Panasonic®

SV-3800

Professional DAT Recorder

Excepriona Sonic Qualiry

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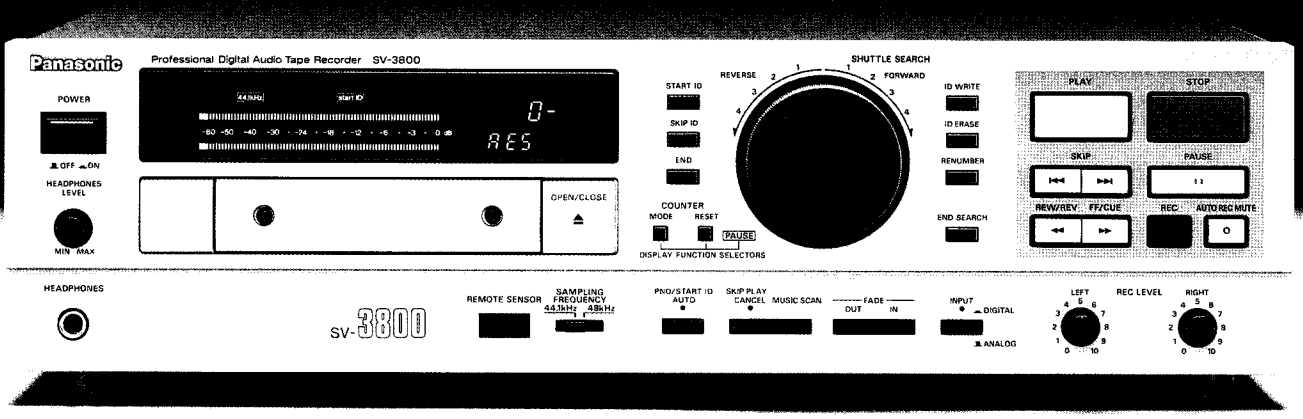
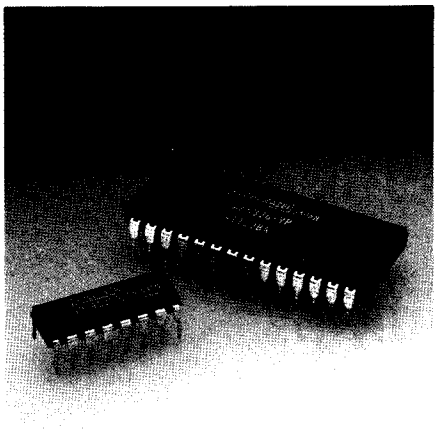


DAT

Digital Audio Tape

SV-3800 Professional DAT Recorder

Technologically Enhanced Professional Performance



Based on the popular SV-3700, the SV-3800 incorporates technological refinements for enhanced sound quality and functionality. It features new 20-bit resolution DACs, together with the same type of 1-bit, 64 times oversampling A-D converter employed in the SV-3700. The result is wider dynamic range, lower noise, and greater linearity. In audible terms this means natural sound, true to the original, with minimum coloration. And of course, the SV-3800 incorporates the highest quality, high tolerance components, resulting in low noise..... and exceptional reliability for which Panasonic is famous.

Enhanced Sound Quality

For professional-quality sound, a 1-bit type A-D converter and high-resolution ladder type D-A converter is the optimum combination available with today's technology. The new SV-3800 inherits this design concept and adds significant improvements.

20-bit Equivalent Resolution D-A Converter

For playback, the higher resolution of the 20-bit equivalent converter used in the SV-3800 offers several benefits. Thanks to its higher resolution, it exhibits improved linearity, while low noise characteristics extend to the high frequencies. The ladder-type DAC design is also resistant to clock jitter. Performance stability is also enhanced by using dual DACs for separate processing of left and right channel data.

64x Oversampling A-D Converter

For recording of analog inputs, the SV-3800 uses a Sigma-Delta type 1-bit converter to achieve high linearity. The high oversampling rate of this ADC produces less group delay in the high frequencies, thereby assuring outstanding phase characteristics.

Noise-Resistant Analog Circuits

High quality, high tolerance audio parts are used exclusively throughout the SV-3800. The circuit configuration has been redesigned with an improved grounding layout for more effective noise suppression. This helps minimize RF interference and hum noise from connected equipment.

Skip Search & PNO Search

For convenient cueing to desired portions of a tape, you can search by Start-ID or program number (PNO). The unit can also be set to skip unwanted portions of the tape by Skip-ID.

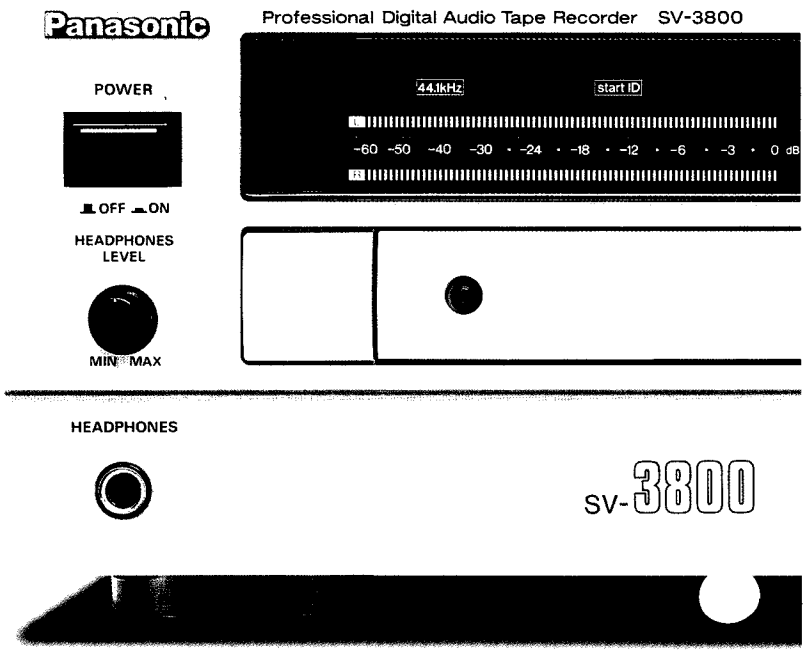
Single Program Play

This function is handy for postprocession, broadcast and live sound applications. It plays the program up to the next start ID, then stops until the play key is pressed again. If Skip Play Cancel is turned off, the unit can also be set to automatically skip unwanted portions of the tape.

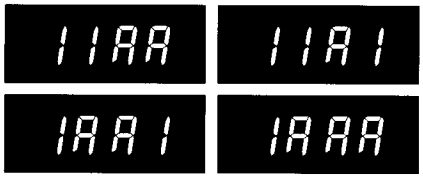
Multiple Digital Interfaces

AES/EBU, IEC 958 (Coaxial, Optical)

Industry standard digital I/O facilities are provided as standard equipment. In addition to AES/EBU professional format XLR terminals, the SV-3800 also has IEC 958 consumer format coaxial and optical input and output connectors.



Selectable Digital Output Format



Compatibility with a wide range of non-standard digital audio equipment is possible. The SV-3800 lets you select from four combinations of digital output terminations and formats (AES/EBU, IEC 958, coaxial, optical), so you can deal with many digital interfaces. Selecting digital I/Os is made easy via front panel controls.

Adjustable Analog Output Level

Analog output attenuation is easily adjustable to deal with a variety of applications and equipment. A front panel switch permits reference level setting to +4dBu for professional equipment or -10dBu for consumer equipment. From +4dBu, attenuation level is adjustable in 1dB steps over a range of +4dBu to -6dBu. The selected attenuation level is clearly indicated on the front panel display.

Selectable Setups on Front Panel

As listed below, all major functions can be set from the front panel. These settings are stored in non-volatile RAM.

- **Digital I/O terminals**
- **Digital output format**
- **Analog output level**
- **Single program play on/off**
- **Blank skip on/off for program play**
- **ID-6 status for SCMS**

Other Pro-Quality Controls & Facilities

Front Panel Hour-Meter Display

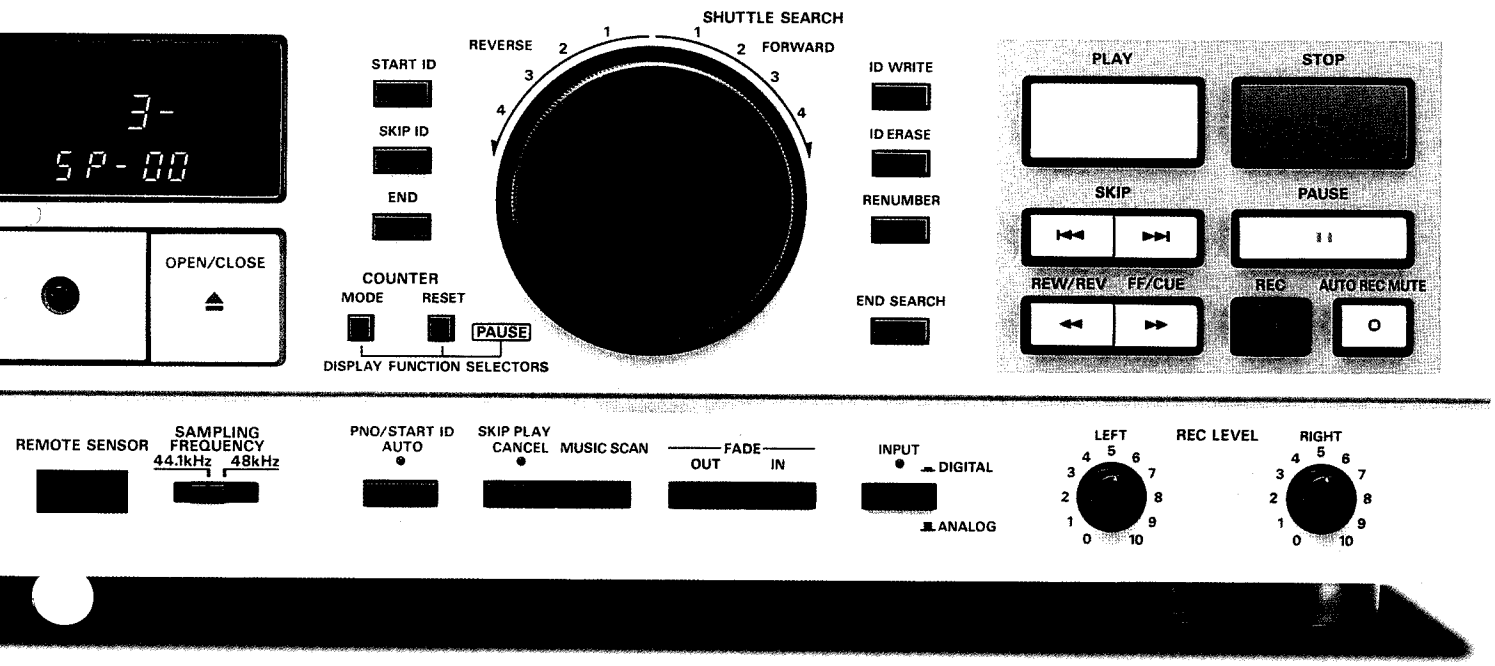
Cumulative cylinder rotation time is shown in 1-hour increments via the front panel display. Non-volatile RAM is used for reliable indication.

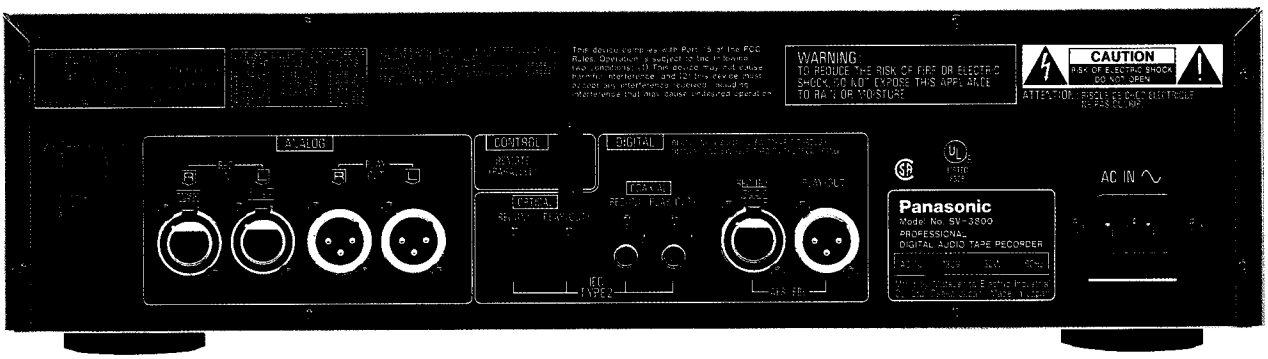
8-pin Parallel Remote Terminal

The 8-pin parallel remote terminal connects to a simple wired remote, for control of 8 basic functions. With a microprocessor-type wired remote these 8 functions plus 42 enhanced functions can be controlled. An infrared wireless remote which controls most front panel functions is supplied as a standard accessory.

Others

- L/R independent recording level controls
- Selectable sampling rate (44.1kHz and 48kHz for analog input recording)
- Error rate display (head A, B, and A+B)
- Shuttle wheel with dual speed range
- 250 times normal speed search
- Digital fade in/fade out





SV-3800 Technical Specifications

Signal Format	
Tape Recording System	Rotary head type DAT
Sampling Frequency	
Recording	48kHz/44.1kHz (analog inputs) 48kHz/44.1kHz/32kHz (digital inputs)
Playback	48kHz/44.1kHz/32kHz (selected automatically)
Number of Quantization Bits	16-bit linear PCM
Number of Channels	Two (stereo)
Audio Parameters	
Frequency Response	
fs: 48kHz	10Hz — 22,000Hz (±0.5dB)
fs: 44.1kHz	10Hz — 20,000Hz (±0.5dB)
Total Harmonic Distortion	Less than 0.03% (+4dBu, 1kHz)* Less than 0.007% (+22dBu, 1kHz)*
Dynamic Range	More than 92dB*
S/N Ratio	More than 92dB*
Wow and Flutter	Unmeasurable
Remote Control	
Parallel Remote	8-pin DIN connector (50 functions available)
Analog Input/Output Characteristics	
Input Connector	XLR-3 type
Nominal Input Level	+4dBu (-18dB rec level)
Input Impedance	10 kohms, balanced
Output Connector	XLR-3 type
Nominal Output Level	+4/-10dBu (-18dB)
Output Impedance	50 ohms, balanced
Headphone Connector	TRS phone jack
Maximum Output Level	30mW + 30mW, 32 ohms
Matching Impedance	8 — 600 ohms
Digital Input/Output Characteristics	
AES/EBU Type	
Input	XLR-3 type, 110 ohms, balanced
Output	XLR-3 type, 110 ohms, balanced
IEC Type II	
Input	RCA phono type (coaxial), 75 ohms & optical
Output	RCA phono type (coaxial), 75 ohms & optical
Transport Mechanism	
Cylinder Diameter	30 mm
Cylinder Rotation Speed	2,000 rpm
Tape Speed	8.150 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	30W
Power Supply	120V AC, 60Hz
Dimensions (W x H x D)	$16^{7}/_{8}$ x $4^{3}/_{4}$ x $12^{3}/_{8}$ inches (430 x 122 x 315 mm)
Weight	13 pounds (5.9kg)
Included Accessories	Wireless remote control Power cable (1) Rack mount kit

* DIN audio weighted (22.4Hz to 22.4kHz bandpass filter)
Specifications subject to change without notice.
Weight and dimensions shown are approximate.
This product may be subject to export control.

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