Douk Audio SUC-U2-PRO-AU

DoukAudio U2PRO USB Digital Interface User Manual

Model: SUC-U2-PRO-AU

1. PRODUCT OVERVIEW

The DoukAudio U2PRO is a high-performance USB digital interface designed to convert USB audio signals into various digital outputs, including Optical, Coaxial, and I2S. It is equipped with the advanced XMOS XU316 chip, ensuring stable, low-latency, and high-resolution audio transmission. This device is ideal for connecting PCs, Macs, phones, or gaming consoles like PS5 and Switch to DACs, amplifiers, and AV receivers that lack USB input, providing a significant upgrade to audio quality.

Image: Front view of the DoukAudio U2PRO USB Digital Interface, showcasing its compact black chassis and indicator lights.

2. KEY FEATURES

- **Pristine Lossless Audio Conversion:** Converts USB signals from various sources (PC, Mac, phone, Raspberry Pi) into clean, simultaneous Optical, Coaxial, and I2S outputs. Delivers a clear, stable, and jitter-free digital signal to DACs, amplifiers, and AV receivers without USB input.

- **Ultra-high Resolution with XMOS XU316:** Features the latest XMOS XU316 chip for minimal latency, stable signal transmission, and exceptional sound clarity. Supports PCM up to 32bit/768kHz and DSD512, suitable for high-end audio streaming and professional playback.

The Latest Chip Brings Ultra-High Resolution Audio

XMOS XU316 adopted, supports up to PCM 32bit/768kHz and DSD512

XMOS XU316

Audiophile-Grade Specs

Max. sampling rate

HDMI-IIS
PCM: 44.1kHz-768kHz/16Bit-32Bit
DSD (Native): 64-512
DSD (DOP): 64-256

Coaxial/Optical
PCM: 44.1kHz-192kHz/16Bit-24Bit
DSD: DOP DSD64

THD+N
0.000008%

Jitter
75ps (typical)

Image: Close-up view of the XMOS XU316 chip, highlighting its role in enabling ultra-high resolution audio processing.

- **Strong Compatibility via UAC Mode Switch:** Includes a UAC mode switch for versatile compatibility.

  - **UAC 1.0 Mode:** Offers plug-and-play, driver-free compatibility for gaming consoles such as PS4, PS5, and Nintendo Switch.
  - **UAC 2.0 Mode:** Enables high-resolution audio support for advanced playback needs with devices like PCs, tablets, and network music players.

In UAC 1.0 mode
Compatible with PS4, PS5, Switch etc., plug and play.

In UAC 2.0 mode
Works perfectly with PC, tablet, phone, network music player etc.

Image: Illustration showing the U2PRO connected to various devices, demonstrating compatibility with PS5, Switch (UAC 1.0) and laptops, phones (UAC 2.0).

- **Expandable Oscillator Design:** Provides internal space for compatible crystal oscillators, allowing users to upgrade to preferred high-precision clocks for reduced jitter and enhanced sonic performance.
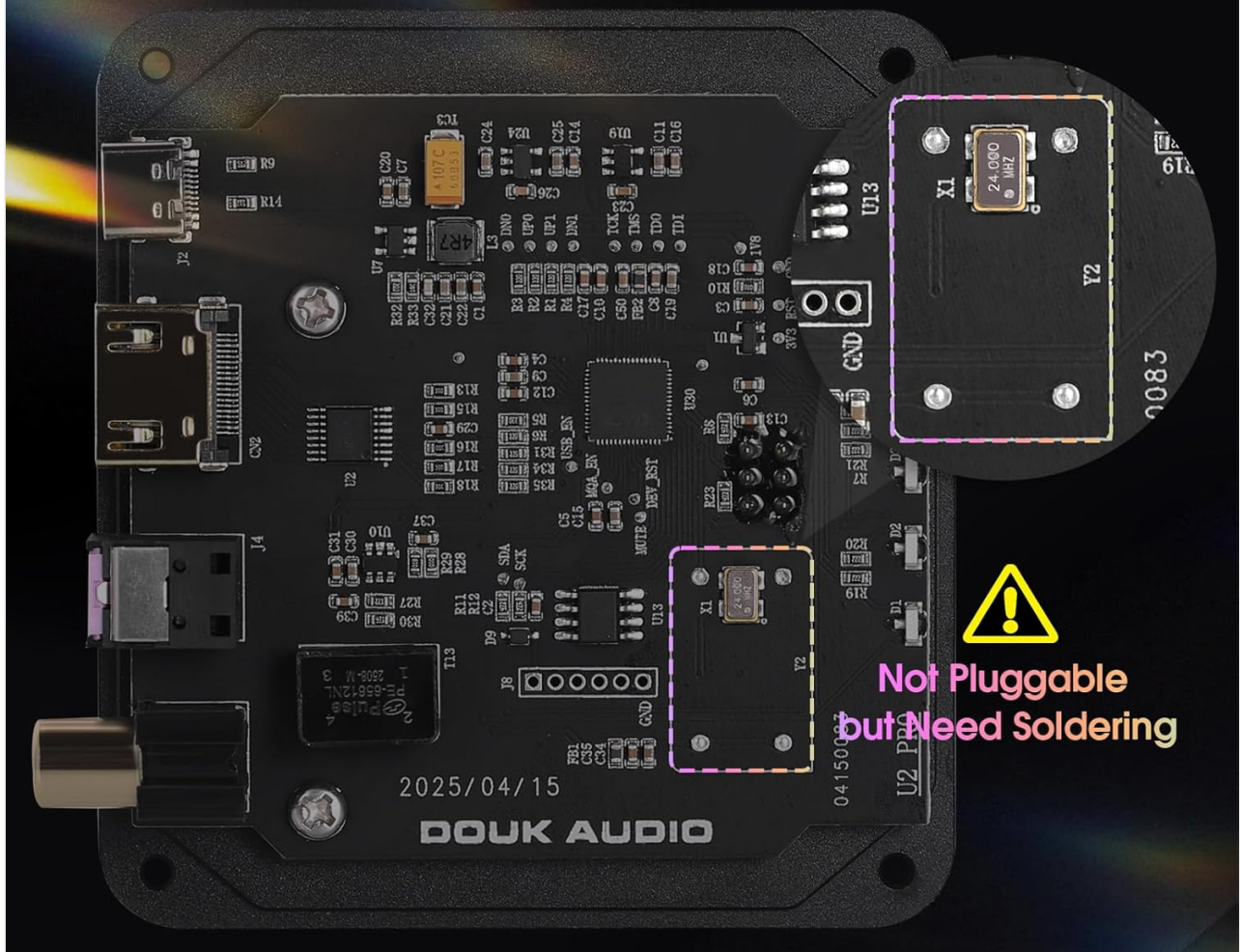
Image: Internal circuit board view of the U2PRO, highlighting the designated area for an expandable crystal oscillator, indicating it requires soldering.

- **Compact Size with Convenient Indicators:** Pocket-sized and USB-powered for portability and ease of use. Includes a USB-C to USB-A/C cable for broad device compatibility. Real-time PCM/DSD indicators allow easy monitoring of sample rates and formats.

3. WHAT'S IN THE BOX

Upon opening the package, please verify that all the following items are included:

- 1 x DoukAudio U2PRO Digital Interface
- 1 x Optical Cable
- 1 x USB-C to USB-A/C Cable
- 1 x User Manual

PACKING LIST

What's in the Box ?

Net Weight
220g/0.44lb

Package Weight
400g/0.88lb

26mm
/1.02in

1*U2-PRO

79mm/3.11in

85mm/3.35in

1*Optical Cable

1*USB-C to USB-A/USB-C Cable

1*User Manual

Image: Visual representation of the DoukAudio U2PRO package contents, including the device, optical cable, USB-C cable, and user manual.

4. SETUP GUIDE

Follow these steps to set up your DoukAudio U2PRO digital interface:

1. **Connect to Source Device:** Use the provided USB-C to USB-A/C cable to connect the U2PRO's "PC-USB IN" port to your source device (PC, Mac, phone, PS5, Switch). The U2PRO is USB-powered, so no external power adapter is needed.

2. **Select UAC Mode:** On the bottom of the U2PRO, locate the UAC mode switch.

   - For gaming consoles (PS4, PS5, Switch), set the switch to **UAC 1.0** for plug-and-play functionality.
   - For high-resolution audio with PCs, tablets, or network music players, set the switch to **UAC 2.0**.

   Note: The selected UAC mode will take effect only after a restart (disconnect and reconnect USB power).

3. **Connect to Audio Receiver (DAC/Amplifier/AV Receiver):**

- **Optical Output:** Use the provided optical cable to connect the U2PRO's "OPT OUT" port to the optical input of your audio receiver.
- **Coaxial Output:** Use a coaxial cable (not included) to connect the U2PRO's "COAX OUT" port to the coaxial input of your audio receiver.
- **I2S Output:** Use an HDMI cable (not included) to connect the U2PRO's "HDMI-IIS OUT" port to the I2S input of your audio receiver. Refer to the pinout definition on the bottom of the device for compatibility.

Abundant Interfaces & Indicators
Clearly show the current working status

176.4/192KHz
88.2/96KHz   705.6/768KHz
44.1/48KHz   352.8/384KHz

DOUK AUDIO U2 PRO

BLUE PCM 44.1K/48K 88.2K/96K 176.4K/192K 352.8K/384K 705.6K/768K
RED DSD   64 128 256 512

DSD64   DSD512
DSD128 DSD256

Sampling Rate Indicator
Blue: PCM   Red: DSD

HDMI-IIS pinout definition

J3 HDMI-A

DATA- DSDR-
DATA+ DSDR+
BCLK+
BCLK-
LRCLK- DSDL-
LRCLK+ DSDL+
MCLK+
MCLK-
DSD EN
GND

UAC1.0   UAC2.0

CE FC RoHS
www.doukaudio.com
Made in China

PC-USB IN   HDMI-IIS OUT   OPT OUT   COAX OUT

HDMI-IIS output   Coaxial output

USB Type-C input   TOSLINK optical output

UAC 1.0/2.0 mode switch
UAC 1.0 for PS4, PS5, Switch etc.
UAC 2.0 for phone, tablet, PC etc.
(The selected mode will take effect only after restart)

Image: Detailed view of the U2PRO's rear panel, showing the USB-C input, HDMI-IIS output, Optical output, Coaxial output, and the UAC mode switch on the bottom.

4. **Power On:** Once all connections are secure, power on your source device and audio receiver. The U2PRO will power on automatically via the USB connection.

5. OPERATING INSTRUCTIONS

The DoukAudio U2PRO is designed for simple operation. Once connected, it functions as a plug-and-play device.

5.1. Indicator Lights

The front panel of the U2PRO features indicator lights that display the current audio format and sample rate:

- **Blue Indicators:** Represent PCM (Pulse Code Modulation) audio. Lights indicate sample rates such as 44.1K/48K, 88.2K/96K, 176.4K/192K, 352.8K/384K, and 705.6K/768K.
- **Red Indicators:** Represent DSD (Direct Stream Digital) audio. Lights indicate DSD rates such as DSD64, DSD128, DSD256, and DSD512.

Image: Close-up of the U2PRO's front panel, showing the blue lights for PCM sample rates and red lights for DSD rates, indicating the active audio format.

5.2. UAC Mode Switching

As mentioned in the setup, the UAC mode switch on the bottom of the device allows you to optimize compatibility. Remember to disconnect and reconnect the USB cable after changing the switch position for the new setting to take effect.

6. Maintenance

To ensure the longevity and optimal performance of your DoukAudio U2PRO, please follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use liquid cleaners, aerosols, or abrasive materials, as they may damage the finish or internal components.
- **Environment:** Operate and store the device in a cool, dry place, away from direct sunlight, heat sources, and excessive humidity. Avoid environments with high dust levels.
- **Handling:** Handle the device with care. Avoid dropping it or subjecting it to strong impacts.
- **Ventilation:** Ensure proper ventilation around the device. Do not block any vents or place the device in an enclosed space that could lead to overheating.
- **Disconnection:** When disconnecting cables, always grasp the connector, not the cable itself, to prevent damage to the cable or port.

7. TROUBLESHOOTING

If you encounter issues with your DoukAudio U2PRO, please refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No audio output.	Incorrect UAC mode selected. Incorrect input selected on DAC/amplifier. Loose cable connections. Source device audio settings.	Verify the UAC mode switch is set correctly for your source device (1.0 for consoles, 2.0 for PC/tablet). Disconnect/reconnect USB after changing. Ensure your DAC/amplifier is set to the correct input (Optical, Coaxial, or I2S) corresponding to the U2PRO's output. Check all cable connections are secure. Verify audio output settings on your source device (e.g., Windows Sound settings, macOS Audio MIDI Setup).
No indicator lights on U2PRO.	No power from USB source. Faulty USB cable.	Ensure the USB source device is powered on and providing power. Try a different USB port. Try a different USB-C to USB-A/C cable.
Audio distortion or dropouts.	High jitter (less common with XU316). Cable interference. Driver issues (UAC 2.0).	Ensure cables are not near strong electromagnetic interference sources. For UAC 2.0, ensure proper drivers are installed on your PC if required by your operating system (though often plug-and-play). Try a different cable.
UAC mode switch not working.	Not restarted after switching.	After changing the UAC mode switch, disconnect the USB cable from the U2PRO and reconnect it to restart the device.

If the problem persists after trying these solutions, please contact Douk Audio customer support for further assistance.

8. SPECIFICATIONS

Feature	Detail
Product Dimensions	3.35 x 3.11 x 0.1 inches
Item Model Number	SUC-U2-PRO-AU
Weight	14.08 ounces

Feature	Detail
Manufacturer	Douk Audio
ASIN	B0FF4KKZ1F
Supply Voltage	5 Volts (DC)
Interface Type	Coaxial, HDMI (I2S), Optical, USB
Number of Channels	2
Max. Sampling Rate (PCM)	32bit/768kHz
Max. Sampling Rate (DSD)	DSD512
Chipset	XMOS XU316

9. WARRANTY AND SUPPORT

Douk Audio products are designed for reliability and performance. For specific warranty details, please refer to the warranty card included in your product packaging or visit the official Douk Audio website.
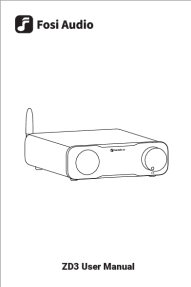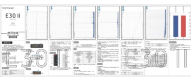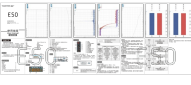
If you require technical assistance, have questions about your product, or need to report an issue, please contact Douk Audio customer support through their official channels. You can typically find contact information on the manufacturer's website or through the retailer where you purchased the product.

For more information, visit the Douk Audio Store on Amazon.

Related Documents - SUC-U2-PRO-AU

[SMSL PO100 PRO User Manual](#)
User manual for the SMSL PO100 PRO, a digital to analog audio converter with MQA decoding, XMOS XU316 USB solution, and various output options including I2S, Optical, and Coaxial.

[DOUK AUDIO U2/U2 Pro USB to Coaxial/Optical Converter User Manual](#)
Comprehensive user manual for the DOUK AUDIO U2 and U2 Pro Mini XMOS USB to Coaxial/Optical Converters, detailing driver installation, audio output setup, DSD music playback with Foobar2000, and system compatibility.

[Eversolo DMP-A6 High Fidelity Music Streamer Product Manual](#)
Comprehensive product manual for the Eversolo DMP-A6 High Fidelity Music Streamer, detailing its features, specifications, hardware, basic operation, system settings, connectivity, and downloads.

[Fosi Audio ZD3 Balanced Stereo DAC User Manual - HiFi Audio Experience](#)
Comprehensive user manual for the Fosi Audio ZD3 Balanced Stereo DAC. Learn about its features, specifications, setup, operation, and troubleshooting for a superior HiFi audio experience.

[Topping E30 II DAC User Manual and Specifications](#)
Comprehensive user manual and technical specifications for the Topping E30 II HiFi DAC, detailing its features, operation, and performance for USB, Coaxial, and Optical inputs.

[TOPPING E50 DAC: High-Performance Digital to Analog Converter User Manual](#)
Detailed user manual and technical specifications for the TOPPING E50 DAC, a high-performance digital-to-analog converter with multiple inputs and outputs, designed for audiophile use.