

#### **Xonar DS**

Bring the Hi-Fi spirit to your Music, Movie and Games

- 192k/24bit true PC Hi-Fi audio presentation
- Immerse yourself in 3D gaming sound with GX2.5 audio engine
- Enjoy lively home theater audio through DTS Connect technology



# Bring the Hi-Fi spirit to your Music, Movie and Games

## Immersive Gaming Audio

Feel enemies crawling behind you and hear voices echo in dungeons with Xonar's immersive GX2.5 audio engine. Enable latest EAX gaming audio, and restores surround gaming in Windows Vista without additional software.

## 192k/24bit True PC Hi-Fi Enjoyment

Xonar DS's 192kHz/24bit playback support let you enjoy all music files converted at highest quality without any sample rate downgrade.

## Bring the Hi-Fi Theater to your desktop

Consisting of DTS Neo: PC<sup>™</sup> and DTS Interactive<sup>™</sup> technologies, DTS Connect brings the world's most welcomed Hi-Fi surround sound to your PC and turns it into a powerful multi-media center and game console.

## Surrounded all the time - DTS Neo: $\ensuremath{\text{PC}^{\text{\tiny TM}}}$

Converts any stereo signals into 7.1 channel – get the most out of your multi-channel speaker setup!

### World's most welcomed surround audio at your service - DTS Interactive $^{\text{TM}}$

Turns every audio into sensational 7.1 DTS Digital surround via S/PDIF output – feed your AV receiver the best surround sound available!!

## The Spirit of Hi-Fi System

## Tune up your own sound with ease - Swappable OPamp socket

The design once only seen on hi-end audio equipment is now presented in Xonar DS. Swappable OPamp socket allows you to customize your sound solderlessly and create your favorite listening experience with ease.

## Best Flexibility and Connectivity

#### Auto-detect front-panel

Intel HDA compatible front-panel header automatically switches output from back-panel to front once plugged in.



# Spezifikationen

Audio Performance

Output Signal-to-Noise Ratio (A-Weighted):

Up to 107 dB

Input Signal-to-Noise Ratio (A-Weighted):

100 dB

Output THD+N at 1kHz: Up to 0.0017% (-95dB) Input THD+N at 1kHz:

Up to 0.0017% (-95dB)

Frequency Response (-3dB, 24-bit/96kHz input):

<10Hz to 48kHz

Output/Input Full-Scale Voltage

1 Vrms (3Vp-p)

Sample Rate Conversion Quality

Almost lossless, high-fidelity floating-point filters, with:

	-140dB THD+N (typical value for 44.1K->48KHz, 24bit) 145dB Dynamic Range (typical value for 44.1K->48KHz, 24bit)
Main Chipset	Audio Processor: ASUS AV66 High-Performance Sound Processor (Max. 192KHz/24bit) 24-bit D-A Converter of Digital Sources: Wolfson WM8776* 1 (108dB SNR, Max. 192kHz/24bit) / Wolfson WM8766*1 (103dB SNR, Max. 192kHz/24bit) 24-bit A-D Converter for Analog Inputs: Wolfson WM8776* 1 (102dB SNR, Max. 96kHz/24bit)
Sample Rate and Resolution	Analog Playback Sample Rate and Resolution:  44.1K/48K/96K/192KHz @ 16/24bit for all channels  Analog Recording Sample Rate and Resolution:  44.1K/48K/96KHz @ 16/24bit  S/PDIF Digital Output:  44.1K/48K/96K/192KHz @ 16/24bit, Dolby Digital, DTS, WMA-Pro  ASIO 2.0 Driver Support:  44.1K/48K/96K/192KHz @ 16/24bit
I/O Ports	Front-Panel Header Intel HDA front-panel compatible and supports HP jack-detection and automatically switch audio output from back-pane to front  S/PDIF Header: Additional SPDIF-out header for connecting graphics card with HDMI audio output Analog Output Jack: 3.50mm mini jack *4 (Front/Side/Center-Subwoofer/Back)  Analog Input Jack: 3.50mm mini jack *1 (Line-In/Mic-In)  Other line-level analog input (for CD-IN/TV Tuner): Aux-In (4-pin header on the card)  Digital S/PDIF Output: High-bandwidth Optical Connector supports 192KHz/24bit (shared with Back surround output jack)
Driver Features	VocaIFX™:  The latest vocal effect technologies for gaming and VoIP, including:  - VoiceEX: produces vivid environmental reverberation for your voice in EAX games  - ChatEX: emulates different background environment effects when you chat online  - Magic Voice: changes your voice pitch to different types (Monster/Cartoon) for disguising your real voice or just for fun in online chatting  Operation System:  Windows Vista/XP(32/64bit)/MCE2005  DTS® Technologies:  DTS® Connect (DTS Interactive Encoder and DTS Neo:PC) for both XP and Vista  -DTS Interactive encodes any 3D gaming audio into true-to-live 5.1 DTS Digital Surround sound experience  -DTS Neo:PC could expand any stereo music to 7.1 surround sounds  Smart Volume Normalizer™:  Normalizes the volume of all audio sources into a constant level and also enhances your 3D sound listening range and advantages in gaming  Xear 3D™ Virtual Speaker Shifter:  Adjustable virtual 7.1-speaker positioning  Karaoke Functions:  Music Pitch-Shifting, Vocal Cancellation, and Microphone Echo effects with Stereo Mix recording (Wave and Mic-in) for online Karaoke or online DJ applications  FlexBass™:  Professional Bass Management/Enhancement system  Other Effects:  10-band Equalier/27 Environment Effects  3D Sound Engines/APIs:  Vista: DirectSound3D® GX 2.5, EAX®2.0&1.0, DirectSound® HW, DirectSound SW, A3D®1.0, OpenAL generic modes, 128 3D sounds processing capability  XP: DirectSound3D® GX 2.5, EAX®2.0&1.0, DirectSound® HW, DirectSound SW, A3D®1.0, OpenAL generic modes, 128 3D sounds processing capability
Bundled Software Utility	and the second s
Accessories	1 x S/PDIF optical adaptors 1 x Low-profile Bracket