**If you find this manual useful, how about a donation of $3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your E-mail address too so I can thank you. Most other places would charge you $7.50 for a electronic copy or $18.00 for a hard to read Xerox copy. These donations allow me to continue to buy new manuals and maintain these pages. It'll make you feel better, won't it?**

**If you use Pay Pal, use the link below. Use the above address for a check, M.O. or cash.** Use the E-mail of butkusmi@ptd.net for PayPal.


back to my “Orphancameras” manuals /flash and light meter site

Only one “donation” needed per manual, not per multiple section of a manual !
The large manuals are split only for easy download size.

# FLASH PHOTOGRAPHY IN THE MANUAL EXPOSURE MODE

**1.** Flip up the flash, and set the shutter speed to 1/100-sec. or slower.


**2.** Set the aperture setting according to the camera-to-subject distance in the table below.

Aperture setting (color negative film)

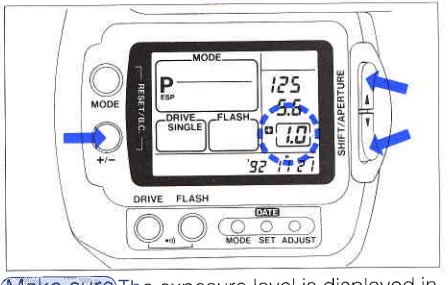
| | Zoom Macro | | | Standard | | | | |
|---|---|---|---|---|---|---|---|---|
| Distance | 0.6 ~ 0.8m | 0.8 ~ 1m | 1 ~ 1.2m | 1.2 ~ 1.5m | 1.5 ~ 2m | 2 ~ 2.5m | 2.5 ~ 3.2m | 3.2 ~ 4m |
| | 2.0 ~ 2.6ft | 2.6 ~ 3.3ft | 3.3 ~ 3.9ft | 3.9 ~ 4.9ft | 4.9 ~ 6.6ft | 6.6 ~ 8.2ft | 8.2 ~ 10.5ft | 10.5 ~ 13.1ft |
| ISO 50 | F22 | F16 | F13 | F11 | F8 | F6.7 | F5.6 | – |
| ISO 100 | | F22 | F19 | F16 | F11 | F9.5 | F6.7 | F5.6 |
| ISO 200 | – | – | – | F22 | F16 | F13 | F9.5 | F8 |
| ISO 400 | – | – | – | – | F22 | F19 | F13 | F11 |

Calculation formula for ISO 100: Aperture setting = GN20 ÷ Distance (m)
Aperture setting = GN66 ÷ Distance (ft)

# EXPOSURE COMPENSATION

The exposure compensation levels can be set up to ±4EV in 1/3EV steps.

1. While pressing the +/- button, set the desired compensation level using the shift buttons or shift dial.




Make sure The exposure level is displayed in the viewfinder and on the LCD panel.

Note: While pressing the +/- button, the exposure counter changes to the compensation level display.

+2EV

±0EV

-2EV

# USING THE DRIVE MODES DRIVE

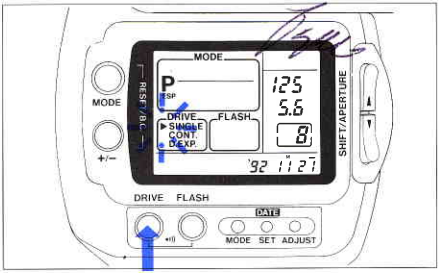
There are two film-advance modes in addition to the standard single-frame advance mode.

## Drive Modes

| Display | Function |
|---|---|
| SINGLE | **Single** Standard single-frame advance mode |
| CONT. | **Continuous Shooting** The camera releases the shutter continuously while keeping moving subjects in focus and correctly exposed. (p. 49) |
| D.EXP. | **Double Exposure** You can combine two images on a single frame. (p. 50) |

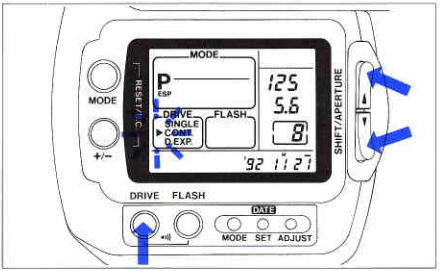
## Selecting the Drive Mode

1. Press the drive button.




The available modes appear, and ▶ blinks on the left of the mode currently engaged.

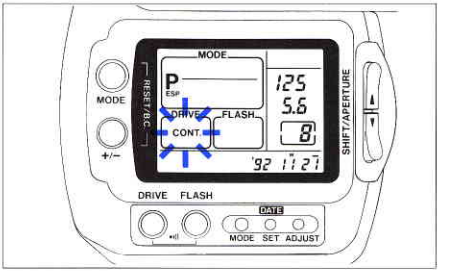
## 2. While pressing the drive button, select the mode using the shift buttons or shift dial.




Make sure

▶ is blinking on the left of the selected drive mode.

## 3. Release the drive button to engage the mode.




Make sure

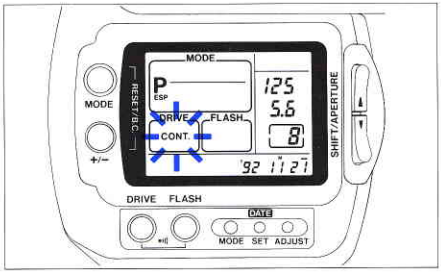
▶ disappears, and the engaged drive mode remains on the LCD panel.

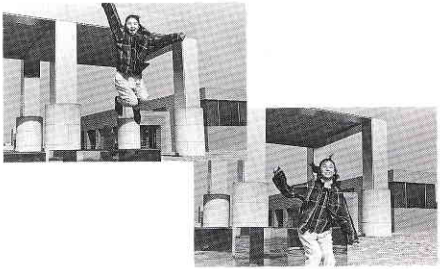
# CONTINUOUS SHOOTING CONT.

The camera releases the shutter continuously while keeping moving subjects in focus and correctly exposed.

1. Select the Continuous Shooting mode to display **CONT.** on the LCD panel.

2. While the shutter release button is fully pressed, the shutter releases continuously.



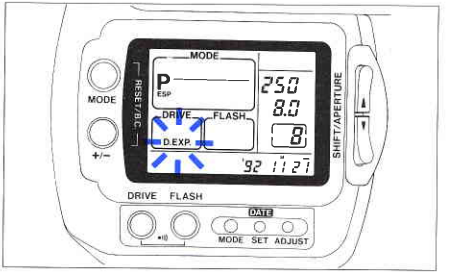
Notes:

- The camera exposes a maximum of approximately 2 frames per second.
- When used in combination with the flash, the flash may not fire after the second frame. The exposure will be adjusted automatically instead.
- The autofocus beep will not function even when the subject is in focus.

# DOUBLE EXPOSURE D.EXP.

You can expose two images on a single frame.

1. Select the Double Exposure mode to display **D.EXP.** on the LCD panel.




2. Press the shutter release button fully to take the first exposure.

Make sure

**D.EXP.** on the LCD panel will blink. The film will not be advanced.

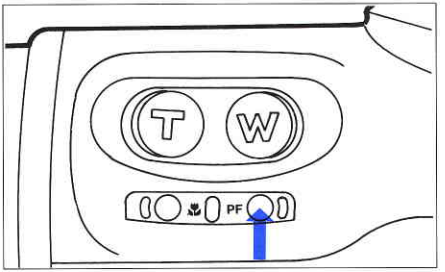
## 3. Take the second exposure. The film will advance, and the Double Exposure mode will be canceled.

Note: The Double Exposure mode cannot be canceled after the first shot (See p. 14).

# Power Focus PF

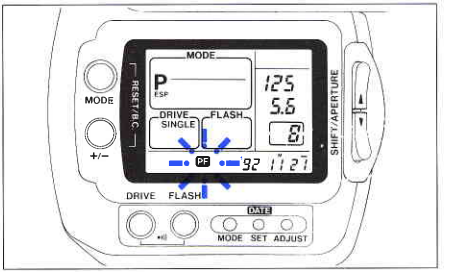
When the distance at which you want to shoot is predetermined, you can set the focus in advance and wait until the photo opportunity comes. Manual focusing is possible in this mode, so PF can also be used when autofocusing is difficult (see P. 70).

1. When you want to wait until the photo opportunity comes, focus on the subject first by using autofocus. Then press the PF button.




Note: Manual focusing is possible using the zoom buttons, but zooming cannot be performed in the PF mode. To cancel the PF mode, press the PF button again.

2. After making sure PF is blinking on the LCD panel, press the shutter release button when the photo opportunity comes.

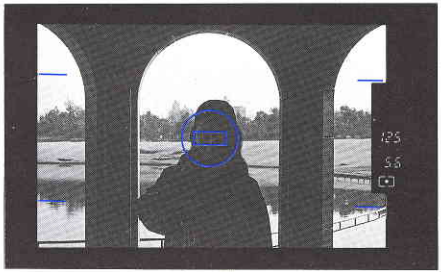


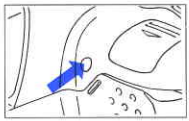

Note: There are two PF speeds, available for manual focusing, functioning in the same manner as the zoom.

# SPOT METERING

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

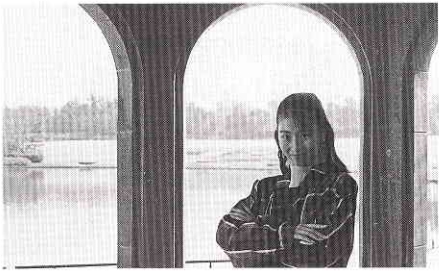
1. Position the subject for spot metering within the spot frame, and press the SPOT button.



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:

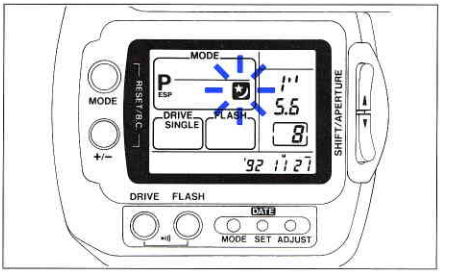
- When the flash is flipped up, or the Night Scene mode is engaged, the camera does not perform spot metering.
- After the shot, the Spot Metering mode is canceled. To cancel the mode without taking a shot, press the SPOT button again.

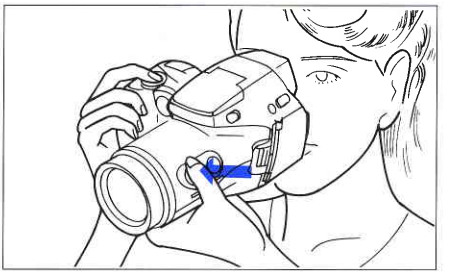
# ZOOM EXPOSURE

Using this mode, the film is exposed while zooming, resulting in intriguing "streaked" images.

1. Select the Night Scene mode to display on the LCD panel. Set the focal length where you want to start zooming.

2. While pressing the shutter release button halfway to keep the subject in focus, press either W or T on the zoom buttons.



Notes:
- This exposure method is most effective when the focal length is set at either the maximum (180 mm) or the minimum (35 mm) setting.
- Use the flash when photographing a person.

Note: The lens will not move until the shutter release button is fully pressed.

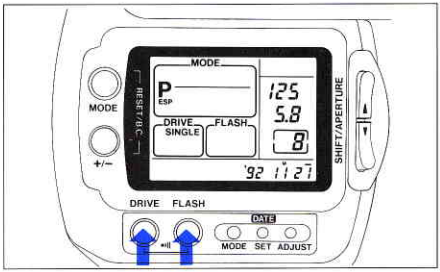
# AUTOFOCUS BEEP

When not required, the beep can be overridden.

**Press the drive and flash buttons simultaneously to override the beep. To reactivate it, press the buttons again.**

**3.** While keeping the zoom button depressed, press the shutter release button fully to take the picture.

Note: If the shutter speed is faster than 1/3-sec., zoom exposure will automatically be canceled, and the camera will operate in the standard Night Scene mode.

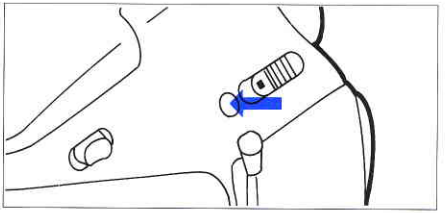



When overriding or reactivating the beep, a confirmation beep is heard.
Note: When the power is switched off and on again, the beep will be functioning.

# REMOTE CONTROL (OPTIONAL)

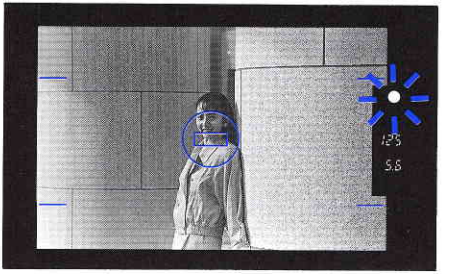
The optional RC-100 Remote Control is required.

1. Press the selftimer/remote control button to engage the Remote Control mode.



| Press | Display | Shutter will be: |
|---|---|---|
| Once | Lights | Released 3 sec. later |
| Twice | Blinks | Released right away |
| Thrice | Goes out | Canceled |

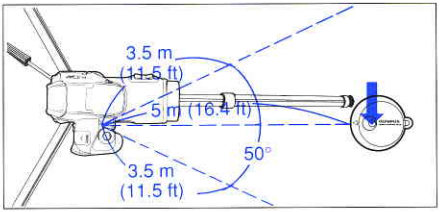
2. Position the autofocus frame on the subject.



Note: When there is no subject in the position you want to focus on, first focus on an object at the same distance as the desired position. Then enter the PF mode, and recompose the frame. (See page 52.)

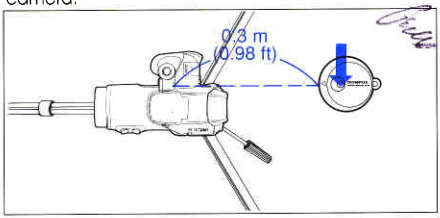
## 3. Aim the remote control at the camera from within the range shown in the illustrations below, and press the button. The shutter will be released after the autofocus beep is heard and the AF illuminator blinks.

When releasing the shutter from in front of the camera:




Notes:
- Use selftimer outside this range.
- When the IS/L B-28 H.Q. CONVERTER 0.8X is mounted, the remote control may not work even within the above range because the signal transmission is blocked by the converter.

When releasing the shutter from behind the camera:

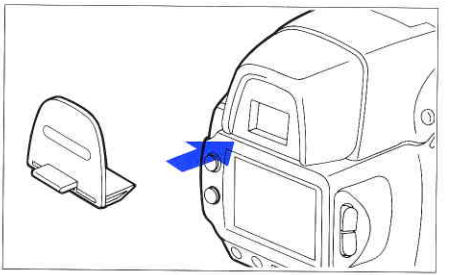



Notes:
- Use the remote control from behind the camera to prevent the camera from shaking by pressing the shutter release button when in macro photography or when the tele-converter is mounted.
- When using the remote control from behind the camera, aim at the remote control sensor on the top of the grip.

Important: After the shot(s), be sure to press the selftimer/remote control button again to cancel the Remote Control mode.

## ■ Viewfinder Cap

Use the provided viewfinder cap to prevent light from entering the viewfinder.



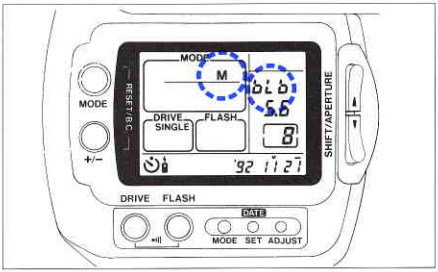
Notes:
- Place the viewfinder cap securely on the viewfinder.
- When the viewfinder cap is not used, the camera may not set the correct exposure or may not focus on the subject.

Notes on the Remote Control:
- The remote control may not work when there is backlighting and when autofocusing is difficult (see p. 70).
- Continuous shooting cannot be performed when the remote control is used.
- The shutter will not release using the remote control when the remote control's battery is exhausted.
- The battery of the remote control cannot be replaced. The service life is approx. 5 years (variable with operating conditions and environments).

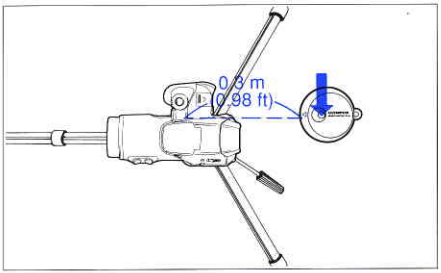
CAUTIONS:
- Keep the remote control out of the reach of children. In case it is swallowed, immediately consult a physician.
- Keep the remote control away from fire and extreme heat. Never try to disassemble it.

## ■ Bulb

1. Select the Manual Exposure mode to display **M** on the LCD panel, and set the shutter speed to **bLb**.



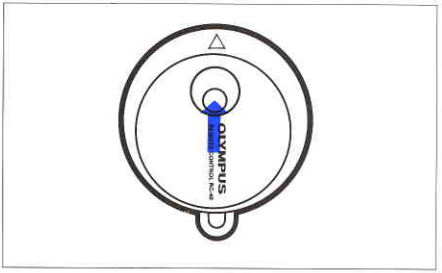

2. Press the button on the remote control.




The shutter will open.

Note: The selftimer/remote control display remains on the LCD panel as long as the shutter is open.

## 3. Press the button on the remote control again.




The shutter will close.

Note: The shutter automatically closes when the camera's batteries are exhausted.

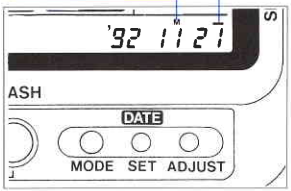
# PRINTING THE DATE AND TIME

There are five printing modes as shown below. Choose the desired mode with the DATE MODE button.

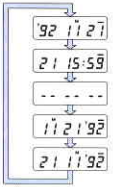
Month mark

Print mark

Blinks for 3 seconds after the exposure to confirm that the data is imprinted.




As the DATE MODE button is pressed, the mode will switch in the order shown below.




Year-month-day

Day-hour-minute

No data

Month-day-year

Day-Month-year

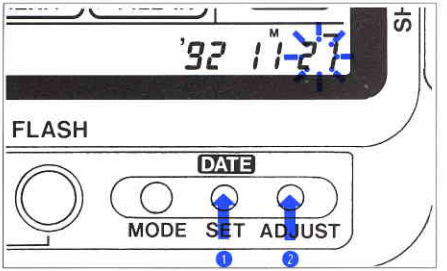
The data will be imprinted when the shutter is released.

**DATE MODE button:**
Switches the mode.
**DATE SET button:**
Chooses the data to be changed.
**DATE ADJUST button:**
Changes the data.

# CORRECTING THE DATA

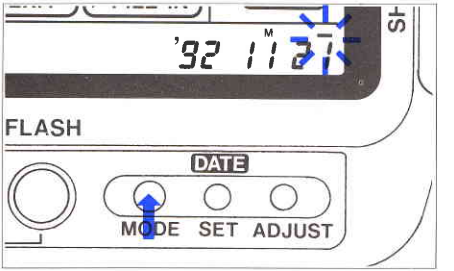
Press the DATE MODE button to select the mode to be corrected.

1. Choose the data to be changed by pressing the DATA SET button. Change the data with the DATE ADJUST button.




Make sure The data to be corrected is blinking.

2. After setting the data, press the DATE MODE button again.




Make sure The print mark is displayed.

Note: For fine-tuning of the built-in clock to the beginning of a specified minute, press the DATE ADJUST button when " : " is blinking.

# FLASH



**Flash Strength**

The flash on the IS-3DLX 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-3DLX 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-3DLX 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-3DLX 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 28 (ISO 100 · m)/ GN 92 (ISO 100 · ft)possible.

The lower tube is designed for telephoto photography and offers GN 28 ~ 1.4 (ISO 100 • m)/ GN 92 ~ 4.2 (ISO 100 • ft). The upper tube is an intelligent variable-power flash offering GN 20 ~ 1.4 (ISO 100 • m)/ GN 66 ~ 4.2 (ISO 100 • ft). When the camera-to-subject distance is less than 1.2 m in the Macro mode, the upper flash will automatically fire to prevent the flash light from being obstructed by the tip of the lens. 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. 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-3DLX 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 case, 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.

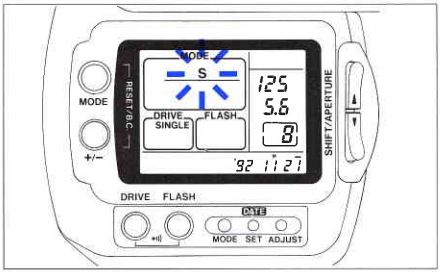
In this mode, the flash fires no matter what light is available as long as the flash is flipped up. (Flash emission in well-lit conditions is called daylight synchro.)

# Electronic Flash G40 (Optional)

The G40 is a dedicated flash for the IS Series (GN 40, ISO 100·m/GN 132, ISO 100·ft). Refer to these pages when the G40 is to be used in the Shutter-Preferred Auto mode.

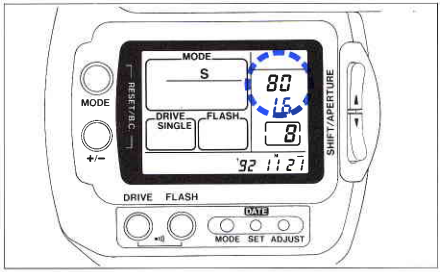
## ■ When shooting in the Shutter-Preferred Auto mode:

1. Turn the power switch ON, set the camera's exposure mode to S.



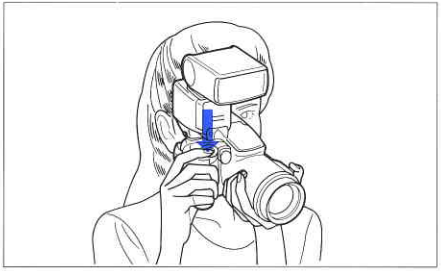

Make sure The battery has been recharged.

2. Select 1/100-sec. or slower shutter speed using the shift dial.




Note: The G40 won't fire at shutter speeds faster than 1/100-sec.

## 3. Press the shutter release button.

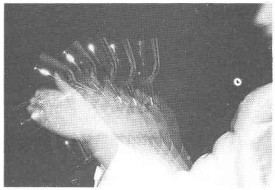


Note: When used together, the G40 fires full emission but the built-in flash is compensated by –3EV.

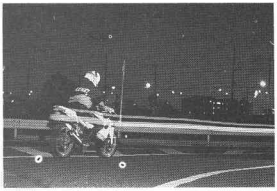
Refer to the G40's manual for more instructions.

# ■ Advanced flash photography using the G40

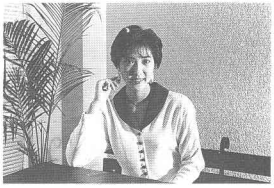
Multi Flash



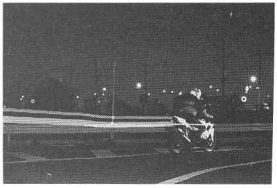
Normal Slow-Synchro
(Curtain-1 Synchro)



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



Follow-Synchro
(Curtain-2 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-3DLX is equipped with the teleconverter lens (1.7X) or the wide-converter (0.8X), the built-in flash cannot be used. We recommend you use the G40 for such cases.

# 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-3DLX, any focal length between 35 mm and 180 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.

- 100 mm

With the lens zoomed to 100 mm, subjects appear three times closer than when the lens is positioned at 35 mm.

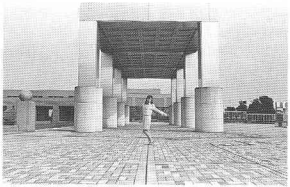
- More than 100 mm

When the lens is set to the maximum focal length of 180 mm, magnification is approximately five 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.

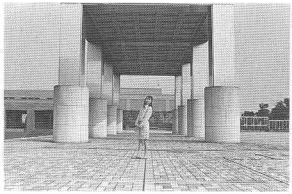
Maximum telephoto lengths are particularly useful for taking pictures at sporting events and for nature photography, when you want to get closer to your subject without disturbing it.

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

28mm  75°



35mm  63°



100mm  24°

●The five pictures below are samples taken using the zoom lens. Notice the dimensions of the subject as the camera zooms in.
●Be sure to hold the camera firmly or use a tripod, as pictures tend to blur more easily at longer focal lengths. Setting the shutter speed at 1/250-sec. or faster is recommended.

**Angle of view and depth of field**

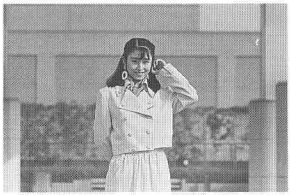
Angle of view is directly related to the focal depth of field (the distance in front of and behind the subject that the camera is able to bring into focus). The greater the angle of view (wide angle), the greater the depth of field. When the angle of view is narrow (telephoto), the depth of field decreases.

●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.

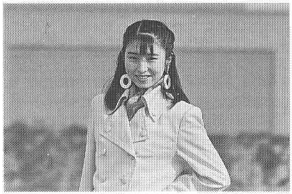
· Instead of 35 mm, a wide-angle converter (0.8X) enables you to reduce the camera's focal length to 28 mm.
Instead of 180 mm, a telephoto converter (1.7X) enables you to increase the camera's focal length to 300 mm.

IS/L LENS B-300 H.Q. CONVERTER 1.7X

180mm 14°



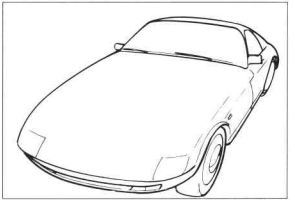
300mm 8°



## ■ Difficult Subjects for Autofocus to Lock Onto

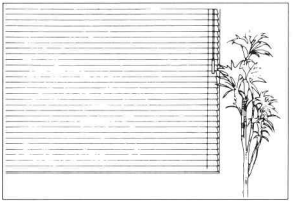
Although the IS-3DLX's autofocus can lock on virtually any subject, there are certain conditions, such as ① ~ ③ shown below, where it may not be possible to obtain the correct focus. In the situations shown below in ④ ~ ⑥, autofocus may not lock on the correct subject even though the autofocus indicator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

① Subjects with low contrast



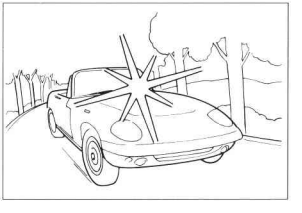
● Use the focus lock by first focusing on something at the same distance as the subject you wish to take a picture of, and then aim at the subject. Or use the power focus to manually focus on the subject.

② Subjects that do not contain vertical lines



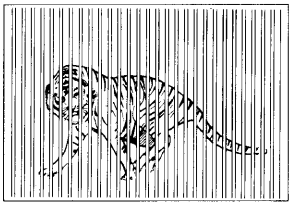
● Use the focus lock first while holding the camera vertically. Then switch the camera to the horizontal position to take the photograph. Or use the power focus to manually focus on the subject.

③ Subjects in excessively bright light



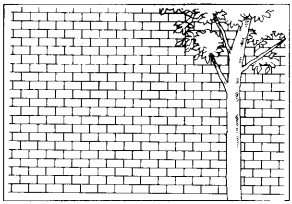
● Use the focus lock by first focusing on something at the same distance as the subject you wish to take a picture of, and then aim at the subject. Or use the power focus to manually focus on the subject.

④ Two subjects at different distances



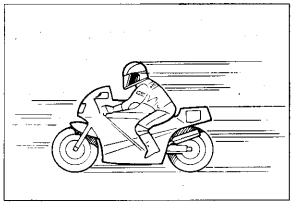
● When the subject looks out-of-focus although the autofocus lamp lights, use the power focus to manually focus on the subject.

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-3000 employs three types of automatic exposure modes: (1) programmed auto-exposure, (2) aperture-preferred auto-exposure, and (3) shutter-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.

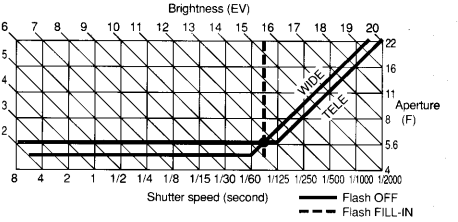
With aperture-preferred auto, you select the desired F stop, and the camera automatically selects the correct shutter speed. Aperture-preferred auto gives more artistic freedom of expression and creativity by selecting a desired F stop to control the blur of the background.

With shutter-preferred auto, you select the shutter speed, and the camera automatically selects the F stop. By changing the shutter speed, you can freeze a fast-moving subject or blur it to convey a sense of motion.

## ■ Program Chart (Standard Photography Mode)

The following program chart is for 35mm wide-angle and 180mm 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 change 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.14), 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.



**■ Portrait Mode**
In this mode, the IS-3DLX chooses a wide aperture for a short depth of field. This results in a softly blurred subject background, against which your subject stands out in sharp focus.

**■ 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-3DLX'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.

**■ Landscape Mode**
This mode is ideal when you want to focus on both the subject and the background or when you want to shoot natural scenery with low contrast. The camera automatically stops down the aperture to make the range of focus as large as possible. In shooting conditions for this mode, the subjects are likely be at a distance of ∞ (infinity), so the autofocus function in this mode starts from the ∞ position.

# METERING THE AMOUNT OF LIGHT

## ■ Light Metering

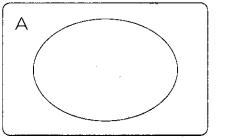
Light metering can measure the brightness of the framed picture in various ways. The IS-3DLX employs three metering systems: (1) ESP light metering , (2) center-weighted average light metering, and (3) spot metering. The IS-3DLX allows you to select the light metering system most suitable in any photographic situation.
At the same time, the IS-3DLX 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.

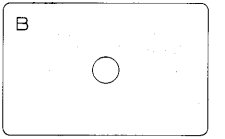
## ■ Center-Weighted Average Light Metering (Exposure Mode A or M)

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), S (Shutter-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, S 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-3DLX, ±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 additional 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 ~ 5000. In the case of non-DX-coded film, the camera will automatically be set to film speed ISO 32.

# MACRO PHOTOGRAPHY

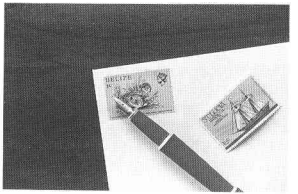
## ■ Zoom Macro

The IS-3DLX's Macro mode enables you to shoot subjects as close as 0.6 m (2 ft) when the focal length is set from 35mm to 120mm. The autofocus and built-in flash can also be used with this function, which can fill the frame with an area of approx. 12 x 18 cm (4-3/4 x 7-1/16 in) at a working distance of 0.6m (2 ft) with the focal length set to 120mm. The picture area can be adjusted by changing the focal length and working distance.

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

This is a close-up lens that lets you fill the frame with an area approx. 4.4 x 6.4 cm (1-3/4 x 2-5/8 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.

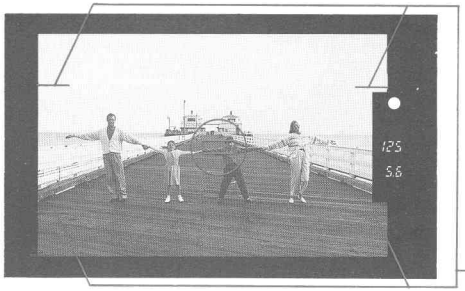
Zoom Macro at 120mm




Converter f=40cm at 180mm

# 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 B-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 B-300
H.Q. CONVERTER
1.7X

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

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

Electronic Flash
G40

Grip Strap B

REMOTE CONTROL
RC-100

IS/L PANORAMA
ADAPTER

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.<br>② The batteries are loaded incorrectly.<br>③ The batteries are exhausted.<br>④ The batteries are temporarily unable to function.<br>⑤ The loaded film has been rewound.<br>⑥ The film is incorrectly loaded. | ① Set the power switch to ON.<br>② Reload the batteries correctly.<br>③ Replace batteries with new ones.<br>④ Keep the camera warm while using it.<br>⑤ Load new film.<br>⑥ Reload the film. | p.17<br>p.10<br>p.11<br><br><br>p.21<br>p.17 |
| 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.18 |
| 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. | ① Use the flash. | p.26 |
| The subject cannot be focused on. | ① When the subject is moving too fast, the camera is being shaken, or the subject is difficult for autofocus to lock onto (refer to p.70), the autofocus may not work.<br>② The subject is closer than the camera's minimum working distance.<br>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.<br>② Use the Macro mode.<br>③ Cancel the PF mode. | p.70<br>p.22<br><br>p.32<br>p.52 |

| 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 ~ 7 m/ 3.9 ~ 23 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.52/70 |
| The shutter doesn't release even when the shutter release button is pressed. | ① The subject is not in focus.<br>② The rewound film is still loaded. | ① Make sure the subject is in focus and the autofocus indicator in the viewfinder lights.<br>② Remove the film. | p.20<br>p.21 |
| The flash doesn't fire | ① The battery has not been recharged.<br>② The shutter speed is set at faster than 1/100-sec. (except in the Manual Exposure and Portrait modes). | ① Wait until ϟ lights.<br>② Set the flash mode to one other than Fill-In. | p.26<br>p.29 |
| The zooming speed does not get faster even when the zoom button is fully depressed. | ① As the batteries get exhausted, the fast zooming speed becomes slower, and the difference between the fast and slow zooming speeds becomes smaller. | ① Check the batteries on the LCD panel. If the display blinks, replace the batteries. | p.11 |

**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 the 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.28 |
| 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 Sand or dust is lodged in the film path.<br>② Film particles have accumulated inside the camera. | ① Clean the film path while taking care not to damage the shutter curtains.<br>② Consult your nearest Olympus dealer or Olympus service center. | |
| The picture is out of focus. | ① The camera moved when the shutter release button was pressed.<br>② The viewfinder's autofocus frame was not positioned on the subject. | ① Hold the camera correctly, and press the shutter release button gently.<br>② Position the autofocus frame on the subject, or use the focus lock. | p.12<br>p.22 |
| The picture is too dark. | ① The subject was out of the working range of the flash.<br>② The subject was backlit. | ① Shoot within the working range of the flash.<br>② Set the flash to Fill-In mode. | p.27<br>p.29 |

# QUESTIONS AND ANSWERS

**Q: How long will the batteries last?**
A: Two new 3V lithium batteries will last for roughly 20 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: 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 ~ 180mm zoom lens.

Film format: 35mm standard DX-coded film (24 X 36mm)

Lens: Olympus lens (filter available, 55mm filter diameter) 35mm ~ 180mm 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. Autofocus beep available. Manual focusing available (power focus). Focusing range — 1.2 m (3.9 ft) ~ ∞; 0.6 m (2 ft) ~ ∞ in Macro mode at 35 ~ 120 mm.

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, Landscape), (2) Aperture-preferred AE, (3) Shutter-Preferred AE, (4) 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 ~ 5000).

Film loading: Automatic loading (automatically advances to first frame when camera back is closed).

Film advance: Automatic film winding, consecutive winding max. 2 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.
Remote control (optional): Infrared remote control unit, 3-sec/0-sec. delay switchable).
Flash: Built-in IVP (Intelligent Variable-Power) flash system with dual light emitting tubes. Manual activating system, recycling time of about 5 sec. (at normal temperature). Light emission, Automatic; ISO 100 · m of GN 28 / ISO 100 · ft of GN 92, Manual; ISO 100 · m of GN 20 / ISO 100 · ft of GN 66
Flash range: Wide — 1.2 ~ 6.3 m (3.9 ~ 20.7 ft), Tele — 1.2 ~ 7 m (3.9 ~ 23 ft) with ISO 100 negative color film; Wide — 1.2 ~ 12.6 m (3.9 ~ 41.3 ft), Tele — 1.2 ~ 14 m (3.9 ~ 45.9 ft) with ISO 400 negative color film. Flash available in 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: 122(W) X 93(H) X 173(D) mm (4.8 X 3.7 X 6.8 in) (excluding protrusions).
Weight: 960 g (33.9 oz) (without batteries).

Specifications are subject to change without any notice or obligation on the part of the manufacturer.