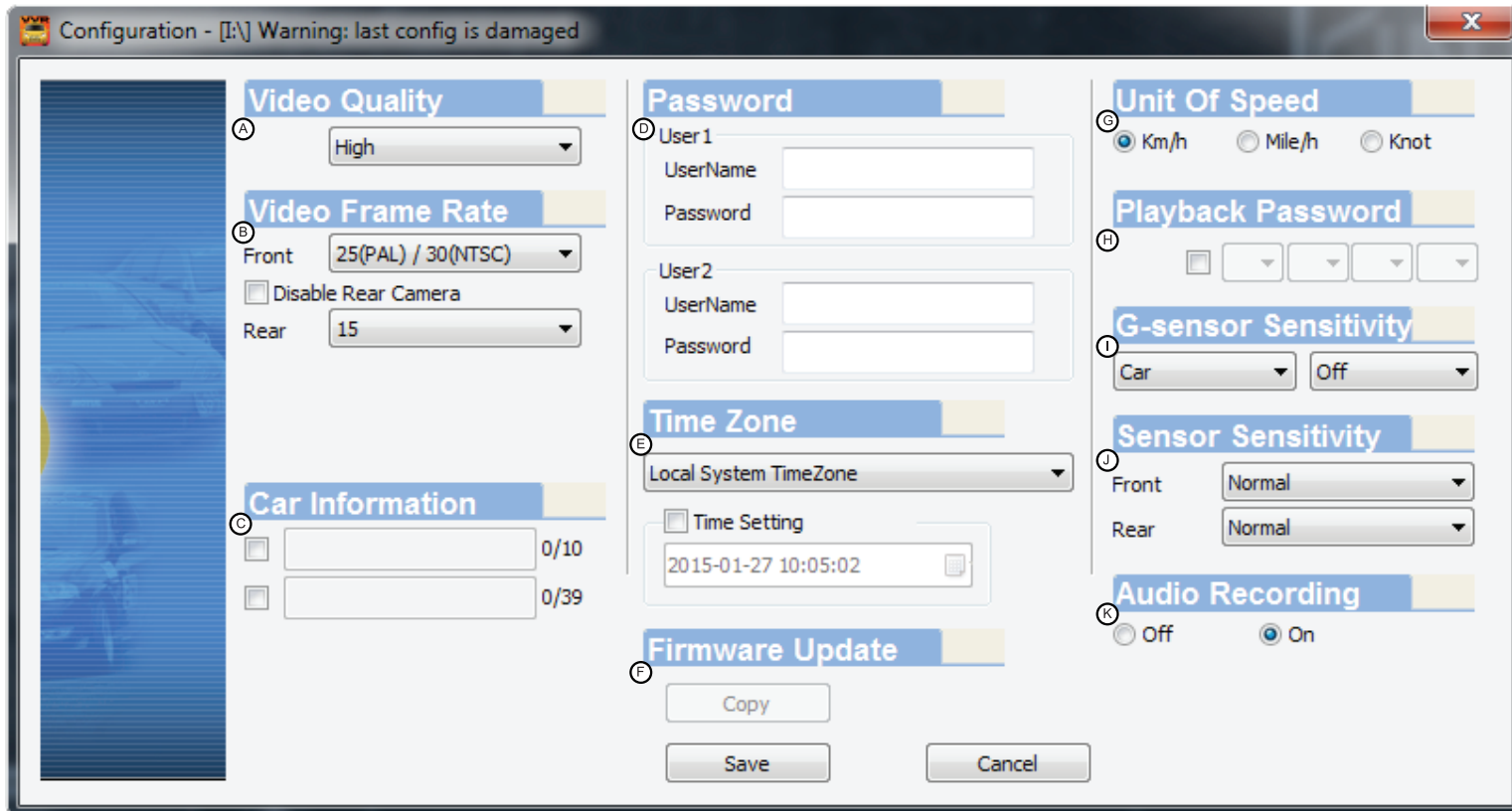


Modify DashCam Settings with CarBox Viewing Software Suite

The Rostra DashCam has a variety of settings that can be adjusted via the CarBox software or disabled altogether. These settings are written to the SD card and accessed by the DashCam once the card has been inserted. To modify these settings, with the SD card inserted into your PC, click the *Configuration* button in the CarBox software (See Figure M). When the *Configuration* dialog window opens, you will have access to all of the features described below.



Interface Quick Reference

- A) **Video Quality** - Adjust the quality of video recorded by the DashCam system using the drop-down menu. Higher quality video being recorded generally means larger video files.
- B) **Video Frame Rate** - Adjust the Frames Per Second (FPS) captured by the cameras. More FPS means smoother video and large video files. Less FPS means smaller video files but delays in the recording.
- C) **Car Information** - The SD card can store two vehicle profiles for when you want to move the DashCam between vehicles.
- D) **Password** - The DashCam system allows for two different user/driver profiles to compare driving between two individuals.
- E) **Time Zone** - Manually tell the SD card in which time zone it is being used, or the DashCam will select a time zone automatically based on the GPS signal it detects.
- F) **Firmware Update** - In the event that a firmware update is required for your DashCam, the firmware file will be available via the *Support* page of www.rostra.com and written to the DashCam using this section.
- G) **Unit Of Speed** - The DashCam can record a vehicle's speed in a variety of units including Kilometers Per Hour, Miles Per Hour, and Knots.
- H) **Playback Password** - The video being recorded by the DashCam is encrypted by default. Setting a 4-digit password enables an extra layer of security so that only the password holder can view or modify the videos recorded to the SD card.
- I) **G-sensor Sensitivity** - The DashCam system includes a multi-axis accelerometer that can detect G-forces from actions like hard acceleration, excessive braking, or sharp steering. These settings are available by vehicle type including Car, Truck, and Motorcycle, and the sensitivity is further subdivided into Heavy, High, Normal, Low, Light, and Off. As well, an option for "Alarm" is available that will mark videos not to be overwritten when an excessive force is detected.
- J) **Sensor Sensitivity** - The sensitivity of the built-in accelerometers can be further adjusted between the front and rear sensors with options for Heavy, High, Normal, Low, Light, and turned completely Off.
- K) **Audio Recording** - The built-in microphone captures audio from within the vehicle by default. The microphone can be disabled using this option if the DashCam owner does not wish to record audio.

Once the desired settings have been selected, click *Save* to write the settings to the SD card, or *Cancel* to cancel any changes.



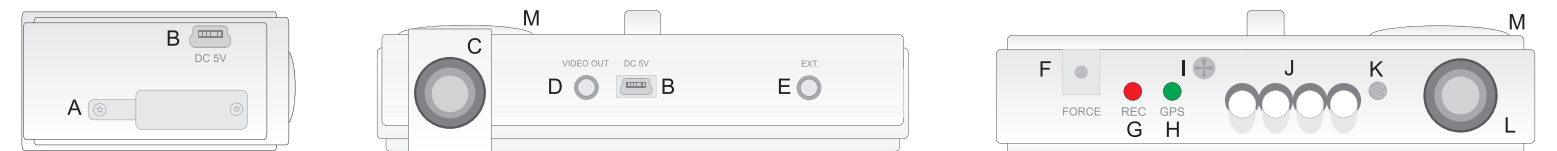
Product Features

Suitable for all vehicles (taxi, bus, car, truck, SUV). Small size does not affect a driver's line of sight. Powers on automatically with vehicle's ignition. Simultaneously records interior and exterior views. Records all driving conditions (sound, GPS, G-force). 120-degree forward-facing camera for exterior view. 170-degree rear-facing camera for vehicle interior. Records 720p with **Class 10** or better microSD card. Driving route mapped using Google Maps imagery¹. Adjustable accelerometer sensitivity by vehicle type. Secure video format protects against deleted videos. Password protected settings and user accounts.

Product Specifications

Built-in H.264 video compression chipset. Records video in either NTSC or PAL format. 720p forward-facing CMOS color camera (30 FPS). VGA interior-facing CMOS color camera (15 FPS). Operates on 5V from included power supply. Records date, time, image, sound, GPS, G-sensor data. Custom video recording format for security. Built-in high sensitivity auto-adjusting microphone. Time auto-calibrated by GPS signal. Built-in 3-dimensional G-sensor. 8GB **Class 10** microSD card included.

Device Features



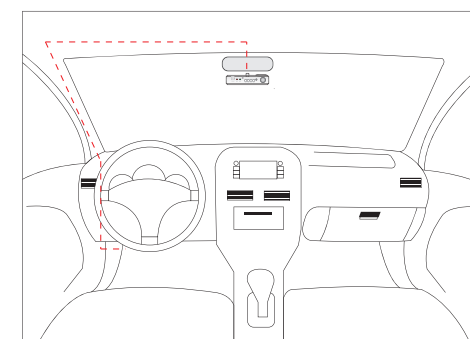
Side View

Forward-Facing View

Interior-Facing View

- A) MicroSD card access with security screws.
- B) USB DC 5-volt ignition power input.
- C) Forward-facing 720p camera lens.
- D) 3.5mm video output. Harness sold separately.
- E) External antenna connection (not used).
- F) Force Record button.
- G) Record indicator LED² (Red).
- H) GPS signal indicator LED³ (Green).
- I) Built-in audio capture microphone.
- J) Infrared LED array (night vision).
- K) Photo sensor for IR LED activation.
- L) Interior-facing VGA camera lens.
- M) GPS antenna.

Product Installation



The final mounting position of the Rostra DashCam unit is ultimately left to the discretion of the installer and customer, but the recommended location is directly beneath the vehicle's rearview mirror using either the included fixed-mount base with 3M double-sided adhesive tape (for permanent mounting), or the included 3-pack of suction cups (for temporary mounting). This position provides an image at the center of the vehicle that allows the forward-facing camera to capture as much of the road in front of the vehicle as possible while providing a detailed view of both the driver and passenger with the interior-facing camera.

Power Supply Wiring

This DashCam includes a two-wire power supply. Connect the Red Wire from the power supply to a 12-volt ignition power source, and the Black Wire to a chassis ground point. The location of the power and ground connection is left to the installer per the vehicle.

¹ Google Maps driving route overlay requires an active internet connection while using the CarBox software suite.

² Blinking LED indicates that the DashCam is recording video. The LED being off indicates that no video is being recorded.

³ Blinking LED indicates GPS position is being acquired or has been lost. Solid LED indicates GPS has been acquired and is recording.

CarBox Viewing Software Suite Introduction

The CarBox Viewing Software Suite is the all-in-one solution for viewing and saving videos recorded by your Rostra Dashcam, saving DashCam settings via the included microSD card, formatting the microSD card, and a variety of other features detailed in the coming sections of this document.

Downloading the CarBox Viewing Software Suite

After your Rostra DashCam has been mounted in the vehicle, before recording video, you must first visit the the DashCam section of www.rostra.com to download the CarBox Viewing Software Suite for your respective DashCam unit (250-8918, 250-8919, or 250-8919HD). This software suite, available as a .zip file¹, will be used to first format the microSD card included with your DashCam and set the recording preferences (See Figure A).

Begin by downloading the software suite that matches the part number of the DashCam that you have purchased and extracting the files inside to a preferred location on your personal computer. Please note that the ultimate location of these files is not important, but for ease of accessibility, Rostra recommends simply saving them to the Desktop of your PC.

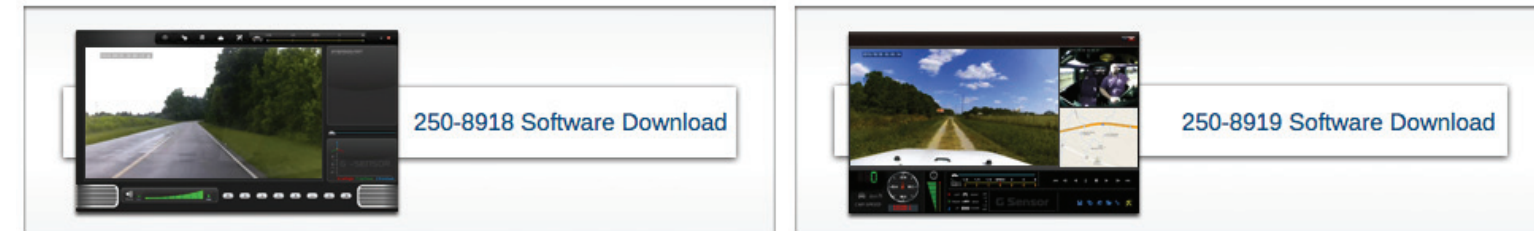


Figure A

Launching the CarBox Viewing Software Suite

Once you have selected a location on your PC for the folder containing the CarBox Viewing Software Suite, locate the "CarBox2" icon inside this folder (See Figure B). Double-click this icon to launch the CarBox software. Please note that the CarBox software requires an active internet connection to access all of the built-in features such as overlaying GPS coordinates onto a Google Map. This may result in a warning message from the Windows operating system as the software attempts to connect online. This is normal and the software should be given access.



Figure B

CarBox Viewing Software Suite Interface



CarBox Interface Quick Reference

- A) Video window for forward-facing 720p camera.
- B) Video window for interior-facing VGA camera.
- C) Window for displaying Google Maps GPS overlay.
- D) Telemetry display (speed, direction, coordinates).
- E) Quick access video volume control (slides up and down).
- F) Video playback speed control (slides left to right).
- G) Accelerometer data visualization (X, Y, and Z axis).
- H) Video playback controls (play, stop, pause, etc...).
- I) Backup button (used for saving video clips).
- J) Configuration button (used for adjusting settings).
- K) Map button (used to enable Google Maps).
- L) Playback button (used to access video files).
- M) SnapShot button (used to save video snapshots).
- N) Format button (used to format microSD card).

SD Card Formatting with the CarBox Viewing Software Suite

The SD card included with this DashCam unit must first be formatted using the CarBox software. Insert the SD card directly into your PC or external SD card reader and wait for Windows to acknowledge that it has been detected. Next, launch the CarBox software and click the *Format* button (See Figure C). In the *Format Tool Dialog* window, use the drop-down menu to select the SD card (See Figure D). Once the SD card is selected, click the button labeled *Format* and confirm that you want to format the SD card (See Figure E). The software will then format the SD card (See Figure F). Once formatting is complete, the SD card is ready for use in your DashCam and the card will be safely ejected from the PC (See Figure G).



Figure C

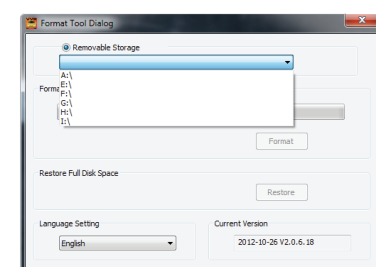


Figure D

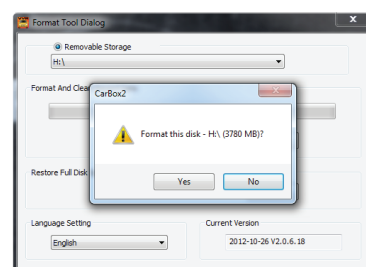


Figure E

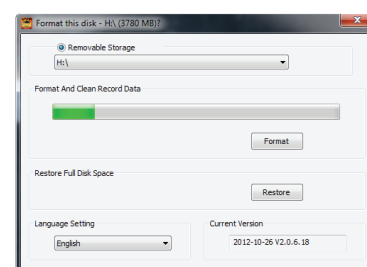


Figure F

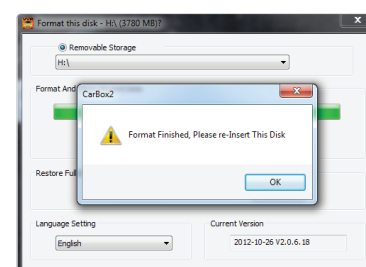


Figure G

¹ The CarBox Viewing Software Suite is currently only available for use on personal computers with Windows XP, Windows 7, or Windows 8/8.1

Select Video for Playback with CarBox Viewing Software Suite

When your SD card with videos is inserted into your PC, the video files on the card should begin playing automatically once the CarBox software has been launched. To browse the files stored on the SD card, or to select a different video file for viewing, click the Playback button (See Figure H) to open the Playback dialog window. From this window, select the video you wish to view by double-clicking it (See Figure I) and the video will begin playing in the CarBox window (See Figure J).



Figure H

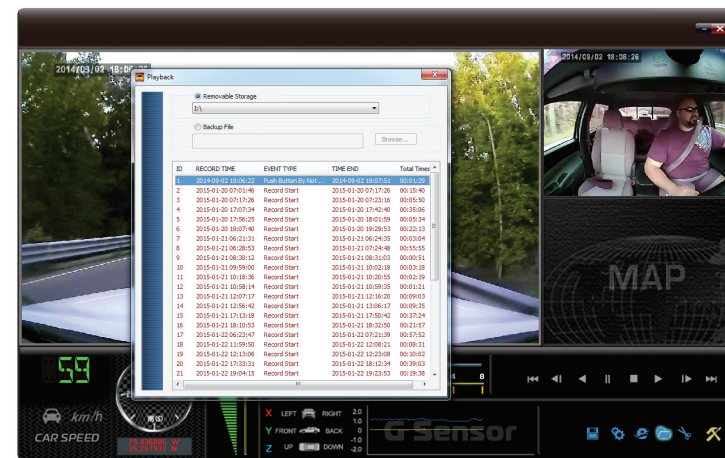


Figure I



Figure J

Exporting/Saving Videos with CarBox Viewing Software Suite

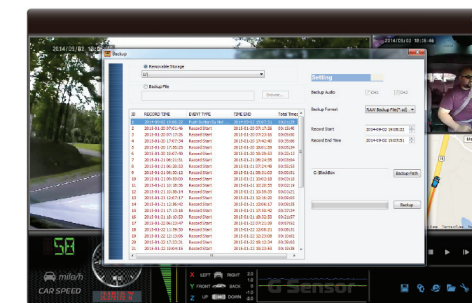
Because the videos written to the SD card of the DashCam are encrypted for added security, the CarBox software must be used to both decrypt the video files and save them to your personal computer. Once audio and video have been recorded to the SD card, re-insert the card into your PC and follow the steps below.



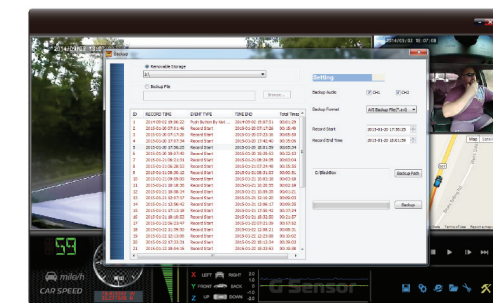
Figure K



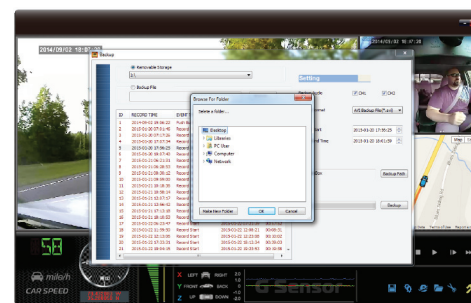
1) Once the SD card is inserted into your PC, click the *Backup* button (See Figure K).



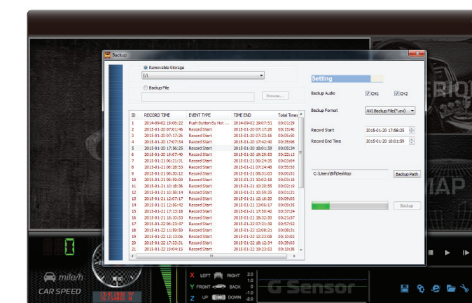
2) The *Backup* dialog window will launch displaying all videos recorded to the SD card.



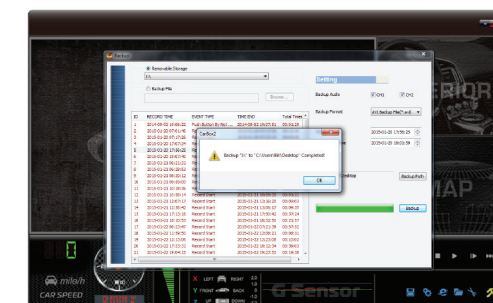
3) Select the video that you want to save and select *AVI Backup File* from the *Backup Format* drop-down list.



4) Use the *Backup Path* button to select the location where you want to save the video on your PC.



5) Click *Backup* to save the video to the selected path on your PC.



6) Once complete, a dialog window will let you know that the video has been saved to your PC.

Once video has been saved to your PC, you can then navigate to its location and watch the video files from the individual cameras.

Saving Video Snapshots with CarBox Viewing Software Suite



While entire videos from the SD card can be exported for viewing using the CarBox software, the suite also allows you to export still images directly from the video. When using the CarBox software, as video from the DashCam is playing or paused, clicking the *SnapShot* button (See Figure L) will save still images from the on-screen video to your PC. Once the SnapShot button is clicked, a dialog window will open with the saved images displayed. Double-click these images to open them with your PC's picture viewing software in order to view them in their full resolution. Note that the SnapShot tool saves images from whichever cameras have recorded video and are currently playing in the CarBox window.



Figure L