

## Behringer ADA8000

# Behringer ULTRAGAIN PRO-8 DIGITAL ADA8000 Instruction Manual

Audiophile 8-Channel A/D and D/A Converter with Premium Mic Preamplifiers and ADAT Interface

## INTRODUCTION

The Behringer ULTRAGAIN PRO-8 DIGITAL ADA8000 is an 8-channel analog-to-digital (A/D) and digital-to-analog (D/A) converter designed to expand the input and output capabilities of your digital recording or mixing environment. It features eight high-quality microphone preamplifiers and an ADAT interface for seamless integration with compatible audio devices. This manual provides essential information for the proper setup, operation, and maintenance of your ADA8000.

## SETUP

### 1. Unpacking and Initial Inspection

Carefully unpack your ADA8000 and inspect it for any signs of damage during transit. Retain the packaging for future transport or storage.

### 2. Power Connection

Connect the supplied power cable to the AC inlet on the rear panel of the ADA8000 and then to a suitable power outlet. Ensure the power switch is in the 'Off' position before connecting to power.

### 3. Analog Input Connections

The ADA8000 features eight analog input channels. Each channel is equipped with an XLR/TRS combo jack, allowing connection of either XLR (microphone) or 1/4" TRS (line-level) sources. For microphone inputs, ensure phantom power is activated if required by your condenser microphones.



Figure 1: Front panel of the ADA8000, illustrating the eight analog input channels with their respective controls.

### 4. Analog Output Connections

Eight analog line outputs are available on the rear panel via XLR connectors. These outputs can be connected to your mixing console, audio interface, or other playback devices.



Figure 2: Rear panel of the ADA8000, showing the ADAT optical ports, Word Clock connections, and XLR line outputs.

## 5. ADAT Interface Connection

The ADA8000 utilizes ADAT optical connections for digital audio transfer. Connect an optical ADAT cable from the ADAT OUT port of the ADA8000 to the ADAT IN port of your digital mixer or audio interface. Similarly, connect an ADAT cable from the ADAT OUT of your digital device to the ADAT IN of the ADA8000 for digital-to-analog conversion.

## 6. Word Clock Synchronization

For stable digital audio transfer, proper synchronization is crucial. The ADA8000 can operate as a master clock or slave to an external word clock source. Use the 'SYNC' switch on the front panel to select the desired synchronization mode (Internal, ADAT In, Word Clock In). If using an external word clock, connect a 75-ohm coaxial cable to the BNC Word Clock IN/OUT ports.

# OPERATING THE ADA8000

## 1. Power On

After all connections are made, switch the power button on the front panel to the 'On' position. The power LED will illuminate.

## 2. Gain Control

Each of the eight input channels has a dedicated GAIN control knob. Adjust this knob to set the input level for your connected microphone or line source. Monitor the 'SIG' (Signal) and 'CLIP' (Clipping) LEDs for each channel. The 'SIG' LED indicates signal presence, while the 'CLIP' LED warns of an excessively high input level that could cause distortion. Adjust the gain to achieve a strong signal without clipping.

## 3. PAD Switch

For very loud input sources, engage the 'PAD' switch on the respective channel. This attenuates the input signal by a fixed amount (typically -20 dB) to prevent clipping at the preamplifier stage.

## 4. Phantom Power

The ADA8000 provides +48V phantom power for condenser microphones. Activate phantom power globally for all eight channels using the 'PHANTOM POWER' switch on the front panel. Ensure dynamic microphones or ribbon microphones that are not designed for phantom power are disconnected before activation to prevent potential damage.

## 5. Sample Rate Selection

The ADA8000 supports various sample rates. Use the 'SAMPLE RATE' switch on the front panel to select the desired sample rate (e.g., 44.1 kHz, 48 kHz). This must match the sample rate of your connected digital device for proper synchronization.

## 6. ADAT Sync Mode

Set the 'SYNC' switch to match your system's clocking configuration. If the ADA8000 is the master clock, select 'INTERNAL'. If it receives clock from an external ADAT source, select 'ADAT IN'. If it receives clock from a dedicated Word Clock signal, select 'WORD CLOCK IN'.

## MAINTENANCE

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To ensure the longevity and optimal performance of your Behringer ADA8000, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid abrasive cleaners or solvents that could damage the finish or internal components.
- **Ventilation:** Ensure adequate ventilation around the unit to prevent overheating. Do not block ventilation openings.
- **Environment:** Operate the device in a dry, dust-free environment. Avoid extreme temperatures or humidity.
- **Cable Management:** Secure all cables to prevent accidental disconnections or damage. Avoid bending cables sharply.
- **Power Off:** Always power off the unit and disconnect it from the mains before performing any cleaning or maintenance.

## TROUBLESHOOTING

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If you encounter issues with your ADA8000, refer to the following common problems and solutions:

- **No Power:**  
*Symptom:* The power LED does not illuminate when the unit is switched on.  
*Solution:* Check the power cable connection to both the unit and the power outlet. Ensure the power outlet is functional.
- **No Audio Signal:**  
*Symptom:* No sound is heard or recorded, and the 'SIG' LED does not light up.  
*Solution:* Verify that the input source is active and connected correctly. Check the GAIN knob for the respective channel and ensure it is turned up. If using a microphone, confirm phantom power is activated if needed. Check ADAT cable connections and ensure the sample rate and sync mode match your digital device.
- **Distorted Audio:**  
*Symptom:* The audio signal sounds distorted, and the 'CLIP' LED frequently illuminates.  
*Solution:* Reduce the GAIN for the affected channel. If the source is very loud, engage the 'PAD' switch. Ensure your digital device's input levels are also not clipping.
- **Synchronization Issues (Clicks/Pops):**  
*Symptom:* Audible clicks, pops, or dropouts in the audio.  
*Solution:* This often indicates a clock synchronization problem. Ensure the 'SYNC' switch setting on the ADA8000 matches your master clock source (e.g., if your audio interface is the master, set ADA8000 to 'ADAT IN' or 'WORD CLOCK IN' accordingly). Verify Word Clock cable connections if used.

## SPECIFICATIONS

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Feature	Specification
Item Weight	6.81 pounds
Product Dimensions	20.87 x 4.21 x 12.01 inches
Item Model Number	ADA8000
Date First Available	October 2, 2001
Body Material	Wood
Color Name	Slvr/Blk
Compatible Devices	Personal Computer
Connector Type	ADAT (25-pin D-SUB), XLR
Mixer Channel Quantity	8
Wattage	25 watts
Brand	Behringer
UPC	689076807784
Manufacturer	Behringer

## WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official Behringer website or contact your authorized dealer. Keep your purchase receipt as proof of purchase for warranty claims.