# **IRO** Dashcam

for Tesla Model S AP1

### Introduction

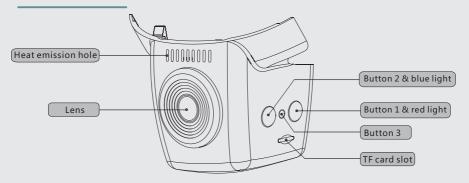
Please read this manual completely before beginning your installation.

Thank you for your purchase of the IRO® Dashcam. Your new IRO Dashcam is only for use in Tesla Model S AP1 (Equipped with Autopilot 1.0 system).

Your IRO® Dashcam can record up to 1920x1080 full HD video. Using your smart phone app, you can connect your phone to your IRO® Dashcam using the built-in WiFi. You may use your smart phone to view real time video from your camera, as well as play video, save video, and download video. The IRO® Dashcam may be completely controlled via the smart phone app.

Note: We are always working on updating the IRO® Dashcam. If you find any discrepancy in this manual, please use the information found with the DVR app.

#### **Product Structure**



#### Button 1 & Red light.

Short press to turn on the dashcam. Long press to turn off the dashcam. Short press to take a photo while recording. Red light on means standby.

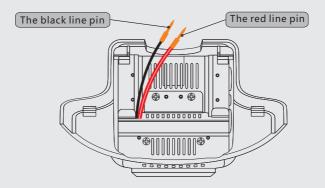
#### Button 2 & Blue light.

When car is powered on, the blue light will flash slowly to indicate that the IRO Dashcam is recording. While recording a short press of this button will lock the video to prevent it from being recorded over. The button will flash green rapidly. A long press of this button will stop recording.

Button 3: Reset button. Short press to reset the system.

NOTE: Audio recording is ON by default. If you wish to disable audio recording, simply mute the audio using the smart phone app.

#### **Product Structure**



The pin on the black line connects to the black wire of the car power connector.

The pin on the red line connects to the red/yellow wire of the car power connector.

When inserting the pins into the power connector, be sure the pins are gently pushed all the way into the connector to assure a good connection.

### Power supply wiring

Insert the pin on the end of the red wire from the camera to the red/yellow wire of the car power connector.

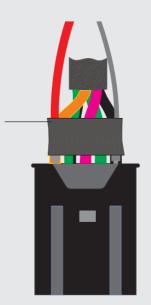


Insert the pin on the end of the black wire from the camera to the black wire of the car power connector.

The IRO® Dashcam is powered from the car's rearview mirror. This avoids having to run power wire throughout the car and into the fuse panel. This method of powering the IRO® Dashcam is more streamline, and avoids having to see ugly wires. The TF card is inserted last.

## Power supply wiring

After inserting the pins into the car power connector, use the provided tape strips to hold the wires in place. This will prevent the wires from separating.



Be sure that the pins on the wires from the IRO® Dashcam are fully inserted and making good contact before applying the tape. Once the wires are properly connected, you will hear an audible beep from the IRO® Dashcam. You will also see the green light indicating the unit is powered on. If this doesn't happen, check your wiring to make sure the pins have good contact with the car power connector and the wires are not loose.

### **Installation Video**

We strongly recommend that you see our installation video before installing. Please scan the following QR to watch the installation video.



Installation video

## **Installation Steps**



Before installing



During installation, be careful when removing the plastic shell from the mirror. You don't want to slip and hit your arm on the dashboard.



Use both hands to remove the plastic shell from the mirror base. You may have to apply downward pressure to remove it.



To remove the power connector, press it in. The power connector will spring out and is easily removed.



See pages 3-5 for proper wiring.



Apply wires using diagrams provided on pages 3-5.

### **Installation Steps**



Once the wiring is completed, you will hear the IRO® Dashcam emit a beep and see a red light. This indicates proper wiring.



Use the provided tape strips to hold the wires in place. This will prevent the wires from separating. Wrap the tape around the wires to hold them together.



Plug the power connector back into the socket from which it was removed.



Align the IRO® Dashcam to the mirror base aligning the plastic hooks.



Firmly press the camera into place making sure all four of the plastic hooks are fastened. The IRO<sup>®</sup> bashcam should fit snugly as if it were the original shell. Insert the TF card. A class 6 TF card is recommended.



Congratulations! Your installation is complete. Please be sure to keep the original shell which you removed. This will allow you to move the camera to another vehicle in the future and put your original shell back in place.

### 1. Recording

When you start the car, the dashcam will be switched on and video will begin automatically. The blue light flash slowly. If the red light is always on, and you hear a sound, this indicates that the TF card is not inserted.

#### 2. Button 1

Recording state short press the button 1 to take a photo, the system will make a clicking sound.Long press the button 1 to shutdown, shutdown state short press button 1 to boot.

#### 3. Button 2

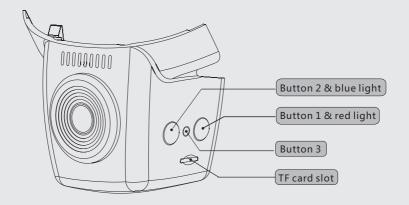
During recording, if you want to save a video and make sure it is not over written, perform a short press of button 2. Your IRO Dashcam has a shock sensor that will automatically lock your recording to prevent overwriting in event of a car crash(This feature is turned off by default). A long press of button 2 will stop recording.

#### 4. Button 3

This is the reset button, press this key to reset the system.

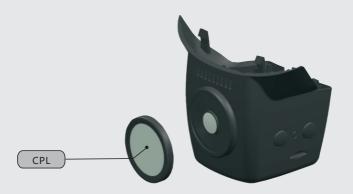
### 5. Set the system time

It will automatically synchronize the time when use phone app connecting to the dashcam .The dashcam Recorder has time memory function.But if you're not driving your car for a long time.Time will revert to the original date.At this point, you need to connect app sync time.



The meaning of the light under the different conditions

	Always on	Slow flash	Quick flash	
Red light	No recording	_	Lock the video	
Blue light	_	Recording	Lock the video	



Magnetic CPL(Circular-Polarizing Filters), using the magnetism to install.

The purpose of CPL is to decrease the backlight reflection from the windshield of the car. The CPL is rotatable, please adjust the CPL to suitable angle, so that the device can maximum reduce the backlight reflection.

The adjusting method as below:

- 1. Using your smart phone app, you can connect your phone to your IRO Dashcam using the built-in WiFi, observe the backlight reflective situation;
- 2.Put something white(such as paper) at the central control desk, where the dashcam can be took video. So the dashcam can record the inverted reflection in windshield of the blank paper right now.
- 3.Rotaing the polarized lens, observing the image of your smart phone until the inverted reflection of something white becomes smallest, even disappeared.



The CPL is rotatable, adjusting to the suitable angle.

## CPL



Paper reflection.



Reflection almost disappeared when CPL rotate to suitable angle

#### Install APP

Scan the QR code with your mobile phone to install the APP. Or in the Apple store search: Lerccenker or Luckycam. Search in Google play: Lerccenker or Luckycam.



iOS version



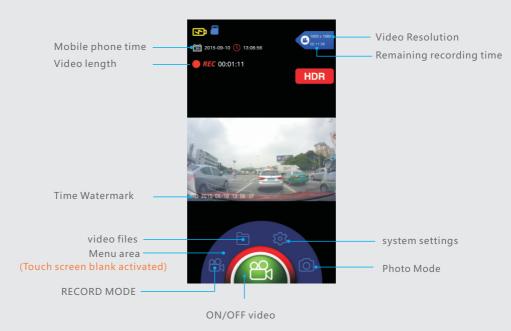
Android version

### Connect with your cell phone

After the recorder is turned on, the system will launch a wifi signal, such as IRO\_xxxxxxxxx, in the system select this wifi on your smart phone, enter the initial password: 12345678, you can build a wifi connection with the machine.

Note that some Android phones automatically detect whether WiFi is connected to the Internet when connecting to a WiFi. Because the WiFi of the dashcam is not connected to the Internet, the phone may indicate that WiFi is not available. Please ignore this prompt and keep the connection.

#### 6. App Main Interface

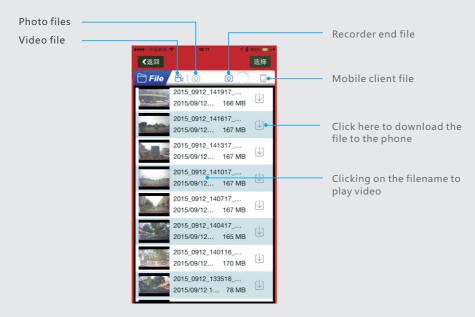


#### 7. System Settings





#### 8. File Management Interface



## **Product specification**

Imaging element	CMOS(Sony323)
Lens	Wide Angle lens/6G/F1.8 aperture
The lens wide Angle	Level 138°
Video coding	H.264
Video Resolution	1920×1080 30FPS
Memory card type	TF card (maximum support 64 GB FAT32 format)
External power supply	DC12V
Built-in power supply	Super-capacitor
Dimensions	108×78×66mm
Machine weight	106g
Operating temperature	-20°C~70°C

### **Memory card**

High quality memory card can be more stable and efficient video recording, we recommended to choose genuine licensed TF card; Select Class 6 or higher read / write rate.

TF card Capacity	1920×1080 30fps	1280×720 30fps
16GB	150min	290min
32GB	300min	580min
64GB	600min	1160min

TF memory card capacity and corresponding recordable time (for reference only, please refer to the actual)

Note: the system may not be able to identify some of the more than 64GB MicroSD cards, you need to use a special tool to format the MicroSD card. You can consult our customer service staff to obtain this tool. You can also enter the following URL or scan the following QR:

https://goo.gl/AS8K15(case sensitive).



Once again, thank you for choosing the IRO Dashcam. Please keep your manual in a safe place. If you have any questions, please contact our customer service department.
Note: Tesla and Model S are registered trademarks of Tesla Inc