

#### **Preface**

This product combines wide dynamic digital industry leading camera, no leakage of footage, seamless circular camera, ultra wide angle shooting, with display real-time playback, it uses Novatek 96655 chipset. This chipset integrates cutting-edge technologies, including 4x FHD video decoding technology, intelligence power performance scaling system, HD multi-screen display processing It provides a high definition video compression and a smooth imaging.

This manual will detail how to install, operate, product parameter and matters needing attention. Please read carefully and keep it safely after usage. Please note that the specification in this user manual may subject to update without prior notice. Please always refer to the actual product for updated specification.

Copyright infringement / privacy notice

Please note that this product is for personal use only, its method of use and image recorded shall not infringe international copyright / privacy laws.

#### **Accessories check**

The following standard list and selection. If there is any missing or damaged items, please contact your dealer immediately.

# Standard



Adhesive buckle



Car charger



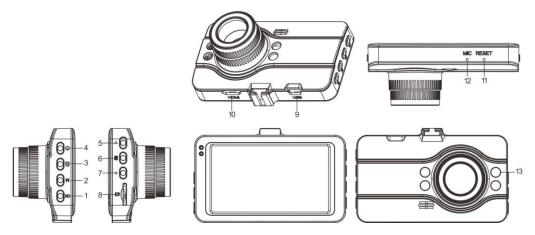
USB



Instructions for use



# **Product description of structure**



Host keys and interface description

No.	Icon	name	Operating instructions
1	ОК	OK	Short press OK to stop or start recording/ In Photo mode, short press OK to take photos/ Act as confirm key in Menu mode. PS: Press OK to stop recording before able to access other mode
2	M	MODE	Press M to switch between Video / Photo / Playback mode
3		Locking	When recording, if you want to protect the current video from being covered, short press Lock key to start emergency locking function, then on the top of the screen, will appear a lock file icon which indicates that the current video is saved as a special file that cannot be recycled or covered by another video
4	(h)	Key switch machine	Long press to power on / off; short press to on / off infrared night vision lamp;
5		On the turn key	Under Menu options, press \( \bigcup \) to navigate on the function keys; Under standby or video mode, press \( \bigcup \) to digital zoom;
6		menu	Continuous short press this key can navigate in the settings menu;



7		Under the	Under Menu options, press ▼ to navigate on the function keys; Under standby or video
,	, ,	double bond	mode, press V to digital zoom out;
8		TF card slot	TF memory card slot, please install in the correct direction prompt;
9	BSB	USB interface	Connect the USB cable to transmit data to PC; Connect the car charger to supply power to the dash camera
10	HDMI	HDMI output	HD output port, used to connect high-definition display devices ;
11	RESET	reset button	System restart reset button;
12	MIC	microphone	Record audio;

### Installation instruction:

- 1. Turn off your vehicle engine.
- 2. Insert the TF card into the recorder slot. Please make sure to insert the sd card in the correct direction. [Note] Please use the high-speed TF card (Class10 above), capacity of not less than 8G. TF card can support up to 32GB.

Note: Please use the device to format the memory card if it is new.

- 3. The recorder is fixed to the front windshield of the car.
- 4. The car charger into the car cigarette lighter.
- 5. Extension cable charging the recorder's USB connector and car charger is connected.

[Note] Reduces charging extension cord wiring can be laid along the edge of the windshield.

- 6. Adjust the lens position to ensure that the lens levels with the ground.
- 7. Start the engine and check if the machine has been installed correctly.

[Note] When the machine is properly installed, the system indicator lights will work; the machine starts to enter the recording state and the recording indicator light flashes. Remember to check if the display screen is normal. If not, please contact us.



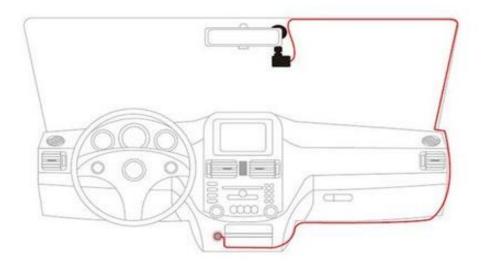
The device will turn on/off automatically according to the car power. When the engine starts, the device will turn on and start recording automatically, and when the engine stops the device will save the recordings and turn off automatically in 15 seconds. The device can be manually turned on / off by long pressing () button.

### Attention:

- Use the original factory standard charger.
- Do not privately dismantle the machine to remain the validity of warranty.
- If modification of power line required, please engage a professional installer.

Note: The equipment in the recording state, do not remove or insert the memory card to avoid damage of the memory card.

Installation of wiring diagram suggested below.



Note: The wiring of the car charger can be hidden by installing according to the picture above.



# **Initial logger settings**

### Set the date and time:

- 1. You need to press the OK button to pause the recording to enter into other modes.
- 2. And then press the button twice, by pressing  $\Delta$ , or to select the date / time, then press the OK button to enter the setting
- 3. Or by pressing the buttons to adjust the value, press the OK button to enter another field. Until the completion date and time settings, press @ exit.

# **Recorder Recording Operations**

1, When the car engine is started, the device is automatically turned on and start recording. When the engine stalled, then it will automatically stop recording. Or press the OK button to manually stop recording.

Note: Some vehicles powered car charger interface is often when the engine stalled, the power supply will continue to work. If you encounter such a situation, take the following steps: Open the manual way off / off the device, or unplug the car charger from a car cigarette lighter port.

2. Other types of camera: Press the OK button, then start recording; press the OK button again, then stop recording.

Note: (1) Video will be recorded in 1, 3, 5 minutes video cycle, please select your preference in Menu settings>Loop recording.

- (2) The videos will be saved in the camera memory card, if the memory card is full, the oldest file is automatically overwritten on memory card.
- (3) Emergency or for gravity sensing camera, video cannot be automatically overwritten, you need to manually delete.

## 3. Emergency camera

Note: If you start a gravity sensor, and detects a collision, the device will automatically lock the current record video and will not be overwritten.



# Recorder camera operator

- 1. Press the M key to switch to the camera mode, camera icon in the upper left corner of the screen display.
- 2. Press the OK button to take pictures, take pictures of the screen flashes once to indicate camera complete.

## Video / photo playback operations

- 1. In the camera mode, you need to press the OK button to stop recording.
- 2. Press the M key to switch to the playback mode, the upper left corner of the screen to display the playback icon.
- 3. Press \(\bigset\) \(\bigset\) key up or down to select the file.
- 4. Press the OK button to play the selected video file; short press again to pause playback.

# Menu setting operation

- 1. If you are recording, need to press the OK button to stop recording.
- 2. Short press once to bring up the setup menu, twice on the menu page.
- 3. By a short press  $\triangle$  or  $\bigvee$  key, you can cycle up and down to select items in each set.
- 4. Select the settings you want to change, press the OK button to enter the changes through short.
- 5. After setting short key to exit standby mode.

# **Special features:**

1. Gravity sensor function

When the gravity acceleration starts, the machine will automatically save the video when the accident occurred and it files will not be deleted.

Gravity sensor can be adjusted in the menu high - medium - low, medium factory default.

2. File locking feature

The imaging process, the Lock key is pressed, the machine will not delete the current video and saved as a file.



### 3. Parking monitoring function

When you open the parking monitoring in the off state, if the car has a slight vibration, the recorder will automatically start recording for 20 sec and shut down.

[Note] This feature requires hardware support.

#### 4. Motion detection function;

If the motion detection after a short press OK to start recording 10 seconds, the camera will automatically switches to standby mode motion detection, on the upper left corner of the screen there is a flashing yellow dots, when an object is detected moving, the recorder start recording, the yellow flashing light spot becomes red spot; motion detection start time of 10-30 seconds after the end of the motion detection it will automatically enters standby mode, the upper left corner of the screen to switch to the yellow dot flashes; when once again detects moving objects, the camera function starts again!

#### 5. USB mode

Connect the USB cable to the computer, tachograph will automatically eject the USB menu will appear the following options:

1) Memory

In this mode, the video file can be accessed, or photo files.

2) Camera

Select this mode will bring up the USB video device, it can be real-time network camera or video chat as a PC camera.

## 6. The battery instructions

Battery level indicator, refer to the diagram:



Fully charged Lower power consumption Low power consumption Lack of electricity

After switching on the car power, the red charging indicator lights up in charge of the process, the whole charging time is approximately 180



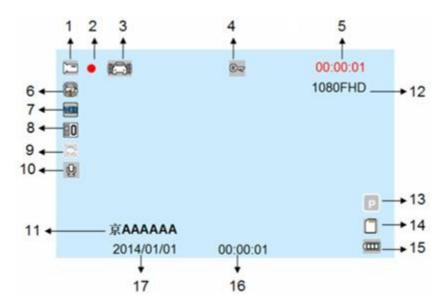
minutes, the red charging indicator light will automatically turn off after charging is completed.

Note: This equipment is to follow cars with state of long working hours, for the built-in battery, shutdown to save the file. Finite length solid battery life in daily use, please link to the vehicle power supply.

### 7. RESET

If during use, if the device is showing abnormalities or crash situation, you can press the RESET button to reset the machine operating system shell through the whole touch with tiny needles.





- 1. Camera icon indicates camera mode;
  - : Camera icon indicates camera mode
  - E: Playback icon, indicating the playback mode
- 2. Flashing red indicates that the device is recording; yellow dot blinking motion detection device in standby
- 3、 Gravity sensor icon

After opening the gravity sensing this icon will be displayed on the screen; indicates the recording process, when the external shock exceeds the set value, the current camera video will be locked, and deleted files cannot be saved as a non-covering

4. Lock icon is displayed, the loop recording mode, if open lock function, the video files don't be cover. When the G-sensor gravity sensor starts, the key icon will appear on the screen indicates the current video is locked video.



5、00:15:30: White font - memory cards remaining recording time / red font - current segment recording time;

After inserting a memory card, the camera displays standby time remaining space of the memory card, display white font; imaging process, the camera displays the current time- segmented in red font.

6. Cycle time imaging segment icon representing the cycle time of 1,3,5 minute imaging; Menu options are: Off

7. Wide dynamic icon on the left side of the screen is the display icons, indicating that the features is activated. Recommendations often open.

WDR shows an image will automatically adjust the brightness of the scene based on the value of the site is particularly bright and specially in dark area, so that the dark areas can see clearly. Wide dynamic range is the ratio of the image can distinguish between the brightest luminance signals values can distinguish between the darkest light signal values.

- 8. EV exposure compensation icon indicates the currently selected exposure parameters;
- 9. Motion detection icon; on the left side of the screen displays the icon, indicating that the feature is activated.
- 10. Recording function Open icon
  - 🖳 : Recording function Close icon

Open the Settings menu and synchronized recording function on or off this icon appears, indicating the current recording function on or off; camera during the short press the Menu key, you can quickly open and close the record

11、AAAAAA: License plate display icon

After opening the license plate in the menu, the display will show the license plate icon, you can edit the owner of the license plate number;

- 12, 1020FHD: Video resolution icons; displays the currently selected video resolution;
- 13、 Parking guard icon; display icons for parking guard function turned on;



14. Memory card icon is displayed

After inserting the memory card icon is displayed

15. Battery level icon; shows the current charge;

16、00: 00: 01: Time display shows the current standard time; before using it for initial setup;

17、2014/01/01: Date display, showing the current standard dates before using it for initial setup;

## **Settings Menu**

Options	Explanation	Available options
Resolution	Set the video resolution	1296P、1080FHD 、720P、WVGA 、VGA
Loop recording	When setting up each video file length	1 minute, 3 minutes, 5 minutes, turn off, if you choose to close the case, the card will not automatically cycle full coverage.
WDR	Wide Dynamic automatic adjustment of light	On, Off, the proposed full-time open
Exposure	Underexposed , dim the screen , you need to fill	+0.0、-1/3、-2/3、-10、-4/3、-5/3、-2.0、+2.0、+5/3、+4/3、
Compensation	light	+10+2/3、+1/3
Motion Detection	In standby mode, when the screen has moved to the detection of automatic video	On, Off
Recording Audio	Recording function is turned on or off	On, Off
Date Label	Camera video watermark date	On, Off
Parking guard	After parking stall, body if you receive external vibration generated by the tachograph will open camera	On, Off
Gravity sensor	Collision generated video never be covered	High , medium, low , off



Date / Time	Date and Time	You can set the year, month , day, hour , minute, second
Automatic shutdown	No automatic shutdown operating state	30 seconds , one minute , off
Веер	During operation, the key is with sound	On, Off
Language Settings	Language operating menu	Traditional , Simplified Chinese , Russian, Japanese,
		French , Italian, German , Spanish, English, Korean
Light frequency	Lights flicker frequency	50HZ、60HZ,
Night Lights	Fill light in the dark state by IR	On, Off
License Plate	Vehicles can enter grades , displayed on the video file	A00000
Format	You can delete memory card data above	SD
The default setting	Restore factory settings	Cancel, OK
Screen Saver	Recorder automatically turns off the display work	On, Off

# **Product Specifications:**

Product Name	live HD tachograph	
Product Features	Extremely wide angle of 170 degrees , 1296P	
	Full HD	
G-sensor	Built-in ( under the car accident case of	
	emergency save , not to be deleted)	

Division date	Support
Vector Media	Built-in memory (total
	amount : 1024MB)
Camera mode	1200M



3.0 -inch high-definition LCD screen		
A + grade high-resolution 170 -degree ultra-		
wide-angle lens		
Russian, English, Chinese, Chinese		
(Traditional), Korean, Japanese, etc.		
MOV		
1728* 1296P ,1920*1080P ,1280*720P		
H. 264, Audio: AAC		
Standard		
Seamless loop recording, no leakage seconds		
Support auto ignition on, turn off shutdown		
Support		

Photo format	JPEG
Memory Card	TF (maximum support 64GB)
Microphone	Support
Built-in stereo	Support
IR	Support
Video Format	PAL/NTSC
Current Frequency	50HZ/60HZ
USB	1: USB-Disk
	2: PC-Camera
Power	5V 1A
Battery	Batt-in200mAh

#### Instruction to use:

- For Best Result in using Dash Camera, we definitely recommend to keep it plug-in into the car cigarette charger. This will allow you to use or record for a longer period of time. Dash Camera uses a lot of battery due to G Sensor system of the camera.
- To watch recorded video clips, please remove SD card from Dash Camera and connect it to your computer or laptop. This will allow you to watch all videos recorded.
- Please peel off the protective film on the screen before use.

## **Common troubleshooting:**



- Dash cam is not recording properly, please check:
- 1. Format the sd card and try again.
- 2. Change to another sd card and try again.
- 3. Reset to factory settings under menu.

Under normal operating conditions, please refer to the solutions.

#### Unable to boot:

Check the recorder and car charger if properly connected, if you manually turned on, check the battery level if it is too low needs recharging. Press RESET button to restore to factory settings.

## When the camera automatically stops recording, or do not cycle the camera:

Due to the huge high-definition video data, it is possible because the memory card reader could not keep pace. Please use the high-speed TF card, such as Class10 high-speed card.

If the loop recording is not working, it is also possible that gravity sensor is open, the files on memory card are all locked. Close the gravity sensor setting, and the format the memory card.

### Each time the camera settings cycle is not the same:

Check if motion detection function is on, because the camera motion detection state length of time, depending on the screen if there is no movement.

### Video recorded is unclear:

Please clean the lens before shooting the surface, keep the lens clean.

### **Bad video effect:**

Camera and lightning conditions will affect the video quality, adjust the position of the dash cam for best result.

### Images have streaks interference:

This is due to the wrong setting "light frequency" produced under the fluorescent lights, the domestic flat rate "50HZ" when the machine briefly press the "RESET" the reset button to restore restart.