

noxar



LUNAR

night vision monocular/clip-on

user manual version: **I 2023 EN**

Device scheme

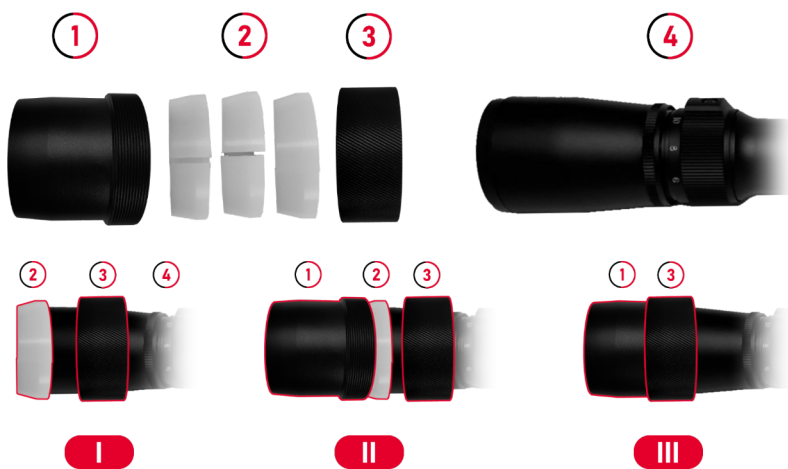


	Click	Hold
	menu: Up Zoom	Menu/Leave
	menu: Left On/Ow LRF	Day/Night mode
	menu: OK Sleep/Wake	Turn ON/OFF
	menu: Right Change IR power	Change IR diode
	menu: Down Noise reduction power	Start/Save Video

Recommendations and cautions

- Insert the 18650 cell into the device with the (+) pole inward. Use cells without protection.
- Remember to remove the cell from the battery tray when not using the device.
- We do not recommend using a powerbank to power the device. There is a risk of pulling out the USB-C socket, which involves replacing the whole motherboard (mechanical damage).
- Do not remove the battery or memory card while the device is turned on. Format the microSD card before using it for the first time. When the card is properly inserted in the device you will hear a characteristic click. The equipment supports microSD cards up to 128 GB.
- Do not look directly at the illuminator beam, as the highly focused beam can damage the eyesight. The highly concentrated beam can also ignite flammable products, so do not leave or pocket the device with the IR on. We do not recommend using IR continuously for more than 10-15 minutes. This may damage the illuminator LED.
- Do not unscrew fully the rings on the illuminator for correcting the illumination angle. This may result in easy loss of the illuminator lens.
- Do not unscrew the eyepiece completely from the device. This can enter dirt and dust inside.
- Do not expose the device to prolonged sunlight, rain, moisture, and avoid dropping or strong shocks - this may damage the internal electronics.
- When installing the mounting adapter on the device, remember to move up the lock.
- We do not recommend updating the software yourself. This may damage the motherboard.
- Failure to follow the above recommendations and cautions may lead to damage not covered by the warranty, and may void it.

Installation on the scope




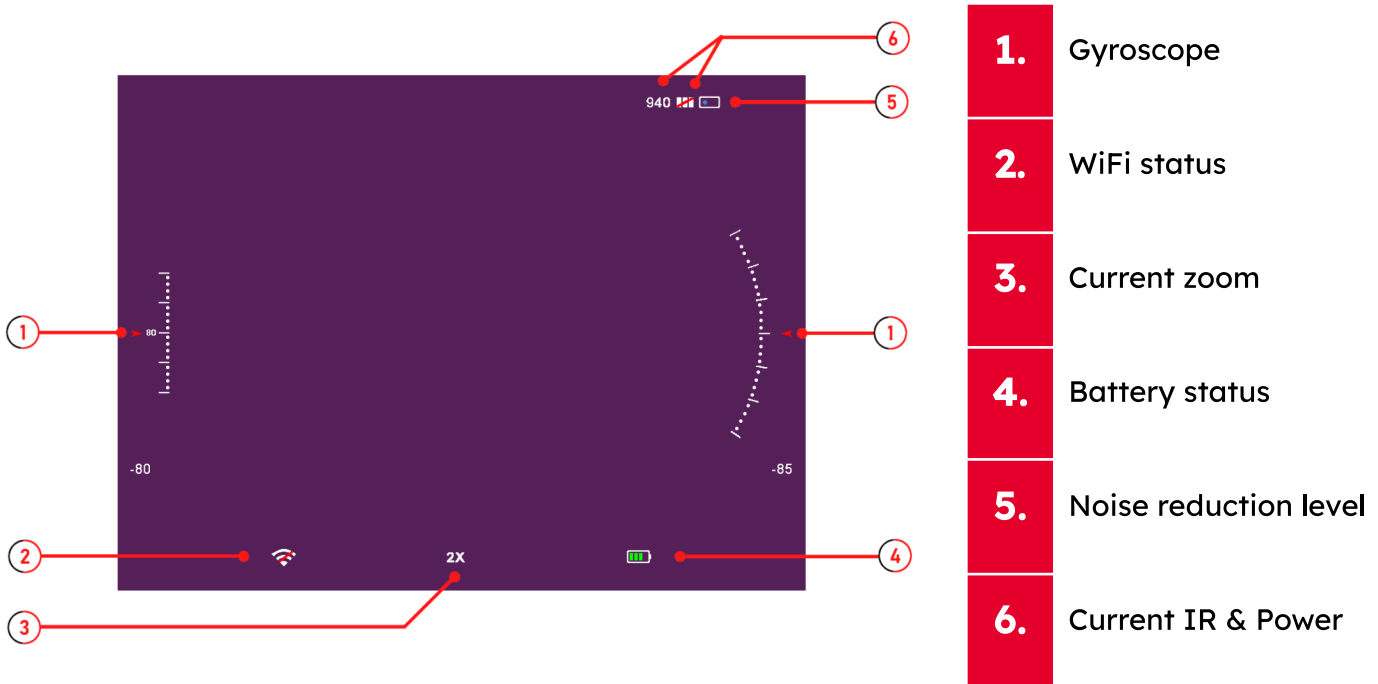
I Put the clamping ring (3) on the scope (4), then the suitable distance ring (2)







II Put the mounting adapter (1) on the distance ring (2)


III Screw the clamping ring (3) to the adapter (1)


Operating the device


1. To turn on the device, hold down the  button, and a short press will put it into sleep mode. Another click will wake up the device.
2. After startup, adjust the focus of subtitles and icons on the screen with the diopter ring (5).
3. It is best to leave the focus of the scope eyepiece unchanged, unless there are problems with focusing. The scope's zoom should be set to the lowest value during calibration. Use the focus knob (9) to set the background sharp.



4. You can enter the main menu by holding down the  button. To navigate through the menu, all buttons are used:  - up,  - down,  - left,  - right,  - OK. The 'left' and 'right' buttons are only required for a few functions. Holding down  will close the menu, saving the changes.


5. On the home screen, a single click  will start the digital zoom. Regardless of the choice of starting zoom, the next digital zoom values are: X1,5 / X2 / X2,5 / X3 / X3,5


6. Holding down  changes the day/night mode. If a laser rangefinder is attached and connected, we can turn it on with a single click. The rangefinder measurement is continuous and will be displayed in the upper right corner.

7. Single click  changes the IR power level. Holding it down changes the type of IR (850/940nm). The focus of the illuminator beam is adjusted by extending it forward or backward. At maximum extension, the beam will be the most focused. To change the illumination angle of a certain illuminator, unscrew a little the ring at the end of the IR housing, then adjust the lens by pressing your finger along the edge of the lens oring. **Caution: do not unscrew the ring completely - this may cause the individual elements of the illuminator to fall out.**

8. Holding down  starts video recording. Holding again will save the recording to the microSD card. A single click turns on or changes the intensity of the noise reduction function.

Menu functions

If the language of the device will be foreign, locate the function with the  icon, enter it using the OK button, find your language on the list and click OK again to confirm selection.



To save changes to the menu, hold down the  button.

- Display position adjustment - The function allows you to center the scope's image. Using the buttons (Up/Down - Left/Right) the center of the display is determined.
Note: when selecting a starting zoom of X1.0, this function cannot be used.
- Default starting zoom - allows you to select the starting digital zoom: X1.1 / X1.2 / X1.3 / X1.4
The X1.0 option does not use digital zoom at startup.
- Display brightness - allows you to adjust the brightness of the screen (1 - darkest; 4 - brightest).
- EV Compensate - allows you to adjust the amount of light entering the sensor.
The +2.0 parameter opens the aperture completely, -2.0 closes it. Default value: 0.0
- Day/Night Mode - allows you to select the color mode activated at startup.
Colorful - day mode, Black/white - night mode, Green - night mode with green filter.
- IR Type - allows you to select the illuminator that is activated when the device starts.
- IR Brightness Level - allows you to select the power level of IR triggered at startup.
Remember that continuous use of level 3 will heavily consume the battery and may damage the diode.
- Noise Reduction - allows you to select the power level of image de-noising at startup.
Level 0 is disabled function (the ' ' icon on the main screen symbolizes the disabled noise).
Level 3 is the highest noise reduction (the '***' icon on the main screen).
- PiP - allows you to enable Picture in Picture mode (at the top of the main screen, a window with the center of the picture magnified X2 will be displayed. Enabling PiP will be remembered at the startup of the device.
- LRF - if a modular laser rangefinder is installed, you can select the unit of measurement.
Meters - measurement in meters, Yards - measurement in yards, Off - no measurement
- Auto Hibernation - allows you to select the idle time after which the equipment will enter sleep mode.
- Auto Turn OFF - allows you to select the idle time after which the equipment will turn off.

Menu functions

- WiFi - Roadcam app (AppStore/Play Store) is used to connect the device to your phone/tablet. After installing the app on your mobile device, activate the WiFi function in the device menu. In the application, give the necessary permissions and click the camera icon on the home screen. After a while, the app will ask if you want to establish a connection. After confirming, you will proceed to select the connection via WiFi. Refresh the list and find the connection starting with 'NOXAR...'. Enter the password: 12345678 and connect. After a while, an image of the device should appear on the application screen, indicating a valid connection.

Note: due to the huge number of hardware configurations and system versions, the manufacturer is not responsible for the correct functioning of the application on all mobile devices.

- Gyroscope - allows you to enable/disable the gyroscope displayed on the main screen.
- Auto Recording - enabling the function starts video recording when the device boots. Holding the  button saves video to the memory card.
- Loop Recording - enabling the function allows recording in a 1/3/5/10 minute time loop. Holding down  will save the last X minutes of the recording to the memory card.
- Playback - the function opens a preview of the stored recordings on the memory card. The 'OK' button selects the recording, clicking again plays/stops the video. 'Left' and 'Right' are used to scroll through the recordings. Holding 'Up' on the selected file gives you access to several options:
 - Delete Current/All - removes currently selected/all recordings from memory.
 - Lock Current/All - puts a lock against deletion on currently selected/all recordings.
 - Unlock Current/All - removes the lock against deletion from selected/all recordings.

Clicking 'Left' on the selected recording exits to the main preview screen.
Holding 'Up' again holding 'Up' will return to the main menu.

- Video Recording Time - sets the maximum time for recordings started manually. The function is not applicable when the loop recording and auto-recording functions are active.
- Audio Recording - option allows audio recording in recordings.
- Date Label Display - option allows you to display a date label on the saved recording.
- Language - allows you to select the language of the device.
- Date/Time - pozwala na ustawienie daty wyświetlanej przy nagraniach.
- Format - allows you to format the microSD card. Any stored data will be lost.
- Default setting - allows you to restore the factory settings of the device.
- Version - displays the current software version.

Notebook

A series of horizontal dotted lines for writing.

Device parameters

Lens:	14.5 mm	FOV:	27.2 x 20.4 x 34
Magnification:	X1.5	Digital zoom:	X3.5 (leap in 0.5)
Diopter range:	5 D	Sensor resolution:	1920x1080 p
Frequency:	60 Hz	OLED resolution:	1024x768 p
Memory:	max. 128 GB microSD	Video resolution:	1920x1080 p
Type of IR:	850 nm 940 nm	Power supply:	3,7 V - 18650 cell without protection
Dimensions:	105x115x80 mm	Weight (w/battery):	420 g
Protection class:	IPX7	Operating temperatures:	-20 ~ 55+ °C

Package contents:

Noxar Lunar	Mounting adapter
Protective cover	Allen key
Manual + Warranty Card	Reduction inserts - 3 pcs.
USB cable	Rubber orings - 4 pcs.

WARNING!

The device is a precision electronic apparatus. Any repairs or modifications on your own may result in damage to the equipment or loss of warranty. The producer is not responsible for the consequences of using the device improperly and not in accordance with the instruction manual. Mechanical damage, breaking the warranty seals and stickers, and self-installing software may void the warranty. Each unit is marked with a unique serial number for identification.

Read the user manual before using the equipment!



Remember!

The symbol of the crossed-out waste container informs about the prohibition of placing used electrical and electronic equipment together with other waste. Waste equipment should be collected selectively, the user is obliged to transfer the used equipment to a collection point to ensure recycling and recovery.

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