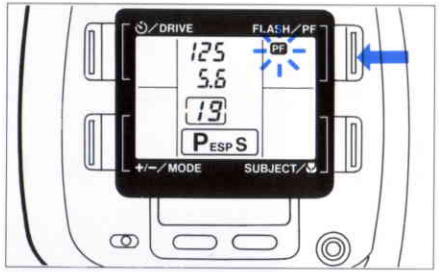
PF (Power Focus)

When the distance at which you want to shoot is predetermined, you can set the focus in advance and wait until the photo opportunity comes.

1. Focus on the subject by using autofocus first. Then press the PF button to display PF on the LCD panel.



Note: Zooming cannot be performed in the PF mode. To cancel the PF mode, press the PF button again.

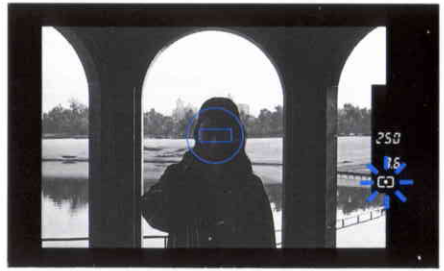
2. Press the shutter release button to take a picture.

Notes:
- The focus is fixed even after the finger is released from the shutter release button.
- Manual focusing is possible using the zoom button. Use it when autofocusing is difficult (see p. 57).

SPOT METERING

In this mode, the camera limits light metering to the subject's particular area such as a face and sets the correct exposure.

1. Position the subject for spot metering within the spot frame, and press the SPOT button.



Make sure ⊡ will be displayed on the LCD panel and in the viewfinder, and the exposure is locked.

2. Recompose the shot, then press the shutter release button to take the picture.

Notes:
- When the flash is flipped up, the camera does not perform spot metering.
- After the shot, the Spot Metering mode is canceled. To cancel the mode without taking a shot, press the SPOT button again.

FLASH

Flash Strength

The flash on the IS-2000 employs a new exposure control system that combines the advantages of both "flashmatic," used in compact cameras, and "auto flash", found in SLR cameras. Flashmatic emits a full-strength flash while automatically adjusting the aperture for proper exposure. This system is effective in most cases. However, subjects at extremely close range tend to be overexposed, and the background too dark, because the narrowest aperture setting has been selected. Auto flash varies the amount of light emitted by the flash, and sets the exposure by measuring reflected light. Depending on the background however, the wrong exposure for the main subject can be selected. For example, with a white background, the subject may appear too dark due to the level of reflected light received through the lens. The reverse is true for a dark background.

The IS-2000 adjusts both the aperture and flash strength to give you perfect exposure every time, taking into account the effect of the background light and the distance to the subject.

Dual-Strobe Intelligent Flash

The flash of the IS-2000 is distinguished by two emission tubes. One of the most important functions of a flash is to distribute light evenly throughout the frame. When a zoom lens is used, the area that can be lit by a single flash is determined by the wide-angle focal length. When telephoto is used, the light is wasted because the light is spread over a wide area. If this wasted light is concentrated on the picture area however, the working distance of the flash will be increased. Solving this problem is crucial to effective telephoto-flash photography.

The zoom flash system found in some cameras is one solution to this problem. With this system, the distance between the xenon tube — which is the emission source of the flash — and the reflective material behind it is varied according to the focal length of the lens. When telephoto is used, the light from the flash is condensed more intensely. (The distance between the xenon tube and the condenser lens can be varied for the same result.)

So why does the IS-2000 incorporate the dual-strobe system? Because the dual-strobe system can utilize the light more effectively while achieving more uniform lighting than the zoom flash system is capable of. The zoom flash system also cannot alter the actual shapes of the reflector and the condenser lens. In practice, these two factors greatly affect the even distribution and condensing intensity of light from the flash. The zoom flash sacrifices the effective use of the light's intensity for even distribution. To achieve both optimal condensing intensity and even distribution, Olympus developed the dual-strobe flash system with two sets of tubes and a reflective backing that are ideal for both wide-angle and telephoto photography. This makes a powerful, versatile flash with GN 20 (ISO 100 · m) possible.

The lower tube is designed for telephoto photography and offers GN 20 (ISO 100 · m). The upper tube is an intelligent variable-power flash offering GN 15 ~ 1.6 (ISO 100 · m). When the flash strength should be less than GN 15 (ISO 100 · m) in order to obtain natural-looking results, even if the lens is set at telephoto, the upper flash will automatically fire.

Even during macro photography, the flash light won't be obstructed by the tip of the lens since the intelligent variable-power flash is placed up and to the side of the camera. The flash is also capable of emitting minimal intensity for ideal macro photography.

Auto-S Flash

The Auto-S Flash mode includes a series of pre-flashes that reduces the phenomenon of red-eye, in addition to the same functions as the Auto Flash mode which prevent camera-shake and insufficient lighting by automatically firing in dimly lit and dark conditions when the flash is flipped up. The phenomenon of red-eye is when subject's eyes appear red in printed photographs. In this mode, the camera will start emitting approximately 20 low-power pre-flashes about a second before the regular flash.

This contracts pupils, which are wide open in the dark, significantly reducing red-eye. The pre-flashes do not decrease the power of the main flash. In addition, the red-eye reducing effect varies according to shooting conditions.

Fill-In Flash

Fill-in refers to the auxiliary light that "fills in" areas of the subject shadowed by the main light source. Even when the subject is backlit, the IS-2000 can shoot it at the correct exposure using ESP metering or spot metering, however this may wash out the background. This happens because the difference in brightness between that of the subject and the background is too great. When the Fill-In Flash is used in such a cases, the subject is lit brightly by the flash. This minimizes the difference in brightness between the subject and the background, allowing both to be shot clearly. This light is also reflected from the subject's eyes (catch light effect), making the picture lively.

In this mode, the flash fires no matter what light is available as long as the flash is flipped up. (Flash emission in well-lit conditions is called daylight synchro.)

Electronic Flash G40 (Optional)

The G40 is a dedicated flash for the IS-2000 (GN 40, ISO 100 · m). It is designed for professional flash photo-effects such as Bounce, Multi-Flash, and Follow-Synchro.

Bounce photography uses indirect lighting of subjects by reflecting the flash off the ceiling or wall. With straight flash photography a strong shadow often appears behind the subject. By bouncing the flash, you can obtain soft, well-balanced lighting of the entire subject. You can also use the built-in flash together with the G40 for additional affects.

Multi-flash emits the light several times in one exposure. With this flash mode, continuous movement, such as a golf swing, can be photographed sequentially in one frame. It's a multiple exposure with flash.

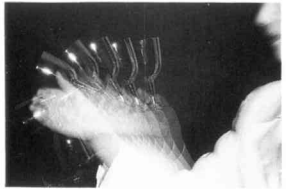
With Follow-Synchro mode, the flash fires at the final point of slow-synchro. For example, the tail-lights of a moving automobile can be captured on film.

When the IS-2000 is equipped with the tele-converter lens (1.5X) or the wide-converter (0.8X), the built-in flash cannot be used. We recommend you use the G40 for such cases.

Note: In the Super Macro and 1:1 Macro modes, the Electronic Flash G40 does not fire except in the Manual Exposure mode.

Direct Flash

Multi Flash



Normal Slow-Synchro
(Curtain-1 Synchro)

Bounce (with simultaneous use of the built-in flash)

Follow-Synchro
(Curtain-2 Synchro)

EFFECTS OF ZOOM AND ITS ADVANTAGES

In a zoom lens, the focal length is changed by moving part of the lens. In the case of the IS-2000, any focal length between 35 mm and 135 mm can be selected.

- 35 mm wide-angle

Because the angle of view is wide and the depth of field is large, sharp photographs with enhanced perspective and contrast can be taken.

- 70 mm

With the lens zoomed to 70 mm, subjects appear two times closer than when the lens is positioned at 35 mm.

- 100 mm or more

When the lens is set to the maximum focal length of 135 mm, magnification is approximately four times greater than at 35 mm, for genuine telephoto photography. As the telephoto power is increased, the perspective narrows and the depth of field becomes more shallow. The result is that objects in front of and behind your subject are more likely to be out of focus. This can be used to interesting effect on snapshots and portraits.
Maximum telephoto lengths are particularly useful for taking pictures at sporting events and for nature photography, when you want to get closer to your subject without disturbing it.

IS/L LENS A-28 H.Q. CONVERTER 0.8X

28mm 75°

35mm 63°

70mm 34°

● The five pictures below are samples taken using the zoom lens. Notice the dimensions of the subject as the camera zooms in. The three pictures on the right were taken without changing the subject's size. Notice how the background and foreground tend to blur at increased focal lengths.
● Be sure to hold the camera firmly, as pictures tend to blur more easily at longer focal lengths.

Angle of view and depth of field

Angle of view is directly related to the focal depth of field (the distance in front of and behind the subject that the camera is able to bring into focus). The greater the angle of view (wide angle), the greater the depth of field. When the angle of view is narrow (telephoto), the depth of field decreases.

● The use of a converter lens (optional)

It is possible to attach a converter lens for an even wider angle of view, or for additional telephoto power.

· Instead of 35 mm, a wide-angle converter (0.8X) enables you reduce the camera's focal length to 28 mm.
· Instead of 135 mm, a telephoto converter (1.5X) enables you to increase the camera's focal length to 200 mm.

IS/L LENS A-200 H.Q. CONVERTER 1.5X

135mm 18°

200mm 12°

35mm

70mm

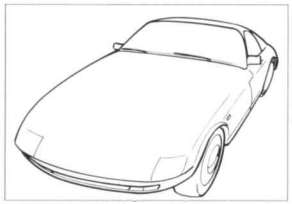
135mm

AUTOFOCUS (AF)

■ Difficult Subjects for Autofocus to Lock On

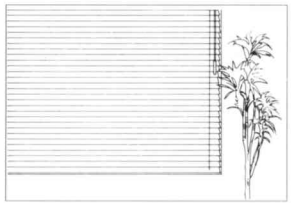
Although the IS-2000's autofocus can lock on virtually any subject, there are certain conditions, such as ① ~ ③ shown below, where it may not be possible to obtain the correct focus. In the situations shown below in ④ ~ ⑥, autofocus may not lock on the correct subject even though the autofocus indicator lights and the shutter releases.

① Subjects with low contrast



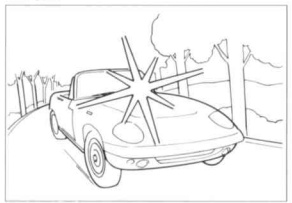
● Use the focus lock by first focusing on something at the same distance as the subject you wish to take a picture of, and then aim at the subject. Or use the power focus to manually focus on the subject.

② Subjects that do not contain vertical lines



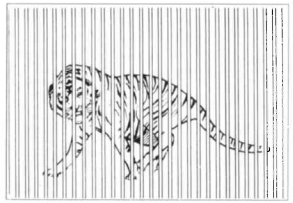
● Use the focus lock first while holding the camera vertically. Then switch the camera to the horizontal position to take the photograph. Or use the power focus to manually focus on the subject.

③ Subjects in excessively bright light



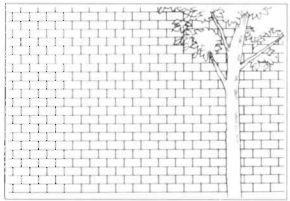
● Use the focus lock by first focusing on something at the same distance as the subject you wish to take a picture of, and then aim at the subject. Or use the power focus to manually focus on the subject.

④ Two subjects at different distances



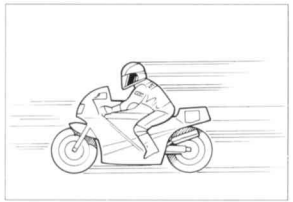
● When the subject looks out-of-focus although the autofocus lamp lights, use the power focus to manually focus on the subject.

⑤ Subjects with repetitive patterns



● When the subject looks out-of-focus although the autofocus lamp lights, use the power focus to manually focus on the subject.

⑥ High-speed subjects at close range



● Focus on another subject at the desired camera-to-subject distance first. Switch the mode to power focus, and shoot the subject when it is at the distance set in advance.

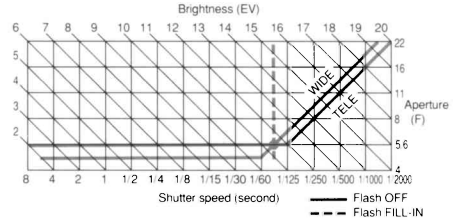
EXPOSURE

■ Automatic Exposure Mode

Exposure refers to the amount of light which strikes the film, and is controlled by a combination of aperture size and shutter speed. The correct amount of light, called correct exposure, depends on the film speed (indicated on the film package, e.g. ISO 100 or ISO 200)
The automatic exposure function automatically sets the correct exposure. The IS-2000 employs two types of automatic exposure modes: (1) programmed auto exposure, and (2) aperture-preferred auto exposure.
With programmed auto exposure, the camera automatically selects the most suitable combination of F stop and shutter speed for the existing lighting conditions. This lets you concentrate on composing your shot and releasing the shutter at just the right time.
With aperture-preferred auto, you select the desired F stop, and the camera automatically selects the correct shutter speed. Aperture-preferred auto allows greater manual control for more artistic freedom of expression and creativity.

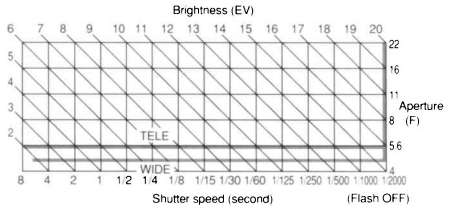
■ Program Chart (Standard Photography Mode)

Following program chart is for 35mm wide-angle and 135mm telephoto focal lengths. According to the focal length, the camera's program itself changes. When the subject is brightly lit, the F stop and shutter speed changes simultaneously. When the lighting is darker, the aperture opens fully and the shutter speed changes to match it.
In the standard photography mode (refer to p. 12), if the built-in flash has been flipped up, it will automatically fire in dark lighting conditions. The shutter speed will be fixed at 1/100-sec.



■ Program Chart (Portrait Mode)

The chart shown below is a program chart for portrait mode.
The shutter speed will automatically be adjusted up to 1/2000-sec. with the aperture fully opened. If the lighting then becomes brighter, the aperture will be adjusted to compensate. This is because with a larger (more open) aperture, the depth of field is reduced. That means that the farther the background is, the more out-of-focus it will be. At the same time, shutter speed is increased to prevent blurry pictures caused by shaking the camera.



■ Night Scene Mode

When shooting night scenes you may sometimes be disappointed with the result, usually because the camera's automatic exposure function works on a standard exposure ratio. In such situations a professional photographer would adjust for exposure compensation based on long experience, or select the manual shooting mode.
The IS-2000's night scene mode will automatically adjust the exposure compensation for attractive night scene photography. For example, when shooting a subject with a night scene as its background, the use of the flash is often desirable. Should that be the case, the camera performs the most suitable exposure compensation for both the subject and the background. Since the selected shutter speed may be very slow (up to 4 seconds with ISO 100 or 15 seconds with ISO 25), the camera should be held firmly in position (with a tripod for example) to prevent blurring.

■ Sports Mode

This mode is ideal for capturing high-speed photo opportunities such as sports scenes and children at play. A fast shutter speed is automatically selected to "freeze" the action on film. However, the high shutter speed is not the only important feature of this mode. To shoot such high-speed action, excellent timing is essential to take the photo at just the right moment. This mode offers the optimal combination of continuous shooting and autofocus to maximize your timing for maximum results.

METERING THE AMOUNT OF LIGHT

■ Light Metering

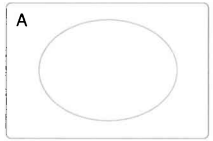
Light metering can measure the brightness of the framed picture in various ways. The IS-2000 employs three metering systems: (1) ESP light metering , (2) center-weighted average light metering, and (3) spot metering. The IS-2000 allows you to select the light metering system most suitable in any photographic situation.
At the same time, the IS-2000 uses TTL (through-the-lens) light metering to automatically measure the light that enters the lens. This allows you to obtain very accurate light metering that is not affected by changes in the distance between the subject and the camera.

■ Fuzzy Logic ESP (Electro-Selective Pattern) Light Metering (Exposure Mode P)

ESP light metering measures the brightness of the central portion and peripheral portion of the frame separately in order to determine the proper exposure. The calculation program used is based on programmed data to properly compensate for backlighting. ESP light metering is used automatically when in the P (Program) mode.

■ Center-Weighted Average Light Metering (Exposure Mode A or M)

Center-weighted average light metering is the most widely used light metering system (Fig. A). This system measures the light available throughout the frame with special emphasis on the center of the frame. When in A (Aperture-preferred) or M (Manual) mode, this light metering system is automatically activated. When the contrast between bright and dark areas is not too extreme outside the center of the frame, this system offers excellent results.



■ Spot Metering

Spot metering (Fig. B) measures the brightness at the center of the frame only. Because this metering system calculates the correct exposure for only one point, it is convenient when the subject is backlit or the picture contains strong contrasts. When shooting a subject in front of an extremely bright background, you should use spot-metering on the subject's face. To properly expose white objects, use spot metering and then press the + side of the exposure compensation button. To properly expose black objects, use spot metering and then press the – side of the exposure compensation button.
Spot metering can be used in any of the P, A or M exposure modes.

EXPOSURE COMPENSATION

■ Fixed Proper Exposure

Proper exposure refers to the balance of light and dark in a photo. When shooting a black and white wall, the exposure will be based on the average ratio of black and white — thus the overall exposure is set for gray. This is technically called "fixed proper exposure." A good example of this is a subject with a strongly lit background. The reason the subject turns out dark is because there is more brightness than darkness in the frame. Therefore, the fixed proper exposure is based on the total level of light in the photo, which is significantly brighter than the subject. In the case of strong backlighting, the exposure needs to be adjusted to compensate for the excessive brightness.
Adjusting the exposure to accommodate lighting conditions is called exposure compensation. When ESP light metering is used, the camera automatically evaluates the lighting situation and compensates for the proper exposure, so manual exposure compensation is not needed.

■ Exposure Compensation

With the IS-2000, ±4EV exposure compensation in 1/3 EV steps is possible. + Compensation will make a subject appear brighter, while – compensation will make a subject appear darker. Under backlit conditions you'll want to make your subject appear brighter (+1 to +2EV). For shooting winter snow scenes, you may want adjust the exposure for addtional definition (+2EV). Or, suppose your picture is composed of a black wall, (–2EV) compensation would most likely be appropriate.

FILM SPEED

■ Film Speed

Film speed is indicated on the back of film packages. ISO 100, ISO 200, and ISO 400 are the most common. High-speed film (ISO 400), as implied by its name, is for taking photos of fast-moving subjects in action shots, for example. However, there are also other advantages. With high-speed film, such as ISO 400, it is possible to take pictures in lower light. And the distance covered by the flash will be greater.
With this camera, we recommend the use of "DX" film cartridges: ISO 25, 32, 50, 100, 200, 400, 800, 1600, and 3200. In the case of non-DX-coded film, the camera will automatically be set to film speed ISO 32. Also, films with intermediate speeds such as ISO 64, 160, and 1000 are automatically set to the next lower speed. When using intermediate film, use the exposure compensation.

ISO 64: –0.3 EV; ISO 160: –0.7 EV;
ISO 1000: –0.3 EV

MACRO PHOTOGRAPHY

■ Zoom Macro

The IS-2000 has an automatic macro function that enables you to shoot subjects as close as 0.6 m (2 ft) when the focal length is set from 35mm to 100mm. The autofocus and built-in flash can also be used with this function, which can fill the frame with an area of approx. 15 x 22 cm (5-7/8 x 8-11/16 in) at a working distance of 0.6m (2 ft) with the focal length set to 100mm. The picture area can be adjusted by changing the focal length and working distance. The range in which the zoom macro is effective is indicated on the lens barrel. So, if you want to shoot a subject closer than 1.2m (3.9 ft) when the lens is at a telephoto setting greater than 100mm, zoom out to a wide-angle setting to position the lens within the zoom macro range.

■ Super Macro

The Super Macro mode is ideal when you want to fill the frame with a small subject. In this mode, the focal length is fixed at 70mm, and shooting is possible as close as 0.39 m (15-3/8 in) to the subject. With this function, an area approx. 12 x 18 cm (4-3/4 x 7-1/16 in) can fill the entire frame, and the picture can be adjusted by changing the camera-to-subject distance. The autofocus and built-in flash can be used with this mode. To prevent blurry pictures caused by shaking the camera, use of the built-in flash is recommended. The camera can focus as far as infinity in this mode, so you'll never miss a photo opportunity.

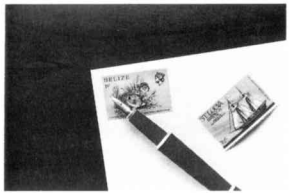
■ IS/L LENS A-LIFE SIZE MACRO H.Q. CONVERTER f=13cm (Optional)

This is a dedicated close-up converter that lets you capture life-size images of small subjects on film (when the focal length is 135mm), for genuine macro photography. When standard-size prints are made, the images become approx. 3 times bigger. The picture area can be changed between approx. 2.4 x 3.6 cm (life-size) and 9 x 13 cm (15/16 x 1-7/16 in and 3-9/16 x 5-1/8 in). When the 1:1 Macro mode is engaged, the built-in flash will give perfect results in the Auto Flash mode. The camera automatically determines the working distance, which is one of the most difficult aspects of macro photography. The camera's autofocus system also takes care of fine focus adjustments. Now, anyone can perform advanced macro photography that would otherwise require a special flash unit and advanced photographic experience.

■ IS/L LENS A- MACRO H.Q. CONVERTER f=40cm (Optional)

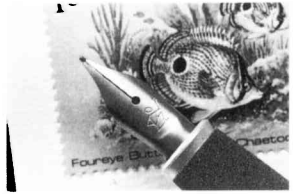
This is a close-up lens that lets you fill the frame with an area approx. 6 x 9 cm (2-3/8 x 3-9/16 in), about the size of an ordinary business card. This converter can be used with the Aperture-Preferred Auto Exposure mode and the Manual Flash mode. Autofocus also works when using this mode, making it ideal for macro photography beginners.

Super Macro



Converter f=40cm

1:1 Macro f=13cm

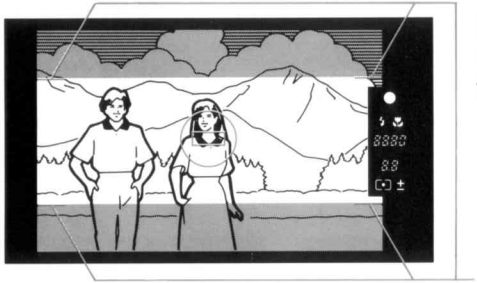


■ Picture Area

Size sample	A4	A5	Post card	Cigarette pack							Working Distance (cm) (in)
Area (mm)	360X240	180X120	120X80	90X60	72X48	60X40	51X34	45X30	40X27	36X24	
(in)	14-3/16 x 9-7/16	7-1/16 x 4-3/4	4-3/4 x 3-1/8	3-9/16 x 2-3/8	2-13/16 x 1-7/8	2-3/8 x 1-9/16	2 x 1-5/16	1-3/4 x 1-3/16	1-9/16 x 1	1-7/16 x 15/16	
Magnification	0.1X	0.2X	0.3X	0.4X	0.5X	0.6X	0.7X	0.8X	0.9X	1X	
Zoom Macro f=35mm											60~∞ (2-3/8"~∞)
Zoom Macro f=100mm											60~∞ (2-3/8"~∞)
Super Macro f=70mm											39~∞ (1-9/16"~∞)
Converter f=40cm											43~56 (1-11/16"~2-3/16")
1:1 Macro f=13cm											25~29 (1"~1-1/8")

PANORAMA PHOTOGRAPHY (OPTIONAL)

By mounting the optional IS/L PANORAMA ADAPTER inside the camera, panorama pictures can be taken. Zoom in and out with the adapter mounted to obtain various compositions. When the optional IS/L LENS A-28 H.Q. CONVERTER 0.8X is used with the adapter, wide-angle panorama photography is possible, adding extension and depth to pictures.



Picture area is shown with panorama marks as illustrated on the left.

Panorama marks

Notes:
- When the adapter is mounted, the entire roll of film must be shot as panorama-format pictures.
- Panorama prints generally take longer to get processed than ordinary prints.
- Availability of Panorama-format film processing facilities varies according to area. Consult your local film processor or camera dealer for details.

ACCESSORIES (OPTIONAL)

IS/L LENS A-200 H.Q. CONVERTER 1.5X

IS/L LENS A-28 H.Q. CONVERTER 0.8X

IS/L LENS A-LIFE SIZE MACRO H.Q. CONVERTER f=13cm

IS/L LENS A-MACRO H.Q. CONVERTER f=40cm

Electronic Flash G40

IS/L PANORAMA ADAPTER

Soft Case A

Grip Strap A

M-Remote Cord 1.2m/5m

Variable Dioptric Adapter A

- +2 ~ 0

- 0 ~ −2

- −2 ~ −4

CARE AND STORAGE

CAUTIONS

- DO NOT EXPOSE THE CAMERA TO EXTREME HEAT (OVER 40°C/104°F) OR TO EXTREME COLD (BELOW −10°C/14°F).
- AVOID SUDDEN TEMPERATURE CHANGES AND HUMIDITY.
- DO NOT EXPOSE THE CAMERA TO STRONG MAGNETIC FIELDS.
- DO NOT APPLY EXCESSIVE FORCE TO THE CAMERA OR ITS CONTROLS.
- DO NOT TOUCH THE CONTACT POINTS INSIDE THE CAMERA.
- DO NOT USE ORGANIC SOLVENTS, THINNERS, OR BENZINE TO CLEAN THE CAMERA.
- AVOID STRONG IMPACTS CAUSED BY BUMPING OR DROPPING THE CAMERA.
- DO NOT EXPOSE THE CAMERA TO WATER, SUCH AS FROM RAIN.
- DO NOT EXPOSE THE CAMERA TO DUST AND SAND.

WARNING

- NEVER ATTEMPT TO DISASSEMBLE THE CAMERA; IT CONTAINS A HIGH-VOLTAGE CIRCUIT.

In case of malfunction, consult your nearest Olympus dealer or Olympus service center.

BATTERY HANDLING

NOTES

- Do not mix different types of batteries or new and old batteries.
- When the camera is not used for an extended period of time, remove the batteries.
- Keep spare batteries on hand when going on a long trip or to a cold area.
- Sweat, oil, and so on can prevent a battery's terminals from making electrical contact. To avoid this, wipe both terminals before loading batteries.

WARNINGS

- NEVER TRY TO DISASSEMBLE, RECHARGE, OR SHORT CIRCUIT BATTERIES. NEVER EXPOSE BATTERIES TO EXCESSIVE HEAT OR OPEN FLAMES.
- KEEP THE BATTERIES OUT OF THE REACH OF CHILDREN. IF A CHILD SWALLOWS A BATTERY, CONTACT A DOCTOR IMMEDIATELY.
- USE TWO 3V LITHIUM BATTERIES (CR123A OR DL123A). NEVER TRY TO DISASSEMBLE OR MODIFY ANY BATTERY OR BATTERY PACK FOR USE IN THIS CAMERA.

TROUBLESHOOTING

Operating Problems

Symptom	Cause	Remedy	See
The camera does not work.	① The power is OFF. ② The batteries are loaded incorrectly. ③ The batteries are exhausted. ④ The batteries are temporarily unable to function. ⑤ The loaded film has been rewound. ⑥ The film is incorrectly loaded.	① Set the power switch to ON. ② Reload the batteries correctly. ③ Replace the batteries with new ones. ④ Keep the camera warm while using it. ⑤ Load new film. ⑥ Reload the film.	p.16 p.8 p.9 p.19 p.15
The displays turn off suddenly.	① The LCD panel and viewfinder displays turn off after approx. 30 sec. (5 min. when the flash is flipped up) if the camera is not used.	① Press the shutter release button halfway to turn on the displays.	p.16
The shutter speed and aperture setting blink.	① When the light metering function of the camera does not work correctly because it's too dark, these indicators start blinking. In the Manual Exposure mode, ± also blinks. ② If the camera-to-subject distance is too great when the flash is used,. they start blinking	① Use the flash. ② Move the camera closer to the subject.	p.23 p.24
The subject cannot be focused.	① When the subject is moving too fast, the camera is being shaken, or the subject is difficult for autofocus to lock on (refer to p.57), the autofocus may not work. ② The subject is closer than the camera's minimum working distance (0.6 m/2 ft with 35~100mm or less than 1.2m/3.9ft with 100~.135mm) ③ When the PF mode is engaged, autofocus will not operate even though the shutter release button is pressed.	① Focus on the subject by using the power focus, or by first focusing on something at the same distance as the subject. ② Use the Super Macro mode. ③ Cancel the PF mode.	p.57 p.30 p.50

Symptom	Cause	Remedy	See
The camera doesn't focus on the subject even though the AF illuminator lights.	① The autofocus may not work when the subject is out of the AF illuminator's working distance (approx. 1.2 ~ 6 m/3.9 ~ 20 ft) or when the subject has low contrast (blue or black).	① Use the power focus, or move the camera closer to the subject.	p.29
The shutter doesn't release even when the shutter release button is pressed.	① The subject is not in focus. ② The rewound film is still loaded.	① Make sure the subject is in focus and the autofocus indicator in the viewfinder lights. ② Remove the film.	p.18 p.19
The flash doesn't fire	① ϟ doesn't light in the viewfinder. ② The shutter speed is set at 1/125-sec. or faster. ③ The flash has been used repeatedly.	① Press the shutter release button halfway to light ϟ. ② Set the shutter speed at 1/100-sec. or slower. ③ Wait until ϟ lights.	p.23 p.48 p.23

Problems with Printed Pictures

Symptom	Cause	Remedy	See
The subjects' eyes appear red in printed pictures.	① This "red-eye phenomenon" occurs with all cameras when a flash is used. It is caused by light from the flash reflecting off retina at the back of the eye. Red-eye varies depending on the individual and the shooting conditions such as ambient lighting. It is also more likely to occur when using 135mm telephoto than when using wide-angle focal lengths.	① Use the Auto-S Flash mode to significantly reduce red-eye phenomenon.	p.25
The subject was within the frame of the viewfinder, but its edges are missing on the print.	① When a negative is enlarged, sometimes the edge of the frame is not printed.	① Leave some room on the edges of the frame when you compose your shots.	
The film is scratched.	① Film particles have accumulated along the path that the film follows as it is wound due to extended use of the camera.	① Clean the inside of the camera.	
The picture is out of focus.	① The camera moved when the shutter release button was pressed. ② The viewfinder's autofocus frame was not positioned on the subject.	① Hold the camera correctly, and press the shutter release button gently. ② Position the autofocus frame on the subject, or use the focus lock.	p.10 p.20
The picture is too dark.	① The subject was out of the working range of the flash. ② The subject was backlit.	① Shoot within the working range of the flash. ② Set the flash to Fill-In mode.	p.24 p.26

QUESTIONS AND ANSWERS

Q: How long will the batteries last?
A: Two new 3V lithium batteries will last for roughly 25 rolls of 24-exposure film on which the flash was used on half of all the shots (determined under Olympus test conditions). If you do not use the flash and zoom very often, the batteries will last much longer.

Q: How should I store the camera?
A: Cameras are susceptible to damage caused by dust, moisture, and salt. Wipe and dry the camera thoroughly before storing it. After using it at the beach, wipe it with a cloth that has been moistened with fresh water and then wrung out. Do not use mothballs.

Q: Can the M-Quartz Remote Controller 1 be used?
A: No, it cannot.

Q: When does the camera measure and set the exposure?
A: When the shutter release button is pressed halfway, the camera measures both the exposure and the focus and then locks them as long as the shutter release button remains halfway depressed. In the Spot Metering mode, the exposure is locked when the spot button is pressed.

Q: How should I clean the lens?
A: Wipe the lens gently with lens cleaning tissue that has been moistened with a small amount of lens cleaning fluid.

SPECIFICATIONS

Type: Fully automatic 35mm autofocus single-lens reflex camera with built-in 35mm ~ 135mm zoom lens.
Film format: 35mm standard DX-coded film (24 X 36mm)
Lens: Olympus lens (filter available, 49mm filter diameter) 35mm ~ 135mm F4.5 ~ 5.6, 16 elements in 15 groups (5-group zoom construction) with extraordinary dispersion (ED) glass at third element in the first zoom lens group.
Shutter: Electronic control system vertical focal plain shutter. Shutter speed 1/2000-sec. ~ 15-sec. bulb.
Focusing: TTL phase-difference detection system autofocus with focus lock, AF illuminator automatically lights up in low light. Manual focusing available (power focus). Focusing range — 0.6m (2 ft) ~ ∞ at 35 ~ 100mm; 1.2m (3.9 ft) ~ ∞ at 100mm or larger; 0.39m (1.3 ft) ~ ∞ in Super Macro mode.
Viewfinder: Single-lens reflex system, magnification ratio 0.75 (at 50mm). Finder view-field — 85% of actual view-field.
Viewfinder information: Autofocus frame, spot frame, panorama marks, autofocus indicator, flash indicator (to be used as flash warning), shutter speed, aperture setting, spot metering, macro, exposure compensation (manual exposure).
Light metering system: TTL light metering system — Fuzzy logic ESP light metering, center-weighted average light metering, spot metering.
Exposure modes: (1) Program AE (Standard, Sports, Portrait, Night-Scene), (2) Aperture-preferred AE, (3) Manual exposure.
Exposure compensation: ±4 EV compensation possible (1/3 EV step).
Exposure counter: Progressive type, displayed on LCD panel.
Film speed range: Automatic setting with DX-coded film (ISO 25, 32, 50, 100, 200, 400, 800, 1600, 3200. Other intermediate film speeds will be automatically set for next lower speed).
Film loading: Automatic loading (automatically advances to first frame when camera back is closed).

Film advance: Automatic film winding, consecutive winding max. 2.3 frames/sec. (in PF mode, under Olympus test conditions), double exposure possible.
Film rewind: Automatic film rewind (automatic rewind activated at end of film, automatic rewind stop). Rewind is possible at any point with rewind button.
Selftimer: Electronic selftimer with 12-sec. delay.
Flash: Built-in IVP (Intelligent Variable-Power) flash system with dual light emitting tubes. Manual activating system, recycling time of about 3.5 sec. (at normal temperature). Light emission: Automatic — ISO 100 · m of GN 20 / ISO 100 · ft of GN 66, Manual — ISO 100 · m of GN 15 / ISO 100 · ft of GN 50
Flash range: Wide — 0.6 ~ 4.6 m (2 ~ 15.1 ft), Tele — 1.2 ~ 5 m (3.9 ~ 16.4 ft) with ISO 100 negative color film; Wide — 0.6 ~ 9.2 m (2 ~ 30.2 ft), Tele — 1.2 ~ 10 m (3.9 ~ 32.8 ft) with ISO 400 negative color film, Flash available in Super Macro mode.
Flash modes, Auto (automatic flash activation in low-light), Auto-S (red-eye reducing, same as Auto otherwise), Fill-In (forced activation), Manual.
Battery check: Displayed on LCD panel.
Power source: Two 3V lithium batteries (CR123A or DL123A) (replaceable).
Dimensions: 117(W) X 91(H) X 155(D) mm (4-5/8 X 3-9/16 X 6-1/8 in) (excluding protrusions).
Weight: 890 g (31.4 oz) (without batteries).

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT ANY NOTICE OR OBLIGATION ON THE PART OF THE MANUFACTURER.