

# Instructions for **MACRONET Auto Macro Converter 3X to 1.5:1**

## **EXPAND YOUR PHOTOGRAPHIC CAPABILITIES IN TWO WAYS WITH THE MACRONET CONVERTER**

This new optical accessory fits most popular SLR cameras allowing full use of your built-in exposure metering system and increases your photographic capabilities in two ways:

First, the **MACRONET Converter** makes it simple for you to take life-size (1:1) and greater-than-life-size (1.5:1) macro pictures using your standard 50mm lens. In addition, as a high quality 3X teleconverter, it effectively triples the focal length of your standard lens while maintaining a high level of optical quality. With the **MACRONET Converter** your standard 50mm lens becomes a 150mm macro lens with a focus capability of infinity ( $\infty$ ) down to a continuous macro range with a reproduction ratio of 1:5 to 1.5:1. (Exact magnification range will vary with different lenses.)

## TECHNICAL DETAILS

Lens Construction:	6 elements in 6 groups
Barrel:	Single-piece construction
Diaphragm Coupling:	Fully automatic
Marked Magnification:	1.5:1 1:1 1:1.5 1:2 1:5
Tele:	3X at $\infty$ marking on barrel
Film-plane-to-subject-distance:	approx. 255mm (10 in.) at 1.5:1 approx. 295mm (11 in.) at 1:1
Length $\times$ Diameter:	72 $\times$ 62mm (2.8 $\times$ 2.4 in.)
Weight:	310g (11 oz.)
Lens Mounts:	Canon Nikon Pentax-K Olympus Minolta

## **MOUNTING**

1. Remove standard lens from camera body.
2. Attach **MACRONET Converter** to camera body in the same fashion as you would attach your standard lens.
3. Attach standard lens onto the **MACRONET Converter**.
4. When properly mounted, the **MACRONET Converter** maintains the automatic diaphragm coupling and through-the-lens metering function of your camera.

## **USING YOUR MACRONET CONVERTER AS A MACRO CONVERTER**

1. In the macro mode, focusing is accomplished by the focusing collar on the **MACRONET Converter**. First, set the focusing collar on your standard lens at infinity ( $\infty$ ). Push the release button on the Converter's focusing collar and focus on your subject.
2. Macro focusing can be accomplished in two ways: If you are within the focusing range of your **MACRONET/lens** combination, you can focus by turning the focusing collar on the **MACRONET Converter**. Or, if you desire a specific magnification ratio, you can set the focusing collar of the **MACRONET Converter**

on the desired magnification ratio and move your camera backwards and forwards until focus is achieved.

3. For a slightly higher magnification ratio of 1.8:1 or 1.8X life-size, set the focus of your standard lens at the minimum focus position and proceed as above.
4. The focusing scale of the **MACRONET Converter** is marked off in magnifications not distances. The macro focus is continuous within the range of 1:5 to 1.5:1 and includes 1:1 life-size. The scale is intended for reference when a 50mm lens is used, other focal length lenses may yield a different magnification range.
5. To see the full range of magnifications available, begin by setting the focus on your standard lens at infinity ( $\infty$ ) and the **MACRONET Converter** at infinity ( $\infty$ ). Then proceed by focusing your standard lens towards its closest focus position; finally, turn the focusing collar on the **MACRONET Converter** towards its closest focus position.

## USING YOUR MACRONET CONVERTER AS A TELECONVERTER

1. Your MACRONET Converter will triple the focal length of any lens it is used with. Your 50mm standard lens becomes a 150mm telephoto; a 135mm lens becomes a 405mm lens, etc.

The MACRONET Converter is equally useful with zoom lenses; an 80-200mm zoom lens becomes a 240-600mm zoom.

2. In addition to tripling the focal length of your lens, the light transmission of your lens will be reduced by three stops. Cameras with through-the-lens metering systems will automatically adjust for this light loss.
3. To focus your MACRONET/lens combination, first set the focus control ring of the MACRONET Converter at the infinity ( $\infty$ ) setting where it will click into place. Proceed to focus on your subject by focusing the standard lens.

## USEFUL PRACTICAL TIPS

1. It is always advisable to attach the **MACRONET** Converter first onto the camera body and then attach the standard lens onto the Converter.
2. Because depth of field is minimal in close-up and telephoto photography, it is advisable to use the smallest possible lens aperture for maximum depth of field and focus carefully.
3. For optimum sharpness it is advisable to use a tripod or a steady camera support. For macro photography in particular, it is recommended to use Universal Micro Focus Adjuster that fits between camera and tripod for final critical focusing which cannot be accurately done by simply moving the tripod legs.

Japan Patent No. 1084517  
U.S. Patent No. 4030113  
German Patent No. 2545950  
Canada Patent No. 1063399