



Product Information

MCU	Snapdragon 660	Vacuum Tube	KORG Nutube 6P1 x2
System	Customized Android 9.0	DAC	ROHM BD34301 x2
Memory	6GB LPDDR4X	Volume Control	JRC NJW1195A (4 Channels)
Storage	128GB eMMC, TF (upto 1TB)	Bluetooth	BTv5.0 with multiple codecs LDAC, UAT, AAC, SBC
Google Play	Preinstalled	Wi-Fi	2.4G/5G IEEE 802.11 a/b/g/n/ac
Display	5" (1280 x 720) OLED multi-point touch screen	Phone Out	3.5mm (Single-Ended) 4.4mm (Balanced)
Physical Control	Volume knob, Power On/Off Playback control buttons	Line Out	3.5mm (Single-Ended) 4.4mm (Balanced)
USB	Type C: USB3.0, OTG, QC3.0, Digital Audio	Digital Interface	I ² S, SPDIF Coaxial (embedded) USB Audio (in and out)
Chassis	Sandblasted CNC Aluminum	Bundled Player	Cayin Music; HiBy Music HiByLink support
Dimension	147 x 77.5 x 25mm	Lossless	DTA bypass Android SRC
Net Weight	~442g	Battery	3.8V 10000mAh (38Wh)

3.5mm Headphone Output									
		Solid State				Vacuum Tube			
Power Rating		16Ω	32Ω	64Ω	150Ω	16Ω	32Ω	64Ω	150Ω
	P	420mW	240mW	140mW	64mW	420mW	240mW	140mW	64mW
	P+*	720mW	480mW	240mW	100mW	720mW	480mW	240mW	100mW
Freq. Response		20Hz-20kHz (±0.2dB, Fs=192kHz)							
THD+N		0.003%				0.1%			
		(1kHz, 1Vrms, Fs=192kHz; 20Hz-20kHz, A-Weighted)							
Dynamic range		121dB (20Hz-20kHz, A-Weighted)				112dB (20Hz-20kHz, A-Weighted)			
SNR		121dB (20Hz-20kHz, A-Weighted)				112dB (20Hz-20kHz, A-Weighted)			
Channel separation		78dB (1kHz, Fs=44.1kHz)							
Output impedance		0.6Ω							

4.4mm Headphone Output									
		Solid State				Vacuum Tube			
Power Rating		16Ω	32Ω	64Ω	150Ω	16Ω	32Ω	64Ω	150Ω
	P	760mW	480mW	300mW	150mW	760mW	480mW	300mW	150mW
	P+*	1200mW	750mW	375mW	160mW	1200mW*	750mW*	375mW*	160mW*
Freq. Response		20Hz-20kHz (±0.2dB, Fs=192kHz)							
THD+N		0.001%				0.05%			
		(1kHz, 1Vrms, Fs=192kHz; 20Hz-20kHz, A-Weighted)							
Dynamic range		125dB (20Hz-20kHz, A-Weighted)				120dB (20Hz-20kHz, A-Weighted)			
SNR		125dB (20Hz-20kHz, A-Weighted)				120dB (20Hz-20kHz, A-Weighted)			
Channel separation		110dB (1kHz, Fs=44.1kHz)							
Output impedance		1.2Ω							

* P+ mode is not available in Class A Operation Mode.

Line Out		
3.5mm	Output Level	2.0V(@10kΩ, LO Level = High) 1.5V(@10kΩ, LO Level = Mid) 1.0V(@10kΩ, LO Level = Low)
	Freq. Response	20Hz-20kHz(±0.2dB,Fs=192kHz)
	THD+N	0.001% (1kHz,Fs=44.1kHz;20Hz-20kHz,A-Weighted)
	Dynamic Range	121dB (20Hz-20kHz,A-Weighted)
	SNR	123dB (20Hz-20kHz,A-Weighted)
	Channel Separation	100dB (1kHz,Fs=44.1kHz)
4.4mm	Output Level	4.0V(@47kΩ, LO Level = High) 3.0V(@47kΩ, LO Level = Mid) 2.0V(@47kΩ, LO Level = Low)
	Freq. Response	20Hz-20kHz(±0.2dB,Fs=192kHz)
	THD+N	0.001% (1kHz,Fs=44.1kHz;20Hz-20kHz,A-Weighted)
	Dynamic Range	125dB (20Hz-20kHz,A-Weighted)
	SNR	127dB (20Hz-20kHz,A-Weighted)
	Channel Separation	107dB (1kHz,Fs=44.1kHz)

Digital Interface	
I ² S	Connector: Mini HDMI (Transmits I ² S signal via HDMI connector, not compatible with standard HDMI devices)
	PCM up to 32Bit/768kHz; DSD up to DSD512
S/PDIF Coaxial	Connector: USB-C(75Ω)
	PCM up to 24Bit/192kHz; DSD up to Dop64
USB Audio Out	Connector: USB-C
	PCM up to 24Bit/768kHz [#] ; DSD up to DSD512 (Native) or DoP256
USB Audio DAC	Connector: USB-C, Asynchronous USB Audio Class 2.0
	Systems: Windows(drivers required), MacOS, Android(partial), iOS
	PCM up to 32Bit/768kHz [#] ; DSD up to DSD512 (Native) or DoP256
Bluetooth	v5.0
	Transmit and Receive Codec: UAT(up to 192kHz), LDAC(up to 96kHz), AAC and SBC (up to 48kHz)

[#] PCM not support 64kHz sampling

Battery and Duration					
Battery Duration	Testing Condition	Screen off, all wireless disabled, 32Ω, mid gain, Class AB, volume 30, playback multi-format music files			
		Vacuum Tube		Solid State	
		3.5mm SE	4.4mm BAL	3.5mm SE	4.4mm BAL
	P	~10Hr	~9Hr	~11Hr	~10Hr
	P+	~9Hr	~8Hr	~10Hr	~9Hr
	Class A	4.4mm (BAL) Vacuum Tube in P mode: ~ 8Hr			
Charging Time	Charger	Standard Charger (5V-2A)		Quick Charge QC3.0	
	Charging Time	~7H		~4.5Hr; 20%-80% ~2Hr	