

### Vico-Marcus 3 Installation Guide

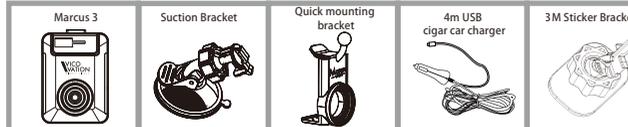
Thank you for choosing Vico-Marcus 3 Extreme HD Car Camcorder. Please follow the installation guide for more detail when using Vico-Marcus 3, and notice our highlight parts as important reminders.

#### Vico-Marcus 3 Outlook Introduction:



- 1. Power button
- 2. Down / Mute
- 3. Up / MENU
- 4. Start/Stop record/Confirm
- 5. Emergency Record / Return
- 6. Micro SD card slot
- 7. USB / Power socket
- 8. HDMI output
- 9. External GPS socket
- 10. Speaker
- 11. Microphone
- 12. 2.0" TFT LCD Display
- 13. LED indicator (Red=Recording, Green=Stand by, Red Flashing=No SD Card)
- 14. Bracket socket
- 15. Mega Pixel Lens

#### Vico-Marcus 3 Standard accessories:

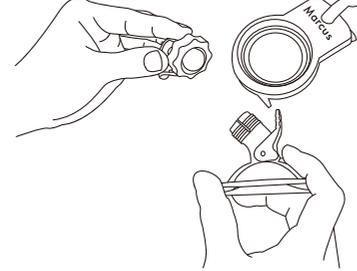


● Installation guide ● Warranty card

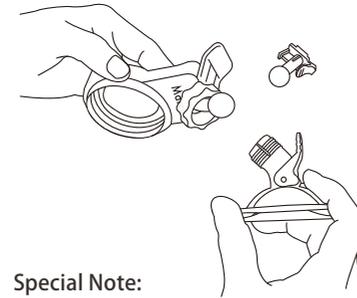
### Marcus Quick Mounting Bracket Installation

There's one quick mounting bracket in Marcus 3 Box. Please check the following steps to reconnect quick mounting bracket with suction bracket.

**Note:** Marcus Quick mounting bracket is compatible with standard 52mm CPL filter to reduce reflection effect from windshield, getting more saturated and beautiful video.



Please loosening the cap nut on Ball Head of Suction bracket first, and pull out T-type ball head.



Insert Quick mounting back into notches. Please notice the cap nut needs to be placed on ball head firstly. And properly fasten the cap nut after you put on Marcus 3.

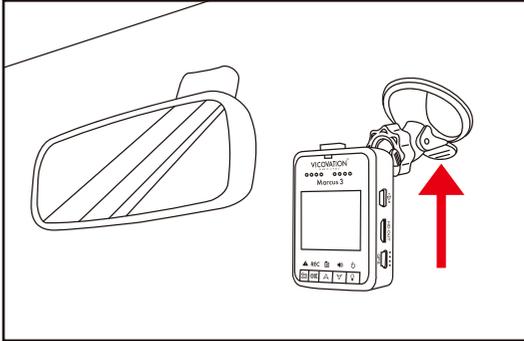
#### Special Note:

- CPL filter is optional accessory, not including in box. Users can choose Marcus CPL filter or any 52mm standard CPL filter.
- CPL filter will lower a little bit brightness of image. Please adjust it especially for night-time record. You can 1. Adjust CPL angle. 2. Set EV value. 3. Or you may Disassemble CPL filter at night.

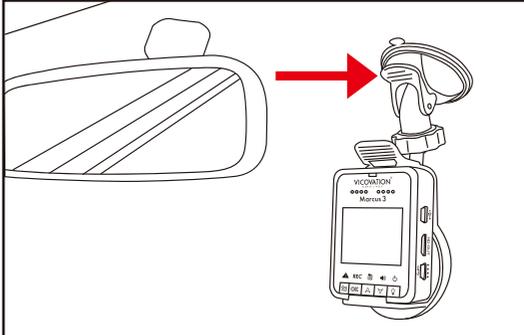
### Suction Bracket & Quick mounting bracket

Vico-Marcus3 equipped with Quick mounting bracket module, you may switch it into Suction bracket or Sticker bracket. We listed 2 ways of installation below with Suction bracket integrated type.

Users may choose by their preference. Install bracket in the proper position on windshield and avoid any view-blocking.



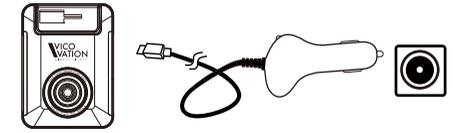
▲ Type A: Marcus 3 + Standard Suction Bracket  
Please notice that the direction of Suction handle faces forward the windshield.



▲ Type B: Marcus 3 + Quick mounting bracket + Suction Bracket  
Please notice that the direction of Suction handle faces upper side.

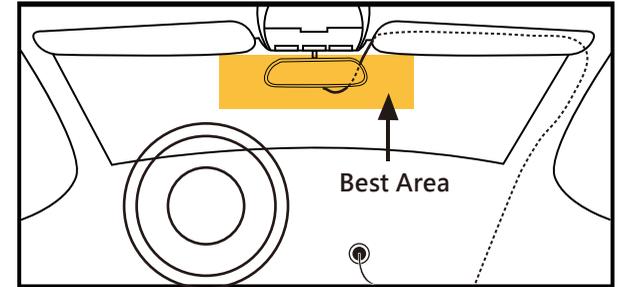
### First time installation

- Always use original VicoVation USB Cigar Car charger in box.
- Install USB Cigar charger into car cigarette Lighters socket, and another USB side insert into Vico-Marcus 3 USB socket.
- Install bracket in proper position on windshield and avoid any view-blocking for driver.



#### DIY Installation and wiring

How to embed the cable easily by yourself: Cable can go through sunshade board, along with door rubber sealing on one side of front pillar (A pillar), and then beneath the carpet of front passenger seat. (You may need special tool for wiring under rubber sealing or professional assistance.)

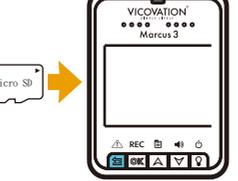


**Special Notice:**  
1. Vico-Marcus 3 applies unique designed Marcus car charger for auto boot up. Please apply only VicoVation Marcus car charger to avoid any damage.  
2. Please notice that Marcus car charger is a unique design for Marcus

**Special Notice:**  
1. If there is safety airbag inside your car front pillar, please ask for professional assistance. Try not to embed the cable on your own.  
2. Please restore the rubber sealing after embedding power cable.

### First time operation

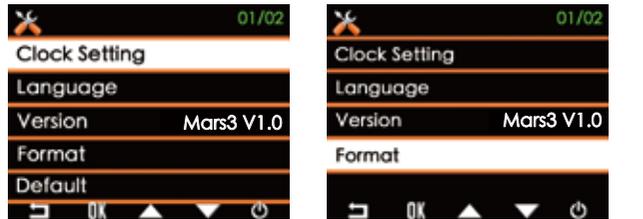
- Insert Micro SD card firstly. (Please aware the direction of Micro SD card data pins.)
- Marcus 3 support Extreme HD 1296p and High Speed Full HD 1080p 60fps recording. Micro SD card under Class10 is forbidden.



#### Normal Recording Time Table (Not including 15 sets Emergency Record):

	1296p 30fps	1080p 60fps	1080p 30fps	720p 60fps	720p 30fps
8GB	45 mins	45 mins	75 mins	100 mins	180 mins
16GB	105 mins	105 mins	166 mins	215 mins	375 mins
32GB	222 mins	222 mins	347 mins	445 mins	765 mins
64GB	460 mins	460 mins	710 mins	910 mins	1545 mins
Video Bit Rate	18Mb/s	18Mb/s	12Mb/s	9Mb/s	6Mb/s

- After power on, device will boot up and enter into recording mode. The initial 3-second recording period is protected from stopping. To enter MENU is not limited by these 3 seconds.
- Please setup system time and format Micro SD card manually for the first time operation.
- To remove Micro SD card, please stop recording or power off firstly to protect recording data.
- Please use Micro SD card (SDHC/SDXC) with level Class10 only.



**Note:**  
Marcus 3 uses standard Micro SD card slot format.  
Marcus 3 becomes card reader (Slave device) in connection with PC by USB cable. To operate Marcus 3, please connect it with cigar car charger or USB power adaptor.

### Main Display

#### Recording:

- Under normal recording, icons represent (From upper left side): Red dot recording sign/ Current Time/ Recording Size/ G-Sensor function sign/ Emerg. Rec. Numbers.



#### 2. Icons in bottom side:

- Emergency record/ Recording sign/ Menu/ Voice recording/ mute switch Power ON/Off



#### User Interface:

- Video settings
- Function Settings
- Display settings
- Audio settings
- Playback settings
- System settings.



### Settings detail

#### Video Settings:

Set video resolution and EV value. 1080p 30fps is recommended.



#### Function Settings:

Setup sensibility of G-Sensor (Default setting is OFF).

#### GPS settings:

To activate this function, please install Marcus GPS Mouse (Optional) and plug the GPS socket properly. (If GPS module doesn't be installed properly, the settings won't be able to enter.)



#### Special Notice:

- GPS relative function can be only activated while GPS installed correctly. GPS function menu can be entered after GPS antenna receive GPS signal.
- After booting, GPS function will be activated after GPS signal received.

After successful GPS positioning, a Blue Arrow will pop out at the top of display to confirm GPS features are activated.

**LDWS (Lane Departure Warning System):**  
When current speed reach your setting value (For example: 60km/h), Marcus 1 will notify drivers with Beep sound and alert Icon while lane departure.  
**FCWS (Forward Collision Warning System):**  
When current speed over 60km/h, Marcus 1 will notify drivers with Beep sounds and alert Icon if distance between car in front reaches 5~7 meters.

## Calibration:

Marcus 1 has to be calibrated to improve the accuracy for LDWS/FCWS activation. After set LDWS/FCWS ON, baseline will show up on monitor when back to Recording Mode. **Please align the Red line with horizon. Baseline will vanish after 30 seconds.**



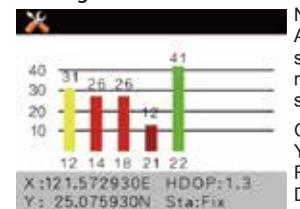
## Over-speed Warning:

Users can choose 80/90/100/110/120/130km. When the driving speed is higher than setting, Marcus 1 will notify with warning beep and Alert Icon to remind driver.

## Over-Speed camera detection:

For some specified countries, this feature is available. (Currently for Taiwan Only)

## GPS Signal:



GPS Positioning requires at least 3 Normal satellite signals to accomplish. As picture shown, there are five satellites signal captured. Different color represents different strength of GPS signal.

Green: Great (40dB or above)  
Yellow: Normal (30~40dB)  
Red: Medium (20~30dB)  
Dark Red: Bad (20dB or below)

Monitor will display Blue Arrow icon on top to confirm the GPS positioning successfully.



Special Notice: Windshield film contains metal ingredient or high buildings might affect GPS signal receiving. Please kindly notice that if monitor show Blue Arrow icon while install Marcus GPS module.

Or you can enter Menu → Function to see the positioning status, to make sure you capture more than 3 Normal satellite signal (40~30dB Yellow color bar). Various environment causes different signal receiving, requiring different positioning-accomplished time.

## Display settings:

**LCD Auto Off:** Default setting is Always ON. Users can choose 1 min/ 3 mins/ 5 mins. After Marcus 1 power on, LCD screen will be OFF (Sleep mode) according to your setting. LCD screen can be waked up by tap ON/OFF button.

**LCD Brightness:** Default setting is Standard. LOW is adjustable.

**Data Stamp:** Time stamp will be tag at bottom left side of video. Default setting is ON.

**Vico-Tag:** 10 characters can be set manually. This Tag will be embedded next to Time Stamp.

**When open "Current Speed & Location overlay", Vico-Tag would not be showed.)**

**Image inverse:** Default setting is OFF. This feature is for special installation.

**Image mirror:** default setting is OFF. This feature is for special installation.



## Audio settings:

Default of Audio recording is ON. By pressing Down Key button (When recording), audio record on/off can be switched rapidly. (hot-key switch)  
Volume control: Default setting is Medium. Volume of videos in playback mode can be set as High/Medium/Low.



## Playback settings:

1. Enter MENU, Select Playback.  
2. In playback mode, you may press ON/OFF key to switch between Normal Record files and Emergency Record files mode. Press arrow key to select files, and then press OK to playback/delete/lock the file.

## Files Lock (File protection):

Expect for Emergency record files, Marcus 1 support manually File Lock function to protect files from overwriting by circular recording when SD card is full.

## System settings:

**Clock Setting:** Please manually setup system time for first time operation.  
**Language:** Default setting is English. 15 more languages can be selected.

**Version:** Display current software version.

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[www.vicovation.com](http://www.vicovation.com)

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## Playback video on PC

1. After Marcus 3 power off, take out Micro SD card. Using Card adaptor or card reader to connect with PC. Copy videos from SD card to PC to playback.

2. Marcus 3 can become a card reader when connecting with PC by USB cable directly. When connecting PC by USB cable, please manually turn on Marcus 3.

**Notice:** Make sure the files are copied to PC HDD for playback. Otherwise, it might not be smooth enough due to lack of transmission speed from SD card to PC.

Marcus 3 store .MOV format with H.264 compression. Some built-in PC media player might not support H.264 codec, causing unsmooth playback or no image. Users can download other professional player to solve this problem.

Marcus 3 default video file is under 1920x1080 @ 30fps. Higher computing power and graphic card requirement are necessary for PC environment.

**Special Notice:** If recorded video display on PC is not normal, users can use Vico-Marcus 3 to playback video in SD card. This is the best way to first check whether the video is corrupted or not. If the display on device itself is smooth, it means the files are properly stored. You may double check PC environment for correction.

## Special Note:

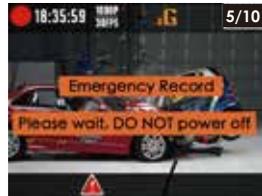
1. Video brightness and clarity will be different because of window film. Please adjust the EV value to achieve better image.
2. Marcus 3 has super capacitors built-in instead of Li-ion battery. Please power on Marcus 3 with VicoVation Marcus Cigar Car Charger.

## 3 Axis Gravity Sensor

Marcus 3 has built-in G-Sensor which can detect accident bump/crash and trigger emergency record automatically. To avoid any false alarm during initial installation, G-sensor function is defaulted as OFF. Please install device properly first and then enter MENU to activate this function manually. When G-Sensor is activated, detection will be started in 15 seconds to avoid false alarm.



After 15 seconds of each boot up, G-Sensor will be activated with "G" icon on the top side of LCD display.



When G-Sensor detects bump/crash



Data Backup



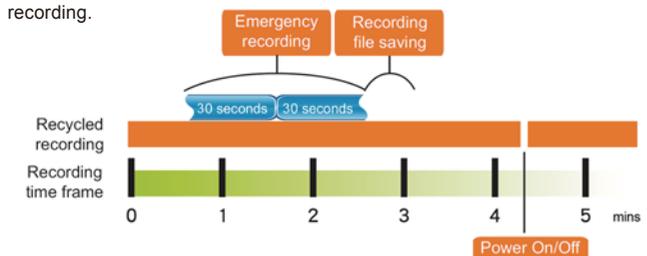
Data Backup

## Special Note:

After 30 seconds upon detection, device will start backup process. Bottom side of LCD monitor will pop up with red triangle signal. It will last about 2 to 3 mins. During this period, no other operation can be made. Please wait till the end of processing and do not remove power.

## Emergency Record Function

1. You may manually press orange button to trigger emergency record when emergency happens. Bottom side of LCD monitor will pop up with red triangle signal.  
2. Marcus 3 will pack 30 seconds before and after you trigger the emergency button (total 1 min video) into emergency folder. The file will be protected from circular recording.



3. Note: after 30 seconds from triggering, device will start backup process. Bottom side of LCD monitor will pop up with red triangle sign. It will last about 2 to 3 mins for processing. During this period of time, no other operation can be made. Please wait till the end of the process and do not remove the power.



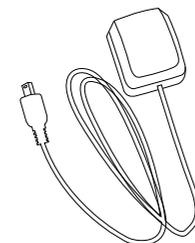
Special Note: if power is removed during emergency record or backup process, device will continue to finish this process in the next power up. It will take longer time to finish processing. Please keep patient. Please DO NOT repeatedly remove power when triangle signal pops up. It will extend processing time by abnormal power off during Emergency Record/Data backup.

## Optional Accessories

### (Optional) Marcus GPS mouse

#### New add function with Marcus GPS mouse installed:

1. LDWS (Lane Departure Warning System).
  2. FCWS (Forward Collision Warning System).
  3. GPS Tracking, work with VicoPlayer.
- Download from [www.vicovation.com](http://www.vicovation.com)
4. Over Speed warning system.
  5. GPS location/Speed info overlay on video.



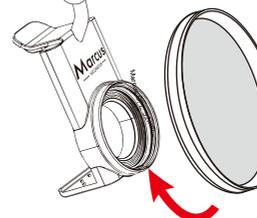
### (Optional) Marcus CPL filter

Marcus Quick mounting bracket is compatible with standard 52mm CPL filter. Users may purchase optional Marcus CPL filter or other compatible one.

Notice: CPL filter would lower a little bit brightness of image. Please adjust it especially for night-time record. You can

1. Adjust CPL filter to adjust deflection angle
2. Set EV value
3. Disassemble CPL filter

Install CPL filter can reduce reflection effect from windshield, getting more saturated and beautiful video.



If there is any question, please don't hesitate to contact us.

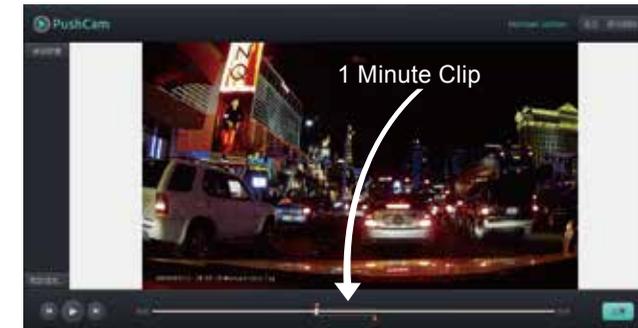
Email: [service@vicovation.com](mailto:service@vicovation.com)

Facebook: [www.facebook.com/vicovation](https://www.facebook.com/vicovation).

## Marcus 3+PushCam

VicoVation crossover PushCam Service, providing PushCam Platform for Dash Cam video uploading/sharing.

Download PushCam Player (Support Windows & iOS) from PushCam website. Take out SD card from Marcus 3 and connect with PC. Open the video files by PushCam Player. Edit your one minute clip (Or 1 min emergency recording) and then upload to PushCam. Share/backup the special scenery captured when driving. Video witness also helps to clarify accident causes.



## Special Notice:

1. PushCam platform limit video clip to be 1 min when upload. Please edit the 1 min video by the Tool Bar below the PushCam Player.
2. Users are able to upload one minute Emergency recording easily without any additional editor.
3. Log in PushCam by your Facebook or Google+ account.

