

Carvin

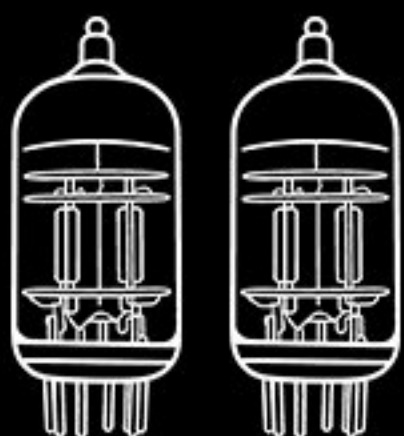


ID6 Streamer DAC and Headphone Amplifier



Triple Timbres

Modern | Classic
Dual Tube + SS Timbre



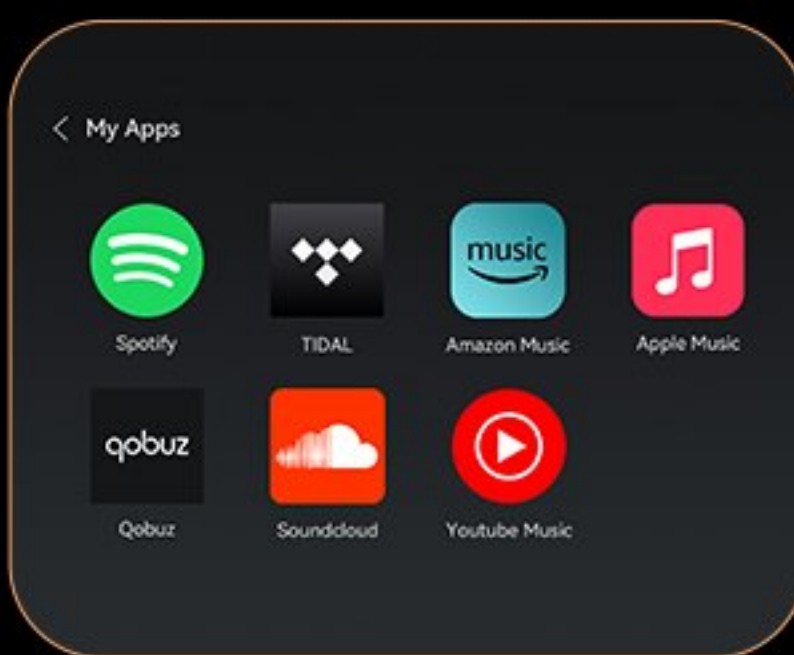
Dual-Triode Tubes
12AU7x2



Dual Amp
Operation (DAO)
4-Ch Fully Balanced
Headphone Amp



Cayin Control App
Smart APP Control



Popular Streaming Apps
System-Wide
Bit-Perfect Audio



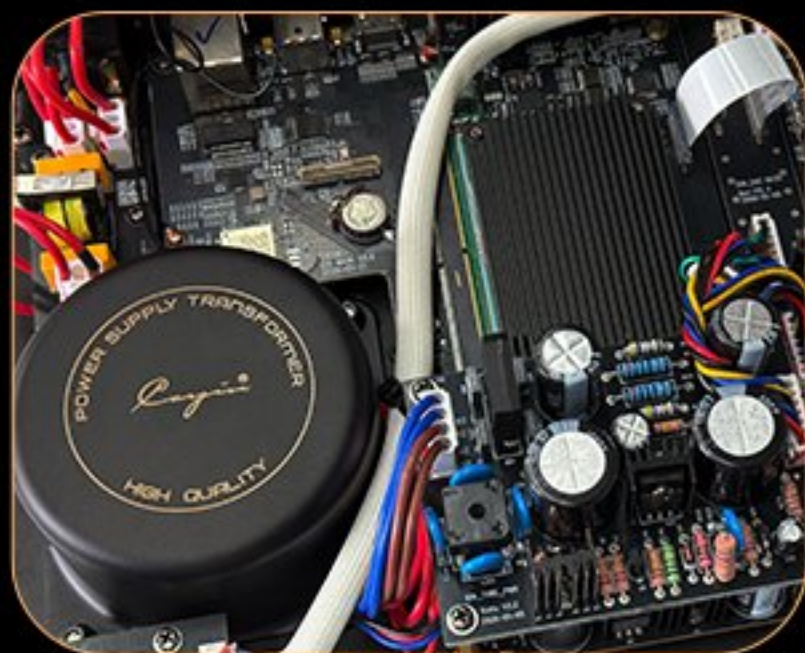
Rockchip RK3576
Octa-core Processor



16-Core XMOS XU316
Hi-Res USB Decoding

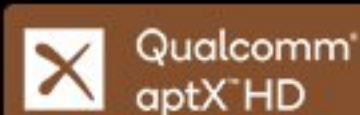


Dual ESS ES9082Q DACs
8-ch High-Performance
Audio DAC



Cayin Customized
Toroidal Transformer
Linear Power Supply

Bluetooth 5.1



Qualcomm QCC5125
Supports Major
Bluetooth Codecs



2.4G / 5G
Dual-Band Wi-Fi



Dedicated SSD Bay
Supports M.2 NVMe
2280 SSD



RCA SE / XLR Balanced
PRE & LO Outputs



6.35mm SE /
4.4mm Balanced
PO Outputs



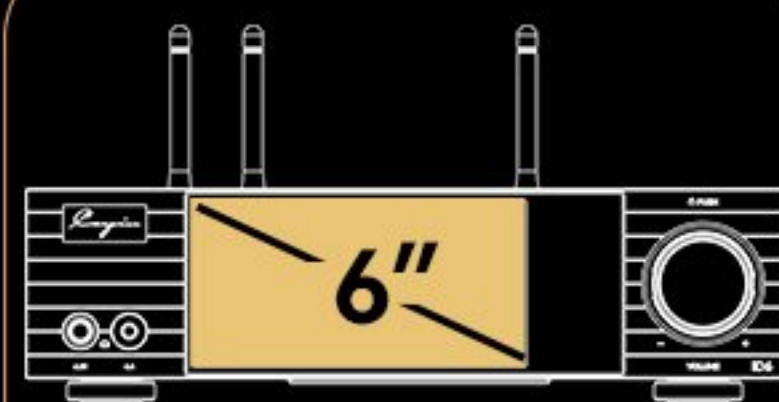
Digital Audio Outputs
USB Audio / I²S-LVDS
/ Coaxial / Optical



HDMI ARC
Audio Input

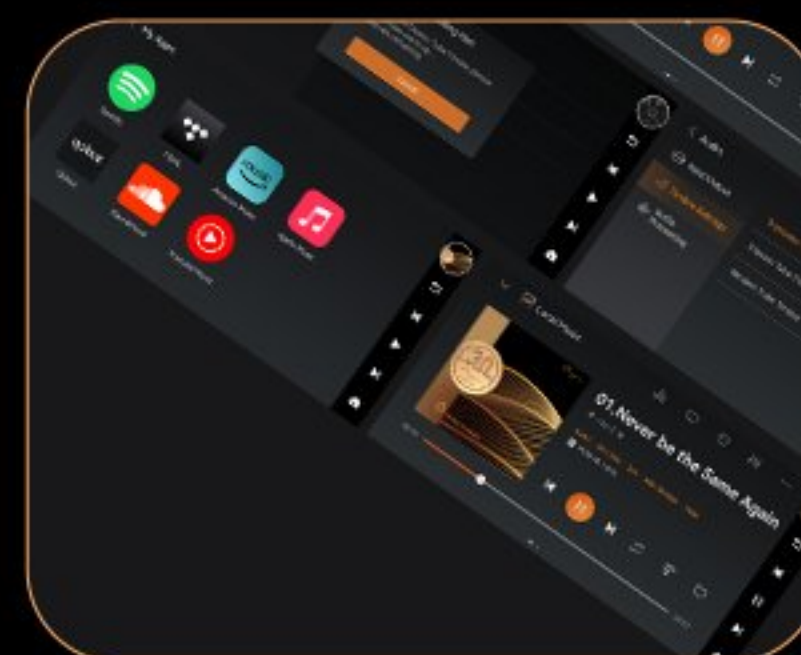
DSD

DSD512
768kHz/32bit



1080x2160 FHD+

6" FHD+ Display



All-New UI Design



Precision CNC Chassis
Black & Silver Options

Multi-Touch Gesture Control User-Friendly Interface

Triple Timbres, Instantly Switchable

The ID6 offers three selectable timbres: Classic Tube, Modern Tube, and Solid-State. The timbre options apply to the headphone outputs, RCA and XLR line outputs, and preamp outputs.



Its tube stage pairs 12AU7 dual triodes with MOS-FETs, delivering two uniquely voiced tube presentations with natural warmth, body, and musicality.

A dedicated tube window puts the glowing filaments on display, enhanced by subtle ambient lighting for a visual experience that complements the sound.

Classic Tube Timbre

Warm, smooth, relaxed,
and easy to listen to;
vocals are delicate and engaging.

Modern Tube Timbre

Expansive soundstage,
incisive resolution, and tight,
powerful bass.

Solid-State Timbre

**Precise and composed,
with maximum resolution;
ideal for revealing fine detail in
classical and instrumental music.**



Redefining Fluid Operation

Powered by the Rockchip RK3576 octa-core processor (4× Cortex-A72 @ 2.2GHz + 4× Cortex-A53 @ 2.0GHz) with a dedicated AI NPU, the ID6 delivers fast, fluid system performance.

Its multi-core architecture handles large music libraries, streaming apps, DSD512 playback, and multitasking with ease—keeping navigation responsive and playback smooth.

Deeply Customized System with Bit-Perfect Transmission

Cayin has optimized Android 14 from the low-level drivers to the audio framework for system-wide bit-perfect playback, including through third-party apps. Its USB Audio and I²S digital paths support up to PCM 32-bit/768 kHz and Native DSD512.

The HDMI I²S-LVDS output and USB HOST audio output allow the ID6 to serve as a digital source for a compatible external DAC. Check I²S pin configuration before connecting third-party equipment.



Four-Channel Discrete Fully Balanced Headphone Amplifier

The ID6 features a four-channel, fully balanced discrete headphone amplifier, with Nexperia audio-grade BJT transistors handling the current gain and output stage.

Switch between Class A and Class AB amplification (DAO) operation to match different listening preferences, while a built-in DC-Servo circuit helps maintain a clean, low-distortion output.

4.0W + 4.0W @ 16Ω | 2.6W + 2.6W @ 32Ω

Balanced PO Output



6.35mm Single Ended
Headphone Output

4.4mm Balanced
Headphone Output



App Integration

The Cayin Control App puts key ID6 functions at your fingertips, from timbre switching and playback settings to device control.

Ongoing firmware updates will continue to expand its capabilities and refine the overall experience.

App features are still being optimized. The Android version can be downloaded from Cayin's official website.



Dual Mono ES9082Q DAC Architecture

The ID6 employs dual ESS ES9082Q SMART Hi-Fi DACs, each operating in dedicated MONO mode for fully independent left and right channels—improving channel separation, SNR, and overall clarity.

Its channel-summing architecture combines the multi-channel outputs of each DAC to further enhance dynamic range and output performance, preserving fine detail while giving large-scale music greater weight, scale, and authority.

Audiophile-Grade USB Processor

The ID6 uses a 16-core XMOS XU316 USB audio processor as its digital interface, with native UAC2.0 and UAC1.0 support for broad compatibility across Windows, macOS, Android, Linux, and other major platforms.

Its asynchronous transfer architecture and precision clocking help reduce jitter and the effect of source-side noise, supporting stable high-resolution playback.



Play Freely, Store Flexibly



Dual-band 2.4GHz/5GHz
Wi-Fi supports online
streaming and major
casting protocols for
flexible network playback.



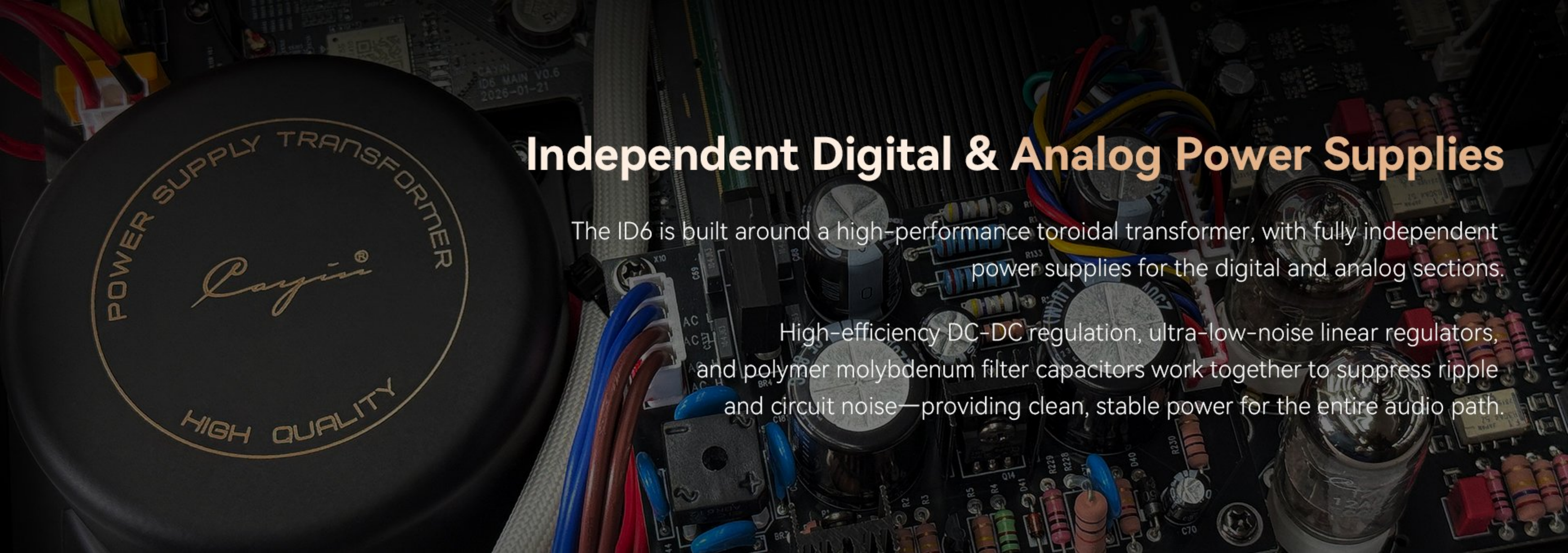
Qualcomm QCC5125
Bluetooth delivers stable
wireless performance with
support for multiple high-
resolution audio codecs.



A dedicated M.2 NVMe
2280 SSD slot supports
high-capacity local storage
for large music libraries.



Music can also be played
from internal storage, USB
drives, external hard drives,
and card readers.



Independent Digital & Analog Power Supplies

The ID6 is built around a high-performance toroidal transformer, with fully independent power supplies for the digital and analog sections.

High-efficiency DC-DC regulation, ultra-low-noise linear regulators, and polymer molybdenum filter capacitors work together to suppress ripple and circuit noise—providing clean, stable power for the entire audio path.

All in One

The ID6 combines a streamer, DAC, preamplifier, and headphone amplifier.

Digital inputs accept compatible sources such as CD players, while its line and preamp outputs connect to amplifiers. Digital outputs can feed an external DAC.



Headphones



Headphone Amplifier



Power Amplifier



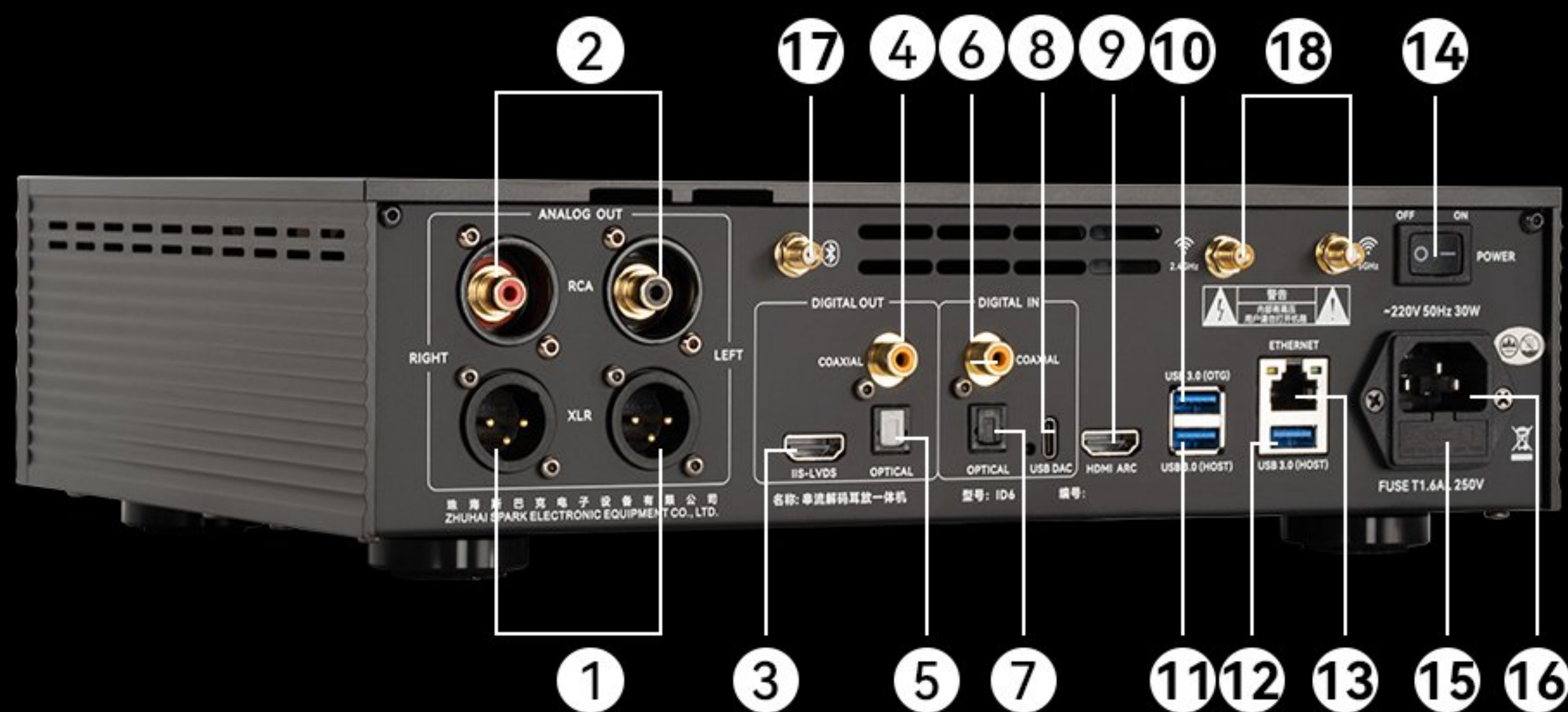
DAC



CD Player



TV / Projector



- ① Balanced Line / Preamp Output (XLR)
- ② Single-Ended Line / Preamp Output (RCA)
- ③ Digital I²S-LVDS Output
- ④ Digital Coaxial Output (COAXIAL)
- ⑤ Digital Optical Output (OPTICAL)
- ⑥ Digital Coaxial Input (COAXIAL)
- ⑦ Digital Optical Input (OPTICAL)
- ⑧ USB DAC Input
- ⑨ HDMI ARC Multimedia Input
- ⑩ USB 3.0 OTG / External Storage / PC Transfer
- ⑪ USB HOST: Storage / USB Audio Output
- ⑫ USB HOST: Storage / USB Audio Output
- ⑬ Wired Network Port
- ⑭ Main Power Switch
- ⑮ Fuse
- ⑯ AC Power Inlet
- ⑰ Bluetooth Antenna Terminal
- ⑱ Wi-Fi Antenna Terminal

Thoughtful Details

A 6-inch 1080 × 2160 FHD+ display features a custom landscape UI with multi-touch control, while the seamless black glass panel creates a cleaner, more refined front profile.



A dedicated ADC feedback circuit works with the SoC to analyze audio in real time, enabling dynamic spectrum visualization and VU meter display.

The precision-tuned volume knob offers smooth, controlled resistance, with an integrated illuminated ring that also indicates the current audio format.



44.1/48 kHz	352.8/384 kHz
88.2/96 kHz	705.6/768 kHz
176.4/192 kHz	DSD



Dual-side ventilation improves heat dissipation for stable operation

External high-gain antennas were included to strengthen both Wi-Fi and Bluetooth connectivity



Compact, Premium

The chassis is machined from a single piece of aluminum alloy, then finely sandblasted and anodized for a smooth, premium finish.

Available in Silver and Black to complement different desktop setups and interiors.





Technical Specifications

ID6 Audio Performance Specifications

Headphone Output (PO)

Performance	Balanced Solid-State Timbre (4.4mm)	Balanced Tube Timbre (4.4mm)	Single-Ended Solid-State Timbre (6.35mm)	Single-Ended Tube Timbre (6.35mm)
Output Power	2.6W + 2.6W @ 32Ω 4.0W + 4.0W @ 16Ω	2.6W + 2.6W @ 32Ω 4.0W + 4.0W @ 16Ω	0.9W + 0.9W @ 32Ω 1.6W + 1.6W @ 16Ω	0.9W + 0.9W @ 32Ω 1.6W + 1.6W @ 16Ω
Frequency Response (Fs = 192kHz)	10Hz-70kHz, -0.2dB	20Hz-70kHz, -0.2dB	10Hz-70kHz, -0.2dB	20Hz-70kHz, -0.2dB
Dynamic Range (A-weighted, 20Hz-20kHz)	122dB	117dB	119dB	113dB
SNR (A-weighted, 20Hz-20kHz)	121dB	116dB	118dB	112dB
THD+N (A-weighted, 20Hz-20kHz)	0.005%	0.20%	0.005%	1.50%
Separation (1kHz, 32Ω)	-98dB	-98dB	-68dB	-68dB
Output Impedance	0.4Ω	0.4Ω	0.6Ω	0.6Ω

Preamp Output (PRE OUT)

Performance	Balanced Solid-State Timbre (XLR)	Balanced Tube Timbre (XLR)	Single-Ended Solid-State Timbre (RCA)	Single-Ended Tube Timbre (RCA)
Maximum Output Level (Volume Controlled)	12.0Vrms @ 47kΩ	12.0Vrms @ 47kΩ	6.0Vrms @ 47kΩ	6.0Vrms @ 47kΩ
Frequency Response (Fs = 192kHz)	10Hz-70kHz, -1.0dB	20Hz-70kHz, -1.0dB	10Hz-70kHz, -1.0dB	20Hz-70kHz, -1.0dB
Dynamic Range (A-weighted, 20Hz-20kHz)	125dB	117dB	124dB	117dB
SNR (A-weighted, 20Hz-20kHz)	124dB	117dB	124dB	117dB
THD+N (A-weighted, 20Hz-20kHz)	0.0009%	0.18%	0.0008%	0.18%
Separation (1kHz, 47kΩ)	-108dB	-106dB	-107dB	-105dB
Output Impedance	20Ω	20Ω	10Ω	10Ω

Line Output (LINE OUT)

Performance	Balanced Solid-State Timbre (XLR)	Balanced Tube Timbre (XLR)	Single-Ended Solid-State Timbre (RCA)	Single-Ended Tube Timbre (RCA)
Output Level (Not Volume Controlled)	4.0Vrms @ 47kΩ	4.0Vrms @ 47kΩ	2.0Vrms @ 47kΩ	2.0Vrms @ 47kΩ
Frequency Response (Fs = 192kHz)	10Hz-70kHz, -1.0dB	20Hz-70kHz, -1.0dB	10Hz-70kHz, -1.0dB	20Hz-70kHz, -1.0dB
Dynamic Range (A-weighted, 20Hz-20kHz)	126dB	117dB	124dB	115dB
SNR (A-weighted, 20Hz-20kHz)	125dB	116dB	124dB	115dB
THD+N (A-weighted, 20Hz-20kHz)	0.0009%	0.18%	0.0008%	0.18%
Separation (1kHz, 47kΩ)	-110dB	-108dB	-109dB	-107dB
Output Impedance	20Ω	20Ω	10Ω	10Ω

* Images in this document show prototype units. Specifications and technical information are subject to change without prior notice.