MiVue™ M820WD

User Manual

all about you

Revision: R00
(11/2024)

Disclaimer

The screenshots in this manual may differ between different operating systems and software versions. You can download the latest User Manual of your product from Mio™ website (www.mio.com).

Specifications and documents are subject to change without notice. MiTAC does not warrant this document is error-free. MiTAC assumes no liability for damage incurred directly or indirectly from errors, omissions or discrepancies between the device and the documents.

Note

Not all models are available in all regions.

Depending on the specific model purchased, the colour and look of your device and accessories may not exactly match the graphics shown in this document.

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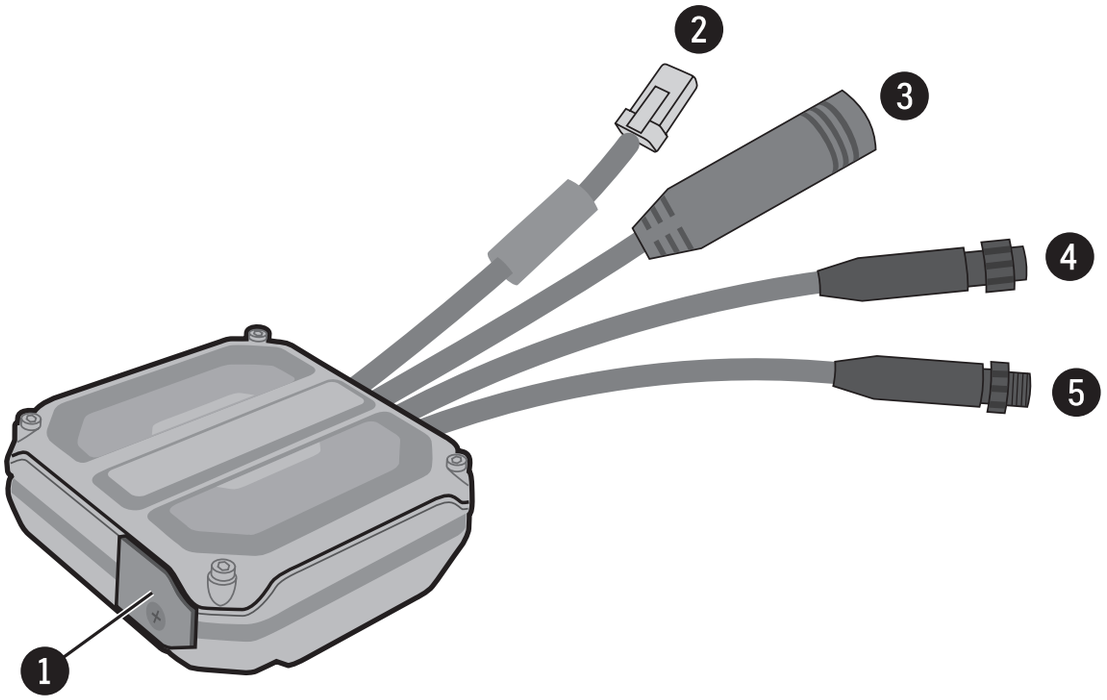
Getting to know your Mio

ⓘ Screenshots and other presentations shown in this manual may differ from the ones generated by the actual product.

Main module



❶ Memory card slot (requires a suitable Phillips screwdriver)

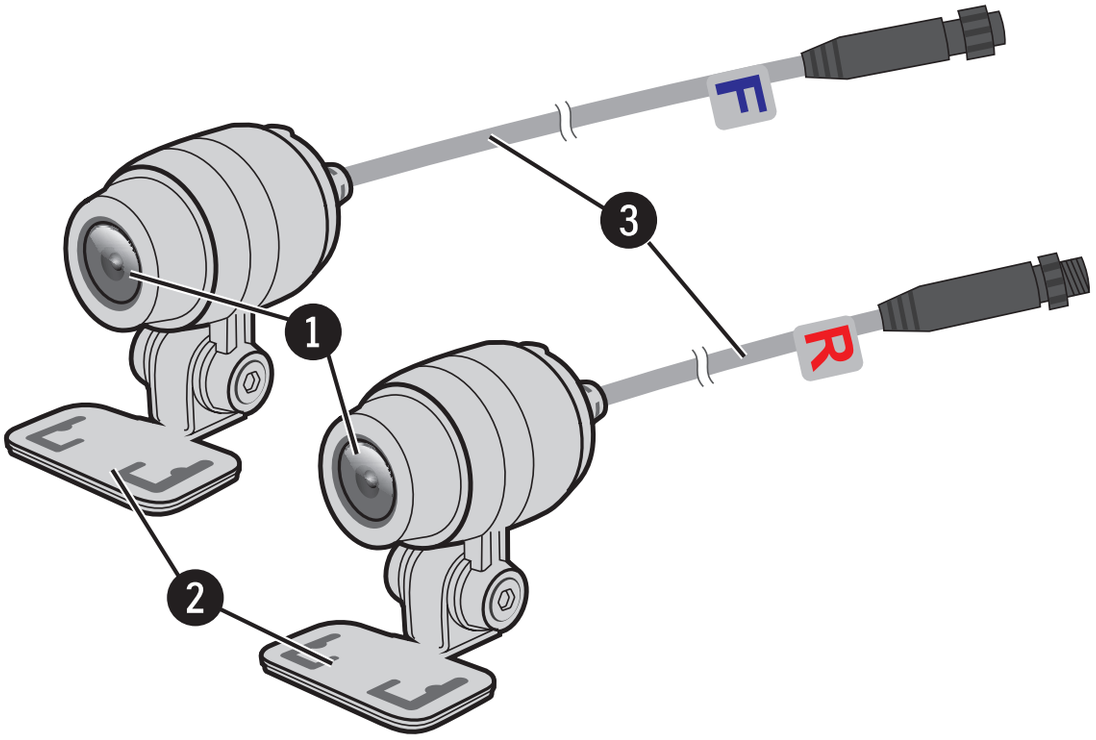
❷ Power connector

❸ GPS / Control Box connector

❹ Rear camera connector (female)

❺ Front camera connector (male)

Front / Rear recording camera



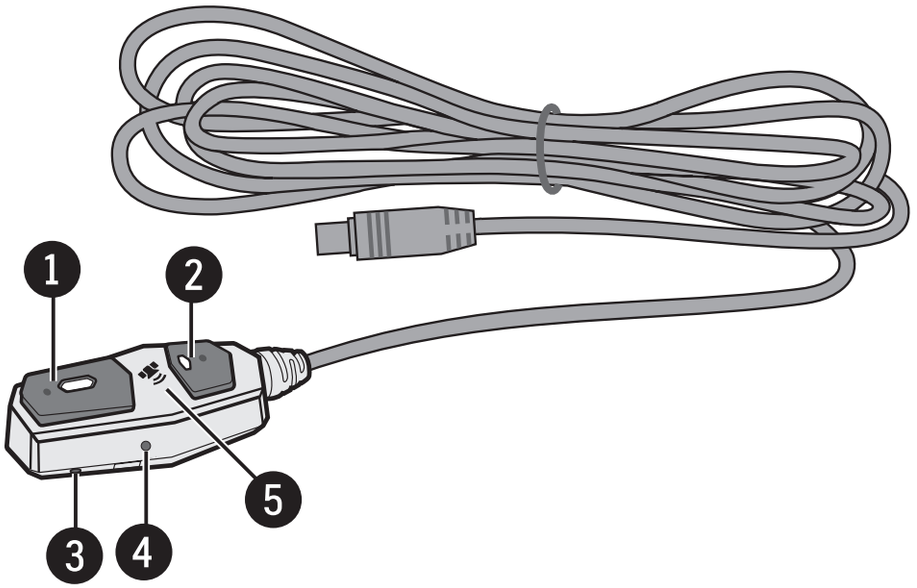
❶ Camera lens

❷ Mounting base

❸ Data cable

ⓘ Use the label attached to each data cable to identify the Front (**F**) and Rear (**R**) cameras.

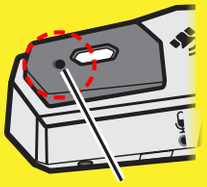
GPS / Control Box



1. Function Button 1 / LED Indicator (Red)
2. Function Button 2 / LED Indicator (Blue)
3. Buzzer
4. Microphone
5. GPS receiver

ⓘ To maintain strong satellite signal reception, make sure the GPS receiver ( ) is facing up and has a clear line of sight to the sky when mounting the control box.

ⓘ The raised point on each function button is designed to help you locate and press the button's contact area that is pressure-sensitive.



Raised point

Using a memory card

ⓘ This device supports Speed Class 10 / UHS-1 SD cards with capacity between 32 and 256 GB.

ⓘ MiTAC does not guarantee the product's compatibility with MicroSD cards from all manufacturers.

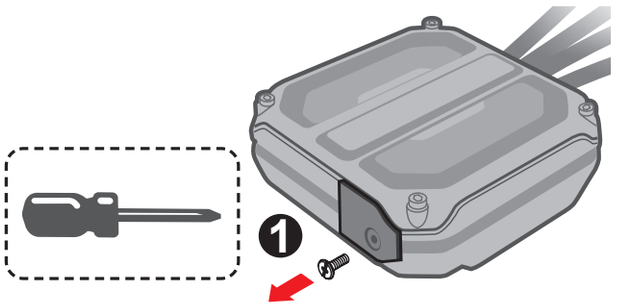
ⓘ Always secure the memory card slot cover by tightening the screw to keep moisture out.

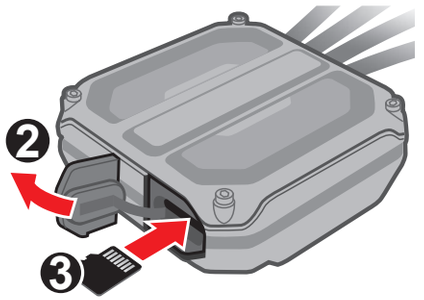
You have to insert a memory card before you can start recording. You should use separate MicroSD cards for recording and for regular data storage.

Insert the memory card before powering on your Mio. DO NOT remove the memory card during recording. Turn the device off before removing the memory card.

To access the memory card slot, remove the screw with a screwdriver and lift the cover. Hold the card (MicroSD) by the edges and gently insert it into the slot as shown in the illustration. Do not apply pressure to the centre of the memory card.

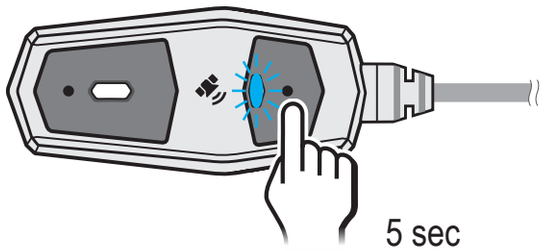
To remove a card, gently push the top edge of the card inwards to release and pull it out of the slot.





Formatting a card

To format the memory card (all data will be erased), press and hold Function Button 2 for five seconds while WIFI is off.



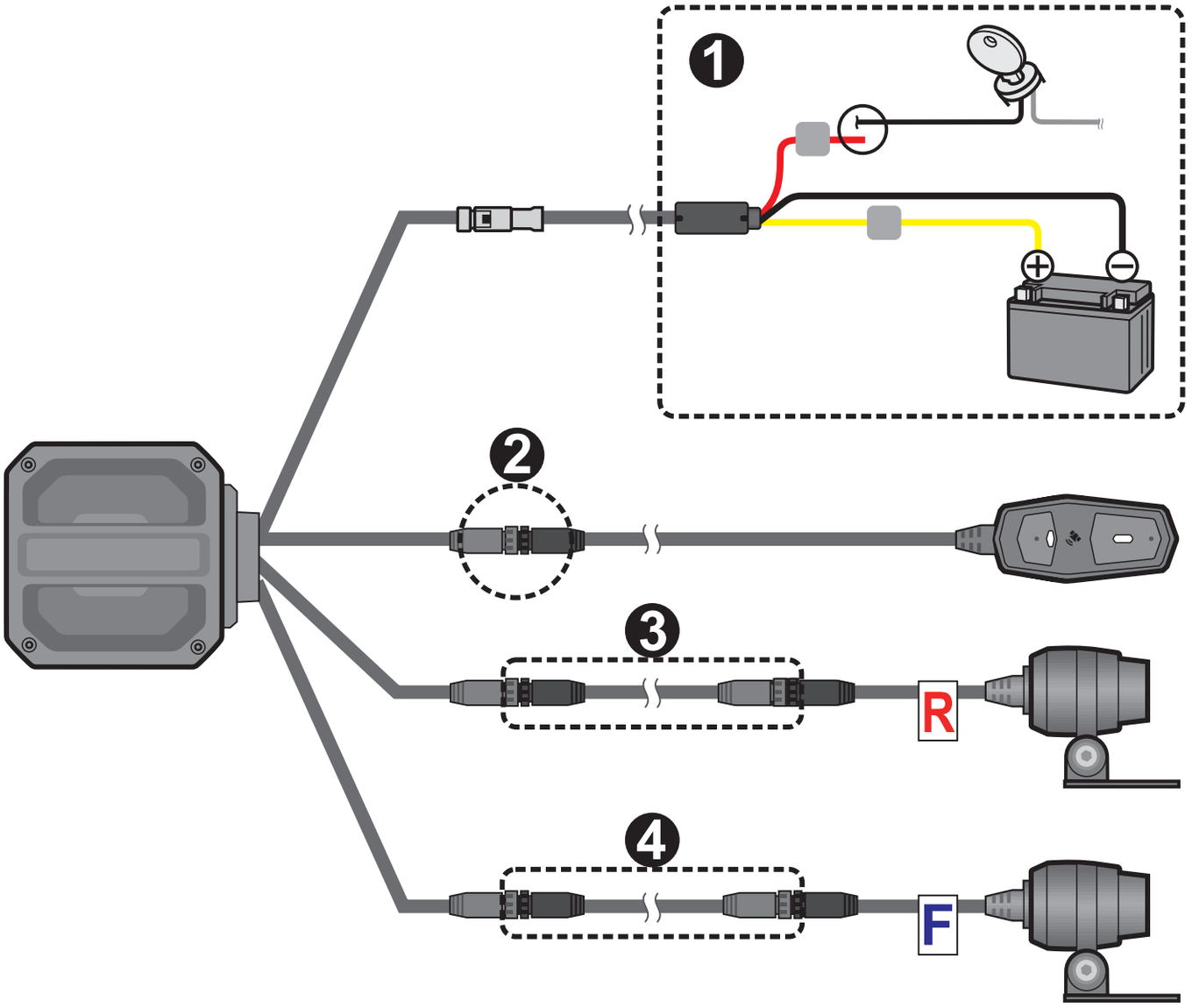
Using your motorcycle dash cam

Precautions and notices

- Do not operate the device while steering a motorcycle. Using this product does not change the requirement for the rider to take full responsibility for his or her road behaviour. This responsibility includes observing all traffic rules and regulations in order to avoid accidents, personal injuries or property damage.
- Make sure that no object is blocking the camera lens and no reflective material is placed near the lens. Please keep the lens clean.
- Select an appropriate location for mounting the device in a vehicle. Never place the device where the driver’s field of vision is blocked.
- The system will automatically calibrate the G-sensor of the device during startup. To avoid G-sensor malfunction, always turn the device on AFTER it is properly mounted in the vehicle.
- Keep the SD card slot cover properly sealed to protect the memory card from dust, debris, and moisture. Do not spray water on the device using a pressure washer.
- Each component must be properly secured to the motorcycle to prevent accidental detachment while riding at high speeds.

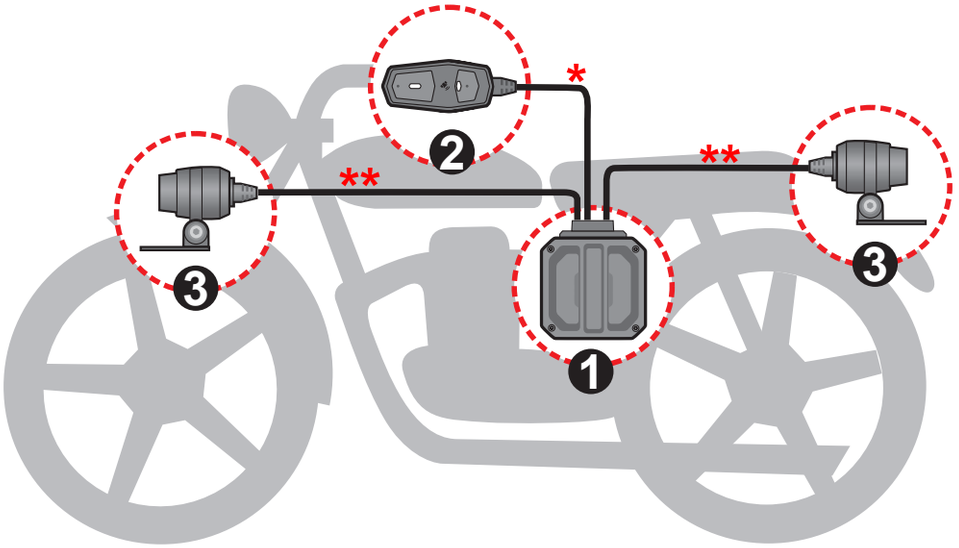
Mounting the motorcycle dash cam

Make sure your vehicle is parked on level ground. Follow the instructions below to mount your dash cam in a vehicle securely. It is recommended that you follow the connection diagram to connect and test the system prior to installation.

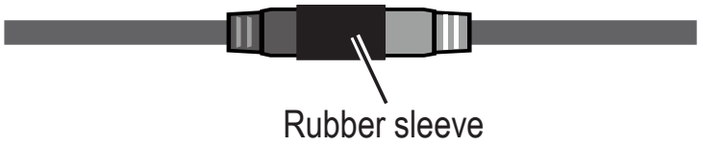


ⓘ This product can only be connected to 12-volt motorcycle batteries.

Install and connect the components:

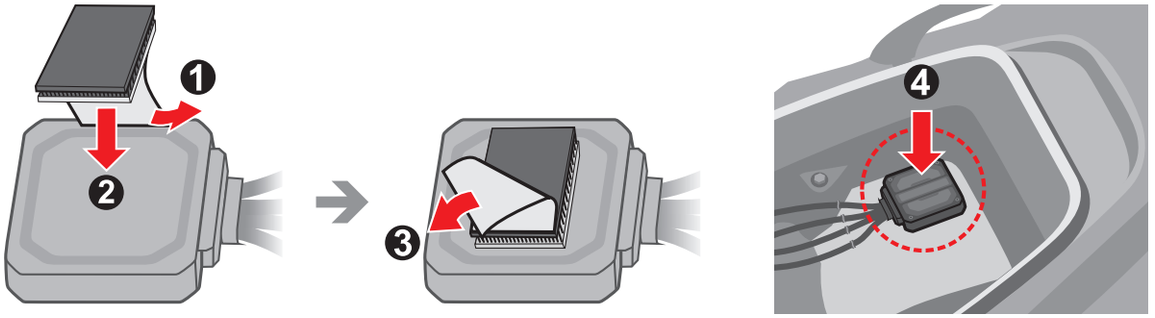


* Use the rubber sleeve to protect the connection point against outdoor elements.



** If necessary, an extension cable (included) can be used to connect the front or rear camera.

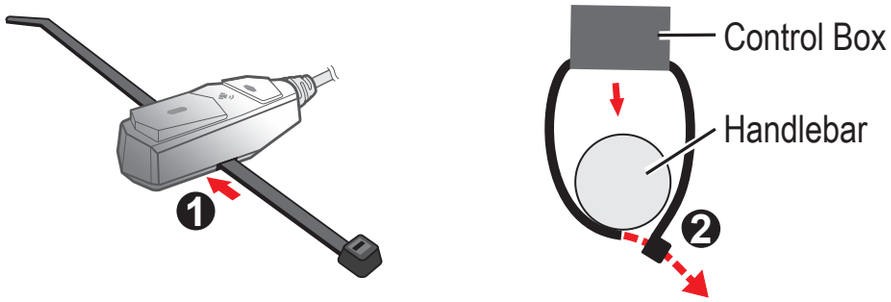
❶ Main Module:



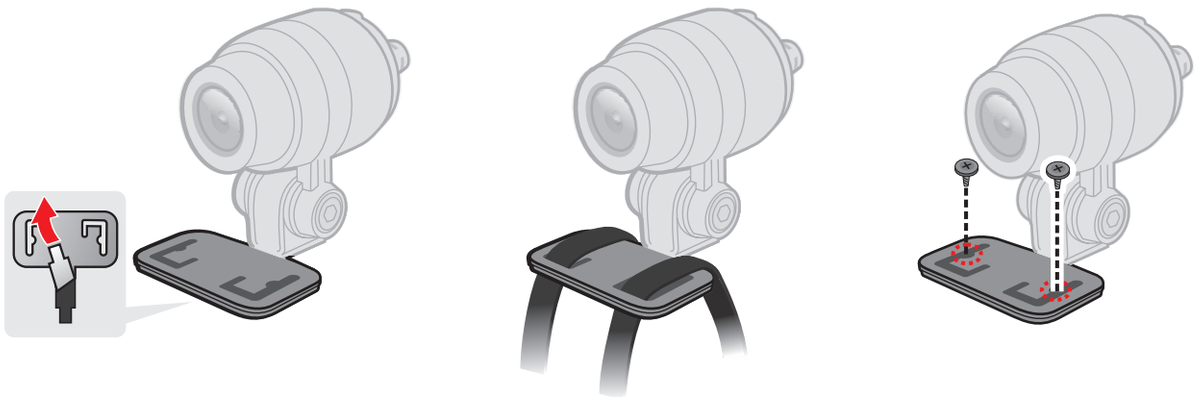
ⓘ Apply firm pressure to assure good contact between the 3M Dual Lock fastener and the surface.

ⓘ Main Module also houses the WIFI antenna, avoid mounting it beneath or inside a metal compartment.

❷ GPS / Control Box:

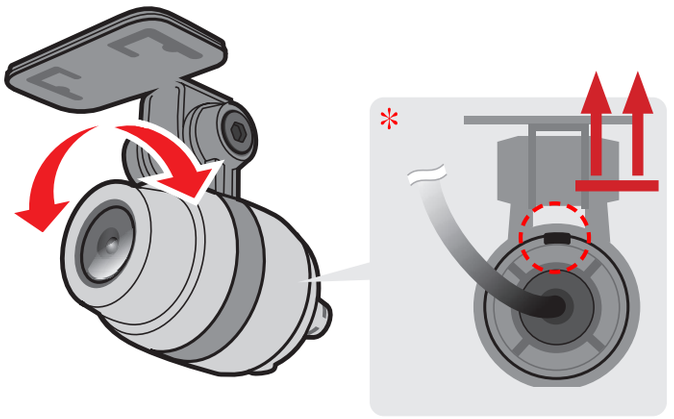


❸ Front / Rear recording camera:

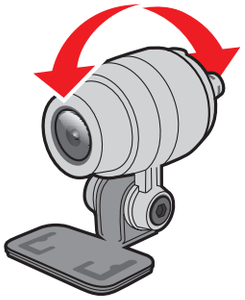


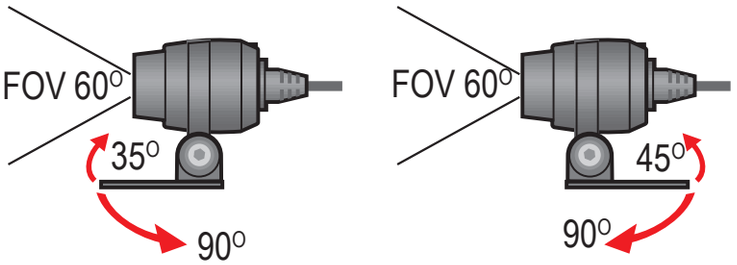
ⓘ The orientation of each camera's mounting base can be flipped by using a hex key to provide more flexibility during installation.

Connect the device to MiVue Pro and use the live view feature to adjust the angle/ image orientation of each camera.

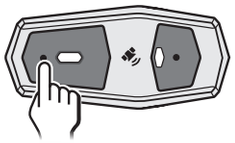
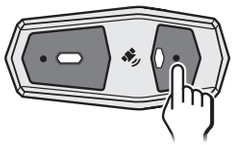
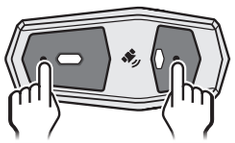


- Setting the camera image right-side up: The “  “ position mark on the back of each camera’s outer rim must be placed at the 12 o’clock position.
- When adjusting the angle of mounting, make sure that the camera’s view is parallel with level ground and the ground to sky ratio is close to a 50/50 split. Tighten the camera locking screw once the position is set.





Button operation

Funtion button	Operation
	• Press to start event recording • Hold for two seconds then release to turn Parking Mode on / off (requires app configuration) * • Hold for five seconds then release to turn trip lapse recording on / off *
	• Press to turn WIFI on / off • Hold for two seconds then release to reset WIFI password * • Hold for five seconds then release to format memory card *
	• Hold for two seconds then release to restart the device
* *Operation available only while WIFI is disabled*	

LED indicators

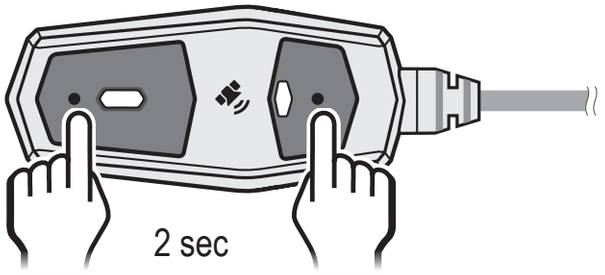
Red	Blue	Device Status
●	○	Normal recording in progress
✳	○	Event recording in progress
✳	○	Trip lapse recording / Parking Mode monitoring enabled
○	●	WIFI is on / Updating firmware
○	✳	Formatting SD card
○	✳	WIFI initializing
● +	●	SD card error
✳ +	✳	Camera malfunction detected
✳ ⇄	✳	Speed camera warning
○ *Off*	● *On*	✳ *Blinking* ✳ *Blinking rapidly*

Turning your Mio on & off

The motorcycle dash camera turns on automatically once the ignition is turned on. The system will automatically begin continuous recording shortly after start-up.

Restarting the device

Occasionally, you may need to perform a hardware reset when your Mio stops responding or if it appears to be “frozen” or unresponsive. Restart the device by pressing and holding both function buttons for at least two seconds before releasing the buttons.



Recording in driving mode

Continuous recording

The system will automatically begin continuous recording shortly after start-up. Recording can be paused by pressing Function Button 2 (to activate WIFI). Press Function Button 2 again to resume normal recording.

ⓘ Once continuous recording is paused by activating WIFI, the device will automatically turn off WIFI and resume recording if connection with a smartphone is not established within 60 seconds.

The recording may be divided into several video clips; recording will not stop between video clips. When your memory card fills up with continuous recordings, it will automatically record over the oldest existing files in this category.

Continuous recordings can be found in the “Normal” category for file playback.

Event recording

By default, if an event happens, such as a sudden impact, high speed driving, an aggressive turn or an accidental crash during continuous recording, the G-sensor will prompt your Mio to start recording the event.

ⓘ You can change the sensitivity level of the G-sensor via MiVue Pro. Please refer to “Customising the Settings” for additional information.

Whenever event-driven recording is triggered, the video file containing the actual event, along with the file recorded right before (if the detected event occurred within the first 20 seconds of the current recording) or after (if the detected event occurred within the final 20 seconds of the current recording) the event are automatically copied to the “Event” folder. When your memory card fills up with event recordings, it will record over the oldest existing files in this category.

Press Function Button 1 to manually activate event recording while continuous recording is in progress.

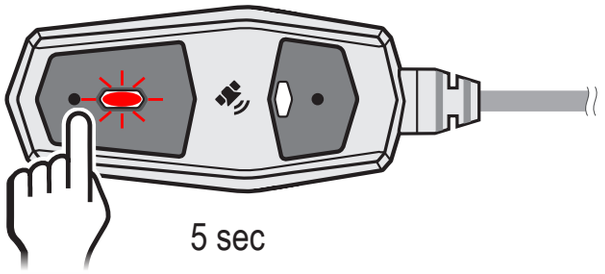
Event recordings can be found in the “Event” category for file playback.

Trip lapse recording

A trip lapse video is created by extracting one frame from each second of a continuous video then showing these frames in one continuous video. For example, a two-hour trip can be condensed into a video that is approximately eight minutes in length. Normal recording will continue to take place while trip lapse recording is active.

Start a trip lapse recording

While normal recording is in progress, press and hold Function Button 1 for five seconds then release the button to start recording a trip lapse video.



To end trip lapse recording, press and hold Function Button 1 for five seconds then release the button.

Trip lapse recording can also be activated / deactivated via MiVue Pro (> **Settings** > **Video Recording** > **Trip Lapse**).

Trip lapse recordings are saved in the “Triplapse” folder. Once the folder has reached its allocated capacity, the system will automatically record over the oldest video saved under this folder.

GPX route tracking

Each trip lapse recording also saves your GPS location data. GPX (GPS Exchange) files can be downloaded and exported from MiVue Pro.

Parking Mode

Your dash cam supports the parking recording function. Parking mode is disabled by default. Before enabling Parking Mode, please check the memory storage allocation of your device. Select > **Settings** > **SD Card** > **Storage Allocation** to set a proper allocation for parking recording. Changing the allocation will erase the memory card, so save any videos or photos to your computer first.

To enable Parking Mode via MiVue Pro, press > **Settings** and toggle the **Parking Mode** switch to ON. Additional settings will appear once Parking Mode is enabled.

Activation Method

- **Control Box Activated:** Parking Mode monitoring is activated manually each time. Prior to turning the ignition off, press and hold Function Button 1 for approximately two seconds and Parking Mode is turned on upon button release. You will hear two sets of beeps (a long beep followed by a short beep) to notify you that Parking Mode monitoring is currently active.

ⓘ The Control Box can only be used to activate Parking Mode monitoring. To exit Parking Mode, you must turn the ignition on and wait for the device to complete its start-up process (until you hear the device start-up sound).

- **Always On:** Parking Mode monitoring is activated automatically when the ignition is switched off.

Detection Mode

- **Passive Powered Mode:** Less power is used under this mode as only vibrations will trigger the device to wake up and start recording. The device will terminate Parking Mode monitoring and shut off completely if the detected battery voltage is less than the **Voltage Setting** value (**12.4V** / **12.6V**). When operating under this mode, the actual recording will start approximately three seconds after a trigger has been set off and continue for 20 seconds.
- **Smart Mode:** Recordings are triggered when vibrations or movements are detected. When operating under this mode, you must set the **Voltage Setting** (**12.4V** / **12.6V**) and **Timer Setting** (**1 hour** / **2 hours**) to avoid over-draining the battery. Once the ignition is turned off, Smart Mode monitoring is activated for the duration of time specified in the **Timer Setting** before automatically switching to Passive Powered Mode. If at any time the detected battery voltage is less than the value set in **Voltage Setting**, the device will terminate Parking Mode monitoring and shut off completely. When operating under this mode, the actual recording will contain footage captured five seconds before and 15 seconds after a trigger has been set off.
- **Parking Lapse Mode:** Once the ignition is turned off, Smart Mode monitoring is activated for the duration of time specified in the **Timer Setting** (**1 hour** / **2 hours**) before automatically switching to Passive Powered Mode. A time-lapse video is created by extracting one frame from each second of a parking video then showing these frames in one continuous video. If at any time the detected battery voltage is less than the value set in **Voltage Setting**, the device will terminate Parking Mode monitoring and shut off completely.

Parking Mode recordings are saved in the “Parking” and “ParkingLapse” folders. When your memory card fills up with parking recordings, it will record over the oldest existing files in this category.

Getting connected

MiVue Pro

ⓘ The MiVue Pro app is compatible with iOS 9.0 (and above) and Android 8.0 (and above) devices. MiTAC does not guarantee the product's compatibility with smartphones from all manufacturers. Not all MiVue dash cam models support the MiVue Pro app or all its features.

MiVue Pro allows you to view, share and back up the videos recorded on a MiVue dash cam via WIFI. Search for "MiVue Pro" in the Apple App Store or Google Play Store to download the app for free.

Setting up a WIFI connection

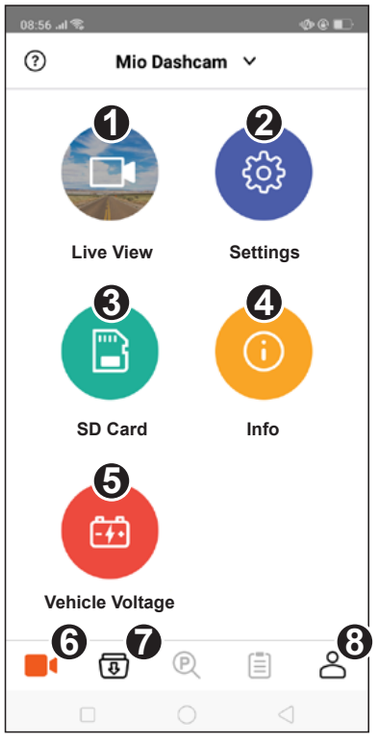
ⓘ The WIFI connection between your Mio and smartphone is not Internet-enabled.

The WIFI function allows you to connect the dash cam to your smartphone. Press the device's Function Button 2 to enable WIFI mode. The WIFI indicator glows in blue when WIFI is enabled.

1. On the smartphone, make sure WIFI is enabled. Open MiVue Pro and tap the "+" icon at the centre of the screen.
2. Select your model from the list of devices then tap **Select WIFI**.
3. Return to MiVue Pro and tap **Done** to complete the WIFI connection.

ⓘ For security reasons, you are immediately prompted to change the default password (1234567890) when connecting to the dash cam network (MiVue_xxxxxx) for the first time.

Using MiVue Pro



1. **Live View**: Shows the live-view of the front and rear recording cameras.
2. **Settings:** Configures device settings.
3. **SD Card:** Browses files saved on the device's SD card.
4. **Info:** Displays device information.
5. **Vehicle Voltage:** Views current and past voltage values of your motorcycle battery.
6. **Home:** Returns to the app's main page.
7. **File Explorer:** Browses files downloaded to the app.
8. **App Info:** Changes the app's storage location and performs firmware updates.

Customising the settings

Open MiVue Pro on the connected smartphone and tap  > **Settings** to configure system settings.

Video Recording

- **Trip Lapse:** Turns trip lapse recording on or off.
- **Video Clip Length:** Sets the length of each video clip for a continuous recording.
- **Video Quality:** Sets the device to record **High** (bitrate = 15 Mb/s) or **Standard** (bitrate = 10 Mb/s) quality videos. Please note that the setting selected has a direct impact on image clarity, space occupied on the memory card, and time required for copying files over the WIFI connection.
- **Resolution:** Sets the resolution of the video.
  - Frame rate (FPS): The number of frames appear within a second.
  - High dynamic range (HDR): The technology to display greater details in very bright and very dark areas.
- **Frequency:** Sets the frequency for the camera to avoid problems caused by artificial light sources that are not constant.
- **EV:** Sets the exposure level to adjust the brightness of the image.
- **G-sensor:** Sets the sensitivity level of the G-sensor that allows automatic triggering of event recording while continuous recording is in progress.
- **Record Sound:** Sets if you want to include sounds in the recordings.
- **Stamps:** Sets the information (**Coordinates** or **G-sensor**) that will be displayed on the recorded video.
- **Riding Stamps:** Displays the average, max, or real Time speed on the recorded video.
- **Text Stamp:** Displays customisable text information.

Parking Mode

ⓘ Refer to the manual's "Parking Mode" chapter for detailed information on Parking Mode settings.

- **Parking Mode:** When enabled, the dash cam will automatically start recording when it detects movements or if an event happens while the vehicle is parked.
- **Activate Method:** Activation method can be set to manual (**Control Box Activated**) or automatic (**Always On**).
- **Detection Mode:** Sets the detection mode to **Passive Powered Mode**, **Smart Mode**, or **Parking Lapse Mode**.
- **Voltage Setting:** Sets the cut-off voltage (**12.4V** / **12.6V**) for turning off Parking Mode monitoring.
- **Timer Setting:** Sets a timer (**1 Hour/2 Hours**) for switching from Smart Mode / Parking Lapse Mode to Passive Powered Mode.
- **G-sensor Sensitivity:** Sets the sensitivity level (**Low** / **Medium** / **High**) of the G-sensor that allows automatic triggering of parking recording when the dash cam is in Parking Mode.
- **Motion Detection:** Sets the sensitivity level of motion detection to **Low**, **Medium** or **High** (not available under Passive Powered Mode).
- **Motion Detection Direction:** Activates motion detection for the Front Camera, Rear Camera, or Both (not available under Passive Powered Mode).
- **Motion Detection Area:** Sets the area of motion detection to **Whole Area** or **Main Area Only** (not available under Passive Powered Mode).

SafetyCam

- **Detection:** Enables or disables safety camera alerts.
- **Alert Sound:** Turns the audio alert on (**Beep**) or **Off**.
- **Alert Distance:** The system will alert you at a preset distance (**Short**, **Medium** or **Long**) when a safety camera is ahead.

- **Threshold:** Sets the speed value for the dash cam to start issuing alerts.
- **Cruise Speed Alert:** Sets the limit for the cruise speed. Alerts are issued when you ride at a cruise speed over the set value.

SD Card

- **Storage Allocation:** The system offers several memory configurations for storing videos. Select a suitable configuration based on usage.

ⓘ Changing the allocation will erase the memory card, so save any videos or photos to your computer first.

System

- **Date/Time:** Sets the system date and time.
  - **Manual (Sync Time with Phone):** Updates date and time on the device based on the mobile phone's cellular network.
  - **GPS:** Sets the time based on the selected Time Zone and Daylight Saving Time settings for your location.
- **Welcome Sound:** Enables or disables the notification sounds during start-up.
- **Button Sound:** Enables/disables notification sound when function buttons 1 and 2 are pressed.
- **Error Reminder Sound:** Enables/disables error notification sound.
- **Distance Unit:** Sets the preferred distance unit.
- **Format SD Card:** Formats the memory card (all data will be erased).
- **Restore to Defaults:** Restores system settings to the factory defaults.

ⓘ Not all setting items and options are available for all models.

For more information

Caring for your device

Taking good care of your device will ensure trouble-free operation and reduce the risk of damage.

- Keep your device away from excessive moisture and extreme temperatures.
- Avoid exposing your device to direct sunlight or strong ultraviolet light for extended periods of time.
- Do not place anything on top of your device or drop objects on your device.
- Do not drop your device or subject it to severe shock.
- Do not subject your device to sudden and severe temperature changes. This could cause moisture condensation inside the unit, which could damage your device. In the event of moisture condensation, allow the device to dry out completely before use.
- Never clean your device with it powered on.
- Never attempt to disassemble, repair or make any modifications to your device. Disassembling, modifying or any attempt to repair could cause damage to your device, may inflict bodily harm or damage to property and will void any warranty.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as your device, its parts or accessories.
- To discourage theft, do not leave the device and accessories in plain view in an unattended vehicle.
- Overheating may damage the device.
- Operating temperature: -10 to 50°C (Max.)

About GPS

- GPS is operated by the United States government, which is solely responsible for the performance of GPS. Any change to the GPS system can affect the accuracy of all GPS equipment.
- GPS satellite signals cannot pass through solid materials (except glass). When you are inside a tunnel or building, GPS positioning is not available. Signal reception can be affected by situations such as bad weather or dense overhead obstacles (such as trees, tunnels, viaducts and tall buildings).
- The GPS positioning data is for reference only.

About FOSS

https://service.mio.com/M0100/F0110_DownLoad_Faq.aspx?bullid=AllBull&faqid=132921&Region=Rest%20of%20Europe&Language=English

https://service.mio.com/M0100/F0110_DownLoad_Faq.aspx?bullid=AllBull&faqid=132924&Region=Rest%20of%20Europe&Language=English

https://service.mio.com/M0100/F0110_DownLoad_Faq.aspx?bullid=AllBull&faqid=132923&Region=Rest%20of%20Europe&Language=English

Regulatory information

For regulatory identification purposes, MiVue M820WD is assigned a model number of N711.

European Union Compliance Information

Products with the CE marking comply with the Radio Equipment Directive (RED) (2014/53/EU) - issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Standards:

ETSI EN 300 328 V2.2.2: 2019
ETSI EN 303 413 V1.2.1 (2021-04)
EN 55032: 2015+A11: 2020
BS EN 55032: 2015+A11: 2020
EN IEC 62368-1:2020+A11:2020
EN IEC 62311: 2020
EN 55035: 2017+A11: 2020
BS EN 55035: 2017+A11: 2020
IEC 61000-4-2: 2008
IEC 61000-4-3: 2006 + A1: 2007 + A2: 2010
IEC 61000-4-4: 2012
IEC 61000-4-5: 2014+A1:2017
IEC 61000-4-6: 2013+COR1:2015
IEC 61000-4-8: 2009
EN 301 489-1 V2.2.3 (2019-11)
EN 301 489-17 V3.2.4 (2020-09)
EN 301 489-19 V2.2.1 (2022-09)
EN 55032: 2015+A11: 2020
EN 61000-4-2: 2009
EN 61000-4-3: 2006+A1: 2008+A2: 2010
EN 61000-4-4: 2012
EN 61000-4-5: 2014
EN 61000-4-6: 2014

The manufacturer cannot be held responsible for modifications made by the User and the consequences thereof, which may alter the conformity of the product with the CE Marking.

IEEE 802.11 b/g/n 2.4GHz

- Operating frequency range: 2400 - 2483.5MHz
- Maximum output power: 19.98dBM

Declaration of conformity

Hereby, MiTAC declares that this N711 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

WEEE

This product must not be disposed of as normal household waste, in accordance with the EU directive for waste electrical and electronic equipment (WEEE – 2012/19/EU). Instead, it should be disposed of by returning it to the point of sale, or to a municipal recycling collection point.

UK Compliance Information

UK
CA

Hereby, MiTAC declares that this device is in compliance with Radio Equipment Regulations 2017.