

P1:

KUNLUN

GaN Desktop Headphone Amplifier

8 GaN FETs | 40 Transistors | 7400mW + 7400mW @ 32Ω

Linear Power Supply | DC Protection | Cutting-edge Components

Single-ended & Balanced inputs/outputs

4ch TI Volume Control | CNC Aluminum Chassis

P2:

Named After Kunlun

The Prologue to iBasso High-End Desktop Devices

Kunlun is the mythological abode of celestial beings and symbolizes utmost reverence. The iBasso Kunlun is named in this spirit—and represents our relentless pursuit of High-End sound quality. As a high-end GaN desktop headphone amplifier, Kunlun integrates cutting-edge amplification technology and embodies a pioneering spirit of technological exploration and advancement.

P3:

Pioneering GaN Desktop Amplifier

The Summit of Sound Quality

As the industry's first to apply GaN in a very affordable desktop headphone amplifier, Kunlun signifies iBasso's exploration of front-line technology. GaN FETs boast electron mobility (up to 2000 cm²/Vs) surpassing traditional MOSFETs and silicon transistors, demonstrating higher electron velocities and lower conduction losses at high frequencies.

GaN FETs have a significantly smaller total parasitic Miller charge (QGD) compared to equivalent R_{ds(on)} power MOSFETs, enabling faster switching speeds. When applied to audio amplification, this results in improved transient response, dynamic performance, and control.

P4:

High Current, Low Internal Resistance

Precision in Every Detail

GaN's ultra-low R_{ds(on)} allows higher current drive capability. As a powerful desktop amp, Kunlun's output impedance is as low as 0.12Ω and capable of accurately driving low-impedance in-ear monitors, delivering a dynamic layered sound. Its control strength is like a towering robot performing delicate ballet.

P5:

Equipped With 40 High-Performance Transistors A Powerful Lineup Delivers an Overwhelming Performance

Kunlun utilizes premium components: 8 power transistors in the output stage and 16×2 configuration of the drive stage, totaling 32 transistors to build a super-large discrete amplification system. Compared to traditional op-amp architectures, Kunlun's current output capacity is several times higher, offering a greater dynamic reserve/headroom, with detailed clarity, while delivering both a powerful and delicate high quality sound equally.

P6: Block Diagram

P7: 7400mW + 7400mW @ 32Ω

Conquering All Challenges

In balanced mode at 32Ω load, each channel delivers up to 7400mW, enough to drive any high-impedance, low-sensitivity full-size headphone. Kunlun exhibits a robust dynamic range with a rich layered soundstage.

P8: Linear Power Supply

Rejecting Digital Rectification, Kunlun, Returns to Analog Aesthetics

Kunlun abandons switching power supplies, opting for linear transformers with high quality voltage regulators. This ensures smoother power delivery and a lower noise floor. Our linear power supply keeps the entire analog signal chain stable and quiet while presenting micro-textures and details with near "zero distortion", enhancing the analog flow of music.

P9: Comprehensive DC Protection A Firewall For Your Headphones

Built-in DC protection circuit detects abnormal DC components and immediately cuts off output power, thus safeguarding your headphones from damage. Providing full protection for audiophiles.

P10: Cutting-edge Parts Selection Investing Heavily For Superior Sound

Every component in Kunlun is carefully selected, adhering to the philosophy of "in pursuit of perfection". The device uses eight high-performance GaN FETs and a large number of audiophile-grade electrolytic and film capacitors, ensuring stable power supply and extremely low distortion, resulting in clean, delicate, warm, and engaging sound.

P11:

Analog Adjustment, Digital Control

Making Ease of Use Second Nature

Kunlun employs high-grade TI (Texas Instruments) volume control chips; at any volume, left and right channels maintain high consistency, with linear and delicate adjustments. At the same time, Kunlun utilizes an analog potentiometer for control, allowing users to experience the tactile feeling of turning the analog potentiometer.

A three-position stepped potentiometer allows hardware gain adjustment, matching various headphone sensitivities and effectively suppressing noise and distortion, keeping the sound pure and natural.

P12:

Plug-and-Play, Simple & Intuitive Design

Every detail is Carefully Crafted For An Intuitive Experience

Kunlun adopts pure analog audio design, requiring no drivers or complex setup—simply plug and play. Volume control and gain switch have an excellent tactile feel. Every detail is refined to bring users a secure, immersive experience.

P13:

CNC Aluminum Chassis

Exudes A Sense of Luxury

The chassis is made with precision CNC machining of aluminum alloy, with anodized surface treatment for a hard, scratch resistant surface. Its sleek, classic appearance exudes a refined metallic texture. The top allows for good heat dissipation and combined with an optimized internal design, this assures a stable and efficient operation under high load conditions, which prevents overheating that can affect sound.

P14:

Input/Output Interfaces

Inputs:

XLR Balanced Input

RCA Single-ended Input

4.4mm Balanced Input

Outputs:

XLR Balanced Output

6.35mm Single-ended Output

4.4mm Balanced Output

P15:

Package Content:

P13:

Specifications:

(4.4mm & XLR Balanced Output):

Frequency Response: 10Hz - 40KHz (+/-0.2dB)

Signal-to-Noise Ratio: 122dB

Dynamic Range: 123dB

THD+N: -117dB (No Load) / -111dB (600Ω Load)

Crosstalk: -109dB

Output Voltage: 16Vrms

Output Power: 7400mW + 7400mW @ 32Ω

Output Impedance: 0.35Ω

(6.35mm Single-ended Output):

Frequency Response: 10Hz - 40KHz (+/-0.1dB)

Signal-to-Noise Ratio: 118dB

Dynamic Range: 119dB

THD+N: -107dB (No Load and 600Ω Load)

Crosstalk: -111dB

Output Voltage: 8Vrms

Output Power: 1900mW + 1900mW @ 32Ω

Output Impedance: 0.12Ω

Weight: Approximately 3000g (including packaging and accessories)

Approximately 2380g (amplifier only)

Dimensions: 239mm x 223mm x 64mm