zidoo 芝杜 Specification

Model	NEO X UHD Hi-End Media Player
Hardware	
Chassis	Aviation Aluminum Alloy
CPU	Realtek RTD1619 DR hexa core 64-bit A55
GPU	ARM Mali G51 MP3
DAC Audio	ES9038Pro+XMOS XU216 Hard decoding up to stereo Native DSD512；768KHz@32bit PCM, MQA
Display	5-inch OLED HD touch screen
Power Supply	Dual linear power supplies significantly improve the power purity by feeding for digital and analog circuits respectively. Two high quality toroidal transformers are made up of high-magnetic-density iron core and 99.99% pure copper coil. It not only provides higher power output, but also ensures lower ripple and magnetic leakage interference.

Media Playback

Audio	Formats	Support native SACD ISO, DFF, DSF, APE, FLAC, WAV, DTS, MP3, AAC, M4A, OGG, WMA, AIF, M4R, MP2, AMR, CUE Track, MQA etc.
	Highest Sampling	DSD stereo DSD512; PCM stereo768KHz@32bit; MQA full decoding
Video	Resolution and Frame Rate	Up to 3840x2160, 60Hz（23.976,59.94,25,30,50,60 auto switching）
	Video Encoding	Support HEVC/H.265/H.265/VP9 encoding
	Video Playback	BD/UHD BDMV/ISO, MKV, M2TS, MTS, TS, MP4, MOV, AVI, WMV, MPG, MPEG, VOB, FLV, 3GP, TP etc.
Playback Ways	Local Playback	Support hard drive formats including EXT3, EXT4, NTFS, FAT32, EXFAT; Hard drive capacity supporting up to 16TB.
	LAN Playback	NAS playback is supported, NFS, SMB V1/V2/V3, DLNA protocols

Main Ports

Storage Extension	USB	USB3.0X1, USB2.0X2
	SATA	Built-in SATA3.0 (no hard drive is included in 3.5-inch HDD bay)
Network	Ethernet	1*RJ-45(10/100/1000Mbps)
	WiFi	2.4G+5G dual band WiFi, 802.11 a/b/g/n/ac 2x2 MIMO 867Mbps
	Bluetooth	BT4.1
HDMI Output	HDMI 2.0 OUT	Support UHD 4K@60fps HDR output, audio passthrough and object-based three-dimensional multi-channel formats.
Digital Audio Input	Bluetooth Audio Input	CSR8675 flagship module, supporting lossless audio protocols such as SBC/AAC/aptX/aptX LL/aptX HD/LDAC.
	AES/EBU Digital Input	XLR(2.0CH)
	SPDIF Coaxial Input	RCA(2.0CH)
	USB DAC Input	USB Type-B (up to stereo DSD512, PCM 768KHz, MQA format） Compatible with Windows (7, 10), Mac, Android
Analog Audio Output	Analog RCA Output	RCA L/R stereo (2.0 CH), (hard decoding)
	Analog XLR Output	XLR balanced L/R stereo (2.0 CH), (hard decoding, fully balanced circuit supports postive and reverse polarity settings）
Digital Audio Output	Optical	SPDIF (2.0CH/5.1CH)
	Coaxial	RCA(2.0CH/5.1CH)
Amp Output	Balanced Output	4.4mm balanced headphone port*1 (low gain mode: 16-32Ω/high gain mode 32-300Ω)
	Single-ended Output	6.3mm singl-ended headphone port*1 (low gain mode: 16-32Ω/high gain mode 32-300Ω)

Analog Audio Characteristics

Pre Output	XLR(balanced) Output	Output Level(Vrms): 4.1 Vrms THD+N: -110dB（0.00031%） Noise: 2uVrms SNR: 118dB(20Hz-20kHz) Frequency Response: ±0.25dB(20Hz-20kHz) Crosstalk:-126dB(1kHz,Fs=44.1kHz) DNR:118dB
	RCA(single-ended) Output	Output Level(Vrms): 2.2 Vrms THD+N:-109dB（0.00035%） Noise: 2.6uVrms SNR: 115dB(20Hz-20kHz) Frequency Response: ±0.258dB(20Hz-20kHz) Crosstalk: -132dB(1kHz,Fs=44.1kHz) DNR: 114dB
Analog Audio Characteristics	4.4mm Headphone Balanced Output（high/low gain mode）	Output Level(Vrms): 3.0 Vrms Output Power: 410mW/32Ω THD+N: -110dB（0.00032%） Noise: 1.7uVrms SNR: 120dB(20Hz-20kHz) Frequency Response: ±0.25dB(20Hz-20kHz) Crosstalk: -131dB(1kHz,Fs=44.1kHz) DNR: 118dB

	Headphone Output	6.3mm Headphone Single-ended Output (standard low gain mode)	Output Level(Vrms): 1.5Vrms Output Power: 110mW/32Ω THD+N: -108dB（0.0004%） Noise: 3.2uVrms SNR: 112dB(20Hz-20kHz) Frequency Response: ±0.25dB(20Hz-20kHz) Crosstalk: -128dB(1kHz,Fs=44.1kHz) DNR: 110dB
		6.3mm Headphone Single-ended Output (high gain mode)	Output Level(Vrms): 2.6Vrms Output Power: 42mW/300Ω THD+N:-108dB（0.0004%） Noise: 3.3uVrms SNR: 114dB(20Hz-20kHz) Frequency Response: ±0.25dB(20Hz-20kHz) Crosstalk: -132dB(1kHz,Fs=44.1kHz) DNR: 108dB
Vision Technologies		HDR	Support all mainstream high dynamic range HDR (HDR10/HLG/HDR10+/Dolby Vision) and 12Bit color depth, BT.2020 wide color range, YCbCr 4:4:4 color space;
		Dolby Vision	Support full-format Dolby Vision playback including single/dual layer ISO/UHD original discs, MKV and MP4. Brightness and color info are output frame by frame via dynamic metadata processing. The shadow is darker while the hightness is brigther. Eye-catching visual effect can also be displayed even in weak light and backlight environment.
		Dolby Vision VS10 Engine	NEO X uses the Dolby Vision VS10 processing engine, no matter what formats or display devices (Dolby Vision, HDR, HLG, SDR, etc.), it can bring a consistent excellent experience.
		Automatic Frame Rate Switching	Exclusively support 23.976, 59.94Hz accurate frame rate output, effectively avoiding splash screen due to repeated frames every a few minutes.
Features		Home Theater	Brand-new movie management system has greatly improved the management efficiency for massive movies with consice user interface, various intelligent and personalized classification, beautiful visual experience and free modular management.
		Seamless Blu-ray Playback	MPLS structure Blu-ray seamless branching playback are supported; BD and UHD Blu-ray menu are supported.
		Subtitle	Online subtitle download; External SUP and ASS special effects subtitles; Brightness adjustment for embedded PGS and external graphics special effects subtitles; External subtitle font, color, size and position can be customized; Judging subtitle encoding automatically to avoid subtitles garbled.
		Streaming Music	Music can be pushed to NEO X through AirPlay, Spotify, DLNA, etc. Making full use of the high-quality audio decoding feature to enjoy your favorite music.
		Music Player	ZIDOO MUSIC 6.0 is capable of adding massive music files, automatically matching and generating artists, album introductions, dynamic lyrics, etc.; Genre, sampling rate, album and artist can be displayed with personalized classification; Creating favorite playlists, quick searching songs by albums, artists, song initials etc.; CUE track display and playback are supported.
		Multiple Filtering Modes and Personalized EQ	7 types of PCM filters and 4 types of DSD high-pass filters; Multiple personalized EQ custom adjustment to meet the needs of different music styles.
		Break Android SRC Limit	Zidoo is the first to break through Android SRC limits among the industry. HDMI and SPDIF output up to 192KHz sampling rate.
		Blu-ray Menu	Support full Blu-ray menu for UHD and BD movies
Control Methods	Trigger	12V Trigger IN/OUT	12V trigger in/out port can be connected to amplifier and audio system to trigger devices linkage for switch-on/ switch-off.
	Smart Control	RS232	RS232 standard 9-pin serial port (complete control protocol commands can be supported, power on/off is supported)
		Control 4	Zidoo is officially certified by control4, just install and add the latest certified zidoo driver in the control4 system.
		HTTP	Supported (complete protocol code can be supported)
		APP Control	Support Zidoo Controller APP control on iPhone, Android mobile phone, iPad, WOL (wake in LAN) also works.
	Fuselage Control	Touch Screen	OLED touch screen
		Buttons	Controlling by multi-function knobs and buttons on the front panel
	Remote Control		Infrared Bluetooth learning remote control
	Front		

Diagrams	Back	
	Side	
Package	Product Dimensions	395(L) X 291(W) X 110(H) mm
	Package Dimensions	490 （L） X 415(W) X 240(H) mm
	Power Supply	AC 110~240V 50/60Hz (built-in dual linear power supply), wide voltage adaptive switching
	Accessories	Remote control*1, Power cable*1, Antenna*3, User manual*1