

JVC[®]
PROFESSIONAL

PROFESSIONAL **S**

VIDEO CASSETTE
EDITING RECORDER

BR-S811U

VIDEO CASSETTE
RECORDER

BR-S611U

A superior new-generation
professional S-VHS editing
system with enhanced multi-
generation dubbing quality.

S VHS



Now There's An S-VHS Editing System Truly Designed To Meet The Needs Of Professionals — Right Down To The Last Dub

Improved Color, Improved Resolution, And S-VHS Quality Make JVC's BR-S811U and BR-S611U The Ideal Professional Editing Suite

Quality. As a professional that's your paramount concern. And as a professional you can't afford to compromise that quality. Whether you're dealing with an original recording or a fifth-generation dub. That's why you need an editing system capable of delivering consistent top-quality pictures, generation after generation — from the first recording to the last dub. And that's exactly what you'll get with JVC's BR-S811U Professional S Editing Recorder and BR-S611U Professional S Recorder — professional-quality performance from start to finish.

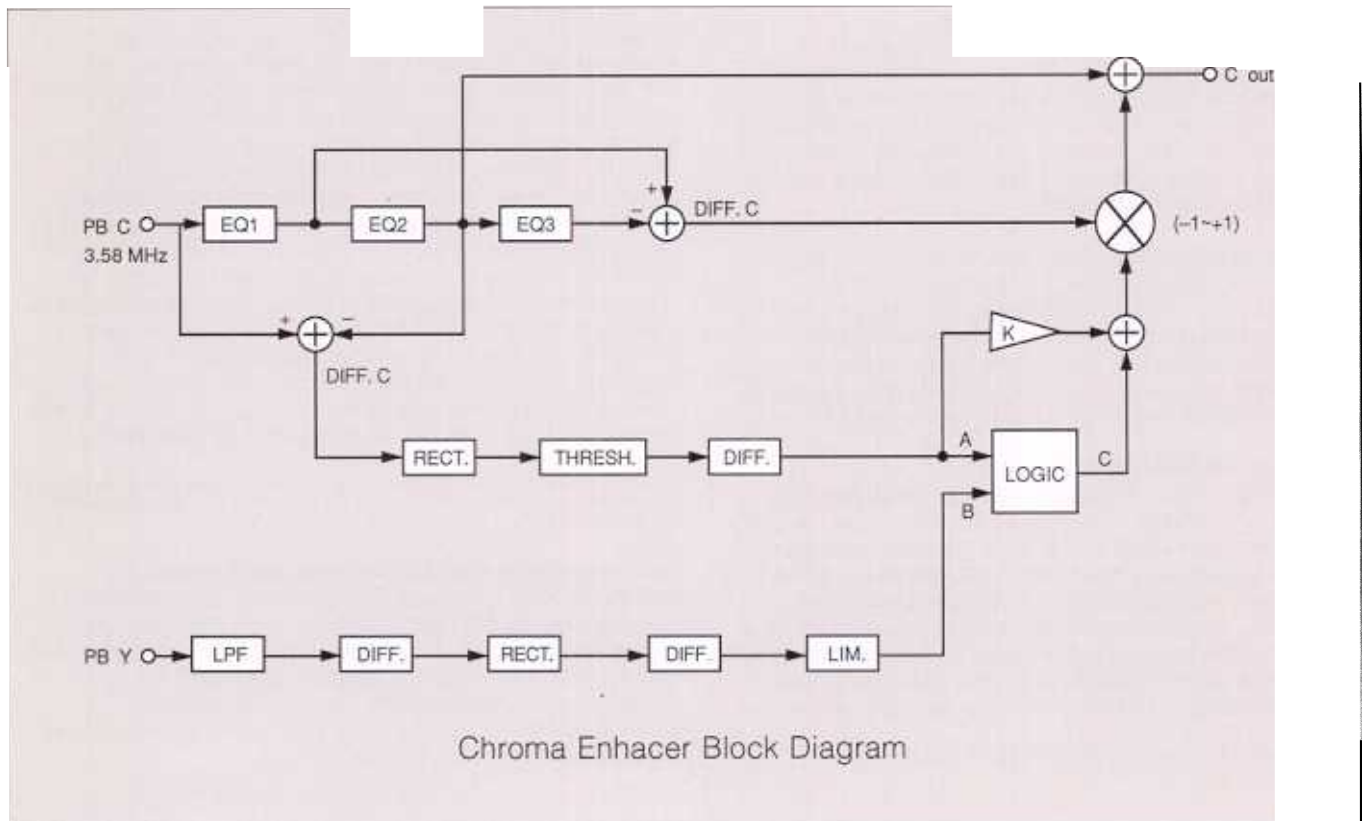
That quality starts with the very first recording you make. Advanced S-VHS technology and sophisticated Y/C separation circuitry work together to provide a picture with more than 400 lines of horizontal resolution and clear, realistic colors. And that quality continues as you edit or dub. Color edges stay sharp and spreading is reduced by a new chroma enhancer. Newly-developed crosstalk cancellation circuitry eliminates color blur. And — with the optional SA-T411U Time

Base Corrector/Noise Reducer — an advanced noise reduction system prevents any significant deterioration of the S/N ratio in multi-generation dubbing. It all adds up to a picture that looks as good on the last copy you make as it did on the first.

There's a lot more too. Like improved luminance signal frequency response. A tape-stabilizing head drum. Powerful Hi-Fi stereo sound. Systems flexibility with TBC connectors, separate Y/C and composite connectors, 45-pin parallel remote connectors, and more. A full range of professional editing functions (BR-S811U). Self-diagnostics. Automatic head cleaning. And years of reliable performance guaranteed by heavy-duty direct-drive mechanisms and rugged diecast aluminum chassis.

The BR-S811U and BR-S611U. From JVC. The first S-VHS editing system that's totally professional, from the first take to the last dub. Choosing it may be the most valuable decision you ever make. And the most economical.





Chroma enhancement

To ensure a sharper chroma edge with no color spreading even after repeated dubs, our new 11-series models incorporate a newly-developed chroma enhancer* circuit which restores the chroma bandwidth lost during recording and playback. By extracting the edge of the C signal, modulating it with the differential edge of the Y signal, and then adding the resulting signal to the C signal, this circuit improves the transient time of the C signal without degrading the signal-to-noise ratio. The overall result is an improvement roughly equivalent to what would be obtained if the chroma bandwidth were expanded by a factor of three.

*Employs chroma-enhancing technology co-developed by JVC and Faroudja Laboratories and modified for S-VHS applications.

Improved crosstalk cancellation circuitry

While effective in a horizontal direction, conventional color crosstalk cancellation circuitry does little to eliminate the problems of vertical color blurring. The new improved crosstalk cancellation circuitry incorporated in the BR-S811U and BR-S611U has been specially designed to prevent this problem. By comparing the current scanning line's chroma signal with the line above and the line below, then adding together the two lines that show the stronger correlation, this circuit is able to prevent vertical color blur, ensuring improved vertical resolution of the chroma signal in multi-generational dubbing.

Improved chroma signal-to-noise ratio

To prevent degradation of the signal at any stage of the signal path, JVC has upgraded all basic components on the signal path including video heads, recording current circuit, APC (Automatic Phase Control) circuit, band-pass filters, and delay lines. This reduces chroma noise and ringing, resulting in a significant improvement in the chroma S/N.

Improved luminance signal frequency response

By improving the frequency response of the luminance signal so that it is flat up to 3 MHz, smear is reduced and response to changing pulse-like signals improved. As a result, image detail in the critical areas most apparent to the human eye is significantly enhanced and high S-VHS resolution is maintained in multi-generational dubs. In addition, an automatic equalizer is provided to prevent deterioration of the luminance signal frequency response with worn heads, or when using tapes that have different characteristics or have been over-played.

Improved picture stability with TS Head Drum

Picture stability is closely related to tape stability. And the most important factor in tape stability is the head drum. To eliminate "head-knocking", both recorders employ JVC's precision-machined TS (Tape Stabilizing) head drum with precision-cut "shoulders" to ensure smooth, bump-free contact at the tape entry and exit points. Together with a new impedance roller on the take-up side of the tape path, and a new, improved drum motor using isotropic magnets, this contributes to a stable, rock-steady picture with no jitter or color snaking.

PERFORMANCE

S-VHS recording and playback technology

With a carrier frequency that extends up to 7 MHz and horizontal resolution exceeding 400 lines, S-VHS has proved itself a format truly capable of meeting professional needs. Pictures are sharp and clear, colors vibrant and alive. Advanced video processing circuits including a sophisticated 3-line Logical Comb Filter ensure superb basic performance and the best possible overall picture quality.

Professional-quality editing functions (BR-S811U only)

As an editing recorder designed to meet the highest professional standards, the BR-S811U is fully equipped to make sure you get the results you want. To prevent picture distortion at edit points, two rotary erase heads and a blanking switcher are provided. And to minimize edit flagging, it features both a framing servo and a highly stable horizontal phase lock.


Separate Y/C* input/output connectors

Both the BR-S811U and BR-S611U feature composite video signal inputs and outputs, as well as separate input and output connectors for direct transmission of the separate luminance (Y) and chroma (C) signals. In conjunction with the new chroma enhancer and crosstalk cancellation circuitry, this ensures strong, realistic colors with reduced color noise and blurring. Color signal deterioration in dubbing can be further suppressed by using the available Y/C 629 mode. As a result, broadcast-quality performance is maintained through as many as five generations of dubs.

* A Y/C filtering technique incorporated under license from Faroudja Laboratories Inc.

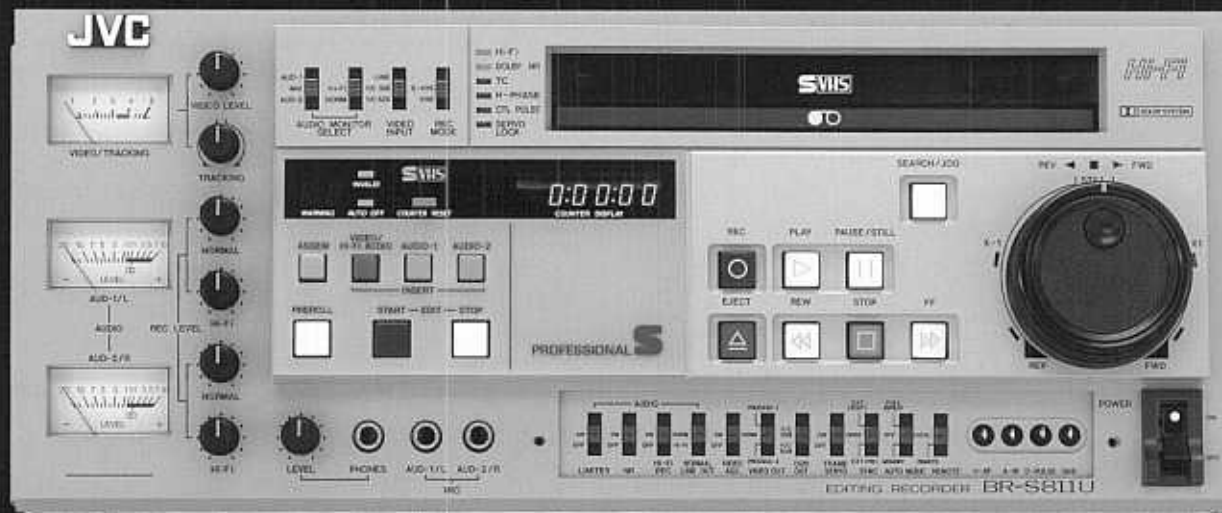
Hi-Fi VHS stereo sound

When it comes to quality video, picture quality is only half the story. Superior sound quality is just as essential. That's why our 11-series BR-S811U and BR-S611U recorders feature JVC's advanced Hi-Fi VHS stereo sound system. Using two rotary FM-audio heads to record the Hi-Fi audio signals on a separate layer of tape beneath the video track, Hi-Fi VHS provides superb stereo sound with a dynamic range of more than 90 dB, extended frequency response of 20 Hz to 20 kHz, and undetectable wow and flutter. Separate input terminals are provided for both Hi-Fi and normal audio, making it possible to record different soundtracks on these tracks. The normal audio track is also stereo and features Dolby* noise reduction for improved sound quality. With the BR-S611U, audio dubbing is possible on the normal audio channel-2 soundtrack, while the BR-S811U, as an editing recorder, features split-insert editing capabilities, allowing new signals to be independently inserted on either of the normal audio tracks. To defeat sound recording on the Hi-Fi track, both units are provided with a Hi-Fi REC switch.

* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. Dolby and the Double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

Professional-standard XLR balanced audio connectors

Both the BR-S811U and BR-S611U feature a complete set of new professional-standard XLR balanced audio connectors to ensure the highest levels of sound quality both in reception and transmission. To provide the flexibility demanded of a professional editing suite, both input and output are independent for all four channels. Input and output levels can be selected from +4 dB, 0 dB, and -6 dB.



BR-S811U Front Panel

Manual audio/video level controls and meters

Featuring large, independent VU audio level meters for channels 1 and 2, together with four audio recording level controls, the BR-S811U and BR-S611U permit easy monitoring of either the Hi-Fi or normal audio tracks, as well as separate adjustment of recording levels for Hi-Fi and normal audio tracks on channels 1 and 2. A three-position switch allows monitoring of the sound from each channel individually or from both together. For added convenience, a switchable audio limiting circuit is provided. Levels can still be controlled manually even when the limiter circuit is switched on. And, with the VIDEO AGC switch off, video signal recording levels can be controlled with reference to the video level meter which doubles as tracking meter during playback.

SMPT E time code recording and playback

Time code capability is an essential feature of any truly professional VCR. Both units feature TIME CODE IN/OUT connectors on their rear panels. LTC (longitudinal time codes) can be recorded on the normal audio track and, when the new optional SA-F911U Interface Unit with built-in LTC/VITC time code reader/generator is used, not only is it possible to read or record time codes, it's also possible to connect an advanced 9-pin serial remote editing controller to the system.

OPERABILITY

Variable-speed dial search and jog control

To meet your requirements for speed and precision, both units are equipped with large, dual concentric JOG/SHUTTLE controls. Convenient and easy-to-operate, these dials permit fast, pinpoint location of edit points. Turning the outer SHUTTLE ring allows you to vary tape speed from still to 10 times normal in forward or reverse. With the inner JOG dial, the tape moves at the same speed and in the same direction as the dial is turned.

Large, illuminated function buttons

Color-coded for easy identification, these large, self-illuminated pushbuttons control all tape transport and editing functions.

Easy-to-see LED indicators

Concentrated, easy-to-see front panel LED indicators show servo lock status, CTL pulse, H-phase (BR-S811U only), time code (LTC), Dolby NR, and Hi-Fi audio.

Half-loading mechanism

To ensure that the control head can pick up the tape's CTL pulses in any mode, our Professional S recorders are equipped with the half-loading mechanism. This permits CTL pulse reading even in the FF and REW modes.

Digital time counter

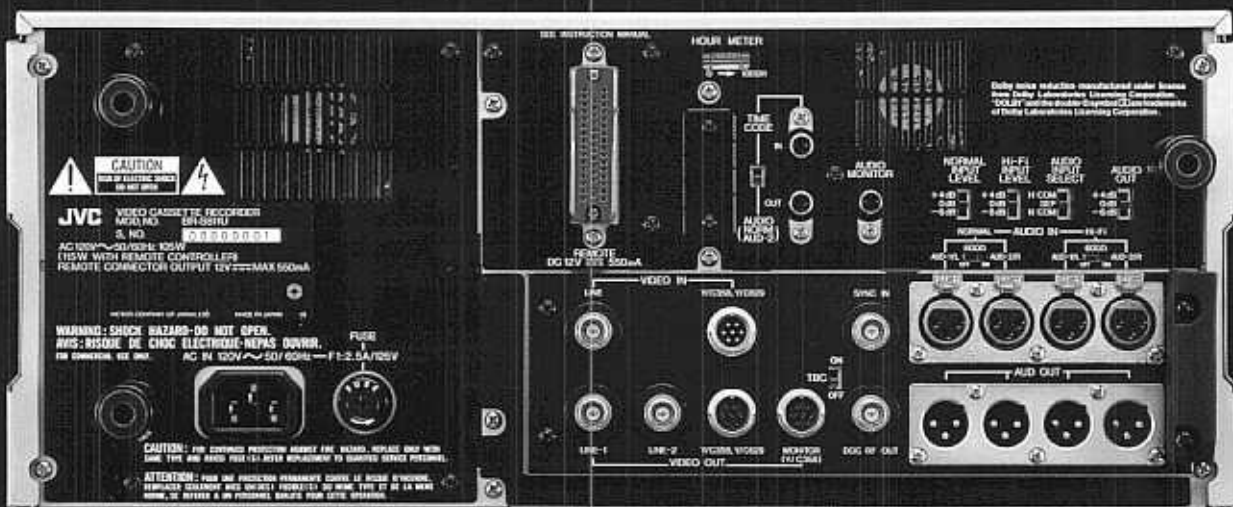
Elapsed tape time is accurately measured by CTL pulse-reading and shown in hours, minutes, and seconds on the large fluorescent display. Thanks to the half-loading mechanism, even readings obtained in the FF or REW modes can be relied on.

Automatic repeat and counter search

To repeat a tape, set the AUTO MODE switch to FULL REPEAT before starting playback. The tape will rewind automatically as soon as it ends and repeat playback from the beginning. The same AUTO MODE switch also controls counter search.

Timer recording and playback with external timer (BR-S611U only)

With the BR-S611U, increased scheduling flexibility is made possible by built-in timer recording and playback circuitry. Connectors are provided for connection to an external timer, permitting convenient, unattended recording or playback.



BR-S811U Rear Panel

RELIABILITY

Heavy-duty mechanism

With independent direct-drive motors for the head drum, capstan, and reels, you can count on long-term operational reliability with minimal downtime. In addition, all critical components are mounted in a rugged diecast aluminum chassis for improved stability and protection against external shock.

Self-diagnostic warning system

Trouble-free operation and quality recordings are ensured by a sophisticated array of microprocessor-controlled sensors and detectors. Warning codes (01 — 73) are displayed on the front panel digital display whenever a problem is detected in the drum and capstan servo system, the tape path, or the loading system. Each code corresponds to a specific problem. An AUTO OFF LED indicator is also provided.

Front panel test points

Thanks to conveniently located front panel test points for the video head and Hi-Fi audio head output signals, test gear for performance analysis can be easily connected without having to open the unit's cover or remove it from a rack.

Automatic head cleaning

Clogging and head abrasion are prevented by an auto cleaning mechanism which automatically cleans the video and Hi-Fi audio heads whenever a tape is loaded or unloaded.

Hour meter

To facilitate scheduling of inspections and preventive maintenance, an external hour meter on the rear panel shows accumulated running time up to 1000 hours.

SYSTEMS FLEXIBILITY

45-Pin remote connector

The final link in this sophisticated editing suite is the 45-pin parallel remote connector featured on each unit. This lets you connect them to a JVC editing controller such as the RM-86U or RM-G810U to form a complete editing suite. It also permits either unit to be combined with non-S-VHS source players or recorders equipped with a 45-pin connector. An advanced 9-pin serial editing controller can be connected to the system via the SA-F900U Interface Unit or SA-F911U Interface Unit With Time Code Reader/Generator. Time code-based editing is possible with the SA-F911U.

External sync input and RF output for DOC

A BNC connector is provided on the rear panel for transmission of RF signals to an external dropout compensator. For external sync operation, either a composite sync or a composite video signal may be used. A TBC can also be connected to the SYNC IN terminal. When combined with the SA-T411U Time Base Corrector/Noise Reducer specially designed for use with the 11-series editing system, the system not only eliminates timebase errors, but ensures higher-quality dubs with greatly-improved video and color S/N ratios.

OTHER FEATURES

- Framing servo on/off switch
- Headphone jack with adjustable output level
- Two VIDEO LINE OUT connectors and one separate Y/C MONITOR connector
- 19-inch EIA rack mounting possible



RELATED EQUIPMENT

1 BR-S411U Portable S-VHS Recorder

Part of JVC's advanced 11-series professional S-VHS equipment, this compact, lightweight unit features VITC (Vertical Interval Time Code) recording capability. Ideal for ENG and field production.

2 SA-F911U Interface Unit With Time Code Reader/Generator

Specially designed to facilitate connection of JVC's 11-series S-VHS recorders to an advanced 9-pin serial editing controller.

3 SA-T411U Time Base Corrector/Noise Reducer

Eliminates timebase errors and further improves video and color S/N ratios in multi-generational dubbing with JVC's 11-series recorders thanks to a newly-developed Y/C separate noise reduction circuit.

4 RM-G810U Editing Controller

Featuring a full range of automatic editing modes and independent JOG/SHUTTLE controls for the feeder and recorder, this editing controller was designed to facilitate transfer of material recorded in S-VHS and a variety of other formats to an S-VHS editor.

5 EI-500 Interface Unit

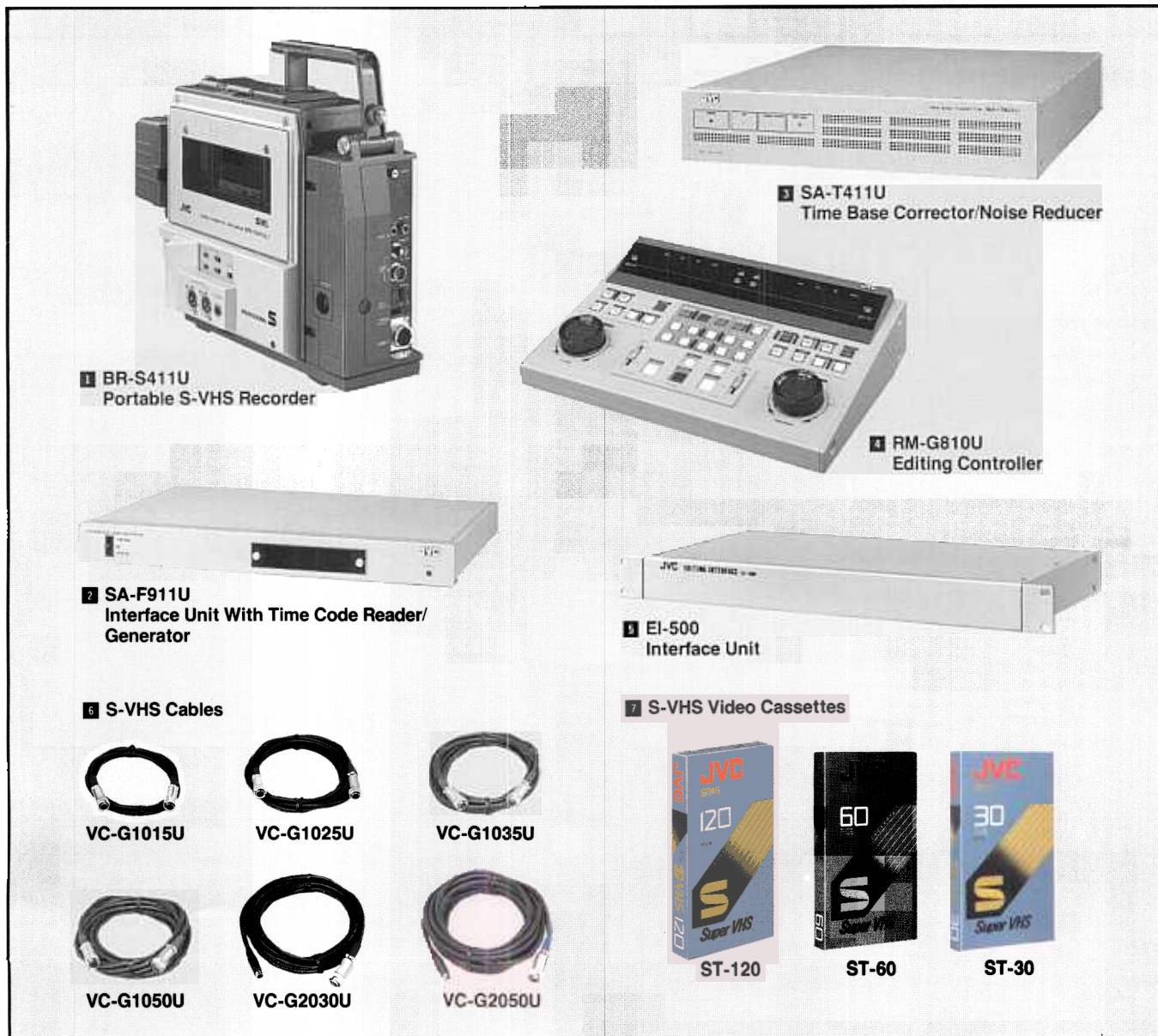
Designed to permit interfacing of JVC's 11-series S-VHS recorders with 33-pin editing controllers.

6 S-VHS Cables

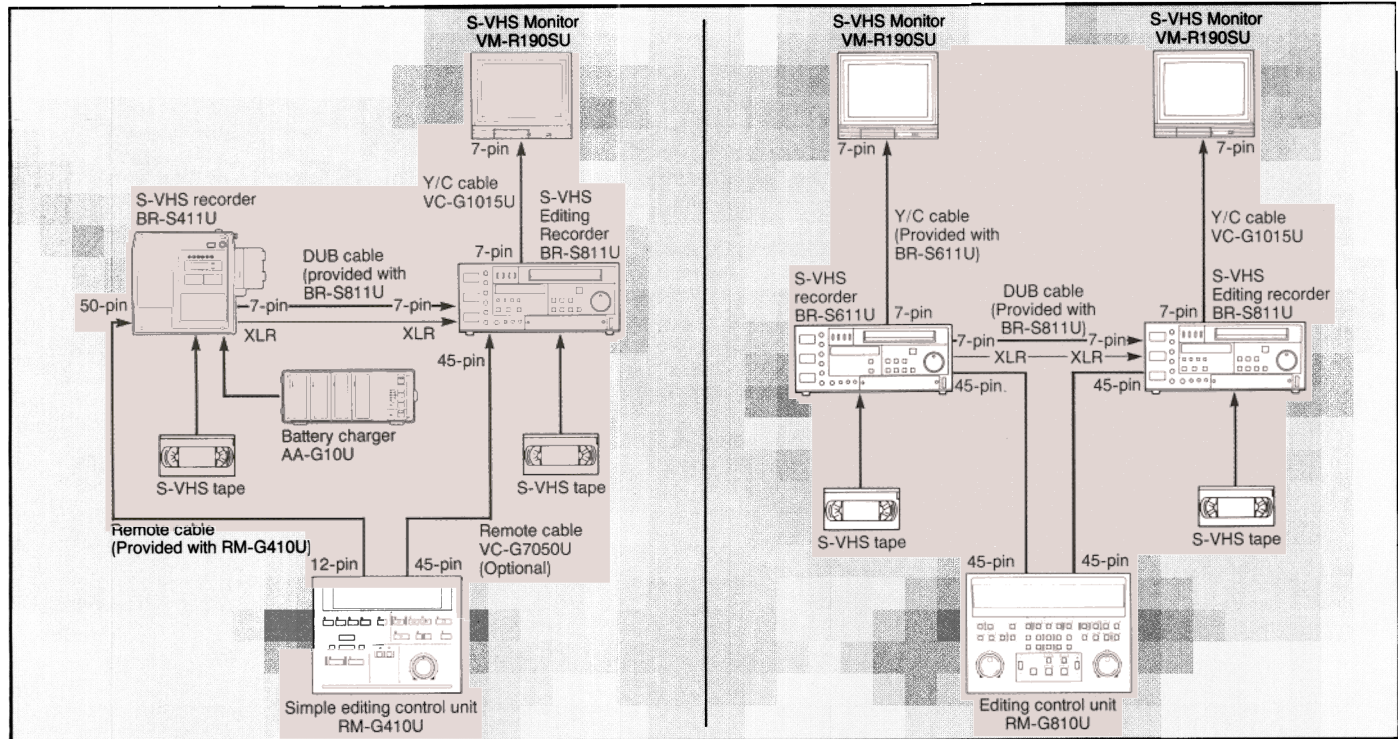
- VC-G1015U: 7-pin male to 7-pin female/1.5 m (4.75 ft)
- VC-G1025U: 7-pin male to 7-pin female/2.5 m (8 ft)
- VC-G1035U: 7-pin male to 7-pin female/3.5 m (12.25 ft)
- VC-G1050U: 7-pin male to 7-pin female/5.0 m (16 ft)
- VC-G2030U: 7-pin male to 4-pin S-connector/3.0 m (9.75 ft)
- VC-G2050U: 7-pin male to 4-pin S-connector/5.0 m (16 ft)

7 S-VHS Video Cassettes

ST-120/ST-60/ST-30
Using advanced "Active Surface" technology, JVC's S-VHS tape takes 100% advantage of the S-VHS system's performance. The culmination of the expertise in tape technology gained at JVC over many years, this tape is available in three lengths — ST-120 (120 minutes), ST-60 (60 minutes), and ST-30 (30 minutes).



SYSTEM CONFIGURATIONS



BR-S811U/BR-S611U SPECIFICATIONS

GENERAL

Format: VHS/S-VHS NTSC standard
 Power requirement: AC 120 V \sim , 50/60 Hz
 Power consumption: 115 watts (max. 125 watts with the Automatic Editing Control Unit, DC 12 V, 550 mA)
 Dimensions: 42.9(W) x 18.8(H) x 53.1(D) cm (16-3/4" x 7-1/2" x 20-15/16")
 Weight: 24.5 kg (55 lbs)
 Operating temperature: 5°C to 40°C (41°F to 104°F)
 Storage temperature: -20°C to 60°C (-4°F to 140°F)
 Tape speed: 33.35 mm/sec
 Recording & Playback time: Max. 120 min. with JVC T-120
 Fast forward/Rewind time: Less than 4 min. for 120 min. tape
 Search speed: Dial Search FWD/REW X \pm 1/30 to X \pm 10

VIDEO

Recording and playback: Rotary two-head, helical scanning system
 Luminance: FM recording
 Color signal: Phase shift, converted sub-carrier direct recording
 Video signal system: NTSC-type color signal/NTSC-type Y/C signal

Input

Line: 1.0 Vp-p, 75 ohms, unbalanced
 YC629 Y: 1.0 Vp-p, 75 ohms, unbalanced
 C: 0.9 Vp-p, 75 ohms, unbalanced
 YC358 Y: 1.0 Vp-p, 75 ohms, unbalanced
 C: 0.286 Vp-p, 75 ohms, unbalanced (Burst)

Output

Line: 1.0 Vp-p, 75 ohms, unbalanced
 YC629 Y: 1.0 Vp-p, 75 ohms, unbalanced
 C: 0.9 Vp-p, 75 ohms, unbalanced
 YC358 Y: 1.0 Vp-p, 75 ohms, unbalanced
 C: 0.286 Vp-p, 75 ohms, unbalanced (Burst)
 Signal-to-noise ratio: More than 46 dB (S-VHS)
 More than 45 dB (VHS)
 Horizontal resolution: More than 400 lines (S-VHS)
 More than 240 lines (VHS)
 External SYNC input: 0.5 to 4.0 Vp-p, 75 ohms, unbalanced
 RF output (DOC): 0.5 Vp-p, 75 ohms, unbalanced

AUDIO

Input

Line: -6/0/+4 dBs, 10 k-ohms/600 ohms, balanced (Hi-Fi/Normal)

Output

Line: -6/0/+4 dBs, Low impedance, balanced (Hi-Fi/Normal)

Signal-to-noise ratio: More than 44 dB (NR-off) (Normal)

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

Frequency response: 20 to 20,000 Hz (Hi-Fi)

40 to 12,000 Hz (Normal)

Wow and flutter: Less than 0.005% WRMS (Hi-Fi)
 Less than 0.25% rms (Normal)

Time code

Input: 0 dB \pm 6 dBs, 10 k-ohms
 Output: 0 dB \pm 3 dBs, Low impedance

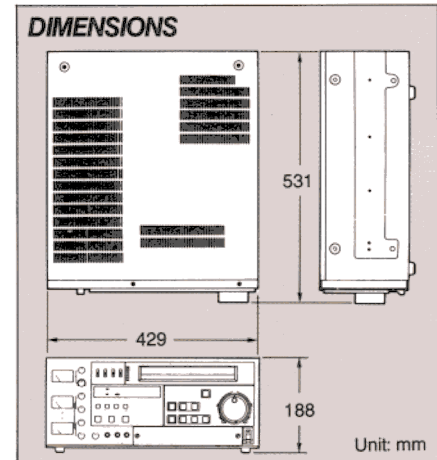
CONNECTORS

Video

Line input: BNC-type connector
 Line output: BNC-type connectors
 YC358/YC629 input/output: 7-pin connectors

Audio

Hi-Fi input/output: XLR connectors
 Normal input/output: XLR connectors
 Remote control: 45-pin connector
 Accessories: 7-pin cable, Power Cord, Switch cover



Design and specifications subject to change without notice.

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The previous **SVHS** logo mark has been changed to **SVHS**. Regardless of this change in the official logo, the S-VHS system represented by either logo, new or old, remains completely identical and therefore products carrying either logo can be used interchangeably.

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