

MDS SA-CD PLAYER

DP-570S

● High-quality SA-CD/CD drive ● MDS+ D/A converter with four parallel circuits using ANCC ● Programmable playlists for playing tracks in a desired order ● Data disc playback ● Direct Balanced Filter with completely separate line and balanced signals ● Display with sampling frequency and number of quantization bits ● Abundant transport outputs and digital inputs ● Digital connections to a voicing equalizer ● Balanced output phase selector





An SA-CD/CD player born from the evolution of ANCC Technology

With a sophisticated design surrounding graceful disc loading, a solid disc drive, and a D/A converter employing unique low-noise, low-distortion ANCC technology, many years of accumulated expertise have created a highly evolved SA-CD/CD player. Ample input and output terminals, programmable playlists that allow you to enjoy music in your preferred order, and digital connections to a voicing equalizer add additional appeal. You will undeniably relish how the DP-570S recreates all your favorite songs.

Technology of Precision

Transporter Features and Characteristics

■ Accurate reading

Vibration countermeasures in SA-CD/CD players that read audio data from rapidly rotating discs greatly impact sound quality. The DP-570S uses a highly rigid SA-CD/CD drive mounted on a three-ply bottom plate with exceptional vibration dampening capabilities to create a low center of gravity. Additionally, high-carbon cast iron insulators support the structure, preventing the housing from wobbling and significantly reducing external vibrations from reaching the traverse mechanism. The disc loading mechanism supports the traverse mechanism using elastic dampers born from research into shapes and materials. This reduces resonance in the objective lens and actuator that read the discs, thus improving reading precision. Music data is read accurately thanks to these vibration protection technologies and then sent to the digital processor.

■ Comfortable listening environment

Creating a quiet listening environment is a critical detail for any SA-CD/CD player. The motor that rotates the discs employs an outer rotor brushless DC motor to minimize vibrations and operating noise. The five-layer large bridge cover surrounding the traverse mechanism also shields against vibrational noise from high-speed disc rotation.

■ Smooth disc loading

Carved from an aluminum block and then finished with a hard anodized aluminum and satin treatment, the elegant and elaborate disc tray uses high-quality steel bearing shafts to open and close smoothly and quietly.







Traverse mechanism

Objective lens and actuator

Digital Processor Features and Characteristics

■ MDS+ D/A converter with four parallel circuits using ANCC

MDS+ drives multiple delta-sigma type D/A converters connected in parallel to provide drastically improved performance. By driving four outputs from a high-performance ES9028PRO DAC chip (ESS Technologies) in parallel, the DP-570S almost doubles (=\sqrt{4}) overall performance for distortion, noise suppression, linearity, etc. Because the improvements provided by the MDS+ principle are independent of signal frequency and level, output signal noise at very low levels can also be minimized, a feat that conventional delta-sigma converters have extreme difficulty achieving. The I-V conversion amplifier uses the low-noise, low-distortion ANCC (Accuphase Noise and distortion Canceling Circuit) principle, further enhancing the effect provided by MDS+.

* ANCC is a technology that improves performance by using a subamplifier to cancel noise and distortion in the main amplifier.



DAC assembly



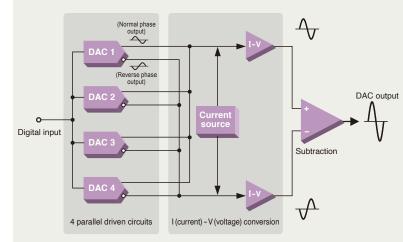
High-performance ES9028PRO DAC chip

■Direct balanced filter circuit

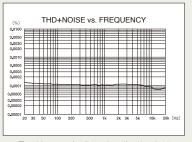
To output an ideal signal, the DP-570S uses a Direct Balanced Filter circuit with independent line and balanced output circuits.



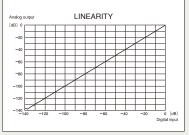
Filter amplifier assembly



MDS+ D/A converter with four parallel circuits

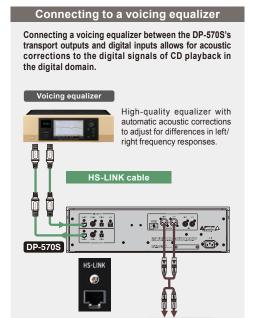


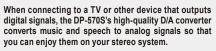
Total harmonic distortion (incl. noise) vs. frequency response



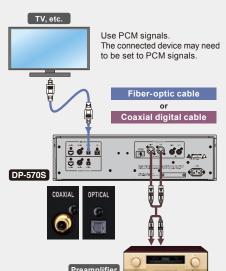
Linearity (digital input vs. analog output)





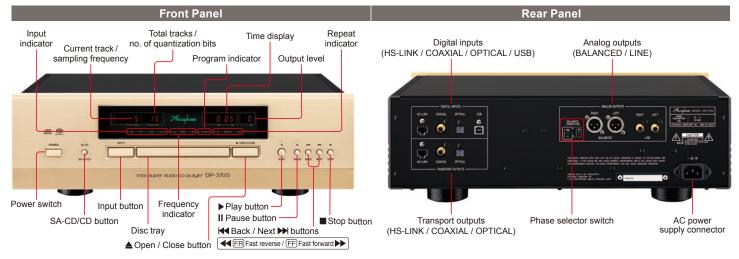


Connecting to TVs, etc.



Connecting to PCs, etc. The DP-570S features a USB port (type B) for high resolution data playback when connecting to

a PC using a USB cable. PC, etc. Compatible sampling frequencies PCM signals: max. 384 kHz/32-bit DSD signals: max. 22.5 MHz/1-bit (Max. 11.2 MHz for DoP) USB 2.0 cable with Type B connector DP-570S



DP-570S Guaranteed Specifications

Compatible Disc Formats	2-channel Super Audio CD				
	CD				
	Data disc	CD-R/-RW, DVD-R/-RW/+R/+RW	Supported formats: WAV, FLAC, DSF, DSDIFF		
Data Read Principle	Non-contact optical pickup				
Laser Diode Wavelength	SA-CD	655 nm			
	CD	790 nm			
Transport Outputs	HS-LINK	Proprietary standard	Dedicated HS-LINK cable		
	OPTICAL	JEITA CP-1212 compliant	JEITA standard fiber-optic cable		
	COAXIAL	IEC 60958 compliant, AES-3 compliant	75 ohm coaxial digital cable		
Digital Inputs	HS-LINK	Proprietary standard	Dedicated HS-LINK cable		
	USB	USB 2.0 High-Speed	USB 2.0 cable with Type B connector		
	OPTICAL	JEITA CP-1212 compliant	JEITA standard fiber-optic cable		
	COAXIAL	IEC 60958 compliant, AES-3 compliant	75 ohm coaxial digital cable		

Sampling Frequencies	HS-LINK	DSD	2.8 MHz		1-bit
	ver. 1	PCM	32 / 44.1 / 48 / 88.2 / 96 / 176.4 / 192 kHz		16 to 24-bit
	HS-LINK	DSD	2.8 / 5.6 MHz		1-bit
	ver. 2	PCM	32 / 44.1 / 48 / 88.2 / 96 / 176.	4 / 192 / 352.8 / 384 kHz	16 to 32-bit
	USB	DSD	2.8 / 5.6 / 11.2 / 22.5 MHz (Max. 11.2 MHz for DoP)		1-bit
		PCM	44.1 / 48 / 88.2 / 96 / 176.4 / 192 / 352.8 / 384 kHz		16 to 32-bit
	OPTICAL	PCM	32 / 44.1 / 48 / 88.2 / 96 kHz		16 to 24-bit
	COAXIAL	PCM	32 / 44.1 / 48 / 88.2 / 96 / 176.4 / 192 kHz		16 to 24-bit
D/A C	Converter		4MDS+ principle		
Frequenc	cy Respon	se	0.5 to 50,000 Hz	+0 dB, −3 dB	
Total Harmonic	Distortion -	- Noise	0.0006 %	20 to 20,000 Hz	
Signal-to	-Noise Ra	tio	121 dB		
Dynamic Range			118 dB		
Channel Separation			117 dB	20 to 20,000 Hz	
Output Volta	Output Voltage BALAI		2.5 V, 50 ohms	Balanced XLR type	
and Impedar	and Impedance LII		2.5 V, 50 ohms	RCA phono jack	
Output L	Output Level Control		0 to -80 dB	1 dB steps	Digital
Power Requirements			120 V, 220 V, 230 V AC (voltage as indicated on rear panel)		
			50/60 Hz		
Power C	consumption	on	18 W		
Maximum	Dimension	ons	Width 465 mm (18.3") × Height 151 mm (6.0") × Depth 393 mm (15.5")		
Mass			Net	18.4 kg (40.6 lbs)	
			In shipping carton	25 kg (56 lbs)	

• Measurement methods for guaranteed specifications conform to JEITA CP-2402A

Supplied accessories

- AC power cord (2 m) Audio cable AL-10 with plugs (1 m) Remote Commander RC-150
- USB Driver 4 CD • USB Driver 4 Setup Guide

Remarks

- This product is available in versions for 120/220/230 V AC. Make sure that the voltage shown on the rear panel matches the AC line voltage in your area. The 230 V version has an Eco Mode that switches power off after 120 minutes of inactivity.
- The shape of the plug of the supplied AC power cord depends on the voltage rating and destination country.

