

Major Specifications

Type

Type Digital AF/AE SLR
Recording medium Type I or II CF card
Image size 35.8 x 23.8 mm (1.4 x 1 in)
Compatible lenses Canon EF lenses
Lens mount Canon EF mount

Imaging Element

Type High-sensitivity, high-resolution, large single-plate CMOS sensor
Pixels Effective pixels: Approx. 11.1 megapixels
Total pixels: Approx. 11.4 megapixels
Aspect ratio 3:2
Color filter system RGB primary color filter
Low-pass filter Located in front of the CMOS sensor, non-removable

Recording System

Recording format Design rule for Camera File system (except Color Matrix 4) and RAW
Image format JPEG, RAW (12bit)

RAW+JPEG simultaneous recording Provided
File size (on CF card) (1) Large/Fine: approx. 4.1 MB (4064x2704 pixels)
(2) Large/Normal: approx. 1.7 MB (4064x2704 pixels)
(3) Small/Fine: approx. 1.4 MB (2032x1352 pixels)
(4) RAW: approx. 11.4 MB (4064x2704 pixels)

* Exact file sizes depend on the subject and ISO speed.

Folders Folder creation and selection is possible
File numbering (1) Consecutive numbering
(2) Auto reset
(3) Manual reset

Processing parameters Standard parameters plus up to three custom processing parameters can be set

Interface IEEE 1394 (with dedicated cable)

White Balance

Settings Auto, daylight, shade, overcast, tungsten light, fluorescent light, flash, custom, color temperature setting, personal white balance (Total 10 settings)

Auto white balance Hybrid auto white balance with the CMOS sensor and a dedicated, external sensor

Personal white balance Up to three personal white balance settings can be registered

Color temperature compensation White balance bracketing: +/-3 stops in full-stop increments

Color Matrix

Type Two types of color space, sRGB and Adobe RGB. Preferable type is selectable out of four types of color tone in sRGB (Total 5 types).

Viewfinder

Type Glass pentaprism
Coverage Approx. 100 percent vertically and horizontally with respect to the effective pixels

Magnification 0.7x (-1 diopter with 50mm lens at infinity)

Eye point 20 mm

Built-in diopter correction -3.0 - +1.0 diopter

Focusing screen Interchangeable (9 types), Standard focusing screen: Ec-CIII

Mirror Quick-return half mirror

(Transmission:reflection ratio of 37:63, no mirror cut-off with EF 1200mm f/5.6 or shorter lens)

Viewfinder information AF information (AF points, focus confirmation light), exposure information (shutter speed, aperture, manual exposure, metering range, ISO speed, exposure level, exposure warning), flash information (flash ready, FP flash, FE lock, flash exposure level), JPEG format, number of remaining shots, CF card information

Depth-of-field preview Enabled with depth-of-field preview button
Eyepiece shutter Built-in

Autofocus

Type TTL-AREA-SIR with a CMOS sensor
AF points 45 AF points (Area AF)
AF working range EV 0-18 (at ISO 100)
Focusing modes One-Shot AF
AI Servo AF
Manual focusing (MF)
AF point selection Automatic selection, manual selection, home position (switch to registered AF point)
Selected AF point display Superimposed in viewfinder and indicated on top LCD panel
AF-assist beam AF-assist beam is emitted by the dedicated Speedlite

Exposure Control

Metering modes TTL full aperture metering with 21-zone SPC

(1) Evaluative metering (linkable to any AF point)
(2) Partial metering (approx. 8.5% of viewfinder at center)
(3) Spot metering
• Center spot metering (approx. 2.4% of viewfinder at center)
• AF point-linked spot metering (approx. 2.4% of viewfinder)
• Multi-spot metering (Max. 8 spot metering entries)

(4)

Center-weighted average metering EV 0-20 (at 20°C with 50mm f/1.4 lens, ISO 100)

Exposure control systems Program AE (shiftable), shutter-priority AE, aperture-priority AE, depth-of-field AE, E-TTL autoflash, manual, flash metered manual

ISO speed range Equivalent to ISO 100-1250 (in 1/3-stop increments), ISO speed can be expanded to ISO 50 with C.Fn 3-1.

Exposure compensation Auto exposure bracketing (AEB): +/-3 stops in 1/3-stop increments. Bracketing methods

1.

Shutter speed or aperture

2.

ISO speed

User-set: +/-3 stops in 1/3-stop increments (can be combined with AEB)

Auto: Operates in One-Shot AF mode with evaluative metering when focus is achieved.

Manual: By AE lock button in all metering modes.

Shutter

Type Electronically-controlled, focal-plane shutter
Shutter speeds 1/8000 to 30 sec. (1/3-stop increments), bulb, X-sync at 1/250 sec.

Shutter release Soft-touch electromagnetic release

Self-timer 10-sec. or 2-sec. delay

Remote control Remote control with N3 type contact

Flash

EOS-dedicated Speedlite E-TTL autoflash with EX series Speedlite

PC terminal Provided

Drive System

Drive modes Single/Continuous

Continuous shooting speed Approx. 3 fps

Max. burst during 10 shots

continuous shooting * The maximum shots per burst depends on the subject, shooting mode, and ISO speed.

LCD Monitor

Type TFT color LCD monitor

Monitor size 2.0 inches

Pixels Approx. 120,000
Coverage 100% with respect to the effective pixels
Brightness control Adjustable to one of five levels

Image Playback

Image display format 1. Single image with information,
2. Single image,
3. Four image index,
4. Nine image index,
5. Magnified view (P.Fn-30)
Highlight alert In display formats 1 and 2 above, any overexposed highlight areas will blink in the image display.

Image Protection and Erase

Protection Erase protection of one image, all images in a folder, or all images in the CF card can be applied or canceled at one time.
Erase One image, all images in a folder, or all images in the CF card can be erased (except protected images) at one time.

Sound Recording

Recording method The voice narration recorded with the built-in microphone is attached to the image.
File format WAV
Recording time Max. 30 sec. per recording

Menu

Menu categories 1. Recording menu,
2. Playback menu,
3. Set-up menu,
4. Custom/Personal Functions menu
LCD monitor language Japanese, English, French, German, Spanish
Firmware update Update possible by the user

Customizing Function

Custom Functions 21 with 67 settings
Personal Functions 26

Power Source

Battery One Ni-MH Pack NP-E3
* AC power can be supplied via the AC adapter and DC coupler.

Number of shots At 20°C/68°F: Approx. 600
At 0°C/32°F: Approx. 450
* The above figures apply when a fully-charged Ni-MH Pack NP-E3 is used.

Battery check Automatic

Power saving Provided. Power turns off after 1, 2, 4, 8, 15, or 30 min.

Back-up battery One CR2025 lithium battery

Dimension and Weight
Dimensions (W x H x D) 156 x 157.6 x 79.9 mm / 6.1 x 6.2 x 3.1 in.
Weight 1265 g / 44.6 oz. (body only, battery: 335 g /11.8 oz.)

Working Conditions
Working temperature range 0 - 45°C / 32 - 113°F
Working humidity 85% or lower

• All the specifications above are based on Canon's testing and measuring standards.
• The camera's specifications and physical appearance are subject to change without notice.

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Canon

EOS-1 Ds

DIGITAL

Digital Camera for Professionals



Canon

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U.S.A.

CANON U.S.A., INC.
One Canon Plaza, Lake Success, NY11042, U.S.A.
For all inquiries about this camera, please phone 1-800-OK-CANON or visit our Web site:
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11.1 million pixels. A full-frame CMOS sensor. This is what professionals have been asking for.

The numbers are staggering: 11.1 million pixels. 3 fps for up to 10 consecutive frames in a burst. It's digital like you've never seen before.

The EOS-1Ds advantage starts at the imaging sensor.

And what a tremendous breakthrough it is. A full-frame CMOS sensor – manufactured by Canon – with an imaging area of 24 x 36mm, the same dimensions used by full-frame 35mm SLRs. It has 11.1 million effective pixels with a maximum resolution of 4,064 x 2,704 pixels. This is almost double the resolution currently considered state-of-the-art by most professionals.



CMOS sensor (Actual size)

Your wide-angle lenses act like wide-angle lenses.

Finally, every EF lens will work the same on a digital SLR as it does on your 35mm film cameras, with the same coverage. It's one less thing for the pro to think about on location, and it's one more thing to ease the transition from film into digital. Even for wide-angle shooters.

The proven performance of Canon's own CMOS technology evolves to the next level.

The EOS D30 and D60 showed the world how Canon-developed CMOS imaging sensors combine superb color, dynamic range, and low noise. Now, the EOS-1Ds almost doubles the D60's resolution for a quantum leap in digital image quality. With the same Canon CMOS benefits.

Battery life has been improved by reducing power consumption.

Battery longevity is an important consideration, particularly when shooting outdoors. Fortunately, CMOS sensors consume less power than CCD sensors of the same resolution. Moreover, the

EOS-1Ds's electronic circuits ensure that electricity flows only to active components, in the absolute minimum required amounts. Thanks to the EOS-1Ds's efficiency, the NP-E3 battery pack lasts up to 600 exposures (at normal temperatures) on a single charge.

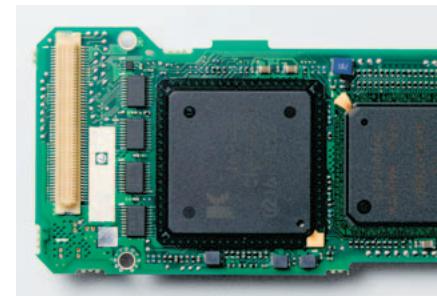
Exclusive new technology meets the challenge of processing large files.

Today's digital pros demand speed and responsiveness along with high quality, and Canon has developed new 2-channel reading to ensure that the EOS-1Ds delivers both. It doubles the reading speed of previous systems, and turns the dream of combining incredible 11.1 million pixel resolution with 3 fps shooting speeds into a reality.

More exclusive technology: Canon's imaging engine.

Unprecedented file sizes, processed with unprecedented quality at unprecedented speed.

The EOS-1Ds's imaging engine is one of the keys to its exceptional image quality. This advanced "chip" processes and assembles image data captured by the sensor to achieve the same color accuracy and wide tonal range as regular film-based cameras. And even with almost twice the pixel resolution of previous pro cameras, the imaging engine still supports a 10-frame buffer memory at framing rates up to 3 fps!



Imaging engine

Extensive noise reduction measures ensure images of consistent high quality.

The EOS-1Ds reduces noise through various refinements. Dark current countermeasures and noise reduction processing in the imaging engine, for example, contribute to an extremely high S/N ratio, and an extremely low level of noise in the EOS-1Ds's images.

Versatile color control at the user's fingertips.

10 white balance (WB) modes and WB bracketing allow versatile response to different lighting conditions.

The goal: accurate overall color balance in each and every image you shoot. The method: an incredible array of white balance (WB) options, including a Canon exclusive – manual adjustment of color temperature in 100K increments from 2,800K~10,000K – and even a white balance bracketing function. The EOS-1Ds places color control where it should be: in the hands of the photographer.

Adjust default imaging settings in the camera, using Parameters.

The EOS-1Ds user has flexibility beyond the expected. Shooting in high or low contrast conditions? Add a parameter set with an adjusted Tone Curve*, and call it up on the menu whenever you want. Similar changes can be made to the amount of JPEG compression, and two types of in-camera sharpening.

* Tone curve settings must be customized and uploaded into the EOS-1Ds via computer.

Color Matrix: your choice of color saturation and color space.

Canon's unique Color Matrix function lets you select any of five different color characteristics. The Color Matrix 4 setting, for example, is optimized for Adobe RGB 1998 and provides a broad color spectrum with low saturation.

Only digital cameras give you this kind of freedom with ISO speeds.

Any ISO speed in the normal 100 to 1250 ISO range can be selected in 1/3-stop increments. When specialized needs arise, a Custom Function allows you to choose an ISO setting of 50. ISO speed bracketing is also possible (± 3 stops in 1/3-stop increments), enabling exposure to be varied while keeping the same shutter speed and aperture settings.

A large, 2-inch TFT LCD monitor – now with the option to magnify images.

The high-definition LCD monitor on the back of the EOS-1Ds can display vital information such as shooting and image data, a histogram and highlighted alerts. An enlargement mode available via Personal Function allows you to check the focus more closely by selecting and enlarging one of 25 sections of the image.

All the strength, responsiveness, and versatility you expect from Canon's best.

3 fps continuous shooting for up to 10 shots, even at the highest quality setting.

Fast data reading by the CMOS sensor and rapid imaging processing by the high-performance imaging engine together achieve a continuous shooting speed of 3 fps, even at the highest quality setting.

Simultaneous RAW and JPEG image recording for ultimate quality and convenience.

The RAW image format is ideal for printing and processing, while the JPEG format is convenient for quickly checking images and transferring data. With the EOS-1Ds you can record every shot in both of these formats simultaneously, at full speed, for maximum productivity.

High-speed IEEE1394 interface and large-capacity FAT32 format. The right combination for ultra high-quality image data.

The EOS-1Ds comes equipped with an IEEE1394 ("FireWire®") interface, allowing speedy plug-and-play data communication with computers. For studio photography, new 4.5m IEEE1394 cables are available. The camera automatically formats the CF card for either FAT16 or FAT32 according to the maximum storage capacity. FAT32 is selected for capacities higher than 2GB.

Capture the exact moment with a top shutter speed of 1/8000 sec.

The same durable, high-speed, high-precision mechanical shutter that professionals have come to trust in the EOS-1v is employed in the EOS-1Ds. Shutter speed can be selected between 1/8000 and 30 seconds in 1/3-stop increments, with X-sync up to 1/250 sec.

45-point Area AF for framing freedom and reliable AF performance.

The Area AF system offers 45-point Automatic, 45-point Manual, 11-point Manual, and 9-point Manual settings. Points are spread over an 8 x 15mm AF ellipse that covers a large part of the image.



Six metering options, for total exposure control in almost any situation.

In addition to 21-zone Evaluative Metering, Canon's metering system allows your choice of Center-weighted Metering, Central Partial Metering, Central Spot Metering, Focusing Point-linked Spot Metering or Canon's unique Multi-Spot Metering – the EOS-1Ds can automatically average up to eight separate spot meter readings.

High-speed response enhances ease of use.

With its shutter release time lag of 55ms and viewfinder blackout time of only 87ms, the EOS-1Ds's operation feels identical to that of the world's fastest 35mm AF SLR, the EOS-1v.

Highly durable, with excellent dust and moisture resistance, the EOS-1Ds is built to take on the world's harshest conditions.

Lightweight yet durable, with a chassis and external covers made of magnesium alloy, the EOS-1Ds is thoroughly sealed and protected from water and dust infiltration. Its rugged design meets professional demands for even the most hostile environments.

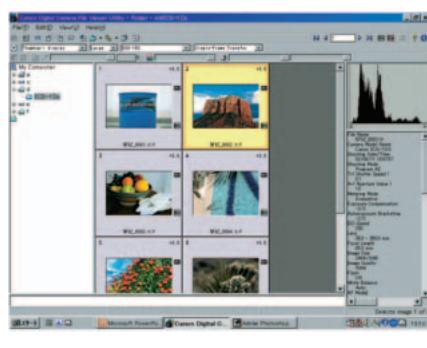
Sophisticated applications answer professional needs.

New File Viewer Utility for more convenient handling of RAW images.

This new stand-alone application enables "devel-

opment" of RAW images, viewing of images, and customization of camera settings right in the camera. It thus dramatically simplifies operation and accelerates image processing. The utility comes bundled with software that supports the latest operating systems* and handles various tasks, including image viewing and management, remote control of the camera, layout printing and image editing.

* Mac OS X compatibility planned for first quarter of 2003.



The world's first digital SLR that can prove its images are unaltered, original files.

An optional accessory Data Verification Kit DVK-E1 consisting of a dedicated IC card and card reader, together with special Windows 2000/XP software is available to verify that EOS-1Ds image files are absolutely unaltered. This may well be a landmark for digital imaging in law enforcement and many other documentary uses.

The EOS-1Ds is fully compatible with all Canon EF lenses, from ultra-wide-angle to super-telephoto. Canon's professional L-series lenses have received worldwide acclaim from professionals.

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