Panasonic®

Driving Recorder

Model:CY-VRP112T1/T2/T3/T4/T5

Operating Instructions

micro**SD**

Please read this instructions carefully before using this product and keep this manual for future reference.

Contents

Safety Information

⚠️ **Warning** | **This pictograph intends to alert you to the presence of important operating instructions and installation instructions. Failure to heed the instructions may result in severe injury or death.**

⚠️ Warning

Observe the following warnings when operating this unit.

■ **Driver shall not watch the screen of the recorder or operate the device while driving.**
Watching the screen or operating the unit prevents distracts from focusing on road safety and could result in a traffic accident. Park the vehicle in a safe location before operating the device.

■ **Never power the unit via an extension cord directly connected to the battery, as to do so runs the risk of a short-circuit and burnt PCB. Please use the cigarette lighter socket as a power connection point.**

■ **Make sure a correct power supply is used.**
This unit is suitable for a vehicle equipped with a negative-ground 12V/24V battery. DO NOT use on any other battery system.

■ **Never dismantle or modify the unit**.
Never dismantle the unit or attempt to modify or repair it on your own, to do so could damage the unit or result in electrocution. If the product requires servicing, please consult your dealer or our service station.

■ **Do not use this unit when it is out of order.**
If the unit is out of order (no power, no sound etc.), or operates abnormally (ingression of foreign objects, soaked by rain or emits smoke or an odor), immediately switch off the unit and disconnect the power supply, then consult the dealer or service station for assistance.

■ **Keep optional accessories (SD Card, etc.) away from the reach of children.**
There are risks that children may swallow the accessory. Keep accessories away from the reach of children. In the event of swallowing any the accessory, seek medical care immediately.

Safety Information

⚠ Warning

Observe the following warnings when installing this unit.

■ **Install the product so that it does not hinder the view of the vehicle.**

■ **Never install the unit within the range of air bag movement or in a position that obstructs activation of the of air bag. Please also verify warnings and precautions regarding the vehicle's air bag.**

■ **Make sure the wiring does not hinder passengers from getting in/out of the vehicle.**
Make sure the wiring is properly fixed to ensure safe driving.

⚠ **Caution** This pictograph intends to alert you to the presence of important operating instructions and installation instructions. Failure to heed the instructions may result in injury or material damage.

⚠ Caution

Observe the following cautions when using this unit.

■ This unit i dessigned for use exclusively in vehicles.

■ Never store the unit in a dusty or dirty place or near the vehicle's air-con/heater.
Long-term exposure to said environment may damage the unit.

■ Never install/store the unit in a high-temperature environment as it could result in damage.

Safety Information

⚠ Caution

Observe the following cautions when using this unit.

■ When disposing of the unit, follow statutory regulations to recycle the built-in lithium battery, so as to prevent environmental pollution.

■ For some vehicles, the unit continues recording after the engine has being shut off. In such a case, the following measures shall be taken: Manually shut off the cigarette lighter or remove the vehicle power connector from the cigarette lighter.

■ Always keep the lens clean to ensure clear images of driving.

■ In the event the ambient temperature reaches 45°C or higher, the vehicle power connection will still supply power to the unit, but the lithium polymer battery will not be recharged. This is a typical feature of lithium batteries and is not a malfunction.

The unit may be affected by RF interference from mobile phones.
If the interference is significant, use mobile phone as far away from the unit as possible.

Safety Information

⚠ Caution

Observe the following cautions when installing this unit.

■ It is recommended that the unit should be installation by a professional.
The installation requires specialty and technical experience; to ensure safety, entrust the dealer to carry out the installation.

■ Make sure no wires are damaged.
Avoid damaging any wires while making the connection by keeping away from screws on the chassis or moving parts of seats. Never twist the wires or position them near a heat source.

■ Make sure the unit is installed correctly.
Avoid installing the unit at a location subject to vigorous vibrations.
The ideal installation location is near the back mirror where an optimal view can be obtained.
Make sure the lens is within range of the windshield wiper so that a clear view is ensured.
DO NOT install the unit on tinted window glass as that could damage the light-colored film.
Make sure the unit is installed at a location that is free from any influence of thermal film and away from any device that may generate electronic interference.

Precautions when using a Micro SD Card
■ Never remove the SD card when the unit is in the process of shutting-down or operating. Failure to comply could corrupt the files or damage the unit.
■ A Class- 6 Micro SD card with 8GB capacity or more is recommended (Max. support up to 32GB).
■ Before using this unit, format the Micro SD Card by this unit.

FCC Statement

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 radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

WEEE Notice

Information for Users on Collection and Disposal of Old Equipment and Used Batteries

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and   the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

[Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

CE Regulatory Notice

Herewith confirm to comply with the requirements set out in the Council Directives on the Approximation of the Laws of the Member States relating Electromagnetic Compatibility of Radio and Telecom device (1995/5/EC); the Low Voltage Directive (2006/95/EC); the Restriction of The Use of Certain Hazardous Substances in Electrical And Electronic Equipment Directive (2002/95/EC), Turkish EEE Directive; the Commission Regulation (EC) No 1275/2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment, and the Directive 2009/125/EC of the European parliament and of the council establishing a framework for the setting of eco-design requirements for energy-related products.

Notes on Installation

1. Install the device near the rear-view mirror to obtain the best open-field view. Do NOT install the camcorder in a location that will obstruct your required driving view.
2. Make sure that the lens is within the wiping range of the windscreen wiper to ensure a clear view even when it rains.
3. Do not touch the lens with your fingers. Finger grease may be left on the lens and will result in unclear videos or snapshots. Clean the lens on a regular basis.
4. Do not install the device on a tinted window. Doing so may damage the tint film.
5. Make sure that the installation position is not hindered by the tinted window.

6. In order to avoid the ripple in the LCD screen due to the car engine vibration , suggest the driver to shift the gear to N Position for the temporary stop.

Caution

❖ Use the authorized charger only.

❖ Never disassemble by yourself.

❖ Never short-circuit the battery.

❖ Dispose of the battery properly.

❖ Exposing the battery to open flames can cause explosion.

❖ Due to local laws and vehicles safety considerations, do not operate the device while driving.

❖ The results of GPS positioning are only for reference, and should not affect the actual driving situation. The system also cannot ensure the positioning accuracy.

❖ GPS positioning accuracy may differ depending on weather and location such as high buildings, tunnels, undergrounds, or forests.
GPS satellite signals cannot pass through solid materials (except glass). Tinted window will also affect the performance of the GPS satellite reception.

❖ GPS reception performance on each device may differ. The system cannot determine the accuracy of the positioning results from different devices.

❖ The values displayed in this system, such as speed, position, and the distance warning to the speed camera set points, may be inaccurate due to the influence of surrounding environment. They are for your reference only.

1 Introduction

1.1 Features

- Full HD Car Camcorder (1920x1080 @ 30fps)
- 2.4" LCD color screen
- 128 degree Wide angle lens
- Motion detection
- Automatic Emergency recording for collision detection
- Supports Micro-SDHC up to 32GB (Class 6 or greater speed required for HD video)

1.2 Package Contents

The package contains the following items. In case there is any missing or damaged item, contact your dealer immediately.

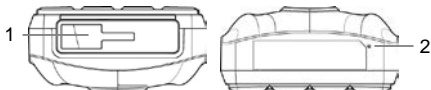Car Recorder

Bracket

CD-ROM

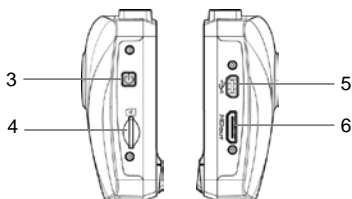Car adapter
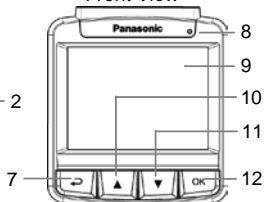
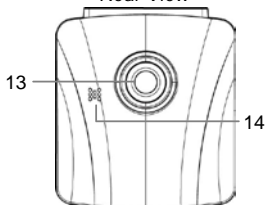Quick Start Guide

Warranty Card

1.3 Product Overview

Top and Bottom Views

Front View

Side (Left and Right) Views

Rear View

| No.	Item		No.	Item
1	Bracket Socket		8	LED Light
2	Microphone		9	LCD Panel
3	Power Button		10	Up Button (▲)
4	Memory Card Slot		11	Down Button (▼)
5	USB Connector		12	Enter Button (OK)
6	HD(Mini HDMI) Connector		13	Wide Angle Lens
7	Back Button (⮐)		14	Speaker

Note:

To operate the device, press the corresponding buttons (7, 10, 11, 12) according to guide icons shown the screen.

2 Getting Started

2.1 Inserting the Memory Card

Insert the memory card with the gold contacts facing the back of the camcorder. Push the memory card until it clicks into place. (Use class 6 or above the micro SD cards for this camcorder; It is recommended to format the micro SD cards before the initial use.)
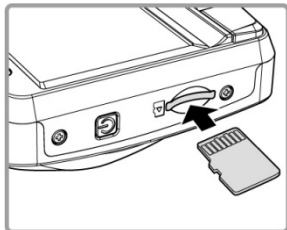
To remove the memory card

Push to eject the memory card out of the slot.

Note:

1. Do not remove or insert the memory card when the device is powered on. This may damage the memory card.

2. Please use a 8GB, Class 6 or above Micro SD card Support to 32GB as the maximum.

**3. Please format the micro SD cards before the initial use.**

2.2 Installing in Vehicles

2.2.1 Mount to Windshield

1. Attach the bracket to the device. Slide it into the bracket holder until you hear a click.
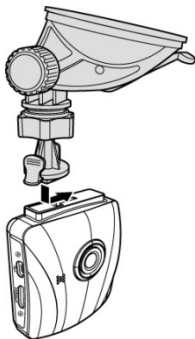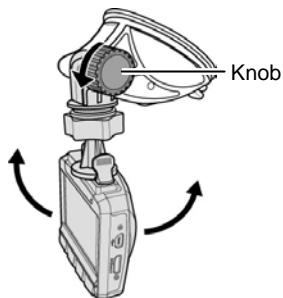
2. With the suction-cup laying flat, position the suction-cup on the windshield.

3. Hold the base firmly on the windshield and press down the clamp to mount the car holder to the windshield. Make sure the base is securely locked in place.
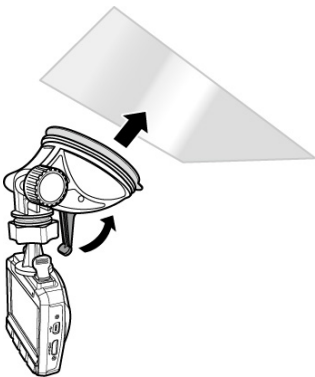
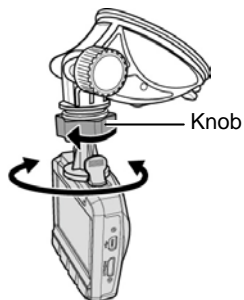## 2.2.2 Adjust the device position
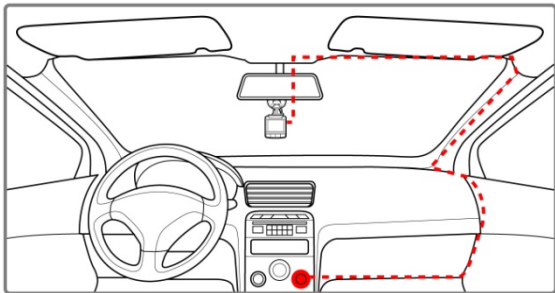
1. Loose the knob to swivel the device vertically.

Knob

2. Loose the knob to swivel the device horizontally up to 360°.

Knob

3. Then tighten the knob to make sure the device is securely locked in place.

2.3 Connecting to Power

Use only the exclusive car adapter to power up the device and charge the built-in battery.

1. Connect one end of the car adapter to the USB connector of the camcorder.

2. Plug the other end of the car charger to the cigarette lighter socket of your vehicle. Once the vehicle engine is started, the camcorder automatically powers on.

Note:

1. The orange LED lights up while the battery is charging.

2. Please take note if the environment temperature reaches 45°C or above, the car adapter still can supply power to camcorder, but it will not charge the battery. This is the characteristic of Lithium polymer battery and is not a malfunction.

2.4 Powering the Camcorder On / Off

2.4.1 Auto Power On/Off

Once the vehicle engine is started, the device automatically turns on.
If the *Automatic Record* function is enabled, the recording will
automatically start right after the camcorder powers on.
See *Set Automatic Recording* (2.5.1).

Once the vehicle engine shuts down, the camcorder automatically
saves the recording and turns off the power within 10 seconds.
See *Delay Shutdown* (4.2).
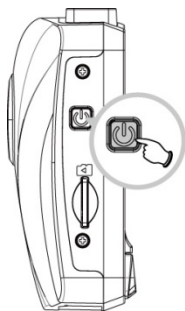
2.4.2 Manual Power On/Off

To manually turn on the power, press the
POWER button.

To turn off, press and hold the **POWER**
button for at least 2 seconds.

To reset, press and hold the **POWER** button
for at least 4 seconds.

2.5 Initial Settings

Before using the device, we recommend you to enable the
Automatic Record function and set up the correct date and time.

2.5.1 Set Automatic Recording

To enable the recording to start automatically after you turn on the power, do the following:

1. Press the ⇆ button to enter the OSD menu.

2. Press the ▲/▼ button to select **Automatic Record** and press the **OK** button.

3. Press the ▲/▼ button to select **On** and press the **OK** button.

4. Press the ⇆ button to exit the menu.
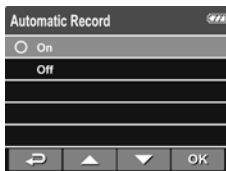
2.5.2 Set the Date and Time

To set the correct date and time, do the following:

1. Press the ⇆ button to enter the OSD menu.

2. Press the ▲/▼ button to select **Date / Time** and press the **OK** button.

3. Press the ▲/▼ button to adjust the value and press the **OK** button to move to another field.

4. Repeat step 3 until the date and time setting is complete.

Note:

1.When the battery is drained dry and the satellite synchronization is off, the user must reset the date/time before the function-automatic record is started. If the user doesn't reset the date/time, the device will give you alert (you can see the as attached) after one minute and the automatic record will be started .

2.But if the sattlelite is synchronized ,the device can do automatic record immediately.

2.5.3 Set the Satellite Synchronization

To set the proper satellite time zone (satellite synchronization), follow the steps below:

1. Press ⏎ into MENU function.
2. Press ▲/▼ to select SATELLITE SYNCHRONIZATION and press **OK** into the function.
3. Press ▲/▼ to select **ON**，then press **OK** to turn on the function.
4. Press ▲/▼ buttons to select the correct time zone for your country and press OK.

Note:

Satellite time is synchronized with time zones. Different countries may use different time zones. When satellite synchronization is enabled, it is necessary to set a time zone to be able to use this function; please follow the instructions below make sure you set the correct time zone.

Country	Time Zone
USA(New York)	**UTC-5**
Brazil	**UTC-4**
Switzerland, South Africa	**UTC+2**
Ukraine	**UTC+2**
Russia (European Area)	**UTC+4**
China /Taiwan/ Hong Kong	**UTC+8**
Korea, Japan	**UTC+9**

If none of the above areas fits your country, visit the following website to find out the correct time zone for your location: http://en.wikipedia.org/wiki/Time_Zone

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3 Using the Car Recorder

3.1 Recording Videos

3.1.1 Record videos while driving

When the vehicle engine starts up and the *Automatic Record* function is enabled, the camcorder automatically turns on and starts recording.

Recording will automatically stop when the engine is switched off. Or, press the ▼ button to stop recording manually.

Note:

On some cars, the recording will continue when the engine is switched off.

If this happens, do one of the following:

- Manually turn off the cigarette lighter.

- Remove the car adapter from the cigarette lighter.

3.1.2 Driver Fatigue Alert

1. Press the ⇌ button to enter the OSD menu.
2. Press the ▲/▼ button to select **Driver Fatigue Alert** and press the OK button.
3. Press the ▲/▼ button to select **On** and press the OK button.

Driver Fatigue Alert function will remind the driver should take a rest after continuing to drive for over one hour via '' bi bi sound '' from the device and also the alert picture (as enclosed) will be appear in the LCD screen. The product will remind the driver again after 30 minutes as each interval . But the product will recalculate the alert time If the car stop moving over 5 minutes .

3.1.3 Record all other types of videos

1. Press the **OK** button to start recording.

2. Press the ▼ button to stop recording.

Note:

1. One video file is saved for every 3 or 5 minutes of recording. See *Using the Menu* (4.1).

2. The device saves the recording in the memory card. If the memory card capacity is full, the oldest file in the memory card is overwritten.

3.1.4 Emergency Recording

During Video Recording, press the **OK** button to enter emergency recording mode, the "***Emergency***" message will be shown immediately on the upper left corner of the screen, and the recorded file will be protected.
To stop the recording, press the ▼ button.

Note:

1. If the *Collision Detection* function is enabled and a collision is detected, the device will automatically trigger the emergency recording.

2. If the *Collision Detection* function is enabled and a collision is detected, the *emergency* recording function of the device will automatically be triggered. The emergency recording file is created as a new file, which will be protected to avoid being overwritten by normal cycling recording. A 8 GB (or above) memory card can save up to 10 emergency video files. The alert message of "*Emergency files are full*" will pop up on the screen when the emergency recording files are full, and the oldest emergency file will be automatically deleted when a new emergency recording file is created.

3. Emergency Recording can happen only in the normal recording status .

3.1.5 The Recording Screen
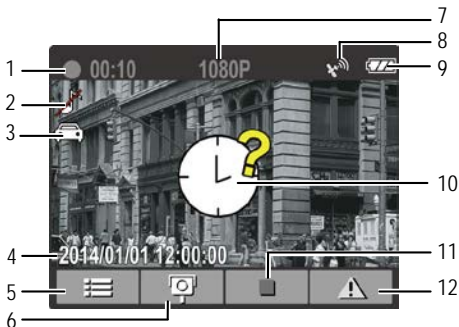
No.	Item	Description
1	Duration	Indicates the recording duration.
2	Voice Record	Indicates sound will not be recorded with the video. Enter the OSD menu to enable "Voice Record".
3	Smart Scene Mode	There are two options for the Smart Scene Mode: 1. Drive Priority 🚗 2. Scenery Priority 🏞 See section 4.2 Menu Tree for more details.
4	Date and time	Indicates the current recording date and time.
5	Guide icon (Menu)	You will see the 4 GRID FUNCTION CHART in the LCD screen after you push ⏎ button.
6	Add speed cam point	Press the ▲ button to add a speed cam point.
7	Resolution	1080P (1920x1080) / 720P (1280x720).
8	GPS icon	When a GPS fix is established, the icon "📡

		" will show on the top-right corner of the screen.
9	Battery	Indicates the remaining battery power.
10	Prompt : reset of date / time	Prompt : NOT reset of date / time
11	Guide icon (Stop)	Press the ▼ button to stop the recording.
12	Guide icon (Emergency)	Press the **OK** button to continuously record the video in one file until the recording is manually stopped.

3.1.6 Taking Photographs

You can also use this camcorder to take photos of the current scene.

From the standby screen, press the ▼ button to take a photo.

Note:

If recording is in progress, press the ▼ button to stop the recording first.

3.1.7 4 GRID FUNCTION CHART in the LCD screen

Please push ⏎ button when you are recording, then you can see the 4 GRID FUNCTION CHART in the LCD screen.
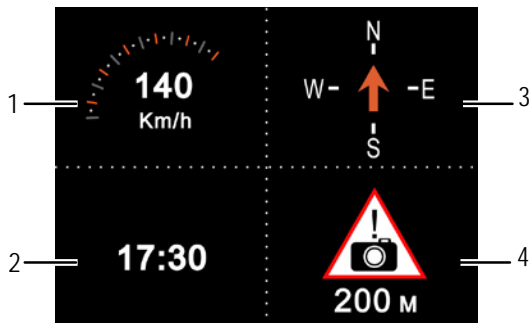
No.	Item
1	Driving speed
2	Time
3	Driving direction
4	Distance warning to the speed camera set points

Note:

The driving speed and driving direction will become gray scale chart if GPS has no signal.

3.2 Playback Videos and Photos

1. If recording is in progress, press the ▼ button to stop recording. The standby screen is displayed.

2. Press the ⮑ button to enter the OSD menu.

3. Press ▲/▼ button , the select File Playback and press the OK button.

4. Press the ▲/▼ button to select the file category that you want to browse and press the OK button.

5. Press the ▲/▼ button to view the previous or the next file and press the OK button to view the file in full screen.

File Playback			
○ Video			
Emergency			
Picture			
⮑	▲	▼	OK
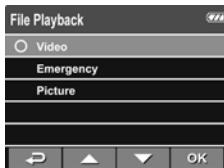
Note:

1. From the standby screen, you can directly enter Playback mode by pressing ▲ button. The last recorded video is displayed on the screen.

2. There is no recording function if the device attach HDMI cable.

3. If the device attach HDMI and then link to TV, the TV screen will show the Preview tatus ,but the device screen show the red frame only.

3.2.1 Playing Videos

To play videos, do the following:

1. If recording is in progress, press the ▼ button to stop recording.

2. Press the ⏎ button to enter the OSD menu.

3. Press the ▲/▼ button to select **File Playback** and press the **OK** button.

4. Press the ▲/▼ button to select **Video** or **Emergency** and press the **OK** button.

5. Press the ▲/▼ button to browse for the desired video file and press the **OK** button to play the video.

6. Press the **OK** button to pause the playback. Press it again to resume.

3.2.2 Viewing Photos

To view photos, do the following:

1. If recording is in progress, press the ▼ button to stop recording.

2. Press the ⏎ button to enter the OSD menu.

3. Press the ▲/▼ button to select **File Playback** and press the **OK** button.

4. Press the ▲/▼ button to select **Picture** and press the **OK** button.

5. Press the ▲/▼ button to browse for the desired photo file and press the **OK** button to view the file in full screen.

3.2.3 The Playback Screen

Video Playback Screen   Photo Playback Screen
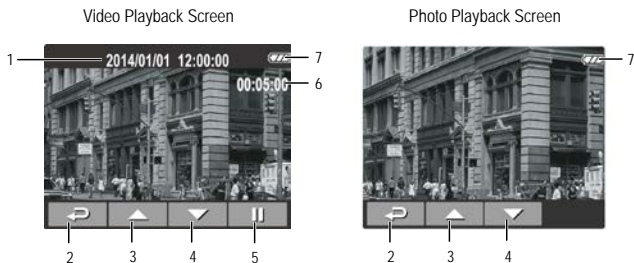
No.	Item	Description
1	Date and time	Indicates the recorded date and time.
2	Guide icon (Back)	Press the ⮌ button to return to file selection display.
3	Guide icon (Previous)	Press the ▲ button to view the previous video/photo.
4	Guide icon (Next)	Press the ▼ button to view the next video/photo.
5	Guide icon (Pause)	Press the **OK** button to pause the video playback.
6	Duration	Indicates the elapse time.
7	Battery	Indicates the remaining battery power.

3.2.4 Deleting Files

To delete file(s), do the following:

1. If recording is in progress, press the ▼ button to stop recording.

2. Press the ⏎ button to enter the OSD menu.

3. Press the ▲/▼ button to select **File Deletion** and press the OK button.

4. Press the ▲/▼ button to select the file category and press the OK button.

5. Press the ▲/▼ button to select the file that you want to delete and press the OK button to enter the Delete menu.
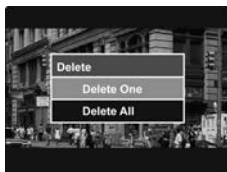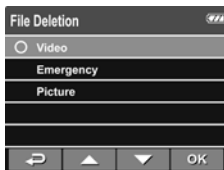
6. Press the ▲/▼ button to select an option.

Item	Description
Delete One	Delete the current displayed file.
Delete All	Deletes all files.

7. Press the OK button to confirm delete.

Note:
Deleted files CANNOT be recovered. Ensure the files have backup before deletion.

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4 Adjusting the Settings

4.1 Using the Menu

You can customize the video recording and other general settings via the on-screen display (OSD) menus.
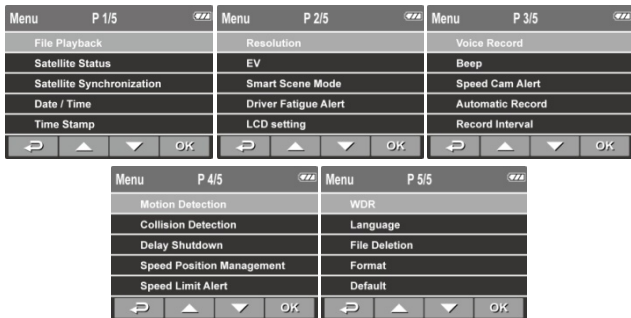
Menu	P 1/5	
File Playback		
Satellite Status		
Satellite Synchronization		
Date / Time		
Time Stamp		

Menu	P 2/5	
Resolution		
EV		
Smart Scene Mode		
Driver Fatigue Alert		
LCD setting		

Menu	P 3/5	
Voice Record		
Beep		
Speed Cam Alert		
Automatic Record		
Record Interval		

Menu	P 4/5	
Motion Detection		
Collision Detection		
Delay Shutdown		
Speed Position Management		
Speed Limit Alert		

Menu	P 5/5	
WDR		
Language		
File Deletion		
Format		
Default		

1. If recording is in progress, press the ▼ button to stop recording.

2. Press the ⮌ button to enter the OSD menu.

3. Press the ▲/▼ button to select a menu option and press the OK button to enter the selected menu.

4. Press the ▲/▼ button to select the desired setting and press the OK button to confirm the setting.

5. Press the ⮌ button to exit the menu.

4.2   Menu Tree

Refer to the below table for details on menu items and available menu options.

Menu option	Description	Available option
File Playback	Select the file category that you want to view.	Video / Emergency / Picture. Default: Video
Satellite Status	Displays the current state of the satellite reception.	
Satellite Synchronization	Automatically synchronize with the local satellite time. When this feature is enabled, the system will use the satellite time, and you cannot manually change the time.	On / Off. Default: On
Date / Time	Set the date and time.	Press ▲/▼ button to adjust the value, press the OK button to switch the field and confirm. Default: On
Time Stamp	Enable/Disable the date stamp.	On / Off. Default: On
Resolution	Set the video resolution.	1080p (1920x1080) / 720p(1280x720) . Default: 1080p
EV	Set the exposure compensation.	Press ▲/▼ button to set the exposure level. You may customize it between +1.0 ~-1.0. . Default: 0.0
Smart Scene Mode	Driving Priority: Calculates exposure based on the entire image area, but provides greater exposure to the center of a subject. Scenery Priority:	Driving Priority/ Scenery Priority. Default: Driving Priority

| Menu option	Description	Available option
	Calculates exposure based on the entire image area.	
Driver Fatigue Alert	When enabled, the camcorder sounds an audible tone after an hour of driving.	On / Off. Default: Off
LCD Setting	Set the duration for the display to automatically turn off right after video recording starts.	On / Turn Off After 30 sec. / Turn Off After 3 min. / Off. Default: On
Voice Record	Enable/Disable the voice recording.	On / Off. Default: On
Beep	Enable/Disable the beep.	On / Off. Default: On
Speed Cam Alert	Warns the driver when the vehicle is approaching a speed camera.	Voice Alert / Off. Default: Voice Alert
Automatic Record	Enable / Disable the device to automatically record video after the device is turned on.	On / Off. Default: On
Record Interval	Set the recording duration for each recorded video file.	3 min. / 5 min. Default: 3 min
Motion Detection	Enable/Disable the motion detection. If this function is enabled and the power off button is pressed, the system alert message, "***Press OK Key to Power off, or enter motion detection after 10sec.***", will pop on the screen. Under motion detection mode, the device will automatically start recording when any	On / Off. Default: Off

Menu option	Description	Available option
	object movement is detected.	
Collision Detection	Enable / Disable the collision detection. If this function is enabled and any collision is detected, the device will automatically trigger the emergency recording.	High Sensitivity / Normal Sensitivity / Low Sensitivity / off. Default: Normal Sensitivity
Delay Shutdown	Set the delay duration before turning off the power.	10 sec. / Off. Default: 10 sec
Speed Position Management	**Add speed point:** The satellite positioning will manually add speed to the camera location. You can add up to 200 speed camera locations to the built-in system. **Delete speed point:** All added speed camera locations will be deleted.	Add speed point / Delete speed point.
Speed Limit Alert	Set a customized maximum speed limit. When the vehicle speed exceeds the maximum, a warning tone is automatically triggered and a warning message is displayed on the screen.	Press ▲/ ▼ button to set the speed limit. You can set the speed limit from 50km/h to 200km/h. Default: Off
WDR	Present a crisp and clear picture quality with harmonious contrast in a high contrast, high discrepancy environment.	On / Off. Default: Off

Menu option	Description	Available option
Language	Set the on-screen display menu language.	English / 繁體中文 / 简体中文 / 한국어 / 日本語 / Русский / Deutsch / Français / Italiano / Español / Português / Türkçe / Bahasa Indonesia / Bahasa Melayu / हिंदी / ไทย / العربية / Українська. Default: English
File Deletion	Delete the file(s).	Video / Emergency / Picture
Format	Format the memory card.	Yes / No.
Default	Reset all settings to factory default settings.	Yes / No.

5 Installing the Software

1. Place the CD disc bundled with the car camcorder in your PC/Laptop optical drive.

2. If the CD does not execute automatically, please use Windows File Manager to execute the **Install_CD.exe** file in the CD.

   The following screen will be shown up.

   QuickTime
   PDF Reader
   User Manual
   SuperCar
   Exit

   HIGH DEFINITION DV
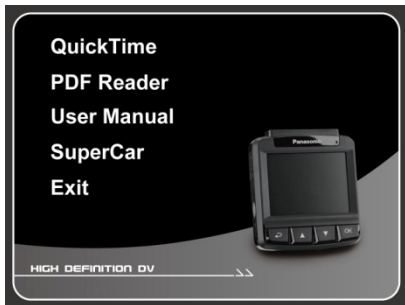
3. Press the [Menu] item to start the installation process according to the instructions on-screen.

6 SuperCar
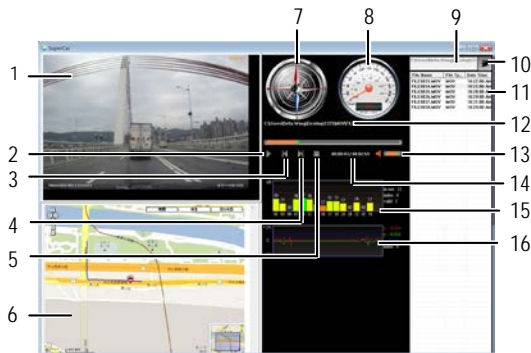
No.	Item	No.	Item
1	Video Player	9	File Path
2	Play / Pause	10	Browser File
3	Previous	11	File List
4	Next	12	File Name
5	Stop	13	Volume
6	Google Map	14	Current Duration / Total Duration
7	Compass	15	Signal Noise Ratio (SNR)
8	Speed Meter	16	G-Sensor

Note:
1. To display the route on Google Maps, please make sure the internet is connected before starting the video playback
2. Video files (MOV / TS) and GPS/G-Sensor files (NMEA) must be stored in the same folder before starting the playback.
3.The included SuperCar software is only for Windows computers.

7 Specifications

Item	Description
Image sensor	1/3" CMOS sensor
Input Voltage	The device : 5V , 1A ; Car Charger : 2~24V
Power Consumption	Recording with battery charging : 4.4 W , Preview with battery charging : 3.7W
Effective pixels	2304 (H) x 1536 (V)
Storage media	Supports Micro SDHC, up to 32GB class 6 or above
LCD display	2.4" LCD color TFT (112K pixels)
Lens	Wide Angle Fixed Focus lens F2.4, f=3.0mm
Focus range	1.5m~Infinity
Movie Clip	Resolution: Full HD (1920 x 1080), 30fps HD (1280 x 720), 30fps
	Format: MOV
Still image (Snapshot)	Resolution: 3M (2304 x 1536)
	Format: DCF (JPEG, Exif: 2.2)
Shutter	Electronic shutter Auto:1/2 ~1/2000 sec.
G-Sensor	3-Axis G-Force sensor
ISO	Auto
White Balance	Auto
Microphone	Yes
Speaker	Yes

Item	Description
Interface	Mini USB, Mini C Type HDMI
Battery	Built-in 470mAH Li-polymer rechargeable (This battery is NOT replaceable)
Operating Temperature	-10° ~ 60° C
Operating Humidity	20 ~ 70% RH
Storage Temperature	-20° ~ 80° C
Dimensions	63 x 70 x 28.7 mm
Weight	Approx. 94g (3.3oz)

8   Trouble Shooting

❖   **Problem**:Function key can not work after the screen become blue color or after formatting the card or the screen show ''on the process ''

   Solution : reset the device via press and hold the power key for over 4 seconds.

❖   **Problem**: why the device start Emergency Recording just due to slight vibration in the car

   Solution : Please adjust the function of COLLISION DETECTION   to LOW SENSITIVITY . (If you adjust to OFF, then the device will NOT start to have EMERGENCY RECORDING when you happen to the car accident .)

❖   **Problem**: Why the recording file is error or damage (File can not playback) ?

   Solution : Please be sure the memory card speed is over Class 6. Also please format the memory card before you start to use it.

❖   **Problem**: The voice can not support after the device link with TV via HDMI ?

   Solution :The device use the format of H.264 + ADPCM, not AAC. The voice can not support if the TV support AAC format .

❖   **Problem**: The TV screen will have oil slick or unclear status.

   Solution: Please be sure the windshield/camcorder len is clean before you attach the device on the windshield .

❖ **Problem** : Why the sound of recording file can not heard when using other playback software ?

   Solution : Please use the QUICKTIME PLAYER software from the CD in the gift box package .

❖ **Problem** : Why the right figure appears on screen when power on ?

   Solution : Remind the user to reset the time before start to use the device .

❖ **Problem** : Why can not see the driving road track when we use the SUPERCAR software ?

   Solution : Video file (mov / TS format) and GPS/G-sensor file (NMEA format) must in the same file folder .

❖ **Problem**:   The device can not link with GPS .

   Solution :   Please reset the device and try again.