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. BRAUNSchWEG
Contents

Loading · Unloading
Opening camera back · Inserting film 5—8
Setting the film counter . . . . . . 9
Unloading the camera . . . . . . . . 10
Changing partly exposed films . . . 11

Operation
Opening and closing the camera front 12
Distance · Snapshot setting . . . . 13—14
Aperture · Shutter speeds · Selftimer 15—17
Instantaneous and Time Exposures . 18

Accessories
View finder "KONTUR" · Focar lenses 19—21
Yellow-, Orange-, Green- and Haze 22—23
filters . . . . . . . .
Lens hood . . . . . . . . . . . . 24
Flash equipment . . . . . . . . . . 25—29

Technical Hints
Aperture and depth of field . . . . 30
Film speeds . . . . . . . . . . . . 31
Care of Camera and lenses . . . . 32
Film winder ("A knob")
Film counter window
Release
Cable release socket
Struts
Keys for closing camera front
Front support
Distance scale
Speed setting ring
Front plate
Shutter tensioning lever
Aperture setting lever
Contact for flash equipment
Synchronizing lever
Optical viewfinder
Accessory shoe
Rewind knob ("R knob")
Locking ledge for camera back

cter release 3 cannot be depressed by turning the A knob to a definite knob will not turn, as the film cannot be released. In this way double of the film are made impossible.

lock the double exposure prevent
lock release lever 19 is raised as it will go. Swinging it up and again releases the film lock for frame (see "Loading"); leaving the erect puts the locking device out of on for as long as the lever is in this on. (See "Unloading the Camera")

wish to release the shutter while there is no film in the camera, the film er shaft 20 must first be turned to tight until it comes to a definite stop.
1. Film winder ("A knob")
2. Rewind knob ("R knob")
3. Click stop of telescopic shaft
4. Film lock release lever
5. Film-counter shaft
6. Take-up spool
7. Tripod bush
8. 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.

— 5 —
Loading the camera: Opening the camera back

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 ledge 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 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.
Unloading the camera

When the last exposure has 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.
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 the 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 until the respective number 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 30).

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).
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' and 16' set to the near focusing mark △, and for those between 16' 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.

— 14 —
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 30.

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 shutter

The VITO II is equipped either with the COMPUR-RAPID resp. the SYNCHRO-COMPUR or the PRONTOR-S resp. the PRONTOR-SV shutter. Turn speed setting ring until the required speed is opposite the indicator. All figures stand for fractions of a second, except "1", which is one second. 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, press lever 11 down as far as it will go (see ill. above). With PRONTOR pull up lever 11 as far as it will go (see ill. below).
The PRONTOR-shutters have built-in self-timers.

After setting distance, aperture and speed, tension the shutter as usual. With the PRONTOR-S the delayed action lever must be pulled up as far as it will go (see left arrow in ill.) and the self-timer is ready for action. With the PRONTOR-SV the synchronising lever must be put to the red dot X (see right arrow in ill.) before the delayed action lever is pulled as above.

After pressing the shutter release you have about 10 seconds to get to your place in front of the camera before the shutter goes off by itself.

Note: The self-timer cannot be used with the shutter set to "B", but with all other speeds. For flash-exposures with self-timer see page 27.
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 (1/25 or shorter) are made with the camera held in the hand. For longer exposure times (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. view 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 close-ups from 3.3 to 6.6 ft.

The finder fits into 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).

Note! Do not allow any direct sunlight to reach the eyepiece of the KONTUR finder.
Close-Up pictures with Focar Lenses

Do not miss the interesting field of "close-up" photography, which, unfortunately, many amateurs neglect. Large-scale 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 1/2" to 1' 6"
Focar lens F 2 for subject distances
1' 5 1/2" to 1' 1/2"

Size: 29 mm. diameter.

<table>
<thead>
<tr>
<th>When focusing on</th>
<th>Sharp definition with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Focar 1</td>
</tr>
<tr>
<td>∞</td>
<td>2' 7 1/2&quot;</td>
</tr>
<tr>
<td>60'</td>
<td>2' 6 1/4&quot;</td>
</tr>
<tr>
<td>40'</td>
<td>2' 5 1/4&quot;</td>
</tr>
<tr>
<td>20'</td>
<td>2' 3 3/4&quot;</td>
</tr>
<tr>
<td>15'</td>
<td>2' 2 3/4&quot;</td>
</tr>
<tr>
<td>12'</td>
<td>2' 1 3/4&quot;</td>
</tr>
<tr>
<td>V</td>
<td>2' 1 1/2&quot;</td>
</tr>
<tr>
<td>10'</td>
<td>2' 1&quot;</td>
</tr>
<tr>
<td>8'</td>
<td>1' 11 3/4&quot;</td>
</tr>
<tr>
<td>7'</td>
<td>1' 11&quot;</td>
</tr>
<tr>
<td>6'</td>
<td>1' 10&quot;</td>
</tr>
<tr>
<td>5'</td>
<td>1' 8 3/4&quot;</td>
</tr>
<tr>
<td>4' 6&quot;</td>
<td>1' 8&quot;</td>
</tr>
<tr>
<td>4'</td>
<td>1' 7&quot;</td>
</tr>
<tr>
<td>3' 6&quot;</td>
<td>1' 6&quot;</td>
</tr>
</tbody>
</table>

— 20 —
How to use the focar lenses:  www.butkus.us

- For close-ups with Focar lenses, 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.

- 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.

- The Focar lenses do not affect the exposure, but longer exposures are, of course, required when the lens is stopped down.

- At such close range the image on the negative is no longer exactly the same as the view through the finder (parallax error). With the Focar 1 the displacement amounts to about 1/8 of the field area, with the Focar 2 to about 1/4.
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 natural, 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: 2—3 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.

Voigtländer Green Filter Gr

For better reproduction of green in landscapes. When using certain panchromatic films, highly sensitive to red, the action of green is promoted by subduing the red. Consequently too pale lips and too dark eyes are avoided on portraits in artificial light. Factor: with panchromatic films, highly sensitive to red: 3—4 times.

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. No exposure increase required.
The Lens Hood

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 Hood for the VITO II is made of metal (diameter 29 mm.). It fits both the lens mount and the mounts of either Voigtländer filter or Focar lens already attached to the camera lens.
The COMPUR- as well as the PRONTOR-shutters make synchronized flash exposures of moving subjects possible up to the highest shutter-speeds. The flash can be used either by itself or combined with daylight or artificial light. It is particularly useful for lighting up shadow areas in against-the-light shots.

All makes of flash units — flash guns for bulbs as well as electronic flash equipment — can be used with the shutter. The following pages give a brief account of how to connect and use the different types of flash equipment.
Connecting the Flash Unit to the Camera:

Screw the connecting bracket to the tripod bush of the camera. The flash unit should be to the left of the VITO II, so that it does not interfere with the operation of the release (see illustration on page 25). Some light-weight flash guns will even clip directly into the accessory shoe on top of the camera.

Then wire up the flash unit to the camera shutter by means of the flash cable, pushing the plug at the end of the cable over the socket on the shutter.

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.
Setting the Shutter:

Flash bulbs and electronic flash tubes vary in their firing delay times, and are classified accordingly in the table on page 29. To ensure that the peak brightness of either type of flash coincides with the maximum opening of the shutter — i.e. to synchronize the shutter accurately with the flash — there are two kinds of synchronization, labelled “X” and “M”.

- The COMPUR-RAPID and PRONTOR-S shutter incorporate only the “X” type of synchronization. They are suitable for synchronized flash shots (with or without the self-timer) at the shutter speeds listed under “Red dot X” in the table. The shutter needs no special adjustment.

- With the SYNCHRO-COMPUR the synchronizing lever is put to X or M before exposing (see ill. on page 28). For possible exposure times look up table on page 29 under X or M.

- With the PRONTOR-SV the synchronizing lever must be set either to the red dot X or the yellow dot M, in accordance with the type of flash at hand. When setting to M it is necessary to pull up the delayed action release before each exposure as far as it will go (see lower ill. on page 28). In this particular case the delayed action release is not used as a self-timer.

For flash exposures with self-timer, the synchronizing lever must be set to the red dot X on principle. Then pull the delayed action release up as usual. For possible exposure times look up table on page 29 only under red X.
**“X” Setting:**
For exposures without any firing delay. Releasing the shutter after tensioning automatically closes the flash circuit at the instant when the shutter blades have just reached their maximum opening.

**“M” Setting:**
For exposures with a pre-set firing delay. Here the flash circuit is closed a short time before the shutter blades begin to open.

**Load Capacity:**
The flash contact will carry the firing current of all types of electronic flash tubes. With flash bulbs it will carry a temporary load of 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 never be used to fire bulbs from 110 or 220 volt electric mains.
<table>
<thead>
<tr>
<th>Class</th>
<th>Flash Bulbs</th>
<th>Synchronizing Lever set to Red Dot (&quot;X&quot;)</th>
<th>Yellow dot (&quot;M&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>General Electric G. E. C. Mazda Westinghouse</td>
<td>1 to 1/100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wabash Sylvania</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Osram</td>
<td>XP F1 and 2 X0</td>
<td>1 to 1/50</td>
</tr>
<tr>
<td></td>
<td>Osram</td>
<td>S 2 S0, S1</td>
<td>1 to 1/10</td>
</tr>
<tr>
<td></td>
<td>Philips</td>
<td>PF 14 PF 25 PF 56</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>General Electric G. E. C. Mazda Westinghouse</td>
<td>1 to 1/25</td>
<td>1/50 to 1/500</td>
</tr>
<tr>
<td></td>
<td>Wabash</td>
<td>Press 25 Press 40 Press 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sylvania</td>
<td>No. 0 No. 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philips</td>
<td>PF 3 N</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>Philips</td>
<td>PF 110</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Electric G. E. C. Mazda Westinghouse</td>
<td>1 to 1/10</td>
<td>1/25 to 1/50</td>
</tr>
<tr>
<td></td>
<td>Wabash Sylvania</td>
<td>No. 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electronic Flash</td>
<td>Kind</td>
<td>Synchronizing Lever set to &quot;X&quot;</td>
</tr>
<tr>
<td>X</td>
<td>Instantaneous firing</td>
<td>1 to 1.500</td>
<td></td>
</tr>
</tbody>
</table>
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 setting", page 14.)
Film Speeds

Films slower than 24° BS Log Index (20 ASA) are extra fine grain films of the highest resolving power, allowing very great enlargement. They tend to be somewhat contrasty, and require accurate exposure.

25—27° BS Log Index (25—40 ASA) Films are best for average subjects. They are fast and give fine grain.

Films faster than 28° BS Log Index (50 ASA) are high speed films for occasions when the light is poor and the subject demands short exposures. Their high red sensitivity makes them particularly suitable for artificial light photography. Their grain is, however, somewhat coarser than with other types of film.

Remember: Every increase or decrease of 3° BS Log Index (double or half the ASA Index number) halves or doubles respectively the exposure time required.
Care of Camera and Lens

Successful results and long life of the camera largely depend on correct handling and proper care. So:

- Please treat the camera gently. Never use force; if anything seems to jam, better re-read the relevant sections of this booklet.

- Before loading a film, always remove any dust inside the camera.

- At the seaside carry the camera in its closed ever-ready case to protect it against wind-blown sand. Open the case only when actually taking pictures.

- Never touch the lens surface with your fingers; finger marks will spoil the definition.

- All surfaces, including the outer ones, of the lens carry an anti-reflection coating. To clean the lens, use a soft sable brush, or a soft piece of clean linen. Grease spots may be removed by careful dabbing with a piece of cotton wool moistened in alcohol.
The smart

Voigtländer

Ever-Ready Case

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