



f491x

**Car Camcorder
User Manual**

About This Guide

The content in this document is for information purpose and is subject to change without prior notice. We have made every effort to ensure that this User Guide is accurate and complete. However, no liability is assumed for any errors or omissions that may have occurred.

The manufacturer reserves the right to change the technical specifications without prior notice.

Regulatory Notices

This document provides country- and region-specific non-wireless and wireless regulatory notices and compliance information for your product. Some of these notices may not apply to your product.

Prohibition of Co-location

This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.

WEEE Notice

Disposal of Waste Electrical and Electronic Equipment and/or Battery by users in private households in the European Union



WEEE



Battery

This symbol on the product or on the packaging indicates that this cannot be disposed of as a household waste. You must dispose of your waste equipment and/or battery by handling it over to the applicable take-back scheme for the recycling of electrical and electronic equipment and/or battery. For more information about recycling of this equipment and/or battery, please contact your city office, the shop where you purchased the equipment or your household waste disposal service. The recycling of materials will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and environment.

CE Regulatory Notice

The product herewith complies with the requirements of the IEC 62368-1:2018, the EMC Directive 2014/30/EU, and the RoHS Directive 2011/65/EU.

EU Health Protection: This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.

Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.

Notes on Installation

1. Please measure the front windshield viewing area, make sure not to block driver's front view, install the camcorder below the rearview mirror (the central, higher right position of the front windshield). And we recommend that the sky and the land occupied by the screen 50%, fix the car holder and then adjust the camcorder so that the lane is aligned with the screen.
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 pictures. Clean the lens on a regular basis.
4. Do not install the camcorder 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. This product is suitable for light windshield or light color heat-resistant film windows, it will affect video quality if install it on the dark windows or dark heat-resistant film windows.
7. Use the products of the attached power charger only, please do not use other brand power charger, in order to avoid equipment burn.

Caution

- ❖ Disposal of a battery into fire or a hot oven, or mechanically crushing or

- ❖ cutting of a battery, that can result in an explosion.
- ❖ Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
- ❖ Due to local laws and vehicles safety considerations, do not operate the camcorder while driving.
- ❖ Open app and synchronize date and time accurately before you use this camcorder.
- ❖ The firmware function in the camcorder is for reference only, drivers are advised to exercise discretion based on actual road conditions.
- ❖ The results of GPS positioning are only for reference, and should not affect the actual driving situation. The camcorder 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 camcorder may differ. The camcorder cannot determine the accuracy of the positioning results from different hardware.
- ❖ The values stamped in this camcorder, such as speed and position, may be inaccurate due to the influence of surrounding environment. They are for your reference only.
- ❖ This product is used only for non-commercial use, within the maximum limits permitted by applicable law. We do not take any responsibilities for the loss of use of the product.
- ❖ Wi-Fi Signals are unable to pass through the building. The max limit of signal transmission is 5m.
- ❖ Wi-Fi Operation Channel: Ch1~Ch13
- ❖ The product employs wireless data communication which may interfere, or be interfered by, a near-by camcorder.
- ❖ Never use this camcorder in the vicinity of a microwave oven or at places where there is radio interference.
- ❖ Radio wave reception may be worsened in specific environments.

- ❖ Please be advised that if another camcorder is also using the same 2.4GHz band as this product, the processing speed of both camcorders may slow down.
- ❖ This camcorder gets warm when in use; this is normal.
- ❖ Improper use or operation of the product may result in damage of the product or its accessories and void the warranty.
- ❖ The radio frequency (RF) generated by this RF electronic camcorder may cause adverse effects on the operation of other electronic camcorders and result in malfunctioning. Wireless transmitters and circuitry may also interfere with other electronic camcorders. Therefore, do observe the following precautions:
 - **Aircraft:** Never use a radio transmitter when you are in an airplane. Please switch off the Wi-Fi function of the camcorder.
 - **Vehicle:** The radio frequency transmitted by this camcorder may affect the electronic system in a motorized vehicle. Please consult the manufacturer or dealer of your vehicle on the possible effect.
 - **Pacemaker:** In order to prevent any potential interference to a pacemaker, anyone who uses a pacemaker should be advised, that, when using this camcorder, a minimum distance of 15cm (6 inch) should be kept between the camcorder and the pacemaker; and never put this camcorder in a chest pocket. In case of any doubt of interference, switch off the camcorder immediately.
 - **Medical Camcorder:** If you use a personal medical camcorder, consult the camcorder manufacturer or your physician to confirm if your camcorder is sufficiently shielded from the RF transmission of this camcorder.
 - **Medical Facilities:** Hospitals and medical institutes may use facilities that are sensitive to an external RF energy. Observe such instructions when the medical care personnel or any posted sign requests you to switch off any camcorder that may interfere the radio frequency.

- Explosion sites or any location with a posted sign: In order to prevent interfering with an explosion activity, observe all the signage and instructions in the Explosion Area or in a zone with a “Switch Off 2-way Radios” sign by switching off camcorders that may interfere with the radio frequency.
- ❖ HP Inc. is NOT responsible for the loss of any data/content during operation.

Before you start using the product, it is assumed that you agree to the above statement.

1 Introduction






Thank you for purchasing this advanced Car Camcorder. This product is specifically designed for real time video recording when driving.

1.1 Features

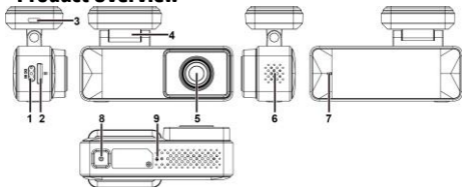
- Super high definition 2K (2560 x 1440)
- Wide angle lens
- Collision Detection, when a collision is detected, the camcorder will automatically trigger the emergency recording
- Parking mode
- Built-in GPS and Wi-Fi
- Optional rear cam

1.2 Package Contents

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

Car Camcorder	Electro-static Sticker	Car Adapter	User Manual	Rear Cam (option)
				

1.3 Product Overview



No	Item
1	Power connector
2	microSD card slot
3	Rear cam(option) connector
4	Bracket socket
5	Wide angle lens

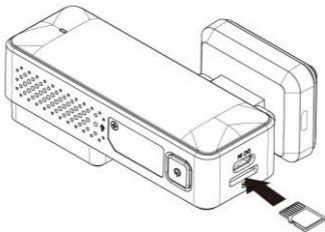
No	Item
6	Speaker
7	LED Indicator
8	Power on/off Long press: reset *in standby/recording mode, short press to turn on Wi-Fi
9	Microphone

2 Get Start

2.1 Storage Media

2.1.1 Insert the Memory Card

Insert memory card with the pins facing forward, see the picture as below:



2.1.2 Remove the Memory Card

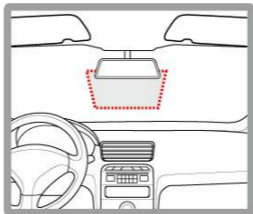
If the camcorder is power on, please power off first and wait for the procedure of switching off the camcorder completed before removing the memory card.

Note:

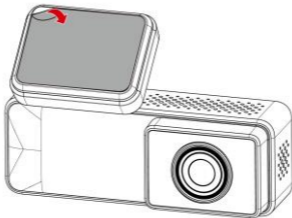
1. Do not remove or insert the memory card when the camcorder is turned on. This may damage the memory card.
2. Suggest to use microSD class V30 or higher and memory storage 16GB or above.
3. Please use this car camcorder to format the microSD card before the initial use.
4. Periodically format the microSD card (recommended period: once a month).

2.2 Install

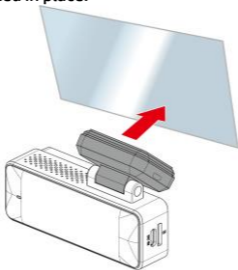
1. Put the electrostatic sticker onto the suggested area on the windshield. Before putting the sticker, please wipe and clean the windshield. During the installation, please make sure the bubbles in between the sticker and the window are all gone.



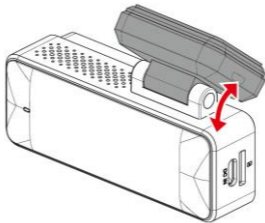
2. Peel off the protective plastic sheet from the adhesive pad.



3. Place and press the bracket firmly onto the electrostatic sticker on the windshield window. Make sure the base is securely locked in place.



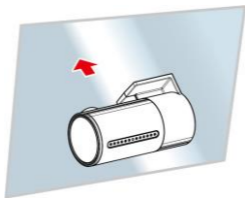
4. Adjust the view angle.



5. Make sure the camcorder is securely locked in place.

2.2.1 Install optional rear cam

1. Position the rear camera at upper central of rear windshield. Use cable to connect rear camera with front camera to check the preview image is in right position (not upside down) before installation. If the preview image is upside down, please rotate the base 180° to make it correct.
2. Check and confirm the field of rear view. Then clean the surface of the windshield with alcohol to ensure that the adhesion surface is clean.
3. Remove the film on the base of rear camera, and then hard press rear camera to ensure firmly stuck.

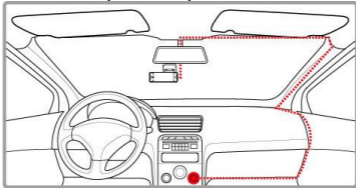


Note:

1. Do not install the device on a tinted window. Doing so may damage the tint film.
2. This product is suitable for light windshield or light color heat-resistant film windows, it will affect video quality if install it on the dark windows or dark heat-resistant film windows.

2.3 Connecting to Power

Use only the attached power adapter to activate the camcorder.



1. Connect one end of power connector to mini USB port of the camcorder. USB port input DC5V/2A.
2. Plug the other end of car adapter to the cigarette lighter socket of your vehicle. Once the vehicle engine is started, the camcorder automatically turns on. Car adapter input DC 12/24V.

2.4 LED Indicator

Status	LED Indicator
Power on, standby	Green, solid
Recording	Red, slow flashing
Emergency recording	Red, rapid flashing
Firmware Updating	Blue, slow flashing

2.5 Power on/off and Reset

2.5.1 Auto Power on/off

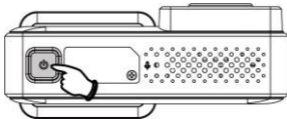
Once start the car engine, the camcorder will automatically power on and start recording.

Once the car engine shuts down, the camcorder automatically saves the recording and turns off the power.

2.5.2 Manually Power on/off

Press power button to turn on.

Long press power button for 3 seconds to turn off.



2.5.3 Reset

Long press power button for 8 seconds to reset the device.

2.5.4 Turn on Wi-Fi again

Wi-Fi is automatically on for 3 minutes when power on. If the device is not connected with smart phone, Wi-Fi will turn off automatically. To turn on Wi-Fi again, short press power button.

3 Setting Go Moto Plus App

3.1 Download

The camcorder allows you to connect to the smart phone via the app. When using for the first time, install the [Go Moto Plus] app for your smart phone.

Scan below QR code or download **Go Moto Plus** app from Google Play or App Store.



iOS/Android

APP layout and features may be changed subject to different software versions. Please refer to Google Play or APP Store for update.


3.2 Wi-Fi Connection

1. Starts the engine, and the camcorder will auto power on and record.
2. Using the Wi-Fi function of your smart phone and search for camcorder's ID "hp_f491x_xxxx" (last 4 digits are system random number). Enter default password **12345678**.

Note:

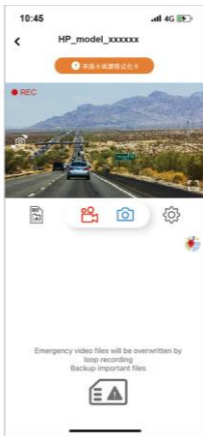
1. Wi-Fi is automatically on for 3 minutes when power on. If the device is not connected with smart phone, Wi-Fi will turn off automatically. To turn on Wi-Fi again, short press power button.
2. Wi-Fi connection in between with the smart phone and camcorder must within 5 meters open space.
3. The language of the Go Moto Plus app will be consistent with your smart phone, beyond the language options, the app will be activated with default language.
4. Supports OS: Android 9.0 or higher, iOS 13 or higher, Harmony 2 or higher.

3.3 Use Go Moto Plus App










Tap [Go Moto Plus] icon  to launch the app. The main screen will pop up. Tap “Access Camera” to enter main screen for set up and operate camcorder.



3.4 Main Screen



icon	Description
 /  Periodically format the microSD card.	Go Moto Plus logo / SD card message

	<p>Preview screen</p>
	<p>Switch front and rear camcorder preview</p>
	<p>Full screen display</p>
	<p>Start/Stop recording</p>
	<p>Take photo</p>
	<p>Camera File (check the files in microSD)</p>
	<p>Camera Setting</p>
<p>Emergency video files will be overwritten by loop recording Backup important files</p> 	<p>To remind the emergency files in the microSD card is about to be full and going to over write the oldest files. Backup the files and clear up the emergency folder, and this message will be gone.</p>
	<p>Map and driving track</p>


Note:

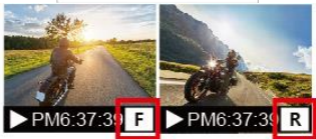
1. The App will auto sync the camera's date/time with your smartphone.
2. App layout and features are subject to change, depending on the software version. Refer to the Google Play Store or iOS App Store for the latest updates.
3. Android phones please download Google Offline Maps in advance. Firstly, update Google Maps to the latest version, open the Google Maps app, click on the user account picture above, and click "Offline Area", select "Custom Area", select the area where you want to download the offline map, confirm and press "Download".




3.5 Playback, Delete, Download

You can use this feature to playback or delete the file saved in camcorder, or to download the file from camcorder to your smart phone.



1. Tap the icon  [Camera File], the camcorder will stop recording.
2. The files saved in the camcorder will be displayed on your smart phone. There are Loop, Snapshot and Locked three folders. The "F" and "R" letter at the right bottom corner of preview thumbnail stands for "Front camera" and "Rear camera". Tap the image and it will start to playback.
3. Tap the right top corner "Select" and pick up the files that you want to delete or download, and tap the icon in the screen bottom to execute.



icon	Description
	<p>Download the file to “Local Album”. The downloaded file can be playback without connecting with the camcorder.</p>
	<p>Delete the file in microSD card.</p>
	<p>Downloaded file will show “Downloaded” in thumbnail image. It can be opened from “Album” without Wi-Fi connection to the camera.</p>

Note:

1. If you find the video playback without audio, please check if you turn on Voice Record on the Setting. If you do turn it on, it means the smart phone itself doesn't support the video decoding. It's not the problem of the file. We recommend you to install a free app software such as VLC to playback the file.
2. Deleted files cannot be recovered. Ensure the files have been backed-up before deletion.
3. More files to be read or downloaded, you are recommended to take out microSD card from camcorder and use computer.






3.6 Album

You can use this feature to playback or delete the file that you download in your smart phone. The files in the Album can be reviewed without connecting with camcorder.



1. Tap icon [Album]. (It will stop recording if the camcorder is connected.)
2. Tap the file that you want to playback, delete or edit.



Icon	Description
	<p>Edit video or snapshot.</p> <ol style="list-style-type: none"> 1. Edit video: Remove original audio/voice, and embed favorite music from the recommendations. 2. Edit picture: Crop the picture, or change the color of picture from recommendations.
	<p>Share the file to social media.</p>
	<p>Video Screenshot. The file will be saved in “Album”.</p>
	<p>Save the file to smart phone’s album. When the file saving is done, screen message will show “Save to smartphone’s album successfully”, and the smart phone’s album will create a new folder named “Go Moto Plus”.</p>
	<p>Delete the file in the App’s Album. The file in the camcorder still exists.</p>

3.7 Camera Setting

You can use this feature to set up most of your camcorder options.

1. Tap icon  [Camera Setting].


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

Menu Option	Description	Available options
Set Time Zone	Set the time zone you are in.	GMT -12 ~ GMT +12
Voice Record	Setting for activating audio in the video.	On / Off
Camera Volume Setting	Setting volume	0~10
Record Interval	Save respective video files in a length of the selected duration.	1 min / 3 min
Collision Detection	Set up sensitivity level of collision detection.	Off / High / Mid / Low
Format	To format the memory card, all the files in the camcorder will be deleted.	Yes / Cancel
Speed Unit	The system displays the speed setting unit.	KM/H / MPH
Car Speed Watermark	To turn on or off car speed watermark.	On / Off
Time Stamp	To turn on or off file stamp including model number, date/time, car speed and location info.	On / Off
Resolution	Setting of video resolution.	2K WDR 1080p WDR
Front cam EV setting	Setting of front cam exposure value	-3 ~ +3
Rear cam EV setting	Setting of rear cam exposure value	-3 ~ +3

Parking Mode	If one of parking mode is activated, the camcorder will enter parking mode 10 seconds after disconnect the external power. *Require to install ACC cable.	Park Recording / Collision Detection / Timelapse / Off
Anti-flicker	Domestic power supply varies by area. It is recommended that you should check the "Table of voltage and frequency of different countries" for the correct setting.	60Hz / 50Hz
Wi-Fi Password	To set up Wi-Fi password	
Default	Return to factory default setting.	Yes / Cancel
Firmware Version	Indicates the current camcorder's firmware version.	

4 Use the Camcorder

4.1 Initial Setting

Before use the camcorder, use smart phone's Wi-Fi to connect with the camcorder and open Go Moto Plus  app to synchronize date/time.

4.2 Recording

Once start the car engine, the camcorder will automatically power on and start recording.

Recording will automatically stop when the engine is switched off.

4.3 Emergency Recording



1. If the *Collision Detection* function is enabled and a collision is detected, the camcorder will automatically trigger the emergency recording. The emergency file is created as a new file and save in Emergency folder, which will be protected to avoid being overwritten by normal loop recording.
2. The emergency recording's file length is same as the Recording Interval Setting. When the emergency recording length reaches the setting, the system will return to the normal recording mode.

Note:

1. The sensitivity of "Collision Detection" can be changed in app.
2. The emergency video folder will occupy 20% of available memory card capacity. When the emergency video folder is full, the oldest emergency file will be automatically deleted by the newest emergency file.

4.4 Picture in Video

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

1. Open Go Moto Plus  app.
2. Tap  icon. A “ka-za” sound will be heard which means photo has been taken.



Note:

1. The screen shots image resolution is according to video resolution setting.
2. The picture resolution is limited by the speed of the target object and changes in ambient lighting. The photograph function is better used for taking still pictures in accident scenes or when the car is stopped to wait for a traffic light.

4.5 Parking Mode

To monitor the vehicle when it is parked, you can activate **Parking Mode**.

Before you activate Parking Mode, it is required to install ACC cable(Hardwire Kit) through professional car service shop.

1. Open Go Moto Plus  app.
2. Tap  icon, recording will be stopped and enter Menu Setting.
3. Tap “Parking Mode” and select **Park Recording, Collision Detection** or **Timelapse**. Then, return to preview screen. And then, exit the app.
4. In the recording mode, long press power button or shut down car’s engine, the camcorder will enter parking mode.
5. When car’s engine again starts, the camcorder will disable parking mode and resume normal loop recording. If no changes of setting, when the car’s engine shuts down once again, the camcorder will enter Parking Mode again.
6. In the Parking Mode, when the collision is detected, the emergency recording will be triggered and the file will be saved in the Emergency Folder which won’t be over written by the normal recording.

Note:

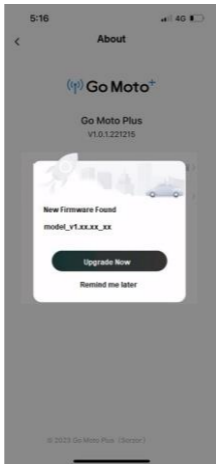
1. ACC cable is not included in the package. Please ask for more information from your distributor.
2. The file size is according to Record Interval setting.
3. **Park Recording** mode is continuously recording during parking mode, and when collision happens, it will trigger emergency recording.
4. **Collision Detection** mode is standby mode. Only when collision happens, it

will trigger emergency recording.

5. **Timelapse** is continuously recording by one second one frame. For example, 30 minutes recording will be saved in one minute.

5 OTA Firmware Upgrade

Connect Wi-Fi of the camcorder and smart phone, open the app. If there is a new firmware published, the screen will show notification as below.



Follow the app instruction,

1. Tap “Upgrade Now”^{note1} to download the new firmware to smart phone^{note2}. (Figure1)
2. When download is completed, screen will show “Upgrade file has been downloaded”. Make sure smart phone Wi-Fi is connected with camcorder, then, tap the “Upgrade Now” on the right bottom corner. Then, the new firmware will be sent from smart phone to the camcorder. (Figure2)



Figure1

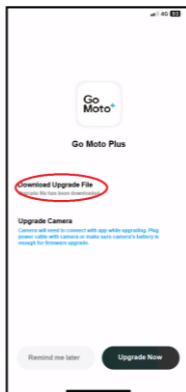
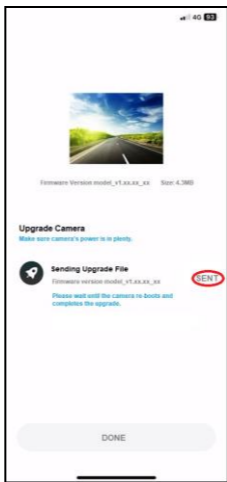


Figure2

3. When the file is dispatched successfully, screen will show “SENT”. The camcorder will then re-boot and automatically upgrade the firmware. After firmware is upgraded, the camcorder will power off.



4. Manually power on the camcorder, and it will work in the latest firmware.

Note:

1. If tap “Remind me later”, the app notification will pop up every time when the camcorder is connected.
2. When the smart phone’s Wi-Fi is occupied by the camcorder, iOS system will auto switch to cellular data, and the network is still useable; but, Android system won’t. Please attention the following notices to upgrade new firmware.
 - (1) iPhone User: Because the smart phone’s Wi-Fi is connected with the camcorder, iPhone will use cellular data to download the new firmware. If you don’t want to use cellular data to download, cut off the smart phone’s Wi-Fi connection with camcorder firstly, then connect with local area network. Then, open the app once again and tap “Upgrade Now” to download new firmware to smart phone.
 - (2) Android User: Because the smart phone’s Wi-Fi is connected with the camcorder, Android phone has no network to download the file. Please cut off smart phone’s Wi-Fi connection with the camcorder firstly, and connect with local area network. Or, turn off the Wi-Fi, and use cellular data. Then, open the app once again and tap “Upgrade Now” to download new firmware to smart phone.

6 Specification

Item	Description
Image Sensor	4MP CMOS sensor
Effective Pixels	2560 (H) x 1440 (V)
Storage Media	Supports class V30 or higher microSD card.
Lens	Wide angle fixed focus lens
Focus Range	1.5m~infinity
Video	Resolution: 2K WDR / 1080p WDR
	Format: .MP4
Picture	Resolution: according to video resolution setting
	Format: JPG
G-Sensor	3 Axis G-force sensor
ISO	Auto
White Balance	Auto
Microphone	Built-in
Speaker	Built-in
Interface	USB type C, micro USB
Operation	0° ~ 45° C

Item	Description
Temperature	
Operation Humidity	20 ~ 70% RH
Storage Temperature	-20° ~ 70° C
Supports OS	Android 9.0 or higher iOS 13 or higher Harmony 2.0 or higher
Dimension	95.4 x 59.5 x 38.6 mm
Weight	approximate 88g

Built-in IEEE 802.11g/n(HT20) Wi-Fi Chip: SSW101BC

Wi-Fi Band	2412~2484MHz
Wi-Fi Frequency	Ch1~Ch13