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back to my "Orphancameras" manuals /flash and light meter site

Only one "donation" needed per manual, not per multiple section of a manual!

The large manuals are split only for easy download size.

TLELECTRO-X



Instruction Booklet ebrauchsanweisung Mode d'Emploi Foll io de Instrucciones

ASHICA

DESCRIPTION 1. Film rewind knob-2. Mirror lock knob-3. Battery check lamp_ 4. Battery check button _ 5. Direct contact accessory shoe/ X flash terminal — 6. Shutter speed dial/Film speed setting dial— 7. Shutter release button-8. Film advance lever 9. Film exposure counter **YASHICA** TL ELECTRO 🎖 10. Aperture ring. 11. Focusing ring. 12. Exposure check lever 13. Self-timer lever 14. Taking lens. **OTUA**

www.orphancameras.com

BESCHREIBUNG

- 1. Filmrückspulknopf
- Spiegelverriegelungsknopf
- 3 Batterieprüflampe
- 4. Batterieprüfknopf
- 5. Mittenkontaktschuh "X"
- Vershlußzeitenring/Filmempfindlichkeitseinstellungsring
- 7. Verschluß Auslöseknopf
- 8 Filmtransport Kurbel
- 9. Belichtungszähler
- 10 Blendenring
- 11. Entfernungseinstellring
- 12. Belichtungsmess-Schalter
- Selbstauslöser
- 14. Aufnahme-Objektiv

DESCRIPTION

- 1. Bouton de rebobinage du film
- 2. Bouton de verrouillage du miroir
- 3. Lampe de contrôle de la pile
- Bouton de vérification de la pile
- 5. Contact direct pour Flash "X"
- Cadran des vitesses d'obturation/bague de réglage de sensibilité du film
- 7. Déclencheur
- 8. Levier d'avancement du film
- g. Competeur de vues
- 10. Bague de diaphragme
- 11. Bague de mise au point.
- 12. Levier de contrôle d'exposition
- 13. Retardateur
- Objectif

DESCRIPCION

- 1. Palanquita de reenrollado
- 2. Botón del seguro del espejo
- Lámpara de comprobación de la pila
- Botón de comprobación de la pila
- 5. Portaaccesorios de contacto directo X
- Regulador de velocidad del obturador/sensibilidad de la pelicula
- 7. Botón del disparador
- 8. Palanca de avance de la película
- 9. Contador de exposiciones
- 10. Regulador de la abertura
- 11. Regulador de enfoque
- Palanca de comprobación de exposiciones
- 13. Palanca de autodisparador
- 14. Objetivo de toma

FEATURES OF TL ELECTRO-X ITS

Lens: Auto Yashinon 55mm f/1.2; Auto Yashinon 50mm f/1.4; Auto Yashinon

50mm f/1.7; Auto Yashinon 50mm f/2.0; stops down to f/16

Shutter: Electrically operated focal plane shutter with speeds from B, SLOW (about

2 seconds) to 1/1000 sec., intermediate shutter speed setting optional;

self-timer plus FP-X sync.

Exposure Control: Thru-the-Lens CdS light measuring system; Electronic Exposure Readout

System (exposure warning arrows suggest exposure corrections): ASA range 25–800 (DIN 15-30); a 6V silver oxide battery is used to power the exposure control system and electric-operated focal plane shutter

(Eveready No. 544 or equivalent).

Viewfinder: Reflex viewfinder with microprism focusing spot, ground-glass collar for

depth of field analysis; focusing from 0.5 meter (1.75 feet) to infinity;

exposure warning arrows visible in the viewfinder.

Film Transport: Ratchet-type, single-stroke film advance lever; automatic resetting film

exposure counter.

Other Features: Battery checker, Mirror lock, Direct contact shoe, Multi-slot take-up spool

for easy and fast loading.

Lens Shade: 57mm slip-on type

Filters: 55mm screw-in type

Dimensions: $151 \times 100 \times 96.4$ mm

Weight: 1070 grs.



Yashica's electronic breakthrough—Electronic Exposure Readout System has been incorporated in an SLR camera for the first time!

It's the transistorized IC (integrated circuit) in the TL ELECTRO-X ITS that pinpoints Thru-the-Lens exposure at stopped-down aperture. Indicator arrows in the finder give warning against over- or under-exposure, and signal how to make corrections. The result-most efficient correct exposure setting under all light conditions. No more eyestraining needle-matching. No chance of the exposure system going out of order due to shock, jolts, heat or cold, because there are no moving parts, meter-needle or hair coil. The electrically operated focal plane shutter also works wonders in assuring accurate exposure. It's a unique shutter system providing a range of intermediate speeds between settings - especially important with narrow-latitude color film.

LOADING BATTERY

 Remove the Battery Compartment Cover by turning it in the direction of the arrow and install a 6V silver oxide battery (Eveready No. 544, PX-28 or equivalent).

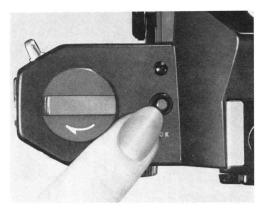


 Make sure that the (-) side faces inside. If the battery is installed in a reverse position, the Electronic Exposure Readout System will not function. Close the Battery Compartment Cover securely.



CHECKING BATTERY

If the battery is weak, the Electronic Exposure Readout System will not operate correctly. Before shooting, check the battery condition. Press the Battery Check Button and when the green lamp lights, the battery has sufficient power to operate the exposure control system. Replace the battery when the green lamp does not light.



NOTES ON SILVER OXIDE BATTERY

- When the battery is installed incorrectly,
 - 1) The green lamp will not light when the battery check button is depressed.
 - 2) The shutter speed will be 1/1000 sec. when the shutter release button is depressed.
- Do not throw used silver oxide battery into the fire, trash cans or waste receptacles.
- Do not disassemble the silver oxide battery or leave it where children can get access to it.

LOADING FILM

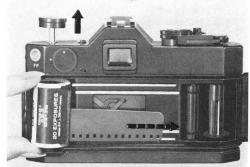
1. Pull out the Back Cover Release Lever and the cover will pop open.

The exposure counter will be automatically set at S (start) mark.

 Pull out Film Rewind Knob, place the film cassette into the film chamber and replace the Film Rewind Knob to its original position. Insert the film leader into one of the slots of the take-up spool.

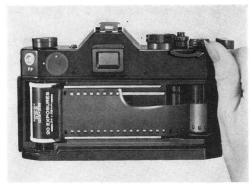
NOTE: . . . Always load the film under a shade or in subdued light, never in direct sunlight.





3. Advance the film, making sure the sprocket teeth properly engage the perforations of the film. Close the Back Cover.

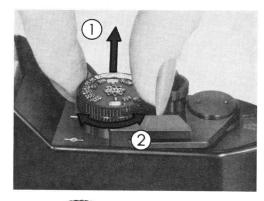
4. Wind the Film Advance Lever and make blank exposures until the figure "1" appears in the exposure counter window. You're now ready for the first exposure.





SETTING FILM SPEED

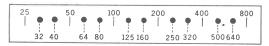
- 1. Lift the Film Speed Setting Ring.
- 2. Turn the Film Speed Setting Ring to align the ASA/DIN speed of the film in use with the triangle index mark.



The ASA/DIN rating denotes the degree of light sensitivity of the film emulsion and is clearly indicated on the box or the instruction which comes with the film.

Film speed scale

ASA





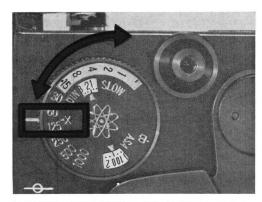


EXPOSURE SETTING

- Preselection of Shutter Speed
 In bright light, preselect the shutter speed by turning the Shutter Speed Dial. Depress the Exposure Check Lever and turn the Aperture Ring to obtain the correct exposure.
- Preselection of Aperture
 In subdued light, preselect the aperture. Depress the Exposure Check Lever and turn the Shutter Speed Dial to obtain correct exposure.
- In either operation, correct exposure is assured.

ELECTRONIC SHUTTER SYSTEM

The electronic shutter system provides intermediate speed range at in-between setting. The shutter speed dial has click-stops at each setting between 1/1000 sec. and 1/30 sec.. When taking pictures either of fast moving subjects or in bright sunlight, it may be easier and better to preselect the shutter speed. Then, obtain correct exposure by turning the aperture ring. On the other hand, in the slower shutter speed range between 1/30 sec. and—index mark (approx. 2 secs.) there are no click-stops. When taking pictures in dim light, preset the lens opening. Then, obtain correct exposure by turning the shutter speed dial.



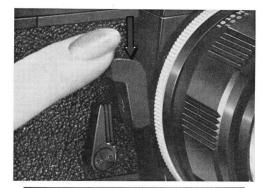


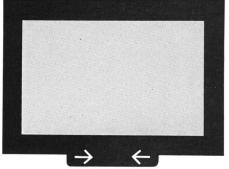
The red exposure warning arrows indicate exposure corrections.

Sight through the finder, keeping the Exposure Check Lever depressed. Either the red UNDER or OVER exposure warning arrows appears in the lower part of the finder.

In the preselection of shutter speed, rotate the Aperture Ring for correction of exposure setting. And in preselection of aperture, adjust the Shutter Speed Dial.

In either case, correct exposure is obtained when the arrows go out.





Over-exposure

Under-exposure

OVER-EXPOSURE

Turn the Aperture Ring or the Shutter Speed Dial in the direction of the arrow in the view-finder until the left exposure warning arrow goes out. If the arrow fails to turn off, use an ND filter.

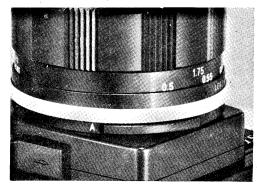
UNDER-EXPOSURE

Turn the Aperture Ring or the Shutter Speed Dial in the direction of the arrow in the view-finder until the right exposure warning arrow goes out. If the arrow fails to turn off, use a larger aperture or a slower shutter speed. Or the use of a flash unit is recommended. When using a slow shutter speed under 1/30 sec., the use of a tripod is advised.

Light conditions & Subjects	Measuring Procedures	Shutter Speeds & Apertures	
Fair: Fast moving subjects	Preselection of shutter speed	1/1000, 1/500, 1/250 sec.	
Hazy: Moving subjects	Preselection of shutter speed	1/250 & 1/125 sec.	
Overcast: Rainy	Preselection of shutter speed	1/60 & 1/30 sec.	
Indoors: Dim light	Preselection of aperture	Select large aperture.	
Special cases		"B" setting	

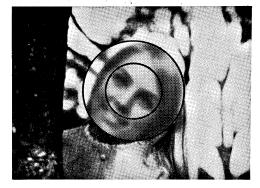
FOCUSING

- 1. For bright viewing and precise focusing, set the Stopdown Bar to "A" position.
- 2. Look through the finder and turn the Focusing Ring until the image on the focusing screen appears clear and crisp.









In focus

Out of focus

ENTFERNUNGSEINSTEL-LUNG

Um hell und präzise fokussieren zu können, rücke man den Blendenschalter auf "A" Position. Durch den Sucher blicken und den Entfernungseinstellring soweit drehen bis das Sucherbild klar und scharf erscheint.

Gut eingestellt Schlecht fokussiert

MISE AU POINT

Pour une visée lumineuse et une mise au point précise, mettre le levier de diaphragme en position "A". Regarder dans le viseur et tourner la bague de mise au point jusqu'à ce que l'image soir claire et nette.

bonne mise au point mauvaise mise au point.

ENFOQUE

Con el dispositivo reductor de diafragma en la posición A, se puede realizar un enfoque más preciso y de mayor claridad visual. Mire a través del visor y gire el mando de enfoque hasta que aparezca perfectamente nítida y clara la imagen.

enfocada desenfocada

UNLOADING CAUTION:

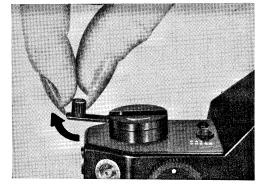
After the last exposure, the film must be rewound into its cassette before removing it from the camera. Avoid winding the Film Advance Lever when a resistance is felt. And do not force to advance the film as it may tear or come loose from the cassette, making it impossible to rewind.



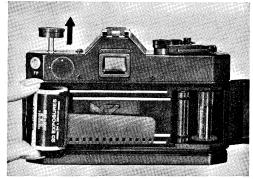


1. Press the Film Rewind Release Button on the base of the camera.

2. Fold out the crank-handle on the Film Rewind Knob and turn it in the direction of the arrow. A slight resistance will be felt when the film pulls off the take-up spool, but continue winding the crank-handle until you feel the film pulling away from the slot of the take-up spool.



3. Open the Back Cover and take out the film cassette.

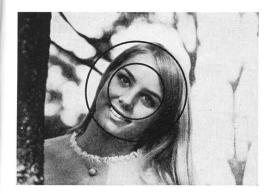


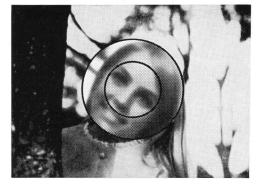
FOCUSING

- 1. For bright viewing and precise focusing, set the Stopdown Bar to "A" position.
- 2. Look through the finder and turn the Focusing Ring until the image on the focusing screen appears clear and crisp.









In focus

Out of focus

ENTFERNUNGSEINSTEL-LUNG

Um hell und präzise fokussieren zu können, rücke man den Blendenschalter auf "A" Position. Durch den Sucher blicken und den Entfernungseinstellring soweit drehen bis das Sucherbild klar und scharf erscheint.

Gut eingestellt Schlecht fokussiert

MISE AU POINT

Pour une visée lumineuse et une mise au point précise, mettre le levier de diaphragme en position "A". Regarder dans le viseur et tourner la bague de mise au point jusqu'à ce que l'image soir claire et nette.

bonne mise au point mauvaise mise au point.

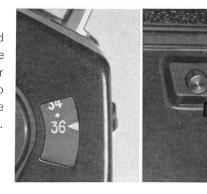
ENFOQUE

Con el dispositivo reductor de diafragma en la posición A, se puede realizar un enfoque más preciso y de mayor claridad visual. Mire a través del visor y gire el mando de enfoque hasta que aparezca perfectamente nítida y clara la imagen.

enfocada desenfocada

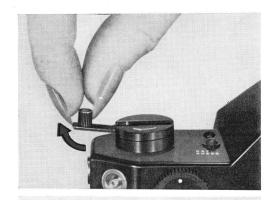
UNLOADING CAUTION:

After the last exposure, the film must be rewound into its cassette before removing it from the camera. Avoid winding the Film Advance Lever when a resistance is felt. And do not force to advance the film as it may tear or come loose from the cassette, making it impossible to rewind.

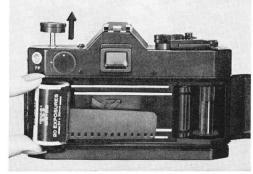


1. Press the Film Rewind Release Button on the base of the camera.

2. Fold out the crank-handle on the Film Rewind Knob and turn it in the direction of the arrow. A slight resistance will be felt when the film pulls off the take-up spool, but continue winding the crank-handle until you feel the film pulling away from the slot of the take-up spool.



3. Open the Back Cover and take out the film cassette.



HOW TO HOLD THE CAMERA

- 1. Hold the camera and sight through the viewfinder.
- For exposure setting, depress the exposure check lever with index or middle finger of the right hand and rotate the aperture ring with the thumb and index finger of the left hand.

KAMERAHALTUNG

- 1. Kamera vors Auge halten und durch den Sucher blicken.
- Zur Belichtungsmessung drücke man den Belichtungsmeßhebel mit Zeige-oder Mittelfinger der rechten Hand und drehe den Blendenring mit Daumen und Zeigefinger der linken Hand.

COMMENT TENIR L'APPAREIL

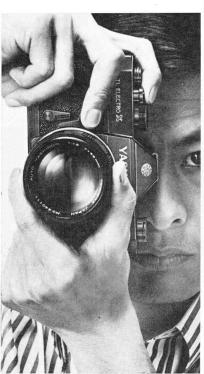
- 1. Prendre l'appareil et cadrer par le viseur.
- Pour le réglage du temps de pose, appuyer sur le levier de contrôle d'exposition avec l'index ou le médium de la main droite, et faire tourner la bague du diaphragme avec le pouce et l'index de la main gauche.

MANERAS DE SOSTENER LA CAMARA

- 1. Sostenga la cámara y mire a través del visor.
- Para ajustar la exposición, apriete el dispositivo verificador de exposición con el dedo índice o el cordial de la mano derecha y de vueltas al regulador de aberturas con el dedo pulgar o índice de la otra mano.







SLOW SHUTTER "B" SETTING

Slow Shutter

When using shutter speeds slower than 1/30 sec., the use of a tripod and a cable release is recommended.

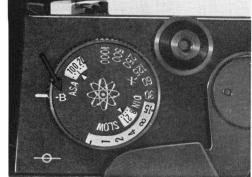
Caution: 1. At an intermediate setting between SLOW and "B" settings, the Electronic Exposure Readout System will not function. Do not set the Shutter Speed Dial between SLOW and "B" settings. 2. In case the mirror stays up and never returns though the Shutter Release Button is depressed, just set the Shutter Speed Dial at "B" setting, and the mirror returns to the normal position

"B" Setting

When a long exposure is required, set the Shutter Speed Dial at "B" setting. At this setting, the Shutter Release Button is depressed. For long exposure, the use of a tripod and a cable release is recommended.

In case the mirror stays up and never returns though the shutter release button is depressed, just set the shutter speed dial at "B" setting, and the mirror returns to the normal position.





EXPOSURE SETTING WHEN SHOOTING AGAINST LIGHT

When shooting against light or photographing a subject near a window, or against an excessively bright background such as snow-covered land-scapes, the main subject is liable to appear extremely dark (under-exposed) if the exposure is set in the normal manner.

To obtain sparkling results in such case, approach your main subject and take exposure reading by seeing to it that the bright light in the background is warded off from the lens.

In case the main subject connot be approached, it's necessary to give from twice to four times the normal exposure.

If the normal setting is f/16 at 1/125 sec., set the aperture at f/11 at 1/125 sec, or at f/16 at 1/60 sec. In the above circumstance, disregard the left exposure warning arrow when taking the picture.

LENS 2007661 CAMERA 20701216



a) Exposure reading set in the normal manner



b) Exposure reading taken by approaching the main subject

FLASH PHOTOGRAPHY

X FLASH SYNC. TERMINAL

Two "X" Sync. Terminals are provided. One of them is on the Direct Contact Accessory Shoe, and the other on the side of the camera body. When using a cordless flash unit, slip it into the Direct Contact Accessory Shoe.

When using an electronic flash connect the synchro cord to "X" Terminal.

FP FLASH SYNC. TERMINAL

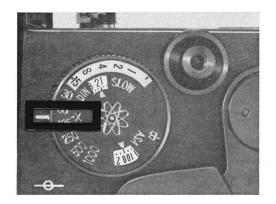
When using ordinary flash unit with FP or M class bulbs, connect synchro cord to "FP" Sync. Terminal.

The compact Yashica AG-D, is a dual use flash unit for AG type bulbs. Use it as a cordless flash unit by slipping it into the direct contact accessory shoe or as a conventional flash unit by connecting the synchro cord to the camera synchro terminal.



Flash Mark X

When using an electronic flash unit, always set the Shutter Speed Dial to this X setting. The shutter speed is set at about 1/90 sec.



Synchronizing shutter speeds are as follows:

Flash Terminal	Type of Flash Unit	1000 500 250 125 (-X) 60 30 15 8 4 2 1 B
FP	F P MF(AG-Type) M	1000 300 E30 1E30 X 7 00 30 13 6 4 E 1 E
х	Electronic flash MF(AG-Type) M	

■ For shutter speeds within the blue zone use Toshiba or National AG-6J or AG-6B FP class flash bulbs.

EXPOSURE SETTING

Correct exposure setting in flash photography is obtained through the guide number for flash bulb or electronic flash unit in use. The guide number is shown on the package of the flash bulb or on the body of electronic flash unit. Divide the guide number by the camera—to-subject distance.

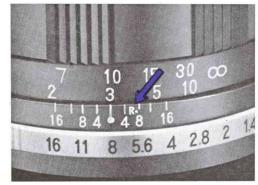
 $\frac{Guide\ Number\ (32)}{Distance\ (2\ meters)} = f/16\ (Correct\ aperture)$

Guide Number (100) Distance (6.6 feet) =15.1→f/16 (Correct aperture)



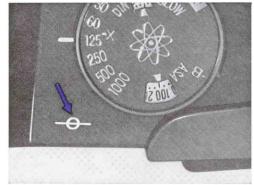
"R" MARK

The red dot (R mark) is used when taking a picture with infrared film. For infrared photography, focus your camera in the ordinary manner and then set the distance reading to the R mark.



FILM PLANE MARK

The red mark on the camera top indicates the position of the film plane. Strictly speaking, the camera-to-subject distance means the distance from the film plane to the subject. In close-up photography, measure the distance from the film plane mark to the subject.

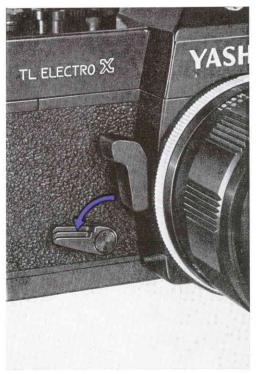


SELF-TIMER

- 1. Give the Film Advance Lever a full turn to charge the shutter.
- 2. Charge the Self-Timer by shifting the Self-Timer Lever all the way down.
- 3. Depress the Shutter Release Button and the Self-Timer trips the shutter at a delayed action of 8 to 10 seconds.

NOTES:

When the Self-Timer does not function, even if the Shutter Release Button is depressed, it's because the shutter is not charged. Charge the shutter by advancing the Film Advance Lever and press the Shutter Release Button.



MIRROR LOCK

Push the Mirror Lock Knob upward in the direction of the arrow to flip up the mirror and lock it in position. To return it to its original position, turn the knob down.

This mirror lock system permits mounting of ultra wide-angle lens.



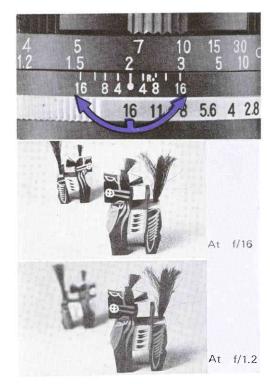


DEPTH OF FIELD

The area in the foreground and background over which objects appear acceptably sharp when you focus your camera on a subject at a given range is called the "Depth of Field." As shown here, the depth of field is more extensive when the lens is stopped down (upper photo) than at full aperture (lower photo). The depth of field can also be determined by referring to the depth of field scale on the lens barrel. If the subject is at a distance of two meters and an aperture setting of f/16 is selected, all objects within the range indicated by the figures 16 on both sides of the red index mark (approx. 1.5 to 3.2 meters) will appear acceptably sharp in the picture.

The depth of field is more extensive . . .

- when the lens is stopped down.
- when you focus your camera on a distant subject.
- in the background than in the foreground.

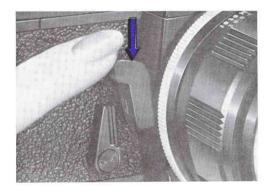


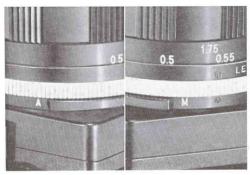
PREVIEW OF THE DEPTH OF FIELD

To preview the depth of field at the preselected aperture, depress the exposure check lever and sight through the viewfinder. Always keep the Stopdown Bar on the lens barrel at "A" for depth analysis.

At this setting, the diaphragm remains fully open to assure maximum brilliance of the image in the finder at all times, except for the fraction of a second the exposure is made.

When the camera is used with extension bellows or tubes for macrophotography, the Stopdown Bar on the lens barrel should be set at the "M" position. The desired aperture can be set manually.



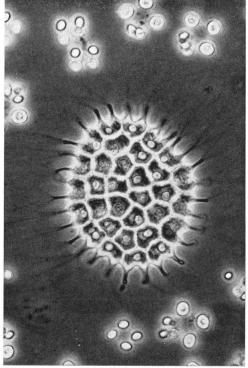


NO EXPOSURE FACTOR REQUIRED

The TL ELECTRO-X *ITS* features the Thru-the-Lens metering system which measures the average brightness of the light coming through the taking lens and exposure compensation is not required, when using any lens, or filter. Perfect exposure is assured every time.

The Stopdown Bar should be set at "M" position when the lens is used with extension bellows or tubes for macrophotography.







www.orphancameras.com

INTERCHANGING THE LENSES

The Yashica interchangeable lenses from wideangle to telephoto feature screw-thread mounts and can be mounted or dismounted instantly.

NOTES:

You should interchange the lens in subdued light, never in direct sunlight.



A WIDE RANGE OF INTERCHANGEABLE LENSES

Model	Diaphragm	Angle of View	Minimum Focus	Filter Size
Yashinon f/3,3 21mm lens	Manual	92°	0.8m	55mm screw-in
Auto Yashinon-DX f/2.8 28mm lens	Automatic	75°	0.4m	62mm screw-in
Auto Yashinon-DX f/2.8 35mm lens	Automatic	63°	0.4m	52mm screw-in
Macro Yashinon f/2.8 60mm lens	Preset	40°	0.235m	58mm screw-in
Auto Yashinon-DX f/2.8 135mm lens	Automatic	18°	1.5m	55mm screw-in
Auto Yashinon-DX f/4 200mm lens	Automatic	12° 20′	2.5m	55mm screw-in
Auto Yashinon-DX f/5.6 300mm lens	Automatic	8° 10′	4.5m	58mm screw-in
Auto Yashinon-DX f/5.6 400mm lens	Automatic	6° 10′	8m	80mm screw-in
Reflex Yashinon-DX f/8 500mm lens		5°	4m	Series
Super Yashinon f/8 600mm lens	Preset	4°	13m	37mm drop-in
Super Yashinon f/8 800mm lens	Preset	3°	25m	37mm drop-in
Reflex Yashinon-DX f/11 1000mm lens		2° 30′	8m	Built-in turret type
Auto Yashinon Zoom f/4.5 75-230mm lens	Automatic	32° 22′ - 10° 46	2.5m	67mm screw-in
Yashinon-R Zoom f/5.8 90-190mm lens	Preset	26° 52′ - 12° 59′	1.8m	55mm screw-in



ACCESSORIES

Macro Lens

The Macro Yashinon 60 mm f/2.8 5-element lens features angle of view of 40° and preset aperture and permits photography of subjects at varying ratios of magnification up to life size. It focuses to 23.5 cm (9 1/4 inches) and provides versatile application in normal shooting as well as in close-up photography and copying work. Filter size: 58 mm screw-in.

Lens Hood

Use of a lens hood is recommended for subjects in bright light, sea or snow scenes, and to prevent unnecessary stray light from falling on the lens. (57 mm slip-on type for f/1.2 and f/1.4 lenses) (54 mm slip-on type for f/1.7 and f/2.0 lenses)

Filter

Better overall results can be obtained through use of a filter when shooting sea or snowscenes, etc. under glaring sunlight and for obtaining special effects.

(55 mm screw-in type for f/1.2 and f/1.4 lenses)

(52 mm screw-in type for f/1.7 and f/2.0 lenses)







28

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Extension Bellows

Effective for extreme close-ups and macrophotography. The use of the bellows provides magnification of the

image up to 2.4 x the life-size.

Auto Extension Tubes

Consist of three tubes measuring 11 mm, 18 mm and 36 mm and permit use either singly or in any combination for copying and close-ups by taking full advantage of the automatic diaphragm provision of the lens.

Extension Tubes

Useful for copying and closeup work. Aset of 4 tubes can be used singly or in any combination for any degree of magnification up to maximum.







Right-angle Viewfinder

This exclusive right-angle viewfinder slips on to the camera eyepiece and is designed for convenient viewing and focusing.

Microscope Adapter

The microscope adapter is used for microphotography. There is no need for compensation of exposure factor.

Slide Copier

Provides copying of slides and strip film and specimen photography at varying ratios of magnification when used in combination with the extension bellows.







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Copy Stand

Ideal for copying photos, documents, etc. Features pantograph sliding arm for ready focusing and adjustment of magnification ratio plus swivel lamp sockets.

Eyesight-Adjustable Eye-cup

The eye-cup has a frame to accept a lens of 18 mm diameter. Mount the prescription lens from your optician to the frame for comfortable viewing.

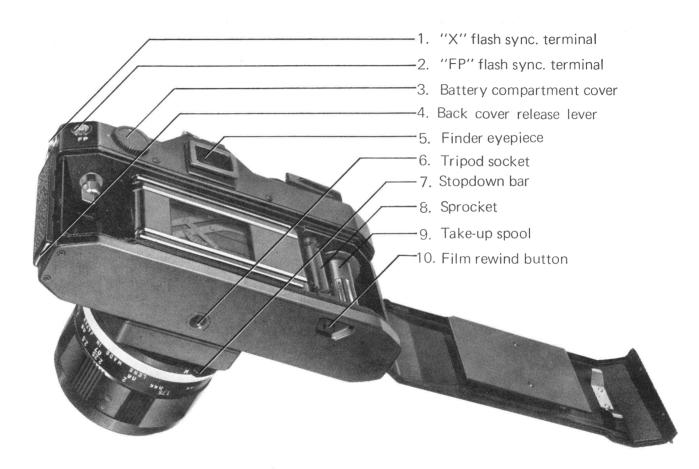
Grip/Tripod ST-7

Use it as a camera GRIP or a TRIPOD. Light, Compact, Versatile — indispensable for quality results.









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