

KORELLE $2\frac{1}{4} \times 2\frac{1}{4}$

for 12 exposures
on $3\frac{1}{4} \times 2\frac{1}{4}$ ins roll-film

The Chief Thing

before taking a camera into use is to study the instructions sent out with it. If you follow them exactly, you will get lasting pleasure from the satisfactory working of the camera and the latter will not be liable to damage by handling it wrongly.

Korelle Roll-film Camera Instructions for Use

**12 exposures
of $2\frac{1}{4} \times 2\frac{1}{4}$ ins size
on $3\frac{1}{4} \times 2\frac{1}{4}$ ins film**

Items of Manipulation.

- (a) Inserting the film
- (b) Opening the camera
- (c) Setting speed of shutter, stop and distance for focus
- (d) Taking the picture
- (e) Closing the camera
- (f) Removing exposed film
- (g) Setting to hyperfocal distance

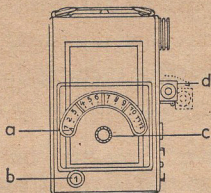
(a) Inserting Film.

Slide the little button (under carrying strap) and turn up the camera back. Put the new spool of film in the lower holder

with the taper end of the wrapping paper pointing towards the upper empty spool. Put the hole in the wooden spool on the stud of the movable holder, press this holder towards the body of the camera with the spool, and incline the other end of the film downwards and release it so that the other hole in the spool engages the opposite stud of the fixed holder.

Now tear off the gummed strip from the spool and draw the taper end over the rollers to the empty spool in the upper holder, and secure the end in place by inserting it in the long slit in the empty spool. Now give a few turns (to the right) of the winding disc on the outside of the camera so as to draw the paper taut from spool to spool. Now close the camera back. The pressure roller of the latter then stretches the paper and - later on - the film. Now again turn the disc of the winding key to the right until

there is seen in the lower red number window *b* in the camera back, first a hand, then some dots and then the figure 1 (see fig.)



- (a) Scale of counter
- (b) Number window
- (c) Setting disc for counter
- (d) Hinged telescope finder

Now **take particular care** to set the pointer of de counter to the figure 1 of the scale, namely with the setting disc *c*. The film is now ready for the first exposure.

(b) Opening the Camera

Push forward the button which will be seen on the side of the camera near the finder. The lens then springs out into position for use, and the cover automatically opens and at the same time adapts itself as a lens shade, so that the picture can be taken, after turning the finder into the working position (see *a* fig. page 5).

(c) Setting Speed of Shutter, Stop and Distance of Focus.

1. Setting of the shutter speed and lens stop is done according to the indications of a good exposure table.
2. Then ascertain the distance of the objekt to be taken and set to this distance on the front mount of the lens.

(d) Taking the picture.

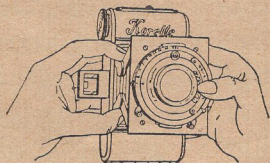
The foregoing adjustments having been made, the picture is taken by operating the shutter by gently pressing the

trigger or cable release. By so pressing, the shutter opens inside, and the light passes through the lens to the film. It is best to use the cable release, as this avoids shaking the camera and giving fuzzy pictures.

The first exposure having been made, turn the disc of the winding key further to the right until the pointer of the counter stands exactly at the dot under the figure 2 of the scale on the camera back. (a) The film is now in place for the second exposure. Proceed in this manner until the pointer reaches the last figure 12 on the counter scale. It is found advisable not to wind on the film with the winding key immediately the first exposure has been made. It is better to defer this operation until shortly before making the next exposure, as the film is especially affected, as regards flatness, by atmospheric conditions, as also by proximity to the human body.

(e) Closing the Camera.

Place the cover (lens shade) over the lens and shutter, whereupon it automatically remains in place. Now with the thumb and first finger, press together

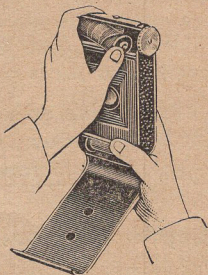


the two struts, as shown in the drawing, taking care not to catch the leather bellows, and then press the cover against the camera. A distinct snap into place will indicate that the camera is closed.

(f) Removing Exposed Film.

The last exposure (No 12) having been made, turn the winding disc until the end of the red wrapping paper is seen in the


lower red window. Then open the camera back, and hold the end of paper firmly with the hand whilst turning the winding key further, thus coiling the paper close on the upper spool. Stick down the end with the gummed strip provided.



By now pressing out the spring holder against the camera body by means of the exposed spool, the latter can easily be removed.

Needless to say, the spools of film can be changed in daylight, but it is well to shield the camera from actual direct sun.





(g) Setting to Hyperfocal distance.

With any lens, there are three ways of setting for focus on distance:

(a) *Setting on „infinity“ (∞)*

(b) *Setting on „near“*

(c) *„Near Setting“ on infinity (∞)*

Depth of Focus with Camera Lens

(a) *When setting to „infinity“ (∞). The depths of focus corresponding with the various stops are given in the bottom line of the table on p. 15.*

(b) *In like manner, when setting to „Near“, the depths of focus applying to the various distances marked on the distance ring are given by the same table.*

The permissible unsharpness (disc of confusion) adopted for this table is $1/1200$ of the focal length viz $1/16$ mm = $1/400$ inch.

(c) *The setting to the „hyperfocal distance“ is of special importance. With this setting, the basis is not critical sharpness of the extreme distance (infinity plane), as in (a), but of a nearer plane, thereby extending the range over which sharpness is obtained.*

The distance (from the camera) of this nearer plane is known as the „hyperfocal distance“ for any combination of focal length and lens aperture.

Setting to the „hyperfocal distance“ when using any stop gives the maximum range of sharpness from a particular near point to infinity. Hence one obtains the greatest range of sharpness consistent with the largest lens aperture, and, therefore, shortest exposure. This is the method to adopt whenever it is desired to obtain both the nearest and furthest objects in sharp focus and also to give the shortest exposure.

Those understanding the use of this

method will have no cause to complain of unsharp foregrounds, even though using large stops.

The pictures will be sharp throughout.

For this purpose, set for distance as follows:

1. For stops $f/2.9$ and $f/3.5$ { to first line
before ∞ viz 32 m
2. For stop $f/4.5$ { to second line
before ∞ viz 25 m
3. For stop $f/5.6$ { to third line
before ∞ viz 20 m
4. For stop $f/8$ to 15 m (=50 ft)
5. For stop $f/11$ to 10 m (=33 ft)
6. For stop $f/16$ to 6 m (=20 ft)

Sharpness in the picture will then extend.

1. With $f/2.9$ & $f/3.5$ from 16 m (53 ft) to ∞
2. With $f/4.5$ from 12 m (40 ft) to ∞
3. With $f/5.6$ from 10 m (33 ft) to ∞
4. With $f/8$ from 7 m (23 ft) to ∞
5. With $f/11$ from 5 m ($16\frac{1}{2}$ ft) to ∞
6. With $f/16$ from 3 m (10 ft) to ∞

For the stops, $f/3.5$ to $f/11$, chiefly used, the basis of above data is a permissible unsharpness of $1/20$ mm = $1/500$ inch. For $f/2.9$ and $f/16$, the basis is $1/17$ mm = $1/420$ inch.

(These data are embodied in the Hyperfocal Distance table, page 15.)

In cases where the above - mentioned values for the near distances (for equivalents in ft, see above), viz 16, 12, 10, 7, 5 and 3 meters, would be less than those for the respective stops, it is permissible, in the extreme case, having regard to a greater degree of enlargement, to go as far as:

- (a) Stop f|2.9 - first line before ∞ (32 m)
Sharpness extends from 16 m (53 ft)
to ∞*
- (b) Stop f|3.5 - second line before ∞
(25 m)
Sharpness extends from 12 m (40 ft)
to ∞*
- (c) Stop f|4.5 - third line before ∞ (20 m)
Sharpness extends from 10 m (33 ft)
to ∞*
- (d) Stop f|5.6 - set to 15 m
Sharpness extends from 7.5 m ($24\frac{1}{2}$ ft)
to ∞*
- (e) Stop f|8 - set a little before 10 m
Sharpness extends from 5.5 m (18 ft)
to ∞*
- (f) Stop f|11 - set to 8 m
Sharpness extends from 4 m (13 ft)
to ∞*
- (g) Stop f|16 - set to 8 m
Sharpness extends from 3 m (10 ft) to ∞*

For the stops from $f/3.5$ to $f/11$, the permissible unsharpness is from $1/15$ to $1/16$ mm; for $f/2.9$ and $f/16$, as stated, it is $1/17$ mm. As a rule, however, the setting on hyperfocal distance is confined to the values given in the table on page 15.

General.

The Korable is of such construction and workmanship that it will remain in proper condition indefinitely with reasonable care. But the camera should not be carried about except in a purse or leather case for protection from damage. To preserve the good appearance of the camera, the case must be clean. Both should be cleaned occasionally. For cleaning the camera, the best thing is a small brush, with which dust should be dislodged from all corners. Special attention should be given to a clean condition of the film stage and rollers, otherwise the emulsion surface may easily be damaged.

Hyperfocal Distance Table.

Setting to Hyperfocal Distance					
Stop	Sharp from to				
f 2,9	} first	} line	} before ∞	} 16 m (53 ft)	∞
f 3,5					
f 4,5					
f 5,6	} second	} before ∞	} 10 m (33 ft)	∞	
f 8					to 15 m
f 11		to 10 m	5 m (16 1/2 ft)	∞	
f 16		to 6 m	3 m (10 ft)	∞	

After closing the back, turn the disc of the winder to the right until there appears, in the lower red window of the camera back, first a hand then some dots and then the figure 1. Then film is now ready for the first exposure. In doing this, turn so that the figure 1 is central in the window.

When using for this camera the new Pan-film 26⁰ shut – after having brought the film to number 1 in the red number-window – the window-lock over this, by pushing the bolt.

Depth of Focus Table. Focal length = 3 ins

Distance focused on		Stop (lens diaphragm)															
		f/2.9 sharp		f/3.5 sharp		f/4.5 sharp		f/5.6 sharp		f/8 sharp		f/11 sharp		f/16 sharp		f/22 sharp	
		from	to	from	to	from	to	from	to	from	to	from	to	from	to	from	to
m	ft	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins
1	3	—39	—40	—38	—41	—38	—41	—37	—42	—37	—43	—35	—45	—34	—48	—32	—53
2	7	6 2	7 —	6 1	7 2	5 10	7 4	5 9	7 7	5 6	8 1	5 4	8 8	4 11	10 2	4 6	12 9
3	10	8 11	11 —	8 9	11 3	8 5	11 10	8 2	12 4	7 8	13 5	7 3	15 7	6 5	21 4	5 6	36 —
4	13	11 6	15 3	11 3	14 1	10 8	16 11	10 4	17 10	9 8	20 8	8 10	25 7	7 8	46 —	6 6	∞ —
5	17	13 11	19 10	13 15	20 8	12 9	22 7	12 14	24 7	11 4	29 10	10 2	42 8	8 6	151 —	7 4	∞ —
6	20	16 3	24 10	15 9	26 3	14 9	29 6	14 1	32 9	12 9	42 8	11 2	72 —	9 6	∞ —	8 —	∞ —
7	23	18 4	30 2	17 8	32 5	16 5	37 8	15 9	42 8	14 1	62 —	12 6	158 —	10 2	∞ —	8 6	∞ —
8	26	20 8	36 5	19 8	39 5	18 2	46 —	17 —	56 —	15 3	98	13 3	∞ —	10 9	∞ —	8 10	∞ —
10	33	24 4	50 2	23 4	56 —	21 —	72 —	19 8	105 —	17 3	∞ —	14 9	∞ —	11 10	∞ —	9 6	∞ —
15	50	32 5	99 —	30 2	134 —	27 —	275 —	24 6	∞ —	20 10	∞ —	17 5	∞ —	13 5	∞ —	10 6	∞ —
∞		95 —	— ∞	79 —	∞ —	59 —	∞ —	49 —	∞ —	36 —	∞ —	27 —	∞ —	18 4	∞ —	13 —	∞ —

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