AE85mm F1.4 AS IF UMC
Instruction Manual

Thank you for purchasing our AE85mm F1.4 AS IF lens.
We believe that this newly-improved AE85mm F1.4 AS IF UMC lens will give you a special photographic experience.

This new lens is designed and manufactured using our patented complex aspherical lens manufacturing technology, coupled with state-of-the-art optical technology.
We have succeeded in reducing aberrations and managing the optical performance of our lens using this technology.

Advantages of the AE85mm F1.4 AS IF UMC lens:

1. Corrects aberrations using a complex aspherical lens and, in the fully opened position, produces high resolution and high contrast at the center of the lens as well as around its periphery.
2. Uses premium optical glass with high refraction and extra-low dispersion.
3. Allows precision focus control with smooth operation.
4. Suppresses flaring and reproduces more vivid color images by virtue of its ultra multi coating, which is superior to the coating applied to the existing 85 mm F1.4 AS IF UMC lens.
5. Maintains a compact size with its inner focus design.
6. Produces smooth outfocusing (blurred background) by means of an aperture design that comes close to a circular shape with its 8 diaphragm blades.
7. Provides convenient control since the lens is equipped with a contact for communication with the camera.

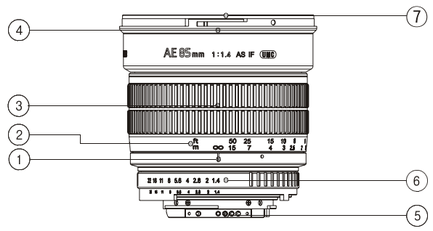
The AE85mm F1.4 AS IF UMC lens is designed for Nikon's own mount.
A contact is attached to the mount to allow the lens to communicate with Nikon cameras. The contacts provide the following functions: They enable the A, S, and P modes of the camera, and when a subject is focused correctly the camera emits a beep or an indicator lights up. You can enjoy more convenient photography with these functions.

Read this instruction manual carefully and use it properly.
※ Please read the safety precautions at the back of this instruction manual prior to use.

● Read this instruction manual prior to use ●

1. Component Names

【 Figure 】



① Depth of field scale ② Focus scaling ring ③ Focusing ring
④ Hood locking area ⑤ Communication contact ⑥ Aperture adjustment ring
⑦ Filter locking area

- AE: Auto Exposure (Automatic shutter control)
- AS: Aspherical lens (GAS: Glass Aspherical, HAS: Hybrid Aspherical)
- IF: Inner Focus
- UMC: Ultra Multi Coating

2. Attaching and Detaching from the Camera

【Attaching】
1. Hold the hood locking area of the lens gently, align the depth of field scale of the lens with the lens attachment reference point on the camera, push the lens into the camera and turn the lens gently until it makes a clicking sound and the depth of field scale is positioned at the upper part of the camera.

2. Turn the aperture adjustment ring on the lens until it is set to the minimum aperture value (F22).
(For the lens to be able to communicate with an AF camera, the aperture adjustment ring on the lens must be turned until F22, a F-number marked on the aperture adjustment ring, is aligned exactly with the depth of field scale on the lens.)

【Detaching】
Hold the hood locking area of the lens gently, press the lens release button on the camera, turn the lens until the depth of field scale of the lens is aligned with the lens attachment reference point on the camera, and then pull the lens out.

3. Focus Adjustment

You can set the focus for a subject by turning the focus adjustment ring when using the AE85mm F1.4 AS IF UMC lens, as it is a Manual Focus (MF) adjustment lens.

① To change the focus from a subject that is far away to a subject that is close, turn the focusing ring to the left (from ∞ to 1) and focus on the clearest subject using the indication signal on the camera or by checking visually.

② To change the focus from a subject that is close to a subject that is far away, turn the focusing ring to the right (from 1 to ∞) and focus on the clearest subject using the indication signal on the camera or by checking visually.

4. Brightness Control

1. AF camera (Applicable for both a film and a digital body)

① Brightness control in A mode (Aperture Priority mode)
Turn the sub command dial at the front of the camera to adjust the brightness.

② Brightness control in S mode (Shutter Speed Priority mode)
Turn the main command dial at the back of the camera. The shutter speed is changed and the brightness is adjusted according to the changed shutter speed.

③ Brightness control in P mode (Program mode)
Turn the main command dial at the back of the camera to adjust the shutter speed and the brightness.

④ Brightness control in M mode
Turn the sub command dial at the front of the camera to adjust the brightness.

(The procedure and description above are given based on the D300. The camera settings are different depending on each model and are subject to change due to functional enhancements. Therefore, for detailed information on your camera settings, please refer to your camera manual or contact your camera manufacturer.)

2. Camera without contacts (Non-AF camera)

① Turn the aperture adjustment ring to set the brightness you want.

【 Aperture adjustment ring markings 】

22 16 11 8 5.6 4 2.8 2 1.4

Each number is 1 stop (1 EV) away from the next number.
Brightness can be set more precisely by using the stop setting in between.

Example)
1.4 and 2 are 1 stop (1 EV) away from each other.

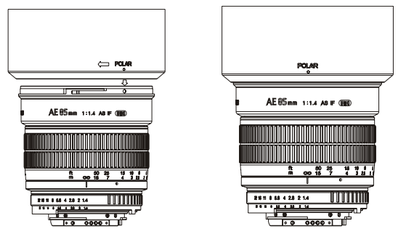
22 16 11 8 5.6 4 2.8 2 1.4

Set a brightness between 1.4 and 2, which is 0.5 stop away (0.5 EV) from of them.

22 16 11 8 5.6 4 2.8 2 1.4

5. Attaching the Hood

The hood has a bayonet system, which guarantees speedy, efficient, safe and precise installation and facilitates the enjoyment of shooting that is free from ghosting or flaring.



Align the attachment reference point on the hood with the reference point on the lens, push the hood onto the lens and turn the hood to the right until it makes a clicking sound.

6. About Photography

The AE85mm F1.4 AS IF UMC lens supports a maximum brightness of 1.4.
If you take a photo in an outdoor place exposed to sunlight, you may not get a clear image because the subject is too bright. Therefore, adjust the brightness to an appropriate level and then take the photo.
Since the depth of focus becomes too shallow at brightness 1.4, if the subject is not focused correctly you may get an unclear image. Therefore, to get a clear image, focus the subject correctly and then take the photo.

7. Specifications

Focal length	85 mm	
Max. aperture	F1.4	
Negative size	24 X 36 mm	
Angular field	35 mm (1:1x)	28.3° (diagonal)
	APS-C (1:1.5x)	19.1° (diagonal)
Focusing range	∞ to 1 m	
Filter connection	∅72 mm (M72 X 0.75)	
Number of elements	9 elements	
Number of groups	7 groups	
Size (without hood)	72.2 mm X ∅78 mm	
Weight (without hood)	493g	

※ When one or more filter is installed, vignetting (the periphery of the image is darkened) may occur. However, if you use a multi-coated filter with both sides are coated, you can get a clear image.

8. Troubleshooting

Symptom	Causes	Action
The lens can't be attached to my camera.	The reference point on the lens is not aligned with the lens attachment reference point on the camera.	Align the reference point on the lens with the lens attachment reference point on the camera.
The lens can't be detached from my camera.	Incorrect rotation direction for detaching the lens. If you turn the lens just by holding your camera, it may cause damage to the lens.	Hold down the lens release button on the camera, and gently turn the lens to the lens attachment/detachment reference point marked on the camera, and then pull the lens forward.
FEE (Blinking)	The aperture adjustment ring on the lens is not set to the minimum aperture value.	Turn the aperture adjustment ring to set it to the minimum aperture value (F22).
Dark image	Incorrect focusing. Insufficient shutter speed or camera shake.	Turn the focusing ring while checking the subject with the indication on the camera or checking visually to set the focus until the subject is clear, and then press the shutter. Steady the camera and take a photograph at a shutter speed of 1/125 sec.
Autofocus failure	Autofocus failed with a manual control focus lens.	Set the focus by turning the focusing ring.
Pictures too dark or too bright	As this lens is optimized for APS-C size images, so the periphery gets dark when using a digital camera for 1:1 size images.	Set an appropriate exposure and then take the photograph.
The camera flash is not geared to the camera.	This lens corresponds to the Nikon AI-P lens.	Refer to your camera manual or your flash manual. This lens is not a "D-type" lens (which relays distance information to the camera).
Zoom failure	This lens is a single lens.	
The lens can't be attached to other cameras.	This lens is designed for Nikon's own mount.	Use this lens with a Nikon DSLR camera.
I want to attach your 2X or 1.4X converter lens.	Our converter is designed for the T (M42 screw) mount only. Therefore, it cannot be used with the AE85mm F1.4 AS IF UMC lens.	Use a converter produced and sold by Nikon. But autofocus is not available.

9. Instructions Prior To Use

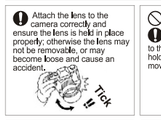
The following precautions are divided into two types according to the level of danger.

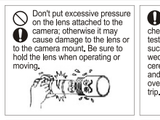
⚠WARNING	⚠CAUTION
If this instruction is not followed, it may cause death or severe injury to the user.	If this instruction is not followed, it may cause death or severe injury to the user.

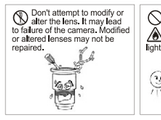
The following pictograms are used in the below precautions:

⚠	Requires caution. Inside the pictogram it shows contents of precautions. (It shows outbreak of fire in the pictogram on the left.)
⃠	Shows prohibition. Inside the pictogram it shows contents of prohibition. (It shows prohibition of dismantling in the pictogram on the left.)
❗	Shows instruction. Inside the pictogram it shows contents of instructions. (It shows instruction of precaution in the pictogram on the left.)

⚠ WARNING







⚠ CAUTION

WARNING!
Don't wet this product or expose it to a moist environment. It may cause a fire or electric shock.

CAUTION!
- Don't use this product or store it close to devices that generate heat i.e., heaters, thermal regulators, stoves, stereo amplifiers.
- Don't leave the lens in conditions where drastic temperature changes can occur.
- Don't touch the surface of the lens by hand, and avoid making contact with sharp objects.
- Avoid dropping the lens.
- Don't soak the lens in water, and avoid water splashing onto the lens.
- If there are foreign bodies on the lens, use a lens cleaning kit only.