

# New!

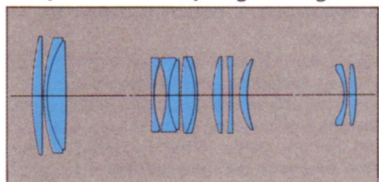
80-210mm F/3.8-4  
CF Tele-Macro Compact Zoom

Model 103A



## New Improved Design! This Very Popular and Versatile Zoom Lens is Now Even Better.

Although its predecessor was highly acclaimed, the new TAMRON Adaptall-2 80-210mm f/3.8-4 has been redesigned to be a masterpiece in its class. The completely new 10-group 13-element optical configuration minimizes aberrations and provides a sharp edge to edge



picture image with superb resolution. Superior colour reproduction has also been achieved by using rare optical glass with a high transmittance factor plus TAMRON's exclusive BBAR (Broad-Band Anti-Reflection) multiple layer coating techniques. As many as seven coating layers ensure the virtual elimination of flare and internal reflections.

The lens covers the most popular focal lengths of 80-210mm and has the fast maximum aperture of f/3.8. With its single action control for focusing, zooming and macro photography the lens is extremely versatile and fast to use making it ideal for general purpose, sports, nature and action photography.

This masterpiece of zoom optics should be considered as the No. 1 choice by every photographer. It's one of the biggest selling zooms in many countries throughout the world!

### Continuous Focusing (CF)

Allows continuous focusing from infinity to macro by simply rotating the focusing ring.

### Tele-Macro

Macro photography with a 1:2.8 magnification ratio is possible at a distance of 0.9 meters (35.4 in.) from the subject. Automatic flash can also be used at this distance with complete ease.

### Fast Maximum Aperture of F/3.8

Allows the use of fast shutter speeds and provides exceptionally bright viewfinder images for easier focusing by minimizing split image blackout.

### Full Zoom Function

It is possible to enter the macro mode at any focal length from 80-210mm. You can even zoom in macro.

### Constant F-Number

A constant F-number is maintained throughout the focusing range eliminating the need for recalculating exposure settings.

### Extremely Compact and Lightweight

Measures only 137.7mm (5.4 in.) in overall length. Weighs only 634 grams (22.4 oz.).

### Minimum Aperture of F/32

Provides greater depth-of-field. This is particularly desirable with today's fast 400 ASA colour films.

### Large Separate Lens Hood and Hard Case

A separate screw-in lens hood and a hard case are supplied as included accessories.



# 80-210mm F/3.8-4

CF Tele-Macro Compact Zoom

Model 103A

# TAMRON

# New!

# TAMRON

CF Tele-Macro Compact Zoom **80-210mm F/3.8-4**

Model 103A

## Continuous Focusing (CF)

The new TAMRON Adaptall-2 80-210mm f/3.8-4 has the very useful feature of "continuous focusing" which allows focusing from infinity to the closest distance of 0.9 meters (35.4 inches) by simply rotating the focusing ring. The traditional macro button or collar is no longer required. You can frame your subject just how you want from normal range focusing to the macro mode or vice versa.



At 15m, f=210mm, F/8, 1/125 sec.



At 7m, f=210mm, F/8, 1/125 sec.



At 3m, f=210mm, F/8, 1/125 sec.



At 0.9m, f=210mm, F/16, synchronized w/strobo

## Tele-Macro

"Tele-Macro" is the feature which allows the photographer to take macro photographs at a comfortable distance. The TAMRON Adaptall-2 80-210mm f/3.8-4 gives a maximum magnification ratio of 1:2.8 at a distance of 0.9 meters (35.4 inches) from the subject. An automatic flash can be used with ease thanks to the long working distance of 0.69 meters (27.2 inches).



At 0.9m, f=210mm, F/16, 1/30 sec. Tele-macro 1:2.8

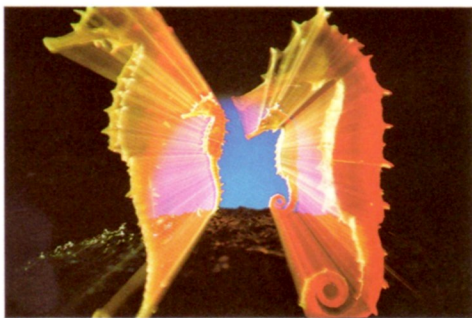
## Constant F-Number

The constant F-number feature ensures that there is no change in the aperture even if the lens is focused down to the minimum distance of 0.9 meters (35.4 inches). It is not necessary to work out the increased exposure by calculation or factors. The optimum exposure time can be obtained without any corrections when an auto-flash is used.

## Full Zoom Function

With this lens you can enter into the macro mode at any focal length setting unlike many lenses where a particular focal length (usually the far from convenient shortest focal length) must first be chosen. The magnification ratio required can easily be selected by changing the focal length and camera-to-subject distance.

Macro range zooming during a time exposure is just one of the creative photographic techniques which is possible with this lens thanks to its "tele-macro" capability and "full zoom function".



Macro zooming during exposure At 0.9m, F/16, 2 sec.

## SP Flat-Field 2X Tele-Converter

The TAMRON SP flat-field 2X tele-converter (available as an optional extra) doubles the focal length to 160-420mm and increases the maximum magnification ratio to 1:1.4 at 420mm focal length while retaining the minimum object distance of 0.9 meters (35.4 inches). This exclusive tele-converter employs the TAMRON Adaptall bayonet mount system and is fitted between the lens and custom mount with a simple flick of the wrist.

## Specification

Focal Length	: 80-210mm
Aperture Range	: F/3.8-4—32, AE
Lens Construction	: 13 elements, 10 groups
Coating	: BBAR (Broad-Band Anti-Reflection) multiple layer coating
Angle of View	: 30°—11.3°
Minimum Focus from Film Plane	: 0.9 meters (35.4 inches)
Working Distance	: 0.69 meters (27.2 inches)
Maximum Magnification	: 1:2.8 (1:1.4 with SP 2X tele-converter)
Filter Size	: 58mm
Overall Length	: 137.7mm (5.4 inches)
Maximum Diameter	: 64.5mm (2.5 inches)
Weight	: 634 grams (22.4 oz.)
Lens Hood	: Screw-in type, detachable
Optional Accessory	: Accepts SP 2X tele-converter

## Adaptall/Adaptall-2 Interchangeable Mount System

Since its introduction 10 years ago, the TAMRON Interchangeable Mount System has been extremely successful because it has been able to keep pace with the constantly changing metering and mounting systems used on today's sophisticated 35mm SLR's. The Adaptall-2 Mount System offers advanced performance and features for most SLR camera systems providing full meter and aperture coupling to faithfully reproduce all of the functions of the lens. Even if you use camera bodies from different manufacturers your lens is compatible.

## Custom Mounts Available For:

Canon FD/FT  
Contax/Yashica  
Fujica ST  
Fujica AX Bayonet  
Konica Autoreflex  
Mamiya MSX/DSX  
Mamiya ZE (in development)  
Minolta MD  
Nikon AI  
Olympus OM  
Pentax ES/Spotmatic F  
Pentax K  
Praktica LLC Series (electric coupling)  
Praktica B200 Series  
Rollei SL/Voigtlander VSL  
Topcon RE  
Universal (Praktica 42mm screw)  
'C' mount for CCTV/VTR cameras and 16mm movie cameras  
'MS' mount for CCTV/VTR cameras.

A special case is available as an optional extra to take this lens (without hood) with the camera in use. It is available in three sizes (small, medium and large) to fit most popular SLR's.

Distributed in the UK and Eire by JOHNSONS OF HENDON LTD.

TAMRON CO., LTD.

Tamron Building, 17-11, 7-chome, Takinogawa, Kita-ku, Tokyo, Japan.

Specifications and availability are subject to change without notice

82110000U Printed in Japan