

# [H]ardBASS

Ai

## Compact Mixing Console User Manual

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# Introduction

Thank you for your purchase of the Ai series Mixing Console. This unit features familiar and simple analog controls with convenient Media Playback, Recording, Effects and Computer USB I/O interfacing.

Please read this guide carefully to get the full benefits of your mixer. Please read all safety information.

## Safety Information

Please follow all standard precautions whenever operating this or any other electrical device. Ensure the device is not exposed to moisture or excess humidity. Ensure it does not become wet. Please ensure the power cord is in good condition before connecting. If the cord is broken or damaged, do not connect. Connect only to AC Mains matching the device's marked input voltage. Do not block any ventilation holes. This device contains no user-serviceable parts; do not open. Refer any repairs to qualified technician only.

## Important Information

Never use spray cleaners or lubricants on the knobs, faders, or any other parts of the mixer. Please properly stow the mixer when not in use to avoid dust entry into the connectors, knobs or faders. Please disconnect the mixer from the AC Mains power supply when not in use.

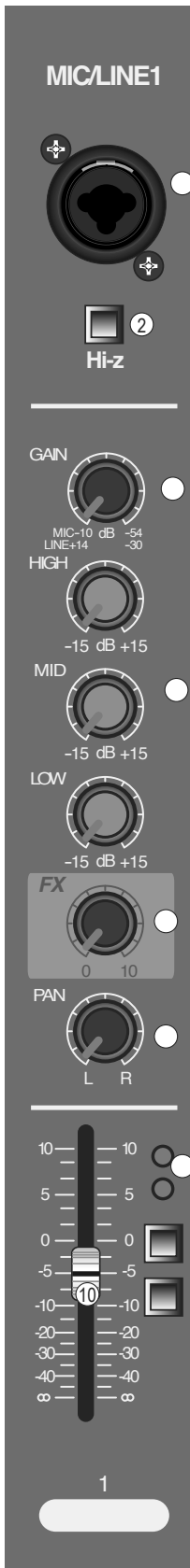
This mixer includes a USB-C Power Supply + USB-C cable. Please use only the included cable and power supply. Do not use any other power supply or cable without authorization from a qualified technician or service representative. Many USB Power Supplies and cables designed for mobile devices are unable to properly power this mixer.

Always turn on your connected Amplifiers or Active Loudspeakers last to avoid equipment turn-on sounds. Reduce volume if your amplifier is “clipping”, normally indicated by a red light on your amplifier or active loudspeaker. Keep levels bouncing nicely in the green lights on all equipment.

## Orientation



# The Channel Strip



## Overview

This mixer features numbered channel inputs as well as Media Player and Aux return inputs. Each of the numbered inputs has a full channel strip whereby gain, mute, Pre-Fader Listen (PFL), Hi-Z on/off, equalization, effects, pan and volume control can be adjusted. The input connector supports both XLR (for Microphones) and 1/4" (for Instrument and Line sources).

## Input Connections

Adjust the **Gain** control at the top of the channel strip to a suitable level for your Microphone or Instrument. The "**Peak**" red-light indicator and **PFL** (Pre-Fader listen) function can be used to precisely set the Gain. The **Hi-Z** switch allows better connection to guitars without a DI box.

## Equalization

Under the Gain control are the Equalization knobs. You will find three knobs on each channel for **High, Mid** and **Low** frequency controls with adjustments +/- 15dB.

## PFL and Effects sends

The **PFL** switch sends the input channel (pre-fader) to the **Phones** output. The PFL bus can be used to monitor these selected inputs via a connected headphone or external monitor.



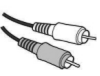
The **FX** knob sends the input channel (post-fader) to the Digital Stereo Effects (FX) section, where the signal is processed and effects returned through the **FX slider**.

## Volume Controls

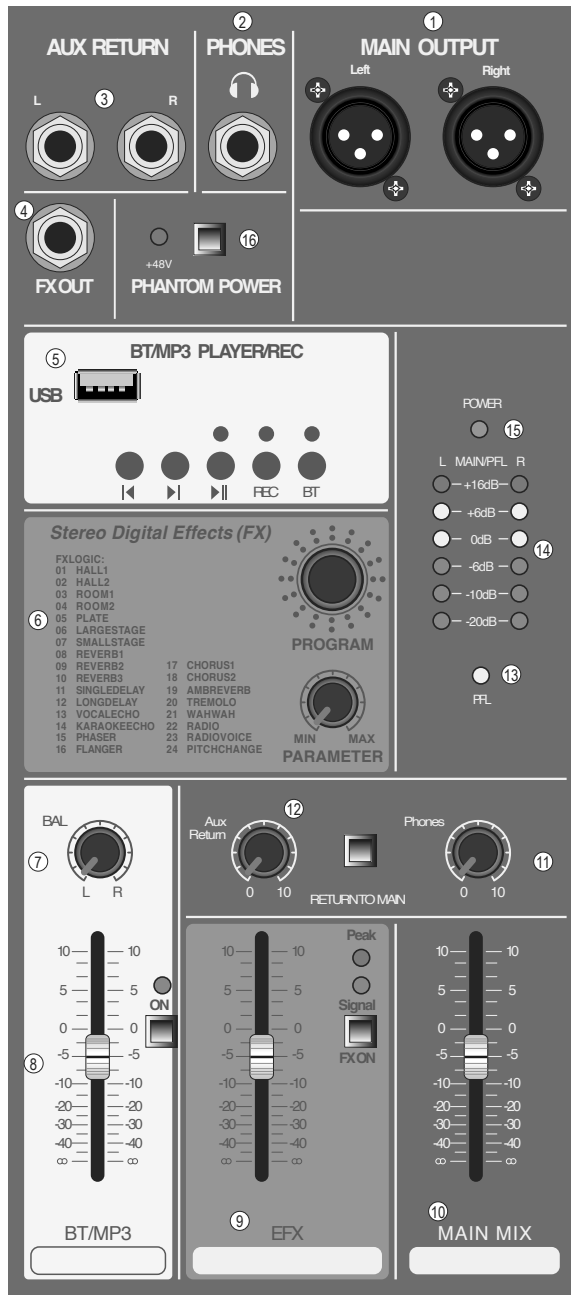
The **MUTE** switch turns the channel on or off. The **PAN** knob shifts the channel from center (both outputs) towards the left or right outputs. Use the channel **Fader** slider for volume control.

The **Peak** red-light blinks when the input Gain knob is set too high. The **PFL** (Pre-Fader listen) switch sends the channel to Phones and LED display for precise gain adjustment.

### Input Connector Types

|   |   |
|---|---|
| <b>XLR</b><br>Balanced 3-pin XLR Microphone inputs for connecting to Dynamic Microphones, Wireless Microphone Receivers or Direct Injection (DI) boxes. Condenser Type Microphones require turning on the <b>+48V</b> Phantom Power switch.             |  |
| <b>1/4" (6.3mm)</b><br>1/4" (6.3mm) Line Input for connecting to Line-level signals such as Musical Instruments, Guitars, DJ Controllers, etc. The right-most channel strips feature paired Left and Right 1/4" Inputs for stereo audio configurations. |  |
| <b>RCA</b><br>Stereo RCA connections are used for Home Audio equipment. These can be connected directly to the stereo channel strips via RCA Female - 1/4" Male adapters (sold separately) or directly into the Tape-in inputs.                         |  |

# Main Mix, AUX and Monitoring Outputs



## Main Outputs

Connect the Balanced XLR **Main Outputs** to your Active Loudspeakers or Power Amplifier. The main outputs are controlled by the **Main Mix Faders**.

Signal level can be seen on the color-coded **LED Metering**. Note all Pre-Fader Listen (**PFL**) switches must be disengaged for the meter to display the Main Mix output levels.

Ideally signal levels should be kept bouncing nicely in the green lights and rarely touching the yellow lights.

## Phones and FX Outputs

This mixer features **PHONES** output for monitoring. Volume is controlled by the **Phones knob**. The monitoring source is assigned by the **PFL** switches on each channel strip.

This mixer features built-in Stereo Digital Effects. The effects volume is controlled by the **FX ON** knob and **EFX Volume Slider**.

In the event you want to use the Effects bus (Post-Fader) for external equipment, an **FX OUT** jack is provided.

## AUX Return

This mixer also features stereo **AUX Return** inputs with an **Aux Return** volume control knob for external equipment. Engage the **RETURN TO MAIN** switch to send the AUX Return inputs to the Main Mix.

## Phantom Power

Phantom Power (+48V) provides power to connected Condenser Microphones. This should be left OFF if you are not using Condenser Microphones.

## BT/MP3 Player/REC/Volume

This mixer features a built-in Media Player with USB (Flash Drive) MP3 and Bluetooth receiver. Volume is controlled by the channel strip labelled **BT / MP3**. Please note the **ON** button for this channel strip. The Bluetooth pairing is engaged by the **BT** pairing button next to the navigational buttons.

The USB input in this section only supports MP3 playback from USB Flash Drives.

# Digital Effects and USB I/O Interface

## Digital Effects

To add effects to a channel, turn the **FX** knob on the channel strip. The signal will then be routed to the marked **Stereo Digital Effects (FX)** section, where the effects type (**Program**) (options listed below) and **Parameter** can be selected. Finally, raise the **FX Fader** to desired level. Note the **ON** switch and **Peak** indicator next to the FX fader.

| FX LOGIC: |             |    |              |    |              |
|-----------|-------------|----|--------------|----|--------------|
| 1         | HALL 1      | 9  | REVERB 2     | 17 | CHORUS 1     |
| 2         | HALL 2      | 10 | REVERB 3     | 18 | CHORUS 2     |
| 3         | ROOM 1      | 11 | SINGLE DELAY | 19 | AMB REVERB   |
| 4         | ROOM 2      | 12 | LONG DELAY   | 20 | TREMOLO      |
| 5         | PLATE       | 13 | VOCAL ECHO   | 21 | WAH WAH      |
| 6         | LARGE STAGE | 14 | KARAOKE ECHO | 22 | RADIO        |
| 7         | SMALL STAGE | 15 | PHASER       | 23 | RADIO VOICE  |
| 8         | REVERB 1    | 16 | FLANGER      | 24 | PITCH CHANGE |

## USB I/O Interface

This mixer features **USB Audio I/O Interface** to optionally connect to your computer for streaming, recording and playback. This interface is plug-and-play with no external drivers needed. Connect the USB-B (square-shaped) port at the rear of the mixer to your computer via a **USB-B to USB-A cable** (sold separately) and select the mixer as your computer's recording and/or playback device.

The signal sent to the computer (for recording or streaming) is the stereo **Main Mix**. If this mixer is selected as a playback device, any incoming sound from your computer will be routed directly to the Main Mix.

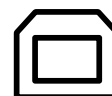
## USB-C Power Supply and Cable

This mixer includes a USB-C Power Supply + USB-C cable. Please use only the included cable and power supply for this mixer. Do not use any other power supply or cable without authorization from a qualified technician or service representative. Many USB Power Supplies and Cables designed for mobile devices are unable to properly power this mixer.

If you have misplaced or lost the included USB Power Supply or USB-C cable, please consult your local **[H]ardBASS** dealer for more information on obtaining a replacement.



**USB-C Port**  
(Only for Power)



**USB-B Port**  
(Only for Audio Streaming)

# Specifications

|                    |   |
|--------------------|---|
| <b>Model</b>       | <b>Ai Compact Series</b>  |
| Description        | Compact Mixing Console with Media Player, Recorder, Effects and USB I/O |
| Microphone Inputs  | Discrete studio-grade, high-performance, low-noise microphone preamps   |
| Line Inputs        | Stereo (including AUX returns) + Mono Line Inputs                       |
| Outputs            | Balanced XLR Main out (+26dBu) + FX Out + Phones Out                    |
| Monitoring         | 6-segment LED metering, Pre-Fader Listen (PFL) and Peak indicator       |
| Frequency Response | 20Hz to 20kHz ( $\pm 1$ dB) All Inputs                                  |
| THD+N              | Less than 0.005% (@ 4 dBu, 1 kHz) (Total Harmonic Distortion)           |
| Fader Length       | 45mm Faders on Input Channels, Bluetooth, FX and MAIN                   |
| Equalization       | 3-band Equalization on each channel                                     |
| High EQ            | 12,000Hz $\pm 15$ dB  |
| Midrange EQ        | 2,500Hz $\pm 15$ dB   |
| Low EQ             | 80Hz $\pm 15$ dB  |
| USB Audio I/O      | 2-in/2-out (24-bit 48kHz)   |
| Media Player       | USB MP3 Playback + Recording + Bluetooth Receiver                       |
| Effects            | 24 Selectable + Parametric adjustment + footswitch bypass               |
| Headphone Out      | 200mW (200 $\Omega$ )   |
| Power Supply       | USB-C Power Supply + Cable, rated 5V at least 3 Amps (5V/3A)            |
| Dimensions         | 310mm x 255mm x 65mm (L X W X H))                                       |

## Block Diagram

