## PANAGOR®

**AUTO MACRO CONVERTER to 1:1** 





# DISCOVER THE FASCINATING & EXCITING WORLD OF MACRO PHOTOGRAPHY WITH THE PANAGOR AUTO MACRO CONVERTER

This new, one piece accessory fits most popular SLR cameras allowing full use of your built-in exposure metering system and makes it very simple for you to take life size close-up and macro pictures using your standard lens.

A set of extension tubes produces a comparable result but the PANAGOR MACRO CONVERTER is MUCH EASIER TO HANDLE. Additionally the focus is CONTINU-OUSLY VARIABLE, from 1:10 to 1:1 in just a single turn of the focus ring. Macro photography used to be for professionals or experienced specialists, but not any

more. Macro photography is for EVERYBODY now!









standard 1:1 1:4 1:10

#### TECHNICAL DETAILS

#### PANAGOR AUTO MACRO CONVERTER

4 elements in 4 groups

length 53mm, weight 250 grammes approximately depending on fitting. Focusing range with 50mm standard lens

| MAGNIFICATION RATIO | CAMERA TYPE                    |
|---------------------|--------------------------------|
| from 1:10 to 1:1    | Pentax, Praktica thread (42mm) |
| 1:10 1:1            | Pentax-K                       |
| 1:10 1:1            | Olympus OM                     |
| 1:10 1:1            | Nikon Al/Nikkormat FT3         |
| 1:10 1:1            | Contax/Yashica                 |
| from 1:7 to 1:1     | Minolta SRT/XD                 |
| from 1:5 to 1:1     | Canon FD                       |
| from 1:4 to 1:1     | Konica T-3/TC                  |
|                     |                                |

Standard lenses having focal lengths of either 55mm, or 57mm, or 58mm may also be used with the PANAGOR Auto Macro Converter but in this case a 1:1 ratio can only be obtained if the lens is set at less than infinity.

Light loss: 2.5 f/stops

2.5 f/stops at 1:10 to 2.75 f/stops at 1:1

The Pentax thread model has a built-in coupler for coupling to the automatic diaphragm. For all other models listed above, full use of your built-in exposure metering system is possible with the PANAGOR Auto Macro Converter.

### INSTRUCTIONS FOR USING PANAGOR AUTO MACRO CONVERTER

- 1. Remove standard lens from camera body.
- Affix PANAGOR Auto Macro Converter onto camera body in the same manner as affixing standard lens onto the camera body.
- Affix the standard lens onto the converter and set the focusing ring on the standard lens to infinity.
- Now use the focusing ring on the PANAGOR Auto Macro Converter to bring the subject into focus.
- Now set the lens aperture on the standard lens.

#### USEFUL PRACTICAL TIPS

object distance.

- (a) It is always advisable to affix the PANAGOR Auto Macro Converter first onto the camera body and then affix the standard lens onto the converter. Affixing the PANAGOR Auto Macro Converter firstly on the standard lens and then attaching both to the camera body can sometimes cause problems.
- (b) The picture distance falls roughly between 1.50m and 10cm. At 1:1 the object distance (distance to front of lens) is about 13.5cm and the picture distance (distance to film surface) about 26.5cm. Focusing can be done in two ways. If you do not need to use a specific pre-selected magnification ratio, select a distance between 1m and 15cm and focus in the manner described in point 4. If you have to take all photographs at the same magnification ratio, turn the PANAGOR Auto Macro Converter's broad focusing ring to the ratio concerned, then adjusting the focus by moving the camera slowly to increase or decrease the

the maximum depth of field it is advisable to use the smallest possible aperture. (the smallest aperture being the highest f/stop number,) The blue figures on the focusing ring of the PANAGOR Auto Macro Converter (d)

(c)

Depth of field is minimal in close-up and macro photography and in order to obtain

- indicate the light loss in f/stops. Either when using a flash gun or a camera without through the lens metering, the aperture indicated by the calculator dial of the flash gun or by a separate exposure meter, should be increased by the same number of
- stops. If the aperture remains at a fixed setting, light loss can be compensated by increasing the exposure time the same number of stops although this is not possible when using a flash gun.
- When using the PANAGOR Auto Macro Converter with your camera the object ratio. (f) It is also possible to use your 135mm F2.8 PANAGOR lens in front of your

PANAGOR Auto Macro Converter but a 1:1 magnification cannot be achieved.

(e) distance (distance from object to front of lens) is greater than when existing extension tubes and bellows are used with a camera. This slight increase in object distance is advantageous for illuminating the object especially at 1:1 magnification

### Similar name converter TELE MACRO is in the market, but it is totally different from PANAGOR AUTO MACRO CONVERTER.

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U.S. Patent 4,030,113 Canada 1,063,399 W. Germany 2,545,950 PAT.P. JAPAN, 126473/75