

SUPER IKONTA

I
(B)

INSTRUCTION BOOK



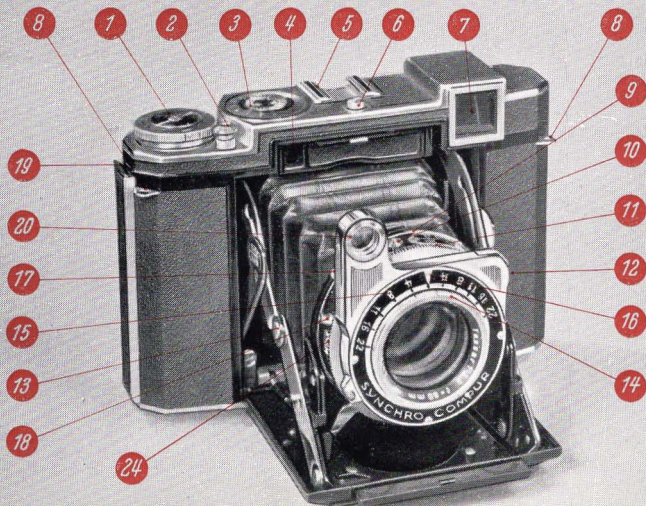
ZEISS IKON A.G. STUTTGART



PARTS OF THE SUPER IKONTA I (B)

- | | |
|--|---|
| 1 Film winding key | 6 Knob for opening camera |
| 2 Shutter release button
(with thread for cable
release) | 7 Window of combined view
and range finder |
| 3 Exposure counter disc | 8 Eyelets for carrying strap |
| 4 Range finder window | 9 Diaphragm setting ring |
| 5 Shoe for optical accessories | 10 Knob for delayed action |
| | 11 Shutter speed setting ring |

Description of parts continued on page 22



The

SUPER IKONTA I

(B)

is a roll film camera of the highest grade taking 11 pictures $2\frac{1}{4}'' \times 2\frac{1}{4}''$ on the usual 120 or 20 (B II 8) wide core. It includes ZEISS TESSAR f/2.8; focusing by coupled distance meter included in one eyepiece with the viewfinder; Synchro-Compur shutter with built-in flash synchronization and delayed action release; and automatic film lock preventing double exposures and blank frames. The SUPER IKONTA I is a precision camera which combines the advantages of the precision miniature camera with the $2\frac{1}{4}'' \times 2\frac{1}{4}''$ negative size.

Small changes on the camera as compared with the description may have been necessary due to the technical development.



FEATURES OF THE SUPER IKONTA I (B)

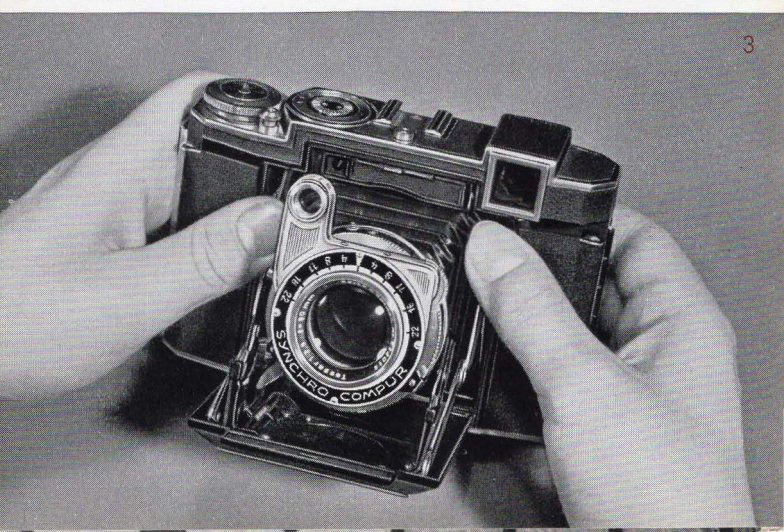
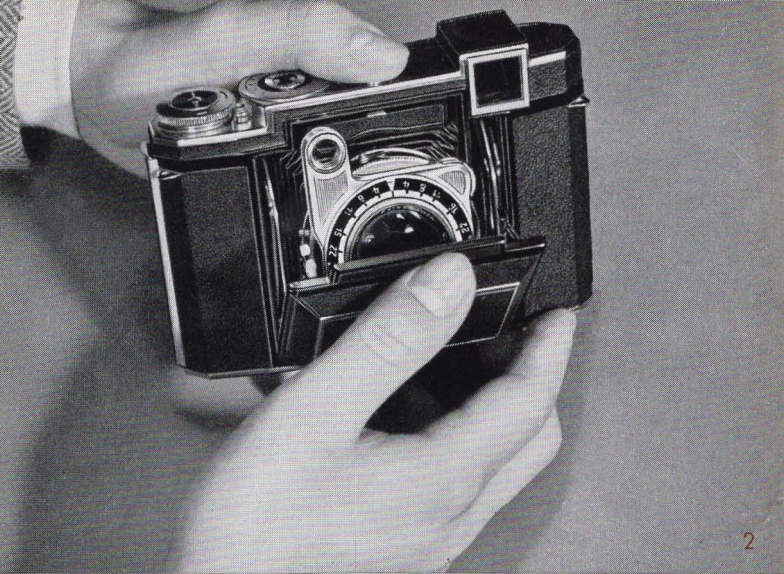
The famous **ZEISS TESSAR** f/2.8 is coated (bloomed) to minimise reflection in accordance with modern practice. It ensures maximum light transmission and the lens is especially suited for colour work as well as giving first class definition and contrast for black and white exposures.

The *rangefinder and viewfinder* are combined in one eyepiece (21) so that both composition and focusing of the image can be carried out together. The sturdy construction of the rotating wedge rangefinder ensures 100 % accurate focusing.

The *Synchro-Compur shutter* is marked in speeds from 1 sec. to $\frac{1}{500}$ sec. with bulb and is equipped with a flash synchronization contact and a delayed action release.

With the *red-dot setting* of the SUPER IKONTA I snapshots can be taken in good lighting conditions without further focusing, because everything between about 13 ft. and infinity is recorded sharply at this setting.

Thanks to all these features the SUPER IKONTA I is suitable for use by amateur and professional photographers, scientists and reporters alike.



OPENING AND CLOSING THE CAMERA

A slight pressure on the knob (6) releases the self-erecting mechanism of the camera, and it will spring into the taking position, providing it is held vertically. If the mechanism should not fully open the camera (because it was held incorrectly) a slight pressure on the bottom will fully extend the struts. Press until the mechanism snaps into place (*Fig. 2*). To close the SUPER IKONTA I take the camera with both hands. Press on the two struts (13) with the two thumbs simultaneously in the direction of the camera body. Then the baseboard moves upward and the camera can be easily closed (*see Fig. 3*). The SUPER IKONTA I may even be closed at any position of the focusing scale, with the shutter set, or with filters fitted on the lens. Thus the camera can be kept instantly ready for use.

SETTING OF EXPOSURE TIME

Turn the milled shutter speed setting ring (11) until the engraved setting mark is directly opposite the required exposure time. The numbers on this scale indicate fractions of a second (*see Fig. 4*), "25" for instance, means $\frac{1}{25}$ of a second, etc. When setting exposure time $\frac{1}{500}$ sec. you will have to overcome a slight additional resistance. For long exposures use setting "B" and employ a cable release to prevent blurring of the picture. For extremely long exposures requiring permanent pressure you may use the plunger

catch of the ZEISS IKON cable release. The shutter is set by lever (17). Except for $\frac{1}{500}$ sec. it does not make any difference whether the exposure time is set before or after setting of the shutter. With the $\frac{1}{500}$ sec. setting the exposure time must be set before the shutter is wound.

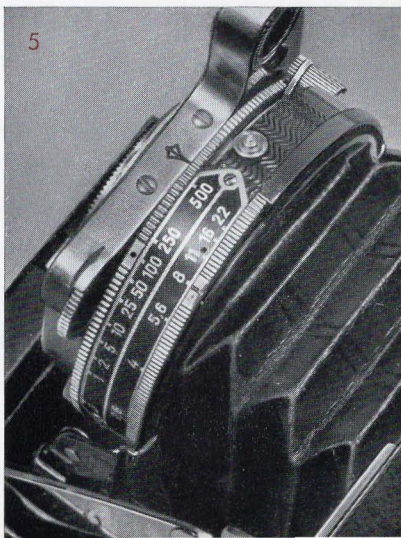


SETTING OF DIAPHRAGM

The diaphragm is set by turning diaphragm setting ring (9) until the desired lens aperture engraving is opposite the setting mark. The setting can be verified from above at a glance (*Fig. 5*).

Reduction of the lens aperture extends the depth of focus of the camera, i. e. objects in front of or beyond the set distance will be recorded more sharply. The actual depth of focus for any focusing setting and lens aperture may be ascertained from the scale provided for this purpose. The various lens apertures are engraved to the left and to the right of the distance scale index mark (16) (*see Ill. 4*).

Example: With a distance setting of 12 ft. and diaphragm setting 8, the number "8" of the diaphragm setting is opposite the 9 ft. mark on the left side and opposite the 18 ft. mark on the right side. Consequently, every object between 9 ft. and 18 ft. will be recorded sharply with diaphragm setting 8 and distance setting 12 ft. The exact figures may be found in the depth of focus table on page 11.



ZEISS IKON

RED-DOT SETTING

Under good lighting conditions, i. e. bright sunshine, the ZEISS IKON red-dot setting may be employed for snapshots. After diaphragm and distance scales are set to the appropriate red-dots no further focusing is required, because with this setting everything from $13\frac{1}{3}$ ft to infinity will be recorded sharply.

Most satisfactory exposure times for this setting are $\frac{1}{25}$, $\frac{1}{50}$ or $\frac{1}{100}$ according to the prevailing lighting conditions.

When set in this manner the SUPER IKONTA I can be closed and is always ready for taking snapshots immediately after opening. Thus the SUPER IKONTA I is the ideal camera for being always ready for action, and no SUPER IKONTA owner should ever miss any subject requiring quick action.



DEPTH-OF-FIELD TABLE

Lens setting	DIAPHRAGM						
	2.8	4.0	5.6	8	11	16	22
inf.	94' 0"	66' 0"	47' 0"	33' 0"	24' 0"	16' 8"	12' 4"
	∞	∞	∞	∞	∞	∞	∞
48'	32' 0"	28' 0"	24' 0"	19' 8"	16' 4"	12' 8"	10' 0"
	97' 0"	173' 0"	∞	∞	∞	∞	∞
24'	19' 4"	17' 8"	16' 0"	14' 0"	12' 4"	10' 0"	8' 4"
	32' 0"	37' 4"	47' 8"	83' 8"	168' 0"	∞	∞
15'	13' 0"	12' 4"	11' 4"	10' 4"	9' 4"	8' 0"	7' 0"
	17' 8"	19' 4"	21' 8"	26' 8"	37' 8"	125' 8"	∞
12'	10' 8"	10' 4"	9' 8"	9' 0"	8' 4"	7' 4"	6' 4"
	13' 8"	14' 4"	15' 8"	18' 4"	23' 0"	39' 4"	41' 8"
9'	8' 4"	8' 0"	7' 8"	7' 4"	6' 8"	6' 0"	5' 4"
	10' 0"	10' 4"	11' 0"	12' 0"	13' 8"	18' 4"	30' 4"
6'	5' 8"	5' 6"	5' 4"	5' 2"	4' 11"	4' 6.5"	4' 2.5"
	6' 4"	6' 6"	6' 10"	7' 0"	7' 8"	9' 0"	11' 0"
5'	4' 9"	4' 8.5"	4' 7"	4' 5.5"	4' 3"	4' 0"	3' 8.5"
	5' 2"	5' 4"	5' 6"	5' 10"	6' 2"	6' 10"	8' 0"



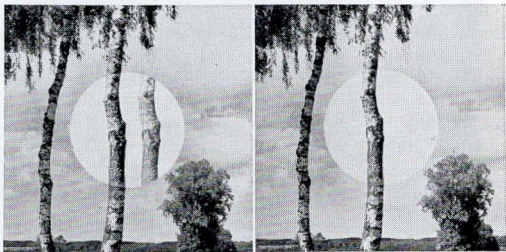
HOW TO HOLD THE CAMERA

In order to obtain negatives of maximum sharpness the camera must be held rigidly during the exposure. It is an advantage of the square $2\frac{1}{4}'' \times 2\frac{1}{4}''$ format that the camera does not have to be turned round for vertical or horizontal pictures. Therefore, there is only one position in which the SUPER IKONTA I has to be held. It is advisable to hold the camera in the palms of the hands with the fingers surrounding it as illustrated. The middle finger of the left hand manipulates the distance setting wheel (12), and the index finger of the right hand releases the shutter (2). When looking through the combined view and range finder with the right eye as in illustration 7, the left eye has to be closed during the focusing. It is much more convenient to focus with the left eye, because then the right eye need not be closed (*see Ill. 8*).

FOCUSING WITH THE COMBINED VIEW AND RANGE FINDER

The viewfinder and the rangefinder of the SUPER IKONTA I have been combined. On looking through the finder eyepiece (21) you see the actual field covered by the camera. In the center of the viewfinder image you will notice a bright circular field, in which part of the object to be photographed appears duplicated. By turning the focusing wheel (12) these double images will come into coincidence. When the images coincide, the lens is accurately focused on the distance of the subject. Sharp vertical objects show coincidence especially easily.

Accurate focusing is particularly required if the full lens aperture $f/2.8$ is used because the larger the lens aperture used the less the depth of field. The exact distance of the object focused on can be ascertained from the scale.



This distance scale reading is particularly useful in showing at the same time the lens aperture which is required to give a particular depth of focus.

RELEASING THE SHUTTER

The shutter is released by pressing down the body shutter release (2) to the limit of motion. The release can only be depressed if

1. the film has been advanced by one picture frame, i. e. if the film winding key has been turned until it locked; and
2. the shutter has been set as described on page 8.

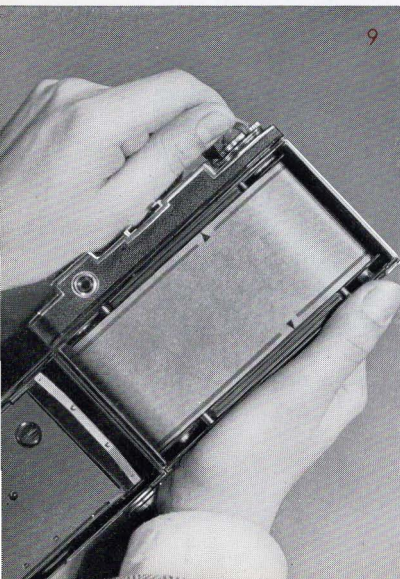
THE BUILT-IN DELAYED ACTION RELEASE

To set the built-in delayed action mechanism, push the button (10) back after setting the shutter. You can then move the shutter setting lever (17) still further over, thereby winding the self-timer. After pressing the body release (2) the clockwork of the delayed action mechanism starts running and, after about 8 seconds, releases the shutter. The delayed action cannot be used when the exposure time $\frac{1}{500}$ sec. or setting "B" are used. It is helpful to use the delayed action for pictures taken with the camera held in the hand with exposure times of $\frac{1}{10}$ of a second or longer. After releasing the shutter it is possible to grip the camera tightly with both hands so that the tendency to blur longer exposures is greatly reduced, especially if the photographer's body has some support, i. e. that he leans back on a wall etc.

LOADING OF THE CAMERA AND SETTING AUTOMATIC FILM STOP

B II 8 (20 or 120) films with the wide diameter spools are used in the SUPER IKONTA I (B). The camera may be loaded in broad daylight. However, in bright sunshine it is advisable to load the camera in the shadow of your body. To load the camera, open the camera back by pushing upward the catch (19). Then pull outwards the spring blade to which is fitted the pool pin and insert the film spool. The feed spool must be inserted in such a manner that the beginning of the red protective paper points toward the take-up spool.

Then slit the label which keeps the protecting paper tightly wound, pull the paper over the picture frame and insert the paper into the long slit of the empty take-up spool. Close the camera back and turn the film winding key (1) until the number "1" appears in the film window (23). Now cover the window by pushing the knob (22) upward.



The exposure counter (3) is set at number "1" by pressing and turning the disc (3) with the finger until it locks. The automatic film stop is now functioning, and after setting the shutter the camera is ready for exposure.

After each exposure the film winding key (1) has to be turned until it locks. At the same time the counter disc (3) advances by one interval, indicating the number of exposures made. After the 11th exposure the film stop mechanism disengages automatically. The film winding key (1) can be turned without locking until the film is completely wound on the take-up spool. It may happen that the mechanism is released before the insertion of a new film, causing the winding to lock. In this case the frame counter need only be turned round to "11". Then the film can be inserted and advanced as described above.



UNLOADING OF THE CAMERA

After the 11th exposure the film stop automatically disengages as soon as the film is advanced further. Consequently, the shutter can no longer be released. When the protective paper of the film is completely wound on to the take-up spool a white ring will appear in the window (23) in the back of the camera. Open the camera by pushing upwards the catch (19). Secure the end of the film and pull the spring blade outwards when the film spool can be removed from the camera.

For re-loading the camera, remove the empty feed spool by loosening the spring blade. Insert this spool into the take-up spool chamber. Test by turning the winding key to see whether the spool rotates smoothly and properly.

FLASH PHOTOGRAPHS

The fully synchronised Compur shutter has provision for two positions (X and M).

After setting synchro-switch (24), exposure time, and lens aperture, cock the shutter, fit the flash cable to contact nipple (18), and insert the flash bulb. On pressing the release (2) the flash bulb is fired in accordance with the synchronisation setting used and the shutter action.

POSITION X

When this position is used, the bulb is fired at the moment when the shutter is wide open. Electronic flashes are always fired with position X.

POSITION M

This position serves for firing flash bulbs, using a pre-ignition that corresponds to the ignition delay of

most flash bulbs. This is the reason why position M allows firing of flash bulbs in conjunction with even the shortest shutter speeds.

The delayed action release can be used for flash photographs in conjunction with the X position. Our table indicates the exposure times to be used with positions X or M for the various types of flash bulbs.

SHUTTER SPEEDS TO BE USED FOR FLASH BULBS

Type of Flash	Synchro-Switch in Position	
	X	M
Osram Vacublitz		
XP, XO	$1 - \frac{1}{50}$	—
F 1, F 2	$1 - \frac{1}{25}$	—
S 0, S 1, S 2	$1 - \frac{1}{25}$	$\frac{1}{50} - \frac{1}{500}$
Philips Photoflux		
Pf 3	$1 - \frac{1}{25}$	$\frac{1}{50} - \frac{1}{100}$
Pf 14, Pf 24	$1 - \frac{1}{25}$	$\frac{1}{50} - \frac{1}{500}$
Pf 25, Pf 45		
Pf 56		
Pf 110	$1 - \frac{1}{10}$	$\frac{1}{25} - \frac{1}{50}$
General Electric Westinghouse		
SM	$1 - \frac{1}{50}$	—
No. 5, 6, 11 } 22, 31	$1 - \frac{1}{25}$	$\frac{1}{50} - \frac{1}{500}$
No. 50	$1 - \frac{1}{10}$	$\frac{1}{25} - \frac{1}{50}$
Sylvania Superflash, Wabash		
SF	$1 - \frac{1}{50}$	—
No. 0, 2 } Press 25	$1 - \frac{1}{25}$	$\frac{1}{50} - \frac{1}{500}$
Press 40		
No. 3	$1 - \frac{1}{10}$	$\frac{1}{25} - \frac{1}{50}$
Electronic flashes	$1 - \frac{1}{500}$	—

ACCESSORIES FOR THE SUPER IKONTA I (B)

THE EVEREADY CARRYING CASE

protects the SUPER IKONTA I (B) from damage. When taking pictures the camera need not be removed from the carrying case.

THE LENS HOOD

is fitted to the camera lens, which it shields from direct light. The lens hood is especially recommended for against-the-light photographs. It may be used in conjunction with filters or supplementary lenses.

FILTERS

In order to give colours their proper values or to obtain special lighting effects ZEISS IKON colour filters may be slipped on (\varnothing 37 mm) to the lens when required. These filters need not be removed when the camera is closed. However, allowance should be made for the filter factor when setting the exposure time. Yellow, yellow-green, orange, red, and ultraviolet filters are available.

SUPPLEMENTARY LENSES

For close-ups, ZEISS PROXAR lenses may be used with the SUPER IKONTA I (B). For objects closer than 5 ft, these supplementary lenses are slipped on to the camera lens. The required setting, scale of reproduction and size of field embraced by the camera may be found from the following table.

Size of picture field and reduction when using ZEISS supplementary lens (Proxar)

Lens setting	Distance	Reduction 1:	Size of picture field
inf.	6' 6 ³ / ₄ "	25.0	4' 8 ¹ / ₂ " x 4' 8 ¹ / ₂ "
48'	5' 9 ¹ / ₄ "	22.0	4' 1 ³ / ₄ " x 4' 1 ³ / ₄ "
24'	5' 1 ¹ / ₄ "	19.5	3' 8 ¹ / ₄ " x 3' 8 ¹ / ₄ "
15'	4' 6 ¹ / ₂ "	17.2	3' 3" x 3' 3"
12'	4' 2 ¹ / ₄ "	15.9	3' x 3'
9'	3' 8 ³ / ₄ "	14.1	2' 8" x 2' 8"
6'	3' 1 ¹ / ₂ "	11.3	2' 1 ¹ / ₂ " x 2' 1 ¹ / ₂ "
5'	2' 8 ³ / ₄ "	10.1	1' 10 ³ / ₄ " x 1' 10 ³ / ₄ "

Proxar f = 2 m

Lens setting	Distance	Reduction 1:	Size of picture field
inf.	3' 3 ¹ / ₄ "	12.9	2' 5 ¹ / ₄ " x 2' 5 ¹ / ₄ "
48'	3' 1 ¹ / ₂ "	11.7	2' 2 ¹ / ₂ " x 2' 2 ¹ / ₂ "
24'	2' 10 ³ / ₄ "	10.9	2' 3 ³ / ₄ " x 2' 3 ³ / ₄ "
15'	2' 8"	10.2	1' 11" x 1' 11"
12'	2' 6 ¹ / ₂ "	9.7	1' 9 ¹ / ₂ " x 1' 9 ¹ / ₂ "
9'	2' 4 ¹ / ₄ "	9.0	1' 8 ¹ / ₄ " x 1' 8 ¹ / ₄ "
6'	2' 3 ³ / ₄ "	7.8	1' 5 ³ / ₄ " x 1' 5 ³ / ₄ "
5'	1' 11"	7.1	1' 4" x 1' 4"

Proxar f = 1 m

Lens setting	Distance	Reduction 1:	Size of picture field
inf.	1' 7 ³ / ₄ "	6.3	1' 2 ¹ / ₄ " x 1' 2 ¹ / ₄ "
48'	1' 7 ¹ / ₄ "	6.0	1' 1 ¹ / ₂ " x 1' 1 ¹ / ₂ "
24'	1' 6 ¹ / ₄ "	5.9	1' 1 ¹ / ₄ " x 1' 1 ¹ / ₄ "
15'	1' 5 ¹ / ₂ "	5.6	1' 3 ³ / ₄ " x 1' 3 ³ / ₄ "
12'	1' 5 ¹ / ₄ "	5.4	1' 1 ¹ / ₄ " x 1' 1 ¹ / ₄ "
9'	1' 4 ¹ / ₄ "	5.2	11 ³ / ₄ " x 11 ³ / ₄ "
6'	1' 3"	4.7	10 ³ / ₄ " x 10 ³ / ₄ "
5'	1' 2 ³ / ₄ "	4.5	10 ¹ / ₄ " x 10 ¹ / ₄ "

Proxar f = 0.5 m

Distance between object and camera is measured from the front rim of the supplementary lens. The depth of focus is sufficient at f/8.

PARTS OF THE SUPER IKONTA I (B)

- | | |
|--|---------------------------------------|
| 12 Setting wheel for range finder and lens | 19 Catch for closing camera back |
| 13 Struts | 20 Rotating wedge range finder |
| 14 Lens mount with focus scale | 21 Eyepiece for view and range finder |
| 15 Depth-of-focus scale | 22 Sliding cover for film window |
| 16 Focusing scale index | 23 Film window |
| 17 Shutter setting lever | 24 Synchro switch |

Numbers refer partly to front-view on page 3



How to Take Care of the **SUPER IKONTA I (B)**

It is advisable to dust the interior of the camera from time to time with a soft camel hair brush. If the lens is dirty, clean it carefully with a soft, well washed, dry linen cloth. Dust particles should be removed beforehand with a soft camel hair brush. The valuable lens should be cleaned only when it is really necessary.

A serial number is engraved on every SUPER IKONTA I, and the ZEISS lens with which the camera is equipped is also numbered. We recommend every SUPER IKONTA I owner to make a record of these two numbers so that in case of loss by theft or otherwise the camera may be identified.





S T U T T G A R T