#### JVC GY-HM150u

- Perfect camera for documenting performances and events
- High quality sound recording
- Very good motion reproduction CCD sensors
- Image starts to get noisy in low light
- Improvements over GY-HM100u: iris control dial, more intuitive menu, better image quality

# JVC GY-HM150u recording times:

Camera comes with two 32 GB cards:

QuickTime/MP4		SDHC	Card	
Quality	4GB	8GB	16GB	32GB
HQ(1080i/720p)	12 m	25 m	50 m	1 h 40 m
SP(1080i)	17 m	35 m	1 h 10 m	2 h 20 m
SP(720P)	22 m	45 m	1 h 30 m	3 h

# Shooting tips

- Reformat the SD card before you shoot
- always shoot progressive 24p, 30p or 60p
- always shoot with HQ image quality
- camera shake is more more apparent on HD cameras
- use a tripod (with Image Stabilizer Off)
- always delete clips with the internal camera menu- keep the SD card structure intact

#### Menu Settings: navigate menu with toggle

MENU THUMB	Main Menu	
	Record Set	
	Camera Process	
T	TC/UB	
A B	LCD/VF	
Ř	A/V Out	
V.S.	Modia	
W	Setup File Manage	
	Exit	
	DISDLAV, Equation LISED1, Add	

## 1. Format SD cards

Record Set Camera Function	
Camera Function	
Octave Discours	
Gamera Process	
TC/UB	
LCD/VF	
A/V Out	
Others	
Media	
Setup File Manage	
Exit	

# Media/Format Media

B	Media	
	Format Media	
	łestore Media <b>3ack</b>	

#### 2. Record Set/Record Format Menu



# Record Set/Record Format Menu



# System Definition: HD (MPEG 2)



# 3. File Format: QuickTime

THUMB	Record	I Format	
	System Definition	HD(MPEG2)	
	File Format	MP4	
	Camera Resolution	QuickTime	
	Frame & Bit Rate	60i(HQ)	
Po	Aspect Ratio	16:9	
A	Ca	Set Incel	
		•Set 4	Cancel

## 4. Camera Resolution: 1920 x 1080

IUMB	Record	Format	
	System Definition	HD(MPEG2)	
	File Format	QuickTime	
	Camera Resolution	• 1920x1080	
	Frame & Bit Rate	1440x1080	
10GRA	Aspect Ratio	[1280x120	
Mas	Second	et	
		●Set 40	Cancel

#### 5. Frame Rate: Choose HQ options

/ THUMB	Record Format	
PROGRAM	System Definition HD(MPEG2) File Format QuickTime Camera Resolution 1920x1080 Frame & Bit Rate • 60i(HQ) Aspect Ratio • 60i(HQ) 50i(HQ) 25p(HQ) 24o(HQ)	
	Cancel Set (Cancel	

#### Best Movie Recording Sizes and Frame Rates

1920 x 1080 24p: most common for NTSC displays 1920 x 1080 30p: for more accurate fast motion reproduction

1280 x 720 60p: a smaller image size but useful for a slow motion effect (frame rate will be conformed later in Premiere to 30p or 24p)

#### All the above changes will need to be Set



# Menu Recommendations

- The following are recommendations for setting up the camera in a neutral state
- These suggestions will avoid over saturated colors or excessive contrast but feel free to experiment and explore the limits of the camera

# Low Light Situations

- The camera has fixed ISO (800 ISO).
- Use GAIN in low light situations
- GAIN introduces image noise (like high ISO)
- The camera has three GAIN settings that are determined in the menu
- Unless the situation demands constant GAIN, always keep the Low setting on 0 db

#### Gain: Use Menu to define the Low, Medium and High Gain Switch



# Defining GAIN: Switch Set Menu

/THUMB	Camera Function	
	Bars Off Tele Macro Off AE Area	
Pa	Switch Set	
DERAM		

# Switch Set/ GAIN: GAIN L should be 0db



# **Avoiding Overexposure**

- Overexposure in Video can result in image areas being "burned out": areas of no information
- Avoid this by turning on zebra stripes on the LCD display: zebra stripes indicate overexposure
- Also, use the ND (Neutral Density) filter on the lens if the image is still too bright after exposure adjustment

# Switch Set/Zebra/5: choose ZEBRA

	Old COME ONE	
GAIN L	0dB	
GAIN M	3dB	
GAIN H	6dB	
Zoom Speed	Normal	
USER1	Focus Assist	
USER2	TC/UB	
LOLUX/3	Loiux	
C.REVIEW/4	Clip Review	
ZEBRA/5	Zebra	
REC/6	Rec	
DISPLAY: Favori	tes USER1: Add	
ZEBRA/5 REC/6	Zebra Rec	

# Turn on Display. Zebra/5 button will toggle Zebra Stripes.



## Zebra Stripes in the Display



# ND Filter switch limits the light entering the lens.



# Other menu options:

- The camera has Gamma and Color controls that alter contrast and color saturation.
- I prefer to have a neutral image
- It is much easier to increase saturation and contrast later than to try to eliminate problems caused by an oversaturated or high contrast image
- The following settings will create a neutral image

#### Camera Process Menu/ Gamma: choose Standard

Cam	era Process 🔲
Detail V/H Balance	Normal
Knee	Auto
Level	
Gamma	Standard
Level	Normal
Preset Temp.	
White Paint R	
White Paint B	#
Color Matrix	Standard

#### Camera Process/ Color Matrix: Choose Standard



#### Camera Process/ Color Gain: choose Normal



# **LCD** Display Information



# **Display Information**



# White Balance

- The camera has two manual white balance settings (A and B) and a preset setting
- The preset setting is defined in the camera menu
- Always do a manual white balance: place a thick white card or paper in front of the lens, make sure that light is falling on the card, and press the AWB button on the front of the camera

#### The AWB button



# **Three White Balance Settings**



# Auto or Manual Focus

- The camera can auto focus smoothly while shooting
- The object in the centre of the image will be focal point
- Always use manual focus when you don't want the focus to change

# Auto/Manual Focus Switch



# Auto or Manual Exposure

- The camera can adjust exposure smoothly while shooting
- Use manual exposure when you don't want the exposure to change
- Or use manual exposure to have control over the image

## Auto/Manual Exposure button



# Exposure check list:

- Check for overexposed areas using Zebra Stripes
- Use Gain in Low Light
- Use ND filter in bright light
- Iris (aperture) Change: higher number means less light
- Shutter Speed: normal shutter speed is twice the frame rate – higher shutter number means a shorter exposure (less light)

#### Exposure Adjustments: Iris (aperture): Turn the Iris Ring to adjust after switching to Manual



#### Aperture appears at bottom of display



# Shutter Speed Adjustment: use dial



#### Shutter Speed Adjustments



# Shutter Speed Adjustments

- Normal shutter speed for video is twice the frame rate, ex: 24p (24 frames per second) uses a shutter speed of 1/48<sup>th</sup> of a second
- Shooting with a higher shutter speed than double the frame rate gives you less motion blur (objects appear more arrested and static)
- Shooting with a lower shutter speed than double frame rate will give you more motion blur to the point where entire image will blur

# Exposure Compensation: turn dial



# Image Stabilizer: toggle on and off



# Audio

- The camera has two microphones: one on top of the lens – this is a stereo microphone that is good quality but omnidirectional – it will pick up room noise
- A directional microphone can be mounted onto the top handle- when this is plugged in the other microphone does not function
- The directional microphone only picks up what is in front of the camera

#### **Directional Microphone in Input 1**



Settings for Directional Microphone: CH-2 Input on Input 1 Input 1 requires Phantom Power (MIC +48V) Audio Select: AUTO



# Audio Levels in LCD Display



## Use Headphones



# **Reviewing Video Clips**

- The camera uses XDCAM video compression that is owned and licensed by Sony
- Video clips can be previewed in the camera
- You will not be able to see the clips on a computer unless you have video software installed (Premiere, Final Cut, Avid or Vegas)
- Or there is a Sony XDCAM viewer on the Sony Professional website

# Backing up Clips

- If you shot using the Quick Time format, simply mount the SD card onto your computer (plug the camera via USB or use a card reader) and drag the .MOV files onto your hard drive
- If you shot using the MP4 format, copy the entire SD card onto a folder on your hard drive and be sure to import into Premiere using the Media Browser

# **Deleting Clips**

- Always delete your clips before returning the camera
- Always use the internal camera Media menu to delete video clips or simply reformat the SD card to delete all clips