





Thank you for purchasing Naito V2 GPS

The Naito V2 GPS is a state-of-the-art ultra compact DashCam featuring full HD 1080 video, Loop Recording, Motion Detection, G-Sensor and GPS. *Please read this manual carefully before using the product.*

- » Motorcams Ltd retains all rights to this manual in accordance with copy right laws.
- » Motorcams Ltd will occasionally update the firmware for this product. All information and specifications in this manual are subject to change without a prior notice.
- » In the event of an accident Motorcams Ltd do not take any responsibility for damages (property, business and/or indirect damages).

Warranty and Disclaimer

- » We take no responsibility for accidental damage, injuries and other losses caused by improper use of the product.
- » This product is a video event data recorder for vehicles but does not guarantee that all accidents will be recorded.
- » This product creates a recorded video to help determine what happened before, during and after a crash or event.

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Safety Instructions

This manual covers what should be done to protect the user's safety and prevent property damage. Please make sure to read these safety instructions before using the product.



Do not disassemble, repair and/or alter the product.

This may cause a fire, an electric shock and/or malfunction. Contact the service center if you need to have the product fixed. User may not be entitled to free service if and when product malfunction is caused by user's fault.



Do not install the product in a location where it obscures the driver's view.

This may be in violation of The Road Traffic Act Regulation 79a



Do not operate the product while driving.

Use after stopping/parking your car in a safe place.



Do not wet the product.

This may cause a fire, an electric shock and/or malfunction.

Drastic changes in brightness (on entry/exit of tunnels), strong backlight in the daytime, and no light source at night may result in diminished video quality.

Excessively tinted windscreens may cause recorded images to look blurry or distorted.

Installation Cautions

- Installing or operating the device while driving may cause an accident. Only install and/ or operate the device while the vehicle is not in motion.
- If the cigarette lighter receptacle emits fumes or a funny smell, stop using the product immediately and contact us or one of our dealerships.
- Dust and dirt build-up in the cigarette lighter receptacle may cause heat or a fire. Clean it on a regular basis.
- » We do not take any responsibility for malfunction, injuries or damage to the product caused by inappropriate use.

⚠

Memory Card Cautions

- » Do not forcefully remove the SD card while the product is in recording mode. Be sure to turn off the camera before removing the SD card.
- » Formatting the SD Card Formatting the SD card on a regular basis can help prevent potential read-write errors and corrupted files.
- The maximum lifespan of a SD card is six months.
 We are not liable for any SD card errors after this period.
- » Be sure to back up your recorded videos using an additional storage device.
- » Format the SD card by using the camera's format function found in the settings menu. Select "YES" when prompted.
- » Always use SD cards recommended by our company. We are not responsible for any issues caused by using an incompatible SD card.















- Check to make sure all the components above are included.
- Components may be changed without notice to improve product functionality and/or quality.
- Original Naito components are recommended. The use of third party components may restrict warranty.
- All Naito units come with a pre-installed 8GB memory card.

3 Product Features

High-definition Video:

Naito uses high quality megapixel lenses, which produce clear and sharp images even at night.

GPS:

The GPS module records speed and location data and is integrated in the mounting bracket. In order for the GPS to work correctly you must do the following:

- > Please make sure the car charger is connected to the USB port on the mounting bracket and NOT to the port on the camera body.
- > In the GPS menu check that GPS is set to ON and GPS Location is set to ON

The GPS icon in the bottom left corner of the screen will turn green when the GPS is receiving a signal. To play back video with GPS data use the "Registrator Viewer" application available here: http://dashcams.co.uk/downloads/

G-Sensor:

When the camera detects gravity acceleration of 2G or more the current file will automatically be protected from being overwritten by the Loop Record function.

When browsing videos on the camera the protected files will be distinguishable by a little padlock icon. When viewing video on a PC the protected files will have names that start with "EMG_"

· Time Stamp:

Date and time can be embedded in the video with the "Date Stamp" function in the setting menu.

· Anti-Shake:

Naito's anti-shaking technology ensures stable images.

· Night Vision:

Naito uses an extremely light sensitive image sensor to ensure clear images at night.

USB/HDMI:

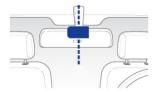
The camera connects to a computer via USB and to a TV/Monitor via HDMI.

Motion Detection:

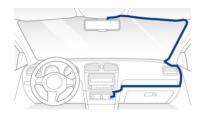
With Motion Detection enabled function turned on (settings menu) the camera will start recording when it detects motion in front of the car while parked. NOTE: This function requires hard wiring the camera into the car's fuse box.

4 Installing the Camera

» We recommend installing the camera behind the rear view mirror to avoid obstructing the driver's view.

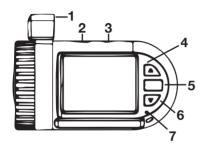


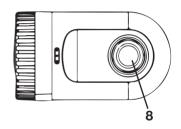
» Make sure the surface is clean and dry in the installation area. Remove the red film from the adhesive mount. Position the camera on the windshield with the lens pointing forwards and adjust the angle by rotating the camera body. » Plug the power cable into the USB port on the mounting bracket. Route the cable neatly around the edge of the windshield by tucking it into any available gap in rubber seal, roof liner etc. Continue around the dashboard towards the 12/24v socket.



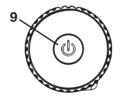
» Turn on the ignition. The camera should power up and start recording automatically.

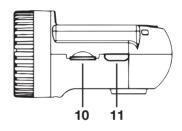
5 Product Overview





1. Bracket w/GPS	2. USB-slot	3. AV-out	4. UP Button
5. OK Button	6. Down Button	7. Led Indicator	8. Wide Angle Lens





9. POWER Button	10. Micro SD-slot
11. HDMI Out	

6 Operating Instructions

Menu Navigation

From the Video Recording Mode (default on start up) press and hold the OK button to enter the Settings menu. Navigate the menu with the UP and DOWN buttons and press and hold the POWER button for 2 seconds to enter/exit sub-menus and selecting options.

Press and hold the OK button for 2 seconds to access each of the remaining settings tabs.

NOTE: The settings menu can not be accessed while the camera is recording. Press and hold POWER for 1 second to stop the recording then proceed as described above

#	Sub-Menu	Description	Function	
	Video Settings Tab1			
1	Resolution	1920x1080 30fps 16:9 / 1440x1080 30fps 16:9 / 1280x720 30fps 16:9 / 848x480 60fps 16:9 / 848x480 30fps 16:9 / 640x480 30fps 4:3	Sets the video resolution	

#	Sub-menu	Description	Function
2	Quality	Super Fine, Fine, Normal	Video Quality Setting
3	Recycle Recording	OFF / 1m / 2m / 3m / 4m / 5m	The length of the file segments
4	Off Delay	OFF, 10s, 1m, 10m, 20m	Delay between turning the iginition off/unplugging the charger until the camera powers down from recording mode
5	Audio Record	ON, OFF	Turn MIC ON/OFF
6	Motion Detection	ON, OFF	ON/OFF
7	G-Sensor Level	OFF, 1, 2, 3, 4, 5	Adjust G-Sensor Sensitivity

#	Sub-Menu	Description	Function
		Video Settings Tab2	
1	Flicker	Auto, 50Hz, 60Hz	Sets the flicker frequency
2	AE (Auto Exposure)	Auto, Night Scene 1, Sports, Landscape, Portrait, Sunset, Sand, Skin, Spotlight, Water	Auto exposure settings
3	WB (White Balance)	Auto, Incandescent, D4000, D5000, Sunny, Cloudy	Adjusts the white balance
4	DE (Digital Effect)	OFF, Art, Sepia, Negative, Black/White, Vivid	Choose to apply a digital visual effect to the recording
5	Contrast	Standard, Hard, Soft	Adjusts contrast
6	Sharpness	Standard, Hard, Soft	Adjusts Sharpness
7	AE Meter	Center, Average, Spot	Auto Exposure meter settings
8	AE ISO	Auto, 100, 200, 400	Auto Exposure ISO settings

#	Sub-menu	Description	Function
9	Day AE	-2.0EV, -1.7EV, -1.3EV, -1.0EV, -0.7EV, -0.3EV, 0.0EV, +0.3EV, +0.7EV, +1.0EV, +1.3EV, +1.7EV, +2.0EV	
10	Night AE	-2.0EV, -1.7EV, -1.3EV, -1.0EV, -0.7EV, -0.3EV, 0.0EV, +0.3EV, +0.7EV, +1.0EV, +1.3EV, +1.7EV, +2.0EV, Stop Night AE	American/European

#	Sub-menu	Description	Function
		General Settings Tab	
1	Language	English, Simp Chinese, Russian, Trad Chinese	Selects operating language
2	Time Setup	Year, Months, Day, Hour, Minute	Set time and date for the unit
3	Format SD Card	Yes, No	Formats the memory card.
4	Default Settings	Yes, No (Confirm with OK)	Revert to factory default settings
5	LCD Control	Brightness, Contrast, Color Balance,	Controls built-in display response
6	Stamp	Off, Date, Time, Date/Time	Embed time, date or both
7	Volume	0(Mute), 1, 2, 3, 4, 5, 6, 7(Max)	Adjusts the speaker volume
8	Auto Power Off	Off, 15sec, 3min, 5min	Delay before shutting down if inactive

#	Sub-menu	Description	Function
9	Auto LCD Off	Off, 1 min, 3 min, 5 min	Sets the delay before the screen turns itself of while recording
10	Version (Firmware)		Displays the firmware version
	GPS Settings Tab		
1	Time Zone	MGT +/- 12 hours	Sets the time zone
2	GPS	On, Off	Activates the GPS module

Operating Modes

1. Video Mode

The camera defaults to Video Mode when switched on manually or connected to the car charger and will start recording automatically. Press and hold POWER for 1 second to stop/ start recording manually. A flashing red icon in the upper left hand corner of the screen and a flashing blue led indicator on the camera body indicates that the camera is recording. When the camera is connected to the 12/24V car charger it will shut off automatically after you turn off the ignition or unplug the charger.

Emergency function. While in record mode click the the OK button once to manually "protect" a file from being overwritten by the Loop Record function.

2. Photo Mode

Use the Up/Down buttons to zoom in/out

Press and hold POWER for 1 second to take a still photo

Press and hold the OK button to enter the photo specific settings menu

3. Media Mode

Use the UP/DOWN buttons to navigate video and photo files. Select a file by pressing and holding POWER for 1 second. Press and hold POWER for 1 second again to start/pause video or view photos (slide shows). Press and hold the OK to access the media mode specific settings menu where you can delete a file or all files and select playback options.

· Connecting the Camera to a Computer

Press the OK button once and the PC will detect the camera as a storage device. Go to My Computer->Removable disk->DCIM where you will find all the files currently on the memory card.

· Charging the Battery

When attached to the car charger the camera will charge the battery while operating normally. The camera will also charge the battery when connected to a computer via USB

Reset

Reset the unit to the factory default settings by selecting "Default Settings" under the General Settings Tab in the menu and confirm as instructed.

· Connecting the Camera to a Computer

There are 3 different ways you can access video recorded with the X2 GPS

1. Directly from the SD card

Eject the SD Card by gently pushing it in with your nail until you hear a click. The card will pop out slightly allowing it to be easily removed. Use any Micro SD compatible card reader to access the data. The video files (.mov) are located inside the DCIM/101MEDIA/ folder on the card.

2. Via USB

Connect the camera to the computer with the included USB cable. Select "Mass Storage" on the camera screen and click OK. The camera will connect as a standard USB device. The video files (.mov) are located inside the DCIM/101MEDIA/ folder on the device.

3. On the Camera Screen

Press the OK button 2 times in succession to access Preview Mode (Indicated by 2 green arrows at the bottom of the screen) Use the UP/DOWN buttons to navigate through the files and press and hold(1 sec) the POWER button to select a file. Press and hold POWER again to Play/Pause videos or view Photos.

7 Viewing Software



To view Video and GPS data we recommend that you use DATAKAM Registrator Viewer which can be found on the included disc. The software does not require installation. Simply copy Registrator Viewer.exe to your desktop and double click to run it.

Registrator Viewer provides a wealth of information at a single glance including video footage, real time display of speed and location as well as graphic presentation of data such as speed and G-sensor values.



Opening Files

Add files to your playlist by clicking the green plus icon located directly underneath the map window on the left. Navigate to the DCIM/101MEDIA/ folder and select all the files with ctrl+A, then click 'Open'. The files will appear in the playlist at the bottom right of the window. Double click on a file in the list to start playback.

To change from Kph to Mph got to view->Measurement and choose 'British system (feet, miles)' A more in-depth guide can be found on the included disc.

8 Specifications

Video Resoloution	1920x1080 30fps 16:9 / 1440x1080 30fps 16:9 / 1280x720 30fps 16:9 / 848x480 60fps 16:9 / 848x480 30fps 16:9 / 640x480 30fps 4:3
Viewing Angle	130 degrees
Screen	1.5" TFT display
Video Format	MOV 30fps
Storage	Micro SD card Max 32GB
USB-interface	USB2.0
AV/HDMI/out	NTSC/PAL
Battery	250m/AH
Weight	55.2g
Dimensions	70x40x40mm

Motorcams Ltd >> UK Headquarters

Address:	Unit D, 28 High Street, Hampton Hill, Middlesex TW12 1PD, UK
Web:	www.naito.co.uk
E-mail:	support@naito.co.uk





