

adaptall

Z-210

85-210mm F4.5

#306202



tamron



TAMRON ADAPTALL

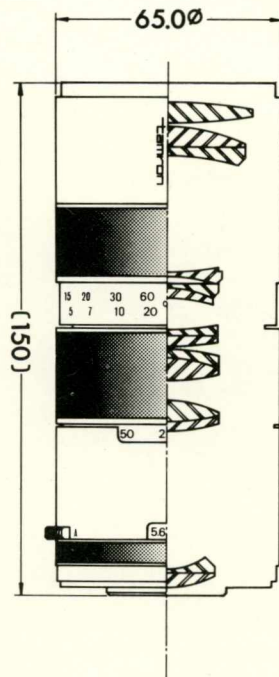
Z-210

85mm~210mm F4.5

The TAMRON ADAPTALL Z-210 covers the most commonly used focal lengths from long focus 85mm to medium telephoto 210mm. Despite the fact that it is a high power 2.625X zoom lens, it is compact and lightweight, affording most convenient use in all fields of photography. It incorporates a cam system of an original TAMRON design, enabling you to cover the entire focal length range with just about 1/5 turn of the zooming ring. Furthermore, smooth zooming is assured through use of Teflon plates on all sliding surfaces. Like all other lenses in the TAMRON ADAPTALL range, the Z-210 features 'Direct Reading' Distance Scale which enables you to pinpoint the camera-to-subject distance. Its optical system based on a new TAMRON formula affords pin-sharp images and contrasty effect throughout the picture area. Also, the marginal image brightness has been enhanced way beyond what has so far been considered the limit of this class of zoom lenses. Being perfectly color corrected, the Z-210 ensures sparkling results in color photography.

Coupled with its unique design which makes it truly outstanding in picture-taking versatility, the overall performance of this Z-210 will make it one of your favorite lenses in your system.

LENS CONFIGURATION



TECHNICAL DATA

Focal Length Range 85mm ~ 210mm

Maximum Aperture F4.5

Lens Composition 14 elements in 9 groups

Angle of View $28^{\circ} \sim 12^{\circ}$

Minimum Focus 2 meters

Focusing System Helicoid focusing; features original TAMRON 'Direct Reading' Distance Scale

Zooming System Mechanical compensation through use of a unique cam system; rotation of zooming ring over a range of $77^{\circ}30'$ (abt 1/5 of a turn) covers the entire zooming range.

Diaphragm System Fully automatic diaphragm system couples to TTL open aperture light reading and SLR EE system; option for manual setting of aperture

Aperture Range 4.5, 5.6, 8, 11, 16, 22 & EE, with half-stops

Filter Size 55mm screw-in

Mount Interchangeable bayonet system
ADAPTALL Custom Mount

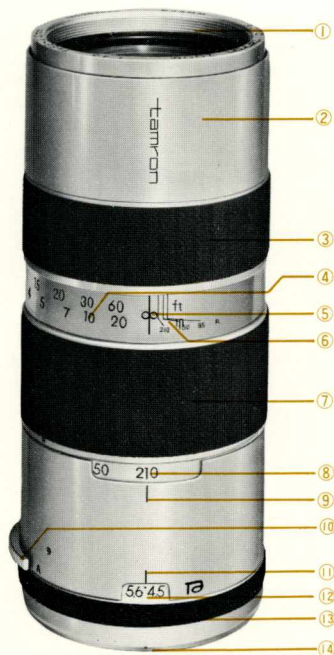
Overall Length 150mm

Maximum Diameter 65mm

Weight 720 grams

Other Features R index for infrared ray photography
Built-in lens shade

DESCRIPTION



- | | |
|---|--------------------------------|
| 1. Filter Mount | 7. Zooming Ring |
| 2. Built-in Lens Shade | 8. Zooming Scale |
| 3. Focusing Ring | 9. Zooming Index |
| 4. Direct Reading Distance Scale | 10. Depth-of Field Preview Bar |
| 5. Distance Scale Index | 11. Aperture Index |
| 6. R Index for Infrared Ray Photography | 12. Aperture Scale |
| | 13. Aperture Ring |
| | 14. Green Dot |

MOUNTING THE ADAPTALL CUSTOM MOUNT



The ADAPTALL Custom Mount features a bayonet system for simple and sure installation on the lens. It has a built-in mechanism which couples the lens to any type of Thru-the-Lens light reading systems — stopped down, full aperture or EE light reading.

To mount

Match the green dot on the bayonet flange of the ADAPTALL mount with the green dot on the lens barrel and turn the mount clockwise until it locks into place.

How to set aperture coupling lever

The ADAPTALL mount for cameras featuring Thru-the-Lens full aperture light reading system has an aperture coupling lever. After mounting it in the manner explained above, turn the coupling lever until the key falls into the corresponding slot on the lens barrel.

To detach

Turn the ADAPTALL mount counter-clockwise all the way while depressing the release latch and lift it straight away from the lens.

- In case of mount for cameras featuring full aperture light reading system, set the aperture to full opening before attempting to detach it from the lens.

OUTLINE OF OPERATION

Focusing

Turn the focusing ring and secure focus while sighting the subject through the viewfinder. For critical focusing, have the zooming ring set preliminarily at the extreme telephoto position.

The lens features TAMRON's original 'Direct Reading' distance scale affording accurate reading of the subject range.

Zooming

Extremely smooth zooming is assured because a cam system of TAMRON's original design is incorporated in the lens. By giving the zooming ring about 1/5 of a turn (77°30'), the entire zooming range can be covered.

While sighting through the viewfinder, turn the zooming ring to obtain the desired effect. A left turn will bring the lens to the extreme telephoto position and will vary the image size accordingly.

To check the focal length in use, read the figure off the zooming scale.

Aperture setting

Turn the aperture ring and align the required figure in the aperture indicator window with the index line.

The TAMRON ADAPTALL Lens features half-stops for pinpointing the exposure. It is designed to couple to either stopped down or full aperture light reading system.





EE mark

When mounting the lens on SLR EE cameras, such as the Konica Autoreflex T, first rotate the aperture ring all the way to the right until the EE mark in the aperture indicator window aligns properly with the index line. At this setting, it can be used most conveniently as an EE lens. For manual setting of the aperture, simply override the aperture ring from EE.

(The EE setting should not be used with Nikkormat EL, Pentax ES etc.)

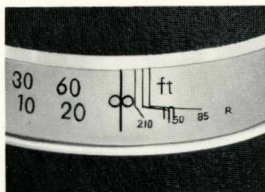
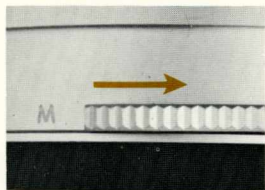
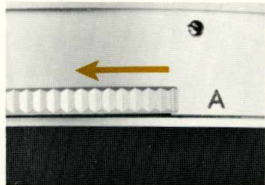
Depth-of field preview bar

When set so that the indication 'A' is visible, the diaphragm closes down to the preset opening only during exposure. When set at 'M', it affords preview of the depth.

- For depth preview, use this bar instead of the camera control.

Infrared index

For distance compensation in infrared ray photography, the lens features red indices corresponding to the figures on the zooming scale. When shooting a subject at infinity, for example, the infinity setting on the distance scale must be reset to the red figure corresponding to the focal length in use. Focus compensation is a cinch with the 'Direct Reading' scale.

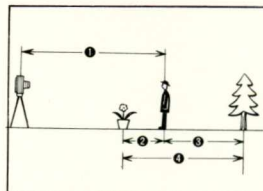
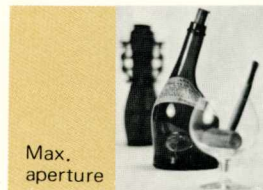


DEPTH-OF-FIELD PREVIEW

To preview the depth of field, slide the depth-of-field preview bar to the position where the indication 'M' becomes visible.

The depth of field is the range in which all objects appear acceptably sharp when the lens is focused on a given subject.

The depth increases when a smaller aperture is preselected, in case of a distant subject and when using shorter focal lengths. Before shooting, preview the depth of field of the preselected lens opening.



- 1 Subject range
- 2 Foreground
- 3 Background
- 4 Depth of Field

Image Variation of TAMRON ADAPTALL Lens



85



150



210



Standard
Lens



The pictures on the left page were taken with the TAMRON ADAPTALL Zoom Lens. Aside from the image size, the foreground and background blurs, perspective effect, etc. differ with the focal length in use.

The TAMRON ADAPTALL Zoom Lens provides a wide zooming range; therefore, it affords maximum convenience in precise framing as well as in obtaining the desired effects in portraiture, snapshooting and many other purposes.

Choose the Best Focal Length
Depending on the subject and the photographic situation, choose the focal length that will assure the best possible effect.

For snapshooting, choose the shortest focal length. Long focus (in the vicinity of 100mm) is ideal for portraiture. It will bring out beautiful foreground and background blurs and reproduce the subject with the most natural perspective effect.

Special Zooming Effect

Zooming in the course of exposure — that is an effect which only a zoom lens can produce.

Zooming in this manner will produce an image which appears to converge to a point,

giving the picture a most dynamic effect.

The effect differs with the speed of operating the zooming ring. You can also zoom intermittently to reproduce the contours of the subject gradually diminishing in size. If you also pan the camera from left to right or vice versa while zooming, or from up to down, for example, all sorts of interesting effects can be produced.

Because the shutter has to remain open over the duration the zooming ring is rotated, there is always a possibility of over-exposing. Therefore, the use of a neutral density filter to provide slow shutter speed is advised.

Try this zooming technique yourself and you will find it extremely interesting.

LENS SHADE



The built-in lens shade can be readily set merely by pulling it all the way out. It serves to ward off extraneous light and assures sharp and crisp results.



HANDLING PRECAUTIONS

Clean the lens occasionally. Fingerprints, oily smears and grit on the lens may affect the overall performance of your lens and may also cause corrosion of the lens surface.

Most blurred results are due to camera shake at the critical moment of exposure. It is advisable, therefore, to mount your camera on a tripod and to trip the shutter by using a cable release.

ADAPTALL CUSTOM MOUNT



For PENTAX



For NIKON



For MINOLTA SRT



For CANON FTb



For KONICA T (EE)



For OLYMPUS M



For MIRANDA



For LEICAFLEX



For ROLLEI 35 SL



For PENTAX ES



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