 Program Input - Talent: $\leq 0.1\%$
 Extension Line - Talent: $\leq 0.1\%$

Noise

Panel Mic - Talent (MA-704 only): < -65 dBu
 Program Input - Talent: < -85 dBu
 Extension Line - Talent: < -85 dBu

Max Gain

Panel Mic - Talent (MA-704 only): ≥ 30 dB
 Program Input - Talent: ≥ -14 dB
 Extension Line - Talent: -14 dB \pm 3dB

Min Gain

Panel Mic - Talent (MA-704 only): ≤ 40 dB
 Program Input - Talent: ≤ -45 dB

Power (PIC-4704)

Input Voltage Range: 20-30 VDC
 Input Current: ≤ 90 mA

Power (MA-704)

Input Voltage Range: 20-30 VDC
 Input Current (Idle): ≤ 140 mA
 Input Current (Max): ≤ 180 mA

Power (AX-704)

Input Voltage Range: 20-30 VDC
 Input Current (Idle): ≤ 120 mA
 Input Current (Max): ≤ 150 mA

Rear Panel Connectors (PIC-4704)

IFB Input: (2) XLR6F
 Power In: (1) XLR3F
 Power Out: (1) XLR3M
 Talent Out: (4) XLR3M
 Program In: (2) XLR3F
 Program Out: (2) XLR3M

Rear Panel Connectors and Controls (MA-704)

IFB Input: (1) XLR6F
 IFB Extension: (1) XLR6M
 Extension Bus Out: (1) 1/4 jack
 External Line In: (1) 1/4 jack
 Mic Gain: (1) Gain adjust

Rear Panel Connectors and Controls (AX-704)

IFB Input: (1) XLR6F
 IFB Extension: (1) XLR6M
 Extension Bus Out: (1) 1/4 jack socket
 External Line In: (1) 1/4 jack socket

Front Panel Controls & Indicators (PIC-4704)

(1) Power indicator LED
 (2) Program input level controls
 (4) Non-interrupt program select switches
 (4) Interrupt program select switches
 (4) Audio dip level controls

Front Panel Controls & Indicators (MA-704)

(5) Talk buttons
 (1) 1/4 microphone jack socket

Front Panel Controls & Indicators (AX-704)

(4) Talk buttons

Environmental

32 - 122°F (0 - 50°C)

Dimensions (H x W x D)

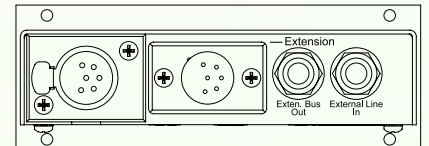
PIC-4704: 1.75in. x 19in. x 7.5in.
 MA-704: 1.75 in. x 6.3in. x 5.5in.
 AX-704: 1.75in x 4.9in. x 5.5in.

Weight

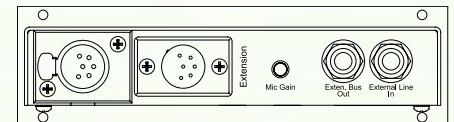
PIC-4704: 5.76 lbs. (2.62 kg)
 MA-704: 1.71 lbs. (.78kg)
 AX-704: 1.35 lbs. (.61 kg)

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.



AX-704 Back Panel



MA-704 Back Panel