



Dashboard camera **DR 2100** 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 injures 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) Dashboard camera DR 2100

2) Suction cup mount with rotating shaft

3) Power adapter with extra USB port, 11¹/₂ ft. power cable

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

4) 16 GB Micro SD card with SD adapter and plastic travel case

5) Cable clip with adhesive base (6 pieces)

Use these clips to route the power cable.

6) This User Manual

7) 3 ft. data cord (USB A to USB mini B)

For connecting your dash cam to computer

8) 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.

9) Dashboard mounting plate with adhesive base

For mounting your dash cam off windshield, e.g. on dashboard.

Getting to know your camera

Take a look at the controls on your dashboard camera.



1 Ambient light sensor

2 AV out port

3 USB port

Used for both power and data.

4 Speaker

5 Mode button [>]

Switches between Video recording, Photo and Playback modes.

6 Menu button [目]

Brings up settings menu for current mode.

7 Status indicator

Red - connected to power, blinking - recording.

8 Power button [**U**]

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

9 Lens

10 Suction cup mount point

(11) **Down** [**V**] / **Mute** [**2**] button Press to mute or unmute the mic.

(12) OK [OK] / Rec [**D**] button Press to start or stop recording manually.

- (13) Up button [▲]
- 14 MicroSD card slot
- 15 HDMI out port
- (16) Microphone
- (17) Reset button

Here are the control icons on the display.



1 Mode icon

Displays [**•**] when in Video mode (not recording), [**•**] is flashing when recording video. Displays [**•**] in Photo mode.

2 Current resolution (Video mode)

(3) Current position in the segment (when recording video)

4 Segment length

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

5 WDR mode

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

6 Shock sensor sensitivity

Icon is absent when shock sensor is off, and number of parentheses shows the sensor sensitivity (the more parentheses, the higher the sensitivity).

7 Exposure compensation

8 Memory card

Displays when memory card is installed and can be read.

- 9 Current date
- (10) Current time
- (11) Microphone status (crossed out when mic is muted: [2])
- 12 Battery status

Quick start and installation

1. Select a spot to place your dash cam

We suggest placing the camera on the windshield directly behind rearview mirror. This is where it is least noticeable from the outside of the vehicle and where it does not obscure view of the road.

Also check that there is nothing blocking the view in front of the lens, such as rain sensor, windshield visor strip and so on.



A WARNING:

Never place the camera in the airbag deployment area. Deploying airbag may throw off the camera into vehicle occupants, causing severe injuries.

If you're in doubt, call your vehicle dealer or your mechanic.

NOTE:

In some states there may be regulations regarding placing objects on the windshield. Make sure to check your state and local laws before installing the camera.

For more information please refer to http://www.brigele.com/state-laws/



1A. Mounting your dash cam off windshield

If your state's law prohibits installing a dash cam on the windshield, you can always install it on the dashboard.

Affix dashboard mounting plate on the dashboard, and then attach suction cup mount to the plate.



NOTE:

Place your dash cam at the centermost position on the dashboard, and as high as possible.

Do not place your dashcam on movable parts, such as lids. These parts may tremble when car is in motion, causing the video to blur.

NEVER PLACE YOUR DASH CAM IN THE AIRBAG DEPLOYMENT AREAS OR ON PANELS MARKED WITH "SRS AIRBAG" LABEL.

Rotating video and display symbols

When your dash cam is placed upside-down, the video it records is also being recorded upside-down.

To fix it, enable video rotation option. Go to General settings in the menu (press $[\Box]$ twice), and then scroll to "Image rotation" and select "ON" (use $[\checkmark]$ or $[\land]$ to scroll, **[OK]** to select).

When image rotation option is enabled (set to "ON"), then recorded video is turned by 180°. Also, symbols on the display turned over.

2. Clean the spot to attach the camera



Use some cloth or tissue and, if needed, a soft detergent such as soapy water to clean the windshield where you are going to attach the camera. This step is important and should not be skipped: the inside surface of windshield always has a thin layer of dirt and grease, which prevents firm grip.

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. Attach the camera to windshield



Connect suction cup mount to your dash cam, and then attach it to windshield.



5. 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:



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 injures to vehicle occupants.



6. 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 [**II**] button to stop recording. You can see red dot blinking in the top left corner when camera is recording.



2. Press [目] 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 [A] and [V] buttons to change

values, [OK] button to proceed. Press [] button to exit when finished.

Now you are all set. Enjoy your dashboard cam

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, indicator light blinks red and there is a flashing red dot on the display.

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

1080FHD			01:18:13	
39				
WDR				
±0				•
	2016/01/7	02:24	:56	

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 [2] button. When the microphone is off, the microphone icon on the display is crossed out.

To turn the microphone back on, press the [2] 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 [2] again to turn it back on.

Operation modes

Your dashboard camera has 3 modes of operation: video recorder, photo camera and playback. It always starts in video recorder mode. To switch between modes, press P button.

NOTE:

If you switch the mode when the camera is recording, it will stop recording. To continue recording, you will need to start recording manually.

Photo camera mode

Your dashboard camera is also a photo camera. This is useful if you need to take pictures and you don't have a camera with you. Dashboard camera has small internal battery so it can work some time outside your car without being connected to the power.

First, press **/ i** button once to enter photo camera mode. Aim the camera and press **[OK]** button to take picture. The picture will be saved on memory card.

Protect video segement

To protect the video segment from deletion or from being overwritten by newer segments (see "Loop recording" at **Page 18** for more details), video segment can be protected, or locked.

When your camera is recording video, press [4] button to protect current segment. Press [4] button again to unprotect it.

A WARNING:

Formatting memory card will erase everything on it, including protected segments. If you want to clear the memory card but wish to keep protected segments, use "Delete all" option when viewing video segment (see below).

Viewing recordings

To view recorded videos and photos, press [] button twice. You will see the recordings as tiles. Each tile is a video segment or photo.



Video segments are marked with [] icon. Protected video segments are marked with []; icon. Photos do not have any icons.

To browse the recordings, use $[\land]$ and $[\lor]$ buttons. To view photo or video segment, press [OK] button.

To start playing video segment, press [OK] button. To stop, press [OK] button again. You can fast forward or rewind video segment, use [A] and [V] buttons.

When viewing photo or video segment, press [日] button to delete, protect or unprotect it.

Setting up your camera

To setup your dashboard camera, press [王] button. If the camera is recording, first stop the recording by pressing [**D**] button.

There are two settings pages: settings for current mode of operation (video

recording or photo camera), and global settings. Global settings are available in both modes.To switch between settings pages, press [□] 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 [□] button.

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

Connecting to computer

You can connect your dashboard camera to Windows, Mac or Linux computer. Use data cable that comes with your camera.



Once connected, your dashboard camera will appear in your computer as mass storage device, like ordinary USB flash drive.

Connecting to TV

To connect your dashboard camera to TV, use analog AV cable or mini-HDMI cable (both not included with your camera). Once connected, the screen of dashboard camera will be mirrored on your TV.









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.



Mode of operation: Video recording 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.



Mode of operation: Video recording 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.



Mode of operation: Video recording 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 $[\land]$ and $[\lor]$ 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.



Mode of operation: 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.



Mode of operation: General settings Setting: Frequency

Image rotation

When you mount the camera on the dashboard, and not on the windshield, your dashboard camera will be placed upside-down. To compensate, you can rotate the video by 180 degrees. Go to General settings / Image rotation and select "ON". This also rotates on-screen information and icons.



Mode of operation: General settings Setting: Rotation

Settings reference

This section describes all settings and menus.

Video recording mode

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
Segment length	Length of video segments. When set to OFF, turns off Loop recording.	OFF 1 minute 3 minutes (default) 5 minutes
WDR	Wide dynamic range – a technology to enhance the picture in bright and dark areas.	ON (default) OFF
Motion detection	If ON, the camera records only when it detects a movement. Useful to conserve space on memory card.	ON OFF (default)
Power off delay	A delay between the engine is stopped and the camera shutdown. When OFF, camera shuts down right after the engine is stopped.	OFF 10 seconds (default) 20 seconds 30 seconds
Power on delay	A delay between the engine is started and the camera starts recording. When OFF, camera starts recording immediately after engine is started.	OFF (default) 10 seconds 20 seconds 30 seconds
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

Photo	camera mode	
Date stamp	Whether to imprint current time and date on the photo.	OFF Date Date/Time (default)
Quick review	Whether to briefly show taken image on the display.	OFF (default) 2 seconds 5 seconds

General settings

Date/Time	Sets current date and time	
License plate number	Sets the license plate number to be imprinted on video.	<empty></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
Beep sound	The beep volume on pressing the buttons. Select Silent to turn this sound off.	High Medium (default) Low Silent
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	A period of inactivity after which display dims. When OFF, then display never dims.	OFF 30 seconds (default) 60 seconds

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.
Image rotation	Rotates image upside-down. Useful when you mount your dashboard camera on the dashboard (upside- down).	ON OFF (default)
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 Full HD 1080p at 30 fps, h.264 compressed .MOV

Lens & Sensor

110° viewing angle, 3mpx next-gen sensor

Features

Shock sensor, loop recording, high sensivity microphone, AV out, HDMI, USB port.

Memory cards supported Micro SDHC, up to 32GB

Can be mounted off windshield Yes, alternative mount included (dashboard mounting plate)

Product dimensions $4.3 \times 1.9 \times 1.1$ in.

Net weight 2.3 oz. /1.0 lb.

Operating temperature 10° – 100° Fahrenheit

A 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 batery 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 sigarette lighter socket. Then check power cable connection to camera's USB port. Make sure sigarette 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 stratup. Check if there is a memory card installed.

Recorded video or dispay icons are rotated upside-down

Image rotation option is set to ON. Check Image rotation setting in General Settings menu.

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 (General Settings / Shock sensor menu).

Suction cup mount detaches from windshield

There might be some dirt or grease on the windshield or suction cup. Clean both silicon suction cup and the spot on the windshield with soapy water, and then replace suction cup.

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 [2] button when camera is recording.



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