YASHICA

TWIN-LENS REFLEX CAMERA

YASHICA 24

INSTRUCTION BOOKLET

66



Your Yashica 24 is the newest model of the Yashica Twin-Lens Reflexes. It provides the amazingly advanced features, such as

* Fabulously sharp f/3.5 lens for color picture-taking,
* High precision Match-Needle CdS exposure meter for fool-proof exposure control,
* Ultra-luminous large focusing screen plus automatic film transport for rapid and easy shooting regardless of your subjects,

and affords you the use of an unusual new 220 film.

Now, you are ready to use a 220 film which makes 24 ($2\frac{1}{4}\times2\frac{1}{4}$-in.) exposures per roll.



Your Yashica 24 is very easy to operate — its automatic picture-taking system gives you the absolute security that you need for your creative photos.

DESCRIPTION



Focusing Hood Cover
Sportsfinder Frame
ASA Window
Exposure Meter Window
ASA Film Speed Setting Wheel
Light Gathering Window
Neckstrap Eyelet
Exposure Counter
Flash Socket
Aperture/Shutter Speed Window
Viewing Lens
Shutter Speed Control Wheel
Aperture Control Wheel
Film Winding Crank/Handle
Taking Lens
Shutter Release Button
Back Cover Locking Bar

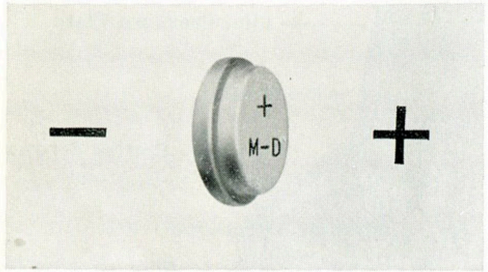


Spool Locking Knob
Focusing Knob
Synchro Selector
Exposure Meter Switch
Spool Locking Knob
Self-Timer

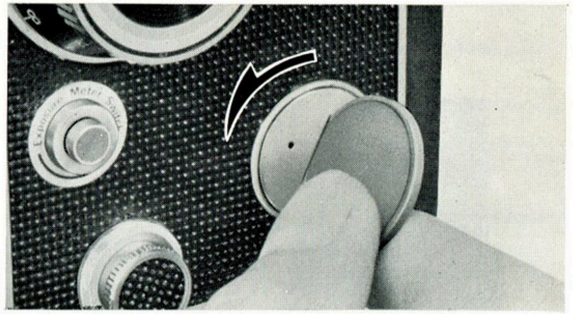


Back Cover Locking Ring
Film Pressure Plate
Starter Arrows
Film Tension Spring
Mercury Battery Cover

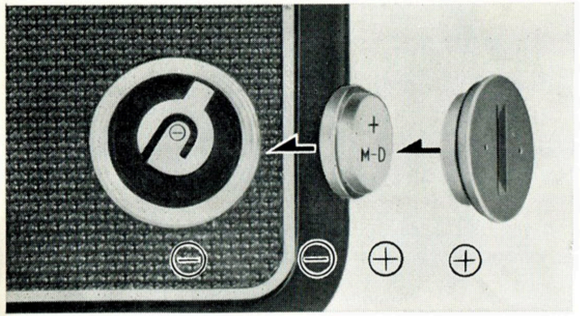
LOADING MERCURY BATTERY



The CdS exposure meter incorporated in your Yashica 24 requires a 1.3-volt mercury battery, Mallory PX-13B, Eveready EPX-13 or equivalent.



1 Unscrew the coin-slotted Battery Cover in the direction of the arrow.



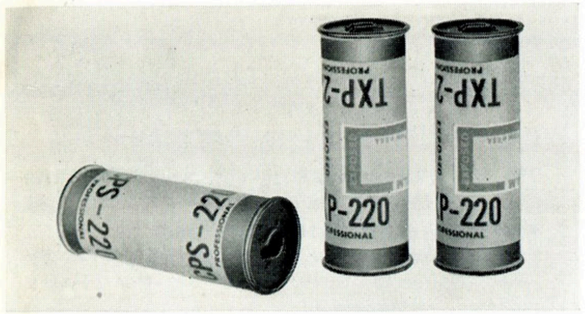
2 Drop the battery in the Battery Compartment as illustrated—the plus pole (+) *up*; the minus pole (−) *down*—then, close the Cover.

CAUTION ON MERCURY BATTERY

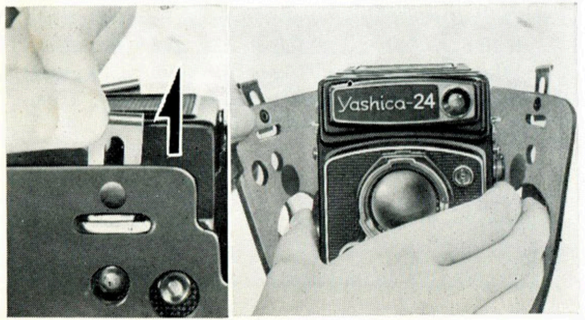
The CdS exposure meter activates when the Exposure Meter Switch is pressed. When not pressed, it prevents battery drain.

* When the meter does not activate even by depressing the Switch, it shows the battery should be replaced.
* Do not disassemble the battery.
* Do not throw any used mercury battery into a fire or where children can get hold of it.
* When the camera is not in use for a long period of time, remove the battery and store it in a cool, dry and safe place.

LOADING FILM (1)

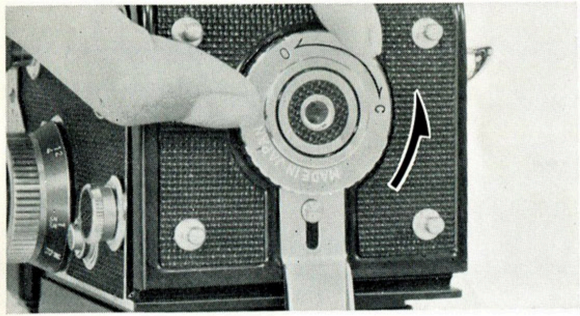


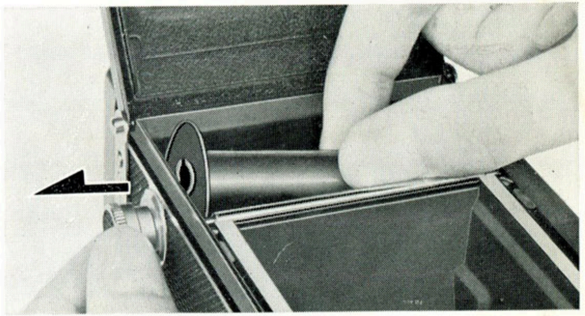
Your Yashica 24 is used with the 220 film (6×6 cm). This film is designed to provide 120 image size but with twice the usual number of frames per roll.



To remove the camera from the carrying case for film loading, raise the two metal Lock slides at the top of the camera and spread the sides of the case apart. Then, lift the camera.

You should load a film in subdued light, never in direct sun light.

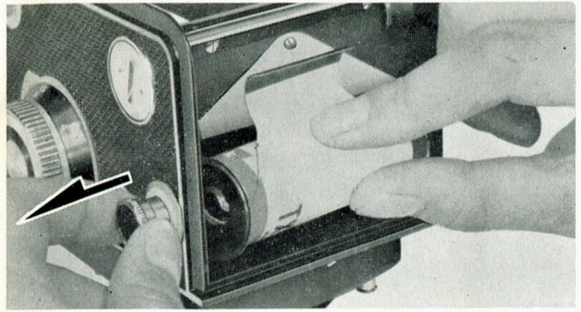




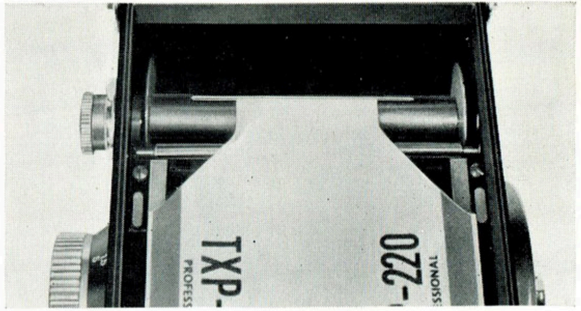
[1] Turn the Back Cover Locking Ring on the base in the direction of the arrow marked "O" and the Cover will pop open.

[2] Remove the Take-up Spool in the Lower Film Chamber by pulling out the Lower Spool Locking Knob. Place the Take-Up Spool in the Upper Film Chamber by pulling out the Upper Spool Locking Knob.

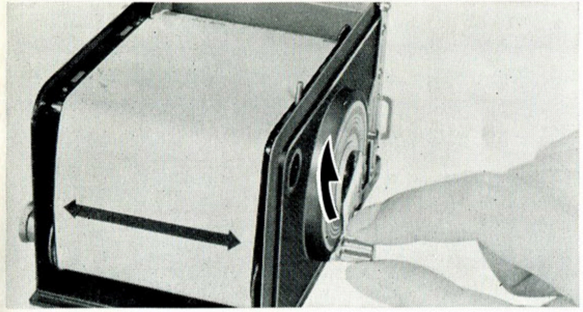
LOADING FILM (2)



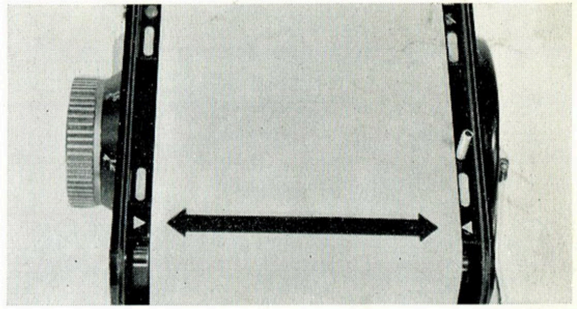
3 Place a new roll of 220 film in the Lower Film Chamber.



4 Gently draw out the film leader and thread it firmly and evenly into the spool slot.

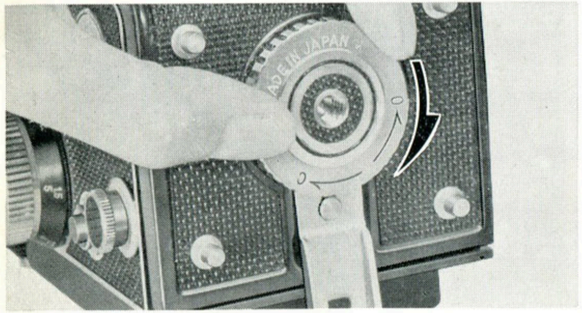


5 Gently wind the Crank in the direction of the arrow.

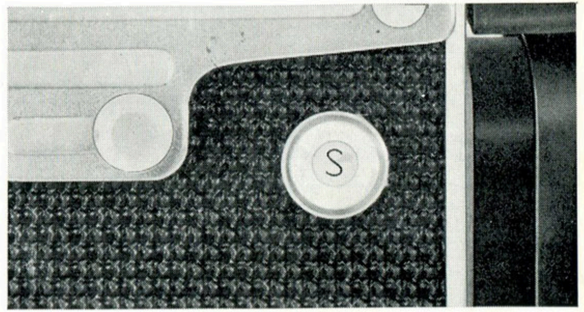


6 Advance the film by winding slowly the Crank until the arrows on the film are opposite the Starter Arrows on either side of the camera.

LOADING FILM (3)

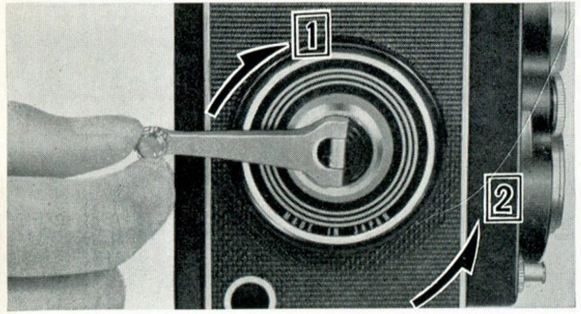


7 Close the Back Cover and lock it by turning the Locking Ring in the direction of the arrow marked "C".



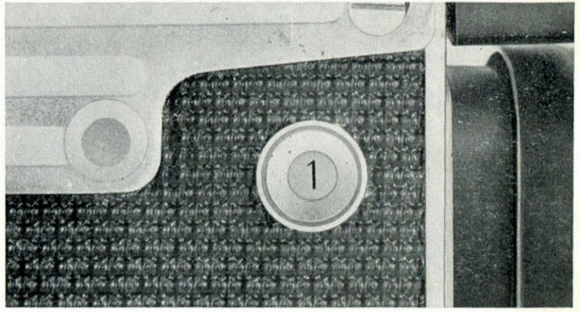
8 The letter "S" appears in the Exposure Counter Window.

> The Film Exposure Counter is automatically reset to 'S' when the Back Cover is opened.



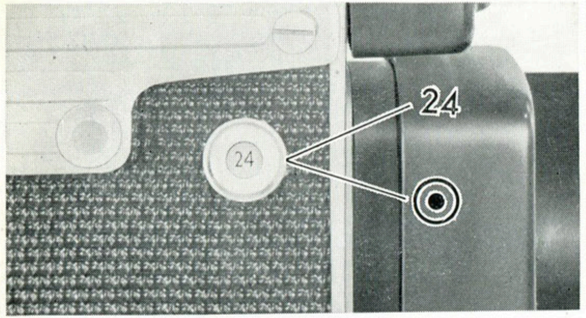
9 (1) Wind the Crank clockwise until it stops. The figure "1" appears in the Window.

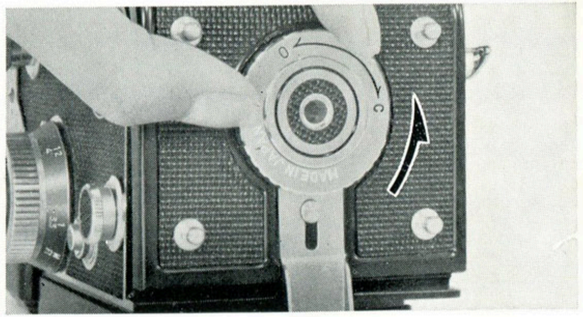
(2) Wind the Crank counter-clockwise until it stops.



10 The shutter is set and you're ready to shoot your first picture.

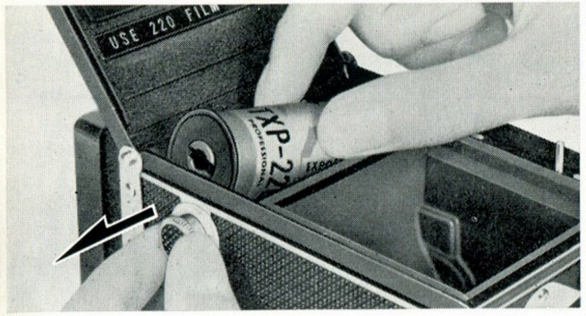
UNLOADING FILM

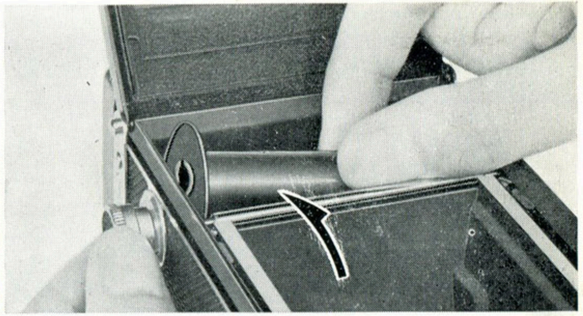




[1] After all 24 exposures have been taken, wind the Crank as far as it will go, until "⊙" mark appears in the Window and continue turning the Crank about another 3 turns to wind off the trailer of the film.

[2] Rotate the Locking Ring in the direction of the arrow marked "O", and the Back Cover will pop open.

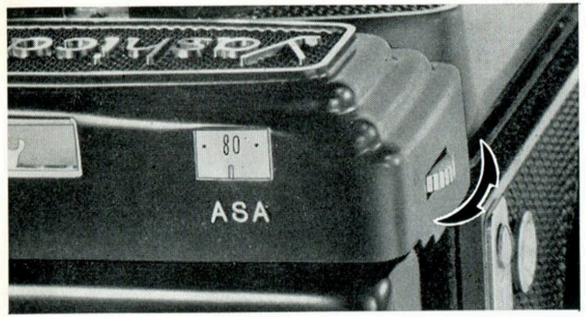




[3] Pull out the Lock Knob in the direction of the arrow and remove the exposed film.

* It is advisable to place the spool of the Lower Film Chamber in the Upper Film Chamber for the next picture-taking.

FOR CORRECT EXPOSURE (1)



[1] Set the ASA speed of your film in use at the index line in the ASA Window by turning the ASA Speed Control Wheel.

ASA FILM SPEED SCALE

A	50 · 80 · · 160 · · 320 400
S	| | | | |
A	64 100 125 200 250

The diagram shows what graduations between specific numbers stand for. You will find an ASA number printed on the film's instruction sheet.



[2] Set the desired shutter speed by turning the Shutter Speed Control Wheel up or down as indicated by the arrow. The exposure needle is cross-coupled to the shutter speeds.

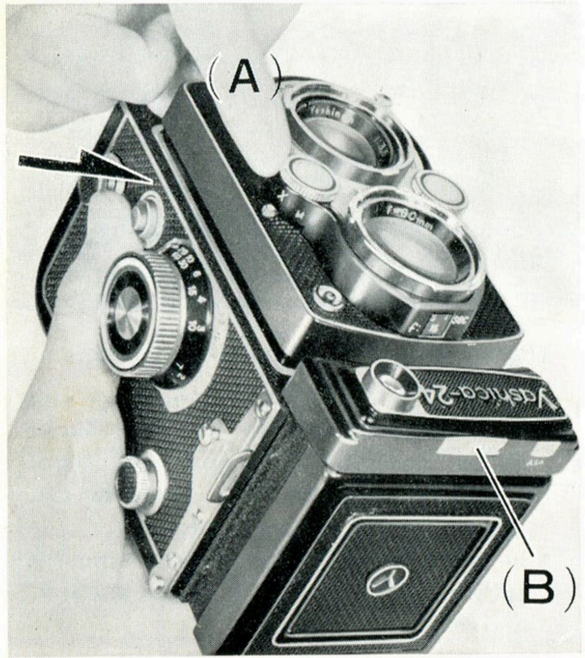
Shutter Speed Table for the beginner

Light Conditions	Average Subjects
Bright or Hazy Sun	1/500 : 1/250 sec.
Cloudy Bright	1/250 : 1/125 sec.
Heavy Overcast or Rain	1/60 : 1/30 sec.
Indoor	Slower shutter speeds than 1/30 sec.
Special purposes	1 sec.: Bulb

The aperture is determined according to light conditions.

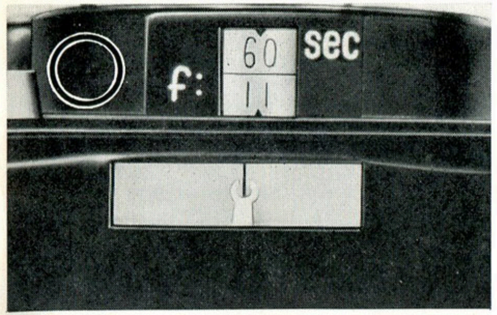
* It is recommended to use the shutter speed of 1/500 sec. when you shoot rapidly moving subjects, such as car, bicycle, action in sports, etc.
* In taking pictures of ordinary moving subjects, such as man, you can shoot it at 1/250 sec.

FOR CORRECT EXPOSURE (2)

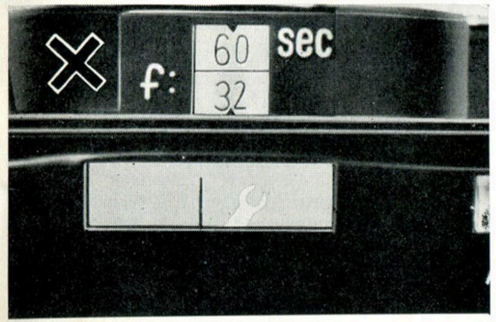


3 (B) Align the needle (cross-coupled to the shutter speeds) and the follow pointer (cross-coupled to the apertures) (A) by changing the aperture, holding the Exposure Meter Switch depressed. If the Switch is not pressed, the meter does not activate.

You can find any combination of the shutter speed and the aperture for correct exposure in the Aperture/Shutter Speed Window.

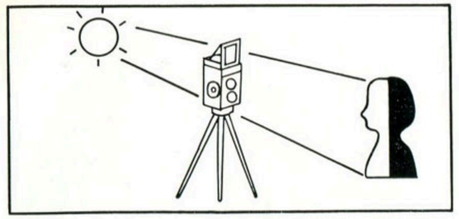


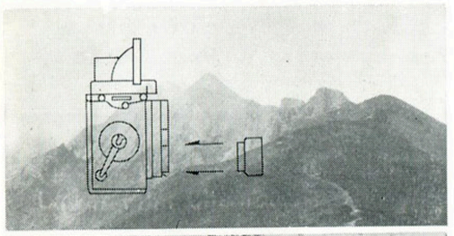
Precise exposure is obtained when the needle and the follow-pointer are aligned. The aperture and the shutter speed are visible in the Aperture/Shutter Speed Window.



When the needle and the follow-pointer are not aligned, change either the aperture or the shutter speed to obtain the correct exposure reading. When the needle and the follow-pointer are never aligned, it is impossible to take your picture. Indoor shooting, it is advisable to shoot by using a flash unit.

FOR BETTER PICTURES





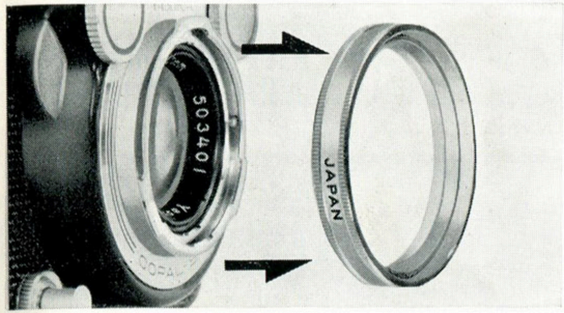


For color pictures: Color films have little exposure latitude, so particularly careful exposure reading is necessary. The best method of using a meter is to go near to the main subject and take a close-up reading. If you can not go close-up to a subject, then try to find something near at hand that is similar in tone to the subject and take a reading from this.

For open views: Open views, such as distant landscapes, usually have very light shadows. The use of a lens hood is recommended to cut off the harmful reflected light to obtain the best results.

For backlighted subjects: Even if the subject is in indoors and bright or strong light coming through the window is backlighting it, no adjustment is necessary as the CdS meter compensates for such extreme lighting conditions. If you want a brighter picture of your main subject, you should take a close-up exposure reading.

FILTER

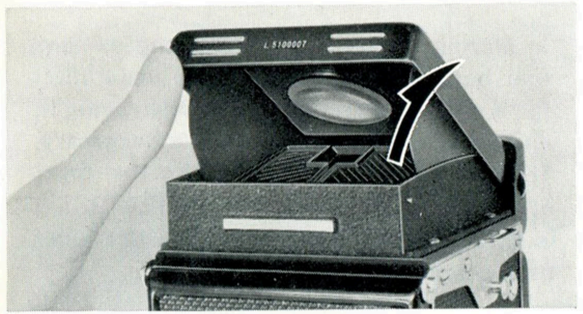


In blazing sunlight, in snow scene or summer beach, it recommended to use a filter for a really dramatic effect. When using it, an increase in exposure time is necessary. This is stated on most filters in the form of a filter factor indicating by how much (e.g., 2 times, 3 times) the exposure must be increased with the filter.

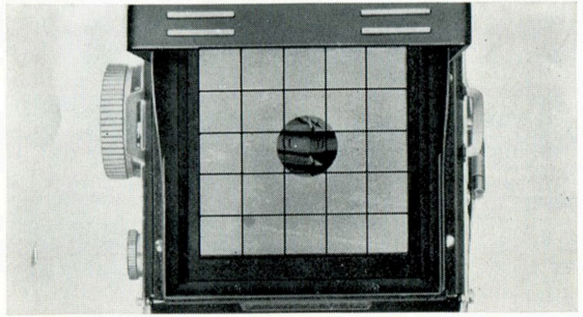


If you shoot the picture at f/8, 1/125. sec. using a Y2 (its filter factor is two times), please reset the aperture at f/5.6

LUMINOUS, LARGE VIEWFINDER

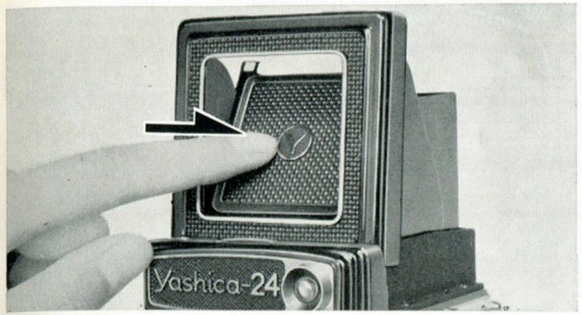


Open the Focusing Hood by lifting it at the back, and point your Yashica 24 at the subject.
When closing it, put down it towards you.

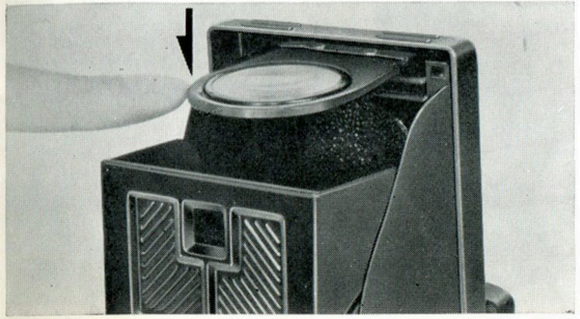


The eight red lines on the Focusing Screen help you to judge proportion and proper composition.

MAGNIFYING GLASS

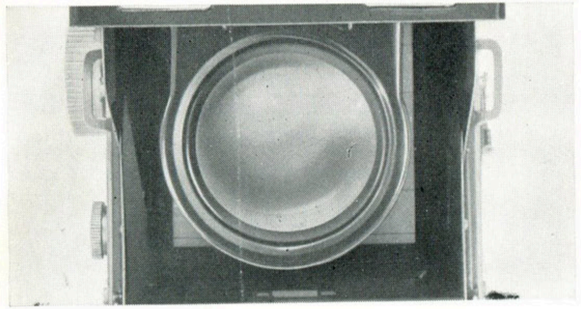


Raise the Magnifying Glass by pressing the front of the Focusing Hood Cover inward, holding the Focusing Hood so that it does not close.

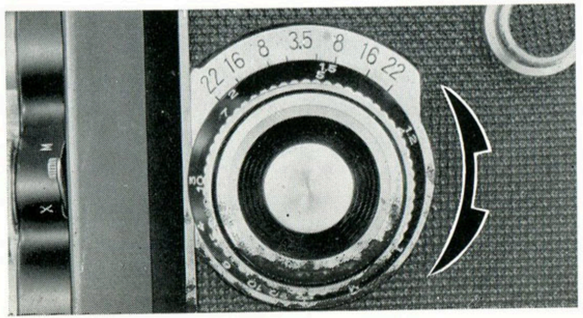


Always make sure that you have first lowered the Magnifying Glass before closing the Focusing Hood.

FOR CRITICAL FOCUSING

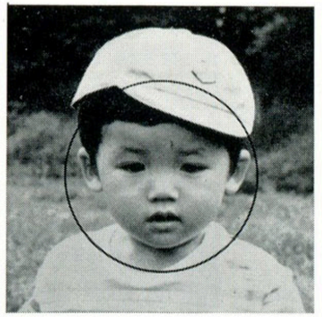


It is advisable to use the Magnifying Glass for more critical focusing. When using it, place your eye as close to the magnifier as possible.

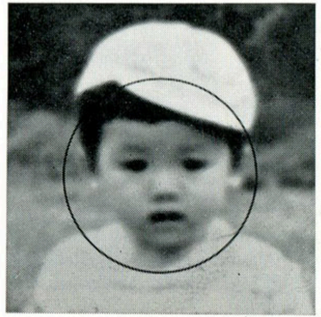


Focus your Yashica 24 on the subject by turning the Focusing Knob, seeing through the Focusing screen.





If the subject on the screen appears crisp, it is in focus.



If there's a slight blur on the subject, it is out of focus.

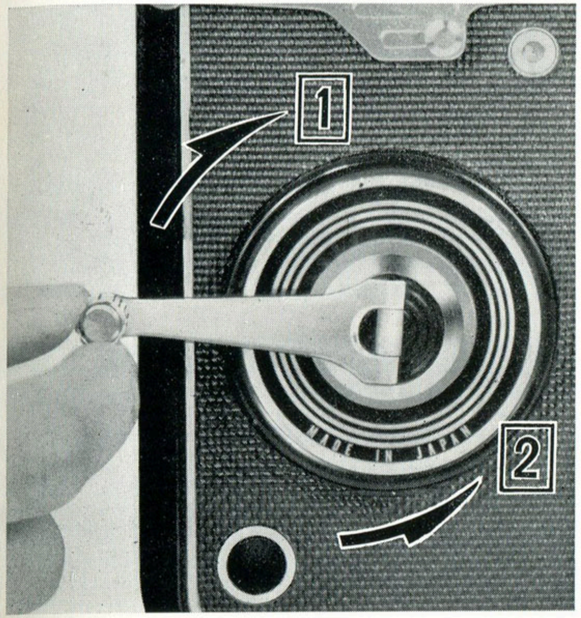
READABLE APERTURES AND SHUTTER SPEEDS



The apertures and the shutter speeds are visible on the Window on the viewing lens.

Shutter Speed Scale
B, 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250 & 1/500
Aperture Scale
3.5, 4, 5.6, 8, 11, 16, 22 & 32

RAPID CRANK FILM TRANSPORT



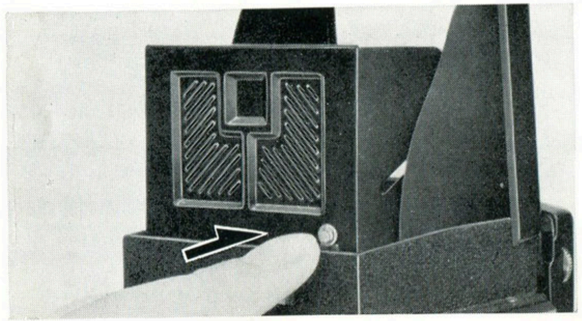
1. Turn the Crank clockwise until it stops as illustrated. The film is advanced for exposure.
2. Wind the Crank counter-clockwise until it stops. The shutter is set for shooting. If the Crank is not wound until it stops the shutter release button can not be depressed.

Note: When the slower shutter speeds are used, such as Bulb, 1 sec., 1/2 sec., etc., it is necessary to advance the film after the shutter have completely released.

SPORTSFINDER FOR RAPIDLY MOVING SUBJECTS

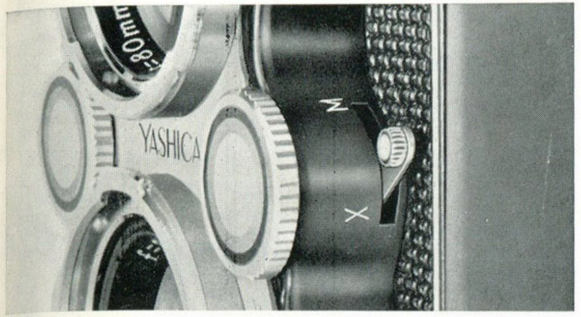


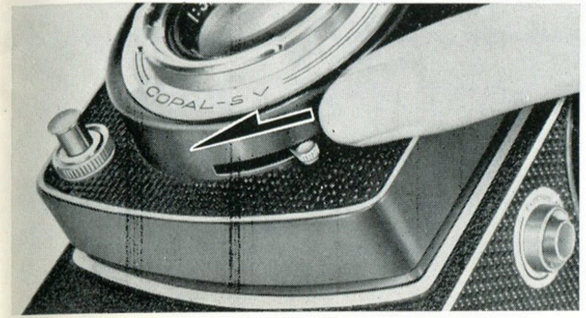
It is very convenient to use the Sportsfinder when you want to take pictures of rapidly moving subjects or to shoot photos from your eye-level.
Depress the Sportsfinder Frame Cover until it clicks in place.



To close the Cover, push the Release Button on the back of the Lens Hood.

SELF-TIMER





1. Move the Synchro Selector to the 'X' position and set the shutter by winding the Crank.
2. Set the Self-Timer on the bottom of the lens barrel by swinging it as illustrated.
3. Press the Shutter Release Button. The shutter goes off after a delay of 8~14 seconds and you've time to take your place in your own picture.

FLASH PICTURES

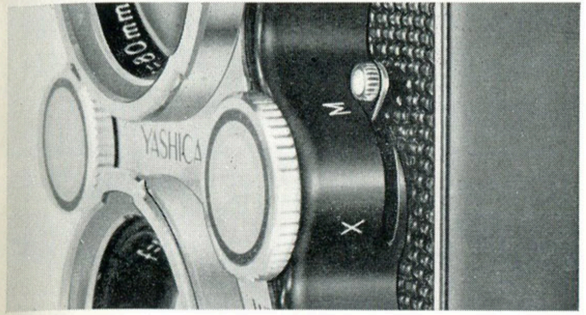


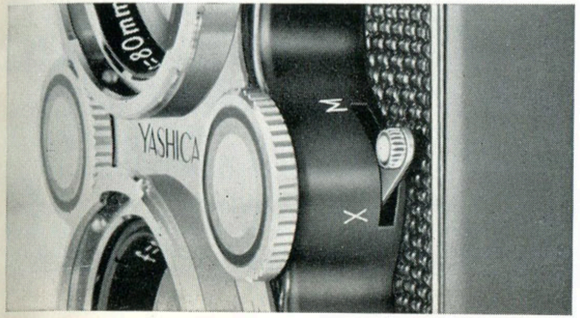
When using a flash gun or an electric flash, attach it on the bracket on which screws into the Tripod Socket on the base of the camera.

Plug the flash cord into the Flash Socket of the camera.

Correct exposure is obtained easily by consulting the guide number of the bulb or the electronic flash. The guide number is different for each film speed.
Correct f/stop is determined by dividing the guide number by the distance to your subject.

M-X SYNCHRONIZATION



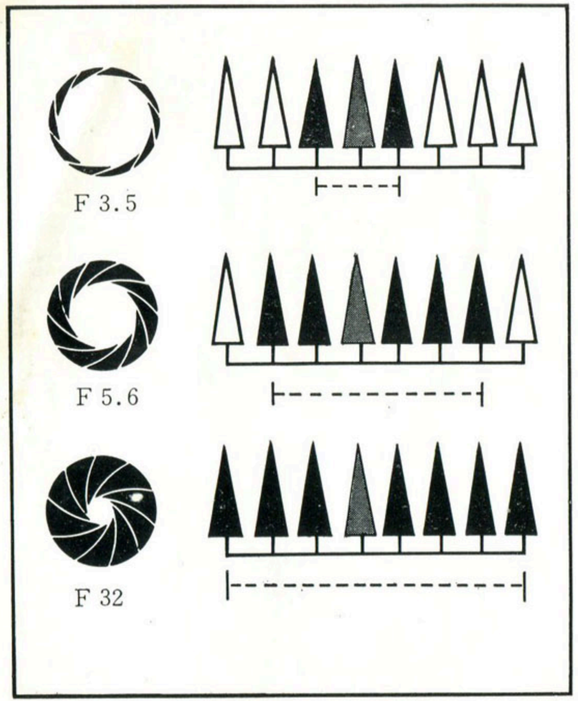


Set the Synchro Selector at the 'M' position, when using an M-class bulb.

Flash Unit	Synchro Terminal	Synchronized range of shutter speeds
M-Class Bulb	M	Any speed
F-Class Bulb	X	Slower shutter speeds than 1/30 sec.
Electronic Flash	X	Any speed

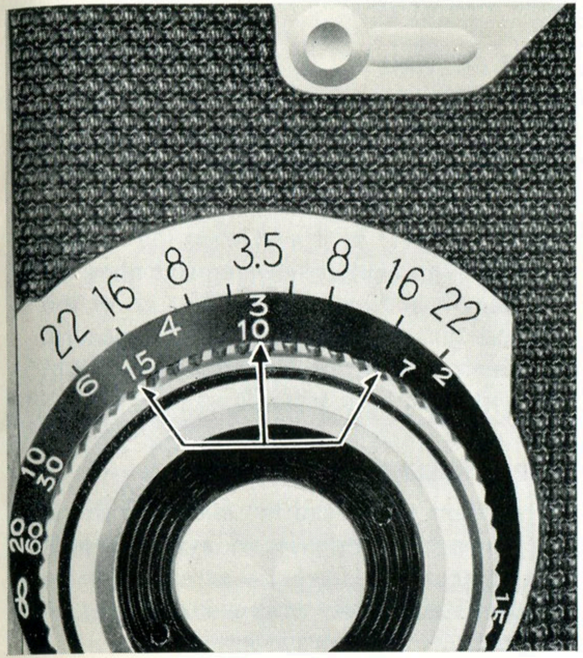
Move the Synchro Selector to the 'X' position when using an F-class bulb or a electronic flash.

DEPTH OF FIELD



When you focus the camera on a given object, the image of it will be really sharp on the film. Other objects to some distance in front of and behind the object will be also sharp. The range of distance over which subjects are still acceptably sharp is known as the Depth of Field.

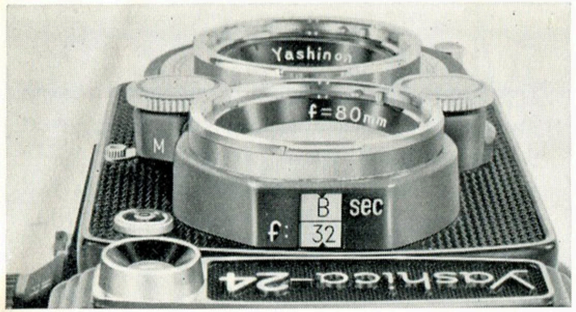
You can control the extent of this sharp zone by the lens aperture. As you stop down the lens, the zone of sharpness grows in both directions; as you open up the lens, its depth decreases. You'll also notice that the depth of field is greater at far distances than at near ones.

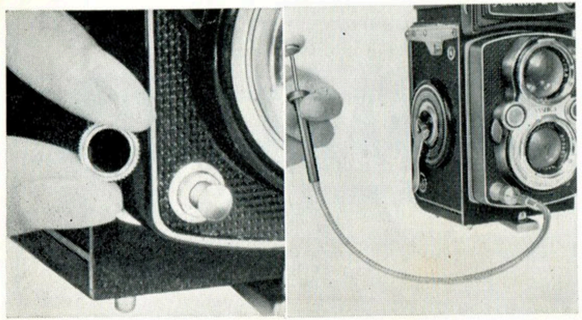


The Depth of Field Scale is engraved around the Focusing Knob of the Yashica 24 next to the distance scale. It is thus quite a simple matter to read off what area will be in sharp focus for any distance setting and aperture.

With the camera focused on 10 feet the depth of field indicated the Scale for an aperture of f/16 is from about 7 feet to about 15 feet.

THE USE OF BULB SETTING AND CABLE RELEASE





BULB SETTING

When the light is very weak, especially when you have a small stop, even the slowest shutter speed may be too short. In that case, you need time exposure.

Set the shutter to 'B' and press the release button. The shutter now remains open for any length of time until you let go of the release button. For such time exposure, the camera must be mounted on a firm support such as a tripod.

CABLE RELEASE

It is safest to release the shutter with the help of a cable release to avoid shaking the camera. This release screws over the release button after unscrewing the ring on the base of the release botton.

DEPTH OF FIELD TABLE

(Meter)

meter \ F.No.		3.5	4	5.6	8	11	16	22
1m	N	0.97	0.97	0.96	0.94	0.91	0.88	0.84
	F	1.03	1.04	1.05	1.07	1.10	1.16	1.23
1.2	N	1.17	1.15	1.14	1.12	1.08	1.03	0.98
	F	1.25	1.26	1.27	1.31	1.35	1.44	1.48
1.5	N	1.44	1.43	1.40	1.36	1.32	1.25	1.17
	F	1.57	1.58	1.62	1.67	1.75	1.89	2.09
2	N	1.89	1.87	1.83	1.76	1.68	1.57	1.45
	F	2.13	2.15	2.21	2.32	2.46	2.75	3.2
3	N	2.8	2.7	2.6	2.5	2.3	2.2	1.9
	F	3.3	3.4	3.5	3.8	4.2	5.1	6.9
4	N	3.6	3.5	3.4	3.1	2.9	2.6	2.3
	F	4.5	4.7	5.0	5.5	6.4	8.8	16.1
6	N	5.01	4.9	4.7	4.3	3.8	3.3	2.8
	F	7.3	7.6	8.4	10.2	13.8	∞	∞
10	N	7.7	7.5	6.8	5.9	5.2	4.2	3.5
	F	14.3	15.2	19.2	∞	∞	∞	∞
20	N	12.5	11.9	10.2	8.5	6.9	5.4	4.2
	F	29.8	∞	∞	∞	∞	∞	∞
∞	N	∞	29.3	20.9	14.6	10.6	7.3	5.3
	F	∞	∞	∞	∞	∞	∞	∞

(Feet)

feet \ F.No.		3.5	4	5.6	8	11	16	22
3.3	N	3.21	3.19	3.15	3.09	3.02	2.9	2.78
	F	3.4	3.42	3.47	3.54	3.64	3.53	4.07
4	N	3.86	3.84	3.78	3.69	3.59	3.43	3.26
	F	4.15	4.17	4.25	4.36	4.52	4.8	5.19
5	N	4.78	4.75	4.66	4.53	4.37	4.14	3.89
	F	5.24	5.28	5.39	5.58	5.84	6.32	7.01
7	N	6.58	6.52	6.35	6.11	5.83	5.42	5.00
	F	7.48	7.55	7.8	8.2	8.76	10.88	11.68
10	N	9.2	9.1	8.8	8.3	7.8	7.1	6.4
	F	11.0	11.2	11.7	12.6	14.0	17.1	23.4
15	N	14.2	13.9	12.3	11.4	10.5	9.2	8.1
	F	17.4	17.8	19.2	21.8	26.3	40.0	∞
30	N	23.6	22.9	20.9	18.5	16.1	13.3	11.0
	F	43.9	43.7	53.4	80.1	∞	∞	∞
60	N	38.8	36.9	32.0	26.7	22.1	17.2	13.5
	F	∞	∞	∞	∞	∞	∞	∞
∞	N	∞	∞	68.5	48.0	34.9	24.0	17.5
	F	∞	∞	∞	∞	∞	∞	∞

CARE OF YOUR CAMERA

* Protect the camera from dust and dirt and avoid rough handling.
* If the lens needs cleaning, first brush or blow away any grit or dust, then wipe the surface with a soft silicon cloth or use a lens cleaner.
* Do not attempt to make any repairs or remove any parts from the camera. Also, never oil the shutter or any other parts of the camera.

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