



IMPORTANT SAFETY INSTRUCTIONS AND PRECAUTIONS

- Read all instructions carefully before use.
- Retain this manual for future reference.
- Use this product only in the manner described.
- Only use a water-dampened soft-cloth to clean the surface of this product.
- The following will damage this product: water or moisture ingress, exposure to prolonged extreme heat or cold; excessive humidity, dust or sandy.
- There are no user serviceable parts in this product.
- Unauthorised attempts to dismantle or repair this product will void product warranty and may result in a dangerous electric shock.
- Remove data cable by pulling it from the plug and not the cord.



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- Read all instructions carefully before use.
- Retain manuals for future reference.
- Use this product only in the manner described.
- Only use a water-dampened soft-cloth to clean the surface of this product.
- The following will damage this product: any liquid such as water or moisture, extreme heat; cold; humidity, dusty or sandy environments.
- The NAVCAM-616GPS is designed to be mounted on a vehicle windscreen, as high as possible, to ensure a maximum viewpoint. Please ensure that any attached cables are secured and will not cause the device to fall.
- There are no user serviceable parts in this product.
- Un-authorized attempts to dismantle or repair this product will void product warranty

WHAT'S IN THE BOX

- 1) NAVCAM-616GPS
- 2) This user manual
- 3) Micro USB Charge and data transfer cable
- 4) CD disc to install the tracking and review software on a Windows® PC

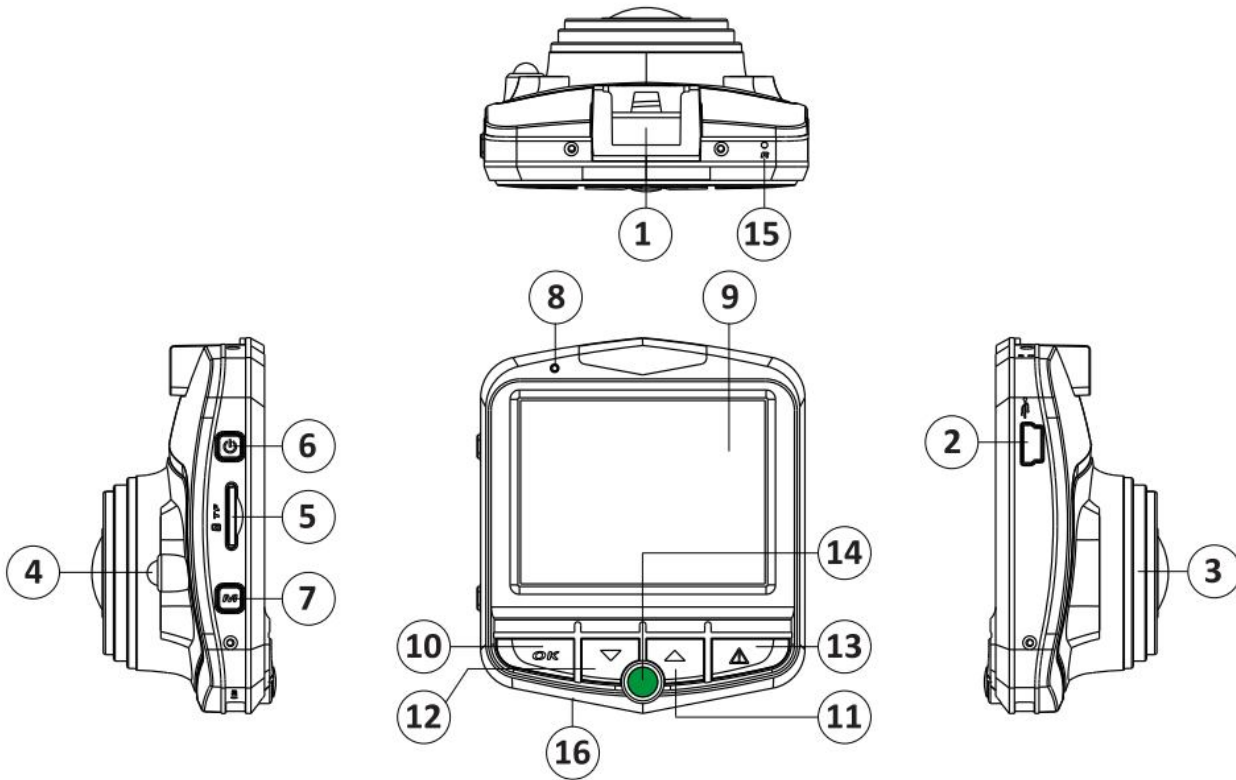
MICRO SD CARD REQUIREMENTS

The NAVCAM-616GPS requires a Micro SD card (not included) to record video/image content. For optimal performance, we recommend using a Class 10 micro SD card UHS3 (minimum) to ensure fast data transfer rates

Note: Some "Extreme Speed" class 10 UHS2 cards will not work correctly with the NAVCAM-616GPS. Other low speed cards are not recommended and the user may experience constant intermittent faults.










CAMERA BUTTON AND HARDWARE OVERVIEW



1	Bracket interface	9	LED screen
2	USB interface	10	OK button
3	Speaker	11	Up button
4	LED Lamp	12	Down button
5	TF card slot	13	Emergency record button (SOS)
6	Power button	14	MODE Button (P)
7	Menu button (M)	15	Reset (R)
8	LED indicator lamp	16	Microphone



WHAT DO THE BUTTONS DO?

Button	Button Name	Video Mode	Photo Mode	Playback Mode
	Power	On / Off – Press and hold to turn On and Off	On / Off – Press and hold to turn On and Off	On / Off – Press and hold to turn On and Off
	M	Mute (<i>While recording</i>) Setting (<i>Recording stopped</i>)	Setting	Setting
	OK	Start / Stop recording	Take a photo	Confirm
	Page Down	Zoom in	Zoom in	Next file
	Page Up	Zoom out	Zoom out	Previous file
	P	Switch modes	Switch modes	Switch modes
	Emergency Record	Emergency record	N/A	N/A



ON SCREEN DISPLAY

HOME SCREEN (IN RECORD MODE)	
1	Exposure compensation
2	Sound recording
3	Loop recording
4	Recording
5	Recorded time
6	Recording resolution
7	Motion detection
8	SD card status (inserted)
9	Power status (charging)



PHOTO SCREEN (PRESS PLAY FROM THE MENU SCREEN)	
1	Photo mode
2	Qty photos taken
3	Photo resolution
4	Time of cycle taking photo
5	SD Card (logo indicates inserted)
6	Battery status indicator



PLAYBACK SCREEN (RECORDING STOPPED)	
1	Menu Settings (Press to Toggle thru)
2	Timer
3	Video Resolution
4	SD Card (logo indicates inserted)
5	Charging status (Connected to charger)
6	File name





WHAT DO THE LED INDICTORS MEAN?

Indicator	Status
Solid Green	Camera is turned On.
Flashing Green	Camera is recording

OPERATING THE NAVCAM-616GPS FOR THE FIRST TIME

Connect a USB car charger to the car's 12v Cigarette lighter socket and the other end to the Micro USB port on the NAVCAM-616GPS. Insert a Micro SD card into the Micro SD slot and turn the device on. When the ignition is turned on, the NAVCAM-616GPS will turn on.

POWER ON/ OFF (AUTO ON/ OFF)

When connected to power, the NAVCAM-616GPS will turn ON or OFF automatically when the car's ignition is turned ON or OFF. If the NAVCAM-616GPS does not turn off immediately it means the device is completing the file save process before turning off (usually only a few seconds).

To turn the NAVCAM-616GPS ON, press and hold the power button on the side of the device. To turn off, press and hold the power button again.

If power is "constant on" (in some European vehicles), then the NAVCAM-616GPS will need to be turned ON/OFF manually using the power switch.

ABOUT GPSSIGNAL RECEPTION

For convenience, your NAVCAM-616GPS will automatically connect to GPS satellites when in range. Just like all PND (Portable Navigation Devices) this may take a few minutes (especially the first time). The signal can also be affected by driving through tunnels for example. The GPS connection however will reconnect when the GPS satellites come back into range.

Until GPS is re-connected, the following features may not be displayed properly:

- The navigation map screen
- Driving speed display
- Safety alerts such as Red Light, Speed Cameras, School Zones etc.
- Tracking details used by the GPS Player such as speed, longitude, Latitude and Date and Time.

AUTO RECORD WHEN TURNED ON

When the NAVCAM-616GPS is turned on (via the auto on feature) the device will automatically begin recording. To stop recording, press the OK button or turn the device OFF using the power button.

RECORDING FILES

Turn on the NAVCAM-616GPS. Recording should start automatically, if not press the Video Camera button. When recording has started a timer indicator will display at the top left hand side of the unit. The screen will also display a count up timer for the recording at the top.



The recorded files are saved to micro SD Card. Recording can be stopped, by either pressing the OK button or by turning the car ignition off (stopping power to the device)

The NAVCAM-616GPS supports cycle recording. It will overwrite the oldest video files with new ones. Depending on the size of the memory card and the speed rating of the card, there may be as much as a 3 second pause whilst old files are selected and overwriting begins with newer files. This pause time will not be recorded.

PLAYING BACK A RECORDED FILE

From the main screen (and while not recording), press the “P” button to toggle to the PLAYBACK mode. Then, select the video you wish to view using the up and down arrow keys and the OK button to confirm.

DELETING A FILE

When in playback mode, select the video you wish to delete, then press the M button. Select delete and then press OK. Lastly select CURRENT or ALL.

Note: Once files are deleted you cannot get them back.

EMERGENCY VIDEO RECORDING

You can press the “Emergency video recording” button at any time to preserve a file from being overwritten.

AUTO BUMP FILE RECORD (G SENSOR) - SAVING RECORDING VIDEO FILES

Due to the “cycle recording” nature of this technology, older recorded files will be overwritten (depending on the chosen resolution settings and the memory capacity of the memory card).

Alternately the G sensor will trigger an auto save lock if it senses a bump (sensitivity is selectable via the user settings), so that the file being recorded is not overwritten in the cycle record process. Such files will be saved to the folder called EVENT.

TAKING A STILL PICTURE

While not in record mode, press the “P” button to toggle to CAMERA mode. Press the OK button to take a photo.

USB CONNECTION

Connect the NAVCAM-616GPS to a Windows PC with a Micro USB to USB cable. The screen will then display “Connected to Computer”. The unit is now connected.

Find the device Under “My computer” or “Windows Explorer” find the newly connected drive. Recorded files and images are recorded in the NORMAL folder, while preserved files are recorded in the EVENT folder. Files can be played back using Windows Media player, VLC or a compatible .AVI media player or an image viewer (for JPG images).



USER SETTINGS

From the main screen, press the MENU button, then using a combination of the arrow keys and the OK button to confirm your choice, select settings from the following options list:

Feature	Options	Description
Size (Video Resolution)	1080p 30fps 720p 30fps	Change the resolution of recorded files (Note: Higher Resolution files take up more storage space)
Time Stamp	Off / Date Only / Date & Time	Select On / Off to add a time-stamp to the recorded video
Loop Recording	1 Minute /3 Minutes/5 Minutes	Select the length of each recorded file
Audio Record	On / Off	Record the sounds/voices from inside your car whilst recording
EV	+0.0, -1/3, -2/3, -1.0, -4/3, -5/3, -2.0, +2.0, +5/3, +4.3, +1.0, +2/3,	Fill light according to different light source intensity in different environment.
Motion Detection	On / Off	When power is connected, begin recording when motion is detected.
Setup (Sub menu)	<i>[See below table]</i>	
Setup (Sub Menu)		
Date format	Select the preferred date orientation	Select between YY/MM/DD, MM/DD/YY, DD/MM/YY
Date Input	Change the date	Toggle through the fields to change Year, Month and Day
Time Input	Change the time	Toggle through the fields to change hour, minute and seconds.
System reset	Perform a factory reset	Select between Cancel and Execute
FW Version	Display Firmware version	Used when checking to see if a new firmware is released.
Format	Format SD card	Format SD card (Note: Permanently erases all data on card. Note: the unit cannot be used until formatting is complete, which usually takes about 20seconds depending on the size of your card.)
Beep	Audible beep on key press	Turn On or Off key press beeps



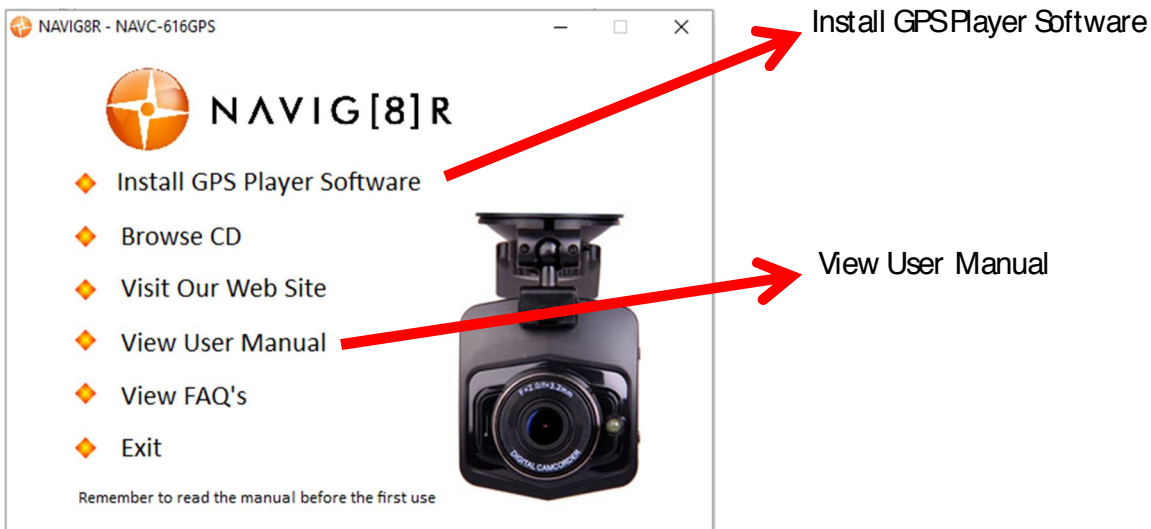
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Auto Off	If no buttons have been pressed and if no recording is taking place, the unit can be shut off automatically after set periods of time	Select between 1, 3, 5 mins or [turn feature] Off.
Screen Off	Turn the screen light on or off according to your driving situation	Select between 1, 3, 5 mins or [turn feature] Off.
Power delay	Keep camera on after car is turned off	Select between 10, 20, 30 seconds or [turn feature] Off.
G-sensor	Off / High / Medium / Low	Adjust the level of impact required to preserve recorded incident files.

TRACKING SOFTWARE – QUICK GUIDE

INSTALLING THE SOFTWARE

Install the software disc and select an installation (or view the user manual)



Note: Permission may need to be granted to the FFDSHOW program following installation.



1	Select AVI File	Click to choose an AVI file for playback. Note: Files for playback should be saved to the local hard drive.
2	Folder	Click to choose from a folder for playback
3	Delete File	Click to remove an unwanted file
4	Screenshot	Click to take a screenshot of the current video
5	Full screen	Expand current video playback to the width of your display device
6	Settings	Click to select language, map source (eg Google Maps) and units of measure (eg. KPH, MPH)
7	Information	Click to information about the video layer version.
8	File name	Playback file name
9	Video screen	Playback screen

FAQ

Fault	Suggestion
The device has frozen / stopped working.	Check the speed of your memory card. We recommend class 10 for faster transfer rates, especially if the record file size is bigger (say 15 min recording increments at 1080Full HD). Alternately, check the car's internal temperature. The device will enter standby mode if the ambient vehicle temperature is below 0 or above 30 degrees C.
The device will not start recording, or stop recording or has other intermittent faults	Most common cause of intermittent faults is an under rated SD card. We recommend a class 10 card for this device as recording at 4K resolution requires a superior speed card.
The speaker warning sounds are a little loud. Can you turn them off?	Yes. Just go the user settings screen and select speaker. Then turn the speaker to OFF.
Device does not turn off	If in vehicle: check that the 12V socket is not still powered (on) when the key is removed (as with some European cars). Wait 10 seconds for finalization and closure. Disconnect power lead to device Press "ok" to stop recording, then turn off.
Cant playback the .AVI video files	Upgrade your windows media player version or use an alternate media player such as VLC media player
My video/pictures of an incident are NOT there	Check the capacity of your memory card, the files may have been overwritten in the record cycle process. If the Bump file record feature did not automatically preserve the footage, then be sure to manually save the footage next time by pressing the
Can't see the device in my computer	Check the USB cable connection to the device and USB port. Try another USB port, possibly directly to the PC/notebook (rather than through a USB hub)



PRODUCT SPECIFICATIONS

LCD Screen	2.31" TFT Colour LCD Display
Video Resolution	1920 x 1080P 30 frames/s, 1920 x 720P 30 frames/s
Built-in Speaker / Microphone	Yes / Yes
Auto Recording on power-up	Yes. Recording starts on ignition power (Charging socket)
Date / Time stamp	Supported – on video and on photos
GPS location and Speed stamp	Supported – on video
Power off auto save	Yes. Current file will auto save when power is turned off.
Auto power on/off	Yes – when ignition turned on / off (1, 3, 5 Minutes)
File preservation	Yes. One touch “SOS” button
Auto Bump Record	Yes. Adjustable sensitivity (low/medium/high)
Lens Viewing angle	140 degree wide angle
Cycle recording times	1, 3 or 5 Minutes
File Format	Image: JPG Video : .AVI
Micro SD Memory Card	Class 10 UHS3 or above recommended. Max capacity 32GB
Language System	English
System support	Windows 8 / Windows 10

For further product information please visit our product web page at www.laserco.com.au or email support@laserco.com.au

Please note: As continual improvements are made to this product, slight operational differences may occur. For the most up-to-date user manual, please visit our web site.



Warranty Against Defects

Laser Corporation Pty Ltd (“Laser”) warrants your new product to be free from defects in materials and workmanship for 12 months, from the date of purchase, provided that the product is used in accordance with accompanying recommendations or instructions where provided. The benefit of this warranty is in addition to your rights under the Australian Consumer Law and to other rights and remedies of the consumer under a law in relation to the goods or services to which the warranty relates.

Through a network of retailers and resellers, Laser will provide you with your choice of a refund, repair or exchange (where possible) for this product if it becomes defective within the warranty period. This warranty will no longer apply where the defect is a result of alteration, accident, misuse, abuse, normal wear and tear, neglect or improper storage.

Please retain your receipt as proof of purchase

How to make a product warranty claim:

Step 1: Find your receipt which proves the date of purchase. Where the date of purchase cannot be verified, your place of purchase or Laser will make an assessment based on the date of manufacture, the condition of the Laser Product and the type of defect.

Step 2a): Contact your place of purchase. They will assess the nature of the fault and refund or replace the product as per their store refund or warranty policy.

Step 2b): If your place of purchase cannot be contacted, then you can contact Laser. Customer Service with details of your defective Laser Product: Phone: (02) 9870 3388; or Email:

service@laserco.com.au or online www.laserco.com.au/warranty (click on “Consumers (End Users)”). Our business address is at 1/6-8 Byfield Street, North Ryde, NSW 2113

Step 3: Laser will issue you with a Return Authorisation (RA) number within 48 hours. When requested, send us the defective Product and a copy of your receipt. Laser will cover the cost of the return delivery.

Step 4: Wait for us to contact you. Once we have received your defective Laser Product for inspection, we will inform you of our assessment of your claim within 7 days. When we contact you, we will firstly let you know whether you have a valid claim under this Warranty, and if so, we will inform you whether your defective Laser Product will be replaced or repaired, together with the number of days you can expect to wait to receive your replaced or repaired Laser Product.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.