

JVC[®]
PROFESSIONAL

STUDIO DV CAMCORDER
GY-DV550U

The first DV camcorder in the world
with full CCU control

Mini DV NTSC

PROFESSIONAL DV

GY-DV550U

1/2" 3-CCD DV Camcorder
with Full CCU Control
26-Pin Interface



In The Studio Or On The Road, This Versatile Camcorder With 26-Pin Interface Delivers The Performance You Need For Any Professional Video Production Application.

As the world's only DV camcorder to offer full CCU control and have features like 26-pin remote, TelePrompTer and intercom, the GY-DV550U – or Studio DV Camcorder – functions exceptionally well as both a full bandwidth (800+ lines) broadcast-standard studio camera and a powerful ENG camcorder. And though it's ideal for broadcasters, it's priced within reach of virtually everyone.

The Studio DV Camcorder offers all the features, capabilities and accessories you'd expect from a CCU-controllable camera – plus the ability to operate in an ISO-cam environment. In addition to its top-notch performance specs, the Studio DV offers it all: a standard 1/2-inch bayonet mount (that accepts virtually every professional lens available), bi-directional IEEE 1394, two

48 kHz 16-bit digital PCM audio channels and a built-in SMPTE time code

reader/generator. Connectivity is outstanding – with XLR microphone inputs, audio outputs, headphones output and both composite and Y/C outputs. And, because it's MiniDV, the Studio DV Camcorder offers the industry's widest compatibility, with the ability to play back recordings on DVCAM and DVCPRO.

Maximum versatility, exceptional performance and superior value make the Studio DV the smart choice for any professional who needs a camcorder that will consistently deliver in the studio, the field – or both. It's clear to see why JVC's Studio DV outperforms anything in its class.



System flexibility



26-pin interface

The GY-DV550U is the only DV camcorder in the world to offer full CCU control. With its 26-pin interface, the

SMPTE TC input/output

SMPTE TC connectors are provided, allowing you to synchronize simultaneous shooting with multiple camcorders.



Genlock input

To meet increasing demand for a digital camcorder that can easily be incorporated in complex production systems, the GY-DV550U is equipped with a genlocking function that includes SC lock to ensure high-resolution pictures.



AUX input (composite video input)

For added convenience, the genlock input connector doubles as a composite video input, so you can use the GY-DV550U as a standard video recorder. This connector can be used for camera pool applications as well.

Return video output for TelePrompTer output

The GY-DV550U can display return video signals from the CCU or an external VTR on the viewfinder or TelePrompTer signals from the camera control unit may be output via a BNC connector, assuring full support for studio



program production.

1/2" bayonet lens mount

The GY-DV550U uses a standard professional 1/2" bayonet lens mount, making it compatible with the widest selection of lenses.



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26-Pin Interface

GY-DV550U can be used in a studio environment where multiple remote camera and ISO-Cam operations are required. This interface allows the user to connect a remote controller or external data storage system. In addition, recording on DV benefits customers who use this system either in live broadcast situations, live webcasting, or ENG applications, as well as assignments where post-production work is required later. Because you can take advantage of its superior picture and sound performance in a studio environment, DV makes it possible to put together a fully digital end-to-end system that's reliable and cost-efficient.

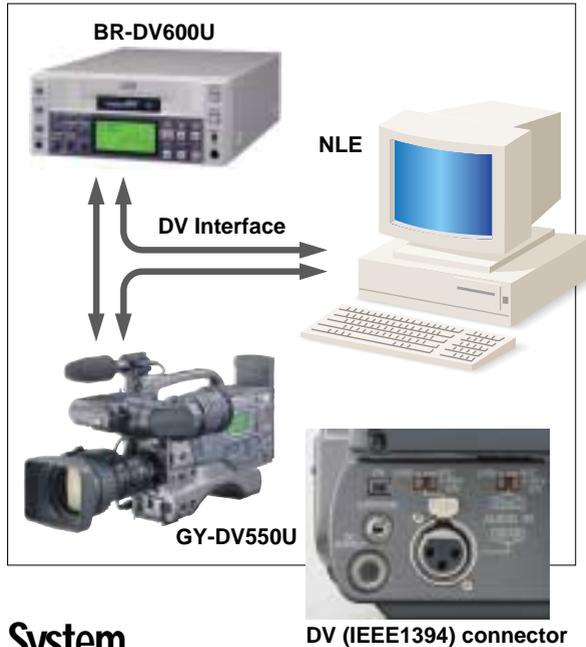
Ready for EFP remote control (RM-LP57/LP55)

The EFP connects directly to the GY-DV550U, giving you the ability to adjust video parameters at any time during the production.



IEEE 1394 (Firewire) input/output compatible with most NLE systems

This allows high-quality compressed digital video signal transfer directly to a computer, a non-linear editing system, or to another DV recorder. Producers can now digitally spool directly to a non-linear editing platform without loss, and then transfer the finished product directly back to video tape using the camera alone.



System application

Using the 26-pin camera cable, you can connect the GY-DV550U to a portable recorder for backup in the field or to a camera remote controller for use in studio.



Full CCU control

The GY-DV550U is the industry's first DV camcorder to offer full CCU control (including Iso-Cam operation), allowing you to use it as the base for a full-fledged studio system.

Connectable CCUs

GY-DV550U	Attached VF	Maximum transmission distance		
		RM-P200*1	RM-P210	RM-P300*2
	VF-P115 (1.5 inches)	100 m (328 ft)	100 m (328 ft)	300 m (656 ft)
	VF-P400 (4 inches)	100 m (328 ft)	100 m (328 ft)	300 m (656 ft)

*1 Iso-Cam capability is not available when the VF-P400 is used. This capability is available using a standard local power supply.

*2 Iso-Cam capability is not available when the transmission distance exceeds 200 m.

This capability is available using a standard local power supply.

Internal adjustment is required depending on the transmission distance. Please contact your JVC dealer for details.

RM-P210 camera remote controller

- Allows remote operation of the GY-DV550U camcorder from a distance of up to 100 meters (328 ft)
- Accepts JVC or Sony 26-pin CCU cables when used in combination with the GY-DV550U
- Full access to camera menus, function controls and camera setup parameters
- Dynamic or carbon equivalent RTS/4-wire compatible intercom
- Front panel built-in genlock controls
- Serial data communications for more reliable and accurate communications between the camera and RCU
- Multiple outputs (R/G/B component for computer graphics and keying, plus Y/R-Y/B-Y component for system or Y/C358 for S-VHS)
- Gain select switch with variable gain function
- 4 programmable function buttons for quick access to menu items
- LCD read out at the base station for easy menu navigation and simple operation



High-quality performance

DV recording on a MiniDV tape

The GY-DV550U combines the convenience and affordability of MiniDV with the high-quality camera performance you need for professional use. Up to 80 minutes* of high-quality 8-bit, 13.5 kHz, 4:1:1 DV component digital images can be recorded on a single MiniDV tape, assuring you the high-quality, non-degradable images you need for top results in post-production editing. Outstanding horizontal resolution of



800 lines is achieved at not only the camera output but also at the video signal outputs including the 26-pin connector.

*With an MDV-80 tape.

State-of-the-art 1/2" 3-CCD image pickup

To ensure the best possible image quality, the GY-DV550U incorporates three 1/2" 380,000 active pixel interline-transfer CCDs. Each CCD is equipped with highly advanced circuitry that virtually eliminates vertical smear when shooting bright lights in a dark room. Lag and image burn are also reduced to indiscernible levels, while high sensitivity of F11 at 2000 lux assures creative flexibility and simplifies lighting requirements.

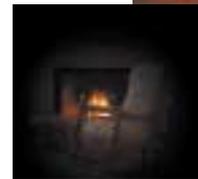


LOLUX 0.75 lux

When activated, the LOLUX mode increases sensitivity with almost no increase in noise. LOLUX lets you shoot in low light conditions, so you can capture high-quality video footage with excellent color balance at just 0.75 lux illumination.



Lolux ON



OFF

User-friendly design

Super Scene Finder (SSF™)

A JVC exclusive, Super Scene Finder lets you log scenes automatically or manually in the field while shooting, and optionally mark the best ones. The SSF data for the last six tapes is retained in the camcorder's non-volatile memory. Data for up to 134 scenes may be permanently stored on the head of the corresponding tape. The camcorder possesses an RS-232 port for controlling the tape mechanism and downloading the scene data to a PC running logging software. Super Scene finder dramatically speeds up and simplifies not only the production, but also the NLE transfer process and saves disk space, because you digitize only those scenes you need for editing.

Viewfinder status display

The viewfinder status display uses characters and menus to display selected information in the viewfinder. For example, 4:3 or 16:9 safe area, time code/tape remain, F stop, battery condition, shutter speed, zebra pattern for skin detail and brightness indication are all displayed, as well as various events, camera setting status, recorder operation, and selected setup parameters.

Convenient menu dial

Quickly and easily navigate through the viewfinder menu or set the shutter speed with the convenient menu point and click dial.

Bi-color tally lamp

The tally lamp flashes during preroll and lights when the camcorder is in the record mode. The tally lamp lights green when the camera is selected on the preview bus and red when it's selected on the program bus. You can switch the lamp on or off as required.

Back-lit LCD display

Clear and easy-to-see even in the dark, this display shows operation status and warning indicators including audio level indicators, remaining tape/battery power display, time code reader/generator indication, menu setting and time date display.

Intercom function

Compatible with carbon or dynamic headset microphones, this function can be switched on and off as required.

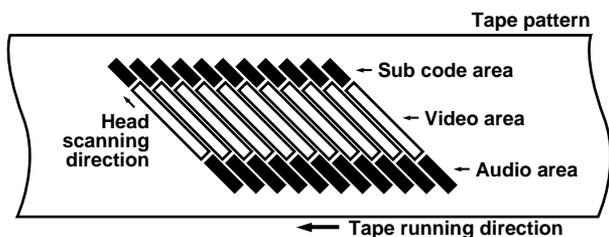
Professional camera features

- Full auto shooting
- Precision "accu-focus" mode
- Continuous auto black (CAB)
- Automatic level control (ALC)
- Variable scan view
- Black stretch/compress
- Built-in phantom microphone power
- Adjustable detail frequency
- Adjustable gamma point
- Time code reader/generator
- Time/date stamp
- Skin tone detection
- Auto kneel

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26-Pin Interface



High-quality PCM digital audio

To complement its superior pictures, the GY-DV550U offers outstanding digital PCM sound. Audio signals are locked with video signals for smooth editing. You can choose from two 16-bit 48-kHz channels or two 12-bit, 32-kHz channels with a dynamic range of more than 85 dB. Three XLR connectors provide line or microphone input level with selectable phantom power, while three audio REC level controls on the front and the side can be used to adjust the recording level.



Letterbox 16:9

The screen can be switched between 4:3 and 16:9, allowing you to record signals with the aspect ratio appropriate to the application.

Front section

- 1 Viewfinder mount base, sliding securing ring
- 2 [VF] viewfinder connector (6-pin)
- 3 [AUDIO IN FRONT] audio input front connector (XLR 3-pin)
- 4 [LENS] lens control connector
- 5 [ZEBRA] switch
- 6 [VTR] trigger button
- 7 [AUDIO LEVEL CH-1] CH-1 recording level control
- 8 [AUTO WHITE/ACCU FOCUS] switch
- 9 [TAKE] button
- 10 Lens mounting ring/lens lock lever
- 11 [FILTER] color temperature conversion filter control knob

Right side section — camera setting

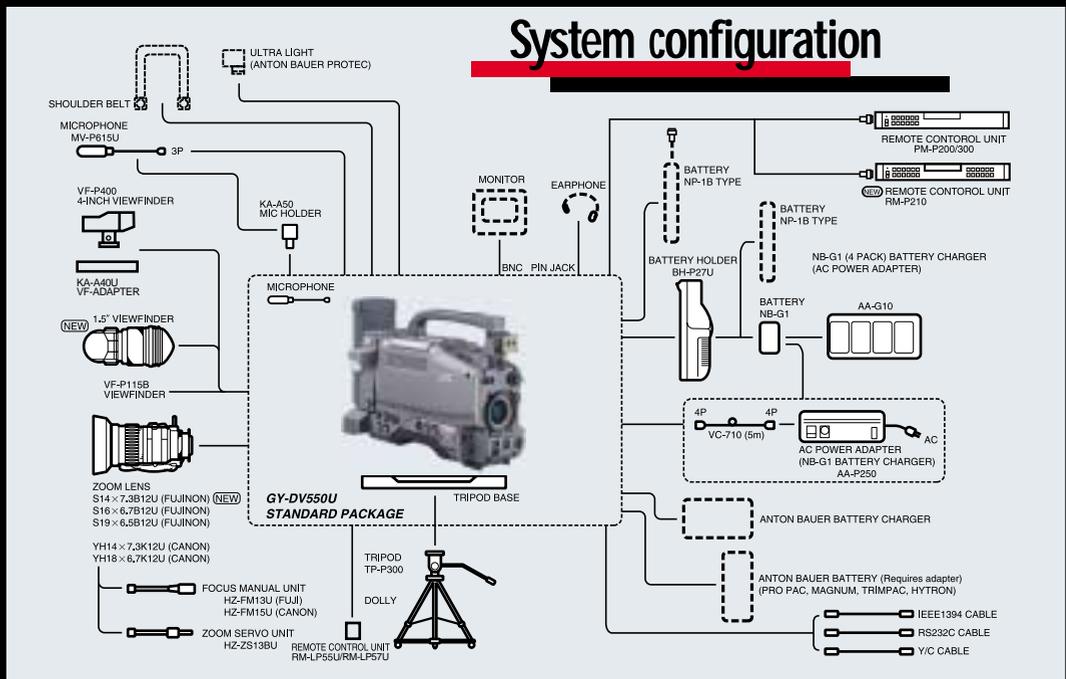
- 12 [ALARM] volume control
- 13 [MONITOR] audio monitor volume control
- 14 [STATUS] status/menu button
- 15 [SHUTTER/MENU] dial
- 16 [LOLUX] LOLUX on/off button
- 17 [BLACK] black stretch/black compression switch
- 18 [FULL AUTO] full auto shooting ON/OFF button and indicator
- 19 [AUTO IRIS] auto iris level switch
- 20 [GAIN] switch
- 21 [VTR SAVE/STBY] switch
- 22 [OUTPUT] color bar/camera/auto knee switch
- 23 [WHT.BAL] white balance switch
- 24 [NG] button
- 25 [POWER] switch

Right side section — audio setting

- 26 Monitoring loudspeaker
- 27 [CH1 AUDIO LEVEL] CH1 recording level control
- 28 [CH2 AUDIO LEVEL] CH2 recording level control
- 29 [MONITOR SELECT] audio monitor selector switch
- 30 [CH-1 AUDIO SELECT] selector switch
- 31 [CH-2 AUDIO SELECT] selector switch
- 32 [CH-1 AUDIO INPUT] selector switch
- 33 [CH-2 AUDIO INPUT] selector switch

Right side section — VCR setting

- 34 [VTR INPUT] setting switch
- 35 [VTR SELECT] VTR setting switch
- 36 [MENU] button
- 37 [HOLD/GROUP] button
- 38 [SHIFT/ITEM] button



Controls, indicators, connectors

- 39 [ADVANCE/SELECT] button
- 40 [PRESET/DATA SET] button
- 41 [CONTINUE] button
- 42 [TC GENE] time generator setting switch
- 43 Lithium battery installation compartment

Right side section — VCR display

- 44 [OPERATE/WARNING] indicator
- 45 [RESET] button
- 46 [LIGHT] switch
- 47 [COUNTER] switch
- 48 Audio level meters
- 49 SP indicator
- 50 32K/48K sampling frequency indication
- 51 [AUD LOCK] indicator
- 52 [MENU] indicator
- 53 [WIDE] indicator
- 54 Cassette indicator
- 55 [REMAIN] indicator
- 56 Tape transport direction indicators
- 57 Remaining battery power display
- 58 Counter display
- 59 Time code-related indications (SLAVE/PB/ND/FL)
- 60 Warning indicators (AUTO OFF/DEW /SERVO/RF/L)

Left side section

- 61 Cassette cover
- 62 [MONITOR OUT] connector (BNC)
- 63 [Y/C OUT] connector (4P)
- 64 [TC IN] connector (BNC)
- 65 [TC OUT] connector (BNC)
- 66 [LINE OUT CH-1/CH-2] connector (RCA)
- 67 [VIDEO OUT] connector (BNC)
- 68 [GENLOCK/AUX IN] connector
- 69 [VTR REMOTE] connector
- 70 Microphone attachment holes

Top section

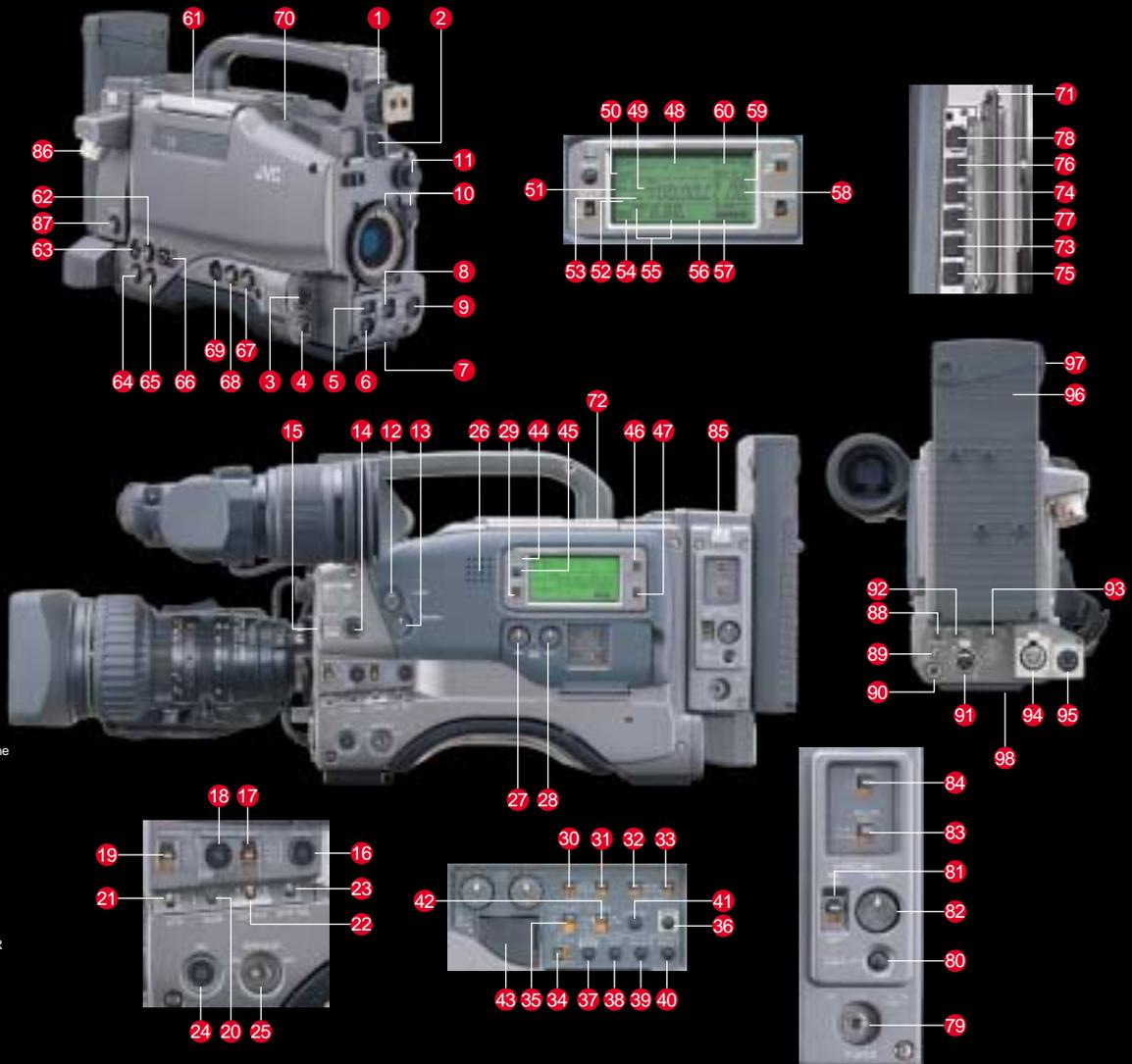
- 71 [EJECT] switch
- 72 Operation cover
- 73 [PLAY] button
- 74 [STOP] button
- 75 [STILL] button
- 76 [REW] button
- 77 [FF] button
- 78 [LOG] button

Adapter section

- 79 [POWER] power source setting switch
- 80 [CALL] button
- 81 [INCOM MIC] intercom microphone ON/OFF switch
- 82 [INTERCOM MIC LEVEL] intercom microphone volume
- 83 [INCOM MIC] intercom microphone setting switch
- 84 [MODE] setting switch
- 85 Tally lamp
- 86 [VTR/RM] VTR/RM multi-pin connector (26P)
- 87 [PROMPTER OUTPUT] connector

Rear section

- 88 [DV] connector
- 89 [EARPHONE] jack
- 90 [DC OUTPUT] connector
- 91 [AUDIO IN REAR] connector (XLR 3-pin)
- 92 [AUDIO IN REAR LINE/MIC] AUDIO IN REAR select switch
- 93 [AUDIO IN FRONT LINE/MIC] AUDIO IN FRONT select switch
- 94 [INTERCOM] input terminal (XLR 5-pin)
- 95 [DC INPUT] connector (XLR 4-pin)
- 96 Battery holder
- 97 [BREAKER]



Specifications

General

Power requirement: DC 10.5 V to 17 V
 Power consumption: Approx. 20 W (w/o viewfinder)
 Dimensions: 336 (W) x 245.5 (H) x 124 (D) mm (13-1/4" x 9-11/16" x 4-15/16")
 Weight: 5.8 kg (12.8 lbs.) (main unit only)
 Temperature
 Operating: 0°C to 40°C (32°F to 104°F)
 Storage: -20°C to 60°C (-4°F to 140°F)
 Humidity
 Operating: 30% to 80% RH
 Storage: 85% RH or less

Camera section

Image pickup device: 1/2" interline-transfer CCDs
 Color separation optical system: F1.4, 3-color separation prism
 Number of effective pixels: 380,000 (768 (H) x 494 (V))
 Color system: NTSC (wide-band R-Y, B-Y encoder)
 Color bars: SMPTE type
 Sync system: Internal sync, external sync (VBS)
 Lens mount: 1/2" bayonet system
 Optical filter: 3200K, 5600K + 1/8ND, 5600K + 1/64ND
 Sensitivity: F11, 2000 lux
 S/N: 62 dB or more (available through 26-pin)
 Resolution: More than 750 lines
 Gain: -3, 0, 6, 9, 12, 18 dB, variable gain in ALC and LOLUX
 Minimum illumination: 0.75 lux with F1.4, LOLUX
 Registration: 0.05% or less (excluding lens distortion)
 Detail correction: Horizontal and vertical dual-edged
 Electronic shutter variable range:
 Standard value: 59.94 (60) Hz
 Fixed values: 100, 250, 500, 1000, 2000 Hz
 Variable scan: 60.1 to 2084.6 Hz

VTR section

Format: DV format
 Signal format: NTSC
 Usable tape: MiniDV tape
 Tape speed: 18.812 mm/sec. (SP mode)
 Record/play time: 60 minutes or more (with an MDV-60 tape)
 FF/rewind time: Within 120 sec. (with an MDV-60 tape)
[Video]
 Video signal recording format: 8-bit, 13.5 MHz, 4:1:1 component recording
[Audio]
 Audio signal recording format: 16-bit, 48 kHz or 12-bit, 32 kHz PCM for 2 channels
 Frequency response: 20 Hz to 20 kHz (16-bit), 20 Hz to 14.5 kHz (12-bit)
 S/N: 60 dB or more
 Dynamic range: 85 dB or more

Connectors

Video output: 1.0 Vp-p, 75 ohms (BNC) (composite video signal)
 Y/C output: Y/C signal, 4-pin, 75 ohms, unbalanced
 Audio inputs (AUDIO 1, AUDIO 2)
 MIC: -60 dBs, low impedance (XLR), balanced
 LINE: +4 dBs, 10 kohms, balanced
 Line outputs (LINE 1, LINE 2): -6 ± 1 dBs, low impedance (RCA), unbalanced
 IEEE 1394 interface: 4-pin
 RS-232C interface: Mini DIN 6-pin
 VF connector: 6-pin
 Genlock/video input: BNC
 Earphone jack: Stereo mini-jack (monaural)

Accessories

Instruction manual
 Tripod mounting plate
 Microphone

Dimensions



Options — A wide range of options are available to expand the flexibility of this camcorder.



BR-DV600U Professional DV recorder/player

- DV recording on a MiniDV tape
- PCM digital audio
- Various video inputs/outputs (IEEE 1394 input/output, composite/YC/component inputs/outputs)
- RS-422 interface/JVC bus interface and optional RS-232C interface
- Super Scene Finder
- Insert/assemble editing and audio dubbing (usable functions vary depending on the editing controller used)
- SMPTE-standard LTC time code generator

VF-P115BU

1.5" viewfinder



VF-P116U

1.5" viewfinder



VF-P400U

4" B&W viewfinder



For attachment, the KA-A40U adapter is required.

S14 x 7.3B12U

14:1 power zoom lens (Fujinon)

S19 x 6.5B12U

19:1 power zoom lens (Fujinon)



YH14 x 7.3K12U

14:1 power zoom lens (Canon)

YH18 x 6.7K12U

18:1 power zoom lens (Canon)



MV-P615U

Monaural microphone with XLR connector



For attachment, the KA-A50U adapter is required.

HZ-ZS13BU

Zoom servo/trigger control (Fujinon/Canon lenses)



HZ-FM13U

Manual focus control for Fujinon lens (excluding S14 lens)



HZ-FM15U

Manual focus control for Canon lens



AA-P250U

AC power adapter/charger



NP-1 type battery



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Design and specifications subject to change without notice.



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