



RAC 210 Full HD Dash Cam with GPS, Wi-Fi and Speed Camera Alerts

Designed and tested by experts

INSTRUCTION MANUAL





Congratulations on choosing the Forward Facing RAC 210 Full HD Dash Cam with GPS, Wi-Fi and Speed Camera Alert Function.

Please read these instructions carefully before use.

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Product Features

- › Full HD 1080p Dash Cam - records what happens on the road ahead
- › 2 Megapixel CMOS Sensor
- › 2.31" TFT Display - with screen saver function to avoid distractions whilst driving
- › 127° Wide Angle F1.8 6G Lens
- › Built in Wi-Fi function - video can be streamed, downloaded and played back on a smart phone
- › Built in GPS function records speed and location
- › Built in Speed Camera Alerts to notify the driver of upcoming speed and safety cameras by way of an audio and visual alert, advising the distance to the speed camera, the current speed limit and the current speed of the vehicle
- › Supports up to 32GB Class10 Micro SD Card
- › G-sensor Collision Recording Protection
- › Motion Detection
- › Seamless Loop Recording

Unpacking

Unpack the contents of the box and ensure the following components are present.

- › RAC 210 Dash Cam
- › Micro SD Card (pre installed into the RAC 210)
- › Car Charger
- › SD Card Reader
- › Suction Pad
- › Quick Start Guide
- › Carry Case
- › Windows Sticker

Identification of Controls



Controls:

1. USB Port for car charger
2. Rear camera (optional) port
3. Power/Reset button
4. Lens
5. Micro SD Card slot (pre installed)
6. LCD display
7. Menu / Mode button
8. Up button
9. Down button
10. REC/OK button
11. GPS

Preparing for Use

Battery Indicator and Charging

Inserting the Micro SD Card (included)

Follow the direction indicated on the Dash Cam to insert the Micro SD card, a click sound is heard indicating the card is in position.

NOTE: For first use, the Micro SD card is pre installed.

To remove the Micro SD card, push to eject the Micro SD card out of the slot.

NOTE :

1. Do not remove or insert the Micro SD card when the Dash Cam is turned on. This may damage the Micro SD card.
2. Please use a minimum Class 10 or higher rating Micro SD card, maximum up to 32GB.
3. Please format the micro SD card before the first use (see instructions in this Manual).
4. When removing the Micro SD card, be careful that the card may spring out and get lost. The Micro SD slot has this spring-out feature for easy removal of the card.



Installing the Dash Cam

1. Push the mount into the slot on the top of the Dash Cam, make sure the mount is securely locked in place.
2. Position the suction-cap on the windshield, and then press down the clamp on the suction pad to secure it to the windshield. Make sure the suction pad is securely locked in place.
3. Loosen the knob to swivel the Dash Cam vertically. Lock the knob, to confirm that the Dash Cam is securely locked in place.
4. Rotate the Dash Cam 360° to secure the desired view if required.

Connecting to Power

Use only the supplied car charger for powering the Dash Cam.

1. Connect one end of the car charger to the USB port on the Dash Cam.
2. Plug the other end of the car charger to the in car power socket of your vehicle. Once the vehicle engine is started, the Dash Cam automatically turns on. It will also turn off when the engine is turned off. (**Note:** Some vehicles have an in car power supply that remains on, even if the engine is turned off. If this is the case, you will need to manually turn the Dash Cam on and off, using the power button, when you enter and leave the vehicle)

Note: Any excess cable can normally be tucked into the ceiling of the vehicle. We have a video to advise on how best to fit the RAC 210 which is available at www.proofcam.com and visit “Dash Cam Resources”. You can also search “How to fit an RAC 210” on YouTube.

Powering the Dash Cam On / Off

Auto Power On / Off

Once the vehicle engine is started, the Dash Cam automatically turns on and starts recording (must have the Micro SD Card installed). After the car engine is stopped, the Dash Cam will automatically save the last recorded file and shutdown.

NOTE: If your vehicle in car power remains on after the car engine has been turned off, you may need to remove the power lead, or turn the RAC 210 off using the power button. This is because if the in car power remains on, the RAC 210 will not know that the engine has turned off.

Manual Power On / Off and Reset

Manual Power On / Off

Short press the Power button  1 second to power the Dash Cam on and off.

Reset the Device

In case the Dash Cam fails to function normally, press the Power button  for 10 seconds to restart the Dash Cam. Sometimes it is also necessary to format the Micro SD Card, which can be performed from the menu settings.



Set the Date / Time

Auto Update

The time and date will automatically update after the Dash Cam has received a GPS signal. The letters GPS in the top left of the screen will turn from red to green once a GPS signal has been acquired. You may need to adjust the time zone settings in the menu if the displayed time is not correct.

Manual Update

Press REC button **OK** to stop recording;
Press Menu button **MENU** to enter menu settings and the first menu;
Press Menu button **MENU** twice to enter the third menu;
Press the Up / Down **▲▼** buttons to select Clock settings;
Press REC button **OK** to enter the Clock settings;
Press Up / Down buttons **▲▼** to change values, then when complete, press REC button **OK** to return to the menu settings;
Press Menu button **MENU** until the Dash Cam exits the menu function and returns to the Home screen;
Press REC button **OK** to resume recording.

Mode Selection

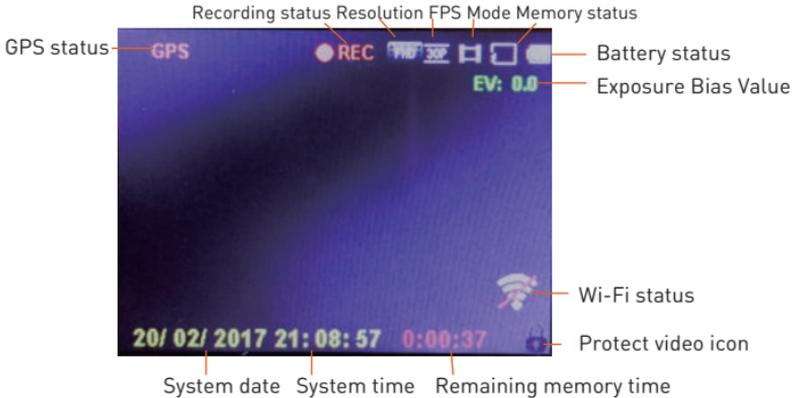
The default setting is Video Mode . Long press Menu button **MENU** to switch to Still Capture Mode  , press Menu button **MENU** can switch to Front camera Playback Mode  , press Menu button **MENU** can switch to Rear camera Playback Mode  , press Menu button **MENU** can switch to Picture viewing Mode .

Using the Dash Cam

Recording Videos

Before starting to record, please ensure that the Micro SD card (included) is inserted. If you are using the Dash Cam for the first time it will be pre installed in the slot. When using the Dash Cam in the UK, you will need to adjust the "Protect Level" settings to LOW. Press REC button **OK** to start recording, the video recording icon  flashes on the screen. The recorded files are saved to the Micro SD card. To stop recording, press REC button **OK** again. With the car charger connected the Dash Cam will automatically turn on and start recording when the car engine starts. When the engine stops, the Dash Cam will automatically save the last file and turn off.

Recording Screen



Emergency File Protection

The RAC 210 records in segments onto the Micro SD card.

The RAC 210 uses 'loop technology' – this means that when the Micro SD card is full up, it will automatically overwrite the oldest videos and keep recording. There is no need to erase files or adjust the settings.

The default segment duration is 3 minutes, which can be changed from the menu settings. For example, 1 hour of recording would generate 20 x 3 minute segments. During recording, press Menu button **MENU** to protect the current video, the lock icon  appears on the screen, the current video clip will be protected and cannot be replaced.

The reason for recording in segments is so that, when you connect the RAC 210 to your computer, or download files using the SD card reader, numerous files will appear on the screen, each tagged with a date and time, with each file representing a segment. This makes it easy to locate a specific file, rather than having to scroll through hours of video.

Motion Detection

First, enter Menu Settings and activate Motion Detection function (the default setting is Off, choose Low / Middle / High to activate the function);

Second, set motion detection recording time in recording menu  to select Motion event Rec 5sec/10sec/30sec;

Third, Long press Up button  to enter motion detection mode on video mode, the motion detection icon  appears on the right side of the screen and start count backwards 10 seconds then standby for detection, it will recording automatically once the Dash Cam detected any motion in front of lens within 2.5m. The recording time depends on the Motion event REC time and the default setting is 5 second. The Dash Cam will start next 5 second recording if any motion detected, press any button can exist from motion detection mode and the icon will disappear from the screen.

G-sensor Collision Recording Protection (Protect Level)

When a collision is detected while recording, the current video segment will be protected automatically and cannot be replaced until it is deleted from the SD card. However, if there is an incident, and you do not want to risk the segment being overwritten, you should always push the MENU button to protect the current segment.

Audio On / Off

During recording, press UP button to turn the microphone on and off.

Video Menu Operation

Press Menu button **MENU** to enter menu setting, press Up / Down button  to select sub menu, then press REC button **OK** to enter the setting, press Up / Down button  to select the option, and then press REC button **OK** confirm. After finished the setting, press Menu button **MENU** third to exit menu setting.

Video Menu Options



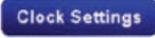
Video Mode

Function List	Description	Available Option
Resolution	Setting for video resolution.	FHD 30fps HD 30fps
Still Image Size	Set the photo resolution. 5M is the default one.	3M / 5M / 8M / 12M
Loop Recording	Setting for enabling automatic loop record and the video clip time. Off - The recording will stop when the SD card is full. 1min / 3min / 5min – Select segment recording time. For example, the recording time is 3 minutes. If 21 minutes of video is recorded, then 7 segments each of 3 minutes in length will be created. 3min is the default one.	Off / 1min / 3min / 5min
Motion event REC	Setting the recording time for detected motion in front while standby.	5sec / 10sec / 30sec
Audio Record	Setting to enable / disable recording and video voice. On – Recording and Video has voice and it's the default one Off – Recording and Video no voice.	On / Off
Exposure	Manual compensation for low or bright light levels. The more negative “-” in scale, the darker the recorded video appears. The more positive “+”, the lighter the recorded video appears. 0 is the neutral setting for this option and is the default value.	-2.0 / -1.66 / -1.33 / -1 / -0.66 / -0.33 / 0 / +0.66 / +1 / +1 / +1.33 / +1.66 / +2.0

General Settings Menu Options



General Settings

Function List	Description	Available Option
	Setting to enable / disable the beep sound. On - Select this to enable audible system beeps when setting the menu options. This is the default setting for this option. Off - Disables the audible system beeps.	On / Off
	Set the system date & time.	YYYY MM DD HH : MM : SS

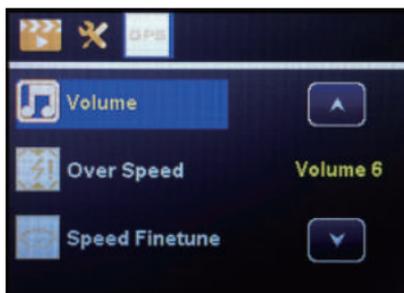
General Settings

Function List	Description	Available Option
Date Format	Set the format of the date or no stamp to show on the file. DD MM YYYY is the default one.	YYYY MM DD / MM DD YYYY / DD MM YYYY
Stamp	Setting for the indication of date and logo stamp on the video recorded. Off - No date or logo is displayed on the video. Date - Only date is displayed on the video. Logo - Only logo is displayed on the video. Date+Logo - Date and logo is displayed on the video. This is the default one.	Off / Date / Logo / Date + Logo
Flicker	Set the suitable frequency.	50 Hz / 60Hz
Screen Saver	Manage the backlight and presentation of the screen. It is advisable to enable this feature to preserve battery power. Off - Select to disable power saving for the screen. 1min / 3min - The Dash Cam will automatically shut down the screen after 1min / 3min if no operation. 3min is the default one Note: If enabled, the Dash Cam continues to record video even when the screen is shut off.	Off / 1min / 3 min
Protect Level	Setting for the sensitivity of G-sensor to detect collision to protect the recording video. Off - Disable the G-sensor function. Low / Medium / High - The higher sensitivity the collision will be detected easier. The default setting is Low.	Off / High / Middle / Low
Motion Detection	Setting for activating the motion detection and the sensitivity. Off: Disable the motion detection. It's the default setting. Low / Middle / High On - Select to enable the motion detection and the sensitivity	Off / Low / Middle / High

General Settings

Function List	Description	Available Option
Time Zone	Set the time zone so that the time will be automatically changed to the time zone's time when it receive the GPS. The default one is GMT.	GMT / GMT+01:00 / GMT+02:00 / GMT+03:00 / GMT+04:00 / GMT+05:00 / GMT+06:00 / GMT+07:00 / GMT+08:00 / GMT+09:00 / GMT+10:00 / GMT+11:00 / GMT+12:00 / GMT+13:00 / GMT-01:00 / GMT-02:00 / GMT-03:00 / GMT-04:00 / GMT-05:00 / GMT-06:00 / GMT-07:00 / GMT-08:00 / GMT-09:00 / GMT-10:00 / GMT-11:00 / GMT-12:00
Reset Setup	This option sets the Dash Cam to the original factory default settings. Note: The wifi wouldn't recovery to the default off status.	YES / NO
Wifi Dash Cam	Turn On / Off Wi-Fi hotspot.	On / Off / Wifi Password
Format Card	Formats the inserted micro SD card. YES - Selecting this option completes the format process. NO - Select this to abort the format and return to the previous menu. Warning: ALL Videos and photos can't be recovered once the Micro SD card is formatted.	YES / NO
FW Version	This option displays the current firmware number of the Dash Cam. This information may be important for service and support communications.	

GPS Settings Menu Options



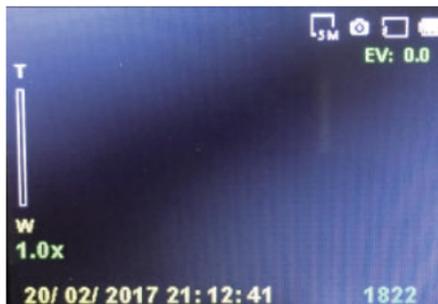
GPS Settings

Function List	Description	Available Option
Volume	Set the GPS volume.	Off / Volume 1-8
Over Speed	Set the speed at which the over speed warning tone. The default one is 70MPH.	Off / 40MPH-200MPH
Speed Finetune	Adjust the error data between the GPS positioning shows the current speed and each brand car dashboard display speed.	-6 ~ +6

Taking Picture

To take a picture make sure the **Still Capture Mode** is selected. Press the **REC/OK** button to take a photo. Photos are saved on the Micro SD Card.

Still Capture Screen



Still Capture Mode	Resolution	Micro SD Card Status	Battery Status	Zoom in / out	Remaining Numbers to Take Photo	Exposure Value	Date and Time
				1.0x	1822	EV:0.0	20/ 02/ 2017 21 : 12 : 41

Zoom in / out

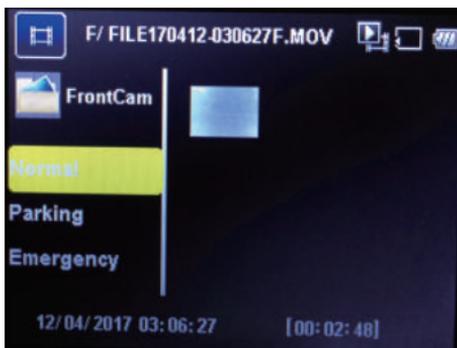
On the **Still Capture Mode**, press ▲ and ▼ to zoom in / out.

Playing Videos Mode

Playing Videos

Long press Mode button **MENU** and then short press Mode button **MENU** switch to videos view mode, press Up / Down button **▲▼** to select the video to play, press REC button **OK** to playing mode, then press REC button **OK** again to start playing video. Press REC button **OK** can pause the playing, press Mode button **MENU** to back videos view mode, then press Mode button **MENU** three times to back video recording mode.

Playing Videos screen



Video Icon	Video Folder	Video Name	date	Time
	Normal Parking Emergency	F/ FILE170412-030327F	12/04/2017 03:06:27	00:02:48
	Normal - Save the normal traffic recording video, can be recycled, can be deleted. Parking - Save the motion detection video, can be recycled, can be deleted. Emergency - Save manual protected video and G-sensor video, cannot auto recycled and deleted			

Viewing Pictures

Long press Mode button **MENU** and then short press Mode button **MENU** three times to switch to picture viewing mode, press Up / Down button **▲▼** to select the picture, then press REC/OK button **OK** to view picture, press Up / Down button **▲▼** for viewing pictures one by one, press REC/OK button **OK** again can return back to picture viewing mode.

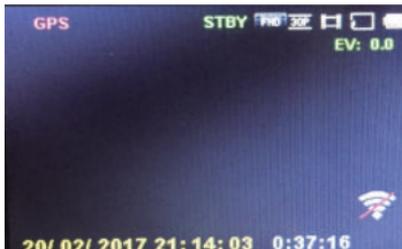
View Picture Screen



	F/ IMG170220-214020F	20/02/2017 21:40:20	
Picture	Picture Name	Date & Time	Picture Viewing Mode

GPS Function

This product built-in GPS module, power on and waiting for 1-5 minutes in outdoor, when GPS word on preview screen turned green, it means that the signal has been received, the recorded video can be tracked at this time.



At this time, the recorded video will have the correct latitude, longitude and speed displayed on the watermark.

GPS Abnormal Warning Condition

GPS Abnormal prompts caused may by:

- › Adjacent lane spacing less than 50 meters.
- › Fixed camera removed but still prompted [notify seller or online feedback].
- › When the front corners have a fixed camera.
- › Continuous speed point spacing is less than 100 meters.
- › There is a fixed camera at the exit of the tunnel.
- › Multi-viaduct overlap.

Above six cases the system may be false positives, please pay attention to identification

Impact of satellite signal reception are:

- › Basement or tunnel
- › Under the viaduct
- › Around High-rises
- › In the jungle or valley

Above four cases the product may not receive satellite signals or weak signal, Please pay attention to Dash Cam to regulations, in order to avoid security accidents or be photographed.

GPS Icon Indication

When the Dash Cam received GPS signal, the LCD will display the following subtitles when a speed point is detected during driving recording:



Indication:

- › 'N': Indicating North.
- › '383m': Indicating there are 383 meters from the speed point.
- › '40': Indicating the current speed limit of 40MPH.
- › '079MPH': Indicating that the current speed of 79MPH, has been speeding, please safe driving.

GPS Tracking Logger (ProofCam GPS Media Player, PC player)

ProofCam GPS Media Player enables you to playback video files and view the speed and location data for each video in real time and is available as a free download from www.proofcam.com.

- › Open www.proofcam.com in your mac / PC and follow the link to find “Dash Cam Resources” ;
- › Download the software according to your computer’s system;
- › Follow the guide to install and use it.

Note:

- › The speed in GPS Media player would have a little different from the speed of original video.
- › Please regularly update the speed camera database from ProofCam website to ensure the accurate speed camera reminding.

Wi-Fi Function

The camera has built in Wi-Fi which allows you to connect the Dash Cam to your mobile phone / tablet via the App. The specific steps are as follows:

Install App on your mobile phone / tablet:

Android system can search keyword “AIT Wifi Cam Viewer”  in Google play to download and install the APP.

iSO systems can search keyword “wifi camera app”  in app store to download and install the APP.

Notes:

Please note that you cannot change any camera setting from the APP. To change any camera settings, please use the menu functions on camera.

Battery Warning and Installation Notes

- › Always charge using the provided in car charger. Improper handling of the battery may result in explosion.
- › Never dismantle or pierce the battery or allow the battery to short-circuit.
- › Batteries may explode if exposed to naked fire. Never dispose of batteries in a fire.
- › Dispose of used batteries observing local regulations.
- › Never replace the battery on your own, have the dealer do it for you.
- › This product should be installed near the rear view-mirror, at the centre of windshield, if possible, for optimal viewing.
- › A protective film on the lens will affect the video or photographic effect, remove the protective film before using the Dash Cam.
- › Do not touch the lens with your fingers. Finger grease may be left on the lens and will result in unclear videos or snapshots. Clean the lens on a regular basis.
- › Do not attempt to disassemble or alter any part of the Dash Cam that is not described in this guide.



THE LITHIUM-ION BATTERY CONTAINED IN THE PRODUCT MUST BE RECYCLED OR DISPOSED OF PROPERLY. USE RAC DASH CAM ONLY WITH THE SUPPLIED DC POWER LEAD AND AC ADAPTER FOR BATTERY CHARGING.

To recycle your RAC Dash Cam unit, please take it to your local recycling centre.

This product fully satisfies the requirements for CE marking when used in a residential, commercial or light industrial environment.



This equipment complies with the essential requirements of EU Directive 99/5/EC.

Do not use this product on board aircraft, or in hospitals, without first obtaining Permission.

Caution

- › Due to local laws and vehicles safety considerations, do not operate the Dash Cam while driving.
- › Set up time and date accurately before you use this Dash Cam.
- › This product gets warm when in use, this is normal.
- › Do not place the Dash Cam near a heat source or directly expose it to flame or heat.
- › Never place the Dash Cam in vicinity of equipments generating strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunctions or data corruption and loss.
- › The system is used only for non-commercial use, within the maximum limits permitted by applicable law. Our company does not accept any responsibility for any data loss during the operation.
- › Improper use or operation of the product may result in damage of the product or its accessories and void the warranty.
- › Before you start using the system, it is assumed that you agree to the above statement.

Warranty

This RAC Dash Cam is warranted to be free from defects in materials or workmanship from one year from the date of purchase. Within this period, ProofCam will repair or replace any part or parts that fail provided such failure is not deemed to be as a result of misuse or damage caused. The warranty does not apply to cosmetic damage not to consumables such as batteries or storage cards. At our option, we will either repair or replace any cameras that are deemed to be eligible under the terms of this warranty. Any damage or fault caused by accident, misuse, unauthorised repair or interference or similar is not covered under this warranty.

If you have a camera that requires service under warranty, then in the first instance you should return it to the retailer from whom it was purchased.

Should you have any general or technical questions on your RAC 210 Dash Cam, please email us at customer@proofcam.com. We will endeavour to answer your mail within 24 hours.

ProofCam Limited EC1V 7LQ

proofcam.com

You can also find general information, news, reviews and competitions on our 'ProofCam' Facebook page and Twitter feed.

Specification

LCD Display	2.31 inch TFT LCD monitor
Image sensor	2MPCMOS
View angle	127°
Video Resolution	1920*1080 30fps / 1280*720 30fps /1280*720 60fps
Picture resolution	12M
Video format	MOV
Picture format	JPG
Memory	Support Class 10 or higher rating Micro SD card, maximum up to 32GB
GPS	Built-in
Wi-Fi	Built-in
Speed Camera Alerts	Built-in
Microphone	Built-in
Speaker	Built-in
G-sensor	Yes
Power source	In car charger
Interface	USB port, SD card slot, Rear Camera port
Operating temperature	0°~ 45° C
Dimensions	63*68*40mm (L*W*H)
Weight	80g

Frequently Asked Questions

- › Micro SD card does not display or cannot read.
 - Make sure using class 10 (on or above) Micro SD card.
 - Format Micro SD card in dash cam before using.
- › Cannot power on or crash.
 - Check the power connection ensure the indicator light of car charger turns on, connect to the camera charging about 30 minutes.
 - Remove the Micro SD card and reset the camera, then press power button power on the camera.
- › Automatically stops recording when recording.
 - Check whether the video recorded in the camera playback mode is fully protected.
 - Make sure cycle recording function has been set, and Micro SD card has been formatted.
- › The camera preview screen has horizontal streak interference.
 - According to the local power supply frequency, set the corresponding 50HZ or 60HZ.
 - It is a normal phenomenon that in the event of generator power generation may lead to horizontal streak more obvious.
- › When computer plays recorded videos, the video is not coherent.
 - Copy the recorded videos from Micro SD card to the computer hard drive.
 - Replace the Micro SD card according to the actual situation.
- › Time cannot be saved, the time cannot be set.
 - If the battery out of power, the power has been exhausted and not connected to the car charge system, time will be restored to factory settings, the battery should be fully charged and then re-set it.
 - If the problem remains, it is the battery is broken, need to contact the dealer to replace the battery.
- › The recorded video is fogged.
 - Check the lens film is take off, or the lens or windscreen of vehicle may not clean. If the problem remains, try to restart the camera. The problem is still not resolved, then please contact our authorized dealers.
- › When connect to Wi-Fi the camera temperature rise up is normal phenomenon.



Important:

It is your responsibility to make sure that you use the RAC Dash Cam in a safe and responsible manner. Do not access functions or change settings whilst you are driving, and the location and positioning of your RAC Dash Cam should not interfere with the driver's field of vision.

Please make sure that you drive in an appropriate way and in compliance with all the laws and regulations. The RAC Dash Cam is not a driving aid and is designed solely to provide a video record of your journey.

ProofCam accept no responsibility whatsoever for any failure of the equipment to work correctly.