

VANTRUE

Pilot 2 **P2**

USER MANUAL **V1.0**



vantrue.com

truly driven.



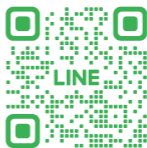
More Info



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ID: @860fnbxk

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Important Reminders:

- Please read this user manual carefully before first use to ensure correct operation.
- Please ensure the dash cam is connected to a power source for it to function properly.
- For your safety, please refrain from adjusting the device or watching videos on your phone while driving.
- Please use a Micro SD card with this product. Ensure the card is functioning correctly and is compatible with the device.
- Please do not disassemble or attempt to repair the dash cam yourself. If you encounter any issues, please contact VANTRUE official customer service promptly.
- Please avoid installing the dash cam in a location that obstructs the driver's view.
- Please keep the device away from high-temperature and humid environments to ensure normal operation.
- Please note that the device firmware is updated periodically to enhance user experience. You may download the latest version to enjoy the newest features as needed.
- Please avoid installing the dash cam directly in front of vehicle occupants to prevent safety hazards in case the device becomes detached.

1. Packing List



① P2 Main Unit



② Main Unit Mounting Bracket



③ Front and cabin view cameras



④ External Camera Cable



⑤ Rear camera



⑥ Rear Camera Cable



⑦ Car Charger



⑧ Electrostatic Stickers



⑨ Crowbar



⑩ Dust-free Cloth



⑪ Double-Sided Tape



⑫ Cable Ties



⑬ Velcro Fasteners

Optional



⑭ Thermal Imaging Camera



⑮ Thermal Imaging Camera Cable



⑯ Hex Wrench



⑰ Screwdriver



⑱ License Plate Bracket

Package Accessory List Notes:

Specification 1 (Main Unit + Front/Cabin Camera + Rear Camera + Thermal Imaging Camera) includes all accessories from ① to ⑱

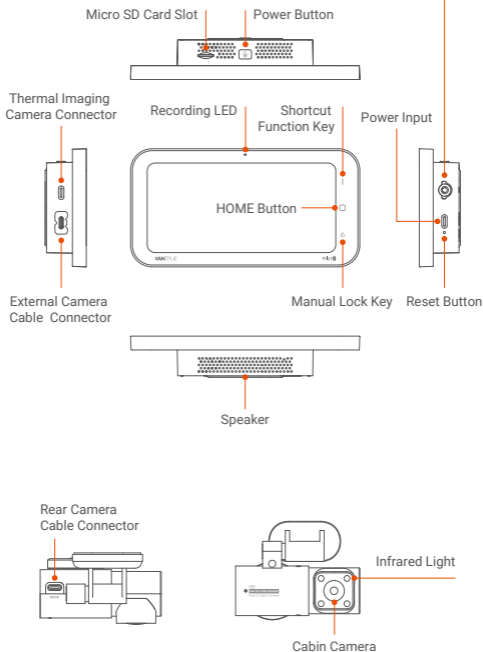
Specification 2 (Main Unit + Front/Cabin Camera + Rear Camera) includes accessories from ① to ⑬

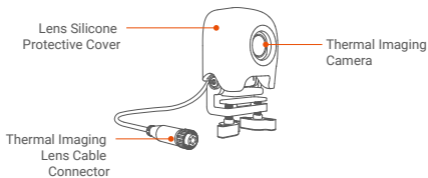
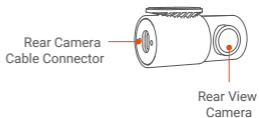
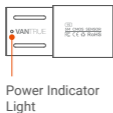
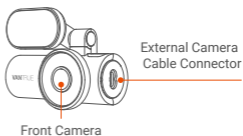
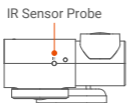
Specification 3 (Main Unit + Thermal Imaging Camera) Includes the main unit and thermal imaging camera accessories; excludes the front/cabin camera, rear camera, and corresponding camera cables.

2. Equipment Introduction

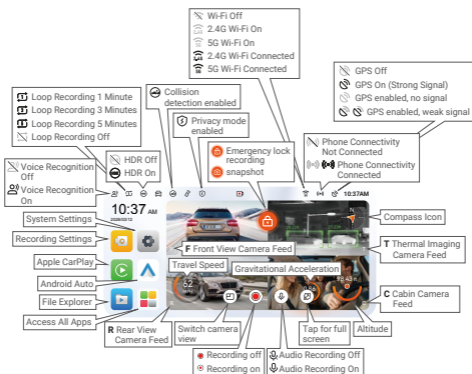
AUX Audio Output

Note: Users need to purchase an AUX audio noise suppressor separately.

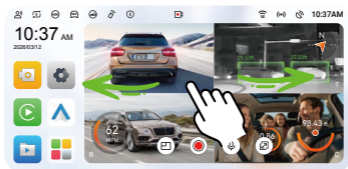




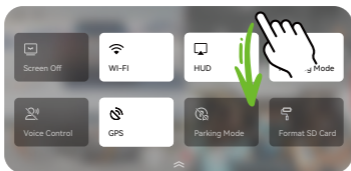
2.1 Screen Icon Guide



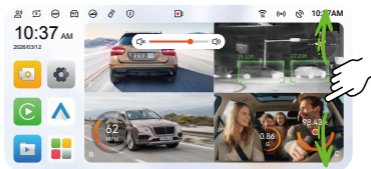
2.2 Interface Operation Guide



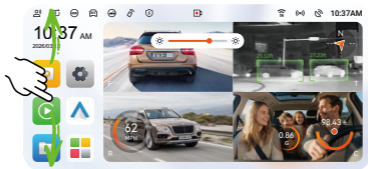
Swipe left or right to quickly switch the number of camera views displayed; or tap a specific camera view to display it in full screen.



Swipe down from the top to display the quick settings panel

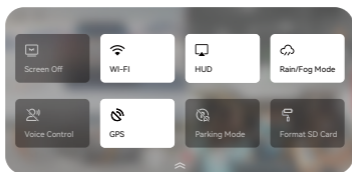


Swipe up or down on the right side of the screen to increase or decrease the volume



Swipe up or down on the left side of the screen to increase or decrease the screen brightness.

2.3 Overview of the Pull-Down Status Bar Icons



- **Screen Off:** Supports turning off the head unit screen display via quick actions.
- **Wi-Fi:** Supports quick toggling of the device's Wi-Fi function.
- **HUD:** HUD smart display—when activated, the screen shows real-time vehicle speed, acceleration, altitude, and compass.
- **Rain & Fog Mode:** When Thermal Smart is enabled, Rain & Fog Mode can be activated to optimize image clarity in rainy or foggy conditions, improving license plate and road condition recognition. Note: Enabling this feature may reduce video smoothness; it is recommended to turn it off during sunny weather or at night when there is no fog. When Rain & Fog Mode is active, the video interface may experience brief stuttering; this is a normal phenomenon caused by the camera's shutter switching and does not indicate a device malfunction.
- **Voice Recognition:** Enable this to activate voice recognition; Currently, it supports only Chinese, English, Japanese, Russian, and French. To view supported voice commands, go to "System Settings" and check "Voice Content."
- **GPS:** Supports quick activation or deactivation of GPS.

- **Parking Monitoring:** When collision detection mode is enabled, you can quickly enter parking monitoring mode using a shortcut key.
- **Format:** Supports quick formatting of Micro SD cards. Please back up important files before proceeding.

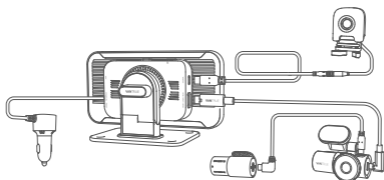
3. Installation Guide

3.1 Installation Precautions

- **Clean the Surface:** Use a lint-free cloth to wipe the mounting area of the main unit and lens to remove oil and dust.
- **Apply Electrostatic Stickers:** Attach Electrostatic Stickers to the mounting area for the front and rear lenses (enhances adhesion and prevents adhesive residue).
- **Cable Management:** After installing the car charger and rear camera, use the provided cable clips to organize the charger cable and rear camera cable.
- **First-Time Use Settings:** When using the dash cam for the first time, it is recommended to format the Micro SD card to reduce recording issues.
- **Installation Notes:** When installing the main unit and lens, ensure they do not obstruct the driver's vision and that all components are securely fastened.

3.2 Installation Process

3.2.1 Main Unit and Lens Installation Process



Device Connection Diagram

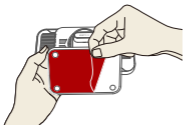


① Installation Mount



② Install the Micro SD card

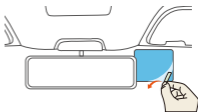
(Note: The Micro SD card is optional; users need to purchase a compatible Micro SD card separately)



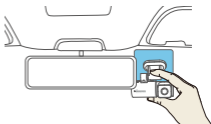
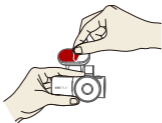
- ③ Peel Off Adhesive from Bracket



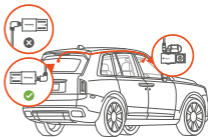
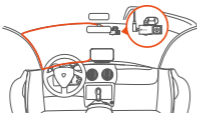
- ④ Install Main Unit



- ⑤ Apply Electrostatic Stickers for Front and Cabin Cameras



- ⑥ Install Front and Cabin Cameras



- ⑦ Connect and Route Cables for Front and Cabin Cameras to Main Unit

- ⑧ Connect and Route Cables for Front and Cabin Cameras to Rear Camera



⑨ Install Car Charger

3.3 Installing the Thermal Camera (Optional)

3.3.1 Installation Precautions:

- **Confirm installation location:** We recommend installing the hood first and checking the space between the hood and the fender liner before installation:
 - $\geq 0.98\text{in}$, Use the default thumb screw. See 3.3.2 for details.
 - $0.39\sim 0.98\text{in}$, Replace with a set screw. See 3.3.2 for details
 - $< 0.39\text{in}$, It is recommended to install using the license plate bracket instead. See 3.3.3 for details.
- **Installation Check: Engine Mounting Position:** Before installing the thermal imaging lens, we recommend activating the windshield wipers to verify that the mounting position does not interfere with their normal operation.
- **Cable Routing:** When organizing the Thermal Imaging Camera Connector, ensure you leave sufficient slack to allow for a smooth connection to the main unit. Use Velcro to secure the cable neatly.
- **Verify the Thermal Camera's Field of View:** After securing the thermal camera in position, power it on and observe the image. Ensure the hood does not appear in the frame, as this may cause false alarms in the algorithm.
- **Adjust/Secure the Camera Position:** Use a hex

Installation Check: Engine Mounting Position:

Before installing the thermal imaging lens, we

- **Other Precautions:**

- Thermal imaging lenses cannot penetrate glass; please do not install them inside a vehicle.
- Ensure there are no obstructions in front of the lens during installation.
- When cleaning, do not use a high-pressure water jet to directly spray the thermal imaging lens.
- Although the thermal imaging lens is equipped with burn protection, do not point the lens at the sun or other heat sources exceeding 300°C for extended periods.
- Please route the thermal imaging camera cables away from high-temperature components such as the engine.

3.3.2 Thermal Camera Installation Location (Method 1: Hood)



- ① Determine the height from the water deflector to the hood



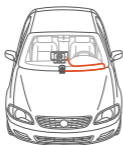
Method 1: Height from water deflector to hood >0.98in, use thumb screw for installation



Method 2: The height from the splash guard to the hood is 0.39–0.98in; use set screws for installation.



② Use a hex screw tool to secure the thermal camera

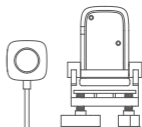


- ③ Connect and route the cable from the thermal camera to the main unit
(Note: Please mount the thermal imaging camera in the center of the hood.)

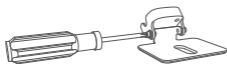
3.3.3 Thermal Imaging Lens Mounting Position (Method 2: Above License Plate)



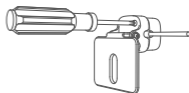
- ① Remove the silicone cover



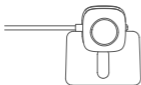
- ② Detach the lens from the bracket



- ③ Installation Mount



- ④ Attach the lens to the groove and secure it



- ⑤ Determine the lens orientation: Ensure the thermal camera logo is facing up



- ⑥ Install the thermal camera and route the cable
(Note: Please mount the thermal imaging camera in the center position above the license plate.)

Precautions:

- Please do not block the license plate during installation.
- After installation, please power on the device to check the thermal camera's field of view. If angle adjustment is needed, loosen the screws on both sides to make fine adjustments. Once the field of view is confirmed to be correct, tighten the screws to secure the lens and prevent movement during use.

3.4 Installing the APP

Scan the APP QR code below to download and install the Vantrue APP, then follow the APP instructions to connect the dash cam to the APP. For detailed APP feature descriptions, refer to the electronic version of the user manual



3.5 Installing Vantrue Player (Windows/Mac)

The PC player supports video playback, GPS track viewing, speed display, and other features, providing users with an enhanced video experience. For more detailed operations, please refer to the complete electronic user manual.

- Windows users can download it from the Vantrue official website:
<https://www.vantrue.com/pages/vantrue-app-player>
Download path: Open the official website → Click "Support" → "APP & Player"
- Mac users can search for "Vantrue Player" in the Apple App Store and download it.



4. Function Introduction

The P2 dash cam features six main functions: Recording Settings, System Settings, File Browser, Thermal Smart, Apple CarPlay, Android Auto.

4.1 Recording Settings

- **Resolution:** Set the default resolution for the front, cabin, and rear cameras.
- **Rotate Display:** Enable or disable rotation display for front+cabin, thermal, and rear cameras. Default is off for all.
- **Collision Sensitivity:** Adjust collision sensitivity for front/rear, left/right, and up/down directions. Supports off/low/lowest/standard/high/highest sensitivity settings. Default is standard.
- **Parking Monitoring:** Users can configure collision detection mode (on/off), collision sensitivity, entry/exit detection, camera settings, low-light night vision for parking, collision detection mode, parking monitoring duration, and ACC delay. See Section 5.3 for details.
- **Watermark:** Enable or disable date/time, brand/model, license plate number, speed, GPS latitude/longitude watermarks. Default is on, can be turned off.
- **HDR:** Default is on. Can be turned on or off separately for front, cabin, and rear cameras.
- **HDR Timer:** Default is off. Can be set to turn on or off at scheduled times.
- **PlatePix™ Timer:** Default is off. Can be set to turn on or off at scheduled times.
- **GPS Settings:** GPS auto-update (default on), GPS speed unit settings, GPS information view.
- **Mirror:** Default is on, can be turned off.

- **Loop Recording:** Default is 1 minute. Options: off, 1 min, 3 min, 5 min.
- **Time-Lapse Recording:** Default is off. Options: 1FPS/5FPS/10FPS.
- **Infrared Light Setting:** Default is auto, can be set to on or off.
- **Video Quality:** Can be set to Standard or PlatePix™. Default is Standard. Enabling PlatePix™ improves license plate clarity.
Note: PlatePix is only effective for the front camera.
- **Privacy Mode:** Disabled by default; enabling this activates privacy protection features. Users can customize the recording duration per segment, the number of loops to save, and the video retention period according to their needs; Recording Segment Duration:
 - Supports four segment durations: 30 seconds, 1 minute, 3 minutes, and 5 minutes. The default setting is 1 minute.
 - Number of Segments to Retain: You can set the number of video segments to retain in a loop. Options include retaining the last 1, 2, 3, or 5 segments; the default is to retain the latest 3 segments.
 - Video Retention Period: You can set an automatic deletion time, with options of 3 days, 5 days, or 10 days; the default setting is "Never automatically delete."
- **Recording Audio:** Default is on, can be turned off.
- **Audio Noise Reduction:** Default is on, can be turned off.
- **Recording Indicator Light:** Default is on, can be turned off.
- **License Plate Setting:** Disabled by default; can be enabled.
- **Mileage Statistics:** Default is on, can be turned off.

4.2 System Settings

- **Wi-Fi:** Default is on (Wi-Fi automatically turns on and turns off after 10 minutes). Can be set to on or off. Wi-Fi mode can be switched, and Wi-Fi information can be viewed.
- **Prompt Tones:** The dash cam has five prompt tones based on different situations: power on/off sound, button sound, lock alert, format reminder, abnormal recording stop alert. Users can enable or disable them as needed.
- **Format:** Format all data on the Micro SD card.
- **Voice Recognition:** The sensitivity is set to "Standard" by default. When enabled, the device can recognize voice commands. You can adjust the sensitivity to "Low," "Standard," "High," or "Off" as needed.
- **Voice Commands:** Voice recognition commands allow users to control the dashcam remotely using various commands.
- **Certification Information:** View certification information for the device.
- **System Information:** View firmware version and official website information.
- **Default Settings:** Restore factory default settings.
- **Language:** Available languages: English, French, Spanish, German, Italian, Simplified Chinese, Traditional Chinese, Korean, Russian, Japanese, Polish, Turkish, Czech.
- **Screen Saver Settings:** Default is off. Options: 30 seconds, 1 minute, 3 minutes.
- **Format Reminder:** Default is off. To avoid forgetting to format the Micro SD card, a format reminder can be set to alert after 15 days or 1 month (counted from the set date). When the time arrives, you can choose "Confirm" to format or "Next" to reset the countdown.

- **Date/Time:** Two setting methods: manual or GPS auto-update. Date format, time zone selection, time format (default 24-hour), and automatic daylight saving time switch (default off) can be set.
- **Screen Brightness:** Set to "Auto" by default; the display brightness adjusts automatically based on the ambient light.
- **Light Source Frequency:** Different countries have different light source frequencies. Select 50HZ or 60HZ according to the region to avoid affecting recording.
- **Volume:** Default is 40%, adjustable as needed.

4.3 File Browser

Under this function, you can view video files and photos recorded by the dash cam.

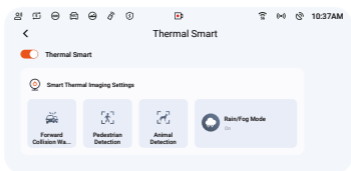
- **Normal Videos:** This folder stores loop recording videos (T) and normal videos (N).
Naming format:
20300128_140633_00008_N_A.MP4
- **Emergency Videos:** This folder stores emergency recording files (E).
Naming format:
20300128_140633_00008_E_A.MP4
- **Parking Videos:** This folder stores parking monitoring videos (P).
Naming format:
20300128_140633_00007_P_A.MP4
- **Photos:** Photo files are stored in this folder.

File naming convention: MM/DD/YYYY + HH:MM:SS + Sequence number + File type + Channel (Front: A, Middle: B, Rear: C, Thermal imaging lens: D)

4.4 Thermal Smart

The Smart Thermal Imaging feature is designed for low-visibility conditions such as nighttime, rain, and fog. It accurately identifies targets including vehicles, pedestrians, non-motorized vehicles, and animals, and uses AI-powered on-screen markings to assist with safe travel, providing comprehensive protection for nighttime driving.

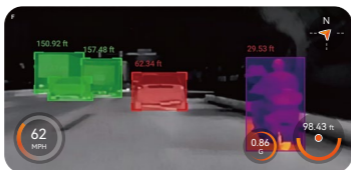
The “Thermal Smart” feature is enabled by default but can be disabled.



(1) The Smart Thermal Imaging settings support the following detection features, which can be enabled or disabled as needed:

- **Forward Collision Detection (Default: On)**
 - Switch: When turned off, the device stops running the vehicle recognition algorithm and no longer displays the vehicle recognition box.
 - Warning Sound: Off by default; can be set to levels 1–5.
 - Sensitivity: Medium by default; adjustable to Low, Medium, or High
 - Activation Speed: 40 MPH by default (adjustable from 5 to 75 MPH)
 - Status Indicator:
 - Normal vehicle recognition: Green recognition box displayed.

- Collision risk detected: Red recognition box displayed.
- Recognition Distance: Maximum recognition distance is 328.08ft.



- **Pedestrian Detection (Default: Off)**
 - On/Off: Controls the pedestrian detection function. When turned off, the pedestrian recognition algorithm is not executed, and the pedestrian recognition box is not displayed.
 - Warning Tone: Default setting is Level 2; can be set to Levels 1–5.
 - Sensitivity: Default setting is Medium; adjustable to Low, Medium, or High.
 - Activation Speed:
 - Minimum default: 5 MPH (adjustable from 5 to 30 MPH)
 - Maximum default: 40 MPH (adjustable from 30 to 75 MPH)
 - Recognition Scope: Covers both pedestrians and cyclists.
 - Status Indicator:
 - Normal recognition: Green recognition box displayed.
 - Collision risk detected: Orange recognition box displayed.
 - Recognition Distance: 229.7ft.



- **Animal Detection (Default: Off)**
 - **Switch:** Controls the animal detection function. When turned off, the animal recognition algorithm is not executed, and the animal recognition box is not displayed.
 - **Warning Tone:** Default setting is Level 2; can be set to Levels 1–5.
 - **Sensitivity:** Default setting is Medium; adjustable to Low, Medium, or High.
 - **Activation Speed:**
 - Minimum default: 5 MPH (adjustable from 5 to 30 MPH)
 - Maximum default: 40 MPH (adjustable from 30 to 75 MPH)
 - **Recognition Scope:** Covers quadrupedal animals such as cats, dogs, cows, sheep, horses, deer, kangaroos, and bears.
 - **Status Indicator:**
 - Normal recognition: Green recognition box displayed.
 - Collision risk detected: Blue recognition box displayed.
 - **Recognition Distance:** 229.7ft (may vary depending on the animal's size).



- **Rain & Fog Mode (Default: Off)**

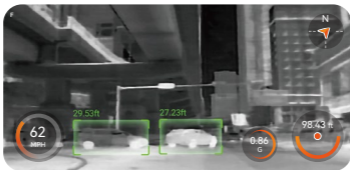
- When enabled, it improves algorithm recognition accuracy, optimizes image clarity in rain and fog conditions, and enhances the ability to recognize road conditions.
- Enabling this mode may slightly reduce video smoothness. It is recommended to turn it off on sunny days and fog-free nights.
- If the recording screen briefly freezes at the moment of activation, it is a normal phenomenon caused by shutter switching and does not indicate a device malfunction.



(2) AI Marking Display

In the thermal imaging view, vehicles, pedestrians, animals, and other targets are marked in real time with high-contrast icons, allowing for real-time monitoring of road conditions. AI Marking Display feature: Enabled by default; can be manually disabled.

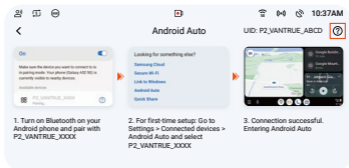
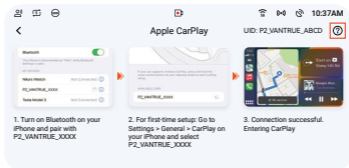
AI Distance: Off by default. When enabled, the value displayed for AI Distance is for reference only and may differ from the actual distance.



4.5 Supports Apple CarPlay/Android Auto


4.5.1 Steps and Precautions for Connecting to Apple CarPlay/Android Auto

- To enable Apple CarPlay or Android Auto, follow the on-screen instructions on the head unit:
 - Turn on your phone's Bluetooth and pair it with the dashcam head unit.
 - iPhone users: Go to Settings > General > Apple CarPlay, find the P2 head unit's Bluetooth name, and complete the pairing.
 - Android users: Go to Settings > Connections > Android Auto, find the P2 head unit's Bluetooth name, and complete the pairing.



Note:

- Android Auto is currently not available in China.
- Android Auto is primarily compatible with all smartphone brands running Android 9.0 or later; this feature is not officially supported on iOS or HarmonyOS.
- Wireless Apple CarPlay requires an iPhone 6 or later running iOS 10 or later; please refer to official updates for the latest information.
- When an iPhone is connected to CarPlay, switching to functions such as the camera may cause CarPlay to disconnect
- The calling function of Android Auto only supports phone calls; it does not support calls through the dashcam's microphone and speaker, meaning call audio cannot be transmitted to the dashcam.
- Apple CarPlay and Android Auto must be used with Wi-Fi enabled and only in 5 GHz Wi-Fi mode.
- The apps supported by CarPlay and Android Auto depend on your phone's operating system and are unrelated to the dashcam's settings.

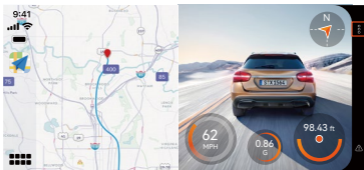
- When connecting to Apple CarPlay, Siri on the iPhone must be enabled (CarPlay relies on Siri).
- If you encounter connection issues with Apple CarPlay or Android Auto, click the help  icon in the upper-right corner of the corresponding feature page for more information, or contact official customer service.

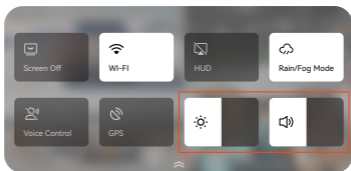
support@vantrue.net



Press and hold this icon to activate Siri

When using Android Auto or Apple CarPlay, tap the shortcut button or swipe down on the screen to quickly open the quick settings panel and adjust the screen brightness and volume.





4.5.2 Exiting CarPlay/Android Auto

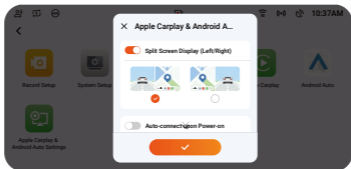
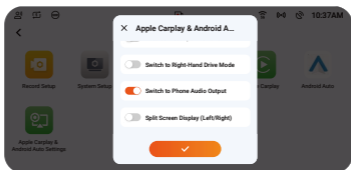
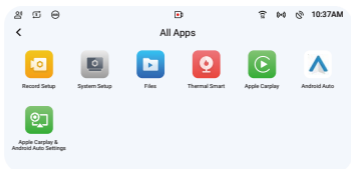
- To return to the dashcam's main interface, tap the Exit icon on the connection screen; To use it again, simply tap the corresponding Apple CarPlay/Android Auto icon on the home screen.
- To completely disconnect from Apple CarPlay/Android Auto, turn off Wi-Fi on your phone or the head unit.



4.5.3 Apple CarPlay/Android Auto Settings

- **Auto-connect on startup:** Enabled by default. When enabled, the device will automatically connect to paired CarPlay/Android Auto devices upon startup.
- **Switch to right-hand drive mode:** Disabled by default. When enabled, the interface and operating logic will be adapted for right-hand drive scenarios.
- **Switch to Phone Audio Output:** Enabled by default. When enabled, audio will be output through the phone's speakers; when disabled, audio will be routed to the head unit's speakers.

- **Split-Screen Display:** Disabled by default. When enabled, the dashcam's main interface and the Apple CarPlay/Android Auto interface will be displayed simultaneously in a split-screen layout.
- **Remove Phone Connection from the Dash Cam:** Disabled by default. Enabling this option will clear the pairing information saved on the dash cam.
 - Recommended scenarios: Use this when switching phones, experiencing app connection issues, or needing to unpair the device.



5. Important Functions

5.1 Loop Recording

When the dash cam is powered on, it automatically enters loop recording mode. Videos will be automatically saved according to the preset loop recording duration and stored in the normal video folder.

The normal video folder occupies 70% of the total dynamic memory capacity. When the folder reaches 70% of the dynamic total capacity, the newest loop recording file will automatically overwrite the oldest one.


With this function enabled, video files are stored cyclically through automatic overwriting, effectively preventing the device from stopping recording due to a full memory card while driving.

Note:

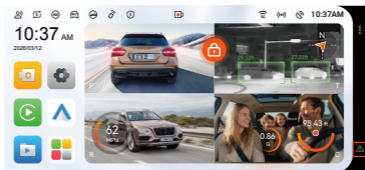
- The proper operation of loop recording heavily depends on the speed of the memory card. Therefore, please format the memory card regularly to avoid issues such as excessive files or card aging affecting loop recording.
- Please check loop recording videos periodically to prevent important videos from being overwritten.
- If you disable loop recording, the lock video function will no longer be effective. After disabling loop recording, each video segment will be 20 minutes long. When the card becomes full, the dash cam will stop recording and display a "Card Full!" prompt.


5.2 Emergency Recording

In the event of special circumstances while driving, you can manually lock or the dash cam can automatically lock to perform emergency recording.

Manual Lock: Simply press the emergency recording button  to lock the current recording and capture a photo.

Automatic Lock: When the vehicle experiences a collision or vibration, the dash cam senses the impact and automatically triggers the locking of the current video.



During locked recording, you can press the emergency recording button  on the screen to capture multiple photos.

After recording ends, the video will be automatically saved in the emergency video folder, and the photos will be saved in the photo folder.

Note:

- The sensitivity of automatic locking is determined by the collision sensitivity setting. You can adjust it via "Recording Settings" → "Collision Sensitivity" → select "Front/Rear," "Left/Right," or "Up/Down." Sensitivity options: Off, Lowest, Low, Standard, High, Highest.
- Emergency video files occupy 30% of the total dynamic capacity of the memory card. When the

emergency video folder reaches its capacity limit, the newest emergency video file will automatically overwrite the oldest one. It is recommended to regularly review and save your emergency video files elsewhere to prevent loss.

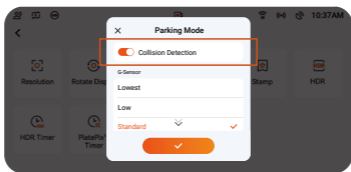
- Locked recording will not be triggered in the following two cases: when loop recording is disabled or when time-lapse recording is enabled. With loop recording disabled or time-lapse recording enabled, only photos can be captured.

5.3 Parking Monitoring Settings

In Parking Monitoring Settings, users can enable collision detection mode according to usage scenarios. Settings include collision sensitivity, entry/exit method, camera settings for monitoring, parking low-light night vision, collision detection mode, parking monitoring duration, and ACC delay.

Operation path: Tap "Recording Settings" → select "Parking Monitoring Settings"

Note: Collision detection mode is disabled by default. Please enable it manually if needed.





Notes for Using the Parking Monitoring Function:

- To ensure the dash cam operates properly in parking mode, please use a VANTRUE step-down cable or another stable and continuous power source to supply power to the dash cam.

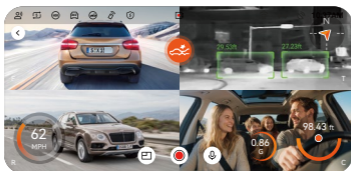
- The ACC step-down cable must be a VANTRUE ACC step-down cable. ACC step-down cables from other brands may not support the ACC function due to differences in the ACC detection pin position.
- Time-lapse recording and parking collision detection mode cannot be enabled simultaneously; enabling one will automatically turn off the other.

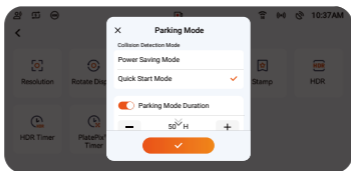
5.3.1 Parking Monitoring Mode: Collision Detection

After enabling collision detection mode, the parking collision  icon will appear in the recording status bar.

When a collision is detected, the dash cam will automatically enter parking collision detection mode according to the activation entry method. The collision detection icon  will be displayed in the center of the dash cam screen, indicating that recording has started. It will record a 30-second video and then enter standby mode.

The video files will be automatically saved in the "Parking" folder.





(1) Parking Monitoring Settings:

(1) Collision Sensitivity: Default is standard. Users can adjust the collision detection sensitivity level according to their needs. The higher the sensitivity, the more easily parking collisions are triggered.

(2) Entry/Exit Method:

a) Automatic Mode (Default)

- Without ACC connection (i.e., G-Sensor mode): Automatically enters 5 minutes after the vehicle remains stationary; automatically exits when a secondary collision is detected by the G-Sensor.
- With ACC connection (i.e., ACC mode): Automatically enters after the vehicle is turned off (ACC OFF); automatically exits when the vehicle starts (ACC ON).

b) ACC Mode

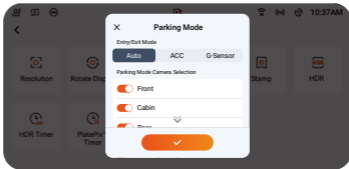
- Properly install the ACC step-down cable and connect to power. Automatically enters after the vehicle is turned off (ACC OFF); automatically exits when the vehicle starts (ACC ON).

c) G-Sensor Mode

- Entry and exit of parking monitoring are controlled by the G-Sensor. Automatically enters 5 minutes after the vehicle remains stationary; automatically exits when a secondary collision is detected by the G-Sensor.

Note:

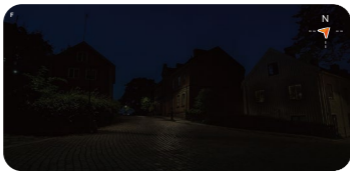
- If the device does not trigger properly after connecting the ACC cable, switch to G-Sensor mode instead.
- If ACC trigger is selected for parking monitoring collision mode, it will enter immediately by default. To delay ACC entry into parking monitoring, go to Recording Settings → Parking Monitoring → "ACC Delay" to set the entry time.



(3) Camera Monitoring Settings: Front, Cabin, Rear. All are enabled by default and can be individually set to On or Off.

(4) Parking Low-Light Night Vision

To enhance safety during nighttime parking, we leverage lens performance combined with low-light night vision technology to improve the night vision effect in parking mode. This function is enabled by default and is only triggered upon entering parking mode, ensuring it does not affect normal recording.



Turn off Parking Low-Light Night Vision



Turn on Parking Low-Light Night Vision

(5) Collision Detection Mode

Based on users' actual needs, the collision detection feature offers two modes to choose from: Quick Start (default) and Power-Saving Mode.

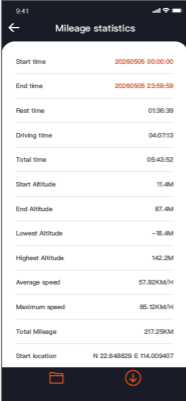
- **Quick Start Mode:** The device enters sleep mode with the screen off. Upon detecting a collision, the screen immediately turns on and begins recording, ensuring the integrity of the event. The device saves the file and returns to sleep mode once recording is complete.
- **Power-Saving Mode:** The device is completely powered off. Upon detecting a collision, it automatically powers on to record. The device powers off after saving the file, offering greater energy efficiency.

(6) Parking Monitoring Duration: The battery runtime can be freely adjusted based on the user's actual needs to ensure the vehicle starts normally. Default is unlimited, or can be set from 1 to 100 hours.

(7) ACC Delay: Users can freely set the time at which the parking monitoring mode activates based on their actual needs, reducing the likelihood of accidental activation when the engine is turned off and the vehicle is parked. Default is immediate entry, or can be set from 1 to 30 minutes.

5.4 Mileage Statistics

The P2 dashcam's journey statistics feature is enabled by default, recording information such as driving duration, mileage, altitude, and speed. Users can export mileage files via the app. In the app's real-time preview interface, users can select a specific time period, and after confirming, download the data as a PDF or JPG file to save locally within the app.



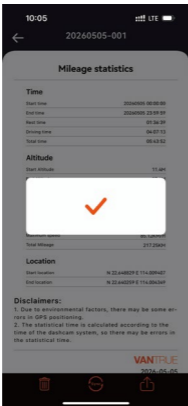
Mileage statistics	
Start time	20260505 00:00:00
End time	20260505 23:59:59
Rest time	01:36:39
Driving time	04:07:13
Total time	05:43:52
Start Altitude	11.4M
End Altitude	87.4M
Lowest Altitude	-18.4M
Highest Altitude	142.2M
Average speed	57.82KM/H
Maximum speed	85.12KM/H
Total Mileage	217.25KM
Start location	N 22.648829 E 114.009407



Mileage statistics	
Start time	20260505 00:00:00
End time	20260505 23:59:59
Rest time	01:36:39
Driving time	04:07:13
Total time	05:43:52
Start Altitude	11.4M
End Altitude	87.4M
Lowest Altitude	-18.4M
Highest Altitude	142.2M
Average speed	57.82KM/H
Maximum speed	85.12KM/H
Total Mileage	217.25KM
Start location	N 22.648829 E 114.009407

JPG

PDF

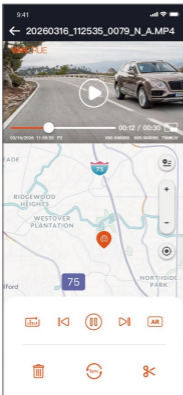


5.5 GPS Settings

5.5.1 GPS Function

The GPS function is one of the important features of the dash cam. GPS is enabled by default. It automatically updates the date and time based on your location and records the location and speed information in the videos.

GPS information is embedded in the recorded videos. To view it, please download and install the Vantrue APP and Vantrue Player.



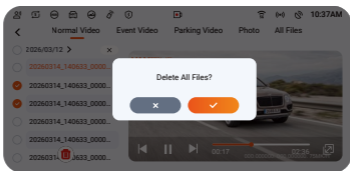
Note:

- GPS will connect within one minute after the device is powered on. If the connection is not successful within one minute, please check whether the GPS function is enabled, whether the device is properly connected to the GPS mount, and consider your current environment (e.g., underground parking lots, densely built residential areas, subways, tunnels, etc., which may affect GPS signal reception).

5.6 Methods for Playing Back and Deleting Files

(1) Operation on the Dash Cam

Playback Videos: Enter File Browser, select any folder to open, choose a video file, and tap it to start playback. Select the desired video and tap "Select" to delete it.

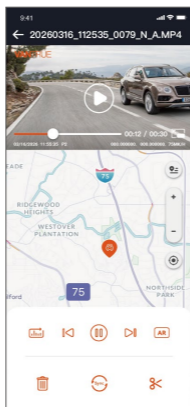


(2) Playback and Deletion on a PC

Insert the Micro SD card into a card reader and connect it to your computer. You can then view, select, and delete video files as needed.

(3) Playback and Deletion in the Vantrue App

After connecting the dash cam to your phone via Wi-Fi, you can play back, download, and delete files within the camera folder in the app.



Note:

- Playing back and downloading files from the Micro SD card via the app does not consume mobile data.
- When playing back downloaded video files locally, you can view GPS track information. However, you must disconnect from the dash cam's Wi-Fi; otherwise, the map information may appear blank.

(4) Optional Viewing with Vantrue Player

Vantrue Player supports video playback, GPS track viewing, speed display, and other features, providing users with an enhanced video experience. For more detailed operations, please refer to the complete electronic user manual.

- **Windows users** can download Vantrue Player from the Vantrue official website:
<https://www.vantrue.com/pages/vantrue-app-player>

- **Mac users** can search for "Vantrue Player" in the Apple App Store and download it.



5.7 Dash Cam Firmware Upgrade

Upgrade Method 1: File Upgrade

- ① Download the latest P2 dashcam firmware from the VANTRUE official website;
<https://www.vantrue.com/pages/user-manual-firmware>



- ② Place the corresponding VT_P2.bin file in the root directory of the memory card;



- ③ Then reinsert the memory card into the main unit, turn on the power, and perform the update.

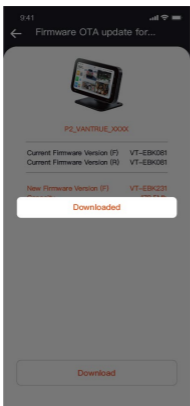
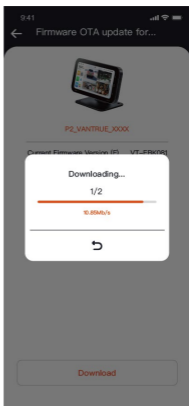


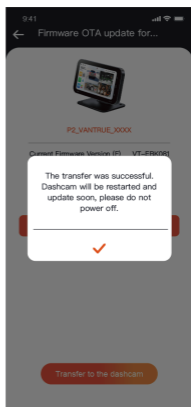
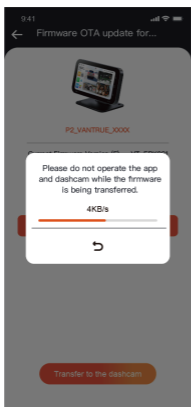
Upgrade Method 2: OTA Upgrade via App

After opening the app, users will receive a dash cam software update notification. Upon confirming the upgrade, they will be redirected to the OTA upgrade interface and can follow the app instructions to complete the update.

Upgrade Precautions :

- Whether performing a file upgrade or an OTA upgrade, ensure the P2 dash cam remains powered on during the process.
- OTA upgrades require mobile data to download the update file.
- For file upgrades, format the Micro SD card in the P2 dash cam before placing the update file into the Micro SD card to proceed with the upgrade process.





6. Specifications

To provide users with a better product experience, we may upgrade the product. Specifications are subject to change without notice.

Model	P2
Chip processor	Dual-core High-performance Processor
Image Sensor	Sony Sensor
G-Sensor	Built-in 3-axis G-Sensor
Screen	6.25" IPS
Lens Angle	Front 158° / Cabin 160° / Rear 165°
Aperture	Front F1.8 / Cabin F2.0 / Rear F1.8

Language	English, Simplified Chinese, Traditional Chinese, Japanese, German, French, Italian, Spanish, Russian, Polish, Korean, Turkish, Czech
Resolution	Front: 2560x1440P、1920x1080P、1280x720P Cabin: 1920x1080P、1280x720P Rear: 2560x1440P、1920x1080P、1280x720P
Video Format	MP4
Audio	Built-in microphone and speaker
Storage	Micro SD card (supports 32GB–1TB)
USB Interface	Type-C
Battery Type	Super Capacitor
Power Supply Current	DC 5V 3A
Operating Power	14W
Operating Temperature	-4°F to 140°F (-20°C to 60°C)
Storage Temperature	-13°F to 158°F (-25°C to 70°C)

7. After-Sales Service

VANTRUE offers a 12-month warranty period. If you have any questions, please feel free to contact us through the following methods. Our dedicated customer service team will respond within 12–24 hours:

- ① Contact us via the Vantrue APP: Go to "My" → "FAQ" or "Contact Us".
- ② Reach out to the customer service team from your point of purchase.
- ③ Send an email to the VANTRUE official email: support@vantrue.net.

Thank you for choosing VANTRUE ®

8. Frequently Asked Questions

Q1. The device won't turn on / keeps restarting

- Check that the power cord and charging port are securely connected; try using a different charging cable or port.
- Replace the Micro SD memory card with a high-speed card that meets the specifications to rule out a card malfunction causing the restart.
- If using a step-down cable, ensure the connections are correct and the fuse is intact.

Q2. No video recording / Card error message

- Use a U3 or Class 10 high-speed Micro SD card; recommended capacity is 8GB–1TB.
- Format the Micro SD card in the dashcam settings; do not use the quick format option on a computer.
- The card is full; we recommend deleting or saving video files promptly.

Q3. Failed to connect to the app

- Check if the dashcam's Wi-Fi is enabled, then reconnect your phone to the device's Wi-Fi (follow the on-screen instructions to complete the connection).

Q4. No video files / Missing videos

- Regular videos are automatically overwritten in a loop; please save important videos promptly.
- Verify that the TF card is functioning properly, is not write-protected, and that Privacy Mode is not enabled.

Q5. No image from the rear camera

- Check that the rear camera cable and connector are securely plugged in and undamaged.
- Use the original rear camera cable; non-original cables may be incompatible.
- Restart the device; if the issue persists, contact after-sales service for inspection.

Q6. Parking monitoring not working / not recording

- Check that the step-down cable is properly connected to the constant power, ACC, and ground wires
- Confirm that parking monitoring is enabled in the dashcam settings.
- Check if the ACC wiring is correct and if the engine-off signal is detected.

Q7. Incorrect time

- Enable GPS auto-update or perform a manual update.

Q8. GPS cannot locate

- Use the device in an open outdoor area to avoid signal interference.
- Confirm that GPS is enabled in the settings.

Q9: Why is the thermal imaging lens mounted outside the vehicle?

- Thermal imaging technology operates in the 8–14 μm long-wave infrared spectrum and cannot penetrate glass; therefore, the thermal imaging lens must be mounted outside the vehicle (recommended location: center of the hood).
- The thermal imaging lens is waterproof, dustproof, and resistant to impacts from sand and gravel, making it suitable for most driving scenarios.

(Note: Please use within an ambient temperature range of -20°C to 70°C.)

Q10: Does thermal imaging technology pose any radiation hazards?

- Thermal imaging technology only captures thermal information emitted by objects and does not actively emit any radiation, so it is safe to use.

Q11: Why does the image freeze occasionally during operation?

- Due to the nature of thermal imaging technology, the camera must periodically refresh the shutter to ensure stable imaging.
- The built-in shutter of the thermal imaging camera automatically performs these refreshes. During the refresh, the image will briefly freeze and a “click” sound may be heard; this is a normal operational phenomenon.

Q12: Why does the image become blurry in rainy weather?

- Raindrops absorb and scatter infrared heat, affecting thermal imaging detection and reducing image clarity.
- You can enable the Rain/Fog mode in Smart Thermal Imaging to increase the shutter refresh rate and improve imaging performance in rainy conditions. (Note: Not suitable for heavy rain.)
- Please check the lens surface for any debris, such as dirt or sand, that may be obstructing the view.

9. Safety Information

Important Safety Warnings

For your safety and the safety of others, please read and follow all safety information below carefully before installing and using this dash cam. Proper operation ensures optimal device performance and helps avoid hazards, personal injury, or property damage

Driving Safety (Primary Principle)

- Please remember that your primary responsibility is safe driving. Do not operate the dash cam interface while driving to avoid distraction and potential accidents.
- Please perform any setup, adjustments, or video playback only before starting the vehicle or after parking in a safe location.

Electronic Devices

- Please do not use this device in areas where wireless devices are prohibited, as it may interfere with other electronic equipment or cause other hazards.

Flammable and Explosive Areas

- Please do not operate the dash cam in gas stations, chemical plants, or any area where flammable or explosive gases may be present.
- Please do not store or transport the device and its accessories in the same container as flammable liquids, gases, or explosives.

Traffic Safety

- Please remember that safe driving is your top priority. Avoid engaging in any activity that may distract you.
- Please note that electronic devices may malfunction due to radio interference. Contact the manufacturer for

further information.

Operating Environment

- Please note that this dash cam is not waterproof. Do not install it in any location where it may be splashed with rain or other liquids.
- Please operate the device in ambient temperatures between -20°C and 60°C. Store it in temperatures between -25°C and 70°C. Extreme temperatures may cause product malfunction.
- Please install the dash cam in a location that does not obstruct the driver's vision. Ensure it is securely fastened and will not come loose while driving.

Child Safety

- Please keep the dash cam and all cables and accessories out of the reach of children and pets. Small parts may pose a choking hazard, and swallowing batteries can cause chemical burns.

Accessory Requirements

- Please do not use unapproved or incompatible power supplies, chargers, or batteries, as this may cause fire, explosion, or other hazards.

Battery Safety

- Please note that the system clock of this dash cam uses a miniature lithium-ion battery. Improper handling may cause hazards. Please strictly follow the requirements below.
- This device uses a non-removable battery. Please do not attempt to disassemble, crush, or puncture the device.
- Please do not expose the battery to high temperatures or heat sources such as sunlight, heaters, microwaves, ovens, or water heaters.

Overheating may cause explosion.

- Please do not place the battery in extremely low air pressure environments, as this may result in explosion or leakage of flammable liquid or gas.
- Please do not disassemble or modify the battery, insert foreign objects, or immerse it in water or other liquids, as this may cause leakage, overheating, fire, or explosion.
- If battery leakage occurs, please avoid contact with skin or eyes. If contact occurs, rinse immediately with clean water and seek medical attention.
- Please do not dispose of batteries in fire, as this may cause them to ignite and explode.
- Please do not use damaged batteries.
- Please dispose of the device in accordance with local regulations. Do not discard it as household waste.

Maintenance and Care

- Please avoid subjecting the device and its accessories to strong impacts, vibrations, scratches, or contact with hard or sharp objects, as this may damage them and cause malfunctions.
- Please turn off the device before cleaning. Use only a soft, dry, lint-free cloth to gently wipe the lens and body. Do not use any chemical cleaners.
- Please do not disassemble or modify the device or cables, as this will void the warranty. For repairs, please contact Vantrue official customer service.
- If the device becomes damp, please turn it off and allow it to dry naturally in a ventilated area. Do not use external heat sources such as microwave ovens or hair dryers.
- Please keep the device and its accessories clean and dry.

Environmental Protection

- Please do not dispose of this device as ordinary household waste.

- Please follow your local regulations for electronic waste disposal and support environmentally friendly recycling.

- **Device Networking Instructions**

This product only supports local LAN communication. It does not connect to the Internet or external networks, and does not support external network data uploading or remote access via the Internet.

- **Factory Reset Instructions**

Performing a factory reset will erase all custom configurations and data on the Micro SD card, restoring the device to its factory defaults. Please proceed with caution.

- **Privacy and Security Statement**

This device does not collect, upload, or disclose any personal user information. All configurations and local data are stored solely on the device itself, with no background collection or uploading.

IC Compliance Statement

IC: 28650-P2

This device complies with Innovation, Science and Economic Development Canada's licence-exempt RSS standards.

Operation is subject to the following two conditions:

- (1) this device may not cause interference; and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This digital apparatus complies with Canadian CAN ICES-3(B)/NMB-3(B).

This equipment complies with Canada radiation exposure limits for an uncontrolled environment. Maintain a minimum distance of 20 cm between the radiator and your body.

Déclaration de conformité ISED

IC: 28650-P2

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage;
- (2) l'appareil doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Cet appareil numérique est conforme à la norme canadienne CAN ICES-3(B)/NMB-3(B).

Cet équipement est conforme aux limites d'exposition aux radiations du Canada pour un environnement non

contrôlé.

Maintenez une distance minimale de 20 cm entre le radiateur et votre corps.

FCC Compliance Statement

FCC ID: 2A7EH-P2

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to reasonably avoid harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that such interference will not occur under a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by switching the device on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Adjust the direction or position of the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit other than that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Product Certification Information Inquiry: Go to "System Settings" → "Certification Information" to view FCC, IC, TELEC, and other certification details.

VANTRUE
truly driven.



IC

IC: 28650-P2

FCC

FCC ID: 2A7EH-P2



R 222-260399

CE



✓
RoHS



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