



# JVC 4K Video Camera Quick Start Guide



The JVC 4K video camera (GY-HM170U) is a great way to step up your video production. With this camera, you will be able to exert more control over the way your video looks and sounds by choosing your own video settings and setting up your own microphones.

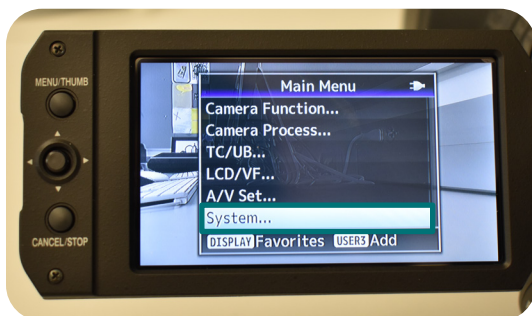
1. Make sure the camera has power by charging the battery or connecting the AC adapter.



2. Insert one or two SD cards into the slots on the side. Press the **SLOT SEL** button to select which SD card you'd like to record to first. (If you have not formatted your SD card, see [Formatting an SD Card](#))



3. Open the LCD panel on the side. Set your recording quality by pressing **MENU** and going to **System>Record Set**. If you're not sure what to use, we recommend setting **Format** to **Quicktime**, **Resolution** to **1920x1080**, and **Frame Rate** to **30p**. **Bit Rate** is the number of bits (1's and 0's) used to store each second of video in the video file. A higher bit rate will give you a higher quality video, but take up more space on the SD card.



- 4.** If you are recording with the built-in microphone, set the **CH1** and **CH2** switches on the handle to **INT**. Set **INPUT1** and **INPUT2** to **LINE**. Set **AUDIO SELECT** to **AUTO** for both channels. You can monitor audio by plugging in your headphones on the back of the camera.

If you would like to attach your own microphone, please refer to **Adding Sound**.



- 5.** Once you have chosen all your settings, you can press **REC** on the back, top, or side of the camera to start and stop recording. The tally lamp on the top of the camera will light up red while you are recording.
- 6.** To view your recording, press and hold the **MODE** button on the side of the camera to open playback mode. When you are done viewing, press and hold **MODE** again to open shooting mode.



# Focus

The JVC 4K camera has manual focus (MF) and two auto-focus (AF) modes. You can change between AF and MF using the **AF/MF** button. To zoom, turn the inner lens ring or press the **W/L** rocker switches on the right and top of the camera.



## MANUAL FOCUS (MF)

To focus on your subject in MF mode, turn the outer lens ring. If you need help determining where the focus is, press **F.ASSIST** to highlight the areas in focus on the LCD monitor or **EXPANDED FOCUS** to zoom in on the focus area. While you are in MF mode, you will see the focal distance displayed on the bottom right corner of the LCD monitor.

## AUTO FOCUS (AF)

There are two different AF modes on the JVC camera: Area and Far/Near. You can set the AF mode by pressing **MENU** and going to **Camera Function>AF Assist**.



## AREA

Area AF allows you to automatically focus on objects in a certain part of the frame. While Area mode is activated, you can move the focus area by turning the focus ring on the lens to select from one of three areas.

## FAR/NEAR

Far/Near AF allows you to automatically focus on objects at a certain distance from the lens. You can set the distance by turning the focus ring on the lens to make the camera focus on distant subjects or near ones.

# Light

## AE MODE

Automatic Exposure (AE) mode automatically adjusts the iris, gain, and shutter according to the amount of light where you're shooting. To change the amount of AE adjustment, press **AE LEVEL** and use the volume control buttons to increase or decrease. The current AE level will be shown in the bottom right of the LCD monitor.



## FULL AUTO MODE

Full auto mode automatically adjusts gain, iris, and shutter according to the amount of light present. Press and hold the **FULL AUTO** button until the iris, gain, and shutter indicators on the screen disappear.



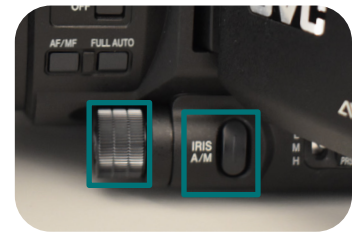
0dB gain  
< F3.2 > iris  
1/60 shutter

## MANUAL MODE

To adjust gain, iris, and shutter, manually, first switch off full auto mode by pressing and holding the **FULL AUTO** button until gain, iris, and shutter appear in the bottom right of the screen.

### IRIS

To adjust iris, turn the dial below the **FULL AUTO** button. The current iris size will be displayed in the bottom right of the screen. A lower number indicates a larger iris and a narrower depth of field, good for shooting in low light or situations where you'd like the background to be out of focus. A higher number indicates a smaller iris and a wider depth of field, allowing you to film in bright light and focus on a larger area. You can also set iris automatically while in manual mode by pressing **IRIS A/M**.



### GAIN

To adjust gain, set the toggle switch to **L**, **M**, or **H**. The current gain will be displayed in the bottom right of the screen. A higher gain amplifies light in a dark setting, but can cause the image to become grainy, so don't set gain higher than you need it.



### ND FILTER

The ND filter setting is used to reduce the amount of light hitting the sensor in very brightly lit environments, such as outdoors during the day. If the scene is too bright, even with the highest iris value, adjust the ND filter until it looks the way you want. If the ND indicator starts flashing on the LCD display, it is either too dark or too bright for your current ND filter setting.



## SHUTTER

Adjust shutter by pressing the SHUTTER button and using the volume control buttons to increase or decrease the shutter speed. The current shutter value will be display in the bottom right of the screen as a fraction of a second.



## Adding Sound

1. Attach the microphone to **INPUT1** on the handle. If your microphone has a 3.5mm jack, you can attach it to the **AUX** port on the back of the camera.



2. On the handle attachment, set **CH1** and **CH2** to **INPUT1** (for **INPUT1**) or **INT** (for **AUX**). If you are using an **AUX** microphone or a built-in microphone, set **AUDIO INPUT** to **LINE**. If you are using a dynamic microphone, set **AUDIO INPUT** to **MIC**. If you are using a microphone that requires power from the camera, set **AUDIO INPUT** to **MIC+48V**.



*Shotgun/boom mic with power from camera*



*Internal/built-in microphone or AUX mic*

*\*If you would like to use multiple microphones, please see the handout **Attaching Microphones to the JVC 4K Video Camera**.*