

OLYMPUS



INSTRUCTIONS

DESCRIPTION OF CONTROLS



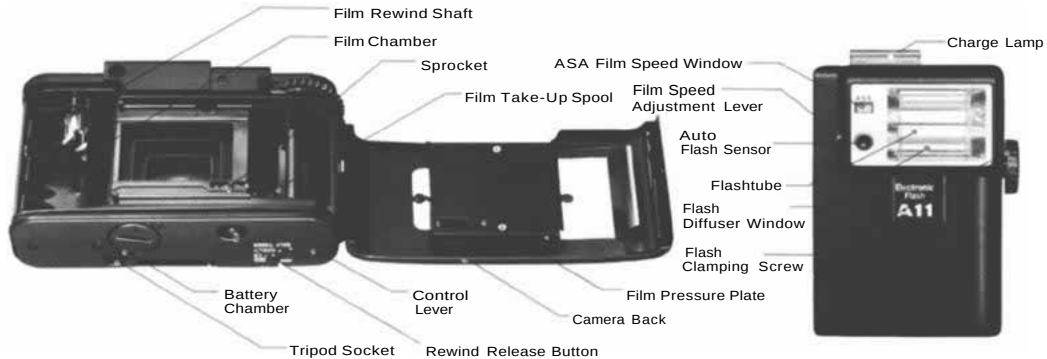


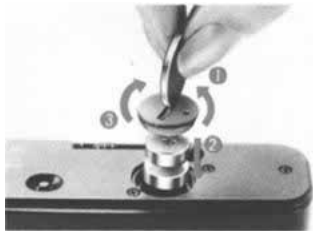
TABLE OF CONTENTS

The Olympus XA is an aperture priority auto-exposure rangefinder camera setting new standards for function and feel, appearance and performance. Please read the following pages carefully and your new camera will provide maximum performance and satisfaction.

DESCRIPTION OF CONTROLS	Page 1•2
PREPARATION	
● Installing the Batteries	4
● Loading the Film	5•6
SIMPLE STEPS FOR TAKING PICTURES	
● Setting the Aperture	7
● Focusing	8
● Releasing the Shutter	9
● Unloading the Film	10
● Self-Timer	10
● Automatic Flash Photography	11•12
PHOTOGRAPHIC TECHNIQUES	
● Aperture and Depth of Field	13•14
● Shutter-Speed Priority Photography	15-16
● Backlighting Compensation	17
● Daylight Synchronization	18
HELPFUL HINTS	19
CARE AND STORAGE	20
MAIN SPECIFICATIONS	21•22

PREPARATION

● Installing the Batteries



1. Insert the batteries correctly.

Yes	No	No	No	SR 44
				(EPX-76,
				MS-76 or
				equivalent)



2. Check the batteries.

Set the control lever to "CHECK".
The beeper emits a tone and the
check lamp glows brightly.

- If the beeper doesn't signal, the batteries are inserted incorrectly or are exhausted.

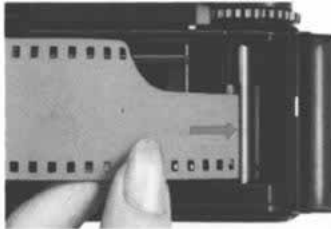
- The batteries will last about one year and must be replaced with two 1.5V silver oxide batteries (SR 44, EPX-76 or equivalent).

- Do not press the shutter release during battery check operation, or the battery will run down quickly, leaving the shutter opened. Return the lever to the normal position.

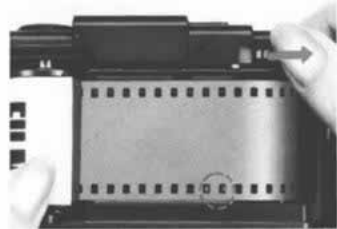
● Loading the Film



1. Open the camera back and insert the film cartridge. (Dust Barrier is in closed position.)
- Never load the film in direct sunlight.



2. Attach the film end to the take-up spool.
- The film end must not stick out of the slot excessively.

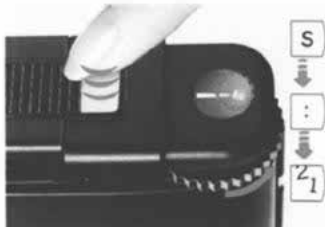


3. Start winding the film and close the camera back.
- Film perforations must engage with sprocket teeth and the film must be drawn flat.



4. Open the Dust Barrier.

- If the Dust Barrier is not fully opened, the shutter cannot be released.



5. Wind and expose two blank shots until the exposure counter shows "1".

- The lens should be aimed toward a bright light when shooting.



6. Set the ASA film speed.

SIMPLE STEPS FOR TAKING PICTURES

● Setting the Aperture



1. Open the Dust Barrier and set the aperture lever (▲ mark) to the F-number required.

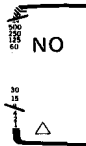


2. Confirm the shutter speed in the viewfinder, aiming at the subject.
(The arrows indicate parallax correction marks.)

Aperture guideline (ASA 100)

Weather			
F stop	16	8	4

(To make full use of aperture control, see pages 13 & 14.)



If the shutter speed needle enters the striped, overexposure warning zone, push the aperture lever downward so that the needle points to "500" (1/500 sec) or under.

If the needle points to "30" (1/30 sec) or under, be careful not to shake the camera.

● Focusing



3. Looking through the viewfinder, compose and focus.

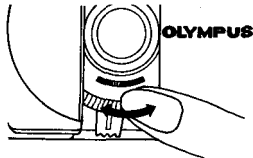


Out of focus



In focus

● If the subject distance is 0.85 ~ 1 meter (2.8 ~ 3.3 feet), frame the subject in the area under the 2 parallax correction marks.



Turn the focusing lever until the double image in the central rectangle fuses into one. Focusing can also be done with the knurled mount (e.g. when a tripod is in use).

● Releasing the Shutter



4. Hold the camera steady and lightly press the shutter release.

The release requires a minimum of finger pressure, reducing chance of image blur due to camera shake.

● Take care not to block the lens, flash diffuser window or auto flash sensor.



● Unloading the Film



5. When the film ends, rewind and remove it.

Close the Dust Barrier, depress the rewind release button and rewind the film. When the crank turns freely, open the camera back and remove the film in the shade.

● Self-Timer



Set the control lever to "SELF TIMER" and release the shutter. The beeper emits a tone and the check lamp glows intermittently. The shutter will release after a delay of about 12 sec. The lever also serves as a camera support. To stop the timer midway, return the lever to its normal position.

● Automatic Flash Photography (Only the Electronic Flash A11 can be used.)



1. Set the ASA film speed.

If the ASA speed of the film to be used is close to "100" or "400", use the nearest setting. (ASA 80 or 125→"100").



1.5V AA battery
(Alkaline preferred)



2. Connect the flash unit to the camera.

Insert the guide pin into the guide pin hole and turn the clamping screw clockwise.

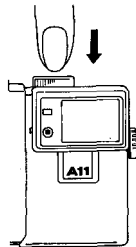
● After connecting, do not twist the A11.



3. Set the aperture lever to "Flash". The charge lamp pops up and the A11 turns on automatically.
 ● The flash setting has been designed to require a stronger pressure than the aperture setting.

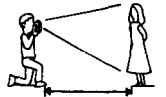


4. When the charge lamp glows, you are ready to fire.
 ● Do not move the lever once it has been set for auto flash, or incorrect flash exposure may result.



5. At the end of flash photography, fully depress the charge lamp to turn the flash unit off.

Maximum working distance 2.5m (8.2 ft.) at ASA 100, 5m (16.4 ft.) at ASA 400.



PHOTOGRAPHIC TECHNIQUES

● Aperture and Depth of Field



Making use of "out of focus" background or foreground effects

F2.8



Deep-focus effects

F22

Depth of field is the area of acceptable sharpness in front of and behind the subject in focus. The larger the F-number used (from F2.8 to F22), the deeper the depth of field. On the contrary, the smaller the F-number (from F22 to F2.8), the shallower this zone of acceptable sharpness.

The table on the opposite page shows that when the camera-to-subject distance is 1m, the depth of field at F4 ranges from 0.91m to 1.12m.

Depth of field table (in meters)

Circle of least confusion 1/30 mm.

F stop \ Distance	* 0.85	* 1	* 1.5	2	* 3	5	10	* ∞
2.8	0.80 0.91	0.93 1.08	1.35 1.69	1.73 2.37	2.43 3.93	3.59 8.27	5.57 50.1	12.4 ∞
4	0.78 0.93	0.91 1.12	1.30 1.78	1.65 2.55	2.26 4.49	3.23 11.2	4.74 ∞	8.89 ∞
5.6	0.76 0.97	0.87 1.17	1.23 1.93	1.54 2.87	2.06 5.62	2.83 22.4	3.92 ∞	6.36 ∞
8	0.73 1.03	0.83 1.27	1.14 2.21	1.40 3.55	1.81 9.02	2.39 ∞	3.12 ∞	4.47 ∞
11	0.69 1.12	0.78 1.41	1.05 2.69	1.26 5.02	1.58 38.1	2.00 ∞	2.48 ∞	3.26 ∞
16	0.64 1.31	0.71 1.74	0.93 4.24	1.08 16.7	1.31 ∞	1.58 ∞	1.86 ∞	2.26 ∞
22	0.58 1.66	0.64 2.42	0.81 14.3	0.93 ∞	1.08 ∞	1.27 ∞	1.43 ∞	1.65 ∞

Depth of field table (in feet)

Circle of least confusion 1/760 in.

F stop \ Distance	* 2.8	3	* 4	6	* 8	12	30	* ∞
2.8	2.64 2.99	2.81 3.22	3.67 4.40	5.26 6.98	6.72 9.89	9.34 16.8	17.4 112	40.6 ∞
4	2.58 3.07	2.74 3.31	3.55 4.58	5.02 7.47	6.32 10.9	8.59 20.1	14.9 ∞	29.1 ∞
5.6	2.50 3.19	2.65 3.46	3.40 4.87	4.71 8.29	5.84 12.8	7.71 27.5	12.4 ∞	20.9 ∞
8	2.39 3.39	2.53 3.70	3.20 5.37	4.32 9.94	5.24 17.3	6.70 62.1	9.94 ∞	14.7 ∞
11	2.27 3.69	2.39 4.06	2.98 6.17	3.92 13.2	4.65 31.0	5.76 ∞	7.97 ∞	10.7 ∞
16	2.09 4.33	2.19 4.86	2.68 8.25	3.39 30.0	3.91 ∞	4.67 ∞	6.00 ∞	7.40 ∞
22	1.91 5.49	2.00 6.39	2.39 13.9	2.93 ∞	3.30 ∞	3.82 ∞	4.65 ∞	5.42 ∞

(Camera-to-subject distances with * are indicated on the camera's distance scale.)

● Shutter-Speed Priority Photography



To emphasize motion

$\frac{1}{8}$ sec.



To stop movement

$\frac{1}{500}$ sec.

When photographing fast moving subjects, the impression of movement can be emphasized by intentionally allowing the image to be blurred using a slow shutter speed. On the contrary, the movement can be "frozen" using a fast shutter speed.



Move the aperture lever until the needle points to the shutter speed required.



● If the shutter speed needle enters the striped zone, push the aperture lever downward so that the needle points to "500" or under.

An aperture-priority auto-exposure camera, the XA lets you select the aperture freely, then automatically sets the right shutter speed for correct exposure. The shutter scale is visible in the viewfinder, so you can pick exactly the speed and aperture you like.

If the needle points to "30" or under, hold the camera steady or support with a tripod; or use a faster shutter speed by pushing the lever upward; or use autoflash. 16

● Back Lighting Compensation



Before compensation



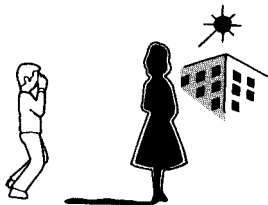
Compensated +1.5EV

When shooting against the light (bright sky, beach, snow, or facing a window), the face tends to appear dark on the image. In this case, use the control lever to properly expose the most important area.

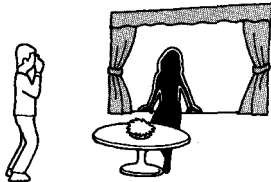


Turn the lever to "BACK LIGHT +1.5" and release the shutter.

You can get the same effect by reducing the ASA film speed setting.



In situations like these, compensate for the back lighting by using the control lever.



● Daylight Synchronization



Manual flash method is recommended for daylight fill-in. Set the A11 film speed lever to "FULL" and the aperture lever to the F-number (after having set to the flash symbol) obtained from the guide number formula.

HELPFUL HINTS

- Dust Barrier

Opening the Dust Barrier fully switches the power ON, and all camera functions are ready to shoot. Closing the Dust Barrier switches the power OFF, and all camera functions are locked.

- Foolproof electronic circuit

With the Dust Barrier closed and camera functions locked, the foolproof electronic circuit nonetheless allows the camera back to be opened for film loading, unlocking all related functions.

- Electronic feather-touch shutter release

The release (pressure conductive polymer) responds to very light pressure. Pressing with a stroke as you normally do with other cameras is not needed.

- Treat the camera with care!

Do not exert stronger pressure on moving parts than needed (Dust Barrier, levers, knobs). When attaching a tripod, care should be taken not to tighten the screw excessively and not to rotate the camera on the screw.

- Filters cannot be used with the XA.

CARE AND STORAGE

- At the completion of photography, completely close the Dust Barrier to prevent battery drain and dust.
- Do not drop or hit the camera. Cameras that have been submerged in water are generally irreparable.
- Do not touch the lens, viewfinder and range-finder window. If touched, wipe the surface lightly with a clean, soft cotton cloth. Fingerprints, if not wiped off immediately, will eventually be unremovable.
- Never leave the camera near radios, TV sets, or magnets.
- Store the camera in a dry, well-ventilated place.
- Never store the camera where temperatures exceed 50°C (122°F) or below -20°C (-4°F). When you use the camera in temperatures under -10°C (14°F), it may sometimes fail to operate properly. To avoid this, warm the camera before use.
- Have all repairs performed by an authorized OLYMPUS Service Center. You may send it directly or through the store where your camera was purchased.

MAIN SPECIFICATIONS (OLYMPUS XA)

Camera type: 35mm rangefinder electronic lens-shutter camera.

Film format: 35mm standard cassette (24 x 36mm).

Lens: F. Zuiko 35mm F2.8, 6 elements in 5 groups.

Shutter: Electronic between-lens shutter.

Viewfinder: Bright frame finder, 0.55x.

Shutter speed readout and over-exposure warning zone visible in finder.

Focusing: Double-image coupled rangefinder, 0.85m (2.8 ft.) ~ infinity.

Exposure control: Aperture-priority automatic exposure. Automatic shutter speed range 10 sec. to 1/500 sec. Backlighting compensation +1.5EV.

Film speed range: ASA 25 ~ 800.

Aperture range: F2.8 ~ F22.

Film advance: Rear winding thumbwheel.

Exposure counter: Progressive type with automatic reset.

21 **Film rewind:** Crank type with rewind release button.

Shutter release: Electromagnetic feather touch shutter release.

Self-timer: Electronic self-timer with 12 second delay. Blinking LED and electronic beeper (Piezoelectric Ceramic Vibrator) during self-timer operation.

Flash mounting: Exclusive automatic Electronic Flash A11 attaches to (or detaches from) the camera in seconds.

Setting camera's aperture lever to flash symbol switches the A11 on, and sets the XA for autoflash.

Lens/finder cover: Sliding Dust Barrier. When opened, power is switched on and shutter release unlocks. When closed, power is switched off and shutter release locks.

Power source: Two 1.5V silver oxide batteries SR 44 (Eveready EPX-76 or equivalent).

Dimensions: 102 (W) x 64.5 (H) x 40 (D) mm (4" x 2.54" x 1.6").

Weight: 225 grams or 7.9 oz. (less batteries).

MAIN SPECIFICATIONS (ELECTRONIC FLASH A11)

Unit type: Automatic electronic flash unit exclusively for use with Olympus XA and XA2.

Guide number: 10 (ASA 100, meters) or 33 (ASA 100, feet).

Applicable ASA film speeds: ASA 100 and 400.

Flash modes: Normal auto (XA, XA2) and manual mode (XA only) with switch lever.

F stop for auto flash: F4

Angle of coverage: Picture area of 35mm focal-length lens. (XA and XA2 utilize 35mm Zuiko lens.)

Number of flashes: Approx. 150 with AA 'penlight' alkaline battery.

Recycling time: Approx. 7 sec with AA alkaline battery.

Max. working distance: 2.5m (8.2 ft.) at ASA 100, 5m (16.4 ft.) at ASA 400.

Connection to camera: Fitted onto left-hand edge of XA (XA2).

Power switch: The flash unit is activated by setting camera's lever to flash symbol, popping up the charge lamp and initiating electrical charge. The flash unit turns off when the charge lamp is pressed down.

Power source: One 1.5V AA 'penlight' battery (including Ni-Cd battery).

Dimensions: 60 (H) x 36 (W)* x 33 (D) mm (2.4" x 1.4" x 1.3").

*Measured from interface.

Weight: 65 grams or 2.3 oz. (less battery).

OLYMPUS

OLYMPUS OPTICAL CO., LTD

San-Ei Building, 22-2, Nishi Shinjuku 1-chome, Shinjuku-ku, Tokyo, Japan. Tel. 03-3340-2211

OLYMPUS CAMERA CORPORATION

Crossways Park, Woodbury, New York, 11797, U.S.A. Tel. 516-364-3000

OLYMPUS OPTICAL CO. (EUROPA) GMBH

Postfach 104908, Wendenstrasse 14-16, 20097 Hamburg, Germany. Tel. 040-237730

OLYMPUS OPTICAL CO. (U.K.) LTD.

2-8 Honduras Street, London EC1Y 0TX, United Kingdom. Tel. 0171-253-2772