

OPERATING MANUAL FOR R300 DASHCAM

This document contains operating instructions for both recording and playback functions of the R300 DashCam.

The unit has a number of features including –

- two cameras, one to the front which has a tilt adjustment and one to the rear
- a GPS module which can utilise Google Maps to show the track taken in conjunction with the recorded video
- a gravity sensor (which can sense any accident shock) the output of which is recorded in conjunction with the video
- an audio recording and playback facility
- automatic recording start when vehicle power is applied
- media player software which is required to playback video and manage the recorded data (Note : this software is only compatible with Microsoft Windows XP, Vista and 7 however it may also work with Windows 2000 and 8. It does not, natively, support Mac OS or Linux however a workaround for Mac OS has been noted on www.motorhomefun.co.uk)

The unit has a recessed connector bay, which is protected by a rubber cover when the unit is disconnected and not in use, and this contains the sockets for 5v DC power input (mini USB socket), a proprietary keyed 4 pin socket for the GPS aerial and a micro SD card slot..

The following diagrams show the layout \ position of the operating controls, display screen, video cameras and audio recording \ playback components. They also show how the mounting bracket is attached to the camera unit and the layout of the connector bay.

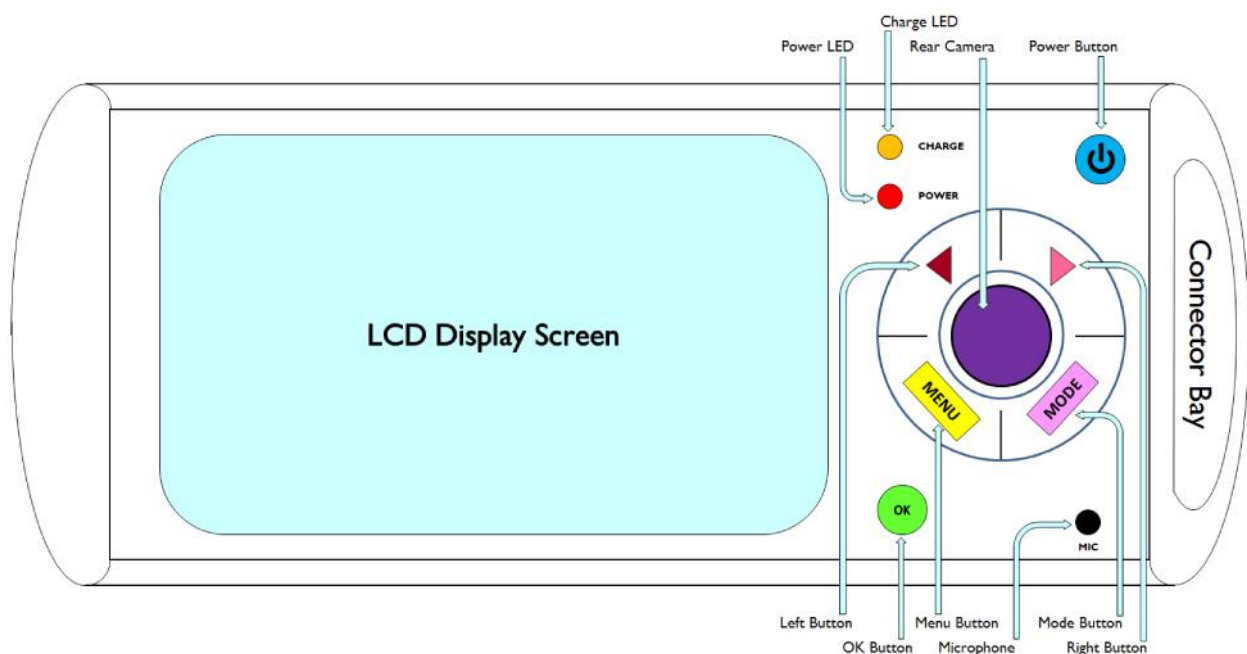


Figure 1: Rear of camera facing into cab area

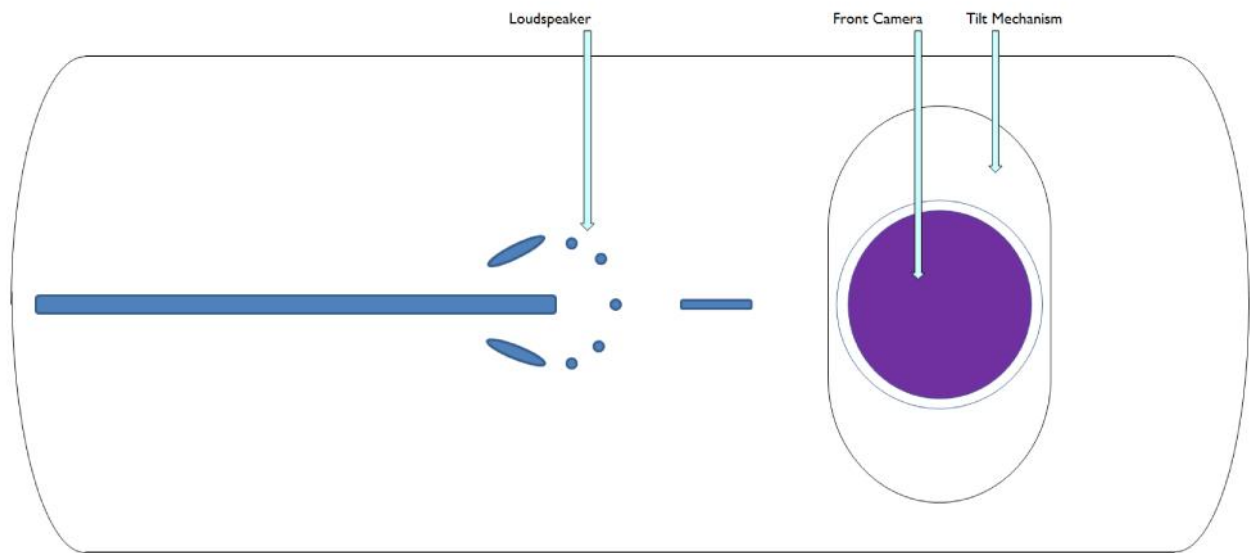


Figure 2 : Front of camera facing towards windscreen

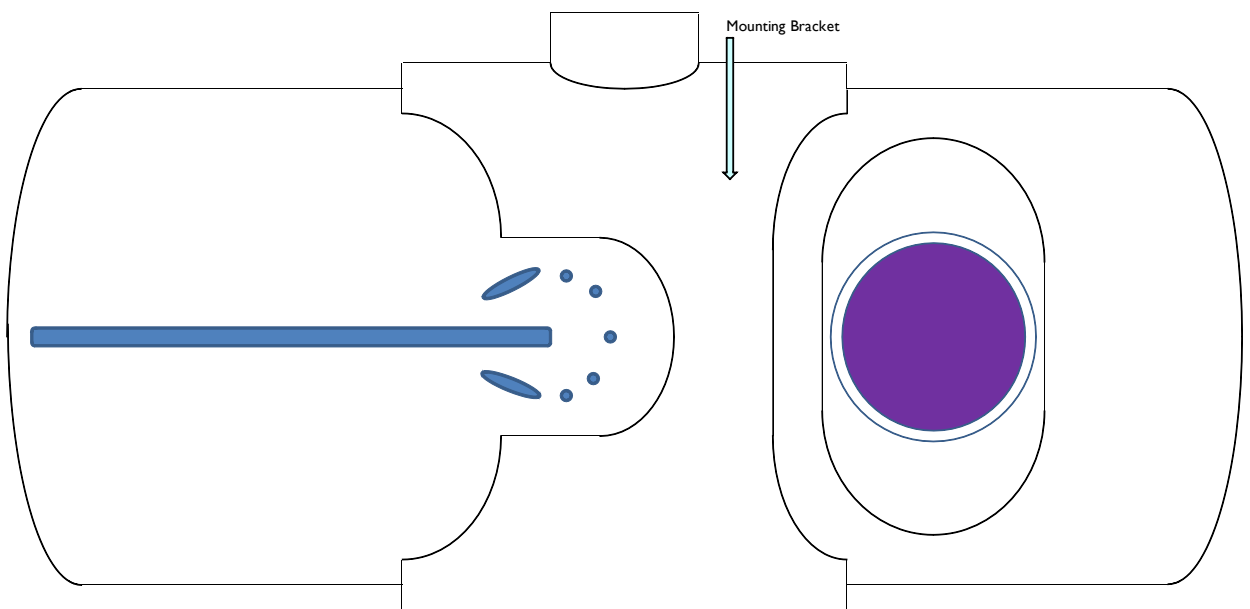


Figure 3 : Front of camera facing towards windscreen (with mounting bracket fitted)

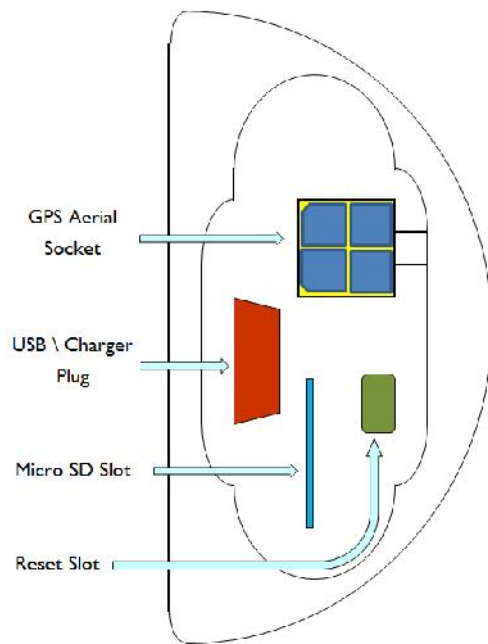


Figure 4 : Layout of the connector bay

INITIAL SET-UP

Battery charging

Prior to first use you should charge the inbuilt lithium battery. This can be achieved in one of two ways –

- by using a mini USB cable (not supplied) to connect the unit to a powered USB socket on a computer
- by using the supplied car charger

When charging, the Charge LED ● shows red. This automatically extinguishes when charging is complete.

As charging can take up to 4 hours it is probably sensible to use the first option, charging from a computer, unless you are making a planned journey in the vehicle.

Micro SD card

Insert a micro SD card in the slot || in the Connector Bay. The card should be aligned with the connection pins to the left and facing you with the LCD Screen Display towards you.

The unit will accept a micro SD card with a capacity of between 1Gb and 32Gb.

To remove the card push again and the card will spring out.

Format the micro SD card

When inserting and using the SD card for the first time in the unit it requires to be formatted.

The unit uses a proprietary format and the inbuilt firmware should recognise when a specific card is being used for the first time (this includes if a previously used card has been subsequently reformatted). Assuming it does it will display a request to format and [Yes] [No]. Select Yes, if not already selected, by using the Left Key ◀ or Right Key ▶ and press OK Button ●. The unit will format the card and, when completed, will take you to a screen displaying the output from the camera channels selected in the set-up menu. Note : all contents previously on the card will be lost.

If the unit does not display the request to format the card this must be done manually through the set-up menu. Alternatively, this can be done by copying and using the systems software on a computer. Both of these options are described later in this document.

Failure to format the card will result in the recorded video being unplayable.

Adjust the front camera lens (CHI)

Powering on the unit

Press the Power Button ⏻ for two seconds and release. The Power LED ● will light amber.

To turn off, press the Power Button ⏻ for two seconds and release. The Power LED ● will light extinguish.

Note : if you are using the unit without an external 5v DC supply the unit will automatically power off when the internal lithium battery reaches a critical level.

The unit will automatically power on when connected to an external 5v DC power supply. This is particularly useful if the unit is mounted in the vehicle and connected to an ignition switched power supply as it turns on and off with ignition key.

BASIC OPERATION OF THE UNIT

Operating modes

The unit has three operating modes –

video recording – this mode is used to record the video captured by the active cameras as defined in the set-up menu (Note : this is the default mode when the unit is powered on)

video playback – this mode is used to playback previously recorded video


video monitoring – this mode displays video being captured, but not recorded, by the active cameras as defined in the set-up menu

These modes are selected by pressing the Mode Key MODE. Pressing this button scrolls through the options listed above.

Video recording

As stated in the previous section this is the default mode when the unit is powered on. Recording of video starts automatically.

The LCD Display Screen will show the video being recorded by the active cameras.





To stop recording press the OK Button . This places the unit in video monitoring mode where you can view what the active cameras are capturing, but not recording, and is useful when mounting the unit in the vehicle to align the camera's.

Note : in video recording mode pressing the Left Key  toggles the audio recording functionality on and off.

Video playback

When this mode is selected the LCD Display Screen will static display the first frame of the last piece of video recorded. Pressing the OK Button  will start playback of this recording.



If you want to view an alternative piece of video –


- pressing the Right Key  will take you to the start of the first piece of video recorded. Pressing the OK Button  will start playback of this recording.
- pressing the Left Key  will take you to the start of the previous piece of video recorded. Pressing the OK Button  will start playback of this recording.




Video monitoring




The LCD Display Screen will show the video being captured, but not recorded, by the active cameras.




THE SET-UP MENU



To enter the set-up menu power on the camera and press the Mode Key  to place the unit in monitoring mode. Note : the Menu Key  is deactivated when the unit is in recording and playback modes.

Press the Menu Key  to display the set-up menu on the LCD Display Screen. The set-up menu comprises the menu items listed below.

Scroll up and down the set-up menu item by pressing Left Key  or Right Key . When the required menu item is highlighted press the OK Button  and this opens the options for each menu item.

Scroll up and down the options by pressing Left Key  or Right Key . When the required option is highlighted press the OK Button  and this selects the option and returns you to the set-up menu.

- Record Mode
 - CH1 & CH2 (both cameras active)
 - CH1 Only (forward facing camera only active)
 - CH2 Only (rearward facing camera only active)
- Time Setup
 - 2015/01/01 (enter the appropriate date – YYYY/MM/DD – by pressing Left Key  to increase or Right Key  to decrease. When correct data is displayed press the OK Button  to move to next field)

- 00:00:00 (enter the appropriate time - HH:MM:SS – by pressing Left Key ◀ to increase or Right Key ▶ to decrease. When correct data is displayed press the OK Button  to move to next field)
- When all fields have been completed, ie SS has been entered pressing the OK Button  saves the entered data and returns you to the set-up menu
- Format
 - Format card? – Yes \ No (Note : all data stored on the card will be lost if Yes is selected)
- TV Out
 - NTSC
 - PAL (you would normally select this option for UK operation)
- Beep
 - On
 - Off
- Audio record
 - On
 - Off
- Language
 - Various language options are displayed (select required option)
- LCD Default
 - On
 - Off
- G-SENSOR Sensitivity
 - Low
 - Normal
 - High
 - Disable
- Frequency
 - 50Hz (you would normally select this option for UK operation)
 - 60Hz
- Default Setting
 - Yes (Note : this option is the default option and selecting this will return the unit to its default settings overwriting all the previously created set-up)
 - No

COMPUTER ACCESS TO RECORDED FILES

X2Player – initial steps

The unit does not support USB plug and play. The unit's in built proprietary player software (X2Player.exe) must be used to playback recorded video and audio.

The act of formatting the micro SD card, as described previously, copies this in built player software from the unit's firmware onto the micro SD card. This piece of software can, and probably should be, copied to the hard drive of your computer as this will enable playing of video files copied from the micro SD card to the computer hard drive. It will also act as a backup copy of the player software in case the original on your micro SD card becomes corrupted.

To view the recorded data on a computer remove the micro SD card from the unit and either place directly into a micro SD card reader slot on your computer (if it has one) or a micro SD card – USB adapter (not supplied). The X2Player can then be run from the micro SD card. If a User Account Control warning is displayed accept this and the software player screen will display.

The X2Player should open the video files stored on the micro SD card and will display a screen similar to the following assuming synchronisation with Google Maps is disabled.

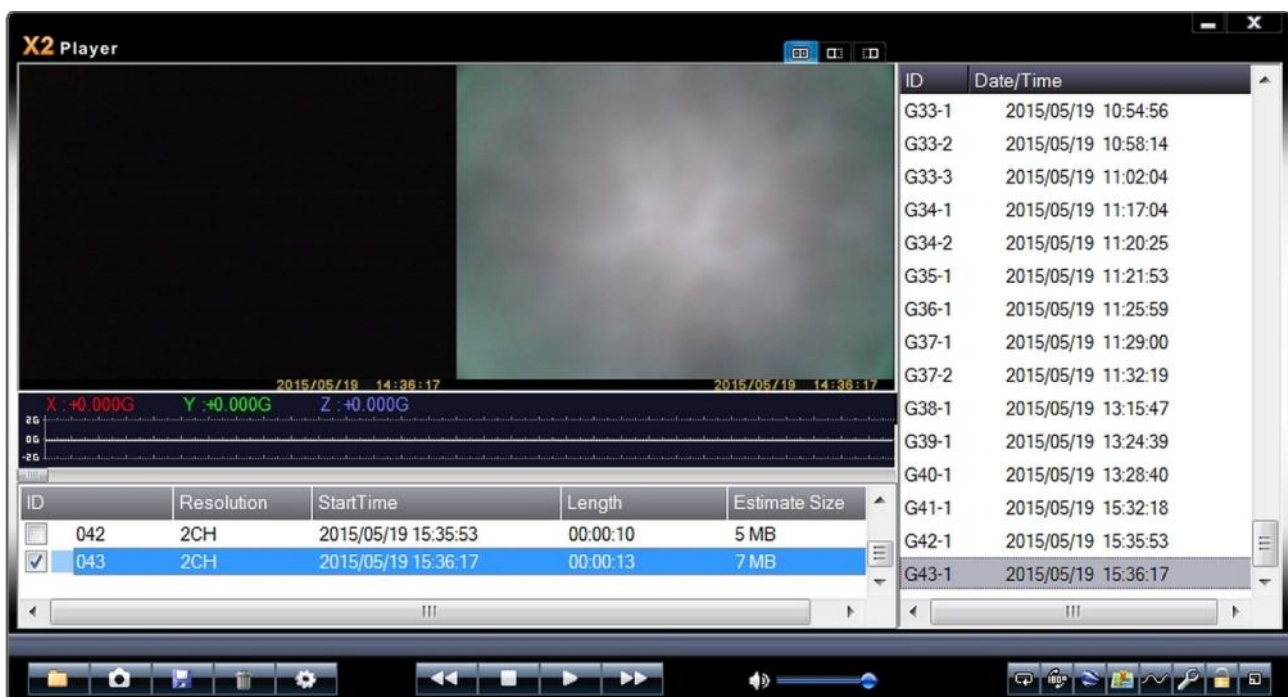


Figure 5 : XPlayer display (map synchronisation off)

If Google Map Synchronisation is enabled the display should look similar to the following.

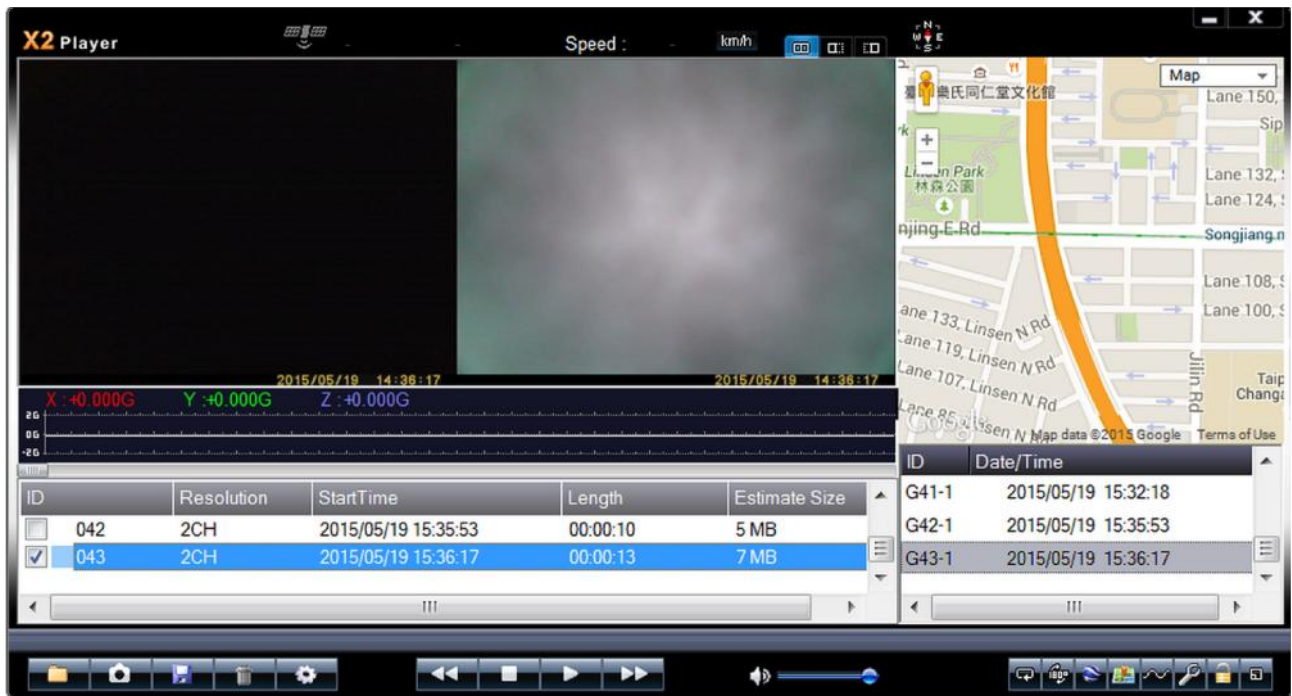


Figure 6 : XPlayer display (map synchronisation on)

X2Player – detailed operation

The following diagram shows an overview of the layout detail of the X2Player display screen.

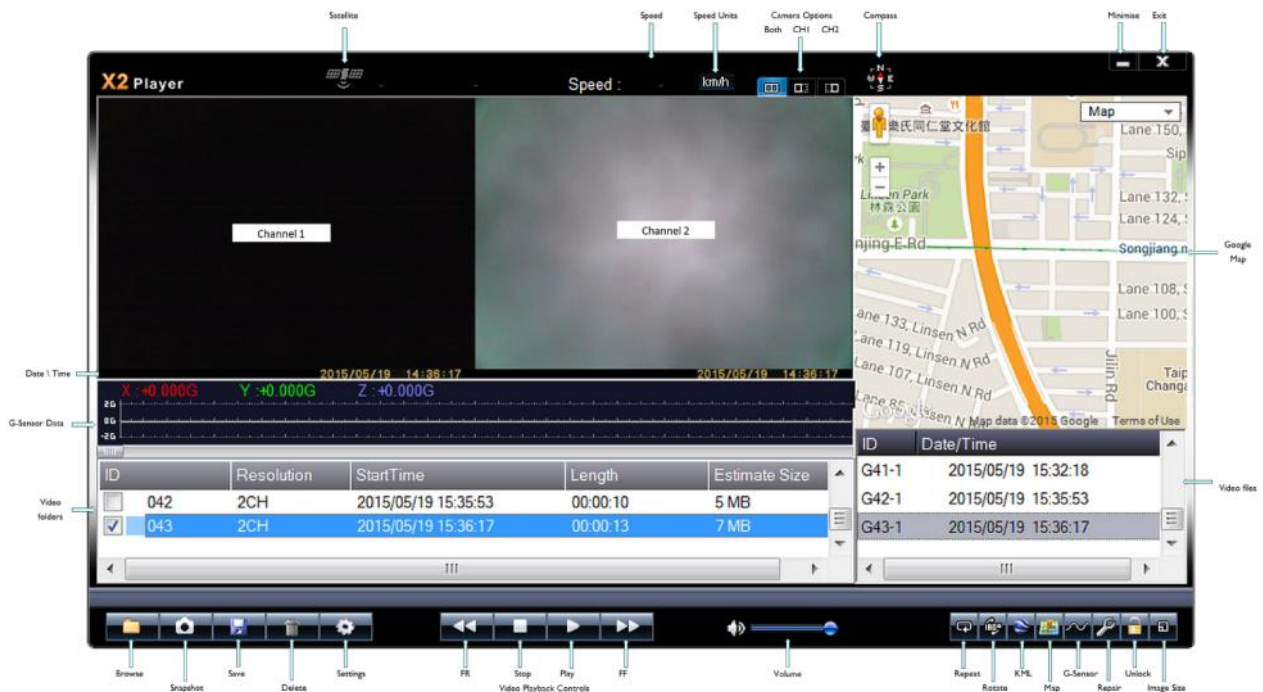


Figure 7 : X2Player layout overview

For clarity the following diagram shows the detail of the left half of the X2Player display screen.

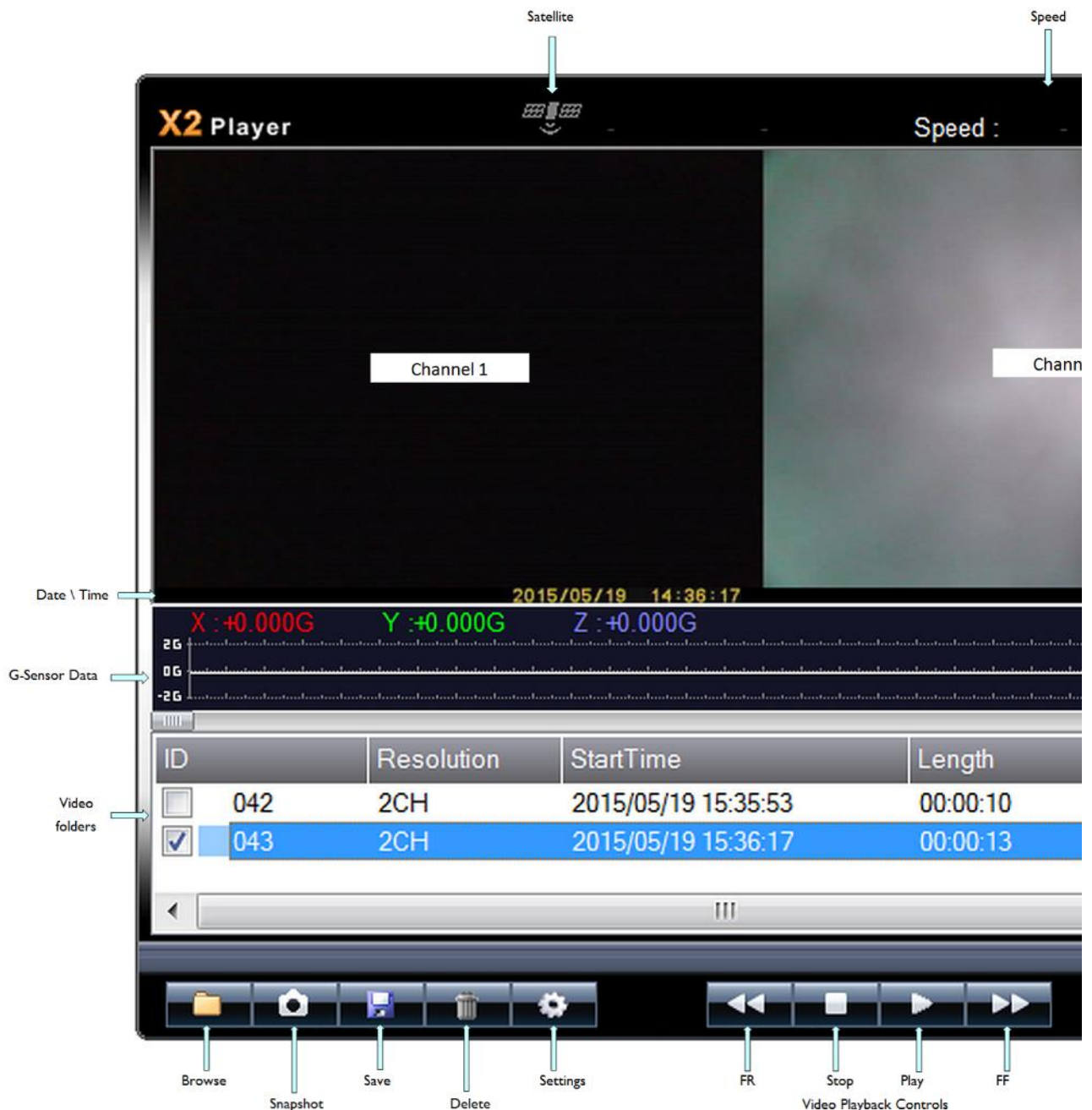



Figure 8 : X2Player left half of display

The content displayed controls on the left half of display comprises –

- Satellite : this displays if GPS satellite reception is operative
- Speed : shows the travelling speed when the video was recorded
- Channel I : is the video recorded by the forward facing camera
- Date \ Time : is the date and time the video was recorded
- G-Sensor Data : displays the g forces being experienced at the time of recording
- Video Folders : are the folders of recorded video

- Browse  : if you are running X2Player from your computer hard disc or from the micro SD card and are seeking to view alternative saved video files you will need to tell X2Player where to find these. Clicking this icon opens the following drop down box to enable this (Note : the drop down box text does not display correctly).

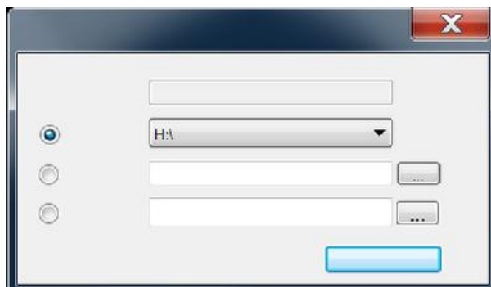






Figure 9 : File selection

- Snapshot  : allows you to take a snapshot of the video frame being displayed and save as a picture to a selected location on your computer.
- Save  : allows you to save selected video folders and files to a selected location on your computer.
- Delete  : deletes selected folders and files.
- Settings  : opens the following drop down box titled Toolbox. It includes a number of setting options including a facility to password protect your files.

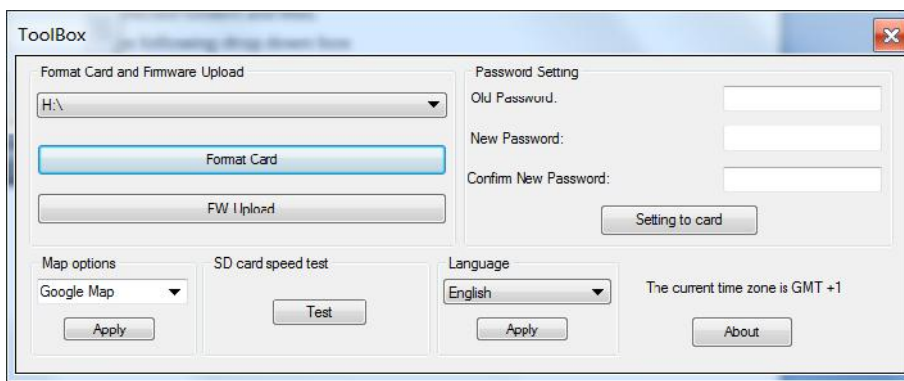


Figure 10 : Toolbox drop down box

- FR  : fast rewind.
- Stop  : stop.
- Play  : Play or pause.
- FF  : fast forward.

For clarity the following diagram shows the detail of the right half of the X2Player display screen.

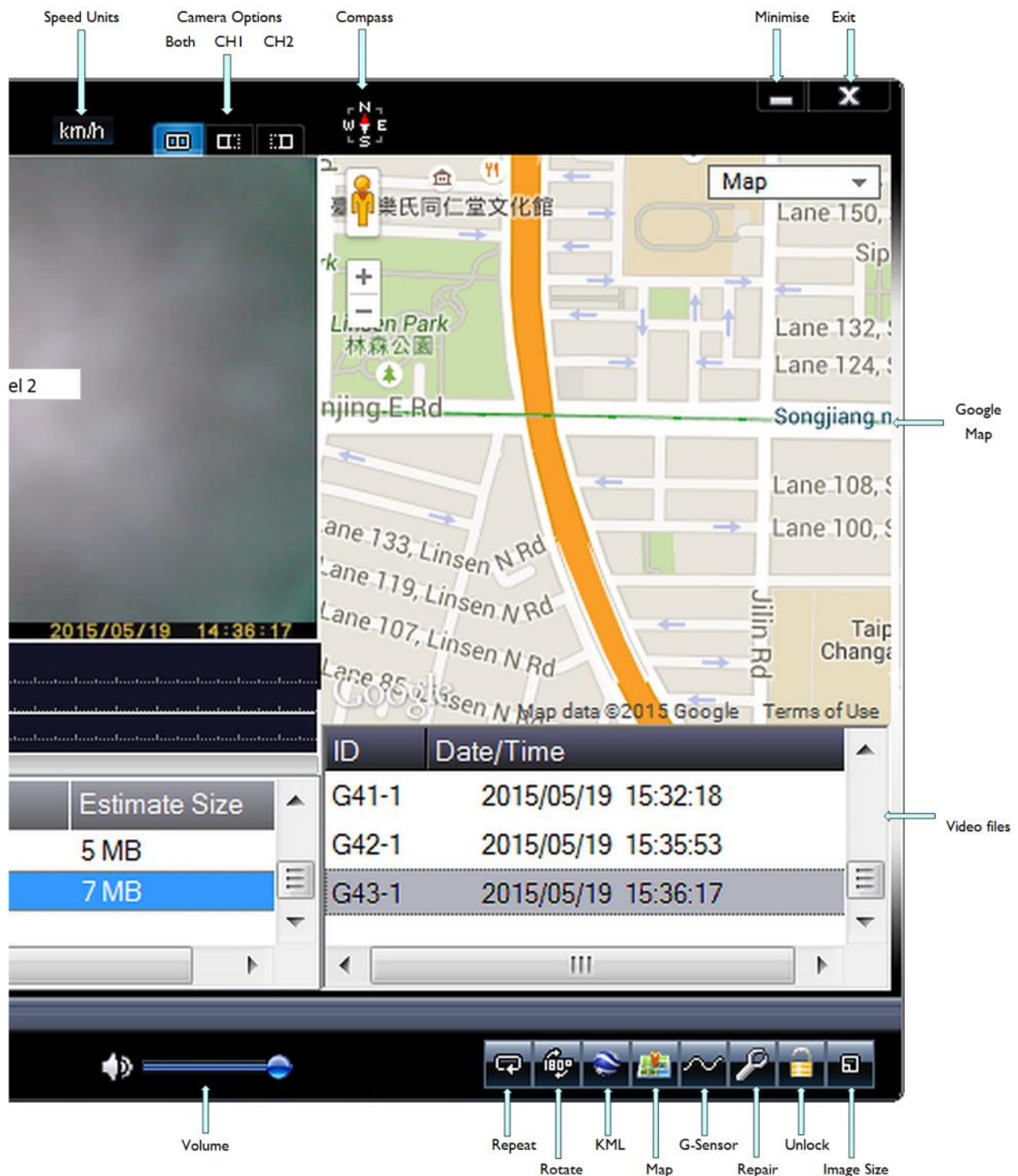









Figure 10 : X2Player right half of display

- Speed Units : toggles between mph and km/h.
- Camera Options
 - Both : displays recorded video from both cameras.
 - CH1 : displays recorded video from forward facing camera.
 - CH2 : displays recorded video from rearward facing camera.

- Compass : shows direction of travel.
- Minimise : minimises the X2Player screen to the taskbar.
- Exit : closes the X2Player.
- Google Map : this shows the location of the video scene in Google Maps (or other as defined on Settings).
- Video files : displays the video files stored on the mini SD card.
- Channel 2 : is the video recorded by the rearward facing camera
- Volume  : increase or decrease audio volume.
- Repeat  : plays the video in a continuous loop.
- Rotate  : this rotates the video image through 180°. This enables “upright” mounting of the unit to the dashboard as opposed to “hanging” from the windscreen and still being able to view the video with correct orientation.
- KML  : this enables output of a KML file to a user defined location.
- Map  : this toggles on and off display of the default map functionality as selected in the drop down box named Toolbar as noted under Settings above. You would normally choose Google Maps.
- G-Sensor  : this toggles on and off visibility of the G-Sensor Data as noted above.
- Image Size  : this toggles the size of the X2Player interface.

RESET THE UNIT

If a fault occurs with the unit you can try and reset it by pushing the reset button and then restarting the unit.

PRODUCT \ TECHNICAL SPECIFICATION

- 140° ultra wide angle forward facing camera which can be tilted up or down by up to 20°.
- 120° ultra wide angle rearward facing camera.
- 1/4” low noise high quality CMOS element to capture video.
- video size is 1280 x 480 pixels @ 30fps when both cameras in use or 640 x 480 pixels @ 30fps when single camera in use.
- rechargeable lithium battery which can be charged whilst connected to the vehicle through the supplied cable.
- built in microphone.
- built in speaker.
- supports up to 32Gb micro SD card.
- automatic power on with delayed start function to prevent power surge damage and recording start when vehicle ignition switched on.
- GPS scanning and positioning functionality.
- G-Sensor which records g force changes.
- 2.7” 16 : 9 LCD screen.
- Proprietary AVI video format recording.
- 5v DC power socket for recharging.

INCLUDED ITEMS

- dashcam unit
- vehicle charging power supply.
- vehicle mount.
- GPS aerial.