

# Cayin iDAC-8 Specification

iDAC-8 Product Information			
DAC	AK4191 Digital $\Delta\Sigma$ Modulator 2x AK4499EX (Mono Mode)	Vacuum Tube	RCA: 6H6b-B x2 XLR: 6H6b-B x2
Volume Control	NJW1195AV 4-channel electronic controlled analog volume	Output Modes	Fixed level: Line Out Variable level: Pre Amp Out
Display	3.12" 256 x 64 OLED Dot-matrix	Power Supply	45W toroidal transformer
Digital Inputs	I <sup>2</sup> S, USB Audio, Coaxial (RCA), Coaxial (BNC), AES/EBU, Optical,	Power Management	29,200uF Nichicon filtering capacitors + LDO + Regulators
Analog Outputs	Balanced: XLR x2 Single-ended: RCA x2	Physical Control	Power On/Off, Source, Timbre, Line/Pre, Menu/Volume Knob
Weight	~4.6kg	Dimension	270x215x70 (mm) (L×W×H)

iDAC-8 Analogue Outputs (Line Out)					
Output	RCA Single-ended		XLR Balanced		
	Timbre	Solid State	Vacuum Tube	Solid State	Vacuum Tube
Output Level (47k $\Omega$ load)		2.2V+2.2V		4.2V+4.2V	4.1V+4.1V
Frequency Response ( $F_s=192kHz$ )		20-50kHz ( $\pm 0.2dB$ )			
THD+N (@1kHz, $F_s=192kHz$ , A-weighted)		$\leq 0.0007\%$	$\leq 0.05\%$	$\leq 0.0006\%$	$\leq 0.8\%$
Dynamic range (@1kHz, A-weighted)		$\geq 120dB$	$\geq 113dB$	$\geq 126dB$	$\geq 126dB$
SNR (@1kHz, A-weighted)		$\geq 117dB$	$\geq 111dB$	$\geq 126dB$	$\geq 126dB$
Channel separation (@1kHz, 47k $\Omega$ load)		$\geq 116dB$	$\geq 105dB$	$\geq 121dB$	$\geq 122dB$
Output impedance		~12 $\Omega$	~60 $\Omega$	~24 $\Omega$	~1k $\Omega$

iDAC-8 Analogue Outputs (Pre Out)					
Output	RCA Single-ended		XLR Balanced		
	Timbre	Solid State	Vacuum Tube	Solid State	Vacuum Tube
Output Level (47k $\Omega$ load, maximum)		6V+6V		12V+12V	10V+10V
Frequency Response ( $F_s=192kHz$ )		20-50kHz ( $\pm 0.2dB$ )			
THD+N* (@1kHz, $F_s=192kHz$ , A-weighted)		$\leq 0.003\%$	$\leq 0.2\%$	$\leq 0.005\%$	$\leq 0.8\%$
Dynamic range (@1kHz, A-weighted)		$\geq 123dB$	$\geq 120dB$	$\geq 124dB$	$\geq 123dB$
SNR (@1kHz, A-weighted)		$\geq 122dB$	$\geq 119dB$	$\geq 123dB$	$\geq 122dB$
Channel separation (@1kHz, 47k $\Omega$ load)		$\geq 114dB$	$\geq 108dB$	$\geq 118dB$	$\geq 116dB$
Output impedance		12 $\Omega$	~60 $\Omega$	~24 $\Omega$	~1k $\Omega$

\* THD+N measured at Volume = 81

iDAC-8 Digital Inputs	
I <sup>2</sup> S	Connector: HDMI Type A (The device transmits I <sup>2</sup> S signal with HDMI connector, it is not compatible with standard HDMI device)
	PCM Input: 16Bit to 32Bit, 44.1kHz to 768kHz
	DSD Input: DSD-64 to DSD512 (22.6MHz)
USB DAC Input	Connector: USB Type-B
	PCM Input: 16Bit to 32Bit, 44.1kHz to 768kHz
	DSD Input: DSD-64 to DSD512 (22.6MHz) Native; DoP256 (11.2MHz)
	Compatibility: Windows 10/11, macOS, Android#, iOS*
	Mode of Operation: Asynchronous USB Audio 2.0 Class
AES/EBU	Connector: XLR3 Male
	PCM Input: 16Bit to 24Bit, 44.1kHz to 192kHz
	DSD Input: DoP64 (DSD over PCM 2.82MHz)
	Impedance: 110 $\Omega$
Coaxial	Connector: RCA, BNC
	PCM Input: 16Bit to 24Bit, 44.1kHz to 192kHz
	DSD Input: DoP64 (DSD over PCM 2.82MHz)
	Impedance: 75 $\Omega$
Optical	Connector: TOSLINK
	PCM Input: 16Bit to 24Bit, 44.1kHz to 176.4kHz
	DSD Input: DoP64 (DSD over PCM 2.82MHz)

\* Some model might require designated accessories such as camera connection kit.

# Android devices with OTG Audio output