PF Jones

QUALITY SERVICE VALUE

Commercial Vehicle Dash Camera

Catalogue

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Preface

Thank you very much for choosing our NEW Dash Camera product. For normal use of this product, please read this manual carefully before use.

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This manual is a product brochure not a product warranty. We do not guarantee the contents of this manual.

PF Jones adheres to sustainable development and reserve the right to make changes to this manual, such as printing errors, typographical errors, inconsistent with the latest materials, software upgrades and product improvements. Product specifications and parameters are subject to change without notice. Keep this manual for future reference.

Safety instructions

· To ensure driving safety and avoid breaking traffic rules, please do not operate the machine whilst driving.

· For safe use of the product, please ask a professional person to install the product . Do not privately disassemble, repair ormodify the machine, to avoid damage to the machine or accident. If there are any problems, please contact customer service.

· Do not use the machine in an environment that is humid, overt temperatures, subject to excessive voltage, flammable, explosive, or other such conditions to prevent damage to the machine, electric shock or fire.

Packing list

Before using this machine, please check the following items according to the machine model to check whether the following items are complete, if there are any omissions please contact customer service.

Dash cam	1 pc	Key	2 pcs
Power cable	1 pc	Double-sided tape	1 pc
Manual	1 pc	RCA adapter	2 pcs
Emergency button	1 pc	Rear camera	（Optional）
Card reader	(Optional)	TF memory card	（Optional）

Note: *TF card by reading and writing speed points Class4 / 6/10, be sure to use Class10 and above.*

When using the new TF card for the first time, be sure to format the card before using it. Please back up your important data before formatting.

Technical specifications and parameters

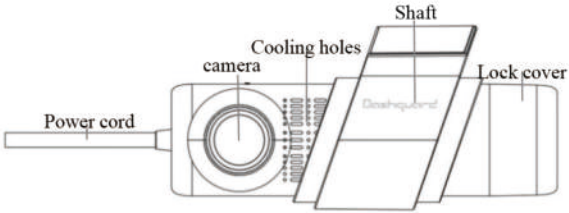
Technical indicators	Parameter Description
Size / weight / color	Front: L170mm*ø65mm / 120g / Black
Camera sensor	Front: 4M physical pixel CMOS image sensor, Seven groups of all-glass lens
Lens Angle	Front: 165 °(horizontal: 130 °, vertical: 80 °)
Second camera	Support the 2nd camera(Optional) Rear: 1M physical pixel CMOS image sensor, four groups of all-glass lens 140 °(horizontal: 100 °, vertical: 70 °)
WIFI	Built-in WIFI module (IEEE 802.11b/g/n, 2.412 GHz-2.4835 GHz)
Mobile terminal app	Dashguard (IOS V8.0 and above, Android V8.0 and above)
Video	Normal recording (card capacity of 79%, this space is automatically deleted after the old file is replaced by new documents) Event recording (20% of card capacity, G-Sensor, SOS button, alarm IN event triggered) Parking guard recording (parking guard function is turned on, the vehicle vibration after ignition off)
Sound recording	Built-in Microphone
Audio and video format	Video: H.264 video encoding / MOV format; audio: AAC
Storage media	TF high-speed memory card (maximum support 128G, make sure to use CLASS10 and above original genuine card)

Speaker	Built-in speaker
Button	Power button/camera button/emergency recording button Reset button Upgrade button (press the key to enter the upgrade mode when the power is turned off or the card is released)
LED	2 LED(red、blue)
G-Sensor	Built-in triaxial three-dimensional collision acceleration sensor
GPS	Built-in high-quality GPS, support PC-side player track playback
RTC	Connect the device's WIFI, open the App or GPS to locate the automatic sync time
Parking guard	The recorder uses car power and turns on the parking guard after the ignition started, if the vibration automatically starts the video
Video output	2-way TVOUT(NTSC/PAL)
language settings	English, Simplified Chinese, Traditional Chinese, etc.
Take pictures	Support JPG format photo capture
Resolution / Bit rate / Frame rate	Front: 1920*1080 16M@30fps / 1280*720 12M@30fps Rear(optional): 1280*720 12M@25fps
Loop recording	Time 1, 2, 3 minutes optional
PC player	Player

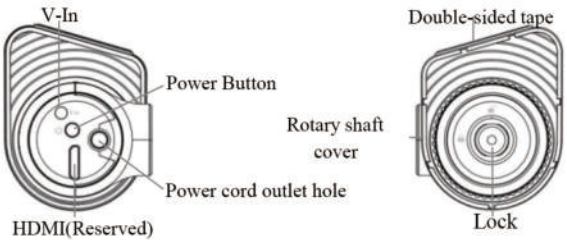
Upgrade interface	SD card upgrade (upgrade process power failure or return to the card cannot start, you need to press the upgrade button to enter the upgrade mode)
Communication Interface	Reserved UART / IR interface
HDMI interface	Reserved HDMI interface
Alarm I/O	Define input / output alarm line (active low)
Lock	With lock to protect card, tamper resistant
Power	9V-32V car battery or car charger power
Static power consumption	3.6W(without connecting the rear view camera) 5W(Front and back cameras are working at the same time)
Standby current	Less than 1mA
Good performance temperature	-25 °C to + 65 °C
Operating temperature	-30 °C to + 70 °C
storage temperature	-40 °C to + 90 °C

Structural diagram

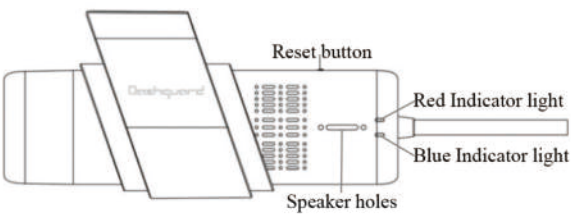
I. Front Camera



Front view



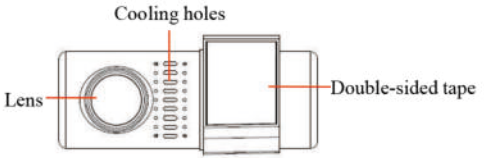
Left **Right**



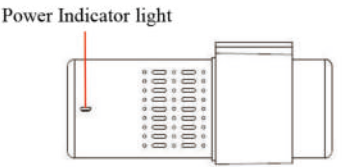
Rear view

(Optional)

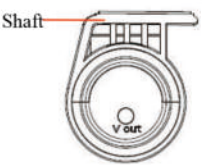
2.Rear Camera



Front view

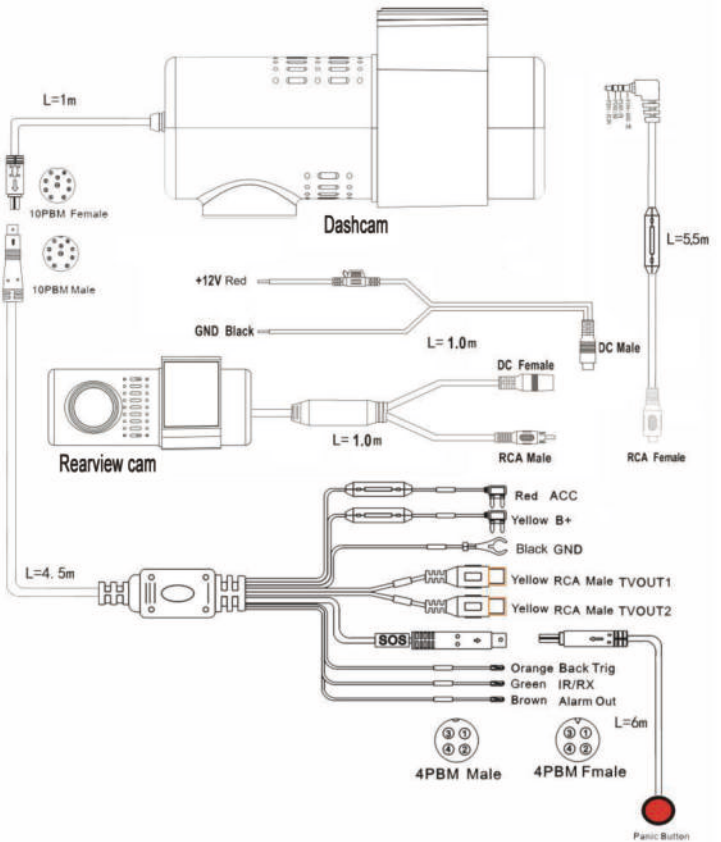


Rear view



Side view

Wiring Diagram



Button and Indicator light definitions

Power button: Press and hold the button to turn on it; Short press to take photo and long press to lock or unlock the current video when you boot up.

Emergency button: Press this button to lock the current video.

Reset button: Press Reset to restart the machine.

Upgrade button: This button does not need to be operated when the machine is upgraded normally, forced to press the upgrade button until you enter the upgrade mode (indicator light flashes) can be released.

Indicator light: The first red light flashes blue when upgrade, the red light is on and the blue light flashes when recording; the blue light is on and red light flashes when insert the card but no recording; Red light is flashing when no card is inserted; Red and blue lights flash alternately when event recording.

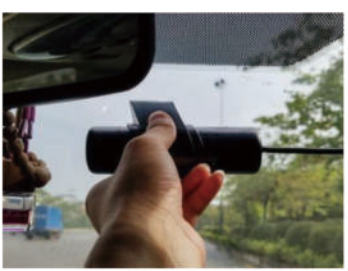
Note: The shaft can be secured with a screw if necessary.

Installation diagram

1. Stop the car in a safe place.
2. Clean the front windshield rear view mirror on the right side of the line of sight and clean the area with a clean towel to wipe the glass.

3. Adjust the lens to the side of double-sided tape and wipe the recorder lens with a clean towel.

4. Tear the double-sided tape plastic protective film on the shaft.
5. Paste the machine horizontally in the direction of the image to the right of the rear glass and clean the camera lens.



6. Connect the power cord or car charge line, and then plug the power cord or car charger along the edge of the front windshield seams until the battery fuse box (power cord

alignment) or car charger slot (cigar jack line alignment), and correctly connect the power.

7. If connect the back camera, first insert the headphone into the V-in interface, then walk the wire along the edge of the vehicle to the rear windshield. According the front camera installation way and fix the rear camera into the proper position of rear windshield.

8. If it is connected to the power line, there is TVOUT video output on the wire harness, and the TVOUT video can be connected to the navigation AV-IN connector or the AV display connector according to the need.

9. Wipe the inside and outside of the windshield in front of the tachograph lens(include front camera and rear camera) to ensure a better video effect.

10.When the car starts and opens the ACC, the recorder will automatically switch on. At this time, the AV recorder or App recorder can be used to preview the image in real time, and the rotating shaft adjusts the recorder to the appropriate video angle.

Note: *Please let the professional installer to install recorder to avoid any damage or accident of the machine*

Recording time table

1. Recording schedule for recording front camera only

Camera and video properties				Memory card capacity and recording time									
				8G		16G		32G		64G		128G	
Camera	Res.	fps	bps	Normal	Event	Normal	Event	Normal	Event	Normal	Event	Normal	Event
Front Camera	1080P	30fps	16M	49 Min	12 Min	99 Min	24 Min	199 Min	48 Min	399 Min	96 Min	799 Min	192 Min
Front Camera	720P	30fps	12M	67 Min	16 Min	134 Min	32 Min	268 Min	64 Min	536 Min	128 Min	1072 Min	256 Min

2. Recording schedule for connecting the 2nd camera.

Camera and video properties				Memory card capacity and recording time									
				8G		16G		32G		64G		128G	
Camera	Res.	fps	bps	Normal	Event	Normal	Event	Normal	Event	Normal	Event	Normal	Event
Front Camera	1080P	30fps	16M	30 Min	8 Min	59 Min	15 Min	118 Min	29 Min	236 Min	59 Min	472 Min	118 Min
The 2nd Camera	720P	25fps	12M										
Front Camera	720P	30fps	12M	35 Min	9 Min	69 Min	18 Min	138 Min	35 Min	276 Min	70 Min	552 Min	140 Min
The 2nd Camera	720P	25fps	12M										

Note: *The data in the table is for reference only, slightly different due to the memory card and storage.*

On/Off operation

The machine supplied by car battery. ACC ignition or press and hold the power button to turn on the machine. It will also turn on when Shocking machine if the parking guard function ison.

Note: *When the machine is shutting down, the ACC ignition will not turn on, it needs to be completely shut down (The light is off). then it will turn on by ACC ignition.*

During the work of the machine, it will automatically shut down to save the video and related settings when the ACC turns off.

App operation

1. Download and install the App.

For a better experience, please download and install the App by the following ways.

Option 1: scan QR code

Google Play

App Store

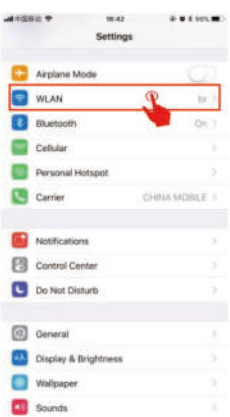
Option 2: search "Dashguard".

Apple users go to the Apple App Store search "Dashguard" to download and install. Android users go to the Google Play Store search for "Dashguard" to download and install.

2. Connect the recorder

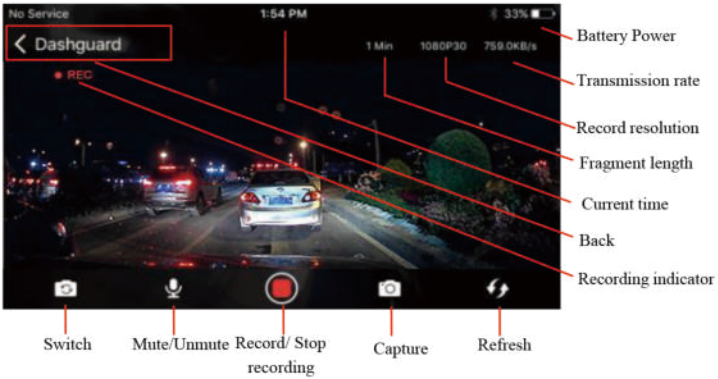
After downloading and installing the App, turn on the recorder and connect it within the WIFI signal coverage.

Please enter the phone system settings, open the WLAN, enter the WIFI list interface, select the WIFI name that starts with "Dashguard-", enter the password 12345678 (factory default password), you can connect to the recorder, and then click the desktop "Dashguard "Icon to open App, enter the main interface.

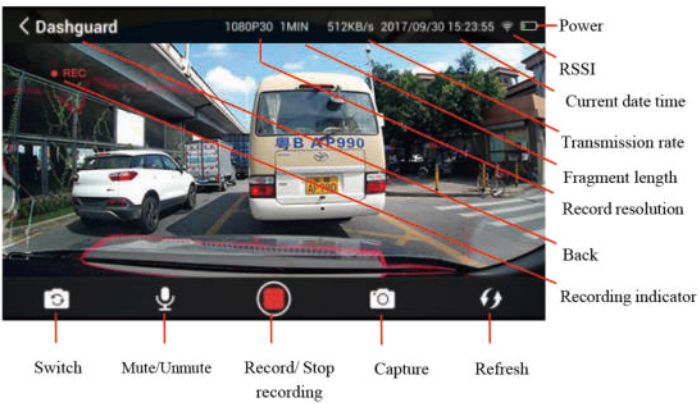


3. Live preview

After connecting to the recorder, click on the home page "real-time preview", you can enter the real-time preview window to view live images. Real-time preview displayed by horizontal screen.



Apple App Live preview



Android App Live preview

Switch: Click this button to switch between the front camera or the rear camera (optional) preview image. (Note: The drive recorder system supports both the front and back recordings when the button is highlighted, otherwise it is grayed out and cannot be clicked.)

Mute/Unmute: You can turn the recording function on or off, this button indicates the current audio recording status.

Record / Stopping Video: When the dashcam is recording, the icon in the upper left corner of the video recording will blink.

Capture: photographed in JPG format.

Refresh: When the real-time preview interface, such as lagging andother abnormal circumstances, you can manually refresh the image.

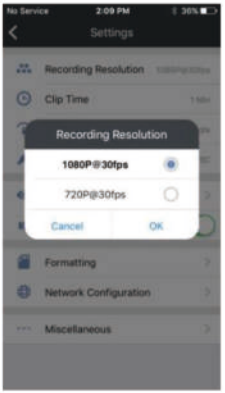
Back: Click to exit the real-time preview interface to return to the main interface.

4. Set up

Click the App home page "Settings" to enter the settings page, you can set up the vehicle recorder and query related information.

Note: *Setting the black bold item in the submenu indicates the default settings for the recorder.*

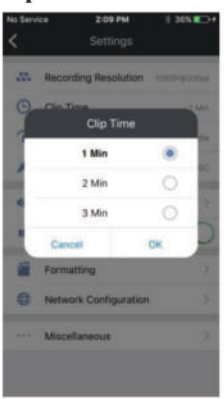
1) Recording Resolution



The recording resolution is used to set the front camera recording resolution. The higher the resolution, the sharper the image.

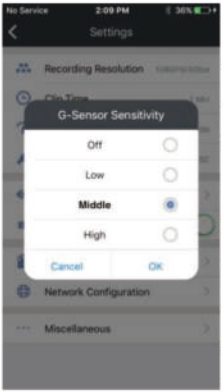
Note: *the rear camera (third-party camera) recording resolution is fixed to 720x480.*

2) Clip Time



Clip Time, used to set the size of each segment of the video when the cycle is recorded, the clip time is shorter and easier to download.

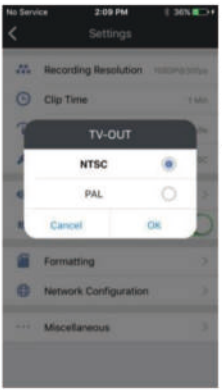
3) G-Sensor sensitivity



Gravity acceleration fluctuations vary greatly when Sudden acceleration and emergency braking and bumpy up and down, the current video is protected when the system senses a large undulating acceleration change.

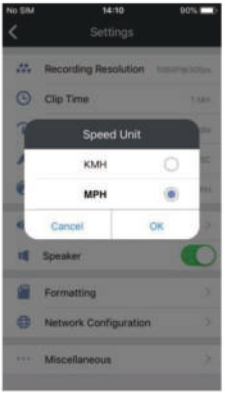
G-Sensor sensitivity is used to set the threshold for sensing the acceleration and deceleration of gravity. The higher the sensitivity, the more susceptible to fluctuations in the acceleration of gravity, resulting in a protected video.

4) TVOUT



The recorder supports TVOUT video output to the third-party AV display, the screen display format can be set through this function.

5) Speed Unit



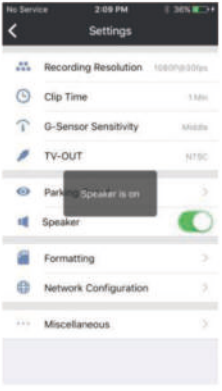
The speed unit is used to set the the speed unit in the video watermark. It supports both KMH and MPH. The default is MPH.

6）Parking guard

Through the App open parking guard, after the vehicle flameout is in the parking guard state, at this time the recorder detects the vibration will automatically start the video for a period (default 25 seconds). The video protection will be canceled, if the vehicle starts firing or the power button is pressed manually during the parking guard video recording.

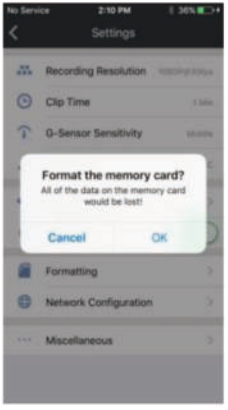
Note: *parking guard automatically boot video time default 25s, if the parking guard video process detected another acceleration of gravity, the congress continued to record 25s*

7) Speaker



Recorder built-in speaker, if the user wants to turn on / off the recorder output sound, through this function on / off.

8) Formatting



This function is used to format the TF card on the drive recorder. When using the new TF card for the first time, use this function to format a TF memory card. If you can not read the TF card and other abnormalities, you can also try to formatTF card. Due to limited TF battery life, do not frequently format TF card.

Note: *Please format the TF card before the backup card useful data, otherwise the card data will be lost.*

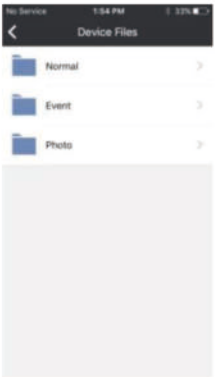
9) Network Configuration

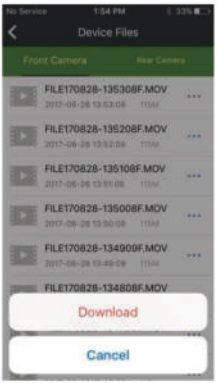
The network configuration interface is used to modify the WIFI name and password. After changing the WIFI name and password, the App and the recorder are disconnected and need to re-enter the new password to connect the modified WIFI.

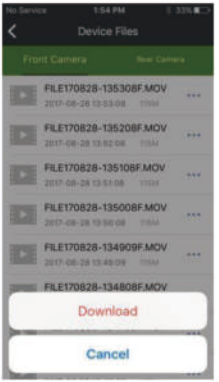
Note: *If you forget your password, you need to re-upgrade the drive recorder to return to the default WIFI name and password.*

5. Device Files

The "Device Files" of the home page is used to view the recorded video and photographed pictures on the drive recorder TF card.







1) Folder Directory

Normal: Used to view recorded video.

Event: Used to view protected event videos.

Photo: Used to view captured pictures.

2) File Operation

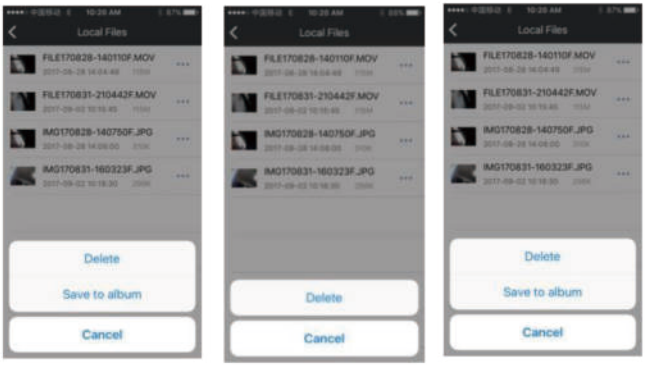
After entering the corresponding folder, click on a video or photo directly to play the video directly or browse the photo online. Click the "More" button on the right to download the video or photo.

Note: *1) When download file, to download stability does not allow other operations but can cancel the download.*

2) The carriage recorder system does not support the rear camera when there is no rear camera tab.

3) online playback to see the video, for high-definition video due to WIFI environment and the transmission rate may be interrupted, the video download to the local view will not appear interrupted.

6. Local Files



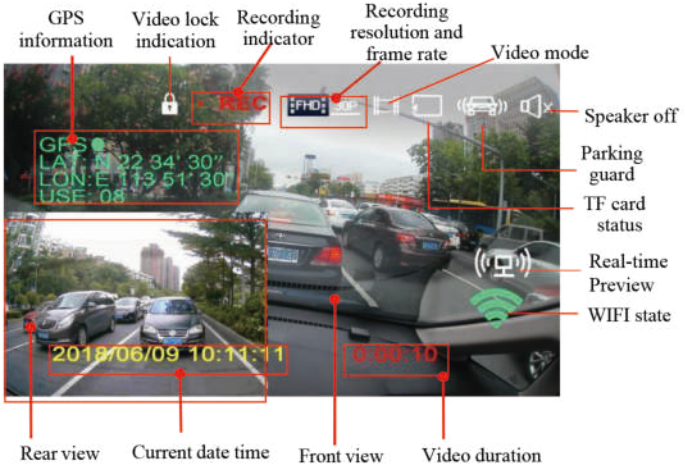
The video downloaded from the drive recorder TF card can be viewed directly from a video or photo via a local file. Above the left is the Apple App local file video function button, you can choose to delete, the right is the local file picture function button, you can choose to delete and save to the local album.

Android users to download the video can also be in the mobile phone TF card root directory "Dashguard" directory to find, through the phone comes with the file management system view.

TVOUT Interface

This machine supports two TVOUT outputs, the output system is optional NTSC system or PAL system, the default NTSC system.

The output interface is as follows:



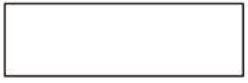
Windows Player operation

The video recorded by the vehicle recorder is H.264 coded MOV format, and the common players on the PC end can play normally. But if you need the GPS information, you shall use the special player to play.

1. Get player application

Please log in the website to get the application.
https://www.dvplayer.net/setup.html

2. Registration code



Please note: each dashcam will have one registration code.
Every user who uses this player will need a registration code. And a registration code can only be bound to one computer,which mean other PC will fail to use this code, other PC will need a new code.
(You need to pay for new code, please contact the supplier)

3. Register an account

After downloading the player, you will need to use registration code and your email to log in .
(Each dashcam will come with a registration code.)

DVPlayer
Version: V4.30
This version is unregistered and is limited the ability to parse GPS data.
Purchase
Enter Registration Code
Watch demo
Copyright KEAEA TECHNOLOGY CO.,LTD @dvplayer.net. All Rights Reserved

DVPlayer 4.30
Please enter your registration code:
Your Email:
Validate Registration Code

TF card operation

1. Insert TF card

Open the device lock and remove the lock cover, insert the TF card into the card slot, then put back the lock cover and lock the device well. Please do not forcibly insert the TF card, wrong or rough inserting method maybe damage the TF card or card slot.

2. Remove the TF card

If the device is in the working state, you need to turn off the device first, then open the device lock and remove the lock cover. Press the TF card into the card slot direction, then the card will pop up automatically.

3. Format the TF card

Using the device first time, please format the TF card. Backup important data in the card before formatting.

Turn on the device, open the "Dashguard" APP and connect it to the device WIFI, enter the "Settings" page, click the "formatting", and then click "OK" to format the TF card on the dash camera.

4. Replace a new TF card

As the service life of the TF card has limited, after long time use, please replace a new TF card. Otherwise it will easily lead to some video storage problem, even lead to the device cannot work normally.

5. Since the device need to deal with two cameras' video recording at the same time, it has high quality requirements for the TF card. When replace a new TF card, please make sure to choose class10 or

higher level famous brand TF card.

6. Use the card reader

After remove the TF card from the device, insert it into the card reader slot. Then insert the card reader into the computer USB port. The computer will read the TF card content automatically. Display removable disk in the computer resources management, which is same as the computer disk operation.

Firmware updates

The firmware update including 2 ways: normal upgrade and forced to upgrade. If the device can work normally itself, you can use normal upgrade mode to upgrade it.

If the device cannot be turned on, you must adopt forced to upgrade mode to upgrade it. Of course, even if the device can work normally, you can also adopt forced to upgrade mode to upgrade it. But in this case, it's a time-consuming job.

First get the firmware update document package (contact the customer service to get the documents, including SD_CarDV.bin, SdFwCode.bin files and update instructions file). Transfer the SD_CarDV.bin and SdFwCode.bin file into the TF card root directory. (Note: Please do not create a new folder or change the name of the firmware, before updating, advise to format the TF card first. Backup important data in the card before formatting.), Then insert the TF card which including the copy ready firmware into the card slot. Adopt normal upgrade mode, if the ACC cable is active or

long press power button, after the device be turned on

it will upgrade automatically. When upgrading, the blue light will flash first, then the red light flashing. During the red light flashing period, please do not power off the device or remove the TF card. Otherwise it can only adopt the forced to upgrade mode to upgrade it. Adopt forced to upgrade mode, you need to use a small needle to press into the "Upgrade" hole, long press the upgrade button and then active the ACC cable or long press power button to turn on the device until it enters the upgrade mode (the lights will flash), In this case you can loosen the upgrade button.

When the upgrading is over, the device will turn off itself. Then you need to delete the upgrade files if they remain in the TF card, or else it will enter upgrade mode again next power on. After the device be turned on again, you can check if it's the target version.

You can also refer to the update instructions file in the firmware update document package.

Note

◆ When install the device first time or the power is cut off completely, the device will beep frequently to remind the user to synchronize the time. After the mobile terminal is connected to the recorder WIFI, open the Dashguard APP, the cellphone time will synchronize to the device automatically (Please make sure your cellphone time is accurate). Or when the device receives the GPS

satellite information, it can also synchronize the time.

◆ The TF card should be FAT32 format before using. Usually if the TF card capacity is larger than 64GB, it's exFAT format.
When first time using a new TF card, must Format the card via the device, then the TF card can be used normally. (the recorder device will format the TF card to FAT32 directly)

◆ please make sure to use class10 or higher level famous brand TF card. If use poor quality TF card, it may cause recording or running problems, or even make the device crash.

◆ When upgrading, please make sure the TF card is FAT32 format and can be normal using, otherwise it cannot read the upgrade file.

◆ When upgrade complete, the machine needs to adjust the data and the boot time is longer at the first time.

◆ Do not format the TF card frequently and replace the TF card after long use.

◆ Full HD video has a large amount of data, and the online playback needs to be buffered, especially if the playback buffer is more frequent in the state of video playback. Please download video for playback.

◆ The real-time preview of the mobile phone is based on WIFI wireless transmission, and the real-time preview of video will have some delay.

◆ In the process of machine video, please do not take out the card or it will cause damage or loss to the last video, or even damage the

TF card.

◆ Be sure to clean the car recorder lens and the front windscreen inside and outside to record better effects.This recorder can connect multiple phones, but only one mobilephone can preview/replay/download in real time at the same time.

◆ The files on the TF card are scrubbed and covered, the storage capacity is distributed in proportion, the default normal recording accounts for 79% of the card capacity, the event video accounts for 20% of the card capacity, and the photo accounts for 1% of the card's capacity. When normal recording space full of normal video, it will delete the first video file, when the event space full of events video, it will remove the earliest recorded video files. When the pictures space full of photos, it will delete the first file to keep the loop video. Therefore, please back up the important video and photo files in time to other storage media.

◆ The "Settings" -> "other" interface query the TF card can be used to record the remaining space for normal recording, the event recording residual space, and the sum of the remaining space of the shot photos.

◆ The machine is in the process of turning off the ACC when the ignition is not turned on, it needs to be shut down before the ignition can be turned on.

◆ The WIFI name and password can be modified. After modification, you need to reconnect. Please remember the WIFI password, otherwise you can only upgrade the machine software

recovery network to the default mode.

◆ The GPS is placed in the shaft, if the front windshield has a metal membrane, it will affect the receiving GPS signal.

◆ Please contact the App within the range of WIFI, and it can be used normally within 10 meters of normal range.

◆ The WIFI signal is easily interfered by Bluetooth. When the signal is unstable, please check whether there is Bluetooth signal interference in the surrounding area.

◆ The reset button is used to restart the system in case of an exception.When the machine reset, it will break the power and may cause the file to be damaged or lost.

Simple troubleshooting

Performance	Solution
Cannot record normally	❶ reset the machine ❷ format TF card ❸ change new genuine TF card, (upper Class10) ❹ ensure TF card right installed ❺ delete the damaged file from memory card
Video not clear	❶ change the resolution ❷ ensure the camera lens clear ❸ ensure the window screen clear
working abnormally	❶ press the reset button to restart ❷ turn off and then restart the machine ❸ format the TF card
Cannot preview in real time	❶ confirm if it has connected with other mobile ❷ lose the app and restart the app. ❸ restart the machine
Don't have WIFI signal	❶ confirm WIFI signal close to the machine ❷ refresh WIFI list ❸ restart the machine ❹ re-upgrade the version
App online can't playback	❶ stop take video then playback. ❷ change the resolution. ❸ download the video then playback
Black screen when real-time preview	❶ press the reset button to reset the machine ❷ turn off and restart ❸ format the TF card
TF card don't record	❶ format the TF card ❷ change new genuine TF card (upper Class10)
Video crash when playback	Change to another brand video player