

SUPER PERFORMANCE RANGE

TAMRON SP

Model **52B**

SUPER PORTRAIT LENS WITH OUTSTANDING
MACRO PERFORMANCE

SP 90mm F2.5

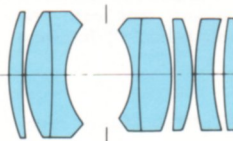
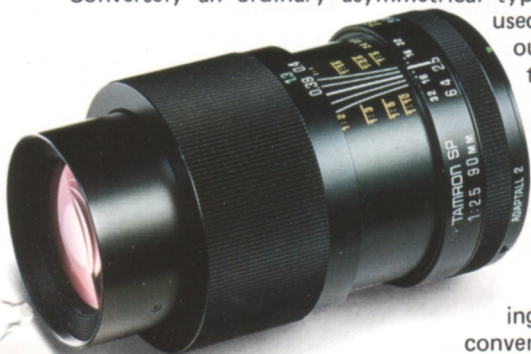


Obj. distance 1m, f/5.6, 1/500 sec.

THE WORLD'S SMALLEST AND LIGHTEST 90MM PORTRAIT LENS FEATURING 1:2 TELE-MACRO CAPABILITY

Conventional macro lenses when used as telephotos had the inherent disadvantages that they were unable to maintain their performance when photographing distant subjects and also that they were heavy making them awkward to handle. Neither could they produce out-of-focus effects sometimes desired in portraiture due to their relatively slow maximum aperture. Conversely an ordinary asymmetrical type telephoto lens could not be

used for macro photography without accessories such as extension tubes. Besides these ordinary telephotos suffered in close-focusing performance as inevitably there were considerable changes in aberration during focusing. The Tamron SP 90mm f/2.5 is a lens which has solved all these problems giving outstanding performance and convenience when used as both a telephoto and macro lens.



Tamron Adaptall Interchangeable Mount System Each Tamron lens may be selected by owners of more than 250 individual SLR models. Each mount provides full cross-coupling with each camera's automatic diaphragm controls as well as complete TTL light metering, including open-aperture and AE-metering systems and ensures compatibility with most popular 35mm SLR cameras.

TAMRON

Newly Developed O.A.C. Optical Configuration Gives Outstanding Performance from Infinity to 1:2 Macro

By the employment of Tamron's special optical configuration "OAC" (Optical Aberration Compensator) system Tamron has succeeded in reducing focus-dependent aberration changes to the absolute minimum from infinity to 1:2 macro despite the fact that it is a 90mm telephoto lens. The most distinctive characteristic of the lens' optical configuration is that it features a Gauss-type master lens which is constructed as symmetrically as possible instead of an asymmetrical telephoto type optical configuration employed in conventional telephoto lenses.

Tamron bore in mind the fact that a symmetrical optical system causes less changes in aberration due to focusing than an asymmetrical system and employed this fact in the design of the SP 90mm. Additionally a pair of compensator lens elements is placed at the rear of the lens to compensate for small aberration changes which are inevitable when a Gauss-type master lens is used. Therefore the "OAC" system reduces aberrations caused in the master lens to the absolute minimum and any small aberration changes are compensated for automatically in a way which is far more natural and acceptable than when conventional telephoto lenses are used for distant subjects as well as in the macro mode. In portraiture the lens describes the tonal range of a model's skin and hair accurately. In macro photography it provides outstanding performance giving true reproduction from the center to the periphery.

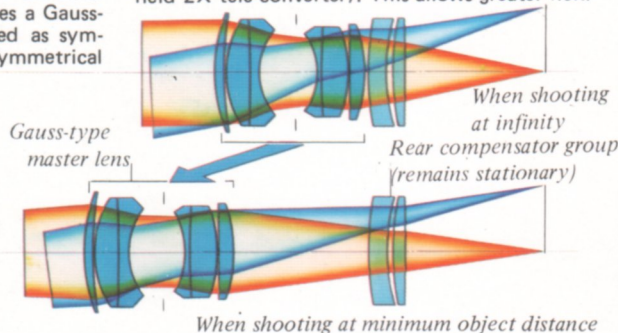
World's Smallest And Lightest 90mm Portrait Lens in Its Class Measuring Only 66mm (2.6 in.) in Overall Length And Weighing 420 Grams (14.8 oz.)

The SP 90mm f/2.5 boasts outstanding optical performance. The fast aperture of f/2.5 allows shallow depth of field which is particularly useful

giving a long working distance and the outstanding performance in macro mode gives fantastic versatility in use.

● Minimum Aperture of F/32

All Tamron SP telephoto and zoom lenses have a minimum aperture of f/32 (f/64 with the SP flat-field 2X tele-converter). This allows greater flexi-



bility in picture taking especially when using the new 400 ASA colour films. Increased depth of field can be obtained for added sharpness. Half-stops are provided from f/2.5 to f/16.

● Quick-Focus

The SP 90mm also features "Quick-Focus" capability. (Only 45 degrees from infinity to 1.5 meters or 4.9 feet) This allows quick and accurate focusing which is particularly useful in sports and other action photography.

● SP Flat-Field 2X Tele-Converter Gives Added Versatility

With the SP flat-field tele-converter (optional extra) the SP 90mm lens becomes a 180mm ultra-telephoto and the macro magnification ratio is increased to 1:1 while maintaining the working distance of 0.23 meters (9.1 in.).

Uses Exclusive Tamron Adaptall Mount

Tamron Adaptall mounts are available for many popular SLR cameras. They provide full metering and aperture coupling to faithfully reproduce all of the functions of the lens. Only one mount is necessary regardless of lens design.

Specification

Focal Length	: 90mm
Aperture Range	: f/2.5~f/32, AE
Construction	: 8 elements, 6 groups
Coating	: BBAR (Broad-Band, Anti-Reflection) multiple layer coating
Angle of View	: 27°
Minimum Focus	: from Film Plane
from Film Plane	: 0.39 meters (15.3 in.)
Working Distance	: 0.23 meters (9.1 in.)
Max. Magnification	: 1:2 (1:1 w/SP 2X tele-converter)
Focusing Ring	
Rotation	: 338° 02' (45° from infinity to 1.5m)
Accessory Size	: 49mm
Overall Length	: 66mm (2.6 in.)
Overall Diameter	: 64.5mm (2.5 in.)
Weight	: 420 grams (14.8 oz.)
Lens Hood	: Screw-in, optional extra
Optional Accessory	: SP flat field 2X tele-converter

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/Voigtlander VSL Series
Topcon RE Series
Universal (Praktica 42mm Mount)
"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 and Minolta Super/X mounts.



Macro mag. 1:1 (w/SP 2X tele-converter)
obj. distance 0.39m, f/5.6, 1/500 sec.

in creative portraiture. This aperture is also valuable in sports and available light photography in dimly lit areas or in other action photography which requires high shutter speeds. The SP 90mm combines the capabilities of a telephoto and a macro lens yet features a compact design comparable to that of a standard lens with the employment of the "double-helicoid" focusing system.

Tele-Macro

The SP 90mm lens features a "Tele-Macro" capability which allows the photography of an object in the macro mode at 1:2 from a distance of 0.39 meters (15.3 in.) without using any accessories. The combined effect of this tele-macro capability

Ideal Colour Contribution (CC) Value of 9-0-1

BBAR (Broad-Band, Anti-Reflection) multiple layer coating provides an ideal colour contribution (CC) value of 9-0-1 resulting in optimum colour balance and outstanding true-to-life colour rendition.

