

350mm

Tele-Macro Catadioptric

TAMRON

SP350mm F5.6

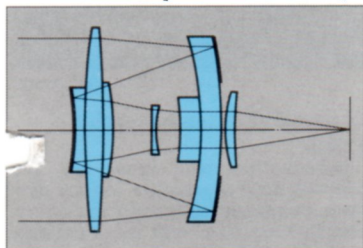
Model 06B



Introducing the world's first 350mm F/5.6 Tele-Macro Catadioptric Lens

Compact 350mm f/5.6 Tele-Macro Catadioptric with a fast f/5.6 aperture and the closest focusing distance of 1.1 meters (43.3")

Features the optical techniques pioneered in the "Handheld Tamron 500mm Tele-Macro Catadioptric" and incorporates silver-evaporated Mangin mirrors with an ultra-high reflection value - 95% or more. Tamron's SP 500mm f/8 Tele-Macro Catadioptric Lens has rapidly earned great popularity and respect among camera enthusiasts and professional photographers as the pioneering step toward more compact catadioptric lenses and achieving this system's remarkable Tele-Macro capability. The superior optical techniques already proven in the Tamron SP500mm have now made possible the develop-



ment of the world's first 350mm Tele-Macro Catadioptric Lens. With its advantages of compactness and high speed, it is particularly suited to long-range photography of fast moving subjects.

Tamron's SP 350mm f/5.6 Catadioptric Lens, with the extremely close focusing distance of 1.1 meters (43.3 inches) not found in other 350mm class lenses, uses rear reflex mirrors for its main and auxiliary mirrors similar to the Tamron SP 500mm f/8 lens. Both the primary and secondary mirrors are specially coated with silver for an extremely bright reflection value of 95% or more. (Compare this with the typical reflection value of 64% of conventional reflex mirrors coated with aluminum). Surface polishing accuracy of the silver-coated reflex mirrors is maintained to an ultra high precision level of one-eighth Lambda ($\lambda/8$); reflection efficiency is further increased by silver ion plating. Possible oxidation of the primary and secondary mirrors' silver surfaces has been completely overcome by using both a non-vaporized special ion plating and an ultra hard, three layer protective membrane more than three times as durable as the U.S. MIL Standard.

The high precision rear reflex mirrors and lens elements in monoblocks achieve the same high transmission

factor (80% or more) common in dioptric system lenses. Additionally, the color aberration uncorrectable in dioptric system lenses, and changes in aberration caused when focusing, are reduced to absolute minimum levels by the rear reflex mirrors. Consequently, throughout the entire focusing range, from infinity to macro, a flat image quality excelling in high contrast and good color balance will be obtained.

Fast f/5.6 aperture

Tamron SP 350mm lens' fast f/5.6 aperture is capable of providing full meter and aperture coupling for full coordination with all the built-in lens functions of almost any popular 35mm SLR camera. The fast shutter speeds possible dramatically reduce image blur on the picture, making handheld telephotography easier than ever. SP 350mm is also at home with indoor photography - stage actions, etc. - and brings new possibilities to the shooting of fast moving subjects.

Lightweight and compact - a truly portable ultra-telephoto

Tamron's unique employment of catadioptrics - the use of mirrors and dioptrics - has achieved unusual compactness and lightness to the 350mm class. SP 350mm measures only 79mm (3.1 inches) in total length;

overall weight is a very modest 577 grams (20.4 oz.). The hand-held opportunities this portability opens will show themselves to particular advantage in shooting action scenes such as motor car races, baseball, distant wild animals, etc.

Continuous focusing (CF)

Focus in from infinity to macro (minimum object distance of 1.1 meters) in one continuous movement, without having to press a macro switchover button or lever.

Tele-Macro

The tele-macro feature enables an object to be photographed with a 1:2.5 magnification ratio at the minimum object distance of 1.1 meters. Because the 350mm lens is fully compatible to all automatic and manual camera functions, lighting (including auto flash) is maintained. Such versatility adds new dimensions to macro-photography.

Constant F-number

The f-number is always the same, from infinity up to macro (minimum object distance of 1.1 meters or 43.3 inches). Troublesome calculations of exposure multiples have been eliminated; in auto flash photography, optimum exposure time can be obtained without any correction.



Tele-Macro Catadioptric

SP350mm F5.6

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Tele-Macro Catadioptric **SP350mm F5.6**

Tamron's Advanced Opto-Technology has reduced the size of the 350mm Tele-Macro Catadioptric Lens. Now a sharp detailed photograph larger than the image seen with the naked eye is easily obtainable.

● **Tele-Macro** This lens has a remarkably close minimum object distance of 1.1 meters (43.3 inches) even though it is an ultra-telephoto lens. Macro-photography with magnification ratios of up to 1:2.5 (1:1.25 with SP flat-field 2X tele-converter) can be enjoyed while focusing in a continuous action from infinity to macro. It becomes possible to freeze the moment of action such as the expression of a gorilla in a cage, tropical fish swimming in a tank, and the flapping wings of small insects and birds when using an auto flash.



f/5.6, AE mode, mag. ratio: 1:2.5 at 1.1 meters

● **SP 2X flat-field tele-converter** The optional SP 2X flat-field tele-converter doubles the focal length to 700mm, for ultra telephoto-effects. In addition, the maximum magnification ratio increases to 1:1.25 while maintaining the minimum object distance of 1.1 meters; ultra close-up photography is also possible.

● **Exclusive filter set** Five specially made filters are supplied with the lens - Normal, ND-



350mm, f/5.6, AE mode

700mm (350mm + 2X
Tele-converter)
f/11, AE mode



f/5.6, AE mode

4X, Y-52, O-56 and R-60. The small-sized 30.5mm rear filters screw onto the rear element thread. Two other 30.5mm filters of ND-2X and 81B are also available as an option.



● **The tripod mount ring features a convenient longitudinal position** The tripod mount ring allows one touch operation and rotates 90 degrees. Even after the lens with camera

are mounted on the tripod, it is simple to switch to horizontal or a longitudinal position. During hand-held photography, this mount ring helps keep a steady hand.

● SPECIFICATIONS

Focal Length	350mm
Aperture	f/5.6
Lens Construction	4 groups 7 elements
Coating	BBAR multiple layer coating
Angle of View	7.3°
Min. focus from Film plane	1.1m (43.3 in.)
Macro Mag. Ratio (W/Converter)	1:2.5 (1:1.25)
Filter Size	30.5mm rear (82mm front)
Length at ∞	79mm (w/Nikon mount) (3.1 in)
Diameter	86mm (w/Nikon mount) (3.4 in)
Weight	577 g (20.4 oz.)
Lens Hood	Screw-in type
Accessory	Accepts SP 2X tele-converter. Supplied w/lens hood and 5-piece filter set.

Adaptall/Adaptall-2 Interchangeable Mount System

Since its introduction nine years ago, the Tamron Adaptall Interchangeable Mount System has been extremely successful because it has been able to keep pace with the constantly changing metering and mounting methods on today's 35mm SLR's.

Now Tamron Adaptall is offering another significant improvement: the Adaptall-2 Interchangeable Mount System. Previously, shutter preferred cameras required a separate mount for each lens with a different maximum aperture. With the new Adaptall-2 system, one mount fits all lenses, regardless of maximum aperture, regardless of SLR system.

The new ADAPTALL-2 Interchangeable Mount System is an extension of the same high quality mount concept incorporated in the ADAPTALL series lenses. It simply provides updated performance and features with certain SLR camera mount systems.

Adaptall/Adaptall-2 Mounts Available

Canon FD Series
Canon FT Series
Contax/Yashica Series
Fujica ST Series
Konica Autoreflex Series
Mamiya SX Series
Minolta MD Series
Minolta SR Series
Nikon F/AI Series
Olympus OM Series
Pentax ES/Spotmatic F Series
Pentax SMC Series (Bayonet Series)
Rollei SL/Voigtländer VSL Series
Topcon RE Series
Universal (Praktica 42mm Mount)
Praktica LLC Series
Fujica AX Series
Praktica B200 Series
Mamiya ZE (in development)
"C" mount for CCTV/VTR cameras and 16mm movie cameras
"MS" mount for CCTV/VTR cameras

Note: The SP Flat-Field 2X Tele-Converter is compatible with all Adaptall-2 mounts. It is not suitable however for the previous Adaptall Canon FD, Konica AR, Topcon RE, Minolta SRT, early Nikon AI and Minolta Super/X mounts.

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