



AB-100 Front Panel

FEATURES

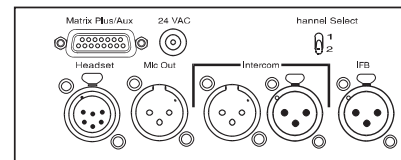
- **Broadcast-quality mic preamp with Jensen™ output transformer**
- **Talent “Talkback” circuit automatically mutes Mic output to “air”**
- **Silent “Mute” button for “Cough” and “Mic On/Off” functions**
- **Easily adapts for use with any mic or headset**
- **Quick and simple set up using standard XLR mic cable**
- **Wide-range, hi-output headphone amplifier**
- **Binaural headset output allows talent to hear stereo program, IFB and/or intercom**
- **Limiters-equipped “Talkback” circuit for consistent intercom audio**
- **IFB input accepts either balanced program or powered IFB**
- **Interfaces with intercom and IFB systems, including digital matrix intercoms**
- **Powered by intercom, IFB line, or external AC or DC source**

DESCRIPTION

The AB-100 Announcer's Console is a compact desktop unit designed specifically for sports, live-event broadcasting, and voice-over work. The ultimate broadcast-quality tool for announcers and commentators, the AB-100 integrates all the inputs, outputs, and controls necessary at the announce position, including intercom “Talkback,” IFB, and a silent “Mute” button that provides noise-free “cough” and “mic on/off” switching.

The “no compromise” mic preamp ensures broadcast-quality audio from the announcer's microphone. A high-output stereo headphone amplifier guarantees talent can always hear both program audio and “cues” from the control room, even in the loudest of sporting environments.

The AB-100 plugs into and draws power directly from most intercom and IFB systems, permitting an announce position to be located virtually anywhere, regardless of available AC power. Extremely flexible, the console is easily configured for practically any combination of audio sources, microphones, headsets, or intercom systems, ensuring quality audio and powerful communications.



AB-100 Rear Panel

ON AIR BROADCAST QUALITY

The AB-100 can be used with virtually any broadcast headset or separate microphone/headphone, and always delivers broadcast-quality line-level audio. Mic gain can be added in 10dB steps to set output level and overcome line noise in adverse conditions. A Jensen™ output transformer delivers up to 0 dB (with 20 dB of headroom) into 600 Ohms, providing a properly balanced signal, and eliminating the possibility of ground loops, buzz, or hum.

When locally powered, the AB-100 also provides phantom power for headsets with condenser microphones.

INTERCOM COMMUNICATIONS

Pressing the Talkback key momentarily switches the microphone output from “on-air” to the intercom channel.

The console can be configured so that intercom audio can be heard in the left ear, right ear, or both ears, helping the talent to instantly identify the source.

The AB-100 connects to almost any party-line intercom system and most 2-wire and 4-wire systems. It also is compatible with digital matrix intercom systems such as the Clear-Com Matrix Plus®.

SPECIFICATIONS

MICROPHONE PRE-AMP

Max Gain: 50 dB
Gain Adjustment: 30 dB in 10dB steps
Input Impedance: 1K Ohms

HEADPHONE AMPLIFIER

Max Gain: 40 dB
Frequency Response: 150 Hz -15 kHz, ±3 dB
Impedance: 8 Ohms - 2,000 Ohms
Level: 4 Watts into 8 Ohms, max (current limited)

LINE OUTPUT

Type: Transformer balanced (Jensen™)
Level: -10 dB nominal
Impedance: To drive 600 Ohms
Frequency Response: 20 Hz - 20 kHz, ±1 dB
Headroom: +20 dBm before clipping
Distortion: <.05% from 100 Hz - 10 kHz

BALANCED PROGRAM INPUT

Type: Transformer balanced
Level: 0 dB
Impedance: 10K Ohms bridging
Frequency Response: 150 Hz - 15 kHz

POWERED IFB INPUT

Type: 2-Channel unbalanced,
Transformer isolated
Level: -10 dB
Impedance: 10K Ohms bridging
Frequency Response: 150 Hz - 15 kHz

INTERCOM

Line Level: Clear-Com: -14 dB
Other: -10 dB
Impedance: 10K Ohms bridging
Frequency Response: 150 Hz - 15 kHz
Voltage Range: 25-30 Volts
Channels: selectable, 1 of 2
(or both with optional 2nd channel)

CONNECTIONS

Headset: 6-pin female XLR
Microphone Output: 3-pin male XLR
IFB Input: 3-pin female XLR,
1 or 2 channels, selectable
Intercom Input/Output: 3-pin female and
male XLRs
Aux (DB-15): 4-wire intercom, Matrix Plus II,
call logic, external AC power
AC power: 2.1 mm female coax power jack

POWER

Intercom or IFB line, Voltage: 25 - 30 VDC
Current: 65mA quiescent/120mA max
AC Adapter: 115V or 230V, 24 Volts @ 15 VA

DIMENSIONS

3" H x 6" W x 8" D (76 x 152 x 203 mm)
depth does not include rear-panel connectors

WEIGHT

2 lbs (0.9 kg)

**Specifications measured when powered with
supplied AC transformer.*

All specifications are subject to change without notice

0 dBu is referenced to 0.775 volts RMS

AMPLIFIED HEADPHONE AUDIO

The announcer's headphones are driven by a high-output stereo amplifier capable of overcoming the ambient noise level at the loudest basketball game or automobile race. Dual volume controls allow the operator to separately adjust the levels of either side of the stereo headphones, creating the desired mix of intercom and program audio.

DUAL-PURPOSE SILENT "MUTE" SWITCH

The "Mute" button acts as a talent "cough" switch, providing momentary muting of the microphone. Alternately, it can be set to latch when pressed, allowing talent to switch the mic on and off with a single touch. The switch is mechanically and electrically silent to ensure no clicking or switching noise when pressed.

IFB PROGRAM INPUT

The AB-100's IFB circuit allows the announcer to simultaneously monitor program audio and verbal cues from the control room. The unit accepts one or two channels of IFB, which can be standard balanced audio or self-powered three-pin circuits like those found on most broadcast IFB systems. Like the intercom, IFB feeds can be assigned to either the left ear, right ear, or both ears.

DUAL POWER OPTIONS

The AB-100 can be powered from the intercom or IFB line, eliminating the need for external power at the announcer's position. When a powered intercom or IFB system is not available, the console can be externally powered with the supplied AC adaptor or a DC source.

EASY-ACCESS CONSOLE FOR ULTIMATE FLEXIBILITY

The AB-100 is easy to configure for virtually any combination of input and output levels and connecting hardware imaginable. No tools are needed to open the console: simply unscrew the rubber feet by hand and it opens, revealing a series of clearly labeled jumpers, switches, and an easy-to-understand configuration chart. The chart explains exactly how to configure the console for various operations. While open, the console remains fully functional so that the operator can double-check and change any jumper settings.

Since many announcer applications have unique requirements, the AB-100 is designed so that all connectors and volume controls can be easily changed, and the console's physical construction lends itself to easy customization. Complete, easy-to-understand documentation makes configuration and customization simple.

AB-100 BLOCK DIAGRAM

