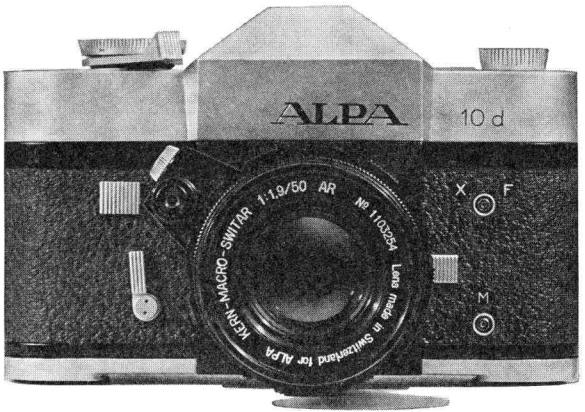
instructions for use of the ALPA 10 d

35 mm Single Lens Reflex



Perfect knowledge of your ALPA, all its functions and features will give you the best photographic results.

Please study these instructions carefully.

PIGNONS S. A. CH - 1338 Ballaigues (Switzerland)

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Instructions for use of the ALPA 10d

The ALPA 10d and the complete ALPA system of photography are the culmination of over 30 years of research and development, to meet the most demanding requirements of today's photographers.
Purpose of this manual is to give you complete instructions for the best possible performance from your ALPA equipment.
For general information on photography, please refer to the many excellent photographic handbooks available.

A. THE ALPA 10d - GENERAL DESCRIPTION

A masterpiece of Swiss precision engineering, the ALPA 10d is literally custom built to your order like the finest Swiss watch. It is an ALL-IN-ONE camera of unbelievable versatility with all desirable features, yet compact and lightweight for maximal convenience. Highly automated and functional—the ALPA 10d is virtually foolproof, for utmost handling ease. Easy to frame, easy to focus, easy to expose, it is the dream of picture taking simplicity. You can completely concentrate on your photographic assignment, without fumbling for a dial, a ring, or a knob—even when wearing gloves.
Automatic, instant exposure readings, clear visibility of exposure needle, dials and figures, rapid diaphragm and speed settings, quickchange bayonet lens mount, high speed, short stroke winding lever (without removing ALPA from your eye), high speed parallelogram rewind crank, etc.—everything is dynamically streamlined for instant fingertip controls, quickest operation and rapid action photography.
ALPA's ingenious, electronic behind-the-lens meter system thinks for you. Foregoing inaccurate and delicate linkage systems, it couples optically—with any lens, any lens accessory, at any distance, for an extreme film speed range from 3—6400 ASA. The 3 CdS cells with highly sensitive galvanometer compute absolutely precise exposure settings.
The precision ground prism with parallax-free, through-the-lens viewing system guarantees precise framing, focusing and depth-of-field control—with any lens, at any distance. You have your choice of attractive chrome or deep satiny black finish, with black, dark red or dark green leather covering that is scuff proof, sweat proof and unaffected by heat, cold and other climatic influences.
The ALPA 10d's uncompromisingly solid and exclusive light metal construction, is geared for more than 100,000 operations, withstands the most rugged use, for lifelong durability. It is virtually impossible to deform the ALPA body.
The complete range of functional accessories, more than 20 ALPA lenses and supplementary equipment fit the earlier ALPA models, 4-5-6-7-8, 4b-5b-7b-8b, 6c, 9d and 9f, with a few minor exceptions.
Every precaution has been taken to make the ALPA 10d as foolproof as possible. Nevertheless, we strongly recommend that you carefully read these instructions before using your ALPA 10d.

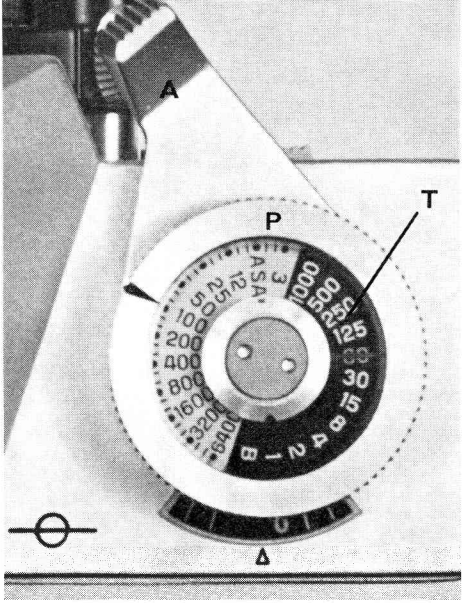


Fig. 1

B. EXTERNAL CONTROL

1) Winding

The high speed, short stroke winding lever (A Fig. 1) cocks the shutter, advances the film and counts the exposures. Because of the short travel of only 160° and its 3 separate functions you feel a certain resistance. If you do not wind the lever completely to its positive stop, the shutter release will be blocked. Just wind it once more, without any force, to unblock it.
The high speed winding lever never interferes with your viewing, so that you can rapidly release and wind your ALPA again and again, without ever removing it from your eye.

2) Setting of ASA Film Speed Rating

The equidistant click stop settings of the extreme film speed range are calibrated in black and correspond to international standards: 3-6-12-25-50-100-200-400-800-1600-3200-6400 ASA.

For fine adjustments you have a choice of 2 each intermediate click stop settings between (Fig. 1).
Depress the outer ring of the speed dial (P) and turn the black index mark opposite the desired black figure or any intermediate calibration in the blank sector. To facilitate the ASA setting you can turn the speed dial first to one of the 2 extreme speed settings of 1/1000 second or B (see below).

3) Setting of Shutter Speeds

The ALPA 10d features a Swiss precision movement with electronically tested, equidistant click stop speeds, calibrated in white on black (T).
Turn the outer ring of the speed dial (P) to the desired setting, indicated by the red line across the transparent disc. Do not try to force the red line past the black sector. Shutter speeds can be changed at any time, whether the shutter is cocked or not. Their calibrated range corresponds to international standards: 1/1000, 1/500, 1/250, 1/60, 1/30, 1/15, 1/8, 1/4, 1/2, 1 second.
B permits you to take time exposures of any desired length. The shutter remains open, as long as you keep the release knob depressed. For longer time exposure or if you mount your ALPA on a tripod, use a cable release with set screw.

Important: For slower speeds such as 1/8, 1/4, 1/2, 1 second or longer, either disconnect the automatic diaphragm control of your automatic lenses, or make sure that the shutter release remains depressed for the entire duration of the exposure. The setting of 1/60 second is marked in red, indicating that it is the fastest shutter speed for synchronization with electronic flash. If you try faster speeds, the moving slit of the focal plane shutter will only expose part of the frame.
Selection of the correct shutter speed usually depends on the mobility of your subject. Consider speed, direction, distance as well as focal length and stability of your camera. For maximal sharpness, use one of the faster shutter speeds.

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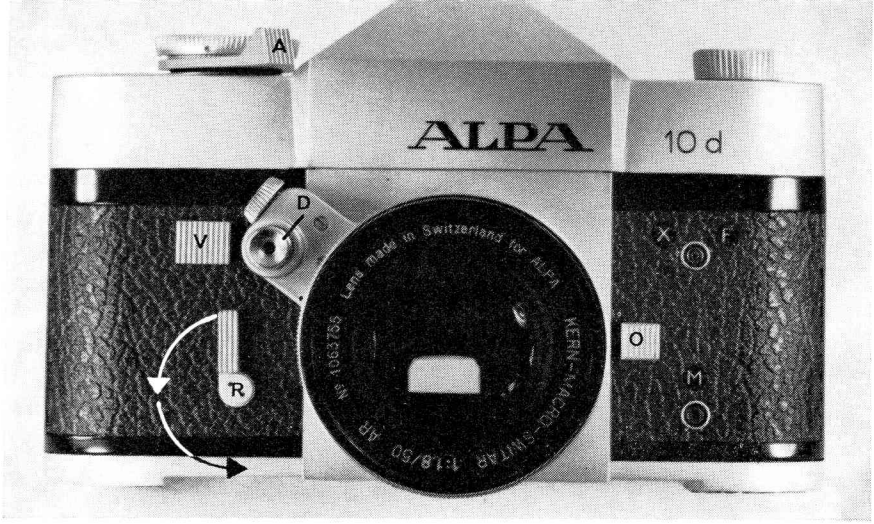


Fig. 2

4) Shutter Release

Located on the front of the ALPA 10d (D Fig. 2) the hair-trigger release instantaneously operates the quiet, lightning-fast reflex-mirror and smooth-gliding, vibration-free shutter. Press your thumb against the camera back in the opposite direction, so as to hold your ALPA as steadily as possible. The conical thread inside the release button accepts a cable release. All lenses with automatic diaphragm have integrated release buttons, which in turn depress the release button on the camera. The flip-up reflex-mirror immediately returns to its normal position, after the shutter is closed, even if you keep the release button depressed. Any vibration you may feel is caused by the flipping down of the mirror, which has no longer any influence on the sharpness of the picture.

Important: If you still depress the release button when starting to wind the camera, the mirror may not flip up for your next exposure and one frame would be lost.
The shutter release lock (V Fig. 2) provides for light readings, previewing depth-of-field and accidental exposure prevention. The lock does not function, if you use a cable release in the release button of the camera itself.

For extreme wide angle lenses with protruding rear elements, the ALPA mirror can be locked in its flip-up position. Wind the high speed winding lever, holding it in its extreme position and depress the camera release button. Then release both release button and lever. For smoothest possible shutter release with extreme telephoto lenses, for ultra close-ups, photomicrography, etc. depress the release button very slowly, so that the mirror flips up first and the shutter is released afterwards only.

Intentional double exposures can be taken as follows: After the first exposure press the rewind release knob at the bottom of the ALPA (Q Fig. 6), while operating the high-speed winding lever the second time. The film will not advance, so that a second exposure can be taken on the same frame. However, perfect registration cannot be guaranteed, as the take-up spool is still turning.

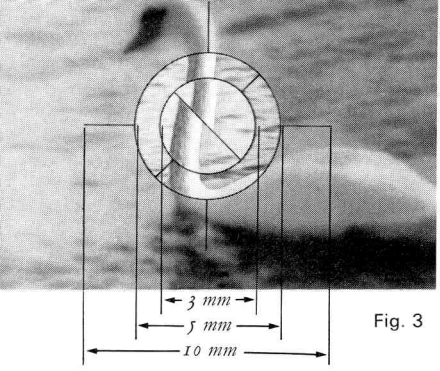


Fig. 3

Out of focus.

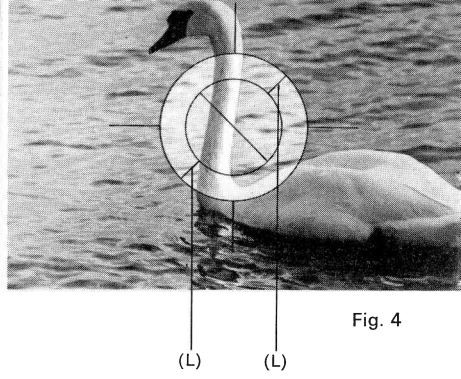


Fig. 4

In focus.

5) Selftimer

The built-in selftimer (R Fig. 2) can be adjusted from 1-20 seconds. Turning the lever to its extreme position corresponds to a delay of approximately 20 seconds. If moved 90° only, the delay will be about 6 seconds.
Wind the ALPA first, set the selftimer, then depress the release button completely. This sets the delayed action into motion, giving you plenty of time to take up your position "in the picture".

Important: When using the selftimer, disengage the automatic diaphragm of your automatic lenses. Otherwise the picture will be taken at full aperture. If you use the selftimer with the shutter set on B, the exposure time will be about 3 seconds. This long exposure time is invaluable for pictures taken under poor lighting conditions or at very small apertures.
The extremely gentle release by the selftimer permits vibration free exposures, especially useful at slow shutter speeds. If for any reason a picture is not taken after the selftimer has been set, simply lock the release button (V Fig. 2), then keep the release button depressed until the lever (R) returns to its original position.

6) Flash Synchronization

The upper X and F contact (Fig. 2) is for synchronization with electronic flash at shutter speeds up to 1/60 second. If you try faster speeds, only part of the image will be exposed. At slow speeds up to 1/15 second, you can also use this contact with the more economical flashbulbs for central shutters, which have a short peak (class F bulbs with 5 milliseconds delay).
The lower M contact (Fig. 2) is for synchronization with class FP bulbs for focal plane shutters. They have a long peak that gives uniform illumination over the entire image, at most shutter speeds.

C. FRAMING, FOCUSING AND DEPTH-OF-FIELD CONTROL

1) Single Lens Reflex System

The precision ground ALPA prism provides a reinverted groundglass image of exactly 25×35 mm, i.e. 24×36 mm less a 1/2 mm safety margin on each side. This corresponds to the 23×35 mm frame of standard slide mounts, so that there are no cut-offs on the projection screen, which guarantees absolutely accurate composition.
The finest grain groundglass offers a brilliant image in 1:1 LIFE size (with standard 50 mm lenses). This means that the image appears just as large as the subject, when you view it with your

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naked eye. And it can still easily be seen, when stopping down to small apertures for depth-of-field control.
When using longer telephoto lenses or close-up attachments, the upper edge of the image may become slightly shaded, because the reflex-mirror does not reflect the entire cone of light rays. However, this has no effect whatsoever on the actual picture.
The eyepiece of the ALPA 10d is equipped with a large, soft-rubber eyecup to exclude extraneous stray light. It can be rotated for taking horizontal and vertical pictures. Its bayonet mount offers instant interchanging with a magnifier or angle viewfinder. The standard 1:1 ocular of the ALPA viewing system can be replaced by a special 1:0,7 eyepiece, so that people who wear glasses or have recessed eyes easily see the entire image. An adapter with standard diopter or prescription lenses snaps easily into the eyecup.

2) Focusing

Turn the focusing ring on the lens to set the proper distance. You have your choice of 3 focusing methods:

a) Groundglass. Turn distance setting ring until image is critically sharp.

b) 45° Diagonal Split-Image Rangefinder

The standard groundglass screen has a built-in optical rangefinder with a 45° diagonal split-image, formed by a pair of prisms which appear as 2 semi-circles (Fig. 5). You can pinpoint focus for both horizontal or vertical lines instantly—with any lens, at any distance. Select a specific detail in the subject to be photographed and turn the focusing ring until the image in the 2 semi-circles is in perfect alignment, with no displacement at the dividing line. Now your focus is perfect (Fig. 3 and 4).

The clear glass ring (aerial image) around the rangefinder (diam. 5 mm) permits you to see everything visually sharp, which is in front or behind the depth-of-field zone of sharpness on the groundglass. You can also use it for rapid location of the subject you wish to

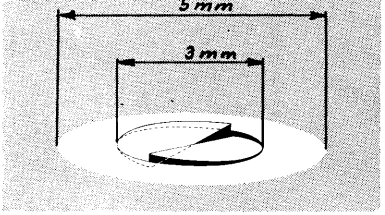


Fig. 5

photograph. And last but not least, it is indispensable for extreme close-ups at high magnifications and photomicrography. The image is in perfect focus when both the aerial image and one of the two lines (L Fig. 4) appear equally sharp.
Both semi-circular prisms will appear uniformly bright under normal conditions. Under certain circumstances (smaller lens apertures, close-up photography) one of the semi-circular prisms may appear to be shaded. In this case you can align your image between the other, bright prism of the split-image and the clear glass ring.

Important: The perfected optical system of the ALPA 10d with 1:1 LIFE size magnification on the groundglass makes focusing remarkably easy. However, this should not tempt you to take photographs of subjects which cover only a small part of the entire area. You can easily avoid this by comparison with the 3 rapid reference scales on the ALPA groundglass: The diameter of the rangefinder is 3 mm, the width of the clear glass ring is 1 mm which brings the total diameter to 5 mm. The overall length of the cross-hair is 10 mm (Fig. 3, 4 and 5). These 3 reference scales clearly indicate when a different (telephoto) lens ought to be used. They are even more useful for measurements and comparisons in macro-photography.

c) Distance Scale

ALPA interchangeable lenses are calibrated with distance scales to preset a specific distance, where focusing on the

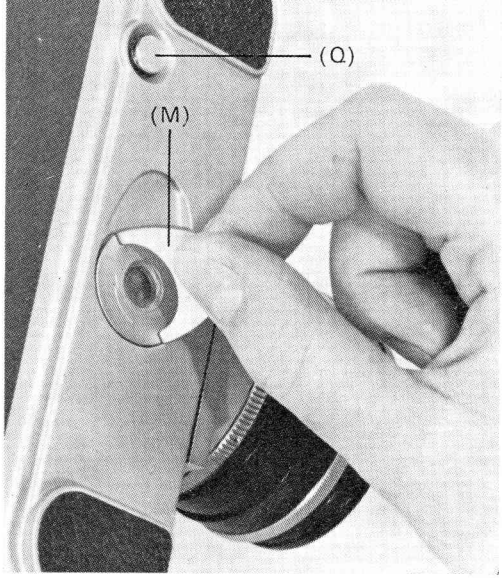
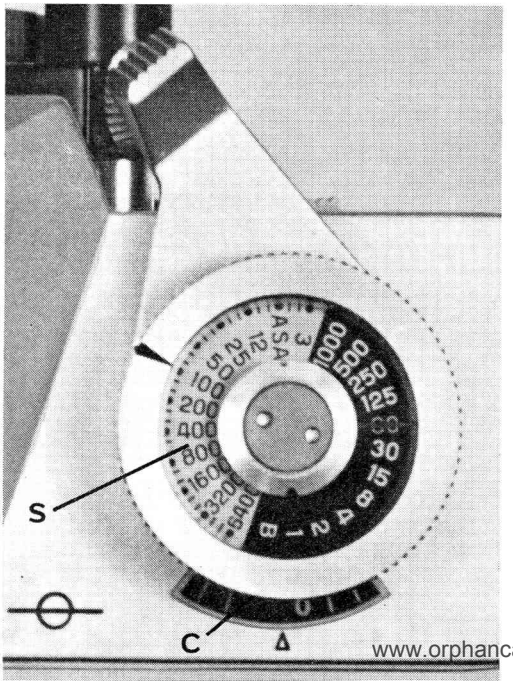


Fig. 6

Fig. 7



groundglass or with the rangefinder is impractical. When taking flash pictures, the available light may be so dim that groundglass focusing can become difficult, especially if the lens is stopped down to a smaller aperture. In sports photography you frequently have no time to do any focusing at all.
Location of the film plane is visibly indicated by the exacting calibration on camera top, to the right of the reflex-prism.

D. LOADING AND UNLOADING

1) Loading

Lift the hinged key (M Fig. 6) at the bottom and turn it to the right clockwise, as far as it will go. Pull the key to remove the combined camera back and bottom. Always lift off the back upwards and never downwards to avoid damaging the film pressure plate. Fig. 8 shows you the best method of how to hold the cartridge to insert the film leader in the slit (marked by an arrow) of the empty take-up spool. Keep the film edge against the lower flange of the spool. Pull out just sufficient film, so that the cartridge can be placed in its chamber. Turn the take-up spool by advancing the film with the high speed winding lever once, so that at least 1 layer of film is wound around it. Make sure that the sprockets engage in the film perforations. You do not necessarily have to wind the film until the sprockets engage the perforations on both sides (Fig. 9). After the film is correctly positioned replace the camera back from above holding it by the key. Lock it by turning the key to the left counter-clockwise. Wind the high speed winding lever and **make sure that the central screw in the high speed parallelogram rewind crank rotates** (Fig. 11)**, wich proves that the film is actually advancing.** Wind and release the shutter 2 or 3 times in succession, in order to eliminate the fogged film leader before you take the first picture.
The automatic frame counter (C Fig. 7), which always starts 3 numbers below 0, advances simultaneously to 0.

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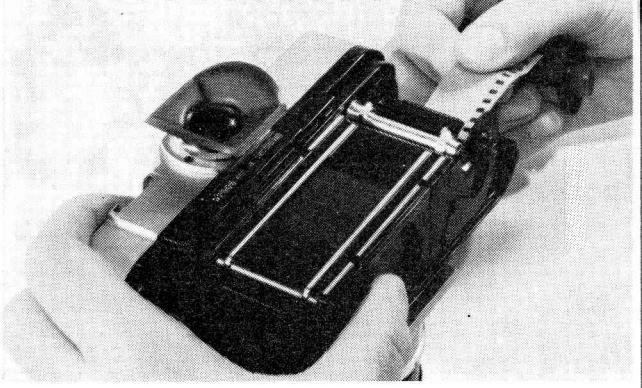


Fig. 8

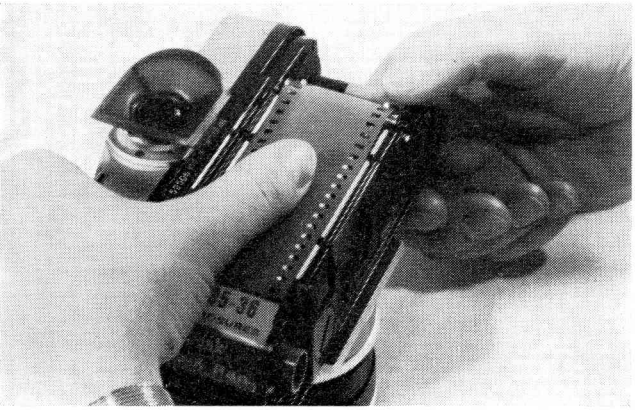
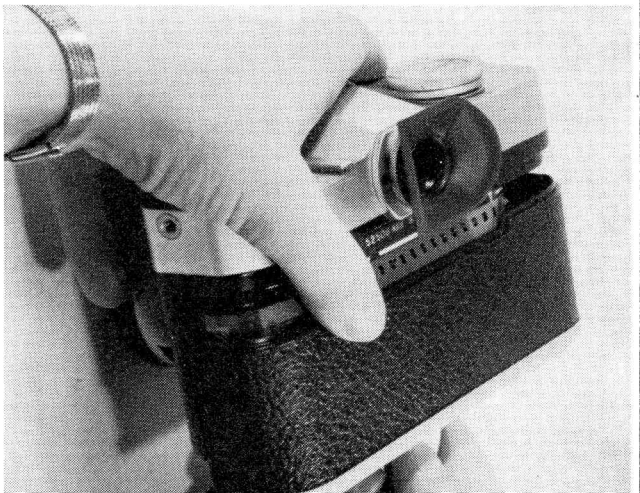


Fig. 9

Fig. 10



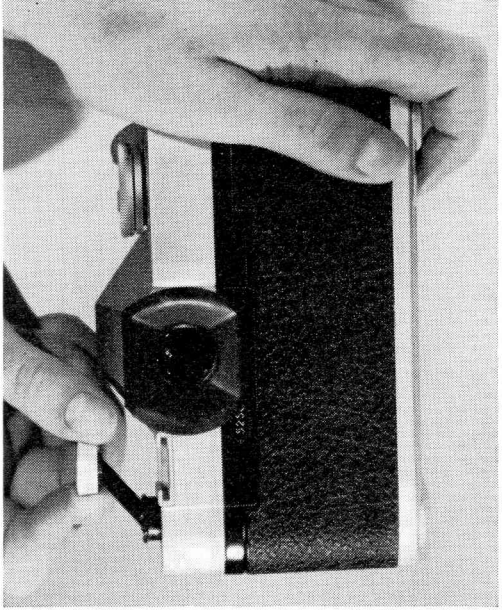


Fig. 11

Whenever possible load the ALPA in subdued light to prevent fogging of the film. If no other shade is available, turn your back to the light.

Important: If you have a partially exposed film, make a note of the number of exposed frames as indicated by the exposure counter, before rewinding the film into its cartridge and opening the camera back. The automatic counter returns instantaneously to zero when you remove the camera back.

Fig. 12



2) Unloading

When the counter indicates the 19th or 35th frame of your 20 or 36 exposure roll, wind the high speed winding lever with caution. According to your way of loading, you may obtain 1 or 2 exposures more or iess than the specified number. If you feel a stronger resistance when winding, do not use any force. Otherwise you may tear the perforations or detach the filmend from the cartridge, which makes rewinding impossible.
The high-speed parallelogram rewind crank rewinds the fully exposed film quickly, within seconds. Depress the rewind release knob (Q Fig. 6), in order to disengage the sprockets. It remains depressed during rewinding and automatically jumps out, when you wind the high-speed winding lever again to advance the new film. Pull out the high-speed parallelogram rewind crank (Fig. 11) and turn it in the direction of the arrow. While rewinding the film, you feel a distinct resistance at first. Once the film has been completely rewound, you hear an audible signal that indicates the separating from the take-up spool. Open the ALPA and remove the original cartridge with the exposed film.

Important: If you depress the rewind release knob accidentally, while winding the camera, this may cause a double exposure (see page 3). Release shutter with lens cap over lens frame and advance the film once, making sure that the rewind release knob jumps out again, which re-engages the film transport sprockets.

E. ALPA LENSES

1) Changing the lenses

Press the lens lock button (O Fig. 2) and turn the lens anti-clockwise. To insert the new lens line up the two red

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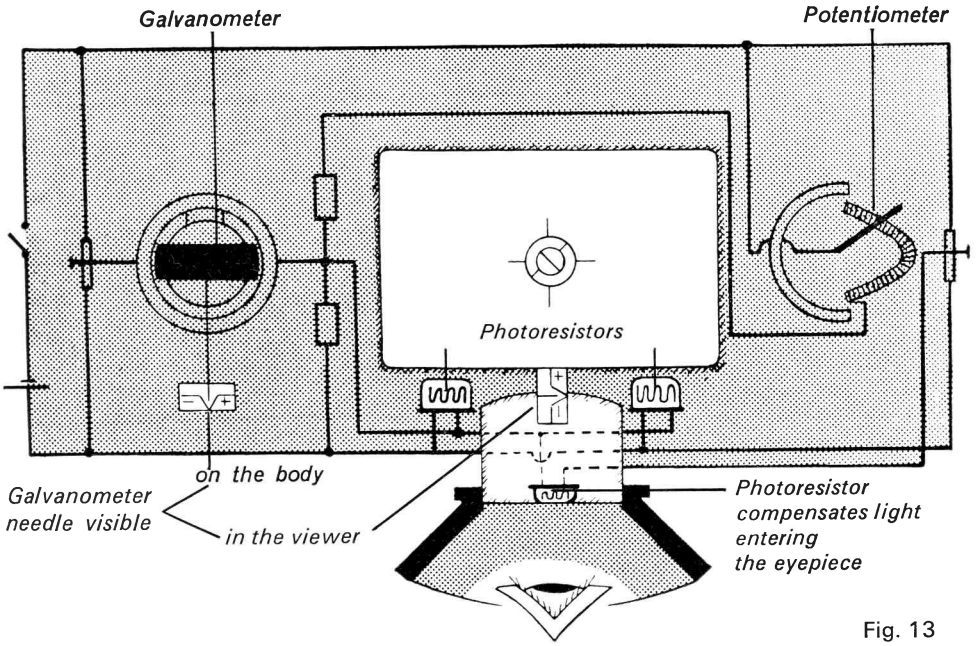


Fig. 13

dots, press lens lightly to the camera body and turn it clockwise until it clicks in.

2) ALPA lenses

ALPA has chosen an incomparable selection of lenses produced by the most well-known manufacturers: Kern, Kinoptik, Angénieux, Schneider, Zoomar and Zeiss. Each lens undergoes a rigorous control of an extremely high standard. The lenses have a range of focal lengths between 24 and 600 mm and their bayonet mounting system has remained unchanged since 1952. Among this fine selection of lenses are three exclusive to ALPA- the well-known Kern Macro-Switar 1.9/50 mm (the standard lens of the ALPA) and the Kinoptik apochromats.

F. EXPOSURE READINGS

1) Basic Principles

Fig. 13 illustrates the ingenious, electronic behind-the-lens CdS meter system which couples optically—with any of the more than 20 lenses, any lens accessory, at any distance, for an extreme film speed range from 3-6400 ASA.

All f/stops, shutter speeds and ASA ratings are directly cross-coupled to the highly sensitive galvanometer for instant exposure settings, automatically—or manually. Two CdS cells take accurate overall light readings with predominance on the center area, while the third CdS cell electronically compensates for light entering the eyepiece, for absolutely precise exposures. The well illuminated needle is always clearly visible, either at eyelevel in a separate window below the viewing screen, or at waistlevel in a second window in the accessory clip on the camera top. The camera release button automatically activates the 2 standard Mallory mercury batteries (PX 450), extending battery life to 2 years or more. Goldplated contacts guarantee accurate functioning of the meter system, even while battery voltage decreases.

Important: Always check ASA rating, when changing your film (see page 2)

2) Two Methods

a) Correct Aperture for given Shutter Speed

Usually you set your shutter speed first, based on the moving or stationary subjects (Fig. 7). Slide shutter release lock towards lens (V Fig. 14). Keep release button (D Fig. 14) depressed and turn diaphragm ring until the well illuminated needle is centered (see page 9). If your picture is properly framed and focused, simply slide back lock (V) and press release button (D) to take your picture.

b) Correct Shutter Speed for given Aperture

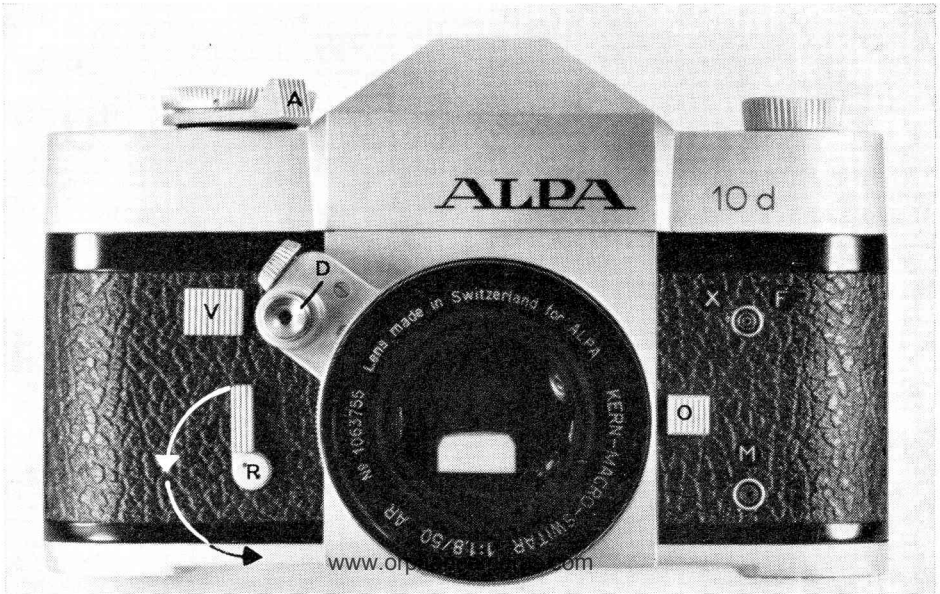
As an exception you may wish to set the aperture first, based on the required depth-of-field. Slide the shutter release lock (V) towards lens. Keep release button (D) depressed with diaphragm stopped down to preset f/stop and turn speed dial until needle is centered. Slide back lock (V) and press release button (D) to take your picture.

3) Recommendations

Light readings can also be taken without locking the shutter release. Either you read the exposure before the camera is wound, or you carefully press the release button and stop down the diaphragm, before releasing the shutter. If you cannot center the needle, there is not enough (— sign) or too much (+ sign) light and you have to change the shutter speed or f/stop accordingly. At your convenience you can also change f/stops or shutter speeds manually, independent of the meter system, for personal exposure control.

Keep your eye as close as possible to the large, rotating soft-rubber eyecup while taking a light reading. This eliminates strong reflections caused by eyeglasses or incident light, which may not sufficiently be compensated by the third CdS cell. If you center the needle at waistlevel in the window on top of the camera, cover the eyepiece either with your hand or the lens cap.

Fig. 14



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4) Range of CdS Meter System

Film speeds ASA	DIN	*Range of Shutter Speeds* fastest	slowest
3	6	1/60	1 second
6	9	1/125	1 »
12	12	1/250	1 »
25	15	1/500	1 »
50	18	1/1000	1 »
100	21	1/1000	1/2 »
200	24	1/1000	1/4 »
400	27	1/1000	1/8 »
800	30	1/1000	1/15 »
1600	33	1/1000	1/30 »
3200	36	1/1000	1/60 »
6400	39	1/1000	1/125 »

If the speed required is outside these ranges, the correct setting can be easily determined, as the ASA film speed ratings are directly proportional to the shutter speeds and f/stops (with the exception of the maximum apertures on certain lenses).
Example: You wish to take a picture with an ASA 12 film at a shutter speed of 1/1000 second. The fastest possible shutter speed is 1/500 second. Assuming the correct f/stop with 1/500 second is f/5.6, you simply open the aperture to f/4 and set the shutter speed to the desired 1/1000 second.
If the shutter speed exceeds 1 second, you can easily determine the exposure based on the ASA film speed rating. Example: You wish to take a picture with a 25 ASA film. The lens is set at full aperture and the shutter speed at 1 second, but the needle still cannot be centered. Change the ASA setting on your dial until the needle is centered. Assuming that it indicates 100 ASA, i.e. 2 stops above your film speed of 25 ASA, you easily determine the exact shutter speed of 4 seconds.

5) Battery Change

If the needle no longer moves, while you depress the release button, the batteries have to be changed. Make sure there is no film inside your ALPA—(counter must be 3 numbers below 0, see page 6)—and remove the camera back. Unscrew the large lid of the battery housing at the bottom with a coin.

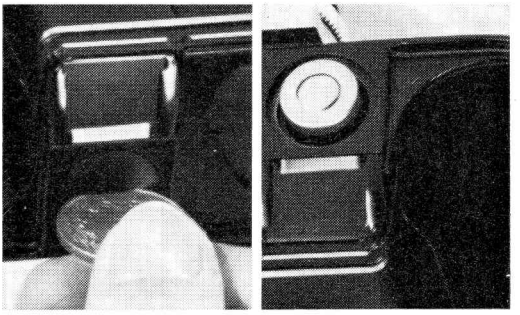


Fig. 15

Insert 2 new standard Mallory Mercury PX 450 batteries, both with the + sign facing outwards i.e. towards the camera bottom (Fig. 15).

6) Filter Factors

Exposure factors caused by filters are automatically compensated for by the behind-the-lens CdS meter system, except for certain red filters.

G. USEFUL ALPA HINTS

ALPA cameras are well known for their exceptionally solid and exclusive light-metal construction that withstands the most rugged use. This has been proved time and again under the most trying climatic conditions, in many expeditions to the artic, the tropics, the ocean depths and up the highest mountains of the world.
Nevertheless, the ALPA is also a precision instrument, which deserves your continued care, so as to maintain its high performance standards. The same principle applies to all ALPA lenses and accessories. Please pay special attention to the following points:

1) Protect your ALPA from sudden blows and falls, by using a carrying case. Avoid continuous vibration (on the floor of a car close to the propeller shaft, on the luggage grid of a motorcycle, etc.).

2) Do not leave your ALPA wound during prolonged periods of time.

3) Keep your ALPA away from dust, wind-blown sand and too much humidity. In the tropics keep it in an airtight container together with a desiccating agent such as silica gel. In winter, when carrying your ALPA from outdoors into a warm room, metal and glass surfaces may become misted over with condensation. Do not wipe this off, but wait until the mist disappears as the camera warms up.

4) Clean the film channel and pressure plate from time to time with a piece of fluff-free cloth (never use cotton or wool).

5) Do not touch the reflex-mirror with your fingers, which may smudge or scratch its surface. Your nearest dealer or service station will be happy to clean it for you.

6) Do not try to lubricate the ALPA mechanism and shutter. They are geared for more than 100,000 operations without lubrication.

7) Do not attempt to dismantle the ALPA. This operation requires not only extensive knowledge and skills, but also special tools. Your guarantee becomes void, if the ALPA or ALPA lenses are serviced by any unauthorized person or service station.

8) The ALPA is not watertight. Special water-tight cases are available for underwater photography. It the camera is dropped accidentally into the water, it should be dried immediately and sent at once to an authorized service station or to the ALPA factory. If dropped into salt water, the camera must first be rinsed several times in fresh water before being dried. If salt water dries inside the camera, the increasing concentration of salt will erode the metal components including chrome, and destroy the mechanism.

9) Standard 35 mm film cartridges may sometimes be faulty. When loading your ALPA make sure that the film moves easily out of the cartridge and that its lips are not too tight or dented. If the film does not pull out freely, gently insert a penknife blade between the back of the film and the lip of the cartridge and open the mouth slightly. Make sure that there are no loose velvet threads hanging from the cartridge lips. They may tear lose and get caught in the film window, which produces shadows on your photographs.

10) Register your ALPA with the agent in your country or with the factory to validate the warranty.

11) If your ALPA is lost or stolen, report the serial number of both camera and lens to your dealer, the ALPA agents in your country or the ALPA factory immediately. This is the only possible method of finding the camera and returning it to you. We strongly recommend that you insure your ALPA equipment.

12) Over 40% of the ALPA factory are engaged in most severe, total quality controls, certified by an inspection label attached to every ALPA. And each ALPA carries a world-wide guarantee for highest mechanical, electronic and optical performance.

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