

● *12mm F2.8 ED AS NCS FISH-EYE*

Instruction Manual

We believe that the 12mm F2.8 ED AS NCS FISH-EYE lens will give you a special photographic experience.

Advantages of 12mm F2.8 ED AS NCS FISH-EYE

1. The lens can handle the 35mm full frame image size.
2. With its compact size, the lens is easy to carry and it can produce various images in shooting at a long distance or short distance.
3. With an optical design in stereo-scopic projective mode, the lens can express distortion smoothly, thereby producing stable images.
4. It compensates for aberrations by using a low dispersion lens and glass aspherical lens and, at the fully opened position, produces a high resolution and a high contrast at the center of the lens as well as around the periphery.
5. Attachable petal hood for reinforcing the user convenience.
6. High strength aluminum body with robust durability.
7. NCS (Nano Coating System) for providing high contrast and the best picture quality with extremely low reflection coating.

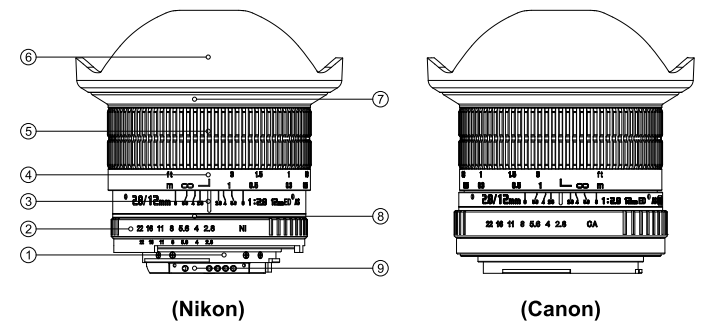
This product is designed with its own mount so you can easily take photographs by mounting the lens directly onto the camera, without installing an additional adaptor .

- ※ Please read this instruction manual carefully and use it accordingly.
- ※ Please read the 'Safety Precautions' at the back of this instruction manual prior to

●Please read this instruction manual prior●

1. Component Names

【Figure】



- | | | |
|------------------------|----------------------------|------------------------------------|
| ① Mount (Camera mount) | ② Aperture Adjustment Ring | ③ Reference Line of Distance Scale |
| ④ Focus Scale Ring | ⑤ Focus Adjustment Ring | ⑥ Hood |
| ⑦ Hood Mount Barrel | ⑧ Point Ring | ⑨ CPU(Electronic Contact) |

2. Attaching and Detaching

The 12mm F2.8 ED AS NCS FISH-EYE lens mount is uniquely designed for Canon, Nikon(Fujifilm) F, Pentax (Samsung GX) K, Sony(Minolta), Canon M, Sony E, Fujifilm X, Samsung NX, Four-thirds, Micro four-thirds compatible cameras.

【Attaching】

Gently hold the lens, align the camera mount attachment point with the attachment reference point or line on the lens, push the lens into the camera and gently rotate the lens 90 degrees clockwise from the front view, until it makes a clicking sound.

【Detaching】

Hold the lens gently, press the lens release button on the camera, and turn the lens in the opposite direction of the attaching direction to detach the lens.

3. Focusing

When using the 12mm F2.8 ED AS NCS FISH-EYE lens, you can set the focus of a subject by turning the focusing ring, since it is an MF (Manual Focus) adjustment lens.

【Nikon (Fujifilm) F / Pentax (Samsung GX) K Mount】

- ① To change the focus from a subject that is far away to a subject that is closeTurn the focusing ring counterclockwise (from ∞ to 0.2) and focus on the clearest subject by using the indicator 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 clockwise (from 0.2 to ∞) and focus on the clearest subject by using the indicator signal on the camera or by checking visually.

【Canon, Canon M/FT,MFT/Fujifilm X/Samsung NX/Sony a, E Mount】

- ① To change the focus from a subject that is far away to a subject that is closeTurn the focusing ring clockwise (from ∞ to 0.2) and focus on the clearest subject by using the indicator signal on the camera or by checking visually.
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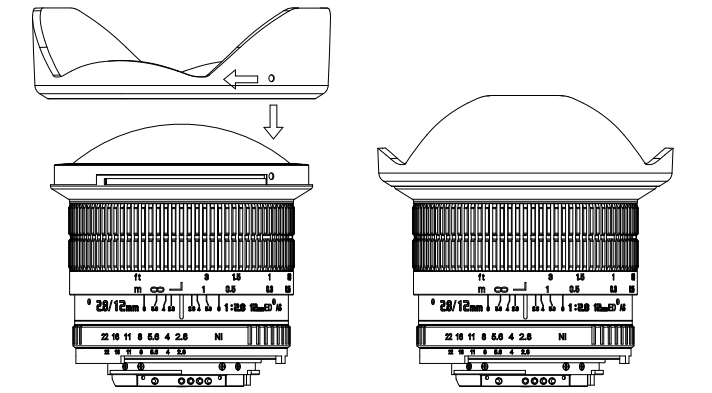
4. Brightness Control

You can set the desired brightness by turning the aperture ring when using the 12mm F2.8 ED AS NCS FISH-EYE lens. You can set F No from 2.8 to 22.

5. Mounting the Hood

The hood has a bayonet system which guarantees speedy, efficient, safe and precise installation, and enables you to enjoy shooting that is free from ghosting or flaring.

【Figure】



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

6. About Photography

Thanks to a stereo-scopic projective design, the 12mm F2.8 ED AS NCS FISH-EYE lens can express 180° of view distortion smoothly. You can produce very interesting photos with this feature.With very short focal distance and 180° diagonal angle of broad view, you can capture an extensive panorama into a photo, which is very useful for landscape shooting.

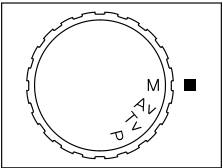
7. Camera Settings

Some cameras require special settings when using this lens.Please refer to the following and set the camera when necessary.

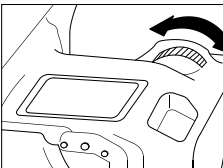
○ **Canon Mount**

The diaphragms of the 12mm F2.8 ED AS NCS FISH-EYE mount is not compatible with the cameras.If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture ring so it is fully open when attaching the lens to the camera, and then set the depth of field and brightness you want prior to shooting.

- 1) Set the camera mode dial to M.



- 2) Adjust the shutter speed to achieve the appropriate exposure for the brightness.



- ※ For some Canon cameras, if you set the camera mode dial to Av and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't have to adjust the shutter speed as well, which is required in M mode.

(The procedures above are for the 40D. The settings for the camera or the menu may vary based on the model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

○ **Nikon (Fujifilm) F Mount**

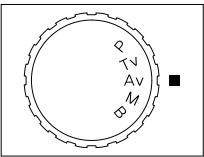
Your Nikon mount has electronic contacts that allow it to communicate with Nikon AF cameras. These contacts enable the A, S, and P modes of the camera. When a subject is correctly in focus, the camera emits a beep or an indicator light comes on.

○ **Pentax (Samsung GX) K Mount**

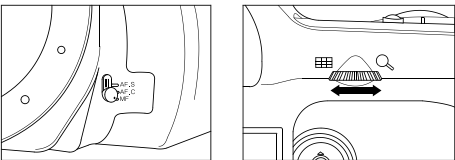
The 12mm F2.8 ED AS NCS FISH-EYE Pentax(Samsung GX) K Mount product supports Av mode.

- 1) Align the A mode indicator to the distance scale indicator mark by pressing the A button on the aperture adjustment ring of the lens.

- 2) Set the mode dial of the camera to Av.



- 3) Set the focusing lever of the camera to MF.



- 4) Set the menu on the camera.User Settings ► Use Aperture Ring ► Prohibit

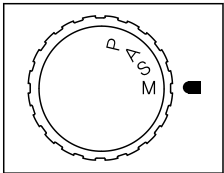
- 5) Adjust the brightness by turning the dial at the back of the camera.

(The procedures above are for the K20D. The settings for the camera or the menu may vary based on the model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

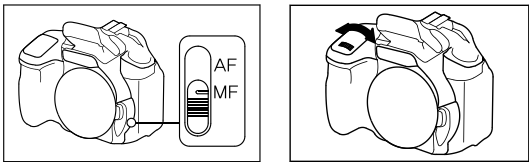
○ **Sony (Minolta) a Mount**

The diaphragm of the 12mm F2.8 ED AS NCS FISH-EYE Sony a (Minolta) mount is not compatible with the camera.If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture ring so it is fully open when attaching the lens to the camera, and then set the depth of field and brightness you want prior to shooting.

- 1) Set the camera mode dial to M.



- 2) Set the focusing lever of the camera to MF.



- 3) Adjust the shutter speed to achieve the appropriate exposure for the brightness.

(The above procedure is given based on the a350. The camera settings are different depending on the model or due to a functional upgrade, therefore refer to the camera manual or contact the camera manufacturer for detailed information.)

○ **Konica Minolta (Minolta) series and DYNA series**

If this lens is used on some Konica Minolta (Minolta) or series cameras, the release lock function (misuse prevention function) of the camera must be disabled.It is required to disable the release lock function only on the first use as below.

Procedure for disabling the release lock function

- ① Set the main switch of the camera to OFF.
- ② Detach the lens from the camera body and set the main switch of the camera to ON by pressing the two following buttons.

9xi···Function +AE lock button	303si···AV button + self mode button
7xi···function button +AE lock button	303si SUPER···drive button + spot button
5xi···function button +spot button	101si···self-timer button+flash button
3xi···Modification at the service center is required	360si···self-timer non-intermittent shooting button + scene select button
807si···AEL button + shooting scene select button	a-Sweet···self-timer continuous shooting button + spot button
707si···card button + spot button	a-Sweet S···(Set the function dial to the multiple exposure))P button + self-timer button
507si···lens exchange button + ISO lock button	DYNAX30···self-timer button + turn the left dial on the main body away from the OFF.
DYNAX3L···shooting scene select button + button	

a-Sweet II . . . L ···Set the camera to the custom function 14 and change the selection number 1 to 2 (N.A).

a-7, -9 -Ti···Set the camera to the custom function 16 and and change the selection number 1 to 2 (N.A).

a-Sweet Digital···Perform the procedure shown below.
MENU ▢2▢Release lock with a lens ▢ To the right ▢ N.A. ▢ ● Execute ▢ MENU
a-7 Digital···Perform the procedure shown below.
MENU ▢3 ▢ Release lock without the lens ▢ To the right ▢ N.A. ▢ ● Execute ▢ MENU

- ※ If the release lock is disengaged in the above way, the state of disengagement is maintained even though the main switch is turned off. If the release lock function is disabled by performing the procedure above, the disabled state is maintained even when the main switch is set to OFF. If you want to enable the release lock function,

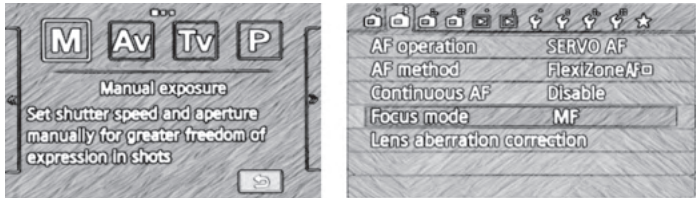
(The camera settings are different depending on the model or due to a functional upgrade, therefore refer to the camera manual or contact the camera manufacturer for detailed information.)

○ Mirrorless Cameras (Canon M, Samsung NX, Sony E, Fujifilm X)

The diaphragms of the 12mm F2.8 ED AS NCS FISH-EYE Canon M, Samsun NX, Sony E and Fujifilm X mounts are not compatible with the cameras.If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture ring so it is fully open when attaching the lens to the camera, and then set the depth of field and brightness you want prior to shooting.

【Canon M Mount】

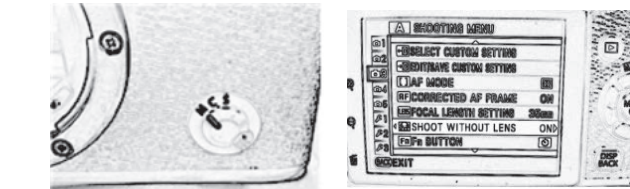
- 1) Set the exposure to manual exposure (M) and change the focus mode to MF.



(The procedures above are for the Canon M. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

【FUJIFILM X Mount】

- 1)) Set the focus mode to M.

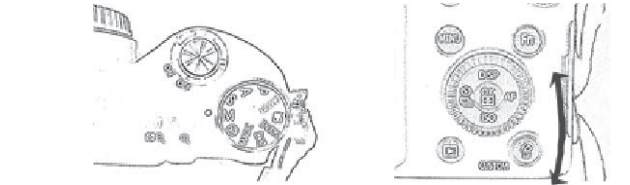


- 2) Press the MENU/OK button, and select ON at 'Shooting without lens' in the shooting menu.

(The procedures above are for the X-Pro1. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

【Samsung NX Mount】

- 1) Set the camera mode dial to M.
2) Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the brightness.

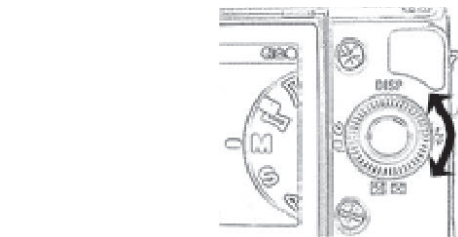


※ For some Samsung (NX) cameras, if you set the camera mode dial to A and set the brightness by turning the aperture ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(The procedures above are for the NX200. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

【Sony E Mount】

- 1) Set the camera mode dial to M.
2) Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the brightness.



※ For some Sony E cameras, if you set the camera mode dial to A and set the brightness by turning the aperture ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

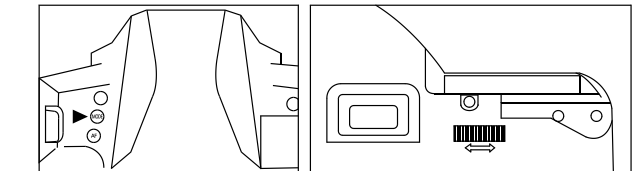
(The procedures above are for the NEX-5. The settings for the camera or the menu may vary based on the model or due to a functional upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

○ Four Thirds, Micro Four Thirds

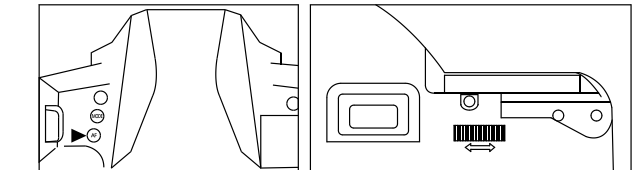
The diaphragms of the 12mm F2.8 ED AS NCS FISH-EYE Four-thirds and Micro four-thirds mounts are not compatible with the cameras. If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture ring so it is fully open when attaching the lens to the camera, and then set the depth of field and brightness you want prior to shooting.

【Four-thirds Mount】

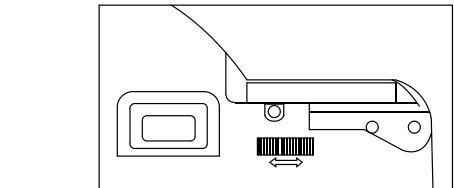
- 1) Hold down the MODE button and turn the dial until it is set to M. (Shooting conditions)
MODE + control dial ► M mode setting (manual shooting)



- 2) Hold down the AF button and turn the dial until it is set to MF. (focusing)AF + control dial ► MF setting (manual focusing)



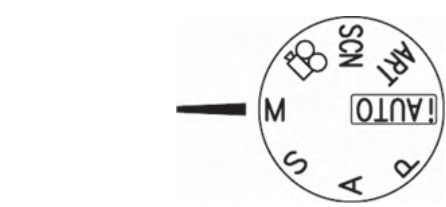
- 3) Adjust the shutter speed to achieve the appropriate exposure for the brightness by turning the dial.



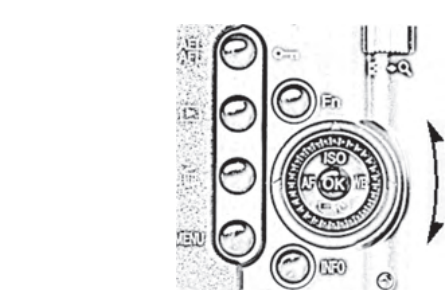
(The above procedure is given based on the Olympus E-3. The camera settings are different depending on the model or due to a functional upgrade, therefore refer to the camera manual or contact the camera manufacturer for detailed information.)

【 Micro Four Thirds Mount 】

- 1) Set the camera mode dial to M.



- 2) Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the brightness.



※ For some Olympus (MFT) and Panasonic (MFT) cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(The procedures above are for the E-P2. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

8. SPEC

SPECIFICATIONS		1:2.8 12mm ED AS NCS FISH-EYE LENS										
APERTURE RANGE		F2.8 ~ 22										
OPTICAL CONSTRUCTION		12 ELEMENTS IN 8 GROUPS (2 ASPHERICAL LENS)										
MINIMUM FOCUSING DISTANCE		0.20 m (0.66 ft)										
FILTER SIZE		NONE										
MAXIMUM DIAMETER		Ø 77.3mm										
MOUNT		CANON EOS	NIKON AE	PENTAX K	SONY α	CANON M	FUJIFILM X	SAMSUNG NX	SONY E	FOUR-THIRDS	MICRO FOUR-THIRDS	
ANGLE OF VIEW	35mm	180°	180°	180°	180°	・	・	・	・	・	・	
	APS-C	118°	124.6°	124.6°	124.6°	118°	124.6°	124.6°	124.6°	・	・	
	FOUR-THIRDS 4/3"	・	・	・	・	・	・	・	・	97.3°	97.3°	
LENGTH		72.7mm	70.2mm	71.2mm	72.2mm	98.6mm	99mm	91.2mm	98.7mm	78mm	97.5mm	
WEIGHT		515g	500g	505g	510g	525g	565g	515g	525g	530g	520g	
FUNCTION		A / S / M / P mode(NIKON AE)										

9. In case of malfunction

Issue	Cause	Countermeasures
A lens cannot be attached to the camera.	The reference point on the lens is not aligned with the lens attachment reference point on the camera.	Align the attachment reference point on the lens with the lens attachment reference point on the camera.
A lens cannot be detached from the camera.	Incorrect rotation direction for detaching the lens.If you turn the lens while holding the camera, it may cause damage to the lens.	Hold down the lens release button on the camera, gently turn the lens toward the lens attachment/detachment reference point marked on the camera, and then pull the lens away.
Blurry images	Incorrect focusing.Camera shake, or insufficient shutter speed.	Adjust the focus on the clearest subject by turning the focus ring while checking the object with the camera indicator or visually, and then press the shutter.Fix the camera to prevent camera shake by securing the shutter speed over 125 seconds and then take photographs.
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)
Automatic focusing does not work properly.	A manual focusing lens has trouble with automatic focusing.	Turn the focusing ring to focus on a subject.
The pictures are too dark or too bright.	The exposure is incorrect.	Set the aperture adjustment ring of the lens correctly.
The camera flash is not synchronized to the camera.	A non CPU lens may not be compatible, depending on the camera.	Refer to the camera manual.
	This lens corresponds to the Nikon AI-P lens.	See the camera manual or flash manual. This lens is not a "D-type" lens (which relays distance information to the camera).
There is no camera finder indication or display.	This lens doesn't have electronic contacts, so there is no electronic communication with the camera.	No problem with shooting.
Zoom failure.	This lens is a single lens.	
The lens can't be attached to other cameras.	This lens is designed for a specific mount type.	Purchase the designated lens mount.
You want to attach our 2X or 1.4X converter lens.	Our converter is designed for the T (M42 SCREW) mount only, thus it cannot be used with this product.	You can use each company's own mount converter.However, be aware that auto focusing is unavailable.

10. Safety Precautions

The following precautions are divided into two types according to the level of danger. ⚠ Warning 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: ⚠ Caution If this instruction is not followed, it may cause damage or injury to the user.	
⚠ Don't look at the sun through the lens.It may cause blindness.	⚠ Attach the lens to the camera correctly and make sure that the lens is attached firmly. If the lens is not attached correctly, it may not be pulled out or it may fall down, causing injury.	⚠ Do not apply excessive weight on the lens attached to the camera. It may cause damage to the lens and camera mounts. Be sure to hold the lens when operating or moving.	⚠ Ensure that the camera operates properly by checking the lens beforehand or by test shooting for important events such as a wedding ceremony and no-guiltless trip.
⚠ Keep the lens out of children's reach. It may drop or fall down, causing injury.	⚠ Do not modify or alter the lens.It may lead to failure of the camera. Modified or altered lenses may not be repaired.	⚠ Don't leave the lens in direct sunlight. It may cause a fire, depending on lenses that concentrate light on a close object.	⚠ Don't look at the sun directly through a camera with a lens attached. It may cause damage to one's eyesight.

- WARNING!**
Do not 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.
 - Do not expose the lens to drastic temperature changes.
 - Do not touch the surface of the lens with your hand, or let it come into contact with sharp objects.
 - Do not drop the lens.
 - Do not 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.