

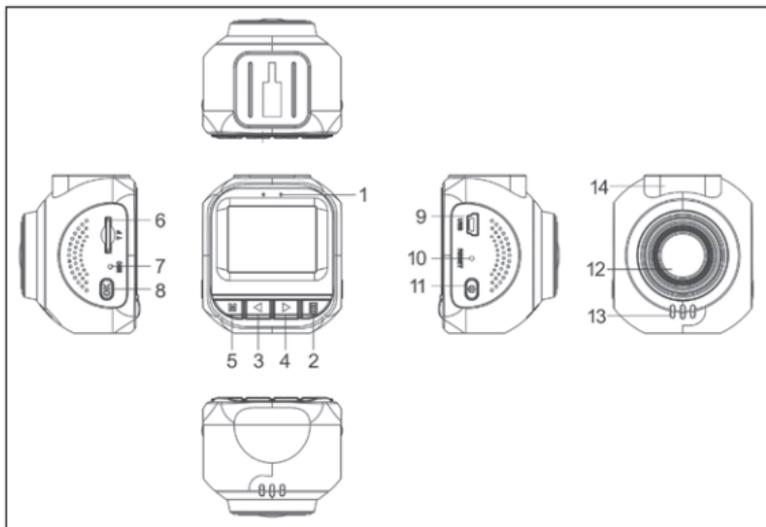
# 1. Important safety instructions

Please read this user's manual carefully before using the device. It contains important information concerning safety, use and troubleshooting. Keep the manual in a safe place for future reference. Should you sell or give the device to a third party, include the user's manual to ensure the new owner can also become familiar with the device.

## Warning

- Protect the display against damage.
- Do not use force to connect the USB. Always make sure you are connecting the USB cable with the device off.
- Do not insert connectors into the USB port other than the specified USB connector with the relevant port size.
- Handle the display with care to prevent damage.
- Protect the device against impacts. Do not expose the device to extreme temperatures, direct sunlight etc.
- When installing the device, degrease the mounting area on the glass and make sure the mount is fixed firmly so that the camera does not fall.
- Insert the SD card carefully, do not insert the card with force. Make sure the device is switched off before inserting the microSD card.
- Due to a wide range of microSD cards on the market, it is not possible to guarantee full compatibility with all microSD cards available.
- Do not expose the device or accessories to dripping or spraying water. Protect against moisture, dust and impurities. Do not place any containers with water on the device, for example, vases.
- Do not expose the device to sources of heat, for example, sunlight. Do not set the device on or near an open fire, for example, a candle.
- Use a dry towel for cleaning. Under no circumstances should benzene, thinner, ammonia or other similar substances be used.

## 2. Device and controls



### 2.1. Device and controls

#### 1. **Status indicator**

The blue indicator is on when the camera is on and a memory card is inserted. It flashes during recording. Red indicator is on when charging.

#### 2. **Menu button**

It locks the file during recording to prevent erasure.

In addition to recording, it switches cyclically between mode Settings, General Camera Settings and Settings Off – normal operating mode.

#### 3. **“Up” button**

Up direction in the menu, except for the digital zoom menu.

#### 4. **“Down” button**

Down direction in the menu except for the digital zoom menu.

It turns the microphone on/off during recording.

5. **MODE button**  
Switches between video/photo/playback.
6. **MicroSD memory card slot**
  - Inserting the card: Carefully insert the card into the TURNED OFF DEVICE in the right direction (printed side toward the screen, the gold-plated contact pads facing forward and into the device, recess in the card case downwards). Insert the card, for example, using your fingernail about 1 mm under the surface until you hear a click. The card will fall into place upon release.
  - Card removal: Push the card in, for example, using your fingernail about 1 mm under the surface until you here a click. When releasing the card from its compartment, hold on to it to prevent it from jumping out.
7. **Microphone**
8. **REC/OK button**  
Menu selection confirmation button. In normal mode start/stop recording or photo capture.
9. **USB connector**
  - a) Powering the camera and charging its battery
  - b) Data connector for transfer to PC (not into camera)
10. **RESET button**  
Turns off the camera if it becomes unstable or does not respond to control, e.g. due to excessive heat. Press the button with a thin, blunt object, such as an open paper clip.
11. **Switch**   
Switch the camera on or off by pressing for 4 seconds. You can turn off the camera using the button only when it is not recording.
12. **Lens**
13. **Speaker**
14. **Built-in GPS receiver**

**Notes:**

- a) you have to use for recording high quality, fast writing card, at least class 7 and of appropriate size. Determine which card capacity best suits your needs before purchasing, a card with a small capacity can quickly become full with standard recording and locked files. We recommend at least 4 GB. The maximum capacity supported is 64 GB. The recording can be affected by the specified speed class, but also by an even speed throughout the entire card memory.
- b) despite maximum effort for compatibility, it is not possible to guarantee the usability and functioning with all devices available on the market. If a feature or recording on the card does not meet your expectations, format the card in the computer and then in the device. If this does not improve functionality, use a different card, preferably a faster one.



**NOTE: the inserted card uses technology sensitive to high temperatures or thermal shocks. Avoid leaving the memory cards in high temperatures (for example, behind the car window in summer) and do not subject them to thermal shocks (e.g. in winter). This could result in temporary or permanent damage to recordings found in the memory.**

## 2.2. Glass mount

Attach the device gently with the groove ("rail") to the holder attached to the car window or to another suitable smooth surface.

Installing the mount to the car windscreen (if the piston is still equipped with a soft transport wrap, remove it prior to installing):

Remove the cover sheet of adhesive tape and stick the holder to the desired location.

Slide the camera onto the mount (via rail). Loosen the tightening joint nut slightly and adjust the camera direction. Gently tighten the nut.

Perform several test recordings at various resolutions and camera positions to ensure the end result meets your expectations. After you have checked the recordings, gently tighten the camera joint nut.



**NOTE: Do not use excessive force when handling and working with the holder and camera, both parts are very light and do not have to be mechanically stressed during operation.**

## 2.3. Battery and charging instructions

### Battery charging indicator:



Full



Almost full



Weak

Charging methods: car adapter, PC USB slot, external power adapter (sold separately).



**WARNING: use a 5V power source only, otherwise you can damage the device.**

Upon connecting the device to the car outlet and starting the ignition, the device will switch on and begin to record once the key is set to "Accessories" and the recording process is stopped when the key is removed from the ignition. The

red charging indicator goes off when the battery is charged and only the device is running. The full charging cycle of an empty battery lasts up to 180 minutes. The built-in battery in the camera serves only as a bridging buffer for transition power supply states and is not used for a longer operation of the camera without a connected power supply.

## 2.4. Description of basic and special functions

### • **G-sensor**

A sensor of extraordinary acceleration, such as an impact or crash, locks the current file against automatic deletion. It can be set for 3 levels or turned off. Try a suitable option to prevent the sensor from being activated, by e.g. normal road bumps and not filling the card with unwanted, indelible files. This would prevent any more recording.

### • **SOS function**

While recording, press briefly the MENU button, the current file will be locked, the display shows key symbol .

### • **Auto power on and off**

When connecting the power, the camera turns on and starts recording and ends recording and shuts down a few seconds after the power is disconnected. Most cars have an on-board power outlet controlled by the ignition key, so you do not need to operate the camera manually or handle the power cable.

### • **Night recording**

The camera is equipped with a special filter to improve night scenes.

1. **Off** – recording like during daylight does not change while recording night scenes. Indicator  on display.
2. **Colour night scenes** – at low scene illumination for at least 5 seconds the IR CUT night filter activates and the recorded scene brightens. If the scene brightens for at least 5 seconds the camera changes to regular recording. Indicator  on display.

3. **Black and white night scenes** – at low scene illumination for at least 5 seconds the IR CUT night filter activates and the recorded scene brightens. If the scene brightens for at least 5 seconds the camera changes to regular recording. Indicator  on display.

- **Motion detection (while camera is on)**

Turned on camera with recording stopped tracks movement in the scene and when motion is detected it makes a short, several seconds recording. Set suitably auto shutdown and dimming of the display so that they do not prevent them from tracking the scene.

- **Card formatting**

It creates a file system on the card for efficient recording. Recommended for any newly inserted card.



**Notice: Formatting permanently deletes previous card content!**

**Tip:** Because of the potentially extreme stress of the memory card (vibration, temperature fluctuations, humidity), it is advisable to occasionally check the integrity of the card's memory space, or reformat it in the computer and then in the camera. We recommend that you exclude cards showing errors from further use.

- **GPS positioning**

Set the GPS menu item to On to collect information from GPS satellite signals and record them in the MOV video metadata files. At the same time, the driving speed will be entered into the video image; keep in mind that driving speed is easy to read while playing on any player.



**Notice: for the correct positioning function you need a direct and unobstructed view from the camera to the sky, with no obstacles visible or invisible. Make sure that the camera is properly positioned behind the windshield.**

### **Instructions and recommendations:**

It is necessary to receive and decode a signal from at least three satellites for position detection, which takes several tens of seconds to several minutes after switching on. During this time, the satellite antenna symbol flashes on the display. Once the position is determined, the symbol is permanently lit and the calculated speed is shown on the display. To further refine your position, you need to locate other satellites in the sky and add their information to the existing ones. Shading the view of the entire sky (by trees, mountains, tall buildings) reduces the accuracy of the position calculation or completely disables it. If your car's glass is equipped with heating (wires) or (anti-heat) shielded by foil or plating, it reduces the signal transmission to the sensor in the camera and can reduce positioning accuracy or completely disable it.

- **Date & time**

You can set the time and date manually in the menu. If you have the GPS sensor turned on and it finds the location, the date and time in the global format will also be read and saved from the information you receive. For the correct local time, it is necessary to set your time zone correctly, including any daylight saving time.

### **Working with USB**

In addition to power, the connector is used to transfer data from the memory card in the camera to the computer. However, not from the computer to the card (erasing, formatting), perform the file management either with the camera

functions or by moving the card into the card reader on the computer. The connected card is reported as another disk drive. The Mass Storage message lights up on the camera display.

## 2.5. Start-up, warm-up

1. Charge the device away from the car, press and hold the On / Off button (5s) for a long time and set it to suit your needs as described in this manual. At the end of the initial procedure, switch the device off by holding down the On/Off button (up to 3 s).
2. Install the camera and mount to a suitable place on the wind shield and manually activate the camera connection to power supply for automatic activation.
3. If you manually turn on the camera, turn it off manually when finished recording (not necessary if you have automatic shutdown).

## 2.6. Operating modes and use

MODE button for mode select

1. Turn on the device by pressing On / Off, the blue status indicator lights up and after the welcome screen an operational screen appears with status icons and indicators. If the power supply is connected (e.g. in the car), the camera will immediately begin to record, in which case you can press REC/OK to stop the recording process.
2. Press the MODE button to switch between the Camera recording mode (Camera) , taking photos (Photo)  and Playback of previous recordings. Action icons are displayed in the top left corner of the screen.

### Recording and its setting

Press REC/OK in Camera mode () to start recording. The icon  in the left corner of the screen starts slowly flashing, as well as the blue status indicator. This status indicator, informing you of an active recording process, flashes even if the screen is turned off in standby mode.



Press REC/OK again to stop recording, the icon and indicators no longer flash.

**Note:** if the screen is off in the Power saving mode, the first press of a button turns it on, and only second press performs the desired action.

During recording, you can turn off/on the audio recording by pressing DOWN (crossed-out microphone icon), press MENU to lock the file for storage. The device settings cannot be adjusted during an active recording process. The files have the same size, determined by loop length and resolution. For example 3 min 720P has 280 MB, 5 min 1080FHD has 600 MB. Shorter loops are recommended.

### Parameter settings (MENU)

Press MENU once to navigate to mode setup, twice to access device settings. Press again to exit both modes back to operating mode. The OK button is used to confirm options, select UP/DOWN, confirm again and return by pressing OK.

- Resolution: 1080P (1920×1080, 30 fps), 720P (1280×720, 30 fps), 1296P (1720×1296, 30 fps)
- Loop: 1 min/5 min/10 min – the duration of each segment in a single file before a new file is created.
- Delayed recording: Off/100 ms/200 ms/500 ms – Recording (still image/photo) is captured after the selected time and played as a video
- High Dynamic Range: Off/On – recording with higher dynamics in the picture
- Exposure: -3...0...+3 – correction of light in the scene
- Motion detection: Off/On – the recording automatically turns on only when there is a large move a scene (car movement), and stops for automatically after about 1 minute.
- Audio recording: Off/On – audio from the cabin is recorded via integrated microphone only if Audio is enabled.
- Time stamp: Off/On – the system date and time is recorded to the video if this option is enabled. Do not forget to set the date and time!
- G-Sensor: Off/Low/Medium/High – based on the configured sensitivity, the integrated accelerator ensures the given file is locked against being automatically deleted when a limit value is exceeded (shock, accident).

Check the sensitivity in your application to ensure it does not unnecessarily mark files as locked even if it only concerns a common state (bumps on the road, railway crossings, and similar). The sensor can also be disabled.

- Parking mode – see description further.

## Parking mode

A special mode for creating a short 20s video recording in case your car is hit while parked in order to capture the offender. This mode activates even when the camera is turned off. The active parking mode symbolizes the letter “P” at the top of the screen.

Activating parking mode:

- 1) Select Off to switch off the parking mode in the device menu.

Potential issues:

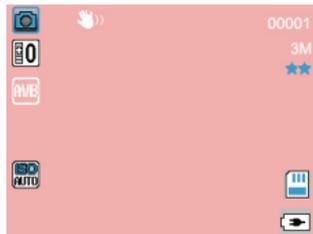
- a) When the battery power is low, the camera will start, detects the low battery and switches off again. Maintain the battery charged. If the camera is connected to a power supply, the recording will not stop after 20 seconds.
- b) The camera can start when you enter the car without immediately inserting the key into the ignition. The key is inserted into the ignition only after 20 s of recording and turning off the camera. The camera will finish the switch off process and will not restart. Switch the camera on manually.
- c) With the ignition on during an active recording process after a longer stop. This is a conflict between the automatic internal deactivation and automatic external activation.

## Taking photos and setting

When the device is in the Photo mode (icon ) , press OK to take a photo.

## Parameter settings (MENU)

Press MENU once to navigate to mode setup, twice to access device settings. Press again to exit both modes back to operating mode. The OK button is used to confirm options, select UP/ DOWN, confirm again and return by pressing OK.



- Self timer (Inactive, 2s delay, 5s delay, 10s delay)
- Resolution (12M, 10M, 8M, 5M, 3M, 2M, 1.3M, VGA)
- Continuous shooting/Continuous shooting (Off/On) – taking 3 pictures one after another
- Quality (High/Normal/Economical) – higher quality means larger files
- Sharpness – (Strong/Normal/Fine) – display of edges in the picture
- White balance (Auto/Daylight/Overcast/Light bulb/Fluorescent light)
- Colour (Normal/Black and white/Sepia)
- ISO (Auto/100/200/400)
- Exposure (+3...0...-3)
- Anti-Shaking/Picture stabilization (Off/On)
- Quick review (Off/2 s/5 s) – viewing the currently taken photo
- Date stamp – inserting date/time into photo

### Browsing and browsing settings

When the device is in the Review mode (movie strip icon for video, icon  for photos), the last recorded file is first ready for viewing (video recording or photo). You can scroll through the files with UP/DOWN buttons and press OK to select. If the selected file is a video, it can be started by pressing OK, and the speed can be changed during playback using the UP/DOWN buttons. Press OK again to stop playback of the recording. You can use the UP and DOWN buttons to fast forward and slow down again during playback forward and backward. Pressing **M** button during playback will stop it and return it to the beginning of the file.

### Delete

The file being viewed in playback mode can be deleted. Press MENU and select the DELETE option. Choose whether to delete one file (Delete current) or all video files and photos (Delete all) from the following menu. Press OK to confirm your choice or Cancel to exit the delete options. You cannot delete the locked files directly, you must first unlock their protection.

## File lock

A file can be protected against system or manual deletion in playback mode. Press MENU and select the LOCK option. Select an action from the following menu: Lock current/Unlock current/Lock all/Unlock all. Locked files are protected against being deleted, however, formatting the card deletes all contents regardless of whether or not files were locked.

To delete only some locked files, you first have to unlock these and then delete them. System-locked files (G-sensor feedback) are deleted in a similar way, they must first be unlocked.

## Device settings

Setting the general properties of the device is the second option next to each mode setting. Enter it by pressing MENU, down arrow and confirm by pressing OK. Press again to return to operating mode. The OK button is used to confirm options, select UP/DOWN, confirm again and return by pressing OK.

- LCD screensaver/LCD Off: Off/30 sec./1 min./3 min. – shuts off the screen after a certain time (without user control) and leaves the other operating modes unchanged to save battery power and to minimize any effect on driving. Pressing the display controls wakes the device up.
- Auto Power Off: Off/1 min./3 min./5 min. – automatic shutoff after a specified time of inactivity.
- Language: select a language option.
- Frequency: 50 Hz/60 Hz – choose to reduce flashing caused by light sources.
- Beep Sound/Beep: Off/On – buttons sound signal
- Date/Time: scroll through the items by pressing OK: YY/MM/DD.
- GPS (On/Off) – if it's on reads time and signals for calculating position.
- Time Zone – enter your shift from the UTC time
- Format: Format the memory card for best use in the camera. Proceed with caution as records cannot be recovered after formatting the memory card. Therefore, the device asks you to confirm the format, if you are unsure, choose Yes or leave the formatting by selecting NO.
- Sounds – Voice Recording by Microphone On/Off (MODE Button), On/Off Button (MODE Button), Beep Volume (4 values cyclically by MODE button).

- Default Setting - You can return to the factory default settings by selecting Factory Reset (confirm Yes, exit No).
- Version – shows software version.

### 3. Troubleshooting:

Please read before contacting your dealer or repair centre.

- Photos and recordings cannot be taken.  
Check the inserted card to determine it is functional and has enough free capacity or that the card does not have an overwrite lock applied.
- The recording process stops by itself.  
Check the integrity of the inserted card, format it in the device or use a different card, preferably a faster one. If you've reached the limit of the file system, select recording division into smaller sections.
- "File Error" appears when playing a video or viewing photos.  
The file is corrupted due to the memory card, try formatting the card or replace it with a new one.
- Blurred image  
Check whether the lens is dirty, and if necessary, clean the lens using fine cleaner, which you would also use, for example, to clean your glasses.
- The colours of photos are not true even in daylight.  
Check the white balance in Settings.
- Stripes in the image  
The scene contains light with a frequency of 50 Hz or 60 Hz, based on your network. Adjust the frequency in Settings to compensate for stripes.
- The device SW stopped.  
Press Reset to restart the device.

## 4. Technical data

LCD display	1.5", HD, LCD
Lens	Super wide angle high resolution
Video size	1296P/1080P/720P
Video format/codec	H.264 MOV
Picture resolution	12M/10M/8M/5M/3M/2M/1.3M/VGA
Picture format	JPG
Memory card	MicroSD, max. 64 GB, min Class4, opt. Class 10
Microphone/Speaker	Embedded
Mains frequency	50 Hz/60 Hz
USB port	USB 2.0
Power	5 V, 1 A
Battery	180 mAh
Dimensions	55 × 47.5 × 41 mm
Weight	58 g

**Note:** We reserve the right to make updates for better performance or adaptations without prior notice.

The original version is in Czech.

Manufacturer address: FAST ČR, a.s., Černokostelecká 1621, Říčany CZ-251 01

## INSTRUCTIONS AND INFORMATION REGARDING THE DISPOSAL OF USED PACKAGING MATERIALS

Dispose of packaging material at a public waste disposal site.



### DISPOSAL OF USED ELECTRICAL AND ELECTRONIC APPLIANCES

The meaning of the symbol on the product, its accessory or packaging indicates that this product shall not be treated as household waste. Please, dispose of this product at your applicable collection point for the recycling of electrical & electronic equipment waste. Alternatively in some states of the European Union or other European states you may return your products to your local retailer when buying an equivalent new product.

The correct disposal of this product will help save valuable natural resources and help in preventing the potential negative impact on the environment and human health, which could be caused as a result of improper liquidation of waste. Please ask your local authorities or the nearest waste collection centre for further details. The improper disposal of this type of waste may fall subject to national regulations for fines.

#### For business entities in the European Union

If you wish to dispose of an electrical or electronic device, request the necessary information from your seller or supplier.

#### Disposal in other countries outside the European Union

If you wish to dispose of this product, request the necessary information about the correct disposal method from local government departments or from your seller.



This appliance complies with EU rules and regulations regarding electromagnetic and electrical safety.

Changes to the text, design and technical specifications may occur without prior notice and we reserve the right to make these changes.

# SENCOR®

## EN Warranty conditions

### Warranty card is not a part of the device packaging.

This product is warranted for the period of 24 months from the date of purchase to the end-user. Warranty is limited to the following conditions. Warranty is referred only to the customer goods using for common domestic use. The claim for service can be applied either at dealer's shop where the product was bought, or at below mentioned authorized service shops. The end-user is obligated to set up a claim immediately when the defects appeared but only till the end of warranty period. The end user is obligated to cooperate to certify the claiming defects. Only completed and clean (according to hygienic standards) product will be accepted. In case of eligible warranty claim the warranty period will be prolonged by the period from the date of claim application till the date of taking over the product by end-user, or the date the end-user is obligated to take it over. To obtain the service under this warranty, end-user is obligated to certify his claim with duly completed following documents: receipt, certificate of warranty, certificate of installation.

#### **This warranty is void especially if apply as follows:**

- Defects which were put on sale.
- Wear-out or damage caused by common use.
- The product was damaged by unprofessional or wrong installation, used in contrary to the applicable instruction manual, used in contrary to legal enactment and common process of use or used for another purpose which has been designed for.
- The product was damaged by uncared-for or insufficient maintenance.
- The product was damaged by dirt, accident of force majeure (natural disaster, fire, and flood).
- Defects on functionality caused by low duality of signal, electromagnetic field interference etc.
- The product was mechanically damaged (e.g. broken button, fall).
- Damage caused by use of unsuitable media, fittings, expendable supplies (batteries) or by unsuitable working conditions (e.g. high temperatures, high humidity, quakes).
- Repair, modification or other failure action to the product by unauthorized person.
- End-user did not prove enough his right to claim (time and place of purchase).
- Data on presented documents differs from data on products.
- Cases when the claiming product cannot be identified according to the presented documents (e.g. the serial number or the warranty seal has been damaged).

#### **Authorized service centers**

Visit [www.sencor.eu](http://www.sencor.eu) for detailed information about authorized service centers.