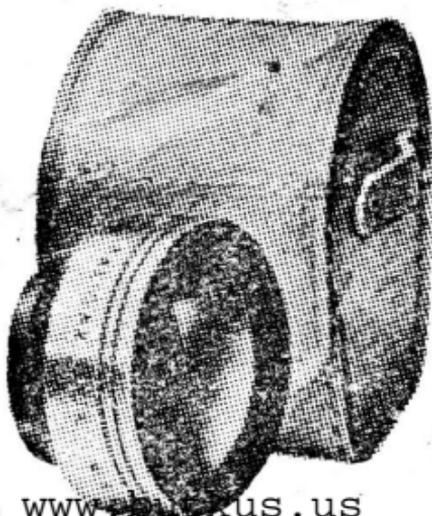


KALIGAR AUXILIARY

TELEPHOTO & WIDE ANGLE LENSES



www.abacus.us



PICTURE TAKEN WITH
NORMAL LENS



PICTURE TAKEN WITH
WIDE ANGLE LENS



PICTURE TAKEN WITH
TELEPHOTO LENS

Kaligar Auxiliary Lenses are supplied in two basic types: Wide Angle Auxiliary and Telephoto Auxiliary. They are designed for use with 35mm camera standard lenses of maximum aperture f:2 or slower, with $2\frac{1}{4} \times 2\frac{1}{4}$ twin-lens reflex cameras having f:3.5 lenses, with Polaroid Highlander or Model 95 cameras, and with $2\frac{1}{4} \times 3\frac{1}{4}$ cameras equipped with f:4.5 lenses, or slower. Each Kaligar Auxiliary Lens is supplied complete with a fixed or interchangeable adapter ring, according to the camera on which it is to be used. No increase in exposure is necessary when using Kaligar Auxiliary Lenses; they are hard-coated for maximum image contrast and transmission.

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TELEPHOTO LENS

The auxiliary telephoto lens is placed over the front of the camera lens and is held in place by means of the adapter ring supplied with it (always specify the name, model and lens of your camera when ordering). Its use results in a moderate increase in effective focal length, magnifying any given object by 2 areas, or $1\frac{1}{2}$ times linear. This increase in focal length improves portraiture perspective by providing a larger image size at a given distance and by avoiding distortion caused by having the camera too close to the subject. Medium distance sports events, distant scenery, camera-shy subjects and small objects normally requiring the camera to be used at closer than its normal focusing range, can all be photographed with improved perspective rendition and increased image size with the Kaligar Auxiliary Telephoto Lens.



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WIDE ANGLE LENS

The auxiliary wide angle lens is simply placed over the front of the camera lens and is held in position by the adapter ring supplied for the specific camera on which it is to be used. A wide angle lens, giving increased angle of coverage is almost indispensable when shooting in cramped quarters, especially in group photography indoors. For sweeping panoramic photos of scenery outdoors, the wide angle lens has definite application. The use of the auxiliary wide angle lens results in an area increase of about 75% as compared with the normal camera lens used at the same distance from the subject.

For Best Results

Kaligar Auxiliary lenses will provide highly satisfactory results if the following factors are taken into consideration. Auxiliary lenses can not be used successfully with 35mm cameras whose standard lenses are faster than f:2; with twin-lens reflexes with f:2.8 lenses; for extreme close-up or copy work; or with lenses of other than "standard" focal length. There is a tendency for auxiliary lenses to "vignette" or cut off corners of the negative area, especially if they are mounted too far from the front surface of the camera's prime lens or if they are used with the 43-45mm focal length lenses supplied on some 35mm cameras. The insertion of filters between the prime and auxiliary lenses may result in marginal image cut-off by increasing the distance between the two lenses. The same effect may be noticed when prime lenses are positioned deep within their mounting barrel. Any cut-off that may result increases as the lens diaphragm is closed down to the smaller apertures.

For maximum definition and image sharpness when using auxiliary lenses, use lens openings f:4.5 or smaller (f:5.6, f:6.3, f:8; f:11, etc.). When softer results are acceptable, larger lens apertures may be used.

How to Focus - Telephoto

With the auxiliary telephoto lens in place on the camera, the distance scale of the prime lens should be set at 0.6 times the actual subject to camera distance, with the exception of infinity. For example; if the actual distance is 20 feet, the camera distance setting should be set at 12 feet because $20 \times 0.6 = 12$. If the actual distance is 5 feet, the camera is set at 3 feet as $5 \times 0.6 = 3$. Remember, when shooting at infinity, however, leave lens distance scale set at infinity.

When using a reflex focusing camera, set distance scale at point where the ground-glass image is sharpest with auxiliary telephoto lens in place on camera.

How to Focus - Wide Angle

The Kaligar Auxiliary wide angle lens has been designed to permit a universal setting for all distances between 18 feet and infinity, by setting the focusing scale of the camera at 4 feet. When actual shooting distance is closer than 18 feet, use camera settings as below:

Actual Subject Camera Distance	Camera Setting
18 ft. - ∞	4 ft.
16 ft.	3'10"
12 ft.	3'6"
8 ft.	3'2"
6 ft.	

Note that for each foot of actual distance less than 18 feet, you set the camera at 1 inch closer distance. These settings are only approximate because the prime lens depth of field is greatly increased by the use of the auxiliary wide angle lens. With a lens aperture of f:8 and camera distance set of 3'6", all objects between 10 ft. and infinity will be in focus.

Read these instructions again carefully. If your results are not completely satisfactory, you have not followed the directions accurately. Good shooting and added camera enjoyment will be obtained when Kaligar Auxiliary Lenses are properly used.

Kaligar Telephoto or Wide Angle Lenses for Reflex Cameras and other cameras with bayonet 1:3.5 lenses. Complete with leather case. . . . List \$19.95

Kaligar Telephoto or Wide Angle Lenses for 35mm cameras. Complete with leather case . . . List \$16.50



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