Clifton Cameras Product Specification

Canon XA70 4K Pro Camcorder

Specifications

Image Sensor

Sensor	1 inch-type CMOS Sensor
Filter	RGB Primary Colour Filter
Total Pixels	Approx.13.4MP
Effective Pixels per Sensor	Approx. 8.29 MP (3840 x 2160)
Subject Illumination Range	Approx. 0.1 lx to 100,000 lx
Minimum Illumination (PAL)	Approx. 0.1 lx: Low Light (shooting mode), shutter speed 1/2 sec.
	Approx. 1.4 lx: In P (Program AE) mode, 50.00P, shutter speed 1/25 sec. auto slow shutter On

Image Processor

Type	DIGIC DV 6
Colour Sampling	YCC 4:2:0 8bit

Lens

Zoom Ratio	15 x optical
Focal Length (35mm Equivalent)	Approx. 25.5 - 382.5mm Standard IS/IS Off
Minimum Focus Distance	1 cm at wide end, 60 cm across entire zooming range
Max. Aperture	f/2.8 - 4.5
Aperture Blades	9 blades
Filter Diameter	58mm
Image Stabilization System	Optical system (lens shift) + electronic stabilization Dynamic, Standard, Powered IS, Off
ND Filter	3 densities: ND 1/4, ND 1/16, and ND 1/64, turret switched, motor-driven.
Zoom Control	Zoom rockers on body and handle;
	Touch Screen or Remote Controller Selectable manual zoom/focus ring on lens; Selectable High Speed and Soft Zoom modes available.

Zoom Speed	Variable (body rocker only) or Constant speed (body and handle rocker; Fast/Normal/Slow, 16 speed level settings in each)
Focus Control	MANUAL: Lens ring and touchscreen point selection (Magnify and Peaking assist functions), Focus Preset.
	AUTOFOCUS: Touchscreen AF point selection, Face Detection and Tracking, Touch and Track, Face Only AF. Face Frame displays tracked subject
Focus System	Dual Pixel CMOS AF, detection range 80% vertical/80% horizontal of field of view Contrast AF.
AF Modes	Continuous, AF-Boosted MF Face Detection and Tracking, Face Only AF.
Manual Focus Assist	Dual Pixel Focus Guide, Peaking, Magnification
Iris Control	Touchscreen, Auto
Digital Zoom/Teleconverter	20x Digital zoom (300x with optical zoom) and 40x digital zoom (600x with optical zoom) are available. Digital zoom not available in AUTO mode.
	2x Digital Teleconverter (Not available when using Digital Zoom)

Recording

Video Storage Media	SD/SDHC/SDXC card (2 card slots)
Type	U3 Class recommended for all recording conditions * UHS-II not supported.
Recording Time	MP4: 150Mbps: 55 mins / 35Mbps: 240 mins / 17Mbps: 495 mins
	XF-AVC:160Mbps: 50 mins/45 Mbps: 185 mins
Recording File System	FAT32/exFAT
Internal Recording Format (PAL)	XF-AVC:
	3840 x 2160 / 25.00P (160 Mbps)
	1920 x 1080 / 50.00P, 50.00i, 25.00P (45 Mbps)
	MP4:
	3840 x 2160 / 25.00P(150 Mbps)
	1920 x 1080 / 50.00P, 25.00P (35, 17 Mbps)
External Recording Output	HDMI output (When Shooting):
	UHD recording mode:
	1920 x 1080 / 25.00P, 50.00P (for Slow&Fast), 50.00i (PsF mode); 1280 x 720 / 50.00P YCC 4:2:2 8-bit
	Full HD recording mode:
	1920 x 1080 50.00P/25.00P/50i ; 1280 x720 50.00P YCC4:2:2 10-bit

Slow/Fast Motion (PAL)	3840 x 2160 / 25.00P: x2, x4, x10, x20, x60, x120, x600, x1200
	1920 x 1080 / 50.00P: x2, x4, x10, x20, x60, x120, x600, x1200
	1920 x 1080 / 25.00P: x0.5
Pre-Record Function	Yes. 3 seconds
Still Photos	JPEG up to 3840x2160 (Still image resolution is dependent on the video resolution)
Photo Storage Media	SD Card

System

Display Type	Capacitive LCD touch panel
Size	3.5-inch (8.8 cm) on the diagonal, Approx. 2,760,000 dots (1280 x RGB x 720)
Wave Form Monitor	No
Focus Assist	Peaking / Magnify
Peaking	Selectable Peaking Colour: Red / Blue / Yellow
Zebra	70% or 100% reference level
Markers	Grid (white/grey), Level (white/grey), 4:3 (white/grey)

EVF

Size	0.36-inch (0.92 cm on the diagonal), Approx. 1,770,000 dots (1024 x RGB x 576)
Correction Lens	+2.0 to -5.5 dioptre

Inputs / Outputs

Audio Input	XLR 3-pin jack (x2) with 48V phantom power, Line and Mic options on detachable handle, 3.5mm microphone input jack (Supply Voltage 2.4V DC) Built-in Mic
Headphone Output	3.5mm stereo mini jack
HDMI Output	HDMITM mini connector. Timecode can be superimposed onto HDMI output
USB	Type-C Hi-Speed USB (USB 2.0) equivalent. Point-to-point class and UVC supported.
SDI Output	No
Time Code	Rec Run / Free Run
Genlock	No
LAN	No
AV Terminal	No

DC Input	USB-C
Remote Control Terminal	2.5mm mini jack

Miscellaneous

Tally Lamp	Yes, in detachable Handle Unit
Colour Bars (PAL)	Yes. SMPTE, ARIB or EBU, with 1KHz Tone
Accessory Shoe	Yes (cold shoe)
Assignable Buttons	5 assignable Buttons
Custom Dial	Iris/Shutter/Gain, AGC Limit, Exposure Compensation, Off
Video Output (UVC)	Recording system: Motion JPEG Resolutions: 1920×1080 (when main resolution is not 1280×720) 1280×720 (when main resolution is 1280×720) Frame rates: 25 fps (best effort)

Exposure

Exposure Metering	Center-weighted average metering
	AUTO, P, Av, Tv, Portrait, Sports, Low Light and IR modes
	Segment evaluative metering
	Night Scene, Snow, Beach, Sunset, Spotlight modes
	No metering in Fireworks mode: Exposure constant
Exposure Compensation	Highlight AE, Normal, Exposure lock, Auto backlight compensation.
Exposure Lock	Yes.
Auto ISO / Auto Gain Control Setting	Auto / Manual
Auto Gain Control Limit	0 - 38dB (1dB increments)
	Wide DR Mode: 9 -38dB (1dB increments)

Shutter Speed

Control Modes	Auto, P, Tv, Manual
Shutter Speed (PAL)	1/6 - 1/2000 sec
	(1/2 - 1/500 sec in Low Light mode)
	Shutter Speed range available dependent on shooting mode
Slow Shutter (SLS)	50.00P:
	Auto slow shutter On: 1/25 to 1/500 sec.

Auto slow shutter Off: 1/50 to 1/500 sec.

25.00P:

Auto slow shutter On: 1/12.5* to 1/500 sec. (*Display is 1/12)

Auto slow shutter Off: 1/25 to 1/500 sec.

Clear Scan (PAL)	No

Streaming, Wi-Fi, & GPS Specifications

Wi-Fi	No
GPS Information (Optional Accessory)	Location (Latitude/Longitude/Altitude), Coordinated Universal Time (UTC), Satellite reception.
	(requires the optional GPS Receiver GP-E2)

White Balance

Auto	Yes
Preset	Daylight (Approx. 5,600K), Tungsten (Approx. 3,200K)
Manual Setting	Colour Temperature range: 2,000–15,000K
	Default value for Set 1 and Set 2: 5,600K

Shooting Modes

Custom Picture Menu	C1: Normal (BT.709 Normal / BT.709)
	C2: Wide DR (BT.709 Wide DR / BT.709)
	C3: LOG3 (Canon Log 3 / BT.709)
	C4: EOS Std. (EOS Standard / BT.709)
	C5 to C6: USER05 to USER06 (same as C1)
Look Settings	Standard
	Neutral
	Wide DR
	Monochrome
Infrared Shooting Mode	Yes
Built-in IR Lamp	Yes, in detachable Handle Unit.
	Wavelength: 850nm (near-Infrared)

Audio

Recording Format	MPEG-2 AAC-LC (16-bit 2ch) / LPCM (16-bit 4ch)
Audio Control	Manual/Auto
	Independent 2ch Line/Mic/Mic+48V input;
	Independent level control per channel (-∞ to +18 dB);
	Independent audio limiters (2 ch);
	Input mic trimming
Reference Tone	1KHz, -12dB / -18dB / -20dB / Off
Microphone Attenuation	On/Off (20dB)
Microphone Level Meter	Yes

Accessories

Supplied	Lens hood with barrier, Mic holder unit, Handle Unit HDU-1, Battery Pack BP-820, USB Power Adapter PD-E1, AC Cable
Optionals	

Canon Battery Pack BP-820/BP-828, Canon Battery Charger CG-800E/CG-800, Canon HDMI cable HTC-100/HTC-100S, Canon Shoulder Strap SS-600/SS-650, Wrist Strap WS-20, Canon PROTECT Filter 58mm, Canon ND4-L Filter 58mm, Canon ND8-L Filter 58mm, Canon GPS Receiver GP-E2, Canon Remote Controller RC-V100, Canon Battery Video Light VL-10Li/VL-10LiII, Canon Battery Pack BP-900 series (for VL-10Li/VL-10LiII), Canon Compact Power Adapter CA-910/920/930 (for charging BP-900 series), Canon Interface Cable IFC-300PCU/S / IFC-400PCU

Power Source

Power Supply (Battery)	Canon Battery Pack BP-820 (supplied), BP-828 (optional)
Power Consumption	MP4, 150Mbps/XF-AVC, 160Mbps, 25.00P: 5.1W
Recording Time	MP4, 150Mbps/XF-AVC, 160Mbps, 25.00P: Max 145 mins, typical 80 mins (BP-820)

Physical Specifications

Dimensions	Approx. 110 x 91 x 214 mm (main body only)
	Approx. 140 x 216 x 265 mm
	(Including lens hood, BP-820, mic holder unit, and handle unit)
Weight (Body Only)	990g
Weight (Accessories)	1465g
Operating Temperature Range 0ºC to +40ºC, 85% relative humidity	