

SONY

PAL

LVR-6000/LVS-6000P

Laser VideoDisc Recorder



CRVdisc
Component Recording Video

LVR-6000 / LVS-6000P

LASER VIDEODISC RECORDER LASER VIDEODISC PROCESSOR

As a leading manufacturer of video, audio, and optical disc products, Sony now launches an innovative "write-once" Laser VideoDisc Recording system. Sony's state-of-the-art technology incorporates the CRV (Component Recording Video) format which allows recording and playing back of superb quality picture and sound. Due to the refinements in the laser pick-up device, the system is capable of quick random access and boasts an extremely long life time. External computer control via an RS-232C port is also provided to maximize user flexibility. Both NTSC and PAL signals can be accommodated with the addition of an optional board. The Laser VideoDisc Recording System is truly a highly versatile video system.

Host of Outstanding Features

LONG LIFE, WRITABLE DISCS

The Laser VideoDisc Recording System allows the user to record images onto blank optical discs. The recorded images are safe for more than 30 years according to the Sony acceleration test.

HIGH QUALITY PICTURE

The adoption of the time compression component recording format ensures that the Laser VideoDisc Recording System records and reproduces high quality picture. The alloy formation techniques used to record onto the optical discs help sustain the image's crispness.

BLACK AND WHITE MODE

The Laser VideoDisc Recording System can be set to record and playback only black and white images. Elimination of color components allows an increase in resolution with the bandwidth of 6.7MHz. This made the Laser VideoDisc Recording System excellent for scientific applications.

MULTIPLE INPUTS/OUTPUTS

The LVS-6000P can accommodate multiple types of video inputs and outputs. Its component inputs/outputs (RGB or Y/R-Y/B-Y) can be used for the highest quality recording and playback. The system is also equipped with a composite input/output to enable interfacing with numerous video sources including VTRs and cameras.

QUICK ACCESS TIME

Any video frame on a disc can be accessed within 0.5 second on the full stroke average.

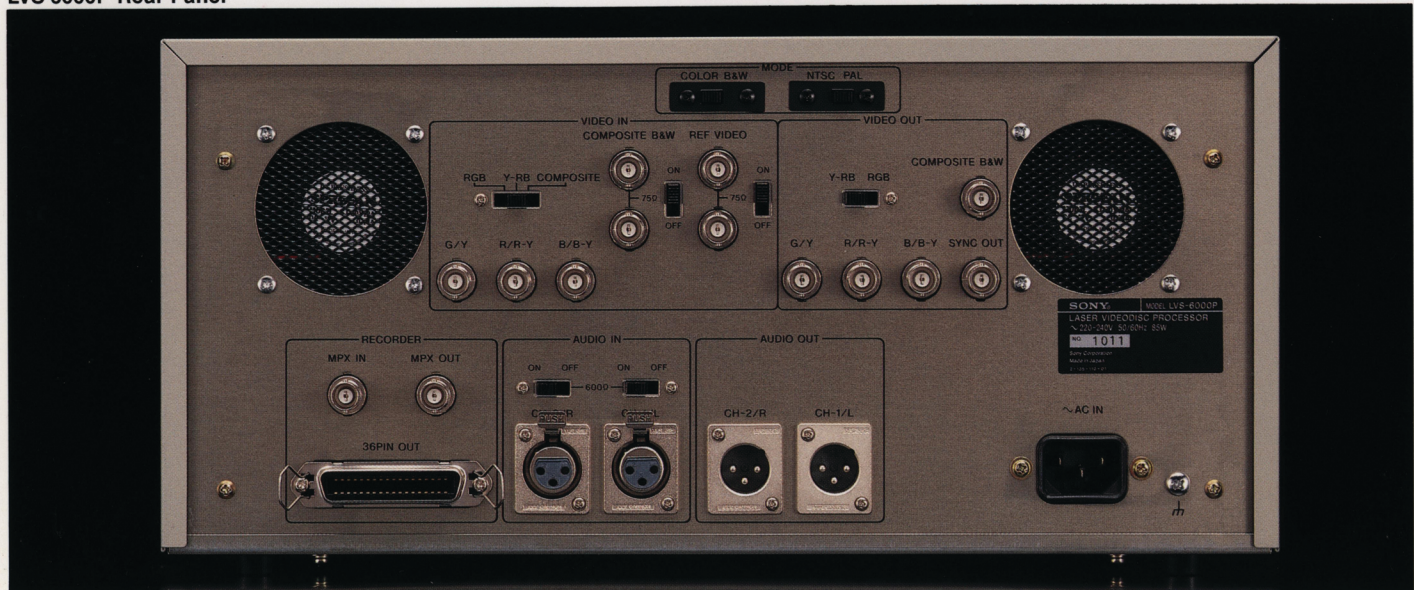
SEMICONDUCTOR DIODE LASER PICKUP

The Laser VideoDisc Recording System employs a high-power semiconductor laser diode, which boasts high durability, long-life, and low power consumption.

FRAME PICTURE RECORDING CAPABILITY

In addition to its ability to record and playback 24 minutes

LVS-6000P Rear Panel



of continuous video and audio, the Laser VideoDisc Recording System allows frame picture recording. A maximum of 36,250 frames in PAL and 43,500 frames in NTSC* can be recorded on one side of the disc.

**NTSC recording is possible only when the optional DB-W6000N NTSC board is installed in the LVS-6000P.*

COMPUTER INTERFACE

The Laser VideoDisc Recording System can be controlled from an external computer via the built-in RS-232C port. The product's software protocol is compatible with that of the Sony LDP series. The optional LDM-5000 Interface Manual will provide detailed protocol information.

CONVENIENT SYSTEM EXPANDABILITY

The Laser VideoDisc Recording System consists of two separate units, a signal processor and a recorder. One processor can be interfaced with up to 10 recorders. When recorders are serially connected and controlled by an external computer, several discs can be recorded and played back consecutively. Furthermore, playback of one segment can be followed by another segment from a different disc without any recognizable transition noise between the two discs.

BOTH PAL AND NTSC SIGNAL PROCESSING CAPABILITY

When the optional DB-W6000N NTSC Board is installed in the LVS-6000P, the Laser VideoDisc Recording System is capable of recording and playing back both NTSC and PAL signals.

PCM AUDIO RECORDING

Audio signals are encoded into a digital form by the PCM (Pulse Code Modulation) circuit. The result is high fidelity audio.

USER DATA

A 64 kByte area is reserved on each side of the optical disc for user data. With the assistance of an external computer, user information such as the disc ID, contents, and picture index can be recorded.

NOISELESS PICTURE PLAYBACK AT VARIABLE SPEEDS

Noiseless pictures can be played back at still and 1/255 to 3 times normal speed in the forward and reverse directions.

GENLOCK CAPABILITY

When a reference video signal (VBS or SYNC) is input, the playback signal will be synchronized with the reference signal.

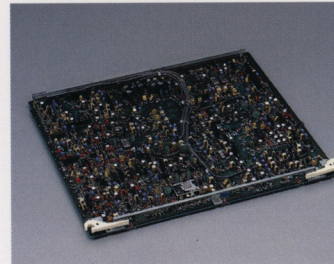
OPTIONAL ACCESSORIES



LVM-3AA0
Laser VideoDisc Media



RM-W5000
Remote Commander
(for wired/wireless remote control)



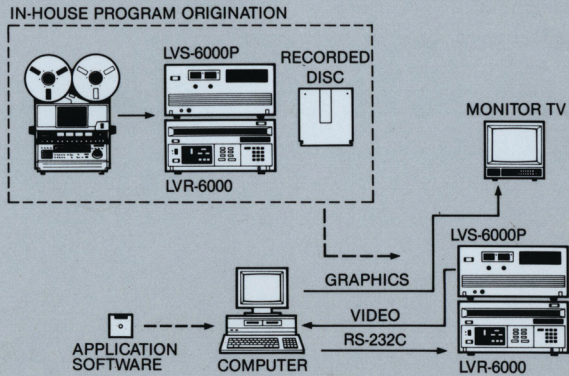
DB-W6000N
NTSC Board

LVR-6000 Rear Panel

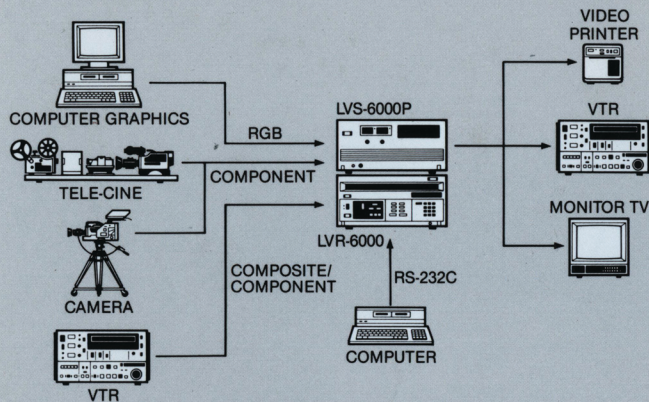


System Applications

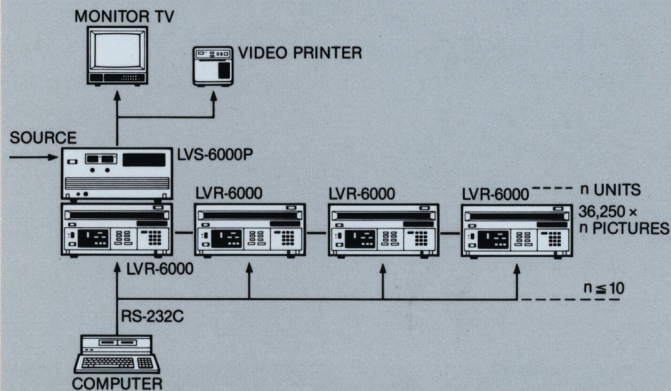
1. INTERACTIVE USE (CAI, SIMULATION, POI, POP)



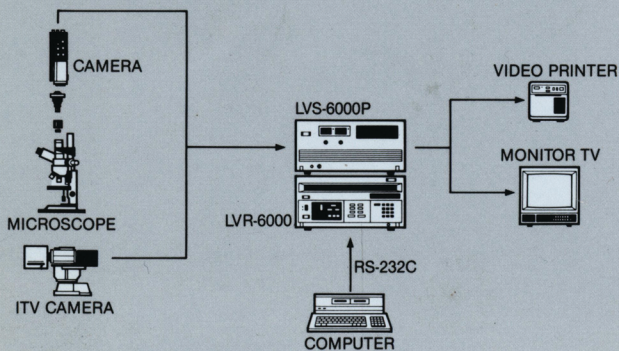
2. FRAME RECORDING (ANIMATION, IMAGE FILING)



3. ARCHIVAL STORAGE/RETRIEVAL SYSTEM



4. SCIENTIFIC ANALYSIS SECURITY (SURVEILLANCE)



Specifications (LVR-6000/LVS-6000P)

GENERAL	
Power requirements:	AC220V to 240V, 50Hz
Power consumption:	Recorder: 60W Processor: 85W
Operating temperature:	5°C to 35°C (41°F to 95°F)
Storage temperature:	-20°C to 60°C (-68°F to 140°F)
Humidity:	20 to 80%
Weight:	Recorder: 18 kg (39 lb 1 oz) Processor: 12.5 kg (27 lb 9 oz)
User data area:	64 Byte x 1024 tracks per side
Dimensions:	Recorder: 375(W) x 180(H) x 530(D)mm (14 7/8 x 7 1/8 x 20 7/8") Processor: 375(W) x 180(H) x 490(D)mm (14 7/8 x 7 1/8 x 19 3/8")
RECORDING/PLAYBACK SYSTEM	
Recording mechanism:	Alloy mode
Laser:	Semiconductor diode laser (λ: 780nm)
Laser output:	17mW (This output is the value measured at a distance of about 1.6mm from the objective lens surface on the Optical Block Assembly during recording.)
Videodisc:	12" (300mm) (CAV mode only)
Maximum playback/recording time and frames:	24 minutes/side 36,250 frames/side
Spindle revolution:	1500 rpm
Access time:	0.5 sec. (full stroke average)
Variable speed playback:	1/255 to 3 times normal speed in the forward and reverse directions and still
VIDEO	
Signal:	CCIR standard, PAL color
Input:	Composite: 1Vp-p, 75 ohms, unbalanced, sync negative Component: Y: 1Vp-p, 75 ohms, unbalanced, sync negative R-Y, B-Y: 0.7Vp-p, 75 ohms, unbalanced
Output:	RGB: 0.7Vp-p, 75 ohms, unbalanced Composite: 1Vp-p, 75 ohms, unbalanced, sync negative Component: Y: 1Vp-p, 75 ohms, unbalanced, sync negative R-Y, B-Y: 0.7Vp-p, 75 ohms, unbalanced
Bandwidth (luminance):	4.5MHz (color mode) 6.7MHz (black and white mode)
Signal to noise ratio:	48dB
REF. Video/EXT. sync in:	Sync: 0.2Vp-p to 5Vp-p, 75 ohms, sync negative REF. Video: 1Vp-p, 75 ohms, sync negative
AUDIO	
Input CH-1/2 (XLR 3-pin female):	+4dBm, 600 ohms/10k ohms selectable, balanced
Output CH-1/2 (XLR 3-pin male):	+4dBm, 600 ohms, balanced
Headphone:	-46dBs ~ -26dBs, 8 ohm load, binaural, unbalanced
Dynamic range:	88dB
Frequency response:	20Hz to 15kHz
External computer interface:	RS-232C: protocol compatible with the Sony LDP series
ACCESSORIES	
Supplied accessories:	LVR-6000: 36-pin system control cable Operation manual AC power cord BNC cables (2) LVS-6000P: AC power cord Operation manual
Optional accessories:	LVM-3AA0 Laser VideoDisc Media RM-W5000 Remote Commander DB-W6000N NTSC Board LDM-5000 Interface Manual RMM-5000 Rack Mount Kit RCC-5000 36-pin control cable (1.5m)

Design and specifications subject to change without notice.