

Considerations When Buying a Video Camera

A video camera is a very personal preference.
Here are some general considerations:

Materials and Design:

Is the camera water-proof or water resistant?

Is the camera mostly plastic or metal?

Is the camera comfortable to hold?

How heavy/bulky is the camera?

Imaging:

What is the size of the sensor?

What is the camera's ability to record in low light?

How pronounced are the CMOS sensor rolling shutter problems? Can you record fast motion without image distortion?

Does the camera have a global shutter or an electronic equivalent?

Are there ND filters built in to the camera?

Compression:

What type(s) of video compression is the camera using?

Does it use inter-frame or intra-frame compression?

Does the codec support 8 bit or 10 bit color?

What frame rates does it support?

Can it shoot at higher frame rates for slow motion?

How does it capture video: SD cards, a hard drive or something proprietary and more expensive?

Does it have a SDI or HDMI output for an external recorder?

Lenses:

Is the lens fixed or are the lenses interchangeable?

Does the image look sharp through the standard lens?

How close can the lens focus?

What is the lowest f-stop on the lens?

What is the highest f-stop?

Does the lens work with motion stabilization?

Focus:

Is it easy to focus the camera manually?

Is it easy to judge the focus in the LCD screen or in the viewfinder?

Does the camera have image magnification as a focus aid?

How quick/useable is the auto-focus?

Exposure:

Can the exposure be easily adjusted? Is there a separate ring on the lens for focus and exposure (iris) adjustment or is there a scroll wheel on the back of the camera? (Avoid any camera that has

touch screen adjustments or complicated menu adjustments for exposure).

Is it easy to set the shutter speed and to fix it at twice the frame rate?

Does the camera have manual white balance settings? Can the color temperature be adjusted in increments?

How does the image look in low light? Is there a lot of noise in the video above 800 ISO?

Can the camera shoot with a high dynamic range (Log)?

Audio:

Can the audio levels be easily adjusted?

How good is the microphone that came with the camera? Is it a hyper-cardioid directional type of microphone or something that will pick up ambient noise?

Are there balanced XLR inputs for external microphones or is it a small unbalanced 1/8" connection? Are the external microphone inputs noisy?

Power:

What is the average life of a battery?

How long does it take for the batteries to charge?

Workflow:

Is the video compression supported by your software? Will the files need to be converted?