

INSTRUCTIONS FOR USE

## Dear Photo-enthusiast

Even with the VITO B you can't get going without some technicalities. Therefore please make a point of reading this little instruction booklet specially carefully to get really familiar with all the details of manipulation before you load your first film and start to take pictures.

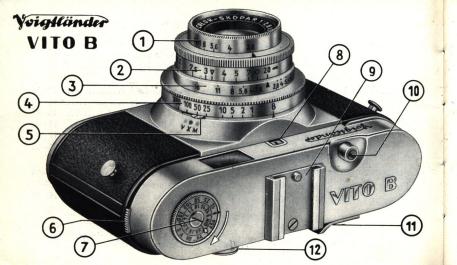
Remember also that the VITO B is an optical and mechanical precision instrument which wants gentle and understanding treatment. The camera will repay careful handling with beautifully sharp and clear pictures for many years to come.



VOIGTLANDER A.G. BRAUNSCHWEIG

## CONTENTS

	2011121110	Page
Loading Unloading	Opening · Inserting the cartridge Film counter · Film indicator	6—9 10 11
Camera Settings · Exposure	Aperture · Depth of field	
Camera Accessories	Focar lenses	24—25 26—27 28—29
Technical Hints	Changing partly exposed films Film speed table Care of the camera and lens	30 31 32



- Aperture scale
- 2 Distance scale
- Depth of field indicator
- 4 Shutter speed scale
- 5 Synchronizing lever (only on Prontor-SVS)
- 6 Reversing lever
  - Rewind knob with film indicator
- 8 Film counter window
- 9 Accessory shoe
- 10 Release button
- 11 Rapid winder
- 12 Finder eyepiece

- 6 Reversing lever
- 11 Rapid winder
- 12 Finder eyepiece
- 13 Base plate latch
- 14 Base plate flap
- 15 Camera back
- 16 Tripod bush
- 17 Film counter setting ring



# Loading and Unloading the Camera



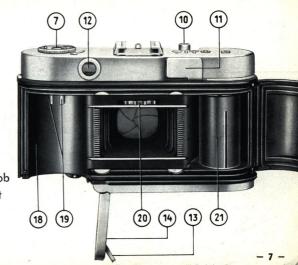
The VITO B takes perforated 35 mm. Miniature film in commercially available daylight cartridges, yielding 36 or 20 exposures 24 x 36 mm. on blackand-white or colour film respectively.

The daylight cartridges are light-tight. Nevertheless, it is advisable not to expose them to strong light; therefore load and unload the camera always in the shade — even the shadow of your own body will do.

#### To open the camera

first pull up the base plate latch and give it a quarter turn to the right. Then fold open the base plate flap (see illustration) and open the camera back by pulling it away from the body (the illustration right shows the camera fully open).

- Rewind knob with
- 10 Release button
- 11 Rapid winder
- 12 Finder eyepiece13 Base plate latch
- 14 Base plate flap
- 18 Film chamber
- 19 Shaft of rewind knob
- 20 Transport sprocket
- 21 Take-up spool



# Inserting the Cartridge



The narrow slit of the take-up spool must point upwards to take the beginning of the film. If necessary turn the take-up spool with the finger or by a few short movements of the rapid winder into the correct position. Then:

- Pull a bit of the film end out of the cartridge and push it into the slit in the take-up spool as far as it will go (see illustration).
- Pull the cartridge across the picture aperture and insert it in the film chamber.

If the shaft of the rewind knob does not immediately engage the core of the cartridge, push back the reversing lever (see illustration on page 11) and turn the extended rewind knob to and fro a little. Then push the rewind knob back into the body.

This is how the loaded camera must appear before closing. The film lies flat in the film track, and the teeth of the transport sprocket engage the perforations of the film.

To close the camera first push the back against the body. Then press the base plate flap into position, and lock by turning the base plate latch. Fold down the latch.

**Note:** If the camera back should not close properly, check the position of the cartridge (left).









### Setting the Film Counter

Every time the film is advanced, the film counter automatically shows the number of exposures still available. The numbers from 36 to 1 appear upside down in the film counter window.

(a) For 36-exposure cartridges:

Turn the film counter sefting ring underneath the camera (see illustration) until the diamond ∮ mark appears in the counter window. Pull the rapid winder once or twice until it locks, press the release, and work the rapid winder until it locks once more. The film counter window now indicates No. 36: the camera is ready for the first exposure.

(b) For 20-exposure cartridges:

Turn the film counter setting ring until the counter window indicates No. 22. Then carry on as under (a) above until the counter window shows No. 20 for the first exposure.

Remember also to set the film indicator in the rewind knob (see illustration) by turning it to the appropriate figure. The black numbers are film speeds in DIN degrees and ASA exposure indices; the red letters stand for various types of colour film:

D (T) = Daylight type reversal film
A (K) = Artificial light type reversal film
ND (NT) = Daylight type negative film

NA (NK) = Artificial light type negative film

When the last exposure is finished, the exposed film must be rewound from the take-up spool into the daylight cartridge. — Proceed as follows:

- Push back the reversing lever; the rewind knob will jump out into its operating position (see illustration).
- Turn the rewind knob in the direction of the arrow while watching the film counter window.
- The film counter now runs back from the last exposure (No. 1) to No. 36 (or 20). When the diamond ∮ mark (or No. 22) appears again, the film is fully rewound. Now open the camera back and remove the film.

For changing partly exposed films, see page 30.

## Unloading the Camera



## The Camera Settings



Make a point of carrying out these operations in the order

Aperture · Distance · Shutter speed

as this has proved the most practical procedure.

#### Setting the Aperture

The iris diaphragm in the lens controls on the one hand the amount of light reaching the film — and thus indirectly the exposure — and on the other the extent of the "depth of field".

To set the aperture, turn the aperture ring on the front of the lens until the required number clicks into position above the index mark (see illustration). Remember that the effective lens opening becomes smaller the higher the aperture number, and vice versa. If, for instance, the correct exposure at aperture f/5.6 is  $^{1/\omega}_{\rm obs}$  second, then the corresponding setting al f/8 will be  $^{1/\omega}_{\rm f}$  second, and at f/4  $^{1/\omega}_{\rm f}$  second.

# Aperture and Depth of Field

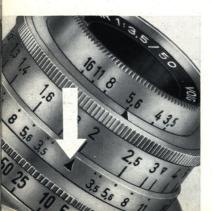
The depth of field covers that part of the subject area in front and behind the focused distance, which is reproduced sufficiently sharply on the picture. The extent of this sharp zone is, however, not constant; it increases as you stop down, and decreases as you open up the lens. Therefore remember:

Large apertures (e.g. f/4) = yield less depth of field; Small apertures (e.g. f/11) = yield greater depth of field.

You can easily find the available depth of field for any setting. When you have focused the lens for the correct distance, look at the ring underneath the distance scale. Two sets of aperture numbers are there engraved in red, arranged symmetrically to each side of the red  $\triangle$  index mark. The depth of field zone now extends from the distance figure opposite the appropriate lefthand aperture number to the distance figure opposite the corresponding right-hand aperture number. (See zone focusing illustration on page 15).

- 13 -

## Setting the Distance



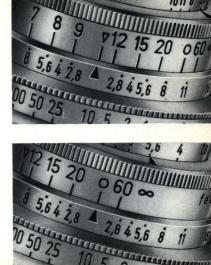
You can find the correct distance from the camera to the subject by estimation, or — better still — by measurement with an accessory rangefinder. The rangefinder can be fitted into the accessory shoe on top of the camera.

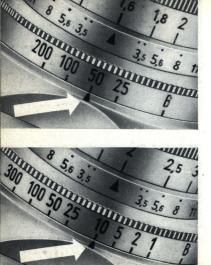
To set the distance turn the large milled ring until the appropriate distance figure is opposite the red triangular A index mark (see illustration). Among the figures on the distance scale you will also find a triangular mark ∇ at about 11 feet, and a circle () at around 35 feet. These are zone focusing settings (see opposite page).

## Zone Focusing

Candid action shots (for example children at play) often yield surprisingly pleasant pictures. In such cases don't waste time by focusing on the exact distance, but use focusing zones instead. For subjects between 8 and 17 feet set the distance scale to the near focusing mark  $\nabla$ , and for subjects between 17 feet and ∞ (infinity) set the scale to the far focusing mark (). Stop down to at least f/5.6, to ensure adequate depth of field.

Provided the light is good enough, these focusing zones are specially useful for sports shots, as there the subject distance often changes suddenly without warning.





## Setting the Shutter

The VITO B is available with two alternative shutters:

**The PRONTO** shutter is X-synchronized for flash and has shutter speeds of  $^{1}/_{25}$ ,  $_{1}/_{50}$ ,  $_{1}/_{100}$ , and  $_{1}/_{200}$  second.

The PRONTOR-SVS shutter is speed-synchronized (M- and X-synchronizat.) and has shutter speeds of 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, and 1/300 second.

For exposure without flash there is no difference setting the synchro lever on M or X.

In addition, both shutters have a B-setting for time exposures. At this setting the shutter remains open as long as the release is kept pressed down.

To set the shutter speed, turn the speed setting ring until the appropriate speed figure is opposite the black A index mark (see illustration). For tensioning the shutter see page 18.

### The Self-timer

You can take self-portraits with both the PRONTO and the PRONTOR-SVS shutter by means of the built-in delayed action release (self-timer).

To use it: After setting the aperture, distance, and shutter speed, tension the shutter in the usual way. Then pull the red self-timer lever on the PRONTO sideways as far as it will go (see top illustration). On the PRONTOR-SVS just push the synchronizing lever to the green dot marked "V" (see bottom illustration).

On pressing the release button the shutter will now open automatically after a delay of about 10 seconds. Note: the self-timer cannot be used when the shutter is set to "B".





# The Rapid Winder and Double Interlock



One full movement of the rapid winding lever, as far as it will go, tensions the shutter, and advances the film and film counter. The spring returns the lever to its original position each time.

An automatic lock prevents the rapid winder from being advanced a second time before the shutter is released. Similarly, the shutter can only be released after working the rapid winder.

This prevents both double exposures and blank frames. If the camera is empty, the rapid winder moves freely without tensioning the shutter.

The rapid winder can also be worked in a number of short movements. In that case carry on moving the lever until it locks. To take the picture, hold the finder eyepiece close to the eye, so that all four corners of the field are plainly visible. Correction lenses which clip over the eyepiece will permit users with faulty eyesight, to view without spectacles.

To expose, gently press the release button as far as it will go. Never jab at it, nor stop half-way.

Short instantaneous exposures (1/25 second and shorter) can be made with the camera held in the hand. For exposures longer than 1/25 second don't hold the camera in the hand, unless you have some support for your arms or you can lean against something solid. For time exposures at the "B" setting preferably mount the camera on a tripod, and release by means of a cable release which screws into the socket in the release button (see illustration).

# Holding the Camera and Releasing





### Synchronized Flash

Both the PRONTO and the PRONTOR-SVS permit synchronized flash shots of moving subjects at the fastest shutter speed (see pp. 22—23). The flash can be used as the only light source, or it can be combined with daylight or artificial light. The flash is particularly useful to light up the shadow areas in against-the-light shots.

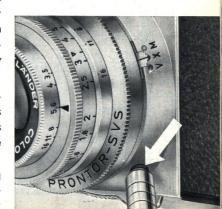
All available flash guns, including electronic flash units, can be connected to the shutter. The following pages give a brief summary of the fitting and exposures with the different types of flash.

Light-weight and small models of flash guns, such as the Voigtländer gun with battery condensor ignition, can also be mounted directly in the accessory shoe on top of the camera (see ill. on left side). Bigger guns should be mounted on one side of the camera by means of a special bracket.

The flash gun is connected to the electrical contacts in the shutter by means of a flash cable. Push the plug of this cable over the flash socket on the shutter (see illustration).

Caution: The flash contacts must never be used to fire bulbs from 110 or 220 V supply mains.

# Connecting the Flash Gun to the Camera:



### Synchronizing Settings:

Flash bulbs and electronic flash units differ in their characteristic firing delay and light output, and have therefore been classified in several groups in the table opposite. To ensure that the peak light output of each type of flash coincides with the full opening of the shutter, there are two types of synchronization: "M" and "X".

- The PRONTO shutter is only X-synchronized. Flash shots with or without the self-timer are possible with the types of flash and the shutter speeds listed in the table under "Red (X)". No special setting is required on the shutter.
- The PRONTOR-SVS shutter is X- and M-synchronised. Before taking a flash shot therefore select the appropriate synchronization by moving the synchronizing lever to the red dot X or the yellow dot M. You can then use all types of flash and all shutter speeds listed under "Red (X)" or "Yellow (M)" in the table.

For flash shots with the self-timer (set the synchronizing lever to the green dot V) use only the shutter speeds given in the table under "Red (X)".

#### SUITABLE SHUTTER SPEEDS

	Flash Bulbs		Synchronizing lever		
Class	Make	Туре	Red ("X")	Yellow ("M")	
F	General Electric G.E.C. Mazda Westinghouse	SM	1 to 1/100	Not suitable	
- 7	Sylvania	SF		for	
	Philips	PFS		M-Synchro-	
1		FO	1 to 1/50	nization	
-	Osram	F1, F2 XO, XP	1 to 1/25		
	0	S 2	1 to 1/10	1/25 to 1/300	
	Osram	S 0, S 1			
	Philips	PF 14 PF 25 PF 38 PF 60			
М	General Electric G.E.C. Mazda Westinghouse	No. 5 No.11 No. 22	1 to 1/25	1/50 to 1/300	
	Sylvania	Press 25 Press 40 No. 0			
	Philips	No. 2	1 to 1/25	1/50 to 1/100	
	Philips	PF 100	i — —		
S	General Electric Westinghouse	No. 6 No. 50	1 to 1/10	1/25 to 1/50	
-72	Sylvania	No. 3			
Electronic Flash Class  Type		Synchronizing lever			
X	Dolay from		1 to 1/300		

#### The Focar Supplementary Lenses

Micro-photographs of small subiects and animals (flowers, coins, insects) are a highly interesting field of photography. You can take them with the gid of the Voigtländer Focar lenses which are also suitable for copying pages from books, postage stamps, and small illustrations.

In effect these Focar lenses shorten the focal length of the camera lens, and thus permit the camera to approach closer to the subject than the normal limit of 3.5' feet.

The close-up ranges covered are:

With the Focar I from 2'71/9" to 1'6" inches With the Focar 2 from 1'51/9" to 1'1/9" inches With the Focar 1 and 2 combined from 111/4" to 83/4" inches

#### Close-up Focusing Table (Vito B)

Camera	Sharp definition with			
set to	Focar 1	Focar 2	Focar 1+2	
00	2' 71/2"	1' 51/2''	111/4"	
60'	2' 61/4"	1' 5''	11''	
0	2' 51/4"	1' 43/4''	11"	
20'	2' 4''	1' 41/2''	103/4"	
15'	2' 3''	1' 4''	101/2''	
12'	2' 2''	1' 31/2''	101/2"	
$\nabla$	2' 11/2''	1' 31/4''	101/4"	
10'	2' 1''	1' 31/4''	101/4"	
8'	1' 113/4''	1' 23/4''	10''	
7'	1' 11''	1' 21/2''	10''	
6'	1' 10''	1' 2''	93/4"	
5'	1' 83/4"	1' 11/2"	91/2"	
4.5	1' 8''	1' 11/4"	91/4"	
4'	1' 7''	1' 1"	9''	
3.5'	1' 6"	]' 1/2"	83/4"	

## Working with the Focar Lenses

- For close-up shots with a Focar lens preferably mount the camera on a tripod, and approach the subject until its image fills the viewfinder field to the desired extent. Then fit a Focar 1 or 2, or both together, (F 1 on top of F 2), over the lens mount, according to the distance of the subject.
- Accurately measure the distance from the front of the Focar lens to the centre of the subject, and set the camera lens to the distance indicated in the table on the left.
- In order to obtain sufficient depth of field stop down to f/8 when taking close-ups with Focar lenses.
- The use of a Focar lens does not affect the exposure. If a filter is used (this should be mounted on top of the Focar lens) the filter factor must of course be taken into account.
- At such close range the picture area no longer corresponds exactly to the view through the finder. This is due to parallax. With a Focar 1 lens the displacement is up to ½6 of the height and ½6 of the width of the finder field. With a Focar 2 the vertical displacement is up to ¼4, and the horizontal displacement up to ⅓8 of the finder area; with the Focar 1 and 2 combined the displacement amounts to ⅓3 and ⅙6 of the height and width respectively.

#### **Filters**

Your Voigtländer lens will satisfy your most exacting demands on definition, but you can appreciably enhance the atmosphere of your pictures, or create special effects, with Voigtländer filters. With a few exceptions, therefore, use a filter whenever possible for outdoor subjects on blackand-white film. With a filter, the sky in particular — with or without clouds — will show up much more effectively.

Colour shots as a rule do not require filters. An exception is the ultraviolet filter for mountain shots at high altitude, and seaside pictures (see the list of filters opposite).

Voigtländer filters are made of spectroscopically tested optical glass, and ground perfectly flat. They therefore fully preserve the extraordinary definition of the Voigtländer anastigmat lenses. The filters are dyed in the mass, and are completely fast to light and heat.

Yellow Filter G1

Slight filtering effect for outdoor shots requiring short exposures, such as sports and action subjects, and pictures with low sun.

Filter factor: 11/2 to 2 times.

Yellow Filter G2 Universal filter for landscapes and other outdoor subjects; indispensable for snow shots.

Filter factor: 2 to 3 times.

Orange Filter Or

Strong filtering effect through appreciable suppression of blue light. Reduces atmospheric haze in distant views. Lightens yellow, red and green tones.

Filter factor: 4 to 6 times.

Green FilterGR
Lightens green tones in a landscape. Recommended for artificial light portraiture and copying of coloured originals.

Filter factor: 3 to 4 times.

Ultra-violet filter UV

Cuts out ultra-violet radiation in high mountains and near the sea. Eliminates any unpleasant blue cast in colour shots. No exposure increase.

## The Kontur Finder



The Voigtländer Kontur finder is specially suitable for capturing rapidly moving subjects (e.g. sports), and is the ideal finder for photographers wearing spectacles.

Keep both eyes open when sighting the subject. The eye looking directly at the subject will see it in natural size and brilliance in its surroundings, while the eye looking through the finder will see a frame outlining the picture area. The dot in the centre of the finder marks the centre of the field of view, while a dotted line indicates the parallax correction necessary for subjects between 2.7 and 7 feet.

For use insert the Kontur finder into the accessory shoe of the camera, and push fully forward. Do not let any direct sunlight reach the eyepiece of the Kontur finder. Against-the-light subjects with their brilliant rims of light and fascinating shadows yield some of the most striking pictures. There a lens hood is a valuable aid, for it screens off any disturbing outside light.

The lens hood is also useful when photographing in bad weather, for it protects the lens against drops of rain. The lens hood for the VITOB fits equally well on to the lens itself, or on to a Voigtländer filter or Voigtländer Focar lens already in position on the lens mount.

## The Lens Hood



## **Changing Partly Exposed Films**

With the VITO B you can always change over from one partly exposed film to another (e.g. black-and-white to colour) without a darkroom.

#### Proceed as follows:

- 30 -

- Rewind the partly exposed film into its cartridge as already described on page 11. Make a note of the last number that had appeared in the film counter window.
- Reload the partly exposed film and set the film counter to the diamond 
   mark (or to No. 22) in the same way as described on pages 8 to 10.
- Push back the reversing lever (letting the rewind knob jump out) and keep pulling the rapid winder fully to the right until the film counter indicates the next number after the one you noted when unloading the film.
- Finally push the rewind knob back into the top of the camera, pull rapid winder fully, and carry on exposing the film in the normal way.

## Films slower than 24° B. S.

are fine grain films of the highest resolving power permitting correspondingly big enlargements. They need accurate exposure.

## Films from 25° to 27° B. S.

are ideal for all average subjects. They are fast, yet fine grained.

#### Films faster than 28° B.S.

are useful when short exposures are required in poor light. Their high red sensitivity makes them specially suitable for artificial light photography.

#### Remember:

every increase or decrease of  $3^{\circ}$  B.S. halves or doubles the exposure required.

#### COMPARISON TABLE

of commonly used film speed ratings

or commonly used film speed ratings					
B. S. Log Index	Scheiner	ASA and B. S. Arithm.	Weston	DIN/10°	General Elektrik
19º	20°	6	5	9	8
20º	21°	8	6	10	10
21º	22°	10	8	11	12
22º	23º	12	10	12	16
23º	24º	16	12	13	20
24º	25º	20	16	14	25
25º	26°	25	20	15	32
26º	27°	32	24	16	40
27º	28°	40	32	17	50
28º	29º	50	40	18	64
29º	30º	64	48	19	80
30º	31º	80	64	20	100
31º	32º	100	80	21	125
32º	33º	125	100	22	160
33º	34º	160	125	23	200
	B. S. Log Index 19° 20° 21° 22° 23° 24° 25° 26° 27° 28° 29° 30° 31° 32°	B. S. Log Index 5  19° 20° 21° 22° 22° 23° 24° 25° 26° 27° 27° 28° 28° 29° 30° 30° 31° 31° 32°	B. S. Leg ASA and B. S. Index 5. Arithm.  190 200 6 8 210 8 210 220 10 220 230 12 230 16 240 250 20 25 260 270 220 280 40 280 290 300 310 80 310 320 100	B. S. Log B. S. Arithm.    19° 20° 6 5 20° 21° 8 6 21° 22° 10 8 22° 23° 12 10 23° 24° 16 12 24° 25° 20 16 25° 26° 25 20 26° 27° 32 24 27° 28° 40 32 28° 29° 50 40 29° 30° 64 48 30° 31° 80 64 31° 32° 100 80	B. S. Log   B. S.   B

### Care of the Camera and Lens

Successful results and long life of your camera depend largely on proper care and correct handling. Therefore always treat the camera very gently and never use force. If you are doubtful on any point, have another look at the appropriate section of these instructions. If the camera appears to have a fault show it to your dealer or post it to. VOIGTLÄNDER A.G. BRAUNSCHWEIG (GERMANY), Dept. Service VA.

For cleaning the camera lens we recommend the carefully tested Voigtländer Special Lens Cleaning Tissue, some sample leaves of which are attached to these instructions. Large specks of dust or grains of sand from the beach must first be carefully removed with a soft sable brush; finger prints and similar grease stains must be wiped off with a piece of cotton wool moistened with medicinal alcohol or ether.

Voigtländer Speciallens Cleaning Tissue (free from chorine or acids, leaves no fluff), also eminently suitable for cleaning filter glasses, spectacles, transparencies, etc., is obtainable from your dealer.

## VITO B - ACCESSORIES

Yellow filter G1 (light) in push-on mount	Cat. No. 301/32			
Yellow filter G2 (medium) in push-on mount				
Orange filter Or in push-on mount				
Green filter GR1 in push-on mount				
Ultra-violet filter UV in push-on-mount				
Focar close-up lens F1 in push-on mount				
Focar close-up lens F2 in push-on mount				
Lens hood in push-on mount				
Kontur finder				
Voigtländer flash gun				
Plastic bag with zip fastener for flash gun				
Ever-ready case for camera with				
surrounding carrying and neck strap	Cat. No. 90/101			
Ever-ready case for accessories to take				
two filters or Focar lenses and a lens hood	Cat. No. 90/091			
Leather case for Kontur finder				
Leather neck strap	Cat. No. 90/014			

## YOUR PHOTO ADVISER:

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