



Manuals.plus /

› AOSHIDA /

› AOSHIDA Gustard X26III Streamer DAC User Manual

AOSHIDA X26III

AOSHIDA Gustard X26III Streamer DAC User Manual

Model: X26III

INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your AOSHIDA Gustard X26III Streamer DAC. Please read this manual thoroughly before using the device to ensure optimal performance and longevity.



Image: The Gustard X26III Streamer DAC in black, accompanied by its remote control. The front panel displays "Streamers EXT DSD 24.5M FIXED".

PACKAGE CONTENTS

Verify that all items are present in the package:

- Gustard X26III DAC Unit
- Remote Control
- Power Cable
- Gustard Card (Warranty/Information Card)
- USB Cable

PRODUCT OVERVIEW

The Gustard X26III is a high-performance Streamer DAC designed for discerning audio enthusiasts. It features advanced components and versatile connectivity options to deliver exceptional sound quality.

Key Features

- **Dual ES9039SPRO Chips:** Utilizes two ESS flagship ES9039SPRO DAC chips for independent left and right channel processing, supported by independent power supply and grounding systems.
- **Versatile Inputs:** Supports USB, LAN, optical, coaxial, AES, and IIS digital inputs. USB, LAN, AES, and IIS inputs support PCM up to 32Bit/768kHz and DSD512.
- **GCLK-02 High-Precision Clock:** Incorporates advanced PLL technology for stable and accurate clock signals, with external clock support.
- **Discrete Class-A Output:** Features a meticulously designed output stage for low distortion and noise, ensuring sound purity.
- **Flexible Output Connections:** Provides RCA and XLR analog audio outputs for connection to various audio equipment.



Image: The Gustard X26III DAC (silver) placed on an audio rack, with a tablet and smartphone displaying music streaming applications, illustrating its integration into a modern audio system.

Internal Components



2x ES9039SPRO

Using two ESS flagship chips ES9039SPRO for Digital to Analog Conversion, 1 chip each for left and right channel. With two completely independent power supply and grounding to seal the great sound performance.

FPGA Programmable Logic Chip

Exclusive technologies such as digital integrated circuits with self-constructed logic functions, clock management, 2nd PLL digital shaping, DOP demodulation, and PCM/DSD depop switch provide a solid foundation for excellent sound quality.



Image: A close-up view of the internal circuit board, highlighting the two ES9039SPRO DAC chips, which are central to the device's audio processing capabilities.

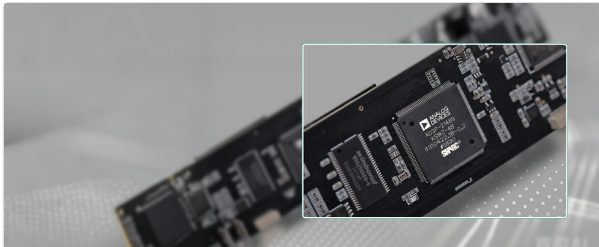


Image: A detailed view of the FPGA Programmable Logic Chip on the circuit board, responsible for digital integrated circuits, clock management, and signal processing.

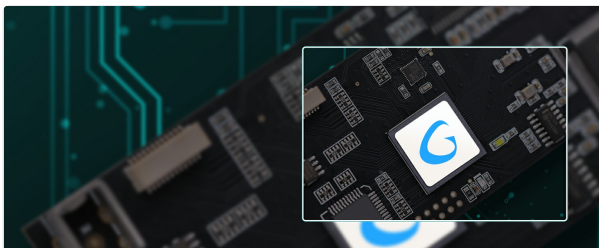


Image: A close-up of the network bridge system board, illustrating the hardware designed for music playback and network connectivity.



Image: A close-up of the GCLK-02 high-precision clock module, indicating its role in maintaining timing accuracy for audio signals.

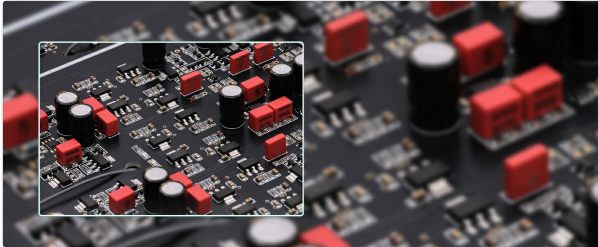


Image: A detailed view of the discrete Class-A output stage components, designed for low distortion and high fidelity audio output.

SETUP

Rear Panel Connections



Specifications

mats interface	For	PCM	MQA	DSD (Native)	DSD (DoP)
USB.IIS. Streamer.		44.1kHz-768kHz 16bit-32bit	Full Decoding	DSD64-DSD512	DSD64-DSD256
AES. Coaxial. Optical.		44.1kHz-192kHz 16bit-24bit	Full Decoding	Unsupport	DSD64

Image: The rear panel of the Gustard X26III DAC, clearly labeling all input and output ports including RCA, XLR, LAN, USB, Optical, Coaxial, AES, IIS, Clock input, and power connections.

- Power Connection:** Connect the provided power cable to the AC input on the rear panel. Ensure the voltage switch (115V/230V) is set correctly for your region before connecting to a power outlet.
- Analog Output:**
 - For unbalanced connections, use RCA cables to connect the "Line out RCA Left" and "Line out RCA Right" ports to your amplifier or active speakers.
 - For balanced connections, use XLR cables to connect the "Line out XLR Left" and "Line out XLR Right" ports to your balanced amplifier or active speakers.
- Digital Inputs:** Connect your digital audio sources (e.g., PC, CD player, streamer) to the appropriate input ports:
 - USB:** For connecting to a computer.
 - LAN:** For network streaming capabilities.
 - Optical (TOSLINK):** For optical digital audio sources.
 - Coaxial:** For coaxial digital audio sources.
 - AES:** For professional AES/EBU digital audio sources.

- **IIS:** For high-performance IIS digital audio sources, typically from dedicated DDCs.
- **Clock Input:** For connecting an external high-precision clock (e.g., GCLK-02) to further enhance audio synchronization.

Once all connections are made, switch on the power using the power switch on the rear panel.

OPERATING INSTRUCTIONS

Front Panel Controls

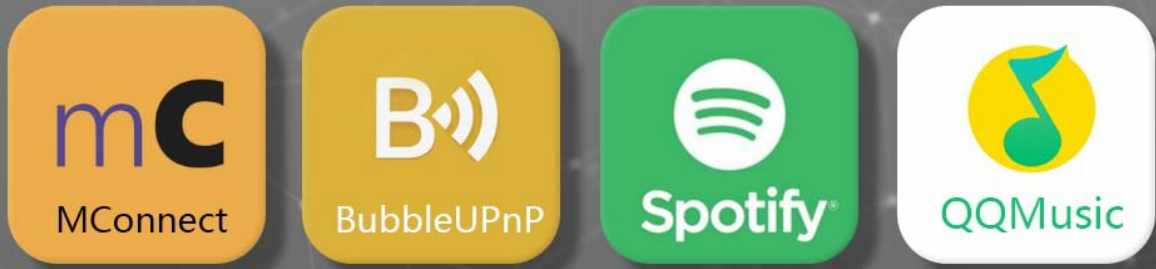
The front panel features a display and control buttons for basic operation:

- **Display:** Shows current input, sample rate, and other status information.
- **Input Selector:** Cycle through available digital inputs.
- **Menu/Settings:** Access various settings such as filters and NOS mode.
- **Volume Control:** Adjust output volume (if variable output is enabled).

Network Streaming

The X26III supports various network streaming protocols. To manage these, access the device's web interface:

1. Ensure the X26III is connected to your network via the LAN port.
2. On a computer connected to the same network, open a web browser.
3. Enter `//x26.local` in the address bar. This will open the network bridge control page.
4. From this interface, you can enable or disable various streaming protocols such as AirPlay, Roon Bridge, UPnP/DLNA, HQPlayer NAA, and Spotify.



Using browser on PC to inputs “//x26.local” to control the network bridge protocol on and off.

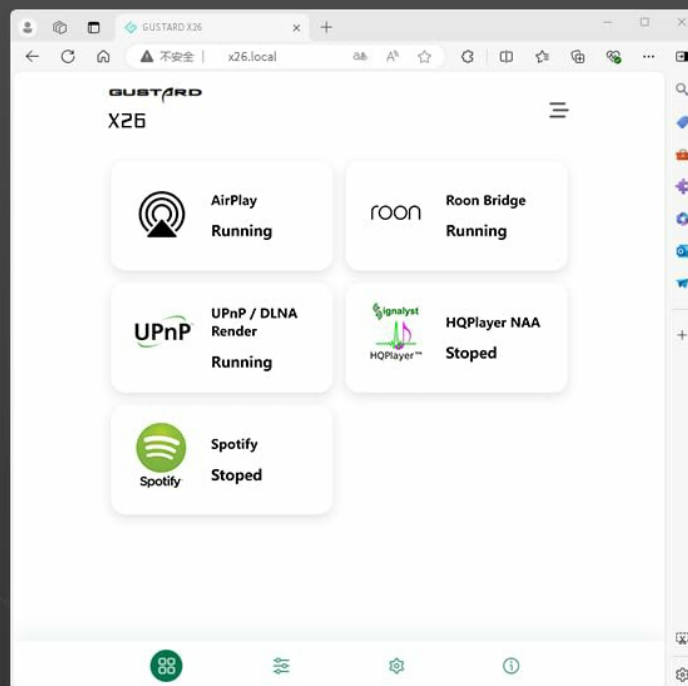


Image: A screenshot of the web-based control interface for the Gustard X26III, showing options to manage network streaming protocols like AirPlay, Roon Bridge, UPnP/DLNA, HQPlayer NAA, and Spotify.

Digital Filters and NOS Mode

The X26III offers various digital filters and a Non-Oversampling (NOS) mode to tailor the sound to your preference. These settings can typically be accessed via the front panel menu or remote control.



Image: The front display of the Gustard X26III showing available settings for PCM filters (Vivid, Gentle, Composite), DSD filters (47K, 50K, 60K, 70K), and NOS mode (Disable, Enable).

- **PCM Filters:** Select from options like VIVID, GENTLE, or COMPOSITE to adjust the sound characteristics for PCM audio.
- **DSD Filters:** Choose from various DSD filter frequencies (e.g., 47K, 50K, 60K, 70K).
- **NOS Mode:** Enable or disable Non-Oversampling mode. This mode bypasses digital filtering for a more direct sound.

MAINTENANCE

- Keep the device in a clean, dry, and well-ventilated area.
- Avoid direct sunlight, heat sources, and excessive humidity.
- Clean the exterior with a soft, dry cloth. Do not use liquid cleaners or solvents.
- Ensure proper ventilation around the unit to prevent overheating.
- Periodically check cable connections to ensure they are secure.

TROUBLESHOOTING

No Sound Output

- Check all audio cable connections (RCA/XLR) to your amplifier or active speakers.
- Verify that the correct input source is selected on the X26III.
- Ensure your amplifier/speakers are powered on and set to the correct input.
- Check the volume level on both the X26III and your amplifier.
- Confirm that the power cable is securely connected and the unit is powered on.

Network Streaming Issues

- Ensure the LAN cable is securely connected to both the X26III and your network router/switch.
- Verify that your network is functioning correctly.
- Access the web interface ([//x26.local](http://x26.local)) and confirm that the desired streaming protocol (e.g., Roon Bridge, UPnP) is enabled.
- Restart the X26III and your network equipment (router, switch).

Distorted or Poor Sound Quality

- Check the quality of your digital audio cables.
- Ensure the sample rate and bit depth of your source material are compatible with the X26III's capabilities.
- Experiment with different digital filter settings or NOS mode to see if it improves the sound.
- If using an external clock, ensure it is properly connected and synchronized.

SPECIFICATIONS



The image shows the Gustard X26III DAC Network Streamer ES9039SPRO X 2, a silver and black device. The front panel features a small display, a volume knob, and a power button. The text on the front panel includes 'GUSTARD', 'X26III DAC', 'NETWORK STREAMER', 'ES9039SPRO X 2', 'GUSTARD', 'Streamer EXT', 'DSD 24.5M', and 'FIXED'. The device is set against a background of light rays.

ES9039SPRO Dual DAC

ES9311Q Dedicated Power Supply

DSP Autonomous Digital Filtering
Reduce Alias Noise

Digital Filtering

3 PCM Filters

4 DSD Filters

Support NOS Mode

Image: The Gustard X26III DAC (silver) highlighting its core features: ES9039SPRO Dual DAC, ES9311Q Dedicated Power Supply, DSP Autonomous Digital Filtering, 3 PCM Filters, 4 DSD Filters, and Support for NOS Mode.

General Specifications

Product Dimensions	12.99 x 10.24 x 2.56 inches (330 x 260 x 65 mm)
Weight	15.04 Pounds (6.82 kg)
Item Model Number	X26III
Brand	AOSHIDA (Manufacturer: Gustard)
Power Supply	AC115V/230V 50/60Hz (Switchable)
Power Consumption	<25W

Digital Input Specifications

Interface Type	PCM Support	MQA Support	DSD (Native) Support	DSD (DoP) Support
USB, IIS, Streamer (LAN)	44.1kHz-768kHz, 16bit-32bit	Full Decoding	DSD64-DSD512	DSD64-DSD256
AES, Coaxial, Optical	44.1kHz-192kHz, 16bit-24bit	Full Decoding	Unsupported	DSD64

Note: LAN supports Roon, AirPlay, UPnP, NAA, Spotify. Configuration via web page to enable/disable protocols. LAN speed 100/1000Mbps.

10M clock (BNC) input impedance 50 Ohm; -20dBm; CMOS square wave 0.2V-3.3V, Sine wave 0.5V-3.3V.

Analog Output Specifications

Frequency Response	20-20kHz / +0.3dB
Dynamic Range	>128dB
Signal to Noise Ratio	>127dB
Channel Crosstalk	-132dB @ 10kHz
THD+N	<=0.0001% @ 1kHz
IMD	<0.001% @ -1dbfs
RCA Output Level	2.5Vrms (VOLUME FIXED)
RCA Output Impedance	100Ω
XLR Output Level	5.1Vrms (VOLUME FIXED)
XLR Output Impedance	100Ω
XLR Interface Definition	American Standard (1 ground, 2 hot, 3 cold)

Digital Input

- LAN Support protocol: Roon, airplay, upnp,NAA, Spotify (Configuration web page can be configured to open and close the protocol,can be upgraded online)
- LAN speed 100/1000Mbps.
- 10M clock (BNC): Input impedance 50 Ohm,0dBm- 20dBm,CMOS square wave 0.2V-3.3V, Sine wave 0.5V-3.3V.

Analog Output

- Frequency Response:20-20kHz/+/-0.3dB
- Dynamic Range:> 128dB
- Signal to Noise Ratio:> 127dB
- Channel Crosstalk: - 132dB@ 10kHz
- THD+ N:<=0.0001% @1kHz
- IMD: ≈0.001% @ -1dbfs
- RCA output level: 2.5Vrms (VOLUME FIXED)
- RCA output impedance: 100Ω
- XLR output level: 5.1Vrms (VOLUME FIXED)
- XLR output impedance: 100Ω
- XLR Interface Definition: American Standard (1 ground, 2 hot, 3 cold)

Other parameters

- AC power supply: AC115V/230V 50/60Hz;
- power consumption: <25W
- Dimensions: W330mm* D260mm*H65mm (excluding protrusions)
- Package Dimensions: L420*W360*H175mm
- Weights with package:7KG
- 115V/220V (Manual Switch)

Image: A comprehensive table detailing the digital input capabilities, analog output performance metrics, and other general parameters of the Gustard X26III DAC.

THD+n vs Freq

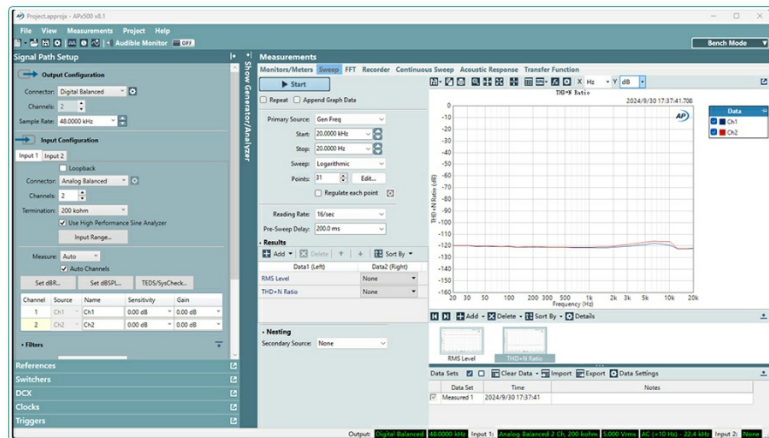


Image: A graph illustrating the Total Harmonic Distortion plus Noise (THD+N) performance across various frequencies for the Gustard X26III DAC.

Dynamic Range AES17

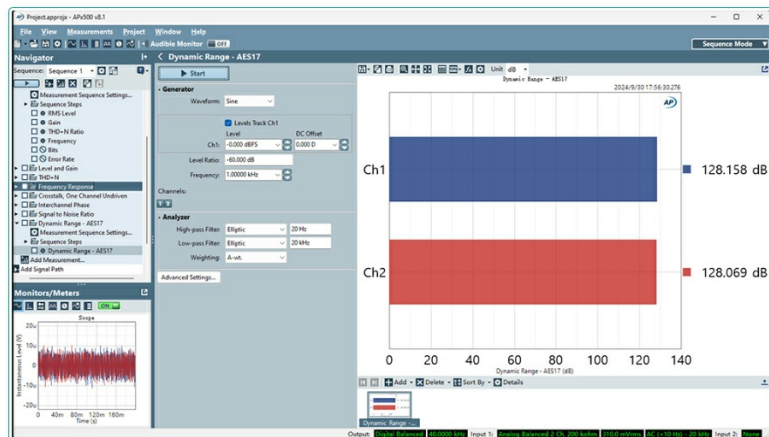


Image: A measurement graph displaying the Dynamic Range (AES17 standard) for the Gustard X26III, showing values for Channel 1 and Channel 2.

multitone

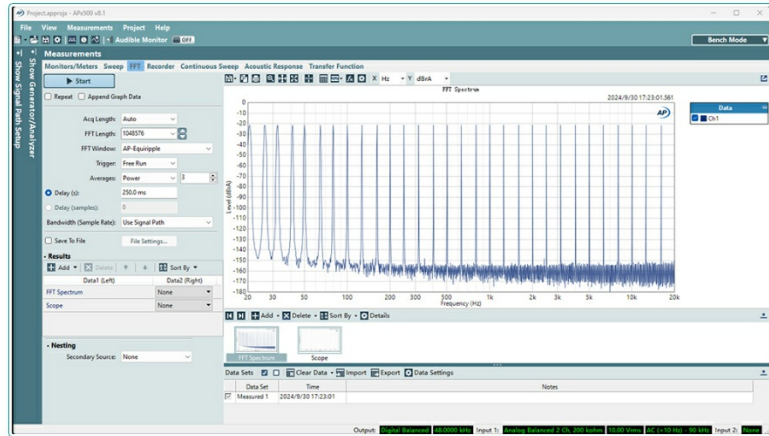


Image: A multitone test result graph, demonstrating the intermodulation distortion performance of the Gustard X26III DAC.

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the Gustard card included in your package or visit the official AOSHIDA website. Keep your purchase receipt as proof of purchase for warranty claims. For further assistance, you may contact AOSHIDA customer service through their official channels.