

Mackie MDB-USB

Mackie MDB-USB Signal Direct Box Instruction Manual

Model: MDB-USB

1. INTRODUCTION AND OVERVIEW

The Mackie MDB-USB is a bus-powered stereo direct box designed to seamlessly integrate computer audio into analog sound systems. It functions as a high-resolution audio interface, converting digital audio signals into clean, balanced stereo output, free from noise and distortion. This device eliminates the need to rely on a computer's headphone jack for professional audio connections, offering enhanced versatility with features like output level control, a dedicated headphone output, and a mono sum option. The analog outputs are dual XLR with a ground lift switch for optimal signal integrity. A USB cable is included for immediate connectivity.

- **Direct USB Connectivity:** Connect your computer directly via USB for audio transfer.
- **High-Resolution Audio:** Supports 24-bit/96kHz audio for pristine sound quality.
- **Balanced XLR Outputs:** Provides professional-grade balanced XLR outputs with ground lift.
- **Bus-Powered:** Operates solely on power supplied by your computer's USB port.



Figure 1: Top view of the Mackie MDB-USB Signal Direct Box, illustrating its compact design and the Mackie logo.

2. SETUP AND CONNECTIONS

Follow these steps to set up your MDB-USB Signal Direct Box:

1. **Connect to Computer:** Use the included USB cable to connect the MDB-USB to an available USB port on your computer. The device is bus-powered and does not require an external power supply.
2. **Audio Output Connection:** Connect the dual XLR outputs (Left and Right) of the MDB-USB to the balanced inputs of your mixer, audio interface, or PA system using standard XLR cables.
3. **Headphone Monitoring:** For direct monitoring, connect your headphones to the dedicated headphone output jack on the MDB-USB.
4. **Ground Lift:** If you experience hum or ground loop noise, engage the Ground Lift switch located between the XLR outputs. This can help eliminate unwanted noise.
5. **Software Configuration:** On your computer, select the MDB-USB as the audio output device in your operating system's sound settings and your preferred audio software.



Figure 2: The Mackie MDB-USB's input and output panel, highlighting the USB input, XLR outputs, and headphone jack.

3. OPERATING INSTRUCTIONS

The MDB-USB offers straightforward controls for managing your audio signal:

- **Level Control:** Adjust the output level of the MDB-USB using the dedicated knob. This controls the signal sent to your mixer or PA system.
- **Headphone Volume:** A separate volume control is provided for the headphone output, allowing independent monitoring level adjustment.
- **Mono Sum Switch:** Engage the Mono Sum switch to combine the left and right stereo signals into a single mono output. This is useful for systems that only support mono input or for checking mono compatibility.
- **Ground Lift Switch:** As mentioned in the setup, use this switch to break ground loops and eliminate hum. Toggle it to the position that provides the cleanest audio signal.

For a visual demonstration of the Mackie MDB series, including the MDB-USB, refer to the video below:

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Figure 3: An official Mackie video providing an overview of the MDB series direct boxes, including the MDB-USB, demonstrating their features and typical usage scenarios.

4. MAINTENANCE

To ensure the longevity and optimal performance of your Mackie MDB-USB, follow these simple maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to wipe down the exterior of the unit. Avoid using abrasive cleaners, solvents, or waxes, as these can damage the finish and internal components.

- **Storage:** When not in use, store the MDB-USB in a cool, dry place, away from direct sunlight and extreme temperatures. Protect it from dust and moisture.
- **Handling:** Handle the unit with care. While built robustly, dropping or subjecting it to strong impacts can cause damage.
- **Cable Management:** Ensure all cables connected to the MDB-USB are not excessively bent or strained, which can lead to cable failure or damage to the unit's ports.

5. TROUBLESHOOTING

If you encounter issues with your MDB-USB, consult the following common troubleshooting tips:

- **No Audio Output:**
 - Ensure the MDB-USB is correctly connected to your computer via USB and recognized as an audio device.
 - Verify that the MDB-USB is selected as the output device in your computer's sound settings and your audio software.
 - Check all cable connections (USB, XLR, headphones) for secure fit.
 - Increase the output level on the MDB-USB and the input gain on your mixer/PA system.
- **Hum or Buzzing Noise:**
 - Engage the Ground Lift switch on the MDB-USB.
 - Ensure all audio equipment is connected to the same electrical outlet or power conditioner to avoid ground loops.
 - Test with different cables to rule out faulty wiring.
- **Distorted Audio:**
 - Reduce the output level on the MDB-USB or the input gain on your mixer/PA system to prevent clipping.
 - Check your computer's audio output level to ensure it's not too high.
- **Headphones Not Working:**
 - Ensure headphones are fully plugged into the headphone jack.
 - Adjust the headphone volume knob on the MDB-USB.
 - Test with another pair of headphones to confirm they are functional.

6. SPECIFICATIONS

Model Name	MDB-USB
Brand	Mackie
Connectivity Technology	USB
Frequency Response	96 KHz
Supported Software	WDM, MME, CoreAudio, DirectSound, WAV
Operating System	Windows (and implicitly macOS via CoreAudio)
Item Weight	1 pounds (16 ounces)

Product Dimensions	3.4 x 5.8 x 1.5 inches
Mounting Type	Tabletop Mount
UPC	663961054019

7. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official Mackie website or contact their customer support directly. Keep your purchase receipt as proof of purchase for warranty claims.