

**Professional Computer  
Audio Interface  
User Manual**

## Preface

The purpose of this section is to ensure that the user is able to use the product correctly through this manual in order to avoid danger in operation or property damage. Before using this product, please read the product manual carefully and keep it for future reference.

### Outlined

This manual applies to Professional Computer Audio Interface.

This manual describes the functions and use of the various functional modules of the Professional Computer Audio Interface, and guides you through the installation and commissioning of the Professional Computer Audio Interface.

### Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 <b>Note</b>	Provides additional information to emphasize or supplement important points of the main text.
 <b>Caution</b>	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 <b>Danger</b>	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

### Safety Instructions

#### **Danger**

To ensure reliable use of the equipment and the safety of personnel, please observe the following during installation, use and maintenance:

- During the installation and use of the equipment, all electrical safety regulations of the country and the region of use must be strictly observed.
- Keep the working environment well ventilated so that the heat generated by the equipment during operation can be discharged in time to avoid damage to the equipment due to excessive temperature.
- Always unplug the unit's power adapter from the AC power outlet before: A. Removing or reinstalling any part of the equipment; B. Disconnecting or reconnecting any electrical plug or connection of the equipment. Do not operate with electricity.

- There are AC high-voltage parts in the equipment, non-professionals should not disassemble them without permission to avoid the risk of electric shock. Do not repair the equipment privately to avoid aggravating the damage.
- Do not spill any corrosive chemicals or liquids on or near the equipment.
- If the unit emits smoke, odour or noises, turn off the power immediately and unplug the power cord, and contact your dealer or service centre.
- If the appliance is not working properly, contact the shop where you purchased the appliance or the nearest service centre and do not disassemble or modify the appliance in any way. (We cannot be held responsible for problems caused by unapproved modifications or repairs).

**Caution**

- Do not drop objects on the equipment or vibrate the equipment vigorously, and keep the equipment away from locations with magnetic field interference. Avoid installing the equipment in a place where the surface vibrates or is susceptible to shock (neglecting this may damage the equipment).
- Do not use the equipment in high temperature, low temperature or high humidity environments. Refer to the equipment's data sheet for specific temperature and humidity requirements.
- Use the unit indoors, not in an exposed installation where it may be exposed to rain or extreme humidity.
- When the equipment is not used for a long period of time or in a humid and dewy environment, the main power supply of the equipment should be switched off.
- When cleaning the equipment, please use a sufficiently soft dry cloth or other alternatives to wipe the internal and external surfaces, do not use alkaline detergent to wash, and avoid hard objects to scratch the equipment.
- Please keep all the original packaging materials of the equipment properly, so that in case of problems, use the packaging materials to pack the equipment and send it to the agent or return it to the manufacturer for processing. We will not be responsible for any accidental damage in transit not caused by the original packaging materials.

**Note**

- Requirements for the quality of installation and commissioning personnel  
Qualifications or experience in the installation and commissioning of audio and video systems and qualifications to perform related work, in addition to the knowledge and operational skills listed below.
  - Basic knowledge and installation skills of audio and video systems and components.
  - Basic knowledge and skills in low voltage cabling and wiring of low voltage electronics.
  - Basic audio and networking knowledge and skills and the ability to read and understand the contents of this manual.

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# Chapter 1 Product Introduction

## 1.1 Introduction

This is a professional plug-and-play computer audio interface designed for high-fidelity (Hi-Fi) audio enthusiasts and professional recording studios. Featuring two dedicated audio isolation transformers, it provides complete electromagnetic isolation to effectively eliminate computer ground potential noise, ground loop interference, and EMI/RFI noise, ensuring pure audio transmission and playback. Supporting high-resolution audio playback, it combines a low-noise DAC with a precision clock system to deliver exceptional Hi-Fi playback quality. Offering superior isolation performance and multi-channel support, it is ideal for desktop Hi-Fi systems, home theaters, and professional audio workstations.

## 1.2 Product Features

- ✧ Plug-and-play design: USB Type-B interface requires no additional drivers, supports hot-swapping, and is compatible with Windows, macOS, Linux, and all domestic operating systems (HarmonyOS 3.0+, Kirin, etc.);
- ✧ Dual isolation transformers: Features two dedicated audio isolation transformers for complete current isolation, blocking computer ground noise and reducing background noise;
- ✧ High-Resolution Audio: Supports high-resolution audio playback with wide dynamic range, ensuring Hi-Fi-level detail reproduction;
- ✧ Professional DAC and Amplification: Utilizes a high-performance DAC chip combined with a headphone amplifier, supporting high-impedance headphones;
- ✧ Noise Suppression Technology: Low-jitter TCXO clock source eliminates EMI/RFI interference for a pristine audio environment;
- ✧ Multi-output support: Balanced XLR connectors for stereo and multi-channel Hi-Fi systems;
- ✧ Rugged design: Metal-shielded enclosure for electromagnetic interference protection, operating in environments from 0° C~50° C.

## Chapter 2 Interface Description



- ① Monitor Output: 3.5 mm monitor output jack with volume control knob;
- ② USB-B: USB Type-B audio interface port, supports USB power delivery with power indicator;
- ③ GND: Ground lift switch to eliminate 50/60 Hz hum and RF interference;
- ④ OUT1 and OUT2: XLR output connectors.

## Chapter 3 Application Scenarios

- Hi-Fi Desktop System: Isolates computer noise for pristine music playback, seamlessly integrates with low-noise DACs/amplifiers.
- Professional Recording Studios: Low-noise output supports multichannel mixing and mastering.
- Professional Conferencing and Performance Venues: Low-latency output enhances immersion.

## Chapter 4 Specification

Category	Parameter Item	Parameter Description
Audio Performance	Chip	High-Performance DAC Chip
	Signal to Noise Ratio	96dB (A-weighted, front-end output)
	Total Harmonic Distortion + Noise	< 0.0001% (-120 dB) @ 1 kHz, 0 dBFS

	Dynamic Range	96dB (A-weighted)
	Sampling Rate	44.1 kHz~48 kHz (PCM);
	Bit Depth	16-bit
	Frequency Response	20 Hz~20 kHz ( $\pm 0.1$ dB)
Isolation and Noise Suppression	Isolation Type	Current-isolated 2 x audio-dedicated transformers (TY-250P grade, 1:1 ratio)
	Isolation Voltage	> 5 kV (PC side to audio side)
	Ground Noise Rejection	> 60 dB (50/60 Hz ground loop)
	EMI/RFI Shielding	Metal-shielded enclosure + internal filtering circuitry
	Power Isolation	Built-in LDO regulator
Interfaces and Connectivity	Analog Output	Balanced XLR (stereo pair)
	Headphone Output	3.5 mm unbalanced, supports 16-600 $\Omega$
	Input Interface	Stereo UAC input for external source switching
Clock and Synchronization	Clock Source	Internal TCXO (temperature-compensated crystal oscillator, $\pm 1$ ppm accuracy)
	Jitter	< 200 ps (RMS)
	Synchronization Mode	Master mode/Slave mode
Physical and Environmental	Dimensions (L x W x H)	70 mm x 36 mm x 100 mm
	Weight	0.45 kg
	Enclosure Material	Metal shielding + PCB ground plane

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	Operating Temperature	0°C~50°C
	Storage Temperature	-20°C~70°C
	Humidity	5%~95% (non-condensing)
Power and Safety	Power Input	USB computer power supply
	Power Consumption	< 8 W (typical, full channel output)
Drivers	Driver Support	Windows, MAC OS, Kylin OS, UnionTech UOS, and other domestic systems

# Warranty Regulations

The warranty period of this product is 1 year.

In the warranty period of non-man-made damage caused by the product performance failure can enjoy three packages of service.

Warranty card by the sales unit stamped after the effective. The alteration is invalid!

**The following conditions (including, but not limited to, this) are not covered by the three-package service:**

1. No warranty card or missing valid invoice or the date has exceeded the validity period of the three packages of services;
2. Not in accordance with the requirements of the product instructions for use, maintenance, management and damage caused;
3. The product model or code on the warranty voucher does not match the physical goods;
4. Damage caused by the dismantling and repair of non-authorized service providers;
5. Normal discoloration, wear and tear and consumption during the use of the product are not covered by the warranty;
6. The product cannot be used due to the user's own network reasons, please consult customer service staff.