



The world is wide but the scope of the Contina is even wider. Fine photos like these become simple to take. The one on the left was taken against the light at $f/5.6$, $1/60$ second; the other by sunlight at $f/8$, $1/60$ second.



Further technical development may involve slight changes in the design and operation of the camera as compared with these instructions.



Z E I S S I K O N A G . S T U T T G A R T

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Author: J. Kraatz Printed in Germany 20 0657 - 2



I N S T R U C T I O N S F O R U S E



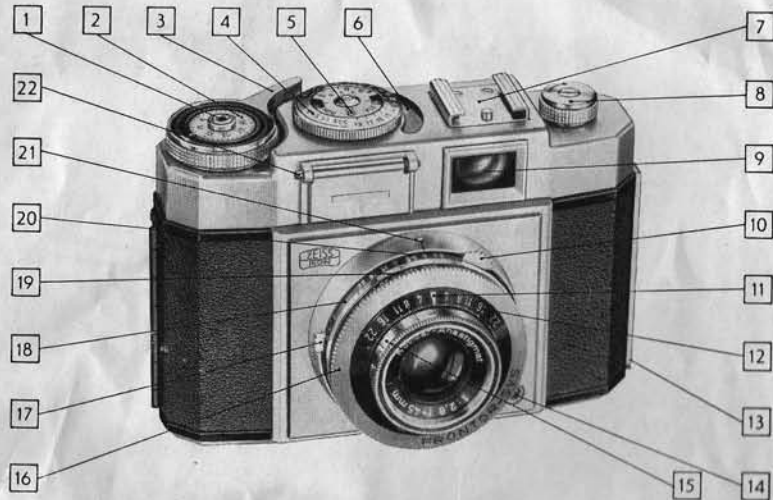
Z E I S S I K O N A G .

ZEISS IKON CONTINA II

35 mm

Z E I S S I K O N A G .

Z E I S S I K O N A G . S T U T T G A R T



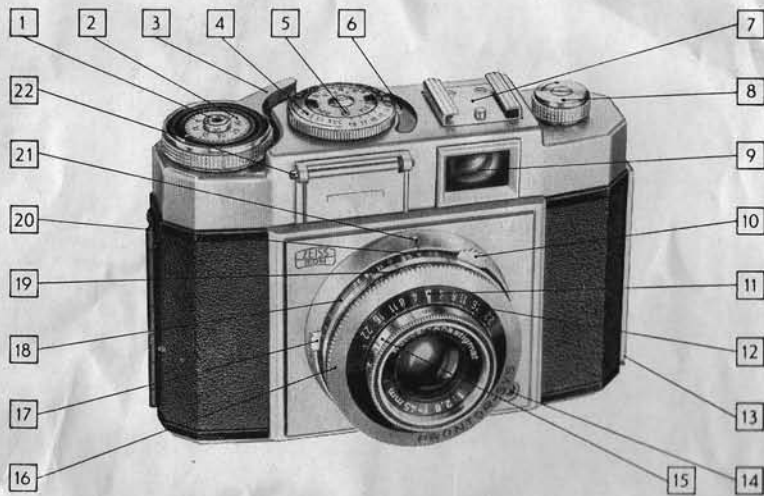
Operational components of the Contina II

(see illustrations on the two inner cover pages)

- | | |
|--|--|
| 1 Shutter release knob | 14 Flash contact |
| 2 Frame counter | 15 Distance setting ring |
| 3 Rapid wind lever | 16 Diaphragm and shutter speed setting ring |
| 4 Computer ring for the exposure meter | 17 Synchro-lever for flash and self-timer |
| 5 Knob for setting film speed | 18 Scale of exposure values |
| 6 Pointer of exposure meter | 19 Shutter speed scale |
| 7 Accessory shoe | 20 Diaphragm scale in f/numbers |
| 8 Rewind knob | 21 Setting mark for stops and shutter speeds |
| 9 Viewfinder | 22 Knob for opening the exposure meter flap |
| 10 Knob for setting exposure values | 23 Tripod bush |
| 11 Distance setting mark | 24 Locking knob for film rewind |
| 12 Depth-of-field scale | |
| 13 Locking bar for camera back | |

The Contina II

is a handsome miniature camera designed to give you much pleasure and great satisfaction. One swing of the rapid film wind lever performs several simultaneous operations and makes the camera "ready to shoot" in an instant. The exposure value setting helps to save much precious time. The built-in photo-electric rapid exposure meter immediately indicates the correct values for the setting of the shutter. The Contina II is fitted with either the high quality f/3.5, 45 mm Novar anastigmat lens or the high-speed f/2.8, 45 mm Novicar lens, both of which are colour corrected and equally suitable for black-and-white and colour photography, giving needle-sharp pictures. In order to make every Contina exposure a success right from the very beginning we suggest that you should read these instructions with utmost care before you load the camera with the first film. Once you have mastered the various mechanical movements and operations, the camera will remain a source of undiminished pleasure. If you still have doubts or difficulties, do not hesitate to ask your dealer for help.



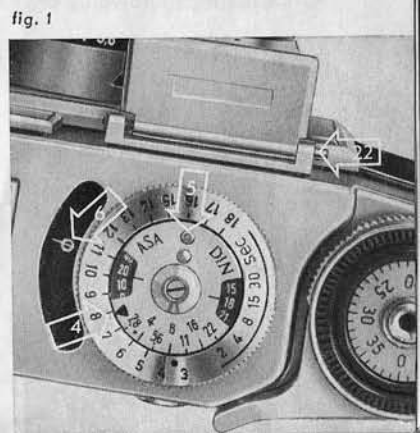
Determining the Exposure Value (sometimes called "Light Value")

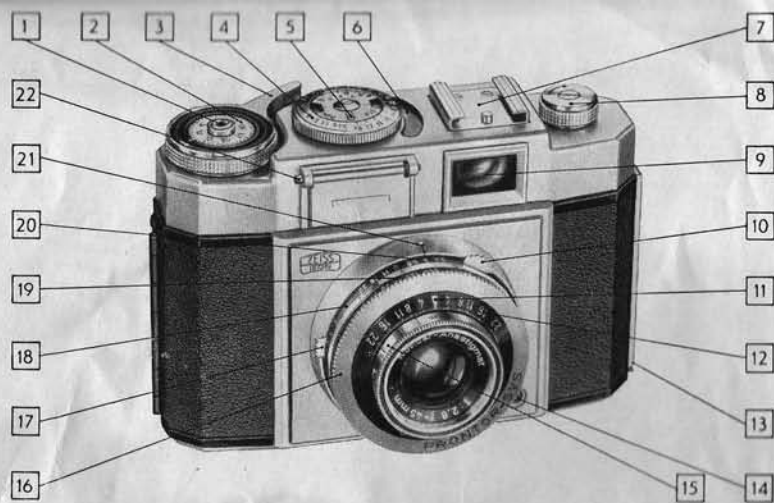
The built-in exposure meter will yield correct exposure values for all black-and-white and colour films, both negative and reversal. First the meter must be set to the speed of the film in use. Turn the inner disc by means of the small knob (5) until the relevant speed value appears opposite the black stroke of the DIN or ASA window. The disc can also be set to intermediate film speeds (Fig. 1).

If a film manufacturer has quoted the film speed according to a rating other than the ASA or DIN system, the corresponding values can be found in the conversion table on page 28. Since the speed of colour film cannot be measured in the same way as that of black-and-white, the colour film manufacturers are unable to give exact speed numbers in ASA or DIN indices but recommend their films to be exposed "as a black-and-white film of DIN or ASA". In most cases this will ensure sufficiently accurate exposure, but in order to be absolutely sure the photographer should check the calibration of his equipment by making several test exposures at different apertures

and thus determine the actual speed of the film in question and the correct setting for the built-in exposure meter.

To measure the light and determine the exposure value, the flap of the exposure meter should be opened by gently pressing the knob (22) to the left. (To close it, press the flap slightly to the left with the right forefinger.) Point the Contina II towards the subject so as to frame it in the viewfinder. The white pointer (6) will then be seen to deflect. By turning the computer ring (4), the small white circular mark should be moved until it is alongside the pointer when seen from above. The exposure value to be used (red figure) can now be read off from the computer ring opposite the red triangular mark on the film speed setting





disc. If the lighting conditions are poor, the required exposure times in full seconds (green figures) can be read off from the scale opposite the f/numbers (black figures on the inner disc to the right of the red triangle mark). Once the exposure value or the stop and shutter speed required have been ascertained, they must be transferred to the shutter of the Contina II.

Setting the Exposure Value

By pressing lightly on knob 10 (Fig. 3), the rear setting ring can be turned until the required exposure value (red figures on the right-hand side) is opposite the red triangular mark 18 (Fig. 2). It is also possible to set half-values.

As this setting ring can only be rotated through a limited radius, in some cases it will be necessary to move the aperture/shutter speed setting ring (16) also

in order to set the required exposure value. By setting the exposure value, the diaphragm stops and shutter speeds are coupled automatically. The amount of light necessary for correct exposure is controlled by the lens opening (diaphragm stop or f/number) and the time the film is exposed to light (shutter speed). For the respective taking conditions the exposure value obtained represents the corresponding f/number and shutter speed combination which can be read off from the setting mark (21) (Fig. 3). If, after having determined and set the exposure value, the shutter speed setting ring (16) is turned to a different shutter speed (19), the lens aperture (20) will be re-adjusted automatically to a higher or lower value in order to give the same exposure. The shutter speed is likewise re-adjusted automatically when the aperture is changed.



fig. 2

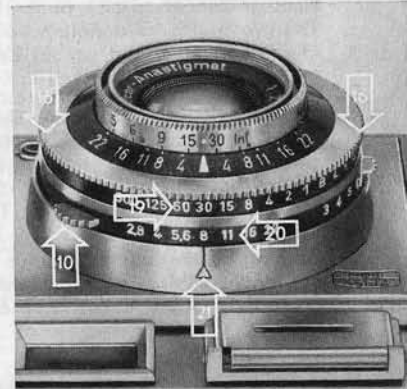
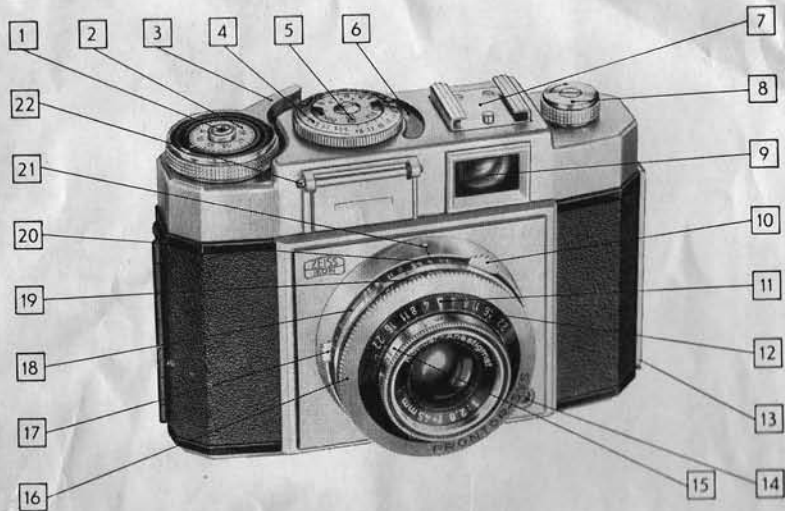


fig. 3



Shutter Speed: The correct shutter speed to choose depends on whether or not the subject is moving, and if so, how rapidly. The faster the subject movement, the shorter should be the exposure time. The silver figures on scale (19) denote fractions of seconds (60 means $1/60$ second, etc.). When set to the green "B", the shutter will remain open as long as the release knob (1) remains depressed (see page 16).

The green figures denote whole seconds, as on the computer disc of the exposure meter, and cannot be set against the setting mark (21); their importance will be explained later on.

Aperture Setting (f/number): The correct aperture of the lens diaphragm, or "stop", for short, depends on the depth of field desired (see page 10). The smaller the f/number, the larger is the actual opening of the diaphragm. To set the f/number required, the same operation should be performed as for setting the shutter speed. The desired value should be set against the setting mark (21).

So long as the exposure value obtained from the exposure meter remains set, any combination of shutter speed and lens aperture will result in a correctly-exposed negative. The aperture and shutter speed setting ring (16)



can only be turned until the final values of the scales on the ring have been set against the setting mark (21). The final value at the right-hand end of the shutter speed scale is "B".

If, after setting the exposure value, the lens is stopped down until the shutter speed scale automatically indicates "B" (green), an exposure time of two seconds will be required. If it is necessary to stop down even further, the required exposure time in whole seconds can be read off (green figures) from the computer disc (4) opposite the chosen f/number. For this purpose the knob (10) should be depressed, as for setting the exposure value. The exposure time can then be controlled by depressing the release knob (1) or, better, the cable release, for the requisite number of seconds. It is also possible in such cases to read off the exposure time directly from the exposure meter as described on page 6. If after these long-time exposures you wish to change from "B" to shorter exposures, the light-meter must first be set anew.

Setting the distance

The setting ring with the engraved distance scale (15) should be turned until the required distance in feet is opposite the setting mark 11 (Fig. 4).

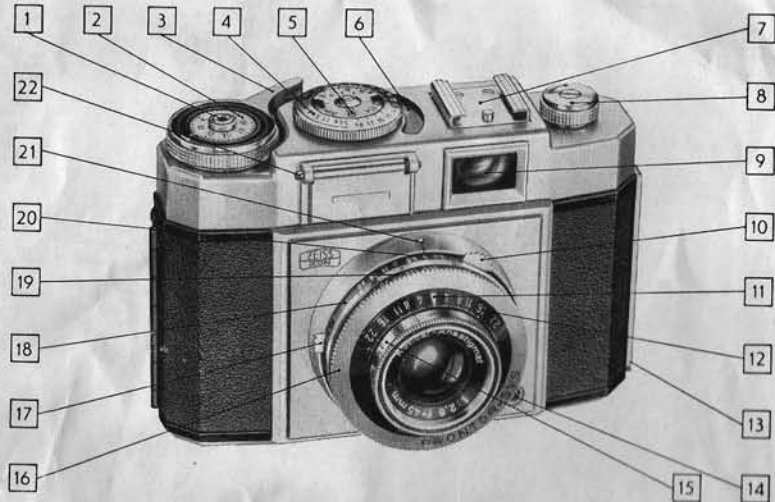


fig. 4

On the underside of this distance-setting ring, the Contina II has for technical reasons a second scale which has no bearing on the actual operation of the camera.

Depth-of-field scale

Every lens, when focused on a definite distance, will only yield a sharp image of objects within a limited space before or beyond the plane on which it is actually focused. This zone of sharp definition becomes deeper the more the lens is stopped down. The "depth of field", as this zone is called, can be read off for any lens aperture and distance

from the depth-of-field scale (12). With the distance setting mark (11) set to the distance focused on, the f/numbers to the right and left of the mark representing the stop in use will indicate the extent of the depth of field.



fig. 5

In Fig. 5, for example, the distance set is 9 feet. The depth-of-field scale indicates that the zone of sharp definition extends from about 6 feet to 15 feet at an aperture of f/8. Exact depth-of-field values can be found in the table on page 29.

Snapshot Setting

In order not to lose time over distance and diaphragm settings when a sudden opportunity for a picture presents itself, assuming the correct exposure value has been set, the aperture should be set to f/8 and the distance to the red dot (Fig. 6). The figure 8 is marked in red for greater clarity. With this setting all subjects between approx. 8 ft. and infinity will be recorded sharply.

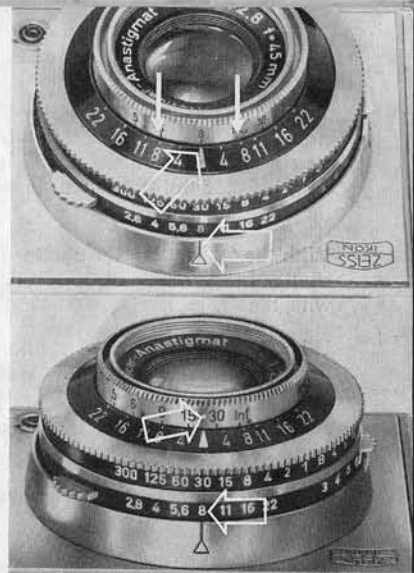
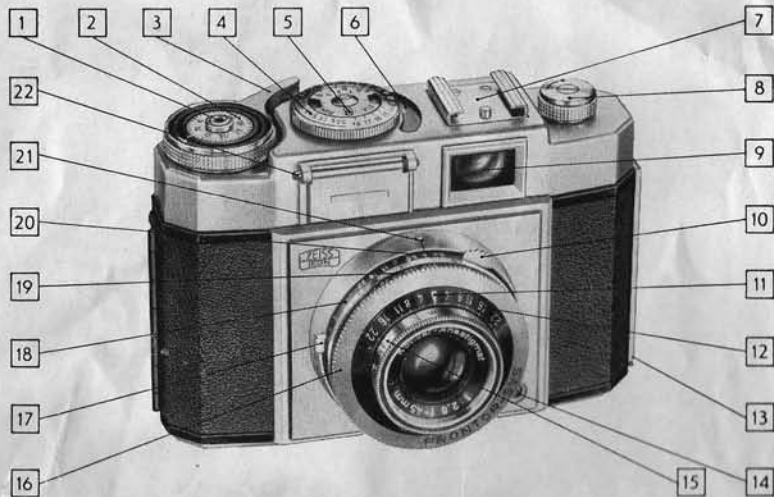


fig. 6



Flashlight and self-timer

The fully synchronized Prontor-SVS shutter can be coupled to every type of flash gun. It also has a built-in self-timer (delayed action release). The lever (17) permits three variable settings, which are explained below; to avoid accidental displacement this lever is on the underside of the Contina (Fig. 7).

With the "X" setting the shutter fires the flash automatically the moment the shutter blades are fully opened. Electronic flash tubes should only be fired with the "X" setting.

With the "M" setting, the shutter opens after a very short delay, which corresponds to the delay to peak of most flashbulbs.

The correct settings ("X" or "M") for the various flashbulbs and flash capsules will be found in the makers' instructions and also in the table on page 30.

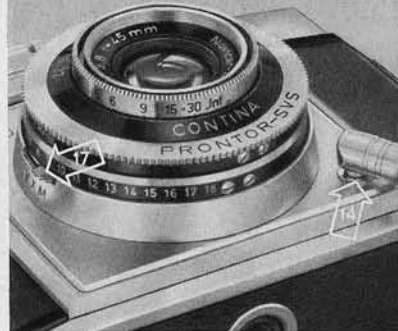
With the "V" setting, the delayed action release (or self-timer) is put into

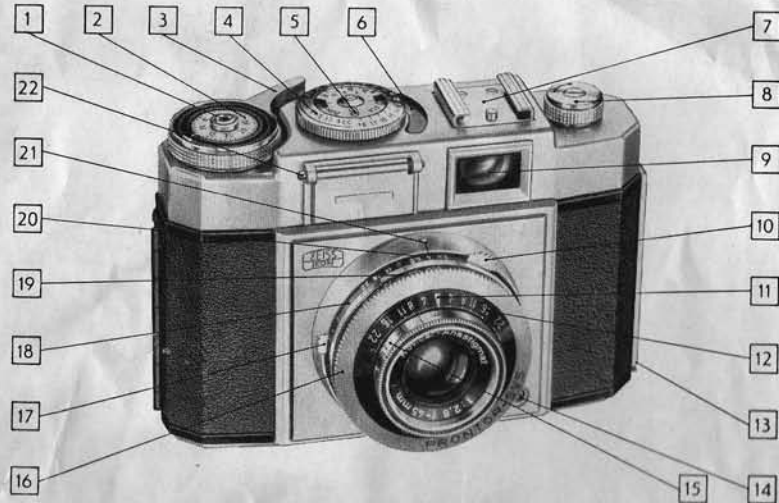


fig. 7

operation. When the release knob (1) is depressed, a retarding movement is set in motion which opens the shutter after about 8 seconds. Time exposures ("B" setting) cannot be made with the self-timer. If a flash lamp is connected to the shutter while the synchro-lever is at "V", the delayed action mechanism will run off normally and the flash will be fired as at the "X" setting. The lever can only be set to "V" if the shutter is tensioned. It returns automatically to "X" and must, if necessary, be set to "V" again.

For flash exposures, the lead from the flash gun should be connected to the flash contact (14) before the flashbulb is inserted. When the shutter is released, the flashbulb will be fired in synchronization with the shutter. For further details, see the instructions accompanying the various flash guns.





Holding the camera

The Contina must be held firmly during exposure. The body of the camera should be held with both hands (Fig. 8). The right hand index finger should operate the shutter release (1), whilst the elbows should be pressed lightly against the body.

This method should be adopted for horizontal pictures. For taking vertical pictures, the left hand should hold the camera from above while the right hand acts as a support (Fig. 9). In this case the release knob (1) is operated with the right thumb.

fig. 8

Hand-held exposures should only be made when the shutter speed is between $\frac{1}{300}$ and $\frac{1}{30}$ second (at the most). For longer shutter speeds when the self-timer is used, the Contina must be placed on a firm support or screwed to a tripod by means of the tripod bush (23). For vertical pictures, a ball-and-socket head should be interpolated between the camera and the tripod. To make sure of avoiding camera shake, all tripod exposures should be made with a cable release screwed into the thread of the release knob (1).

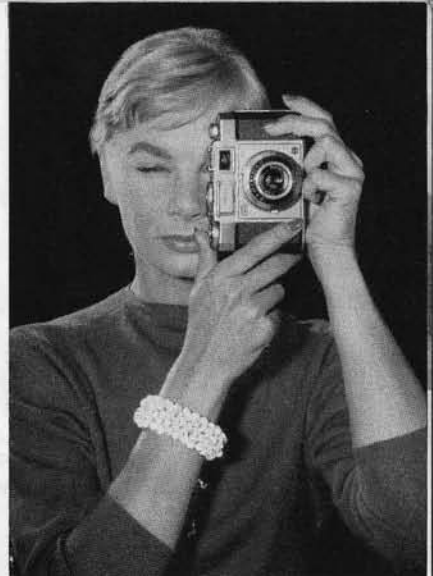


fig. 9

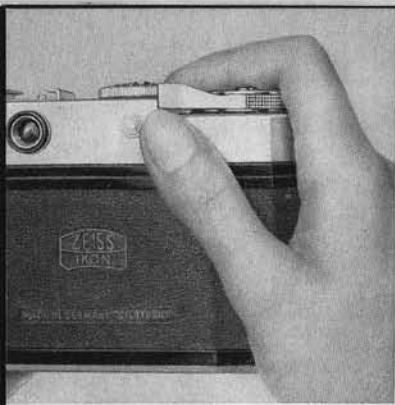
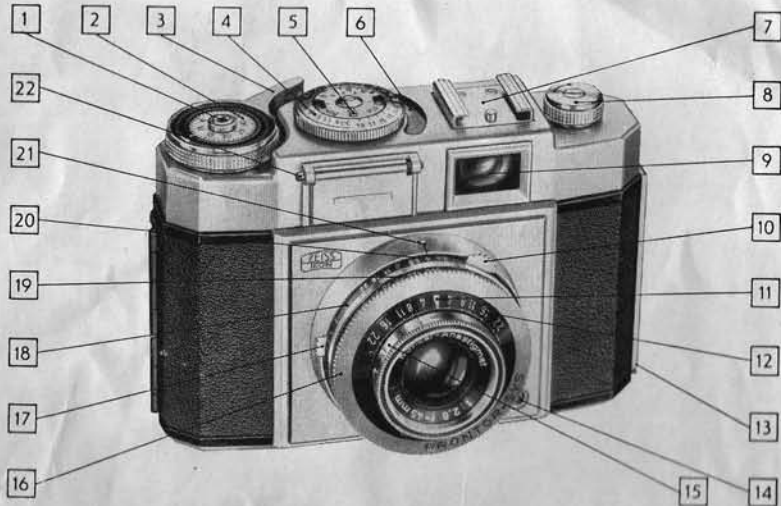


fig. 10

Releasing and Cocking the Shutter

The shutter should be released by gently depressing the release knob (1) with the index finger (Fig. 10). After each exposure, the shutter must be cocked by means of the rapid wind lever (3). Holding the Contina in the taking position, the rapid wind lever should be swung round with a swift movement of the right thumb until it stops (Fig. 11). This also advances the film by one frame and the frame-counter (2) — which registers the number of frames exposed — moves on to the next number.

It can be seen whether or not the film is being advanced correctly if the rewind knob (8) turns whilst the film is advanced.

fig. 11

As the shutter can be released only after being tensioned by the rapid wind lever (3), on the other hand, the rapid wind lever itself can only be operated after the shutter has been released by depressing the release knob (1); in this way both double exposures and blanks are prevented. It is important to ensure, though, that the rapid wind lever is swung until it comes to a positive stop. The shutter can remain cocked without any risk of damage.

Loading the Camera

The Contina II can be loaded with all commercial cartridges containing black-and-white or colour 35 mm film for 36 or 20 exposures; the actual frame size, is, as usual, 24 x 36 mm. The camera should never be loaded in bright sunlight. The back of the camera can be opened by pulling out the locking bar (13).



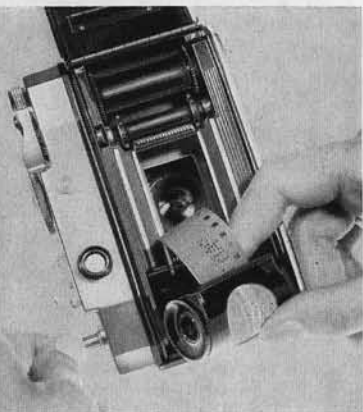
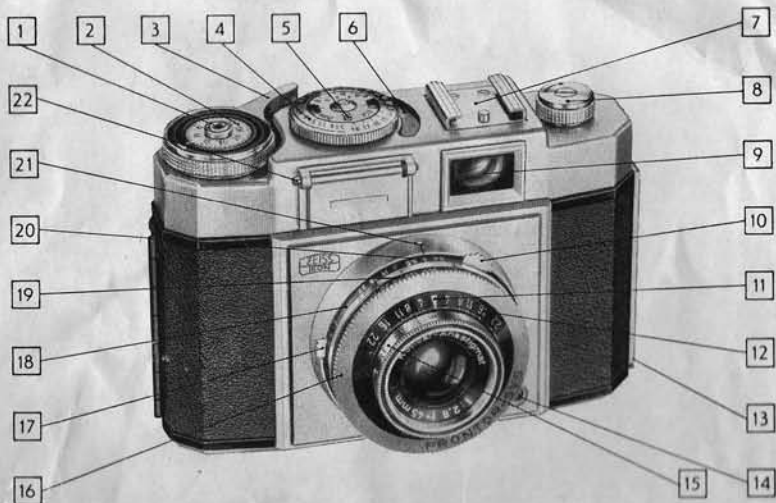


fig. 12

Pull out the rewind knob (8) and insert the film cartridge into the empty chamber (12), with the beginning of the film pointing towards the take-up spool. Push back the rewind knob until its prong engages correctly with the recess at the top of the film cartridge.

Now turn the take-up spool by means of the milled flanges until the slit with a small lug is pointing upwards. Hook the film on to this lug. Wind the film on to the take-up spool until the sprockets engage the perforations on both sides (13), at the same time depressing the locking knob (24). Now close the camera back, tension the shutter and advance the film twice by means of the rapid wind lever

(3) and release the shutter twice. This will advance the unexposed film to the film gate. Set the frame counter (2) to "0" by turning the black ring in the direction of the arrow. Swing the rapid wind lever once again to cock the shutter and the Contina is ready for the first shot. To make sure whether the camera is loaded or not, turn the rewind knob (8) in the direction of the arrow: if the camera is loaded, a resistance will be felt almost immediately.

Unloading the camera

Before opening the camera, the exposed film should be rewound into its original cartridge. Depress completely the locking

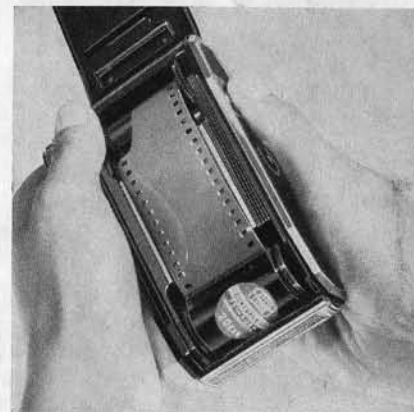


fig. 13

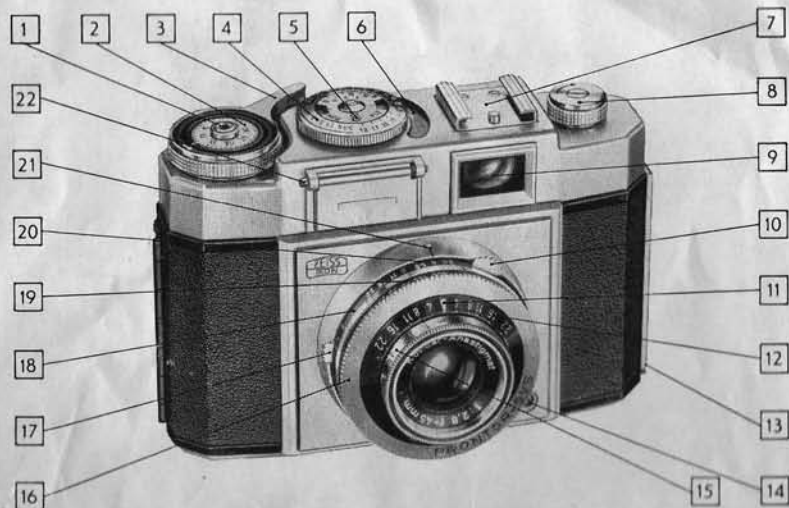


fig. 14

knob (24) and at the same time turn the rewind knob (8) in the direction of the arrow (Fig. 14); to make for easier handling, this knob will automatically unscrew a little. After some time, a slight resistance will indicate that the film end has parted from the take-up spool. Then open the back of the camera, pull out the rewind knob (8) as far as possible and remove the cartridge containing the exposed film. Film chips which occasionally occur should be removed immediately from the camera.

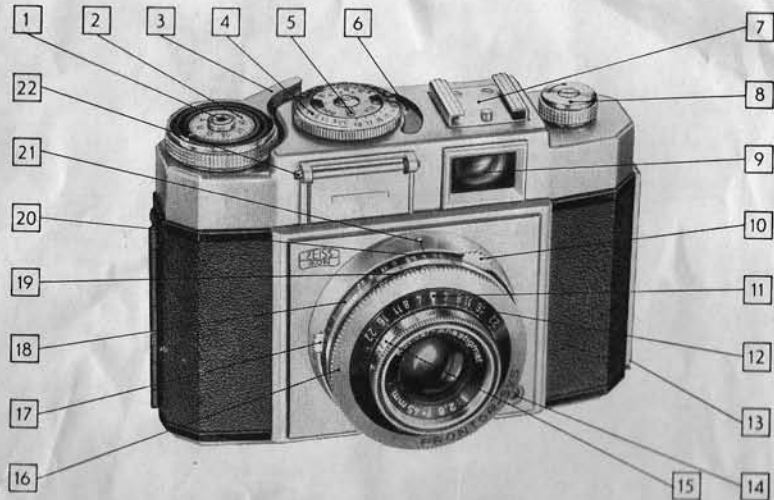
Accessories

Ever-ready case

The Contina II is protected from external strains and damage by its attractive leather ever-ready case. The camera is held in the case by means of a screw which is screwed into the tripod bush (23); the camera need not be removed from the case for hand-help exposures.

Zeiss Ikon Precision Filters

To improve the tonal values in black-and-white photos, Zeiss Ikon Precision Filters (ϕ 27 mm) should be screwed into the lens mount. These filters are available in yellow, yellow-green, orange, red, blue (Ikolor-B) and ultra violet. The Ikolor-B filter should also be used for taking colour shots by artificial light on daylight-type colour film. For daylight shots on artificial light colour film the Ikolor-A filter should be used. When filters are used, the exposure should be increased in accordance with the filter factor, which is engraved on the rim of every Zeiss Ikon filter. When four filters are ordered, a handy case is supplied free of charge.



Contapol Polarizing Filter

To reduce or even eliminate reflections in highly polished, non-metallic surfaces and to darken blue skies in both colour and black-and-white pictures, the Contapol Polarizing Filter can be slipped on to the lens (ϕ 28.5 mm). For particulars see the instructions supplied with the filter.

Supplementary Lenses for Close-ups (Zeiss Proxar Lenses)

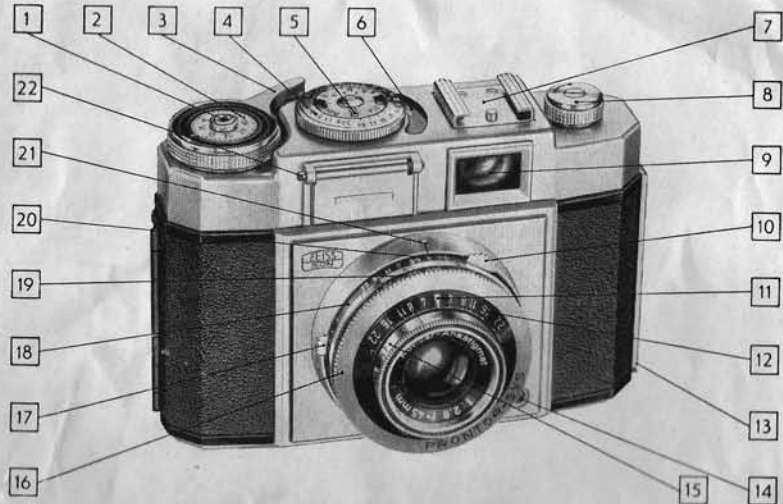
To take short-range photographs with the Contina II, coated Zeiss Proxar Lenses should be slipped on to the front of the 28.5 mm diameter lens. These lenses are available in four different "strengths". The correct lens setting for different distances can be found in the table on page 31. Note that the distance between subject and camera should be measured from the front rim of the mount of the Proxar Lens. Make sure of sufficient depth of field by stopping down the camera lens to at least f/8. When using close-up lenses, particularly those of very short focal lengths, considerable viewfinder parallax will be encountered, which can be compensated for by either tilting the camera or moving the subject slightly.

Close-Up Viewfinder

There is a special close-up viewfinder available for the Contina which is supplied together with the 0.5 m Proxar Lens in a combined plastic case. To determine the actual distance between subject and camera, this viewfinder is fitted with a special measuring chain, marked by coloured balls at 50 cm and 30 cm (approx. 12 and 20 ins). The viewfinder will show the exact area covered at these distances, making even close-up snapshots possible.

Lens Hood

The lens hood or sunshade prevents halation, flares and fog in backlighted pictures and is a necessity for colour photography. It also protects the lens from rain and snow. The Zeiss Ikon lens hood can be slipped over Zeiss Ikon filters and Zeiss Proxar Lenses. When not in use, it can be carried in a practical leather case. There is also a special leather combination case to hold the ϕ 28.5 mm lens hood and three filters.



Eye Correction Lens for Spectacle Wearers

When the black ring around the viewfinder eyepiece (9) is removed, a correction lens, chosen to compensate for the defect in the owner's eyesight, can be inserted for spectacle wearers who prefer to use their Contina without glasses. When ordering a correction lens, please quote the optician's prescription.

Cable Release

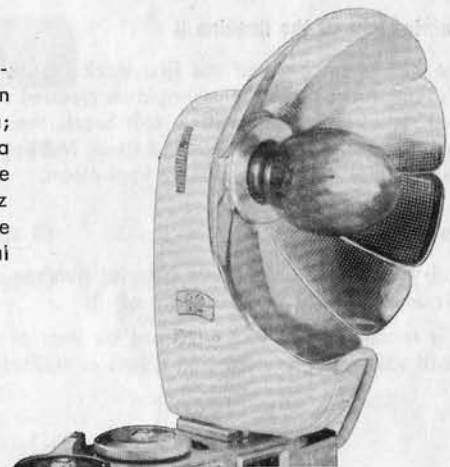
For time exposures from a tripod, a cable release should be used (see page 15). This can be screwed into the thread of the body shutter release (1). For long time exposures (shutter setting "B"), the Zeiss Ikon cable release has a special time lock.

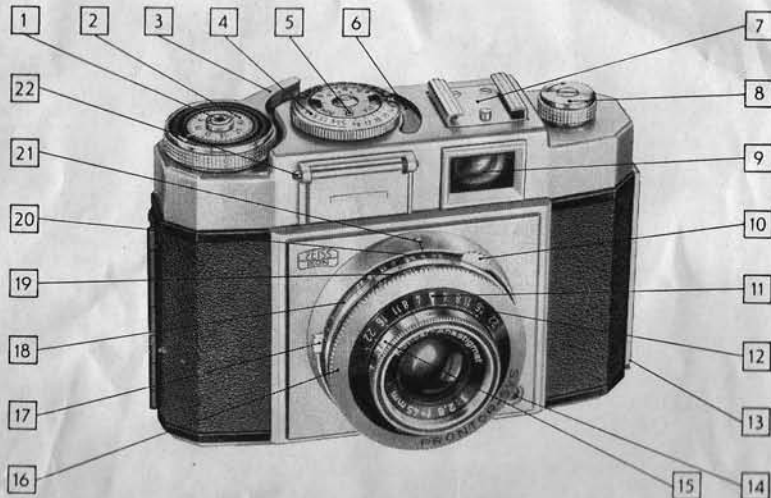
Movilum Lighting Unit

The multi-purpose Movilum Lighting Unit can be used to provide artificial light of any intensity, as it can be fitted with two, four or even six reflectors.

Ikoblitz

The folding Ikoblitz and Ikoblitz 0 capacitor flashguns can easily be fitted to the Contina; both these flashguns provide a very high light intensity. The reflector of the folding Ikoblitz is collapsible, making the whole outfit no bigger than a normal cake of soap.





Maintenance of the Contina II

The film chambers and the film track should be cleaned from time to time with a soft brush. The lens should be cleaned only when absolutely necessary. First remove any dust with a soft brush, then clean the surface with a lens tissue or a piece of well-washed linen. Moreover the opening of the exposure meter under the cover must be kept clean.

Serial Number

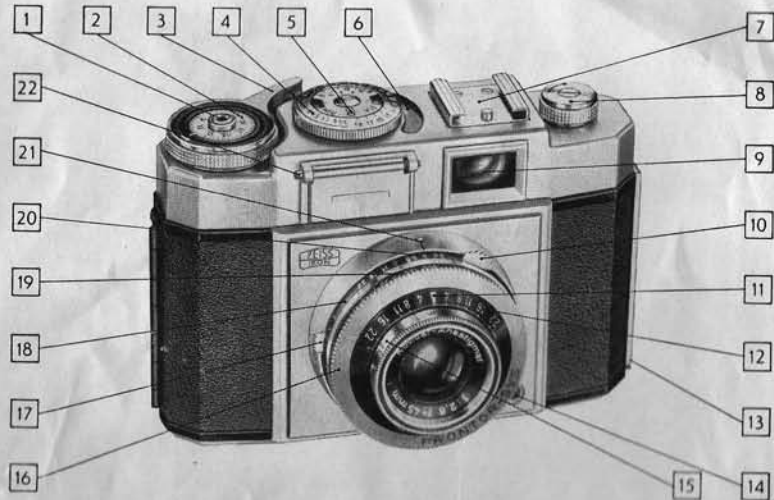
Each Contina camera bears a serial number embossed on the camera back (a number with a letter in front of it).

It is recommended that a record be kept of this serial number which may be of valuable aid in tracing a loss or theft.



Tables

- page 28** Conversion Table of Various Film-Speed Rating Systems
- page 29** Depth-of-field Table
- page 30** Table of Exposure Times for Flashbulbs
- page 31** Table of Distances when using Zeiss Proxar lenses for close-ups



Conversion Table of Various Film-Speed Rating Systems

ASA Exp. Ind.	5	6	8	10	12	16	20	25	32	40	50	64	80	100	125	160	200	250
Scheiner European	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Scheiner USA	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Weston	4	5	6	8	10	12	16	20	24	32	40	50	64	80	100	125	160	200
DIN in/10°	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

The figures in this table conform as closely as possible to the scales of most of the commercial photo-electric exposure meters.

Depth-of-field table

Dis- tance	f NUMBER							
	2.8	3-5/4	5-6	8	11	16	22	
∞	47'8" - ∞	38'1" - ∞	23'10" - ∞	16'9" - ∞	12'3" - ∞	8'4" - ∞	6'2" - ∞	
30'	18'6" - 80'	16'11" - 137'6"	13'5" - ∞	10'10" - ∞	8'9" - ∞	6'8" - ∞	5'2" - ∞	
15'	11'6" - 21'8"	10'10" - 24'4"	9'4" - 39'2"	8' - 129'6"	6'10" - ∞	5'6" - ∞	4'6" - ∞	
9'	7'7" - 11'1"	7'3" - 11'9"	6'6" - 14'4"	5'10" - 18'10"	5'2" - 32'8"	4'4" - 63'2"	3'4" - ∞	
6'	5'4" - 6'9"	5'3" - 7'1"	4'10" - 7'10"	4'6" - 9'1"	4'2" - 11'3"	3'8" - 18'10"	3'2" - 100'7"	
5'	4'7" - 5'6"	4'6" - 5'8"	4'2" - 6'2"	3'11" - 6'11"	3'8" - 8'1"	3'3" - 11'4"	2'11" - 22'1"	
4'	3'9" - 4'4"	3'8" - 4'5"	3'6" - 4'9"	3'3" - 5'1"	3'1" - 5'8"	2'10" - 7'1"	2'8" - 10'1"	
3'	2'10" - 3'2"	2'10" - 3'3"	2'8" - 3'4"	2'7" - 3'7"	2'6" - 3'10"	2'4" - 4'4"	2'1" - 5'4"	

The smaller the aperture, the longer the exposure time must be. The lens should, therefore, be stopped down only sufficiently to obtain the required depth of field, so as to avoid blurred pictures due to the motion of the subject.

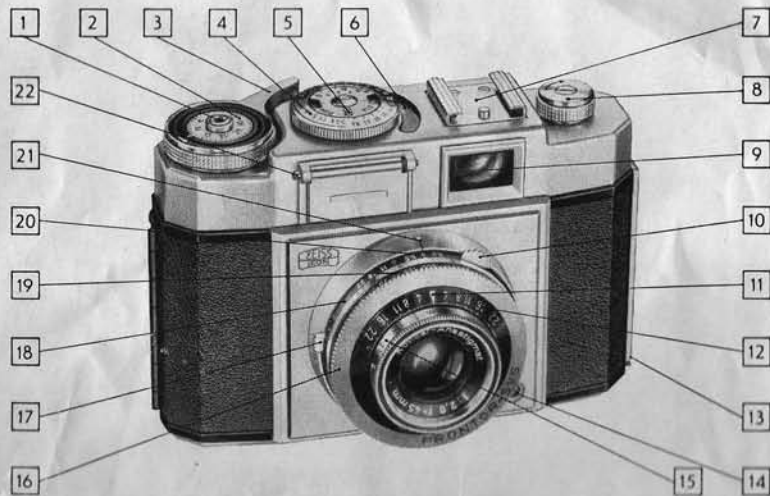


Table of Exposure Times for Flashbulbs

Manufacturer Type of flashbulb	Synchro-lever to		Manufacturer Type of flashbulb	Synchro-lever to	
	X or V	M		X or V	M
Osram XM 1, S 0 XM 1B, S 0B XP XO S 2	1 - 1/30	1/60 - 1/300	General Electric No. 5, No. 11, No. 22 SM No. 50 M 2 Sylvania Bantam 8, 0, 2, 25 C } Press 40 Press 2 B, 25, 25 B, 40 B } Press SF Press 3, 3 B M 2 Electronic flash units	1 - 1/30	1/60 - 1/300
	1 - 1/30	1/60 - 1/125		1 - 1/125	-
	1 - 1/60	-		1 - 1/15	1/30 - 1/60
	1 - 1/30	-		1 - 1/60	-
	1 - 1/15	1/30 - 1/300		1 - 1/30	1/60 - 1/300
Philips PF 1, PF 3, PF 14, PF 25, PF 60 PF 100	1 - 1/30	1/60 - 1/300	1 - 1/30	1/60 - 1/125	
	1 - 1/30	1/60 - 1/125	1 - 1/125	-	
	1 - 1/15	1/30 - 1/60	1 - 1/15	1/30 - 1/60	
	1 - 1/15	1/30 - 1/60	1 - 1/60	-	

Table of distances when using Zeiss Proxar lenses for close-ups

Lens focused at	∞	30'	15'	9'	6'	5'	4'	3'	PROXAR- lens
	Distance of object from camera	3'3 1/4"	3'2 3/4"	2'8 1/4"	2'4 1/2"	2'1"	1'11 1/4"	1'9"	
Distance of object from camera	1'7 1/2"	1'6 1/2"	1'5 1/2"	1'4 1/2"	1'3 1/4"	1'2 1/2"	1'1 1/2"	1'1/4"	f = 0.5 m
Distance of object from camera	1'1 5/16"	1 3/4"	1 9/32"	1 1 3/4"	1 1 1/8"	10 3/4"	10 1/4"	9 1/2"	f = 0.3 m
Distance of object from camera	7 7/8"	7 23/32"	7 9/16"	7 1 1/32"	7 3/32"	6 15/16"	6 23/32"	6 3/8"	f = 0.2 m