

## Other Features

- 2-Channel XLR Audio Inputs with Phantom Power
- 2-Position ND Filter (1/4, 1/16)
- HD-SDI (3G) and HDMI Outputs (4K Output via HDMI only)
- Built-in Stereo Microphone
- 3.5-inch Colour LCD Display (920K Pixel) with Smart Focus Assist Function
- 0.24-inch Colour Viewfinder (1.56M Pixel) with Smart Focus Assist Function
- Dual SD Card Slots for Simultaneous Recording and Relay Recording
- Histogram Display
- Wired Remote Control Supported
- 9 User Button Assignable Function
- Includes Handle Unit, SSL-JVC50 7.4V Battery and AC Adapter
- 4:2:2 Full HD (24-50p) Recording at 50Mbps (Live streaming not available)

- And More: [Overlay not available with the following features]
- 4K Ultra HD Recording (150Mbps, 24/25p) to SDXC (UHS-I Speed Class 3) Cards
  - 4K Ultra HD Recording (70Mbps, 24/25p) to SDXC/SDHC (Class 10) Cards
  - Live 4K UHD Output via HDMI Connector
  - 120fps HD Slow Motion Recording

## 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	
Synchronising	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: UHS-1 U3, HD: 50Mbps Class 10, HD: 35Mbps Class 6, AVCHD/SD Class 4)	
Video recording	Video codec: MPEG-4 AVC/H.264 (4K/HD/SD/Proxy), AVCHD (HD/SD), File format: MOV (H.264), MTS (AVCHD)	
	4K (H.264)	PAL setting: 3840 x 2160/25p, 23.98p (150Mbps), 3840 x 2160/25p (70Mbps) NTSC setting: 3840 x 2160/29.97p (150Mbps), 3840 x 2160/29.97p (70Mbps)
	HD (H.264)	PAL setting: YUV422 mode: 1920 x 1080/50p, 50i, 25p (50Mbps) XHQ mode: 1920 x 1080/50p, 50i, 25p (50Mbps), UHQ mode: 1920 x 1080/50i, 25p (35Mbps), 1280 x 720/50p (35Mbps) NTSC setting: YUV422 mode: 1920 x 1080/59.94p, 59.94i, 29.97p, 23.98p (50Mbps) XHQ mode: 1920 x 1080/59.94p, 59.94i, 29.97p, 23.98p (50Mbps), UHQ mode: 1920 x 1080/59.94i, 29.97p, 23.98p (35Mbps), 1280 x 720/59.94p (35Mbps)
	AVCHD	PAL setting: Progressive mode (Max 28Mbps): 1920 x 1080/50p HQ mode (24Mbps): 1920 x 1080/50i, SP mode (17Mbps): 1920 x 1080/50i LP mode (9Mbps): 1440 x 1080/50i (Web mode), EP mode (5Mbps): 1440 x 1080/50i (Web mode) NTSC setting: Progressive mode (Max 28Mbps): 1920 x 1080/59.94p HQ mode (24Mbps): 1920 x 1080/59.94i, SP mode (17Mbps): 1920 x 1080/59.94i LP mode (9Mbps): 1440 x 1080/59.94i (Web mode), EP mode (5Mbps): 1440 x 1080/59.94i (Web mode)
	SD (MOV/AVCHD)	PAL setting: 720 x 576/50i (8Mbps) NTSC setting: HQ mode (3Mbps): 960 x 540/29.97p, 23.98p, LP mode (1.2Mbps): 480 x 270/29.97p, 23.98p
	Proxy (H.264)	PAL setting: HQ mode (3Mbps): 960 x 540/25p, LP mode (1.2Mbps): 480 x 270/25p NTSC setting: HQ mode (3Mbps): 960 x 540/29.97p, 23.98p, LP mode (1.2Mbps): 480 x 270/29.97p, 23.98p LPCM 2ch, 48kHz/16-bit (4k/HD/SD MOV), AC3 2ch (AVCHD), law 2ch (Proxy)
Audio recording	LPCM 2ch, 48kHz/16-bit (4k/HD/SD MOV), AC3 2ch (AVCHD), law 2ch (Proxy)	
LIVE VIDEO STREAMING		
Protocol	RTMP, MPEG2-TS/UDP, MPEG2-TS/RTP, RTSP/RTP, ZIXI	
Bitrate	0.2 — 12 Mbps	
Resolution	1920 x 1080, 1280 x 720, 720 x 576, 720 x 480, 640 x 360	
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 x1 (Network Connection), DEVICE x1 (Mass storage)	
PROVIDED ACCESSORIES		
	Handle unit, Battery (SSL-JVC50) x 1, AC Adapter x 1	

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# JVC

Streaming Camera with Sports Score and Broadcast Info Overlay

# GY-HM200ESB



Shoot a game with professional score graphics and be ready for the post-game interview with professional broadcast banners.

Recording, streaming and remote control with professional graphic overlays – introducing the all-in-one solution from JVC.



KCS-8447

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HDMI  
HIGH DEFINITION MULTIMEDIA INTERFACE

SD  
CG

SD  
XC

Product photo shown with optional 4G/LTE adapter



## An innovative, affordable live streaming camera featuring overlaid sports scores and broadcast information

The GY-HM200ESB makes sharing with your audience easier than ever. It enables single-camera sports and news coverage producing real-time game score overlays or broadcast information overlays without requiring an external CG or production switcher. For schools or small-scale local TV stations with limited equipment and personnel resources, the GY-HM200ESB is an ideal solution for producing professional-quality, single-camera coverage and streaming.



### Graphic Score Overlay for Sports Coverage

#### Eg. Soccer Score Patterns

**Small**

Timer Team Name (Small) Score Team Name (Small)  
45:00 GHP 1:1 BLB  
1:03 +3  
Additional Time Added Minutes (During additional time only) Team Logo (Small)

Position selectable with SDP Generator (Top left/right or Bottom left/right)

**Large**

Text (Game Title, etc.)  
GRASSHOPPERS 1:1 BLUE BEANS  
Team Logo Team Name Score Team Name Team Logo

**Penalty Shootout**

Team Name Score Team Name  
GRASSHOPPERS 2:1 BLUE BEANS  
Goal / Miss

The GY-HM200ESB produces a real-time score overlay on recorded or streamed video output for sporting events including soccer. For professional soccer game coverage, three types of score graphics are available. You can manually type in the Home and Guest team names or the game title. And using JVC's PC and Mac software (SDP Generator) and an SD card, the team logo and additionally designed team name image can be stored within the camera to be displayed on the scoreboard.

#### Pre-installed Score Graphics for Various Sports

Not only soccer, various score templates are also pre-installed for other popular sports such as basketball, volleyball, field hockey, and more. Just like Soccer scores, team names and team logos can be input for any template.



**Basketball**

GRASSHOPPERS 3 BLUE BEANS 3 1st 15:00

**Type 2 (Volleyball, etc.)**

GRASSHOPPERS 2 1 BLUE BEANS 2 1 1st and more

### Broadcast Info Overlay for News Coverage

Watermark (Imported and movable) "LIVE" mark (Pre-installed or imported mark)  
JVC Breaking News 11:30 15°C  
Programme Name, etc. News Title, Reporter Name, etc. Time Temperature (if needed) Logo (Imported mark)

Overlay is also available for broadcast applications, such as on-site news reports. Various information can be overlaid on recorded videos or streamed videos, including the programme or incident name, reporter name, station logo, or time, etc. The watermark of the station (position free) and the "LIVE" mark can also be displayed on the shoulder of the screen.

#### Graphic Design and Colours Customisable

For text overlay areas, four colour variation designs are pre-installed. Choose the one that matches your preference. Or you can even customise the text bar design by creating your own images and importing them to the GY-HM200ESB.



#### SDP Generator ( Free Software )

SDP Generator is PC and Mac software to create a data file (SDP file) used for importing your own images to the GY-HM200ESB. Prepare image data (PNG [recommended]/JPG/BMP file supported) for the watermark, team logos, station logos, or text bar design, etc., and the SDP Generator generates the SDP files. Created SDP files are imported to the camera via an SD card and you can use those customised images for overlay.

#### Instant Score and Information Entry using Smartphone/Tablet

During the game, the camera operator can input the score using an external Wi-Fi connected smart device such as a smartphone or tablet. With an intuitive, browser-based GUI, it's quick and easy to keep the score updated on the spot. Before the game, team name, game title,

or names, etc. can be manually typed in with the smartphone or tablet. As for broadcast information, choose the item list to be overlaid and update as required. Each overlay item is on/off selectable.



#### Overlay On/Off Selectable for Each Output

When the overlay is selected, you can choose whether the scoreboard or broadcast information is overlaid onto HD recording clips or output video signals such as HDMI and SDI, or both. If desired, the overlay can be placed on the streamed video only, leaving the recorded video without graphics.

#### Password-Protected Overlay Settings

You can protect overlay settings with a password to prevent third parties from removing any graphic on screen. No worry about unauthorised broadcast or recording.

#### Integrated 12x Ultra HD Lens and 1/2.3-inch CMOS Sensor

The GY-HM200ESB was built to deliver stunning, true to life video. The ultra high quality imagery begins with a precision 12x F1.2-3.5 optical zoom lens (35mm equivalent: 29.6-355mm). 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. When shooting in the HD mode, Dynamic Zoom combines optical zoom and pixel mapping to create seamless and lossless 24x zoom.



Original Image No Zoom 12x Optical Zoom 24x Dynamic Zoom in HD Mode  
Dynamic Zoom combines Optical Zoom plus Pixel Mapping — focusing on a smaller image area for lossless 24x Zoom.

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

The GY-HM200ESB 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 lower resolutions, depending on available bandwidth. Live events may be streamed to a decoder at a cable head-end, or directly to the internet through an online video platform such as Facebook, YouTube, Ustream, or JVC's own VIDEOCLOUD server. And while streaming, the camera continues to function as a high quality, full HD camcorder giving you a pristine copy of the game or news report.

\*Requires appropriate network connection and optional adapter



Photo shown with optional 4G/LTE adapter