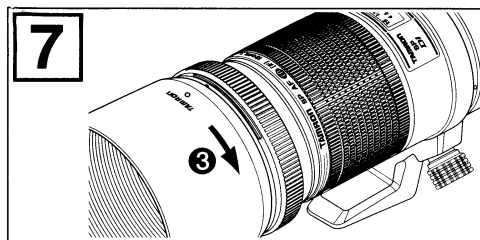
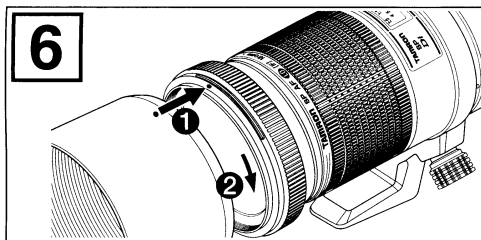
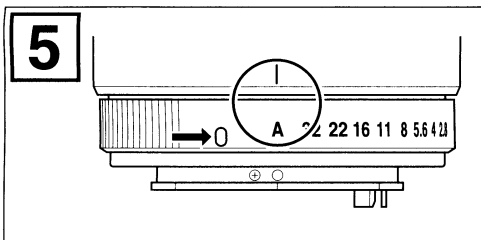
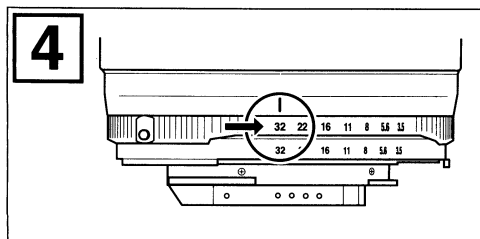
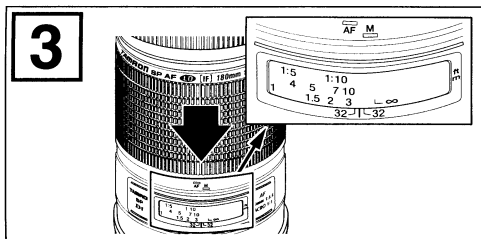
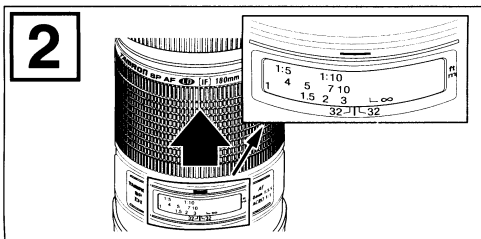
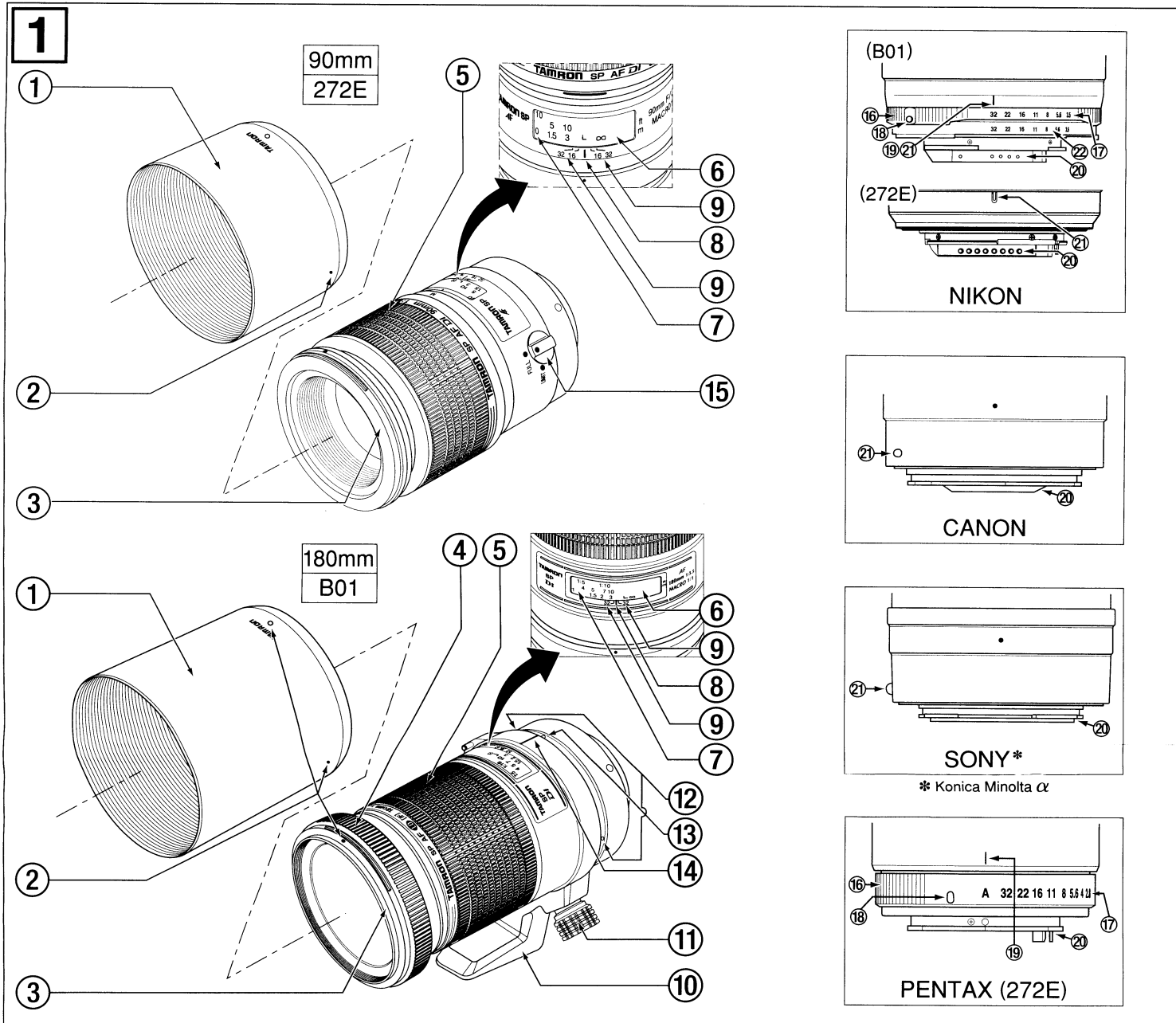
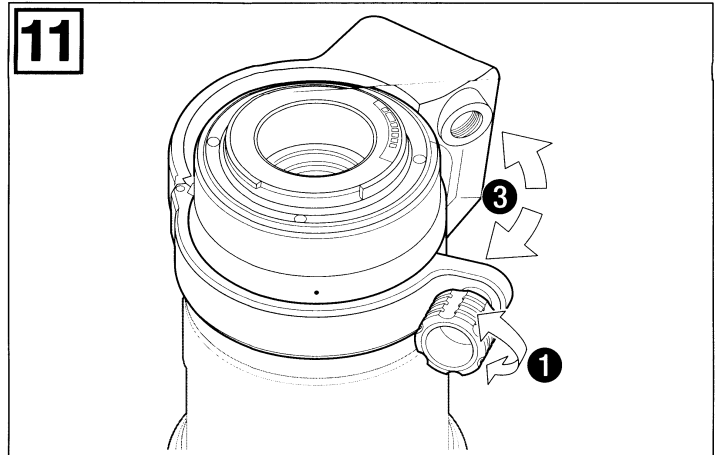
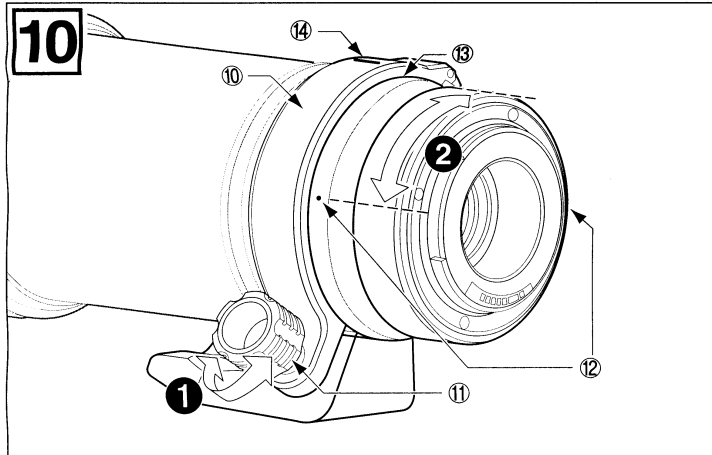
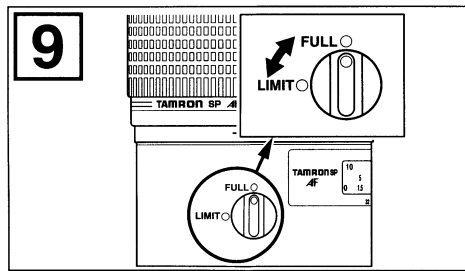
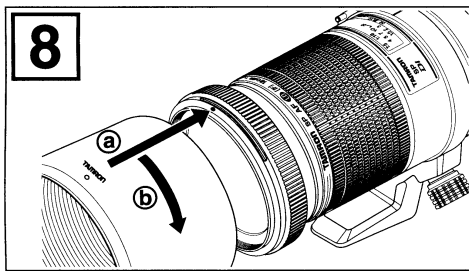


TAMRON

● SPAF 90mm F/2.8 Di Macro1:1 (Model 272E) (Model 272E)

● SPAF 180mm F/3.5 Di LD [IF] Macro1:1 (Model B01)





12 272E (90mm)

①	②	③	④
1 : 1	0.29m	3.98×	+2.0
1 : 1.1	0.30m	3.63×	+1.8
1 : 1.3	0.31m	3.11×	+1.7
1 : 1.5	0.32m	2.76×	+1.5
1 : 1.8	0.34m	2.40×	+1.3
1 : 2	0.35m	2.23×	+1.2
1 : 2.8	0.42m	1.82×	+0.8
1 : 3	0.43m	1.76×	+0.8
1 : 4	0.52m	1.55×	+0.7
1 : 5	0.61m	1.43×	+0.5
1 : 7	0.78m	1.30×	+0.3
1 : 10	1.04m	1.20×	+0.3

B01 (180mm)

①	②	③	④
1 : 1	0.47m	2.69×	+1.4
1 : 1.2	0.49m	2.27×	+1.2
1 : 1.5	0.54m	1.91×	+0.9
1 : 2	0.62m	1.60×	+0.7
1 : 3	0.80m	1.34×	+0.4
1 : 5	1.15m	1.17×	+0.2
1 : 10	2.03m	1.04×	+0.1

- ① Magnification
Agrandissement
Vergrößerung
Aumento
Ingrandimento
Vergröttingfactor
Aumentar
放大率
- ② Distance
Distancia
Abstand
Distancia
Distanza
Afstands
Distância
聚焦距
- ③ Exposure factor
Facture d'exposition
Korrekturfaktor
Factor de exposició
Fattore esposizione
Belichtingsfactor
Fator de exposição
曝光放大倍率
- ④ Exposure compensation
Correction d'Exposition
Bilichtungskorrektur
Compensación de la exposición
Controllo esposizione
Belichtingscorrector
Correção da exposição
放大倍率矫正

13 272E (90mm)

	F/2.8	F/4.0	F/5.6	F/8.0	F/11.0	F/16.0	F/22.0	F/32.0
0.291m	0.291-0.292	0.291-0.292	0.291-0.292	0.291-0.292	0.291-0.292	0.291-0.292	0.290-0.293	0.290-0.293
0.4m	0.399-0.401	0.399-0.401	0.398-0.402	0.398-0.402	0.397-0.403	0.395-0.405	0.394-0.407	0.391-0.410
0.5m	0.498-0.502	0.498-0.502	0.497-0.503	0.495-0.505	0.494-0.506	0.491-0.509	0.488-0.513	0.482-0.519
0.6m	0.597-0.603	0.596-0.604	0.595-0.605	0.593-0.608	0.590-0.611	0.585-0.616	0.580-0.622	0.572-0.632
0.8m	0.794-0.806	0.792-0.808	0.789-0.811	0.785-0.816	0.779-0.822	0.770-0.832	0.760-0.845	0.743-0.868
1.0m	0.991-1.009	0.987-1.013	0.982-1.019	0.975-1.027	0.966-1.037	0.951-1.055	0.934-1.078	0.907-1.117
1.5m	1.477-1.524	1.469-1.533	1.456-1.546	1.439-1.567	1.417-1.594	1.382-1.641	1.343-1.702	1.282-1.814
3.0m	2.903-3.104	2.866-3.147	2.816-3.210	2.744-3.310	2.660-3.444	2.530-3.694	2.390-4.047	2.190-4.820
5.0m	4.727-5.307	4.628-5.438	4.495-5.636	4.309-5.961	4.097-6.426	3.778-7.390	3.474-9.018	3.055-14.294
10.0m	8.941-11.364	8.587-11.975	8.129-13.005	7.527-14.933	6.890-18.337	6.041-29.623	5.265-114.488	4.340-∞
20.0m	16.13-26.321	15.00-30.021	13.64-37.563	12.01-60.327	10.45-250.236	8.597-∞	7.092-∞	5.497-∞
∞	70.84-∞	53.11-∞	39.14-∞	28.08-∞	20.76-∞	14.48-∞	10.64-∞	7.386-∞

B01 (180mm)

	F/3.5	F/4.0	F/5.6	F/8.0	F/11.0	F/16.0	F/22.0	F/32.0
0.47m	0.469-0.471	0.469-0.471	0.469-0.471	0.468-0.472	0.467-0.473	0.466-0.474	0.465-0.475	0.462-0.478
0.5m	0.499-0.501	0.499-0.501	0.499-0.501	0.498-0.502	0.497-0.503	0.496-0.504	0.495-0.505	0.493-0.507
0.55m	0.549-0.551	0.549-0.551	0.549-0.551	0.548-0.552	0.547-0.553	0.546-0.554	0.545-0.556	0.542-0.558
0.6m	0.599-0.601	0.599-0.601	0.598-0.602	0.598-0.602	0.597-0.603	0.595-0.605	0.594-0.606	0.591-0.609
0.7m	0.699-0.701	0.698-0.702	0.698-0.702	0.697-0.703	0.696-0.704	0.694-0.706	0.692-0.709	0.688-0.713
0.8m	0.798-0.802	0.798-0.802	0.797-0.803	0.796-0.804	0.794-0.806	0.792-0.808	0.789-0.811	0.784-0.817
1.0m	1.00-1.003	1.00-1.003	1.00-1.005	0.99-1.007	0.99-1.009	0.99-1.013	0.98-1.019	0.97-1.027
1.5m	1.49-1.507	1.49-1.508	1.49-1.511	1.48-1.516	1.48-1.522	1.47-1.533	1.46-1.545	1.44-1.567
2.0m	1.99-2.013	1.99-2.015	1.98-2.021	1.97-2.030	1.96-2.042	1.94-2.061	1.92-2.085	1.89-2.126
3.0m	2.97-3.031	2.97-3.035	2.95-3.050	2.93-3.071	2.91-3.099	2.87-3.146	2.82-3.204	2.75-3.307
∞	213.22-∞	191.68-∞	144.85-∞	106.00-∞	79.39-∞	55.97-∞	41.34-∞	28.80-∞



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



The EEC Conformity Report applies to the Council Directive 98/336/EEC, 92/31/EEC, 93/68/EEC and is used by Tamron Co., Ltd., manufacturer of this product.

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)

- | | |
|---|--|
| ① Lens hood | ⑭ Vertical indicator on tripod mount (B01) |
| ② Hood attaching alignment mark | ⑮ Horizontal indicator on tripod mount (B01) |
| ③ Hood attaching bayonet ring | ⑯ Tripod mount indicator (B01) |
| ④ Filter Effect Control (FEC) Ring (B01) | ⑰ Focus limiter knob |
| ⑤ Focusing ring | ⑱ Aperture ring (B01 Nikon, Pentax) |
| ⑥ Focus macro magnification scale display | ⑲ Aperture scale (B01 Nikon, Pentax) |
| ⑦ Distance (macro magnification) scale | ⑳ AE lock button (B01 Nikon, Pentax) |
| ⑧ Distance (macro magnification) index | ㉑ Aperture Index (B01 Nikon, Pentax) |
| ⑨ Depth-of-field scale | ㉒ Lens mount/Lens mount contacts |
| ⑩ Tripod mount (B01) | ㉓ Lens attachment mark |
| ⑪ Tripod mount locking screw (B01) | ㉔ Aperture scale for finder display (Nikon) |

SPECIFICATIONS

	272E	B01
Focusing Distance	90 mm	180 mm
Maximum Aperture	F/2.8	F/3.5
Angle of View	27°	14°
Lens Construction	9/10	11/14
Minimum Focus Distance	0.29 m	0.47 m
Maximum Magnification Ratio	1:1	1:1
Filter Size	55 mm	72 mm
Length	97 mm	165.7 mm
Diameter	71.5 mm	84.8 mm
Weight	400 g	920 g

- Lengths, diameters and weights listed in lens specifications are for lenses with Nikon mounts.
- Features and cosmetic designs of lenses listed in this owner's manual may be revised without notice.

ATTACHING LENS TO CAMERA

How to mount the lens

Remove the rear cap of the lens, align the lens attachment mark on the lens barrel with its counterpart on the lens mount of the camera and insert the lens mount into camera's mount opening. 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

Press the lens release button of the camera, turn the lens, counter-clockwise (in case of Nikon lens, clockwise), and lift the lens off the camera's lens mount.

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

SWITCHING BETWEEN AF & MF MODES (Ref. Figs. 2 & 3)

Nikon and Canon models

Simply move the focusing ring forward (to AF) and backward (to MF) to change the focusing mode between autofocus (AF) and manual focus (MF).

Sony and Pentax (272E) models

Move the focusing ring forward (to AF) and backward (to MF) and at the same time, set the AF/MF selector switch of the camera body to the coinciding focusing mode (AF or MF).

Mount	AF/MF Switching Operation
Nikon, Canon	Move focusing ring only
Sony, Pentax	Move and switch both focusing ring and selector of camera body

• Carefully read "Autofocus" and "Manual focus" sections below and operate the camera and lens accordingly. In addition, please refer to the instructions related to focusing operations of your camera.

FOCUSING (Autofocus) (Ref. Fig. 2)

- 1) Set the camera in the AF mode, and move the focusing ring upward to the AF position.
- 2) Press the shutter release button half-way while looking through the viewfinder. The focusing ring will move automatically to focus.

• With Sony and Pentax cameras, when the focusing ring is set in the manual focus position while the camera is set in the AF mode, the focusing ring rotates as if it were in the autofocus mode. Turning of the focusing ring in this instance may cause damage to the lens and/or the camera body. Also, do not force the focusing ring when it is set in the manual focus mode. Manual rotation of the focusing ring when the camera is still set in the autofocus mode (AF) will cause mechanical damage to the lens and/or to the camera body.

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

FOCUSING (Manual Focus) (Ref. Fig. 3)

Nikon and Canon models

- 1) Simply move the focusing ring backward to the MF position.
- 2) Rotate the focusing ring manually while looking through the viewfinder until the image in the finder comes into sharp focus.

Sony and Pentax (272E) models

- 1) Switch the AF/MF selector switch on the camera body to MF mode then, slide the focusing ring backward to the MF position.
- 2) Rotate the focusing ring manually while looking through the viewfinder until the image in the finder comes into sharp focus.

• Before rotation of the focusing ring, make sure that the camera is set to the MF mode. Manual rotation of the focusing ring when the camera is still set in AF mode will cause mechanical damage to the lens and/or to the camera body.

• When using the lens on Nikon F-501 (N2020), please use the switches both on camera body and the lens in order to select MF or AF.

• When the focusing ring is set to the AF position, the focusing ring rotates freely and you cannot adjust focus.

- If you use the lens in the manual focus mode on an autofocus camera, rotate the focusing ring while holding the shutter release button depressed half-way. The focus confirmation indicator will light when subject comes into focus.
- Because B01 uses an internal focus mechanism, the lens does not extend (grow longer out of the front of the camera) even during macro photography. This prevents large loss of balance during focusing.
- The focusing ring rotates beyond the infinity (∞) position in order to properly focus to infinity under a variety of environmental conditions. When manually focusing, make sure the subject at infinity is sharp in the viewfinder.
- At infinity, make sure the image in the viewfinder appears sharp. The infinity position is made with certain allowances to insure proper focus under a variety of conditions.

LENS APERTURE AND AE MODE (Ref. Figs. 4 & 5)

Setting lens f-numbers with Nikon (272E), Canon & Sony cameras

Set the f-number with aperture setting device of the camera body in accordance with the selected photographing mode.

Setting lens f-numbers with Nikon (B01) & Pentax (272E) cameras

Depending on the photography mode, it is possible to set the aperture on either the lens aperture ring or on the camera body.

Setting the aperture on the lens aperture ring

Set the lens aperture ring so it is on the smallest f-stop for a Nikon camera and so it is not on the A mark for a Pentax, then set the f-stop you want with the indicator.

Setting the aperture on the camera

Set the lens aperture ring so it is on the smallest f-stop for a Nikon camera and so it is on the A mark for a Pentax, then set the f-stop you want with the indicator on the camera body.

- The lens aperture varies with focusing movement. Cameras read the different lens openings and automatically adjust the exposure properly.
- For further details, please read the instruction manual of your camera.

ATTACHING THE LENS HOOD (Ref. Figs. 6, 7 & 8)

- 1) Align the index mark (•) on the hood with the index mark (•) on the lens. Place the hood onto the hood's attaching bayonet ring. (6 - 7)
- 2) Turn the hood clockwise until it clicks. (6 - 8) The index mark (•) on the hood appears at the top when it is correctly attached. (7 - 8)

Stowing lens hood on the lens (Ref. Fig. 8)

- 1) Detach and reverse the lens hood. Then align the index mark (•) on the hood with the index mark (•) on the lens. Place the hood onto the hood's attaching-bayonet ring. (8 - 9)
- 2) Turn the hood clockwise until it clicks. The index mark (•) on the hood appears at the top when correctly stowed. (8 - 9)

USING THE FOCUS LIMITER (272E) (Ref. Figs. 9)

When the focus limiter knob is set to "LIMIT", the camera can be autofocused with greater speed within that range.

For the range from maximum close-up to infinity

Set the focus limiter knob to "FULL".

For close-ups (0.29m to approx. 0.4m)

Set the distance scale to a point between 0.29m and 0.4m, then set the focus limiter knob to "LIMIT".

For normal photos (0.45m to infinity)

Set the distance scale to a point between 0.45m and infinity (∞), then set the focus limiter knob to "LIMIT".

• When shooting close-ups with the focus ring set between about 0.40m and 0.45 m the focus limit knob cannot be set to LIMIT. This is due to the camera's mechanical system.

TRIPOD MOUNT (B01) (Ref. Figs. 10 & 11)

B01 is equipped with a tripod mount. Secure the camera to the tripod with the tripod mount when using tripod.

Changing the camera position

Setting the camera to vertical position

- 1) Turn the tripod mount locking screw counter-clockwise to loosen it. (Fig. 10, Step 1)
- 2) Rotate the camera using the lens as the axis, and align Tripod mount indicator and the vertical indicator on tripod mount. (Fig. 10, Step 2)
- 3) Tighten the tripod mount locking screw and lock the camera into vertical position. (Fig. 10, Step 3)

Setting the camera to horizontal position

- 1) Turn the tripod mount locking screw counter-clockwise to loosen it. (Fig. 10, Step 1)
- 2) Rotate the camera using the lens as the axis, and align Tripod mount indicator and the horizontal indicator on tripod mount. (Fig. 10, Step 2)
- 3) Tighten the tripod mount locking screw and lock the camera into horizontal position. (Fig. 10, Step 3)

Attaching and detaching the tripod mount

Removing the tripod mount

- 1) Turn the locking screw on the tripod mount counter-clockwise. (Fig. 11, Step 1)
- 2) The tripod mount will loosen and can then be removed from the lens. (Fig. 11, Step 2)

Attaching the tripod mount

- 1) Loosen the tripod mount locking screw and attach it to the lens barrel. (Fig. 11, Step 1)
- 2) Tighten the tripod mount locking screw and turn the locking screw clockwise to secure. (Fig. 11, Step 2)

• When attaching or removing the tripod mount, be careful not to drop the camera and/or the lens.

• Be cautious when carrying the lens while lens is attached to the tripod mount.

FILTER EFFECT CONTROL (B01)

B01 features a mechanism that allows you to rotate the filter with the hood on. Rotation of the ring (4 Filter Effect Control Ring), which is near where the filter attaches, triggers rotation of the filter allowing you to adjust the effect of the PL filter.

- The Filter Effect Control Ring and the filter rotates opposite to each other. When you rotate the Filter Effect Control Ring in a clockwise direction, the filter rotates in a counter-clockwise direction.
- The rotation angle of the Filter Effect Control Ring is different from that of the filter. If you wish to rotate the PL filter to an exact position using the index as the standard, remove the hood and rotate the filter while keeping an eye on the index mark.

• You can change the visual effect by rotating PL and non-PL special effects filters such as a cross filter.

ABOUT MACRO PHOTOGRAPHY (Ref. Fig. 12)

From infinity (∞) to the macro zone, you can use AF or MF operation.

Since the distance scale and the magnification scale are imprinted side by side, you can get a general idea of the magnification when shooting a picture.

	272E	B01
Minimum Focus Distance	0.29 m	0.47 m
Maximum Magnification ratio		1:1
Magnification scale		1:10 - 1:1

• For the correlation between the photographic distance and photographic magnification, please refer to table 12.

EXPOSURE RATE (Ref. Fig. 12)

When the lens is moved outwards to increase the magnification ratio for shooting close-ups, the actual brightness on the film decreases and the effective F number changes. For auto exposure photographing using the camera's TTL photometry function, the camera automatically corrects this changed effective F number. When shooting with photometry using an external exposure meter or when using an external light-adjusting flash, however, the exposure must be corrected for this decrease in brightness according to the magnification ratio. For the amount of the correction, refer to table 12.

DEPTH OF FIELD (Ref. Fig. 13)

With a camera equipped with a depth-of-field-preview button or a aperture-stop-down mechanism, the depth of field can be directly observed through the viewfinder screen of your camera. For the operational details, read the instruction manual of your camera.

INFRARED PHOTOGRAPHY

Please be aware that there is no infrared index line on any models listed in this owner's manual. Therefore practically no black-and-white infrared film can be used with these lenses.

PRECAUTIONS IN SHOOTING

- The optical design for 272E and B01 takes into consideration the various features of digital SLRs. However, due to the configuration of the digital SLRs, even when the autofocus accuracy is within specifications, the focal point may be a little forward or behind the optimum point when shooting with auto focus under some conditions.
- Do not use the lens hood when using the camera's built-in flash. Also, when shooting close-ups, the lens unit may obstruct the light of the flash even when not using the lens hood, resulting in vignetting at the bottom part of the image. Thus, we recommend using a special externally-mounted flash for flash photography. Also refer to the section of your camera's instruction manual pertaining to the use of the built-in flash.
- When using 272E and B01 with a tele-converter, use the manual focus. When a tele-converter is used with the macro lens, the autofocus may not operate correctly, depending on the focusing distance. This is due to the camera's mechanical system. Use a Tamron tele-converter with a Tamron lens for the best results. Tele-converters produced by other manufacturers may not mount properly and/or cause malfunctions. When a tele-converter is mounted onto a lens, the focusing ring normally feels heavier when rotating.
- When using the lens in macro range, it may be necessary to use a tripod to avoid camera shake. Using high speed film (ISO 400 or faster) with a fast shutter speed is also helpful to reduce the influence of camera shake.
- Do not forcibly turn the focusing ring when camera and/or lens is/are set in the AF mode. Doing so could damage the lens and/or 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.

TO ENSURE LONG-TERM SATISFACTION

- Avoid touching the glass element surface. Use a photographic lens cloth or blower to remove dust from the lens element 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 dirt on the glass lens surface with a rotary motion from the center to the edge. Use a silicon cloth to clean your lens barrel only.
- Mildew is an enemy of your lens. Clean the lens after shooting near water or in any humid place. Store your lens in a clean, cool and dry place. When storing the lens in an lens case, store it with commercially available drying agent such as silica-gel, and change the agent occasionally. If you find mildew on your lens, consult an authorized repair shop or nearby photographic store.
- Do not touch the lens-camera interface contacts since dust, dirt and/or stains may cause a contact failure between the lens and camera.
- When using your equipment [camera(s) and lens(es)] in an environment where the temperature changes from one extreme to the other, make sure to put your equipment temporarily in a case or a plastic bag for a length of time in order for the equipment to go through a gradual temperature shift. This will reduce potential equipment trouble.

Cautions when Using Tamron Lenses

For safe operation be sure to carefully read the manual and the following cautions before using. After reading them, store them in a place where they can easily be reviewed whenever needed.

In this manual, caution instructions are divided into the following two categories:

WARNING:

This indicates instructions which if not heeded could lead to death or serious injury.

CAUTION:

This indicates instructions which if not heeded could lead to bodily injury or physical damage.

WARNING

- (1) Do not look directly at the sun through the lens. Doing so could result in blindness.
- (2) Do not leave the lens within the reach of young children. The lens may fall and injure the child, and the strap may get wrapped around the child's neck, resulting in suffocation.

CAUTION

- (1) Do not leave the lens in places exposed to direct sunlight. The light reflected off the lens may focus on a nearby object, and cause a fire. Place the lens cap of the lens whenever it is not in use.
- (2) When mounting the lens on the camera, make sure the lens and camera are properly set and securely locked. The lens may get stuck if it is not properly mounted, and if it is not securely locked, it may fall off, damaging the lens or camera or causing bodily injury.
- (3) Do not modify or alter the lens. Doing so may result in damage to the lens or camera.
- (4) Mount the lens hood when taking photographs in order to eliminate harmful light rays.
 - * The hood cannot be mounted when certain filters are installed.
 - * Remove the hood if it causes shadows at the edges of the image when using a flash.
- (5) Do not place excessive loads on the lens when it is mounted on the camera. Such loads may damage the mount section on the lens and the camera. Large lenses tend to place a strong load on the mount section. Always hold the lens when operating and moving the camera.
- (6) The focus ring turns during the auto focus operation. Do not keep the focus ring from turning. Also, do not forcibly turn the focus ring by hand when in the auto focus mode. Doing so may damage the lens or the interior of the camera.
- (7) Do not use the lens except for the purpose of photographing.

Vorsichtsmaßnahmen bei der Benutzung von TAMRON-OBJEKTIVEN

Lesen Sie sich diese Bedienungsanleitung und die nachfolgend aufgeführten Vorsichtsmaßnahmen aus Sicherheitsgründen vor der Benutzung des Objektivs sorgfältig durch. Bewahren Sie die Bedienungsanleitung anschließend an einem leicht zugänglichen Ort auf, damit Sie im Bedarfsfall jederzeit darauf zurückgreifen können. Die Vorsichtsmaßnahmen wurden in dieser Bedienungsanleitung in zwei Kategorien unterteilt:

WARNUNG:

Hierbei handelt es sich um Vorsichtsmaßnahmen, deren Nichtbeachtung zum Tod führen oder ernsthafte Verletzungen verursachen kann.

VORSICHT:

Hierbei handelt es sich um Vorsichtsmaßnahmen, deren Nichtbeachtung Körperverletzungen oder physische Schäden verursachen kann.

WARNUNG

- (1) Schauen Sie nicht durch das Objektiv hindurch in die Sonne. Dies könnte zu Blindheit führen.
- (2) Bewahren Sie das Objektiv außerhalb der Reichweite von Kleinkindern auf. Das Objektiv könnte herunterfallen und das Kind verletzen. Der Riemen könnte sich um den Hals des Kindes wickeln und eine Erstickung herbeiführen.

VORSICHT

- (1) Legen Sie das Objektiv niemals an Plätze, an denen es direktem Sonnenlicht ausgesetzt wäre. Das Licht könnte sich auf einem in der Nähe befindlichen Gegenstand bündeln und einen Brand verursachen. Bringen Sie immer die Kappe am Objektiv an, wenn dieses nicht in Benutzung ist.
 - (2) Überprüfen Sie vor dem Aufsetzen des Objektivs auf die Kamera, daß das Objektiv und die Kamera richtig zusammengesetzt und daß das Objektiv fest eingerastet ist. Das Objektiv könnte sich festlaufen, wenn es nicht richtig aufgesetzt wurde. Wenn es nicht richtig eingerastet ist, könnte es herunterfallen und sowohl die Kamera als auch das Objektiv beschädigen und darüberhinaus Verletzungen verursachen.
 - (3) Gestalten Sie das Objektiv nicht um und verändern Sie es in keiner Weise. Dies könnte das Objektiv oder die Kamera beschädigen.
 - (4) Setzen Sie beim Fotografieren die Gegenlichtblende auf, um schädliche Lichtstrahlen zu eliminieren.
 - * Die Gegenlichtblende kann nicht aufgesetzt werden, wenn bestimmte Filter installiert worden sind.
 - * Entfernen Sie die Gegenlichtblende, wenn sie bei Benutzung eines Markierungsfensters Schatten auf den Bildkanten verursacht.
 - (5) Legen Sie keine schweren Gegenstände auf das auf die Kamera aufgesetzte Objektiv. Dies könnte den Aufsatzteil des Objektivs und die Kamera beschädigen. Große Objektive neigen dazu, den Aufsatzteil stark zu belasten. Halten Sie das Objektiv während der Kamerabnutzung und dem Transport der Kamera gut fest.
 - (6) Die Fokussierhülse dreht sich während der automatischen Scharfeinstellung. Behindern Sie dieses Drehen nicht. Drehen Sie die Fokussierhülse darüberhinaus nicht gewaltsam mit der Hand, wenn der Modus für die automatische Scharfeinstellung aktiviert ist. Dies könnte das Objektiv oder die inneren Bauteile der Kamera beschädigen.
 - (7) Benutzen Sie Objektiv nur für den Zweck des Fotografierens.
- Met het oog op een veilige bediening dient u alvorens de lens te gebruiken de gebruiksaanwijzing en de volgende instructies zorgvuldig door te lezen. Bewaar deze na lezing op een plaats waar ze, zonodig, gemakkelijk kunnen worden ingezien. In deze gebruiksaanwijzing zijn de veiligheidsinstructies ingedeeld in de volgende twee categorieën:
- #### **WAARSCHUWING:**
- Wanneer de aanwijzingen die op deze manier worden aangegeven niet worden opgevolgd, kan dit leiden tot ernstig letsel of de dood.
- #### **INSTRUCTIE:**
- Wanneer de aanwijzingen die op deze manier worden aangegeven niet worden opgevolgd, kan dit leiden tot lichamelijk letsel of fysieke schade.
- #### **WAARSCHUWING**
- (1) Kijk met de lens niet direct in de zon. Dit kan resulteren in blindheid.
 - (2) Houd de lens buiten het bereik van jonge kinderen. De lens kan vallen, waardoor het kind mogelijk letsel oploopt. De riem kan zich om de nek van het kind wikkelen, met eventuele verstikking tot gevolg.
- #### **INSTRUCTIE**
- (1) Laat de lens niet achter op plaatsen die blootstaan aan direct zonlicht. Het licht dat door de lens wordt gereflecteerd kan zich richten op een object dat zich in de omgeving bevindt, waardoor brand kan ontstaan. Haal de lenskap van de lens wanneer hij niet in gebruik is.
 - (2) Zorg ervoor dat u de lens goed bevestigd en vergrendelt wanneer u hem op de camera zet. Als de lens niet goed bevestigd is, kan hij vast komen te zitten, en wanneer hij niet goed vergrendeld is, kan hij van de camera vallen. Hierdoor kunnen de lens en de camera beschadigd worden of kan er lichamelijk letsel ontstaan.
 - (3) Breng geen veranderingen of wijzigingen aan de lens aan. Hierdoor kan de lens of de camera beschadigd raken.
 - (4) Tijdens het maken van foto's dient de lenskap op de lens bevestigd te zijn, zodat deze beschermd is tegen schadelijke lichtstralen.
 - * De kap kan niet worden bevestigd wanneer bepaalde filters op de lens zijn geplaatst.
 - * Verwijder de kap wanneer hij bij het gebruik van flitslicht schaduwen aan de rand van het beeld veroorzaakt.
 - (5) Belast de lens niet te zwaar wanneer hij op de camera is geplaatst. Hierdoor kan het bevestigingsgedeelte van de lens en de camera beschadigd raken. Grote lenzen kunnen een zware belasting vormen voor het bevestigingsgedeelte. Houd de lens daarom altijd vast bij het bedienen en bewegen van de camera.
 - (6) Tijdens de werking van de auto focus draait de focusring rond. Zorg ervoor dat hij vrij kan draaien en forceer de ring niet door er met de hand aan te draaien wanneer de camera in de auto focus modus staat. Hierdoor kan de lens of het binnenwerk van de camera beschadigd raken.
 - (7) Gebruik de lens uitsluitend om te fotograferen.

Belangrijk bij het gebruik van Tamron lenzen

Met het oog op een veilige bediening dient u alvorens de lens te gebruiken de gebruiksaanwijzing en de volgende instructies zorgvuldig door te lezen. Bewaar deze na lezing op een plaats waar ze, zonodig, gemakkelijk kunnen worden ingezien. In deze gebruiksaanwijzing zijn de veiligheidsinstructies ingedeeld in de volgende twee categorieën:

WAARSCHUWING:

Wanneer de aanwijzingen die op deze manier worden aangegeven niet worden opgevolgd, kan dit leiden tot ernstig letsel of de dood.

INSTRUCTIE:

Wanneer de aanwijzingen die op deze manier worden aangegeven niet worden opgevolgd, kan dit leiden tot lichamelijk letsel of fysieke schade.

WAARSCHUWING

- (1) Kijk met de lens niet direct in de zon. Dit kan resulteren in blindheid.
- (2) Houd de lens buiten het bereik van jonge kinderen. De lens kan vallen, waardoor het kind mogelijk letsel oploopt. De riem kan zich om de nek van het kind wikkelen, met eventuele verstikking tot gevolg.

INSTRUCTIE

- (1) Laat de lens niet achter op plaatsen die blootstaan aan direct zonlicht. Het licht dat door de lens wordt gereflecteerd kan zich richten op een object dat zich in de omgeving bevindt, waardoor brand kan ontstaan. Haal de lenskap van de lens wanneer hij niet in gebruik is.
- (2) Zorg ervoor dat u de lens goed bevestigd en vergrendelt wanneer u hem op de camera zet. Als de lens niet goed bevestigd is, kan hij vast komen te zitten, en wanneer hij niet goed vergrendeld is, kan hij van de camera vallen. Hierdoor kunnen de lens en de camera beschadigd worden of kan er lichamelijk letsel ontstaan.
- (3) Breng geen veranderingen of wijzigingen aan de lens aan. Hierdoor kan de lens of de camera beschadigd raken.
- (4) Tijdens het maken van foto's dient de lenskap op de lens bevestigd te zijn, zodat deze beschermd is tegen schadelijke lichtstralen.
 - * De kap kan niet worden bevestigd wanneer bepaalde filters op de lens zijn geplaatst.
 - * Verwijder de kap wanneer hij bij het gebruik van flitslicht schaduwen aan de rand van het beeld veroorzaakt.
- (5) Belast de lens niet te zwaar wanneer hij op de camera is geplaatst. Hierdoor kan het bevestigingsgedeelte van de lens en de camera beschadigd raken. Grote lenzen kunnen een zware belasting vormen voor het bevestigingsgedeelte. Houd de lens daarom altijd vast bij het bedienen en bewegen van de camera.
- (6) Tijdens de werking van de auto focus draait de focusring rond. Zorg ervoor dat hij vrij kan draaien en forceer de ring niet door er met de hand aan te draaien wanneer de camera in de auto focus modus staat. Hierdoor kan de lens of het binnenwerk van de camera beschadigd raken.
- (7) Gebruik de lens uitsluitend om te fotograferen.

Per un corretto e sicuro impiego degli obiettivi Tamron

Al fine di garantire un corretto e sicuro impiego dei nostri obiettivi, vi raccomandiamo di leggere con attenzione il libretto di istruzioni e le precauzioni qui di seguito riportate, prima di utilizzare le apparecchiature. In questo libretto le segnalazioni relative alle precauzioni da adottare sono suddivise in due categorie:

ATTENZIONE

La non osservanza di questa segnalazione di pericolo può comportare grave rischio; ferite o lesioni personali.

PRECAUZIONI

La non osservanza di questa segnalazione di pericolo può comportare danni alla persona o all'apparecchio.

ATTENZIONE

- (1) Non guardate mai direttamente il sole attraverso l'obiettivo: potreste rimanere accecati.
- (2) Non lasciate l'obiettivo in luoghi accessibili ai bambini piccoli. L'obiettivo può cadere causando lesioni al bambino; la tracolla potrebbe attorcigliarsi al collo del piccolo, causandone il soffocamento.

PRECAUZIONI

- (1) Non lasciate l'obiettivo esposto direttamente ai raggi del sole. I raggi del sole, riflettendosi, potrebbero causare un incendio. Mettete sempre il coperchio dell'obiettivo quando non si usa il dispositivo.
- (2) Quando montate l'obiettivo sul corpo macchina controllate che entrambi siano impostati correttamente e bloccati in modo adeguato. L'obiettivo, in caso di montaggio non corretto, potrebbe infatti incepparsi o, qualora non fosse adeguatamente bloccato, potrebbe cadere rovinandosi col rischio di lesioni al fotografo e alle persone che gli sono accanto.
- (3) Non cercate di modificare o alterare l'obiettivo: potreste danneggiare sia l'obiettivo che la fotocamera.
- (4) Montate il paraluce per eliminare il rischio di luce parassita.
 - * Il paraluce non può essere montato utilizzando alcuni tipi di filtri.
 - * Rimuovete il paraluce se utilizzate un obiettivo stroboscopico: scongiurerete così il rischio di ombreggiature ai bordi dell'immagine.
- (5) Non gravate di pesi eccessivi l'obiettivo quando è montato sulla fotocamera: potreste danneggiare gli attacchi sia dell'obiettivo che della fotocamera. Gli obiettivi di maggiore dimensioni gravano sui punti di attacco: sostenete l'obiettivo con la mano durante l'uso e mentre vi spostate impugnando la fotocamera.
- (6) La ghiera di messa a fuoco ruota durante le operazioni di autofocus. Non ostacolatene il movimento. Non forzate mai la ghiera di messa a fuoco quando è impostata sull'autofocus: l'obiettivo e il meccanismo interno della fotocamera potrebbero danneggiarsi.
- (7) Non usate l'obiettivo se non per fotografare.

Caution when Using the NII Mount in Di Series

■ The NII mount in the Di series does not function in AF mode with some Nikon cameras since the lens uses a built-in motor AF system. The lens only functions in MF mode.

Cameras	AF	MF
US, F60D, F50D, F-801 series, F-601, F-501, F-401 series, F90 series, F90X series, F4 series, F5, F70D	×	○

*The NII mount in the Di series cannot be used with F3AF.

■ The NII mount in the Di series is not equipped with an aperture ring. Accordingly, there may be some limitations and restrictions upon using. For details, please refer to the following table:

Cameras	P*	S	A	M
D3, D300, D60, D2, D2H, D2Hs, D2X, D2Xs, D1, D1X, D1H, D200, D100, D80, D70S, D70, D50, D40X, D40, F6, F5, F100, F80, F80D, F80S, U2, U, US, F60D, F50D, F401, F401X, F401S	○	○	○	○
F4, F90X, F90XS, F90XD, F90, F90S, F90D, F70D, F801, F801S, F601M	○	○	×	×
F3AF, F-601, F-501, MF [Manual Focus] Camera (except F-601M)	×	×	×	×

○ : Compatible

×

* : P includes Auto mode and Image programming mode.

■ The NII mount in the Di series is cannot be used with the following cameras.

Cameras	
Pronea 600i, Pronea S	×

Vorsicht, wenn Sie den NII-Anschluss in der Di-Serie benutzen

■ Der NII-Anschluss in der Di-Serie funktioniert nicht im AF-Modus bei einigen Nikon-Kameras, da die Linse ein eingebautes AF-Antriebssystem benutzt. Die Linse funktioniert nur im MF-Modus.

Kameras	AF	MF
US, F60D, F50D, F-801-Serien, F-601, F-501, F-401-Serien, F90-Serie, F90X-Serie, F4-Serie, F5, F70D	×	○

*Der NII-Anschluss der Di-Serien kann nicht mit dem F3AF benutzt werden.

■ Der NII-Anschluss der Di-Serien ist nicht mit einem Blendenring ausgestattet. Dementsprechend kann es Einschränkungen und Begrenzungen im Gebrauch geben. Für Details, siehe folgende Tabelle:

Kameras	P*	S	A	M
D3, D300, D60, D2, D2H, D2Hs, D2X, D2Xs, D1, D1X, D1H, D200, D100, D80, D70S, D70, D50, D40X, D40, F6, F5, F100, F80, F80D, F80S, U2, U, US, F60D, F50D, F401, F401X, F401S	○	○	○	○
F4, F90X, F90XS, F90XD, F90, F90S, F90D, F70D, F801, F801S, F601M	○	○	×	×
F3AF, F-601, F-501, MF [Manual Focus]-Kamera (außer F-601M)	×	×	×	×

○ : Kompatibel

×

* : P inklusive Automodus und Bildprogrammmodus.

■ Der NII-Anschluss der Di-Serien kann mit folgenden Kameras nicht verwendet werden.

Kameras	
Pronea 600i, Pronea S	×

Attention lors de l'utilisation du collier NII de la série Di

■ Le collier NII de la série Di ne fonctionne pas en mode AF avec certains appareils photo Nikon vu que l'objectif utilise un système AF à moteur intégré. L'objectif ne fonctionne qu'en mode MF.

Appareils photo	AF	MF
US, F60D, F50D, séries F-801, F-601, F-501, séries F-401, séries F90, séries F90X, séries F4, F5, F70D	×	○

*Le collier NII de la série Di ne peut pas être utilisé avec F3AF.

■ Le collier NII de la série Di n'est pas muni d'une bague d'ouverture. En conséquence, il peut exister des limites et des restrictions d'utilisation. Pour en savoir plus, veuillez consulter le tableau suivant :

Appareils photo	P*	S	A	M
D3, D300, D60, D2, D2H, D2Hs, D2X, D2Xs, D1, D1X, D1H, D200, D100, D80, D70S, D70, D50, D40X, D40, F6, F5, F100, F80, F80D, F80S, U2, U, US, F60D, F50D, F401, F401X, F401S	○	○	○	○
F4, F90X, F90XS, F90XD, F90, F90S, F90D, F70D, F801, F801S, F601M	○	○	×	×
F3AF, F-601, F-501, Appareil photo MF [Mise au point manuelle] (sauf le modèle F-601M)	×	×	×	×

○ : Compatible

×

* : P comprend les modes automatique et programmation d'image.

■ Le collier NII de la série Di ne peut pas être utilisé avec les appareils photo suivants.

Appareils photo	
Pronea 600i, Pronea S	×

Attenzione durante l'utilizzo di attacco NII nella serie Di

■ L'attacco NII nella serie Di non funziona in modalità AF con in alcune fotocamere Nikon in quanto l'obiettivo utilizza un sistema a motore AF incorporato. L'obiettivo funziona solo in modalità MF.

Fotocamere	AF	MF
US, F60D, F50D, serie F-801, F-601, F-501, serie F-401, serie F90, serie F90X, serie F4, F5, F70D	×	○

*L'attacco NII nella serie Di non può essere utilizzato con F3AF.

■ L'attacco NII nella serie Di non è dotato di un anello di apertura. Pertanto potrebbero esserci delle limitazioni e restrizioni nell'uso. Per dettagli far riferimento alla tabella seguente:

Fotocamere	P*	S	A	M
D3, D300, D60, D2, D2H, D2Hs, D2X, D2Xs, D1, D1X, D1H, D200, D100, D80, D70S, D70, D50, D40X, D40, F6, F5, F100, F80, F80D, F80S, U2, U, US, F60D, F50D, F401, F401X, F401S	○	○	○	○
F4, F90X, F90XS, F90XD, F90, F90S, F90D, F70D, F801, F801S, F601M	○	○	×	×
F3AF, F-601, F-501, Fotocamera MF [Messa a fuoco manuale] (eccetto F-601M)	×	×	×	×

○ : compatibile

×

* : P comprende modalità Auto e modalità di programmazione Immagini.

■ L'attacco NII nella serie Di non può essere utilizzato con le seguenti fotocamere.

Fotocamere	
Pronea 600i, Pronea S	×