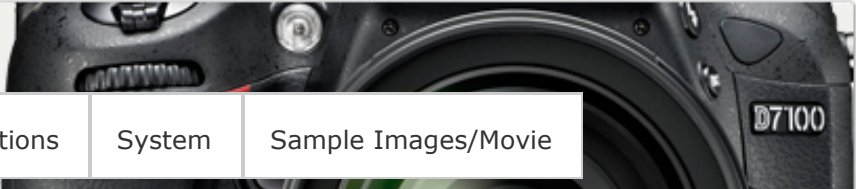




Nikon At the heart of the image

Products & Support Imaging Products Lineup Digital SLR Cameras D7100

D7100



Key Features

Features Explained


Specifications



























System



Sample Images/Movie

Nikon Digital SLR Camera D7100 Specifications

<i>Type</i>	
Type of camera	Single-lens reflex digital camera
Lens mount	Nikon F mount (with AF coupling and AF contacts)
Effective angle of view	Nikon DX format; focal length in 35mm [135] format equivalent to approx. 1.5x that of lenses with FX-format angle of view
<i>Effective pixels</i>	
Effective pixels	24.1 million
<i>Image sensor</i>	
Image sensor	23.5 x 15.6 mm CMOS sensor
Total pixels	24.71 million
Dust-reduction system	Image Sensor Cleaning, Image Dust Off reference data (optional Capture NX 2 software required)
<i>Storage</i>	
Image size (pixels)	<ul style="list-style-type: none"> • DX (24x16) image area: 6000 x 4000 [L], 4496 x 3000 [M], 2992 x 2000 [S] • 1.3x (18x12) image area: 4800 x 3200 [L], 3600 x 2400 [M], 2400 x 1600 [S] • Photographs with image area of DX (24x16) taken in movie live view: 6000 x 3368 [L], 4496 x 2528 [M], 2992 x 1680 [S] • Photographs with image area of 1.3x (18x12) taken in movie live view: 4800 x 2696 [L], 3600 x 2024 [M], 2400 x 1344 [S]
File format	<ul style="list-style-type: none"> • NEF (RAW): 12 or 14 bit, lossless compressed or compressed • JPEG: JPEG-Baseline compliant with fine (approx. 1:4), normal (approx. 1:8) or basic (approx. 1:16) compression (Size priority); Optimal quality compression available • NEF (RAW)+JPEG: Single photograph recorded in both NEF (RAW) and JPEG formats
Picture Control	Standard, Neutral, Vivid, Monochrome, Portrait, Landscape; selected Picture Control

Picture Control System	Standard, Neutral, Vivid, Monochrome, Portrait, Landscape, selected Picture Control can be modified; storage for custom Picture Controls
Media	SD (Secure Digital) and UHS-I compliant SDHC and SDXC memory cards
Double slot	Slot 2 can be used for overflow or backup storage or for separate storage of copies created using NEF+JPEG; pictures can be copied between cards
File system	DCF (Design Rule for Camera File System) 2.0, DPOF (Digital Print Order Format), Exif (Exchangeable Image File Format for Digital Still Cameras) 2.3, PictBridge
<i>Viewfinder</i>	
Viewfinder	Eye-level pentaprism single-lens reflex viewfinder
Frame coverage	Approx. 100% horizontal and 100% vertical
Magnification	Approx. 0.94x (50 mm f/1.4 lens at infinity, -1.0 m^{-1})
Eyepoint	19.5 mm (-1.0 m^{-1} ; from center surface of viewfinder eyepiece lens)
Diopter adjustment	-2 to $+1 \text{ m}^{-1}$
Focusing screen	Type B BriteView Clear Matte Mark II screen with AF area brackets (framing grid can be displayed)
Reflex mirror	Quick return
Depth-of-field preview	Pressing depth-of-field preview button stops lens aperture down to value selected by user (A and M modes) or by camera (other modes)
Lens aperture	Instant return, electronically controlled
<i>Lens</i>	
Compatible lenses	Compatible with AF NIKKOR lenses, including type G and D lenses (some restrictions apply to PC lenses) and DX lenses, AI-P NIKKOR lenses, and non-CPU AI lenses (A and M modes only); IX-NIKKOR lenses, lenses for the F3AF, and non-AI lenses cannot be used The electronic rangefinder can be used with lenses that have a maximum aperture of f/5.6 or faster (the electronic rangefinder supports the center focus point with lenses that have a maximum aperture of f/8 or faster)
<i>Shutter</i>	
Type	Electronically controlled vertical-travel focal-plane shutter
Speed	1/8000 to 30 s in steps of 1/3 or 1/2 EV, bulb, time, X250
Flash sync speed	X=1/250 s; synchronizes with shutter at 1/320 s or slower (flash range drops at speeds between 1/250 and 1/320 s)
<i>Release</i>	
Release modes	S (single frame), CL (continuous low speed), CH (continuous high speed), Q (quiet shutter release),  (self-timer), MUP (mirror up); interval timer photography supported
Approximate frame	<ul style="list-style-type: none"> • JPEG and 12-bit NEF (RAW) images recorded with DX (24x16) selected for

advance rate	<p>image area: CL 1 to 6 fps, CH 6 fps</p> <ul style="list-style-type: none"> • JPEG and 12-bit NEF (RAW) images recorded with 1.3x (18x12) selected for image area: CL 1 to 6 fps, CH 7 fps • 14-bit NEF (RAW) images recorded with DX (24x16) selected for image area: CL 1 to 5 fps, CH 5 fps • 14-bit NEF (RAW) images recorded with 1.3x (18x12) selected for image area: CL 1 to 6 fps, CH 6 fps
Self-timer	2 s, 5 s, 10 s, 20 s; 1 to 9 exposures at intervals of 0.5, 1, 2 or 3 s
Remote control modes (ML-L3)	Delayed remote, quick-response remote, remote mirror-up
<i>Exposure</i>	
Metering mode	TTL exposure metering using 2016-pixel RGB sensor
Metering method	<ul style="list-style-type: none"> • Matrix: 3D color matrix metering II (type G and D lenses); color matrix metering II (other CPU lenses); color matrix metering available with non-CPU lenses if user provides lens data • Center-weighted: Weight of 75% given to 8-mm circle in center of frame; diameter of circle can be changed to 6, 10, or 13 mm, or weighting can be based on average of entire frame (non-CPU lenses use 8-mm circle) • Spot: Meters 3.5-mm circle (about 2.5% of frame) centered on selected focus point (on center focus point when non-CPU lens is used)
Range (ISO 100, f/1.4 lens, 20°C/68°F)	<ul style="list-style-type: none"> • Matrix or center-weighted metering: 0 to 20 EV • Spot metering: 2 to 20 EV
Exposure meter coupling	Combined CPU and AI
Exposure modes	<p>Auto modes ( auto;  auto [flash off]); programmed auto with flexible program (P); shutter-priority auto (S); aperture-priority auto (A); manual (M); scene modes ( portrait;  landscape;  child;  sports;  close up;  night portrait;  night landscape;  party/indoor;  beach/snow;  sunset;  dusk/dawn;  pet portrait;  candlelight;  blossom;  autumn colors;  food); special effects modes ( night vision;  color sketch;  miniature effect;  selective color;  silhouette;  high key;  low key); U1 user settings 1); U2 user settings 2)</p>
Exposure compensation	Can be adjusted by -5 to +5 EV in increments of 1/3 or 1/2 EV in P , S , A and M modes
Exposure bracketing	2 to 5 frames in steps of 1/3, 1/2, 2/3, 1, 2 or 3 EV
Exposure lock	Luminosity locked at detected value with  AE-L/AF-L button
ISO sensitivity (Recommended Exposure Index)	ISO 100 to 6400 in steps of 1/3 EV; can also be set to approx. 0.3, 0.5, 0.7, 1 or 2 EV (ISO 25600 equivalent) above ISO 6400; auto ISO sensitivity control available
Active D-Lighting	Auto, extra high, high, normal, low, off

ADL bracketing	2 frames using selected value for one frame or 3 frames using preset values for all frames
<i>Focus</i>	
Autofocus	Nikon Advanced Multi-CAM 3500DX autofocus sensor module with TTL phase detection, fine-tuning, 51 focus points (including 15 cross-type sensors; the center point is available at apertures slower than f/5.6 and faster than f/8 or at f/8), and AF-assist illuminator (range approx. 0.5 to 3 m/1 ft 8 in. to 9 ft 10 in.)
Detection range	-2 to +19 EV (ISO 100, 20°C/68°F)
Lens servo	<ul style="list-style-type: none"> Autofocus (AF): Single-servo AF (AF-S); continuous-servo AF (AF-C); auto AF-S/AF-C selection (AF-A); predictive focus tracking activated automatically according to subject status Manual focus (M): Electronic rangefinder can be used
Focus point	Can be selected from 51 or 11 focus points
AF-area modes	Single-point AF, 9-, 21- or 51-point dynamic-area AF, 3D-tracking, auto-area AF
Focus lock	Focus can be locked by pressing shutter-release button halfway (single-servo AF) or by pressing ^{AE-L} AF-L AE-L/AF-L button
<i>Flash</i>	
Built-in flash	 : Auto flash with auto pop-up P, S, A, M,  : Manual pop-up with button release
Guide number	Approx. 12/39, 12/39 with manual flash (m/ft, ISO 100, 20°C/68°F)
Flash control	TTL: i-TTL flash control using 2016-pixel RGB sensor is available with built-in flash and SB-910, SB-900, SB-800, SB-700, SB-600 or SB-400; i-TTL balanced fill-flash for digital SLR is used with matrix and center-weighted metering, standard i-TTL flash for digital SLR with spot metering
Flash modes	Auto, auto with red-eye reduction, auto slow sync, auto slow sync with red-eye reduction, fill-flash, red-eye reduction, slow sync, slow sync with red-eye reduction, rear-curtain with slow sync, rear-curtain sync, off; Auto FP High-Speed Sync supported
Flash compensation	-3 to +1 EV in increments of 1/3 or 1/2 EV
Flash bracketing	2 to 5 frames in steps of 1/3, 1/2, 2/3, 1, 2 or 3 EV
Flash-ready indicator	Lights when built-in flash or optional flash unit is fully charged; flashes after flash is fired at full output
Accessory shoe	ISO 518 hot-shoe with sync and data contacts and safety lock
Nikon Creative Lighting System (CLS)	<ul style="list-style-type: none"> Advanced Wireless Lighting supported with: SB-910, SB-900, SB-800 or SB-700 as a master flash and SB-600 or SB-R200 as remotes or SU-800 as commander; built-in flash can serve as master flash in commander mode Auto FP High-Speed Sync and modeling illumination supported with all CLS-compatible flash units except SB-400; Flash Color Information Communication and FV lock supported with all CLS-compatible flash units

Sync terminal	AS-15 Sync Terminal Adapter (available separately)
<i>White balance</i>	
White balance	Auto (2 types), incandescent, fluorescent (7 types), direct sunlight, flash, cloudy, shade, preset manual (up to 6 values can be stored, Spot White Balance measurement available during live view), choose color temperature (2500 K to 10000 K), all with fine-tuning
White balance bracketing	2 to 5 frames in steps of 1, 2 or 3
<i>Live View</i>	
Modes	Live view photography (still images), movie live view (movies)
Lens servo	<ul style="list-style-type: none"> Autofocus (AF): Single-servo AF (AF-S); full-time servo AF (AF-F) Manual focus (M)
AF-area modes	Face-priority AF, wide-area AF, normal-area AF, subject-tracking AF
Autofocus	Contrast-detect AF anywhere in frame (camera selects focus point automatically when face-priority AF or subject-tracking AF is selected)
<i>Movie</i>	
Metering	TTL exposure metering using main image sensor
Metering method	Matrix
Frame size (pixels) and frame rate	<ul style="list-style-type: none"> 1920 x 1080; 60i (59.94 fields/s)/50i (50 fields/s)* 1920 x 1080; 30p (progressive), 25p, 24p 1280 x 720; 60p, 50p <p>Actual frame rates for 60p, 50p, 30p, 25p and 24p are 59.94, 50, 29.97, 25 and 23.976 fps respectively; options support both ★high and normal image quality *Available only when 1.3x (18x12) is selected for image area; sensor output is about 60 or 50 fps</p>
File format	MOV
Video compression	H.264/MPEG-4 Advanced Video Coding
Audio recording format	Linear PCM
Audio recording device	Built-in or external stereo microphone; sensitivity adjustable
Maximum length	29 min. 59 s
<i>Monitor</i>	
Monitor	8-cm/3.2-in., approx. 1229k-dot (VGA; 640 x 480 x 4 = 1,228,800 dots), TFT monitor with approx. 170° viewing angle, approx. 100% frame coverage and brightness adjustment

<i>Playback</i>	
Playback	Full-frame and thumbnail (4, 9, or 72 images or calendar) playback with playback zoom, movie playback, photo and/or movie slide shows, histogram display, highlights, photo information, GPS data display and auto image rotation
<i>Interface</i>	
USB	Hi-Speed USB
HDMI output	HDMI mini connector (Type C)
Accessory terminal	Wireless remote controller: WR-1 and WR-R10 (available separately), Remote cord: MC-DC2 (available separately), GPS unit: GP-1/GP-1A (available separately)
Audio input	Stereo mini-pin jack (3.5-mm diameter; plug-in power supported)
Audio output	Stereo mini-pin jack (3.5-mm diameter)
<i>Supported languages</i>	
Supported languages	Arabic, Bengali, Chinese (Simplified and Traditional), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Persian, Polish, Portuguese (European and Brazilian), Romanian, Russian, Spanish, Swedish, Tamil, Thai, Turkish, Ukrainian, Vietnamese
<i>Power source</i>	
Battery	One EN-EL15 Rechargeable Li-ion Battery
Battery pack	Optional MB-D15 Multi-Power Battery Pack with one EN-EL15 Rechargeable Li-ion Battery or six AA-size alkaline, Ni-MH or lithium batteries
AC adapter	EH-5b AC Adapter; requires EP-5B Power Connector (available separately)
<i>Tripod socket</i>	
Tripod socket	1/4 in. (ISO 1222)
<i>Dimensions / weight</i>	
Dimensions (W x H x D)	Approx. 135.5 x 106.5 x 76 mm/5.3 x 4.2 x 3.0 in.
Weight	Approx. 765 g/1 lb 11.0 oz with battery and memory card but without body cap; approx. 675 g/1 lb 7.8 oz (camera body only)
<i>Operating environment</i>	
Operating environment	Temperature: 0 to 40°C/32 to 104°F; humidity: 85% or less (no condensation)
<i>Accessories</i>	
Supplied accessories (may differ by country or area)	EN-EL15 Rechargeable Li-ion Battery, MH-25 Battery Charger, DK-5 Eyepiece Cap, DK-23 Rubber Eyecup, UC-E6 USB Cable, AN-DC1 BK Camera Strap, BF-1B Body Cap, BS-1 Accessory Shoe Cover, ViewNX 2 CD-ROM

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Memory card capacity

The following table shows the approximate number of pictures that can be stored on an 8 GB SanDisk Extreme Pro SDHC UHS-I card at different image quality, image size and image area settings.

DX (24x16) image area

Image quality	Image size	File size*1	No. of images*1	Buffer capacity*2
NEF (RAW), Lossless compressed, 12-bit	-	22.7 MB	191	7
NEF (RAW), Lossless compressed, 14-bit	-	28.5 MB	148	6
NEF (RAW), Compressed, 12-bit	-	20.2 MB	260	9
NEF (RAW), Compressed, 14-bit	-	24.9 MB	217	8
JPEG fine*3	Large Medium Small	12.0 MB 7.4 MB 3.8 MB	507 853 1600	33 100 100
JPEG normal*3	Large Medium Small	6.2 MB 3.7 MB 1.9 MB	1000 1600 3200	100 100 100
JPEG basic*3	Large Medium Small	2.9 MB 1.9 MB 1.0 MB	1900 3200 6000	100 100 100

1.3x (18x12) image area

Image quality	Image size	File size*1	No. of images*1	Buffer capacity*2
NEF (RAW), Lossless compressed, 12-bit	-	15.1 MB	295	12
NEF (RAW), Lossless compressed, 14-bit	-	18.8 MB	229	8
NEF (RAW), Compressed, 12-bit	-	13.4 MB	399	14

NEF (RAW), Compressed, 14-bit	-	16.3 MB	334	11
JPEG fine*3	Large Medium Small	8.2 MB 5.0 MB 2.7 MB	764 1200 2200	73 100 100
JPEG normal*3	Large Medium Small	4.1 MB 2.5 MB 1.4 MB	1500 2400 4400	100 100 100
JPEG basic*3	Large Medium Small	2.0 MB 1.3 MB 0.7 MB	2900 4600 8000	100 100 100

*1 All figures are approximate. File size varies with scene recorded.

*2 Maximum number of exposures that can be stored in memory buffer at ISO 100. Drops if optimal quality is selected for JPEG compression, ISO sensitivity is set to Hi 0.3 or higher, or long exposure noise reduction or auto distortion control is on.

*3 Figures assume JPEG compression is set to Size priority. Selecting optimal quality increases the file size of JPEG images; number of images and buffer capacity drop accordingly.

Approved memory cards

The following SD memory cards have been tested and approved for use in the camera. Cards with class 6 or faster write speeds are recommended for movie recording. Recording may end unexpectedly when cards with slower write speeds are used.

	SD memory cards	SDHC memory cards*2	SDXC memory cards*3
SanDisk	2GB*1	4 GB, 8 GB, 16 GB, 32 GB	64 GB
Toshiba			
Panasonic		4 GB, 6 GB, 8 GB, 12 GB, 16 GB, 24 GB, 32 GB	48 GB, 64 GB
Lexar Media		4 GB, 8 GB, 16 GB	-
Platinum II	-	4 GB, 8 GB, 16 GB, 32 GB	
Professional			
Full-HD Video		4 GB, 8 GB, 16 GB	

*1 Check that any card readers or other devices with which the card will be used support 2 GB cards.

*2 Check that any card readers or other devices with which the card will be used are SDHC-compliant. The camera supports UHS-I.

*3 Check that any card readers or other devices with which the card will be used are SDXC-compliant. The camera supports UHS-I.

