SONICAKE QAI-23

SONICAKE Sonic Cube II USB Audio Interface Mixer QAI-23 Instruction Manual

1. Introduction

Welcome to the instruction manual for your SONICAKE Sonic Cube II USB Audio Interface Mixer. This device is designed to provide high-quality audio recording, streaming, and podcasting capabilities for musicians, producers, and content creators. It features dual-channel analog preamps, 48V phantom power, and integrates with powerful computer software for digital modeling and DSP effects. This manual will guide you through the setup, operation, and maintenance of your Sonic Cube II, ensuring optimal performance and longevity.

Image 1.1: The SONICAKE Sonic Cube II USB Audio Interface Mixer.

2. Product Overview

2.1 Key Features

- **High-Performance Converters:** Supports recording and mixing at up to 24-bit/48kHz for high-quality audio reproduction with low noise.
- **Dual-Channel Analog Preamps:** Equipped with high-quality analog preamps for excellent dynamic range and low distortion, suitable for various instruments and microphones.
- **+48V Phantom Power:** Provides power for condenser microphones, ensuring compatibility with a wide range of professional audio equipment.
- **Digital Modeling & DSP Effects:** Includes powerful computer software with built-in digital modeling for guitar amplifiers and various DSP effects, enhancing creative possibilities.
- **"ON AIR" Function:** Simplifies live streaming with a dedicated function for ease of use.
- **Broad Compatibility:** Compatible with most recording software (DAWs) on Mac and Windows operating systems, including ProTools, Reaper, and Ableton.
- **USB Connectivity:** Connects via USB-C/USB-A, offering reliable power and data transmission.

Image 2.1: The Sonic Cube II highlighting its high-quality analog preamps for superior sound.

2.2 Controls and Connections

Image 2.2: Front and rear panel diagram of the Sonic Cube II, illustrating all controls and connections.

1. **MIC 1 Input:** XLR input for connecting a microphone.
2. **LINE/INST 2 Input:** 1/4" (6.35mm) TRS input for connecting line-level instruments or high-impedance instruments like guitars.
3. **EFX** / **+48V Switch:** Activates DSP effects or +48V phantom power for MIC 1.
4. **GAIN 1 Knob:** Adjusts the input gain level for MIC 1.
5. **GAIN 2 Knob:** Adjusts the input gain level for LINE/INST 2.
6. **RVB** / **HI-Z Switch:** Activates reverb effect or sets LINE/INST 2 input to high impedance (HI-Z) for instruments.
7. **OUTPUT Knob:** Controls the overall output volume to balanced outputs and headphones.
8. **ON AIR** / **MONITOR Button:** Engages direct monitoring for real-time input sound or activates the "ON AIR" function for streaming.
9. **Headphone Output:** 1/4" (6.35mm) TRS stereo output for connecting headphones.
10. **USB Port (Type-C):** Connects the device to a computer for power and data transfer.
11. **AUTO OUTPUT Switch:** Toggles automatic output routing.
12. **OTG Port (Type-C):** For connecting to mobile devices (e.g., smartphones, tablets) for recording or streaming.
13. **BALANCED OUTPUT (L/R):** 1/4" (6.35mm) TRS outputs for connecting to studio monitors or other audio equipment.

3. Setup Guide

3.1 System Requirements

- **Operating System:** Windows, macOS.
- **Compatible Devices:** Personal Computer, Digital Audio Workstation (DAW).

- **Supported Software:** ProTools, Reaper, Ableton, and other standard DAW software.

3.2 Hardware Connection

1. Connect the Sonic Cube II to your computer using a USB cable. The device is bus-powered, meaning it draws power directly from your computer via the USB connection.
2. Connect your microphone to the MIC 1 XLR input.
3. Connect your instrument (e.g., guitar, bass, keyboard) to the LINE/INST 2 1/4" input.
4. Connect your headphones to the Headphone Output for monitoring.
5. Connect your studio monitors to the BALANCED OUTPUT (L/R) using 1/4" TRS cables.

Image 3.1: Connecting the Sonic Cube II to a computer via USB for power and data.

3.3 Software and Driver Installation

For optimal performance, it is recommended to install the dedicated drivers and software for the Sonic Cube II. While the device may function as a generic USB audio device, proprietary drivers often provide lower latency and access to advanced features.

- **Windows Users:** Search online for "Sonic Cube II Software & Firmware Download". Download and install both the "Sonic Mix Setup" and the "Sonicake USB ASIO Driver". This is crucial for proper device recognition and low-latency performance with DAWs.
- **macOS Users:** The device is generally plug-and-play with macOS. If specific drivers or software are available, they can be found on the official SONICAKE support website.

After installation, restart your computer and ensure the Sonic Cube II is selected as your audio input and output device in your operating system's sound settings and your preferred Digital Audio Workstation (DAW).

4. Operating Instructions

4.1 Powering On/Off

The Sonic Cube II is USB bus-powered. It powers on automatically when connected to a powered USB port on your computer or mobile device. To power off, simply disconnect the USB cable.

4.2 Input Level Adjustment

- Use the **GAIN 1** knob to adjust the input level for the microphone connected to MIC 1.
- Use the **GAIN 2** knob to adjust the input level for the instrument or line-level device connected to LINE/INST 2.
- Monitor the input levels in your DAW to avoid clipping (distortion). Aim for levels that peak around -6dB to -3dB.

4.3 Phantom Power (+48V)

If you are using a condenser microphone with the MIC 1 input, you will need to activate +48V phantom power. Press the **EFX** / **+48V** switch to engage phantom power. Ensure your microphone requires phantom power before activating it. Dynamic microphones typically do not require phantom power.

4.4 Direct Monitoring and "ON AIR" Function

The **ON AIR** / **MONITOR** button allows for direct monitoring, enabling you to hear your input signal in real-time through your headphones or studio monitors without latency. This is essential for recording and live performance.

- Press the **ON AIR** / **MONITOR** button to activate direct monitoring.
- When engaged, the button's indicator light will illuminate.
- This function also serves as an "ON AIR" mode for streamlined live streaming, routing your audio directly.

Image 4.1: The Sonic Cube II highlighting the "One-Click Monitoring" feature via the ON AIR / MONITOR button.

4.5 Output Level Adjustment

Use the large **OUTPUT** knob to control the overall volume of the balanced outputs (L/R) and the headphone output. Adjust this to a comfortable listening level. The headphone output volume is linked to the main output knob.

5. Software and DSP Effects

The Sonic Cube II includes powerful computer software that expands its capabilities with digital modeling and DSP effects. This software allows you to access a variety of guitar amplifier models, cabinet simulations, and other digital signal processing effects directly on your computer.

- Install the "Sonic Mix Setup" software as described in Section 3.3.
- Launch the software to access the digital modeling and DSP effects interface.
- Experiment with different amp models and effects to shape your sound for recording or live streaming.
- Ensure the software is correctly configured to use the Sonic Cube II as its audio input and output device.

Image 5.1: The Sonic Cube II integrated with computer software for digital modeling and DSP effects.

6. Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Avoid using liquid cleaners or solvents, as they may damage the finish or internal components.
- **Storage:** Store the Sonic Cube II in a cool, dry place away from direct sunlight, extreme temperatures, and high humidity.
- **Handling:** Handle the device with care. Avoid dropping it or subjecting it to strong impacts.
- **Connections:** Periodically check all cable connections for wear and tear. Ensure cables are securely plugged in to prevent signal loss or intermittent issues.

7. Troubleshooting

If you encounter issues with your Sonic Cube II, refer to the following troubleshooting tips:

- **No Sound Output:**
  - Ensure the Sonic Cube II is properly connected to your computer via USB and powered on.

- Check that the OUTPUT knob is turned up to an audible level.
- Verify that the Sonic Cube II is selected as the default audio output device in your computer's sound settings and your DAW.
- Check headphone and monitor connections.

- **No Input Signal / Low Input Volume:**
  - Ensure your microphone or instrument is correctly connected to the appropriate input (MIC 1 or LINE/INST 2).
  - Adjust the **GAIN 1** or **GAIN 2** knobs to increase the input level.
  - If using a condenser microphone, ensure +48V phantom power is activated via the**EFX / +48V** switch.
  - Verify that the Sonic Cube II is selected as the default audio input device in your computer's sound settings and your DAW.
  - Check microphone/instrument cables for damage.

- **Driver Issues (Windows):**
  - If the device is not recognized or experiencing high latency, ensure you have installed both the "Sonic Mix Setup" and "Sonicake USB ASIO Driver" as described in Section 3.3.
  - Try uninstalling and reinstalling the drivers.
  - Connect the device to a different USB port on your computer.

- **Distorted Audio:**
  - Reduce the **GAIN 1** or **GAIN 2** knobs to prevent input clipping.
  - Lower the **OUTPUT** knob if the distortion occurs at the output stage.
  - Check for faulty cables or connections.

8. Specifications

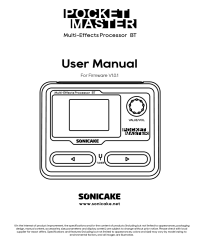
Feature	Specification
Brand	SONICAKE
Model Number	QAI-23
Item Weight	15.5 ounces
Package Dimensions	8.03 x 5.43 x 3.23 inches
Connectivity Technology	USB, XLR, 6.35mm TRS
Number of Channels	2
Compatible Devices	DAW, Personal Computer
Supported Software	ProTools, Reaper, Ableton (versions not specified)
Operating System	Windows, macOS
Phantom Power	+48V

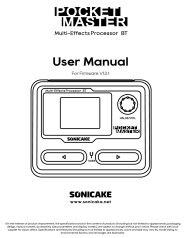
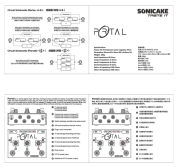
Feature	Specification
Max Sample Rate/Bit Depth	48kHz / 24-bit

9. Warranty and Support

For warranty information and technical support, please refer to the documentation included with your product or visit the official SONICAKE website. Keep your proof of purchase for warranty claims. If you encounter issues not covered in this manual, contacting SONICAKE customer support is recommended for further assistance.

Related Documents - QAI-23

	SONICAKE Matribox Multi-Effects Processor User Manual Comprehensive user manual for the SONICAKE Matribox Multi-Effects Processor, covering features, operation, effects list, troubleshooting, and specifications.
	Sonicake Pocket Master BT User Manual User manual for the Sonicake Pocket Master BT Multi-Effects Processor, detailing its features, operation, and troubleshooting.
	SONICAKE Pocket Master Multi-Effects Processor BT User Manual User manual for the SONICAKE Pocket Master BT multi-effects processor, covering panel introduction, effects editing, settings, drum, tuner, looper, USB audio interface, compatible software, effect list, specifications, and troubleshooting.
	Sonicake Matribox Multi-Effects Processor User Manual Comprehensive user manual for the Sonicake Matribox multi-effects processor, covering features, operation, effects list, troubleshooting, and specifications for Firmware V1.0.4.

	[SONICAKE Pocket Master BT Multi-Effects Processor User Manual] Comprehensive user manual for the SONICAKE Pocket Master BT Multi-Effects Processor, covering panel introduction, main menu, effects editing, settings, drum machine, tuner, looper, audio interface functionality, compatible software, effect list, specifications, and troubleshooting.
	[Sonicake Portal Active Signal Mixer: User Guide and Circuit Schematics] A comprehensive guide to the Sonicake Portal active signal mixer, detailing its parallel and series modes, circuit schematics, and operational controls. Includes specifications and usage instructions.