

AF18-200mm F/3.5-6.3 XR Di II LD Aspherical [IF] Macro **new**

TAMRON[®]

[Equivalent to 28-300mm*]

*When converted to 35mm film format.



**Introducing a powerful zoom range
exclusively for digital cameras**

Di II

Lens designed for exclusive use on
digital cameras with smaller-size imagers.

*This lens is not designed for use with 35mm film cameras and digital SLR cameras with image sensors larger than 24x16mm.

Model A14 For Canon AF, Konica Minolta AF-D, Nikon AF-D, and Pentax AF

<http://www.tamron.com>

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200mm (Equivalent to 300mm) Exposure:F/8 Auto ISO100



18mm
(Equivalent to 28mm)
Exposure:F/11 Auto ISO100

135mm
(Equivalent to 209mm)
Exposure:F/8 Auto ISO100



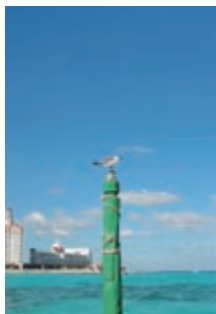
18mm
(Equivalent to 28mm)
Exposure:F/11 Auto ISO100

At last, a powerful zoom range exclusively for digital cameras: The birth of a super high-power zoom designed to meet nearly

11.1x zoom yields 28-300mm* range on digital cameras

* When converted to 35mm format

From snapshots at 28mm-equivalent wide-angle to 300mm-equivalent ultra telephoto for distant landscapes, and from close-up shots of flowers to portraiture of distant subjects, one single 11.1X zoom lens covers all your photographic needs. With this 11.1X versatile zoom lens in your bag, you can enjoy upbeat, stress-free photography without changing lenses.



18mm (Equivalent to 28mm)

▶
x11.1



200mm (Equivalent to 300mm)

Optimum Optical System Designed to Reach Digital SLR Cameras' Greatest Potential

Outstanding Resolution for High Quality Digital Images

This lens is exclusively designed for digital SLR photography, and provides high quality digital photos with its outstanding resolution and contrast.

Abundance of Special Glass Materials

Tamron uses special glass materials to achieve high quality digital images. The LD (Low Dispersion) glass minimizes "on-axis aberration" that degrades the sharpness in telephotography and "lateral chromatic aberration", an image degrading factor in wide-angle photography. In addition, large hybrid aspherical elements are used to compensate distortion.

Systematic Countermeasures against Ghosting and Flare with New Technologies

Ghosting and flare caused by aberrations are annoying factors in digital SLR photography, so Tamron has adopted various countermeasures against the problem including the employment of "Internal Surface Coatings" (i.e., multiple-layer coatings on cemented surfaces of plural elements) and new multiple-layer coating technology on ordinary elements in order to minimize reflections that occur when light enters through the front element and to reduce image degrading effects caused by the imagers themselves.

Peripheral Light Fall-off is Minimized

Peripheral light fall-off that is noticeable in digital images is minimized when compared to conventional lenses for film cameras. The images are uniformly bright from center to periphery.



18mm
(Equivalent to 28mm)
Exposure:F/8 Auto ISO100

18mm
(Equivalent to 28mm)
Exposure:F/8 Auto ISO100

35mm
(Equivalent to 54mm)
Exposure:F/8 Auto ISO100



100mm
(Equivalent to 155mm)
Exposure:F/8 Auto ISO100

200mm
(Equivalent to 300mm)
Exposure:Aperture fully opened
Auto ISO 100
MFD : 0.45m
Macro Magnification Ratio : 1:3.7



new

AF18-200mm F/3.5-6.3 XR Di II LD Aspherical [IF] Macro

every photographic situation

Lightweight and Compact Design for Excellent Portability

Excellent portability and ease of use are assured with the compact, lightweight design from Tamron's original technologies accumulated as the pioneer of high power zoom lenses. The employment of Tamron's "XR" design, the key technology for downsizing high power zoom lenses, has resulted in a zoom lens that is as compact and lightweight as Tamron's acclaimed 28-300mm Di*.

*AF28-300mm F/3.5-6.3 XR Di (Model A061)

As Close as 45cm (17.7")* for Macro Photography

* Distance from the sensor of the camera to the subject.

Effortlessly, you can get as close as 45cm to your subject with a 200mm telephoto setting for close-up shots. The maximum magnification ratio of 1:3.7* (at f=200mm, MFD 0.45m) enables you to fill the frame with a subject approximately the same size as an audiocassette tape. You can easily and conveniently enjoy close-up (macro) photography of flowers and insects.

* The Max. Mag. Ratio of the 18-200mm (Model A14) is 1:3.7 while that of the 28-300mm (Model A061) is 1:2.9. However, since the lens is designed exclusively for digital SLR cameras with smaller-size imagers, the A14 can fill the frame the same way the A061 does on a 35mm SLR camera. The Max. Mag. Ratio of 1:3.7 is equivalent to 1:2.8 when converted to the 35mm film format.

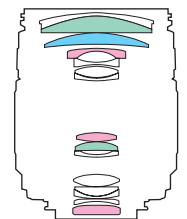
Model A14 Specifications

Model	A14
Focal Length	18-200mm
Angle of View	(Diagonal) 75°33'-7°59' (Horizontal) 65°36'-6°38' (Vertical) 46°21'-4°15'
Maximum Aperture	F/3.5-6.3
Lens Construction	15 elements in 13 groups
Minimum Focus Distance	0.45m (17.7")
Max.Mag.Ratio	1:3.7 (at f=200mm, MFD:0.45m)
Overall Length	83.7mm (3.3")* (at maximum extension:149.4mm (5.9")*)
Maximum Diameter	ø73.8mm (2.9")
Filter Size	ø62mm
Weight	398g (14.0oz.)*
Diaphragm Blades	7
Minimum Aperture	F/22
Standard Accessory	Flower-shaped hood
Compatible Mount	Canon AF, Konica Minolta AF-D Nikon AF-D, and Pentax AF

*Values given are for Nikon AF cameras.

Lens Construction

<15 elements in 13 groups>



LD glass XR(Extra Refractive-Index)glass Aspherical Lens

What does the designation "Di-II" (designed for exclusive use on digital SLR cameras with smaller-size imagers) mean?

Designed to capture the optimum scope when used with a digital SLR camera

Since the size of 35mm film format is different from the image sensor of a digital camera, scopes captured are different even when focal lengths are the same (i.e., angles of view differ). The AF18-200mm Di-II is designed to have shorter focal lengths to achieve optimum angles of view in its wide-angle side.

Images taken with a digital SLR with a smaller-size imager are actually cropped to about 70% scope.

Angle of view: 75°23' (35mm film) vs 52°58' (Digital SLR)

Same Focal Length: 28mm

Principal point, Focal Point, Lights, Mirror, Camera, Film/Image Sensor, Focal Point

35mm Film: 36mm x 24mm, Diagonal: 43.27mm

General image sensor: about 23.2mm x 15.6mm, Diagonal: 27.9mm

*The general image sensors (smaller-size imagers) are about 24mm x 16mm. However, the dimensions and effective size differ depending upon manufacturers.

Designed to fit smaller-size imagers in order to reduce its diameter

Attempts to design shorter focal lengths inevitably result in a larger lens diameter. Tamron has solved this problem by designing the size of the lens' image circle to match that of smaller-size image sensors. In the compact design, it is almost comparable to a lens offering the same angles of view in 35mm film format.

*When pictures are taken with a Di-II lens mounted on a 35mm film camera, image corners become dark (i.e., vignetting becomes noticeable).

Film and Digital – Angles of View and Focal Lengths

Telephoto 7°59'

Standard 31°11'

Wide 75°33'

Film: 300mm
Digital: 200mm

Film: 78mm
Digital: 50mm

Film: 28mm
Digital: 18mm

*Film = 35mm format.
*Digital = Digital cameras with smaller-size imagers.

Different Angles of View

AF18-200mm (A14)	Diagonal 75°33'	Horizontal 65°36'	Equivalent 28mm	Diagonal 31°11'	Horizontal 26°7'	Equivalent 78mm	Diagonal 15°53'	Horizontal 13°14'	Equivalent 155mm	Diagonal 7°59'	Horizontal 6°38'	Equivalent 300mm
11mm	Diagonal 103°29'	Horizontal 93°3'	Equivalent 17mm	18mm	Diagonal 75°33'	Horizontal 65°36'	Equivalent 28mm	SP AF11-18mm (A13)	*Will be available in 2005.			

Categories of Tamron's Di (Digitally Integrated design) lens series

Exclusively for digital

Designed for exclusive use on digital cameras with smaller-size imagers. Di-II lenses are designed exclusively for digital SLRs with smaller-size imagers. This series of lenses are not designed for 35mm format cameras and digital SLR cameras with image sensors larger than 24 x 16mm.

Di II Lens

High Power Zoom

AF18-200mm
F/3.5-6.3 XR Di II
LD Aspherical [IF] Macro
(Model A14)
Equivalent to 28-300mm

SP Di II Lens

Wide-angle Zoom

SP AF11-18mm
F/4.5-5.6 Di II
LD Aspherical [IF]
(Model A13)
Equivalent to 17-28mm

NOTE: Vignetting occurs when pictures are taken with a Di-II lens mounted on a 35mm film SLR camera or a digital SLR camera with an image sensor larger than 24 x 16mm.

For film & digital

Designed for use with both 35mm film SLR cameras and digital cameras. Di lenses are designed to fit the characteristics of digital cameras as well as film cameras by paying attention to countermeasures against ghosting and flare through such advances as special coatings.

Di Lens

AF28-300mm
F/3.5-6.3 XR Di
LD Aspherical [IF] Macro
(Model A061)

Film & Digital

SP Di Lens

SP AF17-35mm Di (Model A05)
SP AF28-75mm Di (Model A09)
SP AF90mm Di (Model 272E)
SP AF180mm Di (Model B01)
SP AF200-500mm Di (Model A08)

Film & Digital

*The angles of view obtained by a "Di" lens mounted on a digital camera with smaller-size imagers differ from those obtained by the same lens mounted on a 35mm format film camera.

Caution : Please read the instruction manual carefully before using the lens.

TAMRON® Manufacturer of precise and sophisticated optical products for a broad range of industries.



Quality Assurance Activities: At Tamron, quality management activities are performed in compliance with ISO9001:2000 not only to assure product quality but to enhance customer satisfaction.

Environmental Protection: We recognize the significance of our social responsibilities. Tamron promotes corporate activities that protect the earth's environment through the establishment of a quality assurance system that is compliant with ISO14001.

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