

OLYMPUS OM 3 FA

For Your Creative Photography (B)



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WHAT IS "CREATIVE EXPOSURE"?

By Akio Kojima

Have you always been satisfied with your image when you determined the exposure as indicated by the camera's manual exposure meter or on an Automatic Exposure (AE) system?

We guess you have probably been satisfied to a certain degree, but you may have sometimes had experiences of being disappointed because the image on your picture did not come out as you imagined, especially when you took pictures with backlighting or other special lighting conditions, or when you photographed to express your individual or specific feelings.

Color reversal films, in particular, allow for only a narrow latitude of exposure so that in many cases satisfactory results are not obtained with a simple exposure. Generally speaking, the results of a camera's light meter represent exposure values obtained by a metering system that has been specifically adopted for that camera. They do not always represent data as the result of analytical measurement of various conditions such as the subject's brightness range and distribution as well as contrast. In actual shooting conditions, however, there is often a very wide brightness range (luminance range) from the brightest spot to the darkest spot in a picture. In some landscapes, for example,



there is sometimes a difference of 8 Exposure Values (EV) in the brightness range of a picture, representing a brightness/darkness ratio of more than 1: 200. The subject brightness range that a film can reproduce (or an effective exposure range of a film) is limited to about 4-5 EV. Therefore. it is in many cases impossible to reproduce the subject in its entire exactly on the film. The Exposure system on ordinary cameras generally consists of metering an exposure value through a simple operation of the exposure meter in combination with the film speed. If we speak in terms of photography as a means of communication, however, you must control the tone of the picture according to the subject motive and expression you want to portray in your picture. For this purpose, it will be necessary to choose the exact spot on which you want to emphasize the desired tone and match this spot to the effective exposure range of a film.

To meet such exposure requirements, there are the following three types of exposure available.

The center-based exposure is the most standard type of exposure. By matching the center of the subject's brightness range to the center of the film's effective exposure range, the subject is reproduced with greater emphasis on that center measured tone.

If the brightness range is greater than the range of the film, the extremes will be ignored.

The shadow-based exposure gives the highest priority to the shadow area in the subject brightness range. The tone in the highlight area that is not covered may be ignored. The highlight-based exposure, on the contrary, gives the highest priority to the highlight area. This exposure allows the shadow area to come out somewhat darker.

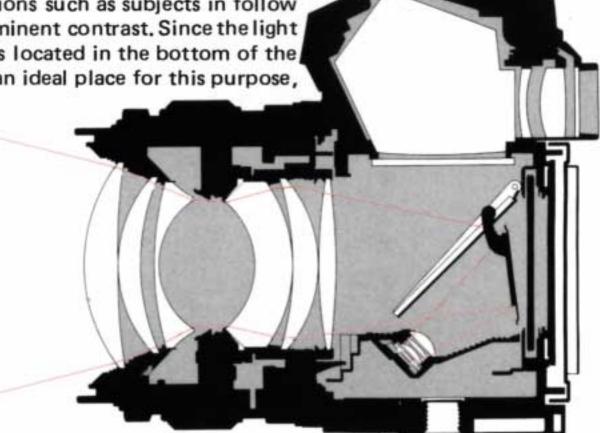
Advanced photographers oriented for creative photography have so far selected their exposure using such way of thinking. Measuring the values on several important spots of the image with a hand-held spot meter, they have usually had to take the troublesome and time consuming steps necessary to calculate the exposure mentally. Hopefully if they did everything right, the image would be exposed properly.

Equipped with a newly developed spot metering system and built-in computer, the OM-3 calculates the correct exposure value automatically to free the photographer from these troublesome exposure calculations. With this camera, anyone can now get high-precision, "creative" exposure control with ease.

CENTER-WEIGHTED, AVERAGED LIGHT METERING

The basic metering method of the OM-3 is centerweighted, averaged light metering. Instead of measuring the light intensity uniformly over the entire area of the picture frame, it measures the light, placing slight emphasis on the central area. Thus, the main subject in the center is less affected by a brighter or darker areas on the edge. This metering method is very convenient in the majority of ordinary shooting conditions such as subjects in follow light or with less prominent contrast. Since the light sensor of the OM-3 is located in the bottom of the mirror box which is an ideal place for this purpose,

the amount of light that strikes the light sensor does not change even when the focusing screen is changed. Therefore, light metering is always accurate with any focusing screen. It also has the advantage of not being affected by stray light entering through the eyepiece.



SPOT METERING (1)



This spot metering system measures the brightness of the central spot of the picture frame (2% of the entire frame).

The center-weighted average metering provides correct exposure for subjects in follow light and in pictures having a nearly uniform brightness on the entire frame. Exposure compensation is necessary, however, for backlighted subjects and in compositions using special lighting in which there is a difference in brightness between the subject and background. In some cases, it would also be desirable to express subtle lighting effects according to

the photographer's subject motive. To realize such sophisticated expressions, fine metering of various spots on the subject is required. If the "Spot" button of the OM-3 is pressed, the metering mode switches to spot metering in which the brightness of the area (corresponding to the microprism section in the center of the viewfinder) is metered and

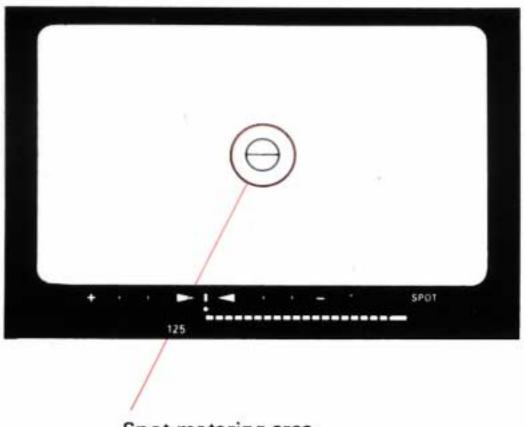
stored in memory. By using this spot metering, photographers can control exposure as desired to realize creative lighting compositions.



SPOT METERING (2)

To ensure correct operation of the spot metering:

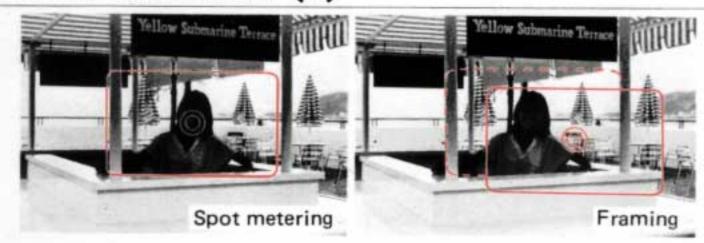
- In spot metering, it is necessary to put the area to be metered in the microprism section. If there is a brighter spot in the microprism section than the main subject, the metering value will be affected.
- 2 If a lens is changed, the light receiving angle for spot metering also changes automatically. The angle is narrower with telephoto lenses, and wider with wide angle lenses. However, the metering area seen in the viewfinder does not change.



Spot metering area

SPOT METERING (3)







When you point the camera at the most important portion of your subject and press the "Spot" button, it measures the light intensity of this area and stores the metered value in memory. With this value stored in memory, you can freely choose your framing of the subject.

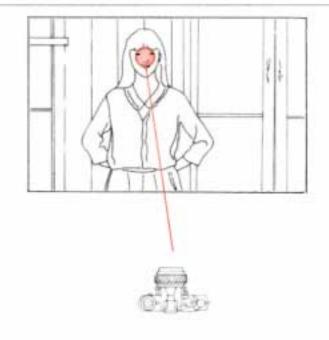
To set correct exposure, simply adjust the aperture ring and/or shutter speed dial until the bar graph tip is set at the fixed point in the viewfinder. You may change the shooting angle during spot exposure setting, too. Exposure compensation (±) is also possible for the metered value.

As soon as the shutter is released, the spot metering mode is automatically cleared and the camera returns to the center-weighted, averaged metering mode. If you want to clear the stored value before releasing the shutter, turn the Clear lever. Since

exposure is totally controlled by you, actual shooting exposures will not be changed unless you change them. However, it will be automatically cleared in 120 seconds even if you do not turn the clear lever.

SHOOTING ON ONE-POINT SPOT METERING





This is a partial metering of only one point on the picture frame. You can get correct exposure of the subject by simply pressing the "Spot" button.

We will give a simple example to explain when onepoint spot metering is used. If a backlighted girl is exposed on averaged light metering, the expressions in her face will not be clear because it comes out entirely underexposed under the effect of sunlight. For correct exposure of her face, it is recommended to make a one-point spot metering on it. Conventional exposure operations based on the photographer's experiences and guesswork have thus been completely eliminated to facilitate exposure compensation in backlight. As soon as the shutter is released, the camera returns to center weighted average metering.

Framing is also facilitated because the exposure value is memorized as soon as the "Spot" button is pressed. To clear the exposure value obtained by spot metering, operate the clear lever and make spot metering again.

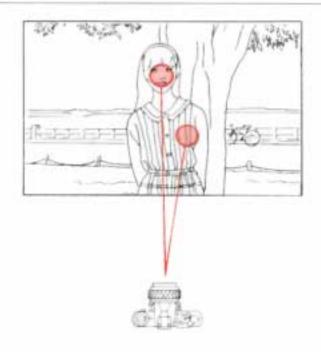




SHOOTING ON MULTI-SPOT METERING



This is a partial metering of two or more spots on the picture frame. It can be used to determine exposure by taking into account various spots that differ in brightness. The picture above shows an example in which the exposure of the background should also be considered while taking care to prevent underexposure of a girl. The first spot metering is made on her face by bringing it in the microprism section. Then the second spot metering is made on her dress by directing the camera, Exposure is determined from the average of the two metered values to meet the photographer's require-



ment.

It is also possible to input more than two points in the same procedure. Metering is possible as many times as you want, but the camera's memory function allows only up to eight points to be stored in memory. If more than eight points are inputted, the last eight points are stored as a basis for determining the exposure value.



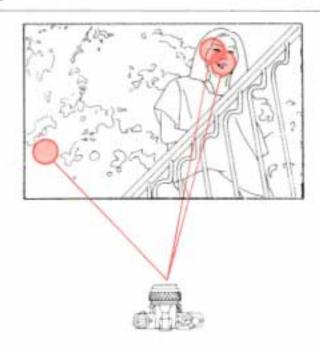


SOPHISTICATED MULTI-SPOT METERING



The OM-3's multi-spot metering system provides highly sophisticated light measurements. Let us take an example in the picture above. If you want to place emphasis on the exposure of the girl, taking the background brightness into consideration, too, you can take two spot meterings on her face and one spot metering on the background, for instance. Exposure is determined from the average of these three values, with greater emphasis on the girl (a 2:1 lighting ratio).

With this system, photographers can weight their exposures so as to make sure the prime subject is



exposed properly and the secondary subject is considered. This is now done without guesswork, in a straightforward easy-to-understand manner.





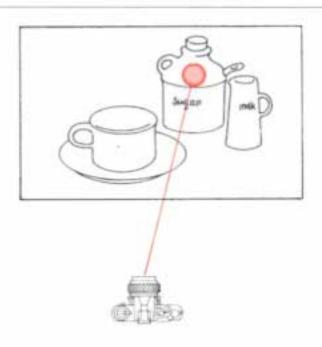
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HIGHLIGHT BUTTON



The Highlight button enables white objects to come out white. It is very useful for copy work and shooting most light or white subjects. After a spot reading is taken from the white subject, then press the Highlight button. The exposure value needed for rendering it in true white will be automatically calculated, and displayed in the viewfinder. You must then adjust either aperture and/or shutter speed to bring the bar graph to the center point.

In the example picture, the brightest spot of the tableware has been metered on spot metering. Press-



ing the Highlight button increases exposure and provides the correct overall exposure to make the tableware white and not a dullish gray.

If the Highlight button is pressed again after the "highlight control" is once set up, only the "highlight control" is released and the camera returns to spot metering. To reset center-weighted averaged metering, operate the Clear lever.

 If the Highlight button is pressed after several spots have been measured, the exposure value for the brightest spot only will be adjusted.





B-16

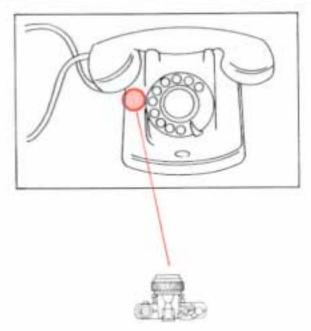
SHADOW BUTTON



The Shadow button enables black objects to accurately come out black. It is very useful for shooting dark or most blackish subjects.

After a spot reading is taken from the black subject, then press the Shadow button. The exposure value needed for rendering it in a rich black will thus be automatically calculated, and displayed in the viewfinder. You must then adjust either shutter speed and/or aperture to bring the bar graph to the center point.

In the example picture, the deep shadow area beside the dial has been imputted. As a result, the black



portion comes out "black" without being grayish. By using this function, it is possible to express subtle tone variations on the dark area which would be ignored in ordinary photography because they would appear as a gray without rich detail.

If the Shadow button is pressed again after the "shadow control" is already activated, only the "shadow control" is released and the camera returns to spot metering. To reset center-weighted averaged metering, operate the Clear lever.

* If the Shadow button is pressed after several spot inputs, the exposure value for the darkest spot only will be adjusted.

A-33-34

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VIEWFINDER INFORMATION

The OM-3 has a large-sized liquid crystal display to clearly show the information needed for picture taking, so that you can concentrate your attention on your image without taking your eye off the viewfinder.

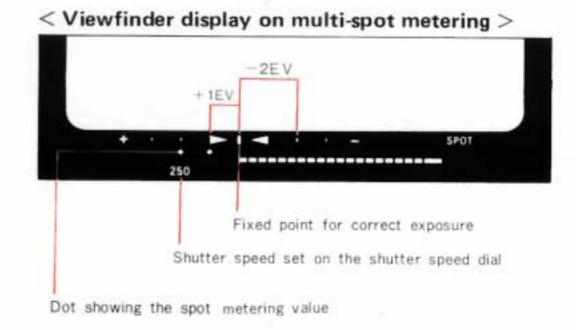
Whether you operate on center-weighted averaged metering or spot metering, correct exposure can be obtained by simply setting the bar graph tip to the central fixed point with the aperture ring and shutter speed dial. As the roration direction of the aperture ring coincides with the bar shift direction, the operation is easy.

The viewfinder provides the following information:

1) digital display of the shutter speed setting, 2 analog display (bar graph) of the metered value,

3 "SPOT" indication (in spot metering mode), dot display of the memorized spot values and the luminosity value being metered. 4 "HI.LIGHT" or "SHADOW" indication when the "Highlight" or "Shadow" button is pressed, 5 blinking "+/-" mark when exposure compensation is made, and 6 green LED that turns on when T-series flash

6 green LED that turns on when T-series flash unit is charged, and blinks when correct flash exposure is achieved.



EXPOSURE COMPENSATION

DEPTH OF FIELD



The OM-3 permits exposure compensation with its Exposure Compensation Dial. If the background is brighter than the subject, turn the dial and set it to a (+) side position. The amount of exposure is double on (+1) position, and four times on (+2) position.

If the background is darker than the subject, turn the dial and set it to a (-) position.

If the compensation dial is turned, the +/- display in the viewfinder blinks. The bar graph display shifts according to the amount of compensation. Exposure compensation is also done easily with the aperture ring and shutter speed dial, while checking the scale in the viewfiner.

 Only the bar graph display shifts if you operate the Exposure Compensation Dial after spot metering. Depth of field is the area of acceptable sharpness in front of and behind the subject in focus. As you get closer to your subject or as you open your lens (e.g. from F16 to F2.8) the depth of field becomes shallower. By stopping your lens down (e.g. from F2.8 to F16) or getting farther away from your subject this depth of field can be increased.

The table below shows that when the camera-tosubject distance is 3m, the depth of field at F16 ranges from 1.93m to 6.93m.

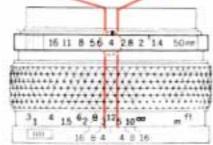
As you press the preview button, looking through the viewfinder, you can ascertain the actual depth of field.

Scale	Came	Camera-to-Subject Distance (m)								
Stop	0.45	0.5	0.7	1	1.5	2	3	5	10	00
1.4	0.45	0.50 -0.50	0.69	0.99	1.47	1.94	2 85 -3 16	4.61 -5.46	8.55 -12.05	57.78 -00
1.8	0.45	0.50 -0.50	0.69	0.98	1.46	1.92	2.82 -3.20	4.52 ~5.60	8.21 -12.79	45.05 -00
2	0.45	0.50	0.69	0.98 ~1.02	1.45	1.91	2.80 -3.23	4.47 -5.68	8.05 -13.20	40.57
2.8	0.45	0.49	0.69	0.97	1.43	1.88	2.78 -3 33	4.28	7.47 -15.15	29.02
4	0.44	0.49	0.68	0.96 -1.04	1.41	1.83	2.63	4.04 -6.57	6.74 -19.44	20.35
5.6	0.44	0.49	0.67 -0.73	0.94 -1.06	1.37	1.77	2.5	3.75 -7.52	5.96 -31.31	14.55
8	0.44	0.48 -0.52	0.66	0.92	1.32	1.69 ~2.45	2.34 -4 18	3.39	5.09~ 378.10	10.21
JL.	0.43	0.48 -0.53	0.65	0.90 -1.13	1.27	1.60	2. 7	3.02	4.30	7.44
16	0.43	0.47	0.63	0.86	1.19	1.47	1.93	2.57- 138.43	3.42	5.13

Depth of Field Table (F1.8 & F1.4 50mm Lenses) Circle of least confusion 1/30mm

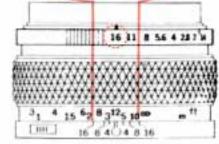
DEPTH OF FIELD SCALE





The double series of numbers engraved on the depth of field scale represents F stops: F4, F8, and F16. Once you have focused on your subject, all objects within the distance range indicated on the lens distance scale between the marks for the F stop you have selected will have acceptable sharpness.





PREVIEW BUTTON







When you wish to see which objects fall within the acceptable zone of sharpness (depth of field), press the preview button on your lens. The diaphragm of the lens will stop down to the preset F stop enabling you to see the depth of field in the viewfinder.

CAUTION: If you jerk the preview button while depressing the shutter release button halfway down the shutter might be released.

SHUTTER SPEEDS

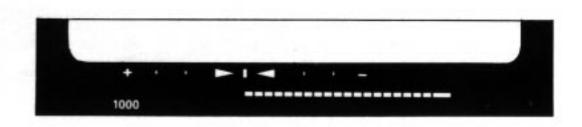
This camera offers various possibilities for visual expression by changing the shutter speed.

High shutter speeds can be used to "freeze" a moving subject to give sharp definition of the image. Shutter speeds of 1/1000 to 1/2000 sec. can "stop" the movement of a considerably fast moving subject. A shutter speed of about 1/250 sec. will be enough to shoot a child at play, if he is not moving too quickly.

There are two methods for giving dynamic expressions. The first one is to blur out the movement of the subject itself, thereby creating a moving image. The second one is to pan the camera according to the movement of the subject. While the background is blurred, the subject is sharply defined to create a moving image.

* In using slow shutter speeds, it is necessary to guard against camera shake. We will suggest a very practical method for choosing shutter speeds. Generally, shutter speeds of which denominator value is larger than the focal length value of the lens used are good for preventing camera shake. If you are using a 50mm lens, for example, shutter speeds of 1/60 sec. or higher are best; and if you are using a 200mm lens, shutter speeds of 1/250 sec. or higher are best.

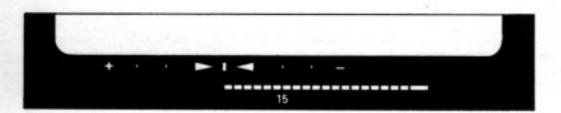


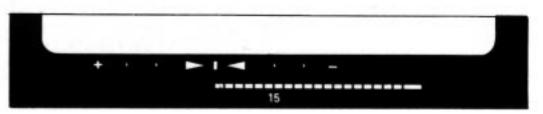










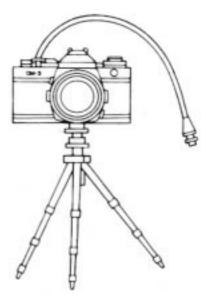


BULB SETTING



To take night pictures and other subjects requiring long exposure, use a tripod and cable release and shoot at B (bulb) to prevent camera shake.

Set the Manual Shutter Speed Ring to B (bulb) and press the shutter release.



MULTIPLE EXPOSURE

INFRARED PHOTOGRAPHY



By tripping the shutter several times on the same frame, multiple images are produced on the same frame.

This is how to do:

- After the first exposure is ended, erect the rewind crank and turn it clockwise as far as it will go to take up film slack.
- While holding both the rewind knob and rewind button with your fingers to prevent them from moving, wind the film advance lever. In fact, the film is not wound and the shutter is cocked by this operation.
- 3 Press the shutter release as you would do normally, and double exposure will occur.
- 4 By repeating the steps ② and ③, the frame will be exposed as many times as you want. However, the frame counter advances each time the shutter release is pressed.
- 5 After ending the multiple exposure, put the front lens cap on and make a blind shot.

Note: The frame may shift slightly.



When shooting infrared pictures with infrared film and a red filter, the point of focus will slightly differ if you focus visually. The amount of shift varies with the lens and a red line or red dot is marked on the lens' depth of field scale to compensate for it. First, focus the lens without a red filter on as you would do normally. Next, read that distance on the distance scale and shift it opposite the infrared mark, then put on a red filter and shoot. (The above picture was taken with the distance at infinity.)





FLASH PHOTOGRAPHY





Electronic flash is very similar to daylight. As it is well balanced for daylight type color films that are most popular, the electronic flash is used for various photographic applications. Electronic flash is especially useful in unfavorable lighting situations, ensuring easy, error-free picture taking. In dim light, for example, without an electronic flash you will have to use slow shutter speed with a risk of causing camera shake and blurred motion. Under the illumination of a fluorescent lamp or incandescent lamp, the picture often does not come out with correct colors because it lacks proper color balance. Electronic flash solves all these problems.

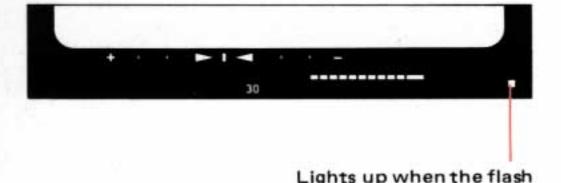
The electronic flash can also be used in daylight as fill-in light for backlighted subjects or subjects with too strong a contrast as well as for freezing a fast moving subject.

OPERATION OF T-SERIES FLASH

MAIN SPECIFICATION OF T-SERIES

No complicated exposure calculation is required with the OM-3 in combination with a T-series electronic flash. On the flash side, you merely turn on the power switch and set the flash mode to Normal Auto. Correct exposure is obtained by simply setting the lens aperture to the value specified by the flash, and setting the shutter speed to 1/60 sec. or slower. You can make sure in the viewfinder that the flash has been fully charged before shooting, and that correct flash exposure has been made.

The OM-3's flash synchronizing range is from 1/60 to 1 sec. and B. Uneven exposure may result if you operate beyond this range.



is fully charged; blinks on

correct flash firing.

	Guide Number	Coverage Angle	-
Electronic Flash T45	45 (ISO 100, meters) or 146 (ISO 100, feet)	53° vertical, 74° horizontal	
Electronic Flash T32	32 (ISO 100, meters) or 104 (ISO 100, feet)	53° vertical, 74° horizontal	
Electronic Flash T 20	20 (ISO 100, meters) or 66 (ISO 100, feet)	40° vertical, 58° horizontal	

FLASH

ELECTRONIC FLASHES OTHER THAN THE T-SERIES FLASH UNITS



Flash Duration	Number of flashes	Dimensions and Weight
1/40,000— 1/1,000 sec.	100-500 with NC Pack (differs with flash-to-sub- ject distance on Auto)	283(H) x 87(W) x 116(D)mm 1,120 gr. (less batteries)
1/40,000— 1/1,000 sec.	100-500 with AA-size alkanline batteries (differs with flash-to-sub- ject distance on Auto)	81(H) x 70(W) x 104(D)mm 320gr. (less batteries)
1/40,000— 1/1,000 sec.	120-500 with AA-size alkaline batteries (differs with flash-to-sub- ject distance on Auto)	68(H) x 57(W) x 77(D)mm 160gr. (less batteries)

- 1 Mount the flash on the accessory shoe. If you are using a flash that has no direct contact, connect the flash synchro cord to the synchro terminal.
- 2 Set the film speed on the flash.
- 3 Set the Shutter Speed Ring to 1/60 sec.
- 4 If the flash has an AUTO/MANUAL switching device, set it to either AUTO or MANUAL.
- Determine the aperture and set it on the camera. If you are using an auto flash, set the desired F stop on the flash unit and then set the aperture ring to this F stop.

If you are using a manual flash, calculate the aperture by the following formula or using the flash's calculator panel and set it with the camera's aperture ring. (ISO/ASA100•m)

Aperture = Flash guide number Flash -to -subject distance

BOUNCE FLASH

In bounce flash, the flash is directed at a ceiling or wall so that a reflected light reaches the subject to produce a soft lighting effect.

The Electronic Flash T45 has a built-in bounce head that tilts 90° vertically and swings 340° horizontally, so that you can use highly advanced techniques such as side-bounced light or back-bounced light with case.

The Electronic Flash T32 has a flash head that tilts 90° upward and 15° downward.

On both flash units, bounce flash operates on the Normal Auto mode.





Electronic Flash T45



Electronic Flash T32



SHOOTING WITH MOTOR DRIVE



Shooting with motor drive is very exciting because it enables you to capture your subject in a critical moment by making several shots in a second.

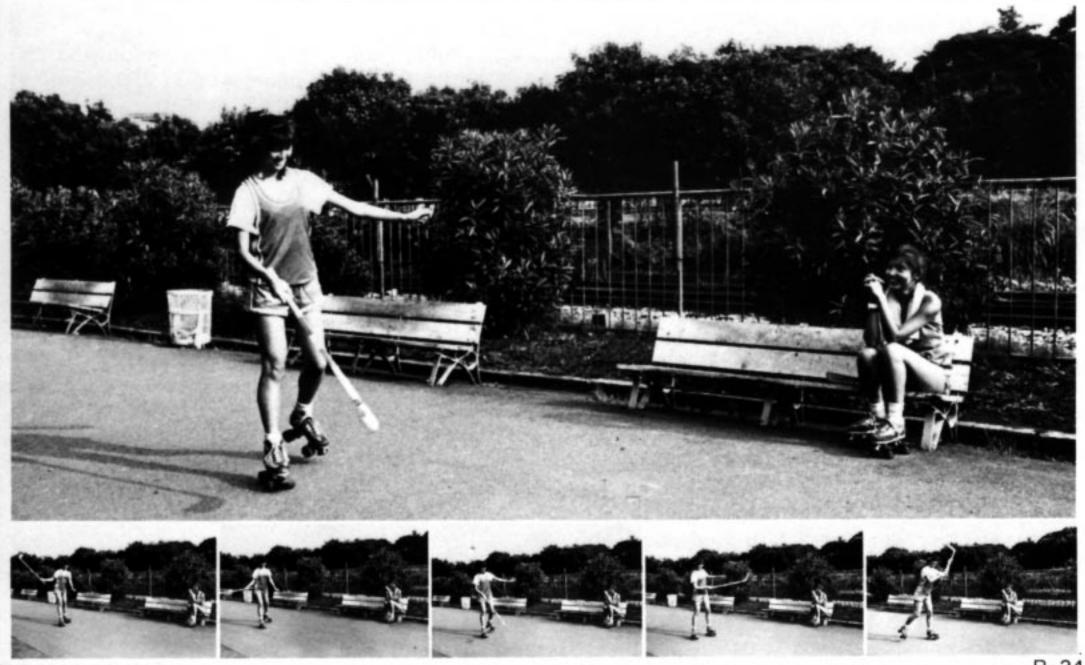
The high speed OM-System motor drive has achieved an extremely compact and lightweight design to take full advantage of its ease of operation and high maneuverability. Motor Drive 2 — the world's first 5-frames-per-second high speed motor drive with a built-in computer. It is equipped with an LCD display of the number of frames and the operating procedure and also permits motorized rewind when it is attached to the OM-3.

In addition, the Winder 2 is also available, which offers both single-frame exposures and sequential exposures on dial switching.

The OM-System's outstanding maneuverability and operability are ideal for shooting dynamic sports photos and documentary press photos. Various accessories can be connected by a direct contact.

 The Motor Drive 1 can also be used, but motorized rewind is impossible.





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MOTOR DRIVE GROUP

Selection of Motors

- Motor Drive 2. If you want to shoot very fast moving subjects such as a dashing animal or a racing car driving at full speed, the Motor Drive 2 is the best choice because it permits continuous shooting at a high speed of up to five frames a second. This quick shooting capability will often allow you to catch a dramatic instant.
- Winder 2. The Winder 2 is very helpful for shooting impressive moments such as sports scenes and children at play. As it permits continuous shooting at a rate of up to 2.5 frames a second, you will not miss a decisive moment.

Selection of Power Source

- For the Motor Drive 2, the following two power units are available: a small, lightweight and portable flat-type rechargeable power unit, M.15V Control Pack 2, and a grip-type battery power unit, M.18V Control Grip 2, which provides added stability when used with a telephoto lens.
- The Winder 2 has a self-contained power supply, but two external power units are also available:
 M.6V Power Pack 1 and 6V Power Pack 2.

Film Back

 To shoot many pictures in succession, the 250 Film Back 1 which permits up to 250 exposures is available for the OM-3. It allows you to save the time for film change and take full advantage or the motor performance.

Remote Control System

• Both the Motor Drive 2 and Winder 2 can be easily remote-controlled with a dedicated remote cord. Besides the Remote Cords 1.2m and 5m, the M. Quartz Remote Controller 1 with an electronic counter is available, which allows you to trigger the camera and check its operation with an LCD display at a remote location. It is very useful for shooting wild birds and animals and for macrophotography and photomicrography to trip the shutter without a shock.



RECORDATA BACK 4



Your pictures with a date or time will provide a perfect record of your life. If you print a date and time on the pictures of your important events such as wedding, entrance and graduation ceremonies as well as your family trips, they will evoke stronger

memories in later years. Pictures with a date are also easier to arrange in an album. This data back can also be used for preparation and classification of various scientific and research materials.

Data imprinting is possible in the following formats:

- (1) Year-month-day (Japanese date description),
- (2) Month-day-year (American date description),
- (3) Day month year (European date description),
- (4) Hour-minute, (5) Counter (additive type),
- (6) Classification number up to 6 digits. Provided with an imprint clear switch to be used when data imprinting is unnecessary. This Recordata Back can also be used as a clock which indicates the hour, minute and second via a Time Button.

Control panel cover Display window



Battery Check/ Time button

Record switch

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MACROPHOTOGRAPHY





If you observe in the eye of macrophotography, you will make many wonderful discoveries even in ordinary objects. However, macrophotography has generally been considered highly technical, because calculation of correct exposure is very difficult. As light control is most important in this field, the spot metering system of the OM-3 will offer a big advantage.

If you choose a backlighted situation and take flower leaves in transmitted light, for instance, correct exposure is obtained by simply making a spot metering of the subject. Your picture will come out with a contrasting shadow in backlight. Olympus provides a complete macro system so that everyone can enjoy taking macro pictures. There are a wide variety of products available for macrophotography: Macro Lens Group products renowned for their high resolution, Extension Tubes with excellent portability, and Flash Group products.

COMBINATION OF SYSTEM UNITS FOR CHOICE IN TERMS OF MAGNIF

	0.1×								
Lens			0.3× (120×80)	0.5 (72×4		0.6× (60×40)	0.8× (45×30)		× 5×24)
	1/60	0.1-0.14	×				1 :		
50mm F3.5	1/60				0.5×				
135mm F 4.5	1/60			0.43×	<u></u>				
80mm F 4				000).48×			1×	1.
38mm F3.5									
38mm F 2.8									
20mm F 3.5									
20mm F 2							/		
38mm F 2.8									
20mm F 2									
38mm F 2.8									
20mm F2									
135mm F 4.5	1/20			0.5×	0000	00000	1000000	888	1.0×
80mm F 4	0.09×	0000000	0000000						
38mm F3.5									
38mm F 2.8									
20mm F 3.5									
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	135mm F 4.5 80mm F 4 38mm F 3.5 38mm F 2.8 20mm F 3.5 20mm F 2 38mm F 2.8 20mm F 3.5 80mm F 4 38mm F 3.5 38mm F 3.5 20mm F 3.5 20mm F 3.5	50 mm F 3.5 3 3 3 3 3 5 3 3 8 mm F 2.8 20 mm F 2 38 mm F 3.5	50 mm F 3.5 3	50 mm F 3.5 3	50 mm F 3.5	50 mm F 3.5	50mm F 3.5	50 mm F 3.5	50 mm F 3.5 36 0.5× 135 mm F 4.5 36 0.43× 80 mm F 4 0.48× 1

CATION



1.5× 3× 5× 10× 24.1×16) (12×8) (7.2×4.8) (3.6×2.4			10× (3.6×2.4)			Extention Units			
2×						Close-up Lens 80mm Macro	Telescopic Aut		
2.5× 4×						Used with Objective lens mount	Extension Tube		
	3.1×	4.5×	es es				65~116		
NS.		5.8×	8.3×			Used with Objective lens mount			
11		6.8×	9.5×						
2×	2.1×						Auto Extension		
	4	.7× 4.9×					Tube 25		
.7× 1.8×	(Auto Extension		
	4.2×	4.4×					Tube 14		
- (0) 10-3	2,2×								
1.8× 6.1×					Used with Objective lens mount	A. to Ballows			
2.3	×	6.7	1×				Auto Bellows		
	4.3	×		12	.4×	Used with Objective lens mount			
		5.3×	CONTRACTOR OF THE PARTY	THE REAL PROPERTY.	13.6×				



B-41

MACRO PHOTO GROUP



Simplified macro system

It allows you to take close-ups up to life size with ease. With this macro system, you will come upon unexpected and wonderful discoveries in tiny things around you such as writing instruments, printed letters, flowers in a vase, etc.

- Close-up Lenses 49mm and 55mm, f=40mm,
 Simply screw them in the front of the standard lens, and you can take up to 0.63X close-ups.
- Auto Extension Tubes 7, 14 and 25. These adapters are placed between the lens and camera body and available in three thicknesses: 7mm, 14mm and 25mm. They can be used in seven combinations. With the standard lens, you can take up to 1.1X close-ups.

Basic System

This is a complete macro system that permits low to high magnifications. It will produce a brilliant image of the marvelous world of tiny things such as the geometric beauty of the compound eye of a dragon fly and close-ups of flowers. An indoor type and outdoor type are available.

Indoor type: This system uses an auto bellows, macro photo stand, top-light illumination device, etc. in combination with various macro lenses. It is suited for taking high-magnification pictures in a room or studio.

- Auto Bellows. A basic unit that helps you take full advantage of the system's capabilities with a variety of lighting units and mounts. The stopdown lever that lets you use a variety of OM System lenses at preset aperture or operated in combination with the double cable release, affords an automatic diaphragm photo function.
- Zuiko Macro 20mm F2. Large-aperture macro lens designed exclusively for macrophotography. Combined with the Auto Bellows, it permits magnifications ranging from 4.2X to 16X. Provided with a helicoid for fine focusing.

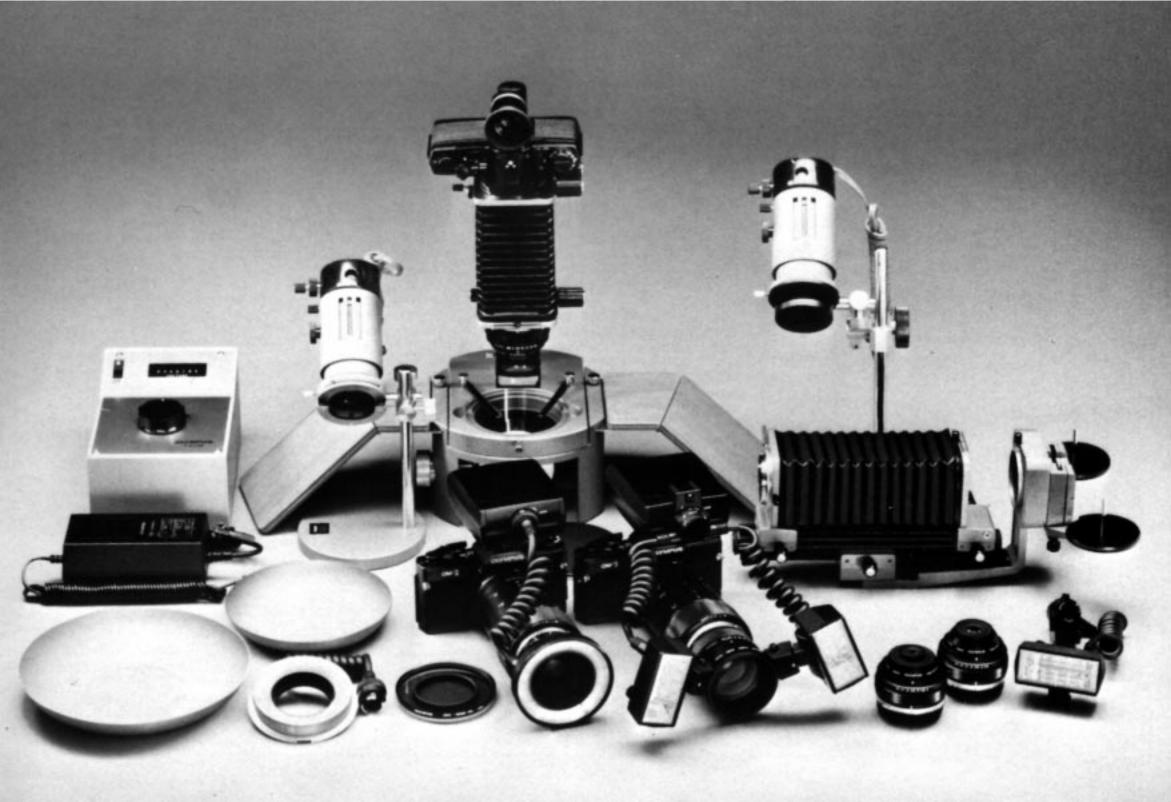
MACRO PHOTO GROUP

- Zuiko Macro 38mm F2.8. Bright, high-magnification macro lens designed exclusively for macro photography. Combined with the Auto Bellows, it permits magnifications ranging from 2.3X to 6.7X. Provided with a helicoid for fine focusing.
- Macrophoto Stand VST-1. A compact and sturdy multipurpose stand for solid camera support in close-up and macrophoto work. Comes with frosted stage glass for incident light and may be used in conjunction with Trans-illuminator Base X-DE for lighting of transparent subjects from beneath.
- Epi-illuminator PM-LSD2. A two-piece lighting set providing ideal reflected light for macrophotography. Moving the filament allows you to change the position and field of illumination.

Outdoor type: This is a handy and highly manueverable system which includes macro lenses, auto extension tube 65–116, etc.

- Telescopic Auto Extension Tube 65—116. With its variable tube length, this auto extension tube enables you to change the shooting distance and magnification freely.
- Zuiko 1:1 Macro 80mm F4: This lens is designed specifically for life-size reproductions. It functions at its best at a 1:1 ratio, but gives outstanding

- images from 1/2 to 2X life-size, the range of magnifications available when used with the Auto Bellows. With the Telescopic Auto Tube it goes up to life-size, and the close-up lens is used to extend the range to 2X magnifications.
- Zuiko Macro 135mm F4.5. Shoots from infinity to life-size with the Auto Bellows, or 0.43X magnifications with the Telescopic Auto Tube, giving long working distances and minimal perspective distortion. It has a helicoid ring for fine focusing.
- Zuiko Macro 50mm F3.5. Designed for optimum performance at 1/10 magnifications, this outstanding lens gives superb results in general purpose photography at infinity, or for macro subjects as large as 1/2 life-size.



FINDER GROUP UNITS

TYPE	SCREEN	FEATURES				
1-1 Microprism-matte type (for most lenses)	•	Standard type, suitable for general photography. Fast and accurate focusing is done on the central microprism spot as well as on the surrounding matte area: When a lens with a maximum speed of F5.6 or slower is used, the microprism darkens and focusing must be made on the matte area.				
1-2 Microprism-matte type (for standard & telephoto lenses)	•	Suitable for general photography in conjunction with a standard or telephoto lens. Focusing is done on the microprism spot as well as on the matte area. When a lens with a maximum speed of F8 or slower is used, the microprism spot darkens.				
1-3 Split image-matte type (for most lenses)	6	Suitable for general photography ensuring critical focusing, and ideal for photographers who prefer the split-field and coincidence type focusing. When a lens with a maximum speed of F5.6 or slower is used, the split prism darkens.				
1-4 All matte type (for most lenses)		Suitable for general photography and ideal for photographers who prefer a view field free from microprism or split prism and for those who are accustomed to focus using matte area. Also suitable for super telephoto photography and close-up photography in conjunction with macro lenses and Auto Bellows.				
1-5 Microprism-clear field type (for wide angle & standard lenses)		This transparent screen provides an exceptionally bright finder image. Highly suitable for snapshots using wide angle lenses. The lack of matte surface means depth-of-field effects cannot be ascertained.				
1-6 Microprism-clear field type (for standard & telephoto lenses)		This screen provides an extremely bright finder image. Focusi done on the microprism spot. The ladk of matte surface means de of-field effects cannot be ascertained.				
1-7 Microprism-clear field type (for super telephoto lenses)	•	Developed primarily for use with super telephoto lenses this field screen provides an extremely bright finder image. The magnetic prism spot remains bright even with a lens whose maximum specified. F11. The lack of matte surface means depth-of-field effects can be ascertained.				

B-45-



TYPE	SCREEN	FEATURES					
1-8 All matte type (for telephoto lenses & astronomical telescopes)		This screen is ideal for use with super telephoto lenses of 300mm or more in focal length, or for astrophotography. The extreme fineness of the matte surface permits outstanding field definition. More accurate focusing may be achieved by the use of the Varimagni Finder.					
1-9 Clear field type (for endoscopic photography)		Designed for use with OLYMPUS fiberoptic endoscopes. This con- denser type screen without fresnel lens requires no focusing when a special adapter couples the camera with the fiberscope. Exposure is made automatically by the light supply.					
1-10 Checker-matte type (for shift lens)		The grid lines engraved on the all-matte surface are used for vertical and horizontal picture alignment. Though originally designed for architectural photography with the shift lens, it is also suitable for general and super-telephotography, and close-up/macrophotography with macro lenses and Auto Bellows.					
1-11 Cross hairs-matte type (for close-up & macro- photography)	⊗	Highly advantageous for close-up and macrophotography with Auto Bellows and extension tubes. For focusing in low magnification close- up photography, use the matte area and in macrophotography greater than life size, use the double cross hairs the same way as with the 1-12.					
1-12 Cross hairs-clear field type (for photomicrography & macrophotography greater than life size)		The transparent screen offers the photographer focusing with an unusually bright finder image. To focus, first correct your diopter using a dioptric correction lens or Varimagni Finder so that each line of the double cross hairs can be seen clearly and separately. Then bring the specimen into focus.					
1-13 Microprism/split image-matte type (tor most lenses)	•	Most suitable for normal photography, this screen assures pinpoint focusing. The central split-image rangefinder is encircled by a microprism collar. Since the outer area has a matte surface, the screen can be used in the same way as the standard 1-1 and 1-3 Screens. When a lens with a maximum speed of F5.6 or slower is used, the prisms darken and the focusing must be made on the matte area.					
1-14 Microprism/split image-matte type (for most lenses)	•	Most suitable for normal photography. The central split-image range finder, encircled by a microprism collar, is inclined 45 degrees to allow easy focusing on subjects with vertical or horizontal lines. When a lens with a maximum speed of F5.6 or slower is used, the prisms darken and focusing must be made on the matte area. The meter needle gives correct light readings.					

Q: Why won't the shutter release button move when I press it?

A: The film advance lever may not have been fully advanced.

Q: Why can't I advance the film?

A: The shutter may be cocked and ready to fire. Try pressing the shutter release button. Or, the film may be fully exposed. Check the exposure counter. If you feel tension on the film advance lever, DO NOT FORCE IT. Re-

wind the film. Or the self-timer lever is not

securely in its upright position: reset and release the self-timer.

Q: My camera is loaded with film. Why doesn't the rewind knob rotate when I advance the film?

A: The film leader may not be inserted in the film take-up spool and the film is not advancing.

Q: The rewind crank does not turn.

A: Press in the rewind button.

Q: Is it normal for the microprism in the center of the viewfinder to "shimmer" and darken?

A: Yes, when a lens with a maximum aperture smaller than F5.6 is mounted on the camera. It also happens with other lenses when the

depth of field preview button is pressed.

Q: What batteries should I use?

A: Use two 1.5V silver oxide batteries SR44 (Eveready EPX-76 or equivalents). Never use 1.3V mercury batteries (though they are the same size).

Q: When should I check the batteries?

A: (1) When new batteries are inserted. (2) After the camera hasn't been used for a long time. (3) Before beginning a prolonged period of use. (4) When the temperature is very cold.

Q: Why can't I set the ISO film speed I need?

A: At the most, 3 stops can be advanced in a single stroke of the dial. If this is not enough, lift up and rotate the outer collar of the dial until it stops; then release the collar and rotate the collar and dial together until the white line is aligned with the black index on the pentaprism. Repeat this procedure until you reach the ISO speed you need.

Q: I want to take pictures with the motor cover detached even when I am not shooting with the motor drive, because attaching and detaching it is quite troublesome.

A: The motor cover should always be attached if you are not shooting with the motor drive. It



- will prevent entry of dust and exposure by stray light.
- Q: I took pictures with the aperture ring set at a halfway position between the f/stop numbers. Was the film properly exposed?
- A: Yes, you can use any in-between settings on the aperture ring to obtain precise exposure.
- Q: How about in-between settings of the shutter speed dial? For example, between "125" and "250".
- A: You can't use the in-between settings of the shutter speed dial. It is recommended that you set the shutter speed ring at a shutter speed index engraved on the camera.
- Q: In the finished print, a peripheral portion of the picture is cut, though I framed it inside the viewfinder.
- A: In some color prints and color slides, a peripheral portion of the picture may be eliminated in the laboratory. It is recommended, therefore, to leave some margin in composing your picture.
- Q: How do I clean the camera and lens?
- A: Clean the camera using a clean, soft lintless cotton cloth. Clean the lens only with a hand powered air blower, antistatic brush or lens tissue. NEVER rub the lens surfaces with your

finger, clothing or other abrasive material.

Take care not to permit water to enter the camera when taking pictures in the rain or snow, especially near seawater spray. After use near the ocean, wipe the camera surfaces clean and never leave salt residue on the camera.

Q: There are sometimes scratches on the film.

A: The cause may be a soiled film passage. The film compartment may be soiled by film debris during long use of the camera. Be sure to dust off the camera periodically.

Q: How do I store the camera?

A: Remove the camera from its case and store it in a dry, well ventilated place. Protect against excess moisture by using packs of silica gel or other desiccant in the storage area. Do not store the units near moth balls or similar volatile chemcial materials to avoid the possibility of damage to metal surfaces.

Q: The dispaly in the viewfinder has disappeared while the camera is operating.

A: As the OM-3 has an energy-saving design, the display will automatically disappear in 120 seconds. To turn it on again, touch the shutter release lightly. Q: On spot inputs, the dot and bar graph tip shift.

A: This may happen because the bar graph is based on a digital display. It does not mean that anything is wrong, and you can get correct exposure. It is for the same reason that the bar graph display shifts at the time of highlight control or shadow control.

Q: The tip of the bar graph display blinks frequently during light metering.

A: This occurs mostly in the case of metering under a fluorescent lamp. Though the fluorescent lamp appears to the human eye as it were lighting continuously, it is in fact blinking repeatedly at a frequency of 50–60 cycles a second. Each dash of the bar graph display represents 1/3 EV. Therefore, if the luminosity is unstable or in the case of a luminance mediated between the bar tip and the adjacent dash, the bar tip will blink.

In actual exposure determinations, however, variations of light are averaged, causing no problem.

Q: After operating the highlight (or shadow) button, I have pressed the spot button by error.

A: If the new spot exceeds the highest value (or falls below the lowest value) that was already

inputted, exposure is changed according to that new value. The bar graph display shows the highest (or lowest) value again, and then the result of calculation. If the new spot is below the highest value (or above the lowest value), it is not affected.

Q: After operating the highlight button, I have pressed the shadow button by error.

A: The highlight control status switches to the shadow control status. On the contrary, if you have pressed the highlight button after operating the shadow button, the shadow control switches to the highlight control status.

Q: Is spot metering possible in the flash mode?

A: No, spot metering is not possible in the flash mode.

Q: At ISO 3200 setting, I turned the exposure compensation dial to the (-) side. Is this effective?

A: At ISO 3200, (—) exposure compensation is not effective. Besides, this procedure causes the ISO setting to vary. To remedy, set the ISO 3200 setting once again. The same applies to (+) exposure compensation at ISO 6.

Other cautions

- The Recordata Backs 1 and 2 cannot be used.
- The original 250 Film Back 1 cannot be used.
 It can be altered for use on the OM-3. Contact an Olympus Service Station.
- The Motor Drive Socket Cap on the camera side cannot be stored in the Motor Drive 1 or Winders 1 and 2.
- When using the Motor Drive in sequence mode, the compatible shutter speed range is from 1/2 to 1/2,000 sec.





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