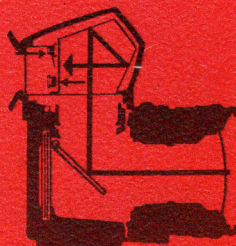


THE ONLY PRECISE LIGHT METERING SYSTEM



WITH
ANY FILM
ANY LENS
ANY FILTER
ANY BELLOWS
ANY MICROSCOPE
AT ANY DISTANCE
ALPA 9d



The Swiss custom-built 35mm single-lens reflex camera
with optically coupled, electronically compensated
BEHIND-THE-LENS CdS METER
and over 30 hand-selected lenses

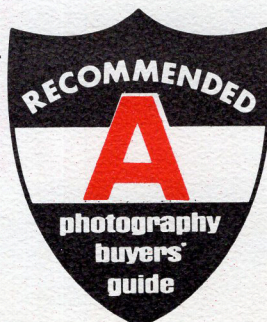
TEST REPORTS

CAMERA 35

"...designed with care
...a superb camera!"

modern
PHOTOGRAPHY

"...Alpa steals a march
on all SLR cameras!"



POPULAR
**PHOTO-
GRAPHY**

"...a thinking camera
rugged and reliable!"

U.S. **CAMERA**

"...how does it work?
...beautifully!"

ALPA 9d

Here is a tool that allows intimacy between photographer and subject: a camera that liberates us, as far as it is possible, from the need to attend to technical details.

The latest version of the Alpa single-lens reflex camera has a built-in exposure meter that *measures the picture-producing light that passes through the lens.*

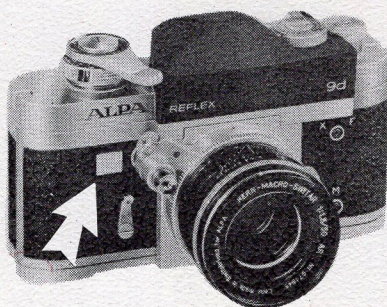
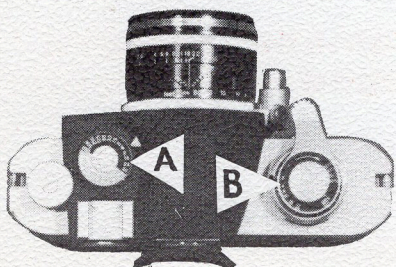
The value of the new Alpa 9d is in its simplicity of operation. You look into the viewfinder, focus, center the needle of the exposure meter (visible in the finder), and shoot. Exposures are always correct.

The heart of the new model is the CdS exposure meter. Two CdS cells are attached to the rear of the prism (out of sight, inside the camera), adjacent to the opening of the eyepiece. They measure the light you see, which is identical, of course, with the light that produces the image, since in a single-lens reflex camera the image seen in the finder is the same as the one that will reach the film. The position of the CdS cells assures an integrated light reading that considers the entire picture area and results in a correct exposure—regardless of the subject, lighting, lens, filter, extension tubes, or other accessories in use.

After many years as a professional photographer, I was enabled for the first time to concentrate on the subject, to pay minimum attention to the technical aspects of picture taking, thanks to the Alpa 9d.

At this point you might feel that they invented a "thinking" camera; otherwise how could exposures be perfect all the time? They didn't do quite that. You still have to use your head, make adjustments to get a desired result. For example, the density of a color transparency is a matter of taste. With the Alpa 9d the photographer can adjust the density of negatives or transparencies to his taste by using a higher or lower ASA rating than the one recommended.

The exposure needle in the viewfinder can be centered in one of two ways. First, the selected shutter speed is set on the meter dial (A below) and then the lens is stopped down until the needle is centered. Second, the lens opening can be adjusted to a selected f-stop and the shutter speed dial can be turned until the needle is centered. If the second method is used, the shutter speed indicated by the meter must be transferred to the shutter, since the exposure meter dial and the shutter speed dial (B) are not connected.



If the exposure meter indicates a speed between numbers on the dial, the shutter speed dial is adjusted the same way, since the Alpa shutter will operate accurately at in-between settings as well as at the speeds that appear on the dial.

The film speed range of the exposure meter is between ASA 12 and ASA 6,400, and the shutter speeds can be adjusted on the meter dial between 4 seconds and 1/1,000 second. The actual shutter speeds, however, range between 1 second and 1/1,000 second; longer than one-second exposures must be made with the B setting.

The range of the shutter speeds to which the meter can be adjusted depends on the ASA speed to which the dial is set. At a film speed of ASA 12 the entire shutter speed range on the meter is operative, up to four seconds. As the film speed rating is raised on the ASA dial, a cut-off point appears in the operation of the meter. At a speed of ASA 400 the usable shutter speeds range from 1/1,000 to 1/4 second. At higher ASA speed settings the bottom value that can be read on the meter is about 1/15 second. This, however, does not interfere with the practical operation of the meter, since when extra-fast films are used the shutter speeds utilized are usually faster than 1/15 second.

CdS exposure meters operate on battery current. To save wear on the battery, the current in the Alpa 9d is used only when the shutter release is pressed. In other words, the shutter release must be pressed to operate the exposure meter. To prevent the accidental release of the shutter, there is a shutter-lock next to the release (arrow in photo above). After some experience with the camera the locking-unlocking operation becomes automatic: the index finger moves by itself, as needed, between the lock and the release button. Of course, the shutter release remains unlocked most of the time, since an exposure meter reading is necessary only once in a series of pictures taken under the same lighting conditions.

The finder window of the Alpa 9d is equipped with a soft rubber eyecup that can be adjusted for vertical and horizontal camera positions. The eye must be held against the rubber cup to prevent stray light from reaching the meter from the rear.

The prism is equipped with a third CdS cell that faces the finder window. To neutral-

ize the effect of light that enters there, it deducts that light from the reading. While this compensating mechanism works well, in bright-light situations the reading changes when the eye is not hugging the rubber cup. Since I wear glasses which prevent me from holding the camera against my eye, I found it better to raise my glasses to my forehead and take the exposure meter reading with my eye against the rubber cup. This eliminated the chance of stray light entering the meter that could have interfered with the accuracy of the reading. Another, better method is the use of a dark plastic shield that prevents the light from getting behind the eyeglasses. They snap on the side bars of eyeglasses and are sold by opticians.

The Alpa has all the advanced features of modern single-lens reflex cameras: instant-return mirror, self-timer, full synch, rapid rewind, depth-of-field preview arrangement and split-image rangefinder in the center of the groundglass viewfinder. The rapid lever wind is on the front of the camera, which is an advantage to eyeglass wearers, since the swing of the lever does not hit the eyeglass, as it often does with rear-mounted winding levers. The prism is not interchangeable, which assures utmost precision in focusing, since the prism is set and adjusted at the factory to coincide with the exact focus of the film plane.

The brightness of the viewfinder image must be seen to be believed. Superior design, fine materials and workmanship add up to the unsurpassed image-brightness.

The standard Alpa lens is the Kern Macro Switar 50-mm f/1.8 that can be focused down to 11 inches (subject to film plane). The sharpness of this lens is excellent at all openings and at all distances. I have used two additional Alpa lenses: the 100-mm f/2 and the 150-mm f/2.8 Kinoptik Apochromats. These lenses certainly rival in sharpness and color correction the finest lenses of the top camera lines. Other Alpa lenses (not tested) range from 9.8-mm to 5,000-mm. Insofar as mechanical performance is concerned, judging from my two years of intensive experience with the basically similar 6c, the 9d's predecessor, it should really be most rugged and reliable.

I feel that the introduction to the Alpa 9d is an important step toward freeing the serious photographer from the need to attend to the technical details of picture taking. While it is an expensive camera, its superb quality and features make the investment worthwhile.—Joseph Foldes

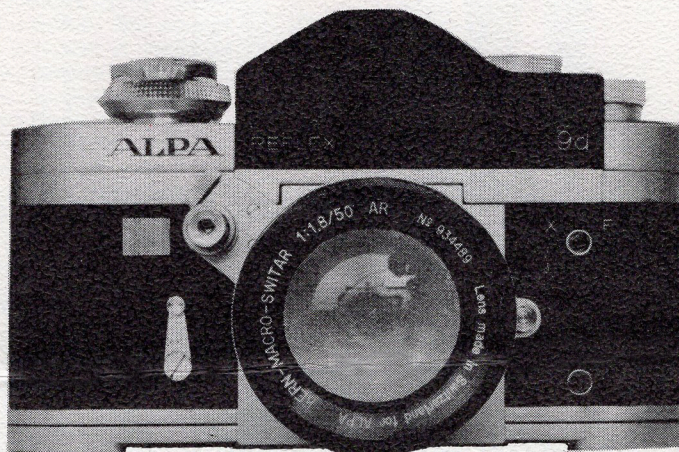
TECH DATA

CAMERA TYPE: 35-mm single-lens reflex.
LENS: 50-mm f/1.8 Kern Macro Switar; focuses from 11 in.; automatic diaphragm; interchangeable with lenses from 9.8- to 5,000-mm.
EXPOSURE METER: Built-in CdS exposure meter measures light through the lens; needle visible in finder.
ASA SPEED RANGE: 12 to 6,400.
SHUTTER: Cloth focal-plane shutter; continuous speeds 1-1/1,000 sec. Built-in self-timer.
FLASH SYNCHRONIZATION: Full synch with separate M-F-X contacts.
OTHER FEATURES: Split-image rangefinder on groundglass. Rapid wind lever, rapid rewind crank. Self-setting frame counter, accessory shoe.
ACCESSORIES: Bellows, extension tubes, copy stand, microscope adapter, underwater housing, among others.
DISTRIBUTOR: Karl Heitz, Inc., 979 Third Ave., New York, N.Y. 10022, (212) HA1-5220

CAMERA 35

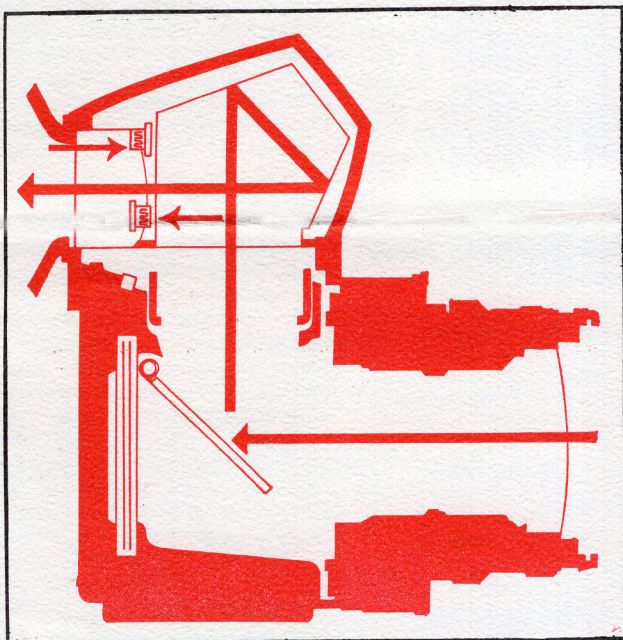
ALPA 9d

What's new about this latest model of an outstanding line of SLRs? Easy. The accuracy and versatility of a through-the-lens metering system.



THE new Alpa Reflex 9d is significant in two ways; first, it is the latest model in a long line of outstanding single lens reflexes; and secondly, it contains as an integral part of its design a through-the-lens CdS exposure meter system. In my opinion, this type of metering is from many points of view far and away the most sensible; and in many cases, the most accurate.

First of all, through-the-lens metering means that no special allowance is needed for extreme lens extension. Change lenses and the meter is affected by the lens in use and produces a considered exposure. I also feel that it is just a matter of time before more single lens reflexes are made this way . . . more so than not. These are just a few reasons why I have a special sort of interest in



METERING SYSTEM of 9d uses two CdS cells located alongside pentaprism. They read light coming through the lens. Third CdS cell faces outward (note small arrows in diagram) reads light entering eyepiece and subtracts it from lens reading.

any new camera that contains through-the-lens metering.

It is especially interesting to see the Alpa embrace this new system at so early a date. But not really surprising. The Alpa makers have exhibited neither conservatism nor moderation in their thinking. Alpa is not moderate in its designs, pricing or workmanship. The Alpa is the only single-lens reflex with focal plane shutter to offer a choice of 60 different speeds. Nine are marked with the actual speed settings, 11 more are indicated by detent marking and the rest are just detent indicated. The Alpa was also the first SLR in the high priced class to change conventional rapid wind lever designs by making theirs work forward—away from the eye—instead of toward the eye. Both of these points are germane to an examination of the new Alpa 9d in the sense that they establish a significant image of the calibre of camera that the Alpa is. It is superbly made and designed with care and innovation that makes it not quite like any other SLR.

The new Alpa 9d is basically the same camera as the preceding model, the 6c. There are two additions that concern us at the moment; the built-in metering system and the shutter lock. As a rule, a feature as unimportant as a shutter lock would hardly be worthy of mention, but in the case of the Alpa 9d and its metering system, this is an extremely important feature, indeed. But more about that later.

The Alpa's metering system is as unusual an approach to the problem as could be imagined. Not just one, but two CdS cells are used. They are battery-boosted and are located alongside the pentaprism . . . one at each side. They meter the light coming in through the lens, reflected from the mirror and the surfaces of the pentaprism and out toward the eyepiece. Since light entering the eyepiece would also affect the reading, a unique compensation was devised. A third CdS cell has been utilized. It faces backward toward the eyepiece and reads the light entering the eyepiece. It takes this reading and subtracts it from (Continued)

MODERN TESTS

NEWEST CAMERAS • LATEST FILMS • IMPORTANT ACCESSORIES

ALPA 9d PUTS METER BEHIND THE LENS



MANUFACTURER'S SPECIFICATIONS: Alpa 9d 35mm single-lens reflex camera. **LENS:** 50mm f/1.8 Macro-Switar, interchangeable bayonet mount, with stops to f/22, focusing to 11 in. **SHUTTER:** Cloth focal plane with speeds from 1 to 1/1000 sec. plus B, FPXM sync. **VIEWING:** Fixed eye-level prism with full focusing screen, central split-image rangefinder, clear glass collar (other screens on request). **OTHER FEATURES:** Cadmium sulfide cell resistor exposure meter circuit built into optical system, quick-return diaphragm, rapid-return mirror, depth of field preview knob, auto resetting frame counter.

Alpa herewith steals a march on practically all SLR cameras by upstaging them with a unique, rugged, workable exposure meter system, which allows you to make your exposure readings right through the lens. Moreover, the engineers have managed to build it into the beautifully finished body without adding measurably to either the size or the weight of the Alpa. That's quite a feat.

Basically the camera is the Alpa 6c which featured a selenium cell meter instead of the far more comprehensive CdS behind-the-lens system of the 9d. Sharp-eyed Alpa connoisseurs will note a few added changes such as the now completely automatic resetting frame counter. Since the meter system itself represents the really radical innovation in this precision instrument, let's get to it.

Unlike the one other SLR which features a CdS meter cell built into the

back of the reflecting mirror, the Alpa uses two CdS cells, one on either side of the eyepiece inside the prism housing. Full brightness of the reflecting mirror is thus retained. Although well outside the field of view in the finder, the two cells measure the amount of light on the ground glass as reflected through the prism—the light from the subject as you actually view it. A third CdS cell inside the prism housing faces toward the rear measuring the amount of extraneous light entering the prism from the eyepiece. The current from the third cell is designed to compensate electrically for extraneous light.

The exposure system is not coupled mechanically to the camera controls. To use the meter, you set the ASA index and the shutter speed you intend to use on a small dial on top of the prism housing. You then press the shutter release inwards. This automatically turns on the CdS circuit. By turning the diaphragm ring of the lens and actually closing down the aperture, you can center a needle visible at the right within the finder area. When you've closed down the diaphragm sufficiently to line the needle up with the center of a ring, you have the correct exposure and you're ready to take the picture. Of course you must set the camera's shutter speed dial to correspond with the shutter speed setting of the CdS meter system.

50mm F/1.8 Macro-Switar		
Aperture	Center Sharpness	Edge Sharpness
1.8	Very Good	Good
2	Very Good	Good
2.8	Very Good	Good
4	Good	Good
5.6	Very Good	Very Good
8	Very Good	Good
11	Good	Very Good
16	Good	Very Good
22	Acceptable	Very Good

The mechanical advantage of the system is one of simplicity rather than convenience. There are no complicated

gearings connecting meter with shutter speed dial or aperture control.

To make exposure meter reading as simple and foolproof as possible, the 9d has a small camera body shutter release locking lever. Slide it sideways and the shutter release is locked so that it cannot trip the shutter while you press it in to make an exposure reading. It requires only a fraction of a second to slide the lock away when you're ready to shoot a picture.

While the number of steps needed to make a reading and then take a picture seem rather lengthy, MODERN found several short cuts during field tests. With the normal lens in place, you can easily press the shutter release inwards part of the way without using the lock. Now quickly close down your lens until you line up the needle. Lastly press the release home to take the picture. However, when the Macro-Switar was extended for close focusing or other automatic lenses were used, we found it advisable to use the shutter lock. The brief distance in depression between the meter system on and shutter release is not pronounced in these latter cases.

In actual use with color film, the CdS through-the-lens meter system worked well, producing an integrated reading of the entire ground glass areas. Naturally, if special effects are wanted or if the main subject is of one brightness and the rest of the picture area is of another brightness some intelligent compensation should be used as with all meter systems. However, it's rather uncanny to be able to make readings through filters, with bellows units, through microscopes and telescopes without recourse to any calculations. Just line up the needle and fire.

The CdS system which handles films from ASA 12 to 6400, can read accurately down to 1/30 sec. at f/1.8 with a film having an ASA rating of 400. This indicates that the meter system is sufficient even for handheld, available light shots.

Our tests indicated that extreme care should be taken to get your eye as close to the eyepiece as possible. Extraneous light can measurably affect the meter reading despite the third compensating CdS cell. However, the Alpa engineers have provided a really excellent soft rubber rectangular eyecup—the first such eyecup MODERN has tested which really is an aid and not a hindrance.

Because the mercury battery only supplies power when the readings are actually made, the life of the battery should be at least two years, but probably longer.

The Alpa 9d closely resembles the 6c, so we will summarize our November 1960 report on the older camera. (Those wishing a full report on the 6c can obtain one by sending to the Chief of Reader's Service a self-addressed stamped envelope):

"The view through the finder is excellent. The magnifying eyepiece produces an exceptionally large focusing screen with nearly 1:1 (almost lifesize) magnification. The ground glass yields one



1.35 Volt mercury battery, located behind the screw cap, is capable of 300,000 readings in 2 years time before low cost replacement.

or the easiest focusing screens we've seen. The image pops in and out of focus with certainty. The rangefinder, instead of being split horizontally as in all other reflexes, is split diagonally in the traditional Alpha camera design. While a horizontal split behaves well enough with vertical subjects such as flag poles, any scene or object with primarily horizontal lines (landscapes or beach scenes, for instance) produces problems solvable only by holding the camera in a vertical position. The diagonal split is a clever compromise, working equally well for all subjects whether you're shooting horizontally or vertically.

"Loading is quite basic. A centrally located folding key on the camera bottom, when twisted, allows the single-piece back and bottom plate to be removed.

"The rapid wind mechanism, a metal-colored plastic lever, fits over the wind knob and is wound front to back, in the opposite direction from the levers on all other 35mm cameras. While this is slightly inconvenient at first, it soon seems quite natural. The inconvenience of pressing down the spring-loaded outer rim of the wind knob and turning it to change shutter speeds remains, however. In recompense, the Alpha provides almost unlimited variations in shutter speeds, since you can set any speeds between the standard settings.

"The rewind knob pulls upwards, moves to the side on parallel rods and becomes a rewind lever. It's compact, clever and excellent in operation.

100mm F/2 Kinoptik Apochromat

Aperture	Center Sharpness	Edge Sharpness
2	Excellent	Excellent
2.8	Excellent	Excellent
4	Excellent	Excellent
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent
22	Excellent	Excellent

"The Macro-Switar lens takes a full $2\frac{3}{4}$ turns to move the focusing ring from infinity to 11 in. The knurled focusing ring works smoothly. At first we found its close proximity to the rear of the lens annoying, but later discovered that this was caused by our familiarity with cameras in which the ring was further toward the front of the lens. In use, we soon became quite accustomed to the Alpha position. The copper dot depth-of-field indicator is certainly unique. The preview button which must be twisted to view the depth-of-field at any aperture is slightly clumsy."

The Alpha 9d in MODERN's opinion represents a camera built with obviously very high precision and workmanship whose controls will require some familiarity. It is a careful specialist's camera with a very definite personality. The exposure system is very advanced, extremely useful, yet thankfully simple—typical of all Alpha engineering thinking. The system did require more time to operate, but operate it did. Certainly the Alpha engineers deserve a hearty pat on the back for their accomplishment.

Among the myriads of accessories for the Alpha which now include lenses from 9.5mm to 5000mm, MODERN has always had a desire to try the 100mm f/2 and 150 f/2.8 Kinoptik Apochromat lenses. Only a precious few ever reach these shores, so we were delighted to test two with the new Alpha.

150mm F/2.8 Kinoptik Apochromat

Aperture	Center Sharpness	Edge Sharpness
2.8	Very Good	Acceptable
4	Very Good	Acceptable
5.6	Very Good	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent
22	Excellent	Excellent
32	Very Good	Excellent

Both have well finished barrels, completely black satin finish with no chrome. Numerals are legibly engraved white on black. Both have the Alpha external automatic diaphragm plunger which operates the external automatic diaphragm mechanism. A lever near the back of the plunger can be moved for manual diaphragm operation.

The 100mm f/2 Kinoptik Apochro is $4\frac{1}{2}$ in. long at infinity position and focuses all the way down to 3 ft., making it a splendid portrait lens. Apertures are click stopped at full and half openings. The lens handled well in field tests. All controls worked smoothly. Incidentally, this lens proved to be the sharpest 100mm f/2 we've ever tested.

The 150mm f/2.8 Apochro has the same $2\frac{1}{2}$ in. front lens diameter but measures an impressive $6\frac{1}{2}$ in. long. It focuses to $5\frac{1}{4}$ ft. making it also a good choice for portraits. Although it weighs 36 oz. and does have a sturdy tripod socket well placed at the right center of balance, the lens can be easily hand held.

Both lenses worked well with the new CdS meter system of the Alpha 9d providing exceptionally large maximum aperture for the focal length offered.



The Alpha offers over 30 interchangeable lenses from 9.8 to 5000 mm, 10 with Auto-Diaphragm, 5 Apochromats, 2 Zoom lenses, custom-ground, hand-picked, individually film-tested and unconditionally guaranteed for highest optical performance.

CAMERA 35

(Continued)

the through-the-lens reading! Very clever.

How does the system work? Well, it's pretty simple. A dial located just to the left of the pentaprism housing is calibrated for ASA speeds and shutter speeds. Just set your ASA speed and the shutter speed you want to work at, look through the finder and press the shutter release half way in until the diaphragm stops down. Then adjust the diaphragm until a needle is centered. That's all there is to it.

Now, here's where the shutter lock comes in. If the camera is cocked and you're not careful, the shutter will fire when you depress the shutter release to operate the metering system. If you first lock the shutter this can't happen. It is a sensible safeguard.

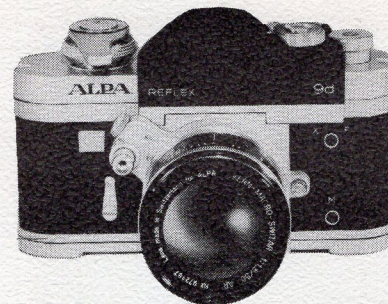
How accurate is the Alpha's metering system? In terms of sensitivity, the Alpha 9d offers readings on the order of f/1.8 at $1/8$ of a second with a 400 ASA film.

Everything considered, a good accessory has been added to a superb camera. *Arthur Kramer.*

(ED. NOTE: for a complete test of the Alpha system see *Camera 35* February/March 1962.)▲

TEST REPORT

ALPA 9d



AFTER A WHILE it has become painfully obvious that despite the constant flow of new, newer and even newest single-lens-reflex cameras inundating the market there has not been an equally great number of serious and important improvements from one model to the next.

By important I certainly do not mean a self-timer on the higher priced model compared to the stripped version which sells for less.

The new concept is the behind-the-lens meter which first saw the light of day in the Beseler Topcon Super D. Now the second camera to feature this brilliant feat of practical automation is the Alpa Reflex 9d.

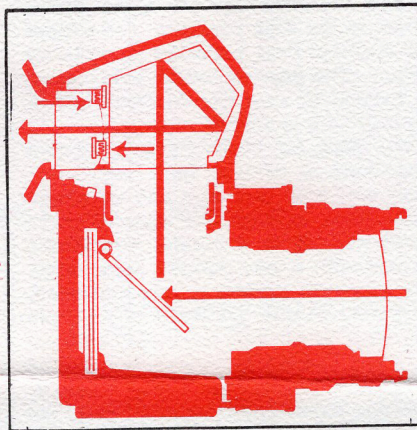
In the Topcon SLR, the mirror contains the light-gathering mechanism, while the Alpa works on a different principle. The 9d has three CdS cells seated about the prism under its housing. There is one on each side of the prism which measures the light that is reflected from the mirror; in addition to these two there is a third near the eyepiece which takes into consideration any stray light that might enter through the eyepiece. All previous SLR cameras with built-in meters have simply ignored the fact that stray light can enter through what may be called the back of the prism and reach the film plane. The Alpa 9d solves that particular problem very, very neatly.

And to answer the first question on your mind . . . how does it work? Beautifully!

To begin with, the Swiss-made Alpa has enjoyed a reputation for its precision craftsmanship similar to that of Swiss watches; and rightly so. The moment you pick up an Alpa you know by the very feel in your hands that this is no toy. It is probably one of the heaviest SLR's on the market and that is because the body can only be compared to that of a tank in its sturdiness.

Except for the meter mechanism the 9d appears identical to the Alpa 6c. Unlike the earlier Alpas which featured a 45° viewing system, this model has the customary 90° viewing system. The camera is slightly smaller than most SLR's on the market and has a different type of rapid film advance in that you start from the front of the camera and turn the lever clockwise rather than from the rear and counter-clockwise. The lenses are of the externally automatic type with the shutter release button on the right front of the camera.

To use the meter you first set the film rating (0-6400 ASA) which is done by lining up an arrow on a wheel



NEWEST Alpa features behind-the-lens meter that uses three CdS cells located within camera's pentaprism.

on the top left side of the camera. This wheel is also used for lining up the pointer in the viewfinder, but there is much more before you get to this step. After the rating is set, you focus and decide on the aperture you wish to use. As with most built-in meters, you can set the camera by either the shutter speed, the aperture, or both.

After you have focused and set the aperture, there is a slide button on the right front of the camera which is pushed towards the lens. What this button does is to permit you to press the shutter release without tripping the shutter. If your aperture is less than wide open, the lens will close down when you press the shutter release while also activating the meter.

Now as you press the shutter release, the needle in the viewfinder comes to life. Using the wheel on the top left of the camera you line up the needle while still holding down the shutter release. Once the needle is lined up, you release the shutter and read off the shutter speed from the wheel you have been rotating. This reading is then transferred to the shutter speed dial, the slide button is moved back to its original position away from the lens, and you are ready to shoot.

The meter system with its three CdS cells is probably one of the best possible. It not only gives you a proper reading when working in the field, but that third cell near the eyepiece really comes into its own when you use bellows, extension tubes, or a microscope.

Throw away those calculating tables for bellows extensions! With the 9d, all that is unnecessary. Here, also, the extra time needed to operate the meter and camera is not bothersome since you rarely have to have a hair-trigger finger with your subject. The joy of working with the lens extended and

not needing to get out the slide rule each time is almost indescribably delicious.

Another bonus with the camera is the 50mm Kern Macro-Switar f/1.8 lens that focuses down to less than 11¼"! Now, with the built-in behind-the-lens meter you simply ignore the exposure factor markings engraved on this superb lens.

Talking of lenses, it might as well be said here and now that since Alpa selects its lenses from manufacturers in France, Germany and Switzerland, they select and give you only the best. Every lens is tested by Alpa and I would feel safe in saying that judging by the camera body itself, if a lens passes their testing you just need not bother going through the same procedure and wasting your time. Lenses for the camera range from 24mm to 5000mm. As if that is not enough, all Exakta mount lenses fit with an adapter.

Another unique feature of the camera is that the shutter speed dial provides you with up to 60 different settings from 1 second to 1/1000. The prism is of the non-removable type because Alpa feels that precision would suffer if the prism housing could be switched; for the 9d particularly, this would have to be a tricky engineering feat.

The viewfinder provides you with the area you would get from a mounted Kodachrome transparency and the split-image focusing aid on the ground glass is at 45°. There is also a rubber eyecup that rotates for either a comfortable horizontal or vertical shot. The image is bright and the split-image device responds to just a hair's touch. In fact, some people might find it too sensitive if they are accustomed to racking the lens further in order to obtain any appreciable difference in the split-image.

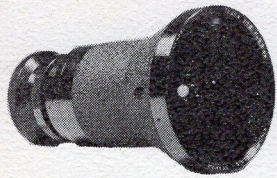
As far as noise, this is probably one of the quietest SLR's on the market.

Naturally the 9d is fully synchronized and has a self-timer. The rewind knob is probably one of the CUTEST on the market. Rather than a miniature handle that never does anyone any good, the entire top cap of the knob is the handle. When pulled up, it goes off to the side providing the necessary leverage. It is unquestionably the fastest rewind knob in town.

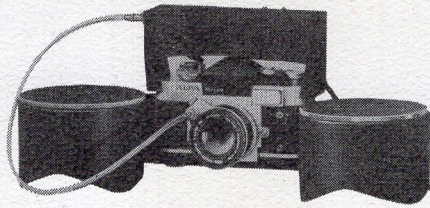
In conclusion, one would have to say that the Alpa 9d is a superb instrument with a unique built-in, behind-the-lens meter

—Michael Edelson

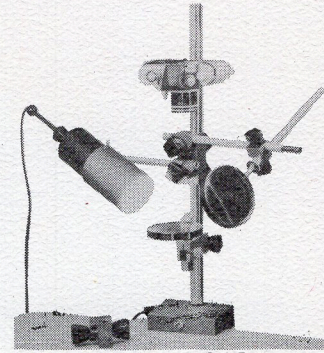
NEW ADDITIONS TO THE ALPA SYSTEM



ALPA 9.8mm f/1.8 and 18mm f/1.8 Super-WideAngle lenses

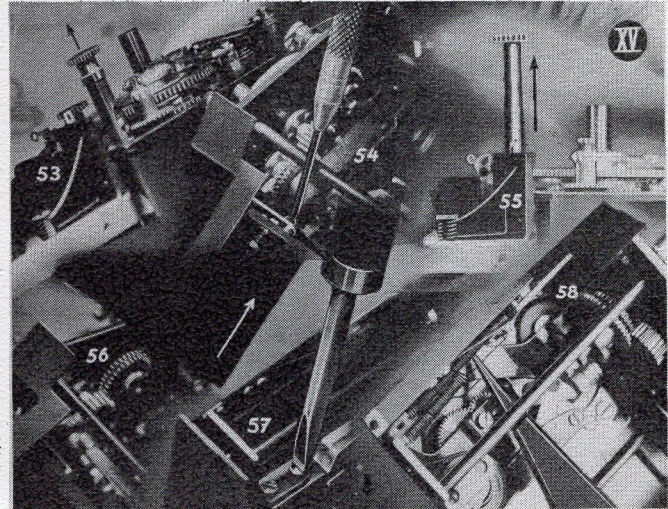
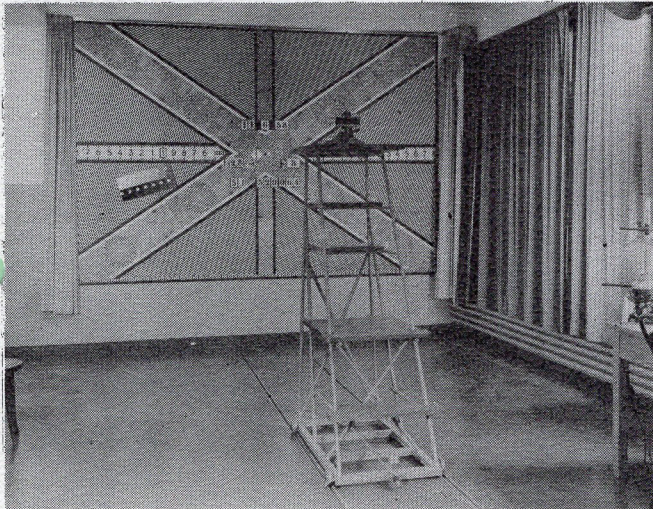


ALPA 100 ft. Film Magazine and Electric Motor with Automatic Film Advance



ALPA Close-up Stand

QUALITY CONTROLS OF THE ALPA FACTORY



1. ALPA's limited production is geared for precision under the most rigid quality standards: Every ALPA is painstakingly assembled like a fine Swiss watch, literally made to your order by skilled Swiss master craftsmen.

2. Manufacturing an ALPA camera means fitting more than 700 precision parts together.

3. All gears and pinions are made with the same high precision as those supplied to the Swiss watch industry: Pignons S.A. (which means Pinions Incorporated), manufacturer of the ALPA, is also a major producer of watch parts!

4. ALPA precision parts are cleaned by an ultrasonic machine, operating at 500 Kilocycles.

5. Important ALPA parts are individually inspected up to 5 times.

6. Precision machines, used for critical controls, work at tolerances up to $1/1000\text{mm}$! ($0.0003937''$)

7. Each of ALPA's 60 shutter speeds is checked by a custom-built electronic speed tester.

8. Each ALPA shutter is operated 2000 times before leaving the factory.

9. MF and X (up to $1/64$) synchronization of each ALPA is checked with 4 Volt low and 1000 Volt high tension testers.

10. Each ALPA lens is handpicked and film tested for you. Test shots of a huge lens chart are taken. These negatives are then scrupulously inspected for resolving power, contrast and overall illumination.

11. The bayonet mount of each lens is checked individually for mechanical precision and absolutely positive fit.

12. Any lens which does not match ALPA's extremely rigid quality standards is rejected and returned to the lens manufacturer.

13. ALPA's rugged precision construction is tested hundreds of times during and after assembly, reducing repairs to an absolute minimum.

14. More than 40% of the ALPA plant is engaged in quality controls.

15. ALL ALPA CAMERAS AND LENSES ARE UNCONDITIONALLY GUARANTEED FOR HIGHEST MECHANICAL AND OPTICAL PERFORMANCE.

THE **ALPA** FORMULA: SWISS CHRONOMETER PRECISION + CUSTOM GROUND OPTICS = UNCONDITIONAL GUARANTEE
FOR HIGHEST MECHANICAL AND OPTICAL PERFORMANCE.

SYMBOL OF SWISS PRECISION: Each ALPA is as painstakingly assembled as a fine Swiss watch, literally custom-built to your order, with all the skill and experience of Swiss master craftsmen.

STREAMLINED: Ultra modern design with attractive chrome, deep satiny black or dark green finish — engineered for utmost speed and simplicity of operation.

ACCURATE COMPOSITION: 24x36mm frame is 1/2mm larger on each side than 23x35mm ground-glass, a safety margin covered by slide mount.

WELL BALANCED: Exceptionally sturdy, yet compact — 5 3/4" x 3 3/4" x 2", and lightweight — a mere 21 ounces.

ELECTRONICALLY COMPENSATED THROUGH-LENS METER: 3 sensitive CdS cells read all the light behind-the-lens, for absolutely precise exposures (9d).

AUTOMATIC, OPTICAL COUPLING: Centering of needle on ground-glass indicates precise f/stop or shutter speed from 1/1000 to 4 seconds, for films from 12 to 6400 ASA — AUTOMATICALLY, with any lens, any lens accessory, at any distance. (9d).

RELEASE LOCK: For light readings, previewing depth of field and preventing accidental exposures (9d).

PARALLAX-FREE: Through-the-lens viewing system guarantees accurate framing, focusing and depth-of-field control — with any lens, at any distance.

ULTRA LUMINOUS: Groundglass image is strikingly brilliant, in 1:1 LIFESIZE.

COUPLED RANGEFINDER: 45° split-image with clear circle pinpoints focus instantly, automatically — couples to any lens, at any distance.

HAIR-TRIGGER RELEASE: Operates both lightning reflex-mirror and vibration-free shutter.

HIGH-SPEED WINDING: Frontal rapid-wind lever provides fast film transport, without removing camera from eye.

HIGH-SPEED REWINDING: Unique pull-out crank with parallelogram support.

AUTOMATIC EXPOSURE COUNTER: Instantaneous zero return.

SWISS PRECISION MOVEMENT: Electronically tested speeds from 1/1000 to 1 sec., B, M, FX synchronization; selftimer from 1 to 20 sec., intermediate speeds between marks — 60 different settings!

OVER 30 ALPA LENSES: From 9.8 to 5000mm: 10 w/ Auto-Diaphragm: 24mm — 28mm — 35mm — Switar 50mm — Macro - Switar 50mm — 90mm — 100mm — 135mm — 150mm — 180mm; also: Zoom lenses.

UNRIVALED APOCHROMATS: Switar and Macro-Switar 50mm f/1.8, Kinoptik 18mm f/1.8, 100mm f/2 and 150mm f/2.8 APOCHROMATS offer exclusive correction of primary colors, for precise color fidelity.

AUTOMATIC DIAPHRAGMS: Usable with extension tubes and bellows (twin-cable release) for close-up work; can be disconnected to check depth-of-field.

ALL-IN-ONE LENSES: Automatic Macro-Switar 50mm focuses from infinity to 7" (1:3), Makro-Kilar 40mm to 4" and 2" (1:1.1), and Makro-Kilar 90mm to 5" (1:1), without accessories.

100% LENS CONSISTENCY: Each lens is individually film-tested and handpicked for you — carries an unconditional guarantee for optical excellence. Macro-Switar, Kinoptik 100mm and 150mm lenses are supplied with test-film.

MACRO/MICRO-PHOTOGRAPHY: Extension tubes, bellows, lens inversion rings, close-up lens and micro-adaptor offer a continuous focusing range from infinity down to ultra close-ups of 1:10 - 1:1 - 10:1 - and (with microscope) 1500 : 1, without gap!

COPY AND CLOSE-UP STAND ALPA-MACROSTAT: Light weight, easily adaptable construction unit with reflectors, close-up light, focusable macro and micro stages, duplicating attachment, groundspikes etc., can be easily adapted to any problem of copywork as well as indoor and outdoor close-up photography.

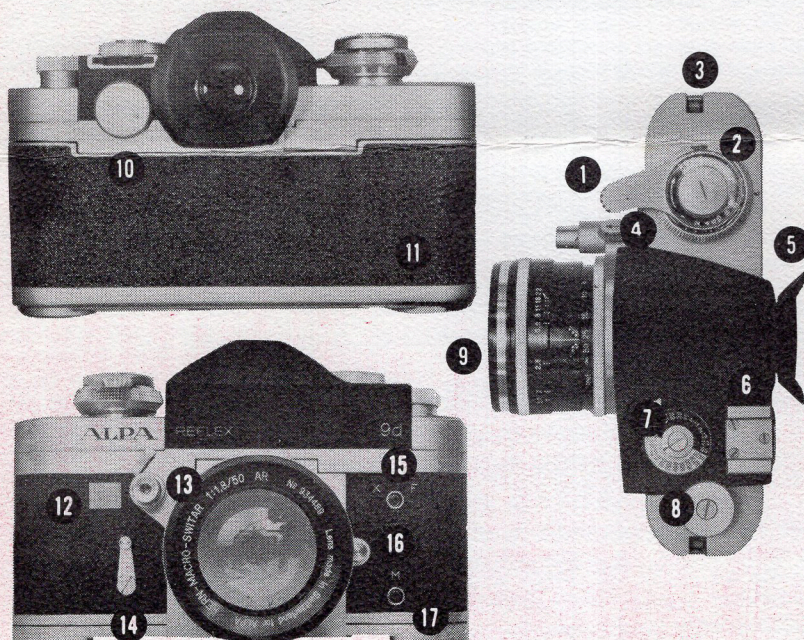
ELECTRIC MOTOR: Attachable 12 Volt DC motor and rechargeable battery rod (or transformer-rectifier) permits automatic film transport and remote release.

100 FOOT MAGAZINE: Interchangeable with camera back, accepts standard 100 foot daylight loading reels for up to 800 pictures, without reloading.

SPECIAL SINGLE FRAME MODELS: Choice of 18x24mm or 17x22.5mm format with spacing accuracy of 0.05mm.

TOTAL QUALITY CONTROL: More than 40% of the ALPA factory is engaged in inspection, certifying the severe and exclusive quality controls with a Swiss Precision Label, attached to every ALPA.

LIFELONG DURABILITY: Sturdy precision construction withstands the most rugged use, is geared for more than 100,000 operations! World wide guarantee.



1. Rapid wind lever
2. Exposure speed selector dial — 60 different settings from B to 1/1000 sec.
3. Eyelets for neck strap or electric motor attachment
4. Control knob for automatic/manual diaphragm
5. Rubber eye piece
6. Accessory shoe
7. ASA film speed dial from 10 to 6400 ASA (inner ring)
Meter-connected exposure speed indicator from 4 — 1/1000 sec. (outer ring)
8. Rewind knob with recessed parallelogram crank
9. Kern Macro-Switar 50mm f/1.8, Auto-Apochromat with exclusive Visifocus depth-of-field indicator
10. Battery housing cap, holding 1.35 Volt Mercury battery for CdS meter
11. Completely detachable camera back
12. Shutter release lock
13. Shutter release with cable release connection
14. Selftimer lever
15. X-F synchronization contact
16. Lock for interchanging lenses
17. M-synchronization contact



ALPA IN A CLASS BY ITSELF

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