

EOS-1D X Mark II

IMAGE SENSOR

Type	35.9 x 23.9 mm CMOS
Effective Pixels	Approx. 20.2 megapixels
Total Pixels	Approx. 21.5 megapixels
Aspect Ratio	3:2
Low-Pass Filter	Built-in/Fixed
Sensor Cleaning	EOS integrated cleaning system
Colour Filter Type	Primary Colour

IMAGE PROCESSOR

Type	Dual "DIGIC 6+"
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LENS

Lens Mount	EF (excludes EF-S / EF-M lenses)
Focal Length	Equivalent to 1.0x the focal length of the lens

FOCUSING

Type	TTL-secondary image-forming phase-difference detection system with dedicated AF sensor
AF System/ Points	61 Point / max of 41 cross-type AF points inc 5 dual cross type at f/2.8 and 61 points / 21 cross-type AF points at f/8 (11) The number of cross-type AF points will differ depending on the lens.
AF working range	EV -3 - 18 (at 23°C & ISO100)
AF Modes	One Shot AI Servo AF (AI Servo AF III+)
AF Point Selection	Automatic selection: All 61 point AF (based on EOS iTR AF setting) Manual selection: Single point AF (selectable points 61, 15, 9 or cross type only points selectable) Manual selection: Single point Spot AF Manual selection: AF point Expansion 4 points (up, down, left, right) Manual selection: AF point Expansion surrounding 8 points Manual selection: Zone AF (all AF points divided into 9 focusing zones) Manual selection: Large Zone AF (all AF points divided into 3 focusing zones) AF points can be selected separately for vertical and horizontal shooting
Selected AF point display	Superimposed in viewfinder and shown on Quick Control screen
AF Lock	Locked when shutter button is pressed half way or AF ON is pressed in One Shot AF mode
AF Assist Beam	Emitted by an optional dedicated Speedlite
Manual Focus	Selected on lens
AF Microadjustment	Manual: Enter adjustment +/- 20 steps (wide and tele setting for zoom lenses) Adjust all lenses by same amount Adjust up to 40 lenses individually Adjustments remembered for lens by serial number

EXPOSURE CONTROL

Metering modes	Approx. 360,000-pixel RGB+IR metering sensor, 216-zone metering. EOS Intelligent Subject Analysis system (1) Evaluative metering (linked to All AF point) (2) Partial metering (approx. 6.2% of viewfinder at centre) (3) Spot metering: Center spot metering (approx. 1.5% viewfinder at centre) AF point-linked spot metering Multi-spot metering (4) Centre weighted average metering
Metering Brightness Range	EV 0 - 20 (at 23°C, ISO100, with evaluative metering)
AE Lock	Auto: In the One-Shot AF mode with evaluative metering, AE lock takes effect when focus is achieved Manual: By AE lock button in P, Av, Tv and M modes
Exposure Compensation	+/-5 EV in 1/3 or 1/2 stop increments (can be combined with AEB).
AEB	+/-3 EV in 1/3 or 1/2 stop increments

Anti-flicker shooting	Yes. Flicker detected at a frequency of 100 Hz or 120 Hz. Maximum continuous shooting speed may decrease
ISO Sensitivity (8)	Auto 100-51200 (in 1/3-stop or whole stop increments) ISO can be expanded to L:50, H1: 102400, H2: 204800, H3: 409600
SHUTTER	
Type	Electronically-controlled focal-plane shutter
Speed	30-1/8000 sec (1/2 or 1/3 stop increments), Bulb (Total shutter speed range. Available range varies by shooting mode)
Shutter Release	Soft touch electromagnetic release
WHITE BALANCE	
Type	Auto white balance with the imaging sensor
Settings	AWB (Ambience priority/White priority), Daylight, Shade, Cloudy, Tungsten light, White Fluorescent light, Flash, Custom, Colour Temperature Setting White balance compensation: 1. Blue/Amber +/-9 2. Magenta/ Green +/-9
Custom White Balance WB Bracketing	Yes, 5 setting can be registered +/-3 levels in single level increments 3, 2, 5 or 7 bracketed images per shutter release Selectable Blue/Amber bias or Magenta/ Green bias
VIEWFINDER	
Type	Pentaprism
Coverage (Vertical/Horizontal)	Approx. 100%
Magnification	Approx. .76x(4)
Eyepoint	Approx. 20mm (from eyepiece lens centre)
Dioptre Correction	-3 to +1 m ⁻¹ (dioptr)
Focusing Screen	Interchangeable. Standard Focusing Screen Ec-C6 provided. Can be changed to Ec-A, B or L
Mirror	Quick-return half mirror
Viewfinder Information	AF information: Single/Spot AF points, AF Frame, AF status, Focus indicator, AF mode, AF point selection, AF point registration Exposure information: Shutter speed, aperture value, ISO speed (always displayed), AE lock, exposure level/compensation, flash metering, spot metering circle, exposure warning, AEB, metering mode, shooting mode Flash information: Flash ready, high-speed sync, FE lock, flash exposure compensation, red-eye reduction light. Image information: Card information, maximum burst (2 digit display), Highlight tone priority (D+). Composition information: Grid, Electronic level Other information: Battery check, Warning symbol, Flicker Detection, drive mode, white balance, JPEG/RAW indicator
Depth of field preview	Yes, with Depth of Field preview button
Eyepiece shutter	Built-in
LCD MONITOR	
Type	8.11cm (3.2") Clear View LCD II, approx. 1620K dots
Coverage	Approx. 100%
Viewing Angle (horizontally/vertically)	Approx 170° vertically and horizontally
Coating	Anti-reflection and Anti-smudge. Reinforced glass incorporated
Brightness Adjustment	Manual: Adjustable to one of seven levels
Touch-screen operations	Capacitive method. During Live View shooting and Movie shooting for AF Point Selection / Switching and for Magnified View. Touch-screen can be disabled
Display Options	(1) Quick Control Screen (2) Camera settings (3) Dual Axis Electronic Level (4) Custom Quick Control Screen

FLASH

Modes	E-TTL II Auto Flash, Metered Manual
X-sync	1/250sec
Flash Exposure Compensation	+/- 3EV in 1/3 increments with EX series Speedlites
Flash Exposure Bracketing	Yes, with compatible External Flash
Flash Exposure Lock	Yes
Second Curtain Synchronisation	Yes
HotShoe/ PC terminal	Yes/ Yes
External Flash Compatibility	E-TTL II with EX series Speedlites, wireless multi-flash support
External Flash Control	via camera menu screen

SHOOTING

Modes	Program AE , Shutter priority AE, Aperture priority AE, Manual (Stills and Movie), Bulb, Custom (x3)
Picture Styles	Auto, Standard, Portrait, Landscape, Fine Detail, Neutral, Faithful, Monochrome, User Defined (x3)
Colour Space	sRGB and Adobe RGB
Image Processing	Highlight Tone Priority Auto Lighting Optimizer (4 settings) Long exposure noise reduction High ISO speed noise reduction (4 settings) Lens optical correction (3): - Peripheral illumination correction - Chromatic aberration correction - Distortion correction (during/after still photo shooting) - Diffraction correction (during/after still photo shooting) - Digital Lens Optimizer (after still photo shooting) Resize to M1, M2 or S (6) Cropping: JPEG images can be cropped (Aspect ratio is fixed - 3:2 or 2:3) - 41 cropping sizes selectable, from 13% to 95% (diagonal) - Switch between vertical and horizontal cropping orientation - Cropping frame can be moved using touch screen operation RAW image processing (7) Multiple exposure
Drive modes	Single, Continuous High, Continuous Low, Silent single, Silent Continuous High, Silent Continuous Low, Self timer (2s+remote, 10s+remote)
Continuous Shooting	Max. Approx. 14fps. with full AF / AE tracking, speed maintained for up to unlimited number of JPEGs or 170 RAW images, with CFast 2.0™ card (1) (2) (10) Max. 16fps in Live View mode with mirror locked up and exposure and AF locked on first frame

LIVE VIEW MODE

Type	Electronic viewfinder with image sensor
Coverage	Approx. 100% (horizontally and vertically)
Frame Rate	29.97 fps
Focusing	Manual Focus (Magnify the image 5x or 10x at any point on screen) Autofocus: Dual Pixel CMOS AF (Face Detection and Tracking AF, FlexiZone - Single), available with all EF lenses
Metering	Real-time evaluative metering with image sensor (315-zone) Partial metering (approx. 6.5% of Live View screen) Spot metering (approx. 2.8% of Live View screen) Center-weighted average metering Active metering timer can be changed
Display Options	3 levels available through INFO. button: No information, Basic shooting information, Histogram Multiple Exposure status also available in Multiple Exposure mode

FILE TYPE - Stills

Still Image Type	JPEG: 10 compression options RAW: RAW, M-RAW, S-RAW (14bit, Canon original RAW 2nd edition) Complies with Exif 2.30 and Design rule for Camera File system 2.0 Complies with Digital Print Order Format [DPOF] Version 1.1
RAW+JPEG simultaneous recording	Yes, any combination of RAW + JPEG possible, separate formats to separate cards possible
Image Size	JPEG: (L) 5472x3648, (M1) 4368x2912, (M2) 3648x2432, (S) 2736x1824 RAW: (RAW) 5472x3648, (M-RAW) 4104x2736, (S-RAW) 2736x1824
File Numbering	New folders can be manually created and selected (1) Consecutive numbering (2) Auto reset (3) Manual reset

EOS Movie

Movie Type	MOV Video: 4K (17:9) 4096 x 2160 - Motion JPEG (internal recording only), Full HD - MPEG4 AVC / H.264 variable (average) bit rate, Audio: Linear PCM MP4 Video: Full HD (16:9) 1920 x 1080 - MPEG4 AVC/H.264, Audio: AAC
Movie Size	4K (17:9) - 4096 x 2160 Full HD (16:9) - 1920 x 1080
Frame Rate	119.9p/59.94p/29.97p/24.00p/23.98p (with NTSC) 100.0p/50.00p/25.00p/24.00p (with PAL) 119.9p/100.0p in Full HD quality High Frame Rate movie only
Colour Sampling (Internal recording)	4K - YCbCr4:2:2 (8 bit) Full HD - YCbCr4:2:0 (8 bit)
Movie Length	4K and Full HD - Max duration 29min 59sec. (excluding High Frame Rate movies). No 4GB file limit with exFAT CF or CFast card
High Frame Rate Movie	MOV Video: Full HD - 1920 x 1080 at 100fps or 119.9fps Recorded as 1/4-speed slow motion movie Single scene maximum recording up to 7min 29sec.
4K Frame Grab	8.8 megapixel JPEG still image frame grab from 4K movie possible
Bitrate / Mbps	MOV: 4K (59.94p/50.00p): Approx. 800 Mbps 4K (29.97p/25.00p/24.00p/23.98p): Approx. 500 Mbps Full HD (119.9p/100.0p)/ALL-I: Approx. 360 Mbps Full HD (59.94p/50.00p)/ALL-I: Approx. 180 Mbps Full HD (59.94p/50.00p)/IPB Approx. 60 Mbps Full HD (29.97p/25.00p/24.00p/23.98p)/ALL-I: Approx. 90 Mbps Full HD (29.97p/25.00p/24.00p/23.98p)/IPB (Standard): Approx. 30 Mbps MP4: Full HD (59.94p/50.00p)/IPB (Standard): Approx. 60 Mbps Full HD (29.97p/25.00p/24.00p/23.98p)/IPB (Standard): Approx. 30 Mbps Full HD (29.97p/25.00p)/IPB (Light): Approx. 12 Mbps
Microphone	Built-in monaural microphone (48Khz, 16 bit x 2 ch)
HDMI Display	External monitor only, External Monitor only without information display or Simultaneous on camera and external monitor
HDMI Output	Full HD recording only, uncompressed YCbCr 4:2:2, 8-bit, sound output via HDMI is also possible
Focusing	Dual Pixel CMOS AF with Face Detection and Tracking AF, Movie Servo AF Manual Focus
ISO	4K - Auto: 100-12800, H: 25600, H1: 51200, H2: 102400, H3: 204800 Full HD - Auto: 100-25600, H: 51200, H1: 102400, H2: 204800

Built-in GPS	
Geotag Information Positioning Modes	Longitude, Latitude, Elevation, Coordinated Universal Time Mode 1: Camera continues to receive GPS signals at regular intervals when power is switched off Mode 2: GPS is switched off when power is switched off
Position Update Timing	Intervals of 1 sec., 5 sec., 10 sec., 15 sec., 30 sec., 1 min., 2 min. or 5 min.
Position Accuracy	Within approx. 30 m/98.4 ft (Based on good GPS satellite reception conditions on a clear day with no surrounding obstructions)
Compatible Satellite Navigation Systems	<ul style="list-style-type: none"> • GPS satellites (USA) • GLONASS satellites (Russia) • Quasi-Zenith Satellite Michibiki (Japan)
Log Files Format Log File Usage	NMEA Format. One log file per day based Transfer log data to memory card and copy it to a computer Use Map Utility to append the log file to the images
Digital Compass	Not provided
OTHER FEATURES	
Custom Functions Metadata Tag	34 Custom Functions with 104 settings User copyright information (can be set in camera) Image rating (0-5 stars) Image transfer with caption (Caption registered with EOS Utility)
LCD Panel / Illumination	Yes / Yes
Water/ Dust resistance	Yes
Voice Memo	Up to 30sec per image - 48Khz/16 Bit or 8Khz/8 Bit
Intelligent Orientation Sensor	Yes
Playback zoom	1.5x - 10x
Display Formats	(1) Single image (2) Single image with information (2 levels - Basic and Detailed) Lens information and RGB histogram White balance Picture Style Color space and noise reduction Lens optical correction GPS information (3) 4 image index (4) 9 image index (5) 36 image index (6) 100image index (7) Jump Display (1, 10 or 100 images, Date, Folder, Movies, Stills, Protected images, Rating) (8) Movie edit (9) RAW processing (10) Rating
Slide Show	Image selection: All images, by Date, by Folder, Movies, Stills, Protected images, Rating Playback time: 1/2/3/5/10 or 20 seconds Repeat: On/Off
Histogram	Brightness: Yes RGB: Yes
Highlight Alert	Yes
Image Erase	Single image, Selected images, Folder, Card
Image Erase Protection	Erase protection of Single image, Folder or Card
Self Timer	2 or 10 sec.
Menu Categories	(1) Shooting menu 1 - 6 (2) AF Menu 1 - 5 (3) Playback menu 1 - 3 (4) Setup menu 1 - 4 (5) Custom Functions menu 1 - 8 (6) My Menu (1 - 5 user selectable)

Menu Languages	25 Languages English, German, French, Dutch, Danish, Portuguese, Finnish, Italian, Norwegian, Swedish, Spanish, Greek, Russian, Polish, Czech, Hungarian, Romanian, Ukrainian, Turkish, Arabic, Thai, Simplified Chinese, Traditional Chinese, Korean and Japanese
Firmware Update	Update possible by the user (Camera, Lens, WFT, External Speedlite)
INTERFACE	
Computer Other	SuperSpeed USB 3.0 HDMI mini out (Type C, HDMI-CEC compatible), System Extension Terminal (for WFT-E8 and WFT-E6), External Microphone In / Line In (Stereo mini jack), Headphone socket (Stereo mini jack), RJ-45 (gigabit ethernet), N3-type terminal (remote control terminal)
DIRECT PRINT	
Canon Printers PictBridge	Canon Compact Photo Printers and PIXMA Printers Yes
STORAGE	
Type	1x CompactFlash Type I (UDMA 7 compatible) (Incompatible with Type II and Microdrive) 1x CFast 2.0™
SUPPORTED OPERATING SYSTEM	
PC & Macintosh	Windows 7 (excl. Starter Edition) Windows 8 and Windows 10 OS X v10.7-10.11
SOFTWARE	
Image Processing Other	Digital Photo Professional 4 (RAW Image Processing) EOS Utility 3 (inc. Remote Capture), Picture Style Editor
POWER SOURCE	
Batteries Battery life Battery Indicator Power saving Power Supply & Battery Chargers	Rechargeable Li-ion Battery LP-E19 (supplied) / LP-E4N / LP-E4 Approx. 1210 shots (at 23°C) (5) Approx. 1020 (at 0°C) 6 levels + percentage Power turns off after 1, 2, 4, 8, 15 or 30mins Battery charger LC-E19 (supplied), AC Adapter AC-E19, DC Coupler DC-E19, AC Adapter kit ACK-E4
PHYSICAL SPECIFICATIONS	
Body Materials Operating Environment Dimensions (WxHxD) Weight (body only)	Magnesium Alloy body covers 0 – 45 °C, 85% or less humidity 158 x 167.6 x 82.6mm Approx. 1340 g
ACCESSORIES	
Viewfinder Wireless File Transmitter Lenses Flash Remote Controller/ Switch Other	Eyecup Eg, Eg-series Dioptric Adjustment Lens with Rubber Frame Eg, Anti Fog Eyepiece Eg, Angle Finder C Wireless File Transmitter WFT-E8 Wireless File Transmitter WFT-E6 All EF lenses (excluding EF-S / EF-M lenses) Canon Speedlites (90EX, 220EX, 270EX, 270EX II, 320EX, 380EX, 420EX, 430EX, 430EX II, 430EX III 550EX, 580EX, 580EX II, 600EX, 600EX-RT, Macro-Ring-Lite MR-14EX, Macro Ring Lite MR-14EX II, Macro Twin Lite MT-24EX, Speedlite Transmitter ST-E2, Speedlite Transmitter ST-E3-RT) Remote control with N3 type contact, Wireless Controller LC-5 and Speedlite 600EX-RT Hand Strap E2, Connect Station CS100

All data is based on Canon standard testing methods except where indicated.
Subject to change without notice.

1 Large/Fine(Quality 8) resolution

2 Based on Canon's testing conditions, JPEG, ISO 100, Standard Picture Style. Maximum fps and buffer capacity may be reduced depending on the camera's settings, light level, subject, memory card brand and capacity, image recording quality, ISO speed, drive mode, Picture Style, Custom functions etc.

3 Not possible with M-RAW and S-RAW

4 with 50mm lens at infinity, -1m^{-1} dpt

5 Viewfinder shooting. Based on the CIPA Standard and using the battery supplied with the camera, except where indicated

6 Frame grab images from 4K movies and images shot in S quality cannot be resized

7 RAW image processing during image Playback only

8 Recommended Exposure Index

10 Figures quoted are when used with CFast 2.0™ cards

11 The number of AF points, cross-type AF points, and dual cross-type AF points vary depending on the lens used