

VIGORPLUS+

Instruction Manual



SPIN DVR

Turning a New Perspective

English

CONTENTS

PRECAUTIONS.....	2
PRODUCT SPECIFICATIONS	3
PACKAGE CONTENTS.....	4
PRODUCT FEATURES	5
PRODUCT OVERVIEW	6
INSTALLATION	8
INSERTING THE MEMORY CARD	8
INSTALLING THE MAIN UNIT AND ACCESSORIES.....	9
Mounting Layout	9
Mounting Main Unit.....	11
Mounting Wired Remote Control and GPS Module	13
Mounting Front and Rear Cameras	14
OPERATIONS	15
MAIN UNIT	15
Video Mode.....	15
Viewing and Managing the Recorded Files	17
Configuring the Device Settings.....	20
Updating the Firmware.....	22
WIRED REMOTE CONTROL	23
Taking Snapshots.....	23
Manual Emergency Recording.....	23

PRECAUTIONS

Please read this manual carefully before operation and keep it for future reference. It will be helpful should you encounter any operational problem.

WARNING: Do not expose this product to rain, moisture or water under any circumstances, doing so may result in the risk of electric shock or fire.

CAUTION: To reduce the risk of electric shock, do not perform and servicing other than that contained in the instruction manual unless you are qualified to do so.

- Have the unit serviced by a qualified service technician if; The Unit has been exposed to rain or water.
- The unit does not seem to operate normally.
- The unit exhibits a marked changes in performance.

LCD: A Liquid Crystal Display (LCD) screen is a multilayer complex component, containing 691,200 pixels. Pixels can however fail during normal product life. 1 pixel = 0.00014% failure rate, and one pixel failures per year of operation is considered normal and not a cause for concern.

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



This symbol on the product or on the packaging indicates that this can not be dispose of as household waste. You must dispose of your waste equipment and/or battery by handing it over to the applicable take-back scheme for the recycling of electronic equipment and/or battery. For more information please contact your local household waste disposal office.

Failure to operate in accordance with the manual is not warranted.

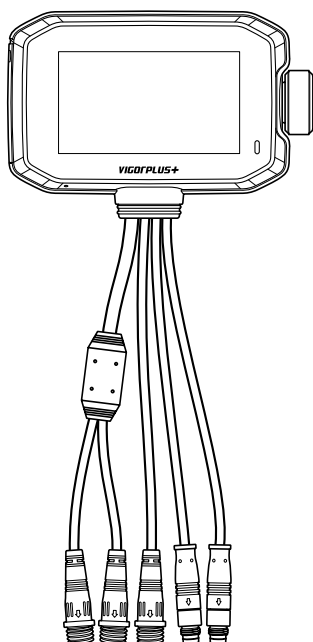
PRODUCT SPECIFICATIONS

Chip	Novatek NT96670
Screen	3-inch IPS
Front Camera	• Sensor: Sony IMX335 • Resolution: 2K • Viewing angle: 154°
Rear Camera	• Sensor: Sony IMX335 • Resolution: 2K • Viewing angle: 154°
Video Resolution	• 1080P@60fps • 2K@30fps(HDR) • 1080P@30fps
Video / Format	• Video: MP4 / TS • Photo: JPEG
GPS	Supported
G-Sensor	Supported
Waterproof	IP67
Memory Card Capacity	MicroSD card, support up to 256GB (Not included in package)
Internal Battery	Super capacitor (2.7V 5F)
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-20°C ~ 70°C
Dimensions	109.5 x 69.5 x 23.2 mm (main unit)
Weight	200g (main unit)

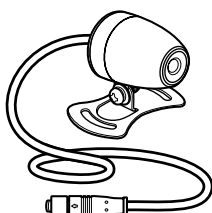
PACKAGE CONTENTS

Please check the contents of your SPIN DVR product package. The actual products might appear slightly different from the pictures shown below.

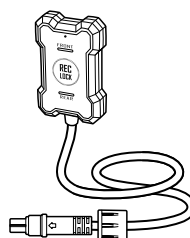
Main Unit



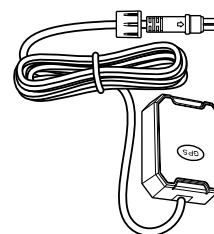
Front and Rear Cameras



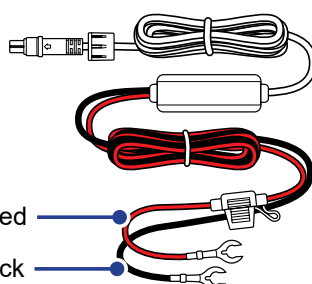
Wired Remote Control



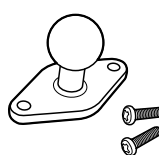
GPS module



Power cable



Main Unit Bracket



Handlebar Ball Bracket



Sideview Mirror Ball Bracket



Universal Ball Bracket



Double-sided tapes



Velcro tapes

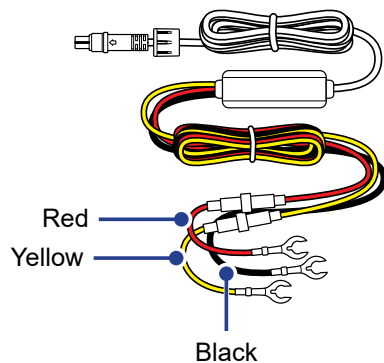


Cable ties



Optional accessories

Hardwire kit



PRODUCT FEATURES

Thank you for purchasing this VIGORPLUS™ SPIN DVR product. In this section, we will outline some of the features available with this product.

3.0" LCD Colour Screen

Large screen for ease of use for the device configurations and viewing the playback of both videos and photos.

E-Mirror

Provide a comprehensive view of the rider's rear blind spots, enhancing motorcycle safety.

Twisting Controller

The patented Dial design allows riders wearing gloves to easily operate menu functions.

One-Touch Locking

Independent Locking Button (wired remote control) for instant snapshots and manually trigger emergency recording.

IP67 Waterproof and Dustproof

The screen main unit's high-density structural design provides peace of mind even in strong winds and heavy rain.

Enhanced Heat Dissipation

Metian heat dissipation fins on the back of the main unit dissipate heat to maintain stable operation.

G Sensor / File Protection

In the event of an impact, the device will automatically 'protect' the recording, stopping the file from being overwritten. Individual files can also be 'protected' when viewed within playback mode.

Automatic Start / Stop Technology

As soon as the motorcycle ignition is turned on, the device will start to record automatically. When the ignition is turned off, the device will perform an automatic shutdown process.

Built-in Microphone & Speaker

Record audio to compliment the video recordings.

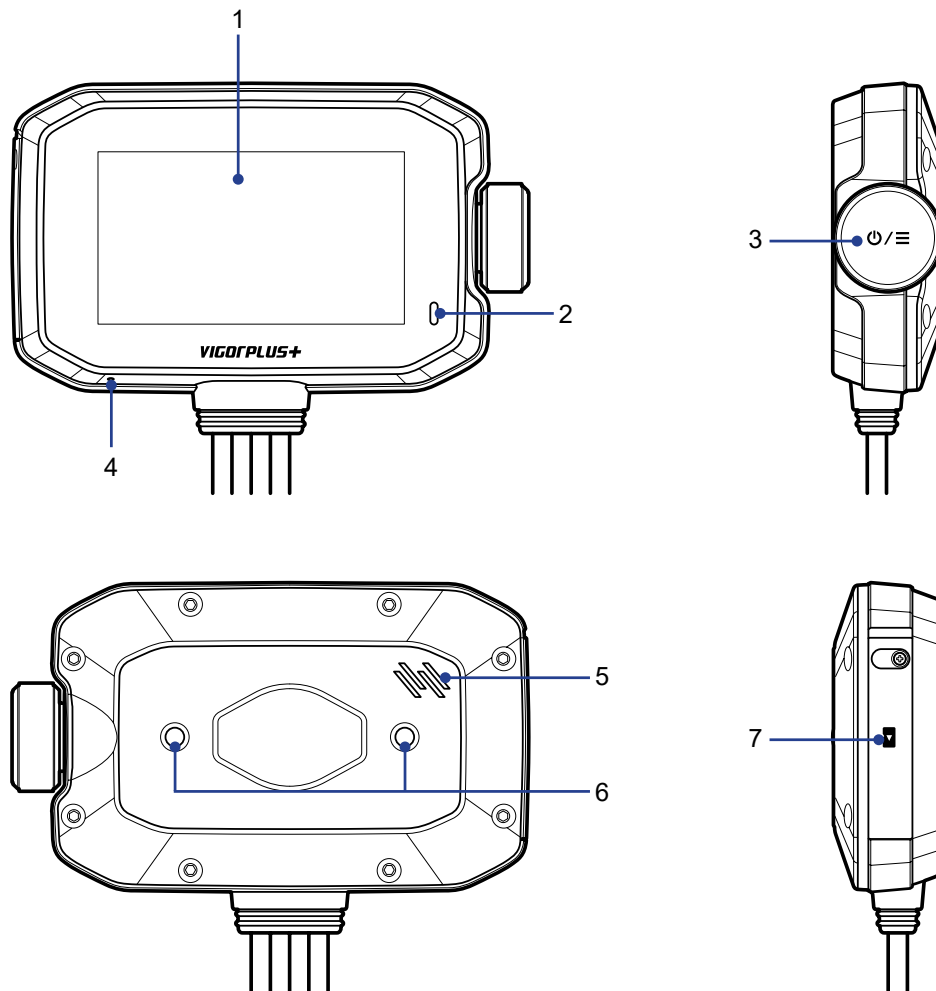
Versatile Installation

The main unit can be installed on the motorcycle rear view mirrors, handle bars, or placed inside the motorcycle compartment.

2K Wide-Angle Front and Rear Cameras

The cameras are equipped with night vision lens. Provides clear recording even in low light conditions at night.

PRODUCT OVERVIEW



1. DISPLAY SCREEN

3.0" screen for viewing the recording or configuring the device.

2. LED INDICATOR

- Red = power on
- Red flashing = recording

3. TWISTING CONTROLLER

Use to operate the main unit. For more information, see page 7.

4. MICROPHONE

Integrated microphone for audio recording.

5. SPEAKER

Integrated speaker for audio playback.

6. MOUNTING SOCKET

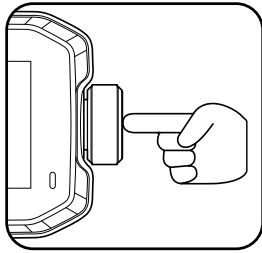
Install the bracket to the mounting socket.

7. SD CARD SLOT

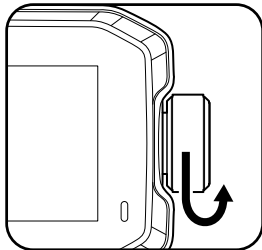
Insert microSD memory card here.

Using the Twisting Controller

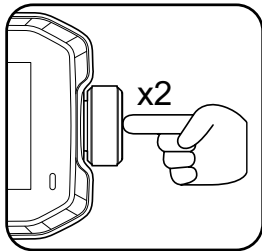
- During video recording:
 - Press to stop the video recording.



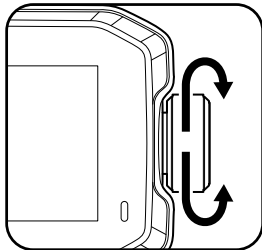
- Rotate down to switch the screen display mode.



- During standby mode:
 - Press to start the video recording.
 - Press **twice quickly** to enter the OSD menu.



- In OSD menu:
 - ⇒ rotate up/down to choose an option.

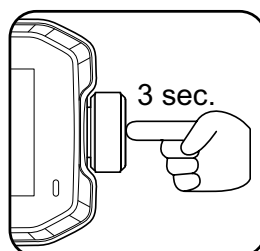


- ⇒ press to confirm the selection.
 - ⇒ press **twice quickly** to return to the previous screen.

- Long press to manually turn off the camera.

NOTE:

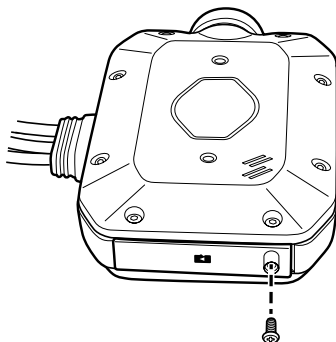
If the main unit is turned off, long press the **Twisting Controller** to manually turn on the device.



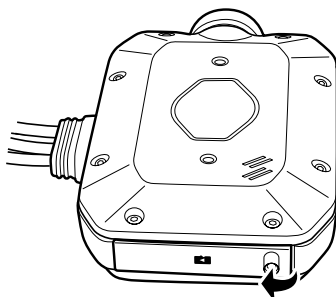
INSTALLATION

INSERTING THE MEMORY CARD

- 1 Place the main unit with the screen facing down. Then remove the screw securing the dust cover.

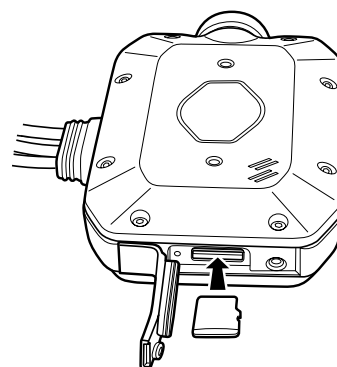


- 2 Remove the dust cover.



- 3 Insert the memory card into its slot until it clicks into place.

- 4 Replace the dust cover. Then secure it with the screw.



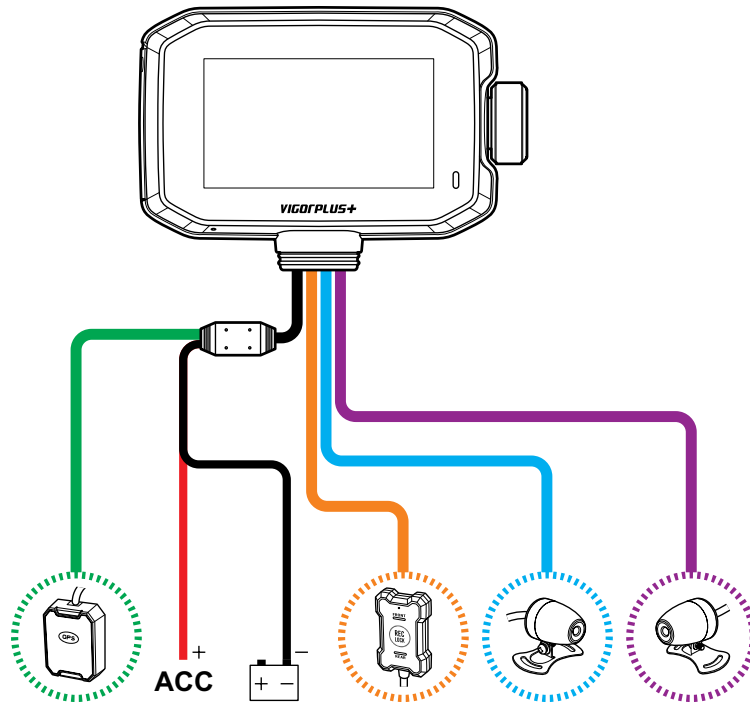
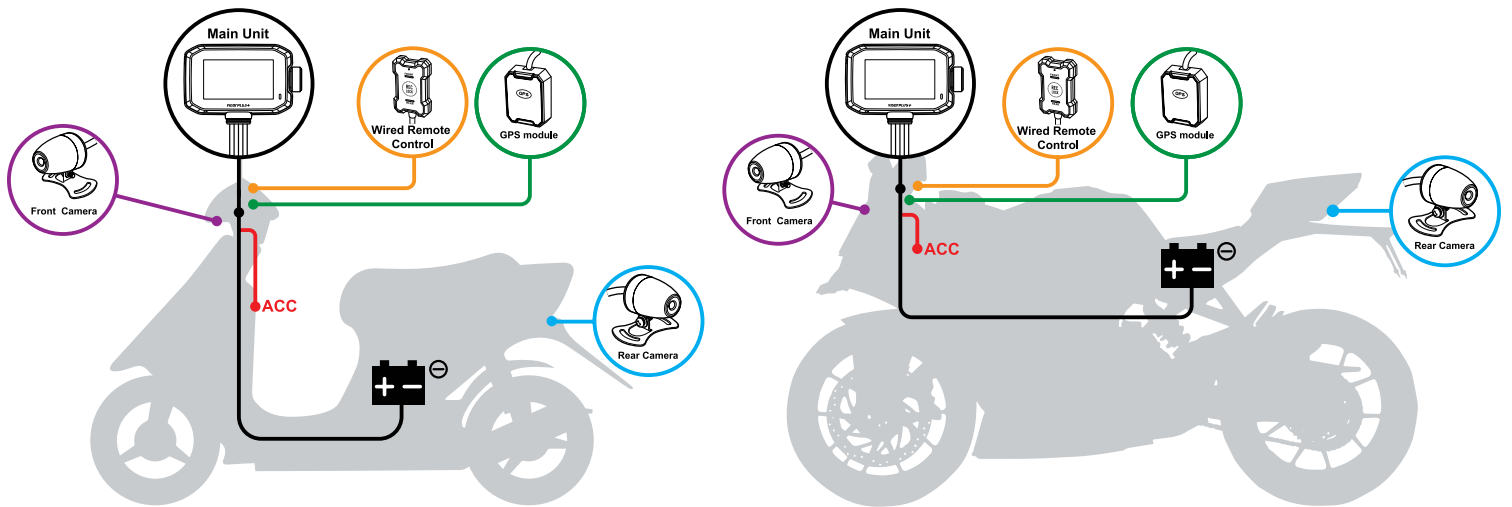
NOTE:

- Do not remove or insert the memory card when the camera is turned on. This may damage the memory card, or recordings within.
- The microSD card is sold separately. The microSD card must have a Class-10 or UHS-1 rating or better, and a capacity between 32GB and 256GB.

Recording Time

The camera supports microSD card up to 256GB.

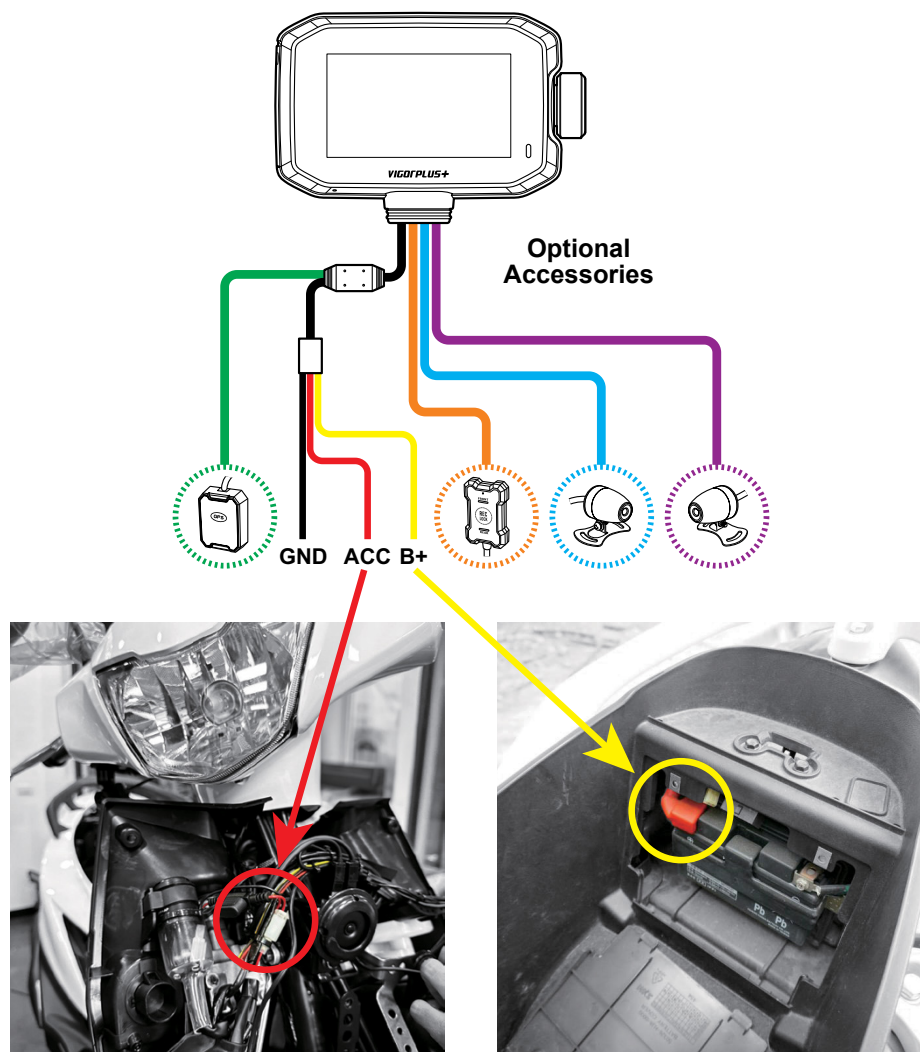
Card Capacity	File Type and Recording Resolution					
	TS			MP4		
	2K 30FPS	1080P 30FPS HDR	1080P 60FPS	2K 30FPS	1080P 30FPS HDR	1080P 60FPS
32GB	3H	3H	3.5H	3H	3H	3.5H
64GB	6H	6H	7H	6H	6H	7H
128GB	12H	12H	14H	12H	12H	14H
256GB	24H	24H	28H	24H	24H	28H

INSTALLING THE MAIN UNIT AND ACCESSORIES**Mounting Layout****[Power Cable Installation Diagram]****[Power Cable Installation on Scooter and Motorcycle]****NOTE:**

This mounting layout is for reference only. The actual installation may vary depending on the motorcycle type/model.

Installing Smart Hardwire Kit

- 1 Locate the fuse box of your motorcycle.
The fuse box location varies depending on your motorcycle type.
- 2 Connect the **black** wire to the metal (ground-negative electrode).
- 3 Connect the **yellow** wire to the positive electrode of the fuse adapter (battery).
- 4 Connect the **red** wire to the ACC power supply as shown in the illustration.



[Hardwire Kit Installation Diagram]

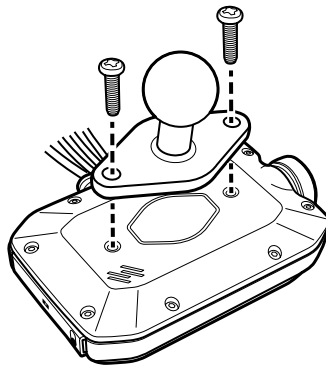
NOTE:

Please be noted the smart hardwire kit will stop working when the motorcycle battery voltage is too low, it's to prevent over consuming of the battery.

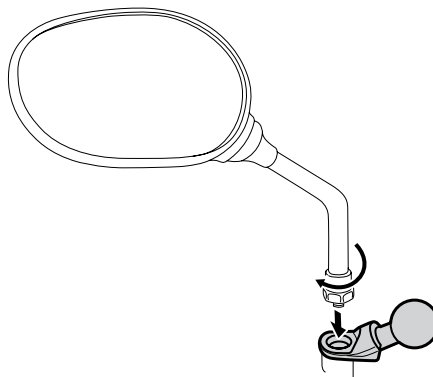
Mounting Main Unit

To mount the main unit on the sideview mirror of your motorcycle, do the following:

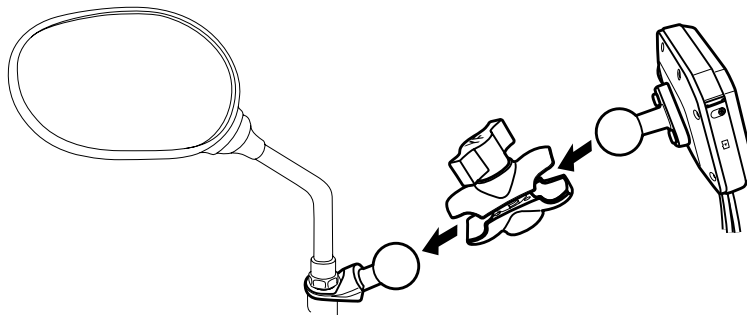
- 1 Align and install the mounting bracket on the rear of the main unit. Then secure the bracket with the 2 screws.



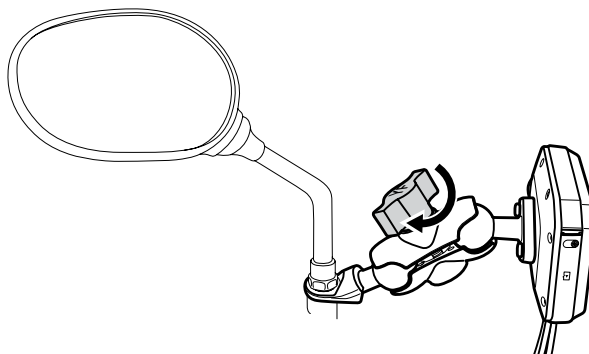
- 2 Loosen the lock nut and remove the sideview mirror. Then install the ball bracket as shown in the illustration below. Replace the sideview mirror and tighten the lock nut.



- 3 By using the universal ball bracket, assemble the sideview mirror ball bracket with the main unit mounting bracket as shown in the illustration below.

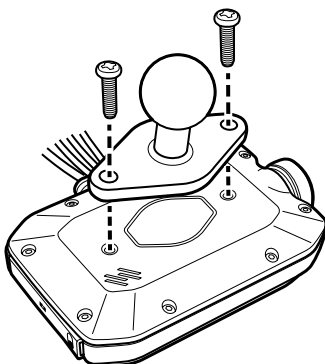


- 4 Adjust the main unit position to your preference. After the adjustment is completed, tighten the knob of the universal ball bracket to secure both mounting brackets in place.

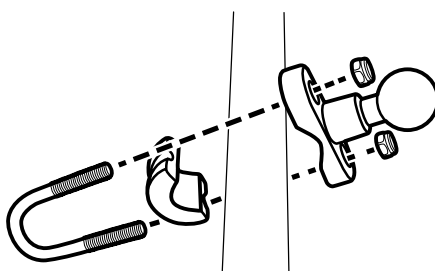


To mount the main unit on the handlebar of your motorcycle, do the following:

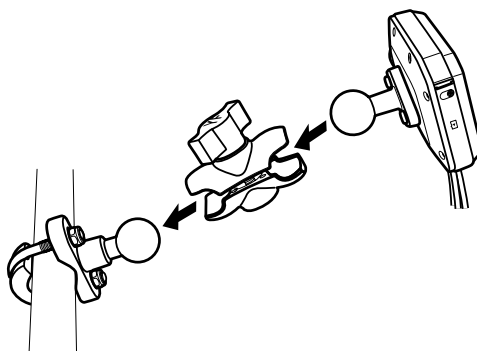
- 1 Align and install the mounting bracket on the rear of the main unit. Then secure the bracket with the 2 screws.



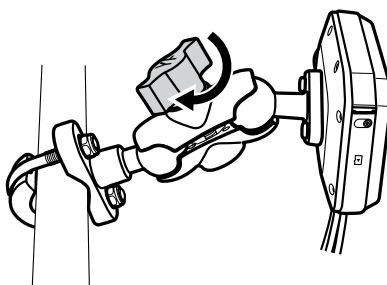
- 2 Select the installation spot. Then install the ball bracket to your motorcycle handlebar as shown in the illustration below. Tighten the lock nuts to secure the ball bracket.



- 3 By using the universal ball bracket, assemble the handlebar ball bracket with the main unit mounting bracket as shown in the illustration below.



- 4 Adjust the main unit position to your preference. After the adjustment is completed, tighten the knob of the universal ball bracket to secure both mounting brackets in place.



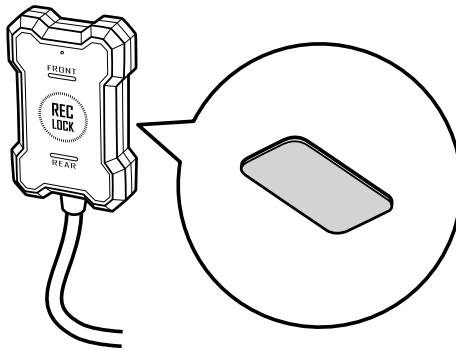
Mounting Wired Remote Control and GPS Module

Always clean the surface before installing the equipments.

Wired Remote Control

It is recommended to install the remote control on the dashboard so that you can easily access the button and it will not interfere with the safe operation of the motorcycle.

- 1 Attach the double-sided tape on the rear of the remote control. Then remove the protective film from the attached double-sided tape.
- 2 Place and press down the remote control firmly onto the installation spot.



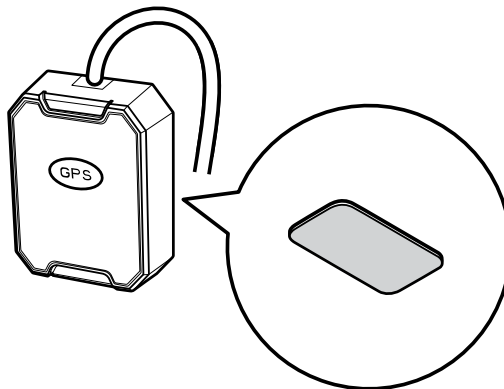
GPS Module

It is recommended to install the GPS module on the front panel or chassis where it can easily receive the GPS signal from the satellites.

Important!

Avoid mounting GPS module near metal surfaces.

- 1 Attach the double-sided tape on the rear of the GPS module. Then remove the protective film from the attached double-sided tape.
- 2 Place and press down the GPS module firmly onto the installation spot.

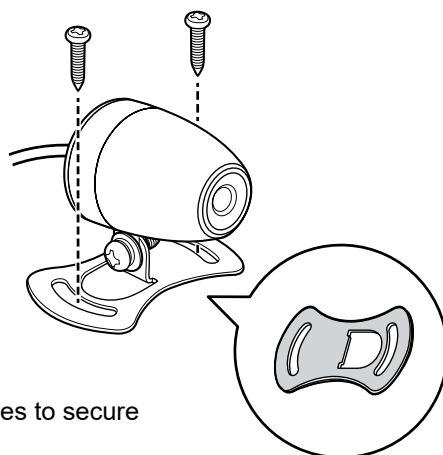


Mounting Front and Rear Cameras

Always clean the surface before installing the equipments. After installation, ensure that the camera is secure and stable to prevent camera vibration during video recording.

To install the camera, do the following:

- 1 Attach the double-sided tape on the bottom of the camera mounting bracket. Then remove the protective film from the attached double-sided tape.
- 2 Install the camera at a mounting position where it will get the best view.
- 3 Secure the camera mounting bracket with the 2 screws.

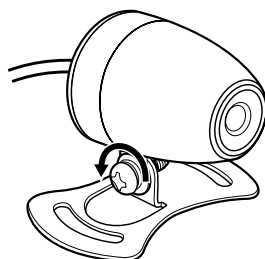


NOTE:

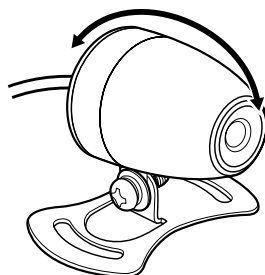
If necessary, you can also use the cable ties to secure the camera mounting bracket.

To adjust the camera view angle, do the following:

- 1 Turn on the main unit. Ensure that the camera is properly installed and connected.
- 2 Loosen the screw on the camera mounting bracket.



- 3 Adjust the camera view angle to your preference. Then tighten the screw to secure the camera in place.



OPERATIONS

MAIN UNIT

When the vehicle engine starts up, the camera automatically turns on and starts recording. Recording will automatically stop when the engine is switched off. Or, press the **Twisting Controller** to stop recording manually.

NOTE:

To manually turn off the main unit, long press the **Twisting Controller**.

Video Mode

The key below explains the various information displayed on the screen when the camera is in Video mode. Some icons will only be displayed once the relevant function has been selected within the OSD menu, as described below.



1. Camera Type

Indicate the camera type screen.

2. Recording Time

Indicate the video recording is in progress and display the length of current recording.

3. GPS Reception Status ON

Indicate the camera is receiving the GPS signal. Can be switched OFF in the OSD menu.

4. Date

Display the current day of week and date. The date setting can be adjusted in the OSD menu.

5. Time

Display the current time. This setting can be adjusted in the OSD menu.

6. Speed

Current motorcycle speed.

7. Date Stamp ON

Can be switched OFF in the OSD menu.

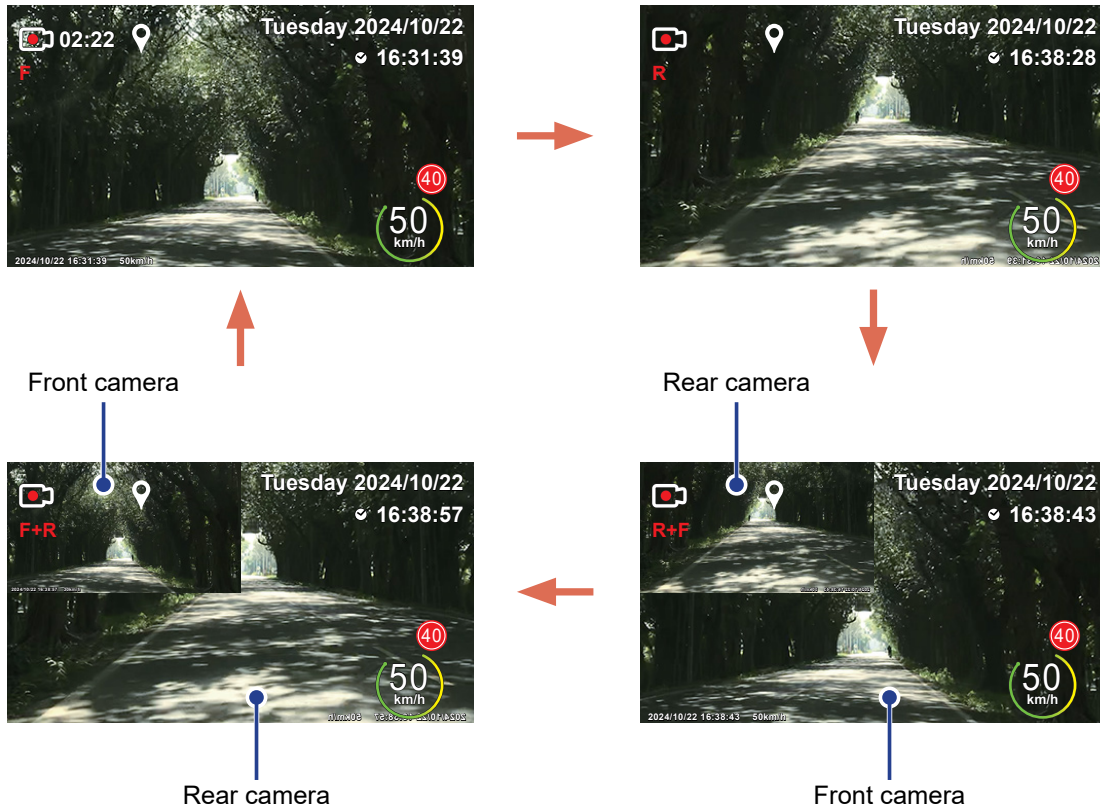
Video Mode

During video recording, press the **REC LOCK** button on the the remote control to take snapshot of the current scene. See page 23.

Switching Camera Display

Rotate the **Twisting Controller** down repeatedly to toggle the screen view:

[Front camera only] → [Rear camera only] → [Rear + Front camera overlaid] → [Front + Rear camera overlaid]



EMERGENCY RECORDING (FILE PROTECTED)

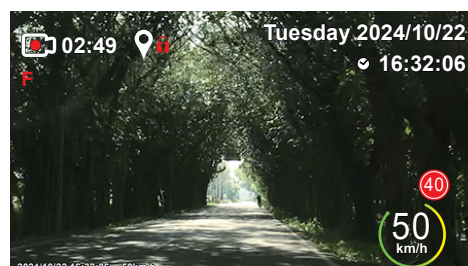
Emergency recording will be activated under the following two situations.

1. G-Sensor event recording: During video recording, if the dash camera detects an impact, it will automatically activate the emergency recording mode.

- If the G-Sensor sensitivity is set to "High Sensitivity", even minor shocks will be detected.
- If the G-Sensor sensitivity is set to "Low Sensitivity", it will only detect the significant shocks.
- G-Sensor sensitivity can be adjusted in the OSD menu. See page 21.

2. Manual emergency recording:

- During video recording, do one of the following actions to activate the emergency recording (File Protected) function manually:
 - ⇒ Press the **Twisting Controller** twice quickly.
 - ⇒ Press the **REC LOCK** button on the remote control twice.

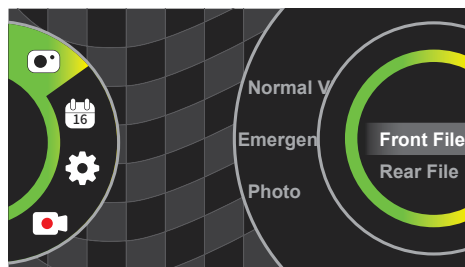


NOTE:

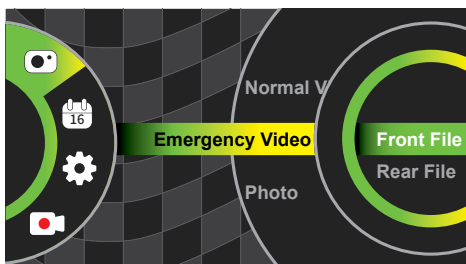
An  icon will appear on the screen to indicate the *Emergency Recording* is in progress.

Viewing and Managing the Recorded Files

During video recording, press the **Twisting Controller** to stop the recording. Then press the **Twisting Controller** twice quickly to enter the OSD menu.



Press the **Twisting Controller** to enter the Playback menu (📺). Then rotate the **Twisting Controller** to select the file category and camera type that you want to browse. Then press the **Twisting Controller**.



NOTE:

Rotate the **Twisting Controller** to select an option and press the **Twisting Controller** to confirm the selection.

PLAYING VIDEOS

Rotate the **Twisting Controller** to browse the desired video file. Then press the **Twisting Controller** to view the video in full screen.



Preview Mode



- To delete the selected file, rotate the **Twisting Controller** to select 🗑️. Then press the **Twisting Controller** to confirm deletion.



NOTE:

You cannot delete the protected files.

- To protect the selected file, rotate the **Twisting Controller** to select . Then press the **Twisting Controller** to confirm. A lock icon () will appear on the screen to indicate that the file is protected.



To unprotect the file, rotate the **Twisting Controller** to select  and press the **Twisting Controller** again.



- To select another file, rotate the **Twisting Controller** to select  or . Then press the **Twisting Controller** to confirm the selection.
- To play the video, rotate the **Twisting Controller** to select . Then press the **Twisting Controller** to start the video playback.

Playback Mode



- To pause the video playback, rotate the **Twisting Controller** to select  and press the **Twisting Controller**. To resume, press the **Twisting Controller** again.
- To return to the previous page/screen, press the **Twisting Controller** twice quickly.

VIEWING PHOTOS

Rotate the **Twisting Controller** to browse the desired photo file. Then press the **Twisting Controller** to view the photo in full screen.



Preview Mode



- To delete the selected file, rotate the **Twisting Controller** to select . Then press the **Twisting Controller** to confirm deletion.

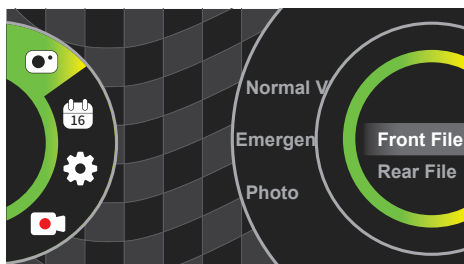
NOTE:

You cannot delete the protected files.

- To protect the selected file, rotate the **Twisting Controller** to select . Then press the **Twisting Controller** to confirm. A lock icon () will appear on the screen to indicate that the file is protected. To unprotect the file, rotate the **Twisting Controller** to select and press the **Twisting Controller** again.
- To return to the previous page/screen, press the **Twisting Controller** twice quickly.

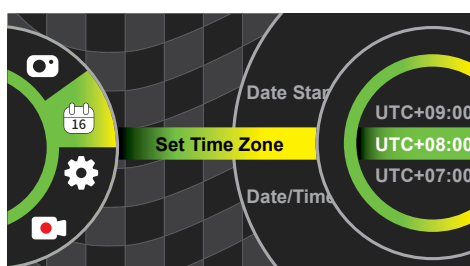
Configuring the Device Settings

During video recording, press the **Twisting Controller** to stop the recording. Then press the **Twisting Controller** **twice quickly** to enter the OSD menu.

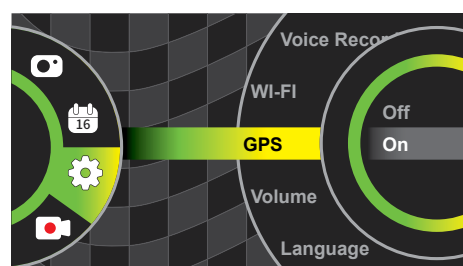


In general, do the following to configure the setting:

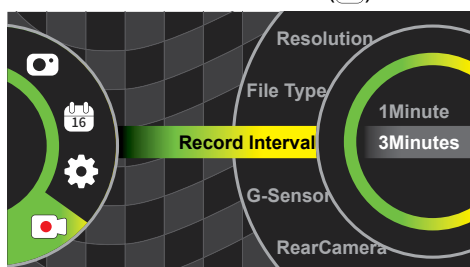
- Rotate the **Twisting Controller** to select an option and press the **Twisting Controller** to confirm the selection.
- To return to the previous page, press the **Twisting Controller** **twice quickly**.



Date & Time menu (📅)



Setup menu (⚙️)



Record menu (📹)

Select the desired option and adjust the necessary settings.

Menu Option	Description
DATE & TIME	
Date Time	Turn on/off the date stamp shown on the recorded files.
Set Time Zone	Select the time zone of your country.
Date/Time	Adjust the date and time settings.
SETUP	
Voice Record	Turn on/off the microphone for video recording.
Wi-Fi	Enable/disable the Wi-Fi function.
GPS	Turn on/off the GPS co-ordinates and speed stamp shown on the recorded files. When a recording is viewed using the third party GPS players, both the GPS co-ordinates and speed information remain available.
Volume	Adjust the beep sound which is heard when a button is pressed.
Language	Select your preferred language.

Menu Option	Description
Frequency	Set the frequency setting according to the power supply specification used in your country or geographical region. Choosing the correct value will reduce flickering caused by incandescent/fluorescent lamps at night time. The LED traffic lights may still flicker as these use different frequencies.
Screen Saver Setting	Turn on the Screen Saver function to turn off the screen after a chosen period of inactivity. Press the Twisting Controller to reactivate the screen. If the setting is set to Off , the LCD screen will always be on.
Default	Reset the camera to the factory default settings.
Speed Unit	Select whether to record and display speed in KM or MILE.
Parking Monitor	Enable/disable the parking monitor function. When enabled, after the motorcycle is turned off (ACC off), the device will enter Sleep mode and turn off after 10 seconds. If the motorcycle is hit or shaken, the G-Sensor will be triggered, causing the device to start recording for 30 seconds. The device will then turn off again, waiting for the next trigger. The device will only work if the motorcycle battery voltage is above 12V. If the battery voltage drops below 12V, the G-Sensor will no longer trigger the recording. NOTE: This function is only available with optional hardwire kit connected. For more information, see page 9~10.
Format	Format the inserted microSD card. Warning! This operation will delete all existing data on the microSD card, including locked files and normal looping recording files! Make sure you back up any important files first.
Version	Display the version number of the currently installed firmware.
RECORD	
Resolution	Select the recording resolution. This will increase or decrease the quality of the recorded videos.
File Type	Select the video format.
Record Interval	Select the recording time for the individual video files. Once the microSD card is full, the camera will automatically replace the oldest files with new files in a loop to allow continuous recording.
G-Sensor	Select the sensitivity level of the G-Sensor. The G-Sensor detects forces which will protect the current recording in the event of a collision. The higher the G-Sensor sensitivity, the less force will be needed to trigger automatic file protection in event of a collision.
Rear Camera Flip	Turn on/off the display mirroring function when using the rear camera. When it is enabled, the image on the rear camera screen appears as if the object is flipped horizontally.

Updating the Firmware

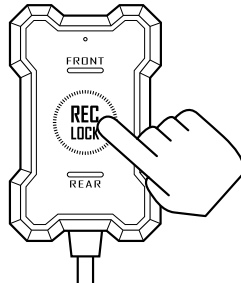
- 1 Download the latest firmware from VIGORPLUS website (www.vigorplus.com.tw/en/), and prepare a microSD card.
- 2 Unzip the zipped file and store the firmware ("FW96670A.bin") into the root directory of the memory card.
- 3 Long press the **Twisting Controller** to turn off the main unit. Then insert the memory card into its slot.
- 4 Long press the **Twisting Controller** again to manually turn on the main unit.
The firmware upgrade process will start automatically and may take a few minutes to complete. Once the process is complete, the main unit will restart automatically.
NOTE:
During the updating process, the LED indicator will blink.
- 5 Stop the video recording and access the OSD menu. Then select **Format** to format the memory card.
See the "Configuring the Device Settings" on page 20~21.
- 6 Restart the camera.

WIRED REMOTE CONTROL

While riding your motorcycle, you can use the remote control to take the snapshot or trigger the emergency video recording.

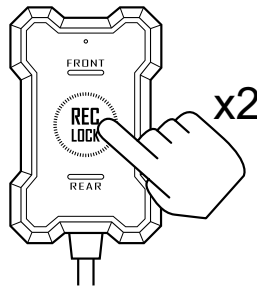
Taking Snapshots

Press the **REC LOCK** button on the remote control to take snapshot of the current scene.



Manual Emergency Recording

Press the **REC LOCK** button on the remote control **twice** to activate the emergency recording function manually.



NOTE:

An  icon will appear on the screen to indicate the *Emergency Recording* is in progress.