

panasonic®

AG-DS850H

S-VHS Hi-Fi Editing VCR

AG-DS840H

S-VHS Hi-Fi Video Cassette Player
(NTSC)



ISO9001 / 285780 : PART 1
PM No. 29389

DIGITAL SLOW

Digital Technologies for High Quality Video Production

Digital Signal Processing

Because most video signal processing takes place in the digital domain, precision and reliability are boosted for improved picture quality. Digital processing also helps maintain uniform picture quality during editing. Color blurring is virtually eliminated by the CAC (Chroma Aperture Compensation) circuit and expanded chroma bandwidth. Color uniformity is also assured, thanks to the Digital Field Forward APC circuit which raises chroma S/N.

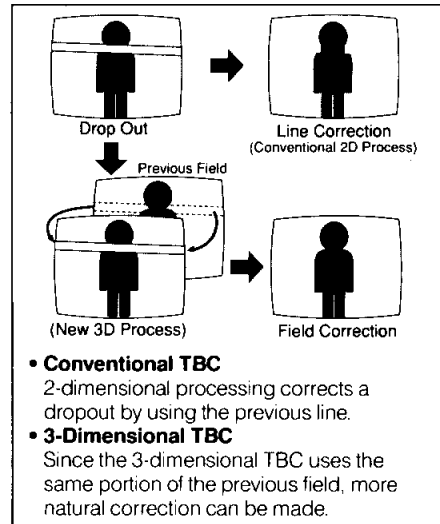
- **Digital Noise Reduction (DNR)** processes Y and C signals separately to boost S/N ratio, thereby minimizing noise during playback.
- **Digital Logical Comb Filter** uses an advanced 3-dimensional system for complete Y/C separation. The result is reduced color and luminance blurring.
- **Switching Noise Masking** effectively eliminates noise caused by head switching.

Digital Slow

A large-capacity memory enables clear, noise-free, high quality slow playback. Playback speed, including Digital Still, is selectable in 10 steps (-1/4, -1/8, -1/16, -1/25, 0, +1/25, +1/16, +1/8, +1/4, +1/2). The AG-DS850H/AG-DS840H editing system offer high-precision slow editing and analysis capabilities. The optional AG-A300 slow-motion controller allows variable speed control of the AG-DS850H/AG-DS840H.

3-Dimensional Digital TBC (Time Base Corrector)

An enhanced performance 3-dimensional type Digital Time-Base Corrector (TBC) boasts a correction range of one field. The VCR continuously retains information for one field memory. This data is used for 3-dimensional type processing, thereby providing excellent dropout compensation. Combined with digital signal processing, the AG-DS850H and AG-DS840H provide reliable, high-quality pictures.



Super-VHS and Amorphous Video Heads

To take full advantage of the high resolution and high S/N ratio of the S-VHS format, the AG-DS850H/AG-DS840H feature special amorphous video heads with higher magnetic coercivity than conventional ferrite heads. Improvement in color reproduction is particularly significant. Expanded color signal frequency response from the amorphous heads enhances picture quality by minimizing color blurring.

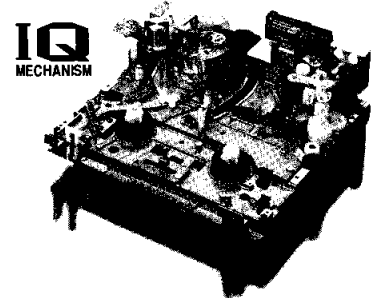
Advanced Design for Outstanding Edit Performance

Compact Design and Low Power Consumption

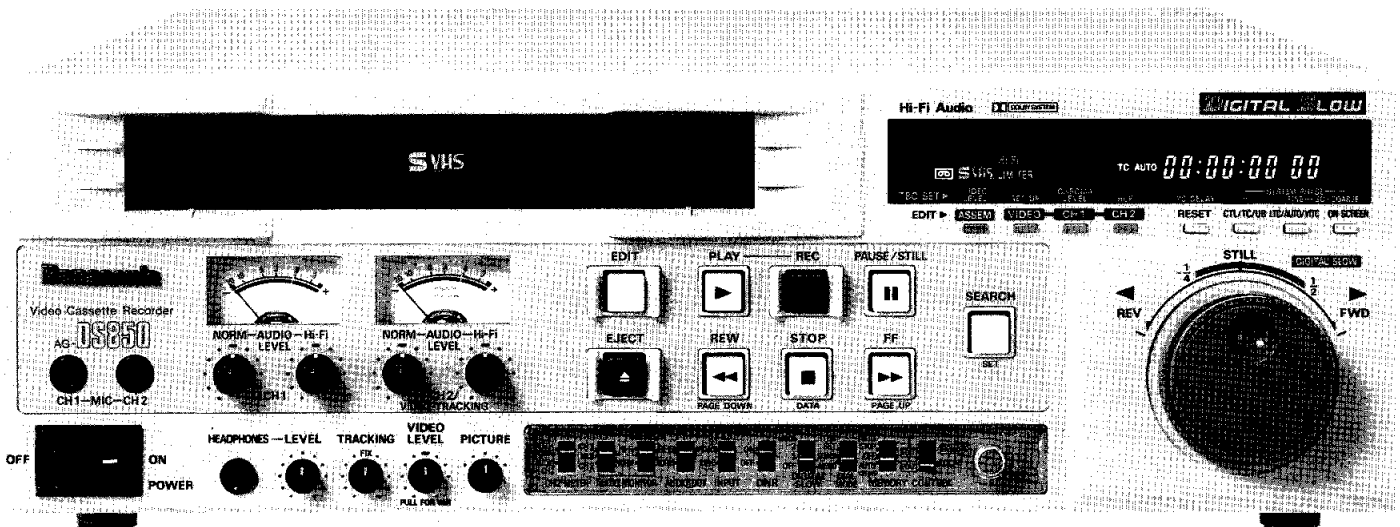
Compared to previous 4 rack units (AG-7750/AG-7650, 7" high), the 3 rack units AG-DS850H/AG-DS840H (5³/₁₆" high) are much more compact for easy space saving installation. They also boast low power consumption for economical operation.

IQ (Intelligent Quest) Mechanism

The IQ Mechanism delivers precise, high-speed operation, plus the reliability that professionals demand. The dual-loading system achieves high-speed response while protecting tapes and heads from damage. Its tape transport mechanism uses five direct drive motors, including two reel drive motors, to attain high precision and response times. A reduced number of parts and simplified circuit wiring contribute to high reliability. Automatic head cleaning also reduces the need for constant maintenance and prevents head-clogging to assure high picture quality.

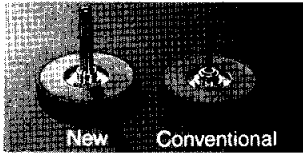


DIGITAL SLOW



32X High Speed Search

With a large capstan spindle (8.9 mm in diameter), the AI Capstan Control System allows high-speed search at 32 times normal speed. At the same time, it minimizes fluctuation in capstan rotational speed in order to control wow.



Jog/Shuttle Dial

During editing, the Jog/Shuttle feature helps you find exact edit points with the touch of a dial. Use the Shuttle at 32 times normal high-speed search to find the scene you want then Jog to pinpoint the desired field accurately.

- **Audio Split Editing** lets you set the edit-in and edit-out points separately from those for video.
- Insert Editing and Assemble Editing

Features for Exceptional Versatility

Component Output Terminals

In addition to composite video terminals, the AG-DS850H/AG-DS840H feature output terminals for connection to other component video equipment. These provide an easy way to transfer source material recorded and edited in the S-VHS format to broadcast and other component video systems.

16:9 Wide Aspect Compatibility

Compatible with the NTSC 525 16:9 Wide Aspect System, the AG-DS850H/AG-DS840H are fully equipped for the next generation of TVs.

Built-in Time Code Generator/Reader

An internal time code generator/reader allows LTC/VITC recording (AG-DS850H only) and playback, making for high-precision time code editing. The AG-DS850H/AG-DS840H permit accurate editing with VITC. In addition, two linear audio channels can be used.

Serial Interface (RS-422A)

The AG-DS850H/AG-DS840H come equipped with an RS-422A 9-pin serial interfaces, the standard control system for professional broadcast components. This provides an easy way to expand your system via connection to MII and other serial control systems.

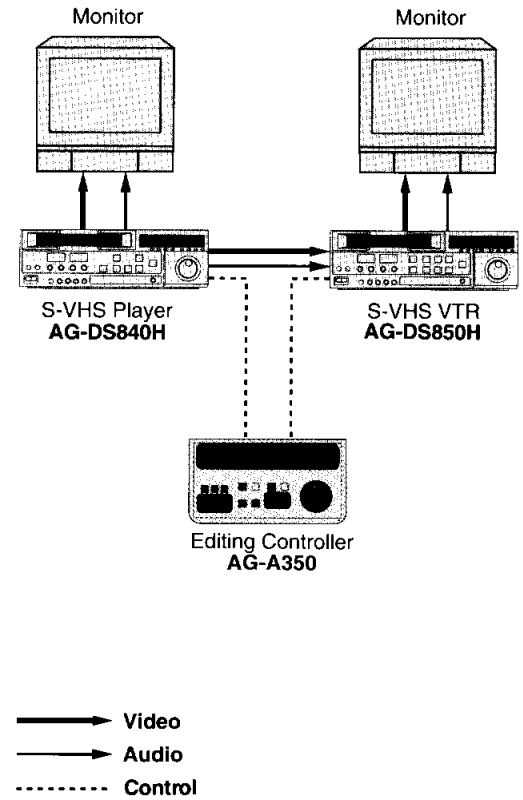
4-Channel Audio

For optimum audio performance, the AG-DS850H/AG-DS840H feature two hi-fi stereo audio channels with a dynamic range of 90 dB, as well as two linear audio channels with Dolby* NR. Each audio channel has its own input (AG-DS850H only) and output with individual channel-level setting capability. Reliable XLR connectors are used as the audio input and output during editing.

* Dolby and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation.

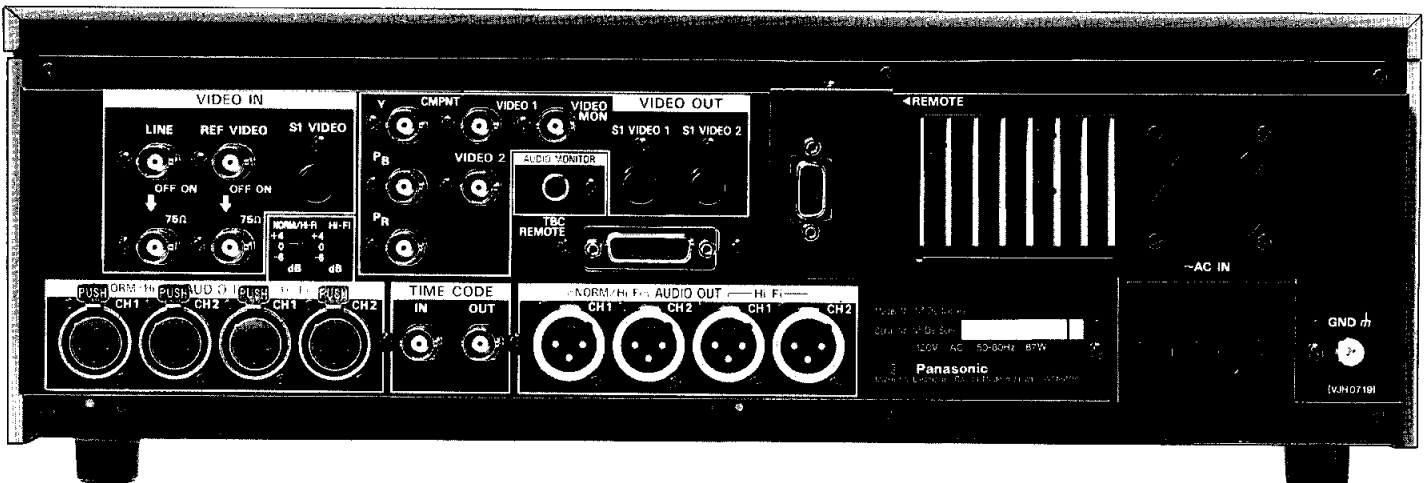
- OSD Menu Setup
- TBC Remote
- 19" Rack-Mountable with optional adaptor AG-M730

Simple Editing System

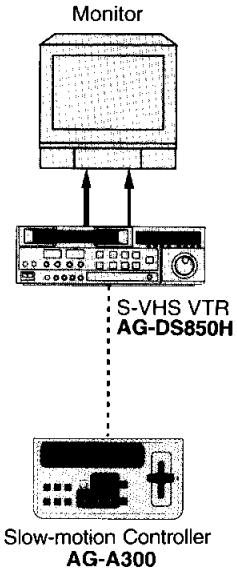


AG-DS850H

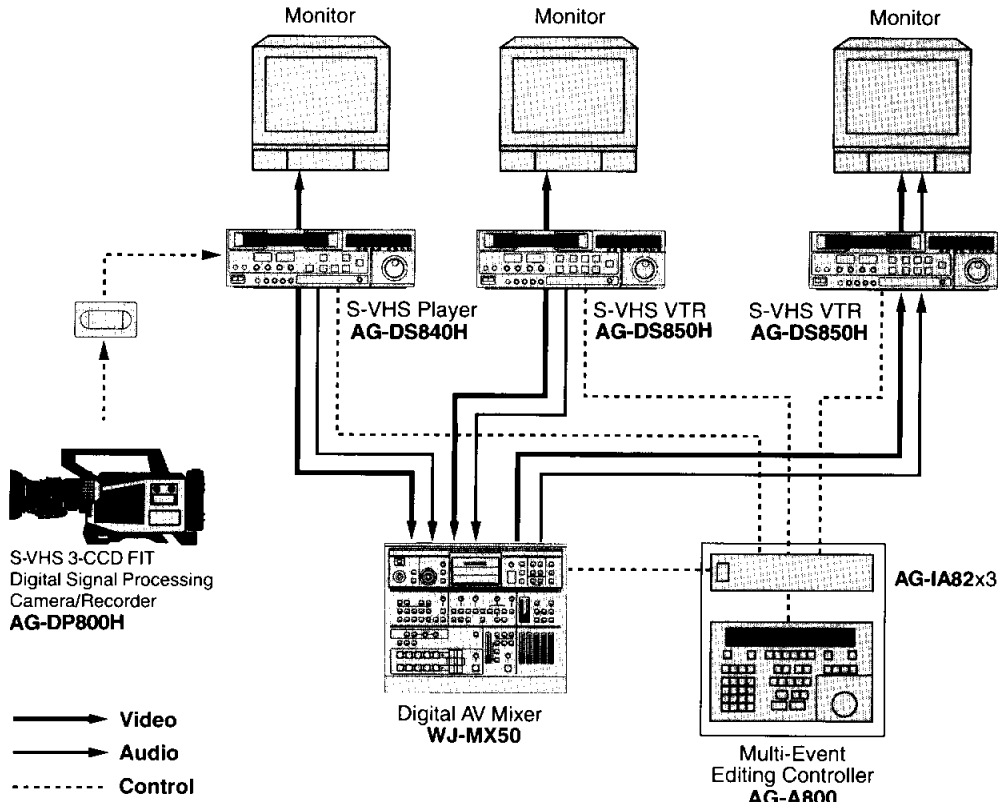
Rear Panel



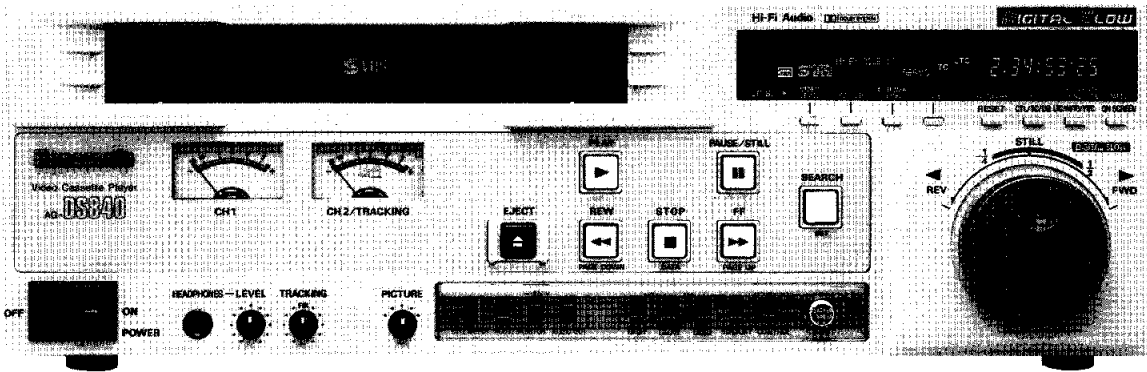
Slow Motion Analysis System



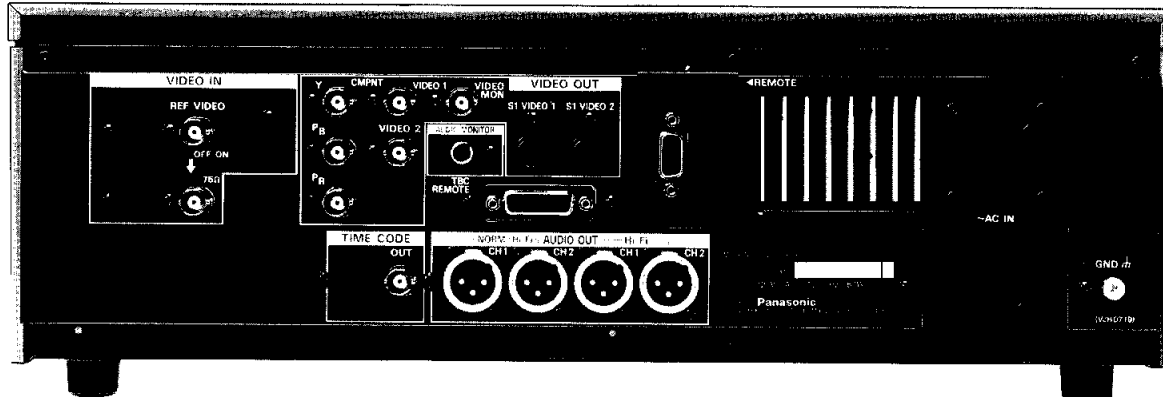
A/B Roll Editing System



AG-DS840H



Rear Panel



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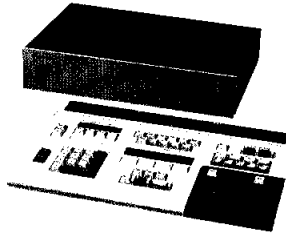
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Optional Accessories

AG-A800:

Multi-Event A/B Roll Editing Controller

- 128-Event Memory
- 9-pin Serial Remote Control Capability (optional)



AG-A350:

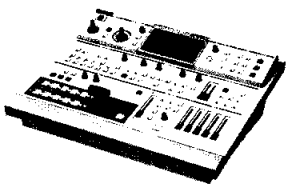
Compact Single-Event Editing Controller

- Standard 9-pin Serial Interface Capability
- Slow Motion Editing (with selected VCRs)

AG-A300:

Slow-Motion Controller

- Standard 9-pin Serial Interface Capability
- Jog/Shuttle Lever for Variable Speed/Slow Motion Control



WJ-MX50:

Digital AV Mixer

- Built-in 2-CH Digital Frame Synchronizer
- AV Mixing Editing of 2-BUS/4-Input Signals



AG-C70/AG-C71:

S-Video Cable

- AG-C70 (3 m)/AG-C71 (5 m)

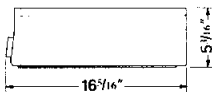
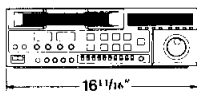
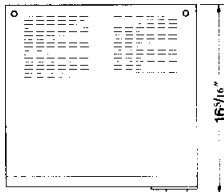
AG-M730:

Rack-mount Adaptor



AG-IA834:

34-pin Interface Adaptor



Specifications

■ GENERAL

Power Source:	120 V AC, 50/60 Hz
Power Consumption:	AG-DS850H: 87 W, AG-DS840H: 69 W (with AG-A750)
Operating Temperature:	+41°F to +95°F (+5°C to +35°C)
Operating Humidity:	35% — 80%
Weight:	Approx. 26.4 lbs (12 kg)
Dimensions (W x H x D):	16 ¹ / ₁₆ " x 5 ³ / ₁₆ " x 16 ¹ / ₁₆ " (424 x 131.5 x 415 mm)

■ SYSTEM

Television Format:	EIA Standard, NTSC Color Signal (525 lines, 60 fields)
Video Recording System:	Two rotary heads, helical scanning system
Modulation System:	Luminance: FM azimuth recording Color signal: Converted subcarrier phase shift recording
Audio Track:	2 tracks (Hi-Fi Audio), 2 tracks (Normal)

■ TAPE TRANSPORT

Tape Format:	S-VHS/VHS tape
Tape Speed:	1 ⁵ / ₁₆ ips (33.35 mm/s)
Recording Time:	120 min. (2 hrs.) with NV-T120
FF/REW Time:	Less than 2 min. with NVT120

■ VIDEO

Input Level:		
S-Video In (4P)*:	Y: 1.0 Vp-p, 75 ohms, unbalanced	C: 0.286 Vp-p, 75 ohms, unbalanced (Burst)
Line In (BNC x 2)*:	1.0 Vp-p, 75 ohms, unbalanced	
REF Video In (BNC):	1.0 Vp-p, 75 ohms, unbalanced	
Output Level		
S-Video Out (4P):	Y: 1.0 Vp-p, 75 ohms, unbalanced	C: 0.286 Vp-p, 75 ohms, unbalanced (Burst)
Line Out (BNC x 2):	1.0 Vp-p, 75 ohms, unbalanced	
Component Out:	Y: 1.0 Vp-p, 75 ohms	P _B , P _R : 0.486 Vp-p, 75 ohms
Video Monitor Out (BNC):	1.0 Vp-p, 75 ohms, unbalanced	
Horizontal Resolution:	S-VHS: more than 400 lines (monochrome/color)	VHS: 240 lines (color)
Signal-to-Noise Ratio	S-VHS: More than 50 dB (DNR on),	VHS: 46 dB (color)

■ AUDIO

Input Level:		
Line In (XLR 3P x 4)*:	+4/0/-6 dBs, high impedance, balanced	
Mic (1/4" Phone)*:	-50 dBv, 4.7 kohms, unbalanced	
Output Level:		
Line Out (XLR 3P x 4):	+4/0/-6 dBs, 50 ohms, balanced	
Audio Monitor (Phono):	0 dBv, 600 ohms, unbalanced	
Headphone (1/4" Phone):	-60 dBv — -20 dBv, 8 ohms, unbalanced	
Audio Frequency Response:	20 Hz — 20 kHz (Hi-Fi Audio)	
	50 Hz — 12 kHz (Normal)	
Dynamic Range:	90 dB (Hi-Fi Audio)	

■ TIME CODE

Time Code Input (BNC)*:	1.0 Vp-p, 10 kohms, unbalanced
Time Code Output (BNC):	2.4 Vp-p, Low impedance, unbalanced

* AG-DS850H only

Weight and dimensions shown are approximate. Specifications subject to change without notice.

* "Dolby" and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation.

This product may be subject to export control regulations.

Warning:

Unauthorized recording of copyrighted television programs, films, videotapes and other materials may infringe upon the rights of copyright owners and be contrary to copyright laws.

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