



*At the heart of the image*

# D7100

## ACT ON YOUR INSTINCTS

Lightweight DX-format agility with a high-pixel-count image sensor unit designed without an optical low-pass filter



# THE POWER AND AGILITY TO LEAP FORWARD

Take advantage of the Nikon DX format that enhances the mobility of the overall camera system, including lenses. The compact and lightweight system of the D7100 is loaded with superior performance and a variety of innovative features.

Enjoy the kind of breathtaking detail reproduction realized by the combination of NIKKOR lenses, a powerful CMOS sensor unit that's designed without an optical low-pass filter, and the EXPEED 3 image-processing engine. Now you can have all the agility thanks to the Nikon DX format, the power you need to close in on your target and capture it exquisitely, as well as the capability to reproduce fine details. The D7100 is ready to go wherever inspiration calls you, beyond frontiers. Your hunt for spectacular images starts here.

## D7100



- Nikon DX-format CMOS image sensor with 24.1 effective megapixels, compatible with high-speed readout
- Image sensor unit designed without an optical low-pass filter delivers exquisite detail reproduction
- High-performance EXPEED 3 image-processing engine
- High-density 51-point AF system with 15 cross-type sensors and f/8 compatibility
- 1.3× crop of DX allows you to get closer to distant subjects, with the 51 focus points covering almost the entire frame
- High-speed continuous shooting at approx. 7 fps (in 1.3× crop of DX mode with JPEG/12-bit NEF [RAW])
- Glass-prism optical viewfinder with approx. 100% frame coverage

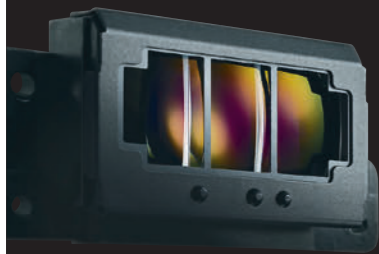
- 8-cm/3.2-in. approx. 1229k-dot, LCD monitor with an RGBW alignment
- Multi-area mode Full HD D-Movie with two movie image areas based on DX and 1.3× crop of DX
- Spot White Balance to measure a selected area of the frame during live view
- Compact, lightweight body employing durable magnesium alloy and featuring superior weather and dust sealing
- Highly accurate shutter unit tested over 150,000 cycles
- *i* button for quick access to frequently used functions
- Double SD card slots compatible with SDXC UHS-I



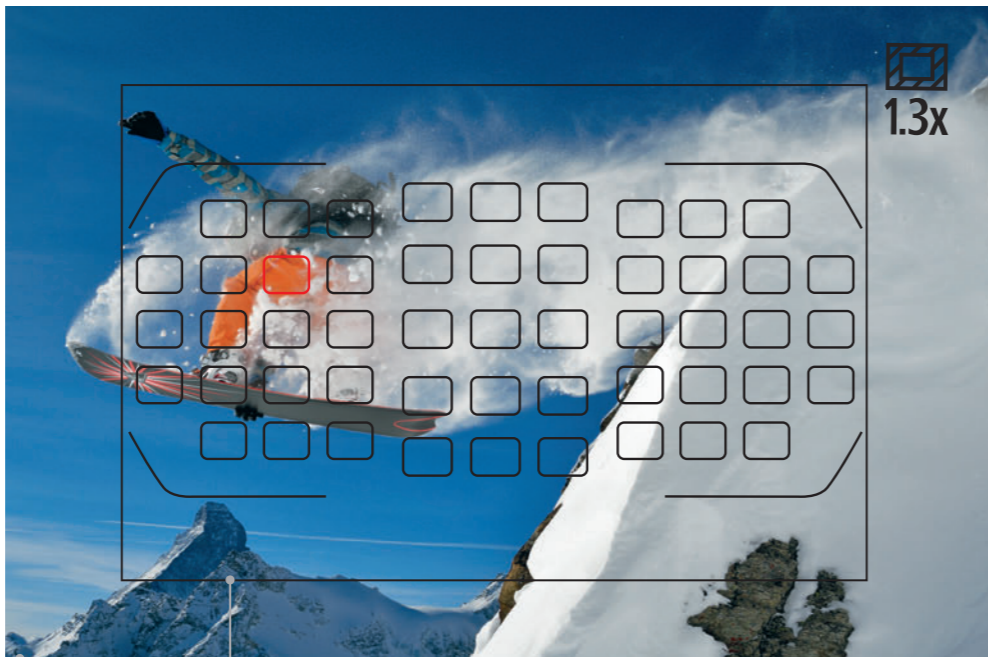
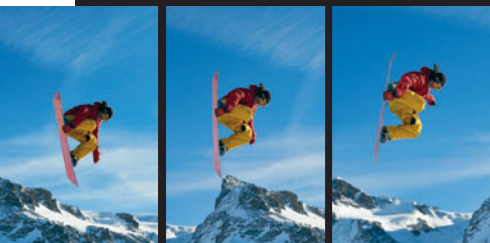


# 51 AF POINTS

# 1.3x CROP OF DX



## CAPTURING POWER TO LOCK ON TO YOUR SUBJECT



DX format 1.3x crop of DX

### High-density 51-point AF system with wide coverage of the frame

Incorporating the newly developed Advanced Multi-CAM 3500DX autofocus sensor module, the high-density 51-point AF system delivers amazing capturing power. Fifteen cross-type sensors cover the most frequently used center area. AF detection is available down to -2 EV (ISO 100, 20°C/68°F), brightness equivalent to a subject illuminated by moonlight. Adopting an algorithm equivalent to that of the D4, the camera obtains faster initial AF detection. The speed you need to effectively capture decisive moments has been radically boosted.

### AF shooting possible even at an effective aperture of f/8

The center focus point is compatible with f/8 or faster. This assures dependable AF shooting with an effective aperture value of f/8, when a 2.0x teleconverter is attached to a telephoto NIKKOR lens with a maximum aperture of f/4. Super telephoto AF shooting is yours without bulky equipment.

### The 1.3x crop of DX lets you get closer to distant subjects and achieves fast continuous shooting of up to 7 fps\*<sup>1</sup>

The D7100 comes equipped with a 1.3x crop of DX option, which enables you to accurately focus on distant subjects with the high-performance AF system while allowing you to capture decisive moments with high-speed continuous shooting of up to approx. 7 fps\*<sup>1</sup>. In DX format, the angle of view is equivalent to approx. 1.5x lens focal length\*<sup>2</sup>. In the 1.3x crop of DX mode, it is equivalent to that of a lens with approx. 1.3 times

longer focal length\*<sup>2</sup> than in DX format; as a result, the angle of view becomes equivalent to approx. 2.0x lens focal length\*<sup>2</sup>. In this mode, you can get close to distant subjects even when



AF-S NIKKOR 70-200mm f/4G ED VR + AF-S Teleconverter TC-20E III (maximum effective aperture: f/8)

- Image quality: 14-bit NEF (RAW) • Exposure: [A] mode, 1/25 second, f/11 • White balance: Auto 1 • Sensitivity: ISO 100
- Picture Control: Standard ©Moose Peterson



Shot in 1.3x crop of DX mode, using a 500mm lens (angle of view: equivalent to 1000mm focal length\*)

\* When converted to 35mm format.

- Lens: AF-S NIKKOR 500mm f/4G ED VR
- Image quality: 12-bit NEF (RAW) • Exposure: [M] mode, 1/1000 second, f/8 • White balance: Direct sunlight
- Sensitivity: ISO 200 • Picture Control: Standard ©Koji Nakano

employing relatively compact, lightweight telephoto zoom lenses. Furthermore, the 51 focus points cover nearly the entire frame of 1.3x crop of DX, demonstrating excellent capturing power, which allows you to effectively focus on moving subjects whose position in the frame randomly changes. The 1.3x crop of DX gives you an image size of approx. 15.4 megapixels, securing a sufficiently high pixel count for general use, and providing high-resolution images.

- \*1 With JPEG/12-bit NEF (RAW).
- \*2 When converted to 35mm format.

### Never miss the moment, with high-speed continuous shooting of up to 7 fps\*<sup>1,2</sup> and fast response

The D7100 employs a high-speed, highly precise sequential mechanism that drives mirror and aperture independently. Combining it with the CMOS sensor compatible with high-speed readout and the fast image processing of EXPEED 3, the camera is capable of high-speed continuous shooting of up to approx. 7 fps\*<sup>1,2</sup> for a maximum of 100 frames\*<sup>3</sup>. The release time lag is approx. 0.052 s\*<sup>2</sup>. The camera's superb high-speed performance supports comfortable shooting of moving subjects.

\*1 In 1.3x crop of DX mode with JPEG/12-bit NEF (RAW). Maximum approx. 6 fps in DX mode with the same image quality.

\*2 Based on CIPA Guidelines.

\*3 When JPEG normal and Large-size image are selected. When JPEG fine and Large-size image are selected, a maximum of 33 frames in DX format and 73 in 1.3x crop of DX are available.

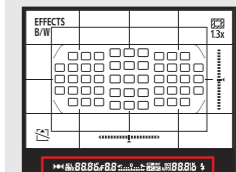
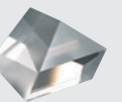
### Additional features that boost your capturing power

- Wide variety of AF-area modes to match your subject matter: single-point AF, dynamic-area AF (with 9, 21 or 51-point options), 3D-tracking and auto-area AF
- Scene Recognition System for highly precise auto control utilizing the 2016-pixel RGB sensor

### Optical viewfinder with professional-model quality featuring truly comfortable viewing

The glass-pentaprism equipped, optical viewfinder, featuring approx. 100% frame coverage and approx. 0.94x magnification\*, realizes comfortable viewing that even satisfies professionals. The organic EL display element, newly employed for the viewfinder information display beneath the image area, also contributes to the excellent visibility.

\*50mm f/1.4 lens at infinity, -1.0 m<sup>-1</sup>.

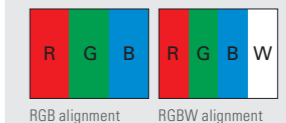
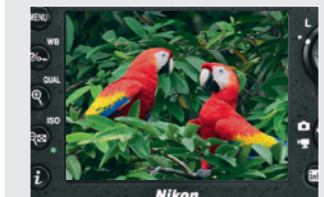


Viewfinder information display employing an organic EL display element (outlined in red)

### Significantly increased visibility in bright daylight with RGBW alignment – newly employed, large LCD monitor

Thanks to its RGBW alignment, the newly employed, wide-viewing-angle, large, 8-cm/3.2-in. high-resolution LCD monitor (approx. 1229k dots) features improved brightness. Combined with the integrated glass-and-panel structure\*, it greatly enhances visibility, even under bright conditions. The color reproduction range has attained a level equivalent to that of the D4 and D800 series. The clear, beautiful display images bring more comfort to live view, movie recording and image confirmation. Playback images can be magnified up to approx. 38x (Large-size images in DX [24 × 16]), helping you quickly and precisely confirm the focus. Scratch- and shock-resistant, reinforced glass is employed for the monitor surface.

\*Equivalent to that employed for the D4, D800 series and D600.



RGBW alignment with enhanced brightness achieved by employing more white dots

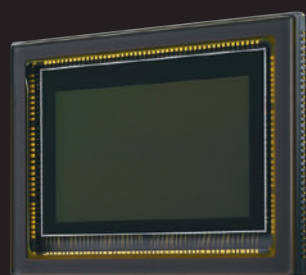


AF-S NIKKOR 70-200mm f/4G ED VR • Image quality: 14-bit NEF (RAW) • Exposure: [A] mode, 1/320 second, f/8 • White balance: Auto 1 • Sensitivity: ISO 100

• Picture Control: Landscape ©Robert Bösch

# 24.1

## MEGAPIXELS WITHOUT OLPF



## EXQUISITE DETAIL REPRODUCTION WITH SUPERIOR CLARITY



• Lens: AF-S NIKKOR 70-200mm f/4G ED VR • Image quality: 14-bit NEF (RAW) • Exposure: [M] mode, 1/180 second, f/8  
• Picture Control: Landscape ©Koji Nakano

• White balance: Direct sunlight • Sensitivity: ISO 100

### Exquisite detail reproduction realized by an image sensor unit designed without an optical low-pass filter

The D7100 employs a Nikon DX-format CMOS sensor that provides approx. 24.1 effective megapixels and is compatible with high-speed readout. It adopts an image sensor unit designed without an optical low-pass filter (OLPF) to fully bring out the true resolving power of the high-pixel-count image sensor, and the sharp rendering of NIKKOR lenses, to deliver exquisite detail reproduction. Even if trimmed or enlarged, the images retain this amazingly high definition.



### High-performance EXPEED 3 image-processing engine

Nikon's exclusive EXPEED 3 image-processing engine handles multiple tasks at high speeds while maintaining high precision in order to maximize the potential of 24.1 megapixels in stills and movies. The result is superior color reproduction, rich tonal gradation and high image quality at high ISO.



### ISO sensitivity range expandable to ISO 25600 equivalent

The D7100's standard ISO sensitivity ranges from 100 to 6400, expandable to ISO 25600 equivalent (Hi 2). Furthermore, the superior noise reduction function effectively reduces noise at high ISO setting; it suppresses noise even for low-contrast subjects such as hair and grass textures while maintaining color saturation and resolution as much as possible. The noise reduction has also been optimized for movies. It excels when shooting in dimly lit conditions, delivering clear and sharp results.



Spot White Balance setting screen  
(■ Spot White Balance target to acquire preset manual data)

### Spot White Balance that enables presetting of the white balance during live view

The D7100 comes newly equipped with a Spot White Balance function that allows you to easily acquire preset manual data based on a specific area of the frame you select during live view. This means that you can effectively achieve pinpoint white balance setting according to the selected subject or a part of it during live view. The Spot White Balance target to acquire preset manual data can be moved around with the multi selector in the frame. As this eliminates the need to use a gray card and allows you to quickly acquire the preset data based on even a distant subject, you can preset the white balance knowing that you won't miss decisive moments. Spot White Balance operation is possible with a super-telephoto lens attached. This is convenient when shooting sports indoors or in stadiums where various types of lights are mixed.



Active D-Lighting: Off Active D-Lighting: Extra high



HDR: Extra high



HDR: Off HDR: Normal

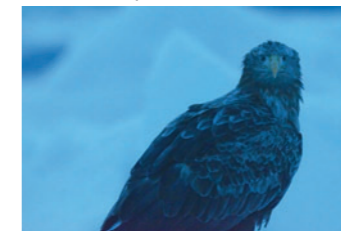


Picture Control: Portrait Picture Control: Landscape

### Diverse technologies to inspire your creativity

- Active D-Lighting for superb image quality by preserving details in both highlight and shadowy areas, all while maintaining moderate contrast and reproducing brightness as you see it, even in high-contrast scenes
- HDR (High Dynamic Range) that produces a single image with a wider dynamic range by taking two images of different exposures with one shutter release and automatically combining them
- Picture Control system with six options to create ideal images by fine-tuning color and tone for stills and movies: Standard, Neutral, Vivid, Monochrome, Portrait and Landscape
- Edge-to-edge sharpness achieved by lateral chromatic aberration reduction/Auto distortion control
- Sixteen Scene Modes let the camera automatically select the best settings for the scene: Portrait, Landscape, Child, Sports, Close up, Night portrait, Night landscape, Party/Indoor, Beach/Snow, Sunset, Dusk/Dawn, Pet portrait, Candlelight, Blossom, Autumn colors and Food

Shot at Hi 2 (equivalent to ISO 25600)



Shot at ISO 6400



# MULTI-AREA MODE FULL HD D-MOVIE

# 1080/ 60i



# GET MORE INTIMATE WITH YOUR SUBJECT WITH FULL HD VIDEO

Full HD video — 1920 × 1080 at 30p/60i/50i supported

With optimum processing of data from the image sensor unit, designed without an optical low-pass filter, performed by EXPEED 3, the D7100 delivers Full HD videos that provide exquisite detail reproduction with reduced moiré and jaggies. You can create beautiful blur only achievable with D-SLRs and a variety of movie expression utilizing a wide range of NIKKOR lenses. The D7100 supports 1920 × 1080; 30p. For smooth rendering of fast-moving subjects, select 1280 × 720; 60p. In movie image area based on 1.3× crop of DX, you can also choose 1920 × 1080; 60i/50i. A noise reduction function optimized for movies effectively cuts down noise while retaining high definition. Furthermore, a flicker reduction function ensures appropriate exposure control that minimizes flickering during video recording or live view. With the movie-record button located next to the shutter-release button, you can smoothly start and stop movie recording while ensuring stable holding. This can be done just like shooting still images, with minimum blur from camera shake. Recorded movies are compressed in the H.264/MPEG-4 AVC format. The maximum recording time is 29 min. 59 s\*.

\*With [Normal] selected for [Movie quality]. 20 min. with [High quality].

Multi-area mode Full HD D-Movie with two movie image areas based on DX and 1.3× crop of DX

In addition to the DX-based movie format, the D7100 offers you movie image area based on 1.3× crop of DX. The angle of view in this movie image area becomes equivalent to approx. 2.0x lens focal length\*, enabling you to closely approach your subjects and shoot a powerful video. Helped by the agility of the compact, lightweight DX-format system, you can boldly get closer to even smaller, more distant subjects.

\*When converted to 35mm format.

Reliable focusing capability of contrast-detect AF for moving subjects and people's faces

Focusing speed of contrast-detect AF, which is used in movie recording and live view, is significantly improved compared to the D300S. If you select full-time-servo AF (AF-F) for lens servo and subject-tracking AF for AF-area mode, the camera tracks a moving subject within the frame and continues focusing. Face-priority AF, which automatically recognizes and focuses on people's faces, is also available.



DX-based movie format

Movie image area based on 1.3× crop of DX



Special Effects provide more creative movie expression

You can produce creative images that best reflect your intentions, whether stills or movies, by applying special effects via simple operation of the camera only. As the result of an effect is displayed on the LCD monitor in real time, you can set the effects while confirming the appearance of the outcome.

Special Effects incorporated in the D7100:  
Night vision, Color sketch, Miniature effect, Selective color, Silhouette, High key and Low key.



Special Effects: Color sketch (still photo)



Special Effects: Night vision (still photo)

Simultaneous display of live view output on an external monitor via HDMI

As the D7100 employs an HDMI mini-pin connector (Type C), simultaneous display of videos on the LCD monitor and an external monitor is available\*. During movie recording or movie live view, you can opt not to display the setting information which appears on the LCD, on the connected equipment via HDMI. This is convenient for viewing the entire frame, when you want to check the image on a large monitor connected via HDMI simultaneously while shooting. Also, it is possible to record uncompressed movie live view data directly to an external storage device (HDMI input video recorder). This allows professionals to edit uncompressed, high-quality movie footage on connected equipment.

\* If 1920 × 1080; 60i, 1920 × 1080; 50i, 1280 × 720; 60p, or 1280 × 720; 50p is selected for [Frame size/frame rate], the monitor will turn off when the camera is connected to an HDMI video device. During movie recording through an HDMI interface, movies may be output at a frame size smaller than that selected [Frame size/frame rate].

HDMI  
HIGH-DEFINITION MULTIMEDIA INTERFACE



The D7100 is compatible with HDMI, which allows you to display stills and movies on an HDTV (Connecting to an HDTV requires an HDMI cable with an HDMI mini connector [Type C] available on the market).

In-camera movie-editing functions

Movie editing can be completed by simple operation of the camera, without a computer. When trimming unwanted scenes, you can set the start and end points by adjusting frame by frame. You can also select a frame to save as a JPEG still image.

Comprehensive, high-fidelity audio recording control

- Built-in stereo microphone with sensitivity control in 20 incremental steps
- Headphone connector for simultaneous sound check when using a stereo headphone (available on the market)
- Sound level indicator on the LCD monitor, in order to visually check the audio levels and change the microphone sensitivity settings during movie live view



Built-in stereo microphone



During movie recording

# HIGH RELIABILITY AND OPERABILITY FOR SMOOTH SHOOTING

Cutting-edge technologies concentrated in a lightweight, compact system



### 1. Viewfinder display employing an organic EL display element

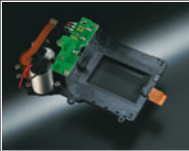
The D7100 newly employs a high-intensity, high-contrast and energy-saving organic EL display element for the viewfinder information display below the image area. While it ensures high visibility, it also contributes to faster response in low-temperature conditions. In the viewfinder, grid lines, useful for landscape and architectural photos, can be displayed (in DX-format shooting).



### 2. Sequential control mechanism contributes to faster operation

A highly precise sequential control mechanism, which drives aperture and mirror independently, is installed. It realizes high-speed continuous shooting of up to approx. 7 fps\*<sup>1,2</sup> and a release time lag of approx. 0.052 s\*<sup>2</sup>, while enabling smooth live view photography with the mirror in the up position.

\*1 In 1.3× crop of DX mode with JPEG/12-bit NEF (RAW). Maximum approx. 6 fps in DX mode with the same image quality.  
\*2 Based on CIPA Guidelines.



### 3. Highly durable and precise shutter unit

The D7100 achieves shutter speeds, ranging from 1/8000 s to 30 s, equivalent to those of the D4. The flash synchronization shutter speed can be elevated up to 1/250 s. The shutter unit achieves high durability as it has endured release testing over 150,000 cycles, actually loaded on the camera.



### 4. Glass-prism optical viewfinder with approx. 100% frame coverage for precise composition and comfortable viewing



### 5. Mode dial and release mode dial

The mode dial and release mode dial are coaxially located to improve operability. Both are equipped with a lock function to prevent unwanted change of modes.



### 6. z button, your shortcut to frequently used settings

The z button allows direct access to menu settings that you wish to change. It prompts lists of settings to appear on the monitor during viewfinder and live view shooting, and the retouch menu during playback.



### 7. Virtual horizon for checking horizontal tilting

A virtual horizon allows you to check the horizontal tilting of the camera. During viewfinder shooting, the indicator is displayed in both horizontal and vertical shooting. The virtual horizon appears superimposed on the monitor image during live view or movie shooting.



### More lightweight than the D7000 – durable, lightweight body that adopts magnesium alloy and weather/dust sealing

The D7100 weighs approx. 675 g/1 lb 7.8 oz (body only), lighter than the D7000, despite its superb capabilities. While securing reliable robustness by employing magnesium alloy for the top and rear covers, it ensures weather-resistance and dust-prevention performance\* by applying effective sealing at various locations of the body.

\* Equivalent to the D800 series and D300S.

### Double SD card slots compatible with SDXC UHS-I



# NIKKOR LENSES

With their sharp resolving power, NIKKOR lenses maximize the potential of the D7100, which features an image sensor unit designed without an optical low-pass filter



©Moose Peterson

### AF-S NIKKOR 70-200mm f/4G ED VR

**When attached to the D7100 (DX format):** The angle of view is equivalent to that of a 105-300mm lens (in FX/35mm format).

Although compact and lightweight, this lens covers a focal-length range from 70 to 200mm with a fixed maximum aperture of f/4. Nano Crystal Coat, that produces clear images with less ghost and flare, is applied. The lens also incorporates a powerful Vibration Reduction function that provides an effect equivalent to a shutter speed approx. five stops faster. Combining this with the D7100's 1.3× crop of DX mode and f/8-compatible AF system, and a 2.0x teleconverter, the AF-S Teleconverter TC-20E III, this compact, lightweight system allows you to enjoy supertelephoto AF shooting with an angle of view equivalent to that of an approx. 800mm lens\*.

\* When converted to FX/35mm format.



### AF-S DX NIKKOR 10-24mm f/3.5-4.5G ED

**When attached to the D7100 (DX format):** The angle of view is equivalent to that of a 15-36mm lens (in FX/35mm format).



©Koji Nakano

An ultra-wide-angle zoom lens starting at a 109° angle of view. This lens is ideal for shooting in a limited indoor space, for architectural and landscape photography, and creating images with an emphasized perspective. As it covers angles of view from 74° to 62°, convenient for snapshots, it is highly useful as a standard lens. Furthermore, with its short minimum focus distance, this lens can also be used for shooting close-ups at the telephoto position.



### AF-S DX NIKKOR 16-85mm f/3.5-5.6G ED VR

**When attached to the D7100 (DX format):** The angle of view is equivalent to that of a 24-127.5mm lens (in FX/35mm format).

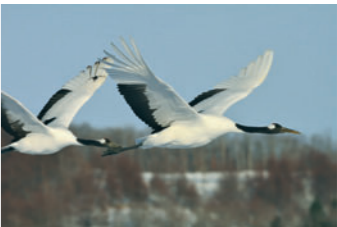


©Robert Bösch

This versatile standard zoom lens, starting at an angle of view of 83° at the maximum wide-angle position, allows you to enjoy a range of wide-angle shots. Two ED glass and three aspherical lens elements are employed. The lens delivers incredibly sharp rendering power and dynamic change in angles of view.



75 million NIKKOR



©Koji Nakano

### AF-S NIKKOR 80-400mm f/4.5-5.6G ED VR

**When attached to the D7100 (DX format):** The angle of view is equivalent to that of a 120-600mm lens (in FX/35mm format).

This 5x telephoto zoom lens, that covers a wide telephoto range up to 400mm, is highly recommended for shooting sports, wild birds, aircraft, trains and landscapes. The newly developed optical design employing Nano Crystal Coat, one Super ED glass and four ED glass elements delivers excellent optical performance throughout the zoom range. The Vibration Reduction function offers an effect equivalent to a shutter speed 4.0 stops faster\*<sup>1</sup>, and the AF speed achieves the highest level in this class. When employed with the D7100 in 1.3× crop of DX mode, the angle of view becomes equivalent to that of an approx. 800mm lens\*<sup>2</sup> and the camera's 51 focus points cover almost the entire frame. This lens delivers comfortable yet dependable supertelephoto AF shooting, which expands your range of photography.

\*1 At 400mm; based on CIPA Standards. \*2 When converted to FX/35mm format.



### AF-S Micro NIKKOR 60mm f/2.8G ED

**When attached to the D7100 (DX format):** The angle of view is equivalent to that of a 90mm lens (in FX/35mm format).



©Moose Peterson

You can enjoy a variety of reproduction ratios from infinity to minimum focus distance (1x). Even with 1x shooting, this lens delivers sharp reproduction from the maximum aperture. As Nano Crystal Coat that reduces ghost and flare is applied, the lens produces a clear image even in backlit situations. What's more, as it creates beautiful bokeh, it is indispensable for diverse subjects, from portraits and landscape photos.



### AF-S DX NIKKOR 18-300mm f/3.5-5.6G ED VR

**When attached to the D7100 (DX format):** The angle of view is equivalent to that of a 27-450mm lens (in FX/35mm format).



©Moose Peterson

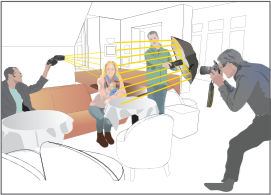
A high-power lens featuring an approx. 16.7x zoom ratio. While covering a wide range of angles of view, it realizes a maximum aperture of f/5.6 at the telephoto position of 300mm, enabling you to easily shoot a variety of subjects.

# EXCELLENT SYSTEM THAT SUPPORTS COMFORTABLE SHOOTING

Diverse accessories for increased expandability while taking full advantage of the agility of the DX-format system

## Built-in flash with a commander function/Nikon Creative Lighting System

The D7100 incorporates a built-in pop-up flash with a guide number of approx. 12/39 (m/ft, ISO 100, 20°C/68°F) which covers the angle of view of a 16mm wide-angle lens. Featuring a commander function compatible with Advanced Wireless Lighting, the built-in flash can control up to two groups of optional Speedlights wirelessly as a master flash unit. When using this built-in flash or an optional Nikon Speedlight, the D7100 becomes compatible with various functions of the Nikon Creative Lighting System, including i-TTL flash control, that is highly praised for its precise flash control.



Using the commander function of the built-in flash

Two SB-700s (one using a reflective umbrella) were positioned, one on each side of the subject, and wirelessly triggered employing the commander function of the built-in flash.



The subject is rendered more softly and gently in natural-looking light.

- Lens: AF-S NIKKOR 85mm f/1.8G
- Image quality: 14-bit NEF (RAW)
- Exposure: [M] mode, 1/80 second, f/4.5
- White balance: Auto 1 • Sensitivity: ISO 400
- Picture Control: Portrait ©Robert Bösch



SB-700 SB-910  
Nikon Speedlights compatible with Advanced Wireless Lighting

## Battery pack & GPS unit



### MB-D15 Multi-Power Battery Pack (optional)

One EN-EL15 Rechargeable Li-ion Battery, six AA-size batteries (alkaline, Ni-MH or lithium), or EH-5b AC Adapter (requires EP-5B Power Connector) can be used. With one fully charged EN-EL15 loaded in the D7100 and another in the MB-D15, you can shoot up to approx. 1,900 frames\*. This battery pack comes equipped with AE-L/AF-L button, main/sub command dials, shutter-release button and multi selector, that are handy for vertical shooting. The magnesium alloy body, with sealing equivalent to that of the D7100 body, achieves superior dust-prevention and weather-resistant performance.

\* Based on CIPA Standards.



GP-1A

### GP-1/GP-1A GPS Unit (optional)

Store location information such as latitude, longitude, altitude and UTC (Universal Coordinated Time) as Exif data on images taken by the D7100, using the optional GP-1/GP-1A GPS Unit. Images with the location information can be displayed on GeoTag workspace of ViewNX 2 (supplied). The information can also be used on Nikon's image-sharing and storage service NIKON IMAGE SPACE, other online image-sharing services or digital mapping software on the market.

## Nikon's exclusive software

Nikon's RAW images are stored as Nikon Electronic Format (NEF), which contains an incredible amount of data. Taking full advantage of the data is only possible with Nikon's exclusive software, ViewNX 2 (supplied) and Capture NX 2 (optional), that are both optimized for the file format. NEF retains original data without deterioration even after repeated editing, an assurance that lets you focus on the editing. Enabling you to create your ideal pictures, the software helps increase the value of your digital photographs.



ViewNX 2



Capture NX 2

### NIKON IMAGE SPACE

"NIKON IMAGE SPACE" is a free, online image sharing and storage service. With a rapid, highly convenient user interface and simple operation flow, you can upload/download, browse, organize and share pictures and movies, as well as coordinate with SNS, smoothly and simply. "Basic account," with a maximum of 2 GB storage space, is available to all registered users. "Special account," that can be used by Nikon digital camera owners, offers storage space up to 20 GB and various useful functions, including the ability to set a password when sharing images and restrict image download.

NIKON IMAGE SPACE  
nikonimagespace.com

## Wireless accessories/Communication unit



### WR-1 Wireless Remote Controller (optional)

The WR-1 is an advanced multifunctional remote controller. When one WR-1 is configured as a transmitter and another as a receiver, which is attached to the D7100, it is possible to view or change the camera settings\*<sup>1</sup> using the display of the transmitter. Utilizing radio waves, the communication range between WR-1 units is up to 120 m/394 ft<sup>2</sup>. Fifteen channels are available. Besides remote control of a camera with a WR-1 (used as a receiver) attached, achieved by operation of another WR-1 (used as a transmitter)\*<sup>3</sup>, there are various remote shooting options, such as: simultaneous release of shutters on several cameras; release of shutters on several cameras synchronized with a master camera that has a WR-1 attached\*<sup>4</sup>; remote control of each group of cameras separately, and Interval Timer Photography. Remote shooting by combining the WR-1 with WR-R10/WR-T10 is also possible\*<sup>3</sup>.

\*<sup>1</sup> Functions limited. Exposure modes (viewing, but not changing, is available), shutter speed/aperture value (Availability of viewing and changing settings depends on the exposure mode in use), ISO sensitivity, etc. \*<sup>2</sup> Approximate range at height of about 1.2 m/4 ft; varies with weather conditions and presence or absence of obstacles. \*<sup>3</sup> This requires pairing the WR-1, WR-R10 and WR-T10 units in use. Maximum number of controllers that can be paired: 20 (WR-1) or 64 (WR-R10). \*<sup>4</sup> Only a camera with a ten-pin remote terminal can be employed as a master camera in Synchronized Release.



### WU-1a Wireless Mobile Adapter (optional)

By attaching the optional WU-1a Wireless Mobile Adapter to the D7100's USB connector, communication via wireless LAN between the camera and a smart device, such as a smartphone or tablet computer, is possible. With the remote shooting function that enables release of the shutter from a distance, you can use your smart device as a remote live view monitor to confirm the live view image and then shoot. After the images are transmitted to your smart device, you can easily upload them to your favorite SNS or attach them to an e-mail. The adapter is compatible with smart devices using the iOS and Android™ OS.

Note: Using the WU-1a connected to a smart device requires you to install Wireless Mobile Utility (Can be downloaded free from the application store of each smart device) to the device prior to use.



### WR-R10/WR-T10 Wireless Remote Controllers (optional)

The maximum communication distance between a WR-R10 and WR-T10 is 20 m/66 ft\*<sup>1</sup>. You can control a single or multiple cameras with a WR-R10 attached (number of cameras is unlimited) by using the WR-T10 as a transmitter. Utilizing radio waves, these remote controllers enable remote shooting even if obstacles, such as trees, stand in the way. Besides driving AF by half-pressing the shutter-release button of the controller and continuous shooting by pressing the shutter-release button longer, you can employ the controllers to operate various functions of the D7100 including movie recording\*<sup>2</sup>.

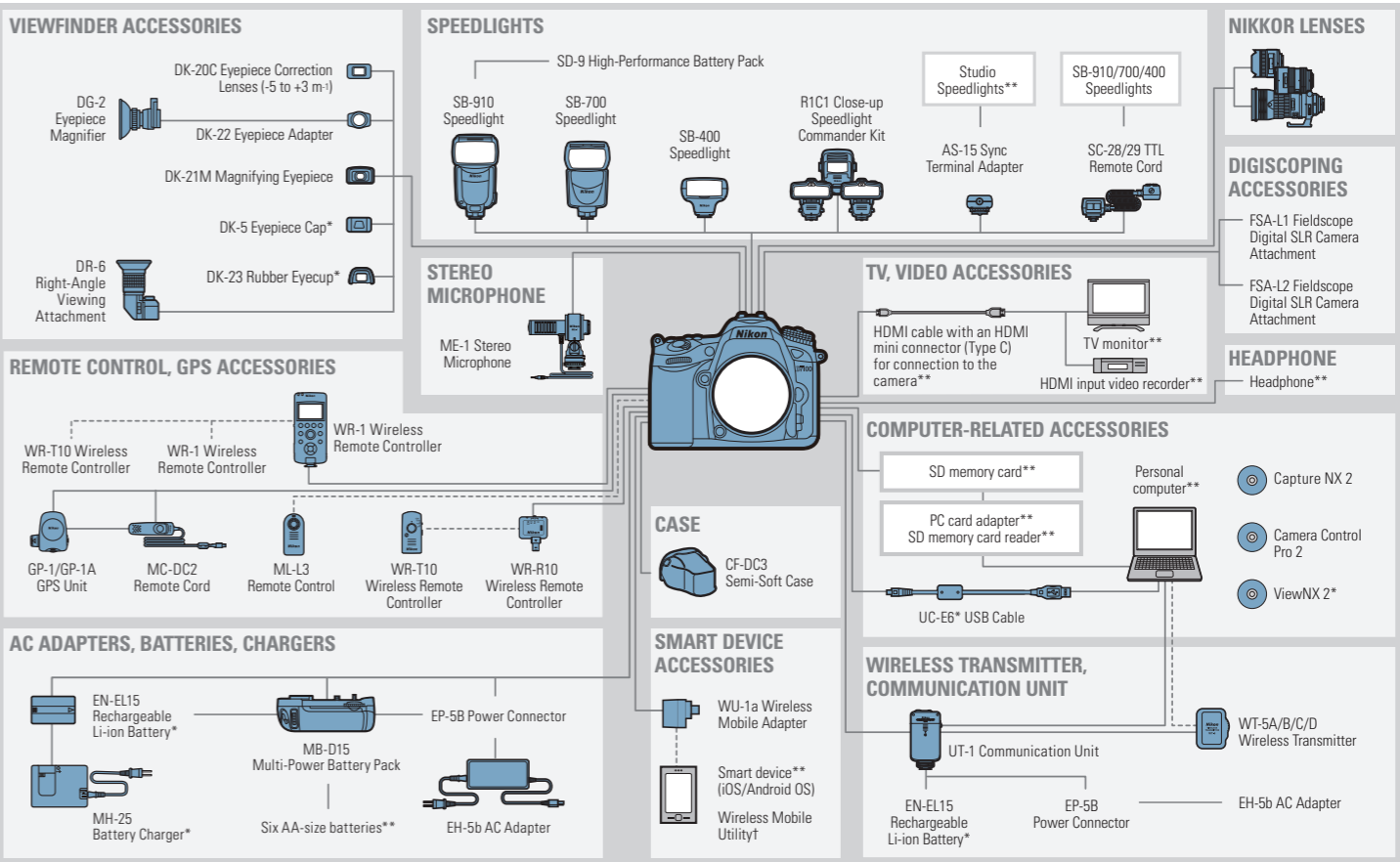
\*<sup>1</sup> Approximate range at height of about 1.2 m/4 ft; varies with weather conditions and presence or absence of obstacles. \*<sup>2</sup> Movie recording is available when employed with the D4, D800 series, D600, D7100, and D5200.



### UT-1 Communication Unit (optional)

The UT-1 Communication Unit can be mounted on the D7100's accessory shoe and connected to the camera with a USB cable. It enables high-speed transfer of image data from the camera to a PC or FTP server and remote controlling of the camera from a PC via wired LAN. Furthermore, it can be utilized over wireless LAN\*<sup>1</sup> when the unit is used in combination with the WT-5A/B/C/D Wireless Transmitter\*<sup>2</sup>. When using the UT-1 with the D7100, transferring stills and movies to a PC or FTP server and remote controlling of the camera from a PC (camera controls and storage of stills and movies to a PC, using optional Camera Control Pro 2 software) are enabled.

\*<sup>1</sup> Based on IEEE802.11a/b/g/n. \*<sup>2</sup> The HTTP server mode and synchronized release mode that are available with a combination of the D4 and WT-5A/B/C/D cannot be used when combining the UT-1 and WT-5A/B/C/D.



\*Supplied accessories \*\*Non-Nikon products † Can be downloaded from the application store of each smart device (free).

Nikon Digital SLR Camera D7100 Specifications

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
Effective pixels	24.1 million
Image sensor	23.5 × 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 required)
Image size (pixels)	• DX (24×16) image area: 6000 × 4000 [L], 4496 × 3000 [M], 2992 × 2000 [S] • 1.3× (18×12) image area: 4800 × 3200 [L], 3600 × 2400 [M], 2400 × 1600 [S] • Photographs with image area of DX (24×16) taken in movie live view: 6000 × 3368 [L], 4496 × 2528 [M], 2992 × 1680 [S] • Photographs with image area of 1.3× (18×12) taken in movie live view: 4800 × 2696 [L], 3600 × 2024 [M], 2400 × 1344 [S]
File format	• 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 System	Standard, Neutral, Vivid, Monochrome, Portrait, Landscape; selected Picture Control can be modified; storage for custom Picture Controls
Storage 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
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 <sup>-1</sup> )
Eyepoint	19.5 mm (-1.0 m <sup>-1</sup> ; from center surface of viewfinder eyepiece lens)
Dioptric adjustment	-2 to +1 m <sup>-1</sup>
Focusing screen	Type B Brite-View 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 ( <b>A</b> and <b>M</b> modes) or by camera (other modes)
Lens aperture	Instant return, electronically controlled
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 ( <b>A</b> and <b>M</b> 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)
Shutter type	Electronically controlled vertical-travel focal-plane shutter
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)
Release modes	S (single frame), C (continuous low speed), Ch (continuous high speed), Q (quiet shutter-release), ☺ (self-timer), MUP (mirror up); interval timer photography supported
Approximate frame advance rate	• JPEG and 12-bit NEF (RAW) images recorded with DX (24×16) selected for image area: Cl 1 to 6 fps, Ch 6 fps • JPEG and 12-bit NEF (RAW) images recorded with 1.3× (18×12) selected for image area: Cl 1 to 6 fps, Ch 7 fps • 14-bit NEF (RAW) images recorded with DX (24×16) selected for image area: Cl 1 to 5 fps, Ch 5 fps • 14-bit NEF (RAW) images recorded with 1.3× (18×12) 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
Exposure metering mode	TTL exposure metering using 2016-pixel RGB sensor
Metering method	• 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)
Metering range (ISO 100, f/1.4 lens, 20°C/68°F)	• Matrix or center-weighted metering: 0 to 20 EV • Spot metering: 2 to 20 EV
Exposure meter coupling	Combined CPU and AI
Exposure modes	Auto modes (☺ auto; ☺ auto [flash off]); programmed auto with flexible program ( <b>P</b> ); shutter-priority auto ( <b>S</b> ); aperture-priority auto ( <b>A</b> ); manual ( <b>M</b> ); scene modes ( <b>👤</b> portrait; <b>🌄</b> landscape; <b>👶</b> child; <b>🏊</b> sports; <b>👁</b> close up; <b>🌃</b> night portrait; <b>🌃</b> night landscape; <b>🍷</b> party/indoor; <b>🏖</b> beach/snow; <b>🌅</b> sunset; <b>🌆</b> dusk/dawn; <b>🐾</b> pet portrait; <b>🕯</b> candlelight; <b>🌸</b> blossom; <b>🍁</b> autumn colors; <b>🍽</b> food); special effects modes ( <b>🌃</b> night vision; <b>🎨</b> color sketch; <b>🎨</b> miniature effect; <b>🎨</b> selective color; <b>🎨</b> silhouette; <b>🎨</b> high key; <b>🎨</b> low key); <b>U1</b> (user settings 1); <b>U2</b> (user settings 2)
Exposure compensation	Can be adjusted by -5 to +5 EV in increments of 1/3 or 1/2 EV in <b>P</b> , <b>S</b> , <b>A</b> and <b>M</b> 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 <b>AE-L/AF-L</b> button
ISO sensitivity (Recommended Exposure Index)	ISO 100 to 6400 in steps of 1/3 or 1/2 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
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	• 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 <b>AE-L/AF-L</b> button
Built-in flash	<b>☑</b> , <b>👤</b> , <b>🌄</b> , <b>👶</b> , <b>🏊</b> , <b>👁</b> , <b>🌃</b> , <b>🌃</b> : Auto flash with auto pop-up <b>P</b> , <b>S</b> , <b>A</b> , <b>M</b> , <b>T</b> : 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)	• 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)
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
Live view modes	Live view photography (still images), movie live view (movies)
Live view lens servo	• 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)
Movie metering	TTL exposure metering using main image sensor
Movie metering method	Matrix
Frame size (pixels) and frame rate	• 1920 × 1080; 60i (59.94 fields/s)/50i (50 fields/s)* • 1920 × 1080; 30p (progressive), 25p, 24p • 1280 × 720; 60p, 50p 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 1.3× (18×12) is selected for image area; sensor output is about 60 or 50 fps
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
Monitor	8-cm/3.2-in., approx. 1229k-dot (VGA; 640 × 480 × 4 = 1,228,800 dots), TFT monitor with approx. 170° viewing angle, approx. 100% frame coverage and brightness adjustment
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
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)
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
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)
Tripod socket	1/4 in. (ISO 1222)
Dimensions (W × H × D)	Approx. 135.5 × 106.5 × 76 mm/5.3 × 4.2 × 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)
Operating environment	Temperature: 0 to 40°C/32 to 104°F; humidity: 85% or less (no condensation)
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-D1 BK Camera Strap, BF-I1 Body Cap, BS-1 Accessory Shoe Cover, ViewNX 2 CD-ROM

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**WARNING**

**TO ENSURE CORRECT USAGE, READ MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT. SOME DOCUMENTATION IS SUPPLIED ON CD-ROM ONLY.**

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