

Tokina

LENS CATALOG

THE FINEST GRADE IN TECHNOLOGY

www.tokinalens.com



LENSES FOR **DIGITAL** SLR CAMERAS



AT-X GOLD RING PRO SERIES



VISIONARY TECHNOLOGY MAKES A DIFFERENCE YOU CAN SEE.

Tokina's proprietary AT-X technology has been evolving toward optical perfection for more than 20 years.

Since our mission began in 1981 we have made continuous advances. Each new model is a further refinement in a continuing legacy of excellence in design and materials. The current AT-X PRO series continues this evolution of excellence by using the most state-of-the-art technology anywhere.

More Quality Than Meets The Eye.

The Tokina difference comes from special material selection and assembly technology that employs micron-unit quality control. This ensures optimum consistency while maintaining the highest quality for every lens. Worldwide, both professionals and knowledgeable photography enthusiasts rely on Tokina lenses.

AT-X Technology

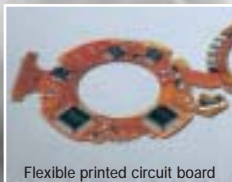
AT-X comes from our original concept of "Advanced Technology Extra." This vision encompasses a special group of lenses that are manufactured without compromise, using the most advanced design and fabrication technologies available. The use of unique and unprecedented optical systems independently pioneered by Tokina, has made advanced features, high performance, lightweight, and compact designs a reality. Of course, we have also given full attention to ergonomics and handling. To any user, AT-X means excellent performance through superior technology.



Floating Element Assembly



Aluminum Alloy Die-Cast Model



Flexible printed circuit board



SD (Super Low Dispersion) Glass

Mechanisms

1. All metallic moving parts are coated with a special lubricant to improve durability.
2. Tokina's independently developed technology maintains the high precision of mechanical fittings, accurately measured in microns.
3. Micron tolerances also give smooth operation and durability to operating rollers and internal focus cams.
4. Brass is used in the lens mount to maintain high precision. Other mechanisms are plated with hard chrome for optimum durability.

Exterior Finish

1. PRO models have a hardened Alumite (Armalite) finish to increase durability and give a top-quality feel and finish.
2. Ergonomic designs emphasize control, grip and ease of operation with textured rubber used on zoom and focus barrels. These are original Tokina materials, designed to give many years of faithful service without deterioration.

Operation

1. Use of our special alloy Duralumin for metal parts provides excellent durability, stabilizes torque and provides better handling. It also maintains smoother operation under all conditions.
2. Our special lubricant is used on moving parts, formulated to perform even under extremes of temperature.

Lens Coatings

Resistance to flare and ghosting, plus faithful color reproduction are all achieved by a unique coating technique – yet another reason for Tokina's reputation for incredibly sharp and clean images.

TECHNOLOGY - MECHANICAL



Focus Clutch Mechanism

The ability of the focus ring to be pushed forward and disengaged allows maximum autofocus speed and efficiency. The ring can be pulled back and re-engaged for manual focusing with just the right amount of resistance.



Auto Focus



Manual Focus



One-Touch Focus Clutch Mechanism

The newly improved one-touch focus clutch allows the focus to be moved quickly and easily from the AF position back into the MF position. In Nikon and Canon mounts, the lens can be set for manual focusing without an AF/MF switch or setting the body to the AF position.



Auto Focus



Manual Focus

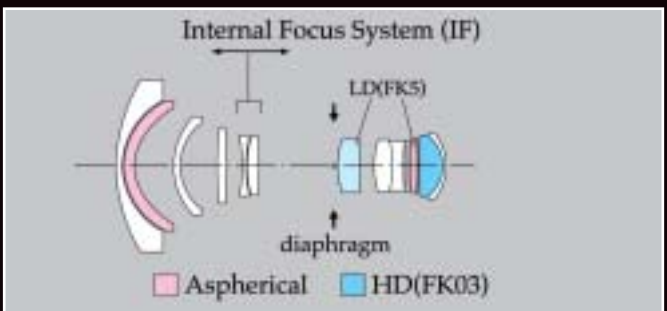


Internal Focus System

The two main methods of lens focusing are either the complete straight forward movement of elements (used mainly with single focal length lenses), or the rotation of the entire front lens barrel group (used mainly with zoom lenses). The internal focusing system used by Tokina moves each lens group, but does not change the overall length of the lens - this is especially useful with telephoto designs.

The internal focusing system has a number of advantages, including:

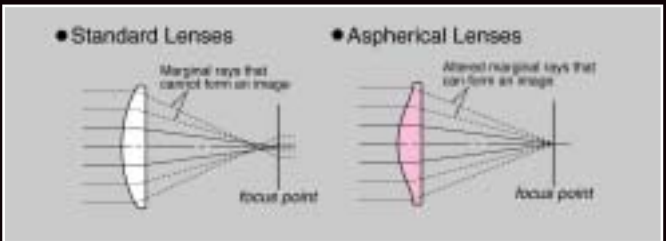
1. Faster focusing
2. Improved handling due to fewer movements near the center of gravity
3. More compact lens designs
4. Superior use of filters as the front filter thread does not rotate





Aspherical Optics

Standard lenses are made from a combination of spherical lens elements. However, there can be problems with such lenses when light entering at the edges of the lens may not be perfectly focused at the same point as light entering at the center. That presents limits to performance in wide aperture and super wide-angle lenses. Tokina uses aspherical glass elements in many of its lenses. In addition to correcting spherical aberration, these lenses fully correct light quantity and distortion at the edge of the image and provide excellent results when used in combination with floating elements. Through technical cooperation with Hoya, Tokina has succeeded in producing high quality molded glass elements with a greater aspherical shape than any other lens so far. This technique is unparalleled in its technological sophistication and excellence.



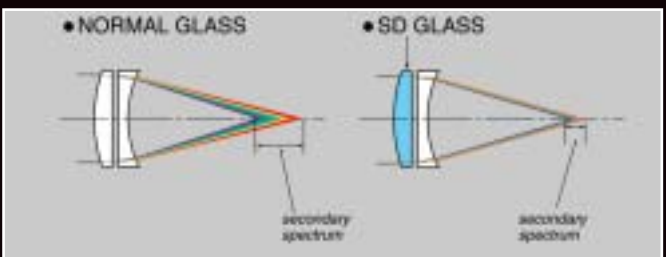
F&R Aspherical

This lens encompasses Tokina's new large diameter F&R Aspherical molded glass elements of 50mm diameter at the front and 20mm at the rear. These give outstanding performance with even illumination in the corners and correction of distortion and aberration.



SD (Super Low Dispersion) Glass

Lenses with the SD mark use Super-low Dispersion glass which minimizes the secondary spectrum caused by chromatic aberration. Basically, these lenses use FK01 and FK02 optical materials which gives them SD (APO) qualities. This provides excellent image quality in telephoto lenses of 200mm or more by correcting color aberration across the entire picture and bringing all colors into focus accurately at the film plane.





for APS & 35mm Full
Format Digital SLR
AUTO FOCUS

AT-X Series

AF80-400mm f/4.5-5.6

AT-X 840 D

TO FIT CANON • NIKON-D

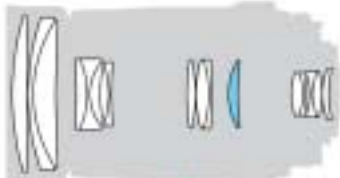


Tokina created the first 80-400mm AF lens in 1996 and when it did, it created a whole new class of telephoto lenses. The latest lens, the AT-X 840 D is still the smallest lens to zoom to 400mm with a bright f/5.6 aperture. Perfect for traveling, the New AT-X 840 D has an internal focusing system which increases AF speed and responsiveness. Further updates make this lens an excellent traveling companion for a Canon or Nikon DIGITAL or FILM SLR camera.

The optics incorporate SD (APO) glass to give clear sharp images and an internal flare cutting design removes unnecessary light (flare). To further eliminate unwanted stray light and flare, Tokina always recommends using the included lens hood for best results.



- 16 Elements in 10 Groups
- Filter size: \varnothing 72mm
- Minimum Focus Distance: 2.5m



As **SD**
Aspherical Super Low Dispersion

SD Lens (FK01)



Lens Hood BH-725

Equipped with a newly developed lens hood (PL assist hood).



AT-X PRO Series

for APS-C Format
Digital SLR
AUTO FOCUS

AF12-24mm f/4

AT-X 124 PRO DX

TO FIT CANON • NIKON-D APS-C Sized Sensor Model Only

Designed exclusively for digital SLR cameras with an APS-C sized sensor, the AT-X 124 PRO DX's incredible 12 to 24mm zoom range gives the digital photographer a super wide-angle zoom lens at a light, affordable price. But the AT-X 124 PRO DX is no lightweight where it counts, optical quality. HOYA SD glass, aspherical elements, the latest optical multi-coating technology are combined in a lens that professionals and photo magazines the world over are praising.

When used on a digital SLR camera with an APS-C sized sensor the corresponding angle of view is equal to an 18-36mm zoom lens on a film camera. New multi-coating technology reduces internal reflections and ghosting. Aspherical elements eliminate spherical aberrations and SD glass corrects chromatic aberrations yielding an unparalleled sharpness.

Fast internal focusing coupled with Tokina's One-Touch Focus Clutch Mechanism makes switching between auto and manual focus as easy as snapping the focus ring back and forth.

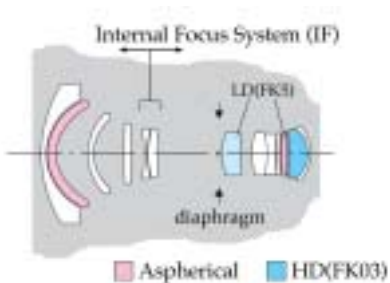
A bright, constant f/4 aperture allows plenty of light to enter the camera for shooting in a wide variety of photographic situations.



Tokina recommends using HOYA PRO 1 Digital filters with the AT-X 124 PRO DX, and low profile circular polarizing filters like the HOYA PRO 1 Digital Wide Band Circular Polarizer or the Super HMC low profile Circular Polarizer.

Notes:

1. The AT-X 124 PRO DX will not yield full coverage on a 35mm film camera.



Lens Hood BH-777

The large BH-777 wide-angle hood with "click-lock" to stay in place.





AT-X PRO Series

for APS & 35mm Full
Format Digital SLR
AUTO FOCUS

AF100mm f/2.8

AT-X 100 AF PRO D

TO FIT CANON • NIKON-D

A new Macro lens to bridge the gap between film and digital, the Tokina AT-X 100 PRO D has full coverage on 35mm while also possessing the latest optical multi-coating technology engineered to match the silicon based CCD or CMOS sensors.

The AT-X 100 PRO D macro closest focusing distance is an incredible 11.8 inches (0.3m) that yields an incredible 1:1 reproduction ratio. Imagine filling the picture frame with a single quarter, key or insect! This lens opens up a new world of photography while maintaining the highest possible image quality. Other features include Tokina's One-Touch Focus Clutch Mechanism, Focus Limiter Switch, and convenient bayonet mounted lens hood.



- 9 Elements in 8 Groups
- Filter size: \varnothing 55mm
- Minimum Focus Distance: 0.3m



One Touch
FC
Focus Clutch



Lens Hood BH-551
The large BH-551 telephoto hood with "click-lock" to stay in place.

AT-X PRO Series

for APS & 35mm Full
Format Digital SLR
AUTO FOCUS

AF28-70mm f/2.8 AT-X 287 AF PRO SV

TO FIT CANON • MINOLTA • NIKON-D • PENTAX

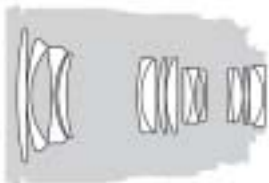


The next generation of AT-X is the AT-X PRO SV series. The first lens of this series is the AT-X 287 AF PRO SV, a 28-70 f/2.8 auto focus. Its cornerstone is Tokina's heritage of HLD optical glass. Advancements in fabrication technology and the greater use of composite material have created a lens that is lighter in weight yet more substantial in value.

The constant f/2.8 aperture makes focusing and shooting in low light situations much easier. An internal focusing system coupled to a Focus Clutch Mechanism yields quick and quiet auto focus as well as smoothly damped manual focus action.



- 16 Elements in 12 Groups
- Filter size: $\varnothing 77\text{mm}$
- Minimum Focus Distance: 0.5m



Lens Hood BH-776

The large BH-776 wide-angle hood with "click-lock" to stay in place.

HLD
High-Refraction, Low Dispersion

FC
Focus Clutch

AT-X PRO Series

for APS & 35mm Full
Format Digital SLR
AUTO FOCUS

AF28-80mm f/2.8

AT-X 280 AF PRO

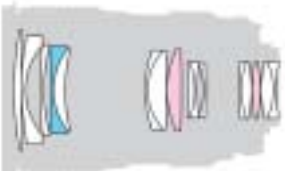
TO FIT CANON • MINOLTA • NIKON-D • PENTAX



You asked. We listened. You asked for lighter weight in the lens that you use most often, yet you wanted the same famous AT-X quality and durability. Tokina's answer is the AT-X 280 AF PRO. To maintain strength, duraluminum alloy and chrome plated brass mount plate were used as its foundation. Then modern composite material formed the outer barrels, focus and zoom rings. The result was a 28-80 f/2.8 lens that weighed less than its predecessor, but maintained AT-X quality and strength. SD glass, and inclusion of an all-glass molded aspherical element in its double aspheric optical design, completely corrects aberrations, providing high contrast and sharpness right to the edges. Tokina has sped up AF and improved handling by incorporating a One-Touch Focus Clutch Mechanism, which allows the focus ring to be moved from AF to manual focus with just a quick-snap movement of the manual focus ring.



- 16 Elements in 11 Groups
- Filter size: $\varnothing 77\text{mm}$
- Minimum Focus Distance: 0.5m



Lens Hood BH-775

The large BH-777 wide-angle hood with "click-lock" to stay in place.



for APS & 35mm Full
Format Digital SLR
AUTO FOCUS

AF Series

AF19-35mm f/3.5-4.5

AF 193

TO FIT CANON • MINOLTA • NIKON-D • PENTAX



The AF 193 uses high-refraction, low-dispersion (HLD) glass and multi-coated lens elements for outstanding performance in a value priced lens. It offers easy handling since it is compact and there is no change in overall length when zooming. Special filters can be used with ease, since the front filter thread does not rotate. The AF 193 uses modern composite material barrels making it light weight, which is important, because you'll want this lens with you all the time!



- 13 Elements in 11 Groups
- Filter size: $\varnothing 77\text{mm}$
- Minimum Focus Distance: 0.4m



HLD
High-Refraction, Low Dispersion



Lens Hood BH-774

The large BH-723 wide-angle hood with locking mechanism

SZ-X Series

28-105mm f/3.5-4.8

SZ-X 205

TO FIT CANON FD • MINOLTA MD • NIKON • OLYMPUS • PENTAX • YASHICA

This all purpose lens will provide the avid shooter with a convenient wide to medium focal range in a lightweight package. Its rotary zoom design also offers a 1:5 macro ratio for interesting close-ups. The creative capabilities are only limited by your imagination.

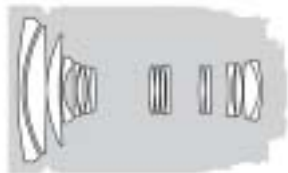


28-200mm f/3.5-5.3

SZ-X 282

TO FIT CANON FD • MINOLTA MD • NIKON • OLYMPUS • PENTAX • YASHICA

With a zoom ratio of over 7:1, this remarkable lens covers all focal lengths required for virtually any situation. It is less than 109mm (4.3 in.) long and weighs only 690g (24.3oz). Photographic applications range from landscapes and portraits to sports.

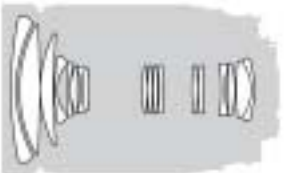


60-300mm f/4.0-5.6

SZ-X 630

TO FIT CANON FD • MINOLTA MD • NIKON • OLYMPUS • PENTAX • YASHICA

A useful manual focus zoom that covers the entire range from standard 60mm to 300mm telephoto. This lens can easily handle many aspects of photography. The "one touch" zoom/focus operation gives it excellent handling and range of magnifications in a compact body.



SL Series

28mm f/2.8

SL-28

TO FIT CANON FD • MINOLTA MD • NIKON • OLYMPUS • PENTAX • YASHICA

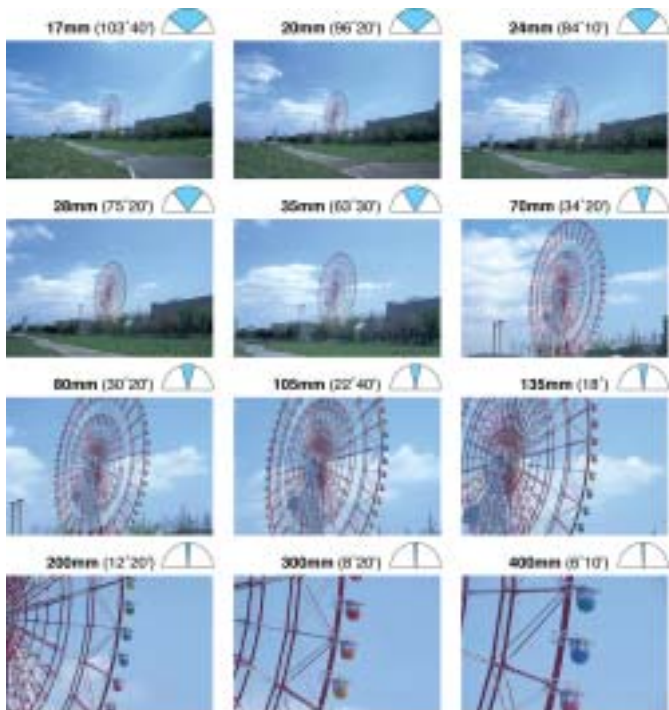
A very popular wide angle lens and the lightest of its kind. Providing natural perspective, it's best suited for architecture and landscape photography.



TOKINA'S LENS TECHNOLOGY

Angle of view

The range across the film surface onto which the subject is exposed is expressed as an angle, called the angle of view. Wide-angle lenses with their short focal lengths have a wide angle of view, which means the exposure range is wide. Conversely, telephoto lenses, which have long focal lengths, have a narrow angle of view, making the exposure range narrow. So a wide-angle lens is used to take a wide area of a subject nearby whereas a telephoto lens is used to take only part of a subject located further away. A single zoom lens, meanwhile, can function as a number of lenses with different focal lengths, enabling you to smoothly alter the angle of view and quickly frame the shot. You can select your lens to create the effect of distance or depth of field, or to suit the location and surrounding conditions.



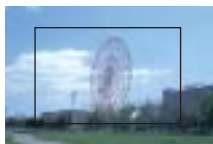
Effective Focal Length in relation to sensor size



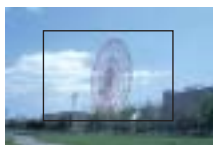
Sensor Size:36x24mm
(Full Frame Sensor)
Canon EOS 1Ds Mark II
Canon EOS 5D



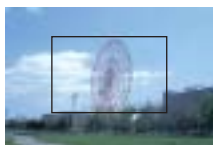
Sensor Size:28.7x19.1mm
(1.3x= Full Frame Sensor)
Canon EOS 1D Mark II N



Sensor Size:23x15mm
(1.5x= Full Frame Sensor)
Nikon D50
Nikon D70
Nikon D100
Nikon D200
Nikon D2H
Nikon D2X
Minolta Dynax 7D
Fujifilm FinePixS3 Pro
Pentax*1s DS



Sensor Size:22.5x15mm
(1.6x= Full Frame Sensor)
Canon EOS 20D
Canon EOS 350D / Rebel XT



Sensor Size:18x13.5mm
(2x= Full Frame Sensor)
Olympus E1
Olympus E300

Depth of Field

When you focus on a subject, there is part of the subject that is in focus and parts in front and behind which are not in focus. This range in which the object is seen to be sharply in focus is called the depth of field. If the focal length is kept the same, the depth of field gets deeper (the range in which the subject is sharp gets wider) as the aperture is stopped down, and it gets shallower (the range in which the subject is sharp gets narrower) as the aperture is opened. Even when the aperture stop is the same, the depth of field gets shallower as the subject distance gets shorter, and deeper as the subject gets further away. Furthermore the depth of field is deeper with a short focal length wide angle lens, and shallower with a long focal length telephoto lens.



80mm F2.8



80mm F22

Perspective

Perspective is the visual effect of moving a subject which is in the foreground closer to or further from the background. If you take photographs with lenses of different focal length while keeping the size of the subject in the foreground constant, the background appears to be further away and the sense of perspective is exaggerated with a short focal length wide angle lens. With a long focal length telephoto lens, the background appears to be closer to the subject and the sense of perspective is lessened. You can greatly change the feeling of presence even with the same subject by using this sense of perspective.



20mm



40mm



100mm



200mm

TECHNICAL SPECIFICATIONS

LENS	Mount	Optical Construction Elements / Groups	Diagonal Angle of View
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AUTO FOCUS LENSES

AT-X 840 D 80-400mm f/4.5-5.6	C, N/D	16/10	29°50' ~ 6°13'
AT-X 124 PRO DX 12-24mm f/4	C, N/D	13/11	99-61
AT-X 100AF PRO D 100mm f/2.8	C, N/D	9/8	24°30'
AT-X 287 AF PRO SV 28-70mm f/2.8	C, N/D, P	16/12	75 20' ~ 34 20'
AT-X 280AF PRO 28-80mm f/2.8	C, M, N/D, P	16/11	75°20' ~ 30°20'
AF 193 19-35mm f/3.5-4.5	C, M, N/D, P	13/11	98°40' ~ 63°30'

MANUAL FOCUS LENSES

SZ-X 205 28-105mm f/3.5-4.8	C, M, N, O, P, Y	15/12	75°20' ~ 22°40'
SZ-X 282 28-200mm f/3.5-5.3	C, M, N, O, P, Y	18/16	75°20' ~ 12°20'
SZ-X 630 60-300mm f/4.0-5.6	C, M, N, P	11/8	32°10' ~ 8°20'
SL 28 28mm f/2.8	C, M, N, O, P, Y	5/5	75°20'



Closest Focus Distance from Film Plane (in Macro Mode)	Magnification Ratio in Macro Mode	Aperture Range	Filter Size (mm)	Dimensions (mm) Diameter	Dimensions (mm) Length	Weight (gram)	Lens Hood
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2.5m	1:5.4	f/4.5-f/32	72	79	136.5	1020	BH-725
30cm	1:08	f/4-f/22	77	84	89.5	570	BH-777
30cm	1:01	f/2.8-f/32	55	73.9	5.1	540	BH-551
0.5m	1:5	f/2.8-f/22	77	84	108.5	715	BH-776
0.5m	1:5	f/2.8-f/22	77	84	120	810	BH-775
0.4m	-	f/3.5-f/22	77	82.2	77	400	BH-774

0.5m	1:5	f/3.5-f/22	62	65	69.8	380	-
2.5m (1.35m)	1:5.5	f/3.5-f/22	72	74	109	690	MH-721
1.7m (1.5m)	1:3.8	f/4.5-f/22	58	65	152.5	730	MH-582
0.3m	-	f/2.8-f/22	49	63.5	36	160	RH-491

■ The external appearance and specifications shown in this catalog may be changed without any advance notice.

■ Auto Focus Lenses

M: MINOLTA AF P: PENTAX AF
 N: NIKON AF-S C: CANON AF
 N/D: NIKON AF-D

■ Manual Focus Lenses

M: MINOLTA MD P: PENTAX PK O: OLYMPUS OM
 N: NIKON AI-S C: CANON FD M: YASHICA ML/CONTAX

- 1g = 0.03527 oz
- 10mm = 0.39370 inch
- 1m = 3.28084 feet

Tokina

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Printed in U.S.A.