

CARCAM-1

User's Guide

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Part Number:

Dear Customer

Thank you for purchasing CARCAM-1.

1. Before using CARCAM-1, you will have to

1-1. Make sure the memory card has already partition or re-format again.

1-2. Check with your dealer to download the update firmware that we offer new functions and improved features.

Enjoy your CARCAM-1

CAUTION

Under no circumstances should you try to repair the system yourself, as this will invalidate the warranty. Do not open the system as there is risk of electrical shock.

FCC Certifications

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.

IMPORTANT WARRANTY INFORMATION

- To reduce the risk of fire or shock hazard, do not expose this equipment to rain, any liquid or moisture.
- Vendor shall have no obligation to repair, replace or refund until the customer returns the defective product to Vendor.
- The repairs and replacement service will not apply to PRODUCT units that were misused, repaired without authorization or by other reasons beyond the range of intended use.
- Any replacement product may be either new or like –new, provided that it has functionality at least equal to that of the product being replaced.
- Vendor is not responsible for any data stored on returned products, please backup any data prior to shipping the unit.
- The limited warranty for accessories (included battery) is only valid for **6** months from the date of purchasing..
- All OUT OF WARRANTY repairs maybe subject to a normal repair fee. Please contact your dealer for current charges.

Package Checklist

- Main unit
- Mounting Bracket
- English user's guide
- Mini 5 Pins USB Cable
- AV cable with 3RCA plug for input/output
- Car Charger
- Wire clip

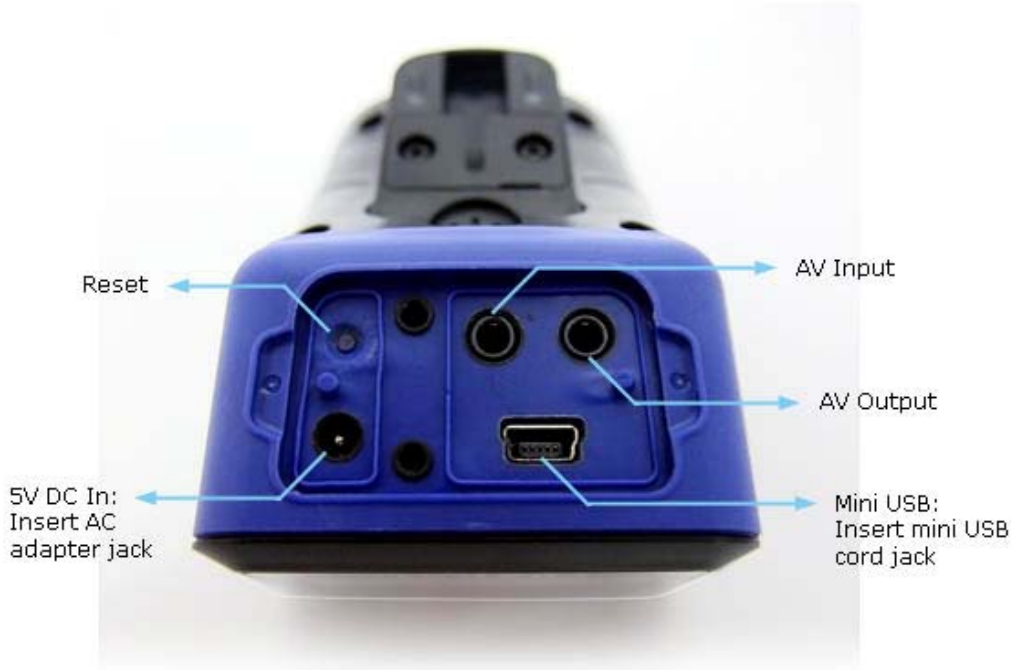
Specifications

Specification							
Camera	Digital color CMOS 2.0 Mega Pixel camera 96 degree diagonal,74 degree horizontal,52 degree vertical field of view						
Recording mode	Continuous Recording (Overwrite the oldest file when memory is full) Full Stop (Stop when the memory is full)						
Video Recording format	Codec: MPEG-4 Format: MP4 Resolution: 720x480 Pixels Audio : AAC Frame Rate: 20~30 fps * A new recording file is created if the file size is about 200MB or the recording time is up to 15 minutes.						
Support memory card	Micro-SD (up to 32GB)						
Video Output	Analog AV-OUT composite RCA jack Resolution : 640x480 Pixels Stereo earphone jack NTSC & PAL						
Approximate recording time	Capacity of micro SD card approximately Recording hours <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">8G</td> <td style="width: 50%;">10~12 hrs</td> </tr> <tr> <td>16G</td> <td>20~24 hrs</td> </tr> <tr> <td>32G</td> <td>40~48 hrs</td> </tr> </table> *A colored and very large objects against ordinary	8G	10~12 hrs	16G	20~24 hrs	32G	40~48 hrs
8G	10~12 hrs						
16G	20~24 hrs						
32G	40~48 hrs						

	backgrounds will take more memory, so, it is possible that the recording time will be shorter.
USB Interface	USB2.0 device
	Power (Green)
LED indicator	REC (Red)
	Error (Red) with beep warning sound
Power Supplier	5V Car Charger 5V/2A DC IN, 100-240V auto switched (Optional) Built-in rechargeable 400mAH Li-ion battery for power outage.
Dimensions	70 x 60 x 60 mm (L x W x H)
Display	2.0" TFT LCD (320x240)
Built-in speaker	Mono Speaker (1W)
Built-in microphone	YES
Keypad	Up, Down, Enter/stop, MENU
Video Input	Analog AV-IN composite RCA jack
Video Playback	Quick forward, backward and pause function
Video Recorder	Time information on OSD is embedded
File System	FAT 12 / 16 / 32

- Please visit our web site to download the most recent manual and software.

1. Overview of Panels & Keys





2. Using the memory card

- Open the memory card door and press the SD memory card into its slot until it clicks into place.
- Do not remove your memory card while the device is recording.
- To remove the memory card , push the card in until it clicks. It begins to slide out, and you can slide it the rest of the way out.
- To keep your SD card in better operating performance , we recommend to periodically run Scan Disk and Disk Defragmenter .

3. Using the CARCAM-1 1

1. Fasten CARCAM-1 to the car sun visor with supplied mounting.
2. Plug CARCAM-1 car charger to working cigar-lighter and hook the hang down line with wire clips.
3. Insert the Micro-SD card into the card slot.
NOTE: Please carefully insert the memory card with the front of the card facing the LED .
4. Switch on the cigar-lighter to start recording
5. The video will be created as every about 15 minutes (200MB) segments.
6. To stop recording, please press Enter/Stop button and the red recording icon will get off from the screen.
7. To ensure no critical shot is ever missed after power outage, the unit will continue recording automatically based on your Power off Record Timer
To completely shut down the unit, you can press [reset] button.

4. LED indicators:

The LED indicators flash as follows:

Error	Unlit	Steady for normal operation
	Red	Erroneous operation occurs (SD Card Error, Improper Power Off)
REC	Unlit	No power connection
	Red	Slow Flash : Steady for normal operation
POWER	Unlit	Power disconnection
	Green	-Charging -USB mode Note: The CARCAM-1 includes one Li-ion battery, this is to ensure no critical shot is ever missed during15 minutes power outage. To completely shut down the unit, you can press [reset] button.

5. Setting for CARCAM-1

Timer Setting

1. Power on the CARCAM-1
2. Press the menu button
3. Using ▼ button to select MENU and press Enter button.
4. Press Enter/Stop button to highlight date/ time.
5. Set the value by using ▲/▼ button.
6. Press Enter/Stop button again to release the highlight.
7. To change between year,month,hours, minutes,seconds,short press the ▲/▼ button .

Power off Record Timer : Using ▲/▼ button to adjust the setting,
the setting can be changed from 30 seconds
to 15 minutes.

Screen Saver Timer : Using ▲/▼ button to adjust the setting,
the setting can be changed from 0 to 60
seconds.

*Setting "0 " : To save power, this will reduce the brightness of the screen
when the unit idles for 3 minute.*

TV output : Switch broadcasting system

NTSC (Taiwan, US, Japan, etc)

PAL (European countries ,etc)

AV source :

Built in : Records from built-in CMOS camera.

Ext. AV in : Record from other external source, such as
rearview camera or other audio/video remote-monitoring
application

Record Mode :

Full stop: Stop recording with “beep” warning sound when the memory card is full.

Overwrite (Continuous Recording) : overwrite the earliest recording file while memory card is full.

Record Audio: Turn on or off the built-in Microphone.

Orientation : Normal /Upside down

Format card : If the memory card already contain data, please backup the data first , because when you partition and format a memory card , all the data on that partition is permanently deleted. The memory card will be formatted as FAT32 format.

Firmware version : Check with your dealer to download the update firmware that we offer new functions and improved features.

Under MENU mode , if the device has idled for 15 seconds, it will automatically go back to recording mode.

The stand can be adjusted to allow camera a 360° of rotation and a pan and tilt action.



7. USB connection

- Connect the CARCAM-1 and PC with the provided USB cable
- Double Click the " My computer" icon , the operating system will display CARCAM-1 as removable disk .
- You can then read ,write,copy ,delete and remove data on the PC.
- The file name is a 14 digit number given by year /month/date /hours/ minutes and seconds.

During file transfer in the PC mode

DO NOT :

1. Plug out the USB cable
2. Remove memory card(s) from the card slot, otherwise, there may be a chance of lost or corrupt data.

*Do not use USB ports repeated through peripherals (such as keyboards) or with un-powered USB hubs.

Note: For Windows® XP users, to safely disconnect the CARCAM 1 from computer, click on the system



remove icon and wait until you get a message saying that you can safely unplug the device before disconnecting the USB cable.

The recorded data can be played on Windows Media Player or other software without the need for dedicated software.

There are many free video editing programs available. here are some free programs to check out.

For the Windows operating system & Mac OS X :

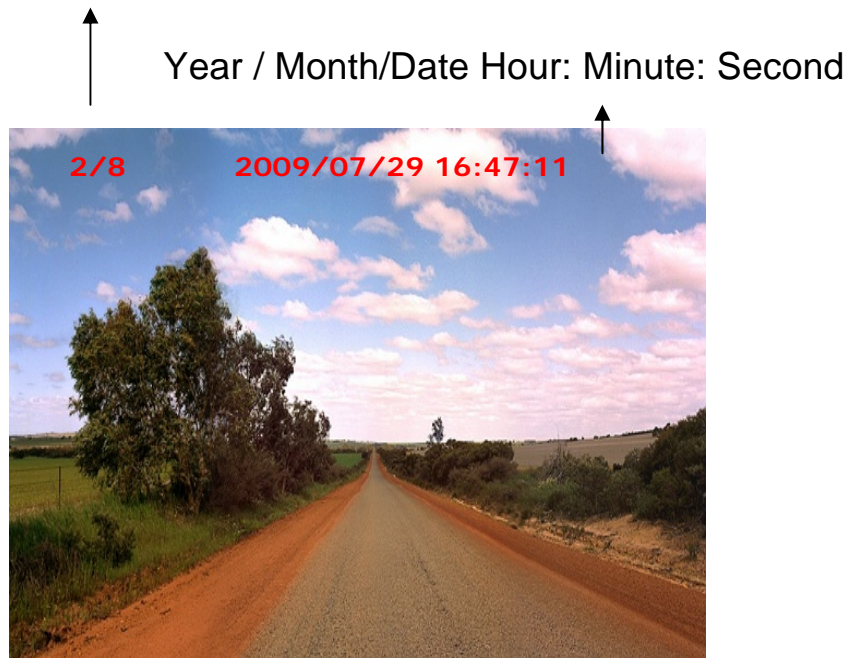
- VLC Media player <http://www.videolan.org/vlc/>
- Divx Player <http://www.divx.com/>

For the Windows operating system

- Windows Media Player 11

8. Viewing the recording vid

The file you are current viewing / Total number of files



- Power on the CARCAM 1
- Press the menu button
- Select Playback and press Enter button.
- Press the ▲ button to search the last file .
- Press the ▼ button to search the next file.
- Long press the ▲ button to fast forward (◀◀)and find the specific part of video you want to play.
- Long press the ▼ button to rewind(▶▶)and find the specific part of video you want to play.
- To pause playback, press Enter/Stop button.
- To start/resume record, press the menu button and select Record and press Enter button.

Play Video Clips on your TV

- Power on the CARCAM-1
- Press the menu button
- Using ▼ button to select MENU and press Enter button.
- Using ▼ button to select TV output
- Press Enter/Stop button and select NTSC or PAL
- Connect the A/V cable to the A/V output socket of the device
- The screen on your CARCAM-1 should go black.
- You should see the CARCAM-1 screen now displayed on your television.

Note: The video Output Quality is 640x 480 pixels

9. Recording from other A/V applicat

- Power on the CARCAM-1
- Press the menu button
- Using ▼ button to select MENU and press Enter button.
- Using ▼ button to select AV source
- Press Enter/Stop button and select Ext. AV in
- Connect the A/V cable to the A/V input socket of the device
- You can press the menu button and select Record.
- If the device has idled for 15 seconds, it will automatically go back to recording mode.
- CARCAM-1 supports only 1 channel recording at a time.

10. General information

- A new recording file is created if the file size is about 200MB or the recording time is up to 15 minutes.
- It's best to mount this device from 0 to 3 meter. to result in better image quality. (For indoor usage)
- It is possible and normal for the recording image to have noise in the low-light conditions or poor wiring.
- In the dark areas, use another source of light that enhances images to enable the CARCAM-1 to detect objects and improves the detection. (For indoor usage)
- The resolution may change in the direction from center towards the perimeter of the field of view. This is an inherent feature of the image tube type utilized in the device. We would recommend placing the scene of observation in the center of the field of view.
- Keep CARCAM-1 away from direct sunlight ,impacts, dust, moisture and sudden changes of temperatures .
- Bright light sources (moon , projectors or headlights) may cause recording quality to degrade or recording image to have horizontal black stripes.
- Poor atmospheric conditions such as fog, haze or extremely dark environments, will decrease the recording quality of the unit.

- Do not keep car engine running in the garage or any enclosed space in order to have device active. The exhaust will permeate into a car ,leading to the possibility of carbon monoxide poisoning.
- Always check the date and time of this device before using or after resetting.
- Do not remove the card until the red recording icon has got off from the screen.
- Please carefully insert and remove the memory card from slot . Do not drop, jar, bump, shock the unit, or expose to severe vibration while unit is recording.
- To reduce the risk of electronic shock , do not remove cover (or back).



- To avoid any dangerous to the environment and to human health. Please do not dispose of the electronic device in a regular trash. Please have this device be collected at places of distribution
- This product is not a lifesaving device; it does not replace the need to operate the vehicle in a safe and responsible manner.
- Vendor and its product should have no obligation for any loss, cost, damage, injury or expense of any kind use of Vendor's products.

11. Erroneous display

1) Error Code :

The error detection method may include producing a warning sound and the LED of error will become red.

2) If any shut down caused by erroneous operation, you can depress the [reset] button located on the bottom to switch off the main unit .

12. Troubleshooting

WARNING

Under no circumstances should you try to repair the system yourself, as this will invalidate the warranty. Do not open the system as there is a risk of electrical shock. If a fault occurs, first check the points listed below before taking the system for repair. If you are unable to remedy a problem, consult your dealer directly.

Frequently Asked Questions

Problem	Solution
The status indicator LED is not lit	It may be caused by faulty charger or hardware failure.
Lower frame rate than expected.	It may be caused by e.g kind of Micro SD card or the low-light conditions.
Faulty power adapter	Check you are using CARCAM-1 power adapter
Image too dark or too light	Camera incorrectly configured on your workstation

<p>The system does not react when buttons are press.</p>	<p>Please press the reset button to recover the unit. If you get a un-normal freezes , call our dealer.</p>
<p>Corrupt data , General Error , Can't open Source File</p>	<p>Please backup the data and run Scandisk , Disk Defragmenter or reformat the memory card.</p>

THANK YOU FOR CHOOSING THIS PRODUCT

We hope it will provide you with years of trouble-free enjoyment. Please look after your CARCAM-1. If you experience problems and cannot find solutions in the previous sections, please contact your dealer to check for updated firmware

