

Dear user!

Thank you for purchasing this 3 in 1 Rear view panoramic mirror with a 4.3 inch mirror dual-channel car DVR. Study this manual thoroughly in order to use the device correctly and to make its service life longer. Do not throw the user's manual away because you may need to consult it in future

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[Operating conditions]

1. Before start of using the device, study the user's manual thoroughly.
2. Get acquainted with warranty terms
3. Before launching the device, charge its in-built battery fully using a car power supply adapter included in the kit.
4. Operate the device using accessories only from the supplied kit. Neoline Company is not liable for any possible damage done to the product if accessories made by other manufacturers are used.
5. Make sure that you install a memory card correctly; incorrect installation of the memory card may damage the device.
6. Use Micro SD cards class 10 (or higher) to avoid operation failure.
7. Use memory cards from 8 Gb to 64 Gb.
8. Format your memory card once in 2 months to avoid any damage to its file system.
9. Do not remove the memory card before recording is completed; otherwise the file may be damaged.
10. If in your car the power supply does not stop automatically upon the engine switch off, remove the power charger from the dashboard outlet to avoid full discharge of the car battery.
11. Do not expose the device directly to sun.
12. Do not connect the car adapter to battery directly (this is not covered by warranty).
13. Disassembling or modifying of the device is forbidden.
14. Do not drop the device or expose it to shocks. Do not press LCD display, this may damage the mirror or DVR screen.
15. Do not expose the device to fire, humidity or chemically active substances (gasoline, solvents, reagents, etc.).
16. Do not operate the device if your hands are wet.
17. Do not clean the device with detergents containing aggressive acids or alkali.
18. Neoline Company is not liable for the loss of data and/or any damage – direct or indirect – sustained by the user or a third party due to the improper usage of the device or software, inadequate installation, or application of accessories that are not included in the accessory kit.

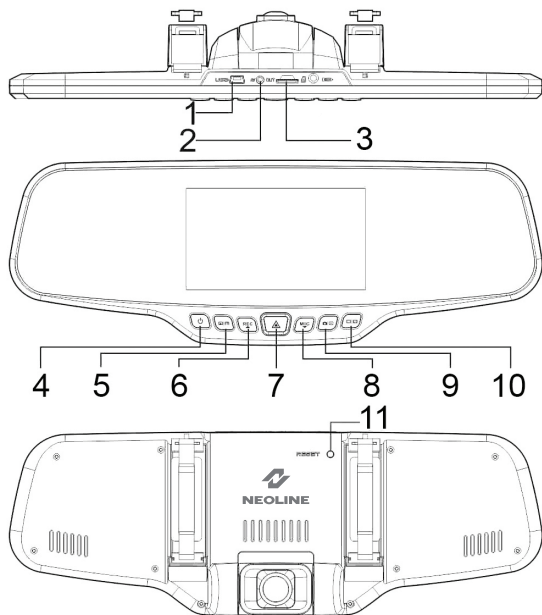
[Technical characteristics]

- Processor: Allwinner V3
- Matrix: SIMG F02, 2Mp, 6 glass lenses.
- View angle: basic camera 170 degrees (diagonal), additional camera 120 degrees (diagonal)
- Video resolution: Front camera Full HD 1920x1080 (30fps). Additional camera VGA 640x480 (50fps)
- Video recording format: MP4 (H.264)
- Video recording format: MP4 (H.264)
- Display: 4.3in
- Screen resolution: 480x272
- Built-in microphone / dynamic
- G-sensor
- Motion sensor
- Loop recording
- Continuous recording
- Night shot mode: no
- Auto switch on/off
- Date/Time stamp
- Car plate number stamp
- Micro SD 8GB-64GB (Class 10)
- Storing temperature: from -20 degrees to +70 degrees
- Operating temperature: from -10 degrees to +60 degrees
- Incoming voltage: DC 5V, 1.5A
- Car charger input: DC 12-24V
- Dimensions: 285x110x13 mm
- Weight: 315 g

[Completing parts]

- Mirror Neoline G-tech X23
- Additional camera
- Mirror cleaning wipe
- Car power charger
- USB cable
- User's manual
- Warranty card
- Car mounting kit

[Description of connectors and buttons]



- | | |
|---------------------------------------|--------------------------------------|
| 1. Mini USB connector | 7. OK button |
| 2. AV outlet (rear-view camera) | 8. Down/Microphone button (DOWN/MIC) |
| 3. TF card slot | 9. Modes button (MODE) |
| 4. On/off power switch button (POWER) | 10. Switch button (SWITCH) |
| 5. Menu button (MENU) | 11. Reset button (RESET) |
| 6. Up/Record button (UP/REC) | |

[Meaning of buttons]

1. Power feeding button (POWER)

Press and hold – switching the device on/off.

Short press in Operation mode – switching the screen lighting on/off.

2. MENU button

Stop video recording. Short press in standby mode opens/closes Settings menu.

3. UP/REC button

Short press in Video mode – starting/pausing the video recording.

Press and hold – switching the motion sensor on/off.

In Settings menu, the button is used for moving along menu items (upwards).

In Playback mode, press on the button allows to select a video or photo for back playing /viewing. During the video playback, press on the button starts the fast reverse winding.

4. OK button

In Setting menu – acknowledging the selection of a definite item or setting.

In Record mode – protection against the re-recording of current video file.

5. DOWN/MIC button

Short press in Video mode – switching the microphone on/off.

Prolonged press – switching the Parking mode on/off.

In Settings menu, this button is used for moving along menu items (downwards).

In Playback mode, press on the button allows to select a video or photo for back playing /viewing. During the video playback, press on the button starts the fast forward winding.

6. MODE button

Stop video recording. Short press in standby mode allows switching the operation modes: Video / Photo / Playback.

7. SWITCH button

Short press – switching between front and rear cameras.

8. RESET button

If your video recorder fails to react to the pressing of buttons, press RESET button for forced resetting of the device.

9. Slot for memory card

Slot is meant for installing MicroSD memory card into the video recorder. Before installing the memory card switch the device off.



ATTENTION: Make sure that the memory card's position is right. Your attempt to insert the memory card facing the wrong direction may bring about damage to the device and also to the memory card.

Warning: Do not apply too much force when installing the memory card to avoid damage to the device.

In order to install the memory card insert the micro SD card into the slot pushing it down all the way (till it clicks). In order to remove the memory card, press it until it clicks and pull it out of the slot.

10. USB connector

USB connector is meant for charging and connecting to computer. In order to transfer data from your device to computer, use cable from the supplied kit, switch off the device by pressing POWER button, and make sure that the device is switched off. Insert into your device mini-USB –B connector, and into the computer – USB type A connector.

For the purpose of securing feeding (car battery charging) connect your video recorder to the car power supply network through the charger included in the kit.

11. AV outlet

AV outlet is meant for connecting rear-view camera from the device kit.

[Operation guide]

1. Battery charging

Connect the car charging adapter to video recorder's USB connector; install and fix the video recorder on the rear-view mirror.

Charging may be also secured either from computer's USB connector (DC 5V) or from a common 220V socket, in this case a special power adapter must be used (not included in the kit).

2. Switching the device on

Press POWER button to switch on the video recorder; upon the appearance of a screensaver with Neoline logo the device will switch on. Press and hold POWER button to switch off the video recorder; this will stop current video recording and save the last file.

Note: Before launching the device, charge its in-built battery fully using a car power supply adapter included in the kit. If the battery charge level is too low, the video recorder may not switch on.

Automated switching on/off: As soon as power is supplied to the video recorder (ignition switch on), the device will switch on automatically, starting video recording. As soon as power supply is cut off, the video recorder will automatically stop the recording and switch off.

Note: If voltage in your car is supplied to the dashboard outlet even after the ignition switch off, remove the plug from the dashboard socket.

3. Entering the system menu

In order to enter Settings menu, stop video recording by pressing REC button and MENU button. Move along menu items by pressing UP and DOWN buttons. Press OK button to select an item or acknowledge setting.

Video

Stop video recording, press Menu button, and then select any menu item for setting.

Video settings	Description	Submenu
Resolution	Selection of video resolution	1080P: FullHD resolution, 30 frames / second 720P: HD resolution, 30 frames /second
Quality	Setting of video quality	Usual / Medium / Best
Cyclic recording	Video file duration	1 min. / 3 min. /5 min. / Off
White balance	Setting of white balance	Auto balance / Sunny / Cloudy / Filament lamp / Fluorescent
Contrast	Setting contrast of a video	0/1/2/3/4/5
Exposure	Setting of exposure value	-3/-2/-1/0/1/2/3

Video settings	Description	Submenu
Recording upon switching on	Automated start of recording upon switching on	<input checked="" type="checkbox"/> • Recording on <input type="checkbox"/> • Recording off
Stamp date/time	Switching on the date and time stamp	<input checked="" type="checkbox"/> • Stamp on <input type="checkbox"/> • Stamp off
Motion sensor	Switching on motion sensor	<input checked="" type="checkbox"/> • Motion sensor is switched on <input type="checkbox"/> • Motion sensor is switched off
Stamp state registration No	Setting of the state registration No	XXXXXXXX

Photo

Press Menu button in Photo mode, then select any menu item for setting.

Photo	Description	Submenu
Resolution	Selection of photo resolution	12M/ 8M/ 5M/ 2M
Quality	Selection of shooting quality	Best / Medium / Usual
White balance	Setting of white balance	Auto / Sunny / Cloudy / Filament lamp / Fluorescent
Exposure	Setting of exposure value	-3/-2/-1/0/1/2/3
Stamp date/time	Switching on the date and time stamp	<input checked="" type="checkbox"/> •Stamp on <input type="checkbox"/> •Stamp off

Playback

In Playback mode press and hold Menu button, then select any menu item for setting.

Playback	Description	Submenu
Remove file?	Removal of video or image	OK / Cancel

Settings

In order to enter the menu of general settings, press Menu button twice in Video mode or Photo mode, then select any menu item for setting setting.

Settings	Description	Submenu
Parking mode	Selection of G sensor's sensitivity level in Parking mode	Off/Low/Medium/High
G sensor	Selection of G sensor's sensitivity level in Video mode	Off/Low/Medium/High
Recording of sound	Switching on microphone	<input checked="" type="checkbox"/> •Microphone on <input type="checkbox"/> •Microphone off
Volume of sound	Selection of the dynamic sound volume	High/Medium/Low
Button sound	Switching on the button sound	<input checked="" type="checkbox"/> •Button sound on <input type="checkbox"/> •Button sound off
Network frequency	Selection of network frequency	50Hz/60Hz
Memory card	Memory card data	Occupied/Overall Urgent recording SD card test
Automated switch off	Setting the interval of auto switch off	15 sec./30 sec./60 sec./Off
Formatting	Memory clearing	OK/Cancel
Language	Selection of the menu language	Russian/ English
Date/Time	Setting of date and time	YY/MM/DD XX:XX:XX
Screen auto switch off	Selection of the interval after which the display lighting will be switched off	10 sec./20 sec./30 sec./Off
Manufacturer's settings	Reset of all settings	OK/Cancel
Software version	Software version	XXXXXXXX-XXXXXXXX

[Operation mode]

1. Video recording mode

Upon switching on the video recorder it gets into Video recording mode automatically. Cyclic recording is set as default; recorded in this mode, video files of equal duration are saved on the memory card consecutively; as soon as the memory card is full, automated removal of old files and saving of new ones starts. In this way perpetual substitution of the oldest video file with the newest currently shot one takes place on the memory card. In cyclic recording mode video file duration can be changed through Settings menu. To start/ finish recording press REC button in Video recording mode. Following the start of recording countdown begins in the upper left corner of display. This means that the recording is actually performed.

2. Photo mode

To enter Photo mode, stop recording by clicking on REC button and then pressing MODE button. An icon in the left upper corner will change from the video camera image to photo. For shooting a photo, it is necessary to press OK button. To get back into Recording mode, press MODE button twice.

3. Playback mode

To enter Playback mode for playing back video files and viewing photos, stop recording by clicking REC button, then press MODE button to get into Photo mode, then press MODE button again. An icon in the left upper corner will change from the video camera image to the blue-coloured symbol "Play". In Playback mode you can view on the video recorder's screen video files and photos saved on the memory card; you can remove them by pressing MENU button. File selection is made by UP and DOWN buttons. To playback / pause a video press OK button. To fast-wind the video back press on UP button during the playback of a video file; press on DOWN button for fast-winding the video forward

[Other functions]

1. Motion sensor

This function is meant for monitoring the environment. As soon as camera spots any motion within its lens range, recording stops automatically for a while. To switch the motion sensor on, press and hold REC button in Standby mode or activate this function through Settings menu. Upon activation of this function an icon of human figure will appear on the screen top.

We do not recommend switching on the motion sensor while the car is moving. This may lead to video quality distortions, hang / damage of the equipment, and fast CD card filling.

2. G sensor

This G sensor (impact sensor) function allows protecting current video file from re-recording and removing in case the device records a shock/impact. In the right upper corner of the screen a "blockage" icon meaning that the current file is protected will appear.

This video file will be protected from deletion / re-recording; prefix "SOS" will be attached at the end of the file name; the file will not get lost unless removed manually.

We recommend setting the "medium" (default) G sensor sensitivity value. The level of sensitivity can be set in Settings menu.

3. Manual file blocking

Press OK button during the recording; in the right upper corner of the screen a "blockage" icon meaning that the current file is protected will appear.

This video file will be protected from deletion / re-recording; prefix "SOS" will be attached at the end of the file name; the file will not get lost unless removed manually.

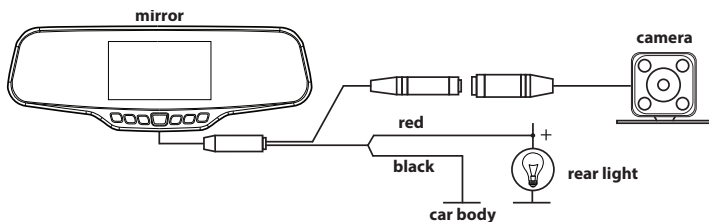
3. Parking mode

Upon activation of this mode, even if the device is switched off, recording will switch on automatically every time the device records a shock/impact.

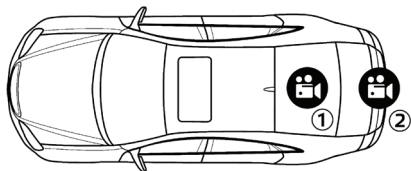
This function may be switched on/off through Settings menu or by prolonged press on MIC button.

[Mounting and operating a rear-view camera]

1. Mount your rear-view camera as shown in Fig.1.



2. Fix the camera on the rear car bumper using self-tapping screws or inside the car using 3M scotch tape (included in the kit) as shown in Fig.2.



Mounting the parking camera:

- 1) Inside the car with 3M scotch
- 2) On the rear car bumper

3. Connect video cable to your video recorder's AV input.

4. Connect power cable to the rear light wires in order to display rear-view camera videos in full screen mode when you switch your car's gear box to the reverse gear box mode. If power is not supplied to the rear light wires, the rear-view camera will record videos but will not get into full-screen mode automatically

[Possible problems and their causes]

If any problems with the device emerge although the equipment maintenance and operation terms have been observed, read this section to solve them.

- **It is impossible to shoot photos and record videos.**

Check if there is enough free space on Micro SD card, and if it is not blocked.

- **Spontaneous stop occurs during the recording.**

Since HD quality video files occupy much space, use only high quality Micro SD cards no lower than 6 class (class 10 is recommended).

- **When you try to view / back play a photo-video file, “video back play mistake” inscription appears on the display.**

This is caused by incomplete file recording due to the file system failure on the Micro DS card. Format the Micro SD card.

- **Blurred image.**

Check for dirt or fingerprints on the lens. If you find any, wipe the lens with a piece of soft cloth before usage. (To avoid damage to the lens surface special substances for the maintenance of optical equipment are recommended).

- **Image is darkened when you shoot the sky or water.**

If a sharp contrast is present on the shooting scene, it will affect the exposure. Change the exposure value settings in menu.

- **Unnatural colour on the recording and photo occurs when you shoot on a cloudy day or indoors.**

Check White balance settings in menu, set White balance in Auto mode or select the value which suits the shooting conditions.

- **Hang (no image on the display, no reaction to pressing on buttons).**

For starting a forced reset of the device press RESET button.