SP90mm F/2.8 Di MACRO1:1 VC USD
(for Nikon, Canon)

SP90mm F/2.8 Di MACRO1:1 USD
(for Sony *Models without the VC)

Model: F017

* The Marking is a directive conformity mark of the European Community (EC).
* Das Zeichen entspricht der EC Norm.
* La marque est un marquage de conformité à la directive CEE (CE).
* La marca es marca de conformidad según directiva de la Comunidad Europea (CE).
* Il marchio attesta la conformità alla direttiva della Comunità Europea (CEE).
* 标志表示符合欧州共同体(EEC)指标

Thank you for purchasing the Tamron lens as the latest addition to your photographic equipment. Before using your new lens, please read the contents of this Owner’s Manual thoroughly to familiarize yourself with your lens and the proper techniques for creating the highest quality images possible. With proper handling and care, your Tamron lens will give you many years of photographing beautiful and exciting pictures.

• Explains precautions that help to prevent problems.

• Explains things you should know in addition to basic operations.

NOMENCLATURE (Refer to Fig. 1. If not specified)

Lens hood
Hood attaching indicator
Hood attaching bayonet ring
Distance scale
VC (Vibration Compensation) switch
Focus limiter
Lens mount/Lens mount contacts

SPECIFICATIONS

FO17

Focal Length
90 mm

Maximum Aperture
F/2.8

Angle of View
27˚2’

Minimum Object Distance
0.3 m (1.0’’)

Maximum Magnification Ratio
1:1

Filter size
62 mm

Length/Overall Length
114.5 mm (4.5’’)/122.9 mm (4.8’’)*

Optical Construction
11/14

Angle of View
27˚2’

Maximum Aperture
F/2.8

Features and appearance of lenses listed in this owner's manual are subject to change without notice.

ATTACHING AND REMOVING THE LENS

■ How to mount the lens
Removing the rear cap of the lens. Align the Lens attachment mark (1) on the lens barrel with its counterpart on the camera mount and insert the lens.

Rotate the lens clockwise until it click-locks. For Nikon models, align the lens attachment mark with the dot on the camera and rotate the lens counter-clockwise until it click-locks.

■ How to detach the lens
Pressing the release button on the camera door, turn the lens counter-clockwise (in case of Nikon lens, clockwise), and lift the lens off the camera's lens mount.

Ensure that the camera is turned off when attaching or removing the lens.

For further details, please read the instruction manual of your camera.

FOCUSING (Autofocus) and using the full-time manual function

In case of a Nikon or Canon camera, switch the AF/ MF switch (1) on the lens to AF (Fig. 12). In case of a Nikon camera with the focus mode selector dial, set the focus mode to S, C, or A, and then set the AF/MF switch (2) on the lens to AF. Press the shutter button halfway down while viewing through the camera’s viewfinder, the lens focuses automatically. An in-focus mark will light when the lens focuses on the main subject sharply. Press the shutter button further to photograph.

In case of a Sony camera, switch the AF/ MF switch (3) on the lens to AF (Fig. 13), and set the focus mode on the camera to Auto focus (AF). Press the shutter button halfway down while viewing through the camera’s viewfinder, the lens focuses automatically. An in-focus mark will light when the lens focuses on the main subject sharply. Press the shutter button further to photograph.

Using the full-time manual function

FO17 is equipped with the full-time manual function. The full-time manual function is a function that the focus can be fine-tuned by the manual focusing ring (1), while viewing through the camera’s viewfinder. The lens focuses automatically. An in-focus mark will light when the lens focuses on the main subject sharply. Press the shutter button further to photograph.

The distance scale (1) is marked for guidance purposes. The actual focal point may slightly differ from the distance marked on the focal length index.

For further details, please read the instruction manual of your camera.

FOCUSING (Manual Focus) (Ref. Figs. 11, 12, 13 & 14)

In case of a Nikon or Canon camera, switch the AF/ MF switch (1) on the lens to MF (Fig. 14). Focus manually rotating the focusing ring (1), while viewing through the camera’s viewfinder (Fig. 2). The main subject in the viewfinder will be sharp when the lens is focused correctly.

In case of a Sony camera, switch the AF/ MF switch (3) on the lens to MF (Fig. 13), and set the focus mode on the camera to Manual focus (MF). Focus manually rotating the focusing ring (1) while viewing through the camera’s viewfinder (Fig. 2). The main subject in the viewfinder will be sharp when the lens is focused correctly.

Even in the MF mode, when turning focusing ring (1) while pressing the shutter button halfway, the focus aid function lamp lights up when the picture is in focus.

At infinity, make sure the image in the viewfinder appears sharp. The infinity position is marked with certain allowances to insure proper focus under a variety of conditions.

For further details, please read the instruction manual of your camera.

VC MECHANISM (Ref. Figs. 15, 16 & 17) (Mouted for Nikon and Canon models)

VC (Vibration Compensation) is a mechanism which reduces the image blur caused by hand-held shooting.

■ How to use VC mechanism
1) Set the switch (1) on.

• When the VC is not used, set the switch off.

2) Press the shutter button halfway to verify the effect of the VC.

When the shutter button is pressed down halfway, it takes about 1 second for the VC to provide a stable image.

■ The VC may be effective for hand-held shots under the following conditions.

- Dimly lit locations
- Scenes where flash photography is forbidden
- Situations where your footing is uncertain
- Taking panning shots of a moving subject

■ The VC may not be able to give full effect in the following cases:

- When the in-focus mark is shown at a fast moving vehicle
- Shooting during the excessive movement of the camera
- When taking photographs using a tripod
- Turn the VC switch OFF when taking pictures with the bulb setting or during long exposures. If the VC switch is ON, the VC mechanism may introduce errors.

Lens Hood HF017

A bayonet-type lens hood (referred to as “hood” below) is provided as standard equipment. We recommend using the hood whenever possible as the lens hood eliminates stray light, which is harmful to the picture. However, please be aware of the precautions stated in the next section when your camera is equipped with a built-in flash.

Attaching the Lens Hood (Ref. Figs. 17 & 18)

Align Hood attaching alignment mark (1) on the hood with the corresponding index mark (1) on the lens. Set the focus limiter switch to “0.5m-∞” (Fig. 16). Focus the lens on the main subject by pressing the shutter button halfway down while viewing through the camera’s viewfinder, the lens focuses automatically. An in-focus mark will light when the lens focuses on the main subject sharply. Press the shutter button further to photograph.

Using the focusing ring (3) to detach the lens hood

1) Reverse the lens hood. Point the lens toward the opening, then align the hood attaching index (1) on the lens with the alignment on the hood attaching indicator (1). Focus the lens on the main subject sharply. Press the shutter button further to photograph.

2) Turn the hood clockwise until the alignment mark (4) is at the top to set it. (Fig. 19)

Focus limiter switch

Set the focus limiter switch to “FULL”. Press the shutter button halfway to verify the effect of the VC.

For the close-up range (0.3 m to 0.5 m) (Ref. Fig. 20)

Set the focus limiter switch to “0.3m-0.5m”.

For normal photos outside the close-up range (0.5 m to infinity) (Ref. Fig. 21)

Set the focus limiter switch to “0.5m-∞”.

PRECAUTIONS IN SHOOTING

■ Optical design for Di takes into consideration the various features of digital single reflex cameras. However, due to the configuration of the digital single reflex cameras, even when the autofocus accuracy is within specifications, the focal point may be a little forward or behind the optimum point when shooting with autofocus under some conditions.

When the lens is used with a built-in flash on the camera, adverse photographic phenomena such as corner illumination fall-off or vignetting at the bottom of the image may be observed, especially in close-up range. This is due to the inherent limitation of the coverage of the built-in flash, and/or the relative position of the flash to the edge of the lens barrel or lens hood which casts shadows on the image. Always use the built-in flash with the hood removed. It is strongly recommended to use a suitable separate flash unit provided by the camera manufacturer for all flash photography, even when using the camera with the hood removed. For further details, please read the “built-in flash” article on the instruction manual of your camera.

■ Certain camera models may indicate the maximum and minimum aperture values of the lens in approximate numbers. This is inherent to the design of the camera and not an indication of an error.

■ Using with a mirrorless interchangeable-lens camera will not be guaranteed.

TO ENSURE LONG-TERM SATISFACTION

Avoid touching the glass element surface. Use a photographic lens cloth or blower to remove dust from the lens surface. When not using the lens, always place a lens cap on it for protection.

Use a lens cleaning tissue or lint cloth with a drop of cleaning solution to remove fingerprints or dust on the lens surface. Use a cotton ball or lens cleaning tissue only for removing stubborn dirt or small dust if necessary. Use a cleaning solution that is safe for the lens.

VC MECHANISM (Ref. Figs. 15, 16 & 17) (Mounted for Nikon and Canon models)

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The VC activates while the “release” button is pushed halfway down. (It is activated 2 seconds after the shutter button is released)

VC can be used in AF or MF mode.

When a photograph is taken from a fast moving vehicle

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This symbol indicates that this product shall not be treated as household waste. Instead it shall be collected separately for the recycling of electrical and electronic equipment.

If the new products are purchased, this product might be handed over to the distributor or the collection system of waste electrical and electronic equipment eventually.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product or components of this product.

If this product is disposed illegally, it might cause a possibility of penalties. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.