

MDS SA-CD PLAYER DP-560



Accuphase Laboratory, Inc.

1

DP-560 is a succession model of DP-550. Technical highlights of DP-560 are newly developed SA-CD drive and ultra low THD and noise performance. They are inherited from our flagship SA-CD transport DP-950 and digital processor DC-950.

Front display

- Easy to see: Sampling Frequency & Number of Effective Bits



Accuphase Laboratory, Inc.

2

DP-560 can show the sampling frequency and the number of effective bits of all input signals on the front display.

Dimensions and Weight

- Same unit dimensions but heavier weight

DP-550

W: 465 mm
H: 151 mm
D: 393 mm

Weight: 18.5 kg



DP-560

W: 465 mm
H: 151 mm
D: 393 mm

Weight: 18.8 kg

Long and Heavy
Bridge for quietness

Accuphase Laboratory, Inc.

3

The dimension of DP-560 is as same as those of DP-550. The weight becomes slightly heavier than DP-550. This is due to the reinforcement of power supply circuit and new SA-CD drive mechanism.

New SA-CD/CD Drive

- Larger bridge cover to reduce motion noise
- High performance vibration absorber



Accuphase Laboratory, Inc.

4

The Bridge cover of SA-CD drive mechanism is bigger and longer than that of DP-550. This is very effective for reducing noise caused of motor drive and air flow by disc rotation. This cover is three storied parts, molded base, iron insulator, and aluminum cover. There are uncountable air gaps between each materials to absorb vibration. Furthermore, laser pickup module is mounted with vibration absorbers. Those are made of the silicon which is selected from many kinds of silicon materials for this mechanism.

By these complete techniques, total noise level you hear has been reduced dramatically. It become less than one third of DP-550. In fact, you can hear nothing.

Internal view

- Fully separated circuit & solid construction



Accuphase Laboratory, Inc.

5

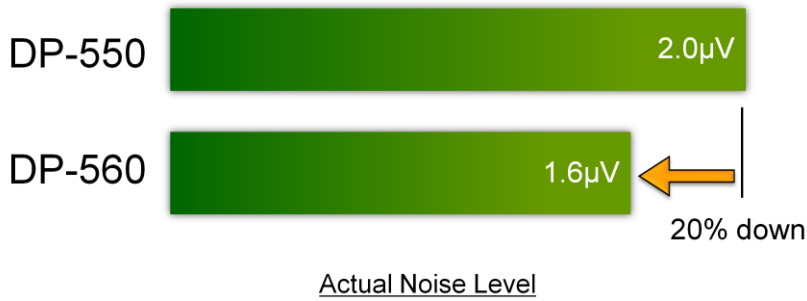
DP-560 is applied systematical layout. Each circuit block is logically placed to make the signal path short as possible.

The digital circuit is on the right side and analog circuit is on the left side at the back panel side.

Logic control board is on the right side of SA-CD drive mechanism, and on the left side, reinforced power supply is installed with the power transformer.

Electrical Performance

- Ultra Low Noise



Accuphase Laboratory, Inc.

6

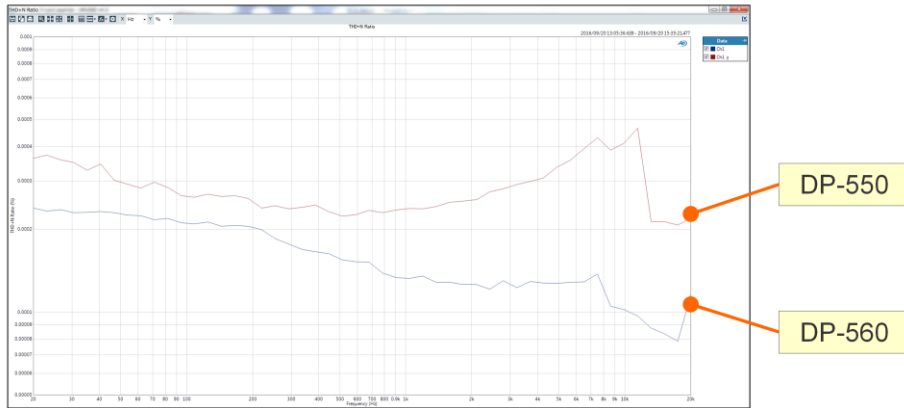
Ultra Low Noise is one of the main technical features of DP-560.

The former model, DP-550 has the excellent noise performance, however, DP-560 achieves 20% output noise voltage lower than DP-550.

DP-560 guarantees 119dB Signal to Noise ratio which means 2.8µV of output noise voltage.

Electrical Performance

- Ultra low THD+Noise



THD + Noise to Frequency

Accuphase Laboratory, Inc.

7

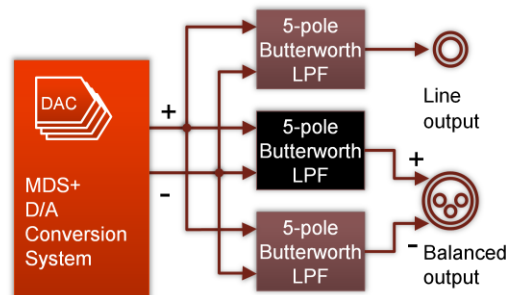
DP-560 proudly shows the great THD+Noise characteristics which are quite important for music playbacks, and this clearly proves that DP-560 can stand comparison with our flagship digital processor DC-950.

D/A converter

- 4 parallel D/A converters per channel
 - ES9018S 32bit Hyper Stream DAC
 - MDS+ Architecture for all digital signals
- Direct Balanced Filter
 - Balanced connected independence post filters



ES9018S



Accuphase Laboratory, Inc.

8

For D/A converter section, Accuphase updates the DAC chip to ESS Technology's 32bit Hyperstream DAC ES9018S for DP-560.

ES9018S has 8 DACs inside, and DP-560 uses 4 DACs connected in parallel per channel with Accuphase's unique technology, MDS+ conversion system.

Full-balanced structure is employed after D/A converter section in DP-560.

In addition, the independent low pass filter is installed for each audio output.

Due to this, the sound signals from all the outputs become high quality.

Digital Inputs

- HS-LINK
 - Version1: 192kHz/24bit, 2.8224MHz/1bit
 - Version2: 384kHz/32bit, 5.6448MHz/1bit
- Balanced, Coaxial: 192kHz/24bit
- Optical: 96kHz/24bit
- USB2.0: 384kHz/32bit, 11.2896MHz/1bit



Accuphase Laboratory, Inc.

9

DP-560 has 4 digital inputs, Coaxial, Optical, HS-LINK and USB.

USB Input accepts 384kHz/32bit-PCM or 11.2896MHz-DSD. DSD data can be received both DoP (DSD over PCM) and ASIO2.1.

HS-LINK has been evolved into Version2.

Original HS-LINK(Ver.1) transmits and receives only 192kHz/24bit-PCM or 2.8224MHz-DSD, but Ver.2 comes to be able to transmit and receive 384kHz/32bit-PCM, 5.6648MHz-DSD.

DP-560 automatically recognizes either Ver.1 or Ver.2 transmissions.

HS-LINK Version2 Available

- HS-LINK is upgraded to Ver.2
 - Transmits master clock separately
 - Supports up to 384kHz/32bit-PCM, 5.8224MHz-DSD
 - Use the same HS-LINK cable as Ver.1
- HS-LINK Ver.1 output is still available.
 - Backward compatibility.



HS-LINK Cable

Accuphase Laboratory, Inc.

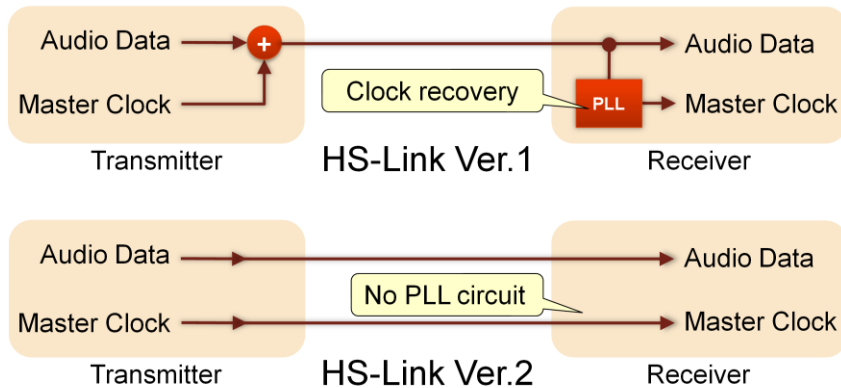
10

HS-LINK Version 2 extends the HS-LINK standard.

For backward compatibility, DP-560 is still available HS-LINK Ver.1 output.

HS-Link Version2 Advantages

- Transmitting the master clock separately
 - No Jitters occurred from Clock Recovery circuit



Accuphase Laboratory, Inc.

11

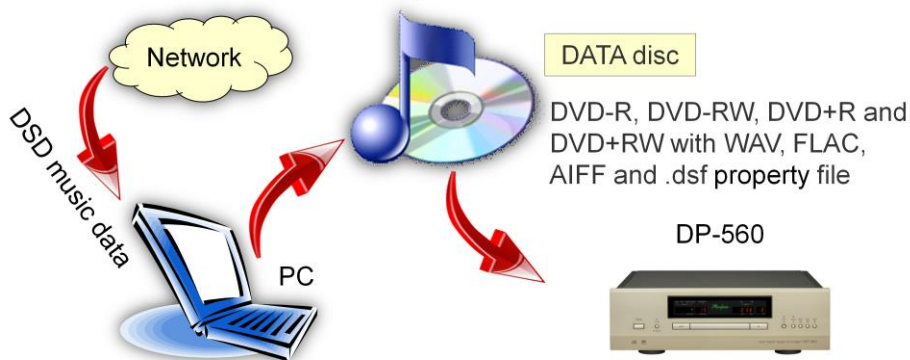
The biggest feature of HS-LINK Ver.2 is sending the music signal and the master clock separately to D/A converter in a receiver.

HS-LINK Ver.1 sends the music signal merging the master clock together, PLL circuit for master clock recovery is needed at receiver side.

Since master clock is been transmitting as it is, in HS-LINK Ver.2, not only master clock recovery is unnecessary at receiver side but it comes to be free from the jitter at PLL circuit.

“DATA Disc” Available

- New SA-CD drive can play DATA Disc which is made with your PC



Accuphase Laboratory, Inc.

12

DATA Disc playback is available.

You can record music files on blank DVD by using your PC.

DP-560 can play 192kHz 24 bit data of WAV, FLAC, AIFF format, and 5.6MHz 1bit DSD data also.

You can enjoy all kinds of digital data with DP-560.