









# Section 2 Professional VCRs

Sony Hi8	88-89
Panasonic VHS/S-VHS	90-99
JVC VHS/S-VHS	100-109
Sony VHS/S-VHS	110-117
Sony Betacam SP	118-130
JVC W-VHS	131
JVC Duplicators	132-135
Panasonic Duplicators	136-137
Sony Duplicators	138-141
JVC Time Lapse VCRs	142-143
Sanyo Time Lapse VCRs	144-145
FEC VCR Accessories	146-147
VueTech VCR Accessories	148-149

# **EVO-250**

# Hi8 Player/Recorder

The EVO-250 is amazingly compact and lightweight, with AC/DC capability, for complete portability. It features Hi-8 record/playback, SP and LP recording, AFM Hi-Fi stereo audio, Control-L terminal and a quick-start mechanism.

### **FEATURES**

- Extremely compact and lightweight design. Weighs only 24 ounces without battery and can be used anywhere.
- Hi8 format, built-in TBC and DNR provides superb picture quality.
- AFM Hi-Fi stereo recording for high fidelity audio with high quality pictures.
- Quick-start mechanism allows immediate recording. Always ready. Only two seconds from Stop to Record.
- SP and LP Record/Playback modes allow up to 4-hours recording and playback with Sony P6-120 Hi8 cassette.
- The EVO-250 operates on DC power. The supplied DCV-700 DC pack provides car battery operation for mobile use. Can also run on AC with the optional ACV-Q800 AC Adapter or with optional NPF-750/950 lithium-ion battery packs.

- Linear time counter shows tape position in hours, minutes and seconds.
- Control-L terminal allows use as a source player or assemble edit recorder.
- Alarm recording capability allows the EVO-250 to be externally triggered by the optional PGV-250 to start recording. This is ideal for surveillance type applications, sports action videography, even scientific monitoring and motion studies. The EV0-250 is rugged enough for the most demanding environments.
- Bilingual program sound monitoring: In addition to Hi-Fi stereo record and playback, the EVO-250 also has secondary audio playback capability. This allows tapes with different sources recorded on separate audio channels, (like in bilingual systems) to be played back separately or mixed.



■ To assure safe operation, indicator lights blink when the battery becomes weak or moisture condenses inside.

EVO-250	749.95
PGV-250	429.95
NPF-750 Lithium-ion Battery	79.95
ACV-Q800	
AC Adapter/Battery Charger	119.95

### **EVO-250 SPECIFICATIONS**

### **GENERAL**

### **Power Requirements:**

DC: 7.2v (Battery Operation), DC: 8.4v (with AC Adapter)

### **Dimensions:**

5% x 2 x 5½" (W x H x D)

Weight: 1.7 lbs. without battery

### **SYSTEM**

### Record/Play Time:

SP Mode: 2 hours 30 minutes LP Mode: 4 hours (with P6-120)

### FF/REW Time:

8 minutes (w/P-120 Cassette)

### INPUT/OUTPUT

### Audio/Video:

Video: S-Video, Composite (RCA) Audio: Phono Connector (x 2 stereo)

### **OTHERS**

### **Phones:**

Stereo Mini Jack, 8Ω

### A/V Out:

Stereo Mini Jack (Monaural) 12-pin Terminal

### Remote (Control L):

Stereo Mini Jack

# PGV-250 Alarm Recording Adapter

The PGV-250 can control the recording mechanism of the EVO-250 with the alarm trigger from external devices, while Program Recording allows for the following recording options: Continuous Record, Quasi TLV (Time Lapse VCR), Timer mode and Alarm Recording.

### **Continuous Record**

The EVO-250 can be programmed to record continuously, regardless if triggered by alarm function or manually.

### Slow Motion/Frame-by-Frame Playback

The PGV-250 gives the EVO-250 slow motion and frame-by-frame playback capability that by itself, is not equipped to do.

### Timer Mode

Program different dates and times for the EVO-250 to record. Utilize Continuous, Alarm and Quasi TLV record modes.

### Quasi TLV

Set duration and interval times and the EVO-250 records like a time lapse VCR. For example, two minutes of recording every two hours.

# **EVO-550H**

## Hi8 Player/Recorder

The EVO-550H is a Hi-8 VCR, with features that make it an effective tool for various applications. It reads time code, offers clean Still and Slow Motion, and has a Bilingual function. Also equipped with dual mode shuttle ring, automatic repeat function and timer playback for enhanced operation.



### **FEATURES**

- Hi-8 format delivers over 400 lines of horizontal resolution and high S/N ratio.
- Reads both professional 8mm Time Code and RC Time Code.
- AFM Hi-Fi stereo recording
- Control-P input/output terminals for daisy-chaining multiple EVO-550H's. Control multiple VCRs with the optional RM-S52A Wired Remote Controller.
- Timer function for record/playback can be controlled by an external AC timer. When the timer is set and the power is turned on, the EVO-550H automatically goes into the selected mode.

- Control-L terminal allows use in an edit system as a source player.
- Auto Repeat function senses a blank section of six seconds at the end of a program and rewinds to the initial start point where playback begins.
- Dual mode shuttle ring for fast picture search. FF/REW, Still, 1/5 and 1x normal speed in forward or reverse, as well as Double Speed Playback are available.
- RMT-540 Wireless Remote (included) controls most functions, including picture search and frame-by-frame picture advance.

■ Bilingual Program Sound Monitoring capability (same as EVO-250)

EVO-550H .......1439.50 RM-S52A Wired Remote ......319.95

### **EVO-550H SPECIFICATIONS**

### **GENERAL**

Weight: 2.2kg (4 lbs. 14oz.)

**Dimensions:** 

8% x 3 x 10" (WxHxD)

Recording Speed: SP Mode Only

or mode on

Playback Speed:

SP/LP Mode

FF/REW Time:

3 Minutes (Sony P6-90)

Search Speed:

1/5, -1, Still, 1/5, x1, x2, Cue/Review, Locked Cue/Review, Forward Search

### **AUDIO**

Frequency Response:

30 Hz to 14kHz

Dynamic Range:

Better than 60dB

### **CONNECTORS**

Video:

Line Input: BNC (1)

Line Output: BNC (1), Phono (1)

Audio:

Line Input: Phono (Stereo) 1 set Line Output: Phono (Stereo) 1 set

### **ACCESSORIES**

Supplied:

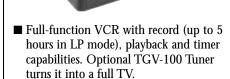
Wireless Remote RMT-540 Cleaning Tape (1)

Optional:

Wireless Remote Control Unit RM-S52A

## GV-A500 Hi-8 VCR/Monitor Combo

Combining Hi-8 record/playback capability with a bright 4-inch LCD screen, the GV-A500 "Video Walkman" is ideal for recording in the field, or as part of a portable edit system.



- 4-inch active matrix color LCD with superior sharpness, increased contrast and more natural color fidelity.
- AFM Hi-Fi stereo recording. Also has a speaker and stereo headphone jack
- Provides crystal-clear freeze frame, as well as 1/5x slow-motion playback.

GV-A500 Video Walkman	799.95
<b>TGV-100</b> TV Tuner	159.95
DCV-Q800 DC Adapter	119.95

- Built-in TBC plus DNR for improved playback and recording quality.
- RC Time Code and Control L terminal allows use as source deck or assemble edit recorder.
- Optional LaserLink wireless transmitter for wireless connections and easy playback. GV-A500 has connections for full video and audio output.
- Lithium-ion battery power system displays the amount of power remaining in the battery to within ± one minute.
- Powered by supplied worldwide AC Adapter/Charger; optional lithium-ion batteries; by car battery with optional DCV-Q800 DC Adapter/Charger.

**NPF-730H** 3000mAh Battery ......**99.95 NPF-750** 3000mAh Battery ......**79.95 NPF-950** 4500mAh Battery ......**119.95** 



# **AG-1330**

### VHS Video Cassette Recorder

An easy-to-use VCR, the AG-1330 offers superb picture and sound quality. It features noiseless and jitter-free playback in any mode, high-speed search, Quick Play mechanism, Quasi S-VHS Playback, and a built-in head cleaner.

The state of the s

- CVC (Crystal View Control) intelligently controls the relationship between the tape, heads and circuitry to deliver optimum performance of each. The result is best picture quality in record and playback modes.
- HR (High Response) mechanism uses the full-loading tape transport for fast picture display. Takes only two seconds for picture to appear from Stop to Play mode.
- High-speed search (11x normal) in EP (extended play) mode .
- Super 4-Head system provides jitter-free play in Double Super Fine Slow mode, Double Speed Playback and Frame Advance.

- Search functions, like Intro-Jet Scan and 60-second Jet-Rewind, let you instantly locate desired scenes or programs.
- Large multi-function display gives you all necessary information at a glance. Indications for time, record, playback and other modes are easy to confirm from across the room.
- On-Screen Display (OSD) of information including operating mode, instructions for initial channel setting, setting the Calendar/Timer, and standby OTR programming. Displays in four languages: English, Spanish, French, Portuguese.
- Playback of S-VHS tapes (Quasi S-VHS) at standard VHS resolution

- Built-in head cleaner automatically cleans the video heads when tapes are inserted or ejected, to maintain VCR reliability.
- Five-year clock and one-month timer backup is a great convenience in case of long power outages, or when moving.

### **Additional Features**

- Digital Auto Tracking
- 181-Channel Tuner
- Full Digital Quartz Timing
- Real-Time Counter
- Auto Repeat (Video End)
- Auto Playback and Auto Rewind
- Includes an Infrared Remote Control

## AG-2560 VHS Hi-Fi VCR

The AG-2560 is an industrial VCR that features advanced circuitry for stunning picture quality, and rugged construction for high reliability and durability. It also offers Hi-Fi Stereo, Super Drive mechanism, Jog/Shuttle, Quasi S-VHS playback and many operating conveniences.



- Jog/shuttle dial offers 19-step control over playback speed at your fingertips.
- At the heart of the AG-2560 is the Super Drive mechanism. Offering the following features, it allows the AG-2560 to operate quickly, quietly and is gentle on tapes.
- Full-Time Full-Loading System
- Direct Drive (DD) Capstan Motor
- Mode Switching Motor
- Twin Tension Regulators
- Servo Microprocessor
- Whisper Quiet Operation

- Hi-Fi stereo (90 dB dynamic range) recording/playback plus a linear audio track.
- Quasi S-VHS allows S-VHS recorded tapes to be played back in standard VHS resolution.
- CVC (Crystal View Control) System for best picture quality in record and playback modes .
- Constructed of a one-piece aluminum die-cast chassis for long life.
- One-month/Eight-Program, 100-Year Calendar Timer

### **Additional Features**

- Front A/V Terminals
- Built-in Automatic Head Cleaner
- One-Touch Index Search System (VISS)
- Digital Auto and Manual Tracking
- 181-Channel Tuner
- MTS (Multi-Channel TV Sound Tuner)
- Variable Super Fine Slow
- Auto Repeat (Video End)
- Two-Way Cue and Review
- Tape Remaining Indicator
- Includes an Infrared Remote Control

# AG-5210

### VHS Hi-Fi VCR

The AG-5210 is particularly suited for work as a VHS duplicator. It features an advanced HR (High-Response) mechanism, Advanced Lower Cylinder and Capstan, and Serial Remote Control for superior operability and ease-of-use.

- Use of Hi-Silicon in its lower cylinder helps achieve outstanding durability and stability for consistent, high quality results. There is also a diamond-like carbon (DLC) coating on the capstan and on the sendust AC head to further improve reliability.
- HR (High Response) mechanism uses the full-loading tape transport system for faster picture display, and faster FF/REW.
- 4-head video system provides exceptional clarity in special effects playback. With two special playback heads in addition to the two normal heads, the AG-5210 is capable of 6 hours of recording.
- Automatic Gain Control (AGC) adjusts recording levels (on/off selectable).
- Backlit LCD for tape counter and audio meter. Also offers an hour meter.

- Hi-Fi stereo plus a normal (Linear) audio track. Two-channel audio allows narration in two languages for bilingual capability.
- Built-in serial interface decoder allows multiple AG-5210's to be connected in parallel. Optional AG-IA12 Serial Remote provides central, simultaneous control.
- For convenience, it features Automatic Digital Tracking and an automatic head that removes residue every time a tape is put in or ejected.
- Mode Lock prevents misoperation by deactivating all front control panels.
- Optional AG-A11 Wired Remote easily connects to front panel remote jack.
- Measures only 10% x 4% x 13%6" (W x H x D).



### AG-5210 SPECIFICATIONS

### **GENERAL**

### Power Source:

120v AC, 50/60Hz

### Operating Temp:

41°F - 104°F (5°C - 40°C)

### Weight:

11.2 lbs. (5.1kg)

### **Dimensions:**

105% x 43/4 x 139/16" (W x H x D) (270 x 120 x 344.5mm)

### **AUDIO**

### **Audio Tracks:**

2 Tracks (Hi-Fi Audio) 1 Track (Normal)

### **Dynamic Range:**

90 dB (Hi-Fi Audio)

### **VIDEO**

### Tape Speed:

SP: <sup>15</sup>/<sub>16</sub> ips (33.35mm/s) LP: <sup>2</sup>/<sub>23</sub> ips (16.67mm/x) SLP: <sup>7</sup>/<sub>16</sub> ips (11.12mm/x)

### Record/Playback Time:

120 minutes with T-120

### FF/REW Time:

3 minutes with T-120

### S/N Ratio:

45 dB (Color, SP Mode)

### INPUT/OUTPUT

### Video:

Composite (BNC)

### Audio (Phono):

Input: - 8 dBv,  $47k\Omega$ , Unbalanced Output: -8 dBv,  $1k\Omega$ , Unbalanced

### **OPTIONAL ACCESSORIES**

AG-A11 Wired Remote Control AG-IA12 Serial Remote Control

# **DVD-T2000** Professional DVD Player

The DVD-T2000 has all the standard features of a "consumer" DVD player but adds RS-232 interface, a longer war-



ranty, detachable 3-prong grounded AC cord and rugged construction—making it ideal for schools and businesses.

- For highly dependable tracking the DVD-T2000 employs a tracking servo that "learns" about each disc's characteristics. Based on this information, the system instantly corrects any deviation.
- The traverse mechanism that carries critical laser pickup across the DVD is side-mounted in a floating suspension. Three rubber-plus-silicone dampers soak up vibrations.
- Incorporates a Class AA audio amp originally developed for Technics Hi-Fi amplifiers, to ensure outstanding sound fidelity.

- Built-in RS-232 interface for external PC control.
- Output for Dolby Digital AC-3 decoder
- Supplied wireless remote control with 4-way directional keys
- Multi-mode repeat including A-B repeat
- Dolby AC-3 digital downmix (2-channel)
- Video CD compatibility
- Detachable 3-prong grounded AC cord
- Optional rack-mount adapter available



# AG-710/720/750

# Compact DC-powered Industrial VHS and S-VHS VCRs

The DC-powered AG-series are compact and lightweight (under 5 pounds) VCRs that are ready for use anywhere. They are virtually shock and heat resistant and incorporate a highly reliable industrial mechanism that is equally suited for horizontal and vertical operation, making them ideal for use in cars, boats, helicopters, surveillance applications, and other places with limited space. They feature self-illuminated buttons to ensure easy operation even in the dark. An optional AC adapter is available when required.



## **They Feature**

### AG-710 Player ......449.95

- Top Loading 4-Heads Playback in SP/LP/SLP
- S-VHS/VHS Playback Compatible Equipped with BNC Connectors
- Auto Repeat/Auto Rewind

# AG-720 Player/Recorder ......849.95 Same as AG-710 PLUS—

- Record in 2/6 hour with T-120 Cassette Switchable Hi-Fi Stereo/Normal Record
- External Microphone Input

## AG-750 S-VHS Player/Recorder .....899.00

Same as AG-720 PLUS—

• Records in S-VHS • Flying Erase Head

### **Optional Accessories**

AG-LC35P 3.2-inch Color LCD Monitor



- Built-in speaker with volume control
- Input jacks for video, audio and 6v DC.
- • Angle of LCD panel is adjustable between  $0^{\circ}$  and  $90^{\circ}$

AG-A11 Wired Remote Control ......49.95
AG-B21 AC Adapter ...........144.95
AG-CR20 Car Battery Cord ........44.95

Feature Comparison at a Glance				
Features	AG-710 Player AG-720 Player/Recorder		AG-750 S-VHS Player/Recorder	
Tape Format	VHS	VHS	VHS/S-VHS	
Record Modes	_	SP/SLP (2/6 hr with T-120)	SP/SLP (2/6 hr with T-120)	
Playback Modes	SP/LP/SLP	SP/LP/SLP	SP/LP/SLP	
Quasi S-VHS Playback	Yes	Yes	N/A	
Hi-Fi Stereo	_	Yes	Yes	
Flying Erase Head	ying Erase Head —		Yes	
Video Input/Output	Video Input/Output Composite (BNC) out only		Composite (BNC), S-Video x 1	
Audio Input	ıdio Input —		RCA x 2 /Mic x 1	
Audio Output	Audio Output RCA x 1		RCA x 2 (L/R)	
Headphone Output	Headphone Output 2		1	
Auto Repeat/Auto Rewind	o Repeat/Auto Rewind Yes		Yes	
<b>Power Consumption</b> 12v DC, 8W		12v DC, 8W	12v DC, 8W	

AG-5710

# S-VHS Hi-Fi RS-232 Editing VCR

The AG-5710 is the successor to the AG-5700, which was long regarded as the industry-standard for a cost-effective desktop editor. A multi-function VCR, the AG-5710 features Digital TBC and Digital Noise Reduction (DNR), putting digital signal processing within the range of multimedia professionals, entry-level videographers and educators. Built-in RS-232 in

level videographers and educators. Built-in RS-232 interface

allows external control. Using the optional AG-571 Single-Event Controller, the AG-5710 can easily be configured for assemble and insert editing, and audio dubbing.



### **FEATURES**

- 400 lines of horizontal resolution and faithful image reproduction.
- Achieves an accuracy of ± 3 frames with the optional AG-A571 Edit Controller.
- RS-232 interface (25-pin) lets you control Playback, Recording and Editing functions from a computer (with appropriate software). Externally control functions including Power On/Off, Record, Play, Variable Slow (Forward/ Reverse) and Variable Vue/Review.
- Hi-Fi stereo system with high speed limiter circuit and Linear Band Pass Filter for impeccable sound quality. Features 20 Hz to 20 kHz frequency response and 90 dB dynamic range. Linear audio track allows audio dubbing or narration.
- Digital TBC (Field) and Digital Noise Reduction (DNR) provide superb picture quality for editing and playback – in both two-hour and six-hour modes. Jitter and distortion are removed for superior results, even after successive generations.
- Equipped with dedicated input and output terminals to simplify editing and playback of linear audio signals. It also provides Hi-Fi/linear audio input terminals with a Hi-Fi/Linear mixing switch and a Hi-Fi recording on/off switch.
- Jog/Shuttle dial for control of playback speed and smooth, fast search for edit points. Vary speed from slow motion to high speed search, as well as move frameby-frame in forward or reverse.

- Sensor Recording function for unattended recordings. When a video signal is detected, power is automatically switched on and the AG-5710 begins recording.
- Auto Repeat function continuously replays a tape which can be cued for tape end or the end of a selected scene. Use the AG-5710 in show rooms, lobbies, or any in-store video display.
- Optional AG-A11 Wired Remote Control plugs into the rear panel, providing recording and playback functions.

### **Additional Features**

- 16:9 Wide Aspect Compatibility
- Remaining Tape Indicator Switch
- Enforced B&W / Color Switch

## **AG-5710 SPECIFICATIONS**

### **GENERAL**

### **Power Source:**

120v AC 50/60 Hz

### **Recording Time**

SP: 120 minutes. (2 hrs.) SLP: 360 minutes. (6 hrs.)

### **Dimension:**

 $16^{15}$ /6 x 4% x  $14^{15}$ /6" (W x H x D)

Weight: 14 lbs. (6.4kg)

FF/REW Time: 3 minutes with T-120

### **VIDEO**

### Input:

S-Video (4-Pin x 1) Line In (BNC x1)

### **Output:**

S-Video Out (4-Pin) Line Out (BNC x2)

## S/N Ratio (VHS):

47 dB (Color, SP Mode)

### AUDIO

### Audio Track:

Hi-Fi Audio (2 Tracks) Linear Audio (1 Track)

### S/N Ratio:

45 dB (Normal)

### **Frequency Response:**

20Hz-20kHz (Hi-Fi); 50Hz-10kHz (Normal)

# **Dynamic Range:** 90 dB (Hi-Fi)

### Input:

Line (RCA x 3) Mic In (M3)

### **Output:**

Line (RCA x 3) Monitor (RCA x 1) Headphone Jack



# AG-1980

# S-VHS Hi-Fi Editing VCR

With the Panasonic AG-1980, you get striking S-VHS images, great sound, plus an array of features and functions for smooth, easy editing. These include laminated amorphous video heads, Digital Time Base Corrector (TBC), 5-pin remote editing terminal, Hi-Fi stereo, and a Quick Response mechanism. With the optional AG-



A96 Edit Controller, it is easier than ever to produce high quality video for business, education or any other applications.

### **FEATURES**

- Every aspect of the AG-1980's design is geared to deliver great video and audio quality. Delivers 400 lines of horizontal resolution and exceptionally detailed images. Also included in its circuitry is a digital filter, helping the AG-1980 achieve exceptionally accurate Y/C separation for clear image reproduction.
- Digital TBC (Time Base Corrector) effectively eliminates jitter and distortion for high quality, stable playback with natural colors – even after successive generations of editing.
- Hi-Fi stereo with a frequency response of 20 Hz to 20 kHz and 90dB dynamic range for near CD audio quality. Also has Hi-Fi stereo recording level control, a headphone monitor terminal with volume control and a microphone input terminal.

- Performs assemble and video only insert editing as well as audio dubbing. Edit switch is provided for optimum picture quality during editing.
- The AG-1980 is the only editing VCR in its class that allows an edit controller to access the frame-by-frame pulse of the control track. Provides exceptional ±2 frame accuracy.
- Advanced dual-loading mechanism features a quick response time, exceptional tape protection, and remarkable tape control accuracy for outstanding editing precision and ease. The mechanism reduces the time it takes for the picture to appear to a mere 0.5 seconds. FF or Rewind time of a 120-minute tape is only 21/2 minutes, and high-speed search in the SLP mode is up to 21x normal speed.
- 5-pin edit terminal on the rear panel makes it easy to set up an edit system. You simply connect the optional AG-A96 to one or more AG-1980s, or any other VCR equipped with a 5-pin terminal, and you are all set.
- Jog/Shuttle for easy control of playback and smooth fast search to edit points. Outputs the audio track during search operations for cuing and quick confirmation of audio recording.
- Equipped with laminated amorphous video heads which are clearly superior to those of conventional ferrite heads, due to their greater magnetizing strength. The amorphous video heads deliver rich, vibrant color reproduction and a high signal-to-noise (S/N) ratio.

### AG-1980 SPECIFICATIONS

### **SYSTEM**

Power Source:

120v AC 50/60 Hz

Weight:

Approx. 17.2 lbs. (7.8kg)

**Dimensions:** 

161% x 4 % x 15%" (WxHxD)

FF/REW Time:

2.5 minutes with ST-120

**Recording Time:** 

SP: 120 minutes. (2 hrs.) SLP: 360 minutes. (6 hrs.)

### **VIDEO**

AV1: S-Video In (4-Pin): AV2: S-Video In (4-Pin):

Output:

S-Video Out (4-Pin): Line Out (BNC):

RF: VHF Channel 3 or 4

S/N Ratio:

43 dB

Tuner:

181 Channel

### Audio Tracks:

2 Tracks (Hi-Fi) 1 Track (Normal)

**Frequency Response:** 

20 Hz - 20kHz (Hi-Fi) **Dynamic Range:** 

90 dB (Hi-Fi)

Headphone Jack:

-30 dBV, 8w, unbalanced with volume control

### **AUDIO**

### Input Level:

**AV1:** Line In (Phono x 2): -10 dB, 47kw, Unbalanced

**AV2:** Line In (Phono x 2): -10 dB, 47kw, Unbalanced

Mic In:-70 dB, 600w, Unbalanced

### **Output Level:**

Line Out (Phono x 2): -8 dBv, 600w unbalanced

# **EDIT CONTROLLERS**

### **AG-A96**

## Multi-Event Edit Controller for the AG-1980

Makes editing exceptionally easy by enabling control of two connected AG-1980s. With its advanced functions, the AG-A96 dramatically expands the editing potential of the AG-1980.

- Performs automatic continuous editing of up to eight pre-selected scenes (Assemble Editing).
- Preroll function precisely synchronizes edit-in points of the Source and Record VCRs.
- With two AG-1980s and the AG-A96, editing accuracy of ±4 frames is achieved.
- Direct search for your selected tape location, defined in hours, minutes and seconds.
- Preview function lets you view edit operations before executing the recording.



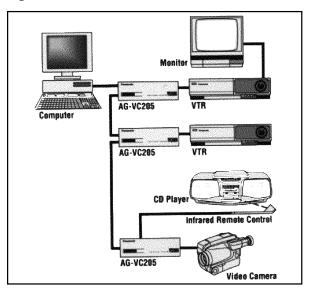
- Jog/Shuttle for smooth tape handling at any playback or search speed.
- Dimensions: 12½″ x 1½″ x 6½″ (W x H x D)

# AG-VC205 Video-Computer Interface

■ Link a VCR, video camera or TV to any computer serial port. By incorporating a device control protocol developed by Panasonic, the AGVC205 translates commands from application software into



- commands that video equipment understands via infrared. With the AGVC205, you can instantly broaden your range for multimedia applications.
- Allows you to take advantage of a wide variety of computer applications. For example, through serial connection, you can connect up to 100 AG-VC205 units serially, and create a large-scale network, coding the address switch.



## **AG-571** *Edit Controller for the AG-5710*

Easily connect two AG-5710 S-VHS VCRs to create a convenient, versatile editing system that is simple enough for anyone to operate.

- Simply connect two AG-5710s from the RS-232 port to the AG-A571 for a single-event editing system, using the control track. Achieves ± 3 frame accuracy for high precision editing.
- Layout features separate keys for edit In/Out points, edit Start and Stop, etc. Offers easy, precise editing at the touch of a button.
- Edit reference signal used: CTL (Control Track)

- Performs assemble editing, video insert editing and audio dubbing, as well as audio/video insert editing.
- Large Jog/Shuttle dial for easy control of playback speed on the AG-5710. Also offers smooth, fast search to edit points with precise frame-by-frame control.
- VCR controls include: Play, Record, Stop, Pause/Still, REW, FF, Jog, Search, Counter Reset and Eject.



■ Editing controls include: Edit Start, Edit Stop, Mark-In, Mark-Out.



# AG-7150/AG-7350

# Industrial S-VHS Player and S-VHS Player/Recorder

The AG-7150 and AG-7350 are high performance S-VHS decks designed for a wide range of playback and record applications (not for editing). In addition to their outstanding picture and sound quality, they offer long-term durability and reliability and have a number of advanced functions for use in professional environments. The AG-7150 and AG-7350 are identical in every way, except that the AG-7150 is only a player, and the AG-7350 is player/recorder.



AG-7350

### **FEATURES**

### **Legendary Construction**

■ IQ (Intelligent Quest) mechanism for reliability and easy maintenance.

Brushless DD (Direct Drive) motors and an 11-bit Digital Servo provide stable and precise tape transport control, with virtually no jitter. Also provides improved tape-to-head contact.

### **High Quality Circuitry**

- Extra wide 58-micron laminated amorphous video heads optimize resolution and S/N ratio for best image quality and exceptionally pure color reproduction.
- CAC (Chroma Aperture Compensation) and an advanced comb filter virtually eliminate color shift and vertical smear, for superb color quality.
- Digital filter helps achieve exceptionally accurate Y/C separation, while providing outstanding resistance to temperature changes and changes due to time.

### **Remote Control**

- Built-in 34-pin terminal allows remote control of playback/record, shuttle, and audio dubbing, when used with optional AG-600E Wired Remote Controller.
- The 34-pin terminal can also be replaced by the optional AG-IA232TC RS-232 interface to provide VCR remote control capabilities directly from a PC.

  The AG-IA232TC also has a Time Code Generator/Reader built-in, enabling recording and playback of LTC time code on the linear CH-2audio track.

### **Operating Conveniences**

- Jog/shuttle enables search in 17-steps, from 1/25 to 11x normal speed. Jog function lets you search from one field at a time, to normal speed.
- Full-loading mechanism ensures the tape always remains wound around the cylinder for smooth operation and fast response. Images appear on screen within one second after play is pressed. Ideal for use at CATV facilities.
- After pausing for 5 minutes, there is an automatic switch to Soft-Pause mode. In this mode, the drum rotates with the tape loose for protection and allows you to quickly restart recording or play.
- Using the Linear tape counter, you can select any segment on a tape (including the full tape) for Automatic Continuous, or One-Time Repeat.
- Rack mountable (3RU high), with optional AG-M730 Rackmount Adapter..

### Sensor Recording (AG-7350 Only)

■ When a video signal is detected, the AG-7350 automatically starts recording. When the signal stops, recording automatically stops. With Sensor Recording using a serial signal, the recorded segment can be played back in the Auto Repeat mode.

### **Four Channel Audio**

■ Two Hi-Fi channels and two normal channels. The Hi-Fi tracks have a frequency response of 20 Hz to 20 kHz and a dynamic range of 90 dB. The linear tracks are equipped with Dolby NR.

### **Additional Features**

- On-Screen Menu Display
- Auto Illuminating Switches
- 6-hour playback (in Linear Audio Mode)
- External Sync Input

### Professional and Industrial Record/Playback Applications

High quality S-VHS video and 4-channel audio make these VCRs ideal for use in corporate environments for training videos and "video newsletters", and in schools as valuable teaching tools. With their superb picture quality, they can also be used in applications where high resolution images are demanded, such as in medical diagnosis and treatment, and sports analysis. Standard A/V connections, 34-pin parallel and optional RS-232 Serial Control allow use in existing systems or to facilitate system expansion. Use them for economical recording and playback at CATV networks and local access providers.

# **AG-MD835**

# S-VHS Hi-Fi VCR Designed for Medical Applications

In the rapidly advancing field of medicine, there is an ever increasing need for high quality video and audio recording. The AG-MD835 meets this need by complying 100% with the UL544 standard for medical equipment safety. In addition, it offers high resolution S-VHS operation, four-channel audio, highly reliable and durable IQ tape transport, and an extremely compact design.



### **FEATURES**

### **Compact Design**

■ Ultra-slim body (only 10%" wide) allows installation flexibility and incorporation into existing systems. It also contributes to lower power consumption – 40% less than the AG-7350

### **High Quality Video**

■ Laminated amorphous video heads maximize S-VHS resolution for exceptionally clear recording and playback. A flying erase head is also included for noise-free transitions between scenes.

### **User-Friendly Design**

- Convenient front panel key layout and easy-to-read fluorescent display. Tape remaining indicator is displayed, and buttons are backlit for use in low-light.
- On-Screen Menu gives step-by-step instructions for multiple functions. Confirm or change settings at a glance.

### **Four Channel Audio**

- Two Hi-Fi channels with a dynamic range of 90 dB and two linear (normal) channels. Narration, music or other material can be dubbed on the linear tracks.
- Independent left/right input and recording level control (Hi-Fi only). Audio level is displayed for confirmation during recording and playback.
- Features microphone input, headphone output with level control and a linear audio limiter.

### Reliable and Durable

■ 5-DD motor system maintains stable tape transport, while a twin projection cylinder ensures optimum tape-to-head contact. Auto head cleaner reduces the need for maintenance, and when an error occurs, a self-diagnostic system immediately displays the error code. A mode lock is provided to prevent misoperation.

### **Playback Functions**

- Index signals (encoded automatically when recording) can also be inserted manually. VISS (VHS Index Search System) uses these signals for high-speed segment location and to provide repeat playback between two index points.
- Automatic repeat playback between marked points. 'Continue Mode' repeats selected section while a "One Time Mode" plays the section once, rewinds to the beginning of the section and stops.
- Blank Search Key for unrecorded sections on a tape. This allows quick setup for the next recording.
- Jog/shuttle with speeds from 1/25 to 11x normal and single frame search.

### **Optional Remote Controls**

■ AG-IA823 RS-232 and AG-IA34 34-pin Interface Boards allow control from a PC or the optional AG-A600E.

## AG-7150/7350/MD-835 SPECIFICATIONS

### **GENERAL**

Power Source: 120v AC, 50/60 Hz

Weight:

AG-7150: 23.8 lbs. (10.8kg) AG-7350: 24.3 lbs. (11kg) AG-MD835: 16.3 lbs. (7.4kg)

**Dimensions:** (WxHxD)

AG-7150/AG-7350: 16<sup>1</sup>1/6 x 53/6 x 16<sup>1</sup>1/6 a AG-MD835:

10% x 5% x 14%" (WxHxD)

### **VIDEO**

### Input:

S-Video In: x1 (AG-7350/MD830 only) Line In: x1 (BNC) (AG-7350/MD835 only) External Sync In: x1 (BNC) (AG-7150/7350 only)

**Output:** 

S-Video Out: (4-Pin) Line Out: BNC (AG-MD835) x 1 (AG-7150/7350) x 2

### Audio Track:

2 (Hi-Fi) 20 Hz to 20kHz 2 (Normal) 50 Hz to 10kHz

### Input/Output:

AG-MD835 Line In: Phono –8 dB (x1) AG-7350 Line In/Hi-Fi: Phono –8 dB (x2) AG-7350 Line In/Hi-Fi: Normal–8 dB (x2)

**Mic In:** (AG-7350/MD835) 5mm Phone

### AUDIO

### **Audio Monitor Out:**

Phono: 0 dB,  $600\Omega$ , Unbal.

### Headphone Out:

3.5mm Phone -60 dB to -20 dB, 8Ω, Unbalanced

### Time Code Input/Output:

**AG-7150:** Phono (In only) **AG-7350**: Phono (In/Out)



# AG-DS545/AG-DS555

# S-VHS Player/S-VHS Edit VCRs

The AG-DS545 and AG-DS555 are S-VHS editing VCRs that provide the quality required for professional video production and even broadcast. Features include Digital S-VHS circuitry, amorphous video heads, Digital Time Base Correction, Digital Noise Reduction, and 32x normal speed recognizable picture search (color). For frame accurate editing, they are equipped with built-in RS-422 control and SMPTE Time Code (LTC and VITC) capability.



### **FEATURES**

### **High Quality Video**

■ They employ amorphous video heads that have a higher magnetic coercivity than conventional ferrite heads. Expanded color signal frequency response from the amorphous heads enhances quality by minimizing color blurring and improving color reproduction.

### Transport Mechanism

- Jog/Shuttle up to 32x normal speed to find the scene you want, then jog to pinpoint the desired field.
- Large capstan spindle allows high-speed search at 32x normal speed, while AI (Artificial Intelligence) circuitry holds scan lines steady for viewing comfort.
- Dual-loading system achieves high-speed response while protecting tapes and heads from damage. The tape transport mechanism uses five direct drive (DD) motors, including two reel drive motors. They also have a built-in head cleaner.

### **Four Channel Audio**

■ Four-channel audio, includes two Hi-Fi with a dynamic range of 90 dB and two linear channels with Dolby NR. Each audio channel has its own input and output with individual channel-level setting capability. All audio channels use XLR connectors.

### **Editing Capabilities**

- Frame accurate assemble; independent audio and video insert, and split audio editing. Split audio editing lets you set edit-in, edit-out points separately from the video.
- They offer SMPTE time code capability. They read (AG-DS555 also generates) LTC/VITC (Longitudinal/Vertical Interval) Time Code and User Bits.
- Both are equipped with RS-422 9-pin interface for connection to edit controllers like the AG-A850.

### Conveniences

- Only 3 RU high, they are compact for space saving installation. 19-inch rackmountable with optional AG-M730.
- Still Time Setting, Superimpose Display Position and various other expansion functions can easily be set by operating the search dial. The Setup menu can be displayed on the monitor, allowing you to check actual settings on screen.
- 16:9 wide aspect compatible, thereby equipped for next generation TV.

### **Digital TBC**

■ Built-in Digital TBC eliminates even small amounts of jitter, skew, head impact error and color blurring. Precise time base correction is invaluable for A/B Roll editing.

### **Digital Signal Processing**

Digital Signal Processing for improved picture and for maintaining uniform quality during editing. Chrome Aperture Compensation (CAC) circuit eliminates color blurring and expands Chroma bandwidth. Other digital processing circuits include:

- Digital Noise Reduction (DNR): Processes Y and C signals separately to boost S/N ratio, by minimizing noise during Playback.
- Digital Comb Filter: Uses an advanced 2-dimensional system for complete Y/C separation. The result is reduced color and Luminance blurring.
- Switching Noise Mask Circuit: Effectively eliminates noise caused by head switching.

### LTC/VITC Time Code Editing with the AG-DS545/AG-DS555's Built-in Time Code Boards

Time Code is an address reference for each and every field (or frame) of a video signal. In the U.S., our television system (NTSC) is based on 2621/2 lines per field, 525 lines per frame, 60 fields/30 frames per second. Therefore, if we started recording to tape with our Time Code generator set at 00:00:00:00 (hours:minutes:seconds:frames), and stopped recording at roughly one minute and fifteen seconds, our Time Code display might look something like this: 00:01:15:24 (one minute, fifteen seconds and twenty-four frames). Referencing video down to the frame is significant to professionals and broadcasters for several reasons.

The obvious is the ability to go to a specific point on tape to locate a frame or a scene time and time again, and from one VCR to another. It is also vital for edit controllers to reference time code as a means of locking and bumping Source and Record VCRs in the editing process. Before Time Code, broadcasters had to rely on control track pulses (CTL) recorded to tape. The problem with control track is that while it records permanent data onto the tape, it does not record a specific address that can be returned to, time and time again, and it gets lost during high speed shuttle.

### LTC Time Code

- ➤ Time Code was originally developed by NASA for logging telemetry tapes during the Apollo space missions. The first practical video time code system was introduced in 1967, and many VCR manufacturers soon introduced their own incompatible versions of time code thereafter. In 1969, the Society of Motion Pictures and Television Engineers (SMPTE) ended the chaos by adopting, in cooperation with the European Broadcasting Union (EBU), a standard that works with all video systems.
- ➤ Longitudinal Time Code (LTC) was the first time code adopted by SMPTE. It records a unique sequential address to each frame of video on one of the linear (longitudinal) audio tracks, hence the name LTC. Unlike Hi-Fi audio, linear audio is not embedded with the video track. This allows tremendous flexibility by allowing time code to be recorded prior to the video recording (prestriped), or added to the tape at a later time (post-striped). Professional VCRs usually have one or two linear audio tracks, in addition to the stereo Hi-Fi tracks. LTC is far superior to CTL in terms of editing accuracy. However, like CTL, it is also limited in that during high speed shuttle search it gets lost until shuttle is slowed. LTC remains a staple in Time Code to this day, primarily because of its flexibility.

### **VITC Time Code**

- ➤ The preference in today's editing environment is for the more precise Vertical Interval Time Code (VITC) adopted by SMPTE in 1980. VITC Time Code is recorded to each video field during the vertical blanking interval and is superior to LTC in the following respects: It will not get lost during jog/shuttle, FF/REW, or at any speed, including Still mode. It does not need regeneration when dubbed. It includes a field ID which LTC lacks (meaning it is field accurate as opposed to frame accurate), and it does not occupy an audio track like LTC. This is very useful in a situation where all the tracks are needed for audio only. Actually, the only advantage of LTC over VITC is that LTC can be independently written to, enabling a previously recorded tape to be post-striped with time code. Since VITC is recorded with the video signal, restriping VITC would mean losing any video that has been recorded to tape.
- ➤ Depending on the type of Time Code and equipment being used, the Time Code can be displayed on the monitor, the Edit Controller, the VCRs and the computer. There are translators or converters available that can convert between VITC and LTC Time Code and change them to RS-422 or RS-232 protocols to communicate with VCRs, Edit Controllers and computers.

### AG-DS545/AG-DS555 SPECIFICATIONS

### **VIDEO**

### Input:

(AG-DS555 only) S-Video In (4-Pin): Line In (BNC x 2): REF Video In (BNC):

### Output:

S-Video Out (4-Pin): Line Out (BNC x 2): Video Monitor Out (BNC)

### FF/REW Time:

2 minutes.(with T-120)

### S/N Ratio:

S-VHS: More than 50 dB

### **AUDIO**

### Audio Track:

2 Tracks (Hi-Fi ), 2 Tracks (Normal)

### **Frequency Response:**

20 Hz to 20kHz (Hi-Fi) 50 Hz to 10kHz (Normal)

### **Dynamic Range:**

90 dB (Hi-Fi Audio)

### Input:

(AG-DS555 only): Line In (XLR x 4): +4/0/-6 dB, 600Ω, Unbalanced MIC In (1/4" Phone): -50dB

### Output:

Line Out (XLR 3P x 2); +4/0/-6 dBs, 50Ω, Unbalanced Audio Monitor (Phono): 0 dB, 600Ω, Unbalanced Headphone (1/4" Phone): -60 dB to -20 dB, 8Ω, Unbalanced

### TIME CODE

Time Code Input/Output: BNC x 1

### **GENERAL**

### **Power Source:**

120v AC, 50-60Hz

### **Power Consumption:**

AG-DS545: 65w AG-DS555: 76w

### Weight:

26.4 lbs. (12kg)

### **Dimensions:**

 $16^{1}\%_{6} \times 5\%_{6} \times 16^{1}\%_{6}$  (W x H x D) (424 x 131.5 x 415mm)



# **SR-S365**

### S-VHS Hi-Fi Recorder with RS-232 Control

The professional-level editing results that are attained with the SR-S365 do not translate into a professional budget. With high-resolution S-VHS pictures, jog/shuttle and built-in

RS-232 interface, the SR-S365 can be used as the foundation of



a very affordable, but professional editing system. Convenient editing functions, such as Insert and Assemble editing and Random Assemble editing, allow you to start producing quality programs right away. And since the SR-S365 is designed for use with the professional RM-G800 and RM-G810 Editing Controllers, assembling a high-performance, easy-to-use editing system with all the benefits of precision CTL Time Code, has never been easier.

### **FEATURES**

### **High Quality**

- Easy to use and set up, the SR-S365 delivers high S-VHS picture quality with more than 400 lines of horizontal resolution for professional-looking results in editing and dubbing. To make certain you get the best possible results, even in 2nd generation tapes, JVC has added video noise reduction circuity to reduce noise and keep pictures clear and sharp.
- Audio capabilities are equally powerful. Two channels of Hi-Fi audio for dynamic, high-quality stereo sound and an editable monaural (normal) channel for improved audio flexibility.

### **RS-232 Interface**

■ The SR-S365 has a built-in RS232 interface for connection and operation from a PC. As this interface is also compatible with the many RS-232-based editing controllers, you will be able to build exactly the system you want.

### **CTL Time Code**

■ Built-in Time Code generator/reader using JVC's CTL (Control Track) Time Code system. Far superior to conventional control track counters that lose reference when the tape is removed from the machine, this system records Time Code data on the control track for fast and accurate access to any frame on the tape. CTL Time Code can also be added to an existing recording without sacrificing the audio track. No need for special Time Code equipment when you record your tapes in the field.

### R.A. Editing

■ Simple, one-touch assemble editing is also available with the convenient Random Assemble (R.A.) editing function. Just connect the R.A. Edit connector to the remote connector of another VCR, and select up to eight scenes in any order. The R.A. Edit function automatically records the selected cuts on the other VCR in the order that you have chosen.

### **Audio Dubbing**

■ Audio dub and Self-audio dubbing functions allow you to add a new soundtrack, such as narration or music, to the normal audio channel (monaural), without affecting the original video or Hi-Fi audio previously recorded on the tape. Self dubbing function allows you to copy the existing Hi-Fi track onto the normal audio track.

### Jog/Shuttle Dial

■ Jog/shuttle dial for fast and accurate search capabilities. Locate a scene at high speed with the shuttle dial, then pinpoint the exact frame you want with the jog control.

### **Advanced Editing**

■ Plug into the RM-G800 or RM-G805 Edit Controllers (via the 12-pin connector) for professional editing results regardless of whether you use the SR-S365 as a Source, or as a Record VCR. With just the RM-G800 and two SR-S365s, you have the most economical and productive cuts-only, Time Code based editing system available. Add a third SR-S365 and the RM-G805, and you have the same, except in an A/B Roll configuration. The video can be edited independently of the audio, adding new audio later, if desired. For faster, more flexible editing, you can build a mixed system, using the professional BR-S800 Editing Recorder. Either way, you get all the benefits of CTL Time Code and excellent video and audio performance.

### **On-Screen Menu**

■ Easy-to-use on-screen menu enables you to quickly specify all VCR mode and status settings.

### **Additional Features**

■ Flying Erase Head; Automatic Head Cleaner; Digital Hour Meter Indication; Hi-Fi Record On/Off; Hi-Fi Recording Level Control and Indicators; Headphone Connector with Volume Control



# 0

# **SR-S365**

### **SR-S365 SPECIFICATIONS**

### **GENERAL**

# Power Source: 120v AC 60Hz

### **Record Time:**

SP: 2 hrs. w/T-120 Cassette SLP: 6 hrs. w/T-120 Cassette

### **Dimension:**

15% x 3% x 13%6" (WxHxD)

### Weight:

10.6 lbs. (4.8kg)

### **VIDEO**

### Input:

S-Video In: 4-Pin (x1) Line In: RCA (x1)

### **Output:**

S-Video Out; 4-Pin (x1) Line Out: RCA (x1) Monitor Out: RCA

### FF/REW Time:

3 minutes with T-120

### AUDIO

### Audio Track:

2 Tracks (Hi-Fi ) 1 Track (Normal)

### Frequency Response:

20 Hz-20kHz (Hi-Fi); 100 Hz-10kHz (Normal)

### **Dynamic Range:**

85 dB (Hi-Fi)

### Input Level:

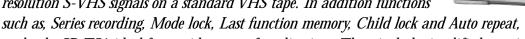
Line In: Phono -8 dB

### **Output Level:**

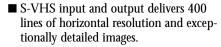
Line Out: Phono -8 dB Monitor Out: Phono -8 dB Headphone: 3.5mm Phone

## SR-TS1 S-VHS Hi-Fi VCR

A versatile, high-performance S-VHS recorder, the SR-TS1 features JVC's exclusive Super VHS ET technology so you can record high-quality, high-resolution S-VHS signals on a standard VHS tape. In addition functions

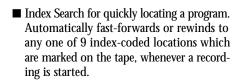


make the SR-TS1 ideal for a wide range of applications. These include simplified security systems for hotels, convenience stores and small businesses to low-cost dubbing systems, educational video systems and in-store promotions.



- Super VHS ET (Expansion Technology) lets you record high resolution Super VHS signals on more affordable and more widely available VHS tapes (High Grade recommended).
- Hi-Fi stereo with wide dynamic range and Intelligent Audio Switching Noise Reduction for clear, powerful sound delivers maximum-impact presentations.
- Two VCRs can be connected for continuous (series) record/playback. The record/playback signal is automatically relayed to the next VCR at the tape end (or picture end on playback).
- Active Video Calibration function automatically calibrates tape quality and video head condition to optimize and maintain VCR playback and recording performance.

- Automatic repeat playback between the tape beginning and tape end or picture end (indefinite amount of times).
- Movie Advance skips over those previews that are recorded on movie releases and rentals.
- When a video signal is received, recording starts automatically. When the signal stops, it enters the Standby mode again.
- Special Effects Playback with Multi-Speed Search and noiseless 5-Speed Slow Motion — ideal for sports analysis and playback of training programs. Multi-Speed Search lets you vary speed in 19 steps (± 21x normal speed).
- Last function memory function saves operation data such as input switching and return-point selection in memory when power is turned off or interrupted. Last function is resumed after power is restored.



- Mode lock prevents accidental operation or tampering. Using the remote, you can lock in the desired operation mode (record, playback or repeat play). A Child Lock is also available to disable all operation keys.
- Shuttle Plus on the wireless remote gives you fingertip control of Frame Advance, Variable Slow Motion, Multiple-Speed Search and Index Search.
- Gold-plated front A/V inputs maximize signal purity.
- Includes VCR Plus + with "Cable Eye" Cable Box Controller
- Also includes multi-brand TV/Cable/DSS compatible remote control.



# JVC

# BR-S500/BR-S800

# "Edit Desk" S-VHS Player/S-VHS Editing Recorder

Fast, accurate and professional style editing is now more affordable than ever. The BR-S500 Player/Feeder and the BR-S800 Editing Recorder can be linked via JVC's proprietary 12-pin Control Bus to the RM-G800 or RM-G805 Edit Controllers, to offer all of the editing features professionals have come to expect. They also feature a fast, heavy-duty tape drive, similar to that used in JVC's top-of-the-line "22DX Series", and built-in CTL (Control Track Time Code) for unparalleled accuracy and flexibility, yet main-



tain the ease of use that JVC editing systems are famous for. There is also powerful picture-improvement technology to assure outstanding S-VHS picture quality, and an open architecture for easy system upgradeability.

### **BR-S500**

The BR-S500 is an economical editing source player. By connecting the RM-G800 Edit Controller into the serial bus connector on the BR-S500's front panel, all functions, including Time Code, are accessed. Equipped with a Capstan Bump function, its tape transport is very fast and very precise.

### **BR-S800**

When connected to the RM-G800, the BR-S800 performs automatic or manual insert editing, as well as assemble edits. Inserts are glitch-free, thanks to twin rotary Erase Heads, Preroll, Frame Servo and Auto H-Phase Lock functions. The Capstan Bump feature assures consistent and accurate editing.

### **FEATURES**

### **CTL Time Code System**

■ Built-in Time Code Reader (BR-S500) and Reader/Generator (BR-S800) utilize JVC's CTL (Control Track) Time Code System. This system records absolute tape address information (hours: minutes: seconds: frames) on the control track, and provides fast and accurate access to any frame on the video tape. This system is far superior to conventional control track counters that lose reference when the tape is removed. CTL Time Code can be added to the tape during the recording process, or on to an existing recorded tape using the "Post Stripe" function. No special time code equipment is required, nor is there any need to give up an audio track. CTL Time Code is the easiest and most flexible time code available. For professional time code operation, the optional SA-R50 VITC and LTC Time Code Reader/Generator card are available.

### Four-Track Audio

■ Each has two Hi-Fi stereo channels with a wide frequency response, a dynamic range of over 80 dB and two linear (normal) audio tracks. The linear tracks of the BR-S800 can be dubbed independent of each other and of the video. This is ideal for adding background music or sound effects to an existing audio track, or for more sophisticated editing. There are two audio level meters, switchable between the Hi-Fi and linear channels. Separate input and output (BR-S500 has output only) terminals are also provided for all four channels. On the BR-S800 there are four level controls permitting separate adjustment of each channel. The channel-2 audio meter also doubles as a tracking meter during playback.

### **Superb Video Performance**

■ They incorporate picture improvement technologies for razor sharp images of over 400 lines of horizontal resolution. Digital Y/C separation, along with Chroma noise reduction, Chroma aperture correction and a 3-line cross-talk canceller all combine to offer outstanding image quality, even when dubbing down multiple generations.

### **Open Architecture**

■ Both VCRs offer two plug-in extension slots to accept a variety of optional expansion boards. To build a PC-based editing system, add the SA-K37 RS-232 board. To use with professional edit controllers, plug in the SA-K26 RS-422 board. Other plugin cards include the SA-N50 DNR board with time base stabilization and the SA-R50 VITC/LTC Time Code Generator/Reader.

# BR-S500/BR-S800

### 32x Vari-Speed Search

■ Front-panel search dials provide fast, accurate picture search at up to 32x normal tape speed, in either forward or reverse. Outstanding search capability is possible because of the incorporated heavy-duty direct-drive mechanism, similar to the one used in JVC's 22DX Series Editing Recorders.

### 100x Search

■ The Edit Desk VCRs have the unique ability to go from its 32x search speed to full Fast Forward or Rewind (100x normal speed) without stopping the tape, while interpolated Time Code continues to be displayed – even at 100x speed. (Picture goes blank in this mode.) JVC's controllers will also automatically accelerate to 100x when searching for an edit point with the GO TO button, or when performing an edit. This is invaluable when editing with a list of Time Code locations. Just dial in your In and Out points, and the VCRs will perform the edit frame accurately, searching across a two-hour tape at 100x, if necessary. This is a tremendous improvement in speed over any other editing system.

### A/X Roll Capability

■ In addition to the variable GPI feature on the Edit-Desk Controllers (RM-G800 or RM-G805) that let you trigger a switcher or SEG at a predetermined distance from the edit IN point (up to 9 seconds, 29 frames before or after), you can also trigger a device up to 29 frames before or after the OUT point. This permits you to use a simple effects unit to do "A - " rolls. It freezes the last frame of the previous edit, then triggers the effect at a following edit with the "fixed" GPI signal. The result is that with two machines, you can perform edits that appear to freeze and then dissolve into the next scene.

### **Other Features**

- Menu Display and On-Screen Mode Check
- Automatic Repeat Playback
- Headphone Jack with Adjustable Level
- External Sync Capability
- Optional Wired Remote Control

### **Frame Grabbing Function**

Grabbing frames (actually fields) from a video tape is usually a difficult procedure, because to obtain a good image the machine has to be in the Play mode - not Pause. This makes it next to impossible to get exactly the frame you want. When equipped with the SA-N50 TBC/DNR Board, the Edit Desk VCRs solve this problem. Just turn on the GRAB function via the menu on the RM-G800 or RM-G805 and set an edit IN point on the player (BR-S500 or BR-S800) at the frame you want to grab. Then preview or perform the edit, and the TBC in the player will freeze and hold that frame until the edit is completed. This is perfect for creating photo montages to music at the beginning or end of a program. For example, as you are editing your program, jot down the time code numbers of specific frames that you want to include in your montage. Then create the montage by dialing the numbers into your controller. The Edit-Desk will zip through your tape at 100x and edit-in the exact still images you chose. Note: the Edit-Desk outputs a still frame that is made from a single grabbed field, to avoid motion artifacts.

### **Optional Plug-in Cards**

### SA-K26 RS-422 Serial Interface

With this card, the BR-S500 or BR-S800 can be directly connected to a wide range of professional editing equipment.

### SA-K37 RS232 Interface Card

With this card, the BR-S500 or BR-S800 can be directly connected to a wide variety of computer-based editing systems.

### SA-N50 TBC Card

Provides Digital Noise Reduction (DNR) of the video signal, as well as Time Base stabilization for improved picture quality.

### **SA-R50** SMPTE Time Code Board

SMPTE LTC/VITC Time Code reader and generator card with UB (User Bits). Two types of installation are possible, depending on your requirements. When installed with the SA-K26, time code referenced editing via RS-422 is achieved. When installed with the SA-K50 Adapter Board, time code is referenced via the JVC control bus.

### **SA-K50U** Adapter Board

Required when installing the SA-R50 for time code editing via JVC's control bus.

### Scene Finder Function with the GY-X2B and GY-X3

JVC's professional camcorders record scene identification on the tape in two different ways. The GY-X2B records a modified CTL pulse on the tape when starting a new scene or recording with the VCR trigger button. Until now, no professional editing system has been equipped to recognize this "index mark". Now you can Search to the next or previous index mark on the tape by pressing the SHIFT+ FF or SHIFT+ REW buttons. The VCR will fast Search (at up to 17x) to the index mark, then cue the tape to the beginning of the scene.

The GY-X3 uses CTL Time Code — instead of a modified "pulse", each new scene is given a unique ID, or "take" number. This data is written into the User Bit portion of the Time Code. Accessing each scene is exactly the same as above. However, having a unique "take" number for each scene opens up many other possibilities. Since the "take" number is displayed on the GY-X3's LCD panel as the scene is recorded, a simple log will make it easy to find the correct scene later while editing. This feature can even be incorporated into an automatic "clip generator" in a non-linear editing system that would digitize only the specified scenes on the tape.



# BR-S500/BR-S800

### **Auto Trim**

External digital effect units often delay the video signal passing through their digital memory by up to one or two frames. This has caused some people to think that their source machine was not "Frame Accurate", even though both decks were editing at exactly the correct locations. It was necessary to manually TRIM the edit to assure that what you saw on the screen (delayed by the effects unit) was what was actually being edited. Equipped with Auto Trim function, both the RM-G800 and the RM-G805 lets you program a fixed delay to compensate for the video that is stored and delayed by an SEG. Now, what you see is what you get!

### BR-S500/BR-S800 SPECIFICATIONS

### **GENERAL**

### **Power Consumption:**

46w (BR-S800) 40w (BR-S500)

### Weight:

25.4 lbs. (11.5kg)

### **Dimensions:**

430 x 130 x 460mm 16<sup>1</sup>% x 5% x 18%" (W x H x D)

### Temperatures:

Operating: 41°F to 104°F Storage: -4°F to 140°F

### FF/REW Time:

2.5 minutes for 120 minute tape

### **VIDEO**

### Input: (BR-S800)

Line: (BNC) S-Video: (4-pin)

### Output: (BR-S500/800)

Line: (BNC) S-Video: (4-pin) Monitor: (BNC) S/N Ratio: Over 46 dB (S-VHS)

### **Resolution:**

400 Lines (S-VHS)

### **External Sync Input:**

0.5 to 4.0 Vp-p,  $75\Omega$ , unbalanced

### **AUDIO**

### Input: (BR-S800)

Line (RCA): -6 dB, 10 kΩ3 unbalanced Mic: -67 dB, 3kΩ, unbalanced

### Output: (BR-S500/800)

Line: (RCA): -6 dB,  $1k\Omega$ , Monitor: (RCA): -6 dB,  $1k\Omega$ , unbalanced Phones: - $\infty$  to -20 dB,  $8\Omega$ . unbalanced

### **Dynamic Range:**

Over 85 dB (Hi-Fi)

### Frequency Response:

Hi-Fi: 20Hz to 20kHz Linear: 50Hz to 10kHz

### BR-S500, BR-S800 AND SR-S365 EDITING COMBINATIONS

### **Cuts-Only Editing Systems**

### **VES-36**

Consists of:

- 2 SR-S365 Player/Recorders
- 1 RM-G800 Cuts-Only Edit Controller

### **VES-58**

Consists of:

- 1 BR-S500 Edit Player
- 1 BR-S800 Edit Recorder
- 1 RM-G800 Cuts-Only Edit Controller

### A/B Roll Editing Systems

### VES-58AB

Consists of: • 2 BR-S500 Edit Player • 1 BR-S800 Edit Recorder

• 1 RM-G805 A/B Roll Controller

### VES-38AB

Consists of: • 2 SR-S365 Player/Recorder • 1 BR-S800 Edit Recorder

• 1 RM-G805 A/B Roll Controller

### VES-36AB

Consists of:

• 3 SR-S365 Player/Recorders • 1 RM-G805 A/B Roll Controller



Integrated Editing System configuration, consisting of two SR-S365's, one BR-S800, RM-G805 controller, three TM-A13S and one TM-A9 video monitor, and the Videonics MXPro Switcher

# RM-G800/RM-G805

# Cuts-Only and A/B Roll Edit Controllers

Bridging the gap between expensive industrial editors and cheap inefficient consumer systems, the RM-G800 and RM-G805 are powerful and cost-effective Edit Controllers, with everything you need for high-quality professional editing. They offer a full range of selectable editing functions and time code referenced editing capability. Based on the same architecture, the RM-G800 is designed for economical cuts-based editing, while the RM-G805 is an ideal entry-level A/B Roll Edit Controller. Compatible with the BR-S500, BR-S800 and SR-S365, they provide a smooth upgrade path for professional video editors and make system expansion a snap.

### **FEATURES**

- The RM-G800 and RM-G805 are economical editing alternatives for editors who require controllers that provide a comprehensive set of basic professional editing functions. Featuring JVC's exclusive Control Bus, these edit controllers are the most powerful in their class and are designed to satisfy a wide range of editing requirements.
- Both feature two GPI (General Purpose Interface) outputs (one variable, one fixed), allowing automatic triggering of external equipment, such as Special Effects Generators (SEGs), Switchers or Audio Mixers. Output timing can be set independently of edit-in points.
- They offer Assemble and Insert Editing, Audio Insert, Preview/Review for checking edits before and after editing, and Go-To for direct access to any edit point. A Capstan Bump function is provided to assure greater edit consistency.

- Besides being fully compatible with JVC's CTL (Control Track Time Code) system, they are also compatible with SMPTE Time Code. Fast and accurate editing is achieved when used with LTC/VITC equipped BR-S500 and BR-S800 VCRs (SA-R50 card required). Time codes are displayed on the LED tape counter for easy control, and edit points can be entered numerically or "on-the-fly".
- 8-digit LED counter indicates all edit data in either the TC or CTL mode, while automatically switching between Player and Recorder. Also displays error messages and elapsed tape time.
- Precise and responsive Jog dial makes it easy to locate any frame on the tape. You can enter the Jog mode directly and switch between either Player or Recorder at the touch of a button. The Jog dial is also used to enter and trim edit points and pulse timing from the GPI ports.

### **Additional Features**

- Scene Finder Function
- Auto Trim Function
- All Stop Function
- Capstan Bump Function (BR-S500/800)
- Frame Grab Function (When used with BR-S500/800 equipped with SA-N50U)

### RM-G805 Only

- Aux Editing
- Auto Match Frame

**EDIT CONTROLS** 

- Provides simultaneous control of two players, edit recorder and switcher for A/B roll edit configuration with special effects.
- Split Editing function: Allows you to specify independent edit-in points for the video and audio signals.
- Last-Edit Memory function: Retains data from the last-executed edit in memory for instant recall at any time.

## RM-G800/RM-G805 SPECIFICATIONS

### **GENERAL**

### Power Source: DC 12v supplied from VCR

### **Dimensions:**

330 x 79 x 182mm (13 x 3½ x 7½°) (WxHxD)

### VCR CONTROLS

### **Control Buttons:**

Play, Record, FF, REW, Pause/Still, Search

### **Operation Dials:**

Continuously variable shuttle ring/jog dial, depending on the Player and Recorder used.

### **Edit Modes:**

Assemble and Insert (Video, Audio-1, Audio-2 and TC

### **Edit Point Trim:**

Possible by frame in both directions

## Time Counter:

Up to 9 hours: 59 min: 59 sec: 29 Frames (CTL Mode) Up to 23 hours: 59 min: 59 sec: 29 Frames (TC Mode)

### **Display Mode:**

Total elapsed time of editin/out points/edit duration



# JVC

# BR-S522DX/525DX/622DX/822DX

# 22DX Series Professional S-VHS Editing Machines

JVC's 22DX Series offer the power, functionality, flexibility and reliability to meet the most sophisticated S-VHS editing requirements. They are equipped with advanced picture improvement technology for the highest resolution playback, as well as consistent quality in recording through multiple generations. They include comprehensive editing functions, such as SMPTE LTC/VITC Time Code Reader/Generator, precision Search/Jog Dial, RS-422 interface, high-speed 32x Search and tiltable control panel. In addition, individual models offer Slow-Motion Editing, Time Base Correction and Digital Noise Reduction circuitry. The result is the most advanced S-VHS Editing System available today.



BR-S522DX S-VHS Feeder/Player BR-S525DX S-VHS Feeder/Player with *Dynamic Tracking*  BR-S622DX S-VHS Feeder/Recorder BR-S822DX S-VHS Editing Recorder

# S-VHS Picture Improvement Technology

- High-precision chroma Noise Reducer (CNR) conducts noise detection on a pixel-by-pixel basis, eliminating color streaking normally caused by lags in CNR phase adjustment. Ensures high chroma S/N ratio in playback.
- A Digital Y/C Separator with advanced IC and a digital filter significantly improves "oblique" or perceived resolution. Picture quality is almost the same with composite inputs as it would be with separate S-Video inputs.
- Non-recursive type Digital Luminance Noise Reducer (YNR) improves the S/N ratio by about 2 dB.
- A Chroma Enhancer restores the chroma bandwidth lost during recording and playback for sharper chroma edge
- Built-in Digital Dropout Compensator (DOC) performs dropout compensation for the Luminance signal on an all-digital basis. Chroma Dropout Compensation is also performed using a glass delay line.
- Luminance signal enhancer allows the frequency responses of the luminance signal at 2.5 MHz to be enhanced by 0 dB, +2 dB or +4 dB, letting you increase playback picture sharpness as desired. Because the system uses a delay line and works on the aperture principle, it is able to improve the picture sharpness in a natural pleasing manner, ensuring that high resolution is maintained even in multi-generational dubbing. The system also incorporates an Automatic Equalizer to prevent deterioration of the luminance signal frequency response when using worn tapes.
- SC (sub carrier) Leak Canceler detects and removes very low-level chroma signals on leaked carriers without interfering with overall signal quality and eliminates much of the deterioration that occurs in repeated dubbing.
- Pre-recording amp installed on the upper head drum significantly reduces transmission loss by maintaining the video signal at optimum levels, right up to the moment it is picked up by the recording heads.

# **22DX SERIES**

### High Performance Editing

- Frame Servo provides automatic odd/even synchronization with source material for picture stability when editing or dubbing. The servo can be switched off via the on-screen menu when random interlaced signals or signals with a low video signal-to-noise ratio are input.
- To prevent edit flagging, the recording tape's horizontal phase is automatically locked (Auto H-Phase Lock) to the input signal from the feeder. Can be switched off via the on-screen menu when CG or other special types of signals are input.
- 9-pin RS-422 interface for connection between other serial systems.
- Capstan Bump function operates during preroll to assure precise synchronization of the Player and Recorder during editing. Can be set to operate at either the Player or Recorder.
- Variable-speed dial Search/Jog control for fast and accurate location of edit points, with visual search speed up to 32x normal speed in monochrome. Stable high-quality color pictures are available at up to 10x normal speed.
- 8-digit counter display indicates edit data in either the TC or CTL mode and is compatible with Drop-Frame and Non-Drop-Frame counts. In the Machine-to-Machine Editing mode, the BR-S822DX's display can be switched to show player data, as well.
- Even after a tape has been ejected, a Freeze Frame can be retained in memory, allowing it to be used for editing.
- External Sync input for synchronization with other equipment, and configuring any of the decks into A/B Roll systems.

### **High Performance Audio**

- Two Hi-Fi stereo channels with wide frequency response and 90 dB dynamic range, two linear tracks with Dolby NR.
- XLR-balanced connectors insure audio quality. Input and output levels are selectable from +4 dB, 0 dB, and -6 dB.
- Separate selectable input terminals for all channels (Hi-Fi and normal) are provided, as well as two mic inputs with level controls.
- Output is selectable between Hi-Fi and normal audio tracks, and all channels can be monitored via the stereo headphone jack with level control.
- The BR-S622DX/822DX have two audio level meters switchable between audio channels 1 and 2 (mixed L/R channel monitoring is also possible), together with four recording level controls, permitting separate adjustment of all audio channels in recording.

### Optional RS-232 Serial Interface Card

With the optional SA-K27 9-pin RS-232 serial remote control board installed, any 22DX model can be directly interfaced with a computer. Data format is preset to match the configuration used by most computers and modems, while data transmission rates are selectable from 1200 to 38400 bps. Typical applications include TV program record or playback, commercial insertion, editing, remote control via modem, and unattended video presentations. Use the optional Windows-based "Application Builder" software to build your own VCR control applications and greatly expand capabilities.

### Standard Professional Features

All DX22 models come equipped with an LTC/VITC Time Code Generator/Reader, and all except the BR-S822DX (optional) come standard with a built-in Digital Time Base Corrector and Digital Noise Reduction circuitry. No need for costly add-ons and options.

### TC Generator/Reader

High-quality editing requires absolute precision and accuracy. To facilitate this, DX22 models come standard with an LTC/VITC Time Code Reader and Generator (reader only on BR-S522DX/525DX). This permits generation, recording, and reading of SMPTE LTC and VITC Time Codes. User bits are also provided. No additional equipment is required, as all controls and switches are provided on the TC module and the video recorder itself. For connection to an existing time code, LTC time code input and output connectors are also provided.

### TBC (Time Base Corrector)

Elimination of time base errors is essential in the production of broadcast-standard pictures, particularly if you are planning to transfer S-VHS material to a component video format, such as Betacam SP. Featuring a Full-Field Memory and Bi-Directional Correction, the DX22's built-in digital TBC assures highly stable, jitter-free playback at all times – even compensates for head impact errors. A component output connector board on the TBC permits direct output to Betacam SP VCRs.

### **Digital Noise Reduction Circuitry**

Digital Noise Reduction circuitry consisting of an Advanced Phase Stabilizing circuit with a double-loop decoder provides additional compensation. Hue stability of the chroma signal is significantly improved, while time base problems, arising from the changes in tape dimension that can be caused by temperature variations, are also eliminated.



# JVC

# **22DX SERIES**

### **User-Friendly Design**

- For faster operation, all models have a full-loading mechanism with Stand-By on/off selection possible.
- Large, color-coded push button controls are provided for all tape transport, editing, and TC functions. Tape transport and editing controls have individual LEDs to indicate on/off status. LED indicators are also provided beneath the cassette loading slot to show TBC mode, Servo Lock, Control Track (CTL) Pulse, Audio Limiter, Hi-Fi, Dolby NR and Time Code mode.
- Convenient On-Screen Menu system with built-in memory lets you quickly set and switch most functions while referring to the counter or on-screen display. Mode selection and initialization are all possible via the menu display, and even functions normally requiring DIP switch resetting can be switched directly, via the menu display.
- Over 70 items are selectable via the menu, including Frame Servo, TBC mode, Dolby NR, Hi-Fi recording, Audio Limiter, and Preroll times. The menu also reduces the number of external switches, reducing the chances of settings being accidentally switched on or off. A full set of LED indicators on the front panel assure you that desired functions are engaged. On-screen mode check and warning indications are also provided.
- Control panels can be pulled out and tilted up to 90°. Locking is possible at angles of 25°, 50°, and 75°. This comfortable keyboard-type approach greatly eases editing operation.
- All units conform to the 19″ EIA rackmount standard and can be easily installed in any rack.

### **BR-S525DX Only**

With conventional tracking systems, video tracks can only be correctly traced during standard speed; during slow motion playback, accurate tracking cannot be maintained and noise is produced, making it impossible to incorporate slow-motion effects in edited material. With the BR-S525DX's automatic Variable Tracking system, slow-motion effects can now be utilized.

- Variable Motion Control (VMC) editing is performed when the BR-S525DX is used with VMC-equipped edit controllers, like the JVC RM-G820 or RM-G870.
- Incorporates a Photo Sensor to detect the proper head position and employs a moving-coil actuator to change the head position of the two pairs of precision-machined variable tracking heads.
- Variable-speed playback at speeds from -2 to +3x normal with picture quality indistinguishable from that of normal playback. This makes the BR-S525DX an ideal editing tool, offering high-quality slow-motion or reverse edits with instant, jitter-free starts from still frames. Noiseless variable-speed playback is invaluable for analysis of fast-moving action, such as sports, field-by-field viewing and editing of special effects.
- Playback time can be compressed and expanded in steps of 0.1% over a range of ± 20%. This indispensable feature lets you adjust playback time to precisely match the length of a musical score or program time slot.
- For improved playback and special-effects picture performance, a Switching Noise Masking system is also provided. Especially effective with digitally processed special-effect pictures, the system sets the switching point 1.5H lower than normal, completely eliminating on-screen switching noise.
- Double-azimuth variable tracking heads also ensure that every field is displayed in the variable speed mode. This is invaluable in scientific and medical imaging, as well as in sports applications requiring field-by-field analysis.

# SR-T5 Compact, Multi-Functional VHS Hi-Fi VCR

Compact, portable and incredibly versatile, the SR-T5 packs the features and performance you would expect from a fullsize VCR into a pint-sized, go-anywhere package. Features like Quasi S-VHS Playback, Series Recording/ Playback and



Auto Repeat, plus a new dust-proof mechanism, make the SR-T5 ideal for a wide range of applications. Connect two or more of them in a series for long-time recording or playback. Use it as a source player in a dubbing system. Hook up a video camera and create a simple, compact video security system. Or bring it along to conferences and meetings for high quality presentations. Ideal for schools, hotels, hospitals and any location where space is at a premium.

- Standard (SP) or Extended Play (EP) modes for recording and playback with easy operation and clear, easy-to-view indicators.
- Quasi S-VHS playback
- Auto Repeat function (in the Play mode, you can set the VCR to rewind at program end or tape end.)
- Series recording/playback for continuous recording or playback over long periods.
- Dust-proof mechanism lets you to take and use it just about anywhere.
- Extremely compact (only 10½" wide)
- Includes a wireless remote control.

# **22DX SERIES**

### Reliability

- For improved stability and protection against external shock, all critical components are mounted in a rugged die-cast aluminum chassis. Independent direct-drive motors for the head drum, capstan and reels assure long-term operational reliability with minimal downtime.
- A sophisticated array of microprocessor-controlled sensors and detectors monitor all internal operating conditions. Whenever a problem is detected in such areas as the Drum and Capstan Servo system, the tape path, or the loading system, a warning code is immediately displayed on the front panel digital display and on the monitor screen. An Auto Off LED indicator is also provided.
- Test points for the video head and FM audio head output signals are conveniently located on the front sub-panel.
- Automatic head cleaning mechanism cleans the video and audio heads whenever a tape is loaded or unloaded, preventing head clogging and abrasion.
- The 8-digit counter display can also be switched to an hour meter showing total operating time up to 9999 hours and estimated working times for the capstan, drum, and reel.
- Their design greatly facilitates maintenance and servicing. For example, all parts on top of the main chassis can be changed from above without removing the main chassis itself. In fact, most internal parts and circuitry can be easily accessed and adjusted or removed.
- The use of a microprocessor servo cuts the number of adjustment points in half, while reduced wiring and rationalized circuit board design further simplifies maintenance.

### BR-S622DX and BR-S822DX Only

- An EE monitor function lets you view source pictures in the Record-Pause mode when only one monitor is being used. Source pictures can also be viewed during playback by pressing the recorder's REC button.

  Monitored output is the direct, unmodulated composite video signal.
- Built-in blackburst signal generator. To prepare a master tape for insert editing, insert a blank tape, set the video input switch to "Black" and start recording.
- Audio dubbing is possible on the normal audio CH-2. Narration, sound effects, or background music can be added.

### **BR-S822DX Only**



- Built-in machine-to-machine editing control capability means any VCR (with RS-422) can be directly controlled from the BR-S822DX. Player/recorder select buttons are provided, and Time Code or CTL readings from the controlled player are displayed on the 822DX's counter display. Control all operations, including Search, FF, REW, Edit Point Entry, etc.
- Equipped with a comprehensive set of editing functions, including automatic or manual insert and assemble editing.



- Other editing feature, like Go-To, Preroll, Preview, and Review, make high-performance cuts-only editing possible, even without a separate edit controller.
- Compensates for the gap between the flying erase heads and the normal audio erase heads to ensure that audio and video are synced in audio insert editing. Prior to insertion, the designated audio signal is slightly delayed, giving the tape time to reach the flying erase heads, so that the audio cuts in at the same point as the corresponding video frames.

### 22DX SERIES SPECIFICATIONS

### **GENERAL**

## **Power Requirement:**

# 120v AC~, 50/60Hz Power Consumption:

BR-S822DX: 92 watts BR-S622DX: 120 watts BR-S525DX: 110 watts BR-S522DX: 105 watts

### **Dimensions:**

16¾ x 7½ x 22¼" (WxHxD) (42.9 x 18.8 x 56.5cm)

## Weight:

23kg (51 lbs.)

### FF/Rewind Time:

2.5 minutes for 120 minute tape

### **VIDEO**

Inputs (BR-S622DX/822DX)

and Outputs: (All Models)
Line: (BNC) x 2
S-Video: (7-pin) x 2
Monitor Out: (BNC) x 2
Component Output:
BNC x 3 (Optional on the BR-S822DX)

### Reference Video Input:

BNC (with one Loop-through, with the TBC)

### TIME CODE

Input: (BR-S622DX/822DX)  $0 \text{ dB} \pm 6 \text{ dBs}, 10 \text{k}\Omega$ 

Output: (All Models) 0 dB ± 3 dBs, Low Impedance

### **AUDIO**

Inputs: (BR-S622DX/822DX)
Line:-6./0/+4 dB Balanced
XLR (Hi-Fi/Normal)
Mic:-67 dB, 10w,
Unbalanced

Outputs: (All Models) Line:-6./0/+4 dB, 10/600w, Balanced XLR

### Hi-Fi/Normal:

Monitor: -6 dB, Low Impedance, Unbalanced Phones: -∞ to -17 dBs, 8w

### Dynamic Range:

More than 90 dB (Hi-Fi)

### Frequency Response: 20 to 20,000Hz (Hi-Fi) 40 to 12,000Hz

40 to 12,000F. (Normal)



# SVO-1430/SVO-1630

### VHS 4-Head Mono and Hi-Fi VCRs

Especially designed for business and industrial applications, the SVO-1430 and SVO-1630 are equipped with VHS HQ circuitry, 4-head design and APC (Adaptive Picture Control), to offer high picture performance. Versatile record



and playback functions include Quasi S-VHS and Auto Repeat Playback, and Timer recording. The SVO-1630 has all the features of the SVO-1430 plus it adds Hi-Fi Stereo, Sensor Recording, Dual Mode Shuttle and a headphone jack. With their high performance, convenient features and high reliability, the SVO-1430/SVO-1630 meet professional demands in variety of applications, such as Presentation, Education, Point-of-Purchase or Point-of-Information displays.

### **FEATURES**

### **High Picture Quality**

- They are designed to consistently reproduce high quality images. HQ circuitry ensures clear edged pictures, and Double Azimuth (DA) Pro 4-Head design offers superb resolution and excellent color record/playback in SP and EP modes. In addition, a variety of Playback modes, including Noiseless Clear Still pictures, Slow Motion, and 2x normal speed are possible, thanks to the 4-head design.
- They incorporate APC (Adaptive Picture Control)II, which tests each tape and adjusts recording parameters for best performance. Also adjusts playback for ideal balance of picture sharpness and low video "noise".

### **Record/Playback Functions**

- Quasi S-VHS playback allows playback of S-VHS tapes at standard VHS resolution.
- Auto Repeat function enables repeated playback of a tape. At the end of a program, they automatically rewind the tape and restart the program at the beginning.
- In One-Time Playback mode they automatically rewind the tape when it reaches the end of the recorded portion. This allows them to always be ready for playback operation.
- They have a built-in timer which allows exact record and playback times. Timer recording can be set for weekly and daily recording. Auto repeat playback works with the timer for unattended and repetitive operation.

### Conveniences

- Index Scan/Index Search function helps you to easily find a specific program. Each time you record a program and index point is also recorded. With the wireless remote you can search up 19 index signals either before or after the current index position.
- Digital Auto Tracking adjusts for tapes recorded on other machines. It eliminates the need for manual adjustment of tracking variances while providing clear pictures.
- Key Inhibit Switch deactivates all keys on the VCR and remote control to prevent accidental or unauthorized operation.
- High Speed FF and REW time in a fast 2½ minutes with a T-120 cassette.
- On-screen display is available in English, Spanish or French.
- The on-board remote control sensor can be deactivated. This allows you to enable the wireless control of specific VCRs without affecting others.
- Their clocks can be set to automatically adjust for Daylight Savings Time.
- They are supplied with a wireless remote control (RMT-V190A).

### Input/Output

■ Control-S In/Out allows remote operation by the optional RM-V200 Remote Control. Up to 50 SVO-type VCRs can be simultaneously controlled from one RM-V200. They have BNC connectors for their video inputs and outputs.

### Reliability

- They incorporate the time-proven reliable mechanical assembly used in Sony's Time Lapse VCRs. Robust chassis and heavyduty head drum are just two examples.
- Built-in lithium battery provides protection against power outages, retaining settings up to 30-days.
- Built-in head cleaner passes over the video heads and removes tape residue every time a tape is loaded or ejected. This helps prevent clogging and deterioration of picture quality.
- Hours meter can display the amount of head drum usage.

### **SVO-1630 Step-up Features**

- The SVO-1630 provides Hi-Fi stereo audio with a wide dynamic range of 90 dB and a frequency response from 20 Hz to 20k Hz. Also offers an external headphone jack.
- Sensor Recording feature makes it easy to create a Satellite Recording system no need for external controllers. The SVO-1630 automatically starts recording when a video signal is sensed via the video input. Goes into Standby mode when the input stops.
- Easy-to-use Dual Mode Shuttle for controlling FF/REW/Still and 2x Play in Forward or Reverse. (1/5x and 1x Playback in forward only.) One-dial operation simplifies Picture Search and overall VCR operation.

# **SVP-1110A**

## 2-Head VHS Player

The SVP-1110A is a compact, high quality VHS Player that incorporates an Optimum Picture Control system and long-life heads for clear and crisp picture reproduction. Extremely affordable, it also offers SP/LP/EP mode Playback, Auto Repeat and other convenient auto features. Ideal for Point-of-Purchase, education, presentation and rental use.



### **FEATURES**

- Extremely compact and lightweight, it fits into a minimum of space. Only 9½ wide and weighs 7.4 lbs.
- Long-life head has a deeper head width than a conventional head for continuous and long term usage. In combination with OPC, this ensures high quality picture for the life of the VCR.
- Auto Power-On, Auto Rewind, Auto Repeat Playback, Automatic Head Cleaner, Auto Tracking and Off-Power Eject
- Optimum Picture Control (OPC) ensures maximum picture quality with minimum noise. Regardless of the tape's condition OPC automatically adjusts frequency response according to the S/N ratio of the tape being played. When a low S/N ratio is detected, signals in the high frequency area will be cut off to reduce the noise level. In the case of a high S/N ratio, the frequency response range will be widened to accurately reproduce picture details.

# **SANYO GVR-S955**

# S-VHS Hi-Fi Editing VCR

The GVR-S955 is a full-featured professional frame accurate S-VHS editing recorder with four audio channels (two Hi-Fi and two linear), RS-232 and RS-422 editing terminal and built-in SMPTE time code (LTC) generator/reader. It can also operate stand-alone for insert and assemble editing. You can even generate time code directly without the need for external control.



- Built-in SMPTE LTC Time Code reader and generator (DF/NDF). Time code is fully programmable from an external computer and resettable from the front panel.
- Auto-sensing RS-232/RS-422 input eliminates the need for optional external interfaces. Interface requirements are automatically sensed and adjusted within the recorder, according to the control cable's wiring configuration.
- Signal monitoring and VCR status indicators on two fluorescent display panels allow easy monitoring of video and audio signal levels along with VCR status.

- Time code display shows record and playback time along with the condition of the time code.
- Video and audio switching with two independent video and two independent audio channels. Each channel contains both composite and S-Video inputs, and each audio channel contains two linear and two Hi-Fi inputs. Switching can be done either manually or from the front panel, or under RS-232/RS-422 control. Video and audio channels are switched independently giving the GVR-S955 the ability to perform breakaway edits.

■ Input and playback video processing allows adjustments to the video level of the incoming video signal. Signal levels and hue can be adjusted during playback.

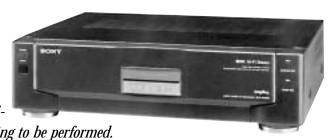




# **SLV-R1000**

# S-VHS Hi-Fi Editing VCR

The SLV-R1000 is an S-VHS VCR that provides high performance for low budgets. An ideal editing deck, it features a Dual Mode Shuttle, Crystal Clear Freeze and Slow Motion, Hi-Fi Stereo Audio and Control-L terminal. Offers full editing capability as well, allowing assemble and insert editing, and audio dubbing to be performed.



### **FEATURES**

- S-VHS format delivers over 400 lines of horizontal resolution and is the perfect tape format for editing.
- Has a Dual Azimuth four-head recording system for superior picture quality.
- Incorporates APC (Adaptive Picture Control), which tests each tape and adjusts recording parameters for best performance. Also adjusts playback for ideal balance of picture sharpness and low video "noise".
- Hi-Fi stereo audio with a frequency response from 20 Hz-20 kHz and a dynamic range of 90 dB. Individual recording level controls are provided for right and left channels.

- Separate audio and video insert editing lets you separately add new audio or video to previously recorded material.
- Provides crystal clear freeze frame and variable slow motion. Also has a flying erase head for glitch-free editing.
- Advanced tape transport system for fast response time. Delivers smooth tape motion with reduced jitter.
- Control-L remote terminal allows use as either a player or recorder in an edit system. There are dozens of edit controllers that address the Control-L protocol.
- Automatic head cleaner reduces clogging by automatically clearing tape residue whenever a tape is loaded or ejected.

- Indexing system enables quick access via fast forward or rewind to the start of recorded sections. You can manually mark, as well as erase, using the remote control.
- Equipped with VCR plus +, which makes programming as easy as dialing a phone number.
- Cable mouse system lets you change channels on the cable box simply by pointing the remote at the VCR.
- Dual-mode shuttle provides a single control for simple operation of all major functions. It controls Slow Motion, Frame Advance and Search, as well as Play, Stop, Fast Forward and Rewind.

### SLV-R1000 SPECIFICATIONS

### **GENERAL**

Power Requirements: 120v AC, 60Hz

Dimensions:

17 x 4% x 15" (W x H xD) (430 x 117 x 379 mm)

Weight:

15 lbs. 7oz. (7kg)

**Recording Modes:** 

SP/EP

**Playback Modes:** 

SP/EP/LP

FF/Rewind Time:

4-1/2 minutes with T-120

**High Speed Rewind:** 

3 minutes with T-120

### **VIDEO**

S/N Ratio:

Over 45 dB

**Horizontal Resolution:** 

Over 400 Lines

Video Input:

S-Video: 4-pin (x3) 1 Front, 2 Rear

Composite:

RCA (x3) 1 Front. 2 Rear

**Video Output:** 

S-Video: 4-pin x 2 (Rear) Composite: RCA x2 (Rear)

Control S In/Out:

Mini Jack x 1

UHF/VHF In/Out:

F-Type x1

### **AUDIO**

Dynamic Range: More than 90 dB (Hi-Fi)

Frequency Response:

20-20,000Hz (Hi-Fi)

**Audio Input:** 

L/R: Phono (x3) 1 Front, 2 Rear

**Audio Output:** 

L/R Phono x2 (Rear)

Headphone Input:

### **TIMER**

Timer Clock:

Crystal-locked 12-hour cycle with 3-hour power backup. 8-Events/1-Month

### **TUNER**

**Channel Coverage:** 

VHF: 2-13; UHF: 14-69; CATV: 1-125

**Total Channels:** 

181

**Supplied Accessories:** 

RMT-V129A Wireless Remote Control Cable Mouse Infrared Repeater

# SVO-2000

# S-VHS Hi-Fi Editing VCR

Although identical in look and features to the SLV-R1000, the SVO-2000 offers premium editing performance. When used with the RM-250 Edit Controller it achieves an editing accuracy of  $\pm 5$  frames, while the SLV-R1000 is only capable of  $\pm 30$  frame accuracy. The SVO-2000 also pro-



vides an Auto Repeat function and has a "Key Inhibit" switch that locks the buttons on the VCR, preventing accidental misoperation. Finally, for the video signal it uses professional BNC connectors versus RCA on the SLV-R1000, and has a UL-approved 3-prong grounded AC cord versus a 2-prong.

## Same Features as SLV-R1000, Plus —

- Auto Repeat mode enables the SVO-2000 to repeatedly play back a program. At the end of a program or tape, the VCR automatically rewinds the tape and restarts the program from the beginning.
- Equipped with BNC connectors for composite video input and output.
- Key Inhibit mode activates all function keys to prevent accidental operation. Also has a hook hole allowing the VCR to be chained for security.
- Equipped with 5-pin Control Edit terminal for direct connection to the optional RM-250 Edit Controller.

# RM-250

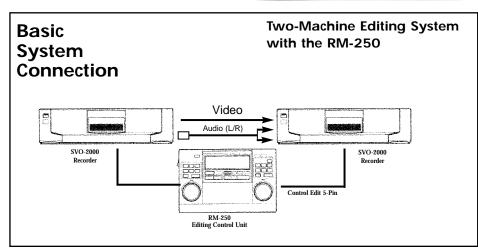
# Cuts-Only Edit Controller for the SVO-2000

The RM-250 is an edit controller designed exclusively for use with the SVO-2000. Used in combination with two SVO-2000 VCRs, the RM-250 easily creates a simple and cost-effective cuts-only editing system. Program edit, video and audio insert and assemble edit functions are easily executed.



÷ , ₹ ₹ ₹

- Program editing allows automatic sequential editing of up to 20 preassigned scenes.
- Assemble edit mode erases the prerecorded video and audio and replaces them with new signals.
- Insert edit mode allows video and audio signals to be inserted independently or simultaneously.
- Two Jog/Shuttle dials enable quick picture search and simplify the editing process.
- Preview and Review functions for monitoring the results of a practiced edit or an actual edit.
- Includes two 5-pin to 5-pin editing cables.



# SVO-2100

# S-VHS Hi-Fi Editing VCR

The high quality SV0-2100 is designed for business and industrial applications, as well as for professional video production. With the optional SVBK-10 (RS-232 Interface Board) installed, the SVO-2100 communicates with computers, as well as with Sony's



FXE-120 Editor/SEG. When used with the FXE~120, frame-accurate editing (based on time code) can be performed. When multiple SVO-2100s are connected, simultaneous recording can easily be accomplished. The SVO-2100 can also be programmed for unattended automatic playback or record and can be triggered or stopped via an optional foot switch.

### **FEATURES**

### **Accurate Editing**

- Audio signals can be inserted to a selected audio channel on a previously recorded tape. Audio is input via the external mic jack or linear audio (RCA) connector.
- Optional SVBK-10 RS-232 Interface Board with LTC Time Code Reader and Generator allows the SV0-2100 to communicate with external equipment, such as computers or Sony's FXE-120.
- When used with a computer, the system can be used to create computer graphics, thanks to the SVBK-10 supporting commands for Number Frame Record and Auto Edit.
- When used with the optional FXE-120 Editor/SEG, you have a cost effective, frame-accurate (via LTC time code ) system with Assemble. Insert. Audio Split. A-Roll, and A/B-Roll editing capability.

### **Excellent Audio and Video**

- S-VHS format provides excellent picture quality and consistent, clear image reproduction for superior editing results.
- Two-channels Hi-Fi stereo with a superb 90 dB dynamic range and wide frequency response of 20 Hz to 20 kHz. Also has two editable longitudinal (normal) audio tracks. Using the Audio Monitor Selector, normal or Hi-Fi can be monitored.
- Automatic head cleaner prevents head clogs and deterioration of picture quality.

### **Play/Record Functions**

- Continuous Auto Repeat Playback and One-Time Playback modes.
- Multiple SVO-2100s can be hooked up (via loop-through connectors) to record the same program simultaneously.

■ When set to Power On Recording or Power On Playback mode, the SVO-2100 automatically starts recording or playing a program back the moment the power is supplied from externally connected equipment. This allows unattended automatic VCR operation.

### **Optional Remote Control**

- Recording can be started or stopped with the optional FS-20 Foot Switch. During recording, the Rec Tally signal can be output from the foot switch jack (this ia especially useful when used with a monitor with Tally In capability).
- Optional SVRM-100A or RM-V200 Remote Control units offer remote control of the SVO-2100's basic functions via the Control S terminal.

## **SVO-2100 SPECIFICATIONS**

### **GENERAL**

### Weight:

7kg (15 lbs. 7oz.)

### **Dimensions:**

16% x 5 x 14¾" (W x H x D)

### **Power Requirements:** 120v AC, 60Hz,

### FF and REW time:

2.5 minutes. (with T-120)

### **VIDEO**

### Sync Input:

x 1 (BNC)

### Video Input:

S-Video: 4-pin x1 Composite: BNC x 2 (one Loop-through)

### Video Output:

Composite: (BNC) x 2 S-Video: 4-pin x1

### **AUDIO**

### Input:

Hi-Fi/Normal x 2 (Phono) Mic: Mini-Jack x 1

### Output

Hi-Fi/Normal x 2 (Phono) Headphone: Stereo Mini-Jack

### **Frequency Response:**

50 Hz ~ 10kHz (Normal) 20 Hz ~ 20kHz (Hi-Fi)

### **CONNECTIONS**

### Control S:

Input/Output: Mini-Jack x 1

### Foot Switch:

Stereo Mini-Jack x 1 (incl. Recording Tally Output)

### RS-232:

D-Sub 9-pin

# SVP-9000 • SVO-9600

# S-VHS Player • S-VHS Player/Recorder

The SVP-9000 and SVO-9600 are designed as multi-purpose machines with the use of various optional interface boards. By selecting one or more boards, they become dedicated machines for satellite recording, office viewing, video library, sports analysis and editing. At the same time, they adhere to Sony's professional VCR concept of reliable mechanism, rigid construction and easy operation – ensuring reliable and stable performance in industrial and professional environments.



SVO-9600

### **FEATURES**

- Wide video and audio heads for more stable pictures and better sound pick up. A cross talk canceler eliminates color blur, providing accurate color and sharper images.
- Two Hi-Fi channels with a frequency response of 20Hz to20 kHz and 90 dB dynamic range. Two linear (normal) audio channels with Dolby NR.
- Rigid aluminum chassis and head drum for highly stable operation. Two direct reel motors (one for supply side and one for the take-up side), provide smooth and rapid response. Transition from Stop to REC, FF to Play is virtually instantaneous.
- Timer function for Play (SVP-9000) and Play/Record (SVO-9600) automatically executes selected mode when power is turned on. Ideal for unattended playback and recording.
- Menu lets you customize VCR operation. Modes include Long Pause Time. Chroma and Luminance NR and Enhancer On/Off.

- External sync input for integration into professional systems.
- Picture search from -10 to +10x speed with the optional SVRM-100 Remote Control.
- Repeat playback operation between two pre-selected points with programmed operation.
- Message code is displayed in the LED indicator when error occurs.
- Built-in head cleaner for preventive care of the tape heads.
- Control panel on both VCRs can be slanted at 30°, 60°, 90° for convenience.
- Install into 19" standard racks with optional RMM-980 Rackmount Kit.

### SVO-9600 (Only)

- Sensor Recording capability allows the SVO-9600 to start recording as soon as it senses a video signal.
- Audio Dub capability for adding music or narration to a tape with pre-recorded video.

## SVP-9000/SVO-9600 **SPECIFICATIONS**

### Weight:

30 lbs. 14oz.

### **Dimensions:**

16¾ x 5¾ x 17¾" (WxHxD)

### **Power Requirements:**

120v AC, 60Hz,

### FF and REW time:

2.5 minutes. with T-120

### Sync Input:

x 1 (BNC)

### Video Input: (SVO-9600 Only)

S-Video: 4-pin (x1)

Composite: BNC with loop-through

### Video Output:

Composite: BNC (x1) S-Video: 4-pin (x1)

### **AUDIO**

### Input: (SVO-9600 Only)

Phono: -6 dBs, 47k, Hi-Fi x 2 (Phono) Normal x 2 (Phono)

### **Output:**

Phono: -6 dBs, 10k, Hi-Fi/Normal x 2 (Phono) Monitor x 1 (Phono)

### Frequency Response:

50 Hz ~ 12kHz (Normal) 20 Hz ~ 20kHz (Hi-Fi)

### Dynamic Range:

90 dB (in Hi-Fi Mode)

### **Optional Interface Boards**

SVBK-120 — RS-232 Interface Board. allows either VCR to be controlled by external computer .......434.95

SVBK-150 — Digital Noise Reducer Board with separate Luminance and Chrominance noise reduction for superior picture quality. Circuitry includes a field memory which removes jitter and Y/C delay, providing stable sharp images and still frames ...........594.95

**SVBK-140** — RS-422 board for configuring either machine into a professional system, or together with an edit controller forming a cuts-only edit system ......**649.95** 

SVBK-160 — SMPTE LTC (Longitudinal Time Code) board attaches to the SVBK-140 for reading and recording of. LTC. LTC is recorded on one of the two linear audio 



# SVP-5600/SVO-5800

# S-VHS Hi-Fi Player/S-VHS Hi-Fi Editing VCR

Packed with a host of advanced features and fully backed by Sony's vast experience and commitment to VCR manufacturing, the SVP-5600 and SVO-5800 bring highly sophisticated S-VHS editing and extreme ease-of-use to the edit suite. They provide frame accurate editing, RS-422 interface, built-in TBC, user-friendly menu and SMPTE LTC and VITC Time Code operation. For added flexibility, optional component output allows easy integration into Betacam SP-based systems. With their advanced features and outstanding cost performance, the SVP-5600 and SVO-5800 complement any professional editing environment - from basic cuts-only editing to a sophisticated A/B Roll edit suite.



### **FEATURES**

### **Editing Capability**

- RS-422 serial interface for integration into professional edit systems. The 9-pin connector carries edit commands and time code data between VCR and the edit controller.
- When connected to an RS-422 equipped controller, the SVO-5800 functions as an editing recorder, performing assemble and insert functions and providing audio split editing of linear CH-1 and CH-2. In insert mode, video, audio and time code can be inserted independently, or in any combination. In the assemble mode, all prerecorded signals (video, audio, control track and time code) are erased and replaced with new signals.
- To prevent operational errors, the SVO-5800 automatically selects the right Servo Reference Sync mode - Edit (Recorder) or Normal (Player). This makes editing much easier.



### **Time Code**

- Both are equipped with SMPTE LTC and VITC Time Code capability. User Bits (UB) are also provided. LTC is recorded on the normal audio track, while VITC is recorded in the vertical blanking interval of the video signal. VITC is especially useful, as it can be used in still or slow playback and allows both normal audio channels to be used simultaneously. The SVP-5600 reads time code, while the SVO-5800 can read as well as generate time code.
- The SVO-5800 allows functions such as Drop Frame/Non-Drop Frame, Free-Run/Rec-Run, to be easily selected by the Setup menu buttons on the front panel. Both machines provide connectors for connection to an external Time Code Generator/Reader.

### **Built-in TBC**

Each has a built-in digital TBC (Time Base Corrector), featuring 4/fsc sampling and 8-bit quantization. The TBC is essential in A/B Roll editing to eliminate VCR jitter and for proper adjustment of phase differential.

### **Sophisticated Circuitry**

- By combining high resolution S-VHS with signal processing techniques like DNR, Digital Field Doc and Chroma Process improvement, they deliver the consistent picture quality so essential to editing. They also have a wide video head gap and track width (58mm) for stable and faithful picture reproduction.
- Chroma process improvement circuitry achieves excellent color picture quality in the playback mode. Sharpens chroma edges and greatly improves the chroma bandwidth, enabling sharper and clearer color picture reproduction.
- For high quality recording, even with composite signals, the SVO-5800 has a digital 3-line comb filter that uses advanced correlation techniques for highly accurate Y/C separation. The SVO-5800 achieves high picture quality by eliminating cross color interference.
- For frame accurate editing, both employ a sophisticated servo system, improved quick response mechanism and built-in LTC/VITC Time Code capability. This makes them equally suitable for animation and computer graphic recording where frame-by-frame capability is indispensable.

## SVP-5600/SVO-5800

### **Digital Noise Reduction**

■ In addition to the TBC an advanced Digital Noise Reducer (DNR) for both Chroma and Luminance signals eliminates noise during playback. At the same time, a Field Memory incorporated in the noise reducer removes jitter to provide sharp, stable pictures. The Field Memory also has a DOC (Dropout Compensator) that replaces signal dropout with information from the previous field.

### Multiple Inputs/Outputs

■ Both employ composite and S-Video connectors. By installing the optional SVBK-170 Component Board, they can output component signals through BNC connectors for integration with Betacam SP VCRs.

### **Four Channel Audio**

- Two Hi-Fi (AFM) and two longitudinal (normal) audio tracks. Hi-Fi tracks have a 20 Hz to 20 kHz frequency response and dynamic range of 90 db. The linear tracks have Dolby B noise reduction for high quality sound reproduction. XLR connectors are used for the inputs and outputs on all four channels.
- The SVO-5800 gives you independent record level controls and metering for each of the four channels. It also has a Hi-Fi Recording On/Off mode to further optimize video performance.

### **High Reliability**

- Utmost attention has been paid to ensure their durability and reliability. A rigid aluminum die-cast chassis and head drum are examples of the care taken to ensure stable operation.
- Incorporating Sony's outstanding tape transport system, they deliver superb operational performance.
- Separate Direct Drive Reel Motors for the supply and take-up sides provide rapid response and smooth operation. Transitions such as Stop to Record, FF to Play and Stop to Rewind, are virtually instantaneous.
- Every time a tape is loaded or ejected, the heads are cleaned, removing tape residue.

### **Compact and Lightweight**

The SVP-5600 and SVO-5800 have a compact, lightweight design and are engineered for low power consumption. They weigh only 11.5 kg (25 lbs. 6oz.) and are 3 RU high.

### **User Friendly Operation**

- They have a built-in character generator which superimposes characters on the video monitor output signal. This allows time code data, control track, Menu Setup and VCR function status to be shown on a monitor.
- On-Screen Setup Menu allows a variety of customized VCR mode operations.
   Programmed in the form of a layer structure, you simply go through the menu and initialize VCR operation.
- Quick and smooth picture search, using an RS-422 equipped edit controller or the optional DSRM-20 Remote Control Unit. Recognizable color pictures are provided at up to 10x normal speed in forward or reverse. A powerful Capstan Servo system provides a very rapid response to the search dial control.

- Cue-up points can be pressed by using the Setup menu buttons on the front control panel. This provides very quick access to the desired edit points and dramatically reduces editing time.
- All parameters of the TBC, such as Luminance level, Chroma level, Setup, Hue, Y/C Delay, Sync Phase and SC Phase, are easily controlled from the front panel, and can be remotely controlled from the optional UVR-60 TBC Remote Control. The UVR-60 also accesses the Field Freeze function in the Still mode and allows On/Off control of the Chroma and Luminance noise reducer.
- They correspond to 16:9 wide screen TV signal and automatically detect a 16:9 wide screen ID signal, recording it or passing it to other video equipment.

### **Optional Accessories**

SVBK-170 Component Output Board489.95	<b>DSRM-20</b> Remote Control Unit <b>249.95</b>		
<b>RMM-980</b> Rackmount Kit <b>299.95</b>	UVR-60 TBC Remote Control529.95		

# SVP-5600/SVO-5800 SPECIFICATIONS

### **GENERAL**

Power Requirement: 120v AC, 50/60Hz

**Power Consumption:** 

SVP-5600: 53w SVO-5800: 60w

**Dimensions** (WxHxD): 16% x 5% x 18″

Weight:

25.6 lbs. (11.5kg)

FF/Rewind Time:

2.5 minutes w/T-120 Tape

**Search Speeds:** 

(with Optional SVRM-100A): **Jog:** Frame by Frame **Shuttle:** Still, 1/30, 1/10, 1/5, 1/2, 1, 2, and 10x

### **VIDEO**

Inputs: (SVO-5800 only)
Reference Video:
BNC x 2, Loop-through
Composite Video: BNC
x 2, Loop-through
S-Video: 4-pin x 1
Time Code: BNC x1

### **Outputs:**

S-Video: 4-pin x 2 Composite Video: BNC x 2 Monitor Out: BNC x 1 Component: BNC x 3 with optional SVBK-170 Time Code: BNC x1

Remotes:

### TBC: 15-pin Remote (RS-422): 9-pin AUDIO

### Inputs/Outputs:

(SVO-5600 Output only)

**Hi-Fi CH-1/2 (XLR):** +4 /0/-6 dB Selectable, 600w

**Linear CH-1/2 (XLR):** +4 /0/-6 dB Selectable, 600w

Audio Monitor Out (Pin): -5 dB, at 47kw, Unbalanced

**Headphone Out** (Stereo Phone): -50 to -18 dB at 8w Unbalanced

Frequency Response: 20Hz to 20kHz (Hi-Fi) 40Hz to 12kHz (Normal)



# UVW-1200/UVW-1400A

# Betacam SP Player & Betacam SP Player/Recorder

The UVW-1200 and UVW-1400A are non-editing Betacam SP VCRs equipped with specialized features for a wide range of playback and recording applications. These include RS-232 control, built-in Time Base Stabilizer and Time Code operation. Wide range of inputs and outputs include selectable RGB/component, composite and S-Video signals. The RGB I/O and RS-232 interface make them especially ideal for large screen, high quality video presentation, scientific research and digital video environments.



### UVW-1400A

### **FEATURES**

### **RGB** Interface

■ Ideally suited for work in computer environments, because RGB signals convert into R-Y/B-Y component signals and vice versa with minimum picture degradation. Selectable RGB/component switch lets them output high-quality RGB for imaging and visual communication applications.

### **RS-232 Interface**

■ 25-pin serial interface allows external computer control of all VCR functions, including Jog, Shuttle, and Playback – based on time code information. The baud rate can be selected from between 1200 bps to 38,400 bps on the Setup menu.

### **Time Base Stabilizer**

■ Built-in Time Base Stabilizer (TBS) locks sync and subcarrier to an external reference signal, as well as provides stable pictures. This eliminates the need for additional time base correction. Advanced high quality digital dropout compensator further ensures consistent picture performance.

### Record/Playback Time

■ Up to 90 minutes of playback and record using L-size metal Betacam SP cassettes. They also accept S-size cassettes, which offer up to 30 minutes of recording. The use of metal particle tape further enhances Betacam SP performance.

### **Two Audio Channels**

■ Equipped with two longitudinal audio channels. With Betacam's high tape speed and the use of Dolby C noise reduction, they deliver audio with a wide dynamic range, minimum distortion and excellent signal-to-noise ratio.

### **Time Code**

■ Both read LTC (Longitudinal Time Code) and UB (User Bits). The UVW-1400A also generates LTC and UB, allowing time code functions, such as Free-Run/Rec-Run, to be easily selected by the Setup menu keys on the subcontrol panel.

### **Multiple Outputs**

■ They output composite and S-Video, as well as component signals via BNC connectors, which are switchable to RGB output. The UVW-1400A adds composite, S-Video and component (switchable to RGB) inputs. The UVW-1400A has two switchable sync connectors and a Sync on Green.

### **Remote Control Unit**

■ With the optional SVRM-100A Remote Control Unit, basic functions, such as Jog, Shuttle, Playback, Record, Pause, FF and REW, can be controlled. When you use the SVRM-100A with the VCRs, recognizable color picture search at up to 5x normal speed in forward or reverse (16x in monochrome) is possible.

### Menu System

■ Initial Setup menu system is programmed in the form of a layer structure. You simply go through the menu using the subcontrol panel and initialize the VCR. The menu allows many detailed operational parameters to be preset and retained in memory, even after power is turned off.

### **Character Generator**

■ Built-in character generator displays information, such as VCR status, Time Code, self-diagnostic messages, setup menu, etc. Characters can be superimposed on the S-Video output and displayed on a monitor.

### Auto Repeat Function

■ An Auto Repeat function enables either an entire tape or a specific portion of tape to be replayed repeatedly. By simply selecting A and B points or presetting the time codes on the Setup menu, they play back the segment repeatedly.

### **Diagnostic Function**

■ Built-in diagnostic function detects errors and displays error messages which identify the problem area. A digital hour meter shows elapsed time on critical operations, such as accumulated drum rotation time.

### Compact & Lightweight

■ They are 19-inch rack mountable (4 RU high) and weigh 39 lbs (UVW-1200) and 42 lbs (UVW-1400A).

# UVW-1200/UVW-1400A

### UVW-1400A Only

- Remotely control the UVW-1400A's record function with foot switch control using the optional FS-20 Foot Switch. This facilitates convenient operation in applications such as scientific research.
- Back Space editing for smooth transitions between scenes, initiated with the optional SVRM-100 Remote Control Unit.
- Offers a Trigger function for Sony color video printers. With the optional SVRM-100A connected via a stereo mini jack on the front panel, the UVW-1400A can send a trigger signal to Sony video printers for high quality hard copies. (Recommended for use with the UP-5500 or UP-7200 printers.)
- Accepts an RGB signal, either Sync on Green or separate sync. In a variety of applications, including medical and /or scientific research, most of the equipment has RGB with a separate sync signal. This separate sync capability allows the UVW-1400A to work with other equipment with greater flexibility.

### Betacam SP— The Universal Choice

With over 1,000,000 machines in the field, Betacam SP is still the worldwide standard for broadcast and post production. And use of this recording standard results in the superior picture quality of the UVW and PVW-series VCRs. Betacam SP is a component recording format where the Chrominance signals (R-Y, B-Y) are time compressed and recorded on one track, using the CTDM system (Compressed Time Division Multiplex). The Luminance signal, meanwhile, is recorded on a separate track. This eliminates cross color and cross luminance effects. This component two-track recording technology is combined with high frequency FM carriers for each track, providing very wide bandwidth for both the luminance and chrominance signals. The result of all this is that detailed luminance and chrominance information – characteristics which create the excellent multi-generation picture performance of the Betacam SP format – is superbly reproduced.

## UVW-1700G

# Betacam SP Computer Graphics Frame Recorder

The UVW-1700G has all the features of the UVW-1400A (except foot switch control), plus it adds frame accurate video insert editing capability, as well as RS-232 and RS-422 interfaces. These make the UVW-1700G ideal not only for conventional video program production, but also for animation and computer graphics creation.

# Same features as the UVW-1400A, *Plus* —

- Uniquely equipped with both RS-232 and RS-422 serial ports for versatile system integration. Both serial ports are easily accessed via the Setup menu.
- Built-in time code capability, combined with a sophisticated servo system, ensures frame accurate insert editing (video only) when connected to computer-based editing systems via RS-232 or RS-422 equipped edit controllers.
- Ideal VCR for animation and computer graphics creation, where frame-by-frame editing is indispensable.





# UVW-1600/UVW-1800

# Betacam SP Player/Feeder and Editing Recorder

The UVW-1600 and UVW-1800 are the other half of the UVW

Series. They provide the true superiority of the Betacam SP format with sophisticated editing features. They are equipped with RS-422 control, have built-in TBCs and offer Time

Code operation. A variety of inputs and outputs, including composite, S-Video and component are provided as well. When controlled from an RS-422-based edit controller, they offer an easy and economical way to form an excellent editing system with all the superior performance, versatility, and reliability that Betacam SP provides.



UVW-1600

### **FEATURES**

### **Built-in TBC**

■ Equipped with a built-in TBC (Time Base Corrector), they provide stable pictures without any additional equipment. Advanced, high quality Digital Dropout Compensation ensures consistent picture performance. The optional UVR-60 TBC Remote allows remote adjustment via the 15-pin connector.

### **Two Channel Audio**

■ They offer two longitudinal audio channels. The combination of the high tape speed (118.6mm/s) of the Betacam SP format and the adoption of the Dolby Ctype Noise Reduction system enables them to deliver high quality audio with a wide dynamic range, minimum distortion, and excellent signal-to-noise ratio.

### **Self-Diagnostics**

■ Self-diagnostic function detects errors and displays an error message identifying the problem area. This function minimizes down time.



### **RS-422 Interface**

■ They are equipped with RS-422 Serial Interface for professional editing. Edit Controllers, including the Sony PVE-500 and other stand-alone, or computer-based Edit Controllers, can be used.

### **Multiple Outputs**

■ They provide two types of component output: Three BNC connectors or a Betacam 12-pin dub connector. The component signal interface allows full advantage to be taken of the superb performance of the Betacam SP format. They also output composite and S-Video. The UVW-1800 features composite, S-Video, component and 12-pin dub inputs, as well.

### **Time Code**

■ Since Betacam SP has an independent time code track, an audio track does not have to be sacrificed for time code. The UVW-1600 has a SMPTE LTC (Longitudinal Time Code) and User Bit reader, while the UVW-1800 reads and generates time code and User Bits. LTC identifies the absolute address of a frame, while User Bits are reserved for your use. Frame accurate A/B roll editing is achieved with LTC. Time Code operation can also be externally locked. Additional time code operation, such as Drop Frame /Non-Drop Frame, Free-Run/Rec-Run, is selectable by the Setup menu keys on the sub-control panel.

### Set-Up Menu

■ An initial Set-up menu allows many detailed operational parameters to be preset. By simply going through the layer structure of the initial setup, the VCRs can be initialized. Once set, options are memorized and retained in memory, even after power is turned off.

### **Character Generator**

■ A built-in character generator superimposes characters on the output signal obtained at the video output. Time code data and VCR functions are shown on a monitor. Menu items, warning and error functions can also be displayed

### **Remote Control Unit**

■ With the optional SVRM-100A Remote Control Unit, basic functions, such as Jog, Shuttle, Playback, Record, Pause, FF and REW, can be controlled. Using the SVRM-10, recognizable Color Picture Search at up to 5x normal speed in Forward or Reverse (16x in Monochrome) is possible.

### **Hour Meter**

■ Hour meter indicates elapsed time on time critical operations, such as accumulated drum rotation time. It can easily be displayed with the push of a button.

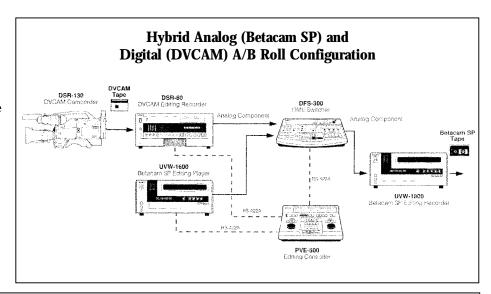
# UVW-1600/UVW-1800

### **UVW-1800 Only**

Connected to an RS-422-based edit controller, the UVW-1800 becomes an editing VCR for assemble or insert editing. Frame accurate editing is assured due to the sophisticated Servo control and built-in Time Code Generator/Reader. In the insert mode, video, audio CH-1/2 and time code can be inserted independently, or in any combination.

### **Optional Accessories**

FS-20 Foot Switch	24.95
UVR-60 TBC Remote Control	.529.95
RMM-130 Rack Mount Kit	199.50
VDC-C5US 12-pin Component Dub Cable	.109.95



UVW-SERIES AT A GLANCE					
	UVW-1200	UVW-1400A	UVW-1600	UVW-1700G	UVW-1800
Designation	Player	Player/Recorder	Editing Player	CG Frame Recorder	Edit Player/Recorder
Remote Interface	RS-232	RS-232	RS-422	RS-232/RS-422	RS-422
Video Inputs:					
Composite	_	BNC (x 1)	_	BNC (x 1)	BNC (x 1)
S-Video	<u> </u>	4-pin	_	4-pin	4-pin
Component	_		_		12-pin, BNC x 3
RGB/Component	_	BNC x 3	_	BNC x 3	_
Video Outputs:					
Composite	BNC (x 2)	BNC (x 2)	BNC (x 2)	BNC (x 2)	BNC (x 2)
S-Video	4-pin	4-pin	4-pin	4-pin	4-pin
Component			12-pin, BNC x 3		12-pin, BNC x 3
RGB/Component	BNC x 3	BNC x 3	_	BNC x 3	_
A. P. T		VID 0		VID 0	VID 0
Audio Inputs	— —	XLR x 2	— —	XLR x 2	XLR x 2
Audio Outputs	XLR x 2	XLR x 2	XLR x 2	XLR x 2	XLR x 2
Time Code I/O	_	_	Output		Input/Output
Menu Driven	Yes	Yes	Yes	Yes	Yes
Time Base Stabilizer	Yes	Yes	Yes	Yes	Yes
Remote TBC Interface	_	_	15-pin	_	15-pin
Sync and S/C Adj.	_	_	Yes	_	Yes
Control S Port	Yes	Yes	Yes	Yes	Yes
Sony Print Trigger	_	Yes	_	Yes	_
LCD Display	Yes	Yes	Yes	Yes	Yes
VU Meter	_	Yes	Yes	Yes	Yes
Audio Level Control	_	Yes	Yes	Yes	Yes

## **PVW SERIES**

### Professional Betacam SP Editing VCRs

Whenever versatility and no compromise performance is needed, there is only one choice. Whether for high quality acquisition, post production or final transmission, the PVW series is the only choice. Legendary reliability and compre-



hensive support for its many users has estab-

lished the PVW series as the standard in broadcast and post produc-

tion. The PVW Series includes the PVW-2600 Player, PVW-2650 Player with Dynamic

Tracking and the PVW-2800 Editing Recorder. They feature built-in Time Base Correctors, LTC and VITC Time Code operation and RS-422 Serial Interface, as well as composite, S-Video and component video inputs and outputs. Most importantly, they are built for heavy, every day duty. Special attention is paid to reliability, stability, and serviceability.

#### **FEATURES**

#### **Superior Construction**

■ The PVW Series has a one-piece base plate made of high strength, die-cast aluminum. This ensures maximum stability and reliability of the complete tape transport, including the cassette loading and tape handling mechanisms.

#### **Superior Design**

- The reel, capstan and drum servo control systems all use digital processing. Servo control alignment parameters are stored in a non-volatile memory, enabling potentiometerless, automatic servo alignment.
- Tension regulators in the PVW-2600 and 2800 for both the 'Take-up' and 'Supply' sides provide smooth and accurate tape movement. Take-up tension regulator correctly controls tape tension, maintaining optimum tape-to-head contact. This significantly improves the acceleration and deceleration characteristics of the tape transport, giving a rapid response to the search dial function.
- To offer the highest reliability, they use LSI circuits. Components and adjustment points are thereby minimal. Furthermore, all PC boards and tape transport systems are easily accessible from the top, which greatly improves serviceability.

#### High Quality Signal Processing

- They invariably have to interface with composite and S-Video systems. To this end, the PVW-2800 has an Adaptive Digital Comb filter which uses correlation techniques to select the appropriate output from three different types of line comb filter, obtaining highly accurate Y/C separation.
- In addition to the Adaptive Digital Comb filter, the PVW-2800 employs digital LSIs for all signal processing, including Y/C separation, decoding of chrominance signal and CTDM. Composite, S-Video and component signals are A/D (Analog to Digital) converted soon after they are input and digitally processed, until just before FM modulation. As well as the decoding process, the composite output signal benefits from a one chip digital subcarrier, ensuring the output of highly stabilized composite signals.

#### **Audio**

■ Equipped with two longitudinal audio channels. Thanks to Betacam's tape speed and the use of the Dolby C - type NR (Noise Reduction) they deliver high quality audio with a wide dynamic range, minimum distortion and excellent signal-to-noise ratio.

#### Inputs/Outputs

■ PVW-2600 and PVW-2650 output component signals with either three BNCs or a 12-pin dub connector. The PVW-2800 provides two sets (for input and output). The PVW-2600/2650 also have composite and S-Video outputs, the PVW-2800 providing input and output of composite and S-Video. They are equipped with RS-422 serial interface for versatile editing system expansion and flexible system control.

#### **VITC/LTC Time Code**

■ The PVW-2600/2650 feature built-in VITC, LTC Time Code readers with User Bits. The PVW-2800 reads and generates Time Code, as well. LTC can be automatically recorded on the dedicated time code track. Time code and User Bit settings are easily executed, and external/internal Time Code, Regen/Preset, or Rec-Run/Free-Run selections are available on the sub-control panel.

#### **Character Generator**

■ Character generator allows output to be superimposed on the signal from the video output or monitor output. It displays either Time Code (VITC/LTC) User Bits or CTL data, read from tape.

## **PVW SERIES**

■ VCR status, including shuttle tape speed, can be displayed by accessing the Setup menu. Error number and status can also be displayed, when detected. Character display is On/Off switchable from the sub-control panel.

#### **Built-in TBC**

■ Built-in TBC provides stable pictures and eliminates the need for additional time base correction. High quality Digital Dropout Compensation also ensures consistent picture performance. In addition to local TBC controls under the front panel, remote TBC adjustments can be made with the optional BVR-50 TBC Remote Controller. The BVR-50 connects via a 15-pin cable on the VCRs rear panel connector.

#### **Easy Maintenance**

- 16-bit CPU in the system and servo control use a common serial data bus interface, permitting a sophisticated diagnostic system to be realized.
- The drum heads of the VCRs use an upper drum rotation system. For head exchange, only the upper drum has to be removed, thus very precise head interchangeability is maintained.
- For maintenance and servicing, they are equipped with comprehensive self-diagnostics. A digital hour meter is also provided, displaying accumulated power time on, drum rotation, tape running, threading and unthreading operations.
- PVW-2800 has four boards at the side, four boards at the rear and one board under the tape transport. No boards are located above the tape transport, enabling quick access to the drum area for head exchange, etc. Audio heads are directly accessible for easy cleaning, and each component is designed for easy exchange.
- The control panel of each VCR can be tilted up to 90° and locked at the desired angle. The panel also detaches up to 15' for remote operation, using the optional BKW-2010 Control Panel Extension Kit and BK-803 Control Panel Case.

#### **Exclusive Features of the PVW-2650**

- Equipped with Dynamic Tracking (DT), the PVW-2650 provides broadcast quality noiseless playback pictures within the range of -1 to +3 times normal tape speed. The highly advanced DT System has head dither circuitry and computerized control to ensure accurate head tracking. The DT heads are mounted on a ceramic bimorph, with positional information derived from strain gauges and fed back to the control system. In the Variable mode, continuous noiseless pictures are reproduced over the range of -1 to +3 times normal playback in 54 steps.
- Provides Dynamic Motion Control (DMC) Playback. This function memorizes the desired tape speed within the DT range of -1 to +3 times normal speed and plays back noiseless pictures at that speed. Performs DMC editing when the PVW-2650 is used as a feeder with the PVW-2800.
- The PVW-2650 is free from color framing, as long as signals are fed directly from the component signal source. However, when playing back the tape recorded from the composite source, there is a Color Framing System which keeps video signal impairment to a minimum. The system is the combination of the 4-Field Capstan Servo function, using the off-tape CF (Color Framing) ID pulse and the off-tape VISC (Vertical Interval Subcarrier) function, which matches the decoding axis to the encoding axis. This results in superior composite output.

#### Conveniences

- High speed recognizable picture search in monochrome at up to 24x normal speed and up to 10x normal in color.
- Performance is further enhanced with the use of metal particle tape. The PVW-2800 uses metal particle tapes exclusively for recording. In playback, all three can use both metal particle and oxide tape assuring compatibility with BVW Broadcast Series Betacam SP VCRs.
- To meet the need for customized operation, an easy to use initial Setup menu allows many functional parameters to be preset. The menu is scrolled and modified by the Search dial, while being monitored via video out, monitor out, or on the LED timer display. Up to eleven items can be monitored on the screen at once.
- Optional RMM-110 Rackmount Kit allows mounting onto a 19" rack without taking off the side panels.

#### **Exclusive Features of the PVW-2800**

The PVW-2800 provides a comprehensive built-in VCR to VCR editing facility. In addition to assemble and insert edit functions which include Auto Preview/Review, the PVW-2800 also provides Audio Split editing capability with independent IN and OUT memories. It meets the requirements of a modern editing system, having Frame-by-Frame Editing Point Trim, selectable Pre-roll time and Auto Edit In/Out functions. The PVW-2800 delivers frame accurate editing without any additional edit control hardware. It also has a DMC (Dynamic Motion Control) editing function. Performs slow motion editing when connected to a DT-equipped VCR like BVW-65, BVW-75 and PVW-2650.



## **PVW SERIES**

#### PVW-2600 Player/Feeder

- 90 minutes of playback using L-size metal or oxide cassettes
- High-speed recognizable color picture search, up to 10x normal speed and 24x speed in monochrome
- Two longitudinal audio channels with Dolby C-type NR
- Equipped with RS-422 9-pin serial interface
- Built-in TBC with advanced Digital Dropout Compensator
- Optional BVR-50 provides remote control of the TBC

#### **PVW-SERIES AT A GLANCE**

- Built-in LTC/VITC Time Code Reader and Character Generator.
- User-friendly dial menu operation and enhanced serviceability with built-in self diagnostics
- R-Y, B-Y component signal output via BNC or 12-pin Betacam dub connector. Also equipped with S-Video output.

## PVW-2650 Dynamic Tracking Player

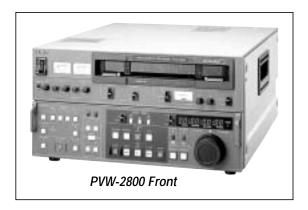
#### Same as the PVW-2600, Plus —

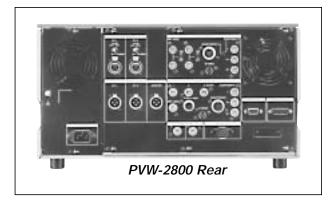
■ Dynamic Tracking (DT) Playback from -1 to +3x normal speed

#### PVW-2800 Edit Recorder

#### Same as the PVW-2600, Plus —

- Built-in comprehensive editing facilities
- Dynamic Motion Control (DMC) with memory provides slow motion editing capability.
- R-Y, B-Y component signal input/output via BNC or 12-pin Betacam dub connectors. Also equipped with S-Video input and output.
- 90 minutes play/record time with L-size cassettes
- Built-in LTC/VITC reader and generator with User Bits





#### UVW/PVW SERIES SPECIFICATIONS

#### **Power Requirement:**

**UVW-Series:** 

90 to 132v AC, 48 to 64 Hz **PVW-Series:** 

90 to 265v AC, 48 to 64 Hz

#### **Power Consumption:**

UVW-1200: 63w

UVW-1600: 65w

UVW-1400/1700/1800: 85w

PVW-2600: 120w

PVW-2650: 130w

PVW-2800: 150w

## Operating Temperature: 5°C to 40°C (41–104°F)

#### **Storage Temperature:**

-20°C to 60°C (-4– 140°F)

#### Weight:

UVW-1200:

17.5kg (38 lbs. 9 oz.)

UVW-1600:

18kg (39 lbs. 10 oz.)

UVW-1400A/1700G/1800:

19kg (41 lbs. 14 oz.)

PVW-2600:

24.5kg (54 lbs.)

PVW-2800/2650:

25kg (55 lbs. 2 oz.)

#### Tape Speed:

11.86cm

#### FF/REW Time:

Less than 3 minutes with BCT-90ML

#### **Search Speed:**

(UVW-Series with Optional SVRM-100)

#### Shuttle:

15 steps, Still to 16x normal speed forward and reverse

#### loa:

Frame-by-frame, forward and reverse

(PVW-Series)

#### Shuttle:

Still to 24x normal speed, forward and reverse

#### Jog:

Frame-by-frame, forward and reverse

#### **Dynamic Tracking:**

(UVW-2650 only):

-1 to +3x Normal Speed

#### Remote Input:

UVW-1200/1400A:

RS-232 (25-pin Female)

UVW-1700G: RS-232,

RS-422 (9-pin Female)

UVW-1600/1800 / PVW-Series: RS-422 (9-pin Female)

#### TBC Remote:

UVW-1600/1800/PVW-Series: 15-pin Male

#### Control S:

UVW-Series only: Mini Jack

## **PVW SERIES**

VIDEO PERFORMANCE (WITH METAL PARTICLE TAPE)			
	UVW-Series	PVW-Series	
Bandwidth Luminance			
(50% Modulation):  Color Difference 50% Modulation)	30 Hz-4.0 MHz +1.0/-4.0 d 30 Hz-1.5 MHz +1.0/-4.0 d	30 Hz-4.0 MHz +0.5/-4.0 dB 30 Hz-4.0 MHz +0.5/-3.0 dB	
S/N Ratio Luminance	More than 49 dB	More than 51 dB	
Chrominance	More than 52 dB	More than 53 dB	
Differential Gain	Less than 3%	Less than 3%	
Differential Phase	Less than 3%	Less than 3%	
K-Factor (2T pulse)	Less than 3%	Less than 2%	
Y/C Delay	Under 30 ns	Under 20 nanosecond.	

#### **AUDIO PERFORMANCE**

(WITH METAL PARTICLE TAPE)

	UVW-Series	PVW-Series
Frequency Response	50 Hz–15k Hz +2.0/-3.0 d	50 Hz-15k Hz +1.5/-3.0 dB
S/N Ratio (at 3% distortion level)	More than 70 dB	More than 72 dB
Distortion T.H.D. (at 1kHz reference level)	Less than 1.5%	Less than 1%
Wow and Flutter	Less than 0.15% rms	Less than 0.1% rms

#### PROCESSOR ADJUSTMENT RANGE

	UVW-Series (Requires Optional UVR-60)	PVW-Series
Video Level	±3 dB	±3 dB
Chroma Level	±3 dB	±3 dB
Setup Level	0 to +15 IRE	0 to +15 IRE
Hue	±15°	±15°
System SC Phase	360° p-p	360° p-p
System Sync Phase	+3 to -1 μs	+3 to -1 μs
Y/C Delay	±100 ns	±50 ns

#### SIGNAL INPUTS

(UVW-1400A/1700G/1800/PVW-2800)

Reference Video

**UVW-1400A/UVW-1700G:** BNC x 2 (Video and RGB)

UVW-1800/PVW-2800: BNC x 1

S-Video

**UVW-1400A/1700G/1800/PVW-2800:** 4-pin (x 1)

**Composite Video** 

**UVW-1400A/UVW-1700G:** BNC x 2 **UVW-1800/PVW-2800:** BNC x 1

Component Video

**UVW-1400A/1700G:** Video/RGB Switchable (BNC x 3) **UVW-1800/PVW-2800:** 2 (BNC x 3), 12-pin Dub Connector

**AUDIO IN CH-1/2** (Balanced XLR 3-pin Female)

**UVW-1400A/1700G/1800/:** +4 dB, 600Ω/10 kΩ selectable

**PVW-2800:** Low: -60 dB, 3 k $\Omega$ ,

High: +4 dB,  $600\Omega/10 \text{ k}\Omega$  selectable,

Time Code In

**UVW-1800/PVW-2800:** BNC x 1 (0.5v TO 18v, 10 k $\Omega$ 

#### SIGNAL OUTPUTS

**Composite Video** 

**UVW-Series:** x 2 (BNC) **PVW-Series:** x 3 (BNC)

Component Video

**UVW-1400A/1700G:** Video/RGB Switchable (BNC x 3) **UVW-1600/1800:** BNC x 3 or 12-pin Dub Connector **PVW-2600/2650/2800:** BNC x 3 or 12-pin Dub Connector

Audio Line Out (CH-1/2)

XLR 3-pin Male: +4 dB, 600Ω, Balanced

Audio Line Out (CH-1/2)
UVW-Series: Phone (-6 dB)

**PVW-Series:** XLR 3-pin Male: +4 dB, 600Ω, Balanced

S-Video

**UVW-Series:** x 1 (4-pin) **PVW-Series:** x 1 (4-pin)

**Time Code Out** 

**UVW-1400A/1700G:** Video/RGB Switchable (BNC x 3)

**UVW-1600/1800:** BNC (2.2v,  $600\Omega$ ) **PVW-2600/2650/2800:** BNC (1.2v,  $75\Omega$ )



## PVV-3

### Dockable Betacam SP Recorder

The PVV-3 Recorder docks directly to the Sony DXC-D30, DXC-637 and the DXC-327B. With an adapter, it can dock to cameras from other manufacturers to form superb Betacam camcorders. To capture the outstanding picture quality of the above cameras, their component (R-Y, B-Y) output signals are recorded with the field-proven Betacam SP format. Combining advanced mechanical design and electronic circuitry with the use of the small Betacam SP cassette, the PVV-3 is remarkably compact and lightweight, weighing slightly over 6 pounds. With low power consumption (10 watts) over an hour of continuous camcorder operation is possible on one fully charged NP-1B battery.



#### **FEATURES**

#### **Highest Quality Video**

■ To obtain maximum performance, the PVV-3 only records onto metal particle tapes. Of course, tapes recorded on the PVV-3 can be played back on any UVW, PVW or BVW series Betacam SP VCR. Recording time is 30 minutes with an S-size cassette. For the highest possible performance, BCT series tape is recommended.

#### **Refined Ergonomics**

■ The PVV-3's extended carrying handle (optional) provides security during transport and allows easy handling in low angle shooting. Furthermore, function controls and indicators have been simplified to help avoid misoperation.

#### **Compact and Lightweight**

■ A highly advanced mechanical design, small tape transport system, electronic circuitry incorporating newly developed ICs and a small cassette compartment result in the compact, lightweight design of the PVV-3. Weighing only 2.8 kg (6 lbs. 3oz.), the PVV-3 - even when combined with the DXC-D30 camera head, lens, battery and tape - weighs only 18 lbs., making it ideal for one-person operation. Up to 60 minutes of continuous camcorder operation is possible on one fully charged NP-1B battery, due to its low power consumption of 10 watts.

#### **Time Code Operation**

- Built-in SMPTE LTC/VITC Time Code and User Bit Reader/Generator. LTC is recorded on a dedicated time code track, VITC in the vertical blanking interval. Using VITC allows both normal audio channels to be used simultaneously. Time Code lock to an external time code generator or another PVV-3 is also possible for multi-camera operation. The PVV-3 has both time code Preset/Regen capability. By using the Shift/Advance buttons, either time code or User Bit can be preset. When viewing recorded material, LTC is indicated on the LCD display.
- The PVV-3 is also equipped with a realtime clock/calendar recording function. When setting to the date/time position, the clock data is automatically recorded on the LTC track of the tape, while calendar data is recorded on the User-Bit area. Clock data can also be recorded on the User-Bit area of the VITC track.

#### **Back Space Editing**

■ Automatic Back Space Editing with instant start gives sequential recording without picture breakup at the transition points.

Time Code regeneration, when used with the Record Review function, enables the PVV-3 to record continuous time code at any editing point.

#### Viewfinder Playback

■ In playback or record review mode, the recorded luminance or chrominance (CTDM) signal can be viewed on the viewfinder. The luminance signal is usually shown. To check the chrominance signal just press the CTDM button on the side panel.

#### Color Playback in the Field

■ Full color playback is available in the field by connecting (via the 20-pin interface) the optional VA-300 Playback Adapter. The VA-300 provides both composite and RF signal outputs (with the optional RFU-95 RF adapter), enabling recording to be checked on a monitor. For field applications and microwave transmission, a component TBS (Time Base Stabilizer) is built in. Also provides an audio output which can be either of the two Audio tracks, or a mixture of both.

#### **Easy Menu Select**

■ Various menus, such as Clock/Calendar setting, Cumulative Head Drum and tape transport operating hours, VITC Insertion Line Setting, DF/NDF mode, Anton Bauer Digital Battery Capacity Indicator, Standby Period Setting and Real-Time Recording function for VITC User Bits can be displayed in characters on the LCD display or a monitor for easy access.

#### **Audio Inputs**

■ Two audio inputs are available, with longitudinal track recoding. Channel recording levels can be independently adjusted.

#### **Built-in Speaker**

■ During recording mixed channels, individual channels or alarm signals can be monitored from the speaker. Separate monitor level and alarm level controls are provided.

#### Microphone Power Supply

■ When the audio input select switch is set to EXT mic, the XLR connectors of audio CH-1 and CH-2 provide (+48v) phantom power for external mics, without the need for an external power supply. When the audio input select switch is set to Line or Camera, mic power is switched off.

#### **Full Function Control**

■ Eject, Play, REW, FF and Stop buttons are located on top and are covered with a lid to avoid accidental operation. They are automatically inhibited during recording. Record mode can be activated either by the trigger button on the front of the camera, or on the zoom lens grip. Start and stop can be activated with the optional RM-81 Remote Control as well.

#### **Record Review Function**

■ Press the Record Review button while in Stop or Pause mode, and the PVV-3 automatically plays back two seconds of the last scene. If the Record Review button is pressed for longer than two seconds, tape rewind time can be extended up to a maximum of ten seconds.

#### 8-Digit LCD Display

■ Comprehensive 8-digit display provides an extensive range of critical information about VCR operation. In addition to time data (Control Track, Time Code and User-Bits), remaining tape and battery capacity are also displayed via a bargraph meter. A digital audio meter is provided to allow precise adjustment of the audio recording level.

#### Warning Indicators

■ When docked to the DXC-327B537/637 or DXC-D30, the PVV-3 provides a comprehensive warning system with indicators like No Tape, Low Battery, Battery End, Tape Near End, Tape End, Servo, Humid, RF and Slack. These are shown on the LCD display and DXF-601/701 viewfinders. An audio alarm is provided, as are warning lights on the side and in the viewfinder. Tally lamps are located on the rear of the PVV-3 and in the front of the viewfinder.

#### **Anton/Bauer Compatible**

■ When used with Anton/Bauer Digital batteries, remaining power is accurately displayed on the LCD panel and in the viewfinder as an interactive 'fuel gauge'. When used with the Anton/Bauer Ultralight, power is turned on/off in conjunction with the VCR start/stop function.

#### **Selectable Battery Cases**

■ In addition to the supplied battery case, the optional DC-520 can be attached to house two NP-1B batteries.

#### **Rugged Construction**

■ Equipped for use even under harsh field conditions, the PVV-3 is ruggedly constructed of die-cast magnesium. The VCR cassette compartment has a rubber seal to protect it from dust and moisture.

#### **Optional Accessories**

-	
• VA-300 Playback Adapter	.1995.95
• <b>AC-550</b> AC Adapter	749.95
• CMA-8A AC Adapter	634.95
• CCQX-3 Cable for CMA-8A	109.95
• NP-1B Nicad Battery	79.95
• DC-520 NP-1B Battery Case	319.95
• BC-1WD NP-1B Charger	634.95
• RM-81 Remote Control	

### **PVV-3 SPECIFICATIONS**

#### **GENERAL**

**Power Requirements:** DC 12v +5.0 -1.0v

**Power Consumption:** 10 Watts

Weight:

Approx. 3.4kg (7 lbs. 8oz.)

**Recording Time:** 

30 minutes with BCT-30

FF Time:

4.5 minutes with BCT-30

**Rewind Time:** 

3.5 minutes with BCT-30

#### VIDEO

#### **Bandwidth:**

**Chrominance** (50% Modulation): 30Hz to 4.5 MHz +0.5 -4.0 dB **Chrominance** (50% Modulation):

30Hz to 1.5 MHz +0.5 -3.0 dB

#### S/N Ratio:

Luminance

(Component In/Out): 51 dB

Chrominance

(AM/PM): More than 53 dB

Y/C Delay:

Less than 20 nanoseconds

#### **INPUTS/OUTPUTS**

Video Input:

50-pin (from camera head)

Video Output:

Composite (BNC x 1)

Genlock Video In: BNC: 1.0 Vp-p, 75Ω

Time Code In/Out:

BNC: 1.0 Vp-p,  $75\Omega$ 

Remote:

Stereo mini jack

Playback Adapter:

20-pin

#### **AUDIO**

Freq. Response:

50 Hz to 15kHz +1.5 -3.0 dB

S/N Ratio:

More than 72 dB

**AUDIO IN CH-1/2:** 

XLR 3-pin female: -60 dBu/+4 d selectable, high impedance, balanced

**Earphone Out:** 

Mini jack



## **BVV-5**

#### Dockable Broadcast Betacam SP Recorder

The BVV-5 offers a number of advantages over the PVV-3, for even more versatility. Functionally the same as the PVV-3, the BVV-5 offers even more rugged construction, records on conventional oxide tape as well as metal tape, has four channels of audio, provides audio/video confidence playback and can be used as a stand-alone unit when used with the optional VA-5 VCR Adapter.

## All the features of the PVV-3, plus —

#### **Four Channel Audio**

- In addition to the two conventional linear audio channels of the PVV-3, the BVV-5 adds two Hi-Fi, making a total of four audio channels available.
- There are four XLR inputs, two for the linear tracks and two for the Hi-Fi tracks. Input selections of line, camera, or microphone are possible. Each channel's recording level can be independently adjusted.

#### **Superior Construction**

■ Ruggedly constructed to meet the most demanding shooting environment. The cassette compartment is shielded by rubber to protect it from dust, as well as to make it nearly waterproof.

#### **Confidence Playback**

Provides simultaneous playback of the monochrome picture on the viewfinder when used stand-alone or as a dockable.

#### **Dockable or Stand-Alone**

■ The BVV-5 can operate as a stand-alone recorder when used with the optional VA-5 VCR Adapter. The VA-5 accepts component and composite signals via a 26-pin connector (also accepts composite signals via BNC connector). This allows connection to almost any camera without modification. Two audio level meters, a record button and tape remaining time indicator are provided on the top panel of the VA-5 for easy operation in the field.

#### Playback In the Field

■ In addition to a built-in LTC/VITC Time Code generator, the BVV-5 has external time code inputs and outputs.

#### Optional VA-500

■ The BVV-5 uses the optional VA-500 for playback and microwave transmission in the field. A compact and lightweight playback adapter, the VA-500, connects to the BVV-5 via a 20-pin interface to allow full color picture and one channel audio (either single of mixed channel) playback. Composite video and VHF outputs are provided, to enable recording checks on TV receivers and microwave transmission. Offers external TBC interface capability as well.



- Available for (DXC, UVW, BVP, BVW Series and Ikegami, Hitachi, JVC cameras docked with Betacam recorders.
- The BetaVue adapter is portable, compact (2.5 x3.5 x 1.25"), lightweight (7 oz.) and made of high-impact plastic.

## BETAVUE Picture/Sound Playback Adapter

The BetaVue can be used in the field or studio to connect a Sony Betacam camcorder to a monitor for on-screen monochrome playback of Betacam tapes. Until now, if you wanted to view playback in the field, you had to look into the camera's viewfinder and listen through headphones, or purchase a color playback adapter. That meant another box to carry and additional expense. With the BetaVue you can view a camera picture (E-E) showing the camera's status indicators display on-screen, and most importantly, view on-screen playback. A 5-inch active matrix color LCD monitor is also available. The lightweight BetaVision monitor attaches to the camcorder with a deluxe mount to the accessory shoe. It gets video and power from the BetaVue, eliminating long cables and extra batteries.

- Needs no special wiring or installation. It plugs into the camera's existing connector and relays monochrome video (NTSC and PAL) via a BNC connector to a monitor.
- The built-in compact audio amplifierspeaker with volume control is connected to the camera's earphone jack.

#### BetaVue

For Sony DXC and UVW Series .. 279.00

#### **BetaVue**

For Sony BVP and BVW Series ....469.00

#### **BetaVision**

5" Color LCD Monitor ......**749.00** 

## **BVW-50**

### Broadcast Betacam SP Portable Player/Recorder

A member of the BVW (Broadcast) Series, as opposed to the PVV3 UVW (Universal) and BVV-5 PVW (Professional) Series of Betacam VCRs, the BVW-50 offers superior construction and has many features that make it ideal for applications ranging from sophisticated field operation to video production. The BVW-50 features 90 minutes of recording/playback, built-in TBC and RS-422 control, Time Code operation and low power consumption.



#### **FEATURES**

#### **Compact and Lightweight**

■ Compact and lightweight, the BVW-50 measures 12½ x 5¾ x 13½" (WxHxD) and weighs 18 lbs. 12oz. It uses very little power, running almost 3 hours on two NP-1B batteries.

#### **Front Loading**

■ Incorporating a front access mechanism enables the BVW-50 to have a one-piece top panel made of high strength die-cast magnesium, with no moving parts. This ensures maximum stability and reliability of the cassette loading mechanism. The cassette lid, linked to the movement of the cassette compartment, is automatically opened and closed for tape insertion and ejection. This allows quick tape changing and reduces the possibility of dust getting into the tape transport, thus minimizing tape dropout.

#### Inputs/Outputs

■ Component or composite video signals can be input via the 26-pin connector. A 12-pin component dub connector is provided for high quality feeds to other Betacam VCRs. There is also a composite (BNC) video line input and two outputs for monitoring, or for external TBC connection. Offers RCA video and audio outputs, allowing even a regular TV with only an antenna input to be used for monitoring, via an optional RF adapter.

#### **LCD** Display

■ Large 8-digit LCD display shows Tape Time, Time Code and User Bits. Tape and battery remaining time are displayed on the bargraph meter.

#### **Four Channels of Audio**

■ Four XLR-balanced channels of audio can be input or output. There are independent meters for each channel on the front panel, and individual recording and playback levels can be manually controlled. Audio inputs can be selected from either the camera or line inputs, and their Gain can be set for input levels of -60, -20 or +4 dB. Each audio input can also provide 48v phantom power for external microphones.

#### **Time Code**

■ Has built-in LTC/VITC Time Code reader and generator. Also incorporates time code genlock capability, allowing integration into multi-camera systems.

#### **Confidence Recording**

■ Allows simultaneous playback of audio and video during recording (Confidence Recording). Video can be seen through the camera viewfinder, and audio can be monitored through headphones or via the CH-4 XLR output connector. Also offers search speeds of up to 5x normal speed with recognizable color pictures and 16x speed with monochrome picture.

#### **RS-422 Interface**

■ RS-422 9-pin interface allows use as an editing player/feeder.

#### **Built-in TBC**

■ Built-in TBC, with high quality Digital Dropout Compensation, ensures consistent picture performance. Video level and system sync phase are adjustable from the side panel. An interface for an external TBC is also provided.

#### **BVR-3 Remote Controller**

Small and simple, the optional BVR-3
Remote was designed for
use with the BVW-50
in EFP applications.
Functions, such as
FF, REW, Play,
Stop, Record,
Pause and Search,
can be remotely
controlled via the
RCC 5/10/30 meter

BVR-3 connecting cables, which combine a 9-pin remote control cable with a 4-pin DC power cable. As these cables power from the BVW-50, an external power supply is not required. The BVR-3 easily mounts on a tripod or microphone stand directly, or with the supplied thread adapter.

### **BVW-22**

### Broadcast Betacam SP Player

The BVW-22 is a player designed for use on the road, in the office, or wherever simple playback is required. It can play back oxide or metal tape and accepts either S-size or L-size cassettes. Moreover, four audio channels (two Hi-Fi and two normal tracks) can be reproduced. Totally user-friendly, the BVW-22 features a front loading system, simply-designed control panel, built-in RF modulator and wired or wireless remote control.



#### **FEATURES**

#### Front Loading System

- All operational functions, including tape cassette insertion, are located on the front panel. This makes the BVW-22 very convenient, especially for use in offices and other places where space is limited.
- Can play back oxide or metal particle tapes, in either S-size or L-size cassettes.

#### Video/Audio Output

■ Audio outputs at line level from CH-1/3 and CH-2/4 are provided via RCA connectors. A front panel switch allows selection of Hi-Fi or normal audio channels. In addition, each channel can be fed independently or mixed. Built-in RF modulator allows playback on an ordinary TV receiver.

#### **Superimpose Function**

■ Time Code, Control Track and User Bit information can be superimposed on a monitor through the video or RF output. Superimpose On/Off can be controlled by a front panel switch or the RM-770.

#### Wired/Wireless Control

■ The BVW-22 is supplied with the RM-770 Remote Control Unit and an Infrared receiver (installs on the front panel) for wireless remote control of Playback, FF, REW and Search. In addition, a superimpose On/Off switch is provided. The RM-770 includes a flexible five meter cable, which allows wired remote control, as well.

#### **Four Audio Channels**

Plays back four audio channels: two AFM (Hi-Fi) and two longitudinal Audio channels (Linear Audio) with Dolby NR.

#### **Additional Features**

- Search mode provides recognizable monochrome picture search at 3.5x normal speed in forward and reverse.
- 8-digit LED display shows Time Code, Control Track, User Bits and hour meter information. Also displays error messages and adjustment details.
- The BVW-22 is 4 RU high and can be installed in a 19" rack with the optional RMM-507 Rack Mount Kit.

### **Sony Rackmounts**

	RMM-110	RMM-130	RMM-501	RMM-507	RMM-980
SVP-9000/SVO-9600					
SVP-5600/SVO-5800					
VO-9800/VO-9850					
UVW-Series					
PVW-Series					
BVW-22					
DSR-60/80/85/2000					
Price	169.95	194.95	199.95	199.95	299.95

## SR-W7

### W-VHS High-Definition Recorder

Incorporating JVC's revolutionary W-VHS recording system, the SR-W7 makes HDTV recording and playback practical and affordable. Based on robust 1/2-inch metal particle tape, the SR-W7 utilizes a component recording system and sophisticated digital processing to record 1125 scan lines with CD-



quality Hi-Fi audio to reproduce images with amazing realism. Ideal for broadcast, corporate boardrooms, scientific analysis, trade shows, museums and home theaters.

#### **FEATURES**

#### **High Definition Mode**

- With 1125 scanning lines, the HD signal delivers twice the image quality as the current NTSC signal. To faithfully capture the HD image, the SR-W7 processes the HD signal by separating it into two discrete signals that are recorded as separate luminance and chrominance signals on parallel tracks. Color information is time compressed, not down converted, so the result is more natural and realistic..
- To further maximize the HD picture with higher efficiency, the SR-W7 has Sendust video heads with five separate layers to capture and reproduce the enormous volume of information in the HD signal.
- All playback is time base corrected (HD and SD mode) to ensure a stable signal.
- Component inputs and outputs accept industry-standard SMPTE 240M signals. Also compatible with virtually all 1125/60, 1080 and 1035 systems.

#### **Standard Definition Mode**

■ Utilizing a TCI (Time Compression Integration) recording system, the SR-W7 offes extended (9 hours with WT-180 tape) high quality analog component recording and playback of current NTSC signals in the SD (Standard Definition) mode. Like Betacam SP, the SR-W5 in SD mode records the luminance and chrominance signals in sequence in different areas of the track to eliminate mutual interference and the need to down-convert the chrominance subcarrier signal. This system yields higher resolution and sharper, more natural color reproduction.

#### VHS/S-VHS Mode

- A high-precision Super Crystal Pro-head eliminates interference from adjacent tracks, while a full set of professional-level image enhancement technologies contribute to master-quality VHS and S-VHS pictures. These include:
- —3-D Super Color circuit to reduce color smear and color loss
- Precise 3-D Digital Y/C Separation circuit for more accurate separation of luminance and chrominance signals
- Video Input Select function helps maintain maximum image definition

#### **Editing Functions**

- Edit functions include preroll editing, insert editing, audio dubbing (VHS/S-VHS only), retake, jog/shuttle control, variable speed playback and Random Assemble (RA) editing for automatic editing of up to eight predesignated scenes.
- RS-422 interface and SMPTE time code make it ideal for advanced presentations.

#### Hi-Fi Stereo

- Equipped with Sendust MIG (Metal In Gap) Hi-Fi heads designed for maximum performance with metal tapes. Offers improved response in S-VHS mode as well. The Hi-Fi heads have a dynamic range of over 90 dB.and a frequency response from 20 Hz to 20 kHz. There is also a manual Hi-Fi audio level adjustment. Has one linear (normal) track for audio dubbing.
- System also offers Zero Cross-Switching Noise Reduction to eliminate Hi-Fi audio head switching noise and a dedicated audio capacitor to eliminate noise interference from other circuits.

#### **Additional Features**

- Equipped with a 15-pin RGB connector for connection to a multiscan monitor. This allows viewing of HDTV images, even without a HDTV monitor.
- VISS signal can be written during record or playback and erased during playback.
- Auto Repeat (tape end) of up to 20 times.

#### **Applications**

With the FCC approval of ATV, broadcasters are providing second-channel programming using ATV standards. The SR-W7 is an ideal, cost-effective VCR to meet the rising demand for high-definition previews and presentations of ATV programs.

Ideal for medical applications requiring extremely high image quality. Record HDTV images of surgical procedures and postoperative observation. And since compatibility with S-VHS is maintained, the vast library of existing video material will not be wasted.

Delivers superior images at trade shows, conventions and conferences. Simply hook up to any 16:9 projector with a PC input, and high quality HDTV images can be projected. Optional wired remote control facilitates real-time presentations.



## **DUPLICATORS**

## Industrial VHS and S-VHS Hi-Fi Video Tape Duplicators

Video is more widely used now than ever before. Fields such as education, industry, medicine, society and entertainment are consuming an ever growing amount of video content. At such time of unlimited expansion in both video software demand and video application, you need a duplicator that can meet the needs of today – and tomorrow.

When it comes to investing in video duplication equipment, JVC offers the flexibility and options you need. Whether you require just a simple dubbing system or are running a high-volume duplication business, JVC's line of 2-in-1 and 3-in-1 VHS/S-VHS Hi-Fi Duplicators provide high picture and sound quality, high precision and long-term durability. They also offer significant savings in terms of space, power consumption and peripheral equipment requirements.



## **BR-7020**

### 2-in-1 High-Performance VHS Duplicator

Slightly wider than a conventional (single) duplication VCR, the BR-7020 houses two removable, high quality VHS recording units to offer great efficiency. With the addition of powerful picture-improvement circuitry borrowed from JVC's professional DX Series recorders, the BR-7020 delivers superb video, as well as audio quality. Add the optional Auto Loader, and even greater productivity is achieved. The SA-L50 Auto-Loader holds an ejected tape



and automatically loads a new one. Developed to meet a more varied range of user requirements, the BR-7020 is built to last and offers further savings in terms of power consumption and peripherals.

#### **FEATURES**

#### Two- in-One Duplicator

■ With two separate VHS units in a single compact cabinet, the BR-7020 occupies far less space on a standard duplicator rack than an equivalent number of single chassis units. It also saves energy by reducing power consumption for each recording unit by nearly half. And since both units have a common interface for video, audio, power and communication, savings on peripherals are also realized.

#### **High Quality**

■ To assure the highest possible dubbing quality, the BR-7020 incorporates the same advanced picture-improvement circuitry used in JVC's DX-series recorders, for improved chroma signal response at low levels. A luminance signal comb filter is also included to reduce color edge noise. A current stabilizer maintains current supplied to the Hi-Fi audio heads at a constant level, thus achieving superior Hi-Fi audio performance.

#### Single Input For Both Units

■ To simplify recording, the BR-7020 is equipped with special distribution circuits, which distribute input video signals to both recording units for simultaneous recording. An advanced circuit configuration prevents signal deterioration after distribution.

#### **Auto Cassette Loaders**

■ Auto cassette loading capability can be added to the BR-7020 at any time with the addition of an SA-L50 Auto Loader to each recording unit. Each loader can simultaneously hold two blank cassettes (4 total) in standby and two recorded cassettes (4 total) in the catcher tray. With no downtime for cassette changes, this easily attached modification permits continuous operation at significantly reduced costs.

#### **Self-Diagnostic System**

■ Incorporates a sophisticated self-diagnostic warning and display system for longterm reliability and continuous operation at peak performance levels. Whenever a problem occurs, numeric or alphabetical warning indicators are displayed for quick identification and trouble shooting.

#### **Easy Serviceability**

■ Downtime is virtually eliminated, because each of the units can be independently removed for repair or replacement. Other maintenance oriented features include a special mechanism for independent adjustment of the angle, height and azimuth of the A/C head, a convenient DIP switch pocket for easy settings, and an optional test point unit which can be used with multiple machines.

#### **Multi-Display Unit**

■ To make this unit as cost effective as possible, JVC eliminated features that are redundant in a multiple-machine operation and have instead, made available an optional multi-display unit that plugs into the front panel of the duplicator. In addition to providing remote control operation, the multi-display unit includes audio VU level meters, digital 99,990-hour meter, ID Code generator and reader.

#### **Additional Features**

- **■** Warning output connectors
- 3-color LED hour meter indicator
- 34-pin parallel remote control connector
- RCA serial remote control In/Out loopthrough connectors
- Switchable audio limiter
- Separate input terminals for Hi-Fi and normal audio
- Independent level controls for each audio channel
- Hi-Fi on/off recording function (also possible via serial remote control)
- Video AGC on/off function for use with Macrovision Copy-Protection System (also possible via serial remote control)
- Internal 8-digit ID code recording system with external ID code input capability



## BR-7030UB/7050UHAL/S777U

### 3-in-1 High-Performance VHS / S-VHS Duplicators

Three-in-one capability, plus three-way recording flexibility, make these cost-saving duplicators a great investment. With no playback circuitry, each of the three chassis' housed are optimized to record the highest quality video, along with flawless audio. In addition, they feature sophisticated Self-Diagnostic Warning and Testing systems to provide the highest levels of reliability. The BR-7030UB and BR-7050UHAL are cost effective, space saving duplicators that feature high quality VHS recording (SP mode) and Hi-Fi audio. They differ primarily in that the BR-7050UHAL has auto loading capability with Auto Cassette Loaders installed. By offering VHS and S-VHS recording capability, the BR-S777U eliminates the need for separate VHS and S-VHS duplicators. Durable, dependable and packed with advanced features, each are at the top of their respective classes.



#### 3-in-1 Design Dramatically Improves Copy Efficiency

#### **Space Saving**

Four 3-in-1 units (12 in total) can be used in place of eight conventional standard-size decks, thus saving space by approximately 30%.

#### **Energy Saving**

If 100 conventional decks are fully used for 25 days a month, the power consumption is around 2160 kw. If 3-in-1 units (100 units) are used, consumption is approx. 1100 kw, for a 50% saving in energy costs.

#### **Equipment Saving**

200 video and audio cables are required to connect 100 conventional VCRs. However, only 67 cables (approx. 40%) are required to connect the equivalent amount of 3-in-1 units. The total amount of video and audio DAs required are similarly reduced.

#### 3-in-1 Duplicator

- With three separate VCRs in a single compact cabinet, you save money in more ways than one. They occupy 50% less space on a standard duplicator rack than an equivalent number of single chassis units. They reduce power consumption for each unit by nearly half. And since all three have a common interface for video, audio, power and communication, savings on peripherals are also realized.
- To simplify recording, special circuits distribute input video and audio signals to all three recording units for simultaneous recording. An advanced circuit configuration prevents signal deterioration after distribution.

#### **Record-Only Chassis**

■ For the very best high-quality dubbing, each chassis is a Record unit only. With no playback circuits to integrate, performance parameters are optimized to deliver the very best quality recording.

#### **ID Code Recording**

■ To facilitate quality control and increase maintenance effectiveness, an ID Code board can be installed. The optional \*SA-K14U ID records an 8-digit ID Code (00000000 to 99999999) on the control track of the tape, without affecting picture or sound quality. Read by the optional SA-15JXU ID Code Display board, a defective duplicating tape can be easily identified as the offending unit. (\*Supplied with the BR-777U)

#### **Audio**

- Superior audio performance characteristics, including a frequency response of 20 Hz to 20 kHz, dynamic range of 90 dB and minimal wow and flutter, are ensured by two rotary FM audio heads dedicated exclusively to Hi-Fi recording. Linear audio tracks are also stereo with Dolby B noise reduction.
- Two pairs of separate input terminals for Hi-Fi and normal audio, for separate recording of Hi-Fi and normal audio. Hi-Fi recording can be turned on or off, for dubbing of normal audio tapes.
- For independent monitoring of all input audio signals, a large audio level meter with a four-position switch (Hi-Fi L/R and normal L/R) is provided. Four audio recording level controls are also provided for separate adjustment of all channels.

24 Hour Fax: 800-947-8003 212-444-5001

### BR-7030UB/7050UHAL/S777U

#### Remote Recording

- Each is equipped with serial remote control in/out loop-through connectors for RCA serial codes. Serial remote capabilities include AGC, Noise Reduction and Audio Limiter. With the BR-S777U, simultaneous S-VHS SP/EP and VHS SP record mode switching is possible.
- With the optional RM-G30 Remote Control plugged into the front panel input, the duplicators can be controlled individually. Or plug the RM-G30 into the rear Serial Code input (RCA) with the provided adapter, and the RM-G30 can control a full bank of looped together duplicators. With the optional RM-G77U Remote Control unit, up to four banks of fifty duplicators each can be individually controlled.
- Functions that can be controlled with the RM-G30 are: Play, Stop, Record, FF, REW, Record-Pause and Pause.
- Functions that can be controlled with the RM-G77U include: Play, Stop, REC, FF, REW, Record-Pause, Eject, Hi-Fi On/Off.

#### Sophisticated Warning, Testing and Self-Diagnostic Systems

#### **Record Indicators**

Three large indicators, one for each unit, are provided. Located on the front panel, their protruding, semi-spherical shape make them visible from a distance — even from the side. They light to indicate recording and blink for warnings.

#### **Warning Output Connector**

Permits connection of a sensor or other signal-reception component to monitor Recording status from a remote location.

#### **Front-Panel Test Points**

All signals output from the Hi-Fi audio and video heads of each recording unit can be easily checked at the front panel test points. A switch is provided for selection of the unit to be tested, while performance characteristics, such as tape-running stability, head-to-tape contact, tracking, and recording level, can also be checked. To check playback signal data, connect a remote control to the 3.5mm mini-jack on the front panel, and send the playback command.

#### **Hour Meters**

Located on the front panel beneath the LED indicators, there are three 5,000-hour meters to help you in scheduling of maintenance and inspection. After 5,000 hours of operation, the meter can be reversed with the direction switch.

#### **Automatic Head Cleaner**

Head cleaning mechanism automatically cleans the video and Hi-Fi heads whenever a cassette is loaded/unloaded, to ensure optimum performance at all times.

## Self-Diagnostic Warning System

A sophisticated self-diagnostic warning and display system is incorporated for long-term reliability and continuous operation at peak performance levels. A large warning code display window and three LEDs, one for each Recording unit - (A, B, and C) - alert you to any problems and immediately identify the specific malfunctioning unit.

#### **BR-S7050UHAL Additional Features:**

Equipped with three auto loaders (SA-L30U) the BR-S7050UHAL



can simultaneously hold one stand-by and one ejected cassette. This not only permits continuous operation without any downtime for cassette changing, it eliminates the need for manual

loading and unloading.

You have ample time to remove ejected cassettes and replace them with stand-by cassettes during recording operation. A sliding tray ensures smooth, quiet cassette insertion and ejection. A catcher tray makes for easier cassette collection after ejection. For added convenience, the remote control commands for the auto loaders match those of the Panasonic AG-CL68 and AG-CL78, offering synchronized remote control.

#### **BR-S777U Additional Features**

- VHS/S-VHS Record capability eliminates the need for separate VHS and S-VHS duplicators. The BR-S777U also gives you the option of three Recording modes: S-VHS, SP and EP, and VHS SP.
- By adding an external ID Code generator you can record not only the 8-digit code via the built-in ID generator to identify the particular VCR that recorded the tape, but also an additional 8 digits of information, such as Time and Date, Serial numbers, etc. This facilitates the most accurate way of identifying when and by which unit the tape was recorded. If an inferior recording is found during post production, the responsible duplicator can be easily identified and serviced. For code reading, an optional ID Code Reader (SA-K15JX) is available.

#### **Optional Accessories**

**RM-G77U** *Serial Remote Control:* Controls four banks or 50 VCRs (200 total). Serial Loop-through connection. Works with all duplicators.

#### SA-K14U ID Code Generator for BR-7030/7040:

Records an 8-digit code onto the control track. Installation by qualified technician only.



# PANASONIC

## AG-6841H/6851H

High-Volume VHS Duplication VCRs

The AG-6841H (Record only) and AG-6851H (Record and Play) Duplicators minimize downtime and power consumption, increase output and deliver high quality VHS video and Hi-Fi stereo – copy after copy. They feature advanced IQ transport mechanism, durable lower cylinder construction, super compact size, loop-through remote control capability and auto-changer interface. Utilizing the same materials found in Panasonic's high-end VCRs, they also ensure durability and long life.



#### **FEATURES**

#### **Super Compact Size**

■ Increased duplicating capacity is achieved through Panasonic's innovative design of these units. Each unit is only 10%" wide, and three VCRs occupy the same amount of rack space as two of the previous models, while power consumption is half of previous units. The larger the system, the more significant their cost/performance benefits become.

#### Hi-Fi Stereo

■ Two Hi-Fi and two linear audio channels provide independent control over stereo recording. Input level controls are separate for Hi-Fi and linear, as are the rearpanel audio input connectors.

#### **Auto-Changer Connectable**

■ With the optional AG-CL78 Automatic Cassette Changer, a maximum of five cassettes can be accommodated at the same time. The AG-CL78 will automatically load and unload cassettes for consecutive dubbing of up to five tapes (using the optional Cassette Holder AG-CH78). The use of Auto-Changers significantly reduces tape handling time.

#### **Serial Remote Recording**

■ Equipped with a Serial Interface Decoder, up to 500 units can be connected in series or parallel, using a simple phonotype pin jack. With the optional AGIA12 Serial Remote Transmitter, remote control of an even wider variety of functions, including Play, Record, Stop, Pause, REW, FF and Eject is achieved. On/Off control of Video AGC, Hi-Fi Record, Audio Limiter and Dolby NR is also possible.

#### 34-pin Remote Control

■ A single rear-panel terminal can be used to connect the optional AG-A600E Remote Control Unit to the AG-6841H and AG-6851H Series Duplicators. This enables control of Record, Play, Pause, Stop, Rewind, Fast Forward and Search.

#### **Durable Lower Cylinder**

■ Their lower cylinder is made of the same material used in Panasonic professional VCRs — designed for the most demanding applications. This material extends the service life of the the lower cylinder and helps ensure the outstanding precision and stability required for mass duplication with consistent high-quality results.

## Loop-Through Remote Control

■ Loop-through remote control capabilities greatly facilitates series connection, permitting simplified remote control operation. Start, Stop, and Eject functions can be controlled at the touch of a button for all connected slave units. And because simultaneous dubbing onto multiple VCRs is extremely easy, they are ideally suited for use in large-scale commercial dubbing facilities.

#### IQ Mechanism

■ Advanced IQ Mechanism maintains highly precise alignment for all critical parts in the tape path, enabling these decks to withstand constant operation. This mechanism employs five direct-drive motors, including separate DD brushless motors for both the supply reel and the takeup reel. A large brass impedance motor absorbs vibrations to minimize jitter and maintains stable tape transport to the head cylinder. The mechanism also features a highly reliable capstan bearing, as well as an automatic video head cleaning function to help maintain the initial performance standards over long periods of continued use.









# PANASONIC

## AG-6841H/6851H

#### **Optional Accessories**

• AG-CL78 Automatic Cassette Changer:

Allows five cassettes to be loaded at the same time (optional Cassette Holder AG-CH78 required) for hours of continuous unsupervised operation. The AG-CL78 easily hooks onto the mounting bracket of the decks for simple installation.

- AG-CH78 Cassette Holder: Attaches to the AG-CL78 to hold up to four tapes ejected from the VCR.
- AG-A600 Remote Control:
   Designed for precise remote control of all tape transport operations.
- AG-A11 Remote Control.
   Provides easy access to recording and playback functions.
- AG-IA12 *Serial Remote Transmitter:*Enables simultaneous control of up to 500 AG-6841H, AG-6851H units.

#### ● AG-AM20 Audio Meter Unit:

Connects easily to the front panel, to enable instant checking of the audio input level of any unit within the system.



#### ◆ AG-AM10 Audio Meter:

Can be installed onto the AG-A6841H/AG-6851H peak meter section for visual confirmation of audio input level.

#### • AG-A100 Dubbing Controller.

Control Start/Stop of either one or two master VCRs for dubbing to as many as 10 slave VCRs (40 with the multi connection system). Remote operation at the slave units include Record, Play, FF, REW, Stop and Eject.

#### • AG-DA100 AV Distributor:

Video and two channel audio signals can be distributed simultaneously to as many as 10 slave VCRs. Each of the two input selections (A and B) has 5 outputs. Loopthrough input terminals and output level adjustment are also provided.

#### **Additional Features**

- Digital hour meter
- Simple internal select system
- Test terminals and hour meter
- Video and audio throughout terminals
- Auto off eject status and warning indicator
- Large Record, Tape Running and VCR mode indicators

#### Standard Dubbing System AJ-D750 DVCPRO VCR AG-DA100 Serial Remote AV Distributer Transmitter AG-IA12 Serial Video/Audio Signal Remote \* Up to 10 units connectable In Out Out ln Out In 1 In Out ln

#### AG-6841H/6851H SPECIFICATIONS

#### **Power Requirements:**

120v AC. 60Hz.

#### FF and REW time:

3 minutes (with T-120)

#### Weight:

6.8kg (14 lbs. 9oz.)

#### **Dimensions:**

10% x 51% x 14% (WxHxD)

#### Video Input/Output:

Composite Video: BNC x 1

#### Audio Channels (4):

Linear (Ch.1/Ch.2) 2 Fixed Heads Hi-Fi (Ch.1/Ch.2) 2 Rotary Heads

#### Line In (Phono):

Normal (Ch.1/Ch.2) 8 dBs, 47k ohms, Hi-Fi (Ch.1/Ch.2) 8 dBs, 47k ohms,

#### Line Out (Phono):

Normal (Ch.1/Ch.2) 8 dBs, 600 ohms, Hi-Fi (Ch.1/Ch.2) 8 dBs,600 ohms,

#### Frequency Response:

50Hz ~ 12kHz (Normal) 20Hz ~ 20kHz (Hi-Fi )

#### **Dynamic Range:**

90 dB (in Hi-Fi Mode)

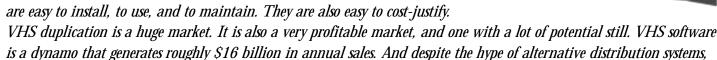


## SVO-915/SVO-965

### VHS Hi-Fi Duplicators

Corporations, government agencies, production houses and universities pay attention. If you use outside duplication services, it is most unfortunate. By sending your work out-of-house, you are losing control of your work, which becomes subject to someone else's priorities and productivity.

Sony's Duplicators save you money by bringing the process in-house. Based on the remarkable SVO-915



VHS is actually growing at the rate of 5% annually. More important, when you consider the huge installed base of hardware, you will realize that VHS will continue to be the dominant video distribution method for years to come.



#### Flexible, Configurable, Versatile — Clearly the Superior System

The SVO-915/965 can be configured in systems from two to 2,000 VCRs. They are also smart enough to clean themselves and flexible enough to accept four types of remote control. When equipped with Automatic Cassette Changers, the SVO-965 can record 5 two-hour cassettes in a row. Ten hours of recording means the machines can run all night, unattended.

What makes them so much better? It starts with a VHS mechanism with all direct-drive motors. There are no belts, no pulleys, no idler wheels. In fact, the pinch roller is the only rubber part in transport. Now, consider the lower drum assembly. It incorporates 20% silicon for increased operating life. To reduce the possibility of head clogging, the rotary heads are automatically cleaned every time you load or eject a cassette. Even the stationary audio head can be automatically cleaned with the optional SVAC-903.

How do you control the VCRs? Count the ways. You can command up to 500 at a time with the RM-V200 Remote Control. Or operate 2,000 at once with SVRM-901. Or even use them with other companies' 34-pin systems, using the SVBK-901 Interface Board.

But the crowning touch is operating the SVO-965 under Bi-Directional Remote Control. Using the optional SVRM-960 Bidirectional Remote Controller, not only are control signals sent to the VCRs, but the VCRs report back! The SVRM-960 sees an array of VCR status information, including operation and Setup mode, and VCR ID.

Bi-directional remote control has one more benefit. It enables comprehensive automation with Sony's Integrated Duplication Operations 2.0 (IDO) software. Using IDO means controlling 4 independent source VCRs and up to 1,000 duplicators, configured in up to 16 independent groups. And there is one more automation option. Using the SVCC-960 Automatic Cassette Changers means being able to dupe up to 5 consecutive cassettes without any manual intervention. Imagine the productivity gains: a third shift of duplication with no increase in payroll!

What makes them even more valuable, especially for unattended operation, is automatic quality control. They can record test signals, rewind, play them back and check for video recording level, Hi-Fi and normal audio recording levels and channel balance. If any problems are found, they go into Auto Off.

## SVO-915/SVO-965

#### **Heavy Duty Design**

- They incorporate Hi-Silicon Aluminum lower drums, specially designed to detect impact error and to provide a stable picture without jitter. Additionally, the high concentration of silicon strengthens the drum material and greatly improves wear durability.
- Strong aluminum die-cast chassis protects them from external damage.
- Outstanding performance from Sony's direct drive tape transport. This reliable mechanism eliminates drive belts and provides stable tape transport, long-life operation and easy maintenance.
- Electronic tape tension control function provides smooth tape transition.
- Wide track width of 58 microns for video and 42 microns for audio enhances picture and sound quality.

#### 4-Channel Audio

4-channel audio inputs (two Hi-Fi, two normal) allow two audio sources to be input separately (bilingual recording). Hi-Fi tracks have a frequency response of 20 Hz to 20 kHz and a dynamic range of 90 dB. Audio level controls are provided for each track.

#### Conveniences

- Up to four VCRs can be connected from one VCR through loop-through connectors, without any signal loss.
- VCR functions can be set from their front panel using the Data Set feature.
  Functions include selectable on/off of record, and display of VCR ID codes, Video AGC, Audio Limiter, Hi-Fi record, Dolby NR, Auto Rewind, Video input and No Write Protection.
- When they are controlled from the optional SVRM-901 Remote Control or SVAC-904 Bi-Directional Remote Control Panel, up to 12 digits of Date/Time and User ID data can be recorded to tape (on the control track). The ID Code can be displayed on the time counter during playback.

#### **Maintenance Functions**

- They automatically stop when an error occurs. The Auto Off indicator blinks, and the Error code is displayed on the LED time counter.
- Standby Notice Function: When they are not in Eject, Stop, Record or Record Pause mode, the signal is output through the Standby connector (phono), and the Standby indicator will be illuminated.
- Record indicator illuminates when the VCR is in the Record or Record Pause mode. The indicator blinks if no signal is being input.

- Convenient front panel test terminals for video, and Hi-Fi signals allow waveform observation using an oscilloscope.
- Digital hours meter can display accumulated drum running time, as well as tape running time on the LED time counter.
- Built-in head cleaner promotes longer head life and high quality recording. With every load or eject, the head cleaner passes over the Video/FM Audio (rotary) heads, removing tape residue that causes head clog. With the optional SVAC-903 Audio Head Cleaner attached, the linear audio heads are simultaneously cleaned as well.

#### **Remote Operation**

- Equipped with a Control-S input terminal on the front panel, they allow remote control operation with the optional RM-V200 Remote Control.
- They are also equipped with a Control-P serial interface. This allows either the RM-V200 or the SVRM-901 Serial Remote Control Board to be used as a master control unit for a large duplication system. With the SVRM-901, up to 2000 duplicators (4 x 500) can be controlled, while the RM-V200 can control up to 500.

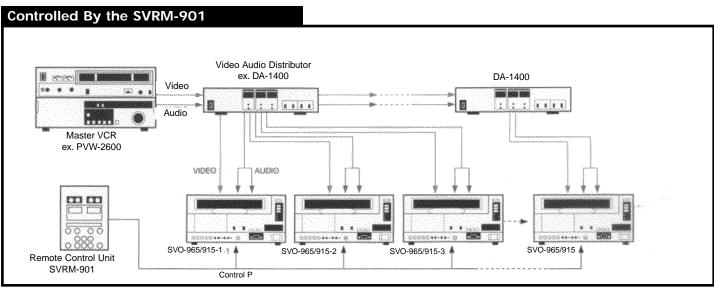
#### SVO-965 Only

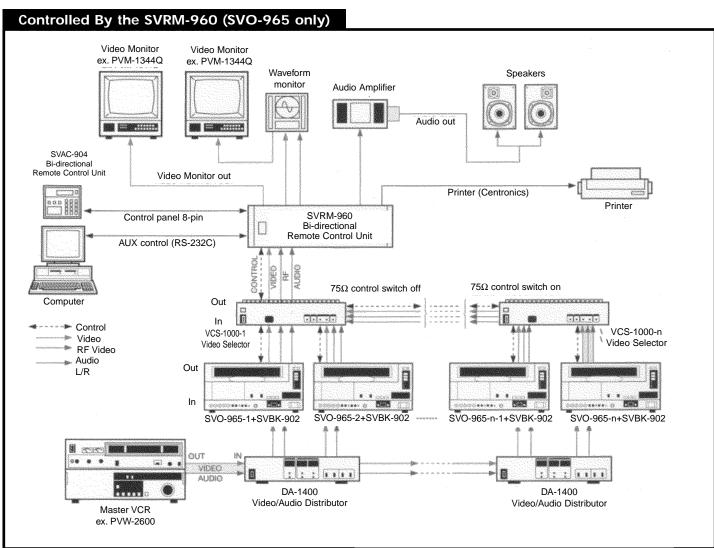
- In addition to overall system control, the SVRM-960 Bi-directional Remote Control provides communication with any individual SVO-965 equipped with the SBVK-902 Bi-directional Interface Card. Monitor status information, such as Operation
  - status information, such as Operation mode, Setup mode, VCR ID, User/Time/Date ID and Error information of the selected VCR. In addition, this information can be displayed on the video monitor. Individual VCR operation can be performed either from the optional SVAC-904 Bi-directional Control Panel or an external computer.



- Combining Bi-directional capability with IDO (Integrated Duplication Software) for Windows enables comprehensive automation for unattended duplication in a user-friendly environment. IDO also allows multiple source stations to be controlled by a single master unit. Simultaneously control up to four source VCRs and up to 1000 duplicators with SVCC-960 Automatic Cassette Changers, configured in 16 independent groups for up to 10 hours unattended.
- By depressing the test button on the SVRM-901 or SVAC-904 Remote Controls, the SVO-965 executes a series of self diagnostic and quality control checks. The VCR searches for blank tape segments and automatically cycles from Record, Rewind and Playback modes. In playback, the video/audio recording level and normal audio L/R channel balance are checked. If any technical difficulty is encountered, the Auto Off function will automatically activate, alerting technicians of trouble.

## SVO-915/SVO-965 SYSTEM CONFIGURATIONS





## SVO-915/SVO-965

#### **Optional Accessories and Peripheral Equipment**

## SVRM-901 Serial Remote Control Board

The SVRM-901 controls an entire duplication system and can easily be installed into a master control panel. VCR functions, such as Eject, Stop, Play, Record, Pause, Forward, Search, FF, REW and Auto Cassette Change Start can all be controlled by this board. In addition, functions such as Data Set and Auto Check can be operated remotely.

## SVRM-960 Bi-Directional Remote Controller

Duplication system management is easy with the SVRM-960 and the SVBK-902 Interface Board. They enable two-way communication between the controller and SVO-965s for system control and system management. VCR control is either from the SVAC-904 Remote Control Panel or an external computer.

## SVAC-904 Remote Control Panel

For operating a system with the SVRM-960 Remote Control

## SVBK-902 Bi-Directional Interface Board

The SVBK-902 enables two-way communication between the SVO-965 and the SVRM-960. The board easily installs into the rear panel of the SVO-965.

## SVBK-901 34-pin Parallel Interface Board

The SVBK-901 installs into the rear panel of the SVO-915 or SVO-965 to provide system compatibility with older 34-pin based duplication systems.

## SVAC-901 Audio Meter Unit

Provides monitoring of audio recording levels.





SVRM-901



SVAC-902



SVRM-960



SVAC-901



SVAC-904

## SVCC-960 Automatic Cassette Changer

Using the Automatic Cassette Changer, cassettes can be duplicated automatically. The SVCC-960 attaches easily to the SVO-915/965, and in conjunction with the optional SVAC-902 Cassette Holder, up to five cassettes can be automatically duplicated.

## SVAC-902 Cassette Holder

Attaches to the SVCC-960, allowing automatic duplication of up to five cassettes at a time.

## SVAC-903 Audio Head Cleaner

Used for cleaning the stationary audio head.

## RM-V200 Remote Control Unit

For simple control of one VCR. Remotely controls Stop, Play, REC, Pause, Forward/Rewind Search, FF, REW and Eject. The RM-V200 can also be used to control a duplication system by changing the Control P/S select switch.

## DA-1400 2 x 14 Video/Audio Distributor

The rack mountable DA-1400 has two video and audio inputs and provides fourteen signal distribution outputs. 19-inch rack mountable.

Four distribution patterns are available: Input signal A (1 to 14 ch.), Input signal B (1 to 14 ch.), Input signal B (1 to 7 ch.), Input signal B (8 to 14 ch.), Input signal B (1 to 7 ch.), Input signal A (8 to 14 ch.).

## VCS-1000 *Video/Selector*

Designed for use with the SVRM-960, the rack-mountable VCS-1000 minimizes signal reflections caused by long cable runs. Up to 20 SVO-965s equipped with the SVBK-902 can be connected to one VCS-1000. A Loop-through output allows the connection of 50 VCS-1000 units, making it possible to connect a total of 1000 SVO-965s in one system.



## JVC

## SR-L900/SR-L901

### Compact Time-Lapse Video Cassette Recorders

No matter how well protected your business is, it may still be vulnerable to theft, vandalism, and other problems. Video surveillance is the key to minimizing your losses, and it serves as a source of invaluable assistance to the police. JVC's SR-L900 and SR-L901 Time-Lapse Recorders are designed to meet the video surveillance requirements of smaller establishments, such as medical clinics, convenience stores, gas stations, government offices, ATMs, video outlets, and the like. Compact and easy to install, they offer up to 24 hours of continuous high-density video and audio recording on a single tape – round-the-clock coverage without interruption. They also offer a host of comprehensive security-related features, including Automatic Alarm Recording/Search capability, Key-operated Mode Lock, Automatic Repeat Recording and Automatic Restart after power failure. Connectors are provided for



SR-L900



SR-L901

#### **FEATURES**

#### **Compact Design**

mic and camera inputs and camera switching outputs.

■ Featuring a compact, narrow design, they install easily in small spaces. Less than 11″ wide, they can be installed on a shelf near the cash register, in an office, or any other convenient location.

#### **Key-Operated Mode Lock**

■ For added security, even in publicly accessible areas, a key-operated Mode Lock function disables all controls, except the Alarm Reset button, and locks the recorders in the Active mode to prevent misoperation or tampering.

#### **Monitoring With Power Off**

■ If you wish to keep monitoring when recording is unnecessary, you can view video signals that are input, even with the power turned off.

#### Alarm Recording/Search

■ Designed for easy integration with an alarm system and closed circuit surveillance cameras. Whenever an alarm signal is input, they automatically switch to the 8-hour record mode for better-quality real-time alarm recording. A VISS index code is also recorded at the switching point, enabling you to seek out at high speed any and all alarm recordings on the tape.

#### Time/Date Generator

■ Time/Date generator superimposes time and date information on the video, ensuring that you have a precise record of all incidents.

#### Repeat Recording

■ To keep costs down while assuring roundthe-clock security, an Automatic Repeat Record function is offered. By automatically rewinding the tape and restarting recording from the beginning, continuous non-attended operation is permitted with a single tape.

#### **Additional Features**

- Automatic restart of recording after power failure
- Field recording capability
- One-year Time/Date backup
- Automatic Head Cleaner
- Digital Tracking
- External Timer Recording Capability
- **■** Camera Switching Signal Output
- Still Playback and Frame Advance for close inspection of recordings
- External microphone Input
- Shuttle Search (7x normal speed on the SR-L900 and 21x on the SR-L901)
- Sensor Recording (SR-L901 only)
- Optional RM-G30 Wired Remote Control

#### SR-L900 Only

■ The SR-L900 has three Record/Playback modes: 2 hours (VHS SP), 6 hours (EP) and 24 hours in 24 HTL (24-hour Time Lapse mode) on a single T-120 Cassette.

#### SR-L901Only

- The SR-L901 records and plays back 8 hours (8H mode) with T-160 cassette; 18 hours (24H mode) with T-120; and 24 hours (24H mode) with a T-160.
- To facilitate faster checking and review of tapes recorded in the 24-hour mode, the SR-L901 also features a High-Speed Playback Sound function that processes the recorded sound digitally, enabling it to be properly heard and understood when played back in the 8-hour mode.
- While technically a timelapse recorder, the SR-L901 has a tape speed of 3.7mm/second and a frame rate of 10 frames per second to allow high-density, real-time video/audio recording in the 24-hour mode. The result is information-rich recordings with smoother, more detailed images and clearer, more intelligible sound. Since recording never stops, there is never any loss of coverage even rapid movements and speech can be picked up.

## SR-9070U

### Time-Lapse Video Cassette Recorder

Building a flexible, state-of-the-art video surveillance system does not have to be expensive. With the SR-9070U Time-Lapse Video Recorder, you can take advantage of a comprehensive and powerful range of surveillance capabilities, all packed into a cost-effective VHS package. Time-lapse record-



ing capability, from 12 hours to an incredible 960 hours on a single T-120 cassette, provides coverage under virtually any conditions. Offers an optional computer interface for remote automated operation, as well as a host of other features.

#### **FEATURES**

#### **Time-Lapse Recording**

■ Responding to market demand for greater time-lapse recording flexibility, record and playback times of 12, 24, 48, 72, 120, 168, 240, 480 and 960 hours are selectable. And whether it is 12 hours or 960 hours, it can all be recorded on a single T-120 cassette—for a day, a week or a month's coverage, at high-quality.

#### **Timer Recording**

■ Up to 8 programs can be recorded daily, weekly, or weekdays (Mon-Fri/Mon- Sat). Makes it easy to integrate your surveillance schedule with your business schedule. An easy-to-use on-screen menu makes programming a snap.

#### Time/Date Generator

■ Superimposes year, month, date, minute and second on the image during recording. Also allows you to display the number of alarms, alarm time and the number of the power failures. Time data is backed up for one year.

#### Camera Switching Function

■ Equipped with a camera select signal output to synchronize camera switching with time-lapse recording intervals. Since switching is performed during a pause in recording, continuous coverage is assured during time lapse recording, even when using multiple cameras. Duration of the camera select signal output is selectable from one field and one frame. Output is possible in the Time-Lapse SP (2H) and EP (6H) modes.

#### **Series Recording**

■ With series input/output connectors as standard, a variety of sophisticated time-lapse surveillance system configurations is possible. Connect several VCRs in series and automatically switch recording from one unit to the next without interrupting the recording. This enables you to extend your recording capabilities indefinitely.

#### Alarm/Sensor Recording

■ Can switch from time-lapse to preselected SP or EP mode for continuous real-time alarm recording. If the SR-9070 is in Stop or Timer mode, as soon as the alarm signal is received, SP or EP recording is automatically activated (Sensor Recording). For easy retrieval of Alarm/Sensor Recording, index codes are permanently and automatically marked when the recording starts. Duration of alarm/sensor recording can be selected from 5, 10, 15, 30, 60, 120, 180 seconds and manual, (for the duration of the alarm signal), or until tape end.

#### **Alarm/Power Loss Memory**

■ To help pinpoint and track critical problem periods, a 999-event alarm memory and 99-event power loss memory are provided. Exact time and date of the first recorded incident and the last nine can be called up and checked on the on-screen display. Added security is provided by a highly reliable standby backup system for automatic restart of recording as soon as power is restored after a power failure.

#### Alarm Search

Alarm search quickly locates the index codes in the shuttle search mode, and automatically starts the playback of an alarm recording.

#### **Optional RS-232 Interface**

■ Meets the requirements of today's most sophisticated surveillance systems with the optional SA-K97U RS-232 interface. With direct computer connection, the VCR can be easily integrated into a centralized, computer-controlled security system.

#### Auto Head Cleaner

■ Built-in head cleaner automatically cleans the heads when a tape is loaded or unloaded. In addition, the head cleaner operates at regular intervals during recording in the 120- and 240-hour modes. Heads are cleaned for one second every two hours in the 120 mode and every four hours in the 240 mode.

#### Conveniences

- On-screen setup menu and display
- Advanced Mode Lock system
- Auto-repeat recording
- Digital hour meter up to 9999 hours
- **■** Electronic tape end buzzer
- Daylight Savings Time switchable
- Record check function for instant playback quality check during recording
- For a closer review of recordings, offers Still and Field Advance with Reverse Play.
- Shuttle search at up 7x normal speed in SP Mode and 21x in EP Mode. Shuttle through a 10-day recording in 17 minutes.



# SANYO

## SRT-600/612DC/672

#### 24-Hour Real-Time VCRs

For security, retail operations, casinos, and wherever surveillance or long recording time applications are required, Sanyo offers a full line of Real-Time and Time-Lapse VCRs. Generally, Time-Lapse VCRs work by recording over a period of time, preset by the user. In order to achieve a long recording period



(24 hours for example), Time-Lapse VCRs record smaller amounts of fields-per-second (generally around 5 fields per second or less) than the standard 60-fields per second. Since there is much less information recorded, images look somewhat jumpy, and sometimes an important scene is lost, because that particular scene took place during a gap between these five fields. In addition, audio is usually broken up because of the intermittent recording.

This is where Real-Time VCRs have an advantage. Real-Time VCRs can record continuously over a period of 24 hours, at about 20 fields per second. During playback, this information is combined with a process that integrates the individual fields of recorded information to reproduce 60 fields and 30 frames per second. As a result, the human eye perceives this picture as "Real-Time". The disadvantage of Real-Time recorders however, is that they are generally limited to recording times of not more than 24 hours, requiring continuous feeding of tapes every day.

#### **FEATURES**

#### **Recording Time**

- They record for 8 hours in 60 fps (fieldsper-second) mode and 24 hours in 20 fps mode, using a T-160 tape, without the usual jumpy images associated with standard Time-Lapse VCRs. They deliver over 300 lines of horizontal resolution in color and 350 lines in B&W, with a signal-tonoise ratio of 45 dB.
- In addition, the SRT-600 and SRT-672 offer up to a 40-hour recording in 12 fps mode. For up to 96-hour recording on a single T-160 tape, the SRT-672 offers triple density recording. Even at 5 fps, it is still three times more fields-per-second than conventional Time-Lapse recorders. Playback is possible in all modes.
- A Field Recording mode is offered, which allows twice as much information to be recorded as with frame recording.

#### **Time-Date Generator**

■ A built-in microprocessor is equipped with a Calendar function that allows the current time, date and other clock functions to be set and displayed on their digital display and the monitor.

#### D.M.S.S.

■ Digital Memory Sound System (DMSS) digitally samples the sound track of the tape to allow near normal sound in high-speed playback. Tapes recorded in the 24-hour mode can be played back at triple speed (8-hour mode) and still provide intelligible audio.

#### **Recording Modes**

- By setting them to Repeat mode, the tape is automatically rewound when reaching the end, and recording starts again.
- Their timers can be programmed to record on a daily or weekly basis. Timer settings are displayed on the monitor.
- If an externally connected alarm sensor is triggered, they can be set to automatically switch from 20-field to 60-field- per-second mode, allowing full capture of the alarm event.
- Series Recording function permits longterm recording, using two or more Time-Lapse VCRs to record in sequence. When end of tape is reached, a pulse is initiated that can be used to start another recorder.

#### Master/Slave Adjustments

■ The Eject and Clock adjustment functions can be controlled by a master VCR — especially useful where multiple VCRs are used, such as in large stores or casinos.

#### **Additional Features**

- 30-Day Memory Backup
- Alarm Scan Function, Security Lock
- Lifetime Counter, Alarm Counter
- Warning Output
- Tape-End Terminal

#### SRT-600/SRT-672 Only

- Alarm Search Function
- Time/Date Search Function
- Reverse Playback
- Forward and Reverse Field Advance

#### SRT-612DC Only

■ 12v DC capability allows operation from a car battery or other 12v power supply. Only two recording speeds are available on the SRT-612DC − 8 and 24 hours.

# SANYO

## TLS-924/972/2500/7000

### Time-Lapse VCRs

Sanyo's Time-Lapse VCRs feature better viewing with Field Recording and Field Advance Playback and over 350 lines of horizontal resolution in monochrome mode. They use BNCs for composite video input/output and incorporate a separate Helical Scan Head for the Time-Lapse mode.



Designed for security and surveillance, they offer multiple recording modes for different lengths of record time, with audio capability on the lower numbers (2, 12 and 24 hour recording modes). There are four models in the series: The TLS-924 24-hour Recorder, TLS-972 72-hour Recorder, TLS-2500 960-hour Recorder and the TLS-7000 960-hour S-VHS Recorder with over 400 lines of horizontal resolution, even in the Time-Lapse mode. Additionally, the TLS-2500 and TLS-7000 also offer an important feature for called Date and Time Search. This function lets you search for recordings made in Time-Lapse mode by date and time, thus dramatically reducing search time.

#### **FEATURES**

#### **Multiple Recording Modes**

■ Three recording modes are available for the TLS-924, including: 2, 12, and 24hours. (All permit audio recording.) For the TLS-972, 48 and 72-hour recording is possible. The TLS-2500 and TLS-7000 add 96, 120, 168, 240, 360, 480, 720, and 960-hour recording capabilities.

#### Field Recording/Playback

■ Field recording lets you record twice as much information as with frame recording. Allows single fields to be recorded one by one in Time-Lapse mode, and all fields can be viewed separately during playback.

#### **Timer and Alarm Recording**

■ Units can be programmed to record daily or weekly. The programming information is displayed on the monitor. If an externally connected alarm sensor is triggered, the unit can be set to automatically switch from 20 fields to 60 fps (2-hour mode), allowing full capture of the alarm event.

#### **Time-Date Generator**

■ Built-in microprocessor-equipped Calendar function allows the current time, date and other clock functions to be set and displayed on their digital display and the monitor.

#### **Alarm Search**

■ Alarm Search available in the TLS-2500 and TLS-7000 finds the next alarm recording on the tape and plays back the first five seconds of that recording.

#### **Date/Time Search**

■ Only in the TLS-9500 and TLS-7000 you can search for recordings made in Time-Lapse mode by date and time, dramatically reducing the time needed for searching for specific scenes.

#### **Record Warning**

■ All except the TLS-924 output a warning if an internal failure occurs during recording.

#### Alarm Scan

■ Alarm Scan searches the whole tape for alarm recordings and plays back the first five seconds of each.

#### **Power Off Video**

■ All except the TLS-924 allow video passthrough, even when the power is off.

#### **Additional Features**

- 30-day Clock-Operation Backup
- Security Lock
- Lifetime Counter, Alarm Counter
- Auto Head Cleaning, Tape-End Terminal
- Wired Remote Control Terminal
- Auto Repeat Recording
- Daylight Saving Time adjustment

#### TLS-2500/7000 Only

- One Shot and Series Recording
- Optional RS-232 Interface
- Reverse Playback (2-hour Mode only)
- Forward and Reverse Field Advance

24-Hour Real-Time VCRs	Time-Lapse VCRs
<b>SRT-600</b> 24-Hour Real-Time Video Recorder	<b>TLS-924</b> 24-Hour Time-Lapse Video Recorder
SRT-672 24-Hour Real-Time/96-Hr. Triple Density Recorder774.95	<b>TLS-2500</b> 960-Hour Time-Lapse Video Recorder
	<b>TLS-7000</b> 960-Hour S-VHS Time-Lapse Recorder <b>1199.95</b>



## **VCR ACCESSORIES**

#### VCR Rackmount Kits for Panasonic VCRs

For Model(s)	FEC #	Description	# Rack Units Required (1RU=1.75)	Rail Depth Required Between Front & Rear Cabinet Rails	mounts on (F)ront Rail or (F)ront & (R)ear	Price
AG-DS540/545/550/555	RKSP7350	Custom Rackslide Kit Includes Rack Ears (Panasonic AGM730E not needed)	3	18" – 30"	F & R	179.95
AJ-D640/650/750/950	RKSPAJ75	Complete Custom Rackslide Kit Includes Rack Ears/Handles	4	18" – 30"	F & R	179.95
AG-DS840/850	RKSP850	Custom Rackslide Kit Includes Rack Ears	3	18" – 30"	F & R	179.95
AG-1320/1330	RKP1320	Custom Rack Kit	3	13"	F	94.95
AG-RT600	RKSPR600	Custom Rack Kit	3	103/8"	F & R	179.95
AG-TL500	RKPT500	Custom Rackslide Kit	3	18" - 30"	F	94.95
AG-1980	RKSP1970	Rackslide Kit with Custom Ears/Handles	3	20" - 30"	F & R	188.95
AG-2550/2560	RKP2550	Custom Rack Kit	3	10 ½"	F	94.95
AG-5710	RKSP1970	Rackslide Kit with Custom Ears/Handles	3	20" - 30"	F & R	188.95
AG-7150/7350/7355	RKSP7350	Complete Custom Rackslide Kit Includes Rack Ears (Panasonic AGM730E not needed)	3	18" – 30"	F & R	179.95

#### VCR Rackmount Kits for JVC VCRs

For Model(s)	FEC #	Description	# Rack Units Required (1RU=1.75)	Rail Depth Required Between Front & Rear Cabinet Rails	mounts on (F)ront Rail or (F)ront & (R)ear	Price
BR-D50/52/80/85/92 BR-D350/750	RKS822U(b)	Rackslide Kit with Custom Ears/Handles	4	22" - 30"	F & R	188.95
BR-S500/800	RKS500U	Rackslide Kit with Custom Ears/Handles	3	18" – 30"	F & R	188.95
BR-S522DX/525DX BR-S622DX/822DX	RKS822U(b)	Rackslide Kit with Custom Ears/Handles	4	22" - 30"	F & R	188.95
BR7030/7040/777U	RKS7030U	Rackslide Kit with Custom Ears/Handles	8	22" - 30"	F & R	233.95
SR-L910/911/970	RKRL91	Custom Rackmount Kit	3	11"	F	94.95
SR-S365	RKS365U	Custom Rackslide Kit	3	18" - 30"	F & R	179.95
SR-3360	RK3360U	Custom Rack Kit	3	91/2"	F	94.95
SR-9070	RK9070U	Custom Rack Kit	3	143/4"	F	94.95
SR-T5	RKRT5U	Custom Rackmount Kit	3	115/8"	F	94.95
SR-W5	RKW5U	Custom Rack Kit	4	171/4" - 30"	F & R	128.50

24 Hour Fax: 800-947-8003 212-444-5001

## **VCR ACCESSORIES**

#### VCR Rackmount Kits for Sony VCRs

For Model(s)	FEC #	Description	# Rack Units Required (1RU=1.75)	Rail Depth Required Between Front & Rear Cabinet Rails	mounts on (F)ront Rail or (F)ront & (R)ear	Price
BVU900/920/950	RKSSBVU9	Rackslide Kit with Custom Ears/Handles/Top	5	24" - 30"	F & R	199.95
BVW-60/65/70/75	RKSSBVW	Rackslide Kit with Custom Ears/Handles FEC Equivalent to Sony RMM-100US	5	21" - 30"	F&R	199.95
DNWA-22/30/45 DNWA-65/75/100	RKSSDNA10	Rackslide Kit for 1 DSR20 VCR Rackslide Kit for 2 DSR20 VTRS	2 2	18" - 30" 18" - 30"	F & R F & R	188.95
DSR-30	RKSSVR30	Custom Rackslide Kit	3	18" - 30"	F & R	179.95
DSR-60/80/85	RKSSUVW	Custom Rackslide Kit Includes Rackears/Handles	4	20" – 30"	F & R	188.95
DVW-500/510 DVW-A500/A510	RKSSPVW2	Rackslide Kit with Custom Ears/Handles FEC Equivalent to Sony RMM-100US	5	21" - 30"	F&R	188.95
EVO-9720	RKSSV058	Custom Rackslide Kit with Ears/Handles	3	18" – 30"	F & R	179.95
EVO-9800/9850	RKSSE98	Custom Rackslide Kit with Ears/Handles	3	18" – 30"	F & R	179.95
PVW-2600/2650/2800	RKSSPVW2	Rackslide Kit with Custom Ears/Handles FEC Equivalent to Sony RMM-110US	5	21" - 30"	F & R	188.95
SVP-111OA	RKSVP1110	Custom Rack Kit	3	101/2"	F	89.95
SVO-1320/1420 SVO-1520/1620	RKSVO1610	Custom Rack Kit	3	131/4"	F	84.95
SVO-2000	RKSV02000	Custom Rack Kit	3	131/2"	F	84.95
SVO-2100	RKSV02100	Custom Rack Kit	3	141/2"	F	94.95
SVP-5600/SVO-5800	RKSSV058	Custom Rackslide Kit with Ears/Handles	3	18" – 30"	F & R	179.95
SVP-9000/SVO-9600	RKSSE98	Custom Rackslide Kit with Ears/Handles	3	18" – 30"	F & R	179.95
UVW-1200/1400A UVW-1600/1800	RKSSUVW	Rackslide Kit with Custom Ears/Handles FEC Equivalent to RMM-130US	4	20" – 30"	F & R	188.95
VP-5000/5030 VO-5600/5630/5800 VO-5850/9800/9850	RKSS59	Rackslide Kit with Custom Ears/ Handles for Type V & IX VTR's. FEC Equivalent to Sony RMM-501US	5	20" – 30"	F & R	199.95
VP-7020/7040 VO-7600/7630 VP-9000/VO-9600	RKSS7	Rackslide Kit with Custom Ears/ Handles for Type VII VTR's. FEC Equivalent to Sony RMM-507US	4	20" – 30"	F & R	199.95

# VueTech

## **V**UEFINDER

### Video Transport Control Panel

The VueTech VueFinder is a self-contained control panel providing basic transport remote control functions for VCRs and hard drive-based video recorders. The VueFinder plugs into any VCR with a 9-pin remote port including Sony, JVC and Panasonic decks. Other versions of VueFinder con-



nect to the RS-232 remote (25-pin) port found on industrial VCRs like the Sony UVW-1200 and 1400, and Panasonic AJ-230. The VueFinder is available in three versions: Standard version, GPI version and Serial Pass Thru. The Standard and GPI versions are available for either RS-422 or RS-232 control. All versions are self powered from the data control lines.

- The VueFinder panel includes five push buttons for control of Pause, Stop, Play, Record, Rewind and Fast Forward. Pushing any of these buttons sends the appropriate serial command to the transport. The control knob enables fingertip control over reverse and forward shuttle, reverse and forward jog functions.
- To provide a wide latitude of control, the Jog/Shuttle knob has two speed ranges. The low range includes tape jog plus shuttle speeds to 2x play speed; the high range accesses only the shuttle speeds, up to 32x play speed. The RS-232 versions have a single speed range only, including tape jog and shuttle speeds from -16x to +16x play speed.
- In the low-speed range, starting from its most counter-clockwise rotation, the one knob covers the range from 2x reverse, to still, through 12 jog steps, to 2x forward speed. The cross-over between jog and shuttle is automatic and intuitive. You don't need to keep track of which mode is active, just keep your eyes on the monitor as the video is searched.

- The low-speed shuttles use the following tape speeds: 1/30, 1/20, 1/14, 1/8, 1/6, 1/4, 1/3, 1/2, 3/4, 1, and 2, in both forward and reverse directions. The high-speed shuttles use the following tape speeds: 1/10, 1/4, 1/2, 1, 1.5, 2.2, 3.2, 4.5, 6.5, 9.3, 13, 20, and 32x, in both forward and reverse directions.
- The VueFinder also has option jumpers allowing for selection of one of the following options: Insert Edit, Preroll, or Eject Option.
- The GPI version is similar to the Standard version but has an additional input connector allowing wire-per-function control of the five push button functions. This allows simple contact closures to trigger the basic VCR functions. The GPI version also has access to the option jumpers via the GPI connector.
- The Serial Pass Thru version has a RS-422 pass-through connector that allows the transport to be alternately controlled by either an edit controller; the VueFinder; or the front panel. This version is ideal for PC-based edit controllers without physical buttons or knobs for transport control.

	VueFinder Pricing	
For Panasonic AJ-D230H/AJ-D250           VF-2P - Desktop         349.95           VF-R2P - Rackmount         374.95           DVF-R2P - Dual Rackmount         699.95           For Panasonic with GPI Option         VF-2PG - Desktop         374.95           VF-R2PG - Rackmount         399.95           DVF-R2PG - Dual Rackmount         749.95           For Panasonic with Pass Thru Option         VF-2PE - Desktop         374.95           VF-R2PE - Rackmount         399.95           DVF-R2PE - Dual Rackmount         749.95	For Sony UVW-1200/UVW-1400: VF-2S - Desktop	For RS-422 VCRs with GPI Option VF-4G - Desktop

# VUETECH

### VariVue

#### TBC Remote Control Panel

The VariVue provides the essential proc amp controls for VCRs with internal time base correctors. The TBC controls, non-existent on most machines are now within convenient reach. Most VCRs accept the VariVue control panel, including Betacam SP as well DVCAM, DVCPRO and Digital-S VCRs.

- The slope-front desktop unit occupies only 4" x 4" of desk space; it controls one TBC. Two 19" rack-mount versions are available, with either single or dual TBC control.
- The VariVue control panel includes four knobs for direct control of the Video Level, Set-up, Chroma Level, and Hue. Each control has an "IN/OUT" switch to allow selective adjustment of each parameter.



■ Additional trimmer controls provide H Sync, SubCarrier, and Y/C delay (for Sony only) adjustments. The VariVue control panel plugs into the15-pin "TBC Remote" connector located on the rear panel of the VCR.

VariVue control panel is available in desktop or rack-mount configurations.

#### **Desktop Versions:**

VV-DS -VariVue for Sony decks	.249.95
VV-DP1 -VariVue for Panasonic DVCPRO decks	.249.95
VV-DP2 -VariVuefor Panasonic S-VHS decks	.249.95

#### Rack-Mount Versions: (note - DVCPRO excludes AJ-D230)

VV-R1S -Single unit for Sony349.95	<b>VV-R2S</b> - Dual unit for Sony <b>619.95</b>
VV-R1P1 - Single unit for Panasonic DVCPRO decks349.95	VV-R2P1 - Dual unit for Panasonic DVCPRO decks619.95
VV-R1P2 - Single unit for Panasonic S-VHS decks349.95	VV-R2P2 - Dual unit for Panasonic S-VHS decks619.95

### **VARIVUEFINDER**

### Combination TBC Remote and Jog/Shuttle Control Panel

Combining the functionality of the VariVue and VueFinder in one dual rack unit, the dual-purpose VariVueFinder remote control panel provides both TBC proc amp control and jog/shuttle control from a single, rack-mount panel. Now, VCRs like



DVCPRO and the UVW series can have the precise control that professionals have come to expect.

#### VariVueFinder Rackmount Versions:

VVF-SS -         for RS-422 Sony decks         649.95           VVF-SP1 -         for DVCPRO decks         649.95	<b>VVF-ES</b> - RS-422 pass thru for Sony decks
VVF-SP2 - for Panasonic S-VHS decks	VVF-EP2 - RS-422 pass thru for Panasonic S-VHS decks659.95
VVF-GS - GPI option for RS-422 Sony decks674.95	<b>VVF-EGS</b> - RS-422 pass thru with GPI for Sony decks719.95
VVF-GP1 -GPI option for DVCPRO674.95	VVF-EGP1 - RS-422 pass thru with GPI for DVCPRO719.95
VVF-GP2 -GPI option for Panasonic S-VHS decks674.95	<b>VVF-EGP2</b> - RS-422 pass thru with GPI
·	for Panasonic S-VHS decks

