

# User Manual



*Happy Driving Happy Sharing*



Product: A970 Dash Cam  
Company: MERCYLION CO.,LTD  
Services Support:sales5@mercylion.com  
Product Warranty: 1 Year  
www.mercyion.com



## A970 Dash Cam

A970 series product manual, version number V2.0. If there is any error in the manual, the actual product specification shall prevail. Please read the manual carefully before use and keep it properly.

## NOTICE!

This Car Video Driving Recorder is designed to be used on +12V power supply system, not +24V power supply system such as buses, trucks and other commercial vehicles.

### Product Main Parameters

FLASH	NOR 8MB SPI
internal memory	Build-In 1Gb
The front view camera image Sensor	IMX307 2M CMOS sensor STARVIS low light level night vision
Lens Material	2G4P+IR
Aperture Value	F1.40
Lens Angle	Diagonal 143°
Max. Resolution	1920*1080
Encoding type	H.264
Video Format	H.264 encoding, TS format storage; no need to install batteries and super capacitor to achieve abnormal power off video files are still intact.
Effective pixels	2 million pixels
Picture Format	JPEG
Recording Mode	1 minute / 3 minute / 5 minute automatic cycle ;
Storage	TF card (Class 10 or above, maximum support 32G) ;
WiFi	802.11b/g/n
Start-up time	About 2 seconds
Working Voltage	DC12V

Working Voltage	DC12V
Working Current	< 500mA
Static Current	<1mA
Storage Temperature	-30 ° C ~ 85 ° C.
Operating Temperature	-20 ° C ~ 70° C.
Operating Humidity	15%-60%RH
LCD screen	2.0" 320x240 TFT-LCD

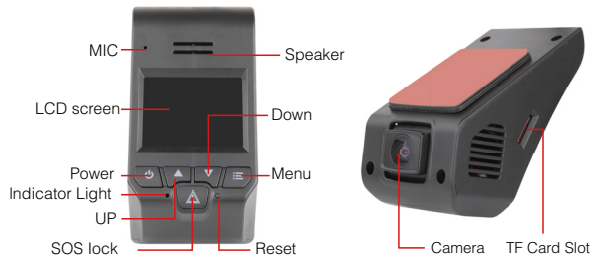
The connection method of power cables and video cable. This dash cam has three power cables, and the connection method is as follows:

Power Cable	Definition	Function
Yellow	12V constant power	Connected to vehicle battery positive pole (BATT+) constant power
Red	ACC 12V	Connected to vehicle ACC power supply; When ACC is 12V, the dash cam is powered on
Black	GND	Ground; Connect to the negative pole of the vehicle battery

It is recommended to have a professional to install it. You are free to attempt the installation yourself, however Mercylion will not be held liable for any product and vehicle damage, or personal Injuries sustained by you or others during the installation.

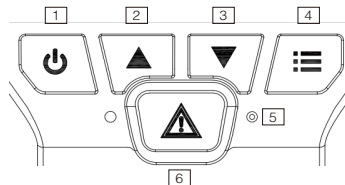
## Product Instructions

### Light Indications and Button Definitions



The system status is indicated by a combination of red and blue lights. The red light is on when the power is on, the blue light is on when recording, and the red light is on when there is no card inserted or the TF card is faulty; the red light is on when the recording is stopped.

### button operation instructions



1. Power button: Short press on the recording interface to start / stop recording; the menu interface is the confirmation key; the playback mode is to confirm playback and stop playback. Long press to turn off, short press to turn on when the machine is off.

2. Up button: Short press to capture during video recording, up button in menu mode, select the previous video in the playback interface.

3. Down button: video interface, short press to switch the front and rear camera screens during video recording, long press to MIC switch, video playback without video recording; down button when menu interface; select the next video in the thumbnail interface; return to the thumbnail interface during the playback interface.

4. Menu button: video interface, short press to wake up / turn off the screen backlight when recording; short press to enter the menu without recording, long press to open WiFi. In the menu, video settings-> general settings-> close the menu. Playback mode, exit playback and return to video mode. In wifi mode, short press to turn off wifi.

5. Reset button: Reset button short press to restart the device.

6. sos lock button recording interface: sos lock button, lock / unlock the video file during recording, if the current video file recording time is less than 10 seconds, lock the current file and lock a video at the same time; if the current video is at the end of the loop recording 10 seconds, the current file is locked and the next video is locked at the same time. When not recording, start recording and lock. Long press to restore default settings.

## Car dvr settings

In the stop recording state, short press the menu button to enter the setting menu of the machine; the setting menu is divided into video menu and general menu, as shown in the figure:



Resolution setting



Loop recording settings



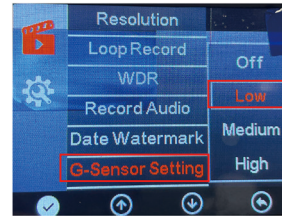
Wide dynamic switch setting



Record Audio switch settings



Date label switch setting



Collision sensitivity setting



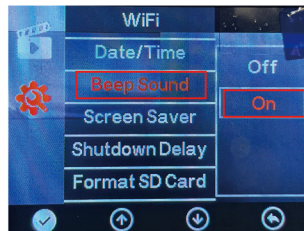
Parking collision sensitivity setting



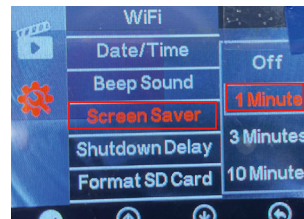
WiFi signal setting



System date and time settings



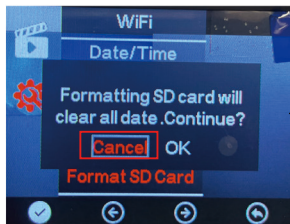
Button sound switch setting



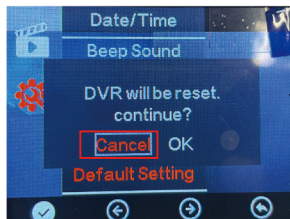
The screen is on for 1 minute , and it enters sleep mode after 1 minute



Delayed shutdown time setting after ACC power off when parking monitoring function is off



TF card format operation setting options



Default setting option, choose to restore the local parameters



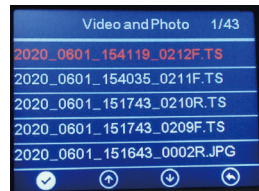
Display the firmware version number

## Video playback

In the stop recording state, short press the down button to enter the video playback list, as shown in the figure



Press the up and down button to select the file list to be played back and press the power button to confirm



Press the up and down button to select the video file to be played back, and then press the power button to confirm the playback

The video playback interface is as follows



The name of the currently playing file

Resolution of currently playing file

Progress of current playing time

Time watermark of current video

## WiFi interconnection

This product has WiFi interconnection function, smart phones, tablet computers and other terminal devices can watch/control the driving recorder through WiFi.

### WiFi TURN ON :

WiFi is turned on After the machine is powered on, the WiFi is turned on by itself;after turning on the WiFi, the driving recorder will act as a WiFi hotspot, the default WiFi name is A970\*\*\*\*, and the password is 12345678

## App operating instructions

Download and install the recorder APP:

Scan the QR code below to download the Vcam mobile APP, or search for "Vcam" in App Store and App Store to download

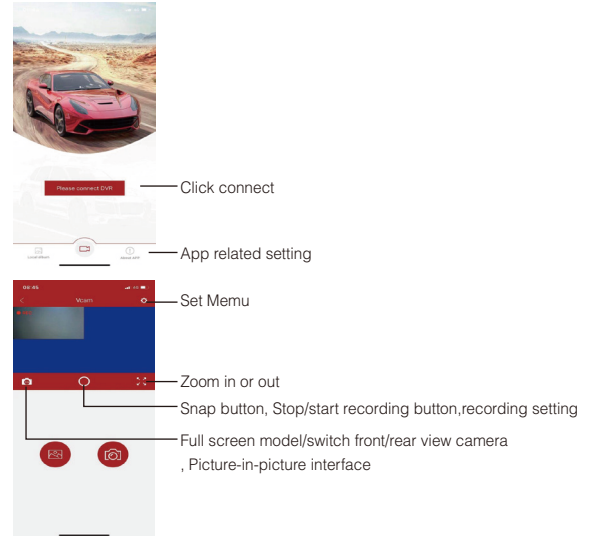


## WiFi connection

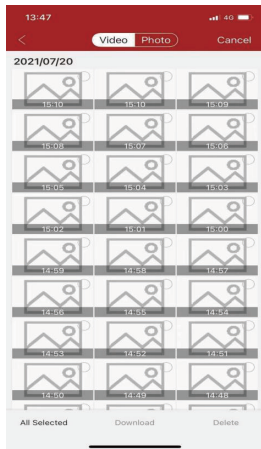
After the machine is powered on, the WiFi is turned on by itself; after turning on the WiFi, the driving recorder will act as a WiFi hotspot, the WiFi name is A970\*\*\*\*, and the password is 12345678; After confirming that the driving recorder WiFi is turned on, open the phone's setting WiFi menu and find the driving Recorder WiFi: A970\*\*\*\*, enter the password 12345678 to connect.

## Recorder APP connection operation

After connecting to the device's WiFi hotspot, enter the APP and click to connect to the recorder to enter the WIFI direct connection interface. The mobile phone can perform real-time image preview, device settings, video and photo preview, download and delete operations on the recorder through the app.

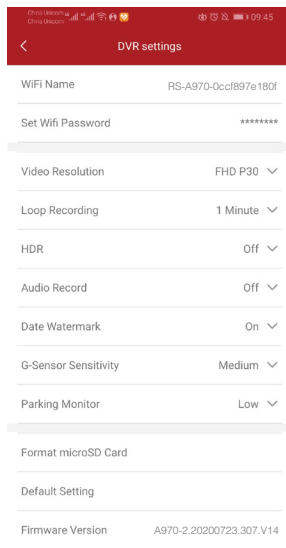


The recorder album preview operation, click the file to display the operation buttons such as play/download/delete, you can download the video file to the local album by clicking download, and click edit to perform batch operations:



After downloading, the photos and videos on the memory card of the recorder will be saved to the local download album or local download video. Exit the recorder and click (Local album) in the lower left corner to enter the local download. Long press the selected video or photo to view, edit, and delete offline. You can also choose to share to Moments of social software: The map can show the rail of car

Basic settings of the recorder:



– New WIFI password can be set

– 1/2/3 minutes optional, default 2 minutes

– Selectable sensitivity off/low/medium/high, default medium

– Click to remind whether to format the card

– Press to confirm the recorder restores factory settings

– Display firmware version



## Front Cam Installation Method

1. Select the installation position on the front windshield of the car and wipe it clean.
2. Tear the 3M adhesive protective layer on the front cam bracket (Figure 1).
3. The front cam bracket should be tightly fastened with the dash cam itself (position a in FIG. 2).
4. Keep the front of the machine in the same straight line as the front of the car, and ensure that the distance between the rear of the machine and the roof of the car is greater than 7MM (position b in FIG 2).  
Note: if it is less than 7MM, it cannot be removed normally. Adjust the camera orientation to the appropriate position (Figure 3).
5. The front cam installation is complete.

Buckling and disassembling of the front cam:

as shown in Figure 4, when the machine is pushed down in the direction of the arrow, it is installed and buckled, and when it is pushed up, it is disassembled.



FIG.1

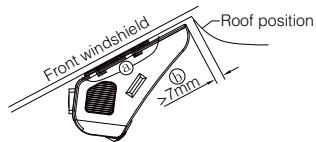


FIG.2

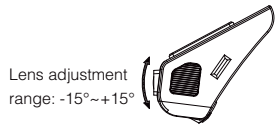


FIG.3

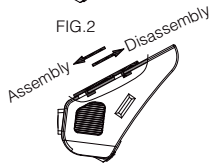


FIG.4

## Recorder accessories list

### A970-1CH Items



Front cam



3M Sticker Bracket



Wire Cover



Power Cable



User Manual

### A970-2CH Items (Added on the basis of A970-1CH)



C100( high profile)



C101(low profile)



Camera extension cable

The content of the accessories list refers to the standard configuration recorder and information that should be included in the box, excluding other accessories you choose. If you choose other accessories, please check them when you buy the machine. The production date is subject to the packing list.

Note: In order to enable you to get timely and effective services, please keep this list of accessories properly.

### Qualification Card

No	Description	Recorder
1	Product Number	<input type="checkbox"/> A970-1CH <input type="checkbox"/> A970-2CH <input type="checkbox"/> A970-2CH(Pro)
2	Inspection date	
3	Inspectors	

### Basic Trouble-shooting

Please try the following solutions when facing any issues.

Issue	Solution
Unable to connect to recorder via mobile APP	<ol style="list-style-type: none"> <li>(1) Start the WiFi on the recorder;</li> <li>(2) Change "APP permissions" in setting on mobile phone;</li> <li>(3) Uninstall the APP and then re-install again. Pay attention when the APP asks for permission notice.</li> </ol>
Cannot record video or audio	<ol style="list-style-type: none"> <li>(1) Ensure the microSD card is a Class 10 High speed card. Also, please reformat the card and try again.</li> <li>(2) Change the resolutions to lower setting.</li> <li>(3) Confirm the microSD is inserted correctly. Ensure the "click" sound is heard upon insertion.</li> <li>(4) Delete the old unused files on the memory card to clear up the memory space.</li> </ol>
Bad quality videos	<ol style="list-style-type: none"> <li>(1) Change the resolutions to higher setting.</li> <li>(2) Ensure protective film on camera lens is removed.</li> <li>(3) Ensure the camera lens and the windscreen is clean.</li> </ol>
Device works well but button not work	<ol style="list-style-type: none"> <li>(1) Press the RESET button with a needle to reset the factory default settings</li> <li>(2) Restart the device.</li> <li>(3) RESET the device. Take note when using the RESET button as this operation may lead to the loss of data. Eject the microSD card before resetting the recorder.</li> </ol>
Video noise or stuttering video playback on PC	Try to use another video software player to play the videos when the videos are not smooth. Try to use a better loudspeaker if there is any noise in the video.
Video noise or stuttering video playback on mobile APP via WIFI	<ol style="list-style-type: none"> <li>(1) Ensure mobile phone is close to the recorder in order to have a strong WIFI connection.</li> <li>(2) Set and decrease the preview resolutions on mobile phone</li> <li>(3) Use a higher spec mobile phone (higher speed) to connect and playback the videos.</li> </ol>

## SD Card Storage Data Reference

RS-A970 front view and rear view car dvr		
32GB	FHD 1920*1080P	
	recording video	203 minutes
64GB	FHD 1920*1080P	
	recording video	422 minutes

### Notice:

Please use a genuine microSD card to ensure the recording quality and reliability. Files maybe lost or damaged when using non-genuine (imitation cards). It is not responsible for any case caused by usage of non-genuine micro SD card. Please ensure to use minimum speed of "CLASS 10" microSD cards. Never eject the memory card while recording. This will damage the card.

## Additional Information

Flashing of indicator light on the recorder:

1. The blue light starts flashing when the recording starts. This indicates normal operation status. If the red light is ON permanently, it means there is no memory card or the recorder cannot read the memory card.
2. If the red light is flashing quickly, or the blue light is flashing abnormally, or both red and blue light is permanently ON, this means the recorder hardware is faulty. In this case, try pressing the RESET button with a pin. If RESET does not work, try removing the car battery Negative terminal for 1 minute, and then reconnect it again.
3. It needs to be restarted when the recording is stopped or halted (shut down first-power on); or restart through the "reset button" to re-observe the light status, only the blue light flashes to prove that the car DVR is working normally, The lights flash alternately to indicate an emergency recording state.
4. The user must observe whether the lights are all turned off after the ignition is turned off, to ensure that the car DVR has been power off, and the normal lights are all turned off in about 1 minute.

## Information about MicroSD card:

1. Because the emergency videos will NOT be overwritten, users are advised to delete the unused Emergency files once a month.
2. There may be too much memory fragmentation in the memory card due to constant writing and erasing activity. This will affect the recording of videos. In order to maintain best performance of the recorder, users are recommended to perform full FORMAT of the microSD card once a month.
3. Minimum speed class of microSD card is CLASS 10.
4. Supplied MicroSD cards have 1 (One) year Warranty from manufacturer against Manufacturing Defects Only. Warranty will be void if the manufacture deems that the defect is caused by users or any other reasons.

## Warranty, Special Clauses and Exemptions

This product is used for video and audio recording. The recorded media shall be used ONLY as an additional reference in any case of accidents etc. It shall not be held liable or responsible in any matter related to the use of the recorder in any situation or scenarios, whether directly or indirectly.

Take note of actions that may lead to loss of data as below:

1. Removing the memory card during recording. Any abnormal operations on the recorder may lead to damaged or loss of the video file.
2. Recorder and Video files maybe damaged or lost following the impact from a major car accident.

## Other Notices!

1. Please use the recorder while abiding the laws of your country, regarding rights in regards to using recording devices.
2. Please keep the user manual for future reference (default WIFI password).
3. Read the Usage terms and conditions clearly before usage of this device.
4. The recorder is directly connected with the vehicle power supply system. Please refrain from using the recorder for long periods of time with the engine is switched off. The car battery may be drained off and cause starting failures.
5. The operation temperature range of this product is -20°C ~70°C. Do not use the recorder in any locations other than a motor vehicle. DO NOT EXPOSE the recorder to any form of liquid or water. This recorder is NOT WEATHERPROOF and shall not be used outside a vehicle.

## Warranty Regulations

I The warranty period of this product is one year.

Customers can enjoy the three guarantees service with the valid invoice or receipt of the purchased product and the warranty card. The product can be returned or exchanged within 7 days for non-artificial product quality problems from the time the product is sold: exchange or repair can be processed within 15 days; warranty can be carried out within one year. If the product has quality problems and needs to be repaired, please send this warranty card together with the purchased product to our company for after-sales repair.

II During the warranty period, faults arising from normal use in accordance with the instruction manual (determined by the official staff of the company) will be repaired free of charge.

III During the warranty period, if one of the following situations occurs, it must be repaired for a fee.

- ① Not able to provide this guarantee and valid proof of purchase.
- ② Failure and damage caused by misuse and improper repair by yourself.
- ③ Failure or damage caused by transportation, moving, or falling after purchase.
- ④ Failure and damage caused by other unavoidable external factors.
- ⑤ Damage caused by water or other falling liquid caused by improper use.
- ⑥ Damage caused by using a power supply other than the specified voltage or voltage.
- ⑦ Damage caused by force majeure.

IV Product appearance and accessories are not covered by the warranty.

V The above guarantee is only made, and no other express or implied guarantees are made, including implied guarantees of merchantability, reasonableness and adaptability to a particular application and application; no matter in the contract, civil negligence, In other respects, the company is not responsible for any special, incidental or indirect damages.

VI Beyond the warranty period, outside the scope of the warranty, failures caused by force majeure factors, maintenance costs will be charged. More warranty details

<https://mercylion.com/pages/shipping-warranty>

Warranty card

User Union

User Profile

User Name: \_\_\_\_\_ User Tele: \_\_\_\_\_

Post Code: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_

Product File

Product Name: \_\_\_\_\_

Product Serial Number: \_\_\_\_\_

Purchasing Date: \_\_\_\_\_

Invoice number: \_\_\_\_\_

Franchise dealer/Repair station information

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Tele: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Franchise dealer's stamp  
/Repair station information's  
stamp

Warranty card

Dealer Union

User Profile

User Name: \_\_\_\_\_ User Tele: \_\_\_\_\_

Post Code: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_

Product File

Product Name: \_\_\_\_\_

Product Serial Number: \_\_\_\_\_

Purchasing Date: \_\_\_\_\_

Invoice number: \_\_\_\_\_

Franchise dealer/Repair station information

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Tele: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Franchise dealer's stamp  
/Repair station information's  
stamp

Warranty card

Archive Tele

User Profile

User Name: \_\_\_\_\_ User Tele: \_\_\_\_\_

Post Code: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_

Product File

Product Name: \_\_\_\_\_

Product Serial Number: \_\_\_\_\_

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Franchise dealer/Repair station information

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