JVC

GY-HM200

Compact 4K Camcorder offering Great Mobility, High Functionality and Live Streaming

4K CAM

HDMI® HIGH-DEFINITION MULTIMEDIA INTERFACE · SDHC™ · SDXC™ · AVCHD Progressive · MOV QuickTime™

Shown with optional microphone

4K Ultra HD Camcorder Delivers the Moment

Meet GY-HM200, the full-featured 4K Ultra HD camcorder that's small and light enough to take everywhere and capable of providing the quality you need. With two SDHC/SDXC slots, you can record hours of 4K/UHD (3840x2160) material or 4:2:2 HD signals at up to 50Mbps. If you need to "go live" right now, you can have the GY-HM200 stream live HD footage over the Internet. Whether you want to fully customize your settings, or leave it to Full Auto and simply concentrate on the subject, count on the compact camcorder that puts professional quality in the palm of your hand.

4K CAM

Shown with optional microphone

Shown with optional 4G/LTE adapter

Advanced IP Network Communication and HD Streaming*

The GY-HM200 features JVC's latest IP communications engine, giving you remote control and monitoring of vital camera and lens functions from a tablet, smartphone, or computer anywhere in the world. Live streaming is possible in HD or Web (Proxy) resolutions, depending on available bandwidth. Connect your GY-HM200 to an optional Wi-Fi or 4G/LTE modem and share your program with an audience anywhere in the world via content delivery networks such as JVC VIDEOCLOUD, Facebook Live, YouTube and USTREAM.

*Requires appropriate network connection and optional adapter

FTP Uploading for Footage Transfer

Video clips recorded on an SDHC/SDXC card can be transferred from the GY-HM200 via FTP server. Clips can be trimmed right in the camera, which is useful for selecting only vital scenes before uploading to an FTP server. What's more, if an upload is interrupted by a weak connection, the FTP Resume function is smart enough to restart from where it left off. This will help to save time for uploading.

SMPTE 2022-1 Protocol for Error Correction

Stable, high-quality live streaming over IP is made possible thanks to support for the SMPTE 2022-1 protocol, which incorporates forward error correction (FEC) for real-time video/audio transport over IP networks.

Advanced Streaming with Zixi

For advanced live streaming solutions, JVC has teamed with Zixi. The GY-HM200 features the Zixi engine, installed directly into the camera, to provide high-quality delivery over 4G/LTE or standard Internet connection. The powerful Zixi engine applies forward error correction (FEC) and adaptive bit rate control with the "high reliable mode" to correct packet loss by over 40%*, delivering a robust, reliable HD stream.

*Quality of live streaming depends on network conditions including packet loss.

IP Remote Control and Viewing

When the camera is IP connected, vital camera operations can be remotely controlled via wireless or wired LAN from smart devices and computers. Remote control functions include lens and camera settings as well as registering zoom presets. Best of all, recording and live streaming may also be triggered remotely—invaluable for minor adjustments when a single reporter is operating the camera or shooting with a 2-camera setup.

The camera on the stage can be remote controlled from a smart device. Controls include REC/STOP, Zoom, Focus, Iris and more detailed settings while viewing live images from the smart device screen.

The Quality Tells the Story

1/2.3-inch 12.4M CMOS Sensor

The GY-HM200 was built to deliver stunning, life-like 4K Ultra HD (3840x2160) video. JVC's 4K CMOS sensor with 12.4M pixels delivers high sensitivity and excellent performance over a wide range of lighting conditions. Details are crisp and accurate throughout the entire image plane.
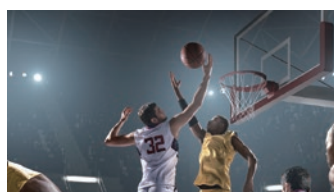
12x Optical Zoom and Seamless 24x Dynamic Zoom

The ultra high quality imagery begins with a precision 12x F1.2–3.5 optical zoom lens (35mm equivalent: 29.6–355mm). When shooti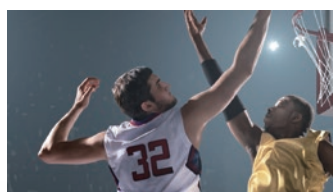ng in the HD mode, Dynamic Zoom combines optical zoom and pixel mapping from a 4K image sensor to create seamless and lossless 24x zoom. This allows the camera to have a long zoom range while retaining its compact form factor.

Original Image No Zoom

12x Optical Zoom

24x Dynamic Zoom in HD Zoom

Dynamic Zoom combines Optical Zoom plus Pixel Mapping—focusing on a smaller image area for lossless 24x Zoom

4K/Ultra HD (UHD) Recording at 150Mbps and Live Output

Working with 4K has never been easier. Insert an SDHC or SDXC (UHS-I Speed class 3) memory card and record hours of 4K/UHD (3840x2160) material. Recordings are made using the Quicktime (.MOV) file format and are compatible with many popular editing systems. Connect a 4K/UHD monitor with a single HDMI cable, and view the camera's live 4K signal. You can also play back recorded files directly from the camera. The GY-HM200 also downconverts UHD signals to standard HD for output through the built-in SDI or HDMI connectors.

120fps (59.94Hz)/100fps (50Hz) High-Speed Recording for Slow Motion Playback

Also available is high-speed recording[*] at up to 120fps (59.94Hz)/100fps (50Hz) for smooth slow motion playback (up to 1/5 slow at 24p mode). It helps create artistic effects and lets you watch replays to examine sporting skills.

*Available in 1920x1080 resolution only

More Manageable 70Mbps 4K Recording Mode

4K 70Mbps recording mode is also available to record 4K footage on economical Class 10 SDHC/SDXC memory cards. The lower bit rate creates smaller, more manageable files.

Built-in ND Filter

To address extremely bright conditions, ND filters have been provided internally. 1/4 and 1/16 are selectable for instant adjustment of light intake.

Full HD 4:2:2 Recording at 50Mbps

The ability to record H.264 4:2:2 24-60p at 50Mbps makes the GY-HM200 an ideal camera for broadcasting and production houses alike. The color accuracy of 4:2:2 enables the GY-HM200 to deliver exceptional color resolution even when images are in sharp contrast to the background. This is particularly useful when strong colors are in contrast to bright backgrounds, or in green screen usage.

More Features for Reliable Shooting

• Histogram Display • Spot Meter Display • Focus Assist
• Built-in Stereo Microphone • 3.5-inch Color LCD Display (920K pixel) • 0.24-inch Color Viewfinder • Wired Remote Control supported

HD 4:2:2 60p/50p at 50Mbps

Shown with optional 4G/LTE adapter

The Versatility to Keep On Going

Manual Control Rings and User Assignable Buttons

Take total control of the scene with dual large rings for zoom and focus, and IRIS dial for smooth shooting. What's more, functions you want can be allocated to 9 buttons and 4 cursor levers, so settings can be changed smoothly during recording, making professional operation really easy.

Heavy-duty Handle Unit with Various Controls

The detachable heavy-duty handle makes the GY-HM200 easy to carry — and also makes it simple to shoot from low angles, thanks to its built-in REC button with lock function, and zoom lever. XLR audio inputs are provided for the attachment of a professional microphone or for LINE input, complete with Phantom power supply capability.

XLR Input (2ch)
Zoom Lever
Rec Button
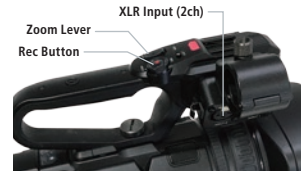
Fully Customizable Settings and Full Auto Simplicity

For more advanced visual expressions, detailed image settings such as gamma and color shade can be customized. All those customized settings are stored on the camera unit or SD card, and can be called up whenever necessary. If speed is your maximum concern, you can always go with Full Auto operation or engage Auto partially for certain functions. Reliable shooting is assured even in Auto mode.
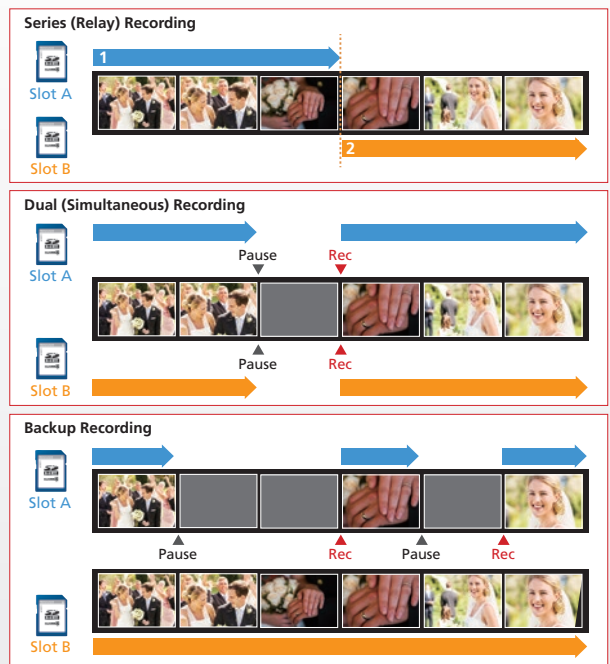
Dual SDHC/SDXC Card Slots for Maximum Versatility

Dual SDHC/SDXC card slots make the GY-HM200 a truly versatile camcorder, offering such benefits as series recording, dual recording, and backup recording modes using reliable and cost-effective media.

• **Series (relay) recording mode:** Shoot continuously and seamlessly over multiple cards. When one card is full, the camcorder switches seamlessly and automatically to the other card. And because cards are hot swappable, there is in effect no limit to the continuous shooting time in any mode, even with lower capacity cards. It is possible to start editing footage from one card while still shooting to the other.

• **Dual (simultaneous) recording mode (HD/HD, HD/SD or HD/Web):** Easily create duplicate backup files as you shoot—either to divide editing tasks or simply for peace of mind. With the new dual codec, it is now possible to record full HD files on one memory card while simultaneously creating smaller SD or proxy files on the other, providing the flexibility for a range of workflow possibilities.

• **Backup recording mode:** While the Rec trigger is used to REC and STOP recording on one card, the other card can act as a continuous backup that overrides the pause function*. This is a unique mode highly demanded by theatrical and bridal camera crews.
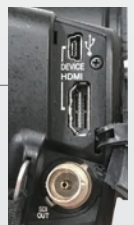
*During simultaneous backup recording in HD mode, the duplicate file records in the same file format and bit rate as the original.

Series (Relay) Recording
Slot A
Slot B

Dual (Simultaneous) Recording
Slot A — Pause — Rec
Slot B — Pause — Rec

Backup Recording
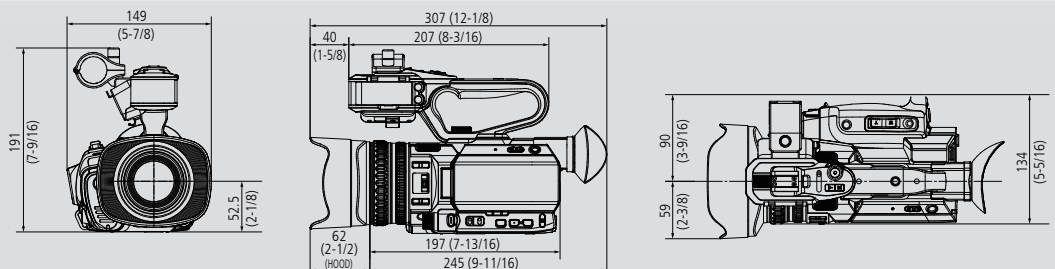Slot A — Pause — Rec — Pause — Rec
Slot B

HD-SDI (3G) and HDMI Output

GY-HM200 comes with a wide variety of connectors to meet the needs of professional applications, including HD-SDI (3G) and HDMI. Secured digital connection is assured between external devices such as a recorder or switcher. Simultaneous output from both SDI and HDMI is also possible.

Dimensions
Unit: mm (inch)

149 (5-7/8)
191 (7-9/16)
52.5 (2-1/8)

307 (12-1/8)
40 (1-5/8)
207 (8-3/16)
62 (2-1/2) (HOOD)
197 (7-13/16)
245 (9-11/16)

90 (3-9/16)
59 (2-3/8)
134 (5-5/16)

Specifications

GENERAL	
Power	DC 12V (AC adaptor), DC 7.4V (battery)
Power consumption	Approx. 7.9W (with VF in 4K REC mode, default setting)
Weight	Approx. 1.6kg (including battery)
Dimensions	149 (W) x 191 (H) x 307 (D) mm
Operation temperature	0°C to 40°C
Storage temperature	-20°C to 50°C
Operating humidity	30% to 80%
Storage humidity	Under 85%

CAMERA	
Image sensor	1/2.3-inch back-side illuminated CMOS, total 12.4M pixels
Synchronizing	Internal synchronization
Stabilizer	Optical image stabilizer
Shutter speed	U model: 1/6 — 1/10000, E/EC model: 1/4 — 1/10000
Lens	35mm equivalent: 29.6mm to 355mm
Filter diameter	62mm
Gain	0, 3, 6, 9, 12, 15, 18, 21, 24 dB, Lolux (30, 36 dB), AGC
ND filter	None, 1/4, 1/16
LCD display	3.5-inch 920 k pixels, 16:9
Viewfinder	0.24-inch 1.56 M pixel, 16:9

VIDEO/AUDIO RECORDING	
Recording media	2x SDHC/SDXC memory card (4K (150Mbps): UHS-1 U3 4K (70Mbps), HD: 50Mbps Class 10, HD: 35Mbps Class 6, AVCHD/SD Class 4), High-Speed: UHS-1 U3
Video recording	Video codec: MPEG-4 AVC/H.264 (4K/HD/SD/Proxy), AVCHD (HD/SD) File format: MOV (H.264), MTS (AVCHD)
Audio recording	LPCM 2ch, 48kHz/16-bit (4k/HD/SD MOV), AC3 2ch (AVCHD), µ-law 2ch (Proxy)

LIVE VIDEO STREAMING	
Protocol	RTMP, MPEG2-TS/UDP, MPEG2-TS/RTP, RTSP/RTP, ZIXI
Resolution and bit rate	1920 x 1080 (59.94i/50i) Audio AAC 128 k 12/8/5/3 Mbps 1280 x 720 (59.94p/50p) Audio AAC 12/8/5/3 Mbps 1280 x 720 (29.97p/25p) Audio AAC 128 k 8/5/3/1.5 Mbps 720 x 480 (59.94i) 720 x 576 (50i) Audio AAC 129 k/64 k 8/5/3/1.5/0.8/0.3 Mbps 640 x 360 (29.97p/25p) Audio AAC 128 k/64k 3/1.5/0.8/0.3 Mbps

INTERFACES	
Video output	AV output (3.5mm mini jack x 1), SDI output (BNC x 1), HDMI output x 1
Audio input	XLR x2 (MIC, +48V/LINE), 3.5mm mini jack x 1
Audio output	AV output (3.5mm mini jack x 1)
Headphone	3.5mm mini jack x 1
Remote	2.5mm mini jack x 1
USB	HOST x 1 (network Connection), DEVICE x 1 (mass storage)

PROVIDED ACCESSORIES	
	Handle unit, battery (SSL-JVC50) x 1, AC adapter x 1

Recording Formats

System	Format	Resolution	Frame rate		Bit rate	Audio	Rec Time on 64GB SD Card
4K	QuickTime (MPEG-4. AVC/H.264)	3840×2160	29.97p/25p/23.98p		150Mbps/70Mbps (YUV 4:2:2/Normal)	LPCM 2ch 48kHz/16bit	50 min./105 min.
HD		1920x1080	59.94p/59.94i/50p/50i/29.97p/25p/23.98p		50Mbps (YUV4:2:2/XHQ)		145 min.
			59.94p/59.94i/50p/50i/29.97p/25p/23.98p		35Mbps (UHQ)		200 min.
		1280×720	59.94p/50p		35Mbps (UHQ)		
	AVCHD	1920x1080	59.94p/50p		28Mbps (HQ)	Dolby Digital 2ch 48kHz/16bit 256kbps	270 min.
			59.94i/50i		24Mbps (HQ), 18Mbps (SP)		312 min./400 min.
SD	QuickTime	720×480 (U model)	59.94i		8Mbps (HQ)	LPCM 2ch 48kHz/16bit	760 min.
	AVCHD					Dolby Digital 2ch 48kHz/16bit 256kbps	842 min.
	QuickTime	720×576 (E/EC model)	50i		8Mbps (HQ)	LPCM 2ch 48kHz/16bit	760 min.
	AVCHD					Dolby Digital 2ch 48kHz/16bit 256kbps	842 min.
WEB (Proxy)	QuickTime (MPEG-4. AVC/H.264)	960×540	29.97p/25p/23.98p		3Mbps (HQ)	µ-law 2ch 16kHz	2160 min.
		720×480	59.94i		8Mbps	LPCM 2ch 48kHz/16bit	760 min.
		720×576	50i				
		480×270	29.97p/25p/23.98p		1.2Mbps (LP)	µ-law 2ch 16kHz	4720 min.
	AVCHD	1440×1080	59.94i/50i		9Mbps (LP), 5Mbps (EP)	Dolby Digital 2ch 48kHz/16bit 256kbps	760 min./1344 min.
		720×480	59.94i		8Mbps		760 min.
		720×576	50i				
High-Speed	QuickTime (MPEG-4. AVC/H.264)	1920x1080	120fps	59.94p/29.97p/23.98p	50Mbps (XHQ), 35Mbps (UHQ)	—	(Differs by setting)
			100fps	50p/25p			
			60fps	29.97p/23.98p			
			50fps	25p			

Optional Accessories

SSL-JVC50
Standard Li-ion Battery (IDX)
DC7.4V, 4900mAh, 37Wh

SSL-JVC75
Long-life Li-ion Battery with X-Tap Connector (IDX)
DC7.4V, 7350mAh, 55Wh

LC-2J
7.4V 2-ch Simultaneous Charger (IDX)

RM-LP100
Remote Camera Controller via LAN
(Firmware update is planned in Autumn 2017)

Simulated pictures.
The values for weight and dimensions are approximate.
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