EOS C700

Flexible, robust and highly capable primary 4K camera

A flexible, robust and highly capable primary 4K camera for drama, independent film and documentary that is configurable for multiple production workflows including support for HDR monitoring.

4K **2K** **FULL HD 1080** **XF-AVC** **ProRes**

WIDE DR Gamma **CFast 2.0** **Dual Pixel** CMOS **AF**

- Stunning internal 4K recording at up to 810Mbits/sec, up to 15 stops of latitude and high frame rates
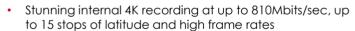
- Up to 4.5k* recording with optional CODEX recorder, at up to 100fps and 4.5K* cinescope up to 120fps

- Supports SMPTE ST.2084 monitoring and ACES 1.0 plus internal ProRes / XF-AVC or optional external RAW recording

- Intuitive operation, accurate autofocus, built-in 10-stop ND, plus optional wired or wireless WiFi control

- Extensive lens support includes anamorphic, EF, PL, and B4; modular design with Shoulder Support Unit and EVF

- Robust construction, power outputs and powerful V-lock battery support, ideal for broadcast and movie industries

* May require firmware update

Product Range

EOS C700

EOS C700 (incl. C700 PL and C700 GS PL)
EOS C500 (incl. C500 PL)
EOS C300 Mark II
EOS C300 (incl. C300 PL)
EOS C100 Mark II
EOS C100

EOS C500

EOS C300 Mark II

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Technical Specifications

CAMERA

IMAGE SENSOR

Sensor	Super 35mm type CMOS
System	RGB primary colour filter (Beyer array)
Total pixels per sensor	Approx. 11.54 megapixels (4622 x 2496)
Effective pixels per sensor	4096 x 2160/2048 x 1080: Approx. 8.85 mp 3840 x 2160/1920 x 1080:Approx 8.29 mp
Dynamic Range	Canon Log 2/Canon Log 3: 1600% (ISO 800 or higher) With Canon Log/Wide DR: 800% (ISO 400 or higher)

IMAGE PROCESSOR

Type	Triple DIGIC DV 5

LENS

Lens Mount	Canon EF Mount with Cinema Lock / PL Mount (Cooke / I Technology compatible) depending on version B4 mount lens via adapter accessory (EF or PL)
Lens Magnification factor (for EF Mount lenses, including Cinema Primes)	4096 x 2160 or 2048 x 1080: focal length x approx. 1.460 3840 x 2160 or 1920 x 1080: focal length x approx. 1.534 B4 adapter attached: focal length x approx 1.3 (1.2947) (Full HD/1920 x 1080) EF and PL Mount version: No magnification factor for Canon Cinema Zooms
Changeable Lens Mount	Yes, via Service Centre. EF to PL or PL to EF options.[1]
Peripheral illumination correction	YES (dependent on lens used)
ND filter	Up to 10 stops via built in ND filter system
Focus control	EF Mount: Via lens, wireless control or wired remote. (dependent on lens used) PL Mount: Only Cine Servo lenses
Iris control	Via body, grip, wireless control or wired remote. 1/2-stop, 1/3-stop or FINE control. Possible to maintain constant F-number during zoom.
Cooke / I Technology Support	YES (PL Mount only)
Anamorphic Lens Support	Yes
Image stabilization system	Depends on lens used

RECORDING

RAW Recording options	1. Capture Drive, CDX-36150: 4096 x 2160, 12bit/10bit, Canon Log 2 applied 4.5K up to 100fps, 4.5K cinescope up to 120FPS, Crop 2K max 240 fps ProRes 422HQ, 4K /QFHD 10bit. 2K / FHD: ProRes 422 HQ 10 bit 120 fps, ProRes 4444 XQ 12 bit 60 fps, ProRes 4444 12 bit 60 fps 2. External device via 3G-SDI: 4096 x 2160, 12bit/10bit, Canon Log 2 applied
Internal Recording	CFast 2.0™ card x 2 for XF-AVC or Pro Res recording, SD card for XF-AVC Proxy recording SD card also used for Photo Storage (1920 x 1080) and firmware update, including firmware updates for CODEX CDX-36150
Recording time (64Gb CFast 2.0™card)	XF-AVC - Intra: 810 Mbps, 10 Mins 160 Mbps, 50 Mins. XF-AVC Long GOP 50Mbps: 165 Mins ProRes: 4K,ProRes4322HQ 10Mins. 2K ProRes4444 25 Mins (25.00P)
Recording Formats	Canon RAW .RMF, XF-AVC Intra, XF-AVC Long GOP. XF-AVC Proxy ProRes, Apple Quick File Format 4444XQ/4444/422HQ/422
Recording Frame Rate	4K RAW: up to 60P (up to 120P to CDX-36150*). Max 240P (2K Cropped)
XF-AVC Recording Bit Rate/ Sampling (50Hz Mode) To CFast 2.0™Card	4096x2160/3840x2160: YCC422 10 bit, 2048x1080/1920x1080: RGB444 12 bit RGB444 10 bit , YCC422 10 bit, 1920x1080: YCC422 10 bit 50Mbps Long GOP 4096 x2160/3840x2160: YCC422 10 bit 2048 x1080/1920x1080: RGB444 12 bit, RGB444 10 bit , YCC422 10 bit Bit rates (depending on recording mode): 810/440/410/310/225/210/170/160/ 90Mbps Intra-frame 50 Mbps Long GOP
ProRes Recording Bit Rate/ Sampling (50Hz Mode)	CODEX CDX-36150: 4K/QFHD: ProRes 422 HQ 10 bit 60 fps 2K/FHD: ProRes 422 HQ 10 bit 120 fps, ProRes 4444 XQ 12 bit 60 fps ProRes 4444 12 bit 60 fps, Crop 2K/FHD: ProRes 422 HQ 10 bit 240 fps CFast 2.0™ Card: 4096x2160 YCC422 10bit/3840x 2160 YCC422 10bit 2048x1080 YCC422 10bit/1920x1080 YCC422 10bit 2048x1080 RGB444 12bit/1920x1080 RGB444 12bit Bit rates: ProRes4444/ ProRes422HQ /ProRes422
XF-AVC Proxy Recording Bit Rate/ Sampling (50Hz Mode) To SD Card	2048x1080 YCC420 8 bit/1920x1080 YCC420 8 bit Bit Rate: 24/35Mbps Long GO
Slow/Fast motion	Yes. 1 - 240 FPS depending on setting
Interval Record	No
Frame Record	No
Pre Record (cache record)	No
Relay Recording	Yes
Double Slot (simultaneous) Recording	Yes
Scan Reverse	Yes
HD->SD conversion	No
Photo storage media	SD/SDHC memory card
Photo Recording Size	Approx. 930 KB at 2048x1080; Approx 880 KB at 1920x1080

SYSTEM

Wave Form Monitor	Yes. Via MON.1/2, VIDEO or HDMI Terminals (Not available from SDI Out 1 -4) Line Display/Line and Spot/Line Select/Field Display/RGBDisplay/YPrPb
False Colour Display (Exposure Indication)	Yes. Via MON.1/2, VIDEO or HDMI Terminals (Not available from SDI Out 1 -4)
Colour Bars	SMPTE, EBU and ARIB color bars available. See the menu.
Peaking	Peaking 1, Peaking 2 (Colour, Gain, Frequency customisable)
Zebra	Level 1; Level 2; Both Output via HD-SDI or HDMI
Markers	On/Off (Aspect ratio, Aspect marker, Safety Zone Area, Safety Zone, Grid, Horizontal, Centre)

EVF

Built- In EVF	No
Optional EVF Accessory	Yes. OLED Electronic ViewFinder, EVF-V70

DISPLAY PANEL

Control Display	3.0-inch (7.66cm on the diagonal) colour liquid crystal, approx. 1.036 million dots

INPUTS/OUTPUTS

Audio in	XLR 3-pin connector x2 , 3.5 mm stereo mini jack (input only)
Headphone output	3.5 mm stereo mini jack (output only)
Video monitor output	MON.1/MON.2: BNC jack , output only
HDMI	HDMI connector (type A) (output only)
USB	No
SDI output	BNC jack (4 lines, output only)
Time code	BNC jack (input/output)
Genlock	BNC jack (input only/also serves as SYNC OUT connector)
Synch	BNC jack (output only/also serves as GENLOCK connector)
Component out	No
AV terminal	No
DC Output	DC 24V 2A jack Fisher 3-pin jack (output only), DC 12V 2A jack LEMO 2-pin jack (output only)
DC input	XLR 4-pin jack
Remote Control Terminal	REMOTE A connector 2.5 mm stereo mini-mini jack (input only) REMOTE B connector Round 8-pin jack (for RS-422)
Wireless Control Terminal	Yes, for WFT-E6B.WFT-E8
Lens terminal	12-pin jack
Ethernet terminal	Ethernet connector (RJ45) (supports 1000 BASE-T)
CTRL terminal	Canon's proprietary specifications, LEMO 7-pin jack
Video connector (For EVF)	Canon's proprietary specifications (special 13-pin jack, output only)

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Technical Specifications

MISC

Tally lamp	Yes
Custom Dial	Yes

SHOOTING FUNCTIONS

EXPOSURE

Exposure metering	Manual exposure determined by shutter setting, iris setting, ISO/gain setting and ND filter setting, Push Auto Iris, Auto Iris
Exposure compensation	Yes
Auto Exposure mode	Auto Iris
Push Auto Iris	Yes EF model all compatible lenses, PL Version compatible Canon Cine Servo lenses only
Exposure Lock	No
Auto Gain Control setting	Yes
ISO Sensitivity	1-Stop Display: [100], 160(*), 200, 400, 800, 1600, 3200, 6400, 12800, 25600, [51200,102400] [---] Displayed when ISO speed expansion is ON. (*) Displayed when ISO speed expansion is OFF 1/3 Stop Display: [100,125], 160, 200, 250, 320, 400, 500, 640, 800, 1000, 1250, 1600, 2000, 2500, 3200, 4000, 5000, 6400, 8000, 10000, 12800, 16000, 20000, 25600, [32000,40000,51200,64000, 80000,102400] [---] When ISO speed expansion is ON.
Auto Focus System **(EF Version Only)**	Dual Pixel CMOS AF, Contrast AF
AF Frame Sizes **(EF Version Only)**	Large; size equivalent to approx. 20% (vertical) x 25% (horizontal) of the image display range Small; size equivalent to approx. 20% (vertical) x 8% (horizontal) of the image display range Selectable AF point over 80% (approx.) of sensor
Auto Focus Modes **(EF Version Only)**	One-Shot AF, Continuous AF and AF-Boosted MF are the available modes. All of these modes take effect when the AF/MF switch of the EF lens is at the AF setting. One-Shot AF Continuous AF AF-Boosted MF
Face Detection AF **(EF Version Only)**	Face Priority or Face Only.
Focus Guide	EF version: All compatible Canon EF lenses, Canon Cine Servo Lenses PL Version: Compatible Canon Cine Servo lenses
Gain setting	[-6dB,-3dB], -2dB(*), 0dB, 3dB, 6dB, 9dB, 12dB, 15dB, 18dB, 21dB, 24dB, 27dB, 30dB, 33dB, 36dB, 39dB, 42dB, [45dB,48dB,51dB,54dB] [---] Displayed when ISO speed expansion is ON. (*) Displayed when ISO speed expansion is OFF. When ISO speed expansion is ON: between -2 dB and 54 dB When ISO speed expansion is OFF: Any value from -2 dB to 42 dB in 0.5 dB increments can be set.

SHUTTER SPEED

Control Modes	Off; Speed; Angle; Clear Scan (CS); Slow Shutter (SLS)
Shutter speed	1/1 to 1/2000 depending on frame rate and Shutter Control Mode, 39 setting options
Shutter Angle	11.25° to 360° depending on frame rate
Slow Shutter (SLS)	1/3, 1/4, 1/6, 1/8, 1/12, 1/15, 1/25, 1/30 depending on frame rate
Clear Scan	24.00 Hz* to 250.40 Hz (*) The frequency will differ depending on the frame rate setting.

CUSTOM PICTURE

Stored Configurations	Preset: Canon Log 3 : C.Gamut (Canon Log 3/ Cinema Gamut/Neutral) Canon Log 3 : BT.2020 (Canon Log 3/ BT.2020 Gamut/Neutral) Canon Log 3 : DCI-P3 (Canon Log 3/ DCI-P3 Gamut/Neutral) Canon Log 3 : BT.709 (Canon Log 3/ BT.709 Gamut/Neutral) Canon Log 2 : C.Gamut (Canon Log 2/ Cinema Gamut/Neutral) Canon Log 2 : BT.2020 (Canon Log 2/ BT.2020 Gamut/Neutral) Canon Log 2 : DCI-P3 (Canon Log 2/ DCI-P3 Gamut/Neutral) Canon Log 2 : BT.709 (Canon Log 2/ BT.709 Gamut/Neutral) Canon Log (Canon Log / BT.709 Gamut/ Cinema EOS Original) BT.2020 (Wide DR/BT.2020 Gamut/Neutral) BT.709 (Wide DR/ BT.709 Gamut/Neutral) Main Settings: Canon Log 3,Canon Log 2, Canon Log, Wide DR, Normal 1(Standard), Normal 2 (x4.0),Normal 3 (BT.709), Normal 4 (x5.0) Colour Space: BT.709 Gamut, BT.2020 Gamut, DCI-P3 Gamut,Cinema Gamut Colour Matrix: Neutral, Production Camera, Cinema EOS Original, Video, Off
Storage Medium	SD/SDHC memory card (all customisation data and metadata), up to 20 Custom Pictures per card
Master Pedestal	-50 to +50
Master Black	-50 to +50 for each channel , R,G,B
Black Gamma	Adjustable Level, Range and Point
Low Key Saturation	-50 to +50 adjusts colour level in low brightness area
Knee	Adjusts over exposure characteristic, start, slope, saturation
Sharpness	Adjustment for Level, H Detail Freq., Coring, HV Detail Balance, Limit, Select, Knee Aperture and Level dependent sharpness
Noise reduction	Off, On (1 to 12)
Skin detail	Off, Low, Middle, High / Hue, Chroma, Area, Luminance. 32 steps
Selective Noise Reduction	Off, Low, Middle, High / Hue, Chroma, Area, Luminance.
Colour matrix	Phase, Gain and RGB adjustment, in tandem with Gamma selection
White balance	-50 to +50 for R and B colours
Colour correction	Area selection / area revision of two areas
Setup level	-50 to +50 On/Off
Clip 100% IRE	Limits output to 100% after setup adjustment

WI-FI & GPS SPECIFICATIONS

GPS Information **(Optional Accessory)**	Latitude/Longitude/Elevation, Coordinated Universal Time (UTC)

WHITE BALANCE

Auto	YES
Preset	Daylight (5400K), Tungsten (3200K), Kelvin (2000K-15000K, 100K intervals), Set A, Set B
White Balance Shift	YES. -9 to +9 (Daylight and Tungsten only)

BLACK BALANCE

Black balance adjustment	YES

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Technical Specifications

TIME CODE

Countup system
Regen, RecRun, FreeRun, External, Hold (Drop frame available for some frame rates)

Start value setting
"00:00:00:00", Set/Reset selectable

AUDIO

Recording
Internal & Capture Drive recording: linear PCM 48 KHz, 24-bit, 4-ch
RAW (SDI OUT): linear PCM 48 KHz, 16-bit, 2-ch
Digital input available following two-channel (XLR), analog input, AES3 standards (48 kHz/24-bit/2-ch).

ACCESSORIES

Supplied
Mic holder unit, Clamp base, Handle unit, Extension unit attachment fittings, Base legs x4, Allen key (1/4"), Allen key (M4), Reinforcing plate, Measuring hook x2, Lithium battery(CR2025)

Optional
(including those not currently for sale)
Canon Remote Controller RC-V100, Canon Wireless Transmitter WFT-E6 / WFT-E8, Canon GPS Receiver GP-E1, Canon Unit Cable UN-5/UN-10, Canon 8-pin Remote Cable RR-10 / RR-100, Canon B4 Mount Adapter MO-4E / MO-4P, Canon OLED Electronic View Finder EVF-V70, Canon Remote Operation Unit OU-700, Canon Shoulder Support Unit SU-15, Canon Shoulder Style Grip Unit SG-1, Canon Remote Operation Unit Cable UC-V75/UC-V1000

Third Party Accessories
Codex CDX-36150 (Codex Recorder for EOS C700)
IDX V-Mount battery

MISCELLANEOUS

Dimensions (Main Body Only)
(width x height x depth)
EF model
Approx. 167 x 154 x 327 mm (6.6 x 6.1 x 1.1 in)
PL model
Approx. 167 x 154 x 336 mm (6.6 x 6.1 x 1.1 in)

Weight (Body Only)
EOS C700: Approx. 3440 g (7.6 lb)
EOS C700 PL: Approx. 3600 g (7.9 lb)

Weight (Accessories)
Microphone holder unit: Approx. 80 g (2.8 oz.)/Clamp base: Approx. 120 g (4.2 oz.)/
Handle unit: Approx. 260 g (9.2 oz.)/Extension unit attachment bracket Approx. 9 g (0.32oz.)/Reinforcing plate. Approx. 56 g (2.0 oz.)/EVF-V70: Approx. 830 g (1.8 lb)/SG-1: Approx. 565 g (1.2 lb)/SU-15: Approx.930 g (2.1 lb)/ OU-700: Approx. 375 g (13.2 oz.)/
UC-V75: Approx. 50 g (1.8 oz.)/ UC-V1000: Approx. 450 g (15.9 oz.)/UN-5 unit cable Approx. 80 g (2.8 oz.)

Operating Temperature range
Approx. 0 to 40°C, 85% (relative humidity)
Approx. -5 to 45°C, 60% (relative humidity)

All specifications are subject to change without notice
* Firmware upgrades may be required to enable all camera features.
Visit the Canon Support website for more information, or contact your local Canon representative.

Footnotes
[1] Lens Mount Exchange is a payable option and must be carried out in a Canon Service Centre or Authorised Service Centre.
Users changing from PL to EF Mount option can also have Dual Pixel AF activated at the same time. Changing from EF to PL mount will result in the loss of Dual Pixel AF capability.

What's in the box?

- EOS C700
- Body cap
- Handle unit
- Clamp base
- Microphone holder
- Bottom surface feet x 4
- Measuring hook x 2
- Extension unit attachment
- Hexagonal wrenches x 2
- Reinforcing plate
- Button battery

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