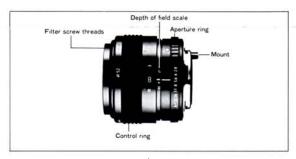
SIGMA 90mm F/2.8 MACRO

Instructions

Thank you for purchasing this Sigma lens. Please read the following instructions carefully so that you can obtain the maximum enjoyment and performance from your new lens.



Special Features

The Macro 90mm 2.8 is a new telephoto-type macro lens developed by Sigma. It utilizes a floating mechanism to correct aberration. and extension from infinity to 1:2 macro shooting is a mere 17mm-less than half that of a conventional macro lens Also, this lens comes with a specially designed life-size attachment.

With this attachment, shooting from 12 to 1:1 (actual size) is possible

- 1. Attach the lens to the camera body. 2. Turn the aperture ring to the center line on top of the lens to set the appropriate aperture in relation to the shutter speed selected.
- 3. Look into the viewfinder, turn the focus control ring until the image is sharp.

Depth-of-Field

This depth-of-field is indicated on the barrel of all Sigma Lenses, including zoom lenses. You can read the depth-of-field on the distance scale.

Infrared Photography

1) When taking pictures using an infrared film, first follow the normal focusing sequence.

2) Then turn the Focus Control Ring slightly so that the distance correctly focused is to be aligned with the Infrared Guide Line marked "R". (R mark infrared line = F 22)

What is the ratio indicator?

This is the scale which shows the ratio between actual subject size and the size of the image as it appears on the film, i.e.: if the 1:2 position is used, then the subject will be photographed at 1 2th of its actual size.

About the Life-size Attachment

This lens comes with a life-size attachment Specially designed for the Macro 90mm, it is an achromatic closeup lens of a with 2 elements in single group construction Light and compact, its outer diameter is 54mm and length is 117mm, and it is more convenient to use than a rear converter or extension ring Attached to the Macro 90mm, shooting from 12 to 1:1 (actual size) is possible (It focuses at a distance of 22cm to 30cm from the subject to the film surface) Use with an aperture of F8 or higher. In the case of extremely delicate subjects we recommend using without the lifesize attachment.

Specifications

Sigma 90mm F/2.8

- Lens Construction: 9 elements in 9 groups.

 ◆ Angle of View:27 ◆ Minimum
- Aperture:F/22

 Minimum Focusing Distance:33cm (approx. 8.7inches)
- Magnification:1:2
- Filter Size:52mm Dimensions: $67\text{mm} \times 60\text{mm} (2.5 \times 2.3\text{inches})$
- Weight: 340g(11.9oz.)
- · Lens Coating: Sigma Multi-Coating.

F istance	2 8	4.0	5 6	8 0	11.0	16 0	22
00	∞- 81.48	∞∼ 58 31		∞∼ 29.24	∞~ 21.31	∞~ 14.71	00~ 10.60
5 0	5 41~ 4 80	5 56~ 4.69	5 79~ 4 54	6 14~ 4 35	6 72~ 4 10	7 78~ 3 80	10 01~ 3 45
2 0	2 06~ 1 97	2 08- 1 95	2 11~ 1 93	2 15~ 1 89	2 22~ 1 85	2 31~ 1 79	2 47~ 1 71
1.0	1 02~ 1.00		1 03-	1 04~ 0 98		1 07~ 0 95	1 10~ 0 93
0.5	0.5028~ 0 4988		0 5048~ 0 4968	0 5066~ 0 4952	0 5090~ 0 4929	0 5126~ 0 4897	0 5178~ 0 4854
0 4	0 4021~ 0 4000	0 4026 ~ 0 3994	0 4032~ 0 3988		0 4055~ 0 3966	0 4075~ 0 3949	0 4102~ 0 3924
0.32	0 3243 ~ 0 3232	0.3246~ 0.3229	0 3249~ 0 3226	0 3254~ 0 3221	0 3261 ~ 0 3215	0 3271~ 0 3206	0 3285 ~ 0 3193

Allowable circle of confusion Diameter 1 30mm

