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# KODAK

You can get
'Kodacolor'
prints
this size
through your
Kodak dealer

Kodak, Kodacolor, Kodisk, Kodaflector, Verichrome, Tri-X, Panatomic-X are trade marks

# films for your KODAK 66 CAMERA model II

'Kodacolor' Film: After exposure, this film is developed to give colour negatives which are then printed to produce large-size prints on paper. The speed of 'Kodacolor' Film is comparable with that of fine-grain black-and-white films; it can be used, without light filters, either in daylight of with clear flashbulbs as the only source of light. It has such a wide exposure latitude that inexperienced users will find no difficulty in achieving a high proportion of satisfactory colour prints.

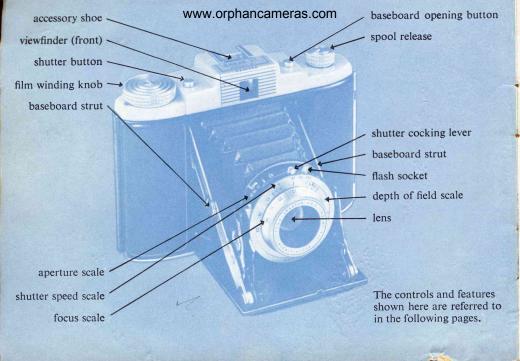
'Verichrome' Pan Film. A general-purpose film for photography under almost all daylight conditions or by artificial light – either flash or flood. High speed, great exposure latitude and balanced colour sensitivity ensure the highest proportion of successful pictures. Excellent enlargements can be made from negatives on this film.

'Panatomic-X' Film. This medium-speed panchromatic film has an unusually thin-coated and fine-grain emulsion, and is capable of producing negatives of extreme image sharpness. This will only be appreciated to the full when high magnification enlargements are made.

'Tri-X' Film. A very fast film of balanced sensitivity and capable of image sharpness quite remarkable in a film of this high speed. For use under difficult daylight conditions, or by Photoflood light, and for flash photography in large halls or out-of-doors at night.



This is the size of negative that this camera produces – 2½ inches square. Black-and-white prints can be made to ary size. Use only 120 size film.



# Practise the basic operations of your camera before you load with film

Press the OPENING BUTTON - the camera springs ready for use.

Move the COCKING LEVER away from the flash socket – until it locks.

Hold the camera as shown, firmly but comfortably, with your finger over the SHUTTER BUTTON.

Look through the VIEWFINDER – keep it close to your eye so that you see all four sides of the front of the finder. It is the front that frames the view that the camera will take.

To take a picture press the SHUTTER BUTTON down – gently, so as not to jerk the camera.

After taking a picture, wind the film on by turning the WINDING KNOB (there is more about this on page 9, when you have a film in the camera).

To close the camera, press down on the centre hinges of both STRUTS and close the BASEBOARD until it latches.



# Loading a 120 film into your camera

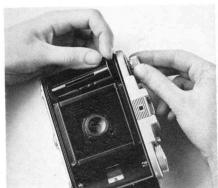
1

Always load and unload with the camera and film well shaded from bright light.
Slide out the LATCH in the bright-plated end of the camera. Lift open the camera back.



Pull on the SPOOL RELEASE knob and give a quarter-turn to hold it out. After exposing each film, the empty spool is left in this recess; take the spool out.



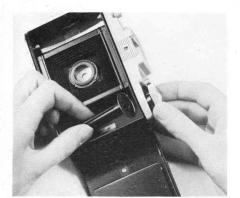


3

Turn the WINDING KNOB anti-clockwise and draw it outwards. Put the empty spool in this recess, slipping one end on to the bearing pin opposite the knob. Push the knob in while turning. Make sure the key engages the slot in the spool end.



Fit the new 120 film into the empty recess, with the tapered end of the coloured backing paper on top, and pointing towards the empty spool. Press the spool down and turn the spool release knob until the spindle springs into the end of the spool.

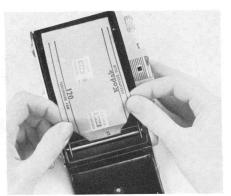


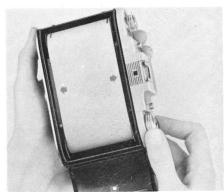


Break the paper seal, and draw the backing paper across to the empty spool. Thread the tapered end as far as it will go through the longer of the two slots in the spool until it protrudes through the other side. Centre the paper carefully on the spool.



Give the winding knob three *full* turns, making sure the paper winds evenly between the flanges of the spool. When the backing paper is wound to the position shown, see that the latch is still 'open', then close the camera and slide the latch in.





Keep on turning the winding knob while watching the red window. You will first see a warning arrow pass the window, followed by the name of the 'Kodak' film. After this comes the figure '1' – when it is centred in the window, you can take the first picture.



# After taking the 12th picture

Turn the winding knob until the end of the film is well past the red window. In a shaded place, open the camera. Pull out the winding knob. Press sideways on the spool flange away from the winding knob, and keep the film tightly wound as you lift it out. Fold under the



tapered end of the backing paper and seal it with the gummed strip. Keep the film out of bright light until you hand it to a Kodak dealer for developing and printing.

9

# Snapshot settings for a simple life

Lens focus '15' Shutter speed '75' VERICHROME PAN aperture '11' KODACOLOR aperture '8' man Shutter

If you want to see some results from this camera quickly, expose your first film according to the following simple rules. *They apply only if the sun is shining*. Even when you have discovered all the possibilities of this versatile camera you will find that these settings will do justice to an astonishingly high proportion of the subjects you wish to photograph. Leave your camera on these settings and you are ready for action when there is little time to think!

**Don't forget:** after every snap, wind on the film until the next number comes into the red window.

# Focus for sharp pictures

With the lens focused at '15', as recommended for snapshots, the sharpest part of a picture will be that showing a subject that was 15 feet from the camera. To be sure of the sharpest picture of any subject, first estimate its distance in feet from the camera, and turn the lens focus scale to the corresponding figure.

But, in practice, a sharp enough picture will be made of objects some distance nearer and farther than the point for which the lens is focused. The range of distances 'in focus' is called *depth of field*. This 'field' varies in depth according to the distance focused upon, and according to the lens aperture setting.

The scales on the camera show you the depth of field for any camera setting. Having set the focus distance, look on both sides of the diamond pointer for the numbers that correspond to the aperture setting; these numbers indicate, on the focus scale, the depth of field. As an example, the diagram shows that, with the 'snapshot setting' (15 feet and aperture '11'), the depth of field is from about 9 to 40 feet.

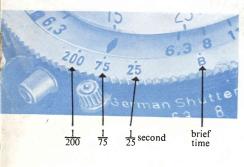


# Lens apertures and shutter speeds



The light necessary for taking photographs will vary in brightness according to the weather, time of day and season. Subjects themselves vary a lot in brightness. These variations have to be allowed for in setting the camera controls if you want perfectly exposed pictures. Both the lens aperture and shutter speed controls have an effect upon the exposure. Settings suitable for various circumstances are given in tables later in the book.

In poor light you may have to move the LENS APERTURE pointer to '6.3', to set the aperture wide open (just as the iris of *your* eye opens in dim light). In bright light, or to get a large depth of field, you might use the '16' or '22' setting. Settings that give half or double the exposure of their neighbours are said to be '1 stop' apart. You *can* set the aperture anywhere between the marked settings. Aperture numbers are usually written with an 'f' in front: f/8, f/16, etc., though the f is not used on the camera or in the tables in this manual.



Turn the SHUTTER SPEED ring to bring the desired 'speed' opposite the pointer. Do *not* set between the marked speeds. Wind the shutter by pushing the COCKING LEVER across until it locks. Press down the SHUTTER BUTTON to take the picture.

The exposure times given by each speed setting are shown in the diagram. Most commonly used is '75'. In bright light, use '200' to be more sure of sharp pictures of moving subjects. In poor light you may need '25'.

Note that high scene brightness is allowed for by setting a high number for aperture and speed. Low brightness requires low setting numbers.

If you have no flash equipment in very bad light you will need to set the shutter to 'B' for a 'time' exposure. The camera and the subject must be stationary. The camera can be held rigidly on a tripod screwed into the TRIPOD BUSH, and the shutter released without a tremor by means of a CABLE RELEASE. This should have a standard tapered thread, which will screw into the SOCKET provided.

# Deciding exposure settings

The most successful photographs are the result of careful consideration of lighting and exposure. The tables later in this book suggest settings which will ensure the correct level of exposure for most normal subjects. But the same exposure level can be obtained from different combinations of aperture and shutter speed. The most suitable combination depends on what you are wishing to photograph.

Setting the shutter one step higher (e.g. '25' to '75') requires the aperture lever to be moved one-and-a-half 'stops' to a lower number (e.g. from '16' to between '8' and '11') to keep the exposure constant.

A fast-moving subject will need a *higher* speed than normal. This must be compensated for by setting a *lower* aperture number.

To bring near and far objects into sharp focus, a *higher* aperture number may be needed. This will entail setting a *lower* speed.



# For pleasing pictures

- Hold the camera still. Press the shutter button gently. Do not jerk when you release the shutter. You can support the camera steadily on a tripod, or on a firm flat surface.
- Hold the camera straight and level: judge this from the horizon or vertical buildings.
- Generally, stand with the sun behind and to one side of the camera for good modelling. If the sun is directly behind the camera, the even lighting tends to flatten contours, and dazzle the subject, while your shadow may be cast on the foreground of the picture.
- Make sure that the sun never shines directly on to the lens. A lens hood is essential for 'against the light' photographs.
- With distant scenes, include a nearby figure or some object in order to give scale and depth to the picture.
- With close-ups, keep the subject away from the top of the viewfinder, or you may cut off some of the desired picture.

- Watch the background if it is not important, keep it plain. To bring your subject against the sky, hold the camera low, e.g. take the photograph from a kneeling position.
- Preferably, take fast-moving subjects approaching or receding, rather than passing close in front of you unless you follow the movement by swinging the camera.
- Wind on to the next film number as soon as you have taken a picture, but do not cock the shutter until you want to take another picture.
- Keep the lens clear of dust, finger-prints or spray; if necessary, gently wipe with a camelhair brush or a clean, soft cloth. Never use silicone-treated lens cleaning tissues. Dust out the inside of the camera regularly.
- Keep the camera protected, yet ready for use, in the specially designed carrying case that your Kodak dealer can show you.

# Lens accessories

A range of simple accessories in the 'Kodisk' series is available to help to improve your photographs. Size 320 accessories may be fitted singly, or in any combination, on to the lens focus ring.

Filters: 'Kodacolor' Film: With this film, filters are unnecessary for daylight or flashbulb photography: Do not use any filters other than those which may be specified in the current instructions for 'Kodacolor' Film.

Black-and-white film: A 'Kodisk' Cloud Filter slightly darkens the blue of the sky and so makes clouds and other subjects stand out

against it. Your dealer will tell you the uses of other 'Kodisk' Filters.

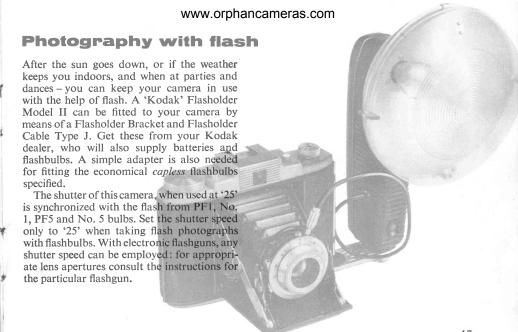
Close-up lens: Your camera already focuses as close as 3½ feet; add a 'Kodisk' Close-up Lens and you will be able to photograph objects between 22 and 40 inches from the camera, e.g. for table-top models or flower studies.

Lens hood: It is important to prevent the sun from shining on the lens, so, when you are taking against-the-light shots (particularly when using a filter or close-up lens) fit a lens hood. When ordering 'Kodisk' filters, close-up lens, or lens hood, ask for size 320.









### Flash indoors after dark

Use clear flashbulbs for black-and-white and 'Kodacolor' films indoors. Set the shutter to '25', to use all the flash. The lens aperture should be varied according to the distance of the flash from the subject.

The table opposite gives all the camera setting information you need to get good results. Three films and the two most popular sizes of flashbulbs are listed. The table assumes normal subjects in average sized rooms.

Out of doors at night, or in large rooms, and for darker than usual subjects or surroundings, preferably use the next lens aperture higher up in the table. In a small room with light walls you can use the next lens aperture lower down the table.

Bounced Flash gives softer, more natural results, without the hard shadows that direct flash often produces. Detach the Flasholder from the camera (leave the cable connected), then direct the Flasholder at a nearby light wall, or a large white card, or at the ceiling. The lens should be wider open by 2–3 steps higher up in the table.





### **Direct flash**

Set shutter to '25'
In the appropriate film and flashbulb column find the most suitable flash distance
Then read off the lens aperture (at either side of the table)

Lens aperture	'Kodaco PF1 No.1	PF5 No. 5	'Verich PF1 No.1	rome' Pan PF5 No. 5	'Tri-X' PF1 No.1	PF5 No. 5	Lens aperture
6.3	9ft	15ft	14ft	20ft	18ft	_	6.3
8	7ft	12ft	11ft	18ft	17ft	<del>-</del>	8
11	5ft	8ft	7ft	13ft	12ft	20ft	11
16	3.5ft	6ft	5ft	9ft	8ft	14ft	16
22	_	4ft	3.5ft	6. <b>5</b> ft	6ft	10ft	22

The distances for 'Kodacolor' can be used for 'Panatomic-X' Film
This table is for normal subjects in average sized rooms; for other conditions see opposite page

# Fill-in flash with sunlight

Direct sunlight usually gives harsh shadows, and most people tend to screw up their eyes when facing it. You can turn the subject round so that the sun is at the side and no longer dazzling. Then, to brighten the heavy shadows, use the fill-in flash method. Use a PF1 or No. 1 flashbulb for black-and-white films, but only blue bulbs PF1/97 or 1B for 'Kodacolor' film. Set the shutter to '25'.

The camera with Flasholder should be between 6 and 10 feet from your subject depending on how bright you wish the shadows to be. Use the table below. The nearer you are, the brighter will be the shadow.

For distances 3.5-6 feet, drape one thickness of a white handkerchief over the Flasholder.

'Tri-X' Film is not included as it would be over-exposed if used on '25' in bright sun. With electronic flash, however, there is no limitation upon the shutter speed, and 'Tri-X' Film can then be used with a shutter speed of '200' and aperture of '16'.

#### At 6-10 ft in bright sun - shutter set at 25

At 0-10 II, in Dright sun - Shutter set at 25					
PF1/97 or No.1B	'Kodacolor'	lens 16			
PF1 or No.1	'Panatomic-X'	16			
PF1 or No.1	'Verichrome' Pan	22*			

<sup>\*</sup>Preferably with a 'Kodisk' Cloud Filter over the lens





### Photoflood indoors

For portraiture, table-top work and indoor subjects not likely to move rapidly, the use of Photoflood lamps will allow greater control over lighting than with flash. Moreover, Photoflood lamps will enable you to judge the effect before exposure.

It is possible to use one No.1 Photoflood lamp in a 'Kodaflector' Standette and a white card reflector (explained in the 'Kodaflector' instruction book). The 'Kodaflector' Assembly allows more flexible lighting set-ups. It consists of two lamps on an adjustable stand which can be raised to 7 feet or lowered almost to the ground. Use the Assembly as the main lighting (above and to one side of the camera) and the Standette close to the camera to relieve the shadows. This is the arrangement assumed in the table below.



#### Lamp-to-subject distance in feet

	shutter	lens 6.3	8	11	16
'Verichrome'	5	4	3	2	
'Verichrome' Pan Film	<i>75</i>	3	4 2.5	_	
	25	8	6	4.5 2.5	3
'Tri-X' Film	75	5	3.5	2.5	_

# Shutter and lens aper WWW.companGamacas.com hite daylight photography

assuming front lighting of the subject (sun behind camera) for use from one hour after sunrise to one hour before sunset winter settings in the table assume no snow is present

		Shutter setting.	s: black figures	Lens aperture settings: blue figure		
		Bright sun sharp shadows	Hazy sun soft shadows	Cloudy bright no shadows	Dull or shaded open to sky – NOT in sun	
ž.	'Verichrome' Pan	75 16	75 11	<b>75</b> 8	75 6.3	
Summer	'Tri-X'	200 16	200 11	200 8	75 11	
SE	'Panatomic-X'	25 16	25 11	25 8	25 6.3	
//inte	'Verichrome' Pan	75 11	75 8	75 6.3	25 8	
	'Tri-X'	200 11	200 8	75 11	75 -8	
	'Panatomic-X'	25 11	25 8	25 6.3	_	

Side or back lighting of close-up subjects – in bright sun – set shutter to next smaller number, or set lens aperture to one or two numbers smaller.

Early or late (within one hour of sunrise or sunset) set the shutter or the lens aperture to the next smaller number.

Snow scenes in winter can be exposed as summer subjects.

### Lens aperture settings for 'Iwww.orphancameras.com

assuming front lighting of the subject (sun behind camera) for use from two hours after sunrise to two hours before sunset winter settings in the table assume no snow is present

	Shutter setting	Summer and Bright sun	in tropics Hazy sun	In winter n Bright sun	onths Hazy sun
Average subject in	75 or	8	6,3	6.3	- 1
normal surroundings	25	16	11	11	8
Light colours and surroundings	75	11	8	8	6.3
Rich colours and dark surroundings	25	111	8	8	6.3

Side or back lighting of close-up subjects – in bri sun – set shutter to next smaller number, or set lens aperture to one or two numbers smaller

Snow scenes in winter can be exposed as light subjects in summer.