

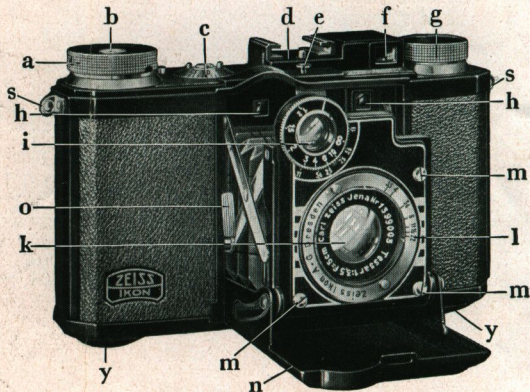


Instructions for Use of the
SUPER NETTEL

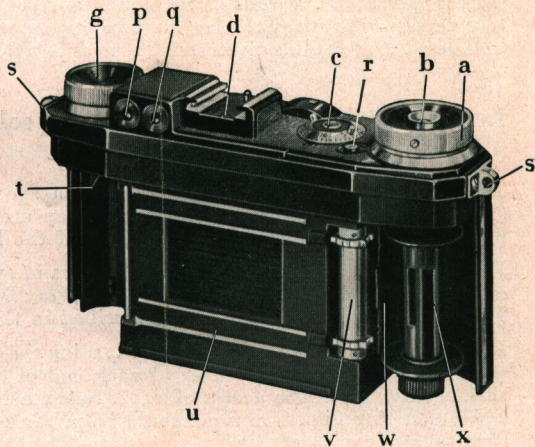
ZEISS IKON AG.
D R E S D E N

C 2502c E.

- a* = Shutter winding knob
b = Shutter release button
c = Counting disc
d = Finder shoe
e = Button for opening baseboard
f = Finder aperture
g = Re-winding knob
h = Distance-meter apertures
i = Rotating prism of distance meter with
k = Lens [scale
l = Diaphragm ring
m = Bayonet pins
n = Baseboard
o = Catch lever



- p* = Viewing aperture of finder
q = Viewing aperture of distance meter
r = Release button for re-winding
s = Eyelet holes for carrying strap
t = Rewind fork
u = Picture aperture
v = Sprocket
w = Spool-holding spring
x = Take-up spool
y = Keys for securing camera back



Important.

The Super Nettel is a precision camera, differing in many respects from similar cameras as regards its manipulation. For this reason it is absolutely necessary to study the instructions for use with the greatest care and to follow the directions given strictly, so as to avoid damaging the camera.

I. Loading the camera with Contax Spool

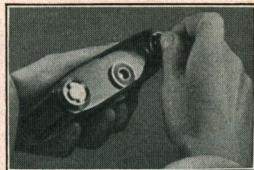
Preliminary remarks

The camera may now be supplied with a spool of black composition (Trolitul) in place of the metal spool. They are very light and allow a particularly quick and secure fastening of the leading end of the film.

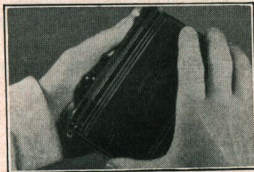
For a certain transitional period both types of spool will be found particularly as there is still a large number of Contax Daylight Spools available. Therefore, in any case, both are described in the instructions.

For rendering it suitable for daylight loading the Contax spool is provided with a paper leader and trailer at each end of the film, thus protecting the sensitive film from access of light. Nevertheless care should be taken when changing film. The film should be put in or taken out by subdued light — never in direct sun.

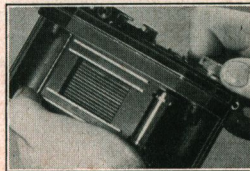
1. Open the camera by raising the two winding keys (y) on the camera base-board and giving them a half turn. In the open position the keys cannot be folded down against the camera body.



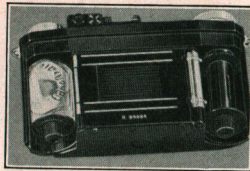
2. Draw down the camera back slightly and then raise it away from the camera body.



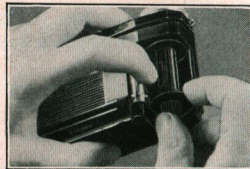
3. Wind up the shutter winding knob (a) as far as it will go in a clockwise direction, until a hard stop is felt. (A slight resistance may not mean that the shutter is fully wound, so that it is necessary to turn fully until the stop is reached.)



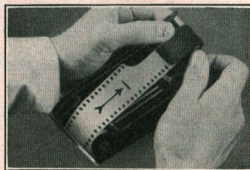
4. Place the Contax spool with its hollow end on the fork (*t*) of the left-hand or feed spool chamber and detach the gummed strip.



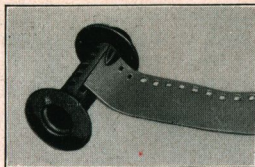
5. Remove the empty spool (*x*) in right hand or take up spool chamber, pressing the film-holding spring (*w*) against the body of the camera.



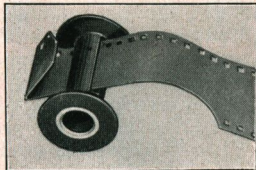
6. Then replace the empty spool in the right-hand chamber with the claw engaging in its hollow end.



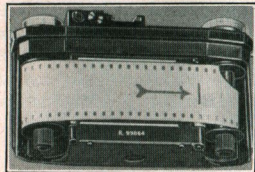
With metal spools the paper leader or the corresponding cut leading end of the film must be threaded through the wide slit of the spool and a length of about $1\frac{1}{4}$ " must be folded back sharply to the outside.



With composition spools the perforated paper leader or the ready cut leading end of the film must be slid under the tongue until the first or second perforation hooks on to the tooth which is to be found there. When the film is to be taken off the spool again, the end is torn out of the tooth by a moderate pull.



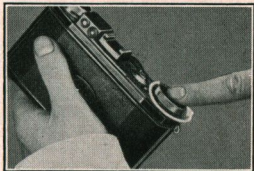
7. Turn on the empty spool until the line to which the arrow on the paper leader points lies over the teeth of the sprocket (*v*).



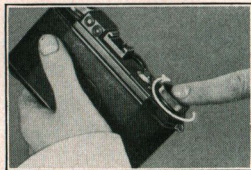
8. Put on the camera back, holding the paper in contact with the teeth of the sprocket with one finger of the left hand. Now put on (not slide in) the camera back as close as possible to the upper edge in the guide grooves, sliding the last part of the back to close the camera completely.



9. Give a half-turn to the keys (y) on the camera base and turn them down so that they lie flat.
10. Set the red dot of the counter to the white dot mark.
11. Press the shutter release button (b) lying in the centre of the shutter winding knob (this will work the shutter), and — holding it down — turn it in an anti-clockwise direction until a stop is felt. In this position the shutter button will stay permanently in the lower level.
12. Wind up the shutter winding knob nine times, until the picture counter shows the number “36”. If the rewinding knob (g) does not rotate during this operation, there is something wrong inside the camera, and the back must be removed to find out the cause of the trouble.



13. By pressing the shutter release button, and turning it in a clockwise direction to its original position, it once more returns to the upper level. The red dot on the shutter button should now be opposite the red dot on the winding knob.



14. Wind up the shutter by the knob (a), and press the shutter release (b), three or four times until the picture counter disc shows "1" when the shutter is wound up. ("1" comes after "0".) The camera is then ready for the first exposure.

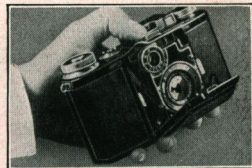
Instructions for loading when using Cassettes and Cartridges are given on pages 16—22.

II. Unloading Camera (after the 36 th exposure)

1. Press down the release button (*b*) and fix it as directed in I, 11. Now turn the shutter winding knob (*a*) until the end trailer paper has run through. You can tell when this is so by the fact that the re-winder knob (*g*) ceases to turn.
2. Again release the button (*b*) (see I, 13).
3. Take off the camera back, as directed in I, 2.
4. Take out the full spool and stick down the gummed strip.
5. Transfer the empty spool from the left hand to the right hand spool holder. When removing the spool, see that the film-holding spring is pressed against the body of the camera.

III. Making the Exposure

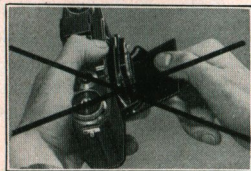
By pressing on the button (*e*) the camera springs open.



Draw out the lens by the grips on the front plate until it snaps distinctly into place.

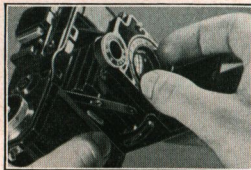


Do not press down the baseboard!!

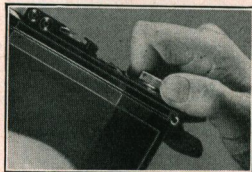


When taking a picture it is best to carry out the following movements as far as possible in the prescribed order: —

1. Set the desired diaphragm number to the white mark.



2. Set the time of exposure on the shutter winding knob. The milled knob (a) is firmly raised and the red index dot turned to the exposure which is required. The knob is then allowed to drop back at this point. When setting shutter speeds it is essential that the shutter is either fully wound up or fully run down.
3. Winding film and shutter. Wind the knob (a) a full turn, taking care that the knob is turned to the limit of motion.
4. Focussing with distance meter.
The user should become accustomed to adopt the employment of the distance meter exclusively for obtaining sharp focus. This latter simultaneously focusses the lens, so that the correct setting of the camera for any distance is absolutely guaranteed.



In the field of view of the distance meter is seen a circular brighter field in which the subject appears as a double image. By turning the little wheel (*i*) one image can be moved. Turn the wheel until the double image is no longer visible, the two images having united. At this setting the lens is in sharp focus on the distance of the subject which has been sighted in the distance meter.



5. Exposure.

To make the exposure, the subject is viewed through the finder, with the eye slightly away from the latter. The shutter is released by pressing down the button (*b*).



When making the exposure the camera must be firmly held preferably as shown in the illustrations thus obtaining pictures free from any unsharpness due to shake of the camera when giving somewhat slow exposures. Camera shake will always give unsharp pictures.

By giving one full turn to the shutter winding knob, the film is moved on the length of one picture, and the shutter is also wound in readiness for the next exposure.

When using the camera on a tripod it is of advantage to employ the special flexible cable release No. 1312/24.



6. Closing the Camera.

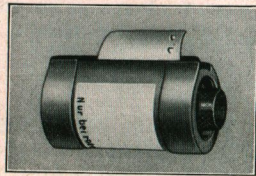
This is done by pressing down the two small levers (o) and then pressing up the "baseboard" (n) to cover the lens.

IV. Using Films made up in other forms than the Contax Spool

In addition to the Contax spool, a variety of other different forms of perforated cinematograph film may be obtained that are intended for use in miniature cameras, and which may be used with the Super Nettel. Only those kinds of chargers, cassettes, or cartridges can however be used that are small enough to fit the spool chambers of the camera comfortably, as otherwise it may happen that the film jams in the camera instead of winding on correctly. In particular, the knob of such spools or chargers must have a hollow in it that will fit the projecting stud in the revolving keys that lock the back of the Super Nettel into place.

1. Film cartridges. Before loading film cartridges, the shutter is to be wound and the picture counter disc must be turned until the index mark is against "37".

The cartridge is then placed in the left-hand (feed) chamber of the camera, and the protruding tongue of film pulled out across the open camera back and attached to the spool core in the take-up chamber. With metal spools the end of the film is pushed through the slot, and only a very small portion ($\frac{1}{10}$ th of an inch) bent over to



anchor it, while where the synthetic spool is used, the perforation is engaged in the pin under the clip. (See notes in Section I.) By turning the empty spool the film is moved across the camera until perforations on both sides engage in the teeth of the sprocket wheel.

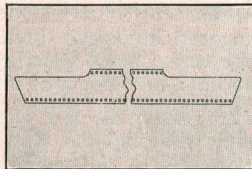
The camera is now closed in the normal manner, and after winding and releasing the shutter three times the picture counter will have advanced to "0". A further operation of the shutter will bring the first section of unexposed film into position for exposure.

All film cartridges need to be rewound after the 36 exposures have been made. For this purpose, the rewind release knob (r) is pressed inwards and the film rewind into the cartridge by turning the rewinding knob (g) in the direction of the arrow.

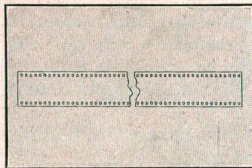


Since nearly every kind of film made for miniature cameras is now available in the form of Contax spools, these should be used if possible, in order not to have to wind the film twice through the picture aperture of the camera.

Naked cinema film may be obtained in lengths of approximately 16 feet, 32 feet, 50 feet, and 82 feet, from which lengths may be cut and loaded into the camera. The ends of the film must be cut to the correct shape with the Zeiss Ikon cutting guide (No. 541/16) and a length of $62\frac{1}{2}$ inches will give 36 exposures in the camera. Ready-cut lengths of film for 36 pictures are also on the market, and these may be loaded into the cassette in the darkroom.



For composition spools the film is already suitably cut, as the lower picture shows. A length of $62\frac{1}{2}$ " is sufficient for 36 pictures and the margins. There are, as well, ready cut lengths of different makes which can be loaded into the cassette in the darkroom.

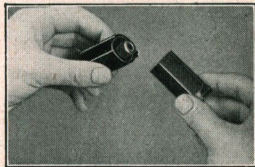
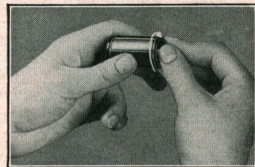
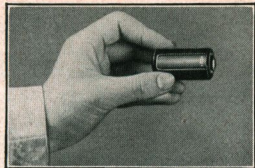


Zeiss Ikon Orthochrom and Panchrom films are available as Contax-Spool in prepared lengths ($62\frac{1}{2}$ "') for 36 pictures (on cardboard cores) and in uncut lengths of 16, 50 and 82 ft.

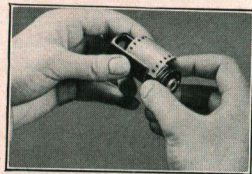
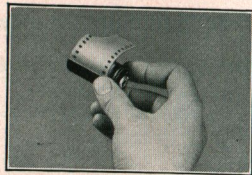
Handling the Cassette

A. Loading with film as feed Cassette.

1. Cassette, empty, closed.
2. Press down the small nickelled button and turn in direction of the arrow until the apertures in the two containers are one over the other.
3. Draw the two containers apart.

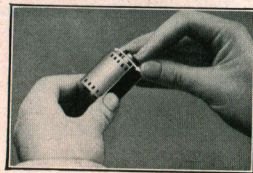


4. To attach the film to the core of the cassette bend it slightly (emulsion side inwards) and push it through the slot in the latter. This makes it easy for the film to run out of the core when unwinding. Wind the film completely on to the core, and place the latter in the inner container of the cassette. When using composition spools cut the film as shown in the lower picture on page 18 and slip under the tooth of the spool. Wind the film on to the core and with the spool knob in front put it into the inner container.



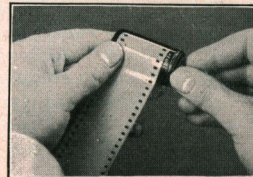
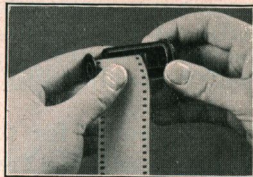
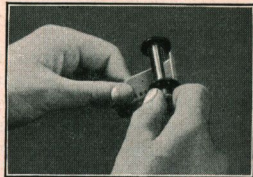
5. Slide the two containers together, with the end of film outside.

6. Close by giving a half turn in the direction of the arrow. The word "zu" ("shut") should be visible.



B. As Take-up Cassette. Attaching Film.

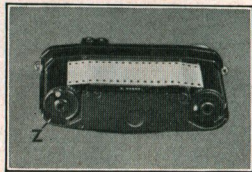
1. Open and separate as A, 1 to 3.
2. Insert the end of film in the core of the cassette, bending over about 2 to 3 mm. ($\frac{1}{10}$ inch.) outwardly.
For composition spools hook the beginning of the film on to the tooth of the spool.
3. Slide the inner and outer containers over the core.
4. Close the cassette by giving a half-turn. The word "zu" ("shut") is visible.



C. Inserting the Cassette and Closing the Camera

Insert the cassette so that the projection (z) on the outer container engages in the corresponding recess of the camera body.

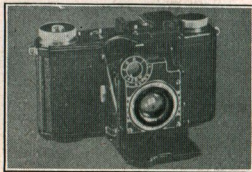
The camera should be loaded preferably with two cassettes. When loading, always take care that the cassettes are closed and that the word "zu" ("shut") is visible. When locking the camera back with the catch (y) the cassettes are opened by mechanism for the purpose, so that the film can readily emerge from them.



V. Accessories for the Super Nettel

1. Yellow and Colour Filters

The filters are screwed into the lens mount and can remain on the lens set to "Infinity" with the camera closed. In addition to the normal yellow filters, colour filters for special purposes are available, e. g. green filters, red filters and "dark" filters.



2. Proxar Lenses

For taking subjects at distances nearer than 3 ft., a Proxar lens of one or two diopters is screwed into the camera lens. The distances (measured from the front rim of supplementary lens) on which focus is obtained at stop $f/8$ are shown by the following table.



Camera lens set to feet	Focus obtained w. Proxar 1 \times 27	Supplementary lens 994/1	Focus obtained w. Proxar 2 \times 27	Supplementary lens 994/2
4	1' 11 $\frac{1}{2}$ "	1' 9 $\frac{5}{8}$ "	1' 3 $\frac{5}{8}$ "	1' 2"
5	2' 1 $\frac{1}{2}$ "	—	1' 4 $\frac{1}{2}$ "	—
6	2' 3 $\frac{1}{8}$ "	2' 1 $\frac{1}{4}$ "	1' 5 $\frac{1}{4}$ "	1' 3 $\frac{3}{8}$ "
9	2' 6 $\frac{3}{8}$ "	—	1' 6 $\frac{1}{4}$ "	—
12	2' 8 $\frac{5}{8}$ "	2' 5 $\frac{1}{2}$ "	1' 6 $\frac{7}{8}$ "	1' 5 $\frac{1}{8}$ "
15	2' 9 $\frac{3}{4}$ "	—	1' 7 $\frac{1}{4}$ "	—
24	2' 11 $\frac{3}{4}$ "	2' 9 $\frac{1}{2}$ "	1' 8"	1' 6 $\frac{1}{4}$ "
48	3' 1 $\frac{3}{4}$ "	—	1' 8 $\frac{3}{4}$ "	—
Inf.	3' 4 $\frac{1}{2}$ "	3' 2 $\frac{5}{8}$ "	1' 9 $\frac{1}{2}$ "	1' 7 $\frac{3}{4}$ "

3. Optical Near Focusser "Contameter"

When taking subjects at distances of 20, 14 and 8 inches the Super Nettel can be equipped as extras with supplementary lenses and a special "near focusser", which is inserted in the finder shoe (d) of the camera. The Contameter acts both as a special distance meter for near subjects and as a finder, with compensation for parallax.



4. Lens Hood

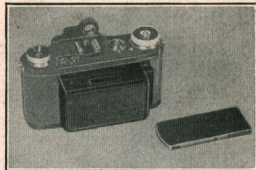
For maximum brilliancy of the pictures it is well to use a lens hood on the camera. This allows of taking most effective "against-the-light" pictures. The lens hood is telescopic and is fitted for use on the three bayonet pins (m). In doing this care should be taken that the spring bow engages properly. In addition a screw-in cylindrical lens-hood is available.



5. Plate Adapter

The Super Nettel is primarily a film camera but can be employed as a plate camera by means of the plate adapter, which is designed to take single metal plate holders. Plates of the required small size of $1\frac{1}{8}'' \times 1\frac{5}{8}''$ may be cut from larger plates by means of the cutting arrangement No. 2006/1.

With the plate adapter in use on the Super Nettel, the back of the camera is taken off and replaced by a second back which carries the adapter. The adapter is supplied complete with back to fit the camera.



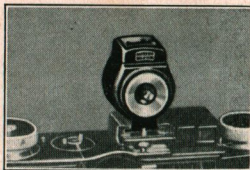
6. Finder on the van Albada System

An optical finder which gives an erect unreversed picture. Clear field of vision. Particularly suitable for fast action pictures. It is simply attached to the finder shoe.



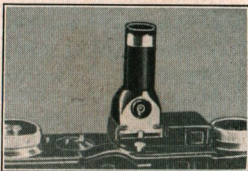
7. Prism finder

A brilliant finder can be swung over which is attached to the ordinary finder shoe. Designed chiefly for exposures at waist level. Gives an upright picture right way round; with the push on magnifier 1352 can be used as an angle finder on turning over on its side.



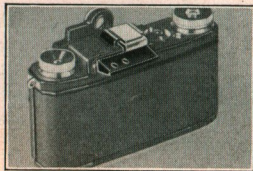
8. Waist-level Finder

This finder which gives an unreversed image is suitable for children and animal photography.



9. Oblique Viewer

A prism attachment by which finder and distance meter may be used at an angle of 60 deg. The camera can be held at a low level when taking horizontal pictures; it can also be held better against the head when the camera is pointed upwards, e. g. for air and other sport objects.



10. Autoknips

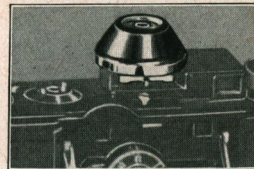
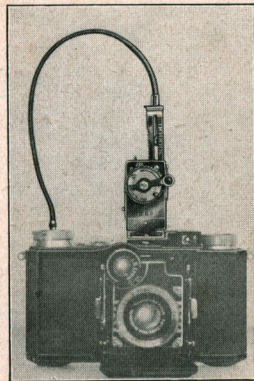
A special self-portrait release by which the user of the camera can include himself in the picture.

11. Holder for mounting sight correcting lenses

A holder for glasses employed for correction of the user's sight. Allows wearers of spectacles to work without them.

12. Level

A spirit level which is simply slid on to the finder shoe and shows when the camera is level. Important for architectural scenes and the like to avoid faulty perspective.



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