

JVC[®]

The Perfect Experience / —

ProHD

COMPACT SHOULDER CAMCORDER

GY-HD250

JVC ProHD — Your Creativity is Our Inspiration



720/24p/30p/60p

HDV[™] Mini **DV**
HDV 720p

JVC ProHD — Defining the future of professional video

With the introduction of JVC's ProHD, the promise of digital technology has finally been fulfilled. Equipped with robust professional features, yet surprisingly affordable and remarkably compact, ProHD embraces the HDV format to deliver a complete high-definition solution that has been designed to meet the needs of today's most demanding professionals, while retaining the ability to adapt to future requirements.

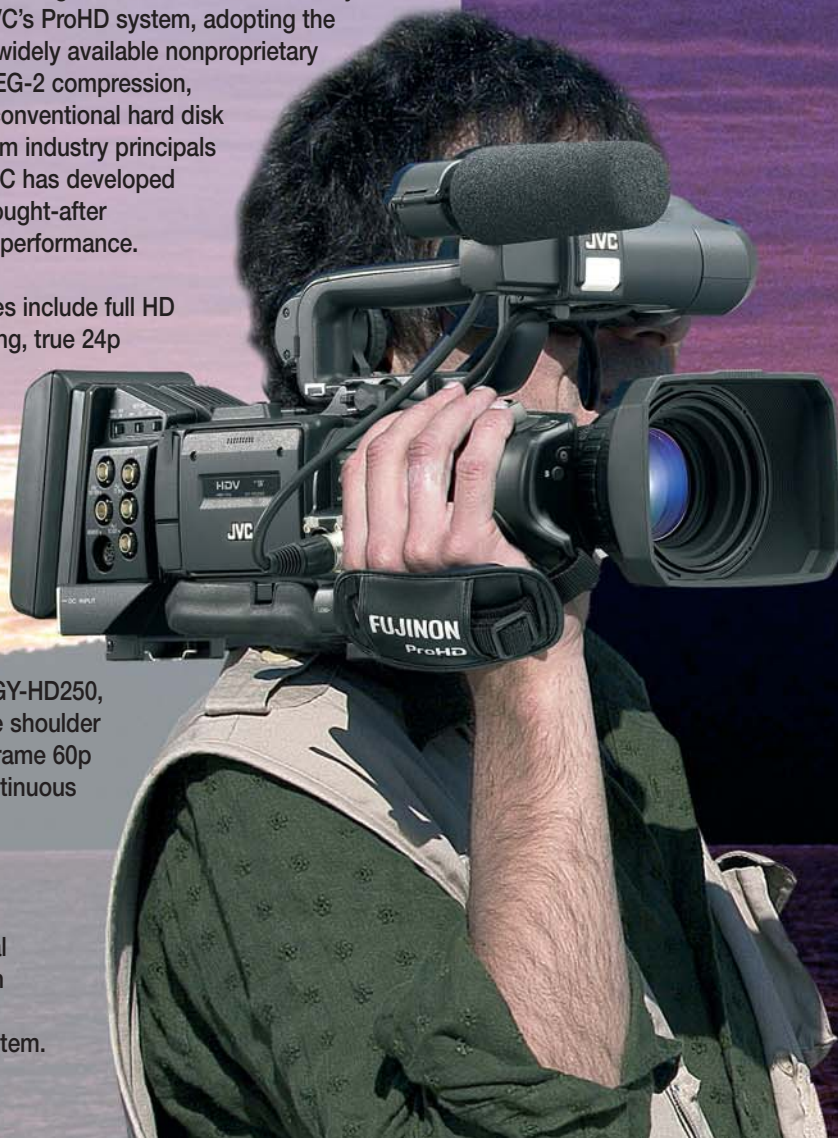
Since 1996, JVC has continued to develop and diversify its digital video offerings in response to the rapidly changing environment of visual communications and production. JVC continues to evolve its digital cameras and recorders with ground-breaking features and varied storage options, including full-size DV tape and Hard Disk Drives.

Now with the production and delivery of video content shifting to high definition, JVC has combined its expertise in camera, encoding and storage technologies to create an advanced yet affordable HD solution. JVC's ProHD system, adopting the HDV720P format, utilizes widely available nonproprietary technologies such as MPEG-2 compression, DV recording media and conventional hard disk drives. Based on input from industry principals and leading end users, JVC has developed a system with the most sought-after professional features and performance.

Noteworthy ProHD features include full HD progressive image scanning, true 24p frame capture, and a dual recording system using tape & HDD. As ProHD evolves, JVC will continue to pursue the optimal method of storage media for our professional video products.

The latest addition to the ProHD system is the GY-HD250, a compact studio-capable shoulder camcorder featuring full-frame 60p recording for smooth, continuous images.

Designed and built for professionals, ProHD is the fulfillment of the digital promise, offering true high definition performance in a compact, affordable system.



ProHD — Concept of JVC's Affordable HD Solution

1. HDV Full Progressive Scanning (720p)

Industry leading professionals told us that they wanted a full-frame progressive scanning system that would shoot and record the highest quality moving continuous images. ProHD uses the 720/60p progressive HDV format and produces crisp, native HD images which perfectly match today's digital displays and which can be converted easily, without degradation, to interlaced pictures.

2. Time Code

As a professional system, ProHD products include the facility to record and display time code. Convenient menu operation makes it easy to preset time code at the beginning of a tape. Simply select REC RUN or re-generation mode. User bits are also available.

3. Highly efficient video compression

To provide the highest quality HD recording, JVC uses the broadcast industry standard MPEG-2 Main Profile at H-14. Offering far greater efficiency than frame-bound systems, ProHD records at data rates at or above commercial broadcast rates. Recent advancements in non-linear editing have made it possible to edit ProHD on virtually all popular Non-Linear systems. Direct digital transfers through IEEE 1394 ensure there is no loss in quality throughout the transfer process.

4. Dual recording system

Designed to utilize both DV tape and optional hard disk drives, ProHD offers the ultimate in media versatility, maximizing productivity with efficient, economical editing and low-cost archiving. Now you can safely archive the original tape cassette and then plug the hard disk straight into your NLE. Editing can start right away — no need to make dubs or transfer data.

5. Real 24p

With ProHD, the dream of creating HD video with the essence of film has at last been realized. By capturing and recording at the film frame rate of 24fps, and offering extensive user configurable settings such as exposure, gamma and detail, ProHD becomes an ideal tool for creative expression. In addition, native 24p editing is now possible in HD at a low bit rate of 19Mbps, enabling the creation of EDLs (Edit Decision Lists) of 24 frame material with compatible Non-Linear Editing software. For the ultimate expression on the big screen, 24 frame progressive recordings can be transferred easily to 16 mm or 35 mm film.



GY-HD250

Advantages of ProHD

1. HDV format

HDV™

HDV 720p

HDV is a video format designed to enable the recording of high definition MPEG-2 video on standard DV media (DV or MiniDV cassette tape). The HDV format was defined by four

companies: Canon Inc., Sharp Corporation, Sony Corporation, and Victor Company of Japan, Limited (JVC). The specification of the HDV format incorporates two versions, one progressive (720p) and the other interlaced (1080i). HDV uses the same track pitch and tape speed as the DV format, and therefore the recording times are the same duration as the DV format.

2. HD Progressive (720/60p) format for high quality moving pictures and digital stills

■ Progressive scanning

JVC's ProHD products use the same progressive scanning system used in high-end HDTV cameras. Because the GY-HD250 uses a full-frame (60p) progressive scanning system, it has the unique ability to capture and store full frames of image information. An added bonus of progressive scanning is that it is a very simple process to convert a progressive image to interlaced, whereas the opposite is not the case. When progressive recordings are paused or played in slow motion, each individual frame contains the full detail of the original image — excellent for viewing and analyzing motion. Stills and prints captured from HD progressive video avoid the distortion typically resulting from the combining of two different frames of interlaced video. In addition, today's flat panel television displays and fixed matrix projectors, such as D-ILA, DLP and LCD, are all native progressive scanning systems. This means that JVC's progressive HDV recordings can be displayed without imperfection, because they do not need to pass through the degenerative process of de-interlacing prior to being displayed.

■ HDV and DV compatibility

The HDV format uses the same recording track pitch (10 µm) as Professional DV, meaning that ProHD also offers track pitch compatibility with the DV format and the same recording time. This remarkable HD recording capability was achieved by developing a new high-power MPEG codec system capable of maintaining high-definition picture quality, while compressing the data to 19.7 Mbps bit rate. With its superior resolution and advanced processing, ProHD delivers top performance in both its native 16:9 HD mode and in the SD mode. The facility to make recordings in either HD or SD makes ProHD the ideal choice for professionals not quite ready to make the full transition to HD.

■ Progressive HDV-compatible support

To maximize picture quality and performance from input to output, JVC employs the HDV 720 progressive system. Progressive HDV's resolution of 1280 x 720 is the same as the native resolution of most HD display devices in use today (LCD, plasma, DLP, D-ILA). HDV 720p is thus natively compatible in terms of both resolution and scanning system.

3. True 24p frame capture

24p Progressive Full HD images are ideal for cinematographic applications. From shooting to editing and distribution, an HD system can be established for film-like productions. Unlike 24p images in standard definition, when real 24p HD video is down-converted to SD, the result is truly film-like DVDs. The camcorder itself, with its video lens removed and replaced by a film lens converter system, such as the Mini 35 from P & S Technik, effectively becomes a digital film camera.



The GY-HD250, fitted with Mini 35 film adapter from P & S Technik, becomes an ideal digital film camera

4. JVC's dual recording system

The optional JVC Hard Disk Recorder DR-HD100 creates a dual recording system of tape and hard disk. This system is already utilized by Professional DV users the world over. The many advantages inherent in JVC's dual recording system of tape & hard disk drive are well appreciated. It was only natural that JVC's range of ProHD models would include a Hard Disk Drive recorder and one that can operate equally in DV and HDV modes. The dual recording system provides fast and efficient HDD-based editing and cost-effective archiving, using low-cost tapes. Thanks to the newly developed MPEG-2 encoding IC, high-quality pictures can be recorded on readily available compact DV cassettes, so running costs are minimized as no special equipment or exclusive media are required. The DR-HD100 will also be able to record in the QuickTime .mov file format enabling Direct-To-Edit (DTE) capability with compatible non-linear editing systems. The DR-HD100 can be mounted at the rear of the camcorder, through the use of an optional bracket which is offered by the leading battery systems manufacturers.

GY-HD250 ProHD Compact Shoulder Camcorder (HDV/DV Input/output)

Professional ProHD camcorder with super-smooth 720/60p imaging for ENG and sports acquisition, plus a 26-pin connector for studio use.

With 720/60p capture and recording capabilities, the GY-HD250 delivers full-resolution HD images, ensuring the high resolution and smooth motion critical to news and sports field production. Equally proficient in the studio, the GY-HD250 can easily be converted for studio use with the optional KA-HD250, a specially designed studio adapter incorporating an industry-standard 26-pin multi-core connection. Other valuable features of this versatile camcorder include genlock capability, component and HD-SDI output, a wide selection of HD lenses, enhanced cinema gamma, external time code synchronization and professional connectors on a rugged die cast chassis.

From live field recording to high-end studio production, the GY-HD250 is the cost-effective solution to today's demand for high-quality imaging.



GY-HD250 fitted to the optional Studio Adapter KA-HD250 and with optional LCD monitor.



GY-HD250

ProHD Compact Shoulder Camcorder (HDV/DV Input/output)

Professional specifications

HDV and DV compatible

As the HDV format uses the same recording track pitch as Professional DV, the GY-HD250 can record signals in either standard or high definition according to the user's needs.

True 24p recording

The GY-HD250 is a professional high-definition camcorder featuring real HD 24p recording capability — previously available on only the most expensive HD cameras. Ideal for DVD production, HD progressive 24-frame-per-second recording makes it possible to shoot images with film-like quality and smooth motion. Once recorded, those images can easily be transferred without frame rate conversion to 16 mm or 35 mm film with full HD fidelity.

ProHD's outstanding image quality is supported by a wide range of powerful features including an image inverse function that cancels image reversal (reversal of top/bottom and left/right) and a Film out

mode function that automatically adjusts the gamma curve and color matrix to give images a filmic look.

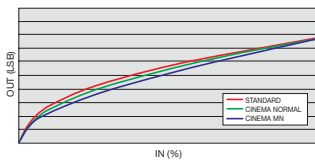
Three preset gammas (Standard, Cinema for a film-like setting and Film out for the optimal imagery of a film camera) are available to choose from depending on the purpose. Combined, these features make this camcorder ideal for digital film productions.

Interchangeable HD lenses

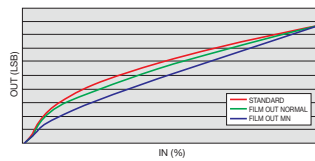
The GY-HD250 features a standard professional 1/3" bayonet lens mount, giving you the ability to use a variety of other professional HD lenses. In addition to the standard detachable 16x servo Fujinon lens, a wide range of options are available, including a 13x (3.5 mm) wide zoom lens, 18x Fujinon zoom lens, 20x Canon zoom lens, a wide angle converter for the standard 16x lens, and adapters that allow 1/2" and 2/3" bayonet mount lenses to be used.

And when you add film lens mount adapter to the 1/3" bayonet mount, you can even mount 16mm film camera lenses on the GY-HD250, greatly expanding your production lens options.

Cinema Gamma



Film Out Gamma



Fujinon HTs18x4.2BRM



Canon KT20x5BKRS



3-CCD camera system with 720p HD CCDs

The GY-HD250 uses three 1/3" high definition CCD image sensors. Each array has a pixel resolution of 1280 x 720 and uses a micro lens system. Since this native resolution matches that of most HDTV displays, the need for image scaling is eliminated, further enhancing the quality of the recorded images. Other advantages of these CCDs include sophisticated circuitry that virtually eliminates lag and image burn.

Uncompressed 720/60p live signal output

In addition to providing superior quality HD recording in the HDV format, the GY-HD250 can capture and output both digital and analog HD signals at 60 frames per second. Ideal for live broadcasting, the uncompressed full-resolution signal (either 720p or converted 1080/60i) can be output via the built-in HD-SDI and component analog terminals, providing an ideal feed to a video server, HD switcher or microwave link.

Professional functions

Compact shoulder mount design

JVC's ProHD camcorders are the only professional HD camcorders to feature a compact shoulder mount design. Like its predecessors, the GY-HD250 offers excellent mobility and enhanced usability, while its flexible range of ergonomic adjustments ensures that camera operators, regardless of stature or physique, can support the camcorder steadily and, above all, comfortably.

Professional functions and switch layout

In addition to the Full-Auto Shooting to handle difficult or variable lighting environments, the GY-HD250 is equipped with an array of functions that give professionals creative flexibility. These include, amongst others, zebra, gain, white balance and full shutter control. Also, the GY-HD250's switches have been positioned where professional camera operators can expect them. This helps make shooting more intuitive, precise, easy, and error-free, because the learning process is minimized dramatically, making the GY-HD250 the ideal camera for any assignment.

Detachable 230,000-pixel LCD color viewfinder

The viewfinder's eyepiece can be moved backwards and forwards and can also be adjusted laterally for left or right eye shooting, enabling it to fit the operator comfortably. JVC's own proprietary and patented Focus Assist control ensures fast and easy focusing. To make focusing even easier, a black and white mode is available. Stronger contrast and reduced color noise make visualization and composition easier in this mode and put less strain on your eyes so you can shoot for longer periods. You can also keep using the viewfinder even when using the LCD display. When not required, the viewfinder may be detached.



GY-HD250

ProHD Compact Shoulder Camcorder (HDV/DV Input/output)

3.5" LCD display panel*

This 250,000-pixel 3.5" color TFT LCD monitor provides a high-resolution image during shooting and playback. JVC's own developed Focus Assist control (see this page) ensures fast and easy focusing. A push button selects three display modes:

1. Video only
2. Video images with text information overlay including time, status, mode and other data are shown on the screen.
3. Only information such as time, status, mode, time code, audio levels and other data is shown on the screen. When the LCD display panel is in this mode, the viewfinder can also be used.



Various audio-related functions

When color bars are output, an audio reference level (test tone) can also be output if required. This is set via the menu. The audio reference level can be set at -12 dB or -20 dB as required. To minimize extraneous noise picked up by the microphone, a "wind cut" function is provided.

Genlock

This camcorder has genlock input capability for synchronization and time code input/output, making multi-camera shooting possible. For synchronization, BB or VBS signals (SD) and HD tri-level sync signals (HD) are available to lock to various components, including external audio recorders, other cameras and switchers. In addition, H Phase (HD/SD) and SC Phase (SD only) can be adjusted

Versatility and flexibility

Camera settings recorded on SD card

Customized settings can be stored on a standard SD memory card and loaded into another GY-HD250 or changed on site, as required.

IEEE 1394 interface/HD-SDI output interface

A convenient IEEE 1394 interface allows easy direct connection to NLE systems or to a PC for capturing, editing and archiving.

An HD-SDI (High Definition Serial Digital Interface) is also provided to enable transmission of uncompressed digital HD signals via co-axial cable. Since the HD-SDI interface can use existing SDI (Serial Digital Interface) cabling, configuring studio applications is greatly simplified.

User-friendly design

Universal ergonomic design

The GY-HD250 has multiple adjustments to provide a comfortable positioning of the camera, such as a shoulder pad that can be moved back and forth, a viewfinder with an eyepiece that can be adjusted left and right as well as back and forth, and a padded audio monitor that adjusts up & down.



Patented "FOCUS ASSIST" function

A JVC-patented feature, Focus Assist, turns focusing into an easy, fast and accurate process. When Focus Assist is activated, the picture in the viewfinder becomes monochrome and all objects which are in focus take on a color fringe. In addition to the factory default Middle position, Low and High positions are available. In the Low position, you can limit the area in focus for more precise focusing. This is particularly helpful when using the technique of pulling focus. Focus Assist works equally in the 0.44" viewfinder and the 3.5" LCD panel. There are two Focus Assist buttons, one for each of handheld and shoulder operation.



Out-of-focus image



In-focus image

The edge of the in-focus subject is shown in color, telling the operator that the subject is in-focus. A major benefit of this system is that it operates in real time.

Shutter angle display mode

In addition to the conventional second-unit indication for shutter values, a shutter angle display mode is available. This makes it easy for all users — including those more familiar with film cameras — to set the shutter value.

Connect to optional external HDD

The camcorder has a hard disk drive accessory option, DR-HD100, which connects via the IEEE 1394 port, allowing footage to be edited immediately without having to wait for data to be transferred.

Other features

- Two XLR audio inputs
- Full Auto Shooting
- Color matrix
- LCD mirror mode
- Two-mode composite out
- Color bars

DR-HD100 Hard Disk Drive incorporating the latest DTE (Direct to Edit™) technology

Interface to GY-HD250 camcorder

The DR-HD100 has been designed specifically to interface with the GY-HD250 camcorder via IEEE 1394. Interlocked to the camcorder's record trigger, HD and SD images can be recorded together with audio and time code. It can be powered by either a built-in rechargeable or external battery. The DR-HD100 is supplied with its own cradle, from which it can be detached easily. Optional brackets are available for mounting the HDD recorder to the rear of the camcorder.

Compatibility with NLE systems for HDV and DV editing

DTETM technology permits the DR-HD100 recordings in HDV and DV to be set to the NLE's native file format. This means that no time is lost due to the lengthy processes of file transfer and conversion. The DR-HD100 can be used with most popular editing applications from Adobe, Apple, Avid, Canopus and many more*. As new application support is released, the DR-HD100 can be updated in the field with new system software easily by connecting the disk drive to a computer.

*NLE Dependent

Integrated with camcorder and disk drive operation

Attached with the GY-HD250, the DR-HD100's record and record/pause functions are controlled from the camcorder. Time code generated by the camcorder is recorded to files on the DR-HD100, and recorder status and other information can appear in both the viewfinder or LCD display.

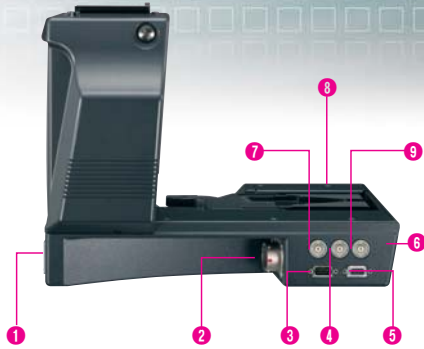
Long record times

This hard disk drive option extends uninterrupted record time by many hours. For example, a 40GB FireWire drive can store 3 hours of DV video and 4 hours of HDV video, and 80GB drive does twice these times. It is also possible to daisy chain up to four external drives of different capacities to the DR-HD100, enabling uninterrupted recording of extremely long duration.

LCD display and playback modes

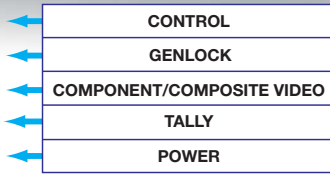
The DR-HD100 features a detailed LCD that displays the system mode, time code and disk space remaining. Video clips can be reviewed in the viewfinder, LCD panel or external monitor, by using DR-HD100's playback mode. Functions include record, play, pause, stop, forward index, back index and multi speed fast forward and rewind.

KA-HD250



- 1 INTERCOM
- 2 26-PIN
- 3 TALLY IN
- 4 Pr
- 5 TALLY OUT
- 6 PROMPTER OUT
- 7 Y
- 8 VF OUT
- 9 Pb

Rear panel connectors

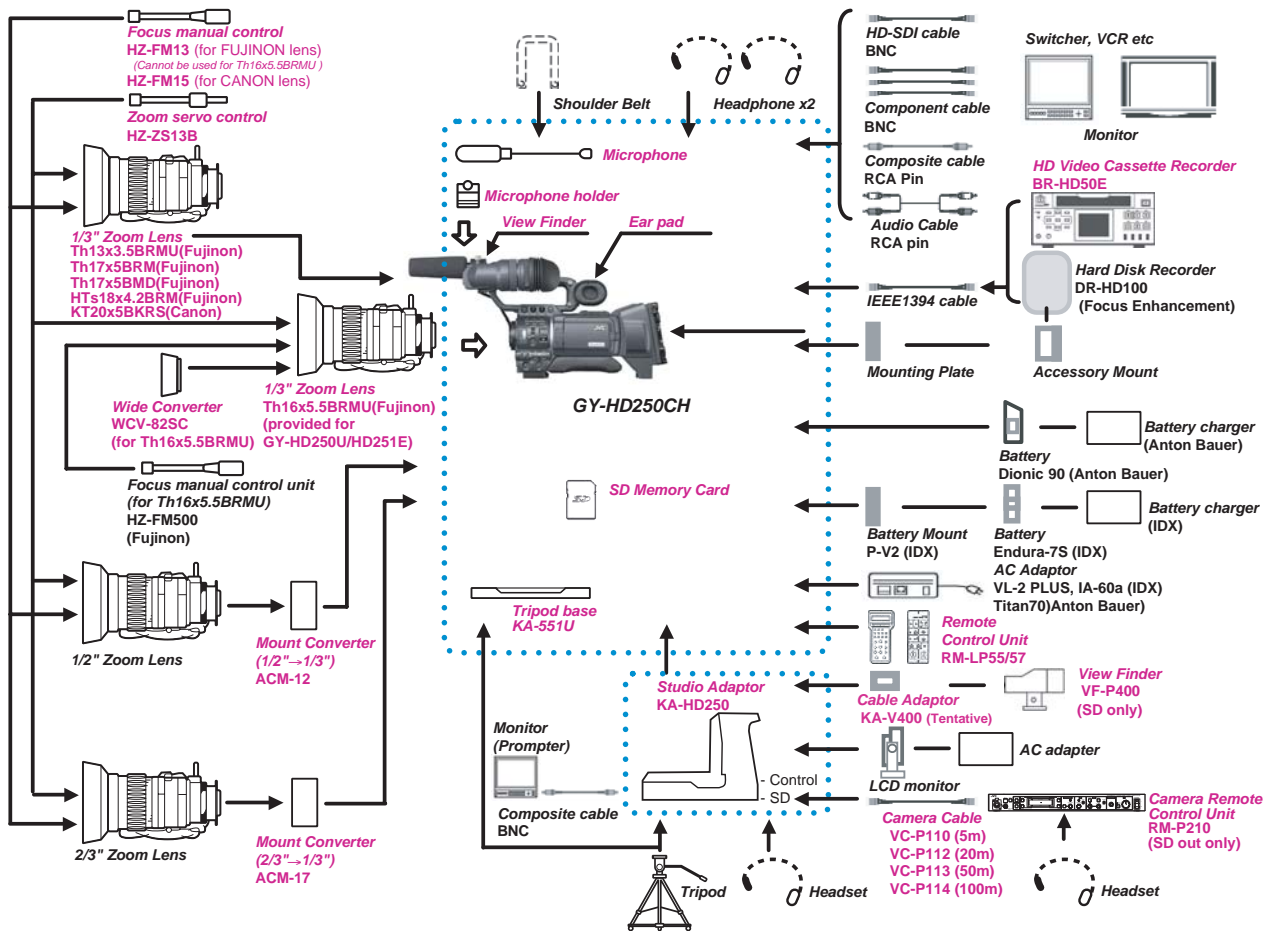


GY-HD250 fitted to the optional Studio Adapter KA-HD250 and with optional LCD monitor.



- 1 GENLOCK/AUX IN
- 2 HD/SD-SDI
- 3 DC INPUT
- 4 REMOTE
- 5 Pr/TC OUT
- 6 Pb/TC IN
- 7 Y

System configuration



Options and related equipment

CAMCORDER OPTIONS

<p>1/3" High quality zoom lens</p>  <p>(Fujinon)</p> <p>■ HTs18x4.2BRM</p>	<p>1/3" Wide zoom lens</p>  <p>(Fujinon)</p> <p>■ Th13x3.5BRMU</p>	<p>1/3" Zoom lens</p>  <p>(Fujinon)</p> <p>■ Th17x5BRM</p>	<p>1/3" MD Zoom lens</p>  <p>(Fujinon)</p> <p>■ Th17x5BMD</p>	<p>1/3" High quality zoom lens</p>  <p>(Canon)</p> <p>■ KT20x5BKRS</p>
<p>2/3" Bayonet mount converter</p>  <p>■ ACM-17</p>	<p>1/2" Bayonet mount converter</p>  <p>■ ACM-12</p>	<p>Wide converter</p>  <p>■ WCV-82SC for use with the Th16x5.5BRMU</p>	<p>Film lens adapter Mini 35 from P&S Technik</p> 	<p>Anton Bauer battery</p>  <p>■ Dionic 90 (Battery) ■ Titan70 (Adapter)</p>
<p>IDX V-mount battery</p>  <p>■ VL-2PLUS (Charger) ■ Endura E-7S (Battery)</p>	<p>Microphone</p>  <p>■ MV-P615U</p>	<p>ProHD recorder</p>  <p>■ BR-HD50U</p>	<p>Studio adapter</p>  <p>■ KA-HD250U</p>	<p>Camera control unit</p>  <p>■ RM-P210U</p>
<p>Remote control unit</p>  <p>■ RM-LP55U ■ RM-LP57U</p>	<p>Manual zoom control</p>  <p>■ HZ-ZS13BU ■ HZ-ZS100U (Handle zoom)</p>	<p>Manual focus control</p>  <p>■ HZ-FM13U (Fujinon) ■ HZ-FM15U (Canon) ■ HZ-FM500 (for Th16x5.5BRMU)</p>	<p>7" LCD monitor</p>  <p>(Marshall) ■ V-R70P-HDA</p>	

Battery bracket is required.

ProHD TAPES



■ M-DV63PROHD
ProHD tapes (miniDV size)
■ M-DV12CL
MiniDV cleaning tape

HARD DISK DRIVES



■ DR-HD100-40
■ DR-HD100-80

MONITORS

10" HDTV monitor



■ DT-V100CG

17" HDTV monitor



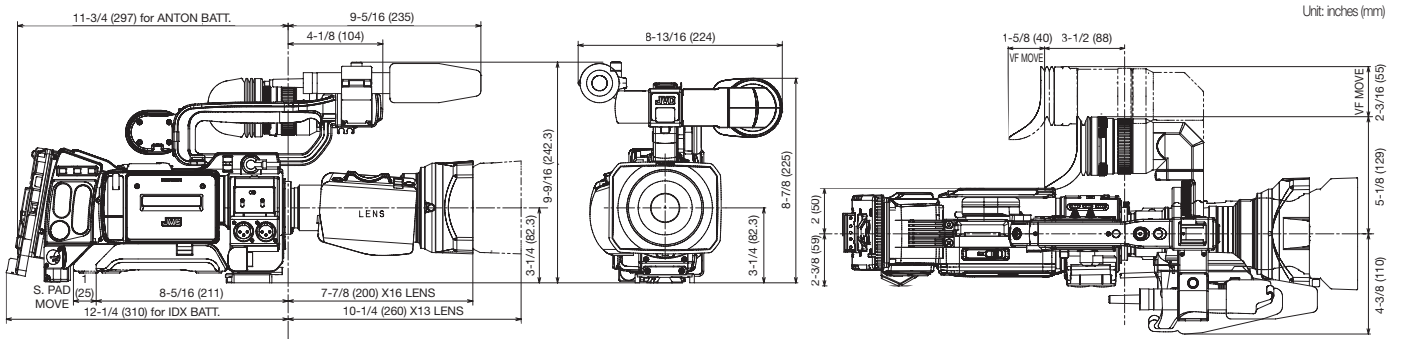
■ DT-V1710CG

20"/24" LCD HDTV monitor



■ DT-V20L1D/V20LI
■ DT-V24L1D/V24LI

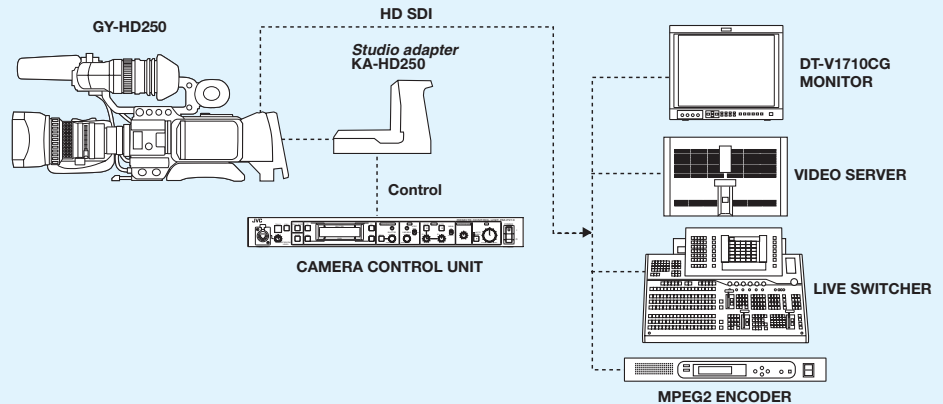
DIMENSIONS



Diverse capabilities for a wide range of applications

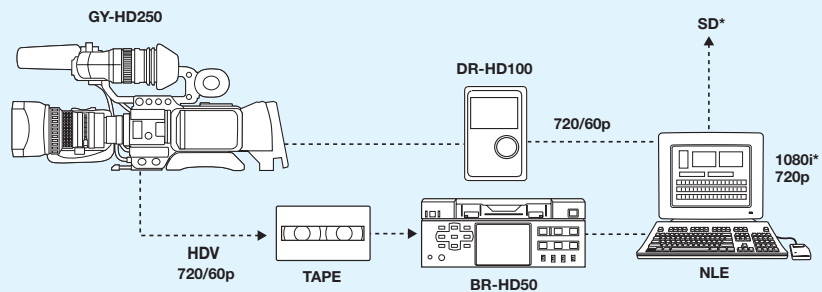
Studio production

By combining the GY-HD250 with the KA-HD250 adapter, you can create a studio system with camera control and tally/intercom bi-directional communication via 26-pin multi-core cable. For video/audio transmission, the HD/SD SDI allows long-distance digital transmission at 1.5 Gbps with minimal degradation via a separate coaxial cable.



Live HD recording

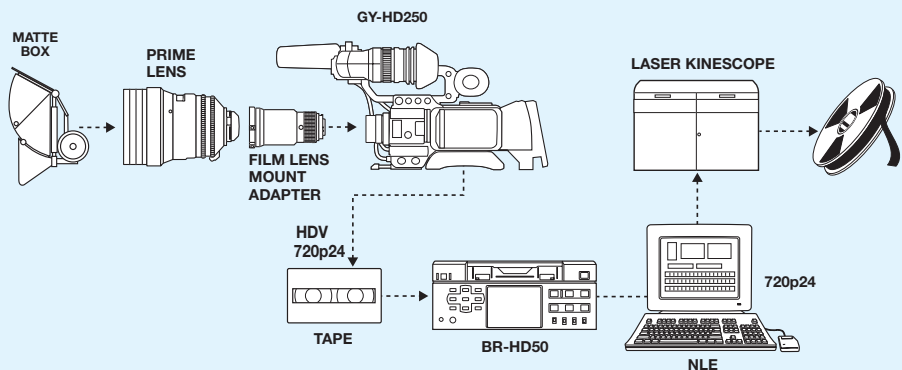
With 720/60p acquisition capability, you can record smooth, full-frame high-quality images. Also, with genlock input and time code input/output, multi-camera shooting is possible. When the GY-HD250 is combined with the DR-HD100, high-quality hybrid (HDD and tape) ENG is possible.



*NLE dependant

HD cinematography

In addition to the 720p 24p, advanced cinema/film out gamma is provided, allowing you to capture images with a more film-like appearance. With the optional film lens mount adapter optimized for 16mm film lenses, you can mount a prime lens with a PL (precision lock) mount, creating an ideal economical digital cinematography system. The image inverse function capability of the GY-HD250 enables images to be recorded in the proper proportion.



Specifications

GY-HD250U

[General]

Power requirement: DC 12 V
 Power consumption: Approx. 20 W (in the Record mode)
 Dimensions: 224 (W) x 243 (H) x 401 (D) mm
 (8-13/16" x 9-1/2" x 15-3/4")
 Mass: 3.7 kg (8.3 lbs.) (including viewfinder, microphone and tape)
 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: 1/3" interline-transfer CCDs
 Color separation optical system: F1.4, 3-color separation prism
 Number of pixels: Total: Approx. 1,110,000 pixels
 Color bars: HD: SMPTE HDTV color bars
 NTSC: SMPTE type color bars
 Sync system: Internal sync (built-in SSG)
 External sync: BB, VBS, signal or HD tri-sync signal
 Lens mount: 1/3" bayonet system
 ND filter: +1/4ND, +1/16ND
 Gain: 0, 3, 6, 9, 12, 15, 18 dB, ALC
 Electronic shutter:
 ■ Standard value: 59.94 Hz
 ■ Fixed values: 7.5-10,000 Hz, 11 steps (HDV HD60P/HDV HD30p; DV 60i mode: 6.25-10,000 Hz 11 steps (HDV HD50p/HDV HD25p: 6-10,000Hz, 12 steps (HDV HD24p/DV 24p)
 ■ Variable scan: about 60 to 10,000Hz (HDV HD60p/HDV HD30p; DV60i/ about 50 to 10,000 Hz (HDV HD50p/HDV HD25p), about 24-10,000Hz (HDV 24p; DV24p)

[VTR section]

[Video]
 Recording format: 720/24p, 720/25p, 720/30p, 720/50p, 720/60p, 480/24p, 480/60i
 Video Format:

[HDV]

- Video signal recording format: HD1 format, 8-bit, 19.7 Mbps
- Compression: MPEG-2 video (profile & level: MP@H-14)
- Sampling frequencies: 720/60p: 74.25/1.001 MHz (4:2:0 component), 720/50p: 74.25 MHz (4:2:0 component), 1080/60i: 74.25/1.001 MHz (4:2:0 component, up conversion only), 1080/50i: 74.25 MHz (4:2:0 component, up conversion only)

[DV]

- Video signal recording format: DV format, 8-bit, 25 Mbps
- Compression: DV compression, 4:1:1 (NTSC)

Audio:

[HDV]

- Audio signal recording format: MPEG1 Audio Layer II

[DV]

- Audio signal recording format: 16-bit (locked audio), 48 kHz PCM for 2 channels or 12-bit, 32 kHz PCM for 4 channels
- Usable tape: Mini DV tape
- Tape speed: 18.812 mm/sec. (NTSC)
- Record/play time: 63 minutes (with an M-DV63PROHD tape)

[Connectors]

HD/SD SDI output: 0.8 V (p-p), 75 ohms, unbalanced (BNC)
 HD-SDI: SMPTE292M/299M standard(embedded audio)
 SD-SDI: SMPTE259M/272M standard(embedded audio)
 Analog composite output: 1.0 V (p-p), 75 ohms, unbalanced (RCA)

Analog component output:

- Y: 1.0 V (p-p), 75 ohms, unbalanced (BNC)
- R-Y/B-Y: 0.7 V (p-p), 75 ohms, unbalanced (BNC)
- Analog composite input: 1.0 V (p-p), 75 ohms, unbalanced (BNC: switchable from Genlock input)
- Genlock input: 1.0 V (p-p), 75 ohms, unbalanced (BNC)

Audio inputs:

- Mic: -60 dBs, 3 kohms, balanced (XLR), +48 V output for phantom power supply
- Line: +4 dBs, 10 kohms, balanced (XLR)
- Audio outputs: -8 dBs, low impedance, unbalanced (RCA)
- Earphone jack: -18 dBs to -60 dBs, 8-ohm impedance (stereo mini-jack x2)
- Time code input: 1.0V-4.0V, high impedance, unbalanced (BNC: switchable from component output)
- Time code output: 1.0V-4.0V, low impedance, unbalanced (BNC: switchable from component output)
- IEEE1394 connector: 6-pin
- Remote connector: DIN 6-pin

[Accessories provided]

Viewfinder x 1, Lens (Th16x5.5BRM) x 1, Microphone x 1, SD memory card x 1, Tripod base x 1
 (Lens is not supplied for GY-HD250CHU.)

RECORDING FORMATS & LIVE SIGNAL OUTPUTS

	Recording (Shooting)	Rec on tape	1394 out	Component/SDI out (EE out)	Composite out
HD (HDV)	720/60p	←	←	←	480/60i
	720/30p	←	←	720/60p	480/60i
	720/50p	←	←	←	576/50i
	720/25p	←	←	720/50p	576/50i
	720/24p	←	←	720/60p	480/60i
HD	720/60p	N/A	N/A	1080/60i	480/60i
	720/50p	N/A	N/A	1080/50i	576/50i
DV	480/60i	←	←	←	←
	480/60i (24p)	←	←	←	←

	Playback	1394 out	Component/SDI out			Composite out
HDV	720/60p	←	480/60i	1080/60i	720/60p	480/60i
	720/30p	←	↑	↑	↑	↑
	720/50p	←	576/50i	1080/50i	720/50p	576/50i
	720/25p	←	↑	↑	↑	↑
	720/24p	←	480/60i	1080/60i	720/60p	480/60i
DV	480/60i	←	←	←	←	←
	480/60i (24p)	←	←	←	←	←

	Recording (1394 in)	Rec on tape	Component/SDI out			Composite out
HDV	720/60p	←	480/60i	1080/60i	720/60p	480/60i
	720/30p	←	↑	↑	↑	↑
	720/50p	←	576/50i	1080/50i	720/50p	576/50i
	720/25p	←	↑	↑	↑	↑
	720/24p	←	480/60i	1080/60i	720/60p	480/60i
DV	480/60i	←	←	←	←	←
	480/60i (24p)	←	←	←	←	←

* Tape recorded in HDV 1080i format cannot be played back by GY-HD250 and BR-HD50.

* HDV™ and HDV™ logo are trademarks of Sony Corporation and Victor Company of Japan, Limited (JVC).
 * DVCAM™ is a registered trademark of Sony Corporation.
 * DTE™ (Direct to Edit™) is a registered trademark of Focus Enhancements.
 * Product and company names mentioned here are trademarks or registered trademarks of their respective owners.



DISTRIBUTED BY



• Tapes recorded in HDV1080i format cannot be played back by GY-HD250 and BR-HD50.
 ■ Hachioji Business Center of Victor Company of Japan, Ltd. has received ISO14001 and ISO9001 Certifications under the global standard for environmental management.

Simulated pictures.
 The values for weight and dimensions are approximate.
 E. & O.E. Design and specifications subject to change without notice.