

AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED
February 2003

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*New compact, lightweight ultra-wideangle zoom G-type lens
designed exclusively for Nikon digital SLRs*

TOKYO - Nikon Corporation is pleased to announce the introduction of a new lens, the **AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED**.

The AF-S DX Zoom-Nikkor 12-24mm* f/4G IF-ED is the first lens in the new DX Nikkor series. Designed specifically for use with Nikon D1-series and D100 digital SLR cameras, it features ultra-wideangle zoom capability, ED (Extra-low Dispersion) glass and Nikon's exclusive built-in SWM (Silent Wave Motor).

*2X zoom ratio and variable picture angle (angle of view) from 99° at 12mm to 61° at 24mm (18-36mm in 35mm [135] format) with Nikon D1-series and D100 digital SLRs

The lens is targeted at professional and advanced amateur Nikon D-SLR users who demand both the advantages of high optical performance and ultra-wideangle focal range.

The AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED has been developed in response to the growing enthusiasm towards Nikon's D1-series and D100 digital SLR cameras, and in recognition of the market's interest in and need for wider-picture-angle high-performance optics for digital SLR photography.

The AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED takes advantage of the current sensor design, using a 23.7 x 15.6mm format which allows D1-series and D100 owners to use shorter focal length lenses to achieve a narrower picture angle.

Compact and lightweight, the AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED is an ultra-wideangle 2x zoom lens with focal length starting at 12mm (picture angle with D1-series and D100 digital SLRs is equivalent to that of 18mm lens in 35mm [135] format) for greater wideangle covering power.

The lens incorporates two ED (Extra-low Dispersion) glass and three aspherical lens elements in a new optical design, effectively minimizing chromatic aberration and significantly reducing distortion.

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For fast, quiet Autofocus operation, the lens comes equipped with Nikon's exclusive SWM (Silent Wave Motor).

And the rounded diaphragm opening makes out-of-focus elements appear more natural.

This G-type Nikkor lens is designed with no aperture rings, and offers easier, virtually mistake-free operation because the aperture does not need to be set to minimum.

Note: We do not recommend use of DX Nikkor lenses with 35mm (135) or IX240 format cameras.

Focal length and Picture angle

When Nikkor lenses originally designed for the 35mm (135) format are used on the Nikon digital format, photographers believe that the lens' focal length is increased by a factor of 1.5. For example, a 12-24mm lens would become a 18-36mm lens. Technically, that is not correct. In fact, there is no change of focal length as you switch the lens from one format to the other. The actual change is that the picture angle of the lens is narrowed on the digital format because the digital format is smaller in relation to the lens' image circle projected on the sensor. Focal length and reproduction ratio remain constant for the comparable viewed portions of the image. It is the picture angle that changes.

The new DX Nikkor lens' true focal length is 12-24mm with a picture angle that will vary from 99° at 12mm to 61° at 24mm.

The combination of reduced picture angle and a smaller image circle enabled the creation of the first compact, lightweight ultra-wideangle DX Nikkor lens.

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AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED Major Features

- Lightweight and compact design that fits nicely in users' hands
- 12-24mm ultra-wideangle G-type (no aperture ring) zoom lens; 99° to 61° picture angle equivalent to 18-36mm lens on 35mm (135) format camera
- ED (Extra-low Dispersion) glass elements minimize chromatic aberration, provide higher resolution and superior contrast
- Three aspherical lens elements minimize distortion, especially at the periphery, for superior optical performance
- High-grade Nikon Super Integrated Coating (SIC) offers superior color reproduction and minimizes ghost and flare
- Nikon's exclusive SWM for swift autofocus with superior accuracy and ultra-quiet operation
- The rounded diaphragm opening (7 blades) makes out-of-focus elements appear more natural
- 0.3m (11.8 in.) closest focusing distance throughout full zoom range
- M/A mode allows rapid switching between autofocus and manual even during AF servo operation, with virtually no time lag
- Internal Focusing (IF) design for smoother focusing and great body balance
- Flower-shaped Lens Hood HB-23 (provided) greatly reduces stray light
- Fits in Lens Case CL-S2 (optionally available)

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AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED Specifications

Focal length	12-24mm (picture angle with D1-series and D100 digital SLRs is equivalent to that of 18-36mm lens in 35mm [135] format)
Maximum aperture	f/4
Lens construction	11 elements in 7 groups
Picture angle	99°-61° with D1-series and D100 digital SLR
Focus distance	0.3m (11.8in.) to infinity
Max. reproduction ratio	1/8.3
Aperture	f/4 to f/22
Attachment size	77mm
Dimensions	Approx. 82.5mm dia. x 90mm (3.2 in. dia. x 3.5 in.)
Weight	Approx. 485g (17.1 oz.)

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer.