



# Information

**AF DX Fisheye-Nikkor 10.5mm f/2.8G ED**  
July 2003

## **AF DX Fisheye-Nikkor 10.5mm f/2.8G ED**

*Bringing an exciting new dimension of 180° picture angle options to the Nikon DX Format digital SLR lineup*

TOKYO – Nikon Corporation is pleased to announce the introduction of the first fisheye lens developed exclusively for Nikon DX Format digital SLR cameras, the **AF DX Fisheye-Nikkor 10.5mm f/2.8G ED**.

An important addition to the DX Nikkor lens lineup, the first fisheye lens designed specifically for digital SLR photography is also the first to achieve a full-frame 180° picture angle. The ultra-wideangle focal length of 10.5mm brings digital camera users a picture angle equivalent to that of a 16mm fisheye lens on a 35mm [135] format camera.

The lens is targeted at Nikon DX Format digital SLR camera users who seek the unique visual effects a full-frame fisheye lens lends to landscape and other shots, to taking close-ups, or when shooting within vehicles or other tight interiors.

The AF DX Fisheye-Nikkor 10.5mm f/2.8G ED excels at shooting extreme close-ups. Combining a minimum focus distance of just 3cm (1.2 in.) from the front of the lens with Nikon's Close-Range Correction (CC) System ensures sharp results.

The new "Fisheye to Wideangle Transformation" function in the optional Nikon Capture 4 software package transforms diagonal fisheye images shot using the AF DX Fisheye-Nikkor 10.5mm f/2.8G ED to ultra-wideangle photos, (by transforming the type of projection). This is an appealing new feature made possible only with digital photography and with the Nikon Total Imaging System.

Optical and close-range focusing performance are both optimized for Nikon DX Format digital SLR cameras. An ED (Extra-low Dispersion) glass element minimizes chromatic aberration for clear, natural colors, and the rounded seven-blade diaphragm opening ensures a natural look to out-of-focus elements.

This G-type Nikkor lens is designed with no aperture rings. Its operation is easy and



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virtually mistake-free because the aperture does not have to be set to minimum.

The compact, lightweight design fits comfortably in the hand. And photographers at all levels will be pleased with its outstanding performance.

Note: This lens is not compatible with 35mm [135] or IX 240 format film SLR cameras.

## **Focal length and Picture angle**

When Nikkor lenses originally designed for the 35mm [135] format are used on the Nikon DX Format, photographers believe that the lens' focal length is increased by a factor of 1.5. For example, a 10.5mm full-frame fisheye lens would become a 16mm fisheye 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 true focal length of the new AF DX Fisheye-Nikkor 10.5mm f/2.8G ED is 10.5mm with a picture angle of 180°.

The combination of reduced picture angle and a smaller image circle enabled the creation of the first fisheye lens in the DX Nikkor lineup.



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## **AF DX Fisheye-Nikkor 10.5mm f/2.8G ED Major Features**

- The first fisheye lens developed exclusively for Nikon DX Format digital SLR cameras
- Achieves a full-frame 180° picture angle equivalent to a 16mm fisheye lens on a 35mm [135] format camera
- Delivers high-performance focus at extremely close range. Minimum focus distance is 14cm (5.5 in.) -- only 3cm (1.2 in.) from the lens front
- ED (Extra-low Dispersion) glass element minimizes chromatic aberration, for natural colors
- Rounded diaphragm with seven-blade opening provides natural look to out-of-focus picture elements
- Lightweight, compact size fits easily in hand
- Optional Nikon Capture 4 software makes post-processing of images easier and more efficient, while also expanding the pleasure of exploring new possibilities with digital photography.
- Fixed flower-shape barrel-type hood greatly reduces stray light
- Soft lens case CL-0715 supplied



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## **AF DX Fisheye-Nikkor 10.5mm f/2.8G ED Specifications**

<b>Focal length:</b>	10.5mm (the picture angle is equivalent to a 16mm lens in 35mm [135] format)
<b>Maximum aperture:</b>	f/2.8
<b>Lens construction:</b>	10 elements in 7 groups (includes one ED glass lens element)
<b>Picture angle:</b>	180°
<b>Focus distance:</b>	0.14m (5.5 in.) to infinity
<b>Max. reproduction ratio:</b>	1/5 (0.2)
<b>Aperture:</b>	f/2.8 to f/22
<b>Filter:</b>	Rear-attachment bayonet type
<b>Dimensions:</b>	Approx. 63mm dia. x 62.5mm (2.5 in. dia. x 2.5 in.)
<b>Weight:</b>	Approx. 305g (10.8 oz.)

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. July 2003  
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