PANAGOR® AUTOMATIC LENSES

FOR 35mm SLR CAMERAS



PA NAGOR°

Telephoto & Wideangle Lenses tor 35mm SLR Cameras

High Speed
High Resolution
Color Corrected
Hard Coated
Fully Guaranteed





85mm

105mm







28_{mm}







135mm

180 m m

200mm



50mm(Standard)



85mm to 205mm ZOOM LENS

AUTO & PRESET ZOOM 85mm-205mm F3.8

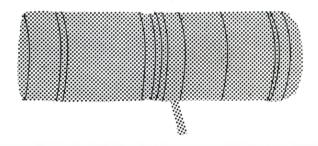
The Panagor Automatic Zoom is designed to operate with the same simplicity and ease as the normal lens of your camera. Just mount the lens to your camera and operate as you would your normal lens. The diaphragm will automatically close to the pre-selected f stop at the moment of exposure, and re-open automatically as soon as the exposure time has ended. No pistol grips, cable releases, or external mechanisms are necessary with the Panagor Automatic Zoom.

PRE-SET LENS OPERATION

The Panagor Basic Zoom Lens is compatible to "T" system and must be used with a "T" Adapter. If the orientation dot on the top of the lens does not align properly on

the camera, simply place the camera on its back, with the zoom lens mounted in position, and loosen the three set screws on the "T" Adapter ring. Then rotate the lens until it is properly aligned, and retighten the three set screws on the "T" Adapter.

The Panagor Basic Zoom Lens has two rings to operate the diaphragm. Set the upper (preset) ring so that the proper f stop is indicated in the window. Set the lower (aperture) ring to its maximum opening by turning it counter-clockwise. After focusing and composing your picture, turn the lower ring in a clock-wise direction until it stops. You may now preview the depth of field and release the shutter.



ZOOM LEVER

Each Panagor Zoom Lens is supplied with a zoom lever. To attach, simply remove the screw on the zoom adjustment ring and replace it with the zoom lever.

FOCUSING AND ZOOMING

The lens can be focused before or after zooming, however since the 205mm focal length has the greatest magnification and narrowest depth of field, it is best to focus at 205mm and then zoom to the desired focal length. The unique, built-in, cam-operated focusing system will maintain focus regardless of zoom setting. The zoom ring can be set any where between 85mm and 205mm, and produce perfect results. The engravings showing the various focal lengths serve only as a guide.



Photo taken at 85mm setting

OPTICAL VERSATILITY

- By zooming from 85mm to 205mm, you can do the following:
 - A) Make the subject appear closer eliminating unwanted background.
- B) Change the depth of field: Zooming to 205 mm also narrows the depth of sharp focus at a pre-selected distance, thereby making unwanted background appear out of focus. By taking full advantage of the above features, you can be sure of professional looking results.
- C) Change perspective: Zooming to 205mm causes a foreshortening effect and gives the appearance of compressing the planes in a picture to look flat and almost two dimensional.



Photo taken at 205mm setting

AUTO WIDEANGLE 28mm F2.5 AUTO WIDEANGLE 21mm F4

The PANAGOR Wideangle lenses 28mm F2.5 & 21 mm F4 are the latest addition to the PANAGOR line of lenses for SLR cameras. The inclusion of the AUTO DIAPHRAGM feature now makes your lens truly the equal of the finest and fastest automatic lenses available for your camera.

SETTING THE F STOP

Rotate the diaphragm ring to the desired f stop as determined by an exposure meter. Click stops are provided at the full f stops; however, the diaphragm can be set between stops as well.

FOCUSING

Due to the depth of field, it is difficult to see the image "snap" into focus as it does with your normal, or even more so, with your telephoto lens. This depth of field makes the lenses desirable for quick, prefocussed shooting. For example, 28mm lens at F16, the depth of field extends from less than 1 meter (3 feet) to infinity.

PANAGOR

AUTO TELEPHOTO 135mm F2.8 AUTO TELEPHOTO 200mm F3.5

The PANAGOR Auto telephoto lenses 135mm F2.8 & 200 mm F3.5 are the high speed, fully automatic telephoto lenses which are the ideal choice for sports, nature, and general telephoto work.

FOCUSING AND COMPOSING WITH LONG TELEPHOTO LENSES

On many SLR cameras, the rangefinders on microgrid prisms built into the groundglass do not work as well with longer focal length lenses as with the normal lens and may black out. Under these conditions, focusing is best done on the groundglass portion of the finder. Some cameras also, produce apparent cutoff, primarily in the upper corners or along the entire upper edge of the viewfinder. Actually, such cutoff is caused by the size of the camera's mirror which is sometimes inadequate for longer focal length lenses. This cutoff, however, occurs only in the viewfinder system and will not affect the slide the or negative.

AUTO DIAPHRAGM-MANUAL CONTROL

PENTAX (Praktica Yashica: Edixa: Mamiya: Ricoh:) MODEL

For automatic operations, set the control lever near the base of the lens to the "A" position. In this setting, the diaphragm will remain wide open for maximum brightness in focusing and composing. When the shutter is tripped, the diaphragm will automatically close down to the set f stop and then reopen to maximum. For manual operation, or to preview the scene at the shooting aperture, move the autocontrol lever to the "M" (manual) position.

ALL MODELS NIKON F, NIKKORMAT, PHOTOMIC

The Nikon lens is fully automatic, coupling with the auto diaphragm as well as with the meter control. The preview of the camera will operate the diaphragm manually. On FT models, set the ASA speed on the camera control to the maximum speed of the lens.

ALL MODELS MINOLTA SR, SRT-101

The Minolta SR model operation is the same as that outlined for the Pentax model. Minolta SRT-101 lens, automatically engage the meter to the camera.

CANON FX, FT, PELLIX MODELS

Mount the lens to the body in the usual manner and the diaphragm control will engage automatically.

KONICA AUTOREFLEX T MODEL

Mount the lens to the body in the usual manner and by setting the aperture ring to the EE mark, correct lens aperture opening is automatically assured.



AUTO & PRESET ZOOM 85mm-205mm F3.8

SPECIFICATIONS

Focal Length: 85mm to 205mm

Zoom Ratio: 1:2.4

Construction: 13 elements 9 groups -fully coated, color corrected

Aperture: F3.8 to F22 with half stops

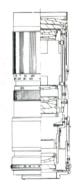
Angle of View: 28° at 85mm to 12° at 205mm

 $\begin{tabular}{lll} Minimum & Distance: & & {\bf 2} & meter & ({\bf 7} & feet) \\ \end{tabular}$

Filter Size: 58mm Screw-in

Net Weight: 780 grams (approx., depending on mount)





AUTO WIDEANGLE 21 mm F4

SPECIFICATIONS

Focal Length: 21mm

Construction: 9 elements 7 groups fully coated, color corrected

Aperture: F4 to F22 with half Stops

Angle of View: 92°

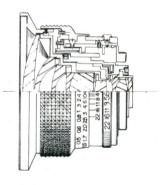
Minimum Distance: 0.16 meter (0.5 feet)

Filter Size: 82mm Screw-in

Length: 60mm (approx., depending on mount)

Net Weight: 350 grams (approx., depending on mount)





AUTO & PRESET WIDEANGLE 28mm F2.5

SPECIFICATIONS

Focal Length: 28mm

Construction: 8 elements 7 groups fully coated, color corrected

Aperture: F2.5 to F22 with half stops

Angle of View: 75°

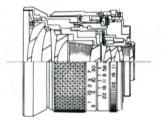
Minimum Distance: 0.3 meter (12 inches)

Filter Size: 62mm screw-in

Length: 70mm (approx., depending on mount)

Net Weight: 340 grams (approx., depending on mount)





AUTO TELEPHOTO 135mm F2.8

SPECIFICATIONS

Focal Length: 135mm

Construction: 4 elements 4 groups fully coated, color corrected

Aperture: F2.8 to F22 with half stops

Angle of View: 18°

Minimum, Distance: 1.3 meter (4.5 feet)

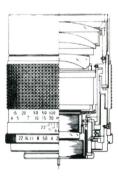
Filter Size: 55mm Screw-in

Length: 98mm (approx., depending on mount)

Net Weight: 420 grams (approx., depending on mount)







AUTO TELEPHOTO 200mm F3.5

SPECIFICATIONS

Focal Length: 200mm

Construction: 5 elements 5 groups fully coated, color corrected

Aperture: F3.5 to F22 with half stops

Angle of View: 12°

Minimum Distance: 2.5 meter (8 feet)
Filter Size: 62mm Screw-in

Length: 140mm (approx., depending on mount)

Net Weight: 720 grams (approx., depending on mount)



Built-in Retractable Lens Hood



PANAGOR AUTO TELE CONVERTERS 2X

The PANAGOR Automatic Tele Converter doubles the effective focal length of any SLR normal or telephoto lens, while maintaining the automatic diaphragm operation of automatic lenses. With non-automatic lenses, the PANAGOR Automatic Tele Converter works equally well on a non-automatic basis. The Converter fits directly into the camera body and accepts any lens made for such camera body. The normal 50mm lens becomes a 100mm, the 100mm a 200mm and so on. The "converted" lens will focus over the same range as the "unconverted" lens.

The converter changes your f stop scale by two openings: F5.6 becomes F2.8 , F8 becomes F4 and so on. If you prefer, you can set your exposure meter at 1/4th the usual ASA speed and read directly (set at ASA 100 for Tri X, for example).

However, do not use wide openings, but stop down at least two stops beyond the maximum aperture of your lens for critical sharpness. If your lense's maximum aperture is F1.8, stop down to at least F4 (which will be the equivalent of F8) and so on.

Larger openings can be used, but there will be some loss of sharpness.

The converter can be used with zoom lenses, for close-up work, and even with mirror lenses.

However, only lenses of good quality should be "Converted", since the Converter also brings out and enlarges faults of the lens with which it is used,

For best results, use a tripod when you "convert" a lens longer than your normal lens.

The rangefinder prism or grid of the camera's viewfinder groundglass is matched to the normal focal length lens. With longer lenses or Converter-Lens combinations it may not function properly. In such cases, correct focus is obtained by focusing on the groundglass portion of the finder, and disregarding the rangefinder system.

On some cameras, the corners or the upper portion of the viewed groundglass image appear blacked out when long lenses are used. A similar effect may result from the lengthening of a normal or moderate telephoto lens by the use of the converter. Such loss of image is caused by the size of the camera's mirror and will not occur on the negative or slide which will be fully exposed.

Properly understood and used, the PANAGOR Automatic Converter will greatly add to the versatility of your lenses and the effectiveness of your picture-taking.



ML 1.4 2 2.8 4 5.6 8 11 16 22 W/ATC 2.8 4 5.6 8 11 16 22 32 45



STANDARD 55mm



STANDARD 55mm+ATC $2 \times$

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TOOM LENS TO

85mm-205mm F3.8

PANAGOR®







200mmF3.5

135mm F2.8

28mm F2.5

v1: with 21mm Lens