

# GY-HM250E



**Compact 4K Camcorder** offering Great Mobility, **High Functionality** and Live Streaming with Overlay Information









JVC









### Advanced IP Network Communication and HD Streaming\*

The GY-HM250 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 SD resolutions, depending on available bandwidth. Connect your

GY-HM250 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 YouTube, Facebook Live, and other cloud service.

\*Requires appropriate network connection and optional adapter



#### **Real-Time Broadcast Info Overlay**



Designed for enhanced single-camera production, the GY-HM250 produces real-time broadcast information overlays for recorded video or streamed video without an external CG or production switcher. Lower-third graphic overlays are generated and controlled using a browser-equipped device, such as a tablet or smartphone.

Note: This feature is not available in 4K or SD mode.

#### Full-Screen Graphics Overlay and Slide Show



Stores up to 50 full-screen custom graphics (PNG or JPG) in the camera to overlay on live streaming and HD recording. Graphics can be advanced manually or presented as a looping slide show with timing of 1 – 99 seconds\* per slide.

Note: This feature is not available in 4K or SD mode.

 $\mbox{\ensuremath{^{\star}}}\mbox{Time}$  is approximate. It does not necessarily guarantee that switching the slide precisely at set seconds.

#### FTP Uploading for Footage Transfer

Video clips recorded on an SDHC/SDXC card can be transferred from the GY-HM250 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.

# **Advanced Streaming with Zixi**



For advanced live streaming solutions, JVC has teamed with Zixi. The GY-HM250 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.

\*Requires Zixi licensed decoder or server. Quality of live streaming depends on network conditions including packet loss.

## **Zero Config Capability**

Provides automatic JVC camcorders detection within the same LAN group, and simple setting up connection with the Streamstar switcher system.

#### **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, computers, or optional RM-LP100. Remote control functions include lens and camera settings as well as registering zoom presets and IP connection settings.



# The Quality Tells the Story

#### 1/2.3-inch 12.4M CMOS Sensor

The GY-HM250 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.

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.

#### 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 shooting in the HD mode, Dynamic Zoom combines optical zoom



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) 4:2:2 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) 4:2:2 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-HM250 also downconverts UHD signals to standard HD for output through the built-in SDI or HDMI connectors.

### 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.

### Full HD 4:2:2 Recording at 50Mbps

The ability to record H.264 4:2:2 24-60p at 50Mbps makes the GY-HM250 an ideal camera for broadcasting and production houses alike. The colour accuracy of 4:2:2 enables the GY-HM250 to deliver exceptional colour resolution even when images are in sharp contrast to the background. This is particularly useful when strong colours are in contrast to bright backgrounds, or in green screen usage.

4K (UHD) 4:2:2 30p/25p/24p at 150Mbps/70Mbps

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

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

Also available is high-speed recording\* at up to 120 fps (59.94 Hz)/100 fps (50 Hz) 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



### **Built-in ND Filter**

To address extremely bright conditions, ND filters have been provided internally. None, 1/4, and 1/16 are selectable for instant adjustment of light intake.

### More Features for Reliable Shooting

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



# 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



#### **Heavy-duty Handle Unit with Various Controls**

The detachable heavy-duty handle makes the GY-HM250 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. 2ch XLR audio inputs are provided for the attachment of a professional microphone or for LINE input, complete with Phantom power supply capability.



## **Fully Customisable Settings and Full Auto Simplicity**

For more advanced visual expressions, detailed image settings such as gamma and colour shade can be customised. All those customised settings are stored on the SD card, and can be called up whenever necessary. If speed is your maximum

# Tele/Wide Macro Shooting

The GY-HM250 features the Tele/Wide Macro mode to provide better focus on close objects. A clear focus is maintained even at a distance of approx. 60cm from the subject at tele end.







"TELE+WIDE" at MACRO Menu

concern, you can always go with Full Auto operation or engage Auto partially for certain functions. Reliable shooting is assured even in Auto mode.

#### **Highlight Display Priority Mode**

Particularly effective for areas of high brightness, this mode records footage with more natural tones and richer colours. Perfect for scenes with bright sky and reflective surfaces.



Highlight Display Priority mode OFF

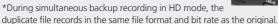


Highlight Display Priority mode ON

# **Dual SDHC/SDXC Card Slots for Maximum Versatility**

Dual SDHC/SDXC card slots make the GY-HM250 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: Continuous recording card by card.
- Dual (simultaneous) recording mode: Recording to 2 cards at same format for backup or multi-purpose.
- 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.





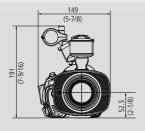


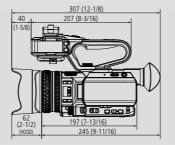
# HD-SDI (3G) and HDMI Output

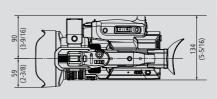
GY-HM250 comes with a wide variety of connectors to meet the needs of professional applications, including HD-SDI (3G) and HDMI. Secured digital connection is assured between external devices such as a recorder or switcher. Simultaneous output from both SDI and HDMI is also possible.



#### **Dimensions** Unit: mm (inch)







#### **Specifications**

GENERAL	
Power	DC 12V (AC adaptor), DC 7.4V (battery)
Power consumption	Approx. 8.5W (with VF in 4K REC mode, default setting)
Weight	Approx. 1.47kg (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 synchronisation
Stabiliser	Optical image stabiliser
Shutter speed	1/6 – 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), MP4 (Exchange format: U model only)
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 128 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 Car
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.
	AVCHU		59.94i/50i		24Mbps (HQ), 18Mbps (SP)		312 min./400 min.
	Exchange MP4 (U model only)	1920x1080	- 59.94p		12Mbps (LP)	AAC	512 min.
		1280x720			8Mbps (LP)		752 min.
SD	QuickTime	720×480 (U model)		59.94i 8Mb		LPCM 2ch 48kHz/16bit	760 min.
	AVCHD		59.941		8Mbps (HQ)	Dolby Digital 2ch 48kHz/16bit 256kbps	842 min.
	QuickTime	720×576	50i		8Mbps (HQ)	LPCM 2ch 48kHz/16bit	760 min.
	AVCHD	(E/EC model)				Dolby Digital 2ch 48kHz/16bit 256kbps	842 min.
WEB (Proxy)		960×540		29.97p/25p/23.98p	3Mbps (HQ)	μ-law 2ch 16kHz	2160 min.
	QuickTime (MPEG-4. AVC/H.264)	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		συνιμές (Ληζή, σοινίμες (ΟΠζή	_	(Dillers by Setting)
			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



7.4V 2-ch Simultaneous Charger (IDX)



RM-LP100 Remote Camera Controller via LAN

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