

C A M E R A

Ленинград



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INSTRUCTION
BOOKLET





*The "Leningrad" camera
was awarded the "Grand-
Prix", the highest award
at the World's Fair
in Brussels in 1958*





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The high quality of the "Leningrad" camera has been recognized at a number of Soviet and international exhibitions. It was awarded the supreme award, the "Grand-Prix" at the World's Fair in Brussels in 1958.

The "Leningrad" is a modern camera with excellent specifications, construction, finish and appearance that will satisfy anyone who owns it.

If you are an *amateur photographer*, the large aperture, coated, "Jupiter-8" lens and the precise coupled rangefinder-viewfinder, will allow you to quickly learn how to produce satisfying black-and-white and color pictures. The "Leningrad" is easy to use; it has a convenient daylight loading system, a self-timer and double exposure prevention.

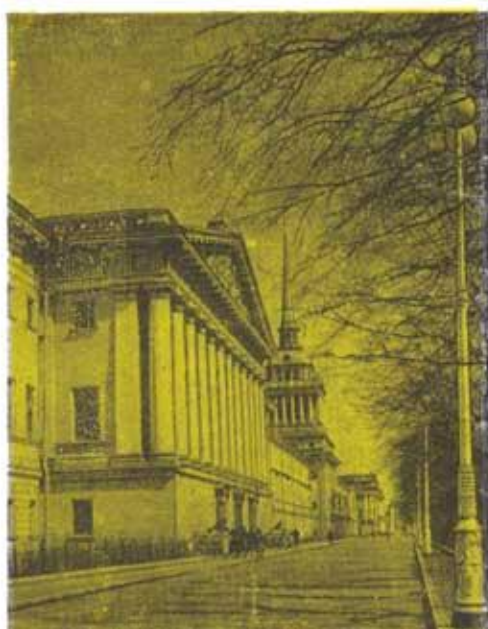
The *press photographer* will find a wide range of shutter speeds, an adjustable synchronizer for flash photography, and a universal viewfinder providing convenience for working with accessory lenses. The camera allows you to take excellent pictures of sporting events. It can be used even under water with aid of small accessory device (see page 15).

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GENERAL INSTRUCTIONS

The camera and lenses require careful handling. Use care in cleaning the lenses. Do not wipe the coated surface of the lens with suede or cotton wool. Brush off the dust from the lens with a soft, clean squirrel hairbrush or a jet of dry air from a rubber syringe. In exceptional cases it is possible to use washed and boiled cambric napkin.

Do not disassemble the camera, as this could damage the various components. Qualified technicians should do repair and adjustment of the camera only. The camera works trouble-free in a temperature range from -10 up to +40 degrees centigrade.



Specification of the camera "Leningrad"

Width of a film	35 mm
The frame sizes	24X36 mm
Capacity of the cartridge	1,65 m of a film (36 frames)
Lens "Jupiter-8":	
Focal length	50 mm
Relative aperture	1:2
Scale of distances	1, 1.2, 1.5, 1.7, 2, 2.5, 3, 4, 5, 7, 10, 20 m and "infinity"
Shutter speeds	1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/250, 1/500, 1/1000 sec. and manual "B" and "D"

The use of accessory lenses will allow the scientist to make reproductions, to photograph far or close objects, to photograph a fast moving object at up to three frames per second. The shutter mechanism and automatic film advance reduce the time of preparation for the next picture. This is the distinctive feature of the "Leningrad" camera. Fully winding the camera shutter allows you to take not less than fifteen pictures.

READ THIS MANUAL CAREFULLY BEFORE USING THE CAMERA.



The spring of the self-starter mechanism may be in the wound state for an unlimited time. There is no need to release it every time after unloading the camera.

NOTE

Clearances between frames will be unequal, as the film roll diameter increases while it is winding on the drum.



Main parts and their purpose

1. Nipple for insertion of the tip of the flash lamp.
2. Synchronizer adjustment ring.
3. Shutter winder.
4. Picture counter.
5. Shutter release button.
6. Switch lever.
7. Head of the shutter speed selection.
8. Rack of the shutter speed index.
9. Accessory shoe.
10. Viewfinder-rangefinder.
11. Head of the film rewind.
12. Film speed reminder.
13. Scale of depths of sharpness.
14. Scale of distances.
15. Scale of diaphragm.
16. Self-timer lever.
17. Cartridge.
18. Eyepiece.
19. Picture counter reset button.
20. Scale of the synchronizer.
21. Take-up drum.
22. Lugs for a neck strap.
23. Rotary lock.



ACCESSORY LENSES

In addition to the Jupiter-8 lens, the camera may work with accessory lenses:

Jupiter-3 (1:1.5/5.0 cm).

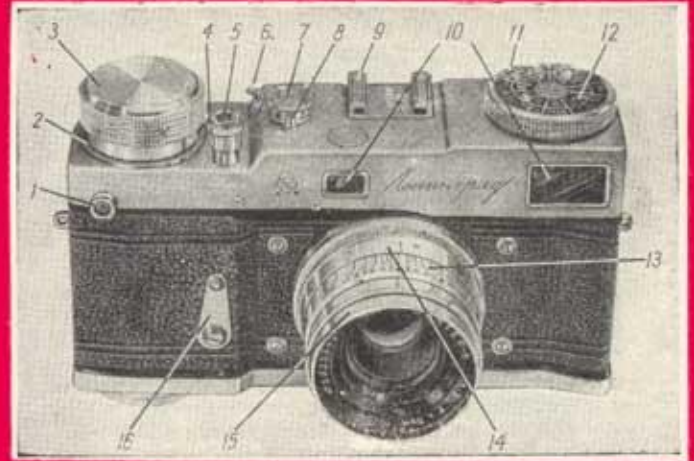
Jupiter-9 (1:2/8.5 cm).

Jupiter-12 (1:2.8/3.5 cm).

Jupiter-11 (1:4/13.5 cm).

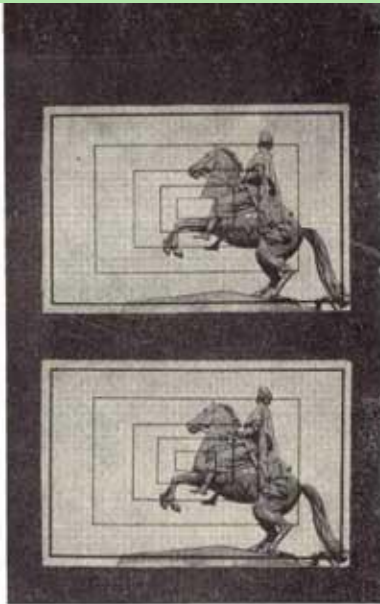


- 24. Screw of the winding drum.
- 25. Clamping plate.
- 26. Folding support.
- 27. Support nut for fastening the camera.
- 28. Screw lock of the back cover.



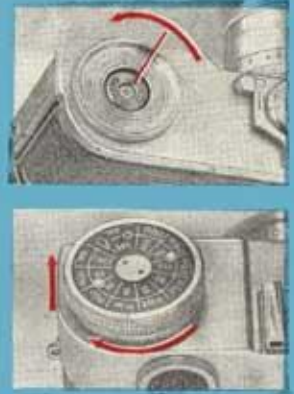
Correct focusing is achieved by exactly matching the shifted image in the center of rangefinder field. Here you can see examples of the viewfinder images before and after focusing.

5. To take a picture, smoothly press the shutter release button; your fingers should not touch the shutter speeds head.



UNLOADING THE CAMERA

1. Release the screw of the drum, rotating it counter-clockwise.
2. Pull the head of rewind upwards with turn, and rewind a film into the cartridge, rotating the head clockwise.
3. Open locks and remove the back cover.
4. Take the cartridge with exposed film out from the camera.
5. Turn the screw of the drum until it stops.
6. Put the camera cover on, and fix the locks.



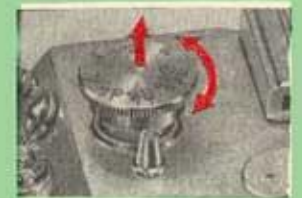
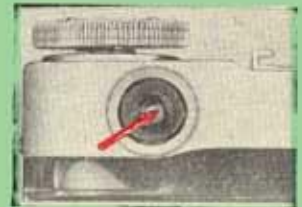
The camera has a curtain shutter. The head of the shutter speeds has a scale with marks '1000' instead of 1/1000, '500' instead of 1/500 etc.

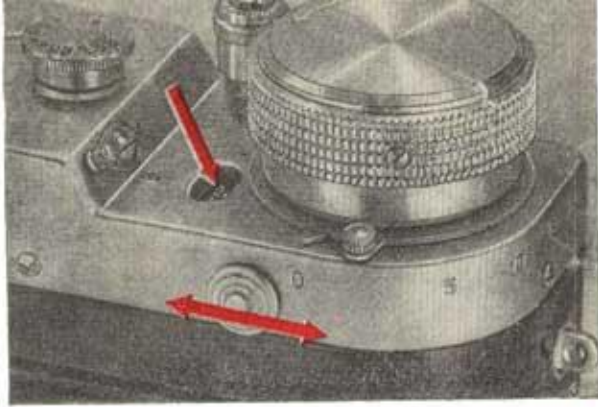
The switch lever is intended for setting the shutter mechanism to automatic speeds 'M' and to manual speeds 'B' or 'D'. For using automatic speeds from 1/1000 up to 1 sec., the lever should be set to 'M'. To get a 'B' speed, it is necessary to set both the lever and the head to 'B' position, and to press the shutter release button. The shutter also allows you to make an exposure for a long time ('D' speed). For this purpose it is necessary to set the lever to 'M', and the head to 'B', and to press the release button.



TAKING PICTURES

1. Adjust the eyepiece of the viewfinder-rangefinder, rotating its frame until frame lines and figures become clearly visible.
2. Set required shutter speed. To do this, raise the speed selector head and turn it, matching figure of the chosen speed with an index. Do not turn the head in range between '25' and '1' (this range is marked by red line on the head) without cocking the shutter.
3. Set an aperture by rotation of the aperture ring on the lens.
4. Focus the lens by rotating the focusing ring on the lens and aligning (matching) the center of the image in the viewfinder-rangefinder.





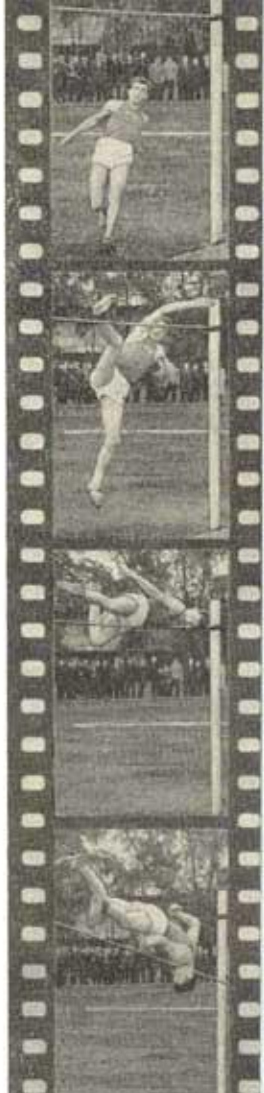
6. Reset the picture counter to '0'. To do this, shift the button of the counter to the left and to the right, as shown by an arrow at the picture.
7. Set the film speed reminder.
8. Insert the camera into a case and secure it with the screw.



To close a frame window, it is necessary to set the lever to 'B' position, and to return it to the original position after shutter release.

Rotating the head in the arrow direction until it stops starts the mechanism of the shutter and automatic film winding. Each pressing of the shutter release button provides automatic operation of the shutter and winding of the film by one frame. The full winding of the head allows you to take not less than fifteen pictures.

The bright viewfinder-rangefinder provides clear delimitation of the frame and precise focusing even in low light and poor visibility conditions. There are tiny frames marked as '5', '8.5' and '13.5' inside of the viewfinder. These frames define the field of view of accessory lenses with focal lengths of 5, 8.5 and 13.5 cm. Whole field of the viewfinder corresponds to a field of view of a Jupiter-12 lens with focal length of 35 cm. The eyepiece has a diopter adjustment.



LOADING THE CAMERA

The camera can be loaded in daylight (however it is necessary to avoid bright sunlight). For this purpose it is necessary to do following:

1. Open locks of the back cover. To do this, raise and turn by 180 degrees the staple of the rotary lock, and then unscrew the screw lock.
2. Take off the cover from the camera body. Wind self-starter mechanism turning its head. Repeatedly press the shutter release button until you find a convenient spring position for a film loading.





The mechanism of synchronization allows you to synchronize the action of the shutter with flash lamps of various types. It has a time scale with divisions from 0 up to 20 msec.

When using a disposable flash lamp, it is necessary to take into account its flame-up time. Depending on the lamp parameters, the synchronizer adjustment lever should be set to '5', '10', '15', or '20', that provides short circuit of an electric circuit at the appropriate time before the shutter opens completely. When using electronic flash lamp, the lever should be set to '0', that provides short circuit at the moment of full opening of the shutter curtains. With flash lamps of any type the shutter speed should be set not less than 1/25 sec.

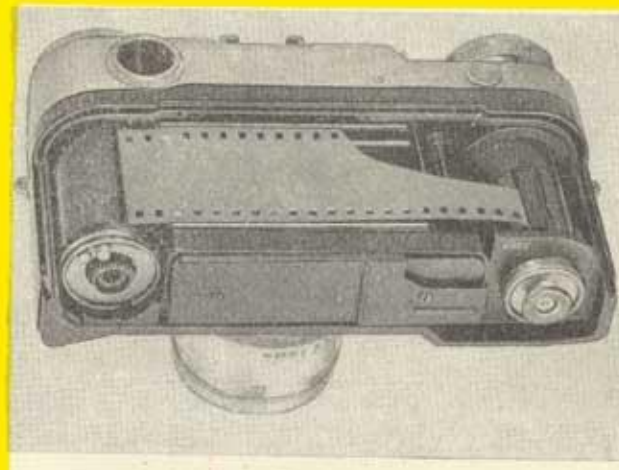
Flash lamp allows you to produce good negatives at any exposure.



3. Attach the end of a film to the drum, having secured the film under the spring. Insert the cartridge with the film into the camera so that a ledge of the cartridge has come into a groove of the body. Press the film to the drum with your finger while pulling it to prevent it from coming off during the initial turns.

4. Close the camera cover. Fix the screw lock, and then rotary lock.

5. To advance the exposed part of the film, press shutter release button twice.



The *picture counter* is connected to the film drive mechanism cinematically. The scale of the counter may be set to '0' or to other positions.

The *self-timer* has a preliminary course not less than 10 sec. To activate it, turn the lever by a pointer until it stops, and press the shutter release button.

WIND THE SELF-TIMER WITH COCKED SHUTTER ONLY.

The distance scale is located on the barrel of the lens. The scale is marked in meters. On both sides of the red index mark of the distance scale are figures for image sharpness (depth of field) at various apertures. For example, the lens with focal length of 5 cm at 1:11 aperture is set to 2 m distance. In this case, the image will be sharp enough in range from 1.5 up to 3 meters.





The film speed reminder scale is located on the rewind head. To not forget what film you loaded into the camera. Match the value of its sensitivity in GOST or DIN with a red point at edge of the rewind head.

The scale can be used also for translation of film sensitivity between GOST and DIN.

'Sun' mark on the scale means a color film for daylight, and 'bulb' mark means a film for artificial light.



LOADING A CARTRIDGE

The cartridge is inside the camera. To take it out, it is necessary to take off a back cover. To do this, raise and turn staple of the rotary lock, and then unscrew the screw lock. Shift the back cover slightly on lateral grooves to remove it.

The cartridge consists of two barrels inserted one into another, and a spool for winding a film.

To disassemble the cartridge, do following:

1. Press the button of the internal barrel and turn it until a cut became fully open.

2. Take the internal barrel and the spool out of the external barrel.

Loading of the cartridge should be done in full darkness in the following order:

a) Cut the end of a film, insert it in slot of the spool, and fix it;

b) Wind a film onto the spool emulsion inside (if to hold the spool head toward you, coils should be wound clockwise);

c) Insert the spool into the internal barrel of the cartridge so that the spool head passed through its bottom;

d) Put the internal barrel into external one, leaving about 10cm of the film outside;

e) Close the cartridge, having turned the internal barrel counter-clockwise until click; after that barrels should not be turned and there should be an inscription '3AKP.' visible in middle of the cut ;

f) Bend about 5mm of film end.

