High-grade playback not only of SACDs but also of conventional CDs

Single lens/twin pickup high-speed access mechanism

Digital processor ready for 2.8224 MHz/1 bit and 192 kHz/24-bit source formats

MDS Plus type D/A converter with ultimate conversion precision

Transport section outputs and digital inputs

HS-Link capability via option board
Rediscover what the Compact Disc is all about — Integrated SACD/CD player with MDS Plus type D/A converter. Transport section features single lens/twin pickup high-speed access mechanism. Processor handles latest formats such as 2.8224 MHz/1-bit and 192 kHz/24-bit. Separate construction of transport and processor sections and respective connectors allow independent use. HS-Link input/output board available as option.

The integrated SACD/CD player DP-77 is based on the superior know-how gained through the development of the separate type player combo DP-100 and DG-101, using the latest advances in digital technology. This player lets you fully enjoy the wide frequency range and amazing dynamics of the SACD format. But the DP-77 also brings out hidden musical qualities inherent in conventional CDs, letting you hear even familiar recordings like you’ve never heard them before.

The transport section of the DP-77 features a dedicated DSP for the digital servo circuitry, assuring highly precise processing of the digital SACD signal recorded according to the DSD principle. The highly critical laser pickup section features a single lens/twin pickup high-speed access mechanism to achieve totally accurate signal readout. The processor section uses the latest in sophisticated digital technology to provide support also for 2.8224 MHz/1-bit and 192 kHz/24-bit sources. The D/A converter section which has a crucial effect on sound quality employs the MDS Plus principle, with multiple strictly selected Delta Sigma converters in a parallel configuration, assuring unprecedented conversion precision.

The SACD/CD transport section and the processor section of the DP-77 are kept entirely independent of each other, to achieve optimum performance in each regard. This manifests itself in utterly authoritative sound. Thanks to transport outputs and digital processor inputs, the two sections can be used separately as well.

An optional HS-Link Board is available for combination with the DC-330/DP-100 or for high-quality sound field compensation with the DG-28/DG-38, including wide-range sources. Even multi-amping with the DF-35 is possible, opening up a whole world of high-class audio possibilities.

Connection examples for effective use of SACD/CD transport

- Digital servo with dedicated DSP assures highly accurate signal pickup for SACD and CD
- Plays also regular CDs with impressive quality
- Single lens/twin pickup mechanism minimizes access time
- Strong, precision-machined chassis with resonance and vibration resistant construction
- “High Carbon” cast iron insulator feet with superior damping characteristics further enhance sound quality
- Multi-function remote commander RC-28 supplied as standard equipment
- Optional HS-Link output board for SACD/CD transport section
- Dedicated coaxial and optical connector for CD signal output

The DP-77 provides output facilities of the SACD/CD transport section to allow flexible combinations. By installing an HS-Link option board, the unit can be used with a DC-330 for SACD/CD playback. From the DC-330, the digital signal can be further routed to the Voicing Equalizer DG-28/DG-38, the Channel Divider DF-35, etc. This offers a host of possibilities for creating a multi-amped system entirely in the digital domain.

Connection to DC-300 for SACD/CD playback and digital connection to DG-28 for sound field compensation

Using HS-Link, it is possible to keep the connection of the digital domain until directly before the power amplifier. The various components are connected with HS-Link cable.
Digital processor supports new generation formats with high sampling rates such as 2.8224 MHz/1-bit and 192 kHz/24-bit

- MDS Plus type D/A converter achieves stunning performance and sound quality
- Ultra jitter-free PLL circuit topology totally eliminates pulse distortion
- Fully separate processor section with coaxial and optical digital inputs
- Ultra high-speed digital coupler ensures effective separation between digital and analog sections
- Digital level control with adjustment range 0 dB to –60 dB
- Balanced and unbalanced analog outputs

MDS (Multiple Delta Sigma) is a revolutionary design which employs several delta sigma type converters in a parallel configuration. In the combined output of these multiple converters, conversion errors cancel each other out, resulting in a drastic improvement in all relevant aspects of converter performance: accuracy, S/N ratio, dynamic range, linearity, THD, etc. In the MDS Plus type converter employed in the DP-77, this principle has been further refined by enhancing the current-to-voltage converter in the signal adder section for even better stability and top-notch performance. The DP-77 uses four delta sigma converters in parallel, which results in an overall performance improvement by a factor of \( \sqrt{4} \).
The DP-77 allows separate use of its SACD/CD transport section and digital processor section, for connection to other digital components. Besides the digital input and output provided as standard equipment, there are also two option board slots on the rear panel which accept various kinds of boards.

* For copyright reasons, the SACD signal does not appear at any other output except HS-Link and can therefore not be recorded digitally.

### Option Boards

<table>
<thead>
<tr>
<th>Option board type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPC Coaxial (BNC) Input Board</td>
<td>DI-BNC1</td>
</tr>
<tr>
<td>Digital Input/Output Board</td>
<td>DIO-OC1</td>
</tr>
<tr>
<td>HPC Coaxial (ST) Input Board</td>
<td>DIO-ST1</td>
</tr>
<tr>
<td>AES/EBU Input/Output Board</td>
<td>DIO-PR01</td>
</tr>
<tr>
<td>HS-Link Input Board</td>
<td>DII-HS1</td>
</tr>
<tr>
<td>HS-Link Output Board</td>
<td>DII-HS1</td>
</tr>
</tbody>
</table>

### Guaranteed Specifications

* Measurement disc: PHILIPS 3122-783-00632

#### Transport Section
- **Compatible disc formats**: 2-channel Super Audio CD
- **Data read principle**: Non-contact optical pickup
- **Digital input connectors**: COAXIAL, OPTICAL
- **Digital inputs**: SACD: 650 nm
- **Digital outputs**: COAXIAL: 0.5 Vp-p, 75 ohms
- **Digital processor section**: COAXIAL Format: EIAJ CP-1201 compliant
- **Digital outputs**: CD: 780 nm
- **Sampling frequencies**: 32 kHz, 44.1 kHz, 88.2 kHz, 96 kHz
- **Signal-to-noise ratio**: 110 dB (24-bit input, low-pass filter off)
- **Dynamic range**: 108 dB (20 to 20,000 Hz)
- **Frequency response**: 0.5 ~ 50,000 Hz
- **Output level control**: BALANCED: 2.5 V at 50 ohms, RIAA phono jack
- **Power requirements**: AC 120 V, 230 V, 50/60 Hz
- **Weight**: 17.7 kg (39.0 lbs) net

#### Digital Processor Section
- **Digital inputs**: OPTICAL: 2.8224 MHz (1 bit, 2-channel DSD)
- **Digital outputs**: 24-bit MDS Plus converter
- **Frequency response**: 0.5 ~ 50,000 Hz
- **Total harmonic distortion**: 0.0008% (20 to 20,000 Hz)
- **Signal-to-noise ratio**: 114 dB
- **Dynamic range**: 110 dB (24-bit input, low-pass filter off)
- **Channel separation**: 108 dB (20 to 20,000 Hz)
- **Output voltage and impedance**: BALANCED: 2.5 V at 50 ohms, XLR type
- **Output level control**: 0 to -60 dB, 1 dB steps (digital)
- **Power consumption**: 24 W
- **Maximum dimensions**: Width 475 mm (18-7/10"), Depth 240 mm (9-1/4"), Height 252 mm (9-15/16")
- **Weight**: 23.0 kg (51.0 lbs) in shipping carton