

Panasonic HC-X2 Vs HC-X20 Camcorder Comparison

The [Panasonic HC-X2](#) and [HC-X20 Camcorder](#) are an exciting launch for filmmakers from one of the most popular [pro video camera](#) brands. Both of these professional 4K camcorders from [Panasonic](#) arrive with innovative new features, 4K60p (HEVC) recording and face detection AF/AE, ensuring these will be amongst the most popular [Panasonic camcorders](#) to date.

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Both models are packed with technology for filmmakers working on documentaries, drama, sports and on-location news, reporting and interviews, and our Panasonic HC-X2 and HC-X20 camcorder comparison highlights key features as well as the differences between these two Panasonic 4K camcorders.

Whether you're looking to learn about specific Panasonic HC-X2 and HC-X20 features and specifications, or want to discover how they compare to other video cameras, we've got everything you need.

WHAT IS THE PANASONIC HC CAMCORDER RANGE?

Panasonic HC camcorders are broadcast-ready [pro video cameras](#), which capture 4K video and are compact enough to be handheld for location shoots. The HC-X2 and HC-X20 models joining the HC range are positioned above existing [Panasonic HC-X1500E](#) and [Panasonic HC-X2000E Camcorder](#), with new capabilities for advanced video creators.



These models are placed both towards the top of Panasonic's range of professional broadcast video camcorders. These are aimed at solo filmmakers working in a range of subjects as well as crews working in ENG and other areas.



WHAT LENS DOES THE NEW PANASONIC CAMCORDER HAVE?

Both of the new HC-X2 and HC-X20 Panasonic camcorders include a built-in wide angle lens, with 20x optical zoom. The zoom lens provides an equivalent 24.5mm focal width to ultra-telephoto 490mm at UHD/FHO in full-frame format. You can zoom to approximately 32x FHD (24x UHD) while maintaining HD image quality.

With a powerful built-in lens the new camcorders offer a powerful all-in-one solution for portable content creation, particularly when coupled with the 5-axis hybrid OIS.

PANASONIC AUTOFOCUSING IN VIDEO

Panasonic's 4K High-Precision AF accurately detects, tracks and keeps subjects in-focus even when objects suddenly enter the frame or pass behind obstructions. Face detection AF/AE has been added to the system, making it easier to accurately track humans across the frame.

Whats the difference between the Panasonic HC-X2 and HC-X20 Camcorders?

Both cameras record 4K60p High Efficiency Video Coding (HEVC) with new 4.2.0-10bit and 4K30p 4.2.2-10bit, but what sets them apart? The main difference between the Panasonic HC-X2 and HC-X20 camcorders comes down to a handful of features designed for filmmakers working in multi-cam productions.

The HC-X2 also captures a wider dynamic range with HLG 13-stop VLOG, includes ethernet connectivity, Timecode IN/OUT and 3G SDI output.

Our features and specifications comparison table highlights all of the new features as well as the key differences between the Panasonic HC-X2 and HC-X20.

Feature	Panasonic HC-X2 Camcorder	Panasonic HC-X20 Camcorder
1.0-type MOS Sensor with 15-megapixel effective resolution	Yes *NEW	Yes *NEW
Face detection AF/AE	Yes *NEW	Yes *NEW
4K60p (HEVC)	Yes *NEW	Yes *NEW
4K60p 4.2.0-10bit	Yes *NEW	Yes *NEW
4K30p 4.2.2-10bit	Yes *NEW	Yes *NEW
HLG 13-stop VLOG	Yes *NEW	N/A
USB-C 3.1	Yes *NEW	Yes *NEW
Live Streaming	Yes *NEW	Yes *NEW
Ethernet	Yes *NEW	N/A
Built-in WiFi	Yes *NEW	Yes *NEW
HCROP	Yes *NEW	Yes *NEW
New Mic Holder	Yes *NEW	Yes *NEW
Timecode IN/OUT	Yes	N/A
3G SDI output	Yes	N/A
5-Axis hybrid OIS	Yes	Yes
4K high-precision AF	Yes	Yes
ND filter	Yes	Yes
Triple manual rings	Yes	Yes
120 Super Slow 2-60 fps VFR	Yes	Yes
IR shooting	Yes	Yes
2x XLR IN	Yes	Yes
24bit PCM audio	Yes	Yes
Dual SD memory card slots	Yes	Yes
Dual Codec Recording	Yes	N/A



FEATURES UNIQUE TO THE PANASONIC HC-X2

1. The HC-X2 offers Hybrid Log Gamma (HLG) for High Dynamic Range (HDR) video recording, with natural results, which don't compromise on tonal graduations. It captures 13-stops of dynamic range using VLOG for wider colour gamut, which has been ported over from VARICAM and [Lumix mirrorless cameras](#).
2. You can output simultaneous SDI/HDMI to a [4K recorder / monitor](#) as well as a live switcher and other broadcast [video camera accessories](#). There are some considerations, such as only one LCD/EVF can be displayed when SDI/HDMI is output simultaneously, only the same frame rate is possible for output formats and HDMI 480p/576p is not selectable.
3. 3G-SDI and built-in Ethernet provide the ability to connect to an external recorder to send Full HD 1080/60p / 50p up to 100m using a coaxial cable. You can also connect to the internet using a LAN cable for stable live streaming.
4. Timecode IN/OUT enables multiple camera and audio recorder syncing for quick and effective sync in post production when working in multi-cam environments.



SHARED NEW PANASONIC CAMCORDER FEATURES

Both of these camcorders share professional capabilities to make your job easier, more efficient and to capture high quality results.

5-Axis Hybrid O.I.S. + (UHD/FHD)

Three modes are available, which can be handheld, which are:

- Normal
- Stable
- Pan/Tilt

Electronic Image Stabilisation provides powerful correction by detecting and correcting shake in 5-axis directions, including rotational blurring, which is ideal when handholding, particularly at difficult high and low angles. Drive wear is reduced through the use of a Ball O.I.S. System.

Triple Manual Rings

Lens barrel controls enable you to intuitively adjust Zoom, Focus and Iris with both the Panasonic HC-X2 and HC-X20, using linear and non linear focus ring rotation.

Built-in ND Filter

You will be able to compensate for bright recording conditions with built-in 1/4, 1/16, 1/64, or Clear ND Filters, which is found in both of these video cameras.

Full-HD VFR (Variable Frame Rate)

Recording is possible from 2 to 60 fps with 10-step VFR (Variable Frame Rate).

Simultaneous Display on a 3.5-inch High Brightness LCD Monitor and EVF

Full sensor recording is possible from 2 to 60 fps with 10-step VFR. Capture Super Slow 120/100fps (FHD, MOV) and support for high-quality 10-bit recording in FHD mode.

Dual DS card slots with professional recording options

The X2 allows you to record simultaneous 4K/UHD + FHD. Both cameras enable Unlimited Relay Recording, simultaneous recording and background recording to two [SD memory cards](#). You can also save camera settings to SD card for reuse and multi-camera set-up.

IR Shooting

When the IR Cut Filter is switched off you can add optional commercial IR lights to capture shots in darkness, in either white or green, which is perfect for events, wildlife and general night scenes.

Simultaneous Display on a 3.5-inch High Brightness LCD Monitor and EVF

A high resolution 2,760K-dot 3.5-inch LCD with touch operation and tiltable viewfinder with eyecup ensure convenience, useability and control. Simultaneous output to the LCD and EVF is possible, along with Selfie-shooting Mode for 180° monitor rotation.

Professional assist functions

Panasonic is known for providing a suite of assist functions to ensure accurate exposure and focus. These include WAVE (Waveform) and VECTOR (Vector scope), new simultaneous Zebra 1 and Zebra 2, Flash Band Correction, Luminance Level Adjustment, Level Gauge and more.

Direct live streaming connection with RTMP, Facebook and Youtube Live

Whether you are streaming live sports, concerts or breaking news both Panasonic HC-X2 and HC-X20 Camcorders have you covered with a range of live-streaming options.

High resolution PCM audio in 48kHz/24-bit

Capture high quality audio through 2x XLR inputs with switchable 48-V phantom power using your favourite [pro video camera microphones](#). You'll also find an OSD level meter, headphone output, two channel volume control and 24-bit linear PCM recording in MOV mode.

Extended battery life

For the best results use the [Panasonic AG-BRD50EC Battery Charger for VBR series batteries](#) with the following [camcorder batteries](#):

1. [AG-VBR118G \(8850mAh\)](#)
2. [AG-VBR89G \(8850mAh\)](#)
3. [AG-VBR59 \(5900mAh\)](#)

This is where the HC-X20 pulls ahead slightly, thanks to offering up to 8h 50min. recording with the optional AG-VBR118G battery, against 7h 40min. which the X2 provides.

WHICH IS THE BEST PANASONIC CAMCORDER FOR DOCUMENTARY?

For solo filmmakers the HC-X20 makes a great documentary camcorder, due to its lower price and simple operation, whereas the Panasonic HC-X2 camcorder offers team productions features. These include timecode, ethernet and 3G SDI output, as well as capturing a wider dynamic range with HLG 13-stop VLOG.

Either of these pro video cameras will provide excellent quality 4K60p video and Full HD VFR, whilst offering a number of advanced features to support pro handheld video and audio capture. The wide angle 24.5mm optical zoom lens covers the majority of focal widths and there are numerous assist functions to ensure perfect video recording.

The [HC-X2 UHD 4K Professional camcorder](#) includes features more tailored to team or multi-cam productions, with more connectivity options and a wider dynamic range. The [HC-X20 UHD 4K Professional camcorder](#) offers almost identical features, exchanging those aimed at team productions for even better battery life, although battery power options are impressive with either model.