

## Mirror Mounted Dash Camera Discovery H609

# USER MANUAL

Please read this manual carefully before using and keep it well for future reference.

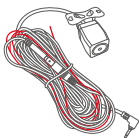
## NOTICE

1. To ensure an uninterrupted use of the device, please connect it to the car charger while recording to avoid sudden shutdown due to insufficient battery.
2. Please power the device with the car charger provided.
3. Make sure the camera lenses are clean and not blocked.
4. It is recommended that you perform a pre-installation test to ensure the device is in good condition.
5. DO NOT leave the product where the temperature may exceed 70°C (160° F) for a long time to prolong its service life.

# PACKING LIST



Mirror Dash Camera



Rear Camera Kit



Car Charger  
(11.5ft)



Rubber Mounting Strap x 4



Trim Tool



Screw x 4



3M Adhesive Pad x 2



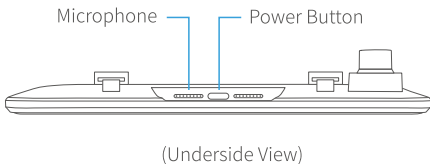
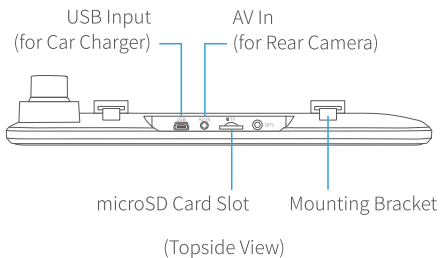
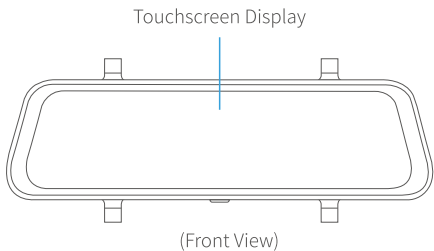
Cleaning Cloth

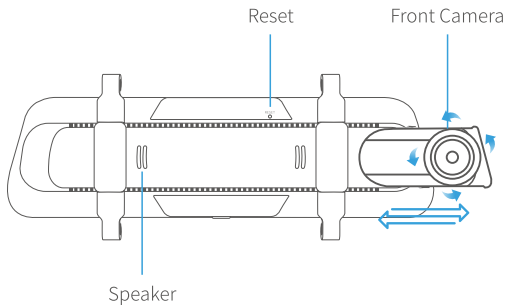


User Manual

# PRODUCT OVERVIEW

## Mirror Dash Camera



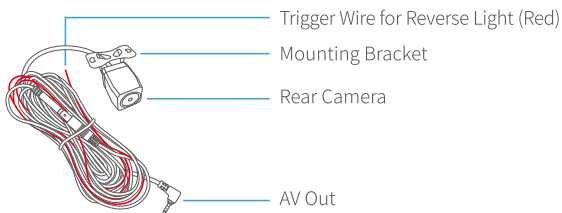


(Rear View)

**Tip:**

To achieve the best view from the front camera, please utilize the extendable plate together with the camera's extension mechanism as needed.


## Rear Camera Kit



## INSTALLATION INSTRUCTIONS

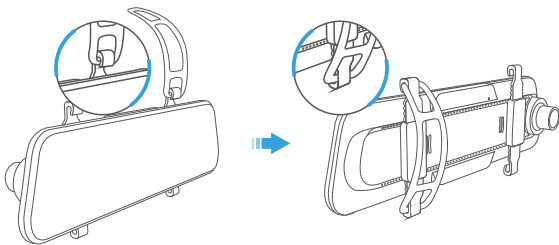
### **i** IMPORTANT:

1. The pre-install test is a must before final installation.

2. Insert a formatted microSD card into the product before your first use.  
To format the card, tap  on the bottom right corner, then tap **SETTINGS > Format > CONFIRM**. Due to the data rate of the video being recorded, a reputable Class 10 or higher speed microSD card must be used.
3. Professional installation of this product is generally recommended.

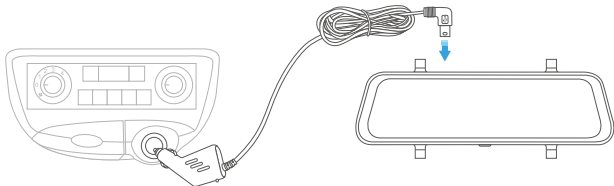
### Step 1:

Mount the **Mirror Dash Camera** over the original rearview mirror of the vehicle with the provided **Mounting Strap**, then adjust the angle of it.



### Step 2:

Connect one end of **Car Charger** cable to the **USB Input** port on the topside of **Mirror Dash Camera**. Plug the other end of the **Car Charger** cable to the **Cigarette Lighter Receptacle** in the vehicle.



**Step 3:**

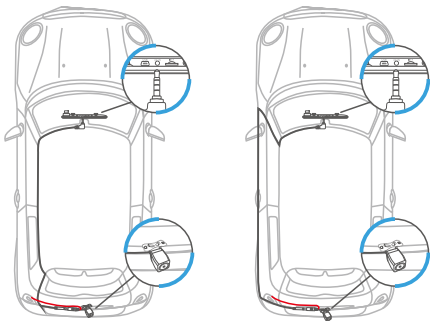
Attach the **AV Out** connector of the **Rear Camera** with the **AV In** port of the **Mirror Dash Camera**, then snake the black cable of the **Rear Camera** through the body of your vehicle to the rear of it.

**Step 4:**

Set the vehicle in reverse gear, then identify the wire that feeding the **Reverse Light** from the rear light cluster. Tie the **Red Trigger Wire** with the positive terminal of the correct wire.

**Step 5:**

Mount the **Rear Camera** to the rear of the vehicle.

**! Notes:**

1. DO NOT connect the **Red Trigger Wire** with **Brake Light** or **Tail Light**.
2. After installation, the **Mirror Dash Camera** will display **Rear Camera's** view by default when starting the engine.
3. The **Rear Camera** will be triggered when reversing, and the view will be from the **Rear Camera**.
4. For better viewing, please clean the lenses of both cameras after installing.

# GET STARTED

## Power On/Off

### Option 1:

Start the engine to automatically power on the **Mirror Dash Camera**.

### Option 2:

Press the **Power Button** for 3s to power on/off the **Mirror Dash Camera**. After it is powered on, please tap 🏠 on the bottom right corner, then tap **SETTINGS > Language** to select your language.

## Screen On/Off

Simply press the **Power Button** once to switch the screen off when the **Mirror Dash Camera** is ON; press it again or tap the touchscreen to wake the camera up.

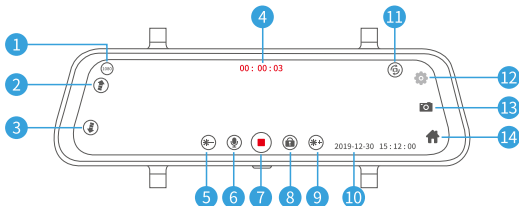
### 💡 Tip:

The **Mirror Dash Camera** can serve as a standard rearview mirror after screen off.

# FUNCTION OVERVIEW

## Video Mode

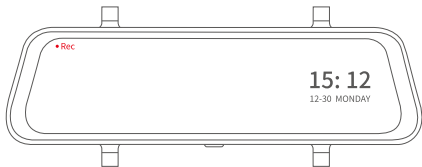
The dash camera will automatically power on and enter **Video Mode** after the engine is ignited.








- |                       |                      |
|-----------------------|----------------------|
| 1 Video Resolution    | 8 Lock/Unlock        |
| 2 Move Upward         | 9 Brightness+        |
| 3 Move Downward       | 10 Date&Time         |
| 4 Time Recorded       | 11 Camera Switch     |
| 5 Brightness -        | 12 Video Settings    |
| 6 Microphone          | 13 Photo Mode Switch |
| 7 Start/End Recording | 14 Homepage          |

\* All the icons in video mode will be displayed on the touchscreen when the dash camera starts recording videos. After a few seconds, it will enter into **full-screen mode**.



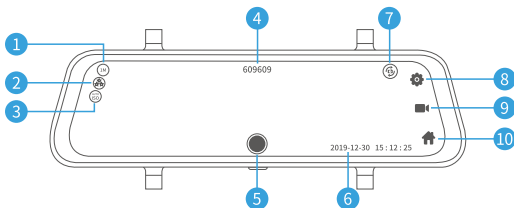
- ① Tap to end & save the recordings into the microSD card and enter **Live Mode**.
- ② Tap to move the front camera upward to achieve the best view from it.
- ③ Tap to move the front camera downward to achieve the best view from it.
- ④ Tap to decrease the brightness of the display screen.
- ⑤ Tap to mute/unmute the microphone.
- ⑥ Tap to start manually recording a locked video at the time length (cycle) you set.
- ⑦ Tap to increase the brightness of the display screen.
- ⑧ Tap to switch among the view from the rear camera, the view from both cameras and the view from the front camera.
- ⑨ Tap to view all the available setting options in video mode.
- ⑩ Tap to switch to Photo Mode.

### ! Notes:





- \* The brightness is set to max by default. The icon  will be grey and not accessible unless you decrease the brightness first.
- \* The icon  will be grey and not accessible when the camera is recording.
- \* The icon  will be displayed on the upper part of the display screen if you manually lock the video.

## Photo Mode

In video mode, tap  on the display screen to enter Photo Mode.

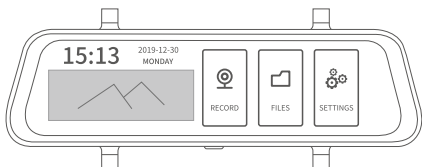





- |                               |                     |
|-------------------------------|---------------------|
| 1 Photo Resolution            | 6 Date&Time         |
| 2 Photo Quality               | 7 Camera Switch     |
| 3 Photo ISO                   | 8 Photo Settings    |
| 4 Number of Recordable Photos | 9 Video Mode Switch |
| 5 Shutter Button              | 10 Homepage         |

- 1 Tap  to capture one photo.
- 2 Tap  to switch among the view from the rear camera, the view from both cameras and the view from the front camera.
- 3 Tap  to view all the available setting options in photo mode.
- 4 Tap  to switch to Video Mode.

## Homepage

Tap  on the display screen to enter the homepage interface.





- \* Tap  to enter Video Mode.
- \* Tap  to manage the files saved.
- \* Tap  to enter System Settings.

## Media Gallery

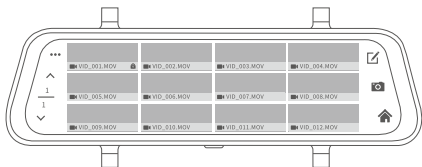
### 1. Check the Video Files

Step ①: In the homepage interface, tap **FILES** > **DCIM**. The **FRONT** folder contains the videos recorded by the front camera, the **REAR** folder contains the videos recorded by the rear camera.

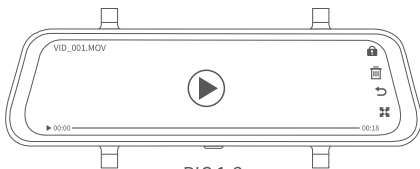
Step ②: Tap to open one folder, then select one video from the thumbnails to enlarge the video and view it in full-screen size.

- \* Tap  /  to move to the previous/next page to view all the video files in thumbnails.

Step ③: Tap  /  to play/pause the video file.






PIC 1-1




PIC 1-2



### Tips:

- \* In PIC 1-2, tap  on the top right corner to manually lock the video file.
- \* In PIC 1-2, tap  to return to the previous menu.
- \* In PIC 1-2, tap  to switch view modes.

## 2. Check the Photo Files

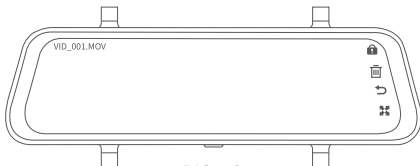
**Step ①:** In the homepage interface, tap **FILES** > **DCIM**, then tap  to switch to photo folder. The **FRONT** folder contains the photos captured by the front camera, the **REAR** folder contains the photos captured by the rear camera.

**Step ②:** Tap to open one folder, then select one photo from the thumbnails to enlarge the photo and view it in full-screen size.

- \* Tap  /  to move to the previous/next page to view all the photo files in thumbnails.






PIC 2-1



PIC 2-2

### Tips:




- \* In PIC 2-2, tap  on the top right corner to manually lock the photo file.
- \* In PIC 2-2, tap  to return to the previous menu.
- \* In PIC 2-2, tap  to switch view modes.

## 3. Check the Locked Files

Step ①: In the homepage interface, tap **FILES** > **DCIM**, then tap  > .

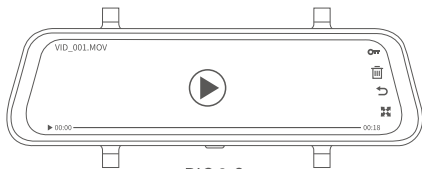
The **FRONT** folder contains the locked videos recorded by the front camera, the **REAR** folder contains the locked videos recorded by the rear camera.

Step ②: Tap to open one folder, then select one locked video from the thumbnails to enlarge the video and view it in full-screen size.

- \* Tap  /  to move to the previous/next page to view all the locked files in thumbnails.
- \* The icon  on the top right corner means the file is locked, tap once to unlock the file.






PIC 3-1




PIC 3-2

### Tips:

- \* In PIC 3-2, tap  on the top right corner to manually unlock the video file.
- \* In PIC 3-2, tap  to return to the previous menu.
- \* In PIC 3-2, tap  to switch view modes.

## 4. Delete the Video/Photo/Locked Files

**Step ①:** In the interface of PIC1-1, PIC2-1 and PIC3-1, tap  once.

**Step ②:** Tap  on the thumbnail to select the files that need to be deleted.

**Step ③:** Tap  to bring up the deletion option.

**Step ④:** Tap DELETE to confirm the deletion.

### Tips:

\* To delete the locked files, please tap  to unlock the files first.

\* Tap  to return to the previous menu.

\* Tap  to return to the homepage interface.

## File Transfer

### Option 1:

Remove the microSD card from the **Mirror Dash Camera** and insert it into a card reader(not supplied), then plug the card reader into a computer to make file transfer.

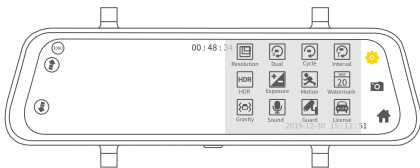
### Option 2:

Directly connect the **Mirror Dash Camera** to a computer with a USB cable, then tap **Memory Mode** on the touch screen to use the dash camera as a USB disk.

## SETTINGS

### Video Setting

In video mode, tap  on the top right corner to bring up the menu that displays all the available setting options.





## Resolution

The resolution of the **front camera** and the **rear camera** is set to **1080P** by default. Tap to change the resolution of the front camera.



## Dual

This setting is set to **ON** by default. Sets to **OFF** implies that the view from the rear camera can only be viewed on the dash camera, but will not be recorded or saved into the microSD card.



## Cycle

Change the recording time of each video. Options are **OFF**, **1 Min**(default setting), **3 Mins** and **5 Mins**.

### ! Notes:

- \* If you choose a time length from **1 Min/3 Mins/5 Mins**, the new files will overwrite the old one if the space of the microSD card is full.
- \* If you choose the option **OFF**, each recording will be saved in **3 Mins** time length, and the dash camera will stop recording once the space of the microSD card is full.



## Interval

Sets the frame rate of the video. The camera captures 30 frames per 1s by default (**OFF**). If the **Interval** is set to **100 ms**, the camera will capture 1 frame per 100 ms and merge them into a video. Set to **200 ms** indicates the camera will capture 1 frame per 200 ms, and set to **500 ms** indicates the camera will capture 1 frame per 500 ms.



## HDR(High Dynamic Range)

Setting to **ON** implies the camera will keep more original details, thus the visual effects of the video will better reflect the real environment.



## Exposure

Set the amount of light per unit area. Higher value results in a brighter image.



## Motion

If the dash camera is powered on and not recording, the dash camera will automatically start recording a video when a moving object is detected. When the object stops moving, the camera will stop recording after 5 seconds. The video recorded is not locked.



## Watermark

Show/hide the Date&Time on the lower left corner of the video files.



## Gravity

Sets different G-sensor sensitivity of collision detection when driving. You can select from **Low**, **Middle**, **High** and **OFF** as needed. When the dash camera is recording, if the car encounters a collision, the current video will be locked. Select **High/Low** implies the dash camera will lock the current video when the car encounters a **minor/severe** collision.



## Sound

Tap to enable/disable the microphone when recording.



## Guard

Setting to **ON** implies when parking(the dash camera is off), the dash camera will automatically start recording a video for around 30s when the car encounters a collision. The video is locked and will not be overwritten.




## License


Sets to display the vehicle license on the lower left corner of the screen.



## ! Note:

Please tap  on the bottom right corner of the display screen, then tap **SETTINGS > License** to input your license number.

## Photo Setting

In photo mode, tap  on the top right corner to bring up the menu that displays all the available setting options in photo mode.



### Resolution

The photo resolution of both the front camera and the rear camera is set to **1M** by default. Tap to change the photo resolution of the front camera.



### Delay

Sets different capture mode as needed. You can select from **Shot**(default setting), **Delay2s**, **Delay5s** and **Delay10s**.



### Continuous

Sets to **ON** implies the camera will capture **3** photos continuously when you press the shutter button.



### Quality

You can select image quality from **Good**(the highest JPEG resolution), **Standard** and **Economy** (the lowest JPEG resolution).



### Sharpness

It determines the amount of detail an image can convey.



### Color

Sets to render specific colors.



### ISO

Sets to amplify or decrease the image sensors' ability to read and gather light during exposure.



### Exposure

Sets the amount of light per unit area. Higher value results in a brighter image.



### Anti-Shake


Sets to **ON** implies the camera will shoot images at slow shutter speeds without causing blurring when shooting handheld.

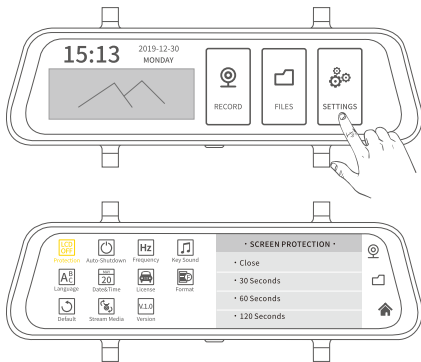


### Watermark

Show/hide the Date&Time on the lower left corner of the photo files.

## System Settings

Tap  on the display screen to enter the homepage interface, then tap **SETTINGS** to enter **System Settings**. The options of the selected setting will be displayed on the right of the display screen.



### Protection

Sets a time duration, after which the dash camera will screen off to save battery.



### Auto-Shutdown

Sets a time duration, after which the dash camera will automatically power off.



### Frequency

Sets different frequency according to the power supply specification used in your country or geographical region.



### Key Sound

Turn on/off the button sound.



### Language

Sets the language that displays on the screen.



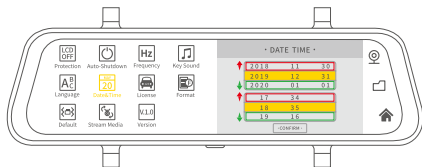
## Date&Time

Sets **Date/Time** that shows on the lower right corner of the display screen.

**Step ①:** Tap on the upper/bottom part of the first rectangle to increase/decrease the value of **Year**, **Month** and **Day** accordingly.

**Step ②:** Tap on the upper/bottom part of the second rectangle to increase/decrease the value of **Hour** and **Minute** accordingly.

**Step ③:** Tap **CONFIRM** when the Date&Time is correctly set.



## License

Tap to input your vehicle license.

**Note:**

The license will not be displayed on the main screen unless the **License in Video Setting** is set to **ON**.



## Format

Sets to format the microSD card inserted. Please note that all the files in the card will be lost.



## Default

Sets to reset the dash camera to default setting.



## Stream Media

Sets which camera's view will be shown on the display screen when the dash camera is powered on. Set to **ON(default setting)** implies the view from the **rear** camera will be shown on the display screen. Set to **OFF** implies view from the **front** camera will be shown on the display screen.



## Version

Tap to check the version of the dash camera. The information maybe required if technical support is needed.

# SPECIFICATIONS

CPU	ARM Cortex A5
Display Size	IPS 10 Inch
Display Resolution	1280 x 320
Speaker	1W
microSD card	Support up to 128GB (not included)
Battery	400mAh/3.7V
Touch	Single-Touch
Connection	Mini USB Port, AV In Port, microSD Card Slot
Video Resolution	1920 x 1080P@30fps
Sensor(Front Camera)	SC2360


Sensor(Rear Camera)	FH-2031J
Video Format	MOV
Photo Format	JPEG

## TROUBLESHOOTING GUIDE

**Q1: The dash camera stops recording after a period of time.**

- \* Please check if the microSD card is full of locked videos. If yes, please erase the unnecessary videos or format the microSD card.
- \* Make sure the "Cycle" function in **Video Setting** is set to **ON** to prevent the dash camera from stopping recording once the space of the microSD card is full.

**Q2: The microSD Card can't be read, or there is an error after it is installed in the dash camera.**

- \* Make sure the microSD Card is installed correctly.
- \* Tap  , then select **SETTINGS > Format** to format the microSD card.
- \* Try another Class 10 microSD Card with a well-known brand, such as SanDisk, Kingston, Samsung etc...

**Q3: The dash camera restarts automatically.**

- \* Please check if the USB cable is in poor contact.
- \* Remove the microSD card to see whether it's caused by the microSD card.
- \* Insert a pin into the **Reset Hole** to make a factory reset.

**Q4: A pause or frame skipping occurs when playing the videos or photos.**

- \* Try another Class 10 microSD card with a well-known brand and format it.
- \* Try to use the media player that can decode H264 compressed.

Q5: The video recorded in the microSD card is blurry or shows strips.

- \* Please check whether the lens of the dash camera is dirty.
- \* Please take off the protective film of the lens.
- \* Please check whether the windshield of the vehicle is clean enough.
- \* Please set the correct **Frequency** according to your country or geographical region.

## CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.  
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

 The symbol indicates DC voltage



RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.



## CUSTOMER SUPPORT

North America : [support@vantop.com](mailto:support@vantop.com)

United Kingdom : [support.uk@vantop.com](mailto:support.uk@vantop.com)

France : [support.fr@vantop.com](mailto:support.fr@vantop.com)

España : [support.es@vantop.com](mailto:support.es@vantop.com)