



OLYMPUS

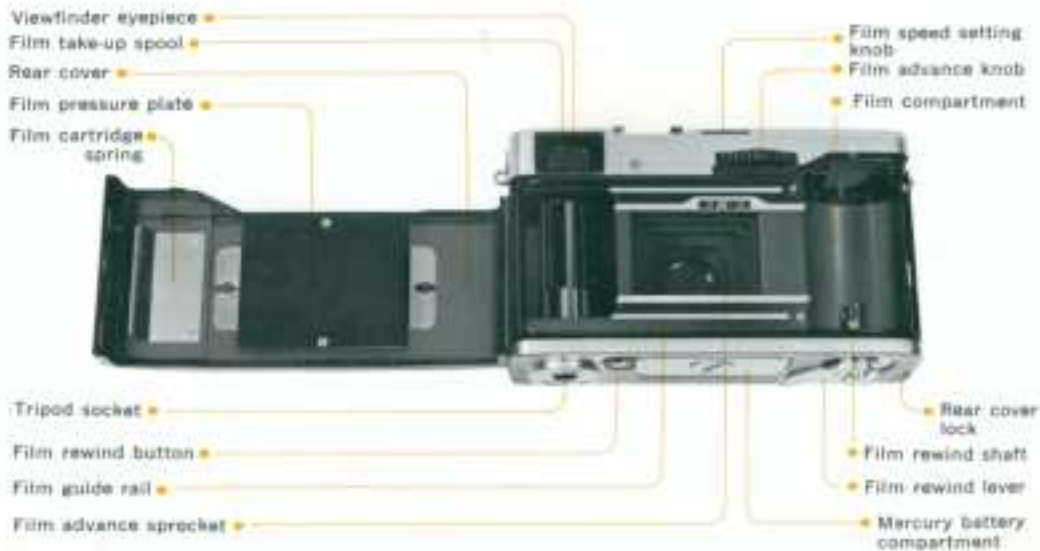
35EC

● INSTRUCTIONS ●



● NAME OF PARTS





SPECIFICATIONS

Format	24×36mm full frame (35mm roll film)
Lens	E. Zuiko F2.8 1-42mm (5 elements in 4 groups)
Shutter	Seiko ESF electronic shutter
Exposure control	Automatic—Fully programmed system automatically selects correct lens aperture and shutter speed from 4 sec. to 1/800 sec. EV1 (4 sec. F2.8) to EV17 (1/800 sec. F13) at ASA 100. Flash—Auto flash fires only when necessary and is bypassed when not. Flash-matic system selects correct aperture and sets correct shutter speed automatically according to the subject distance. Synchronization speed 1/20 sec. X synchro of cordless and PC contact. Guide number range 7.56 for meters (23.180 for feet)
Sensing cell	Ultra-sensitive Cadmium Sulphide (CdS) type
Power source	1.4V mercury battery HM-N type, 2 pcs (Mallory RM-640, Eveready E-640, Burgess HG-640)
Film speed scale	ASA 25-800/DIN 15-30
Viewfinder	*Bright frame viewfinder (0.7X) with parallax correction marks and zone focus marks
Signal light	*Yellow light for battery test and slow shutter speed warning *Blue light indicating activation of auto flash system
Focusing	Zone focus, eye-measurement type of rotating helicoid system. Focusing range 0.9m (3 ft.) to infinity ∞. Click stops at 1m (3.3 ft.), 1.5m (5 ft.), 3m (10 ft.) and infinity.
Film loading	EL system (Easy Loading procedure)
Film advance	Thumb wheel film advance at camera rear. Automatic shutter locking to prevent double advance and double exposure
Film rewinding	Rapid rewind crank, film rewind button setting type
Film exposure counter	Exposure counting type, automatic-resetting to "5" (start)
Shutter release	Push button with locking control
Rear cover operation	Hinge type
Accessory shoe	Cordless flash contact
Filter size	43.5mm, screw-in type
Size & weight	111mm×67mm×49mm, 410 g (4 $\frac{1}{2}$ "×2 $\frac{1}{2}$ "×1 $\frac{1}{2}$ ", 14 $\frac{1}{2}$ oz.)

● CONDENSED OPERATING INSTRUCTIONS

The Olympus 35EC features a highly accurate electronic system that automatically selects the proper speed and lens aperture combination, ensuring perfect exposure every time. When a flash is affixed to the camera, it will fire automatically only when necessary thereby ensuring perfect exposures if there is insufficient light for a non-flash picture.



- 1** Load the camera with a film. (See page 11.) The camera is already charged with the mercury battery. (See page 7.)



- 2** Set the proper ASA film speed. (See page 8.) When using flash, also be sure to set the proper guide number. (See page 19.)



- 3** Advance the film and release the shutter till the film exposure counter shows the number 1. (See pages 9-12.)



4 Set the distance. (See page 15.)



5 Compose your picture. (See page 16.)



6 Release the shutter gently. (See page 17.)



7 After film is completely exposed, rewind the film into magazine and remove. (See page 18.)

Here are descriptions in detail about each part. Please see how to handle each part properly.



In order for the camera to operate properly the mercury batteries must be properly inserted into the battery compartment at the bottom of the camera.

1. Place a coin in the battery compartment screw and rotate counter-clockwise until completely loose. Lift the compartment door off.
2. Insert two mercury type RM640 or equivalent into the battery compartment observing correct polarity. Please refer to the diagrams inside the battery chambers for correct orientation. Replace the lid. Tighten the lid by rotating screw clockwise until securely in place.
3. **To test batteries**, simply depress the shutter release button slightly. The yellow light will illuminate if the batteries are properly inserted, are fresh, and of the proper voltage. (See page 13.) This means the electronic shutter operates properly.
4. If the yellow light does not illuminate, check the polarity of the batteries and/or try a new fresh set of batteries.
The batteries should be replaced once a year.

● Opening the rear cover



Pull down the rear cover lock with your fingernail and the rear cover will open by itself. At the same time, the film counter will return to the starting position (S) automatically.

To close it, press the cover until it clicks. Be sure that it is locked steady.

● Setting the ASA film speed



Rotate the ASA film speed selector wheel on the top of the camera and select the ASA film speed for the film which you are using. In order to obtain correct exposures, the correct ASA of the film you are using must appear in the ASA window on the top of the camera.

The ASA scale of J5EC is as follows: 25, 32, 40, 50, 64, 80, 100, 125, 160, 200, 250, 320, 400, 500, 640, 800.



Look at the lock lever on the front left side, which locks the shutter release button to prevent accidental exposure when pushed down in the direction the arrow indicates until it clicks. If the release button is kept locking, the mercury battery is prevented from consumption as a possibility is eliminated for the button to be pressed accidentally.



1. Rotate the knob until it stops. As the film is advanced one frame, the shutter release is charged for next exposure. Be sure you rotate the knob all the way until it stops; otherwise the shutter can not be actuated.
2. Squeeze the release button gently. As the shutter is released, the film is advanced.



The film counter shows 5, 1, 2, 4, 6 and subsequent even numbers up to 36. The numbers 12, 20 and 36 are in yellow color. Each time the film is advanced, the counter counts up the number of exposures made, which is indicated at the point of the orange color arrow (▶). When the rear cover is opened, the counter returns automatically to 5. Do not open the rear cover when the film is loaded.

● Film rewind button ● Film rewind lever



To rewind the film, after you have taken your picture, depress the rewind button at the bottom of the camera. The film re-winding must be made only after the button is pushed. The depressed button will automatically return to its original position at the next winding stroke of the advance knob.

To rewind the film after the rewind button is depressed, raise up the rewind lever and turn the lever in the direction of the arrow for rewinding the film completely into cassette. While the film is in rewinding process, the rewind lever is tight, but when the film is rolled up and the film end leaves the take-up spool, the lever suddenly turns freely.



● LOADING THE CAMERA

Use an ordinary 35mm roll film of 12, 20 or 36 exposures.



- 1** Release the shutter lock lever. Push up the shutter lock lever to the opposite direction of the arrow until it clicks.



- 2** Open the rear cover. Pull down the rear cover lock, and the cover will snap open automatically.



- 3** Load the camera with a film. Pull out the film rewind knob to put the rewind shaft out of the film compartment. Put the film cassette into the film compartment. Push the rewind knob back. If the knob cannot be pushed in completely, turn it slightly clockwise or counter-clockwise, while maintaining pressure on the cassette in position.



- 4** Insert the film leader into the take-up spool. Hold the camera firmly in your left hand and lead out the film with your right hand to such extent that it reaches the take-up spool. Insert the film leader into any of the six slots on the take-up spool.



- 5** Advance the film. Be sure that the gear teeth on the sprocket spool engage the perforations of the both sides in the film, winding the film onto the take-up spool.



- 6** Close the rear cover. At this point, for reassuring safety, raise up the rewind lever and turn it in the direction of the arrow slightly until the film is tightened enough.



- 7** Check the film counter. Advance the film and release the shutter button. Repeat this motion two or three times until the film counter shows the number "1". From this point, start taking pictures. Whenever you advance the film, be sure you rotate the film advance knob all the way. If the rewind shaft turns during the repeated motions, this shows the film is being advanced properly.

● Electronic shutter and signal lights

An F/stop ring or a shutter speed ring is no longer necessary with Olympus 35EC, because exposure is measured and determined by the fully automated electronic system that selects proper lens aperture and shutter speed combination. At the time you load the camera, you have only to set the ASA film speed setting knob to the ASA number of the film you use. The lens aperture and film speed meet automatically the brightness of the subject. The ultra sensitive CdS cell covers the wider range of automatic photography from 4 sec. to 1/800 sec. Just push the shutter button. If the yellow light flashes briefly, that is your signal that the shot is ready to be taken perfectly.



● Yellow light

- 1) When the yellow light is lit:
As you press down the release button slowly, the yellow light is lit, indicating the electronic shutter actuates properly. This also means the batteries are working all right.
- 2) When the light does not appear:
If the yellow light does not appear when you push the release button approximately 1mm (1/25"), it means that no battery is contained in the compartment, or the batteries are put in a wrong polarization, or they wear out. In such cases, do not take any pictures as the entire shutter and exposure mechanism does not operate.



MODIFICATIONS OF EXPOSURE

3) When the light remains illuminated:

The yellow light also serves as a slow shutter speed warning. If the shutter must operate at 1/30 sec. or slower, the yellow light will remain illuminated if you continue to depress the shutter release button indicating that you should use a tripod or affix a flash unit to the camera.

If no flash is used, the camera will take a slow shutter speed exposure from 1/30 sec. up to 4 sec. guaranteeing perfect exposure within this range. In order to avoid camera shake during exposure, always use a tripod for slow shutter speeds. In case you use a tripod, remember you have to push the shutter button all the way down until the light goes out.

If you wish to intentionally over or under expose your pictures for special effects or due to background situations, you can accomplish this by over- or under-rating the ASA setting on the camera. Modification of this procedure, under special circumstances as shown below.

Always pay your attention to reset the ASA speed to its original value afterwards.

1. Against the light



When clear details are required in your photographs, taken against the light or a good deal of sky and sea water, simply set the ASA to half the value of the original ASA setting to over-expose by one F stop equivalent.

2. Against brightness from dark places



When taking a picture facing a bright subject setting your camera at dark places, set the ASA scale to double the original ASA setting to under-expose by one F stop equivalent.

FOCUSING



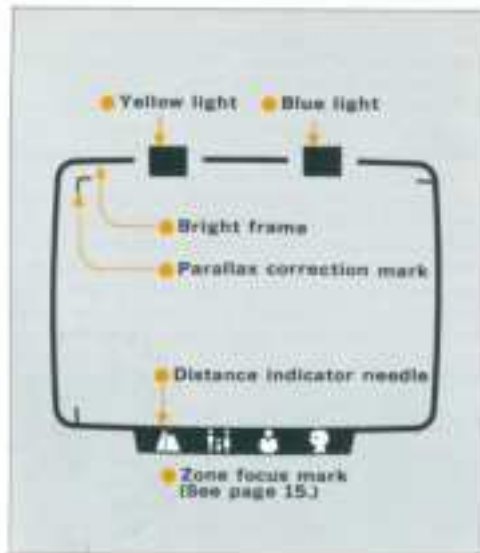
Estimate the distance from camera to subject and set it to center index mark by rotating the focus ring. The ring clicks at 1m (3.3 ft), 1.5m (5 ft), 3m (10 ft) and infinity ∞ . The black dot between 1m and 1.5m represents 1.2m (4 ft).

If you set the focus ring to 3m (10 ft) click, you can use the 35EC as a fixed focus camera, which is very convenient to make a snapshot for general purpose.

In the viewfinder, you can see the four zone focus marks with the distance indicator needle. The needle is geared with the focusing ring. So you can focus without taking your eye from the viewfinder.

Distance scale	∞	3m (10 ft)	1.5m (5 ft)	1m (3.3 ft)
Zone focus marks				
Subject	Land- scape	Group- snap	Portrait	Close-up

COMPOSING THE PICTURE



When looking through the viewfinder, you see a luminous frame. This is called the "bright frame". Any subject coming within this frame is actually exposed on the film. Compose your picture so that the subject occupies the frame area as fully as possible. In the close-up pictures within 1m (3.3 ft) distance, bring the subject in the area enclosed by 2 small indices (parallax correction marks) in the frame.

- * Yellow light
(See page 13.)
- * Blue light

After insertion of the flash gun into the accessory shoe (with built-in cordless contact) at the top of the camera, depress the release button all the way, in which course the yellow light first lights and goes out, followed by the blue light. This indicates the flashmatic photography is switched on. (See page 19.)

● HOLDING THE CAMERA PROPERLY



The camera must be held steady in order to take good pictures. Shaking leads to unsharp pictures. Practice until you become fully accustomed to the feel of the camera.

Squeeze the release button with the ball, not with the tip, of your finger. DO NOT conceal any part of the lens or the CdS sensing cell with your fingers or the case.

You can hold the camera either vertically or horizontally as your composition requires.

When holding the camera horizontally, keep both elbows close to your body. When holding the camera vertically, keep the right elbow close to your body and support the camera firmly with the left arm, pressing the camera back on your forehead.



REWINDING THE FILM

When the whole roll has been exposed, rewind the film. To determine whether the whole roll has been exposed or not, check the film counter. It will show the number 12 (in the case of 12-exposure roll), 20 (20 exposure roll) or 36 (36 exposure roll).

To rewind the film, first push in the rewind button at the bottom of the camera; second, lift up the rewind lever and turn the lever in the direction of the arrow. While the film is being rewound, the lever is tight, but when the film is rolled up and the film end leaves the take-up spool, the lever suddenly turns freely; third, the film thus rewound is taken out in a place free from direct sunlight. The recessed rewind button will return its former position at the next winding stroke.

Towards the end of the roll of film in use the advance knob may meet resistance and refuse to move half way through the advancing stroke. It means all the film is used up. Do not attempt to force the knob or you will damage the camera and tear the film. Push the rewind button and you can then complete the winding stroke.



● HOW TO USE FLASH

In dark conditions make flash pictures with flash bulbs or an electronic flash unit. The compact style Pen Flash CL can be used without a cord.

The auto flash system makes the attached flash unit automatically when the light is too dim. Furthermore, the flashmatic system will eliminate any trouble of exposure calculation.

A blue light will appear in the viewfinder whenever a flash picture is about to be taken. If the blue light does not light, it indicates that there is sufficient light for a picture to be taken without flash and the flash will not fire even if it remains on the camera.



1 Attach the flash gun to the camera.

a) Simply insert the Pen Flash CL into the accessory shoe at the top of the camera; where it connects automatically to the shutter opening mechanism.

b) When using ordinary flash guns or electronic flash, insert the unit into the accessory shoe and attach flash connecting plug into the synchro. socket of the camera.

Note: Any flash unit that has no sliding foot is not attachable.



2 Set the guide number.

Turn the guide number ring and set the guide number for the flash bulb or electronic flash to the center index mark (▼).

If the guide number is not found on the guide number ring, select a most similar number to the value. After setting the guide number, you have only to focus on the subject.

For example, if AG-1 bulb is used with Pen Flash CL, the guide number will be 28 (m) or 92 (ft) at ASA 100. If AG-1B is used, the guide number 20 (m) or 66 (ft).



3 Focus.

Estimate the distance from camera to subject and set it to center index mark. When taking flash pictures, make absolutely certain that your focus setting is accurate, as only accurate focusing sets the proper shutter speed and lens aperture automatically for correct exposure.

4 Use flash.

In case the subject is so dark that flash is required, the yellow light is replaced by the blue light as you push down the release button. This switchover from the yellow to the blue light tells flashmatic system is synchronized with constant shutter speed at 1/20.



● HOW TO USE SELF-TIMER

As shown in the picture, you can use an attachable self-timer which is available in any camera store. The shutter release shaft of any self-timer used with 3SEC must have a stroke of 6.5mm or more in order to actuate the shutter release properly. If the shutter must operate at 1/30 sec. or slower (the yellow light will remain illuminated), switch to flash photography.
(See page 14.)



● Give your camera the care it deserves

1. Dust and moisture are enemies of your camera. Be sure to store the camera in a dry and well-ventilated place.
2. Never touch the lens with your finger. To clean lens, wipe with a soft non-abrasive cloth. Finger prints must be cleaned immediately, or they may become a permanent stain.
3. After using the camera on the beach, be sure to wipe the surface of the camera with a soft cloth so that no salt or other corrosive substance will be left on it.
4. Don't leave the camera near the radio set, TV or other strong magnetic radiating sources for long periods of time.
5. When you don't use the camera for an extended length of time, remove the mercury battery from the compartment. Be sure to clean and replace the batteries before the camera is used again.
6. If the camera should need service, bring it immediately to your dealer, who is an OLYMPUS service agent.

HANDY ACCESSORIES



● Filters

Use Olympus 43.5mm screw-in type. When Y2 or ND4 filter is attached, the ASA setting should be adjusted to 1/2 or 1/4 respectively against original ASA number. For instance, set ASA at 50 or 25 instead of 100.

Filter Types and Characteristics :

UV	Eliminates undesirable ultra-violet rays and gives clear pictures. Also usable constantly for lens protection. (For black-and-white film)
Y2	Accentuates contrasts, for example, by darkening a blue sky and bringing white clouds into relief, and produces three-dimensional effects. (For black-and-white film)
1A	(skylight) Like UV, eliminates stray ultra-violet rays and prevents pictures from assuming a bluish tone. Usable for lens protection. (For color film)
81C	(for cloudy weather) Designed for color photography, prevents a bluish tone from entering pictures taken under cloudy or rainy weather.
82C	(for morning and evening) Designed for color photography, prevents a yellow-reddish tone from entering pictures taken during morning or evening hours when red rays abound.

● HANDY ACCESSORIES



● Lens Hood

This lens hood eliminates undesirable glare caused by the sun or other light source. The hood can be put on the lens in reverse, when the camera is put in a case.



● Pen Flash CL

This cordless contact microflash unit is extremely compact and uses the standard AG-1 type bulb and AG-1B (for color photography).



● **Attachment lens**
(Close-up lens)

$f=30\text{cm}$, 43.5mm screw-in type

By attaching the lens, you can take a close-up picture at minimum distance of 29.6cm (11 1/2"). The area photographed at the time is 17.3×26cm (6 7/8×10 1/2"). When using this lens set the distance scale at infinity (∞).



● **Slide Projector**

The newly introduced Olympus slide projector is equipped with a fast F2.8 lens and contains a self cooling fan that ensures cool running for many continuous hours to protect the valuable slides and protect stable pictures from over heating. It accepts any 5×5cm (2×2") slide mount (full frame, half frame, 26×26 mm slides), paper, metal or plastics. It is very easy to operate.

OLYMPUS

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