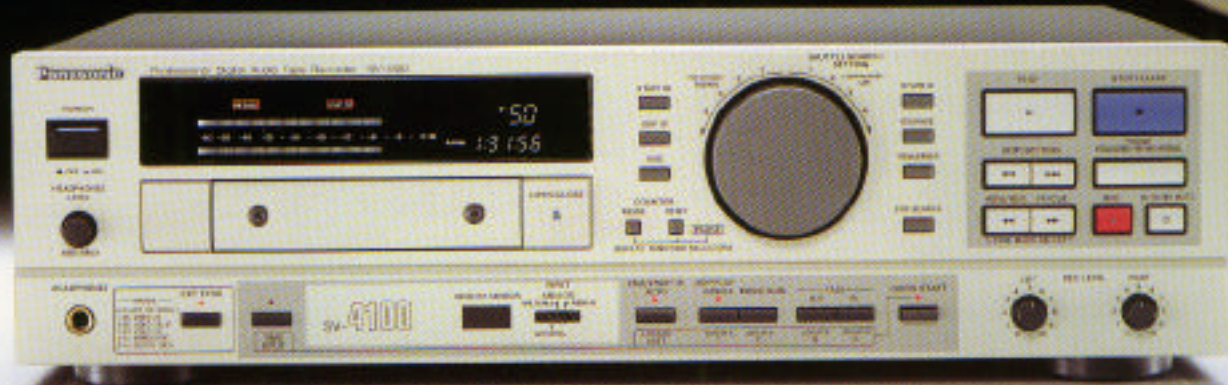


Panasonic[®]

SV-4100

Professional DAT Recorder



SV-4100 Professional DAT Recorder

■ Quick Start with Trim & Rehearsal

■ Flexible Search & Locate

■ 5-Mode External Sync

■ Enhanced Sound Quality

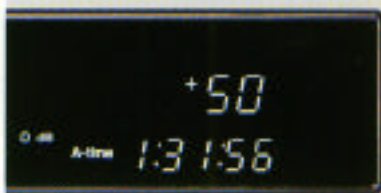
■ Multiple Digital Interfaces

Quick Start with Trim & Rehearsal

Quick Start provides sound right on cue — almost instantly after a play command is executed — thanks to 8 Mbit memory holding about 5 seconds of audio data. Conventional DAT recorders lag about 0.7 seconds, often making them unsuitable for some professional applications.

You can easily adjust the Quick Start position and specify it by A-time (TIME input or LOCATE button), start ID, or PNO. Recording via Quick Start mode is also possible. So two SV-4100s can be used for frame-accurate punch-in/punch-out and assemble editing.

High Precision Trimming



With this RAM stereo scrubbing facility you can adjust the Quick Start position with 1-frame (30ms) resolution over a range of ± 50 frames. Start position can be set as a relative frame value from the present position. And you can use the SHUTTLE dial and SETTING (SKIP) key for adjustment. Absolute time, subcodes and peak level are displayed to provide a general guide to positioning. Frame number is preceded by a + or - sign.

Rehearsal Playback

Without playing the tape itself, you can monitor the level of stored data to check your Quick Start position. This preview capability is handy before actual editing or on-air play. Repeated play is also possible, using about 1.5 seconds of the data — it creates a kind of sampler effect. Since the display shows replay with meter indications, A-time, frame number and IDs synchronized with the audio data retrieved from memory, you can confirm locations by eye as well as by ear.

Frame-Accurate Indexing

Using the Trim and Rehearsal functions, you can accurately determine points to write Start and Skip IDs. Of course, these IDs can be written, rewritten or erased at any point in the recording, and automatically renumbered.

Frame-Accurate Assemble Editing

With two SV-4100 recorders connected via the 8-pin parallel remote control terminals, you can perform synchronized frame-accurate editing. Continuity of edit points can be checked by rehearsal playback. If you enter an editing end position in one of the LOCATE buttons, that can be used to determine a punch-out point, as well.

Flexible Search & Locate

A-time Search

If you know your target A-time, then accessing it is easy and accurate. You can



specify hour, minute, second, and frame. Press PAUSE for search & pause or PLAY for search & play.

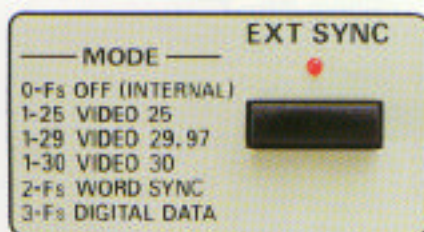
Locate 1 to 4, Last

In most modes, the currently displayed A-time can be assigned to one of the four LOCATE buttons. Then, from stop, pause or play, you can rapidly cue to any of these four addresses by pressing its LOCATE key. In addition, LOCATE LAST takes you to the most recent Quick Start A-time data position.

Skip Search & PNO Search

Searching is also possible by Start-ID or program number. You can have the SV-4100 shift to the Quick Start Trim mode after pausing at the end of the search, allowing you to adjust the position with frame accuracy.

5-Mode External Sync



External sync is essential for many applications such as video postproduction and stereo submix recording. It assures uniformity of timing between different

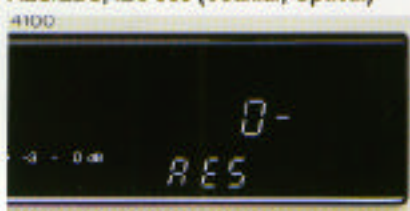
equipment, so that the audio data consistently matches up with the target media. On the SV-4100 you can select from three VIDEO external sync modes (25, 29.97, and 30) or use the WORD SYNC or DIGITAL DATA modes (which lock to the input sampling frequency). The EXT SYNC setting can be displayed and selected with a single key.

Enhanced Sound Quality

The SV-3900 is designed to satisfy the highest professional expectations, in terms of both sound quality and functionality. It features new 20-bit equivalent resolution DACs, together with the same type of 1-bit, 64 times oversampling A-D converter used in the SV-3700 and SV-3900 DAT recorders.

Multiple Digital Interfaces

AES/EBU, IEC 958 (Coaxial, Optical)



Industry standard digital I/O facilities are provided as standard: AES/EBU professional format and IEC 958 consumer format.

Selectable Digital Output Format

For compatibility with non-standard digital audio equipment, the SV-4100 lets you select from four digital output combinations.

Other Pro-Quality Controls & Facilities

3-Way Remote Control

Use GPI for simple triggering of Quick Start play. The 8-pin parallel remote terminal connects to another DAT deck, computer or wired remote. An infrared wireless remote is also supplied.

Single Program Play

Handy function plays program to next start ID, then stops until play key is pressed again. Can also be set to automatically skip unneeded space on tape.

Adjustable Output Level

Analog output can be adjusted for level compatibility with other equipment, and stored for instant recall.

Others

- Error rate display
- Selectable ID6 value for SCMS
- Hour meter display
- Selectable sampling rate
- Shuttle wheel with dual speed range
- 250 times normal speed search
- Digital fade-in/fade-out

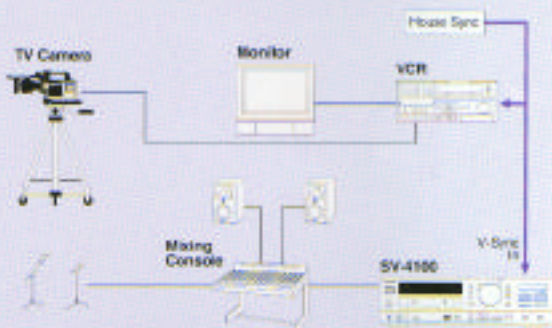




System Applications

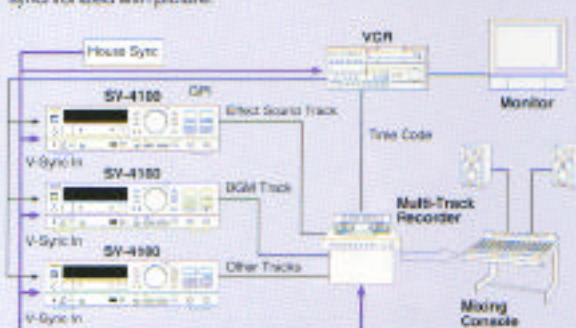
Video Recording

Synchronized picture and sound recording. Ideal for live performance situations.



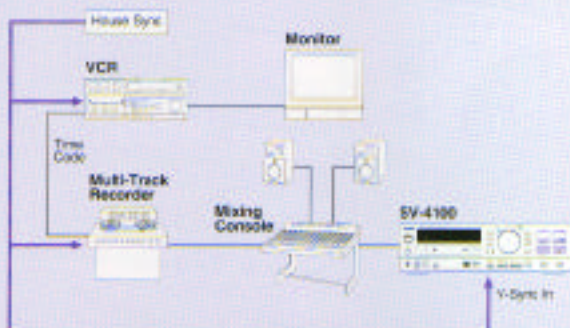
Editing and A/V Post-Production

Utilizes the SV-4100's Quick Start, Single Program Play, and GPI control functions. GPI pulse from video system triggers instant sound playback synchronized with picture.



Mastering

Multi-track mixdown to stereo on the SV-4100 can be synchronized with videotape for soundtrack mixes.



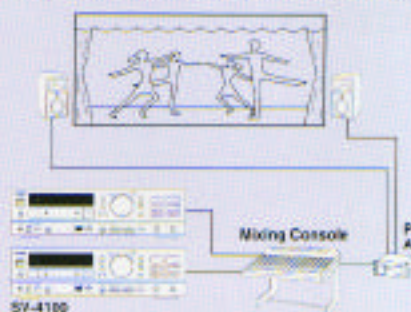
Digital Mixing

For digital mixing, all source signals must be synchronized. This is possible using the Word Sync function of the SV-4100.



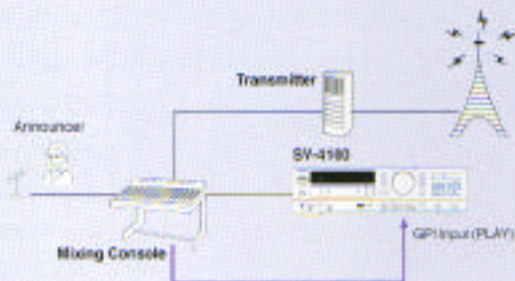
Stage Production

Quick Start and Single Program Play functions enable convenient control and accurate timing of sound and music to match stage action. Automated control systems can interface via B-pin or GPI.



Broadcast

Quick Start, Single Program Play, and GPI are essential features for many on-air broadcast and production situations.



Setting the DAT Quality Standard for Studio Mastering and Editing, Live Performance, On-Air Broadcast and Post-Production.



Derived from the highly successful SV-3700, the SV-4100 was developed to enhance the performance that professional production, broadcast and live-sound systems require. Advanced digital technology offers:

- Quick Start with Trim and Rehearsal
- Accurate Program & Cue Assignment
- External Sync Capability
- Programmable Cue Locations
- Multiple Digital Interfaces
- Enhanced System Diagnostics
- Exceptional (20 bit Equivalent) Sound Quality

SV-4100 Technical Specifications

Signal Format	
Tape Recording System	Rotary head type DAT
Sampling Frequencies	
Recording	48kHz/44.1kHz (analog inputs) 48kHz/44.1kHz/32kHz (digital inputs)
Playback	48kHz/44.1kHz/32kHz (selected automatically)
Number of Quantizing Bits	16-bit linear PCM
Number of Channels	Two (stereo)
Audio Parameters	
Frequency Response	% 48kHz: 10Hz — 22,000Hz (± 0.5 dB) % 44.1kHz: 10Hz — 20,000Hz (± 0.5 dB)
Total Harmonic Distortion	less than 0.05% (± 40 dB, 1kHz) [*] less than 0.007% (± 22 dB, 1kHz) [*]
Dynamic Range	More than 100dB [*]
SN Ratio	More than 92dB [*]
Noise and Flutter	Unmeasurable
Remote Control	
Parallel Remote	8 pin DIN connector (60 functions available)
RFI Remote	Stereo 1/4-inch jack (Play & Pause functions)
Analog Input/Output Characteristics	
Input Connector	XLR-3 type
Nominal Input Level	+4dBu
Input Impedance	10 kohms, balanced
Output Connector	XLR-3 type
Nominal Output Level	+4 — 10dBu (± 15 dB)
Output Impedance	75 ohms, balanced
Headphone Connector	TRS phone jack
Maximum Output Level	30mW + 30mW, 32 ohms
Matching Impedance	8 — 600 ohms
Digital Input/Output Characteristics	
AESEBU Type	
Input	XLR-3 type, 110 ohms, balanced
Output	XLR-3 type, 110 ohms, balanced
EC Type II	
Input	RCA phono type (coaxial), 75 ohms & optical
Output	RCA phono type (coaxial), 75 ohms & optical
External Sync Input/Output Characteristics	
Video Sync Input	
Input	BNC type
Input Signal	NTSC: 29.97 FPS, 30 FPS PAL/SECAM: 25 FPS 1Vp-p, 75 ohms
Nominal Input Level	
Word Sync Input	
Input	BNC type
Input Level	TTL level compatible, 75 ohms
Word Sync Output	
Output	BNC type
Output Level	TTL level compatible, 75 ohms
Transport Mechanism	
Cylinder Diameter	30 mm
Cylinder Rotation Speed	2,000 rpm
Tape Speed	8.15 mm/sec (normal track) 12.225 mm/sec (wide track)
Search Speed	Up to 250 times normal playback speed
FF/Rewind Speed	Up to 250 times normal playback speed
FF/Rewind Time	Approx. 35 sec for a 2-hour DAT tape
General	
Power Consumption	35W
Power Supply	120V AC, 60Hz
Dimensions (W x H x D)	16 1/2 x 4 1/2 x 12 1/2 inches (430 x 122 x 315 mm)
Weight	14.1 pounds (6.4kg)
Included Accessories	Wireless remote control, power cable (1), stereo phono cable (2)

^{*} DIN audio weighted.
Specifications subject to change without notice.
Weights and dimensions shown are approximate.
This product may be subject to export control.

Two Other Models Also Available



SV-3700 Professional DAT Recorder

Developed for professional applications, with attention to critical audio engineering details, from choice of A-D and D-A

converters to interface construction. The result is an outstanding combination of functionality, reliability and sound quality.

SSE44 Remote Controller (Optional)

The optional wired remote control makes it possible to control major functions of the SV-3700 and SV-4100 DAT recorders.



SV-3900 Audio Quality and Full Serial Control

Designed specifically for remote control applications. Up to 32 machines can be connected and individually controlled on

an ES-bus local area network. Also accepts P2 protocols for single machine/controller combinations.

SH-MK390 Remote Controller (Optional)

For network management of single or multiple SV-3900 Pro-DAT machines, the SH-MK390 provides ES-bus serial control of all transport modes and functions.



Panasonic

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