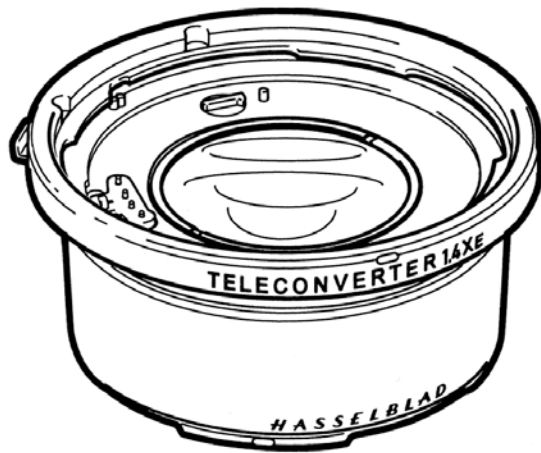


# HASSELBLAD

## TELECONVERTER 1.4XE



Instruction Manual  
Gebrauchsanweisung  
Mode d'emploi  
Manual de instrucciones  
Manuale d'istruzioni  
Gebruiksaanwijzing  
Bruksanvisning

20608

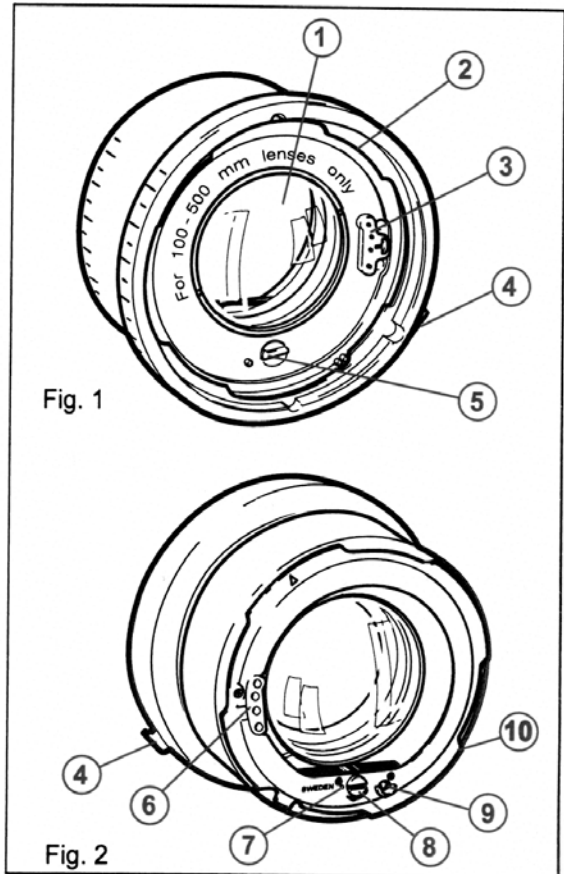


Fig. 1

Fig. 2

## Hasselblad Teleconverter 1.4XE (20608)

The Hasselblad Teleconverter 1.4XE is a teleconverter that increases the focal length of the lens to which it is attached by 40%. Being equipped with the data-bus contacts it can be used on all Hasselblad SLR camera bodies but it should be used on Hasselblad tele-lenses only, i. e. lenses within the focal length range 100 – 500 mm. The optical system, which is built into a rigid one-piece all metal housing, is computed to give an optimized performance with these Hasselblad lenses, extending the available range of focal lengths to 700 mm. All lens-to-air surfaces in the Teleconverter 1.4XE have multi-layer coatings to reduce internal reflections and increase the efficiency of the optical system. Special efforts have been made to minimize the influence on sharpness, color rendition and vignetting. When attached to a lens the Teleconverter 1.4XE increases the focal length, but the basic characteristics of the lens remain. Thus, a macro lens should still be used in the close-up range also with the teleconverter attached.

**WARNING!** The Teleconverter 1.4XE is exclusively designed for use together with Hasselblad tele-lenses within the focal length range 100 - 500 mm **except** the Makro-Planar 135 mm lens. Attempts to attach lenses with shorter focal lengths or the Makro-Planar 135 mm lens may damage the teleconverter optics.

**NOTE:** When the Planar 110 mm lens is combined with the teleconverter it should be stopped down at least one full stop to produce satisfactory image quality.

Since the Teleconverter 1.4XE increases the focal length it also by the geometrical laws of optics decreases the aperture of the total optical lens/converter system by one f-stop. Thus a selected aperture of e.g. f/2.8 will act as f/4 at the exposure, etc. Also the EV-reading on the lens' EV scale should be reduced by one step, e.g. to 12 at a reading of 13, etc. (See also under the headline "Light metering...").

### Parts and Components

- |                               |                               |
|-------------------------------|-------------------------------|
| 1. Teleconverter optics       | 6. Rear contact bridge        |
| 2. Front bayonet mount        | 7. Drive shaft alignment mark |
| 3. Front contact bridge       | 8. Drive shaft rear coupling  |
| 4. Lens catch lever           | 9. Release lever              |
| 5. Drive shaft front coupling | 10. Rear bayonet mount        |

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### Focusing

The Teleconverter 1.4XE does not change the readings from the distance scale on the focusing ring of the lens, but the depth-of-field indications are no longer valid and should be disregarded. The near and far limits remain unchanged but depth-of-field should always be checked using the preview button on the lens. To ensure that all lenses with the Teleconverter 1.4XE attached still can be focused at infinity ( $\infty$ ), the converter is calibrated to make the system in some cases reach infinity slightly before the  $\infty$  symbol. Thus the focus should always be checked on the focusing screen, especially for very distant objects.

### Attaching the Teleconverter 1.4XE

The teleconverter should always be attached next to the lens.

1. Make sure that the camera is cocked and not pre-released.
2. Also make sure that the drive shaft in the teleconverter is cocked, i.e. the groove is aligned with the white dot-mark next to the word SWEDEN (7, fig.2).
3. If it is not, insert a coin or similar object in the groove and turn it in the direction of the arrow until it stops.
4. Attach the teleconverter to the camera body in the same way as a lens or extension tube.

Do not attach any accessories between the teleconverter and the lens!

### Removing the Teleconverter 1.4XE

There are two optional ways to remove the teleconverter when it is installed between the camera body and the lens; either separated to be combined with another lens or still attached to the lens for further use of that particular lens/converter combination.

#### A) Lens and converter to be separated:

1. Make sure that the camera is cocked and not pre-released.
2. Depress the lens catch lever (4, fig. 1, 2) and remove the lens in the same way as it normally is removed from the camera body.
3. Depress the lens release button on the camera body and remove the teleconverter in the same way as a lens.

#### B) Lens and converter to be kept together:

1. Make sure that the camera is cocked and not pre-released.
2. Depress the lens release button on the camera body and remove the lens/converter assembly in the same way as a lens.

**NOTE:** Separation of lens and teleconverter when removed from the camera as a unit may result in unintentional release of one or both, requiring manual cocking before re-attachment.

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### Close-up equipment

Hasselblad extension tubes and automatic bellows can be used together with the Teleconverter 1.4XE. They should always be installed between the camera body and the teleconverter, never between teleconverter and lens.

### Light metering

**Hasselblad SLR meter camera models** (205TCC, 205FCC, 203FE)  
No additional actions beyond the normal procedure are required when the Teleconverter 1.4XE is used on the Hasselblad SLR meter camera models. Since the teleconverter is equipped with data-bus contacts the FE lenses can communicate normally with the built-in camera processor to show the preselected lens aperture setting on the display.

### Hasselblad Meter Prism Viewfinders

The most suitable means for light metering with the Teleconverter 1.4XE installed on the Hasselblad non-meter SLR models are the Hasselblad Meter Prism Viewfinders. All new or old models can be used, provided that the corresponding viewfinder instructions are followed. No additional correction is required. Set the largest lens aperture and film speed on the viewfinder as usual, read the exposure value (EV) and transfer it to the lens or camera shutter.

### External light meter

When an external light meter is used, the EV number must be reduced by one full step before it is transferred to the shutter, e.g. a meter reading of EV 13 should be reduced to EV 12.

If the meter does not read out in EV but in exposure data the read-out should be increased by one full stop, i.e. one full shutter speed stop or one full aperture stop.

**Example:** Meter reading 1/125 s at aperture f/11 should be changed to 1/60 s and f/11 or 1/125 s and f/8.