EOS-1Ds *Mark III*

Imaging Sensor

Effective Resolution	Approx. 21.1 million pixels (total pixels: approx. 21.9 million)
Recording pixels	5616 x 3744
Sensor type	Full-frame CMOS sensor, with primary R-G-B filtration (28 x 18.7 mm)
Pixel size	6.4 microns square
Lens focal length factor	None (1x)

Performance

Imaging processor

Dual DIGIC III image processors

Maximum frames per second

5 fps (at shutter speeds $\frac{1}{500}$ sec. or faster, in all recording modes)

Drive modes

- Single
- Silent (Single-frame)
- High-speed continuous (5 fps; adjustable 5~2 fps)
- Low-speed continuous (3 fps; adjustable 4~1 fps)

Maximum number of frames / burst

- JPEG: 45 (full-resolution, Level-8 fine compression)
- RAW: 15
- RAW plus JPEG: TBA

Flash sync speed

Up to $\frac{1}{250}$, with EX-series Speedlites

Shutter "lag" time

Approx. 55ms (from half-way to fully depressing shutter button)

Start-up time

0.15 seconds

Image Recording

Image type

JPEG, RAW (14 bit)
- Improved A/D conversion to 14-bit processing for 16,384 individual tones

Highlight tone priority

Improve tonal range in highlight areas by approx. 1 stop (C.Fn II-2)

Noise Reduction

- Long exposures 1 sec. and longer (C.Fn II-1)
- High-speed ISO images (C.Fn II-2)

Storage Media

Compatible with two card slots and external storage media
- CompactFlash (Type I or II, including MicroDrives™)
- SD card slot (SDHC-compatible for 2GB higher SD cards)
- USB external Hard Drives (requires optional WFT-E2A wireless transmitter)

Recording options

Multiple media recording options:
- Record to only one memory card
- Record the same image to both SD and CF card
- Record RAW image to a CF card and JPEG image to a SD card

New additional features:
- Files can be automatically written to another media if card beomes full
- Select different image sizes and save to different media (example: different JPEG sizes)
- Record same image using all three media options, including external hard drive
- Copy files manually from one card to another, or to connected USB hard drive

Image format options	• JPEG (compression adjustable in 10 steps on menu)
	• RAW ("CR2" RAW file format)
	• RAW + JPEG (selectable on rear LCD panel)
	• sRAW ("CR2" small RAW file format; 1⁄4 file size of full-resolution RAW, approx 5.2MP)
Resolution options	"Large" — 5616 x 3744 (approx. 21.0 million pixels)
	"Medium 1" — 4992 x 3328 (approx. 16.6 million pixels)
	"Medium 2" — 4080 x 2720 (approx. 11.0 million pixels)
	"Small" — 2784 x 1856 (approx. 5.2 million pixels)
	"RAW" — 5616 x 3744 (approx. 21.0 million pixels)
	"sRAW" — 2784 x 1856 (approx. 5.2 million pixels)
Data recording format	DCF 2.0 and EXIF 2.21
	• EXIF 2.21 — applies "Adobe 1998 RGB" color space tag to images
Sound recording	Maximum 30 seconds per sound clip (more than one clip can be assigned to each image)
Folder settings	Create new folder and select on memory card

Dust Reduction

3-part approach to dust reduction	EOS Integrated Cleaning System
	• <u>Self-cleaning sensor unit</u> — low pass filter in front of the sensor vibrates at a very high frequency for about four seconds to "shake" loose dust and dirt off; Occurs on start-up and shut down — can also be activated by user, or totally disabled
	• <u>Dust Delete Data</u> — A test shot is taken and any dust spots are "mapped" and added to each image's text data; Automatic removal possible in Canon DPP software
	• Manual — User can lock up mirror to blow off any dust or have service technician wipe sensor clean

Image Playback

LCD monitor	<u>3.0-inch (diagonal)</u> TFT color; approx. 100% coverage
	• Approx. 230,000 pixels
Playback options	• Single image
	• Single image with info and histogram
	• 4-index or 9-index image
	• magnified zoom display

Live View

Type	Electronic viewing of scene, directly off imaging sensor, on LCD monitor
Coverage	Approx. 100%
Metering	Real-time evaluative metering (off CMOS imaging sensor)
Grid display	Two vertical and two horizontal lines; can be turned on or off by user.
Aspect ratio	Masking for 6:6, 3:4, 4:5, 6:7, 10:12, and 5:7
PC live view	Enabled using EOS Utility (v.2.0) (Use computer monitor as viewfinder)

Exposure Control

Shutter speed range — 30 seconds ~ $\frac{1}{8000}$, plus bulb ($\frac{1}{3}$, $\frac{1}{2}$, or full-stop increments when user-set)

Maximum flash sync speed — $\frac{1}{250}$ sec.

Anticipated shutter durability — 300,000 exposures

ISO range —
- 100~1600, in $\frac{1}{3}$-stop increments
- ISO 50 and 3200 can be added via ISO extension on menu
- New ISO safety shift (camera shifts ISO in Tv or Av mode if needed to preserve exposure)

Exposure modes — Manual, Aperture-priority, Shutter-priority, Program, Bulb

Metering — 63-zone metering linked to 19 AF points
- Evaluative metering (63-zone, linked to active AF point)
- Center-weighted metering
- Partial metering (approx. 8.5% of the picture area)
- Spot metering (approx. 2.4% of the picture area)
  Options: Center only; linked to any of 19 AF points;
  and Multi-spot metering up to 8 readings

Metering range — EV 0~20 (all patterns; at normal temperatures)

Exposure compensation — Possible in any Auto exposure mode; up to +/- 3 stops, in $\frac{1}{3}$-stop increments

Exposure bracketing — 2, 3, 5, or 7 shots (selectable with C.Fn I-6); up to +/- 3 stops, in $\frac{1}{3}$-stop increments
- Standard Auto bracketing, via aperture and/or shutter speed

Flash

Compatible flashes — Canon EX-series Speedlites (TTL flash not possible with non-EX speedlites)

E-TTL II — 63-zone metering with EX-series speedlites
- Evaluative E-TTL flash metering (can be averaged over all 63 metering zones)
- Distance information now used from compatible Canon EF lenses for flash calculations

Flash Metered Manual — Possible with flash in Manual mode, via FEL button

Flash Exposure Lock — 2.4% Spot metering of pre-flash illumination

Flash exposure compensation — Possible on body for certain speedlites (up to +/- 3 stops, in $\frac{1}{3}$-stop increments)

Flash exposure bracketing — Possible with 580EX II, 580EX, 550EX, MR-14EX, and MT-24EX (set on speedlite)

Hi-speed flash speed — Possible with EX-series speedlites, up to $\frac{1}{8000}$ sec., normal maximum x-sync is $\frac{1}{300}$

PC socket — Standard; sync line voltages up to 250v are OK through PC socket or hot shoe

Autofocus

Number of AF points
45 (inside of ellipse area of focus screen)
- 19 high-precision cross-type points (require ƒ2.8 or faster lens for cross-type coverage)
- 26 assists points (require ƒ5.6 or faster lens)

Number of cross-type points
19 points — any of these can be user-selected with manual AF point selection
(high-precision type points; require a ƒ2.8 or faster lens; Center point requires ƒ4 or faster)

Focus modes
- One-Shot AF (for stationary subjects)
- AI Servo AF (for tracking moving subjects)

Manual AF point selection
- 19 AF points (default)
- Inner 9 AF points (via C.Fn III 9-1)
- Outer 9 AF points (via C.Fn III 9-2)

Automatic AF point selection
Possible in both One-shot and AI Servo AF modes

AF On button
AF button on rear of body executes AF and metering;
AE Lock button can switch functions with AF On button via C.Fn IV-2-1

Viewfinder

Coverage
100%, vertically and horizontally

Eyepoint
20mm

Magnification
0.75x

Focusing screen
Ec-C IV (New standard focusing screen)
- Interchangeable with Ec-series screens from all previous EOS-1 series cameras)

Diopter
-3~+1.0 (user-adjustable); Further adjustment possible with Eg series diopter lenses

Mirror lock-up
Possible via C.Fn III-14
- New: option to have mirror remain up for multiple pictures, until SET button is pressed

Eyepiece shutter
Built-in; activated by lever to right of eyepiece

Color control

White balance modes
- Auto (WB is read off of CMOS imaging sensor only)
- Pre-set (Daylight, Shade, Cloudy Tungsten, Fluorescent, Flash)
- Custom (Reading taken off 18% Gray card or white object;
  up to 5 custom readings can be stored)
- Color Temperature (range 2500k ~ 10,000k; 100k increments)
- Personal WB settings — PC-1 ~ PC-5
  (up to five, created in computer and uploaded into camera)

White balance compensation
Alter white balance in amber~blue direction, and/or magenta~green direction +/- 9 levels

White balance bracketing
Alter white balance in amber~blue direction or magenta~green direction, up to 15 mireds

Picture Style
Allows user to easily adjust the "look" of JPEG images, or RAW files processed with
Canon software
- Six presets —Standard, Portrait, Landscape, Neutral, Monochrome, Faithful
- Adjustable settings: Sharpening, Contrast, Color Saturation, and Color Tone

Interface

Digital terminal	USB 2.0 Hi-speed (Type B port)
Video output terminal	NTSC/PAL
System extension terminal	15-pin terminal (connects new Wireless File Transmitter WFT-E2A)
Remote control terminal	N3-type terminal

Customization

Custom Functions	57 Custom Functions (Personal functions built into Custom Functions)
My Menu	Up to six menu settings can be stored separately for quick access

Power Supply

Battery	New lightweight LP-E4 Lithium-Ion battery pack
Battery information	• Current Power Source in use (battery, AC adapter, etc.) • Remaining capacity (displayed in 1% increments, on camera's LCD monitor) • Current shutter count on this battery charge • Recharge performance (displays when battery should be discarded; 3 levels)
Main switch	Three settings: Off, On, and On with Quick Control Dial active)

Camera Body

Exterior material	Magnesium alloy
Chassis material	Magnesium alloy, including mirror box
Operating temperature range	32˚~113˚F (0°~45°C); 85% or lower relative humidity
Dimensions, W x H x D	6.1 x 6.2 x 3.1 in. (156 x 160 x 80mm)
Weight (without battery or CF card)	41.3 oz. (1205g)

Note: Underlined items are new features or specs superior to previous
EOS-1Ds Mark II camera