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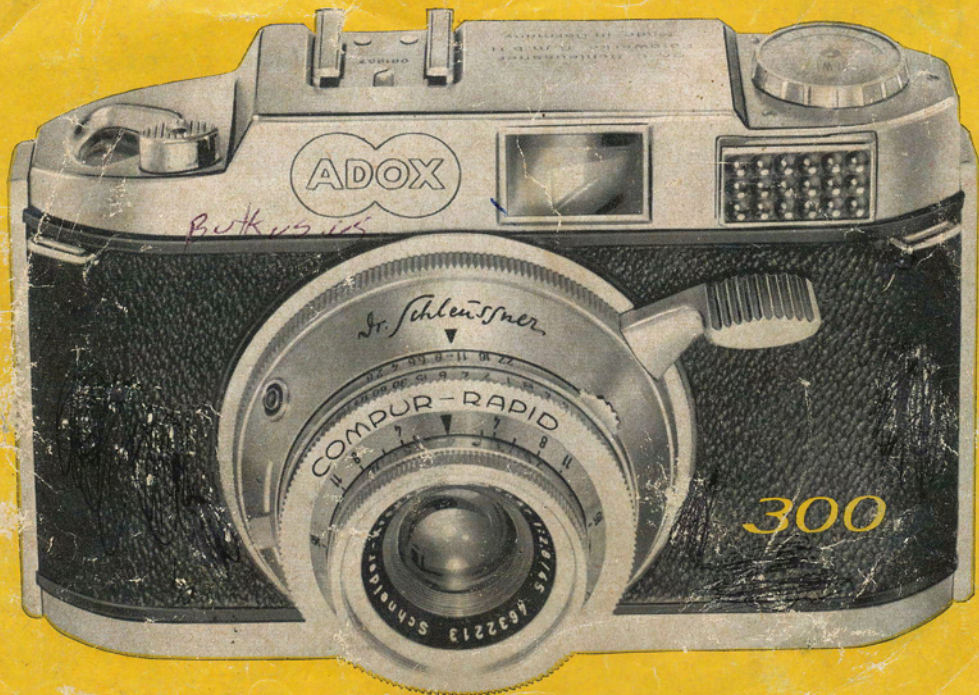
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ADOX

*Butkus 115*

*Dr. Schlenker*

COMBUR-RAPID

Schneider 4632213

300



# 300

## the new miniature camera with interchangeable magazines

Black-and-white and colour

in almost the same breath!



### Technical data

24x36 mm miniature camera with interchangeable magazines built-in fully automatic photoelectric exposure meter, bright optical viewfinder, rapid film wind, double exposure prevention device, snapshot focusing. Lenses: Schneider Xenar f/2.8,45 mm in exposure value Compur Rapid XV shutter, synchronised, self-timer, "B", 1-1/500 sec. or Steinheil Cassar f/2.8,45 mm in exposure value Synchro-Compur MXV shutter, fully synchronised, self-timer, "B", 1-1/500 sec. or Schneider Xenar f/2.8,45 mm in exposure value Synchro-Compur MXV shutter, fully synchronised, self-timer, "B", 1-1/500 sec.

Accessories: Interchangeable magazines, special ever-ready case, special magazine case.

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ADOX

**300** the new miniature camera by ADOX Fotowerke Dr. C. Schleussner GmbH. is new in design as well as in its variety of uses. In fact it is a completely new camera system.

This system comprises a camera body containing the optical components and the automatic exposure meter and an interchangeable magazine which contains the film and its advance mechanism and is, of course, completely light-proof.

A special adjustment mechanism of the highest precision guarantees that any ADOX 300 body forms a complete precision unit with any of the interchangeable magazines. Photographs taken with this camera will be pin-sharp and brilliant. A black-and-white film can be exchanged for a colour film in a few

moments or a low-speed film can be replaced by a high-speed one if lighting conditions change rapidly, and there is not the slightest loss of film.

Furthermore, the employment of a second interchangeable magazine makes the immediate rewinding of an exposed film unnecessary. The time thus saved may be used to take another picture which might otherwise have been missed.

The sturdy construction of the camera body and interchangeable magazines and the equipment with top-ranking lenses, shutters and automatic exposure meters guarantee permanent efficiency of the highest precision. When handled with care the ADOX 300 represents money well invested.

## These instructions

should make you familiar with the operation of the ADOX 300. Best take your time and study it carefully, then everything will become much easier in operation.

With your ADOX 300 photographing will be quicker, more versatile and simpler than you've ever known before



## Loading the camera

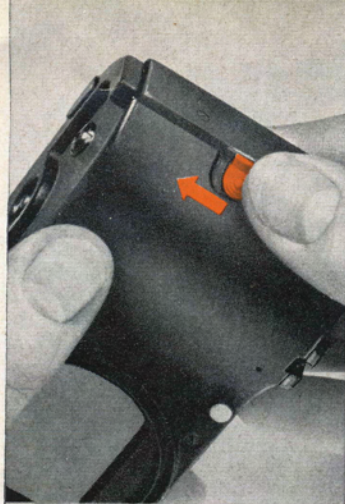
Turn the locking key (R 1) in the base of the camera in the direction of the arrow\*)

\*) See page 26 for the names of the components.

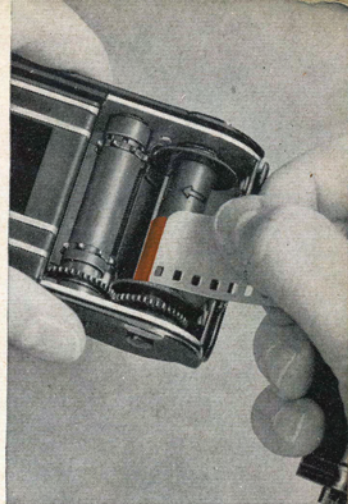
Press lightly against the back of the camera



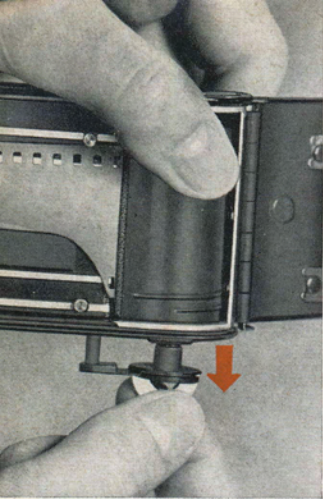
Swing the back open and let the magazine (M1) slide downwards to the right.



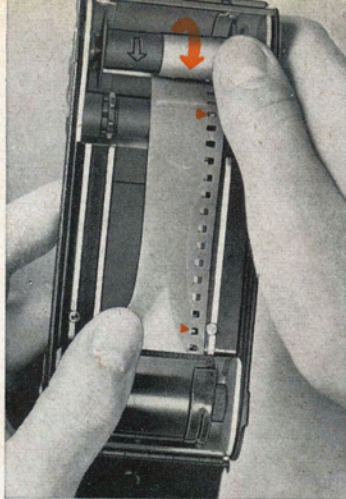
Push the locking bar of the magazine (M3) to the left and swing its back open.  
A = open - Z = closed



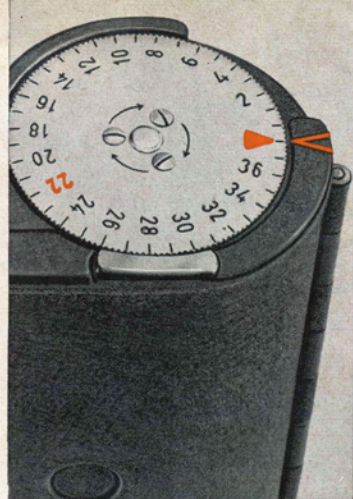
Push the tapered leader of the film into the clamping spring (T6b) of the take up spool (6).



Pull out the rewind key (E4) and insert a miniature daylight cartridge into the film chamber (F1).



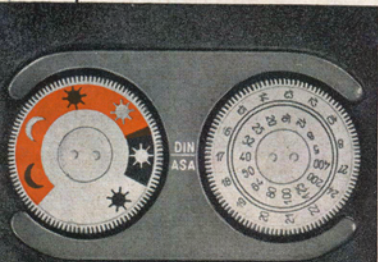
Turn the take up spool (T6) by means of its milled edge until the film is taut. See that the perforations of the film are properly engaged with the teeth of the film transport roller (T5) and those of the frame counter.



Close and lock the magazine and set the frame counter (T8) so that the triangle mark on the counter wheel is opposite the index mark. (When a film for 20 exposures is used, the red figure 22 should be opposite the index mark on the rim.)



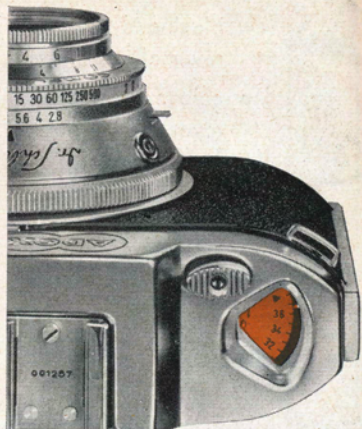
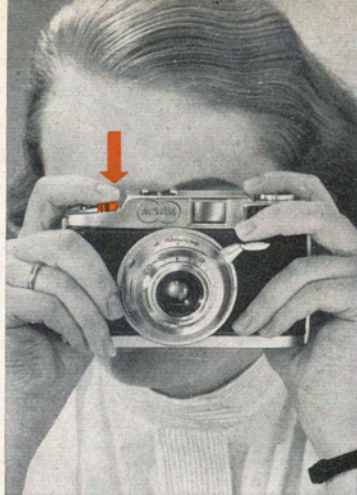
- = black-and-white negative
- = black-and-white reversal
- = colour daylight reversal
- = colour daylight negative
- = colour artificial light reversal
- = colour artificial light negative
- = special films



Now set the hinge at the end of the magazine on the guiding cams (G10) and let it slide into the correct position.

Close the camera by means of the locking key (R1). The window (G5) will show you which type of film is in the magazine.

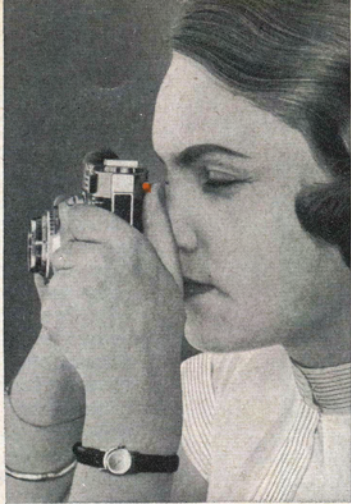




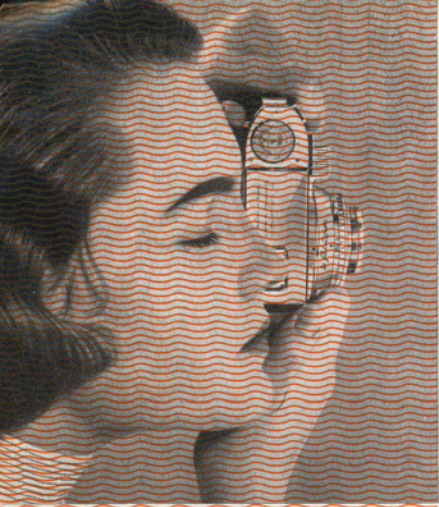
Now depress fully the rapid film winder (T<sub>1</sub>) using the second finger of your left hand. This advances the film and tension the shutter.

Press down the release knob (V7). Look at the frame counter (T8) – see illustration on the right – through the window (G3). The counter should now indicate one line before the figure 36 or 20. – If you wish you can now remove the magazine from the camera so as to make other magazines ready for an immediate use. (Always close the back of the empty camera to keep out dust.)

The  
automatic  
exposure  
meter



The automatic exposure meter is used for making "light stop readings". Set the meter for the speed of the film in use by turning the milled ring (B3a) until the index mark (B3b) points to the speed desired, which will be found on the scale (B3c). The figures indicate the speed values in German/10° DIN degrees and American ASA indices. Then view your subject through the view finder (O6) and depress the light measuring button (B2) for 2 seconds. Release the button and you have then recorded your light stop value.



When measuring the light you should bear in mind that the Bewi-Automat is an instrument with a pointer. When the camera is in a horizontal position or inclined up to about  $30^\circ$  everything will be in order. However, if the camera is tilted beyond this angle the exposure meter will indicate approximate values only. For this reason the light should always be measured with the camera in a horizontal position! This is of particular importance when colour pictures are to be taken.

When measuring the light take special care that your fingers do not cover the honeycomb lens (B1) with the photo-cell behind it. When measuring the honeycomb lens should be completely clear of any obstruction.

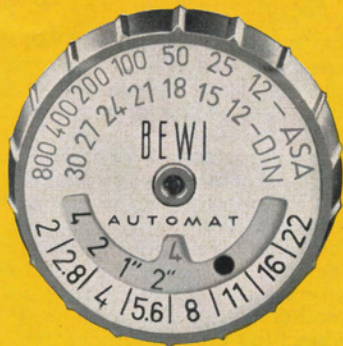


*wrong*

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After measurement you can read off from the scale (B3e) the correct shutter speed for any diaphragm stop marked on scale (B3d). The figures on the shutter speed scale (B3e) indicate fractions of a second, only 1", 2" and 4" are full seconds. This is called "object measurement" and is generally sufficient for most exposures.

(Please read also our "Hints For Exposure Measuring" on page 21.)



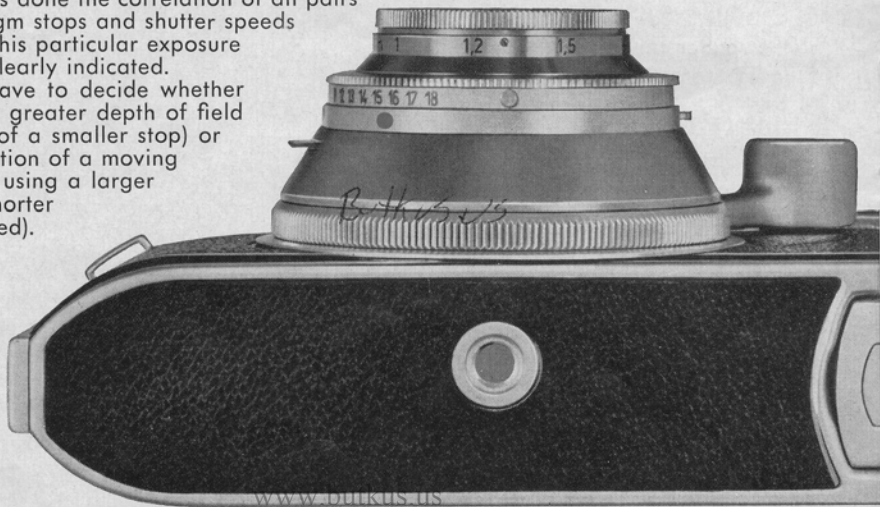
## *Important!*

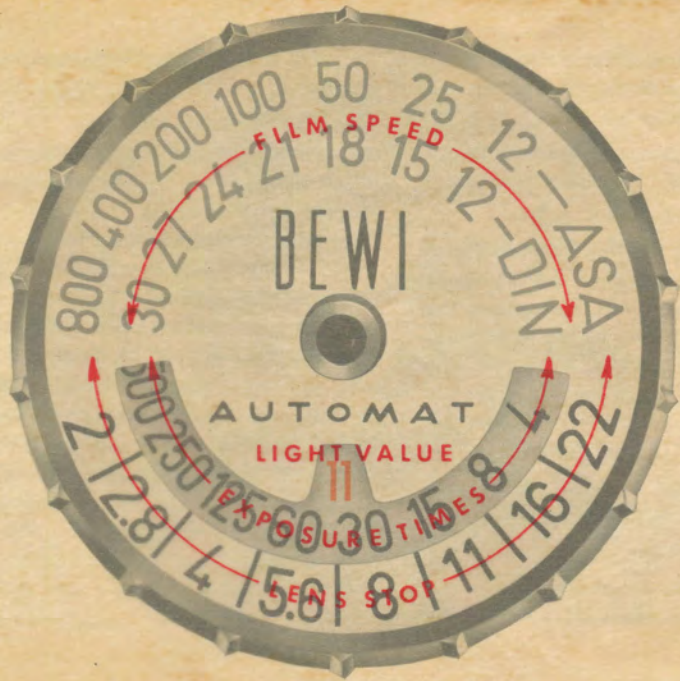
If a red warning dot (B3g) appears on the shutter speed scale, the lighting conditions are insufficient for a correct measurement and the values indicated should not be used!

The "exposure value" indicated should be transferred to the exposure value ring (V1) which must be turned until the red dot on the exposure value scale (V2) is opposite the exposure value indicated.

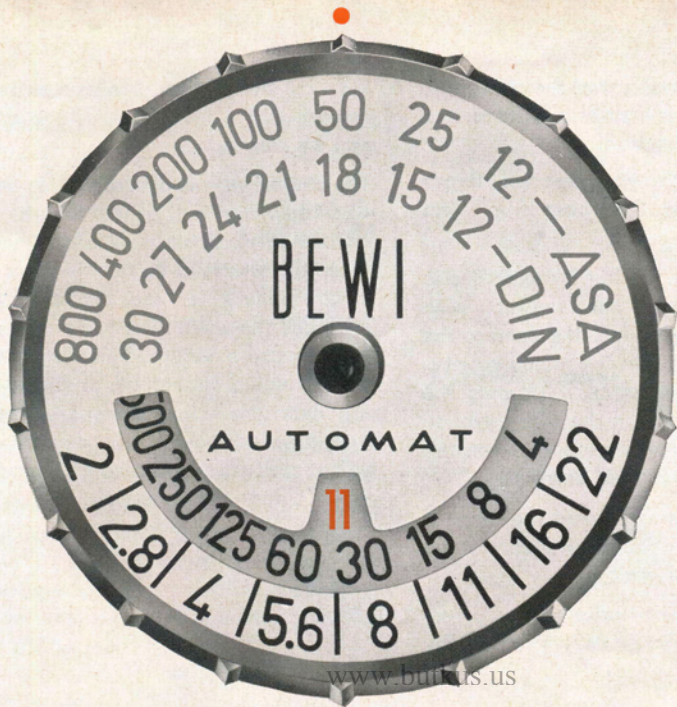
When this is done the correlation of all pairs of diaphragm stops and shutter speeds related to this particular exposure value are clearly indicated.

You only have to decide whether you want a greater depth of field (by means of a smaller stop) or good definition of a moving subject (by using a larger stop and shorter shutter speed).





Automatic Exposure Meter



[www.burris.us](http://www.burris.us)

**Automatic Exposure Meter**

Make sure you understand the automatic coupling between the various stops and shutter speeds functions.

Press down with your second finger of the left hand the rapid film wind lever (T1).

This will advance the film by exactly one frame and tension the shutter. With a magazine inserted into the camera the film itself will actuate the frame counter (this is important, since it permits the finding of any fault in the film advance which may happen sometimes when the magazine is not loaded correctly).

When the shutter is cocked the camera is locked automatically and cannot be opened. Try it yourself.

When the shutter is released by pressing the release knob (V7) – which, by

the way, has a thread to accept a cable release (V8) –, the back of the camera can be opened again.

The shutter with exposure values permits also the use of half exposure values and accordingly half stops. This is convenient when pictures must be taken with a filter, since many filter manufacturers have replaced the usual filter factors by negative exposure values. This negative exposure value should be deducted from the exposure value measured and the ensuing result used as the new exposure value. Half-stops are also of importance when colour film is used.



## Distance and depth of field

The distance between the camera and the most important portion of your subject should be set by turning the distance scale (O4) to the triangle mark. When looking at the fixed depth-of-field scale (O5) you will find the stop you are using to the left and right of the triangle mark and can thus read off the depth of field available.

## Snapshot focusing

In order to be always ready for action the camera can be set to the so-called "snapshot settings" or "zone focusing", either to a "near" or a "foreground-infinity" zone. In both cases set the diaphragm to 8 and the distance setting ring to the distance indicated in the table alongside.

## Schneider Xenar, 1:2,8, f = 45 mm

Stop 8, distance setting 2 m (6 ft)

1 m	1,2	1,5	2	2,5	3	4	6	10	∞
-----	-----	-----	---	-----	---	---	---	----	---

Stop 8, distance setting 6 m (20 ft)

1 m	1,2	1,5	2	2,5	3	4	6	10	∞
-----	-----	-----	---	-----	---	---	---	----	---

## Steinheil Cassar, 1:2,8, f = 45 mm

Stop 8, distance setting 3 m (10 ft)

O 9 m	1	1,2	1,5	2	2,5	3	4	6	10	∞
-------	---	-----	-----	---	-----	---	---	---	----	---

Stop 8, distance setting 10 m (30 ft)

O 9 m	1	1,2	1,5	2	2,5	3	4	6	10	∞
-------	---	-----	-----	---	-----	---	---	---	----	---

The range marked yellow will be sharp.

## The self-timer

The Compur Rapid Shutter XV as well as the Synchro Compur Shutter MXV have a built-in self-timer. You have nothing to do but set the lever (V6) to V. As soon as you press the release knob (V7) the delayed action device starts running and will release the shutter automatically within about 8 seconds. With this setting the shutter is also set to X-synchronisation; flashbulbs may be used if the shutter speed chosen is not shorter than 1/25 sec. For electronic flash any shutter speed may be employed.

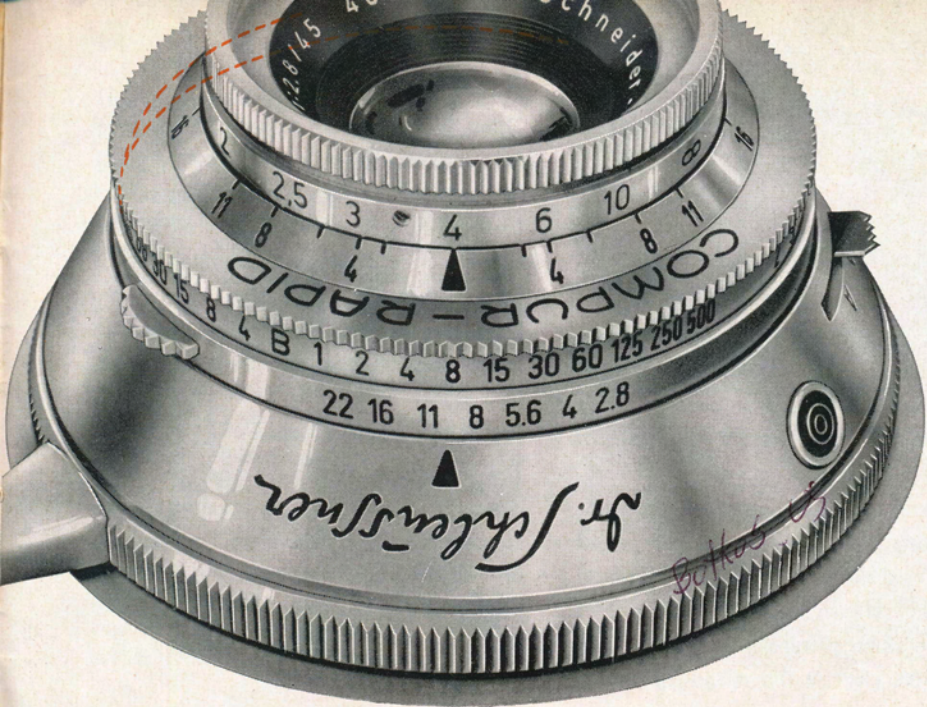
It is impossible to use the self-timer when the flash synchro-lever is set to "M".

## Shutter settings for flash exposures

The Compur Rapid Shutter XV permits the use of all electrically ignited types of flash, such as flash capsules, flashbulbs and electronic flash units. The shutter speed ring (V4) should be set to 1/25 second or longer exposure times. The flash-lead must be connected to the flash contact (V5) and the lever (V6) set to "X".

With the Synchro-Compur Shutter MXV shorter shutter speeds than 1/25 sec. can be employed. The lever (V6) should then be set to "M" and the instructions for the use of the particular flashbulb be studied carefully. For electronic flash any speed may be used but the lever V6 must be set to "X". This type of flash must not be used with the "M"-setting.





# THE SHUTTER

## Taking pictures

Load the camera with an interchangeable magazine (M1) containing a film of your own choice. Now the ADOX 300 is ready for action, for it should always be carried with the shutter untensioned and the rapid film wind lever (T1) should be pressed down only immediately before the actual exposure. Make the necessary measurements and settings in front of your subject, press down the rapid film wind lever, look through the viewfinder and press the release knob. If you want to take the same picture on colour or any other film, change the magazine.

### **This is done like this:**

Open the back of the camera (see page 4) and remove the magazine. Exchange it for another magazine containing a different film (see page 6) and close the camera once again. You are then ready for another shot. This rapid transition from one film to another is the most interesting feature of the ADOX 300.

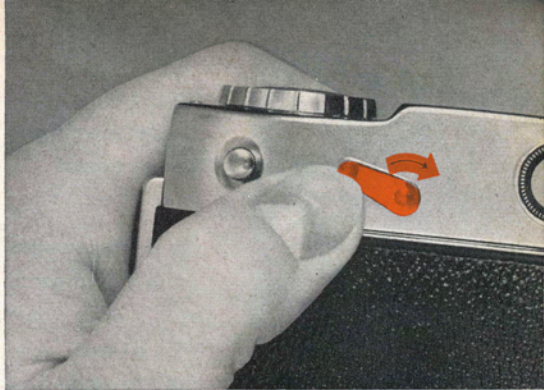
### **However, please note!**

The magazine should be changed only after the shutter has been released. As soon as the film in one magazine is used up and the rapid film wind lever can no longer be pressed down completely, one final operation must be carried out.

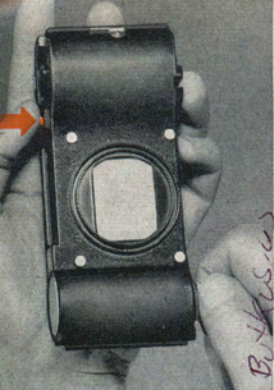
## The final operation

To make this final operation possible the spring loaded lever (E1) should be pushed with the thumb and the rapid film wind lever (T1) pressed down simultaneously. This will tension the shutter. Cover the lens with the lens cap (O2, see page 26) and release the shutter. The magazine can now be removed and replaced by another one. You are ready for action once again. Rewinding the film can be done later at home.

This is another great advantage of the ADOX 300. You need never miss a picture because your camera is loaded with the wrong type of film. With two or several cameras you would have to work hard before they were ready for action. With the ADOX 300 it is sufficient to focus once, to have ready one additional inter-



changeable magazine and to set the exposure meter to the speed of the new film. This feature is a wonderful time-saver but it should not tempt you to waste film unnecessarily. It is up to you to select just the right film for the exposure in hand after having composed the picture and found the correct exposure time.



### **Rewinding and removing the exposed film**

Press the rewind knob (E3) inwards with your left thumb and turn the rewind key (E4) with the right

hand in the direction of the arrow until you feel a slight resistance (this is when the film leader slips from the clamping spring). Release the lock bar of the magazine (M3), open the back of the magazine, pull out the key (E4) and remove the film cartridge.

Cartridges with exposed films should be handled with care. Wrap them in tin-foil to protect them from dust, since the latter tends to settle down on the mouth of the cartridge which results usually in annoying "tramlines" all along the film.

# Hints

## for measuring the exposure time

In general, the so-called "subject measurement" will be sufficient. This means that you view your subject through the viewfinder, measure the light and record it by pressing the light measuring button (B 2). This method is suitable for all subjects without extremely high contrasts.

When taking an open landscape or a high mountain range you have to bear in mind that the intensely blue sky or the radiant white clouds can easily falsify the reading. For this reason you should tilt the camera downwards slightly in order to give the automatic exposure meter the opportunity of indicating the correct exposure values relative to the all important foreground.

1/500	Instantaneous shots
1/250	Hand-held exposures
1/125	" " "
1/60	" " "
1/30	" " "
1/15	Instantaneous shots of longer duration
1/8	Camera on a firm support better on a tripod
1/4	Instantaneous shots of even longer durat.
1/2	Tripod indispensable
B	Time exposure Tripod indispensable





**Exceptions:** Photographs of interesting cloud formations in which the details of the landscape or buildings, etc. are to be reproduced as silhouettes only.

In some cases the "subject measurement" has to be revised by means of a "short-range measurement", for instance, when bright subjects are to be photographed in front of a dark background or vice versa or with close-ups of small subjects such as small living creatures. This type of measurement is particularly important when you want to take a portrait. For a "short-range measurement" you should approach your subject until the honeycomb lens of the automatic exposure meter can accept only that light which radiates from the individual portions of the subject to be measured. It is a good idea to record two or three portions of the subject and to use the mean value.

### **A rule of thumb for short-range measurement**

Distance between the exposure meter and the important portion of the subject not greater than the portion in question is wide.

For exposures of subjects with very high contrasts (e. g. snow landscapes) it is more advantageous to replace the measurement of the reflected light by that of the "incident light". For this purpose fix the diffusing disc (B3h) in front of the honeycomb lens (B1) of the exposure meter and measure the incident light in the reversed direction, that is, from the subjects towards the picture taking position. Thus the intensity of the light falling on the subject is measured while the brightness of the subject is neglected. Incident light measurement should also be used for photographs in interiors (with or without artificial light). This method is simple and safe and secures good pictures.

**Shots against the light** require a special method of measuring. Once again the diffusing disc should be used but, in this case, measuring should be carried out from the camera towards the subject. The result has to be corrected, however: when the subject contains high contrasts and you want sufficient detail in the shadows also, the diaphragm should be opened by two stops in relation to the stop measured. If the contrasts are not so high opening the diaphragm by one stop will be sufficient.

**Please note:**

Low speed films of 32 ASA = 26° B.S.I. = 16/10° DIN and less, such as the ADOX KB 14 are "fine-grain films" with the highest possible resolution and accordingly suitable for any size of

enlargement. However, these films should be exposed as correctly as possible.

The ADOX KB 17 (of 40 ASA = 27° B.S.I. = 17/10° DIN) is the general purpose film. It is always 'the right' film, has a very fine grain and a sufficiently high speed.

ADOX KB 21 should be chosen when the light is poor and the subject calls for a very short exposure time. Its high sensitivity to red makes it particularly suitable for shots with artificial light.

● **Please remember:**

- An increase or decrease of
- 3/10° DIN means half or double
- the exposure time.



## Exposure for colour shots

The photo-cell of the built-in automatic exposure meter has a colour sensitivity which matches the basic colours and thus guarantees their correct evaluation in terms of brightness. When taking colour shots the light value should be used in the same way as for black-and-white pictures. The exposure latitude of colour reversal films, however, is relatively small; for this reason the exposure value should be ascertained with care. It is a good plan to match the colour film used, the camera and the automatic exposure meter by taking a few trial colour shots: the first shot on a colour film should be exposed according to the exposure value stopped. The second one of the same subject, at the same distance and the same lighting conditions should be made with half an exposure value higher, the next one with half an exposure value lower and two more shots with a full exposure value up and down the scale.

## for taking colour pictures

Look for subjects with a large area of the same colour and without excessive contrast! Portraits should always be taken in front of a quiet, neutral background. Open air portraits will be most successful when the sun is covered by a slight haze.

**Landscapes:** Look for a colourful foreground. In the high mountains and on the sun-lit beach use an ultra-violet filter, which prevents that annoying "blue cast".

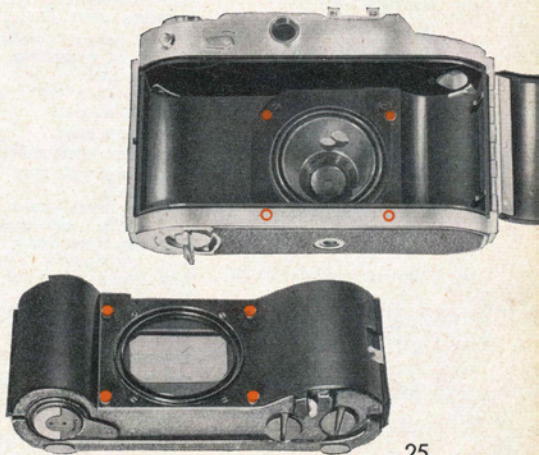
When taking colour pictures in daylight, the shadows can be brightened by white reflectors or by blue flashbulbs or electronic flash. Avoid mixed light (incandescent lamps with daylight), since it will falsify the colours.

## Maintenance

The ADOX 300 is a high-precision optical instrument which needs to be attended to regularly and carefully if its original state of precision is to be maintained.

For this purpose only a brush of fine marten hair should be used, with which the camera should be dusted regularly inside and outside. Although the camera body is dust-proof there is no harm in cleaning it. Special attention should be paid to the adjusting nipples (J1) in the camera body and (J4) on the interchangeable magazine. They should always be scrupulously clean. When the temperature changes abruptly and the lens becomes covered with moisture, this should not be wiped off. Wait until the

moisture disappears. — If the camera should develop a fault after the expiration of our guarantee, forward it to an approved photomechanic.



## The accessories for the ADOX 300

First and foremost the camera should be equipped with at least one more **interchangeable magazine**. This should be stored in a **magazine case** which also accommodates two filters. It can easily be fixed to the camera strap and, by means of a bright window, it can be established with what type of film the magazine is loaded.

The camera is supplied with a lens cap (O2) and the diffusing disc (B3h) for the automatic exposure meter.

In order to protect the camera from dust and the inclemency of the weather keep it in the **special ever-ready case** which also accommodates the lens cap and the diffusing disc. The ever-ready case allows for the rapid changing of the magazine. The carrying strap of the camera fits the eyelets of the camera body (G4) as well as those of the ever-ready case.

### List of components

#### Camera body (G)

- G 1 Accessory shoe
- G 2 Serial number of the camera
- G 3 Frame counter window
- G 4 Eyelets for carrying strap
- G 5 Window for film type indicator
- G 6 Tripod bush, 1/4"
- G 10 The guiding cams.

#### Optical components (O)

- O 1 Lens
- O 2 Lens cap
- O 3 Lens serial number
- O 4 Distance setting scale
- O 5 Depth of field scale
- O 6 Optical viewfinder

#### Fully automatic exposure meter (B)

- B 1 Honeycomb lens
- B 2 Light measuring button
- B 3 Indicator disc
- B 3a Milled ring
- B 3b Index mark
- B 3c Film speed scale
- B 3d Diaphragm stop scale
- B 3e Exposure time or shutter speed scale
- B 3f Exposure values (red figures)
- B 3g Red warning dot
- B 3h Diffusing disc for incident light measurement

#### Shutter (V)

- V 1 Exposure value ring
- V 2 Exposure value scale
- V 3 f/numbers (camera body)
- V 4 Shutter speed ring
- V 5 Flash contact

- V 6 XV or MXV synchro-lever
- V 7 Release knob
- V 8 Thread for cable release
- V 9 Green figures

#### Changing Magazine (M)

- M 1 Magazine
- M 1a Magazine number
- M 3 Magazine locking bar
- M 4 Film type indicator discs

#### Locking devices for camera body (R)

- R 1 Locking device for camera back
- R 2 Safety catch for camera back

#### Adjusting devices (J)

- J 1 Adjusting nipple (camera body)
- J 4 Adjusting nipple (magazine)

#### Film advance (T)

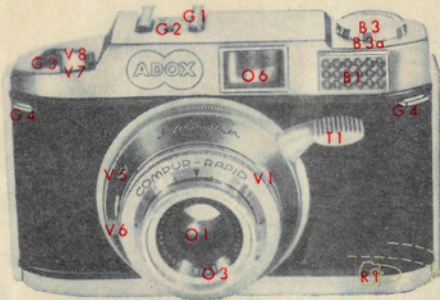
- T 1 Rapid film wind lever
- T 5 Film transport roller
- T 6 Film spool
- T 6a Milled ring
- T 6b Clamping spring
- T 7 Drive of frame counter (Frame counter sprocket)
- T 8 Frame counter

#### Film guide (F)

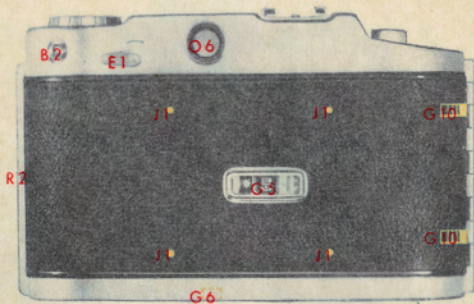
- F 1 Chamber for film cartridge

#### Final operation and rewinding (E)

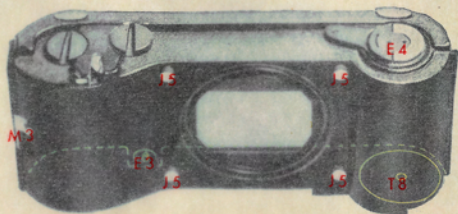
- E 1 Spring-loaded lever
- E 3 Rewind knob
- E 4 Rewind key



Kamera von vorne

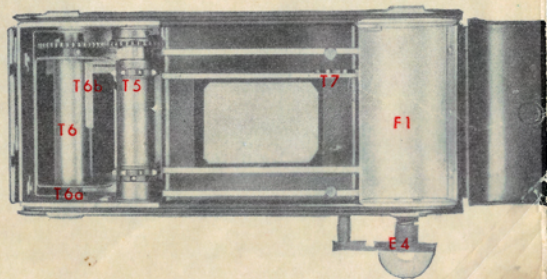


Kamera von hinten



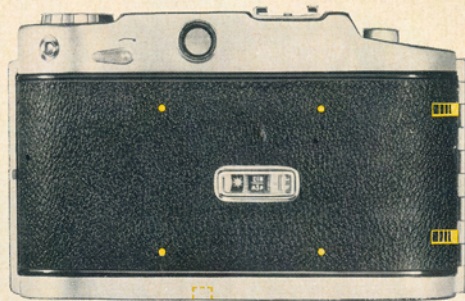
Magazin von vorne

Magazin von hinten, aufgeklappt

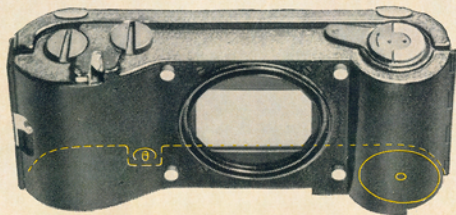




Kamera von vorne

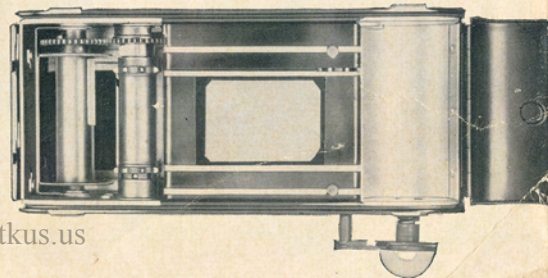


Kamera von hinten



Magazin von vorne

Magazin von hinten, aufgeklappt



DR. C. SCHLEUSSNER FOTOWERKE  
FRANKFURT AM MAIN

**ADOX**

