

内爪バヨネットマウント  
Inner-bayonet mount  
レンズバヨネットロック  
Lens-bayonet lock

外爪バヨネットマウント  
Outer-bayonet mount



カメラ着脱指標  
Camera-body-removal dot

レンズ着脱指標  
Lens-removal dot

● 説明写真は主にリアコンバーター1.4×を使用しています。

● The photos used to illustrate this manual are of the 1.4X type, unless otherwise indicated.

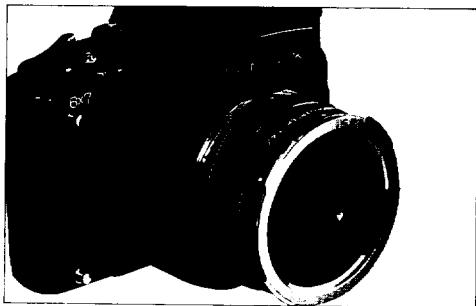
#### リアコンバーター1.4×・2×適合67レンズ LENSES COMPATIBLE WITH 1.4X OR 2X TYPE

	リアコンバーター1.4× Rear Converter 1.4X	リアコンバーター2× Rear Converter 2X
使用可能レンズ Usable lenses	165～400(※)mmレンズ 165 - 400(*)mm lenses	35～400(※)mmレンズ ● シフト75mmF4.5は除く 35 - 400(*)mm lenses (Except Shift 75mm f/4.5)
使用不可能レンズ [像性能の劣化または画面 四隅にケラレを生じる。] Unusable lenses (Causes inferior image quality or "vignetting")	シフト75mmF4.5および 500mm以上の望遠レンズ  Shift 75mm f/4.5, 500mm and longer telephotos	シフト75mmF4.5および 500mm以上の望遠レンズ  Shift 75mm f/4.5, 500mm and longer telephotos

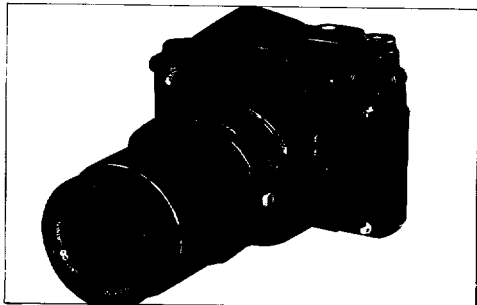
● 上記以外のレンズは結合禁止です。むりに取りつけると、破損する恐れがあります。  
● 上記(※)印のSMCタクマー67 400mmF4レンズは、絞り開放付近では画面周辺部に光量不足が表われますので、F8以上の小絞りでお使いください。

● Do not combine the Rear Converters with the lenses not listed in this table; otherwise they may be damaged.  
● The lens marked (\*) causes light falloff when almost fully opened up; close it down to f/8 or more in actual shooting.

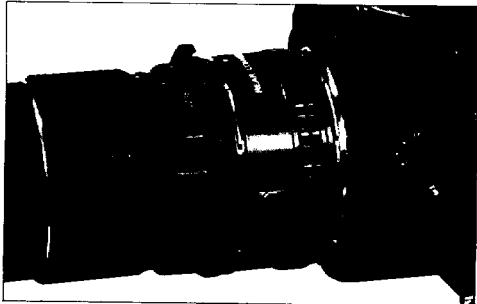
1



2



3



4



1. カメラからレンズをはずします。リアコンバーターのマウントキャップをはずし、レンズ〔内爪マウント・レンズ〕の取り付けと同じ操作でボディに取り付けます。
2. リアコンバーターの上に使用レンズを取り付けます。外爪マウント・レンズは、外爪バヨネットマウントに取り付けます。
3. 内爪マウント・レンズを取りはずすときは、リアコンバーターのレンズバヨネットロックを矢印方向に押しながらレンズを左に回すとはずせます。外爪マウント・レンズの場合は、レンズ着脱と同じ操作です。
4. TTL ペンタプリズムファインダーの場合は、そのまま露出が測れます。自動絞り・開放測光レンズまたはクリックストップ絞り・絞り込み測光レンズも連動します。

1. Remove the lens from the camera body. After removing the rear cap from the Rear Converter, attach the Converter to the camera body the same way as you do the lens (inner-bayonet).
2. Mount the lens over the Converter. The outer-bayonet lens should be connected to the outer-bayonet mount.
3. To remove the inner-bayonet-mount lens, turn the lens to the left while pushing the lens-bayonet lock lever on the Converter in the direction of arrow. In the case of the outer-bayonet-mount lens, remove it the same way as you do the lens.
4. Even when you use the TTL Pentaprism Finder, you can directly measure the light with it. Whether you use the automatic-diaphragm lens, full-aperture-metering lens, click-stop-diaphragm lens or stop-down-metering lens, they are all coupled with the Rear Converter.

1. レンズの焦点距離がそれぞれ1.4倍(1.4×)または2倍(2×)になり、実際の絞り値は1絞りまたは2絞り暗くなりますので、カメラブレにご注意ください。  
高感度フィルムのご使用をおすすめします。
2. リアコンバーターは開放絞りから使えますが、1段か2段絞った状態で使用すると良い結果が得られます。
3. 無限遠( $\infty$ )の風景などを撮影するときでも、必ずファインダーでピントを合わせてから撮影してください。
4. 被写界深度は、リアコンバーターを使用したとき、1.4×では1絞り、2×では2絞り浅くなります。例えば、リアコンバーターを使用して絞りをF8にセットしたときは、1.4×ではF5.6、2×ではF4の被写界深度となります。
5. リアコンバーター使用のときのレンズの距離目盛はそのまま使えます。
6. ファインダー内のマイクロプリズムにカゲリが出るときは、マット面でピントを合わせてください。
7. リアコンバーターは性能上、2個以上接続して使うことはできません。必ず1個でご使用ください。

1. When each of these Rear Converters is combined with a lens, the focal length of the lens is multiplied by 1.4X or 2X respectively, while the actual lens aperture gets slower by one or two f-stops. So care must be taken to prevent camera shake, and the use of high-speed film is recommended.
2. The Rear Converter can be used with the lens at its maximum aperture, but stopping down one or two stops enables you to obtain better results.
3. Even when shooting landscapes with the lens set at infinity, be sure to do it after focusing through the viewfinder.
4. The depth of field gets shallower by one f-stop when the 1.4X is used, and two f-stops with the 2X. For instance, when the lens is set to f/8 with the 1.4X used, the depth of field gets as shallow as when the lens is set to f/5.6, and with the 2X, as shallow as when set to f/4.
5. Even when the Rear Converter is used, the distance scale on the lens can be used as it is.
6. When the microprism in the viewfinder looks too dark to focus, focus in the matte field.
7. Two or more Rear Converters cannot be combined for reasons of performance. Be sure to use only one between camera and lens.





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リアコンバーター1.4×  
Rear Converter 1.4X



リアコンバーター2×  
Rear Converter 2X

仕様

	倍率	構成枚数	絞り方式	測光方式	最大径×長さ	重さ
リアコンバーター1.4×	1.4×	3群5枚	自動	開放	φ91×39.5mm	520g
リアコンバーター2×	2×	4群6枚	自動	開放	φ91×71.5mm	560g

※マウントは、カメラ側内爪バヨネットマウント、レンズ側内爪および外爪バヨネットマウント

Specifications	Magnification	Lens construction (Group-element)	Diaphragm	Metering	Max. diameter & length	Weight
Rear Converter 1.4X	1.4X	3-5	Auto	Open-aperture	91 x 39.5mm	520 g
Rear Converter 2X	2X	4-6	Auto	Open-aperture	91 x 71.5mm	560 g



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### Rear Converter T6-2X

Rear Converter T6-2X is a tele converter unit which fits between the 6x7 camera body and the lens in use to double the focal length of the lens. It may be used with both inner and outer bayonet mounting SMC Takumar and SMC Pentax 6x7 lenses and features internal linkage to retain the automatic diaphragm action and open-aperture metering capabilities of the master lens (with stop-down metering lenses, diaphragm control is manual). The "T" in the designation T6-2X denotes that this is a telephoto converter, while "6" denotes that it is constructed of 6 elements; "2X" refers to the focal length increase.

In addition to doubling the focal length of the master lens, the converter unit also doubles the f-number reading, or in effect, reduces the maximum aperture of the lens by 2 stops. Thus, when used with the 135mm

f/4 telephoto, for example, the lens becomes a 270mm f/8 telephoto, etc.

### Usable Lenses

With the exception of two lenses (SMC Pentax 6x7 500mm f/5.6 and SMC Reflex Takumar 6x7 1000mm f/8), the T6-2X Rear Converter Unit may be used with all SMC Pentax 6x7 and SMC Takumar 6x7 lenses having a focal length of 135mm or greater. It will not mount and/or function properly with lenses having shorter focal lengths than the above.

Also, use is not recommended at minimum or near-minimum focusing distances with the 400, 600 and 800mm lenses when using small apertures, as vignetting will result. In addition, there is also noticeable light fall-off at the edges when using the 800mm lens at minimum aperture, even when focused at infinity.

## Mounting

Normally, especially when changing lenses frequently, it is considered more convenient to mount the converter unit to the camera body first, and then mount the lens to the converter. However, the converter and the lens may also be assembled first, and then attached to the camera. Mount the converter to the camera in the same manner you would a lens; and mount the lens to the converter in the same manner you would attach a lens to the camera body, using the converter's inner or outer bayonet mount, whichever is appropriate.

## Exposure

When using the TTL Pentaprism finder, the reduction in exposure is automatically compensated for through the lens. However, the following should be kept in mind.

1. Because the actual f-number value in effect when the converter is used is double that to which the lens is set, exposure is only 1/4 of what it was originally, or, in effect, reduced by 2 stops. Thus, as a longer shutter speed will be required, it is advisable to use a tripod or take similar precautions against camera shake, even with the shorter telephoto lenses.
2. Exposure loss may also be offset by use of high speed film in situations where optimum resolution and fine grain are not required. Thus, in situations where your exposure would be f/5.6 at 1/250 sec. using ASA 100 film without the converter, for example, you will obtain the same exposure with ASA 400 film at 1/250 sec. when the converter alters the f-number to f/11.
3. Results of using the converter unit are similar to those obtained with a fixed focal length lens when it is stopped down. For example, the 150mm f/2.8 lens becomes a 300mm f/5.6 lens, or roughly the equivalent of the SMC Takumar 300 mm f/4 lens when it is stopped down to f/5.6. However, when the converter is

used, sharpness is most pronounced in the center of the picture area and drops off somewhat at the edges. For this reason, we recommend placing the subject near the center of the picture to maintain better overall focal balance.

4. Better results are also obtained if you do not use the master lens at maximum aperture, but stop it down a stop or two. Thus, use an f/3.5 lens at f/5.6 or f/8, where possible, which will give an effective f-number of f/11 or f/16 when the converter is used. On the other hand, you should avoid stopping the lens down to minimum apertures, as loss of sharpness will occur in this instance, also.
5. In addition to focal length and f-number value, depth of field and focusing distances are also doubled when the converter is used.

## Close-ups, etc.

Although the T6-2X has the power of doubling the magnification of subjects at close focus, it was designed to render maximum sharpness with distant subjects near infinity. We do not normally recommend use of the converter unit for close-ups, because far better results can be obtained with standard close-up accessories. The only exception to this is when it is impossible to get close enough to the subject to take the picture with standard close-up accessories. In this instance, the greater working distance of the converter unit will enable you to get the job done. In normal shooting situations, however, high quality telephoto close-ups can be made using the telephoto close-up attachment lenses or Auto Extension Tubes.

## Specifications

**Construction:** 6 elements in 6 groups

**Magnification:** 2X

**Lens Coating:** SMC

**Size:** 91mm dia. x 71mm

(61mm excluding mount)

**Weight:** 443 grams (15.6 ozs.)



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