RØDE
MICROPHONES

AI-1

USER GUIDE

OVERVIEW

The **AI-1** USB Audio Interface adds studio-quality Input and Output capabilities to your PC or Mac, turning your recording software into a full recording setup.

With its high quality Neutrik XLR-1/4" Combo Jack combined input and discrete Class-A preamp, the **AI-1** allows you to connect a microphone or instrument or line level audio signal to your Mac/Windows computer for recording. The **AI-1** provides the necessary A/D conversion at up to 24 bit/96kHz.

The **AI-1** also allows playback and monitoring of audio either direct from the microphone or via playback from the recording software. This is done via a high-quality discrete headphone amplifier and outputs via either the ¼" headphone output on the front of the unit or the balanced ¼" outputs on the rear of the unit.

Features:

- Ultra low-noise Class-A discrete preamplifier
- Sampling rate of up to 96kHz/24-Bit
- Premium discrete headphone amplifier
- XLR-1/4" Combo Jack Instrument / line level input
- 2 x Balanced 1/4" speaker outputs
- Rugged body with Satin Black Finish
- USB-C/3 connectivity

SYSTEM REQUIREMENTS

Apple
MacOS 10.10 or later with USB 2.0 or 3.0 USB port

Windows
Windows 7 OS or later with USB 2.0 or 3.0 USB port

The **AI-1** is USB bus powered so there is no need for an external power supply.

Some laptops may limit the USB output power when running on battery. This could mean the **AI-1** does not receive enough power to run optimally. If this is the case, connect your laptop to the power supply when using the **AI-1**.

CONNECTING YOUR AI-1

If your computer doesn't automatically switch its default input/output to the **RODE AI-1** when connected, you can set this up with the following steps:

Mac OS

Go to System Preferences **>** Sound

Confirm that **'RODE AI-1'** is selected as the input and output device.

Windows

Go to Start **>** Control Panel **>** Hardware and Sound **>** Sound **>** Manage Audio Devices

(alternatively right click the speaker icon in the bottom right of the taskbar and select Playback)

Confirm that **'RODE AI-1'** is selected as the default device in both the Playback and Recording tabs.

The **AI-1** is a class compliant device and therefore does not need any drivers installed.

For future firmware updates, please visit **rode.com/ai1**

TIPS FOR BEST RESULTS

Phantom power needs to be activated for most condenser microphones, but is not necessary for dynamic microphones or instruments. It is recommended that you deselect phantom power before connecting devices that do not need it.

When setting levels, adjust the input gain so the signal level LED flashes yellow during the loudest parts of the performance. This will give the best performance without distortion or noise.

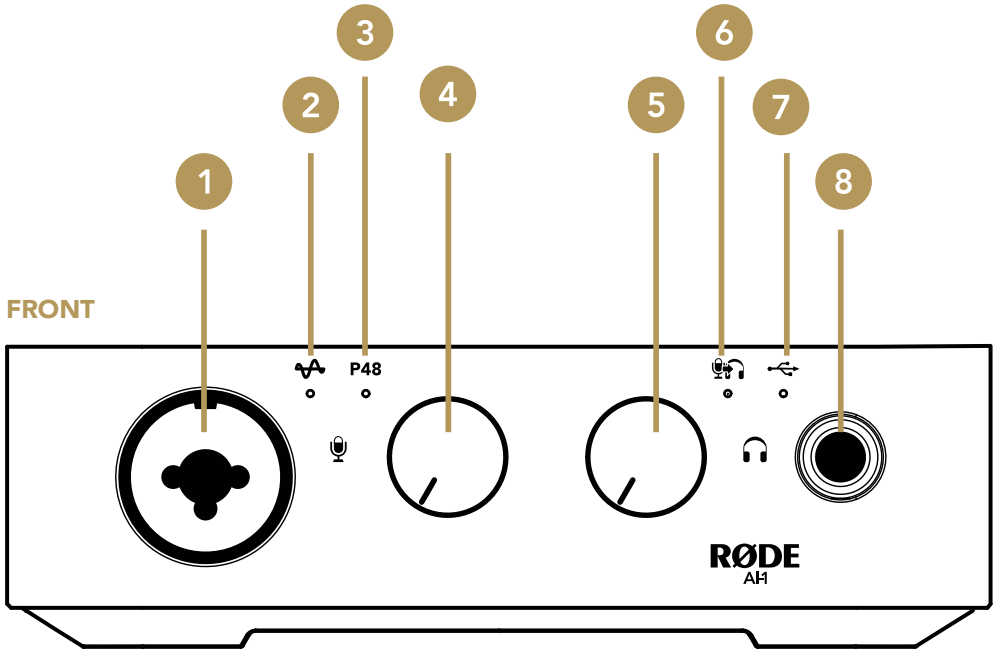
The high-power headphone amplifier in the **AI-1** is capable of producing extremely high volume levels in some headphones. Start with the volume turned right down, and turn up until the level is comfortable.

Please turn headphone level down before unplugging headphones to mix via speakers.

HARDWARE FEATURES

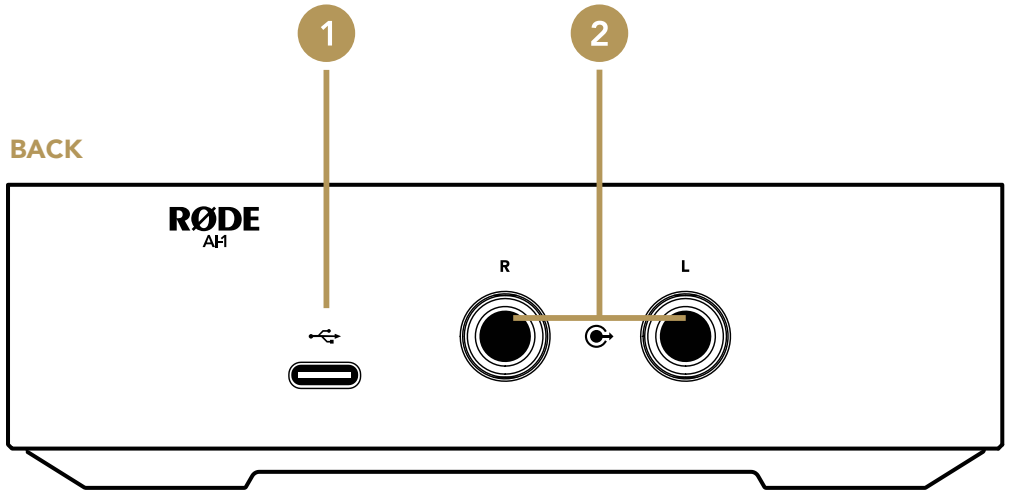
Front

1. **XLR-1/4" Combo Input** Balanced input via 3-pin XLR-1/4" Neutrik combo socket. Microphones, instruments (guitars) and line level instruments (synthesizers) can be connected via this input.
1. **Signal LED** Indicates signal input level. No LED indicates below -60dB. Green LED indicates an input level of at least -40dB, Yellow indicates an input level above -12dB and Red indicates an input level of above -3dB.
1. **Phantom Power LED** Indicates when phantom power 48V is applied to XLR-1/4" Combo Jack input. Gain level knob must be pushed to turn on/off.
1. **Gain Level Knob** Gain knob for adjusting input gain. Press knob to turn on/off phantom power.
1. **Playback/Monitor Level Knob** Gain knob for adjusting headphone / speaker volume. Press knob to turn Direct Monitoring on/off.
1. **Direct Monitor LED** Indicates when Direct Monitoring is on/off. When Direct Monitoring is ON, audio from the microphone will be routed directly to the headphones. When Direct Monitoring is OFF, you will hear only audio from the computer.
1. **USB LED** Indicates when the **AI-1** is connected via the USB cable.
1. **Headphone Jack Output** Connector for headphones, ¼" TRS jack required.



Back

1. **USB-C Port** USB-C type connector. Connect to your laptop or computer with the USB cable supplied.
2. **Speaker outputs** 2 x ¼" impedance balanced outputs.



Note
Speaker output is muted when headphones are connected. Unplug headphones to enable monitoring via the speaker output. To avoid feedback loops when monitoring on speakers, please disable any connected microphone. When ready to record with a mic, either turn down speakers or switch to headphone monitoring.

SPECIFICATIONS

Computer Connectivity	USB
Form Factor	Desktop
Simultaneous I/O	1 x 2
Number of Preamps	1
Phantom Power	Yes
Bit Depth	24-bit
Sample Rates	44.1 kHz 48 kHz 88.2 kHz 96 kHz
Analog Inputs	1 x Neutrik XLR-1/4" combo
Analog Outputs	2 x 1/4" (impedance balanced) 1 x 1/4" (headphones)
Direct Monitor	Yes
USB	1 x USB Type C
Bus Powered	Yes
OS Requirements	Mac OS 10.10 or later Windows 7 or later
Power	USB bus-powered
Depth	100mm total (with knobs) chassis: 88mm
Width	124mm
Height	38mm
Weight	1lb 3.7oz 560g

ADVANCED SPECIFICATIONS

INPUT	
XLR/MIC INPUT	
Dynamic Range	104dBu
Equivalent Input Noise @ Maximum Gain (Source Impedance 150 ohms, 20Hz-20kHz, A-weighted)	–128dB-A
Frequency Response (Measured after ADC)	20Hz – 20kHz better than ±1dB
Gain Range	0dB – >45dB
Input Impedance	1.3K Ohms
INSTRUMENT INPUT	
Dynamic Range	104dBu
Frequency Response (Measured after ADC)	20Hz – 20kHz better than ±1dB
Gain Range	0dB – >45dB
Input Impedance	0.9M Ohms

OUTPUTS	
MONITOR OUTPUTS	
Maximum Output Level	-6dBu
Frequency Response	20Hz – 20kHz better than ±1dB
HEADPHONE	
Max output power at 1% THD	32Ohms – >24mW 300Ohms – >245mW