

Vivitar®

Medium Format Teleconverters

Owner's Manual

General Information

(applicable to all compatible cameras)

1—Your new Vivitar medium format Teleconverter is a precise, quick and convenient means of doubling the focal length of the prime lens. *Example:* an 80mm lens/Teleconverter combination gives you 160mm telephoto capability in the few seconds it takes to make the conversion, with no change in close focus distance.

2—Vivitar Teleconverters fit between the camera body and the prime lens.

3—Teleconverter installation is as simple as interchanging lenses—the procedure is virtually the same.

4—Automatic diaphragm coupling is maintained when the Teleconverter is installed on your camera.

5—Focusing is accomplished in the conventional way with the Teleconverter installed—i.e. by rotating the lens focusing ring.

6—*If your camera is equipped with TTL metering,* exposure compensation is automatic and no adjustments are necessary.

7—*If your camera is not equipped with TTL metering,* exposures must be increased by adjusting (a) the shutter speed, (b) the aperture, or (c) a combination of both to the value of 2 f-stops (See notes and table following for examples of

adjustments).

8—Follow these simple rules to achieve optimum results:

(a) Always use the smallest possible aperture setting.

(b) Never shoot with your lens wide open—always reduce the maximum aperture setting by at least 2 f-stops.

Focal Lengths of Prime Lenses, Prime Lens/Teleconverter Combinations (In mm)

Focal Length of Prime Lens.	80	100	135	200	300	500
*Teleconverter/ Lens Combined.	160	200	270	400	600	1000

*NOTE: When lens focal length is doubled by adding Teleconverter, lens f-stop also changes. Example: An 80mm f2.8 lens becomes a 160mm f5.6 lens.

Brightness Differential (By f-stop)

Prime Lens f-stops.	2.8	4	5.6	8	11	16	22	32	45	64
f-stops with Teleconverter Mounted.	5.6	8	11	16	22	32	45	64	90	128

Exposure Adjustments (for cameras without TTL metering)

Example: assume that, without the Teleconverter

mounted, an exposure of 1/250th second at f11 is indicated. To correctly expose the same subject/lighting conditions *with the Teleconverter mounted* it is necessary to adjust aperture, shutter speed or both as shown in the chart below.

Adjusting Shutter Speed Only.	Adjusting Lens Aperture Only.	Adjusting Shutter Speed and Lens Aperture
1/60th sec. at f11	1/250th sec. at f5.6	1/125th sec. at f8

Vivitar Medium Format 2X Teleconverters

Instructions and Specific Information by Camera Make/Model—

Hasselblad 500C, 500C/M, 500EL, 500EL/M (Vivitar HSB 6x6)

1—Cock camera shutter and remove prime lens from camera body in accordance with owner's manual instructions. **IMPORTANT!** Shutter *must* be cocked when attaching or removing a lens or Teleconverter.

2—Ensure that groove in cocking shaft on camera side of Teleconverter is pointing directly at adjacent red spot. If it is not, rotate shaft as far as it will travel (clockwise in direction of red arrow), using a coin or screwdriver. This positions shaft for correct shutter coupling.

3—Attach Teleconverter to camera body in the

same way you attach a lens.

4—Attach prime lens to front of Teleconverter as if you were mounting it directly on your camera. Lens is securely mounted when locking button snaps back to its original position.

5—To detach Lens/Teleconverter combination, reverse preceding steps; i.e. remove prime lens first, then the Teleconverter. Remember—the shutter must first be cocked before either lens or Teleconverter can be removed.

Caution: To avoid possible damage, follow preceding instructions carefully. Refer to camera owner's manual for information specific to lens interchangeability and related data.

Asahi Pentax AP67 (Vivitar APK 6x7)

There are two methods of attaching your Vivitar Teleconverter, determined by the focal length of the prime lens.

When using lenses with focal lengths from 105 thru 300mm:

1—Remove prime lens from camera body in accordance with owner's manual instructions.

2—Attach Teleconverter to camera body as you would a lens, making certain it is locked securely in position.

3—Depress locking button on Teleconverter and

attach prime lens in same way lens is attached to camera body, using *inner bayonet mounting*.

When using lenses with focal lengths from 400 thru 1000mm:

1—Align white dot on prime lens bayonet ring with center index line on lens depth of field scale.

Depress locking button on Teleconverter, align red dot on lens mount with corresponding red dot on lens side of Teleconverter and turn clockwise until lens and Teleconverter are locked firmly together in the inner and outer bayonet mounts.

2—Attach prime lens/Teleconverter unit to camera body in the same way you attach a lens.

3—To detach Teleconverter, reverse preceding steps.

Zenza Bronica EC-S2 (Vivitar BRN 6x6)

(NOTE: Not designed to fit Bronica cameras with rack and pinion focusing.)

1—Remove prime lens from camera body in accordance with owner's manual instructions.

2—Attach Teleconverter to camera body as you would a lens, making certain it is locked securely in position.

3—Attach prime lens to Teleconverter in same way lens is attached to camera body. For lenses up to 200mm align *red dot on focusing ring* with

corresponding dot on Teleconverter. For all other lenses, align *red dot on lens barrel (rear)* with red dot on Teleconverter.

4—To detach Teleconverter, reverse preceding steps.

Mamiya M645 (Vivitar MAM 645)

NOTE: Your Vivitar Teleconverter is equipped with a coupling pin for automatic TTL metering when the PD prism finder is in use.

1—Remove prime lens from camera body in accordance with owner's manual instructions.

2—Attach Teleconverter to camera body as you would a lens, making certain it is locked securely in position.

3—Attach prime lens to Teleconverter in the same way lens is attached to camera body. Should the Teleconverter TTL coupling pin obstruct the AM lever or TTL claw on camera lens, move the coupling ring (rear of Teleconverter) in either direction until it clears before locking Teleconverter into place. Never exert force since damage could result.

4—Make certain TTL coupler is securely located when using the PD prism finder. To locate Teleconverter coupling pin in lens claw, rotate coupling pin towards claw. The coupling pin cannot

reach the claw when lens aperture is wide open or stopped right down. To overcome this, move the coupling ring adjacent to claw and turn aperture scale ring until pin engages.

5—To detach Teleconverter, reverse preceding steps.

IMPORTANT: When eye level prism or waist level finder is being used, increase exposure by 2 f-stops or equivalent value.

Mamiya RB67 (Vivitar MAM RB67)

Use Teleconverter with lens focal lengths of 127mm or longer.

1—Cock camera shutter and remove prime lens (shutter *must be cocked* when installing or removing your Teleconverter or lens).

2—Ensure that shutter cocking pins on Teleconverter (camera side) are aligned with two green dots. If they are not, rotate pins simultaneously until they align with two red dots. When released, pins will spring back and align with the green dots, indicating that shutter will couple properly and be fully cocked when the Teleconverter is attached to the camera.

3—With camera side of Teleconverter facing you, turn bayonet ring counter-clockwise until it clicks into place.

4—Attach prime lens to Teleconverter in the same

way you attach a lens to your camera.

5—To detach Teleconverter and prime lens, reverse preceding steps, making certain camera shutter is cocked first.

IMPORTANT: Never use force to turn bayonet ring—it interlocks with the shutter cocking mechanism and will not turn unless shutter is cocked.

Exposure Compensation

When used without TTL metering, it is necessary to increase indicated exposure by 2 f-stops. Due to the mechanical characteristics of the Mamiya RB67 additional exposure compensation may be necessary, depending on subject distance. In closeup photography situations, image brightness decreases and exposure compensation is necessary. Typical compensation examples follow: Using your Teleconverter with a 127mm lens gives you a combined focal length of 254mm. Read the exposure compensation value corresponding to 250mm from the exposure compensation scale on your camera. The bottom scale column indicates exposure compensation in steps: "0", "0.5" and "+1", depending on the distance between film plane and subject. Exposure adjustments are tabled below.

Compensation Value	Distance-Film Plane to Subject	Total Exposure Increase
0 Step	Over 3 Meters	2 1-stops (Teleconverter Exposure Factor Only)
0.5 Step	2-3 Meters	2.5 1-stops (Teleconverter Exposure Factor + 1/2)
+ 1 Step	Closer Than 2 Meters	3 1-stops (Teleconverter Exposure Factor + 1)

Note: For other lens combinations, determine necessary exposure increase in the same manner.

Using your Teleconverter with a 250mm or a 360mm lens gives you combined focal lengths of 500mm and 720mm respectively. Since the camera's exposure compensation scale does not go beyond 360mm focal length, use the following table to determine exposure compensation.

Lens Extended Out:	Teleconverter/250mm Lens Combination
Less than 36mm*	2 1-stops (Teleconverter Exposure Factor Only)
More than 36mm*	2.5 1-stops (Teleconverter Exposure Factor + 1/2)

Lens Extended Out:	Teleconverter/360mm Lens Combination
Less than 40mm*	2 1-stops (Teleconverter Exposure Factor Only)
More than 40mm*	2.5 1-stops (Teleconverter Exposure Factor + 1/2)

*Read extension distance from scale on upper side of bellows.

Using the CdS TTL finder accessory

Exposure compensation is not necessary with the TTL finder in place, since light passing through the lens is measured to give you accurate exposure information.

Vivitar Corporation
Santa Monica, CA 90406 USA

Subsidiaries

Vivitar Japan Ltd.: Tokyo, Japan
Vivitar Photo-Elektronik GmbH: Bad Soden, FRG
Vivitar Canada Ltd.: Mississauga, Canada
Vivitar France S.A.: Rungis, France
Vivitar U.K. Ltd.: Abingdon, Oxon, England
Vivitar Europe Inc.: Mijdrecht, Netherlands

3000576

Printed in Japan