Superb audio quality, long life and rapid random access to recorded material are just a few reasons why the Compact Disc has been so enthusiastically adopted by broadcast studios, post production houses and other facilities around the world. The Sony CDP-3000/CDS-3000 CD Player/Remote Control System was introduced to bring the advantages of this then new format to the specialized operational requirements of its professional users. As CDs have become even more widely used, Sony research has followed their operational development—leading to the introduction of the CDP-3100/CDS-3100 CD Player System.

Consisting of the CDP-3100 player and CDS-3100 remote controller, this compact system offers functions such as variable speed playback and a JOG function and can be expanded with a range of optional interface boards. Enhanced features include the ability to preview the beginning and end of a recorded track. The addition of an AES/EBU digital output makes possible the direct connection of professional equipment of complementary performance and quality. The CDP-3100 system meets the demands of professional users—both now and in the future.
MAIN FEATURES

Superb Sound Quality
The CDP-3100 employs an 18-bit D/A conversion system with 8 times oversampling, giving excellent sound quality and an outstanding dynamic range. It also employs a linear power supply to ensure superb audio performance and reliable operation.

Convenient Remote Control Capability of Outstanding Features
The CDS-3100 remote controller provides convenient remote operation of the CDP-3100 player. To minimize misoperations in on air application, a ‘one player to one remote controller’ approach is chosen. Only a single cable is required for the control interface since the power is supplied to the CDS-3100 from the player via this cable.

Together, the CDP-3100 and CDS-3100 provide many useful functions:

Jog Search Function
A JOG search function, operated from the CDS-3100, allows speedy, easy and precise search to a desired start point.

Preview 'END' and 'BEGIN' Functions
The CDP-3100/CDS-3100 has END REHEARSAL or BEGIN REHEARSAL functions. The END REHEARSAL function plays back the last 15 seconds of a selected track. The BEGIN REHEARSAL function makes it possible to playback from the beginning of the track.

Three Timer Modes Selectable
Three timer modes, REMAINING TIME, ACTUAL TIME and SET TIME, can be selected to an LED (Light-Emitting Diode) display on the CDP-3100/CDS-3100. These are helpful in on air application in broadcasting stations.

Variable Speed Playback
The playback speed can be varied over a range of ±12.5% in 0.1% steps. The speed can be set by the jog dial or the numeric keys on the remote controller.

AMS (Auto Music Sensing) Function
The AMS function enables a rapid start from a point where modulation is detected on a track. This eliminates the possibility of replaying a part of a disc where no signal is recorded. This is a useful function for on air applications in broadcasting stations and for sound sweetening in video/film post production houses where perfect timing is essential. The detection level is selectable from -57dBu, -63dBu and -78dBu.

Cue Point Memory Function
Up to nine cue points (start points) on a disc can be easily memorized and recalled.

Last! Cue Memory Function
After a CD has been played from a memorized cue point, this function automatically recues the disc to the same point.

**Fader Start Function**

The CDP-3100 can be controlled from a mixing console via a built-in 8-pin DIN remote control interface. This connector accepts fader start and stop cues from the mixing console ideal for on air applications. The fader start cue can be delayed by 250ms.

**Excellent System Expandability**

The CDP-3100/CDS-3100 can be fitted with a range of optional interface boards, so that a system can be configured according to its application.

**DABK-3101 Memory Board**

The DABK-3101 provides both a memory start function, for a rapid start, and a memory JOG function with an accuracy of one CD frame.

**DABK-3102 Interface Board**

The DABK-3102 is an interface board for digital mixers and video editors. AES/EBU digital output (which can be locked to reference video sync, word sync or D-l sync in the range of 38kHz to 50kHz), reference video sync input, word sync input, D-l sync input and timecode signals are provided. The absolute time on a disc can be transformed to SMPTE 30Hz NDF, 29.97Hz DF or EBU 25Hz timecode. This interface board also allows the CDP-3100 to be controlled from a digital mixer or Sony BVE Series video editors via a 9-pin serial remote connector.

**DABK-3103 Interface Board**

With the DABK-3103 fitted, the CDP-3100 can be controlled from a DAE-3000 digital audio editor. Both an SDIF-2 output and a word sync input are provided.

**Player Modes Selectable**

The CDP-3100 has three alternative player modes for use over a range of applications - on air, video post productions, recording studios and so on. For example, in Mode 1 for an on air application, only the STOP key functions during actual on air use. These modes can be easily set on the rear panel of the CDP-3100.

**End Alarm Function**

A warning signal is provided 15 seconds before the completion of the track being played. This signal is routed to the 8-pin DIN connector on the rear panel.

**Single Play Mode and Index Mode**

The CDP-3100 provides a single play mode in which the CDP-3100 automatically stops when it finishes playing one track. In its index mode, the CDP-3100 also stops automatically when it reaches the next index.

**Compact Size**

The CDP-3100/CDS-3100 is an exceptionally compact CD player system. The front loading design of the CDP-3100 player permits two of these units to be mounted side by side in a 19-inch standard rack, and up to four CDS-3100 remote controllers can be mounted in the same way.
Channel Origin Data
The CDP-3100 can send the channel origin data with the channel status of the AES/EBU digital audio signal. The channel origin data can be displayed on the alphanumeric display of Sony digital audio mixers.

Accomodates 8cm (3-inch) and 12cm (5-inch) CDs
Equipped with an AES/EBU digital output for direct connection to professional digital audio equipment

Front Panel of CDP-3100
Rear Panel of CDP-3100

SPECIFICATIONS
CDP-3100 COMPACT DISC PLAYER UNIT

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of channels</td>
<td>2 (stereo)</td>
</tr>
<tr>
<td>Error correction</td>
<td>Sony Super Strategy Cross Interleave Reed-Solomon Code (CIRC)</td>
</tr>
<tr>
<td>D/A converter</td>
<td>18-bit 8 times oversampling</td>
</tr>
<tr>
<td>Frequency response</td>
<td>20Hz - 20kHz ±0.5/-1.0dB (maximum output level)</td>
</tr>
<tr>
<td>Harmonic distortion</td>
<td>Less than 0.01%</td>
</tr>
<tr>
<td>Wow and flutter</td>
<td>Below measurable limit</td>
</tr>
<tr>
<td>Dynamic range</td>
<td>More than 92dB</td>
</tr>
<tr>
<td>Cross talk</td>
<td>Less than -80dB at 20kHz</td>
</tr>
<tr>
<td>Access time</td>
<td>Within 2 seconds</td>
</tr>
<tr>
<td>Variable speed range</td>
<td>±12.5%</td>
</tr>
<tr>
<td>Outputs: LINE OUT</td>
<td>Balanced, XLR-3-32 type (×2), nominal +4dBu (600Ω), maximum +1dBu (600Ω)</td>
</tr>
<tr>
<td>MONITOR OUT</td>
<td>Unbalanced, RCA pin jack (×2), nominal -10dBu (47kΩ), maximum +5dBu (47kΩ)</td>
</tr>
<tr>
<td>DIGITAL OUT: AES/EBU</td>
<td>Maximum 0dBu (32Ω)</td>
</tr>
<tr>
<td>XLR-3-32</td>
<td>(×1)</td>
</tr>
<tr>
<td>HEADPHONE OUT</td>
<td>Maximum 0dBu (32Ω)</td>
</tr>
<tr>
<td>Parallel remote connector</td>
<td>9-pin type</td>
</tr>
<tr>
<td>Remote control connector</td>
<td>10-pin type</td>
</tr>
<tr>
<td>Power requirements</td>
<td>AC 100, 120, 220 - 230, 240V, 50/60Hz</td>
</tr>
</tbody>
</table>

Power consumption: 35W
Dimensions: 212(W) × 118(H) × 408(D) mm
(8 1/3 × 4 1/4 × 16 1/8 inches)
Weight: Approx. 65kg (14 lb 5 oz)
Supplied accessories: AC power cable (1)
Operation manual (1)
Optional accessories: DABK-3101 MEMORY BOARD
DABK-3102 INTERFACE BOARD
DABK-3103 INTERFACE BOARD

CDS-3100 COMPACT DISC PLAYER CONTROL UNIT

Search precision: ±1 CD frame (13.3ms)
Headphone output: Maximum 0dBu (32Ω)
Weight: Approx. 700g (1 lb 9 oz)
Dimensions: 106(W) × 58(H) × 220(D) mm
(4 1/4 × 2 1/8 × 8 6/8 inches)
Supplied accessories: Connecting cable (2m) (1)
Operation manual (1)

- 0dBu = 0.775V r.m.s.
- Design and specifications subject to change without notice.

System Application

(1) DAE-3000 system

- 9-pin
- AES/EBU
- Word sync
- Time code out
- Time code in

file://D:\pdfs\cd-cdp3100.htm
3/13/2002
1. If 9-pin interface is implemented, a digital audio mixer like the DMX-S6000 or the DMX-B4000 can control the CDP-3100 via the 9-pin.

2. Ref. Video, DI sync or Word sync can be used as a reference.