XTUGA Q-16

XTUGA Q-16 USB Audio Interface Instruction Manual

Model: Q-16 | Brand: XTUGA

Introduction

The XTUGA Q-16 is a professional USB audio interface designed for high-quality audio recording and live streaming. It features 16-bit/48 kHz audio resolution, DSP effects, 48V phantom power, and XLR inputs, making it suitable for musicians, podcasters, and content creators. This manual provides detailed instructions for setup, operation, and maintenance of your Q-16 audio interface.

Key Features

- **16-bit/48 kHz Audio Resolution:** Ensures professional and clear sound quality for recordings.
- **Easy-to-Use Touch Screen:** Features 48V phantom power, DSP effect, and computer recording activation via touch screen controls.
- **Driver-Free Installation:** Compatible with various devices (PC, mobile phone) and operating systems (Windows, Mac) without requiring specific drivers.
- **Wide Compatibility:** Connects microphones, electric guitars, bass, and other instruments.
- **Zero-Latency Monitoring:** Allows real-time monitoring of audio input without delay.
- **Dual Power Source:** Can be powered via USB 2.0 from a PC/mobile device or an external 5V DC power supply.

Product Overview: Controls and Connections

Familiarize yourself with the various controls and connection points on your XTUGA Q-16 audio interface.

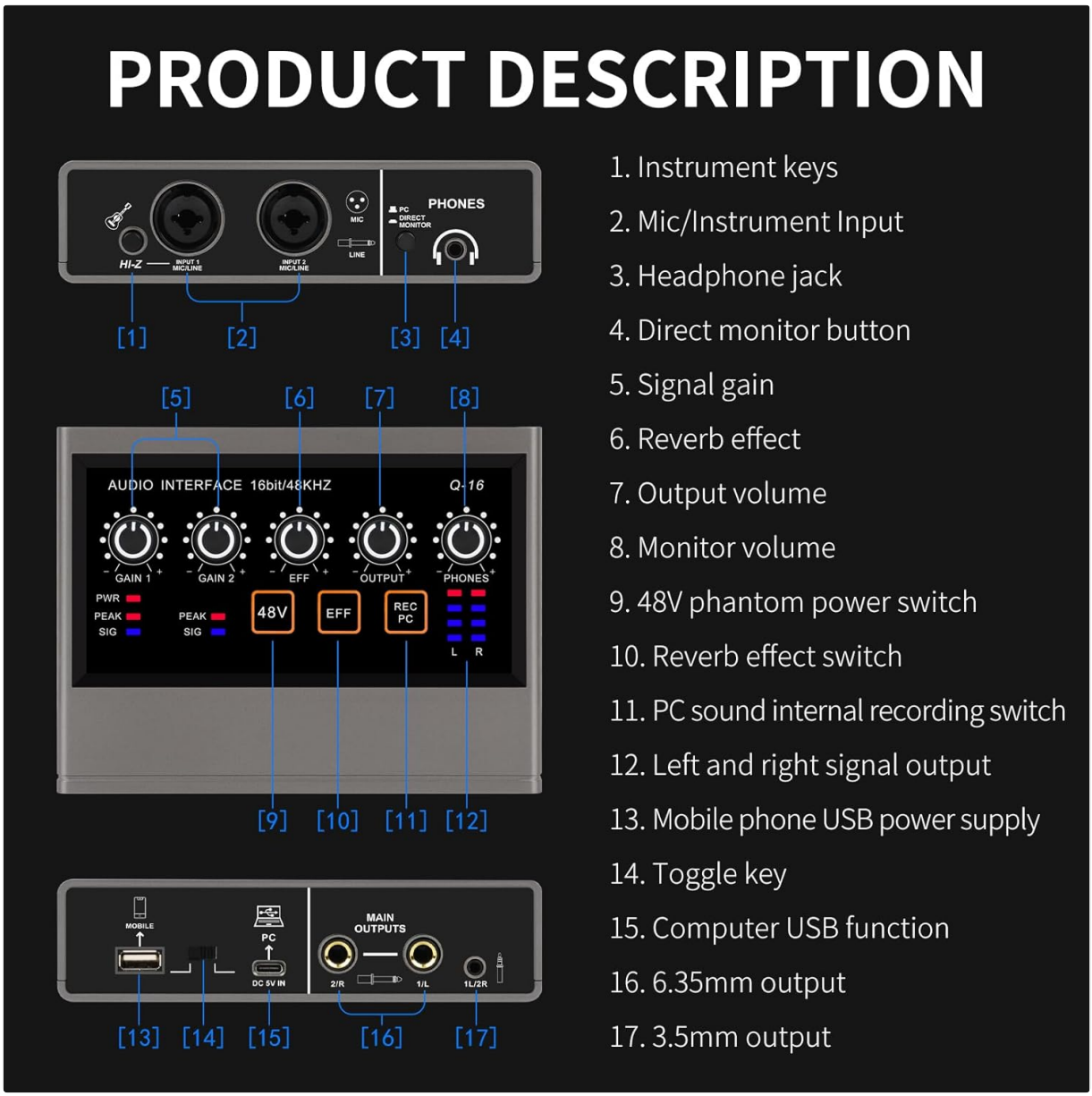


Figure 1: XTUGA Q-16 Front and Rear Panel Layout. This image displays the front and rear panels of the XTUGA Q-16 audio interface with numbered labels indicating various controls and connection ports.

Front Panel Controls:

1. **Instrument Keys (HI-Z):** Input for high-impedance instruments like guitars or basses.
2. **Mic/Instrument Input (INPUT 1, INPUT 2):** Combo XLR/TRS inputs for microphones or line-level instruments.
3. **Headphone Jack (PHONES):** 3.5mm output for headphones.
4. **Direct Monitor Button:** Activates zero-latency monitoring.
5. **Signal Gain (GAIN 1, GAIN 2):** Adjusts input level for Input 1 and Input 2.
6. **Reverb Effect (EFF):** Controls the amount of reverb applied.
7. **Output Volume (OUTPUT):** Adjusts the main output volume.
8. **Monitor Volume (PHONES):** Adjusts the headphone output volume.
9. **48V Phantom Power Switch:** Activates 48V phantom power for condenser microphones.
10. **Reverb Effect Switch:** Toggles the reverb effect on/off.
11. **PC Sound Internal Recording Switch (REC PC):** Enables internal recording of PC audio.

Rear Panel Connections:

12. **Left and Right Signal Output (MAIN OUTPUTS):** TRS outputs for connecting to studio monitors or other audio equipment.
13. **Mobile Phone USB Power Supply (MOBILE):** USB port for connecting and powering mobile devices.
14. **Toggle Key (PC/MOBILE switch):** Switches between PC and mobile device connection modes.
15. **Computer USB Function (PC):** USB port for connecting to a computer.
16. **DC 5V IN:** Power input for external 5V DC adapter (for use when USB power is insufficient).
17. **6.35mm Output:** Additional output.
18. **3.5mm Output:** Additional output.

SETUP

1. Connecting to a Computer (PC/Mac)

1. Ensure the XTUGA Q-16 is powered off or disconnected.
2. Connect the USB 2.0 cable from the "PC" port on the rear of the Q-16 to an available USB port on your computer.
3. Set the "Toggle Key" on the rear panel to "PC" mode.
4. The device is driver-free for Windows and Mac operating systems. Your computer should automatically recognize the Q-16 as an audio device.
5. If your computer's USB port does not provide sufficient power, connect a 5V DC power adapter (not included) to the "DC 5V IN" port.
6. Select "XTUGA Q-16" as your input and output audio device in your computer's sound settings and your preferred Digital Audio Workstation (DAW) or recording software.

Figure 2: Universal Connectivity. The Q-16 can connect to both PC/Mac and mobile devices.

2. Connecting to a Mobile Phone

1. Connect a USB cable from the "MOBILE" port on the rear of the Q-16 to your mobile phone. (An OTG adapter may be required for some phones, not included).
2. Set the "Toggle Key" on the rear panel to "MOBILE" mode.
3. The Q-16 will draw power from your mobile phone. If additional power is needed, connect a 5V DC power adapter to the "DC 5V IN" port.

3. Connecting Microphones and Instruments

- **Microphones:** Connect XLR microphones to the "INPUT 1" or "INPUT 2" combo jacks. For condenser microphones requiring phantom power, press the "48V" touch button on the front panel.
- **Instruments (High-Impedance):** Connect electric guitars or basses to the "HI-Z" input.
- **Line-Level Instruments:** Connect keyboards, synthesizers, or other line-level devices to the "INPUT 1" or "INPUT 2" combo jacks using 1/4-inch TRS cables.

Figure 3: Instrument Connection. The Q-16 supports direct connection of musical instruments like guitars.

4. Connecting Headphones and Speakers

- **Headphones:** Connect your headphones to the "PHONES" 3.5mm jack on the front panel. Adjust the headphone volume using the "PHONES" knob.
- **Studio Monitors/Speakers:** Connect your studio monitors or active speakers to the "MAIN OUTPUTS" (L/R) on the rear panel using 1/4-inch TRS cables. Adjust the main output volume using the "OUTPUT" knob.

Operating Instructions

1. Adjusting Input Gain

Use the "GAIN 1" and "GAIN 2" knobs to set the input level for your connected microphones or instruments. Observe the "PEAK" and "SIG" indicators:

- **SIG (Signal):** Lights up when an audio signal is detected.
- **PEAK:** Lights up when the input signal is too high and clipping (distortion) is occurring. Reduce the gain until the PEAK light no longer illuminates.

2. Using 48V Phantom Power

For condenser microphones that require external power, press the "48V" touch button on the front panel. The indicator light will illuminate, providing power to the XLR inputs. Ensure dynamic microphones or ribbon microphones are not connected when 48V phantom power is active, as this can cause damage.

Figure 4: Touch Screen Controls. The 48V phantom power and DSP effects are activated via touch buttons.

3. Applying DSP Effects (Reverb)

Press the "EFF" touch button to activate the built-in reverb effect. Use the "EFF" knob to adjust the intensity of the reverb.

4. Zero-Latency Monitoring

To hear your input signal directly through your headphones without any delay, press the "DIRECT MONITOR" button. This is crucial for musicians to monitor their performance accurately during recording.

Figure 5: Real-Time Monitoring. The direct monitor function allows musicians to hear their input without latency.

5. Recording to PC/Mobile

Once connected and input levels are set, open your preferred recording software (DAW) on your computer or a recording application on your mobile phone. Select the XTUGA Q-16 as your audio input device. Press the "REC PC" touch button to enable internal recording of PC audio if desired.

Figure 6: High-Quality Recording. The Q-16 provides 16-bit/48kHz audio resolution for professional recordings.

6. Software Compatibility

The XTUGA Q-16 is compatible with most major recording software, including Ableton Live, Logic, Audacity, Reaper, and others.

Figure 7: Plug and Play Compatibility. The Q-16 works with various operating systems and recording software.

Maintenance

- Keep the device clean by wiping it with a soft, dry cloth. Avoid using liquid cleaners or solvents.

- Do not expose the device to extreme temperatures, humidity, or direct sunlight.
- Avoid dropping or subjecting the device to strong impacts.
- Disconnect all cables when the device is not in use for extended periods.

Troubleshooting

Problem	Possible Cause	Solution
No sound output	Incorrect volume settings; incorrect audio device selected; loose cables.	Check "OUTPUT" and "PHONES" volume knobs. Ensure "XTUGA Q-16" is selected as the output device in your computer/software settings. Verify all cables are securely connected.
No input signal	Incorrect gain setting; 48V phantom power not activated (for condenser mics); incorrect input selected in software.	Increase "GAIN" knobs. Activate "48V" for condenser microphones. Ensure the correct input channel is selected in your recording software. Check microphone/instrument connection.
Distorted audio (clipping)	Input gain is too high.	Reduce the "GAIN" knob until the "PEAK" indicator no longer lights up.
Latency during monitoring	Direct monitoring is not enabled.	Press the "DIRECT MONITOR" button on the front panel.
Device not recognized by computer	Loose USB connection; incorrect toggle key setting; insufficient power.	Ensure USB cable is firmly connected. Set the "Toggle Key" to "PC". Connect a 5V DC power adapter if the USB port cannot provide enough power. Try a different USB port or cable.

Specifications

- **Audio Resolution:** 16-bit/48 kHz
- **Inputs:** 2 x Combo XLR/TRS (Mic/Line), 1 x HI-Z (Instrument)
- **Outputs:** Main L/R (TRS), 3.5mm Headphone, 6.35mm Output, 3.5mm Output
- **Phantom Power:** +48V (switchable)
- **Effects:** DSP Reverb
- **Connectivity:** USB 2.0
- **Compatibility:** Windows, Mac, Mobile devices
- **Power:** USB Bus-powered or 5V DC external power supply
- **Item Weight:** 1.04 pounds
- **Package Dimensions:** 8.39 x 6.02 x 2.32 inches

Warranty and Support

For warranty information and technical support, please refer to the official XTUGA website or contact your

retailer. Keep your proof of purchase for warranty claims.

XTUGA Official Website: Visit XTUGA Store on Amazon

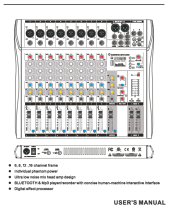
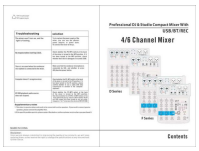
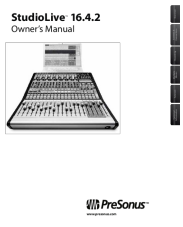
Additional Resources

Product Overview Video

Watch this video for a visual overview of the XTUGA Q-16 USB Audio Interface.

No official product videos from the seller are available in the provided data.

Related Documents - Q-16

	XTUGA Audio Mixers: User Manual and Specifications for 120CT, 80CT, 60CT, and 80S Series Comprehensive user manual for XTUGA audio mixers, including models 120CT, 80CT, and 60CT. Details features like digital effects, 48V phantom power, audio interface capabilities, and connectivity options for studio and computer recording.
	Q-AUDIO Q-24 USB Audio Interface Operation Manual Comprehensive operation manual for the Q-AUDIO Q-24 2x2 USB Audio Interface. Learn about its features, connections, operation, technical specifications, and troubleshooting for recording, streaming, and podcasting with high-fidelity 24Bit/192kHz audio.
	BOMGE Q-12 Audio Mixer User Manual User manual for the BOMGE Q-12 2-Channel Audio Mixer Sound Mixing Console, featuring USB and 48V Phantom Power for recording and studio use.
	BOMGE 4/6 Channel DJ & Studio Compact Mixer User Manual Comprehensive user manual for the BOMGE 4/6 Channel DJ & Studio Compact Mixer, detailing features, operation, troubleshooting, and specifications for home music production, broadcasting, and live streaming.
	PreSonus StudioLive 16.4.2 Owner's Manual: Setup, Features, and Operation Guide Comprehensive owner's manual for the PreSonus StudioLive 16.4.2 digital mixer and FireWire recording interface. Learn about setup, Fat Channel processing, recording with Capture, and mixing techniques.
	MIDAS M32R LIVE Quick Start Guide: Digital Mixer Console This Quick Start Guide provides essential information for operating the MIDAS M32R LIVE digital mixer console. It covers safety instructions, control surface layout, rear panel connections, main display functions, firmware updates, USB recording, block diagram, technical specifications, and FCC compliance for live sound and studio applications.