# Clear-Com Encore™

PIC-4704, MA-704, AX-704 Program Interrupt/IFB System





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, interruptable 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:

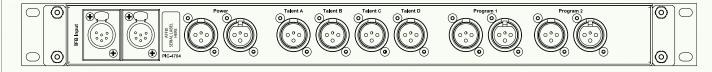
- Works as stand-alone system, or can be integrated with Clear-Com intercom stations
- Large system capacity up to 96 Talent Receivers accessible from up to 50 locations
- Provides split program feeds for binaural headsets on a single mic cable
- Two separate program inputs and individual program level 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-Commain and remote stations

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PIC-4704 Back Panel

# **Technical Specifications:**

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

#### Panel Microphone Input (MA-704)

 $\begin{array}{lll} \mbox{Input Type:} & \mbox{Electret} \\ \mbox{Input Impedance:} & \mbox{>=}2K\Omega \\ \mbox{Mic Limiter Threshold:} & \mbox{OdB} \pm 3dB \\ \mbox{Mic Limiter Range:} & \mbox{>=}15dB \\ \end{array}$ 

#### Program Line Input Maximum Level before

Clipping:  $\Rightarrow$ = 20dBu Input Impedance:  $\Rightarrow$ = 5K $\Omega$ 

#### Frequency Response

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

#### Max Distortion

 Panel Mic - Talent

 (MA-704 only):
 <= 0.5%</td>

 Program Input - Talent:
 <= 0.1%</td>

 Extension Line - Talent:
 <= 0.1%</td>

#### Noise

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

## Max Gain

 Panel Mic - Talent

 (MA-704 only):
 >= 30dB

 Program Input - Talent :
 >= -14dB

 Extension Line - Talent:
 -14dB ± 3dB

#### Min Gain

# Power (PIC-4704)

Input Voltage Range: 20-30 VDC Input Current: <= 90mA

## Power (MA-704)

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

#### Power (AX-704)

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

#### Rear Panel Connectors (PIC-4704)

### Rear Panel Connectors and Controls (MA-704)

IFB Input:(1) XLR6FIFB Extension:(1) XLR6MExtension Bus Out:(1) 1/4 jackExternal Line In:(1) 1/4 jackMic 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)

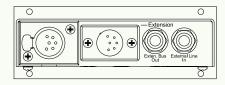
PIC-4704: 1.75in. x 19in. x7.5in. MA-704: 1.75 in.x 6.3in. x 5.5in. AX-704: 1.75in x 4.9in. x 5.5in.

## Weight

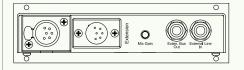
PIC-4704: 5.76 lbs. (2.62 kg) MA-704: 1.71 lbs. (.78kg) AX-704: 1.35 lbs. (.61 kg)

# 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

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