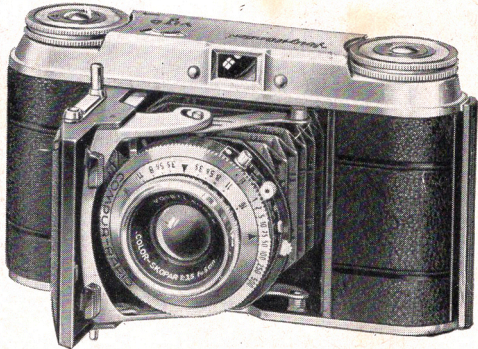


Voigtländer
VITO II

35 mm



INSTRUCTIONS FOR USE

The most important point

of the whole instruction booklet is on this page. You are requested to read the instructions carefully to make yourself familiar with the handling of your camera before you start taking photographs or investigate its mechanical construction.

Keep in mind: the VITO II is a precision instrument which must be handled with feeling and understanding. It will repay your care with an endless number of beautiful and wonderfully sharp pictures.

Voigtländer

VOIGTLÄNDER A.G. BRAUNSCHWEIG

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Operation

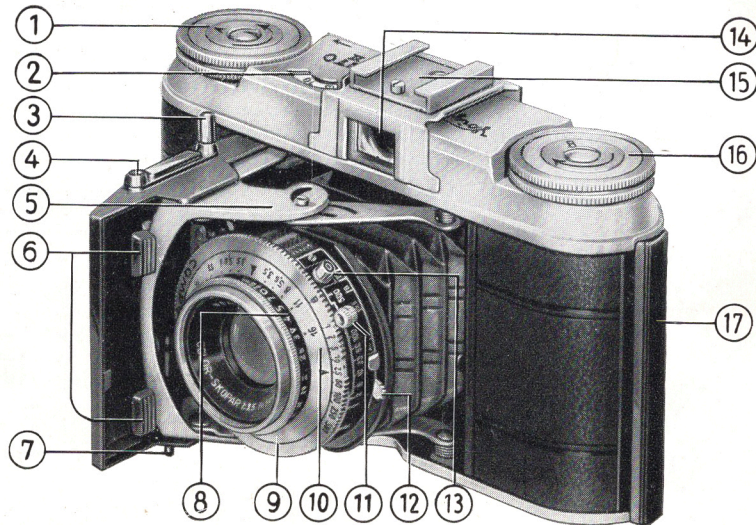
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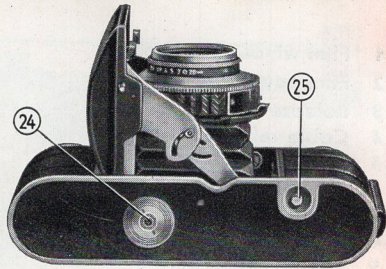
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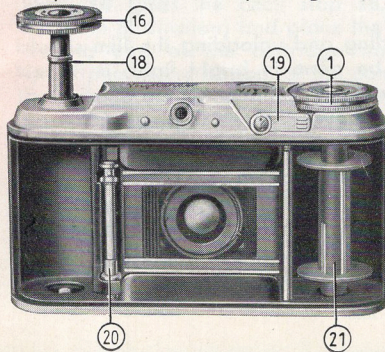
- 1 Film winder ("A knob")
- 2 Film counter window
- 3 Release
- 4 Cable release socket
- 5 Struts
- 6 Keys for closing camera front
- 7 Front support
- 8 Lens mount with distance scale
- 9 Speed setting ring
- 10 Front plate
- 11 Shutter tensioning lever
- 12 Aperture setting lever
- 13 Contact for flash equipment
- 14 Optical viewfinder
- 15 Accessory shoe
- 16 Rewind knob ("R knob")
- 17 Locking ledge for camera back



- 1 Film winder ("A knob")
- 16 Rewind knob ("R knob")
- 18 Click stop of telescopic shaft
- 19 Film lock release
- 20 Film-counter shaft
- 21 Take-up spool
- 24 Tripod bush
- 25 Button to open camera front

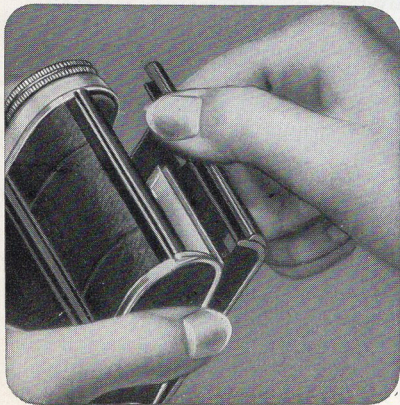
Important: The automatic double lock

After an exposure has been made, the **shutter release 3 cannot be depressed** until the film has been wound on again by turning the A knob to a definite stop; but if you omitted to expose, the **A knob will not turn**, as the film can only be wound on after the shutter has been released. In this way double exposure as well as passing over a frame of the film are made impossible.



To unlock the double exposure prevention, lock release lever **19** is raised as far as it will go. Swinging it **up and down again** releases the film lock for one frame (see "Loading"); **leaving the lever erect** puts the locking device out of action for as long as the lever is in this position. (See "Unloading the Camera") If you wish to release the shutter while there is no film in the camera, the film counter shaft **20** must first be turned to the **right** until it comes to a definite stop.

Loading the camera



The perforated miniature film supplied in daylight cartridges yields 36 exposures 24×36 mm. in black and white material; the number of pictures on colour film varies with the different makes, and is stated on the film wrapping.

Loading and unloading the film should not be done in bright light; it is best done in the shade — the shadow of your body will do — to prevent fogging the film.

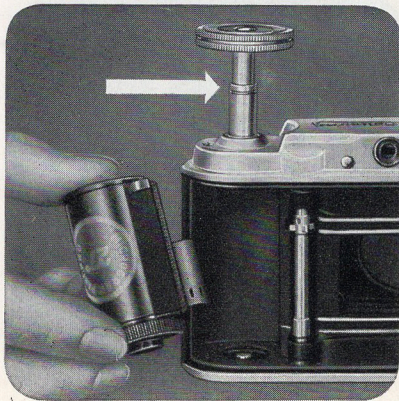
Open the camera back by lifting up locking ledge **17**, as shown in illustration. The back is hinged to the body. When **closing the back** later on see that the latch catches properly.

The left film chamber is for the film cartridge. The right chamber contains the take-up spool **21**, which is built into the camera and cannot be removed.

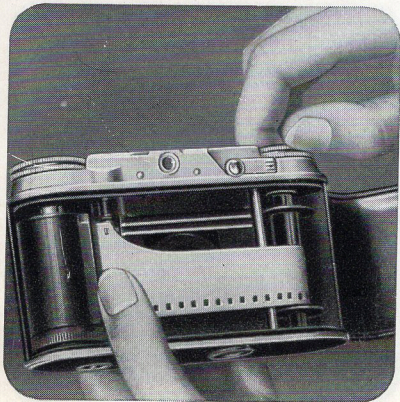
To insert the film cartridge proceed as follows: Pull up completely Rewind knob **16** (past the click stop **18**, see arrow in illustration) and place the protruding end of the cartridge on the spool peg in the bottom of the camera. Push back R knob into its original position; turning it a little will make it engage the centre of the cartridge more easily.

Turn the take-up spool by means of the A knob **1** until the longer slot lies to the side. (Should the A knob be locked, swing release lever **19** up and down again.)

Inserting the film cartridge



Inserting film into take-up spool



Pull the end of the film projecting from the cartridge across the film guides, and push it well into the long slot of the take-up spool. (The two short ones may be used to remove remaining bits of film, if any.) The lower edge of the film must lie against the disc of the spool, otherwise the film may not run straight later on.

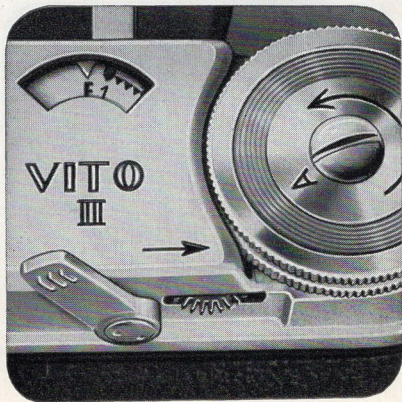
Give the A knob one full turn to ensure that the end of the film winds tightly round the take-up spool. (Should the A knob be locked swing release lever up and down once.) Take care that the film runs straight across the film guides and that the sprockets of the film-counter shaft **20** engage the perforations.

Close camera back.

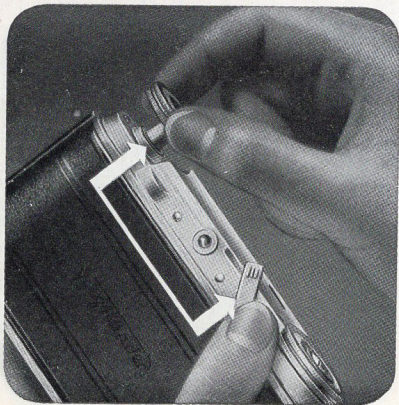
The film counter automatically registers the number of exposures as they are made; they may be read off any time in the semi-circular counter window **2**.

Before setting the counter, turn the A knob as far as it will go (unless, of course, it is in this position). Raise lock release lever **19** as far as it will go (see illustration) and hold it in this position. Turn the little wheel (which has thus been uncovered) in the direction of the arrow until the indicator of the film counter points to "F". Now let the release lever fall back into its original position. Turn A knob until it stops, swing release lever up and back again once, and give the A knob another turn until it stops. Now the film counter is set to "1"; the film is ready for the first exposure.

Setting the film counter



Unloading the camera



When all 36 exposures have been made the film must be wound back into the film cartridge.

1. Swing up release lever as far as it will go, and hold it in this position (see lower arrow in illustration).
2. Pull up R knob until it "catches" the first click stop (**about halfway up the shaft**, see upper arrow), and turn it evenly in the direction of the engraved arrow.
3. The A knob will turn at the same time. When it stops (and you feel a marked resistance turning the R knob), the film is fully rewound.
4. Now let the release lever fall back, open camera back, pull up the R knob to the second click stop, and lift out the film cartridge.

Changing partly exposed film

You can remove a partly exposed film from the VITO II and exchange it for another (e. g. black-and-white for colour film), without using a darkroom. The partly exposed film is rewound as described. All you need do is make a note of the last number indicated on the film counter.

To re-insert the film is not difficult; you start as you do when loading a new film. As soon as the back is closed, and the film counter set to "1", swing up the release lever as far as it will go, and hold it there. Now turn the A knob until the counter disc shows one number higher than the number you noted down. Then let the release lever fall back into its original position. You can now go on exposing in the usual way until the end of the film is reached.

Opening and closing the camera front



The camera front is opened by pressing button **25** (see arrow). Pull the front downwards until the struts engage firmly. Then the lens carrier is in the taking position.

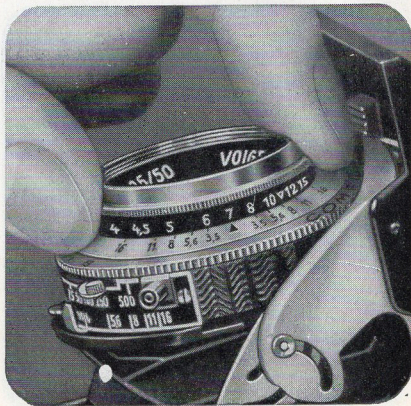
To close the front, depress both keys **6** at the same time, and fold up the front to camera body.

Note: During all these manipulations take care not to depress release **3**, which emerges from the edge of the front as it is opened, and recedes automatically as it is closed.

The distance between camera and subject may be estimated, or measured with the help of a rangefinder which is inserted into the accessory shoe **15** attached to the camera. To set the distance, turn lens mount **8** until the distance feet is opposite the index mark on the front plate **10**. The aperture figures right and left of this mark point to the depth of field at this particular setting (see page 27).

Between the figures on the distance scale you will find a triangular mark ∇ (at 11 ft.) and a circle O (at 33 ft.). These are "snapshot settings" (see page 14).

Setting the distance



Snapshot setting



Snapshots taken unnoticed by the subject (for example children at play) often result in surprisingly pleasant pictures. There may be no time for critical setting of the distance, so this is the occasion for "zone focusing". For subjects between 8' 3" and 16' 6" set to the near focusing mark ∇ , and for those between 16' 6" and ∞ to the distant mark. O. **Do so in good light only; also stopping down to at least 5.6 is essential in order to obtain sufficient depth of field.**

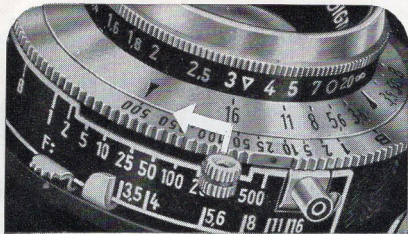
These snapshot settings are extremely useful for sports pictures where the subject distance often changes with lightning rapidity.

The iris diaphragm controls the amount of light falling on the film, and influences both exposure time and depth of field. It is necessary to remember that the aperture (or "stop") becomes smaller when the "stop number", i. e. the figure denoting it, becomes higher, and vice versa. From stop to stop the required exposure time is **doubled** (or halved, in the opposite direction). Example: If at aperture f 5.6 the correct exposure time ("speed") is $\frac{1}{50}$ second, the correct speed to which you must set at f 8 is $\frac{1}{25}$ second. — Aperture and depth of field are discussed on page 27.

The aperture is set by means of the setting lever **12** (see arrow). The indicator must be close to the index line of the respective figure.

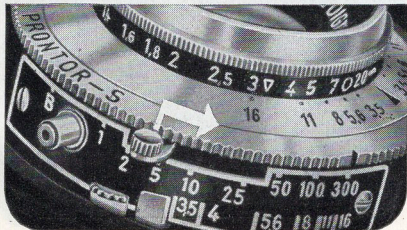
Setting the aperture ("stop")





Setting the shutter

The VITO II is either equipped with the COMPUR-RAPID or the PRONTOR-S shutter. Turn speed setting ring until the red dot on the ring, or the indicator on the front plate is opposite the required speed. The figures on the scale stand for fractions of a second, except "1", which is one second. The PRONTOR-S ranges from 1— $\frac{1}{300}$ sec., the COMPUR-RAPID from 1— $\frac{1}{500}$ sec. If set to "B" (time exposure), the shutter will remain open as long as the release is depressed.



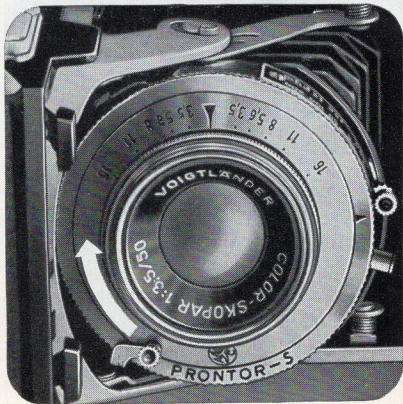
To tension ("cock") the shutter, also when set to "B": With COMPUR-RAPID, press lever 11 down as far as it will go (see ill. above). With PRONTOR-S pull up lever 11 as far as it will go (see ill. below).

The PRONTOR-S shutter has a built-in delayed action release.

Procedure: First set distance, diaphragm and exposure time and tension shutter as usual. Then pull the button with the red mark as far as it will go in the direction of the camera front and the selftimer is ready. The shutter will open about 10 seconds after release has been depressed and you have sufficient time to go to your preselected spot.

The delayed action release cannot be used with the "B" setting.

The delayed action release (Selftimer)



Instantaneous and time exposures



During the moment of exposure hold your breath and depress the shutter release quite softly as far as it will go. Short instantaneous exposures ($\frac{1}{25}$ or shorter) are made with the camera held in the hand. For longer exposure times ($\frac{1}{10}$ to 1 second) the camera should not be held in the hand; if you cannot avoid it, rest your elbows or lean against some support.

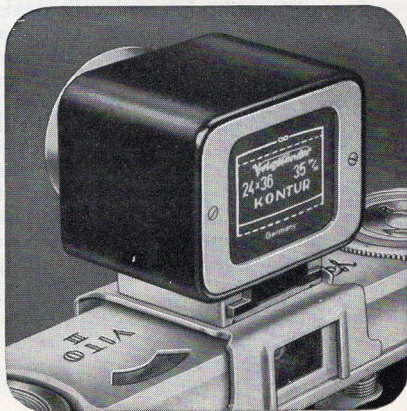
For long time exposures ("B" setting) it is essential for the camera to have a firm support. It may be placed on a level surface making use of the front support 7 (for horizontal pictures only), but the only safe way is to screw it to a tripod. For exposures of very long duration the use of a cable release with locking screw is recommended.

The Voigtländer 24 x 36—35 mm suspended frame finder "KONTUR" is ideal for following fast moving subjects (sports shots, etc.); it is specially convenient for people who have to wear spectacles.

Keep both eyes open when sighting the subject. The eye looking past the finder sees the subject and its surroundings in their natural size and brightness, while the eye looking through the finder sees a white frame outlining the field of view. The dot in the centre of the viewfinder indicates the centre of the field of view, while the dotted line shows the parallax correction for near subjects.

The finder fits onto the accessory shoe which — with the stop pin at the front — is first pushed over the fastening pegs on the top of the camera (right picture).

Frame finder "KONTUR"



Close-Up pictures with Focar Lenses

Do not miss the interesting field of "close-up" photography, which, unfortunately, many amateurs neglect. Largescale pictures of flowers, butterflies, and other insects, small "objets d'art", etc. may yield effects of extraordinary beauty. Moreover, with the help of Focar lenses you can make excellent copies of pages of books, stamps, or small pictures. Care, however, is recommended in portraiture, as perspective may easily appear distorted when working at close distance.

Voigtländer Focar Lenses in push-on mounts are supplied for two distance ranges:

Focar lens F 1 for subject distances

2' 7 $\frac{1}{2}$ " to 1' 6"

Focar lens F 2 for subject distances

1' 5 $\frac{1}{2}$ " to 1' 1 $\frac{1}{2}$ ".

Size: 29 mm. diameter.

| When focussing on | Sharp definition with | |
|-------------------|-----------------------|----------------------|
| | Focar 1 | Focar 2 |
| ∞ | 2' 7 $\frac{1}{2}$ " | 1' 5 $\frac{1}{2}$ " |
| 60' | 2' 6 $\frac{1}{4}$ " | 1' 5" |
| ○ | 2' 5 $\frac{1}{4}$ " | 1' 4 $\frac{3}{4}$ " |
| 20' | 2' 3 $\frac{3}{4}$ " | 1' 4 $\frac{1}{4}$ " |
| 15' | 2' 2 $\frac{3}{4}$ " | 1' 4" |
| 12' | 2' 1 $\frac{3}{4}$ " | 1' 3 $\frac{3}{4}$ " |
| ▽ | 2' 1 $\frac{1}{2}$ " | 1' 3 $\frac{1}{2}$ " |
| 10' | 2' 1" | 1' 3 $\frac{1}{4}$ " |
| 8' | 1' 11 $\frac{3}{4}$ " | 1' 2 $\frac{3}{4}$ " |
| 7' | 1' 11" | 1' 2 $\frac{1}{2}$ " |
| 6' | 1' 10" | 1' 2" |
| 5' | 1' 8 $\frac{3}{4}$ " | 1' 1 $\frac{1}{2}$ " |
| 4' 6" | 1' 8" | 1' 1 $\frac{1}{4}$ " |
| 4' | 1' 7" | 1' 3 $\frac{3}{4}$ " |
| 3' 6" | 1' 6" | 1' 1 $\frac{1}{2}$ " |

How to use the focar lenses:

- For close-up with Focar lenses, mount the camera on a tripod, and approach the subject until it appears in the desired size in the finder. According to the subject distance, push a Focar 1 or a Focar 2 lens over the camera lens mount.
- Measure the distance accurately from the front surface of the Focar lens to the centre of the subject, and set the focusing scale of the camera by the table opposite.
- The Focar lenses do not affect the exposure, but longer exposures are, of course, required when the lens is stopped down.
- At full aperture ($f/3.5$) the pictures will be slightly unsharp, particularly towards the corners. The definition improves on stopping down to $f/5.6$, and reaches its normal standard at $f/11$.
- At such close range the image on the negative is no longer exactly the same as the view through the finder (parallax error), but is displaced in the direction of the lens axis. With the Focar 1 this displacement amounts to about $1/10$ of the field area, with the Focar 2 to about $1/5$.

Filters

Your Voigtländer lens will give you pictures of excellent sharpness; but the mood of the picture can be improved, and special pictorial effects achieved, by using a filter. So when taking photographs out-of-doors (except in very few cases) use a filter to enhance your picture. — Especially the sky, with and without clouds, is rendered more naturally, and will look more beautiful.

There are only few occasions when a filter should not be used: when very short exposure time must be given in unfavourable light conditions, for example for sport pictures in dull weather, fog or mist scenes, etc.

Voigtländer filters are made of spectroscopically tested, optical glass, critically ground with plane-parallel surfaces. This ensures that the superb definition given by the Voigtländer anastigmats is fully retained. The coloured glass of the filters is lightproof and heatproof.

The filters are supplied in push-on mounts, and may be used in combination with a Focar lens, and or Voigtländer lens hood. Suitable size for VITO II: 29 mm. diameter.

Voigtländer Yellow Filter G 1

A light yellow filter recommended when only slight correction is desired, or where the increase in exposure time required with Filter G 2 (medium yellow) cannot be given.
Filter factor (exposure increase): 1.5—2 times.

Voigtländer Yellow Filter G 2

The "universal filter" for all outdoor work. Particularly suitable to bring out cloud effects on blue sky, to render correctly fair hair or ripe corn; spring and autumn foliage are given more brilliance. Indispensable for snow pictures in sunshine.
Factor: 3—4 times.

Voigtländer Orange Filter Or

A filter for special effects. Renders the blue of the sky rather darker than natural, makes yellow and reddish colours stand out clearly. In distant views it reduces atmospheric mist, thus bringing out detail. In outdoor portraits it suppresses certain skin blemishes.
Factor: 5—8 times (for panchromatic film only).

Voigtländer UV Filter

Suppresses ultra-violet rays in high altitudes, which may cause unsharpness. In black and white photography it preserves the natural delicate aerial perspective; in colour photography it counter-acts the much disliked "blue tinge", securing warmer tones in general.
Factor: No increase for black and white; $1\frac{1}{2}$ times for colour film.

Flash pictures — synchronized



Both the "COMPUR-RAPID" and the "PRONTOR-S" shutters are synchronized for use with all commercial flash bulbs and electronic flash equipment. The flash can be used as sole light source, or equally well combined with daylight. It is very useful for lighting up shadow detail in against-the-light shots.

To take flash pictures, fix the camera to the bracket of the flash unit by means of a tripod screw (see illustration). Connect the shutter to the circuit of the flash unit by means of a special cable, pushing the co-axial plug at the end of the cable over the flash contact of the shutter. To ensure that the peak brightness of the flash coincides with the maximum shutter opening, set the shutter always to one of the speeds shown in the cable opposite for the type of flash in use. Look up the instructions enclosed with the flash bulb or electronic flash unit for the correct aperture to use. After tensioning the shutter, the camera is ready for exposure.

| Suitable shutter speeds for flash bulbs | | | |
|---|----------------------------------|------------------------------|----------------------------|
| Class | Make | Type | sec. |
| F | General Electric Westinghouse | SM | Prontor S 1 to 1/50 |
| | Sylvania Wabash | SF | Compur-Rapid 1 to 1/100 |
| — | Osram | FO | 1 to 1/50 |
| | | F1; F2 | 1 to 1/25 |
| M | Osram | S 2 | 1 to 1/10 |
| | | S 1 | 1 to 1/25 |
| | Philips | PF 14/25/56 | |
| | General Electric Westinghouse | No. 5/11/22 | |
| | Sylvania Wabash | Press 25/40/50/No.0 No. 2 | 1 to 1/25 |
| S | Philips | PF 110 | 1 to 1/10 |
| | General Electric Westinghouse | No. 6/No 50 | |
| | Sylvania Wabash | No. 3 | |

| Suitable shutter speeds for electronic flash tubes | | |
|--|------------------------------------|------------|
| Class | Kind | sec. |
| X | Instantaneous firing | 1 to 1/500 |
| F | Relay fired with 5 millisec. delay | 1 to 1/100 |

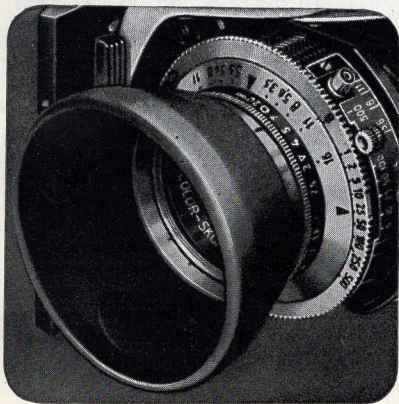
Electrical Details:

The outer pole of the flash contact is earthed to the shutter. To avoid wiring up the leads the wrong way round, get an expert to connect the cable to the flash gun the first time.

The flash contact will carry the firing current of all types of electronic flash tubes. When used with flashbulbs it will carry a temporary load up to 10 amps at 24 volts, thus allowing simultaneous firing of several bulbs connected in parallel. The longest permissible exposure time in this case is $\frac{1}{10}$ second.

Caution: The flash contact must not be used to fire bulbs from 110 or 220 volt electric mains.

Against-the-light pictures



with their shimmering light fringes and interesting shadows are among the most beautiful photographic possibilities. They are helped considerably by the use of a "lens hood", which protects the lens from disturbing reflections caused by direct or side light striking the glass. A good way is to arrange the subject in such a manner that it is illuminated from behind and the side. The lens hood is also very useful in artificial light. In bad weather it protects the lens from raindrops.

The Lens for the VITO II is made of metal (diameter 29 mm.). It fits both the lens mount and the mounts of either Voigtlander filter or Focar lens already attached to the camera lens.

Aperture and depth of field

Depth of field comprises that part of the picture space (from near the camera towards the background) which will be rendered sharp in the photograph. The extent of this sharp zone, however, is not always the same; it depends on the distance of the subject and the stop used. It increases as you stop down; it decreases as the lens is opened up. Therefore, remember:

Large aperture (e. g. 3.5) — small depth of field;

Small aperture (e. g. 16) — great depth of field.

How far it will extend, you can easily find out. Having set the correct distance of your subject, you can simply read it off from front plate **10**. On the right and left of the index mark ▲ the aperture numbers are arranged in the same order; immediately above are the figures of the distance scale (feet). The depth of field extends from the figure opposite an aperture number on the left to the figure opposite the same aperture number on the right. (See illustration in Snapshot section, page 14.)

Care of camera and lens

Successful work and long life of your camera depend mainly on its being handled correctly, and your care of it.

Do, please, treat it with the respect due to a precision instrument, and avoid using force. — If anything should not go smoothly, it is much better to read again the relative paragraphs of these instructions.

Before inserting a film, make sure every time there is no dust inside the camera; if necessary, clean it gently.

If the camera is not in use for a number of days, it is preferable not to leave the shutter tensioned, particularly not at $\frac{1}{500}$ second.

When on the beach, carry the camera in the **closed** ever-ready case, opening the case only when actually making an exposure. Beware especially of sand. — Avoid finger prints on the lens; they affect definition.

The lens is coated also on its outer surfaces (anti-reflection layer). It may be cleaned with a very soft hair brush, or a piece of clean, well-washed linen, or special "lens tissue".

Grease spots may be removed by gently dabbing with a wad of cotton wool moistened in alcohol.

Films of ASA 25 and less

belong to the group of "fine-grain films", characterized by highest power of resolution, therefore permitting the highest degrees of enlargement. They require accurately determined exposure time.

Films of ASA 32 to 50

are always right for normal subjects. They are characterized by high speed coupled with fine grain.

Films of ASA 64 and more

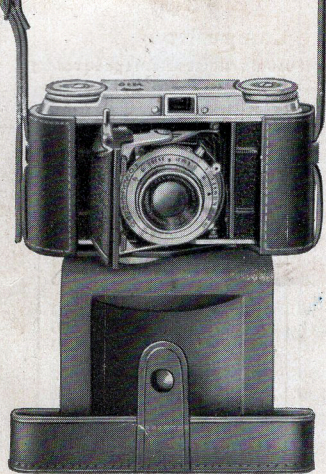
are used when in unfavourable light conditions exposure time must be kept very short. Because of their high sensitivity to red they are particularly suitable for photography by artificial light.

Note: Each 3/10⁰ DIN more (or less) requires half (or twice) the exposure time.

Comparison

of the most usual systems of film speed rating

| ASA & BS | Din /10 ⁰ | BS Log Index | Scheiner | General Electric | Weston | H & D |
|----------------|-------------------------|-----------------|-----------------|---------------------|--------|-------|
| 6 | 10 | 19 ⁰ | 20 ⁰ | 8 | 5 | 125 |
| 8 | 11 | 20 ⁰ | 21 ⁰ | 10 | 6 | 150 |
| 10 | 12 | 21 ⁰ | 22 ⁰ | 12 | 8 | 200 |
| 12 | 13 | 22 ⁰ | 23 ⁰ | 16 | 10 | 250 |
| 16 | 14 | 23 ⁰ | 24 ⁰ | 20 | 12 | 300 |
| 20 | 15 | 24 ⁰ | 25 ⁰ | 25 | 16 | 400 |
| 25 | 16 | 25 ⁰ | 26 ⁰ | 32 | 20 | 500 |
| 32 | 17 | 26 ⁰ | 27 ⁰ | 40 | 24 | 600 |
| 40 | 18 | 27 ⁰ | 28 ⁰ | 50 | 32 | 800 |
| 50 | 19 | 28 ⁰ | 29 ⁰ | 60 | 40 | 1000 |
| 64 | 20 | 29 ⁰ | 30 ⁰ | 80 | 48 | 1250 |
| 80 | 21 | 30 ⁰ | 31 ⁰ | 100 | 64 | 1600 |
| 100 | 22 | 31 ⁰ | 32 ⁰ | 125 | 80 | 2000 |
| 125 | 23 | 32 ⁰ | 33 ⁰ | 160 | 100 | 2500 |
| 160 | 24 | 33 ⁰ | 34 ⁰ | 200 | 125 | 3200 |



The smart

Voigtländer

Ever-Ready Case

for the VITO II is made of best quality hide, lined, and fitted with a carrying and sling strap.

This case — from which the camera is not removed during exposure — gives excellent protection, and does not in the least affect the camera's readiness for quick shooting.