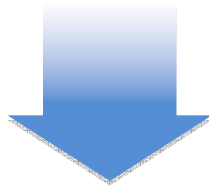


Professional JVC camcorders **GY-HM200** and **GY-LS300**

Streaming to **Facebook Live**, **YouTube** and **Ustream**

Setup Guide



Check our comprehensive line of streaming products at pro.jvc.com:



Follow these steps to setup GY-HM200 / GY-LS300 streaming to Ustream or YouTube:

1. Select recording format to enable network / streaming.
2. Plug USB adapter, enable camera network function and connect to Wi-Fi (LAN) network.
3. Verify camera's IP Address by pressing *Status* button.
4. Using PC/Mac browser, type camera's IP Address to access Settings and Remote page.
5. Find *RTMP URL* and *Stream Key* from your Ustream / YouTube accounts.
6. Copy and paste these values into camera's Streaming / RTMP settings and click *Save*.
7. Assign one of User Buttons to Stream function. Example: *User 7*, next to zoom control

Camera controls to be used during setup:

- *Menu* button and Joystick for navigation
- *User 3* button to confirm Recording Format changes
- *Status* button to verify camera's IP Address and connection information



By pressing *Menu* button two menu screens are available – *Main Menu* and *Favorites Menu*. Pressing *Menu* button for two seconds toggles between *Main Menu* and *Favorites Menu*. Any items from the *Main Menu* can be added to the *Favorites Menu* for quick access. Example: Added Connection / Streaming Setup and Record Format to the Favorites Menu.



1. Selecting camera Recording Mode and Streaming resolution / bitrate.

While Streaming and Recording to SD card are available simultaneously, some recording modes may inhibit streaming functions. Example: Streaming is not available when in 4K or 1080 HD422 recording modes. Progressive streaming formats are not available when recording interlaced video formats; HD streaming is not possible when recording SD etc.

Setting camera to 1080p (25/30/50/60) H.264 (not 422) recording mode enables all streaming formats.

Recording Mode	Streaming			
	270p	480i	720p	1080i
4K	Streaming is not possible			
HD422				
HD + Web				
1080 24p				
1080 25-60p				
1080i				
720p				
480i				

720p is recommended for streaming to Ustream / YouTube



2. Plug Wi-Fi, Ethernet (LAN) or 4G LTE adapter into USB Host connector.

Some USB adapters may be not recognized or generate errors during high-bitrate streaming. Please, use JVC certified adapter for error-free streaming – **Hawking Technology HD65U**

http://hawkingtech.com/products/hawking_products/wireless_ac/hd65u.html



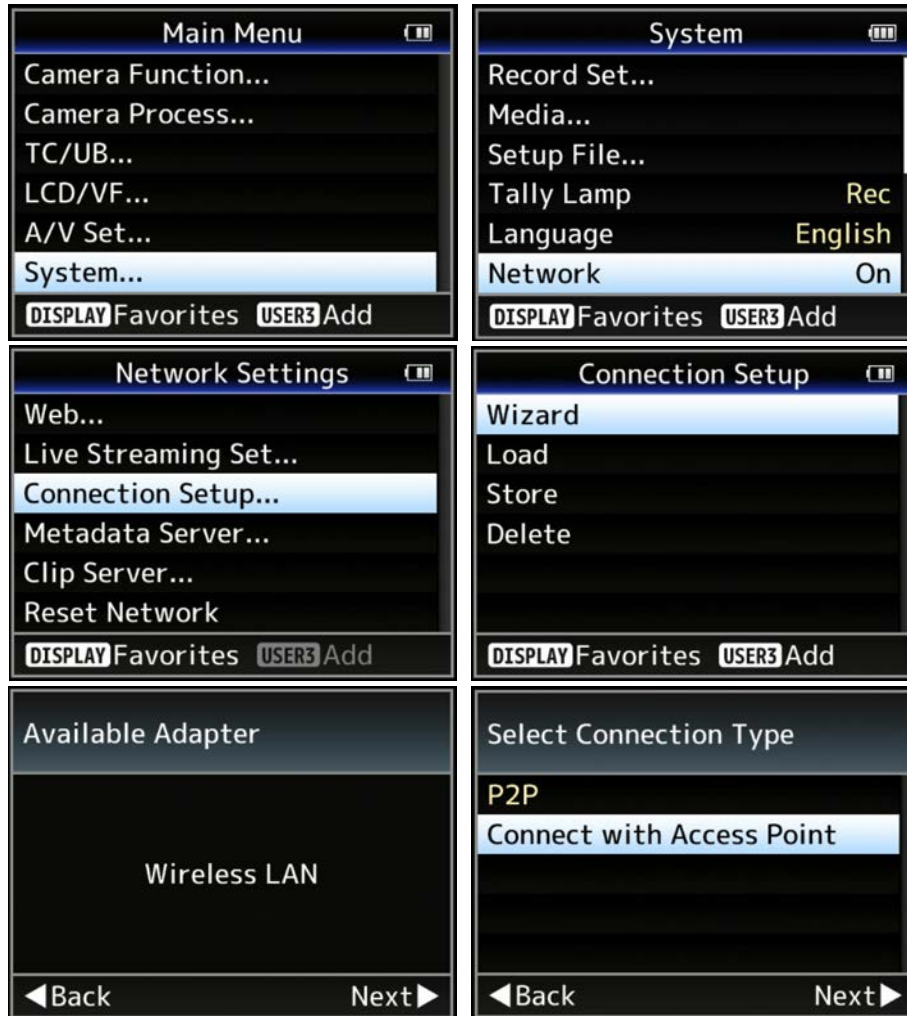
Supported **4G LTE** cellular broadband modems:

<i>Provider</i>	<i>Model</i>	4G LTE	XLTE
Verizon	UML290	√	
Verizon	UML295	√	√
Verizon	U620L	√	√
AT&T	AirCard 313U	√	

XLTE nearly doubles upload speed due to simultaneous use of two frequencies.



Enable Network function and connect to available network.



Follow menu prompts until successful connection is established.

Connection status is displayed in the upper right corner of Viewfinder and LCD screen:



Network symbol is **Yellow** while obtaining IP address and **White** when connected to network.

System Reset: **Menu** → **System** → **Reset All** is recommended if connectivity problem occurs.

3. Press Status button and using left-right joystick controls, navigate to the *Network* Status page. (Press Status again to cancel)



Note that *192.168.1.109* is camera's IP Address. (Your IP address may be different)

4. Now, you will need PC/Mac connected to the same network.

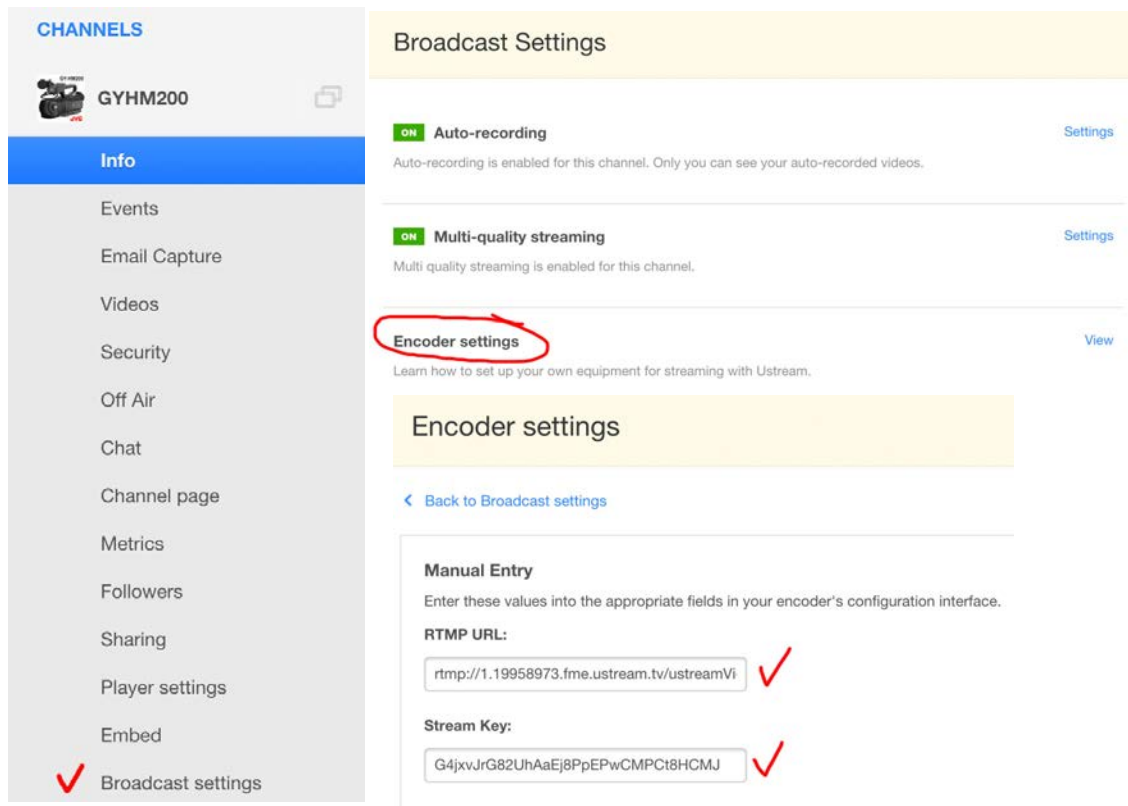


Enter <http://192.168.1.109> in PC/Mac browser to access camera's Remote Control page.

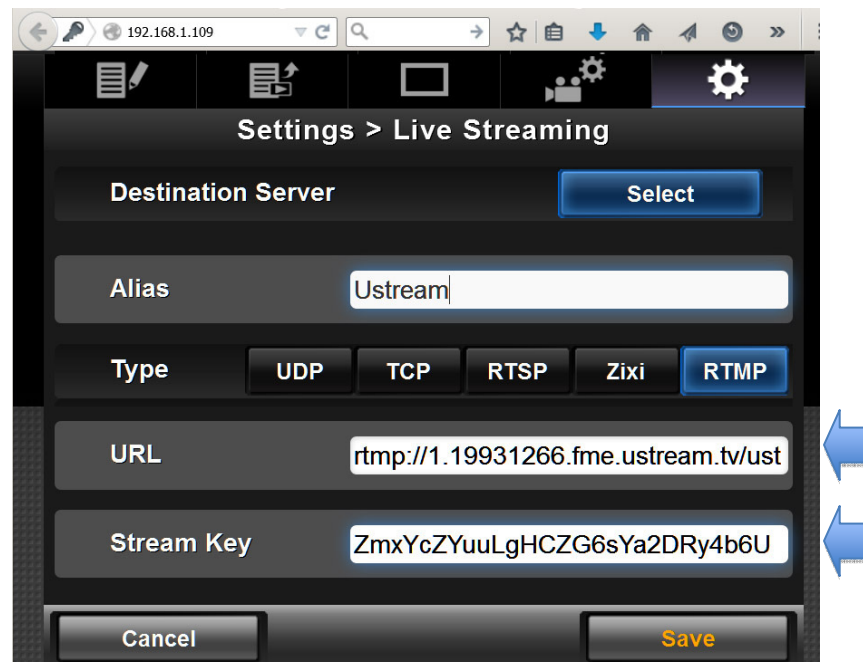
User Name: **jvc** Password: **0000** (four zeroes)



5. Open your Ustream account page in the new browser window and navigate to *Channel Settings*. Click on *Broadcast Settings* and select *Encoder Settings*



6. Copy and Paste RTMP URL and Stream Key (one by one) into camera's RTMP setup page.



Click **Save** to complete setup.

For **YouTube**, proceed to: *My Channel – Video Manager – Live Events – New Live Event*

Select *Custom ingestion* and *Other encoders* to see RTMP credentials

CREATOR STUDIO

- DASHBOARD
- VIDEO MANAGER**
 - Videos
 - Live Events**
 - Playlists
 - Copyright Notices
- COMMUNITY
- CHANNEL
- ANALYTICS
- CREATE

[Send feedback](#)

Info and Settings | **Ingestion Settings** | Cards | Live Control Room

Event successfully saved.

GY-HM200

Main Camera [Add a Camera](#)

Thumbnail

Please upload as large an image as possible (suggested: 1280x720) since the image will also be used as the embedded on other sites. You can upload a JPG, GIF, BMP, or PNG file. Maximum file size is 2MB.

[Browse](#)

Choose maximum sustained bitrate of your encoder *
Select a range that corresponds to the maximum sustained output your encoder provides.

Basic ingestion

Custom ingestion [?](#)

720p (720p)

Select your encoder
YouTube Live provides support for a variety of encoders. Select one of the encoder options below and follow the instructions.

Other encoders

- 1. Configure your encoder**
[Recommended settings](#) [?](#)
- 2. Copy and paste into your encoder**
Enter the stream names and URLs in the configuration options of your encoding software.
 - Stream Name: gy-hm200-8681.aw4f-vqp0-f4m6-4re8 **Stream Key**
 - Primary Server URL: rtmp://a.rtmp.youtube.com/live2 **URL**
 - Backup Server URL: rtmp://b.rtmp.youtube.com/live2?backup=1
- 3. Start your encoder**
In your encoder, start sending us your video stream.
- 4. Go to the Live Control Room.**
You can preview and start your event from the [Live Control Room](#).

For Facebook Live:

<https://www.facebook.com/facebookmedia/get-started/live>


Page Messages Notifications **7** Insights **Publishing Tools** Settings Help ▾

Posts
Published Posts
Scheduled Posts
Drafts
Expiring Posts
Expired Posts

Videos
Video Library

Video Library + Live + Upload

Search... Actions ▾ Filters ▾

<input type="checkbox"/>	Video	Views	Date Added
<input type="checkbox"/>		0	May 26, 2016 at 5:33pm Lucas Veras
<input type="checkbox"/>	ref video 26 may 1	7	May 26, 2016 at 5:34am Ankita Patel

Create Live Video

This will create a live video, streamed directly from your professional video equipment or encoding software. This is not for creating live videos from your computer's webcam.

Secure connection (SSL)
A secure connection is better, but it may not work with all encoders.

Depending on your streaming software, you will use either the Single Field or Separate Fields option below. Copy the contents of these text fields into your video streaming software's set-up fields. [Learn more about live video](#)

Single Field

Server or Stream URL ⓘ

OR

Separate Fields

Server URL ⓘ

Stream Key ⓘ

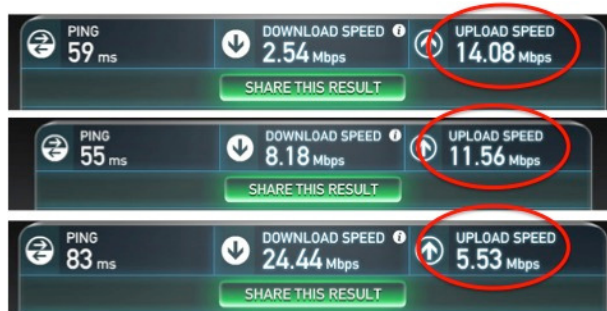
i Keep the Stream Key secret. Anyone can use them to stream video to your post. This stream key is valid for 7 days. Once you preview the video, you have up to 5 hours to go live. If you need more time, create a new stream key closer to the time.

Next

Selecting Streaming Format and Bitrate.

Depending on local conditions and type of connection (Wi-Fi, Ethernet or 4G LTE) different streaming formats and bitrates may be chosen to provide smooth streaming and pleasant viewing experience. Keep in mind that slightly lower resolution but stable stream is always preferable vs. higher resolution video, which stops and breaks abruptly.

It is always good idea to check you connection speed with Speed Test tools utilizing smart phone, tablet or PC prior to start streaming. Check *Upload speed*, not *Download* since you will be uploading (pushing) video to the server.



JVC camcorders offer wide range of streaming bitrates from as low as 0.2 Mbps for Skype-like video to broadcast-quality streaming @ 5-8-12 Mbps.

Format	Streaming - Bit Rate, Mbps								
	0.2	0.3	0.8	1.5	3	5	8	12	
480x270p									
720x480i	recommended								
1280x720p						recommended			
1920x1080i							recommended		

The rule of thumb is to select *streaming bitrate* at approximately 50-65% of *available upload speed*. Depending on type of video: low motion (interview, focus group, “talking head” etc.) or high-motion (sports, action, stage) chose 480i or 720p/1080i formats.

Speed Test		Type of Video	
Download	Upload	Low Motion	High Motion
-	1.5	480i @ 0.8 Mbps	
	3	720p @ 1.5	480i @ 1.5
	5	720p @ 3 Mbps	
	7	720p / 1080i @ 5 Mbps	

8. And finally, one of camera's eight *User Buttons* can be assigned to Streaming function.

Menu → Camera Function → USER Switch Set → USER7 → Live Streaming

Example: We chose *Rec/7* (User 7) button located next to zoom rocker.



Setup is complete and now, you can stream live to Ustream by pushing *Rec/7* button.

All settings are stored in the camera (four separate Ustream channels/accounts can be saved).



For more information visit:



VIDEOTOYBOX.COM