

# Program Interrupt and IFB System

Analog Partyline Solutions

Linking  
People  
Together



MA-704



AX-704

## Key Features and Benefits

- Wet/Dry switch to access 3rd party wireless IFB, console input, recording devices, etc.
- 4 separate program inputs and individual program level controls XLR cables
- Program attenuation individually adjustable for each talent output
- Compatible with all Encore main and remote stations
- Works as a standalone system or integrated with Clear-Com intercom station
- Expansion of up to 96 IFB channels between connected systems
- Modular access stations expandable in group of 4
- Up to 12 talent access buttons in 1RU
- “Tally” lights indicate IFB channels in use
- “ALL IFB” button simultaneously accesses all IFB channels

Clear-Com Encore® is an intuitive, robust, plug-and-play partyline intercom system with high-quality “Clear-Com Sound”.

## PIC-4744 IFB Router

The PIC-4744 provides four XLR3M analog partyline level audio outputs (IFB channels) and four XLR3F analog line level audio inputs (Program channels). Each IFB channel can select and place one of the four program sources to the output. A front panel variable trim pot is supplied for adjusting the source level to the output. Connections to control stations, typically used for a director to cue talent, are provided for interrupting the source input to the audio output. The PIC-4744 can interrupt the program source with variable attenuation. Each IFB channel carries a composite of three signals: the program audio, the cue audio and the dip or mute control. Multiple PIC-4744 panels can be used together if more than four audio outputs are needed.

## Talent Access Stations

Each talent access station contains four momentary pushbuttons, each of which is associated with a separate talent output from a PIC-4744 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.

The MA-704 Master Control and Talent Access Station provides individual access to the four IFB channels. The ALL button simultaneously accesses all Talent positions of the MA-704 and each AX-704 expansion station. It contains the audio line-driver circuits for cue audio. One MS-704 is required at each talent access control location.

The AX-704 Expansion Station connects to an MA-704, 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 IFB channels.

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## Technical Specifications

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

### PIC-4744

#### Program Line Input

Maximum Level Before Clipping:  $\geq 20$ dBu  
Input Impedance:  $< 10k\Omega$

#### Audio

Output Level for Talent: Clear-Com Partyline Level (approx. -10dBu)

PGM Source Adjustable Range: +20dBu

Attenuation Adjustable Range: 50dBu

#### Frequency Response

Panel Input - Talent: 200 - 18kHz +3dB

#### Max Distortion

Program Input - Talent:  $\leq 0.1\%$

#### Noise

Program Input - Talent:  $< -85$ dBu

#### Power

Input Voltage Range: 20-30V DC

Input Current:  $\leq 90$ mA

#### Rear Panel Connectors

IFB Input: (2) XLR6F-Switchcraft pin layout\*

Power Loop Through: (1) XLR3M, (1) XLR3F

Talent Out: (4) XLR3M

Program In: (4) XLR3F

Wet/Dry Switch: (4)

#### Front Panel Controls & Indicators

(1) Power indicator LED

(4) Program Output level controls

(4) Program Select input switches

(4) Attenuation (Atten) test buttons

(4) Attenuation (Atten) level controls

(2) Headset Monitor ports (3.5mm and XLR)

(1) Monitor select switch

#### Environmental

32° - +122°F (0° - +50°C)

#### Dimensions

19 x 1.75 x 7.5in (WxHxD)

(483 x 44 x 190mm)

#### Weight

5.76lbs (2.6kg)

### MA-704

#### Panel Microphone Input

Input Type: Electret

Input Impedance:  $\geq 2k\Omega$

Mic Limiter Threshold: 0dB  $\pm$  3dB

Mic Limiter Range:  $\geq 15$ dB

#### Frequency Response

Panel Mic - Talent: 200 - 18kHz  $\pm$  3dB

Extension Line - Talent: 200 - 18kHz  $\pm$  3dB

#### Max Distortion

Panel Mic - Talent:  $\leq 0.5\%$

Extension Line - Talent:  $\leq 0.1\%$

#### Noise

Panel Mic - Talent:  $< -65$ dBu

Extension Line - Talent:  $< -85$ dBu

#### Max Gain

Panel Mic - Talent:  $\leq 40$ dB

Program Input - Talent:  $\leq -45$ dB

#### Power

Input Voltage Range: 20-30V DC

Input Current (Idle):  $\leq 140$ mA

Input Current (Max):  $\leq 180$ mA

#### Rear Panel Connectors

IFB Input: (1) XLR6F-Switchcraft pin layout\*

IFB Ext.: (1) XLR6M-Switchcraft pin layout\*

Extension Bus Out: (1) 1/4 TRS jack

External Line In: (1) 1/4 TRS jack

Mic Gain: (1) Gain adjust

Requires a cable with 4 shielded pairs.

#### Front Panel Controls & Indicators

(5) Talk buttons

(1) 1/4 Threaded TRS Microphone Socket

#### Environmental

32° - +122°F (0° - +50°C)

#### Dimensions

6.3 x 1.75 x 5.5in (WxHxD)

(160 x 44 x 140mm)

#### Weight

1.71lbs (0.78kg)

### AX-704

#### Frequency Response

Extension Line - Talent: 200 - 18kHz  $\pm$  3dB

Max Distortion

Extension Line - Talent:  $\leq 0.1\%$

#### Noise

Extension Line - Talent:  $< -85$ dBu

#### Power

Input Voltage Range: 20-30V DC

Input Current (Idle):  $\leq 120$ mA

Input Current (Max):  $\leq 150$ mA

#### Rear Panel Connectors

IFB Input: (1) XLR6F-Switchcraft pin layout\*

IFB Ext.: (1) XLR6M-Switchcraft pin layout\*

Extension Bus Out: (1) 1/4 TRS jack socket

External Line In: (1) 1/4 TRS jack socket

Requires a cable with 4 shielded pairs.

#### Front Panel Controls & Indicators

(4) Talk buttons

#### Environmental

32° - +122°F (0° - +50°C)

#### Dimensions

4.9 x 1.75 x 5.5in (WxHxD)

(125 x 44 x 140mm)

#### Weight

1.35lbs (0.61kg)

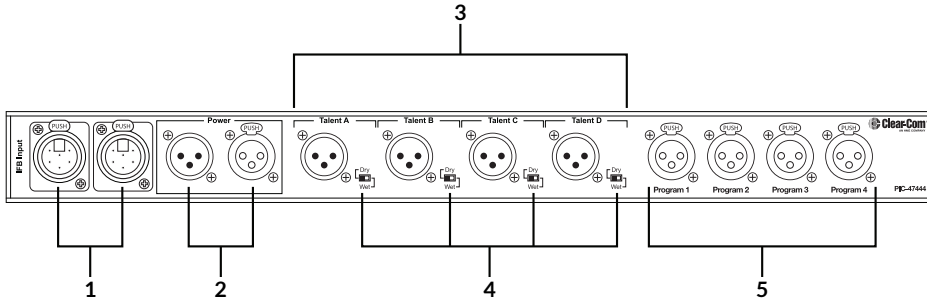
#### \*IMPORTANT: XLR Connector Compatibility

Clear-Com products featuring 6-pin XLR connectors utilize the Switchcraft XLR pin layout. Compatible connectors are available from manufacturers, such as Switchcraft and Neutrik, yet compatibility must be verified. Neutrik 6-pin XLR connectors must include "S" in the part number to ensure compatibility.

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## PIC-4744 Back Panel

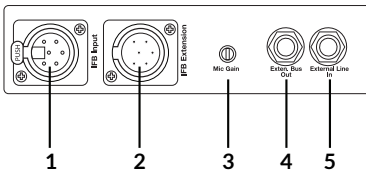


## Legend

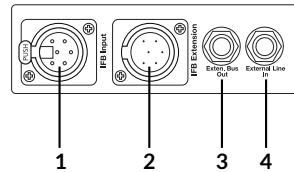
### PIC-4744 Back

1. IFB Talent Access Station output
2. Power
3. Output to Talent receiver (A - D)
4. Wet/Dry switch
5. Program input (1 - 4)

## MA-704 Back Panel



## AX-704 Back Panel



### MA-704 Back

1. IFB Access Station input
2. IFB Talent Access Station extension output
3. Mic Gain adjust
4. Hot Mic Extension output
5. Hot Mic input

### AX-704 Back

1. IFB Access Station input
2. IFB Talent Access Station extension output
3. Hot Mic extension output
4. Hot Mic input

## Order Codes

**PIC-4744:** IFB Router

**MA-704:** Master Control and Talent Access Station

**AX-704:** Talent Access Expansion Station

**CEP-RK:** Optional rackmount kit for the MA-704 and AX-704

**IC-25-6:** IFB Control Cable - 25ft/7,5m

**IC-50-6:** IFB Control Cable - 50ft/15m

**IC-100-6:** IFB Control Cable - 100ft/30m



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**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.CA.gov](http://www.P65Warnings.CA.gov)