

CAMERA KIEV-19(M)



Instructions for use

Note: This is the original Kiev-19 manual by Tendo. The author who digitized it included the differences of the Kiev-19M as red notes. These notes are only included as a convenience, in no case can the author ever be held responsible for any error, damage, or loss arisen by following these notes, or by using this manual for the Kiev-19M.

1.GENERAL

1.1. PURPOSE OF CAMERA AND ITS FEATURES

Camera KIEV-19 is a miniature reflex camera of system TTL with semiautomatic setting of exposure. It is intended for amateur photographing.

The camera is designed for using the photographic film 35 mm wide in the standard magazines (36 pictures sizing 24x36 mm in loading of 1.65 m of film).

Camera KIEV-19 is released with lens MC HELIOS-81H (diaphragm setting range 2...16, focal length 50 mm, relative aperture 1:2). The lens is provided with special multilayer anti-reflection coating of which the marking (MC) is indicative. The multilayer anti-reflection coating improves the quality of an image and increases its contrast grade on account of increasing the integral transparency and decreasing the light dispersion by the lens.

The lens joint is of a bayonet type, the thread for a light filter is 49x0.75.

The design of the camera envisages the use of the change lenses which are specially released for cameras KIEV-17, KIEV-19 and KIEV-20. The change lenses of camera NIKON can also be used.

The metal curtain shutter ensures the speeds in the range from 1/500 to 1/2 s and "B".

The curtain travel occurs along the short side of the picture from bottom to top.

The view finder is of a reflecting brilliant type.

The Fresnel lens and the condenser lens in the finder ensure the increased brightness of an image and, thus, the opportunity of shooting under conditions of weak lightening.

The field of vision of the viewfinder occupies 93% of the picture area.

The focusing is carried out with the aid of a wedge, microscreen ring and ground glass.

The shutter cocking mechanism is interlocked with the film transport mechanism.

The picture counter counts off the numbers of the pictures taken and is automatically reset to the initial position when the back is opened.

The exposure meter of the camera of system TTL enables to determine the exposure by the light passing through the lens at an actual diaphragm set on the lens scale.

Note: The Kiev-19M offers TTL exposure metering at open diaphragm.

The advantage and convenience of measuring system TTL consists in the automatic taking into account of all factors which influence the exposure value.

The working range of the exposure meter is equal to 6.4...13,000 cd/mI when the regular lens (relative aperture 1:2) is used. While determining the exposure, take into account the film sensitivity value in the range from 16 to 500 units as per GOST - State Standard (from 13 to 28 units as per DIN).

Note: The Kiev-19M's exposure meter has a working range of 4.8~13,900 cd/mI and allows for film speeds in the range of 25~3200 ISO/GOST.

The battery cell rated for 3 V (overall dimension: diameter 12 mm, 8 mm long) serves as a power source for the exposure meter.

Note: The Kiev-19M uses one PX28 lithium type 6 V battery or four pieces of AG-13/LR-44/SR-44 type 1.5 V batteries in a small plastic adapter. As far as the Kiev-19 itself is concerned, I've heard that two pieces of LR-44/S76/SR43W type 1.5 V batteries fit.

The camera is provided with a synchronizer for combined operation with flash lamps.
The camera back is folding, hinged and can be removed from the camera, when necessary.
The delivery set of the camera includes a detachable eye-cup which's design envisages the use of a dioptic lens.

2.DELIVERY SET

Camera with lens MC HELIOS-81H	1
Lens cap (front)	1
Shoulder sling	1
Guide clip insert	1
Eye-cup	1
Case	1
Instructions for use	1
Packing box	1

3.MAIN UNITS AND PARTS

1	lens
2	eye for sling attachment
3	lever for switching on the exposure meter and checking the focal depth; (Note: On the Kiev-19M, this is only the depth-of-field preview lever. The exposure meter of the Kiev-19M is working as long as the shutter release button is pressed halfway down.)
4	shutter cocking lever
5	release button
6	film sensitivity setting index
7	film sensitivity scale fixing button
8	film sensitivity scale
9	rewinding knob
10	exposure setting index
11	exposure setting head
12	lens lock lever
13	plug jack
14	clip with contact for cableless flash lamp
15	folding handle of film rewinding knob
16	picture counter aperture
17	diaphragm setting ring
18	focal depth scale
19	lens focusing ring
20	power source recess cover
21	tripod nut 1/4"
22	tape transport mechanism release button
23	view finder eyepiece
24	back
25	frame for arrangement of information on the film to be used

Note: The Kiev-19M also has a black plastic hand grip with a screw included. This grip can be screwed onto the front of the camera, beneath the film transport lever and the neck strap attachment.

4.CAMERA OPERATION PROCEDURE

4.1. INSTALLATION OF POWER SOURCE

To install the power source, unscrew cover 20 arranged from below the camera. Insert the battery cell into the power source recess, observing the polarity indicated on the cover (plus towards the cover).

Note: The Kiev-19M doesn't have a screw cover for the battery compartment, but a hinged one. Open it and insert the battery, observing polarity (plus towards plus, minus towards minus).

Screw up cover and check the operation of the power source by pressing on lever 3. In this case the light signals (one or two) must light up from the left-hand side of the field of vision of the view finder.

Note: For checking the power source on the Kiev-19M, press the shutter release button 5 halfway down. In this case one or two of the LEDs on the left-handed side of the viewfinder field of vision must light up.

4.2. CAMERA LOADING

The camera is loaded with the film in the magazines.

The camera can be loaded in the daylight (it is advisable to load at weak lighting, at least in the shadow from your own body).

Pull up rewinding knob 9. In this case back 24 must get opened.

Insert magazine 26 with film into the left-hand recess in the camera body.

Lower the rewinding knob as far as it will go.

Fix the film on reel 27, having threaded the film end into one of the slots in the reel. In this case the film perforation must become engaged with teeth 28 of the sprocket. If necessary, the film can be straightened by rotation of the take-up reel.

Close the camera back.

Set the sensitivity of the film loaded in the camera by pressing on button 7 and turning scale 8 until the film sensitivity value coincides with red index 6 on the upper cover.

4.3. PREPARING OF CAMERA FOR SHOOTING

Cock the shutter twice by lever 4, pressing after each cocking on release button 5. At the next cocking of the shutter the digit "1" of the picture counter will be set opposite the index. If the camera has been loaded correctly, during the cocking of the shutter rewinding knob 9 rotates. When the film winding is not tight, it may happen that during the first pictures the rewinding knob will not rotate.

4.4. SHOOTING

The shooting process consists of the following jobs:

shutter cocking and film rewinding;
determining the exposure (shutter speed and diaphragm);
viewing and framing;
focusing;
releasing the shutter.

The shutter cocking and the film rewinding are carried out by turning lever 4 counter-clockwise as far as it will go. In this case the scale of the picture counter turns through one division.

The free travel of the cock within 35° is envisaged for convenience in operation and stowing the camera in the case.

When the cocking has been fully completed, the lever is automatically returned to the initial position. When the cocking is incomplete, the lever remains in the intermediate position (in this case the shutter must be additionally cocked).

To determine the exposure, direct the camera onto the subject so that its image would be arranged within the field of vision of the view finder.

The field of measurement of the exposure meter has an oval shape, arranged in the middle part of the view finder frame with the offset to the lower side of the frame (ref. to the Figure).

Note: The measurement zone of the Kiev-19M is a circle with 12 mm in diameter located centrally around the microscreen ring.

Switch on the exposure meter by pressing on lever 3 as far as it will go (in this case the diaphragm setting mechanism operates). Keep lever 3 in the depressed position until the end of determining the exposure.

Note: To use the Kiev-19M's exposure meter, press halfway down the shutter release button 5 instead of fully pressing down its depth-of-field preview lever 3. You also need to remain in this halfway pressed down position until you're finished with metering.

The light indication of the exposure meter is arranged from the left-hand side of the field of vision of the view finder: upper signal - MORE LIGHT, lower signal - LESS LIGHT. The blinking of two signals in turn is a normal condition for shooting NORM.

Set the exposure required for shooting preliminary by turning head 11 until the fixing of the selected exposure value opposite index 10 arranged over the head. Then, while keeping lever 3 in the depressed position (**for Kiev-19M: while keeping shutter release button 5 in the halfway pressed down position**), slowly turn lens diaphragm setting ring 17 until the instant of blinking of two signals. The diaphragm value, which will be set automatically upon pressing on the release button, will be opposite the index on scale 18.

Note: If using the Kiev-19M, overread the next two paragraphs and the following table, since it has exposure metering at opened diaphragm.

Owing to the fact that determining of the exposure is carried out at an actual diaphragm as well as taking into account the technical parameters of the photodetector and the operating range of the exposure meter, in shooting you are to set the shutter speeds not greater than those below.

For example, when shooting on the film possessing the sensitivity of 20-18 units as per DIN with the fully opened diaphragm, set the shutter speed of not over 1/8 s which is a NORM for the brightness of a subject to be shot equal to 6.4 cd/m². In the event of the greater brightness the NORM is obtained either by slight closing of the diaphragm or by decreasing the shutter speed.

28-27	1/60
26-24	1/30
23-21	1/15
20-18	1/8
17-15	1/4
14-13	1/2

Note: Now also Kiev-19M users need to read on.

The exposure meter determines the exposure by the integrated (total) brightness of the subjects which are in the field of measurement. Therefore in shooting the subjects which sharply differ in the brightness (e. g. a man on the snow background), the exposure for the main subject can be determined incorrectly. In this case you are required to make a correction (e. g. increase the diaphragm value).

Note: 1. To prolong the service life of the power source, limit the time of operation of the exposure meter. 5...10 s are sufficient for determining the exposure.

Under such operating conditions, the exposure of 8-10 films per month within a year is ensured without replacement of the power source. 2. In operation under conditions of weak lighting, switch on the exposure meter in 15...20 s after aiming at a subject to minimize the effect of persistence of the photodetector. 3. To exclude the errors in determining the exposure, press on lever 3 as far as it will go (**for Kiev-19M: halfway press down shutter release button 5**) and use the eye-cup without fail.

When the change lenses with relative apertures of 1:1.4; 1:2.8; 1:3.5; 1:4 are used, the lower limit of operation of the exposure meter is equal to 3.2, 12.8, 17.9 and 25 cd/m² respectively.

Carry out the viewing and framing of a subject to be shot by examining its image in eyepiece 23 in the field of vision of the view finder.

Perform the focusing by turning of lens ring 19 until the image on the microscreen and ground glass becomes sharp. When a subject to be shot has apparently expressed vertical lines, the focusing can be carried out with the aid of the wedges, arranged in the centre of the ground glass, by matching two halves of an image.

Check the focal depth by an image of parts of a subject to be shot on the ground glass, having preliminarily pressed on lever 3 so as to set the lens diaphragm.

The focusing and framing can be carried out both with the exposure meter switched on and switched off. Switch on the exposure meter only for the time required for determining the exposure so as to save the energy of the power source.

Release the shutter by smooth pressing on release button 5 as far as it will go. Prior to operation of the shutter the lens diaphragm is automatically set to the preliminarily set value, determined with the aid of the exposure meter.

Do not carry out the next cocking of the shutter until its complete operation or when the shutter release button is depressed.

At the exposure "B" the shutter remains opened until the release button is depressed.

To obtain sharp pictures, you are recommended to shoot at speeds from 1/30 to 1/2 s from the tripod and use the straight thread for releasing the shutter.

The straight thread is to be screwed into the thread of release button 5. The tripod nut in the camera is provided with thread 1/4".

4.5. CAMERA UNLOADING

Press on button 22 and release it. The button must be fixed in the depressed position. Throw out handle 15 and rotate it clockwise until the film has been completely rewound into the magazine of which the abrupt weakening of the rotation force is indicative.

4.6. SHOOTING WITH FLASH LAMP

Different flash lamps can be used in shooting with camera KIEV-19.

For connection of the flash lamp to the camera the latter is provided with a central contact in clip 14 and plug jack 13. This provides an opportunity of using the flash lamp with a central contact (cableless connection) or the flash lamp with a plug connector (cable connection).

The minimum shutter speed in operation with the flash lamp is equal to 1/60 s.

Note: Prior to fitting the flash lamp into clip 14, remove the safety insert from the clip.

5. LENS REPLACEMENT

To remove the lens, press on lens lock lever 12 as far as it will go and disconnect the lens from the camera by turning it clockwise.

When installing the lens, match the index of diaphragm scale 31 with dot 30 on the camera bayonet joint, insert the lens into the camera and turn it counter-clockwise until the lens is fixed.

6. INSTALLATION OF DIOPTRIC LENS

The photographers whose sight is defective in shooting can use the dioptric lens which is to be fitted in the mount of the eye-cup available in the delivery set of the camera.

To install the dioptric lens, remove the rubber shade from the eye-cup and unscrew the knurled nut.

Install the dioptric lens and assemble the eye-cup.

The lens diameter is 21 mm.

7. REPLACEMENT OF POWER SOURCE

When the voltage of the power source has dropped below an admissible level, the signals in the field of vision of the view finder go out. In this case the battery element is to be replaced with observance of the conditions, specified in section "Installation of Power Source".

8.CARE

Store the camera in the case in a dry place. Protect it from dirt, dust, moisture, abrupt jerks and jolts since they can result in damaging the camera mechanisms. In shooting in frosty weather (at below minus 10°C), do not leave the camera outdoors, carry it under your outdoor clothing and take it out only for the time of shooting.

It is not recommended to remove the lens from the camera without necessity so as to avoid the fouling and getting of dust onto the surfaces of the optical parts.

Wipe the optical parts surfaces with clean soft cloth or cotton wool slightly moistened in rectified alcohol or ether.

To avoid the sweating of the optical surfaces when the camera has been brought from frost into the warm room, do not open it immediately, let it warm up in its case for some time.

Do not exert the excessive force in handling the camera.

When the defects or faults have been discovered, do not perform the repair on your own. The repair and regulation of the camera are to be carried out only by the specialists.

