

NEXT BASE

iN-CAR CAM™

Instruction Manual



English

202 | Lite
High Definition Car DVR

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PRECAUTIONS

Please read this manual carefully before operation and keep it for future reference. It will be helpful should you encounter any operational problem.

WARNING: Do not expose this product to rain, moisture or water under any circumstances, doing so may result in the risk of electric shock or fire.

CAUTION: To reduce the risk of electric shock, do not perform and servicing other than that contained in the instruction manual unless you are qualified to do so.

- Have the unit serviced by a qualified service technician if;
 - The Unit has been exposed to rain or water.
 - The unit does not seem to operate normally.
 - The unit exhibits a marked changes in performance.

LCD: A Liquid Crystal Display (LCD) screen is a multilayer complex component, containing 691,200 pixels. Pixels can however fail during normal product life. 1 pixel = 0.00014% failure rate, and one pixel failures per year of operation is considered normal and not a cause for concern.

WEEE: **Disposal of Waste Electrical and Electronic Equipment and/or Battery by users in private households in the European Union.**



This symbol on the product or on the packaging indicates that this can not be disposed of as household waste. You must dispose of your waste equipment and/or battery by handing it over to the applicable take-back scheme for the recycling of electronic equipment and/or battery. For more information please contact your local household waste disposal office.

DO NOT ATTEMPT TO SERVICE THE UNIT BY YOURSELF!

CAUTIONS ON USING THIS PRODUCT






1. Ensure that the windscreen is free of dirt or grease before placing mount upon it.
2. Do not obscure the view of the road ahead or impede the deployment of any airbags in the event of an accident.
3. When not in use, please disconnect the car adaptor from both the 12/24Vdc outlet in your vehicle and the device itself.
4. Only clean the device with a soft dry cloth, for tough dirt, apply some neutral detergent diluted in 5 to 6 parts water to a soft cloth.
Note that alcohol, thinner, benzene etc could cause damage to the paint or coatings.
5. Avoid making contact with the lens as damage be caused.
6. If required clean the glass lens carefully using spectacle lens cleaning fluid on a soft cloth only.
7. The video recordings made by this Digital Video Recorder are intended for personal use only.
8. Publication of the recordings on Youtube, the internet or other methods are subject to the Data Protection Act and the requirements thereof must be adhered to.
If the Digital Video Recorder is to be used within a commercial environment, i.e. truck use, then the CCTV regulation apply also, in addition to the Data Protection Act regulations. This includes labelling to identify the use of CCTV is taking place, the omission of Audio recording and informing the relevant authorities of who controls the data.
9. Video playback upon the device which is visible to the driver is prohibited or restricted in some countries or States. Please adhere to these laws.
10. Whilst driving, do not adjust the controls of your device as this is a distraction to driving.

PRODUCT SPECIFICATION

Model Number / Name	NBDVR202 / NEXTBASE iN-CAR CAM 202 Lite
Power Requirements	5V / 200mA
Power Supply	12-24Vdc Car Power Cable (supplied) Fuse Type: 20mm Glass Fast Blow 2A
Sensor Resolution	1M Pixel (1,000,000 Pixel)
Lens Type	4G
Lens Angle	120°
Aperature	F2.0
Recording Resolution (Max.)	1920 x 1080 @ 25fps
Recording Resolution (Default)	1280 x 720 @ 30fps
Screen Size	2.7"
Screen Resolution	960 (W) X 240 (H) pixels x RGB
Screen Ratio	16:9
Card Reader	Full Size SDHC, Class 6-10, <=32GB
SD Card (Recommended Type)	8-32GB Class 10 (30mb/s) branded (not supplied)
Recording Format	AVI
Video Out	HDMI (Type C) Mini Socket 3.5mm Jack (Video / Audio)
Internal Battery	Lithium-ion 3.7V / 300mAh (approx. 30mins recording time)
Unit Dimensions	105.5 x 54.4 x 26.1mm
Unit Weight	71g

PACKAGE CONTENTS

Please check the contents of your iN-CAR CAM product package. The actual products might appear slightly different from the pictures shown below.

<p>iN-CAR CAM</p> 	<p>Mount</p> 	<p>Car Power Cable</p> 	<p>USB Cable</p> 
<p>Instruction Manual</p> 			

PRODUCT FEATURES

Thank you for purchasing this NEXTBASE iN-CAR CAM product, in this section we will outline some of the features available with this device.

2.7" 16:9 LCD Colour Screen

Large screen for ease of use and viewing the playback of both videos and photos.

1.0M PIXEL CMOS Sensor

Provides high quality recording up to 1920 x 1080P Full HD.

120° Wide Angle Lens

Wide angle lens to allow best possible recording of the vista ahead.

G Sensor / File Protection

In the event of an impact the device will automatically 'protect' the recording stopping the file from being over-written. Individual files can also be 'protected' when viewed within playback mode.

Still Camera

Take still images with a variety of options / settings available.

IR LEDs

Allow enhanced recording in low-level light conditions.

Auto Shutdown Timer

Select how long you would like the device to continue recording once power has been removed.

Built-in Microphone & Speaker

Record audio to compliment the video recordings

Motion Detection

The device will detect motion and start recording automatically, useful for car park surveillance.

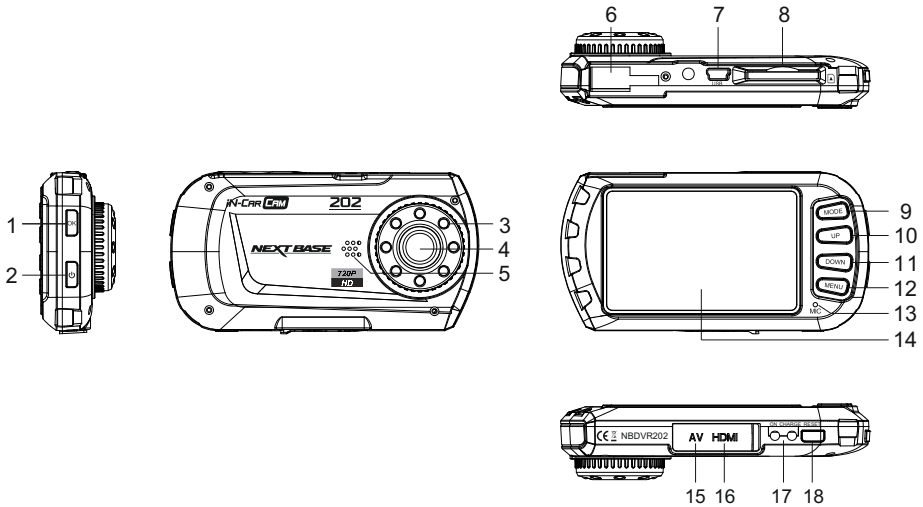
HDMI Output

View files directly from your device via a HDMI cable (sold separately) to an external screen.

PC Compatible

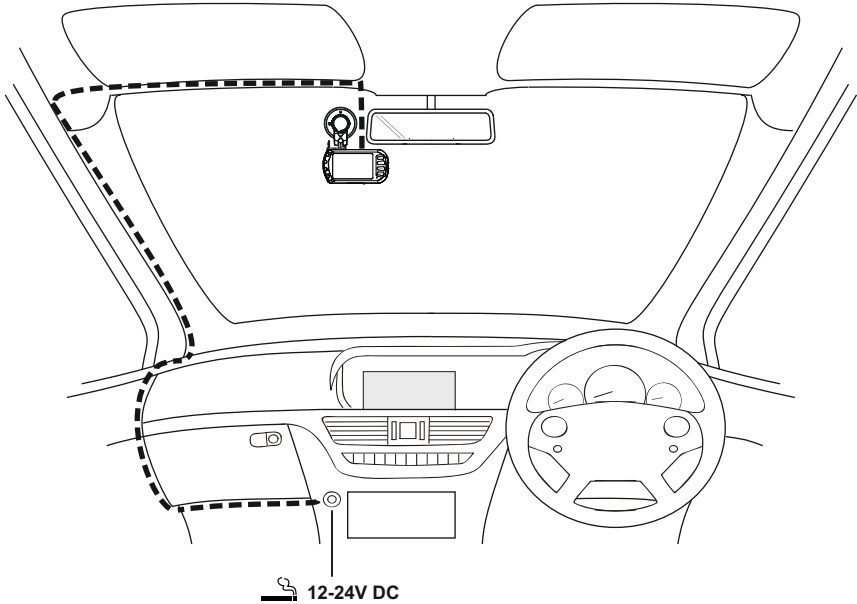
Device can be used as Webcam or Card Reader once connected to your PC using the supplied USB cable.

CONTROLS



- 1. **OK**
Press to confirm selection or to start / stop a recording.
- 2. **POWER**
Press and hold for 2 seconds to turn on / off.
- 3. **IR LEDS**
Turn on/off within Setup menu to enable enhanced night time recording.
- 4. **LENS**
- 5. **SPEAKER**
- 6. **MOUNTING POINT**
Attached supplied mount here.
- 7. **MINI USB 2.0 SOCKET**
Connect car power cable / USB cable here.
- 8. **MEMORY CARD SLOT**
Insert memory card here. Compatible with SDHC <=32GB, Class 6-10.
- 9. **MODE**
Press to select Video / Photo / Playback modes.
- 10. **UP**
Press to zoom in when in video & photo modes and to navigate up within menus.
- 11. **DOWN**
Press to zoom out when in video & photo modes and to navigate down within menus.
- 12. **MENU**
Press to open the Menu within current mode. Press twice to open the Setup menu.
- 13. **MICROPHONE**
Turn on/off within Setup menu to enable audio recording.
- 14. **SCREEN**
- 15. **AV OUT SOCKET (located under dust cover)**
For use with AV Cable (sold separately).
- 16. **HDMI MINI SOCKET (located under dust cover)**
For use with HDMI Cable (sold separately).
- 17. **LED INDICATORS**
Green = Battery is charging, LED will turn off once the battery is fully charged.
Red = Power on.
- 18. **RESET**
Press to reset the iN-CAR CAM.

INSTALLATION



The above illustration depicts recommended installation.

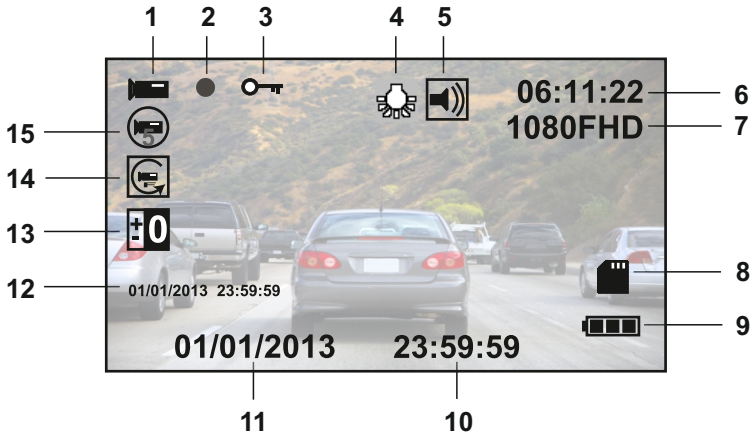
1. Insert a suitable memory card (Class 6 or higher) in to the device, taking care to follow correct orientation markings (gold contacts facing the back of the device). Push the memory card until it clicks into place.
2. Attach the device to the supplied mount, taking care the locking tab has 'clicked' firmly into place.
3. Place mount in a suitable location, while pushing the suction cup onto the glass turn the locking wheel clockwise to secure the mount to the windscreen. Please ensure that once mounted the iN-CAR CAM is located within the area of the vehicles windscreen wipers to maintain a clear view during rainfall.
4. Connect the car adaptor to mini-USB socket of the iN-CAR CAM and then plug the supplied car adaptor into the 12-24Vdc outlet of your vehicle. The device will automatically power on and start recording once power is available. In some vehicles this will be when connections are made, for others the device will power on once the ignition has been turned on.

NOTE:

- Do not place the iN-CAR CAM in such a way that may impede the driver's vision of the road ahead, interfere with the deployment of air bags or other safety equipment.
- Do not operate the unit while driving.
- To reduce the risk of theft, remove the unit and the mount from your vehicle, or position out of sight, before leaving your vehicle unattended.
- Do not remove or insert the memory card when the iN-CAR CAM is turned on. This may damage the memory card.
- In vehicles where the 12V / 24V output remains on when ignition is turned off please disconnect the device when not in use.
- The supplied car adaptor has a 4m long cable to allow cable to be placed neatly within the vehicle.
- First time use of the device will require the Time and Date to be set. See Page 10 for details.

VIDEO MODE

The key below explains the various information displayed on the screen when your iN-CAR CAM is in Video mode, some icons will only be displayed once the relevant function has been selected within the Video menu, as described further down this page.



1. Video Mode Icon: Indicates the iN-CAR CAM is in Video mode.
2. Recording Indicator: Flashes red when a recording is in progress.
3. Protected File Icon: Displayed when a video file has been protected by activation of the internal G Sensor.
4. IR LED Icon: This icon appears if the IR LED function is switched on from within the Video menu.
5. Audio Icon: Displayed on screen when Audio Recording is selected from within the Video menu.
6. Recording Time: Displays the length of current recording. When a recording is not in progress the remaining recording time available on the memory card based on current resolution is displayed.
7. Resolution: Displays the current resolution as selected from within the Video menu.
8. Memory Card Icon: Icon will be marked with a red cross when there is no memory card inserted.
9. Battery Indicator: Displays battery level, it is recommended to keep the car adaptor plugged in during use, the indicator will flash during charging.
10. Time: Displays current time as set within the Setup menu.
11. Date: Displays current date as set within the Setup menu.
12. Recording Date & Time Stamp: During a recording the date & time are 'stamped' on the video file, depending on the selected resolution the date & time may only be legible when files are viewed on a PC.
13. Exposure Icon: Displays current exposure setting as selected from within the Video menu.
14. Motion Detection Icon: This icon appears if motion detection is switched on from within the Video menu.
15. Loop Recording Icon: Displays current recording chunk time setting as selected from within the Video menu.

The Video menu is accessed by using the MENU button located on the rear of the iN-CAR CAM, use the UP and DOWN buttons to navigate through the Menu and press the OK button to enter the options screen. Select the required setting press OK to confirm, press MENU once more to exit the Video Menu.

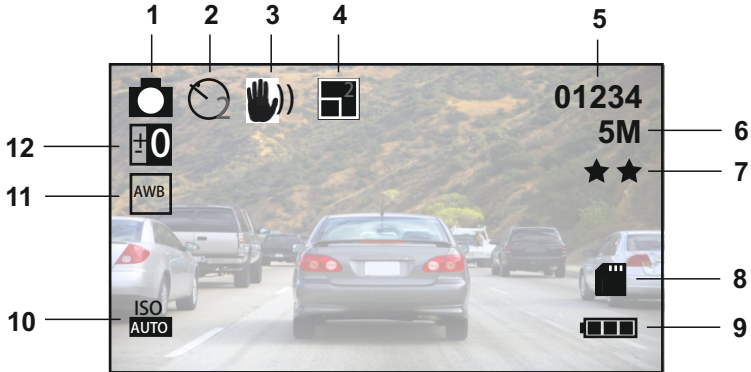
The default settings within the iN-CAR CAM have been set to allow you to use the iN-CAR CAM without the need to change any settings, however it is recommended that you explore these settings to familiarise yourself with the product and its capabilities.

Note:

Within the SETUP menu which is accessed from within any mode by pressing the MENU button twice, there is a 'Default Setting' option to allow you to reset the iN-CAR CAM to the factory defaults if required.

PHOTO MODE

The key below explains the various information displayed on the screen when your iN-CAR CAM is in Photo mode, some icons will only be displayed once the relevant function has been selected within the Video menu, as described further down this page.



1. Photo Mode Icon: Indicates the iN-CAR CAM is in Photo mode.
2. Capture Mode Icon: Displayed on screen when Capture Mode (timer) is selected from within the Photo menu.
3. Anti-Shaking Icon: Displayed on screen when the Anti-Shaking enhancement has been enabled from within the Photo menu.
4. Sequence Icon: Displayed on screen when the Sequence function has been selected from within the Photo menu, the iN-CAR CAM will automatically take five pictures when OK is pressed.
5. Image Count: Displays number of images that can be stored on the memory card based on current image quality settings.
6. Resolution: Displays the current resolution as set within the Photo menu.
7. Quality: Displays the current image quality as set within the Photo menu.
8. Memory Card Icon: Icon will be marked with a red cross when there is no memory card inserted.
9. Battery Indicator: Displays battery level, it is recommended to keep the car adaptor plugged in during use, the indicator will flash during charging.
10. ISO Icon: Displays the current ISO setting as selected within the Photo menu.
11. White Balance Icon: Displays the current White Balance setting as selected within the Photo menu.
12. Exposure Icon: Displays current exposure setting as selected from within the Photo menu.

The Photo menu is accessed by using the MENU button located on the rear of the iN-CAR CAM, use the UP and DOWN buttons to navigate through the Menu and press the OK button to enter the options screen. Select the required setting press OK to confirm, press MENU once more to exit the Photo Menu.

The default settings within the iN-CAR CAM have been set to allow you to use the iN-CAR CAM without the need to change any settings, however it is recommended that you explore these settings to familiarise yourself with the product and it's capabilities.

Note:

Within the SETUP menu which is accessed from within any mode by pressing the MENU button twice, there is a 'Default Setting' option to allow you to reset the iN-CAR CAM to the factory defaults if required.

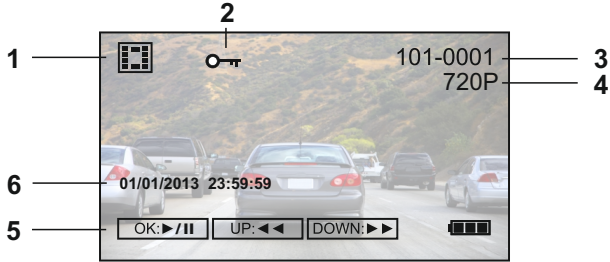
PLAYBACK MODE

The iN-CAR CAM can display both Videos and Photos stored upon the SD card when in Playback Mode. As the displays are slightly different please refer to the two sections below.

VIDEO PLAYBACK

When a video is detected upon the SD Card, the screen below is shown.

The key below explains the various information displayed on the screen, during video playback and how to use the control buttons.



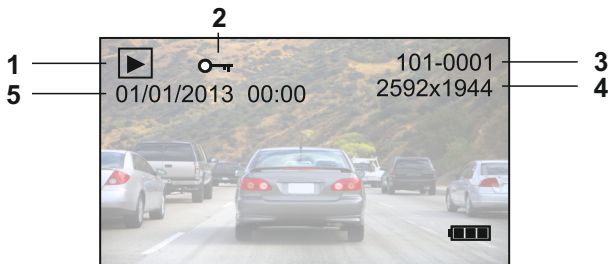
1. Video Playback Icon: Indicates the iN-CAR CAM is displaying a video in the Playback mode.
2. Protected File Icon: Displayed when a video file has been protected by activation of the internal G Sensor during recording or by selecting 'Protect' from within the playback menu.
3. File Number: Displays current file number.
4. Resolution: Displays the resolution that current video was recorded in.
5. Control Buttons: To scroll through the saved files use the UP and DOWN buttons, to view a chosen video press the OK button which acts as a play / pause button. During video playback, the UP and DOWN buttons will serve as rewind and fast forward, once the video is paused press the MODE button to exit the playback mode, then select playback again should you want to view other files.
6. Recording Date & Time Stamp: The date & time are 'stamped' on the video file, depending on the selected resolution the date & time may only be legible when files are viewed on a PC.

Recommended PC playback software: VLC Media Player (free download from www.videolan.org/vlc)

PHOTO PLAYBACK

When a photo is detected upon the SD Card, then the screen below is shown.

The key below explains the various information displayed on the screen, during photo playback.



1. Photo Playback Icon: Indicates the iN-CAR CAM is displaying a photo in the Playback mode.
2. Protected File Icon: Displayed when a photo file has been protected by selecting 'Protect' from within the playback menu.
3. File Number: Displays current file number.
4. Resolution: Displays the size of current photo.
5. Photo Date & Time Stamp: The date & time are 'stamped' on the photo file, this feature can be disabled or changed to display date only within the Photo menu.

Note:

To view the NEXT or PREVIOUS item stored upon the SD Card press the UP or DOWN button respectively.

MENUS AND SETTINGS

Each mode (Video, Photo and Playback) has a menu used to access the various options and settings, press the MENU button on the rear of the device to access the menu, specific to the current mode selected. Use the UP, DOWN buttons to select chosen option and press the OK button to confirm.

1. VIDEO MODE

1.1 Resolution

Select recording resolution, this will increase or decrease the quality of the recorded video.
Default Setting: 1280 x 720 @ 30fps

1.2 Loop Recording

Select duration of recording length for the individual video files, the iN-CAR CAM will fill the SD Card then loop back to the beginning overwriting the saved files (unless protected).
Default Setting: 3 Minutes

1.3 Exposure

Select exposure, used to adjust exposure level for different light conditions.
Default Setting: +0.0

1.4 Motion Detection

Turn On / Off the motion detection function, the device will need to remain on and will start a 30 second recording when a change to the viewed scene is detected.
Default Setting: Off

1.5 Record Audio

Turn On / Off audio recording.
Default Setting: On

1.6 Date Stamp

Turn On / Off the date stamp shown on recorded files.
Default Setting: On

1.7 G Sensor

Turn Off or adjust the sensitivity of the G Sensor, it is the G Sensor that detects forces which will automatically protect the current recording in event of a collision.
Default Setting: Low

2. PHOTO MODE

2.1 Capture Mode

Set the timer for delayed shutter function, can be used for self-portrait or group shots.
Default Setting: Single (instant photograph taking)

2.2 Resolution

Select resolution, this will increase or decrease the quality of the recorded image.
Default Setting: 5M 2592 x 1944

2.3 Sequence

Turn On / Off the sequence feature, when this feature has been turned on, the device will take a series of 5 photographs in quick succession automatically when the OK button is pressed.
Default Setting: Off

2.4 Quality

Increase or decrease the quality of the recorded image.
Default Setting: Normal

2.5 Sharpness

Adjust the sharpness of the recorded image.
Default Setting: Normal

2.6 White Balance

Adjust the white balance for different light conditions.
Default Setting: Auto

2.7 Colour

Adjust the colour effect of the recorded image.
Default Setting: Colour

MENUS AND SETTINGS (CONTD.)**2.8 ISO**

Adjust the ISO setting, the brighter the conditions the lower the ISO required.
Default setting: Auto

2.9 Exposure

Select exposure, used to adjust the amount of light received by the sensor.
Default setting: +0.0

2.10 Anti-Shaking

Turn On / Off the anti-shaking feature, may help reduce image being blurred under some circumstances.
Default setting: Off

2.11 Quick Review

Turn On / Off the quick review feature, view an image for a short period of time after it has been taken.
Default setting: Off

2.12 Date Stamp

Turn Off the date stamp shown on recorded photographs, can also change to date only.
Default setting: Date / Time

3. PLAYBACK MODE

The playback menu is the same when viewing either videos or photos.

3.1 Delete

Used to delete either the current file, also available is the option of deleting all files

3.2 Protect

Used to lock or unlock either the current file, also available is the option of locking and unlocking all files

3.3 Slide Show

Used to start a slide show of images stored on the SD card, press the Menu button to exit the slide show.

4. SETUP MENU

There is also a Setup menu for the general settings, press the MENU button twice on the rear of the device to access the menu. The options and settings available are described below.

4.1 Date / Time

Adjust the date / time as required using the OK button to toggle through fields, UP and DOWN to set variables.
Note: In event of battery becoming fully dis-charged, the date will reset to 01/01/2012.

4.2 Auto Power Off

Adjust the timing of the Auto Power Off function, this can be used to continue recording in event of loss of power within in the vehicle, with options of 10 Seconds. 2 Minutes and 5 Minutes.
Default Setting: 10 Seconds

4.3 Beep Sound

Turn Off / On the beep sound, note if Beep is turned off the audible low-battery warning will also be disabled.
Default Setting: On

4.4 Screen Saver

Turn on the Screen Saver function, shut down the screen after a period of inactivity, press any button to re-open.
Default Setting: Off

4.5 IR LED

Turn on the IR LEDs for enhanced nighttime recording.
Default Setting: Off

4.6 Language

Set the language as required.
Default Setting: English

MENUS AND SETTINGS (CONTD.)

4.7 TV Mode

Set the TV Mode as required.
Default Setting: PAL

4.8 Frequency

Set the Frequency as required.
Default Setting: 50Hz

4.9 Format

Format the inserted memory card, this will delete all content.

4.10 Default Setting

Reset the device to the default settings.

4.11 Version

Displays the version number of your device's software.

PC CONNECTION

Connecting the iN-CAR CAM to a Windows based PC using the supplied USB Cable will automatically trigger the iN-CAR CAM to display the two options of:

- Mass Storage
- PC Camera

Use the UP and DOWN buttons to select preferred option and OK to confirm.

■ Mass Storage

If Mass Storage is selected, the iN-CAR CAM screen will show the words 'Mass Storage' and then take the function of an SD Card reader for your PC. Upon your PC an extra drive will appear (e.g. Drive E:) and you will be able to navigate through the SD Card and view / manage the stored files.

This feature is useful if you do not have an SD Card reader built in to your PC.

■ PC Camera

If PC Camera is selected, the iN-CAR CAM screen will show the words 'PC Camera' and then take the function of a Webcam (no audio) for your PC. Start the normal application upon your PC that uses a webcam (e.g. Skype) and select the webcam which is entitled 'USB Video Device'.

This feature is useful if you do not have a Webcam built in to your PC.

Note:

- The iN-CAR CAM is only compatible with the following Windows based operating systems: XP, VISTA and Windows 7.

VIDEO & AUDIO OUTPUT

HDMI Output

As you connect an HDMI Cable (sold separately) between the iN-CAR CAM and your television, the iN-CAR CAM screen will blank, as all output is now visible upon your television, the iN-CAR CAM will enter playback mode automatically.

The controls upon the iN-CAR CAM operate for the Play / Pause and Fwd / Rev functions only.

AV Output

As you connect an AV Cable (sold separately) between the iN-CAR CAM and your television, the iN-CAR CAM screen will blank, as all output is now visible upon your television. All elements of the Video, Photo and Playback are available via the AV output so you can monitor your recordings upon a larger screen instantly (useful for when using your iN-CAR CAM as a rear facing camera while connected to another device for viewing).

The controls upon the iN-CAR CAM operate normally.

Please contact your local NEXTBASE dealer for accessory purchases.

TROUBLE SHOOTING

Video Image is blurred	Remove the protective lens cover, clean the lens, adjust the resolution to 720p in order to get the 30frames per second recording. Clean the windscreen!
Video recording is jumpy.	Remove the SD card and reformat to remove non-contiguous files. For best recording use a branded class 10 type (30MB/s) SD card of 8 to 32GB recommended size. Recommended video playback software for PC use is VLC media player from www.videolan.org/vlc . Playback PC may not be sufficient for the playback task, try an alternative PC.
Video has no sound.	Ensure that "Record Audio" setting is turned ON within the Video Menu.
Photograph is blurred.	Hold the camera still whilst taking the photo. Please be aware the photo is taken around 1 second after the shutter noise is heard.
Playback of Video can not be stopped during playback	Normal. Either wait for the video clip to end, or press MENU to exit and then choose another video clip to watch.
I can only record a few minutes of video on my SD card.	Change the recording size (Loop recording function) to a smaller size. Increase the size of the SD card. Max 32GB.
Mass Storage or PC Camera function does not work.	Will only work with Windows PC's. Restart the PC, as this may be required for the necessary driver to be loaded correctly. Disconnect and reconnect the In-CAR CAM. Contact NEXTBASE for the required driver.
The sucker will not stay in place upon my windscreen.	Ensure that the rotary dial is fully counter clockwise. Make sure that the glass is smooth and clean. Do not stick to glass that has any non-smooth effect or paint whatsoever. Affix to the glass firmly and then rotate the dial clockwise, until the latch is felt to engage.
The AV Out from my iN-CAR CAM just buzzes on my TV.	Ensure that the AV cable is correct. Use a stereo 3.5mm jack plug where the tip is the video and the ring is the audio signal.
I get the message "Card Error" on screen.	The SD card has become unuseable by the iN-CAR CAM. Remove useful files using your PC and then perform a "FORMAT" upon the SD card from within the SETUP menu.
I get the message "Memory error" on screen.	The SD card has become unuseable by the iN-CAR CAM. Remove useful files using your PC and then perform a "FORMAT" upon the SD card from within the SETUP menu.
I get the message "Card Full" on screen.	The SD card has become full as the Loop recording function is set to OFF. Set the "Loop Recording" function to 3 mins (default) to enable the cycle recording function and automatic deletion of older files.
My iN-CAR CAM shuts down by itself after a while.	Either the battery has gone flat, or there is no power to the iN-CAR CAM and the AutoPower Off period (which is in the SETUP menu) has been triggered.
No power to my iN-CAR CAM, but it works upon my PC.	The cigarette power cable is not working. Inspect the fuse in the Car Power plug. Replacement fuse = 2A 20mm type. If the fuse is found to be blown, inspect the power cable for damage which may have caused the fuse blow.
The SD card in my iN-CAR CAM can not be read.	Use a good quality branded SD card between 4GB and 32GB (suggested) and format the card from within the SETUP menu of the iN-CAR CAM.
I can't delete or format my SD card within the iN-CAR CAM.	Remove the SD card and ensure that the switch on the SD card is in the unlock position.
The screen blanks after a few minutes upon my iN-CAR CAM.	The screen saver is set to ON. Change settings to OFF if required. Default setting is off.
I get the message "Cluster Wrong" on screen.	The SD card has been formatted in another device and the Cluster Size is not compatible. Simply use the MENU, SETUP option to re-format the SD card from within the iN-CAR CAM.
With the IR LED's turned on, they do not seem to enable night time recording at a distance, in zero light conditions.	Normal. The IR LED's are intended for close range use only.

NEXT BASE

www.next-base.com

