

**Right Here**  
is the first and most important piece of advice for the VITOMATIC II. Please read this booklet carefully. Make yourself thoroughly familiar with all the operations and controls of the camera. Then you can load your first film and begin to take pictures.

Remember also that the VITOMATIC II is an optical and mechanical precision instrument which requires gentle and sensible treatment. The camera will repay careful handling with beautifully clear and sharp pictures for many years to come.

**VOIGTLÄNDER A.G. BRAUNSCHWEIG**

**Contents**

Opening the camera and inserting the film . . . 2-4  
Setting the film counter . . . 5  
Unloading the camera . . . 6  
Changing partly exposed films . . . 7  
Setting shutter speeds and apertures . . . 8-11  
The self-timer (delayed action release) . . . 11  
Setting the distance . . . 12-13  
The rapid-winder - the double exposure lock . . . 14  
The crystal bright-line frame finder . . . 15  
Flash exposures . . . 16-19  
Using filters . . . 20-21  
Close-ups with Triometer . . . 22  
Hints for using the exposure meter . . . 23-27  
Aperture and depth of field . . . 28  
- 1 -

**Aperture and Depth of Field**  
The depth of field covers that part of the subject area in front of, and behind, the focused distance which appears acceptably sharp in the picture. The extent of this sharp zone is by no means constant: it increases the more you stop down the lens, and decreases the larger the lens aperture is set.

**Large apertures (e. g. f/4) yield limited depth of field.**  
**Small apertures (e. g. f/11) yield greater depth of field.**

The available depth of field zone is easily determined. After you have set the lens to the correct subject distance, look at the depth of field scale (12). This carries two series of aperture numbers arranged symmetrically to the left and to the right of the "i" index. The depth of field then extends from the distance marking opposite one of the left hand aperture figures to the distance marked opposite the corresponding right hand aperture figure (see the illustration of zone focusing on page 13).

**Care of the Camera and Lens**  
Satisfactory results and long life of your VITOMATIC II depend largely on proper care and correct operation.

- **Flashes** should operate the camera gently, and never use force. In particular, avoid the camera's contact flash bracket, and do not shoot it. If you travel by car, do not keep the camera in the glove compartment or in the rear parcel locker. The car's "vibration" will not do any good to the built-in shock-resistant exposure meter.
- **Do not** clean the lens with a soft fluffy cloth. However, first remove finger marks or other marks as far as possible with the lens brush. Finger marks or other marks on the lens may not be removed with the lens brush, but they will not do any good to the built-in shock-resistant exposure meter.
- **In the case of any trouble** consult your photo dealer, or post the camera to the Service Department, Voigtländer A.G., Braunschweig, Western Germany.

**Loading and unloading the Camera**  
Standard 35 mm. miniature film for 24x36 mm. negatives is commercially available as black-and-white as well as colour film in daylight cassettes of 36 or 20 exposures.

Although the cassettes are light-tight, it is advisable not to expose them to strong light. Make a point therefore of always loading and unloading the camera in a dark room - even the shadow of your own body will do.

**Opening the Back**  
First lift up the base plate latch (25), and turn it through a quarter turn to the right. Then fold away the base plate flap (26) as shown in the illustration, and swing open the back from the body.

**Inserting the Cassette**  
• Pull out a short length of the film leader from the cassette, and push it into the slit of the take-up spool (27) as far as it will go (see illustration).

• Draw the cassette across the film track, and insert it in the cassette chamber (22). The shaft (23) of the rewind knob will properly engage the cassette, otherwise you will not be able to close the camera later on.

• Now push the reversing lever (5) backwards (breaking the rewind knob (4) jump key), and keep pulling out the rapid winding lever (28) until the film leader is firmly rolled around the take-up spool, and the transport sprocket (26) engages the film perforations. Then push the rewind knob back again.

Before closing, the loaded camera must appear as shown in the illustration on the right. The film lead flat in the film track, with the teeth of the transport sprocket engaging the film perforations.

**Closing the Camera Back**  
First push the lock against the body, then press the base plate flap (24) into position, turn the base plate latch (25) to lock it, and fold down.

**Setting the Film Counter**  
Every time the film is advanced, the film counter shows the number of exposures still available. If that runs backwards (No. 36 or 20 first exposure) to No. 1.

**With 36-exposure cassettes:** Turn the milled knob (30) and the counter (28) once or twice until it looks like No. 1. Then pull the rapid winding lever (28) fully to the right until the number 36 appears in the film counter window (21) below the red index mark.

**With 20-exposure cassettes:** Turn the milled knob (30) until the red index mark (31) is opposite the index mark (32), and the film is ready for the first exposure.

The film indicator in the central mark (33) is intended solely as a memory aid. Set it by turning to the appropriate number:

- 32 (F) - Daylight type reversal colour film
- 33 (V) - Daylight type negative colour film
- 34 (N) - Daylight type negative colour film
- 35 (N) - Artificial light type negative colour film
- 36 (B) - Black-and-white negative film
- 37 (R) - Black-and-white reversal film

**Unloading**  
After the last frame of the exposed film must be reloaded from the take-up spool into the daylight cassette.

Push back the reversing lever (5), the rewind knob (4) will spring up into its operating position (see illustration).

Turn the rewind knob in the direction of the arrow while observing the film counter window. The film counter now runs back from No. 1 last exposure. When after No. 36 or 20 the red index "F" or "R" and following the number originally marked appears in the film counter window (21) below the red index mark, the film is fully reloaded. The cassette can then be removed from the camera.

**Changing Partly Exposed Films**  
With the VITOMATIC II you can at any time take out a partly exposed film and change over to another one (e. g. from black-and-white to colour) without the need for a darkroom.

- **Rewind** the partly exposed film into its cassette, or already described on page 6. Make a note, however, of the last number that appeared in the film counter window.
- **When re-inserting** the partly exposed film, proceed in the same way as described on page 3 to 5 up to setting the film counter to "F" or to No. 22.
- **Then** push back the reversing lever (5), setting the rewind knob (4) spring up. Keep pulling the rapid winding lever (28) fully to the right until the number following the number originally marked appears in the film counter window (21) below the red index mark.

Finally push back the rewind knob (4), pull the rapid winding lever (28) once more so far as it will go, and carry on exposing the film in the normal way.

**The Perfect Automatic Exposure System**  
Of this camera gives you at the same time the maximum certainty of correctly exposed pictures, and a hitherto inaccessible simplification in operation.

A single turn of the universal setting ring covers the whole aperture-speed scale in one continuous range, and brings the setting pointer of the exposure meter to coincide with the meter needle of any reading.

In other words, without having to engage or disengage any sort of coupling, and completely independently of the shutter speed or aperture set, you in effect use the shutter to take the meter reading. In that way you automatically set a correct aperture-speed combination on the camera according to the prevailing light conditions. In case the index-mark is in between two spaces let it click into position opposite the figure next to it.

The VITOMATIC II provides this refinement with the new Priorator SLK-V shutter in the special version, coupled with the built-in photo-electric exposure meter.

**Setting the Film Speed**  
Fully depress the lever (21), and turn the front milled ring (see white arrow) of the universal setting ring (16) until the required film speed figure appears in the DIN or ASA window (14). Release the lever again, and the front rim is once more coupled with the universal setting ring. A comparison table of film speed systems is given on page 7.

**Taking the Meter Reading**  
Point the camera at the subject, and turn the universal setting ring (16) to the left or right until the white circle of the setting marker (17) coincides with the exposure meter needle (20), as shown in the illustration on the right. Take care, however, not to obscure the honeycomb call window (18) with your finger.

You will find further useful hints on taking exposure readings on pages 13 to 27.

**The Aperture-Speed Settings**  
By taking the exposure reading as described on the previous page, you have at the same time set an aperture-speed combination to suit the prevailing light conditions. You can now shoot, unless you wish to use a different shutter speed (e. g. for moving subjects) or a different aperture (for greater depth of field - see page 28).

In that case simply turn the shutter speed ring (3) to the required speed or aperture. The corresponding aperture or shutter speed ring thus covers the whole range of aperture-speed combinations suitable for your subject.

**Be please note:** Once you have taken the exposure reading, do not move the universal setting ring (16) any more, otherwise the effective exposure will be altered. The same also happens if you turn the shutter speed ring (7) so that the black double index (4) goes beyond the left hand limit (12) or the right hand limit (12 B) of the aperture scale. In both cases the setting marker would no longer coincide with the exposure meter needle.

**The Self-timer**  
When you have set the correct aperture-speed combination and the distance and have tripped the shutter, the exposure meter needle (14) to "0" (see illustration), on its own after a delay, the shutter will now set down the photographing lever automatically returns back "F" to "C". Do not use the self-timer when the shutter is set to green "B".

**Setting the Distance**  
It is particularly easy with the VITOMATIC II: in the centre of the crystal bright-line frame finder you can see the bright circular rangefinder field. As long as the rangefinder is not correctly focused on the subject, the latter appears with double outlines in the rangefinder field (see top illustration).

Turn the lens focusing mount (1) to fast the double outlines in the rangefinder field into one. This sets the lens exactly to the measured distance (see bottom illustration).

**With horizontal shots, focus always on vertical outlines; with upright shots use horizontal lines of the subject.**

**Zone Focusing**  
Candid action shots (for instance of children at play) often yield surprisingly fine pictures. On such occasions don't waste time by setting the exact distance. Instead, set the focusing scale to the near zone mark "V" for subjects between 8 and 17 feet, and to the far zone mark "O" for subjects between 16 feet and infinity.

**You must, however,** stop down to at least f/5.6 (marked as red) to ensure adequate depth of field.

Provided the light is good enough, these focusing zones are very useful when photographing sports subjects, where subject distances may change very suddenly.

**The Rapid Winding Lever**  
One full movement of the lever tensions the shutter, and advances the film and the film counter. A spring then returns the lever to its original position.

The rapid winder can of course also be worked in a number of short movements, in that case keep pulling the lever until it clicks. An automatic lock prevents the rapid winder from being operated a second time before the shutter is released. Conversely, the shutter can only be advanced after operating the rapid winding lever.

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

**The Crystal-Bright-Line-Frame Finder**  
This really unique finder not only shows the subject in full natural size, but you can also keep the other eye open and thus observe the surroundings of the subject as well. This is a special asset when taking candid action shots. The marvellous brilliant image frame clearly outlines the exact field of view.


Note that with near subjects at about 3 feet from the camera the field of view in the finder is displaced downwards or sideways, according to whether the camera is held horizontally or upright. This is indicated by the two short marks in the crystal bright-line frame (see illustration page 12).

### Flash Shots

The PRONTOR SK-V shutter permits synchronized flash shots up to the fastest shutter speed of 1/500 with any flash gun or electronic flash unit on the market.

**Please Note:** With black-and-white film the flash (color or blue bulb, or electronic flash) can be used on its own, or combined with daylight or artificial light sources such as tungsten lamps.

When using a flash for colour-film (artificial or daylight) we recommend to observe exactly the instructions for use of these films. In case of doubt please contact your photo-dealer.




- 16 -

### Mounting the Flash Gun on the Camera

Small light-weight units such as the Voigtlander battery-capacitor flash gun can be fitted directly into the accessory shoe (12) of the camera (see illustration on the left). Larger flash guns or the flash holders of electronic flash units are generally fitted to the side of the camera by means of a special bracket.

The flash cable completes the electric circuit between the flash unit and the camera shutter. Push the plug of the flash cable into the flash socket (13), as shown in the illustration.

**Warning:** Never use the shutter contacts for live flash bulbs from the model 110 to 220 volt series.



- 17 -

### Setting the Shutter and the Aperture

Flash bulbs and electronic flash units differ in their characteristics such as the firing delay and light output. The table opposite classifies them in several groups. To ensure that the peak brightness of the flash coincides with the instant when the shutter is fully open, there are two types of synchronization, "M" and "X".

Before taking a flash shot therefore move the synchronizing lever (16) of the PRONTOR SK-V shutter to the yellow dot marked "M" or to the red dot marked "X", as required. You can then use all types of flash and all the shutter speeds listed in the table opposite under "M" or "X" respectively. **Notes:** For flash shots with the self-timer (with the synchronizing lever set to the green dot "T") use only the shutter speeds listed in the table under "T".

The lens aperture required for correct exposure can be obtained from the so-called guide number. This is usually quoted on the flash bulb packing or in the leaflets issued by the makers of the bulb or electronic flash unit. To find the correct aperture, divide the appropriate guide number by the distance in feet between the flash and the subject. In short: **Aperture = guide number : distance.**

- 18 -

### Suitable Shutter Speeds

Flash Bulbs	Flash Units	Synchronizing Lever Set to M		Synchronizing Lever Set to X	
		Not available	Not available	Not available	Not available
Flash Bulbs	Flash Units	1/1000	1/1000	1/1000	1/1000
Flash Bulbs	Flash Units	1/500	1/500	1/500	1/500
Flash Bulbs	Flash Units	1/250	1/250	1/250	1/250
Flash Bulbs	Flash Units	1/125	1/125	1/125	1/125
Flash Bulbs	Flash Units	1/60	1/60	1/60	1/60
Flash Bulbs	Flash Units	1/30	1/30	1/30	1/30
Flash Bulbs	Flash Units	1/15	1/15	1/15	1/15
Flash Bulbs	Flash Units	1/8	1/8	1/8	1/8
Flash Bulbs	Flash Units	1/4	1/4	1/4	1/4
Flash Bulbs	Flash Units	1/2	1/2	1/2	1/2
Flash Bulbs	Flash Units	1	1	1	1
Flash Bulbs	Flash Units	2	2	2	2
Flash Bulbs	Flash Units	4	4	4	4
Flash Bulbs	Flash Units	8	8	8	8
Flash Bulbs	Flash Units	15	15	15	15
Flash Bulbs	Flash Units	30	30	30	30
Flash Bulbs	Flash Units	60	60	60	60
Flash Bulbs	Flash Units	125	125	125	125
Flash Bulbs	Flash Units	250	250	250	250
Flash Bulbs	Flash Units	500	500	500	500
Flash Bulbs	Flash Units	1000	1000	1000	1000

- 19 -

### Voigtlander Filters

are made of spectroscopically tested optical glass, dyed in the mass, and coated to reduce reflections (p. 22 and 23). The filter factors given below are approximate values, as they necessarily depend on the colour sensitivity of the black-and-white film used, and on the light conditions prevailing at the time of the exposure.

**Yellow filter G 15 x** Slight filtering effect for outdoor shots requiring short exposure times, such as sports and action subjects, and portraits with filter factor 1.5 times.

**Yellow filter G 3 x** Universal filter for landscapes and other outdoor subjects, filter factor 3 times.

**Green filter G 4 x** Lightens green tones in landscapes. Recommended for artificial light and especially for infrared photography, filter factor 4 times.

**Orange filter O 5 x** Removes blue rays by considerable suppression of blue light. Reduces atmospheric haze in distant views, filter factor 5 times.

**Ultra-violet filter UV x** Cuts out ultra-violet radiation in high mountains or near the sea. Eliminates very unpleasant light casts in colour shots. Requires no exposure increase.

- 20 -

### Setting the Filter Factors

The use of any filter except the ultra-violet filter during the exposure requires a certain adjustment of the exposure setting. With the VITOMATIC II you can carry out this adjustment in two ways. For this purpose you use the millidial (2) at the side of the camera setting ring (9). Mark for dot divisions in the same way for the one on the scale for conversion.

**Example A:** For a factor of 15 times the universal setting ring to the left by half a division (the fraction of 15 on the ring) for 8 seconds and 2 times instead of 16 times to half and a half division. In every case you therefore adjust the aperture setting according to the filter factor required. If however the aperture-speed combination has exceeded the limit of 1/250 on the millidial, you have to find the universal setting ring (10) and adjust the shutter speed according to the required filter factor. Note: when setting half or quarter speeds set the shutter to the next longer exposure time.

**Example B:** If the aperture-speed combination obtained is 1 second at f/2.8 (the lowest limit of the exposure meter) you must adjust the filter factor on the millidial.

**For a factor of 15 times** advance the universal setting ring by one whole division (to "15" at f/2.8), set f/2.8, and expose for 16 seconds.

**For a factor of 3 times** advance the universal setting ring by one division (to "3" at f/2.8) and expose for 8 seconds.

**For a factor of 1.5 times** advance the universal setting ring by one division (to "1.5" at f/2.8) and expose for 4 seconds.

- 21 -

### Close-ups with Preometer

Large-scale views of objects and animals, or half-frame copies of pictures and documents, which are particularly fascinating and interesting subjects, are made really simple with the Voigtlander Preometer.

The special advantage of this ideal close-up attachment is that it permits hand-held close-up shots with the camera instantly ready for action on important points with live or rapidly moving subjects. At the same time the viewfinder portion, or close distances is automatically eliminated, and lens and rangefinder as result are coupled as same as in the normal zoom from 3 feet to infinity.



- 22 -

### Hints for Using the Exposure Meter

Generally it is sufficient to point the exposure meter at the subject from the camera position, thus measuring the light reflected from the subject. Such reflected light readings are suitable for all average subjects which show no excessive contrasts of light and shade and which are not set against an exceptionally light or dark background.

With outdoor shots, especially open views, the sky nearly always occupies part of the subject area, and thus part of the view of the exposure meter. As however the brilliant sky reflects much more light from the subject itself (the landscape, buildings, animals) it is advisable to point the camera slightly downwards when taking a reading.

Excursions are shots of interesting cloud formations where foreground details such as buildings or figures are purposely intended to record only as silhouettes. The same applies to snow and seascapes. Pictures of people in the snow or on a brilliant beach, however, always call for close-up readings (see next page).

- 23 -

### In some cases close-up readings are necessary for more accurate reflected light measurement.

Examples are:

- Light subjects against a dark background, and vice-versa;
- Close-ups of small objects and animals;
- Nearly all pictures of people, especially portraits (see illustration).

In this case only the important parts or the subject should be used to determine the brightness range.

When taking a close-up reading, approach the subject sufficiently closely so that the lens of the exposure meter only receives the light reflected by the individual subject areas. If necessary measure in three extreme areas, and take a medium value. Always watch that the shadow of the camera or of your own body does not obscure the part from which you are taking a reading.

**Note:** This rule also applies for close-up readings. The exposure meter should not be further away from the measured area than the width of the lens.

- 24 -

With tricky subjects or situations involving extreme brightness differences between the subject and its background or surroundings (e.g. against-light shots, snow subjects), incident light measurement is often more useful.

Is that case mount the diffusing screen in front of the exposure meter window (9), and take the reading from the subject in the direction of the camera position to be used. This then measures the light actually reaching the subject. Incident light measurement is also successful with interiors with or without artificial light, for the diffusing screen is extended with every VITOMATIC II, and can be carried in the ever-ready case of the camera.

**However, please note:** With incident light readings correct exposure will of course also depend on the amount of light the subject is able to reflect. For obvious reasons it is not possible to quote any correction factors for that. You will therefore be well advised to base exposures with incident light readings on your own previous experience.

- 25 -

### Exposures with Colour Shots

Exposure readings for colour pictures are taken in the same way as for black-and-white film. Note however that reversal colour film has a very limited exposure latitude and therefore needs specially careful readings.

To make quite certain of correct exposure - especially with reversal colour film - it is advisable to calibrate the meter for the camera and film by a few exposure tests. When you find that a colour film therefore does not need interesting subjects, and expose x times as much as with the aperture-speed combination indicated by the exposure meter. At the same time make additional exposures of the same subject from the same viewpoint and in the same light, but giving half a stop and one whole stop above and below the basic setting.

Overexposure of reversal colour film yields a very light transparency which may however still be usable. Underexposure results in excessively dark images. The density of the transparency should be judged on projection.

- 26 -

### Comparison of Film Speed Systems

The VITOMATIC II can be set to various ASA or DIN film speeds. The actual values marked are those which correspond to most colour and black-and-white film ratings on the market (see bold figures in table).

However there are two more ratings, which are quite often used those of ISO and ASA. For these films you find a white point near the next higher or lower film speed. In the setting ring click into the position right there. All other ratings not indicated can be set also by adjusting the ring (page 9) to an intermediate setting.

For film ratings of other film speed systems use this comparison table (DIN, ISO and ASA) to get the correct film speed corresponding to those on the setting ring.

ASA	DIN	ISO	Wester
10	11	21	8
12	13	25	10
16	16	32	13
20	18	36	16
25	21	40	18
32	24	45	20
40	27	50	24
50	30	56	28
64	33	64	32
80	36	71	36
100	40	80	40
125	42	88	45
160	48	100	50
200	54	112	56
250	60	125	63
320	66	143	71
400	72	160	80
500	78	180	90

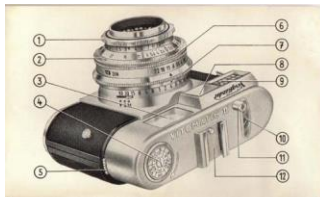
- 27 -



**Voigtlander**  
VITOMATIC II  
24 x 36 - 35 mm  
INSTRUCTIONS FOR USE

151 05 - 12 A 7/78 II

- 28 -



- VITOMATIC II**  
24 x 36 — 35 mm
- 1 Lens focusing mount with distance scale
  - 2 Dot divisions on setting ring (6) for filter factor adjustment
  - 3 Viewfinder window
  - 4 Rewind knob with film indicator
  - 5 Reversing lever
  - 6 Universal setting ring for exposure readings, combined with film speed setting ring
  - 7 Shutter speed ring
  - 8 Rangefinder window
  - 9 Honeycomb cell window of exposure meter
  - 10 Exposure meter setting window
  - 11 Release button with cable release socket
  - 12 Accessory shoe
  - 13 Depth of field scale
  - 14 Setting window (DIN or ASA) for film speeds
  - 15 Shutter speed scale
  - 16 Synchronizing lever for M and X synchronization and self-timer (V)
  - 17 Distance scale
  - 18 Aperture scale
  - 19 Setting marker of exposure meter
  - 20 Exposure meter needle



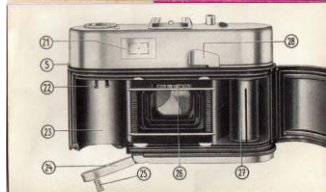
**The 2 inch (50 mm.) COLOR-SKOPAR F2.8**  
fitted to your camera is a four-element unit, and is one of the series of Voigtlander high-class anastigmat lenses. It meets every requirement for optimum image quality: excellent definition, high brilliance, and maximum resolution over the whole picture area — coupled with absolutely faultless colour rendering in colour photography.

The Color-Skopar is focused by the movement of the whole lens system as a self-contained optical and mechanical unit. It goes without saying that all air-glass surfaces are hard-coated with a vacuum evaporated anti-reflection layer.

We guarantee this camera against defects due to faulty materials or workmanship according to present-day standards of technical perfection. Should any such defects become apparent, they will be rectified free of charge if the claim is made within a reasonable period after purchase. We cannot entertain claims for further damages, consequential or otherwise, or for the free repair of faults due to incorrect handling or storage.

**WARRANTY**

**VOIGTLANDER A. G. BRAUNSCHWEIG**



- 11 Reversing lever
- 12 Universal setting ring for exposure readings, combined with film speed setting ring
- 13 Shutter speed ring for setting the correct aperture-speed combination after taking the exposure reading
- 14 Viewfinder eyepiece
- 15 Shaft of rewind knob
- 16 Cassette chamber
- 17 Base plate flap
- 18 Base plate latch
- 19 Sprocket to operate shutter, film counter and double interval
- 20 Take-up spool
- 21 Rapid winding lever to advance the film and cock the shutter
- 22 Lever to uncouple the film speed setting ring (see No. 6)
- 23 Milled film counter setting knob
- 24 Film counter window
- 25 Tripod bush
- 26 Flash socket

