

20mm F1.8 ED AS UMC Instruction manual

We believe that this new 20mm F1.8 ED AS UMC lens will give you a special photographic experience.

The 20mm F1.8 ED AS UMC lens uses extra low dispersion and aspherical lens elements plus UMC coating for incredible edge-to-face sharpness.

Advantages of the 20mm F1.8 ED AS UMC lens:

- Optical design optimized for cameras with a Full Frame image sensor.
- Uses Extra Low Dispersion and Aspherical lens elements for outstanding optical performance.
- Allows precision focus control with smooth operation.
- UMC coating suppresses flaring and ghosting.
- 7 aperture blades provide a circular aperture for a pleasing bokeh.
- Close-focus distance of 0.2m offers maximum flexibility when selecting subject-matter.

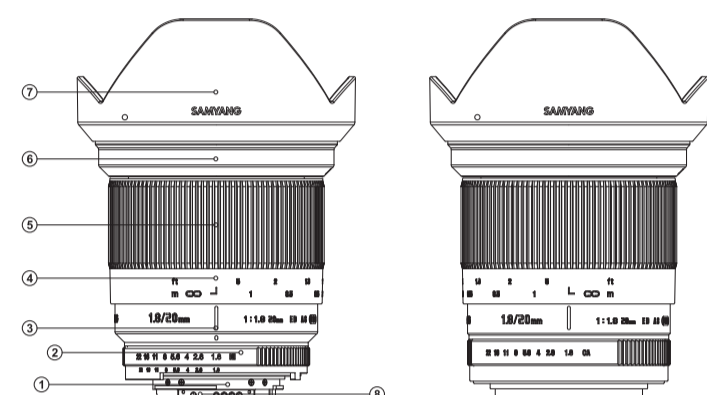
The 20mm F1.8 ED AS UMC lens is designed to fit specific camera mounts. Read this manual carefully to ensure correct operation with your camera.

Please read the 'Safety Precautions' at the back of this instruction manual prior to use.

Please read this instruction manual prior to use.

1. Component Names

[Figure]



- Mount (camera locking area)
- Aperture adjustment ring
- Distance scale indicator mark
- Focus Scale
- Focusing ring
- Hood locking tube
- Hood
- CPU (Electronic contact)

2. Attaching and Detaching

The 20mm F1.8 ED AS UMC lens mount is uniquely designed for Canon, Nikon/Fujifilm/F, Pentax (Samsung GX) K, Sony α (Minolta), Canon M, Sony E, Fujifilm X, Samsung NX, Four Thirds and Micro Four Thirds cameras.

[Attaching]

Hold the hood locking area of the lens softly, align the depth of field scale of the lens with the lens ring mount of the camera, push the lens into the camera and turn the lens softly until it makes a clicking sound and the depth of field scale is positioned on the upper part of the camera.

Regarding Nikon F mount, CPU chip is installed in it. Please turn the aperture adjustment ring until F22 (Minimum aperture value) so that lens can communicate with the camera accordingly.

[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 adjust the focus by turning the focusing ring when using the 20mm F1.8 ED AS UMC lens, as it is a Manual Focus (MF) adjustment lens.

[Nikon / Pentax K Mount]

- 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 0.2m) and focus on the clearest subject by using the indication signal on the camera or by checking visually.
- 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 0.2m to ∞) and focus on the clearest subject by using the indication signal on the camera or by checking visually.

[Canon, Sony α, Canon M, Sony E, Fujifilm X, Samsung NX, FT, MFT Mount]

- To change the focus from a subject that is far away to a subject that is close, turn the focusing ring to the right (from ∞ to 0.2m) and focus on the clearest subject by using the indication signal on the camera or by checking visually.
- To change the focus from a subject that is close to a subject that is far away, turn the focusing ring to the left (from 0.2m to ∞) and focus on the clearest subject by using the indication signal on the camera or by checking visually.

4. Brightness Control

You can set the depth of field and brightness by turning the aperture adjustment ring when using the 20mm F1.8 ED AS UMC lens.

[Aperture adjustment ring markings]

- Canon, Nikon F, Pentax K, Sony α, Canon M, Sony E, Fujifilm X, Samsung NX, FT, MFT

22	16	11	8	5.6	4	2.8	1.8
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Pentax K

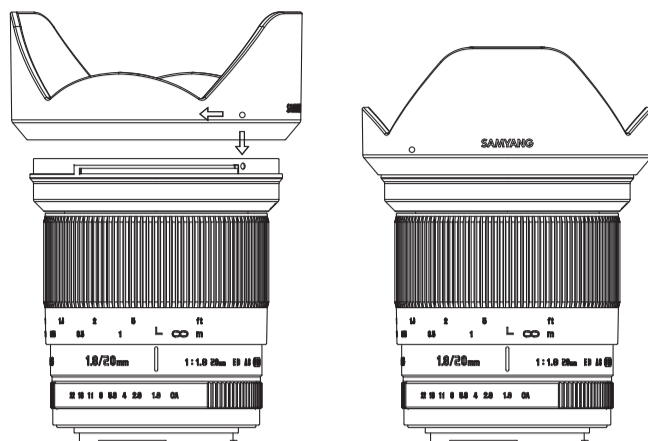
A + 22	16	11	8	5.6	4	2.8	1.8
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[Nikon F Mount]

- A / M mode
Turn the sub command dial at the front of the camera.
- S / P mode
Turn the main command dial at the back of the camera.

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 hood indicator and the hood locking indicator on the lens, push the hood in softly, and then rotate to the left until it makes a clicking sound.

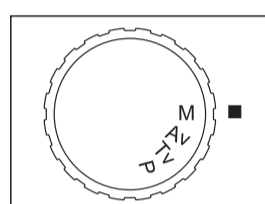
6. Camera Settings

Some cameras require special settings when using this lens. Please read the information below and set your camera accordingly.

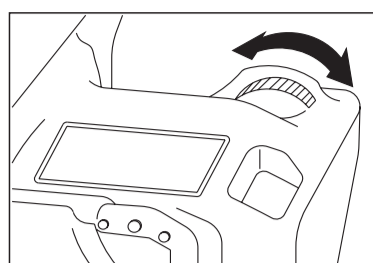
○ Canon Mount

The aperture of the 20mm F1.8 ED AS UMC Canon mount is not geared to the camera. If the F stop is set to above 8, the user may not be able to set the correct focus due to a difficulty in viewing a subject through the camera viewfinder. Therefore turn the aperture adjustment ring again to set the depth of focus and brightness you want to express prior to shooting.

- Set the camera mode dial to M.



- Adjust the shutter speed to achieve the appropriate exposure according to brightness.



The shutter speed of some Canon cameras changes automatically if the shooting mode dial is set to Av and the brightness is set by turning the aperture adjustment ring. Therefore the shutter speed is not required to be set additionally as with the M mode.

(The above procedure applies to the 40D. The settings for the camera or the menu may be changed depending on the model or due to a menu upgrade. Therefore refer to the camera manual or contact the camera manufacturer for detailed information.)

○ Nikon (Fujifilm) AE 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.

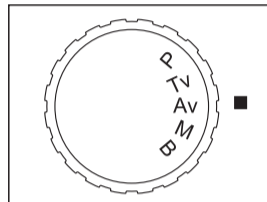
When using the Nikon mount, set to the minimum aperture value (F22) by turning the aperture ring, as it is a CPU equipped lens (AE).

(For the lens to be able to communicate with an AF camera, the aperture adjustment ring must be turned until the F-number F22 is aligned specifically with the reference line on the lens.)

○ Pentax (Samsung GX) K Mount

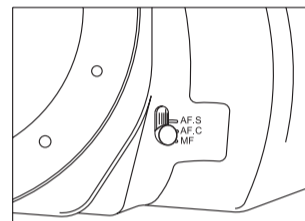
1. Av Mode (Aperture Priority Mode) The 20mm F1.8 ED AS UMC Pentax K mount Av mode is supported.

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

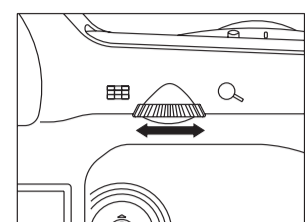


- Set the mode dial of the camera to Av.

- Set the focus adjustment lever of the camera to MF.



- Set the menu on the camera.
User settings => Use aperture ring => Not allowed



(The above procedure applies to the K20D. The settings for the camera or the menu may be changed depending on the model or due to a menu upgrade. Therefore refer to the camera manual or contact the camera manufacturer for detailed information.)

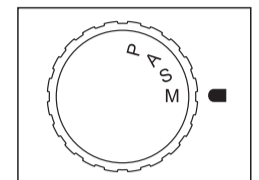
When in AE mode, the aperture value appears as 1.7; however, the actual value is 1.8. Please note that this does not cause any problems with use of the lens.

○ Sony (Minolta) α Mount

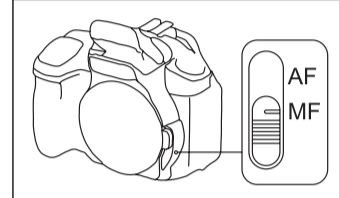
The aperture of the 20mm F1.8 ED AS UMC Sony (Minolta) α mount is not geared to the camera.

If the F stop is set to above 8, the user may not be able to set the correct focus due to a difficulty in viewing a subject through the camera viewfinder. Therefore turn the aperture adjustment ring and fully open it when attaching this lens to the camera, and then turn the aperture adjustment ring again to set the depth of focus and brightness you want to express prior to shooting.

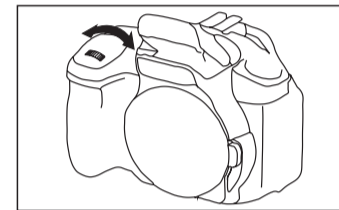
- Set the camera mode dial to M.



- Set the focusing lever of the camera to MF.



- Adjust the shutter speed to achieve the appropriate exposure according to brightness.



(The above procedure applies to the α350. The settings for the camera or the menu may be changed depending on the model or due to a menu upgrade. Therefore refer to the camera manual or contact the camera manufacturer for detailed information.)

○ Konica Minolta (Minolta) DYNA Series

If this lens is used on some Konica Minolta (Minolta) DYNA 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

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

- | | |
|--|--|
| 9x/-function button + AE lock button | 303si/-AV button + self mode button |
| 7x/-function button + AE lock button | 303si SUPER-drive button + spot button |
| 5x/-function button + spot button | 101si/-self-timer button + flash button |
| 3x/-Need to modify at the service center | 363si/-self-timer non-intermittent shooting button + scene select button |

- | | |
|--|---|
| 807si/-AEL button + shooting scene select button | α-Sweet/-self-timer non-intermittent shooting button/spot button |
| 707si/-card button + spot button | α-Sweet S/-Set the function dial to the multiple exposure |
| 507si/-lens exchange button + ISO lock button | P button + self-timer button |
| DYNAX3L/-shooting scene select button + button | DYNAX30/-self-timer button/turn the left dial on the main body away from the OFF. |

α-Sweet III TTL: Set the camera to the custom function 14 and change the selection number 1 to 2 (IN A).

α2.7-9.7T: Set the camera to the custom function 16 and change the selection number 1 to 2 (IN A).

α-Sweet Digital: Carry out the following operation.

MENU => 2 - Release lock with a lens => To the right => N.A => Execute => MENU => 7 - Digital - Carry out the following operation.

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, perform the procedure above again.

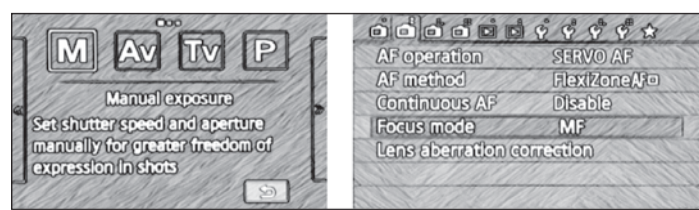
(Settings for the camera or the menu may be changed depending on the model or due to a menu upgrade. Therefore refer to the camera manual or contact the camera manufacturer for detailed information.)

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

The diaphragms of the 20mm F1.8 ED AS UMC Canon M, Samsung 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]

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



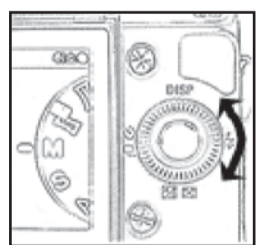
(The procedures above are for the Canon M. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

For some Samsung (NX) 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, so you don't have 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]

- Set the camera mode dial to M.
- 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.

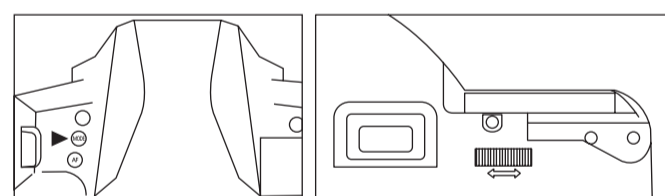
(The procedures above are for the NEX-5. The settings for the camera or the menu may vary based on the model or due to a functional upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

○ Four Thirds, Micro Four Thirds

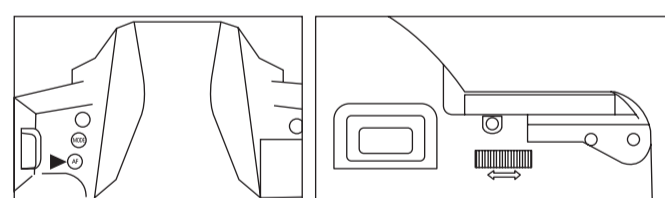
The diaphragms of the 20mm F1.8 ED AS UMC Four-thirds and Micro four-thirds mounts are not compatible with the cameras. If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture ring 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]

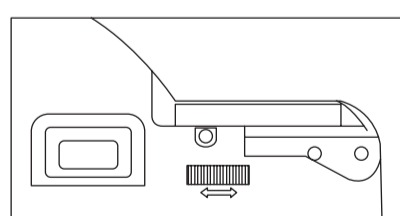
- Hold down the MODE button and turn the dial until it is set to M. (Shooting conditions) MODE + control dial ▶ M mode setting (manual shooting)



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



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

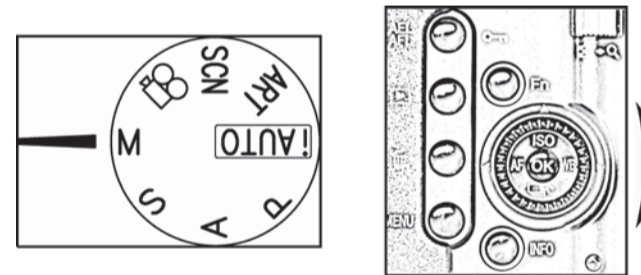


For some Four-Thirds cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed, so you don't have to adjust the shutter speed as well, which is required in M mode.

(The procedures above are for the Olympus E-3. 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.)

[Micro Four Thirds Mount]

- Set the camera mode dial to M.



- 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. Troubleshooting

Symptoms	Cause	Countermeasures
A lens cannot be attached to the camera.	The release 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 from the lens with the lens attachment reference point marked on the camera, and the lens may be damaged.	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 out.
Blurry images	Incorrect focusing/Camera shake, or insufficient shutter speed.	Turn the focusing ring while viewing the subject with the viewfinder in the camera or shooting usually to set the focus with the subject in view, and then check the shutter speed. When using a camera with a 1/250-sec or faster, steady the camera and take a photograph.
FEEL (blinking)	The aperture adjustment ring on the lens is not set to the minimum aperture value (F22).	Turn the aperture adjustment ring until it is set 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.	With non-Canon lens, the camera flash may not be synchronized to the camera.	Refer to the camera manual.
There is no camera finder indication or display.	This lens corresponds to the Nikon AF lens.	See the camera manual or flash manual. This lens has a "Crop" lens option which displays information for the camera.
Zoom failure.	This lens is a single lens.	No problem with shooting.
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 F 3402 (S2000) mount only. This converter is not used with the product.	You can use each company's own mount converter. However, the camera that uses focusing is unavailable.

9. Safety Precautions

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

Warning	Caution
<p>Don't look at the sun through the lens. It may cause blindness.</p> <p>Keep the lens out of children's reach or out of hand. Caution against.</p>	<p>Don't touch the lens to the camera body or other objects. If the lens is attached to the camera, it may cause damage to the camera, or it may cause damage to the lens.</p> <p>Don't touch the lens to the camera body or other objects. If the lens is attached to the camera, it may cause damage to the camera, or it may cause damage to the lens.</p> <p>Don't touch the lens to the camera body or other objects. If the lens is attached to the camera, it may cause damage to the camera, or it may cause damage to the lens.</p> <p>Don't touch the lens to the camera body or other objects. If the lens is attached to the camera, it may cause damage to the camera, or it may cause damage to the lens.</p>

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, stress amplifiers.
Do not expose the lens to drastic temperature changes.
Don't touch the surface of the lens by hand, and avoid making 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.

7. Specifications

SPECIFICATIONS	1:1.8 20mm ED AS UMC									
APERTURE RANGE	F1.8 - 22									
OPTICAL CONSTRUCTION	13 ELEMENTS IN 12 GROUPS (2 ASPHERICAL)									
MINIMUM FOCUSING DISTANCE	0.2 m (0.66ft)									
FILTER SIZE	Ø77.0mm									
MAXIMUM DIAMETER	Ø83.0mm									
MOUNT	CANON EOS	NIKON	SONY α	FUJIFILM X	SAMSUNG NX	SONY E	FOUR-THIRDS	MICRO FOUR-THIRDS		
	35mm	94.8*	94.8*	94.8*	94.8*	94.8*	94.8*	94.8*	94.8*	94.8*
ANGLE OF VIEW	APS-C	68.5°	70.3°	70.3°	70.3°	69.5°	70.3°	70.3°	70.3°	70.3°
	FOUR-THIRDS	42°	-	-	-	-	-	-	56.1°	56.1°
LENGTH	88.4mm	85.9mm	86.9mm	87.3mm	114.2mm	114.7mm	106.9mm	114.4mm	83.7mm	113.2mm
WEIGHT	487g	486g	483g	488g	525g	555g	515g	525g	530g	530g

If more than one filter is attached to the camera, it may cause vignetting (the reduction of an image's brightness at the periphery). If a filter, which has both sides multi-coated, is used when attaching a filter, the user can shoot clear images.