



This manual is for reference and historical purposes, all rights reserved.

This page is copyright© by M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs.

It'll make you feel better, won't it?

**If you use Pay Pal or wish to use your credit card,
click on the secure site on my main page.**



INSTRUCTIONS FOR USE



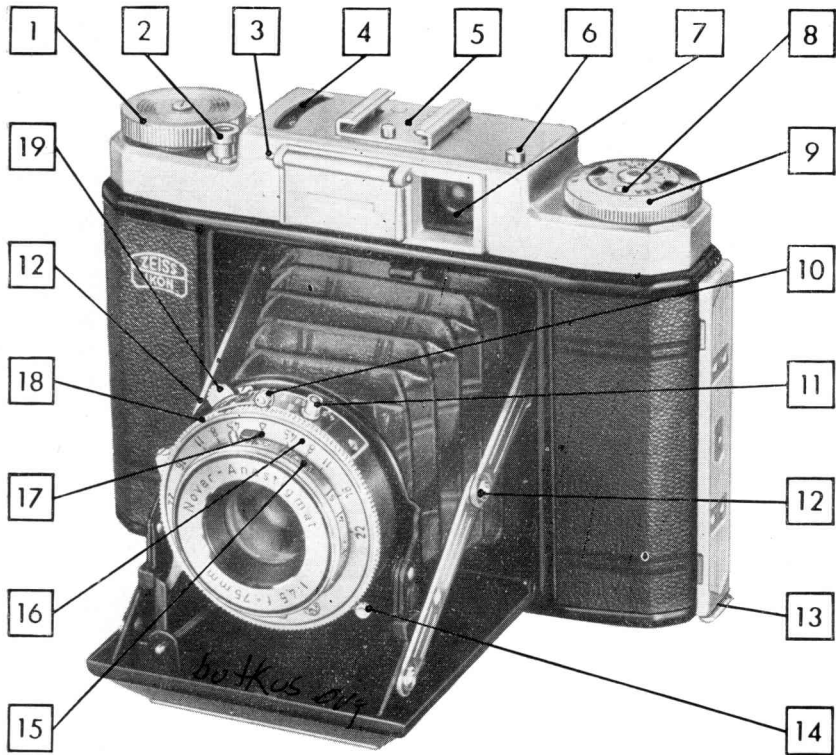
INSTRUCTIONS FOR USE



INSTRUCTIONS FOR USE

NETTAX 6x6

ZEISS IKON AG. STUTTGART



Components of the Nettax

- 1 Film wind knob
- 2 Body shutter release knob with thread for cable release
- 3 Knob operating exposure meter flap
- 4 Pointer of exposure meter
- 5 Accessory shoe
- 6 Knob to open camera
- 7 Viewfinder
- 8 Film speed setting knob
- 9 Setting ring of exposure meter
- 10 Shutter tensioning lever
- 11 Flash contact
- 12 Struts
- 13 Locking bar for camera back
- 14 Tensioning lever for self-timer
- 15 Distance setting ring
- 16 Depth-of-field scale
- 17 Distance setting mark
- 18 Shutter speed setting ring
- 19 Diaphragm setting lever

Every picture a success

this was the aim of the Zeiss Ikon designers for the Nettax 2 $\frac{1}{4}$ square rollfilm camera. For this reason the photo-electric rapid exposure meter was built into the camera. It eliminates all your troubles about the correct settings of your shutter. You can rely on its accuracy under all lighting conditions and your photographs will always be correctly exposed, no matter whether they are taken on black-and-white or colour film, once you have made yourself familiar with its simple operation described in these instructions. If still in doubt ask your photo-dealer who will be glad to give you advice.

The Nettax takes twelve $2\frac{1}{4}'' \times 2\frac{1}{4}''$ pictures on standard 120 roll film. The film advance is interlocked with the shutter to prevent double exposures and has a visual signal which eliminates blanks. It is equipped with the widely approved, popular f/4.5 Novar anastigmat lens which is hard coated and excellently colour corrected. Load your Nettax with colour film, you will have no difficulty in obtaining good colour photographs. You will take equally great pleasure in taking first-class black-and-white pictures.

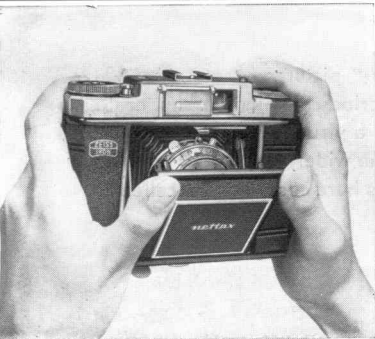
How to open the Nettax

Tilt the camera slightly forward and press knob (6) with your finger (fig. 1). The Nettax will snap into taking position.



fig. 1

fig. 2



How to close the Nettax

Take the camera in both hands as shown in fig. 2. Press the struts (12) down with your thumbs on both sides and fold the baseboard upwards. The Nettax can also be closed when in taking position by pressing down the two struts (12) with both your index fingers and closing the baseboard (fig. 3).



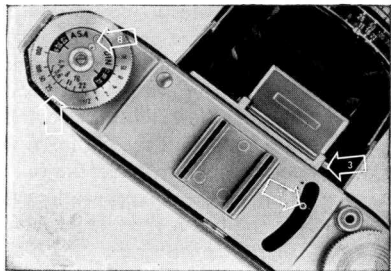
Measuring the exposure time

Prior to every exposure the correct values of the shutter settings should be measured with the built-in photo-electric

fig. 3

Zeiss Ikon rapid-exposure meter. First the exposure meter must be set to the speed of the film in use. For this purpose turn the inner disc by means of the small knob (8) until the relevant speed value appears opposite the black stroke of the DIN or ASA window. The disc can also be set to intermediate film speeds (fig. 4). If a film manufacturer has quoted the film speed according to a rating other than the DIN or ASA systems, the corresponding index can be found in the conversion table on page 7.

Since the speed of colour film cannot be measured in the same way as that of black-and-white film, the colour film manufacturers are unable to give exact speed numbers but recommend their films to be exposed "as a black-and-white film of X DIN or XX ASA". Generally this advice is quite reliable, but in



order to be absolutely sure the Nettax owner should calibrate his own equipment by making various test exposures at different stops and thus determine the actual speed of the film in question and the correct setting of your built-in exposure meter. To measure the prevailing light the flap of the exposure meter should be opened by gently pressing knob (3) to the left. (To close it, press the flap slightly to the left with the right index finger). Point the Nettax towards the subject so as to frame it in the viewfinder. The white pointer (4) will then be seen to deflect. By turning the setting ring (9), the small white circular mark should be moved until it is exactly alongside the pointer as seen from above (see fig. 4). The exposure time to be used (outer scale) can now be read off from the setting ring (9) for any aperture of the lens (inner scale) and vice versa.

The exposure times or shutter speeds to the left of $1/2$ denote fractions of a second (e. g. $25 = 1/25$ second, etc.); the figures to the right of $1/2$ denote full seconds. In order to avoid confusion the long exposure times are marked in green.

The values found should then be set on the aperture scale and shutter speed ring of the Nettax.

Conversion Table of Various Film-Speed Rating Systems

ASA Exp. Ind.	Scheiner Europe	Scheiner USA	Weston	DIN in 1/10°
5	20	13	4	12
6	21	14	5	13
8	22	15	6	14
10	23	16	8	15
12	24	17	10	16
16	25	18	12	17
20	26	19	16	18
25	27	20	20	19
32	28	21	24	20
40	29	22	32	21
50	30	23	40	22
64	31	24	50	23
80	32	25	64	24
100	33	26	80	25
125	34	27	100	26
160	35	28	125	27
200	36	29	160	28
250	37	30	200	29
320	38	31	250	30

Diaphragm

The correct aperture of the diaphragm or "stop", for short, depends on the depth of field desired (see page 9). The red setting mark of lever (19) should be set to the f/number required (fig. 5). The larger the f/number the smaller is the actual opening of the diaphragm.

Shutter speed

The correct shutter speed to be chosen depends on the amount of movement of the subject. The faster the subject movement, the shorter should be the shutter speed.

Turn the milled setting ring (18) until its red setting mark is opposite the shutter speed required. The figures also denote fractions of a second. When set to "B" the shutter remains open as long as the release knob

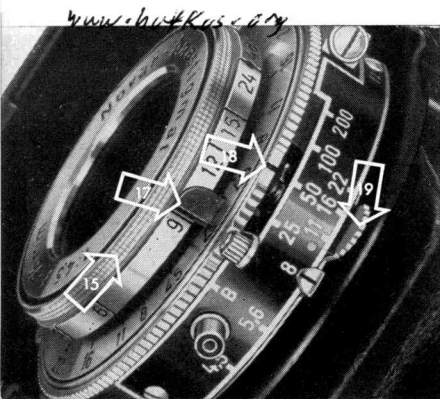


fig. 5

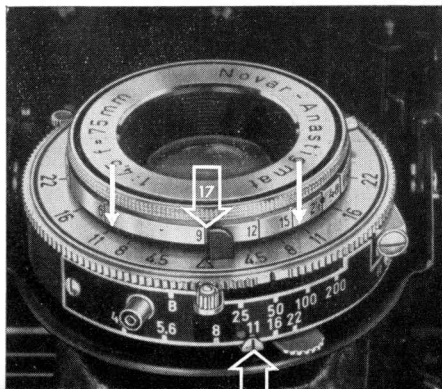
remains depressed. Prior to every exposure the shutter must be tensioned by operating the lever (10).

Distance

The distance setting scale is engraved on the lens mount. By turning ring (15) the lens of the Nettax is focused to the taking distance required which should be opposite the setting mark (17). Intermediate distances can be estimated easily (fig. 5).

Depth of field

Every lens focused on a definite distance will yield sharp pictures of subjects only within a limited space before and beyond the plane on which it is focused. This zone of sharp definition (depth of field) becomes deeper the more the lens



Depth-of-field table

Dis- tance	Diaphragm stop 4.5	Diaphragm stop 5.6	Diaphragm stop 8	Diaphragm stop 11	Diaphragm stop 16	Diaphragm stop 22
inf.	55'0" — ∞	44'4" — ∞	31'0" — ∞	22'8" — ∞	15'8" — ∞	11'4" — ∞
48'	25'8" — 364'0"	23'4" — ∞	19'0" — ∞	15'8" — ∞	12'0" — ∞	9'4" — ∞
24'	17'0" — 42'0"	15'8" — 51'4"	13'8" — 101'0"	11'8" — ∞	9'8" — ∞	8'0" — ∞
15'	12'0" — 20'4"	11'4" — 22'4"	10'4" — 28'0"	9'4" — 42'4"	8'0" — 265'4"	6'8" — ∞
12'	10'0" — 15'0"	9'8" — 16'4"	8'8" — 19'0"	8'0" — 24'4"	7'0" — 47'0"	6'0" — ∞
9'	7'8" — 10'8"	7'8" — 11'0"	7'0" — 12'4"	6'6" — 14'4"	5'10" — 19'8"	5'2" — 35'8"
6'	5'6" — 6'8"	5'4" — 6'10"	5'2" — 7'4"	4'10" — 8'0"	4'6" — 9'4"	4'1" — 11'8"
5'	4'7.5" — 5'6"	4'7" — 5'6"	4'4.5" — 5'10"	4'2.5" — 6'2"	3'11" — 7'0"	3'7.5" — 8'4"
4'	3'9" — 4'3"	3'9" — 4'4"	3'7.5" — 4'6"	3'5.5" — 4'8.5"	3'3.5" — 5'1.5"	3'1.5" — 5'8.5"

The smaller the stop the longer the exposure will have to be. The lens should, therefore, be stopped down only so much as is necessary for obtaining the required depth of field, in order to avoid blurred pictures due to the motion of the subjects. The depth of field is measured from the film plane.

is stopped down. This depth of field for any lens aperture can be read off from the depth-of-field scale (16) by means of the distances on the distance scale which are opposite the f/numbers to the left and right of the setting mark (17). In fig. 6, for instance, the distance is set to 9 ft. With this setting the depth-of-field scale shows that the sharp zone extends from 6 ft to 15 ft when stop f/11 is used. The exact depth-of-field values can be found in the table on page 10.

Holding the camera

The Nettax must be held firmly during the exposure. The right-hand index finger should operate the shutter release (2). By depressing the knob the film will be exposed (fig. 7).



Exposures with the hand-held camera should be made only when the shutter speed is set to an instantaneous shutter speed. For longer exposure times (shutter setting to "B") the Nettax should be screwed to a tripod or placed on a firm support. A tripod bush is in the bottom of the camera. All these time-exposures should be made with a cable-release which can be screwed into the thread of the release knob (2).

Releasing the shutter

The body shutter release (2) can be depressed only when the shutter has been tensioned and the film advanced to the next number by turning the film wind knob (1). – See page 17. – This eliminates double exposures.

Furthermore the Nettax has a transparent red warning signal inside the optical viewfinder. If, when looking through the viewfinder eyepiece, part of the image field appears coloured red the film has not been wound on and must be advanced before the next shot can be taken. This is a clear indication whether the camera is ready for a shot and eliminates blanks.

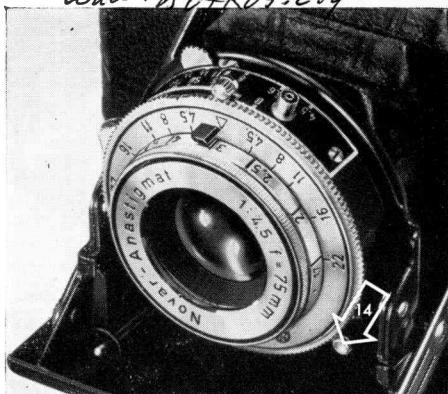
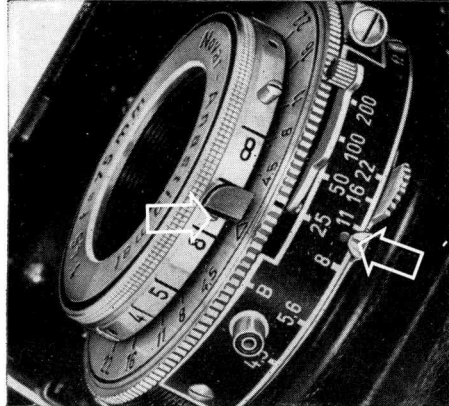
fig. 8

Red dot setting

In order not to lose time over shutter setting when taking snapshots, it is advisable to use the red dot setting. The diaphragm should be set to the red dot and the distance to the other red dot (fig. 8). With these settings all subjects between approx. 13 ft and ∞ will be sharply recorded. The shutter speed should be set according to that indicated by the exposure meter for stop f/11.

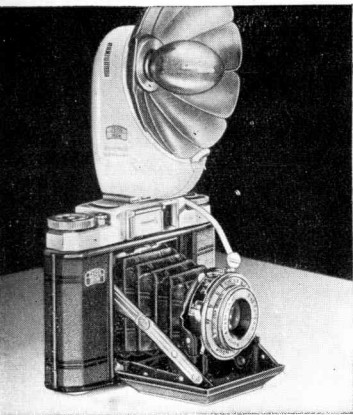
Self-Timer

If you want to be in the picture yourself the Nettax should be screwed to a tripod or placed on a firm support. When dis-



tance,, diaphragm and shutter speed are suitably set the shutter should be tensioned in the usual way. Furthermore, press downwards the small red lever (14) (fig. 9). When the release knob

(2) is depressed the delayed action mechanism will run for approx. 8 seconds and then release the shutter automatically. But you can not make time exposures (shutter setting "B") by means of the selftimer.

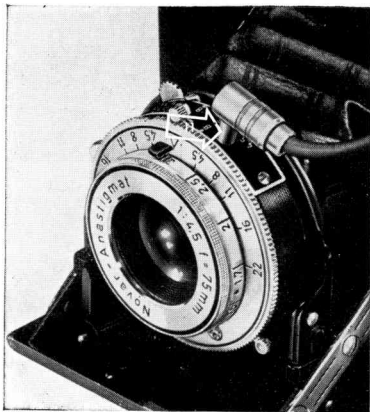


Exposures with flash light

For exposures with flashbulbs the shutter should be set to $\frac{1}{25}$ second. With electronic flash all shutter speeds can be used. The stop to be used depends on the intensity of the light source, the speed of the film and the dis-

tance between the light source and the subject. For further particulars study the instructions for the use of the various flashguns.

The flash lead from the lamp should be connected to the flash contact (11) and only then the flashbulb inserted (fig. 10). When the release knob (2) is depressed the flashbulb will be fired in synchronization with the shutter. The capacitor-flashguns Folding Ikoblitz and Ikoblitz 0 can be slipped into the accessory shoe of the Nettax (5). Both flashguns provide an extremely bright flash. The reflector of the Folding Ikoblitz is collapsible when not in use; the entire outfit is then no larger than a soap container.



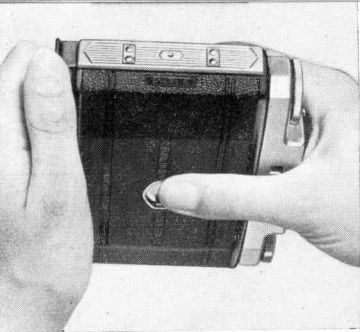


fig. 11

Loading the camera

Never insert a film into your Nettax in bright sunshine! The camera back can be opened after pulling out the locking bar (13) – fig. 11 –. Unwrap the 120 roll film and insert it into the spool chamber underneath the exposure meter setting knob (fig. 12). For this purpose the spring on the under-side of the camera should be pulled out. Slit open the gummed label on the roll of film and pull the protective paper towards the empty take-up spool. Insert the tapered end of the paper into the wide slot of the take-up spool (fig. 13). Tighten the protective paper by



fig.12

fig. 13

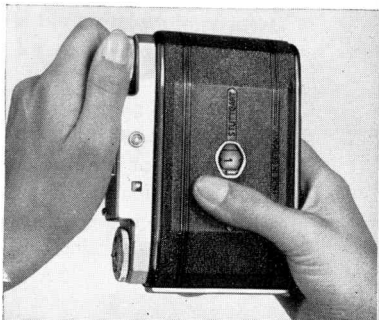
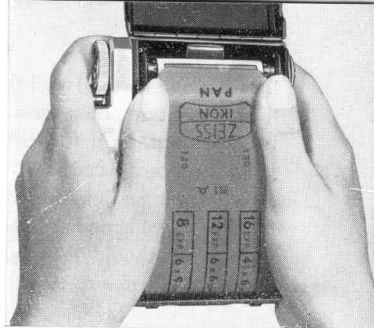
several turns of the film wind knob (1). Close the camera. Open the small film window on the back of the camera and turn the film wind knob until the number "1" appears in the window (fig. 14). Close the window.

When the shutter is tensioned the Nettax is ready for the first exposure. After every exposure the film should be advanced by one number. When this is done the red warning signal inside the viewfinder, which appears after each exposure, will disappear.

Unloading the camera

After the twelfth exposure turn

fig. 14



the film wind knob (1) until the end of the protective paper passes the film window. Then open the camera back, pull out the spring loaded pivot, as if for loading, and remove the exposed film spool cautiously and in the shade. Seal it immediately. Before inserting a new film, the empty feeding spool must be inserted into the spool chamber beneath the film wind knob (1). The film wind knob should then be turned several times in order to ascertain that the spool is in the correct position.



Accessories

Ever-ready Case

The Nettax is protected from external strains and damage by the practical Zeiss Ikon ever-ready case. The camera is held in the case by means of a screw which is screwed into the tripod bush and need not be taken out of the case for taking pictures.

Zeiss Ikon Precision Filters

In order to improve the tone values in black-and-white pictures Zeiss Ikon precision filters should be screwed into the lens mount (ϕ S 35.5 mm).

Precision filters are available in yellow, yellow-green, orange, red, blue (Ikolor B) and UV-filter. The Ikolor-B filter should also be used for colour shots with artificial light on daylight colour film. For daylight exposures on tungsten-light colour films the Ikolor-A filter should be used. When filters are used the ex-

posure time has to be extended in accordance with the filter factor engraved on the mount of every Zeiss Ikon filter ($2\times = 1$ step, $4\times = 2$ steps, $8\times = 3$ steps).

Polarising filter (Zeiss Bernotar)

To eliminate reflections in highly polished, non-metallic surfaces and to darken the blue sky in colour and black-and-white photographs, the polarising filter Zeiss Bernotar can be slipped on the lens mount (ϕ 32 mm). For particulars see the instructions supplied with the polarising filter.

Supplementary lenses for close-ups (Zeiss Proxars)

The Nettax is suitable for all exposures at distances between ∞ and 4 ft. If photographs are to be taken at a shorter range Zeiss Proxar Lenses should be slipped on to the lens mount of the Novar (ϕ 32 mm). They are available in two different focal lengths. The distance and lens settings necessary can be found in the table on page 21. The distance between subject and camera should be measured from the front rim of the mount of

Setting table for close-ups with Zeiss Proxar lenses

Lens focused on	With Proxar lens $f = 1 \text{ m}$		With Proxar lens $f = 0,5 \text{ m}$	
	Distance between camera and object	Size of the area covered	Distance between camera and object	Size of the area covered
inf.	3' 3 $\frac{1}{4}$ "	2' 6" \times 2' 6"	1' 7 $\frac{3}{4}$ "	1' 3 $\frac{1}{4}$ " \times 1' 3 $\frac{1}{4}$ "
48'	3' $\frac{1}{2}$ "	2' 3 $\frac{3}{4}$ " \times 2' 3 $\frac{3}{4}$ "	1' 7"	1' 2 $\frac{1}{2}$ " \times 1' 2 $\frac{1}{2}$ "
24'	2' 10 $\frac{1}{2}$ "	2' 2 $\frac{1}{2}$ " \times 2' 2 $\frac{1}{2}$ "	1' 6 $\frac{1}{4}$ "	1' 2" \times 1' 2"
15'	2' 8"	2' $\frac{1}{2}$ " \times 2' $\frac{1}{2}$ "	1' 5 $\frac{1}{2}$ "	1' 1 $\frac{1}{4}$ " \times 1' 1 $\frac{1}{4}$ "
12'	2' 6 $\frac{1}{2}$ "	1' 11 $\frac{1}{4}$ " \times 1' 11 $\frac{1}{4}$ "	1' 5"	1' 1" \times 1' 1"
9'	2' 4 $\frac{1}{4}$ "	1' 9 $\frac{1}{2}$ " \times 1' 9 $\frac{1}{2}$ "	1' 4 $\frac{1}{2}$ "	1' $\frac{1}{2}$ " \times 1' $\frac{1}{2}$ "
6'	2' 3 $\frac{3}{4}$ "	1' 6 $\frac{3}{4}$ " \times 1' 6 $\frac{3}{4}$ "	1' 3 $\frac{1}{4}$ "	11 $\frac{1}{2}$ " \times 11 $\frac{1}{2}$ "
5'	1' 11"	1' 5 $\frac{1}{4}$ " \times 1' 5 $\frac{1}{4}$ "	1' 2 $\frac{1}{2}$ "	10 $\frac{3}{4}$ " \times 10 $\frac{3}{4}$ "
4'	9' 9 $\frac{1}{4}$ "	1' 3 $\frac{1}{2}$ " \times 1' 3 $\frac{1}{2}$ "	1' 1 $\frac{1}{2}$ "	10 $\frac{1}{4}$ " \times 10 $\frac{1}{4}$ "

the Proxar. Sufficient depth of field should be ensured by stopping down the Novar to $f/8$ at least. The resulting finder parallax can be compensated for by a corresponding displacement of the camera or the subject.

Cable release

For time exposures from a tripod a cable release should be used (see page 12). It can be screwed in the thread of the body shutter release knob (2). For long time exposures (setting "B") the Zeiss Ikon cable release has a special time lock.

How to take care of the Nettax

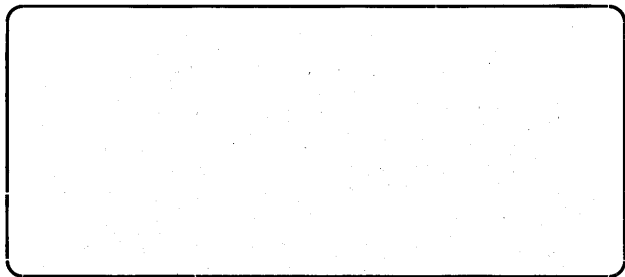
The Nettax needs no special maintenance. From time to time clean the film track and the spool chambers with a soft brush. The lens should be cleaned only when it is really necessary. Gently wipe it with a soft, well-washed piece of linen, after removing any dust with a lens cleaning brush. The opening of the exposure meter underneath the flap should also be kept clean.

Serial number

The back of every Nettax carries a serial number. It is recommended that a record should be kept of this number, which may be of valuable aid in establishing ownership in case of loss or theft.



Further technical developments may involve slight changes in the design and construction of the camera compared with these instructions.



Z E I S S I K O N A G . S T U T T G A R T

englisch

319/513/16

Printed in Germany, Author: J. Kraatz 15 1256