



Asus XONAR ESSENCE ONE User Manual

Hi-fi usb dac

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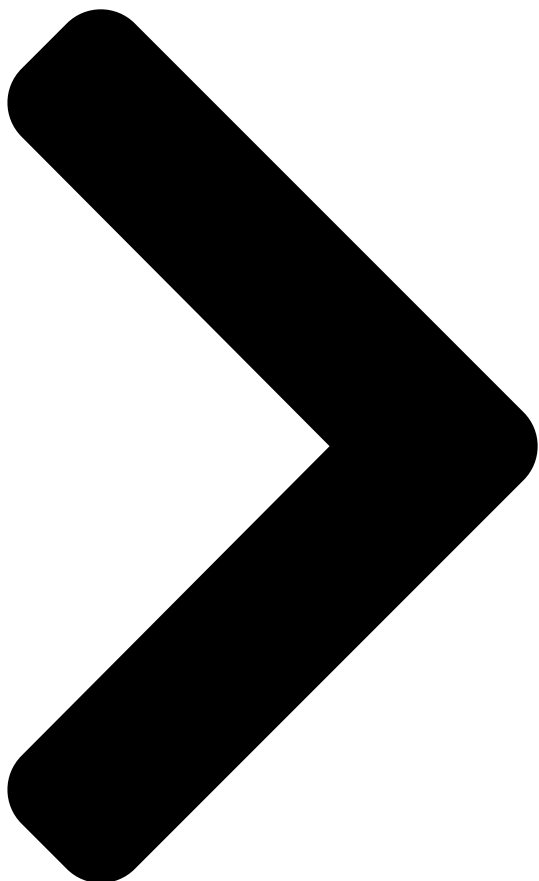
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Xonar Essence One

*Hi-Fi USB DAC (Digital-to-Analog
Converter)*

User manual

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Related Manuals for Asus XONAR ESSENCE ONE

[Media Converter Asus Xonar Essence One Quick Start Manual](#)

Hi-fi usb digital-to-analog (92 pages)

[Sound Card Asus XONAR ESSENCE - Sound Card - 192 kHz User Manual](#)

User manual (49 pages)

[Sound Card Asus XONAR - Sound Card - 192 kHz User Manual](#)

Premium gaming audio set (47 pages)

[Media Converter Asus Xonar Essence One Switching Manual](#)

Hi-fi usb dac opamp swap guide (5 pages)

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Hi-fi usb dac (digital-to-analog converter) (18 pages)

[Media Converter Asus Clique R100 User Manual](#)

Wireless music streamer (18 pages)

[Media Converter Asus WMP-N12 Quick Start Manual](#)

Wireless-n300 audio streamer (10 pages)

Summary of Contents for Asus XONAR ESSENCE ONE

[Page 1](#) Xonar Essence One Hi-Fi USB DAC (Digital-to-Analog Converter) User manual...

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Stand alone DAC.....10 Headphone amplifier10 Important Features
.....11 Hi-Fi audio via the world-first 8x symmetrical upsampling:11 Extreme audio
clarity with 120dB SNR:11 Audiophile class headphone amplifier output:11 User
customizable tone characters by 11 swappable OP-amps:11 Balanced XLR output:
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[Page 4: Introduction](#)

(120dB SNR), and hassle-free controls that help to re-discover one's music collection. As every member in Xonar Essence family, a shining tiger totem etched on the surface of its state-of-the-art design shows Xonar Essence One's commitment of the never-ending pursuit of the Essence of Sound.

[Page 5: Safety Information](#)

47.5 to 52.5 or 57 to 63 Hz. At 115, the Xonar Essence One will operate normally over a range of 95 to 132 VAC. At 230, the Xonar Essence One will operate normally over a range of 190 to 264 VAC.

[Page 6: Repairs](#)

Repairs Do not service or repair this product unless properly qualified. Only a qualified technician should perform repairs. **Fuses** The fuse holder is built into a drawer next to the IEC power connector. **CAUTION:** For continued fire hazard protection always replace the fuses with the correct size and type (1A 250V, 5 x 20 mm).

[Page 7: Other Safety Information](#)

A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

[Page 8: Driver Installation](#)

Driver installation After connecting ASUS Xonar Essence One with your computer by the bundled USB cable, you need to install the device driver that enables the Xonar Essence One to work with Windows operating system. **NOTES:** • The driver is only needed when you connect ASUS Xonar Essence One with PC/NB.

[Page 9: Functionality](#)

Functionality USB DAC (Digital-to-Analog Convertor) Clear, detailed, life-like sound for your digital music collection in PC/NB, with all the connection(XLR, RCA) you need for end devices. **Steps:** • Connect PC/NB with an USB cable • Need to install driver in your PC/NB to work •...

[Page 10: Stand Alone Dac](#)

Stand alone DAC With S/PDIF in and input select, it also serves as an independent DAC which connects with digital inputs such as CD audio source and then plays to the end devices. **Steps:** • Connect with other audio resource with S/PDIF input (by Coaxial/Optical cable) •...

[Page 11: Important Features](#)

User customizable tone characters by 11 swappable OP-amps: This is the unprecedented attempt for any hi-end USB DAC. Op-amp is the key part that amplifies the analog signal in your soundcard and affects tone characters (darker, brighter, sound image etc..) Xonar Essence One allows user to swap almost every OPamps for a fully customized sound.

[Page 12: Balanced Xlr Output](#)

PC and Device. Instead, ASUS Xonar Essence One supports Asynchronous Data Transfer mode. This mechanism feedbacks the buffer status to the system, and the system will base on buffer status to adjust the speed of data transfer, which leads to the low jitter in Xonar Essence One.

[Page 13: Front Panel](#)

(1) Press to turn on the upsampling function which increases sample rate to 352.8 or 384kHz symmetrically and bit rate to 32bit (2) When the upsampling function is turn on, the LED light of Bit perfect / sample rate indicator will light off.

[Page 14: Rear Panel](#)

These 4 screws are used to hold the machine bed (including PCB board and power module) and machine housing together. For repair's sake, ASUS technicians may need a small screwdriver to loosen the 4 screws to remove the front panel and then draw the machine bed out for checking PCB board (or power module).

[Page 15](#) Connects to external digital decoder or digital speaker systems, Home Theater systems, AV receivers for outputting digital audio. These outputs loop or pass-through unprocessed digital audio from the selected digital input. Two types are available and this port is for Coaxial S/PDIF Input.

[Page 16: Hardware Introduction](#)

Hardware Introduction USB Audio processor: C-Media CMI6631 (for USB input) S/PDIF receiver: AKM AK4113 (for digital input) DSP: ADI ADSP-21261 DAC: TI PCM1795 Swappable Op-amps: NE5532 Swappable Op-amps: NE5532 Film Cap (red ones): WIMA FKP2/FKS2 Swappable Op-amps: LM4562 (for Speaker out)

[Page 17: Connections](#)

VOLTAGE SELECTOR AC IN (1) Connect a USB 'B-A' type lead (as illustrated at left) from the Xonar Essence One's USB input to one of the USB ports on the PC/NB. (2) Turn on the Xonar Essence One using the front panel On/Off switch and make sure that the USB input is selected (USB LED lit).

[Page 18: Toslink And Coaxial S/Pdif Audio Input Connections](#)

Xonar Essence One will be listed as "ASUS Xonar Essence One". Click on this description to highlight in blue and then click on the Disable icon at the top of the window. A warning message will appear: "Disabling this device will cause it to stop functioning."

[Page 19: Output](#)

(1) Connect your digital source (ex. CD/DVD players or some PC/NB with SPDIF output) to Digital Input. Either S/P DIF Coaxial or Toslink optical types can be used, each being of equal quality. NOTE: Both Coaxial and Toslink Inputs can be used to connect and run equipment at the same time.

[Page 20: With Active Speaker Directly](#)

With Active Speaker directly COAXIAL TOSLINK UNBALANCED OUTPUT BALANCED OUTPUT DIGITAL INPUT VOLTAGE SELECTOR AC IN Connect Xonar Essence One with a set of active speakers directly. With Headphone/Headset Connect Xonar Essence One with high-quality headphones/headsets directly. ASUS Xonar Essence One...

[Page 21: Specifications](#)

Balanced / Un-balanced I/V NE5532 Balanced / Un-balanced LFP NE5532 Clock 12MHz For USB Crystal clock 24.576MHz For S/PDIF 45.1584MHz (for 44.1, 88.2, 176.4KHz sample rate) Oscillator 49.152MHz (For 48, 96, 192KHz sample rate) continued on the next page ASUS Xonar Essence One...

[Page 22](#) Potentiometer Voltage Selector AC 115V/223V Slide Switch Accessories USB cable ('B-A' type) *1 Power cord *1 (Some versions may have 2 power cords for different countries) 6.3mm to 3.5mm adaptor *1 Accessories User manual *1 Audio Precision (AP) test report *1 Installation driver CD *1 * Specifications are subject to change without notice.