



Owner's Manual

For your safety and comfort, read carefully and keep in the vehicle.

DIGITAL VIDEO RECORDER (DVR)

Please read this manual carefully before using this product. Keep it in a safe place for future reference. If this device is resold, this operating manual must be handed over to the purchaser along with it.

The manufacturer cannot be held liable for damage resulting from improper usage or incorrect operation.

Versions, technical modifications, and delivery options reserved.

Version 1.0



TOYOTA KIRLOSKAR MOTOR PRIVATE LIMITED

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PRIVACY WARNING

- A microphone is built into this DVR. If the voice recording function is turned on, then sounds and voices in the vehicle are recorded and saved on the SD card. The Audio Recording function is turned off by default from the factory. Recorded sound data may infringe the privacy rights of passengers inside the vehicle. You must notify passengers when the voice recording function is turned on and request approval from passengers where necessary to record in the vehicle. You must comply with federal and state laws (including wiretapping laws) when the audio recording function is on.
- A video camera is built into this DVR. If the video recording function is turned on, images and video of the inside and outside of the vehicle are recorded and saved in the SD card. Recorded images and videos may infringe the privacy rights of passengers and other parties. You must notify passengers when the video recording function is turned on and request approval from passengers where necessary to record in the vehicle. You must comply with federal and state laws (including wiretapping laws) when the video recording function is on.
- Sharing or distributing images or video recorded from the DVR, including to a social media site, may infringe the privacy rights of passengers, pedestrians, or other parties. Manufacturer, Distributors and Resellers of the DVR are not liable for the recording or use of images, video or audio recordings that infringe on the privacy of third parties, including if those recordings are uploaded to a social media site.



SAFETY PRECAUTIONS

WARNING

- While driving, the driver must not insert or eject the SD memory card. Doing so may cause an accident from being distracted. If these operations are necessary, be sure to park the car in a safe place.
- NEVER drive dangerously on purpose to check that this equipment detects the impact properly. Noncompliance with this instruction may result in accidents.
- Do not disassemble or modify this equipment. Noncompliance with this instruction may result in traffic accidents, fire and/or electric shock.
- Do not allow water or foreign objects to enter the internal parts of this equipment. Otherwise, the equipment may emit smoke and/or catch fire and/or electric shock may result.
- If abnormal conditions occur, i.e., foreign objects enter this equipment and/or it is exposed to water and/or emits smoke and/or a strange odor, turn off vehicle immediately and contact the dealer from whom you purchased the equipment. Continuing to use it in these conditions may result in unexpected accidents, fire and/or electric shock.
- Do not damage the camera cable. Any holes in the camera harness will provide a point of entry for moisture and water. Noncompliance with this instruction may result in fire, electric shock and/or malfunctions.
- During a thunderstorm, do not touch the camera. Danger of electric shock may result from lightning strikes.
- The product packaging contains a plastic bag. NEVER put a plastic bag over your head or mouth. Failure to do so may result in serious accidents and/or death by suffocation. Keep plastic bags away from children.
- If the equipment becomes loose or dislodged during driving, do not attempt to pick up the camera or reinstall it while driving. Park the vehicle in a safe place before attempting to pick up or reinstall the camera.
- Do not put your hands and/or fingers into the card loading slot. Noncompliance with this instruction may result in injury.



- Do not use this equipment except for in-vehicle use. Otherwise, the equipment may emit smoke and/or catch fire, and/or electric shock and/or injury may result.
- Do not apply a strong shock to this equipment. Do not drop it. Do not put heavy objects on it. Noncompliance with this instruction may result in fire and/or malfunctions.
- If the equipment is dropped or the outer case is damaged, turn off vehicle and contact the dealer from whom you purchased the equipment. Continuing to use it in this condition may result in fire and/or electric shock.



NOTICE

- When changing the location of this equipment, consult the dealer from whom you purchased the equipment for removing and re-installing the equipment. Expertise is required for removal and installation of the equipment.
- If exposed to direct sunlight surface of camera may become hot.
- To ensure Parking Mode Recording, prevent vehicle 12-volt battery discharge.
- Do not leave the power switch in ACC or ON for long periods of time without the Hybrid system ON or the Engine running.
- If "ACCESSORY" or "IGNITION ON" is displayed on the multi-information display, the power switch is not in OFF. Exit the vehicle after turning the power switch to OFF.
- Failure to follow the above steps will result in the vehicle's 12-volt battery draining below a safe voltage (11.7V), at which point your DVR will shut down to protect the vehicle's battery, resulting in the Parking Mode function being stopped.



ABOUT THIS MANUAL

For safety reasons, this manual indicates following terms requiring particular attention:

-  **WARNING:** Explains something that, if not obeyed, could cause death or serious injury to persons.
-  **NOTICE:** Explains something that, if not obeyed, could cause damage to or a malfunction in the vehicle or its equipment.



IMPORTANT INFORMATION

WARNINGS ABOUT THE VIDEO RECORDING

- The purpose of this DVR is to record the conditions when a vehicle is driven. Do not use the DVR for mischief or any other improper, unintended, or unlawful purposes, including in a manner that violates the privacy rights of another person.
- One of the purposes of this DVR is to provide proof in the event of an accident. However, its effectiveness as evidence is not guaranteed.
- Manufacturer, Distributor and Reseller is not liable for any damages that arise, such as from the video failing to record or a recorded file being damaged, nor for any losses, such as the DVR being damaged or from use of the DVR.

Videos may not be recorded or protected (locked) under the following conditions:

- (1) If a microSD card is not inserted in the DVR.
- (2) If the microSD card is ejected from the DVR.
- (3) If anything, other than a genuine microSD card or the one provided with the DVR is used.
- (4) If recorded videos are overwritten (deleted) by newly recorded videos.
- (5) If the DVR or the microSD card is severely damaged, included but not limited to; a vehicle collision or being immersed in water.
- (6) If the power supply cord from the battery to the DVR is broken or if the battery is damaged due to a severe accident.
- (7) If the impact registered by the DVR G sensor is less than that of the set G sensor sensitivity value (Event recording in Normal and Parking mode).
- (8) If camera visibility is extremely low, such as due to windshield condensation or heavy precipitation.
- (9) If the MicroSD card memory has become corrupted, you may lose data or may not be able to record. MicroSD cards have limited life and may require replacement.



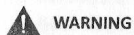
Videos during an impact event may not be recorded or saved during the following cases:

- (1) If your vehicle collides at low speed, or if another vehicle collides with yours at a relatively low speed.
- (2) If a part of your or the other party's vehicle is hit in a part designed to mitigate impact, such as but not limited to, bumpers, doors, fenders, spare tire cover, etc. absorb shock, so the actual impact may be smaller than it appears.
- (3) Accidents in which the impact is so slight that the air bag does not activate may not be detected.
- (4) If the other party's vehicle has relatively less weight than your vehicle, or if your vehicle collides with a person or a bicycle.
- (5) If the contact with the other party's vehicle is at an angle rather than a direct impact.
- (6) If sudden braking is applied on a snowy or frozen road.
 - a. There is little friction between the vehicles tires and the road when it is snowy or frozen. Consequently, the vehicle slips at even the slightest impact, which is difficult for the G-sensor to detect.
- (7) If the impact is below G-sensor sensitivity settings.
- (8) If there is a problem in the installation of the DVR, such as the body of the DVR not being fixed.
 - This DVR is used for recording video; however, it is not guaranteed that it will always be able to confirm a traffic signal. Environmental factors may prevent confirmation of the traffic signal. Manufacturer, Distributor, Reseller bears no liability for conditions in which a traffic signal cannot be confirmed.
 - LED traffic signals flash faster than the human eye can detect, so when video is shot with the DVR, it may appear to be blinking. Manufacturer, Distributor, Reseller shall bear no responsibility if video cannot capture an LED traffic signal device.
 - This video recorder is constantly recording while ignition is on. When the microSD card is full, older videos are deleted and overwritten by new ones.



- When the data is important, save the video to your smartphone using the smartphone application or first ensure the vehicle is off to avoid corrupting the previous footage, then eject the microSD card and save the video on a personal computer.
- In the case of an accident, turn off the ignition key of the vehicle as soon as possible. Eject the microSD card and save the video on a personal computer.
- Manufacturer, Distributor and Reseller is not liable for corrupted files that may occur when saving image or video files that you have captured to a computer.

Cautions about Operating and Handling the DVR



WARNING

The driver should not eject/insert the microSD card or operate a smartphone while driving. Doing so may cause an accident from being distracted. If these operations are necessary, be sure to park the car in a safe place first.

- Do not park or stop the car illegally in order to use the DVR.
- Do not touch the DVR with a bare hand if it has been sitting in direct sunlight during the summer. The DVR may be hot and cause a burn.
- Do not spray any type of cleaner or pour water on the DVR. The double-sided tape may fail and allow the DVR to fall.
- Videos recorded when there is water on the windshield or when it is dirty may result in unclear images.
- When cleaning the windshield, do not pull on the DVR or the cord with excessive force. The DVR may come off. (Please consult your dealership if it comes off).
- When the vehicle battery is removed, reset time to the correct time at the next startup.
- Due to the properties of the camera's lens, people and objects on the screen may appear to be in a position and distance which may differ from their actual position and distance.
- Blooming phenomenon: When a bright object (sun, headlight, etc.) is recorded, white saturation occurs around the light.

- Scratches to camera surface may allow humidity or moisture inside, causing malfunction, fire, and/or electric shock.
- Do not wipe the DVR with alcohol, benzene, thinner, gasoline, or other volatile chemicals. Doing so may cause deformation, deterioration, or other damage.
- When the camera lens is dirty, lightly wipe the lens with a soft damp cloth making sure not to leave any residue on the lens. Rubbing the lens roughly with a dry cloth may cause scratching.

Handling SD Cards

- When using a microSD card for the DVR, always use a genuine microSD card or the microSD card provided with the DVR. MicroSD card provided with the DVR is industrial grade with longer life compared to other commercially available microSD cards. The DVR may not operate properly if another type of microSD card is used. You are advised to use a Class 10 microSD card with minimum 8GB or maximum 128GB capacity.
- Always format new SD cards in the DVR or computer before beginning new recordings.
- Do not save data other than that recorded by this DVR to the microSD card. Otherwise, videos may not be recorded properly.
- Confirm that the DVR is OFF (All LEDs are off) when inserting/ejecting the microSD card. Do not insert/eject a microSD card while the DVR is ON. Doing so may damage the microSD card.
- Never eject the microSD card while the DVR is accessing the card (LED is on or blinking). Doing so may damage not only the microSD card but also the DVR itself.
- This product has a G-sensor setting function. The system will occupy 30% of the memory card capacity to save locked video files, and 70% of the memory card capacity to save normal loop recording. In case of the locked file exceeds 30%, the locked video will also start to loop automatically.
- The DVR is not guaranteed to work or be compatible with microSD cards of all manufacturers.
- Do not apply pressure or twist the microSD card when handling the DVR under any scenarios to avoid irreversible damage.



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VIDEO PLAYBACK REQUIREMENTS

The videos recorded on this DVR may be played back via the Smartphone App or on a personal computer.

Minimum Requirements for Personal Computer

- **OS:** Windows 7 +, MacOS 10.12+
- **CPU:** Intel i5 or Higher
- **Memory:** 4GB or higher
- **Display:** 1024 x 720p or higher
- **Other:** SD Card reader or USB Port for external SD card readers.

Minimum Requirements for Smartphones

- **Apple:** iPhone 6 or later with iOS 13 or later. (iPads not supported)
- **Android:** Android smartphones with Android OS 8 or later. (Android Tablets not supported)

NOTE

PC and Smartphone compatibility requirements may change with time, please refer to the latest owner's manual in the Smartphone App or contact your dealer for up-to-date information.



TRADEMARKS

- App Store is a service mark of Apple Inc., registered in the U.S.A and other countries.
- Apple and iPhone are trademarks of Apple Inc.
- iOS & macOS are the name of the OS of Apple Inc.
- Google Play is a Trademark of Google Inc.
- Android is a Trademark of Google Inc.
- microSDHC is a trademark of SD-3C, LLC.
- Windows 7, 8, 10 & 11 are registered trademarks of Microsoft Corporation in the U.S.A and other countries.
- Any other company names and product names mentioned or used in this manual are registered trademarks of their respective companies.



INTRODUCTION

The DVR is designed to be installed on your front and rear (if rear camera equipped) windshield for recording the areas in front and in the rear (if rear camera equipped) of your vehicle. The DVR will automatically save and record data in the event of a crash. The DVR automatically starts recording when the ignition power of the vehicle is on. When the vehicle is stationary you can access videos or change settings in your DVR via the onboard controls or Smartphone App:



The DVR features a number for recording modes:

Normal: Loop recording with set video file duration (default 3 minutes). Oldest file deleted once normal recording allocation is full.

Emergency: Triggered by G-Sensor or Manually (long press the OK button). Oldest file deleted once Emergency (locked) file allocation is full. Please ensure to save important emergency files periodically to avoid losing important video footage.

Parking: Triggered when vehicle is turned OFF, DVR will stay in a sleep mode till the G-Sensor is triggered by impact or heavy vibrations. The DVR will record a 30 second locked footage and go back to sleep mode. This recording mode only works when Parking mode is enabled in the DVR settings.

Photo: This mode allows the DVR to take photos, to take photos stop recording by pressing the OK button then pressing the back button to enter photo mode, then simply press the OK button again to take a photo.



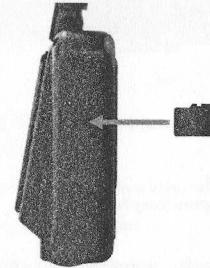
DVR FUNCTION AND OPERATIONS

MEMORY CARD OPERATION

If the DVR cannot record even though card inserted in the slot, please confirm the following:

- The microSD is secured in the card slot. If not eject and re-insert again.
- Format microSD card if re-inserting card does not work.
- If format does not work, try a different compatible microSD card.

Inserting/Removing Memory Card:



- Insert the microSD card into the DVR card slot by gently but firmly inserting it so the card is locked and secured, with the label facing away from you.
- Remove the microSD card by gently pushing down on the top edge of the card to release the lock and gently pull it out of the slot.



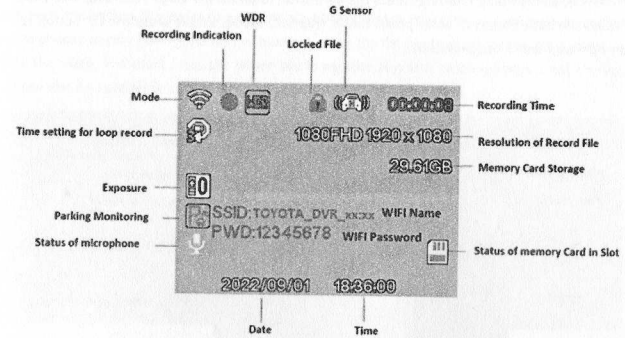
DVR BUTTON FUNCTIONS



1. Power Button.
2. microSD Card Slot.
3. Menu/Settings Button.
4. OK Button (Dual Function).
 - a. Stop Recording (Short Press).
 - b. Emergency Recording Start/Stop (Long Press).
5. Back Button (Dual Function).
 - a. Change Front & Rear Camera (if equipped) view combination, Picture in Picture format (Short Press).
 - b. Enable Wi-Fi Start/Stop (Long Press).
6. LED Indicator.
7. Up Button.
 - a. While recording Press Up to zoom in.
 - b. In settings use to navigate settings menu.
8. Down Button.
 - a. When recording press to control MIC ON or OFF.
 - b. In settings use to navigate settings menu.
9. Microphone.
10. Reset switch.



DISPLAY OVERLAY



Recording Indication: The red dot flashes to indicate video is being recorded, no red dot means recording has stopped or DVR is in Photo Mode.

Mode: Shows what mode the DVR is in; default mode is Video Recording.

WDR: Shows if Wide Dynamic Range feature is enabled.

Recording Time: Displays the duration of current video being recorded.

Storage: Shows the remaining storage on the microSD card.

Memory Card: Shows the microSD card is being read.

Date & Time: Shows the date and time set. Both should be set at the time of installation.

Status of Microphone: Shows if audio recording is on or off.

Parking Monitoring: Shows status of Parking mode setting (on or off).

Exposure: Shows exposure level set.



PHOTO MODE

In the main video recording interface, press the OK button to pause the video recording, and then short press the back button to enter photo mode. In photo mode, simply press the OK button to take a photo and save it automatically.

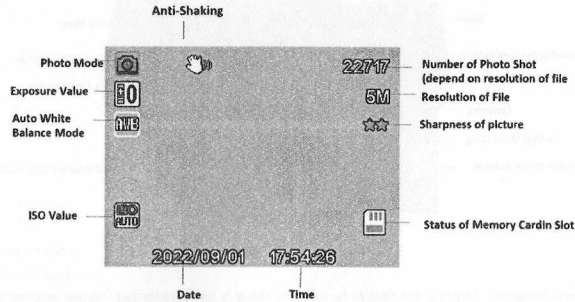
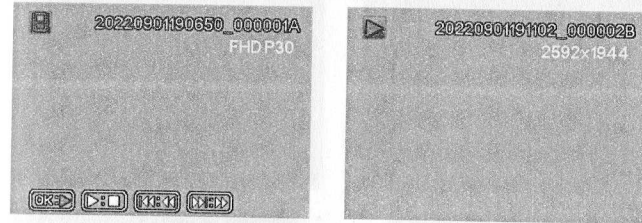


Image quality can be set to: ★Economic, ★★Standard, ★★★Premium

PLAYBACK MODE

In the main video recording interface, press the OK button to pause the video recording, and then short press the back button **twice** to enter the playback interface. Press the up and down navigation keys to choose to play back video files or pictures, press the OK key to playback the file content or pause the video, and short press the return key to exit the playback mode when it is not playing. Files can also be deleted or protected (locked) from the playback menu.



Delete: delete current, delete all 2 options

Protect: lock, unlock, lock all, unlock all

Slide show: 2 seconds, 5 seconds and 8 seconds



RECORDING SETTINGS

Press the OK button to pause the recording in the camera interface settings and press the M button once to enter the recording menu settings, you can set the menu as shown below.



- **Resolution:** 1080FHD 1920*1080, 720P 1280*720, WVGA 848*480, VGA 640*480
< Default setting: 1080 HD >
- **Loop Recording:** Off, 1 min, 2 mins, 3 mins, 5 mins, 10 mins
< Default setting: 3 minutes >
- **WDR:** Off, On < Default setting: On >
- **Exposure:** +2.0, +5/3, +4/3, +1.0, +2/3, +1/3, +0.0, -1/3, -2/3, -1.0, -4/3, -5/3, -2.0
< Default setting: +0.0 >

- **G-Sensor:** Off, Low and High < Default setting: High >
- **Audio recording:** Off, On < Default setting: Off >
- **Date label:** Off, On < Default setting: On >
- **WiFi:** Off, On < Default setting: Off >
- **Flip Rear Live View Image:** Actual Image, Mirrored Image < Default setting: Mirrored Image >
*Actual shows reversed image for proper rear-view orientation (L -> R), Mirror will flip image but will show incorrect rear-view orientation (R -> L).



SYSTEM SETTINGS

Press the OK button to pause the recording in the camera interface settings and press the M button twice to enter the system settings, you can set the menu as shown below.



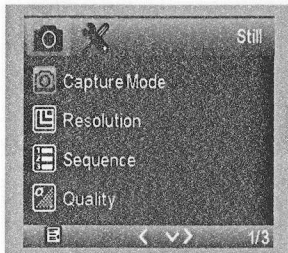
- **Date/Time:** DD/MM/YY
- **Language settings:** English, Francais, Portuguese and Simplified Chinese
< Default setting: English >
- **Button Sound:** On, Off
< Default setting: On >
- **Screen Saver:** 8 secs, 30 secs, 1 min, 2 mins, 3 mins, 5 mins
< Default setting: 8 Secs >

- **Light Source Frequency:** 50Hz, 60Hz < Default setting: 50Hz >
- **Parking Monitoring:** Off, Low, Medium, High < Default setting: Medium > (when the setting is off, the parking monitoring function cannot be triggered)
- **Display Ratio:** 16:9, 4:3 < Default setting: 16:9 >
- **SD card to format:** Cancel(No), Confirm(Yes)



PHOTO SETTINGS

When in the photo mode (Stop recording and press back button once to enter photo mode) press the M button to enter photo settings, you can set the menu as shown below.



- **Image Quality:** Premium, Standard, Economy < Default setting: Standard >
- **Sharpness:** Intense, Standard and Soft < Default setting: Standard >
- **White Balance:** Auto, Daylight, Cloudy, Tungsten, Fluorescent < Default setting: Auto >
- **Color:** Color, Black/White, Sepia < Default setting: Color >
- **IOS:** Auto, 100, 200 and 400 < Default setting: Auto >
- **Exposure Compensation:** +2.0, +5/3, +4/3, +1.0, +2/3, +1/3, +0.0, -1/3, -2/3, -1.0, -4/3, -5/3, -2.0 ...etc < Default setting: +0.0 >
- **Anti-shake:** Off, On < Defaults setting: On >
- **Quick Preview:** Off, 2S, 5S < Default setting: Off >
- **Date Label:** Off, Date, Date/Time < Default setting: Date/Time >



SMARTPHONE OPERATION

Videos recorded on this DVR can be directly viewed on your Android or Apple smartphone via the "DVR Connect Play" App found on the Google Play Store or Apple Appstore.

The Smartphone App can also be used to change various settings of the DVR according to your preference.

i NOTE

- The instructions and images shown here are for reference only. The actual setting options and methods may vary depending on your phone type/model.
- Video is not recorded while DVR files are accessed, or settings are being changed. Please confirm Wi-Fi has been turned on, on your smartphone.
- The viewer app for smartphones can only be used if the smartphone is connected to the DVR Wi-Fi.
- For smartphone Wi-Fi settings and connection procedure please refer to your smartphone's instruction manual.

INSTALLING THE SMARTPHONE APPLICATION

Search for "DVR Connect Play" and download the application from your smartphone app store or scan the QR codes below:

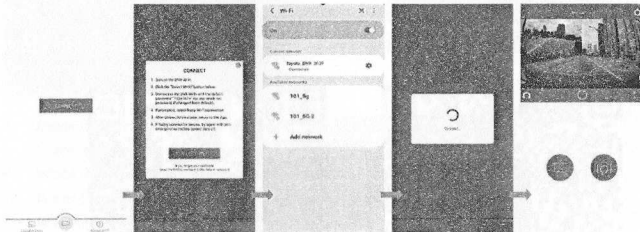


CONNECTING TO THE DVR WI-FI

1. Press and hold the Wi-Fi (back) button on the DVR till the Wi-Fi SSID and password are displayed on the DVR screen.
2. Open the DVR Connect Play App and press the "Connect" button.
3. Select the DVR Wi-Fi which will have a name similar to "Toyota_DVR_xx:xx" in your Smartphones Wi-Fi settings page and then enter the default password and return to the App.

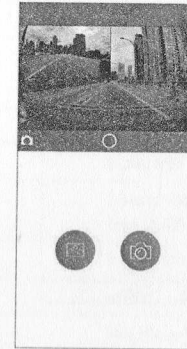
NOTE


- Default Wi-Fi password is "12345678".
 - When it is the first time you set up the Wi-Fi connection, you will be asked to change the Wi-Fi password once you tap "OK" to complete the setup. For security purposes, it is strongly recommended to change the default password. Follow the on-screen instructions to set your new password.
 - In the event the Wi-Fi password is forgotten, it can be reset to the default "12345678" by pressing the "R" pin hole button on the right side of the camera.
4. Return to the App to complete the connection.





USING THE SMARTPHONE APPLICATION


Once the DVR is connected, the screen will display the home page:





Tap  to change the live view display to Front Only, Rear (if equipped) Only or Rear (if equipped) + Front (PIP).

Tap  to view or change DVR settings like Resolution, Audio Recording, etc. (note: recording is stopped when accessing settings)

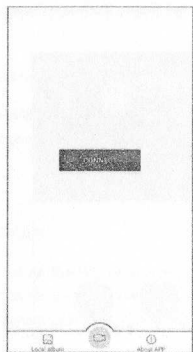
Tap  to view, download, share or delete recorded files (Normal, Event, Parking, Photos). (note: recording is stopped when accessing files)

Tap  to take a picture.

Tap  to change the live view display to Full screen. Tap  to stop or start DVR recording.




When disconnected from the DVR, the following page is shown:



Tap  to connect to the DVR.

Tap  Local album view downloaded files.

Tap  About APP to access user help, End User License Agreement & App Version details.



GENERAL SPECIFICATIONS

Resolution	1920 x 1080p
Video FPS	30 FPS
Sensor	Front: Sony IMX307 Rear: GC2053 (if equipped)
Aperture	F 1.8
Recording Format	H.264, MP4
Lens Viewing Angle	Front : D 136°, H 115°, V 61° Rear : D 125°, H 104°, V 54° (if equipped)
Display	2.0" IPS LCD (Front)
Microphone	In-built
G-Sensor	3-axis Sensor
Power Supply	12VDC
Current Consumption	Normal Recording: less than 330mA Parking Monitor: less than 3mA
Wi-Fi	IEEE802.11b/g/n 1T1R 2.4G Dual
Memory	Class 10 only, Max 128GB supported <i>Industrial Grade Recommended</i>
Clock	Manual Set or Auto Set by connecting to Smartphone.
Vehicle Battery Protection (Parking Monitor)	11.7V Automatic Cut-off
Parking Monitor	G-sensor Activated
Operating Temperature	-20° C to +70° C

