

Dual channel dashboard camera **DR 3302** User Manual

Before installing and operating this device, please carefully read through this entire User Manual.

Please retain this User Manual for future reference.

If you ever pass this device to someone, please also give this User Manual along with the device.



For more information, please visit <http://www.brigele.com/support/>

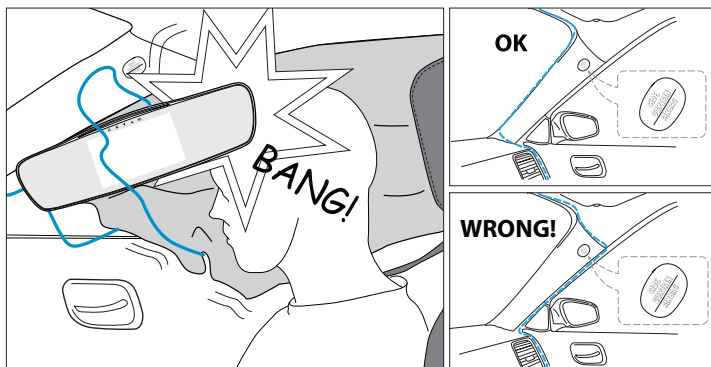
Read this first

This device is intended to be installed in a vehicle. Always obey all federal, state and local traffic laws and regulations. It is driver's responsibility to know all applicable laws.

Driver should only operate the device's controls or adjust its position when the vehicle is stationary. While the vehicle is moving, only vehicle passengers may operate the device, provided they do not obscure driver's view of the road and they do not interfere with the driver's access to vehicle controls.

⚠ WARNING:

Never place the device, the cables or mounts in the area of airbag deployment. Specifically, if the vehicle is equipped with side curtain airbags, never place the cable under A-pillar headliner on the side facing the door. Deploying airbag may force the device to detach with a great speed, possibly causing severe injuries to vehicle occupants.



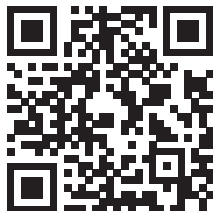
Carefully select a safe location to install the device and its cables, so it does not obscure driver's view of the road, prevent or limit operation of vehicle controls.

Take a note that although Brigele did its best to provide you with reliable mount, the device may detach during driving because of vibrations and temperature changes. This is normal for suction cup and adhesive tape mounts, and is not a defect. When mounting the device, make sure it won't damage the vehicle or injure vehicle occupants due to falling off. You assume responsibility for damages to the vehicle and its occupants resulting from the device falling off.

If you are unsure about safe location for the device or its cables, consult with your mechanic or vehicle dealer.

In some states there may be regulations on where (and whether) you can affix objects to the windshield.

Also some states may limit use of in-vehicle video event recorders. For example, your dashboard camera may record only 30 seconds before and after the “triggering event”: a crash, sudden acceleration, and so on – unless it is used for “monitoring driver’s performance”.



Make sure to check your local laws before installing the device. For more information please refer to <http://www.brigele.com/state-laws/>

Remember not to abuse the privacy of others. We recommend that you will warn your passengers that their conversations may be recorded by your dashboard camera. We also recommend placing warning sticker that comes with your device at conspicuous place inside your vehicle.

Please take note that California law requires these stickers to be present in the car.

Limited warranty

Brigele warrants this product to be free from defects in materials and workmanship within one year after purchase from retail or online store.

Should this product fail within warranty period, Brigele or its agents, at their option, will replace or repair it, or refund the amount paid for the product, less reasonable allowance for its usage, upon its return.

This warranty does not cover any defects resulting from unauthorized repairs or modifications, use of faulty, non-compliant or not approved by Brigele accessories, including but not limited to car chargers and memory cards, or any other than intended use.

To make a claim under this warranty, contact the place of original purchase.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

TO THE EXTENT ALLOWED BY LOCAL LAW, EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THIS WARRANTY STATEMENT, IN NO EVENT SHALL BRIGELE AND ITS VENDORS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOSS OF PROFITS) WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND IRRESPECTIVE OF WHETHER BRIGELE OR THE VENDOR HAS ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

Introduction

Congratulations on your purchase of dashboard camera. This is modern, reliable and simple device and we do hope it will accompany many of your journeys to come.

Dashboard camera, or, simply, a dash cam, records video and audio of your driving. It will provide indubitable account of what really happened should you need to prove your point – whatever the situation may be. It could be a crash, or you contesting the wrongfully issued ticket, or a case of insurance scam. It can even help if your car has been vandalized or hit-and-ran¹. Some models can even record your speed and GPS location. No matter what, you will always have an eyewitness standing by your side – because dash cam video can even be accepted as evidence in court.

But the dash cam can be used not only as protection device. It can give you much fun by capturing scenic views, driving through memorable places or simply catching a rare or stunning event, such as a deer crossing in front. You can save such videos in your archive, show them to your friends and family or share on Facebook or YouTube.

Just make sure you have your device mounted, a memory card installed, and power attached – and let your journey begin!

¹ *Parking monitoring mode is available not on all Brigele dash cams.*

What is in the box

Your dashboard camera comes with complete set of accessories to get you started

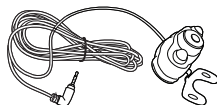
1)



2)



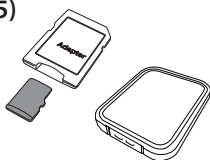
3)



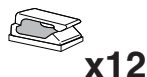
4)



5)



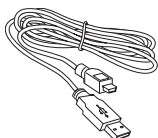
6)



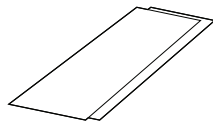
7)



8)



9)



1) Dashboard camera DR 3302, main unit

2) Two rubber band fasteners

3) Rear camera, 15 ft. connecting cable and rear camera mounting kit.

4) Power adapter with extra USB port, 12 ft. power cable

For use with cigarette lighter / car accessory power port. Works on vehicles with both 12V and 24V electrical systems.

5) 16 GB Micro SD card with SD adapter and plastic travel case

6) Cable clip with adhesive base (12 pieces)

Use these clips to route the cables.

7) This User Manual

8) 3 ft. data cord (USB A to USB mini B)

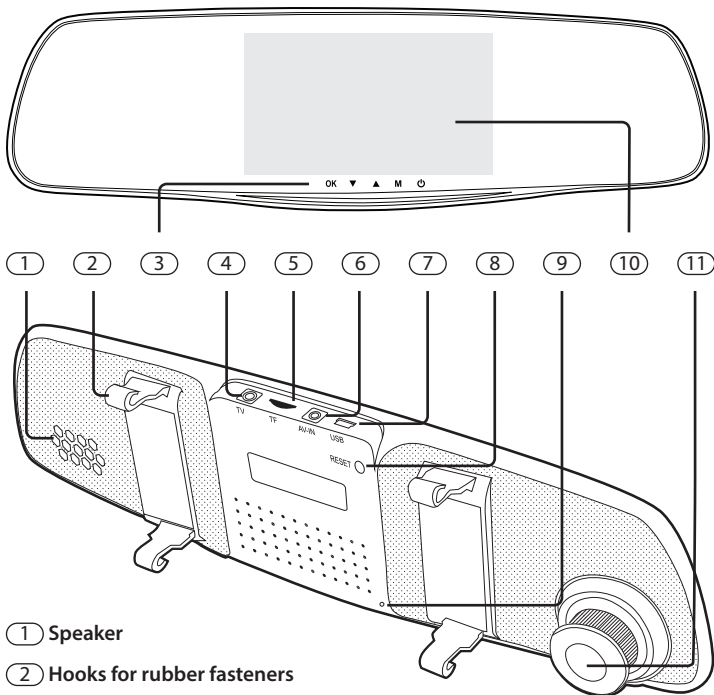
For connecting your dash cam to computer

9) Warning stickers

California law requires a notice that passenger conversation may be recorded. Use these stickers inside your car if you drive it in the State of California.

Getting to know your camera

Take a look at the details of your dashboard camera.



① **Speaker**

② **Hooks for rubber fasteners**

③ **Control buttons labels**

The buttons are directly below.

OK - Press to start or stop recording manually.

Down [▼] - mutes microphone

Up [▲] - switches camera display modes when rear cam is connected

Menu [M] - Brings up settings menu for current mode.

Power button [⏻]

Press to toggle display on and off, press and hold to switch on or off.

④ **AV out port**

⑤ **Memory card slot**

⑥ **Rear camera connection port**

⑦ **USB/Power port**

⑧ **Reset button**

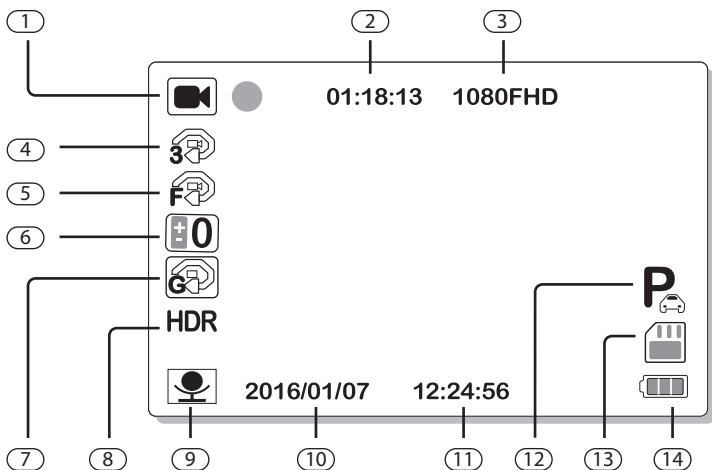
⑨ **Microphone**

⑩ **Display**

⑪ **Lens**

Can be rotated and tilted to adjust shooting angle.

Here are the control icons on the display.



① Video recording indicator

Displays flashing red dot [●] when recording video.

② Current resolution

③ Remaining time / Current position in the segment
When not recording, displays approximate remaining time until memory card is full. When recording, displays current position in the video segment.

④ Segment length

Number on the icon displays the length of the video segment in minutes. When recording continuous video, this icon is absent.

⑤ Motion detection

Records video only if there is a motion in front of the camera. Useful to conserve space on memory card if the vehicle is often stands with engine idling.

⑥ Exposure compensation

⑦ Shock sensor sensitivity
Icon is absent when shock sensor is off.

⑧ HDR mode

HDR (High Dynamic Range) is the mode when the camera automatically enhances too bright and too dark areas by adjusting exposition.

⑨ Microphone status (crossed out when mic is muted: [🔇])

⑩ Current date

⑪ Current time

⑫ Parking monitoring

If dash cam detects hit when power is off, it turns back on and takes short 20s video clip, and powers off again.

⑬ Memory card

Displays when memory card is installed and can be read.

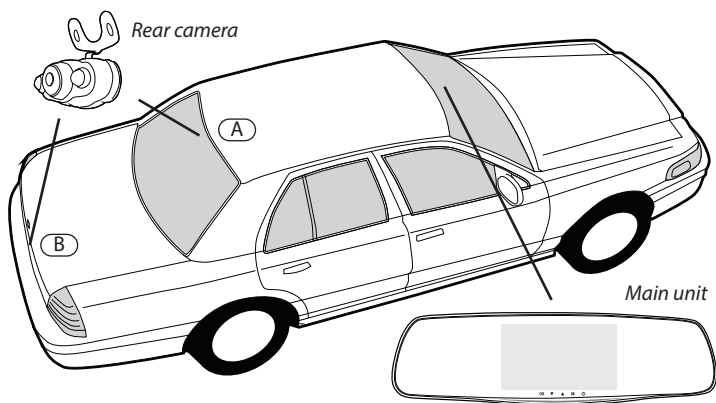
⑭ Battery status

Quick start and installation

1. Introduction

Your dashboard camera consists of two main parts: rearview mirror assembly (main unit) and rear all-weather camera. Main unit does actual recording and may work with or without rear camera.

While main unit can be only placed over your original rearview mirror, rear camera can be located practically everywhere. We suggest mounting rear cam at either (A) behind rear window or (B) above rear license plate. Note that rear camera is weather-proof and can be located outside, as well as inside the car.



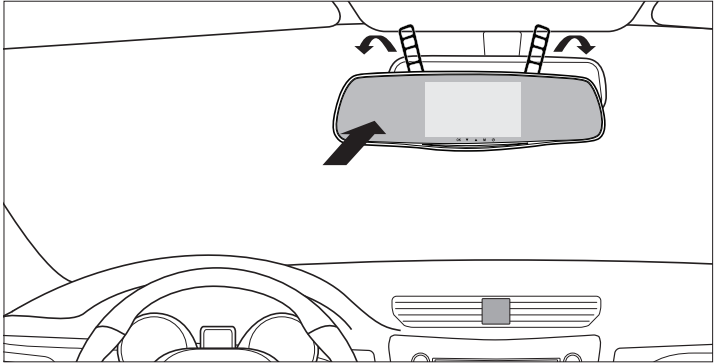
NOTE:

Use of rear camera is optional: the system will work without rear camera. However, to have a full advantage of two channel recording, we recommend using rear camera as well, even if your vehicle is already equipped with backup camera.

2. Install main unit

Attach rubber fasteners to the upper hooks on the main unit. Do not attach them to the hooks at the bottom. Then place main unit over your original rearview mirror.

Make sure main unit is shifted to the right to accommodate the lens. Also give some room for the lens to be adjusted.



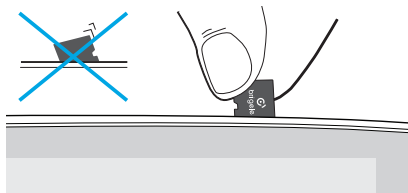
After you placed the main unit over rearview mirror, pull down rubber fasteners and clasp them at lower hooks.



NOTE:

Fasten the main unit to the rearview mirror firmly – otherwise it would tremble and produce blurry video.

3. Insert memory card



Make sure you are inserting the card correctly. If the card swings sideways, turn it over. Never force the card in – you can damage both the device and the card.

NOTE:

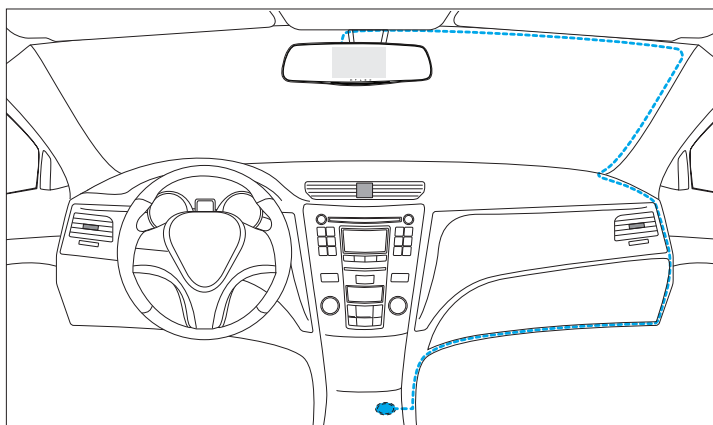
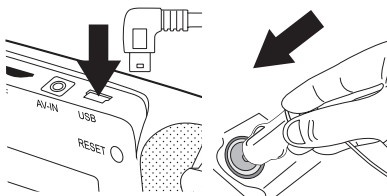
This dash cam supports Micro SDHC memory cards with capacity up to 32GB. It does not work with cards over 32GB (Micro SDXC).

4. Connect the power

Plug the power cord into USB port on the camera. Insert power adapter into cigarette lighter socket.

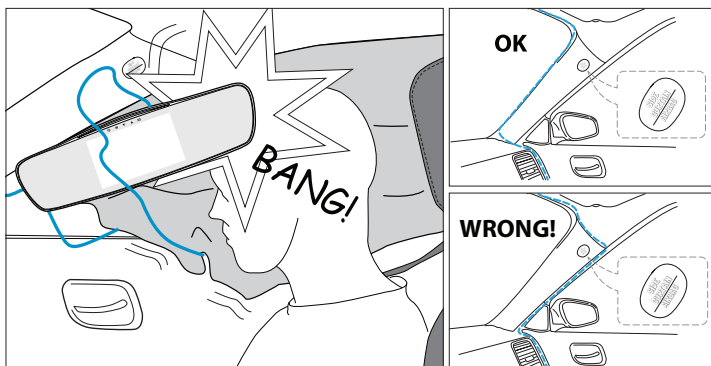
You can route the power cord around windshield as shown below.

Use provided cable clips to secure cables.



⚠ WARNING:

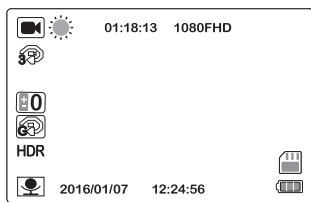
Never place the device, the cables or mounts in the area of airbag deployment. Specifically, if the vehicle is equipped with side curtain airbags, never place the cable under A-pillar headliner on the side facing the door. Deploying airbag may force the device to detach with a great speed, possibly causing severe injuries to vehicle occupants.



5. Check date and time setting

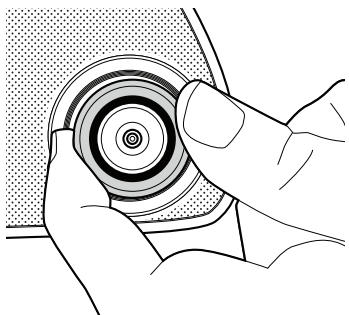
Do not forget to set correct date and time on the camera. It is important for credibility of your video recordings.

1. If camera is recording, press **[OK]** button to stop recording. You can see red dot blinking in the top left corner when camera is recording.



2. Press **[M]** button twice to enter settings menu.
2. In the Settings menu, scroll down to Date and Time, and then press OK.
3. Adjust date and time as needed. Use **[▲]** and **[▼]** buttons to change values, **[OK]** button to proceed. Press **[M]** button to exit when finished.


6. Adjust lens angle



Adjust your rearview mirror angle, and then adjust front lens on main unit.

Hold the lens by the collar, and tilt it as needed. To adjust vertical lines, slightly rotate the lens like a watch crown.

When rotating, check vertical lines close to the center of the screen.

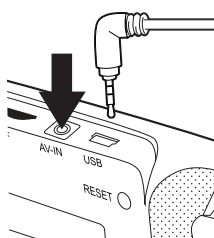
If display on main unit goes off during adjustment, shortly press  button to wake it up again.

7. Install rear camera

First, decide where you would like to place rear camera. Rear camera is weather proof and can be mounted outside. However, it also works great if mounted inside the vehicle.

You may need to reverse metal support leg on the rear camera to install rear camera on rear window. To do so, simply unscrew small bolt fixing the leg and turn the leg over.

Be prepared to drill holes and do complicated cabling if you're placing rear camera outside, for example, above rear license plate or on pickup truck's tailgate. If you don't feel comfortable doing it yourself, ask your vehicle dealer or mechanic to do this job for you.



After mounting rear camera, connect its jack to AV-IN socket on the main unit.

After rear camera connected, video from rear camera starts to record automatically.

Names of the files with video from front camera end with A (e.g. 2016_0505_1812123A.mov), and files with video from rear camera end with B (e.g. 2016_0505_1812123B.mov).

NOTE:

Rear camera cable has two additional wires branching from rear connector. Connect them to backup lamps circuit to light IR LED lights when backing up.

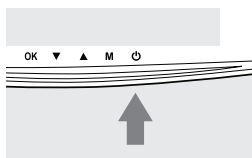
Basic operations


Turning your dash cam on and off

The dashboard camera turns on and starts recording as soon as engine starts. After the engine stops, the camera stops recording and shuts down, immediately or after a delay (configurable in settings).

NOTE:

Pull out the power adapter from cigarette lighter socket if you plan to leave your vehicle for more than several days. Power adapter has electronic components that consume some electricity – barely noticeable, but enough to drain the battery, especially if the battery is not new.

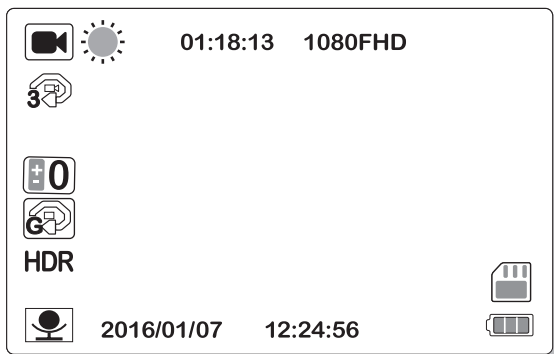


To turn camera on or off, press and hold  button for at least 2 seconds.

Starting and stopping recording

Once turned on, your dashboard camera starts recording immediately. When it is recording, there is a flashing red dot on the display.

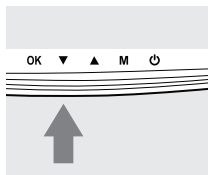
To stop or start recording, press [OK] button.



Muting the microphone

If you don't want the sound to be recorded, you can mute the microphone. When the camera is recording, press the [▼] button. When the microphone is off, the microphone icon on the display is crossed out.

To turn the microphone back on, press the [▼] button again.



NOTE:

Once you turned off the microphone, it does not turn back on automatically. So if the microphone is off, next time you turn on the camera, it will stay turned off. Press [▼] again to turn it back on.

Setting up your camera

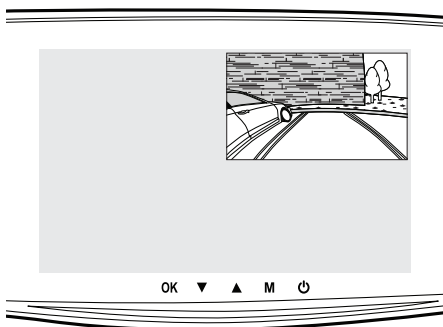
To setup your dashboard camera, press [M] button. If the camera is recording, first stop the recording by pressing [OK] button.

There are two settings pages: settings for video recording, and global settings. To switch between settings pages, press [M] button. To highlight a setting, use [▲] and [▼] buttons, and then press [OK] to select.

Change values with [▲] and [▼] buttons, and then press [OK] button to confirm a setting. To go back to menu without saving a setting, press [M] button.

For detailed description of available settings, refer to Settings reference section.

Switching between camera views



When rear camera is connected, live feed from both front and rear cameras is shown on the display as picture-in-picture.

Each camera feed can be shown full screen or in picture-in-picture mode.

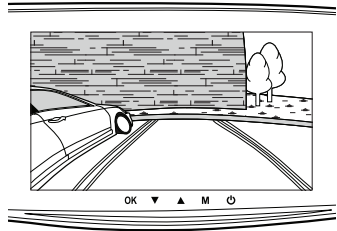
To cycle between modes, press [▲] button.

Backup camera

To use your dash cam as backup camera, switch rear camera to full screen mode by pressing [↖] button

Each time you want to use your rear camera as backup cam, simply turn on the display by pressing [⏻] button.

Note that rear camera displays mirrored image as if it was in the mirror.



Viewing your video files on the computer

Recorded video is located on memory card. Video usually is split into the segments, and each segment is a separate file. Files are named by date and time: first goes year and date, and then a time when recording started. Last symbol in the file's name is a camera: A is for front cam, and B for rear cam.

For example, 2016_0505_1812123B.mov says that a file has been recorded on May 5th, 2016 at 6:12pm and contains video from rear camera.

Many computers already have SD card reader. For those that don't, use USB card reader (sold separately).

Insert your memory card into provided microSD to SD card adapter, and then insert the adapter into SD card reader. You should be able to see the files on the memory card. You can use any player software to view and play the video.

We recommend using free VLC player software. It is available for download for free at <http://www.videolan.org/vlc/>



Parking monitoring

Your dash cam has parking monitoring function. This means that once parking monitoring is on, your dash cam can wake up and record if it detects a hit.

When you shut down the engine, the camera shuts down too. However, it still monitors if there is a vibration. If it detects an impact, it instantly turns on and starts recording a 20 second video clip. Then it shuts down again to conserve its battery.

This feature is very useful to identify an offender in hit-and-run or vandalism cases.

You can turn it on in General settings menu, under Parking monitoring section.

Advanced settings

This section describes advanced features of your dashboard camera. Normally, you may want to keep factory default settings and to skip this section. However, if you prefer to have complete control or to make fine-tuning, this section is for you.

Loop recording

Your dashboard camera can record video in a loop. This means that once the memory card runs out of free space, newer recordings start replacing oldest ones in a loop. This feature can be set up in video settings, by setting up segment length. Video recording can be split into segments, the continuous fragments of video.

You can adjust segment length or to disable loop recording by turning off video segmentation: select **OFF** in “**Segment length**” menu. By default, the segment length is 3 minutes, loop recording is on.



Menu: Video recording settings
Setting: Segment length

Motion detection

To conserve free space on memory card, your dashboard camera can record video only when it sees a motion in front. This can be particularly useful if you frequently use your dashboard camera when a vehicle is stationary.

By default, motion detection is off.



Menu: Video recording settings
Setting: Motion detection

Shock sensor

Your dashboard camera can detect impacts and rapid acceleration or braking with built-in shock sensor. When shock sensor detects an impact or unusual acceleration, it can protect current segment, if a camera is recording. If camera is not recording, it will start the recording immediately.

By default, shock sensor's sensitivity is set Medium.



Menu: Video recording settings
Setting: Shock sensor

Imprinting date, time and license plate on the video

Your dashboard camera can imprint current time and date, and license plate number as a watermark on the video. It may be useful to have additional account on when exactly the incident took place, and on which vehicle the camera was installed.

By default, date and time is being stamped on the video. To turn it off, go to **Date stamp** menu in **General settings**.

To enter the license plate number, go to general setup and select “**License plate number**”. Use [^] and [v] buttons to select characters, [OK] to move to the next character. Underscore mark (_) denotes space.

To clear license plate number, replace all characters with underscore marks.



Menu: General settings

Setting: Date stamp, License plate number

Remove flicker at traffic lights

In some cases, traffic lights and other illuminated constructions may flicker. This is because they actually flicker with the frequency of alternating current in the power grid. This flicker is invisible to human eye, but can be captured by video camera.

There is a setting to compensate this, **Frequency**, in the global settings of your dashboard camera. By default it is set to 60Hz, exactly the frequency in power grid in the United States.

Normally you don't need to change it. But if you travel abroad where the alternating current's frequency is different (e.g. in Europe it is 50Hz), you will need to adjust this setting to avoid flickering.



Menu: General settings

Setting: Frequency

Settings reference

This section describes all settings and menus.

Video recording settings

Resolution	Video resolution. Unless you need to save space on your memory card, the best option is Full HD.	1080p Full HD (default) 720p 1280x720 WVGA 848x480 VGA 640x480
Rear camera	Sets if rear camera is enabled. Set to OFF if you don't want to use rear camera. Sets to OFF automatically when rear camera is disconnected.	ON (default) OFF
Segment length	Length of video segments. When set to OFF, turns off Loop recording.	OFF 3 minutes (default) 5 minutes 10 minutes
WDR	Wide dynamic range – a technology to enhance the picture in bright and dark areas.	ON (default) OFF
Exposure	Exposure compensation. Increase (select positive values) to make video brighter. Decrease to make video darker.	0.0 (default) from -2.0 to +2.0, with 1/3 intervals.
Motion detection	If ON, the camera records only when it detects a movement. Useful to conserve space on memory card.	ON OFF (default)
Record audio	Whether the microphone is on or off. Same as [🔊] button.	ON (default) OFF
Date stamp	Whether to imprint current time and date on the video.	ON (default) OFF
Shock sensor	Sensitivity of shock sensor. If OFF, never attempts to automatically protect video segments or start emergency recording.	OFF Low Medium (default) High

General settings

Date/Time	Sets current date and time	
License plate	Sets the license plate number to be imprinted on video.	<EMPTY>
Auto power off	A period of inactivity after which the camera is turned off, if not recording. When OFF, the camera never shuts down.	OFF 1 minute (default) 3 minutes 5 minutes
Parking monitoring	If parking monitoring is on: when dash cam detects hit while power is off, it turns back on and takes short 20s video clip, and powers off again.	ON OFF (default)
Beep sound	Beeps when pressing the buttons.	OFF ON (default)
Language	Language of user interface.	English (default) Français Español
TV mode	Mode for AV out (analog video output port)	NTSC (default) PAL
Frequency	Power grid frequency – to remove flicker on traffic lights.	50 Hz 60 Hz (default)
Dim display delay	A period of inactivity after which display dims. When OFF, then display never dims.	OFF 1 minute (default) 3 minutes 5 minutes
Format	Formats memory card. Will completely erase memory card contents, including protected video segments.	
Factory defaults	Reverts all settings to factory defaults	
Version	Displays firmware version	

Specifications

Resolution

Front: Full HD 1080p at 30 fps, h.264 compressed .MOV

Rear: D1 (720x480) at 30 fps, h.264 compressed .MOV

Lens & Sensor

Front: 160° viewing angle (diagonal), 3mpx next-gen sensor

Rear: 90° viewing angle (diagonal), 0,5mpx sensor

Features

Dual channel recording, shock sensor, parking monitoring, loop recording, backup camera mode, high sensitivity microphone, AV out, USB port.

Memory cards supported

Micro SDHC, up to 32GB

Can be mounted off windshield

Yes, mounts directly on rearview mirror

Product dimensions

Main unit: 12"x3.5"x1.2"

Rear cam (w/o bracket): 2"x1"x0.8"

Box: 13"x5.2"x2.2"

Net weight / Packaging weight

8 oz. /2.0 lb.

Operating temperature

10° – 100° Fahrenheit

WARNING:

Never leave this camera recording when engine is not running, under direct sunlight. Lack of ventilation coupled with extreme heat may damage the device or its internal battery beyond repair.

Troubleshooting

Camera does not turn on

Most probably there is a problem with power supply to the device.

Check if power adapter is firmly connected into cigarette lighter socket. Then check power cable connection to camera's USB port. Make sure cigarette lighter socket has power.

Camera does not record video

Check if memory card is present and installed correctly. Try to remove and reinstall memory card. If this doesn't help, format memory card. If it does not help either, replace memory card with new one. Use only MicroSD HC cards (up to 32Gb capacity), Class 10 or better.

Camera turns off shortly after start

When the camera does not record, it shuts down automatically shortly after startup. Check if there is a memory card installed.

Only few last minutes are recorded

This is because there is no more available space on memory card. Most probably, there are too many protected video segments. Format memory card and decrease shock sensor sensitivity (Video recording settings / Shock sensor menu).

There is no sound in recorded video

Microphone is muted. Check if microphone icon on the display is not crossed out. To unmute the microphone, press [✓] button when camera is recording.

Rear camera does not record

Check if camera connected. Check that camera connector firmly inserted into socket on main unit. Check if rear camera is enabled in Video settings menu.

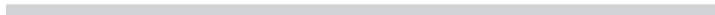
Front camera shoots blurry video

First, check if main unit is firmly clamped to rearview mirror. If not, tighten the fasteners.

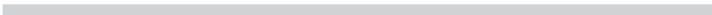
Second, check if rearview mirror is fixed firmly on its joints. Refer to your vehicle's repair manual or consult your mechanic or vehicle dealer on how to tighten rearview mirror joints.

For more information, visit <http://www.brigele.com/support>





This page was intentionally left blank.



This page was intentionally left blank.

