Canon EFS LENS

EF-S35mm f/2.8 MACRO IS STM





Thank you for purchasing a Canon product.

The Canon EF-S35mm f/2.8 MACRO IS STM is a macro lens for use with EF-S lens compatible EOS cameras*. It is equipped with an Image Stabilizer capable of shooting portraits, scenery, and other normal shots as well as close-up (macro) shots with a magnification ratio of 1:1.

- * The lens can only be used with compatible EOS cameras. For compatibility information, please check the camera's instruction manual, product catalog or the Canon website.
- "IS" stands for Image Stabilizer.
- "STM" stands for stepping motor.

Camera Firmware

 Please use the latest version of firmware with the camera in use. For details on whether the firmware is the latest version or not, and for details on updating the firmware, please check the Canon website.

Conventions used in this instruction



Warning to prevent lens or camera malfunction or damage.



Supplementary notes on using the lens and taking pictures.



Safety Precautions

Precautions to ensure that the camera is used safely. Read these precautions thoroughly. Make sure all details are observed in order to prevent risks and injury to the user and other people.

⚠ Warning Details pertaining to risks that may result in death or serious injury.

- Do not look at the sun or a bright light source through the lens or single-lens reflex camera.
 Doing so could result in loss of vision. Looking at the sun directly through the lens is especially hazardous.
- Whether it is attached to the camera or not, do not leave the lens under the sun without the lens cap attached. This is to prevent the lens from concentrating the sun's rays, which could cause a fire.

⚠ Caution

Details pertaining to risks that may result in injury.

- Do not hold the Macro Lites located on the front of the lens close to the eyes or stare at them when they are illuminated. Doing so may result in eye damage.
- Do not leave the camera in locations subject to high or low temperatures. This may result in the camera becoming excessively hot or cold, which may cause burns or other injuries when touched.

Caution

Details pertaining to risks that may result in damage to property.

 Do not leave the lens in excessive heat such as in a car in direct sunlight. High temperatures can cause the lens to malfunction



General Precautions

Handling Precautions

- If the lens is taken from a cold environment into a warm one, condensation may develop on the lens surface and internal parts. To prevent condensation in this case, first put the lens into an airtight plastic bag before taking it from a cold to warm environment. Then take out the lens after it has warmed gradually. Do the same when taking the lens from a warm environment into a cold one.
- Please also read any lens related handling precautions listed in your camera's instruction manual.

Shooting Precautions

Note that there are cases in which the white ring on the front of the lens may be reflected into photographs if the lens is held close to reflective objects (glass surface on wristwatches, for example), even if the Macro Lites are not illuminated. This can be avoided by attaching the hood when taking photographs.

Shooting Precautions

This lens uses a stepping motor to drive the focusing lens.

1. Initial focus lens resetting operations

The lens performs an initial reset of the focus lens when the camera is switched on. When the lens is attached to the following cameras*, an initial reset will be performed, as when operation is resumed from an auto power off state.

The lens will move in and out of focus during initial reset.

2. Lens sleep mode

When the camera is ON, the lens will enter the sleep mode in order to conserve power if it is not operated for a certain period of time. The lens will also constantly be in the sleep mode when the camera's auto power off function is in effect. The focus lens will not be operated when the lens is in the sleep mode.

- Focusing by rotating the focusing ring is not possible when the lens is in the sleep mode. To exit sleep mode, press the shutter button halfway.
- * Applicable to the following cameras:
 EOS 7D Mark II, EOS 7D, EOS 70D, EOS 60D, EOS 60Da, EOS 50D, EOS 40D, EOS 30D, EOS 20D, EOS 20Da,
 EOS REBEL T3i/600D, EOS REBEL T2i/550D, EOS REBEL T1i/500D, EOS REBEL XSi/450D, EOS REBEL T5/1200D,
 EOS REBEL T3/1100D, EOS REBEL XS/1000D, EOS DIGITAL REBEL XTI/400D DIGITAL, EOS DIGITAL REBEL
 XT/350D DIGITAL. EOS DIGITAL REBEL/300D DIGITAL

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

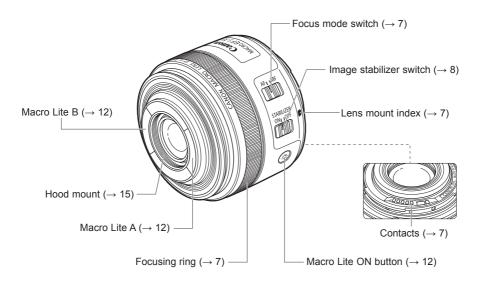
This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAN ICES-3 (B) / NMB-3 (B)

Nomenclature

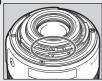


lacktriangle For detailed information, reference page numbers are provided in parentheses (\rightarrow **).

Mounting and **Detaching the Lens**

See your camera's instructions for details on mounting and detaching the lens.

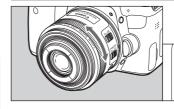






- After detaching the lens, place the lens with the rear end up to prevent the lens surface and contacts from getting scratched.
- Contacts that are scratched, soiled, or have fingerprints on them may result in faulty connections or corrosion, which may lead to malfunctions. If the contacts get soiled, clean them with a soft cloth
- Attach the lens cap and dust cap when disconnecting the lens. When attaching the dust cap, align the lens mount index with the \square index of the dust cap and rotate in a clockwise direction as shown in the illustration. Follow the reverse procedure to detach it.

Setting the Focus Mode





To shoot in autofocus (AF) mode, set the focus mode switch to AF

To use only manual focusing (MF), set the focus mode switch to MF, and focus by turning the focusina rina.



- Quickly rotating the focusing ring may result in delayed focus.
- Focusing by rotating the focusing ring is not possible when the camera is OFF.



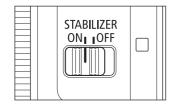
When AF operation is set to [ONE SHOT], manual focus is possible after autofocusing has been completed by continuing to press the shutter button halfway (Full-time manual focus).

There are times when camera setting changes are required.

Image Stabilizer

You can use the Image Stabilizer in AF or MF mode

Also, the Image Stabilizer provides image stabilization depending on shooting conditions (such as shooting still subjects, following shots, and close-ups (macro)).



- Set the STABILIZER switch to ON.
 - If you are not going to use the image stabilizer function, set the switch to OFF.
- When you press the shutter button halfway, the Image Stabilizer will start operating.
 - Make sure the image in the viewfinder is stable. then press the shutter button the rest of the way down to take the picture.



- The shorter the subject distance from the camera, the lesser the Image Stabilizer effect will be.
 - The Image Stabilizer cannot compensate for a blurred shot caused by a subject that moved.
 - The Image Stabilizer may not be fully effective if you shoot from a violently shaking vehicle or other transportation.
 - The Image Stabilizer consumes more power when set at ON than normal shooting at OFF, resulting in fewer shots and a shorter movie shooting time.



- When shooting a still subject, it compensates for camera shake in all directions.
 - It compensates for vertical camera shake during following shots in a horizontal direction, and compensates for horizontal camera shake during following shots in a vertical direction.
 - When you use a tripod, the Image Stabilizer should be turned off to save battery power.
 - Even with a monopod, the Image Stabilizer will be as effective as during hand-held shooting. However, depending on the shooting conditions, there are cases in which the Image Stabilizer effect may be less effective.
 - The image stabilizer function also operates when the lens is used with an extension tube FF12 II or FF25 II
 - The Image Stabilizer will operate even when you press the button assigned to the AF function with the camera's Custom Functions

Image Stabilizer

The image stabilizer for this lens is effective for hand-held shots in the following conditions.





- Hand-held close-ups (macro)
- In semi-darkened areas such as indoors or outdoors at night.
- In locations where flash photography is prohibited, such as art museums and theater stages.
- In situations where your footing is uncertain.
- In situations where fast shutter settings cannot be used.

When panning subjects in motion.



Taking Hand-held Close-ups (Macro)

This lens allows users to focus from infinity to a magnification ratio of 1:1 for close-ups (macro).

Hold the camera firmly

Hold the camera firmly as shown in the illustration on the right when taking hand-held close-ups (macro), and take the shots carefully to minimize camera shake and prevent focus blurring.

Taking Photographs using Al Servo AF It is recommended that the camera AF is set to AI SERVO when taking close-up (macro) shots. See

the camera's instruction manual for further details.

- It is necessary to be careful of the following during close-up (macro) shooting.
 - · There is a tendency for camera shake to affect closeup (macro) shots more than normal shots, and the effects of the image stabilizing function are reduced.
 - · Depth of field becomes extremely shallow when taking close-up (macros) shots, and the focus may blur if the camera is moved forward and backward



The minimum focusing distance of this lens (minimum distance between the subject and the image sensor at which the lens can focus) is 0.13 m/0.43 ft. The working distance of this lens (minimum distance from the front of the lens to the subject) is 30 mm/1.18 inch.



Place both elbows on a steady surface such as a table.



Use your knee to support an arm holding the camera or lens.



Lean against a steady object like a wall.

Exposure When Taking Close-up (Macro) Shots

Setting the Exposure

When taking photographs using TTL metering, no exposure compensation is necessary to meter the light coming through the lens.

With TTL metering, AE (autoexposure) is possible at all focusing distances. Just set the desired picture-taking mode, then check the shutter speed and aperture before taking the picture.

Magnification and Effective f-number

The aperture displayed by the camera assumes that the focus is set to infinity. The actual aperture (effective f-number) becomes darker (effective f-number increases) at closer focusing distances (magnification increases). This does not cause exposure problems for normal picture-taking. However, for close-up photography, you cannot ignore the change in the effective f-number.



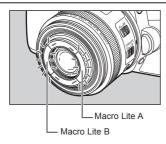
- Conditions prevalent with the subject are very important when deciding on the correct level of exposure for close-up (macro) shots. It is therefore recommended that exposure levels are amended as much as possible during shooting, or that the image of the subject is checked on the camera's LCD monitor.
 - Using either the aperture-priority AE (Av) mode or manual exposure (M) mode is recommended for close-up (macro) photography, as these make it easier to adjust the depth of field and exposure.

When you use a handheld exposure meter to set the exposure, you must take into account the exposure factor shown in the following table.

Magnification	0.3	0.5	0.7	1.0
Focusing Distance	0.21/	0.17/	0.14/	0.13/
(m/ft.)	0.69	0.56	0.46	0.43
Effective f/No.	3.3	3.5	3.7	4.0
Exposure Factor (stops)*	+1/3	+2/3	+2/3	+1
Exposure racior (Stops)	+1/2	+1/2	+1/2	+1

^{*} Upper values: 1/3 stops. Lower values: 1/2 stops.

Macro Lites



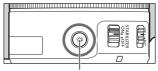
The Macro Lites on the front of the lens shine light on the subject during close-up (macro) photography to facilitate shooting. There are two light-emitting Macro Lites located on both sides of the lens, and it is possible to illuminate both simultaneously or either of them independently.



The Macro Lites can only be illuminated when the power to the camera is switched on.



The use of a single Macro Lite will add shadow to the subject and add a sense of three-dimensionality to photographs.



Macro Lite ON button

The Macro Lites are illuminated by pressing the Macro Lite ON button. Pressing the Macro Lite ON button will illuminate the Macro Lites for approximately 30 seconds.

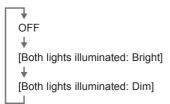


- During Live View or movie shooting, the Macro Lites will not turn off until the camera is turned off.
 - Remove the hood when using the Macro Lites.
 - If any of the following actions are performed within 30 seconds of the Macro Lites being activated, the Macro Lites will remain activated for an additional 30 seconds.
 - Pressing the shutter button halfway/completely*
 - · Pressing the Macro Lite ON button
 - · Manual focus operation
- The Macro Lites will turn off after a few seconds when you remove your finger from the shutter button after a halfway/ complete press in the case of the EOS 30D, EOS 20D. EOS 20Da, EOS DIGITAL REBEL XT/350D DIGITAL and EOS DIGITAL REBEL/300D DIGITAL.

Macro Lites

■ Both Macro Lites Illuminated

Briefly pressing the Macro Lite ON button will alternate between ON and OFF for both lights, and between Bright and Dim.



Macro Lites A and B Illuminated Independently

- Hold down the Macro Lite ON button with the light switch off to illuminate one of the lights.
- Briefly pressing the Macro Lite ON button when one light is illuminated will alternate the ON status to the other light.



Switching Between Both Macro Lites and a Single Macro Lite

 Hold down the Macro Lite ON button with the light illuminated to alternate between both lights and a single light.

Macro Lites



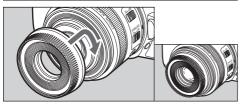
- The Macro Lites cast shadows from the camera and lens onto the subject during close-up (macro) photography to facilitate shooting and improve the end result. They are not designed to shine sufficient light on subjects when shooting in dark locations.
 - More battery power is consumed when the Macro Lites are in use than when they are not in use, which will reduce the number of photographs that can be taken and the amount of time that videos can be filmed
 - The illumination status of the Macro Lites will be saved if they have turned off automatically after 30 seconds has elapsed. Press the Macro Lite ON button to reactivate them. This will cause the Macro Lites to be illuminated at the same level as before they were extinguished.
 - The illumination status will not be saved if the camera is turned off and the Macro Lites extinguished.
 - There are cases in which the Macro Lites will be extinguished when the camera's power-saving function (Auto Power Off) turns off the power, even when they are illuminated. When this occurs, the illumination status will not be saved.
 - Depending on the camera used, there are times when the Macro Lites will not illuminate even after pressing the Macro Lite ON button during Auto Power Off.



- There are cases in which the Macro Lites will be extinguished for short periods of time during operations and when illuminated if image replay, menu display, movie/still image switching and other camera settings are amended. The illumination status will not be saved in this case. Check the illumination status of the Macro Lites immediately prior to taking photographs.
 - If AF or MF is selected using the focus mode switch while the Macro Lites are illuminated, the Macro Lites may turn off for a short period of time. The illumination status of the Macro Lites will be saved in this case.
 - There are cases in which the Macro Lites will not be illuminated for several seconds after the lens has been attached to the camera
 - In order to illuminate the Macro Lites continuously during interval shooting, set the shooting interval within 30 seconds.
 - In order to illuminate the Macro Lites continuously during time-lapse shooting, set the shooting interval within 10 seconds.
 - After pressing the shutter button halfway, don't change the Macro Lite status when shooting. Since pressing the shutter button halfway locks the exposure*, it may not be possible to shoot in standard exposure if the Macro Lite status has changed.
 - The Macro Lites will be concealed when the hood is attached, so don't forget to switch them off.
- Differs according to the camera's photometry and AF settings. For details, please check your camera's instruction manual.



Hood



The ES-27 lens hood plays the following roles:

- In addition to blocking out damaging light, it also protects the lens from rain, snow, dust and other elements.
- It prevents the white ring on the front of the lens from being reflected back into images.
- It acts as an adapter when filters are being used.

Screw the hood firmly and correctly onto the front of the lens.

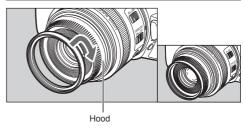


- Attaching the hood at an angle may damage the outside of the lens.
- If the hood is not attached properly, vignetting (darkening of the perimeter of the picture) may occur.
- Remove the hood when using the Macro Lites.



It is possible to attach the lens cap to the front of the hood when it is attached to the lens.

Filters (sold separately)



You can attach filters (which are 49 mm in diameter) to the filter mounting thread on the front of the hood.

- 1. Attach the hood.
- 2. Attach the filter to the front of the hood



- Filters cannot be used unless the hood is attached
 - Only one filter may be attached.



Macro Flash (sold separately)

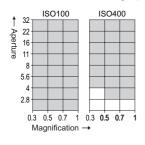
The Macro Ring Lite MR-14EX II or the Macro Twin Lite MT-24EX enables fully automatic macro flash photography up to 1x magnification in F-TTL autoflash mode



For information on operating the Canon Macro Ring Lite MR-14FX II or the Macro Twin Lite MT-24FX refer to the individual instruction manuals

■ When the MR-14FX II is in use

Effective Flash Range (Reference)



Effective flash range (both sides firing) (with the Macro Lite set at OFF)



- There are cases in which the areas surrounding the subject will be brighter in images taken close to the minimum focusing distance.
 - There are cases in which vignetting may occur around the center of images taken close to the minimum focusing distance with a 67 mm in diameter filter attached to the light-emitting Micro Lites on the MR-14EX II. which will make them darker. In this event, attach a 49 mm in diameter filter to the lens

■ When the MT-24EX is in use

The MT-24EX's flash range largely depends on the flash head's position.



- In the event of over-exposure, lower the value of the ISO sensitivity setting, or reduce the size of the aperture, etc.
 - Depending on the shape and size of the subject. there are cases in which the light-emitting Macro Lites will interfere with the subject in images taken close to the minimum focusing distance.

Extension Tubes (sold separately)

You can attach extension tube EF12 II or EF25 II for magnified shots. The shooting distance and magnification are shown below.

	Magnification (×)		Focusing Distance Range (mm) (Working Distance)		
	Close distance	Long distance	Close distance	Long distance	
EF12 II	1.41	0.34	133 (20)	209 (97)	
EF25 II	1.91	0.76	142 (15)	167 (39)	





Focal Length/Aperture	35mm f/2.8
Lens Construction	6 groups, 10 elements
Minimum Aperture	f/32
Angle of View	Diagonal: 42°35′, Vertical: 24°20′, Horizontal: 35°55′
Min. Focusing Distance	0.13 m/0.43 ft.
Max. Magnification	1x
Field of View	Approx. 15.0 x 22.3 mm/0.59 x 0.88 inch (at 0.13 m/0.43 ft.)
Filter Diameter	49 mm (when lens hood ES-27 is attached)
Max. Diameter and Length	69.2 x 55.8 mm/2.72 x 2.20 inch
Weight	Approx. 190 g/6.7 oz
Hood	ES-27
Сар	Lens Cap EF-S35, Lens Dust Cap E
Case	LP1014 (sold separately)

- Equivalent to 56 mm in the 35 mm film format.
- The lens length is measured from the mount surface to the front of the lens. When the lens cap and dust cap supplied are attached, add 34.1 mm if the hood is attached and 24.1 mm if the hood is not attached.
- The size and weight listed are for the lens only, except as indicated.
- Extenders cannot be used with this lens. In addition, there are no close-up lenses designed for use with this lens.
- Aperture settings are specified on the camera.
- All data listed is measured according to Canon standards.
- Product specifications and appearance are subject to change without notice.

Canon