

# **USER MANUAL**

























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# INTRODUCTION

Thank you for purchasing ROVE™ R2-4K Ultra HD 2880x2160 @ 24fps Digital Vehicle Dash Cam (Automobile Black Box). This product provides high quality image capture and irrefutable evidence for what goes on from the perspective of your dashboard. Rove Dash Cam is a very elegant, convenient and durable multi-vehicle deriving recorder.

#### Product Overview:

This Product is a leading Ultra HD Digital Vehicle Black Box Recorder. Equipped with ULTRA-HD 2160P @24fps with NOVATEK NT-96660 processor + OV4689 4MP CMOS sensor for excellent low light sensitivity and high dynamic range which allows you to record continuous high-quality video playbacks, it brings phenomenal 4K Ultra-HD resolution videos even at night time without the need for infrared sensors. It has superior night vision technology which captures super low light during night time. It has advanced built-in Wi-Fi, built-in GPS, G-Sensor, Emergency Video lock button, Audio recording, Loop cycle recording, Motion detection, Parking mode, HDMI output. When compared to most dash cam, this exclusive product design provides an elegant appearance, packed with top rated unique features, superb unbeatable video recording and it is very easy to use.

#### Features:

- 2.4" LCD Screen
- NOVATEK NT-96660 Chipset + OV4689 4MP Light Sensor
- 4K Ultra-HD 2880x2160P @24fps
- ◆ Built-In WiFi
- · Built-In GPS for Geo Tagging
- ◆ 150° Ultra-wide A+ Viewing Angle
- Loop Cycle Recording
- Split Record Mode
- G-Sensor
- Motion Detection
- · Parking Mode
- Time Lapse Video
- Emergency Video Lock Button
- Up to 128GB Class-10 Micro SD Card Support (Micro SD Card NOT Included – Required for camera operation)
- Auto Power OFF
- Built-In Speaker & Microphone
- Time, Date, Driver ID, Driving Speed, GPS stamp support
- Internal Rechargeable Battery 250mAh

# WARNINGS/PRECAUTIONS: IMPORTANT SAFETY INSTRUCTIONS

WARNING: FAILURE TO COMPLY WITH THE FOLLOWING WARNINGS COULD RESULT IN SERIOUS ACCIDENT, INJURY OR EVEN DEATH.

Please read and understand all instructions before using this product. If any damage is caused by failure to follow the instructions, the warranty will be voided.

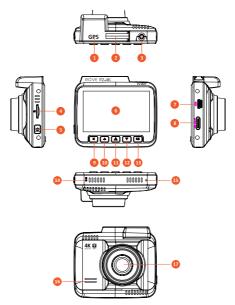
- Do not put the unit in a damp environment. This machine is not designed with waterproofing features. Please do not expose to water of any kind, including rain water.
- Do not try to open the cover or try to repair it yourself. If the accessories for this machine have any problem, please contact the seller for assistance.
- This camera is intended to use inside motor vehicle. Don't install it
  where it will block the driver's view of the road inducing mirrors or the
  deployment of airbags.
- Do not place the camera loose on top of the dashboard or in-front of the air bags.
- Do not mount the camera where it can become distraction if it became loose and falls of the windshield while driving.
- Do not expose this machine to an excessive heat, dust or use any chemical substance or cleaning solvent to clan this machine. Instead please use soft, moist cloth for cleaning.
- Pay careful attention when cleaning the lens surface. Use a soft, moist cloth to clean the lens to avoid compromising video quality.
- Removing the camera from the vehicle when not is use is recommended.
   This prevent likelihood of theft or exposure to excessive heal to prevent damage to unit.
- Do not operate or install the camera while driving, or attempt to change any settings etc. Pull off the road first and only do so when it is safe.
- Do not drop, puncture or disassemble this product.
- Do not use the charger if the cord is broken or damaged.
- · Keep out of reach of children
- Some countries or USA states prohibit drivers from mounting anything on windshield or prohibit mounting on certain area of the windshield. It is owner/operator's responsibility to mount or use of this device in compliance with local laws.
- Do not leave the camera in the direct sunlight for a long period of time or where temperature could go above 140°F (60°C)

The Company is NOT responsible for the loss of any data or your content during operation or in any circumstance.

# **STATUS ICONS: Understanding Status**

WHAT DOES IT MEAN?
Video Mode
Photo Mode
Play Mode
Current loop record timer Current resolution
Parking Mode
Loop Recording ON + number indicates your selection.
Exposure Value
G-Sensor
Microphone ON
Microphone is OFF (MUTE)
Memory Card Installed
Memory Card NOT Installed/Memory card is deffective
Battery Is Charging / Power Cable is Plugged in
Power Cable is NOT Plugged in / Internal Battery Level
Current Date (Displayed bottom Middle of LCD)
Current Time (Displayed bottom Middle of LCD)
GPS – Flashing GPS means looking for signal (GPS will ONLY have signal in open or in your car)
GPS – Now has Signal: Driving Speed + GPS Coordinates are now being recorded with each video file & it may be stamped based on your stamp settings.
Emergency Video Locked Symbol Current video loop is being locked. Emergency locked button pressed

# **Unit Structure Appearance & Buttons:**



- 1. Built-In GPS
- 2 Windshield Mount Latch
- 3. TV Out
- 4. Micro SD Card Slot
- 5. Power On/Off or Photo Button
- 6. LCD
- 7. Mini-USB Power Input /Data output slot
- 8. HDMI Out
- 9. Menu/Mode Button
- 10. UP or Mute on/off Button

- 11. Emergency Lock or WiFi on/off Button
- 12. Down or LCD
  - on/off Button
- 13. OK or Confirm Button
- 14. Reset
- 15. MIC
- 16. Speaker
- 17. LENS

## 1 BUILT-IN GPS

This is your built-in GPS antenna for GPS Geo-Tagging.

# 2 WINDSHIELD MOUNT LATCH

This is where you connect your camera to windshield suction cup mount. How to install windshield mount and camera assembly?

- Before installing, remove plastic protective film & clean windshield area (If Grease or dust is present suction will not be strong)
- (2) Make sure the locking knob is set to unlocked position.
- (3) While applying pressure to suction cup base towards windshield from locking knob, rotate the locking knob towards LOCK position. This should create the strong suction between windshield and the mount
- (4) Now you can connect the camera with long mini USB power cable, then slide the camera to the windshield mount's bracket hook until snug fit.

## How to remove suction cup windshield mount?

To unmounts, turn the locking knob to the unlock position and then lift the plastic flap on the base to release the suction and then windshield mount.

# 3 TV OUT

This is where you can plug in your traditional RGB TV Out cable.

# 4 MICRO SD CARD SLOT

Micro SD Card, MAX Support up to 128 GB.

Micro SD Card NOT Included and it is required for camera operation.

# How to Insert & Remove Micro SD Card?

- TO INSERT: First, make sure you align Micro-SD Card correctly as directed on camera slot. If card does not slide in smoothly do NOT force insert it. Please re-check its correct alignment before proceeding.
- Gently insert first half of Micro SD card into slot then use your finger nail / paper clip to PUSH inwards until it clicks and locks.
- TO REMOVE: Gently use your finger nail / paper clip to PUSH Micro SD card inwards until it clicks and pops out, then you can pull it out of the slot.

#### POWER ON/OFF OR PHOTO BUTTON

- · Power ON: Press once to turn the camera ON.
- Power OFF: Press and HOLD to turn the camera OFF.
   How to take Photos?
- · Press once while video is being recorded to take photo.

# 6 LCD

5

2.4" TFT-LCD 240 x 320 RGB

#### 7 MINI-USB POWER INPUT / DATA OUTPUT SLOT

- Power Input: Connect included mini USB long DC Car charger to
  provide power to the camera. When you start your car it will provide
  power to the camera. This will auto turn ON camera and auto start
  recording video if Micro SD card is inserted. When you shut off & turn
  the key to LOCK position your car will disconnect power, then camera's
  internal battery will take over, it will stop the current video that is being
  recorded, save that last video file safely and it will auto turn OFF your
  camera within few seconds
- Data Output: You can connect your camera directly to you PC / MAC
  via included mini-USB data cable to download or view video files to
  your computer directly.
- P.S. (Please do NOT use "Windows Media Player" to play this high bitrate videos. We recommend downloading free VLC Media Player to enjoy stream less high quality vides from your ROVE Dash Cam.

Download Free VLC Media Player at http://www.videolan.org
You can also use our FREE - ROVE Car DV Player by visiting our website
http://www.rovedashcam.com

# 8 HDMI OUT

Connect your camera via mini-HDMI output to HDMI HD Television input to view Videos directly on your television or monitor.

#### MODE BUTTON (WE WILL REFER THIS BUTTON TO AN ("M") BUTTON)

This button acts as two functions. MENU & MODE Button. In General, Camera will always start in VIDEO Mode after a shutdown of the camera or after turning off Wi-Fi.

If video is being recorded, press OK Button to STOP video recording first, before you can access MENU or switch between any of the three MODEs.

MENU: Pressing this button ONCE will act as MENU Button.
MODE: Pressing & Holding for 2-seconds will act as MODE Button. To switch between 3-Modes Press & Hold ("M") button.

Mode Button: ROVE R2-4K has three different modes: (1) Video Mode, (2) Photo Mode and (3) Playback Mode. (See Page 16 for detailed explanation) Each mode has their own particular MENU Settings.

SYSTEM SETTINGS are common between all 3-modes.

While Under Video Mode: (Look Top Left of LCD to confirm Video Mode icon)

- · Press OK Button to Start/Stop Recording
- Press UP Button to Mute/Un-mute Audio Recording with Video.
- Press Down Button to Turn OFF/ON LCD (Camera Still Stays ON if you use this button, RED LED indicator confirms camera is still ON).
- Press MENU("M") Button to enter VIDEO MODE'S MENU SETTINGS.
   Press MENU ("M") button again will enter SYSTEM SETTINGS. Pressing ("M") button again will exit MENU.
- Press & Hold ("E") Emergency Lock Button to turn Wi-Fi ON / OFF

While Under Playback Mode: (Look Top Left of LCD to confirm PlayBack Mode icon)

- To Play Video/ View Photo: Select Desired Video/Photo file by using
   ("UP") /("DOWN") Buttons > Press ("OK") Button to Play that Video File.
   Press ("DOWN") Button once to Fast Forward video to 2X...4X...8X.
   Press ("UP") Button to reverse Fast forward one step at a time.
- Press MENU("M") Button to enter PLAYBACK MODE'S MENU SETTINGS. Press MENU ("M") button again will enter SYSTEM SETTINGS. Pressing ("M") button again will exit MENU.
- Press & Hold ("E") Emergency Lock Button to turn Wi-Fi ON / OFF

#### 10 UP / MUTE ON-OFF BUTTON

While under any Mode's Settings or System Settings: Press to scroll UP While under Video Mode or during video is being recorded: Press to Mute ON/OFF for Audio Recording.

While under Photo Mode: Press to digital ZOOM-IN up to 2.9X While under Playback Mode: Press to scroll up, or while video is playing press to Reverse Fast Forward one step at a time.

#### 11 EMERGENCY VIDEO LOCK / WI-FI ON-OFF BUTTON

How to Lock the video that is currently being recorded Manually? While Video is Being Recorded:

- Press Emergency Lock button (Add button Icon here) Once to Manually Lock the Current Video that is being recorded.
  - **P.S.** (1) (The manually locked video by emergency lock button will not be deleted by loop cycle Recording Function. It can only be deleted manually after an un-protecting it from the camera or by you can do so by inserting memory card directly to your computer)
  - **P.S. (2)** Emergency Locked Videos will be marked by (Add button Icon here) under Video Playback Mode.

P.S. (3) You can also access this Locked Videos by connecting your Camera directly to computer or Connecting Micro SD card to your computer. Event Locked videos will be marked in a separate Folder name "LOCKED Files"

# 12 DOWN / LCD ON-OFF Button

While under any Mode's Settings or System Settings: Press to Scroll Down While under Video Mode or during video is being recorded: Press to Turn OFF/ON LCD. (Please Note that Camera Still Stays ON)

While under Photo Mode: Press to digital ZOOM-OUT.

While in Playback Mode & Video is being played: Press once to reverse fast forward video one step at a time.

# 13 OK / CONFIRM BUTTON

While under Video Mode: Press Once to START / STOP Recording.

While in Photo Mode: Press once to take Photo

While Under Playback Mode: Press to Select / Play Video or View Photo While under any Mode's Menu or System Settings: Press to OK to enter specific menu and to Confirm any Selection.

# 14 RESET

If you are having problems with the camera functions or freezing issue, it is recommended that you utilize Reset button to Reset the camera.

#### How to Reset:

Insert a pin or paper clip into the reset slot while camera is ON, then press and hold until camera is turned off and It will restart automatically.

# 15 MIC

Built in MIC to record Audio with Video. Default Setting is ON.

## 16 SPEAKER

This is where built in speaker is located.

# 17 LENS

 $150^\circ$  Ultra Wide A+ Viewing angle with 6 layers of lenses for more ambient light capture with 4MP OV4689 CMOS sensor.

#### DOWNLOADING ROVE APP

Search for "ROVE" in App Store or Google Play Store to find the App and then download and install it.







#### Note:

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#### CONNECTING ROVE R2-4K DASH CAM WITH SMART PHONE:

- TURN WIFI ON from ROVE Dash Cam first, by Pressing & Holding emergency lock button for 2-seconds. This will turn ON WiFi router (signal) from the dash cam.
- CONNECT WIFI from your Smart Phone: Go to Phone's Settings > WiFi > Select ROVE R2-4K Dash Cam WiFi PASSWORD: 1 2 3 4 5 6 7 8
- Now open ROVE App to view live video stream, view/download recorded videos & even change settings.
  - (When you open the App, it should be paired automatically with dash cam if your phone is connected to WiFi correctly with ROVE R2-4K Dash Cam WiFi)

# **GETTING STARTED:**

#### 1. CHARGING:

- FIRST TIME USE: Before first time use we strongly recommend that you fully charge your ROVE R2-4K Dash Cam to prevent any errors.
- Please make sure to always keep camera plugged into power, because the internal battery is NOT meant to last more than 3-5 minutes. See battery information for more details.
- Charge Camera by connecting in your DC car charger or to any PC's USB. (You can also use your 1.5A USB charger (for ex. iPhone or Samsung USB phone charger). Make sure NOT to exceed 1.5A or damage to device may occur.
- The camera charges the battery whenever power is detected through USB cable.
- Solid RED Light: indicates that the device is being charged. When the
  device is fully charged the red indicator light will turn OFF.
- To fully charge the unit from a dead battery it may take up to 120 minutes.

#### 2. OPERATION:

#### SETTING UP YOR DASH CAM FOR THE FIRST TIME:

- The camera comes with default settings which allows you to start using your camera right out of the box. This allows you to just install the camera and plug in the power.... SET & GO!
- You will need to insert a memory card before you can start recording.
   Please insert class 10 or higher Micro SD card up to 128GB max for reliable operation.
- Memory Card: We strongly recommend that you please format your
  memory card first before using it the first time by going into camera's
  system settings. If you see an error message "Please insert Micro SD
  Card" even though you have already inserted it, then please press
  "M" button to ignore the message, then go to camera's system settings
  and format memory card. Then turn OFF camera by press & hold the
  power button for 2 seconds. Now turn On camera, the memory card
  format is now compliable with Rove dash cam.

- It is also recommended that you occasionally keep formatting your memory card for reliable operation.
- You can always customized various settings offered by ROVE R2-4K Dash Cam. This user manual will guide you in customizing your own settings as you read through it and after you understand it fully.

#### MOST IMPORTANT:

Please understand PARKING MODE and MOTION DETECTION fully before turning ON these features.

#### PARKING MODE:

- Do NOT turn ON this feature until you install the camera to your windshield.
- If PARKING MODE is turned ON while you explore and learn the features of the camera in your hands, the camera will turn ON/OFF and START/STOP recording randomly, as PARKING MODE will keep getting activated every time camera senses the movement by its built in Gyro Sensor (G-Sensor).
- 3. You would want PARKING MODE turned ON after you install your dash camera to your windshield.
- 4. You can test and learn how parking mode works, by setting it to ON, then exit the menu settings, and without moving your camera press and hold power button to turn the camera OFF. Now shake the camera.... it will turn ON the camera, and if memory card is installed then It will start recording video for 1-min, then save and lock that video and turn OFF the camera automatically.

#### MOTION DETECTION:

**CAUTION:** We do NOT recommend this feature to be turned ON while you are driving and for your daily commute. If you turn ON motion detection while driving around and during your daily commute, then your camera will NOT record videos continuously, and it will have missing video seconds.

 Motion Detection is designed to be used for surveillance when your car is parked and NOT moving. Usually when you are not inside your car. During your car is parked and you wanted continuous surveillance.

- 2. To use motion detection, first make sure you set "AUTO POWER OFF" to OFF under system settings. Now turn ON Motion Detection while your camera is installed on windshield. Now the camera will START recording video when there is motion detected in front of the camera's field of view and it will automatically STOP recording when there is no more motion. To save the battery you can also set "LCD ON/OFF Setting" to either 1, 3 or 5-min for LCD to be turned OFF automatically.
- 3. We recommend "HARD-WIRE" your dash camera to your car's battery as the internal battery is NOT designed to last more than 8 minutes when fully charged and depending upon video resolution. We recommend to purchase the "Mini-USB Hard Wire Kit" which has protection from dying car's battery. Basically this feature will cut the power to the camera when the battery voltage of your car's starting to run critically low. You can search YouTube "how to hard wire a dash cam" for demonstration videos.

# TIME-ZONE SETTING:

Once you set your correct time-zone setting, then you will always have correct date and time every time you will have GPS signal to your camera.

- Go to http://www.greenwichmeantime.com/time-zone/usa to find our your correct GMT (Greenwich Mean Time) value based on your location in the USA.
- Now go to time-zone setting and set your correct time-zone setting under camera's system settings.

That's it. Now you are all set with your date and time settings. One your camera will have GPS signal, then it will show you correct date and time automatically at the bottom of the LCD.

#### 3. INSTALLATION:

#### INSTALLING CAMERA TO WINDSHIELD MOUNT:

 Before you install camera to your windshield, it is essential to first properly install the mount. Please make sure to install in a place where it will now obstruct the driver's view at any point.

#### CONNECTING THE CAR CHARGER TO 12V DC POWER OUTLET:

 Be sure to only use ROVE approved car charger designed for your device specifically. Using incompatible cables or charger can cause serious personal injury or damage your device.

#### INSERTING MEMORY CARD:

- Do not insert / remove Micro SD card while camera is turned ON, which may cause damage to memory card.
- TO INSERT: Insert Micro SD card with the gold contacts facing the LENS/ FRONT Side of the camera. Push the card in until it will click and lock into its place.
- TO REMOVE: Gently push its top edge inward until it clicks and then pops out, and then pull it out of the slot.
   TIP: User Paper clip to easily insert/remove small Micro SD Card.

# **TURNING ON/OFF YOUR CAMERA:**

#### 1. AUTO POWER ON/OFF:

- Auto Power ON: ROVE R2-4K Dash Cam is designed to auto turn ON and start recording when it receives power, e.g. When the car engine is started.
- Auto Power OFF: It is also pre-configured to turn itself OFF automatically when the power gets disconnected within few seconds, e.g. when the car key is turned to LOCK position.

## 2. MANUAL POWER ON/OFF:

- To Manually Turn ON: Press the power button once.
- To Manually Turn OFF: Press and hold the power button for at least 2 seconds.

# **UNDERSTANDING 3 - CAMERA MODES:**

#### ROVE R2-4K has 3 different camera modes:

- 1. VIDEO MODE
- 2. PHOTO MODE
- 3. PLAYBACK MODE

The "M" button will act as two functions, MENU button & MODE button.

MENU Button: Pressing ONCE will act as MENU button.

MODE Button: Pressing & HOLDING for 2-seconds will act as MODE button.

TO SWITCH MODE: Press & HOLD "M" button for 2-seconds.

#### NOTE:

- · Each Mode has their own separate Menu Settings.
- · System Settings are common between all three Modes.

#### 1. VIDEO MODE:

Video mode lets you record live videos and store them on the installed Micro SD card memory card.

#### While Under Video Mode:

- · Press OK button to Start/Stop video recording manually.
- Press POWER button Once to take a snapshot.
- · Press UP button to Mute/Un-Mute audio recording with video.
- Press DOWN button to Turn Off/On LCD. (camera still stays ON if you use this button – Red LED indicates camera is still ON)
- · Press MENU button to enter Video Mode's Setting Menu.
- Press "Emergency Lock Button" while video is being recorded to manually lock the video, so it will not get deleted by loop cycle function.
- Press & Hold "Emergency Lock Button" to turn ON/OFF WiFi.

#### 2. PHOTO MODE:

Photo mode lets you take a snapshot.

#### While Under Photo Mode:

- · Press OK button to take a snapshot
- Press UP button to ZOOM IN.
- Press DOWN button to ZOOM OUT
- Press MENU Button to enter Photo Mode's Menu Settings
- Press & Hold "Emergency Lock Button" to turn ON/OFF WiFi.

#### 3. PLAYBACK MODE:

Playback mode lets you play your video file or photos. It can even let you delete or lock any videos while viewing it.

#### While Under Playback Mode:

- Press OK button to Play/Pause Video.
- · Press UP button to scroll to Previous (Icon Here) video file.
- · Press DOWN button to scroll to Next (Icon Here) video file.
- While Video is being played, Press DOWN button to FF video playback up to 8x.
- While Video is being played, Press UP button to REVERSE FF Video playback up to -8x.
- · Press Menu button to enter Playback Setting Menu.
- Press & Hold "Emergency Lock Button" to turn ON/OFF WiFi.

# **VIDEO SETTINGS:**

# To Enter Video Setting:

- 1. Make sure you are under Video Mode
- 2. Press "M" button ONCE to enter Video Settings.
- 3. Press "DOWN" button to access video settings.
- 4. Now use "UP" or "DOWN" buttons to scroll through > then press "OK" button to enter particular setting > then press "OK" button again to confirm that setting and exit to video setting's menu.

#### 1. RESOLUTION:

You can choose the video resolution you like. Higher resolution videos will take more storage space.

- 2880x2160P @24fps (4K)
- 2560x1440P @30fps

- 2304x1296P @ 30fps (NO GPS Geo-Tagging
   Data will be recorded with this resolution)
- 1920x1080P @60fps (FULL HD) (Default)
- 1920x1080P @30fps
- 1280x720P @120fps (Can Play: SLOW-MOTION VIDEO)
- 1280x720P @60fps
- 1280x720P @30fps

#### 2. LOOP RECORDING:

To Turn ON LOOP RECORDING: Choose either 3-min, 5-min or 10-min. This allows you to split your video files length to selected setting.

If You Select OFF: It will only record one long video file until memory card gets full. When memory card runs out of memory, camera will display a message "CARD FULL". At this time camera will NOT record any further until you make space available wither by deleting video or by formatting memory card.

- OFF
- 3 Minutes (Default)
- 5 Minutes
- 10 Minutes

## 3. EXPOSURE:

Adjust video exposure setting for either brighter or darker video according to your preference.

- 0.0 (Default)
- -2, -1.7, -1.3, -1.0, -0.7, -0.3, 0.0, +0.3, +0.7, +1.0, +1.3, +1.7, +2

#### 4. TIME LAPSE RECORD:

Utilize this setting to record a time lapse video.

NOTE: If you utilize this setting, it will record time lapse video ONCE, until the power gets disconnected. After camera receives power again, it will start under normal video recording. You can start/stop time lapse video recording manually by pressing OK button.

- · OFF (Default)
- · 4-images/Second
- 2-images/Second
- 1-image/Second
- 1-image/2-seconds

#### 5. MOTION DETECTION:

This setting can be used for various purposes such as remote video surveillance, during parking etc.

When this feature is turned ON: The built in camera will record ONLY

when there is motion detected in front of camera's field of view by using its advanced motion detection algorithm.

Camera will START recording when there is motion detected and STOP recording when there is no more motion in front of the camera.

**CAUTION:** We do NOT recommend this setting turned on during your daily commute, because it could have missed video seconds due to continuous driving will not have comparison algorithm for motion detection feature to work accurately. This feature works best when camera is still and nothing is moving in front of the camera. Now when motion is detected camera will start recording until there is no more motion.

- OFF (Default)
- ON

#### 6. PARKING MODE:

This feature is designed to work when camera is SHAKEN during Hit-&-Run event while your car is parked.

When someone hits your car and shaking is detected based on your G-sensor setting, the camera will turn ON automatically > then START recording for 1-min on internal battery > then lock that video file safely so it does NOT get deleted by loop cycle function & turns it self OFF automatically.

NOTE: This function is designed to run on internal battery. Internal battery can provide power up to 8-minutes when it is fully charged.

- · OFF (Default)
- ON

#### 7. RECORD AUDIO:

ROVE R2-4K has built in microphone to record audio with video. You can choose to record mute video by choosing OFF. You can also press UP

button to mute/un-mute while video is being recorded.

- OFF
- ON (Default)

#### 8. G-SENSOR:

G-Sensor is a 3-axis impact gravitational accelerometer which is designed to detect physical and gravitational forces on the camera.

While Video is Being Recorded: In the event when G-Sensor is triggered due to physical or gravitational impact force on the camera, the current loop cycle length of video file will be locked so it will NOT be deleted by loop cycle function.

**CAUTION:** In the event of accident please make sure you retrieve your footage before using your camera again to prevent the loss of important video file due to the loop cycle function, incase the force was minor which did NOT trigger G-Sensor to lock video file automatically. It is best practice and recommended to you to retrieve all necessary video footage after any event of accident before using your camera to prevent loss of vital video file. Parking Mode: G-Sensory setting also impacts Parking Mode feature based on your setting selection.

- OFF
- HIGH (Higher sensitivity detects small impacts)
- MEDIUM (Default)
- LOW (Lowest sensitivity detects higher impacts)

#### 9. SPEED UNIT:

You can choose desired speed option stamp to be displayed and recorded on video stamp based on your selection.

- KM/H
- MPH (Default)

# **PHOTO SETTINGS:**

# To Enter Photo Setting:

- 1. Press & Hold "M" button to enter Photo Mode.
- 2. Press "M" button ONCE to enter Photo Settings.
- 3. Press "DOWN" button to access photo settings.
- 4. Now use "UP" or "DOWN" buttons to scroll through > then press "OK" button to enter particular setting > then press "OK" button again to confirm that setting and exit to photo setting's menu.

#### 1. CAPTURE MODE:

Here you can choose take single shot snapshot or set self timer according to your preference.

- · Single Shot (Default)
- 2-Second Self Timer
- 5-Second Self Timer
- 10-Second Self Timer

#### 2. RESOLUTION:

Here you can choose your desired photo resolution. Higher the resolution better the pixel resolution for captured image.

- 12M 4032x3024 (Default)
- 10M 3648x2736
- 8M 3264x2448
- 5M 2592x1944
- 3M 2048x1536
- 2MHD 1920x1080
- 1.3M 1280x960
- VGA 640x480

# 3. 3F/SECOND BURST MODE:

This feature allows you to take burst capture of 3-Frames/Sec with single press of a button.

- · OFF (Default)
- ON

## 10. IMAGE QUALITY:

This feature allows you to set the quality level of an image captured. Higher the image quality more space it will take on the memory card.

- · Fine (Default)
- Standard
- Commonly

#### 11. IMAGE SHARPNESS:

This feature allows you to choose the clarity of an image sharpness.

- Strong
- · Normal (Default)
- Soft

#### 12. WHITE BALANCE:

This feature allows you to adjust the warmth of a light on an image for various environments.

- · Auto (Default)
- Daylight
- Cloudy
- Tungsten
- Fluorescent

#### 1 3. PHOTO EFFECT:

This feature allows you to choose color effect for captured image.

- · Color (Default)
- · Black & White
- Sepia

#### 14. ISO:

This feature allows you to set the camera's sensitivity to light when taking photos. The higher the setting value the greater the sensitivity.

- · Auto (Default)
- 100
- 200
- 400

#### 15. EXPOSURE:

This feature allows you to adjust the brightness of a captured image.

- 0.0 (Default)
- -2, -1.7, -1.3, -1.0, -0.7, -0.3, 0.0, +0.3, +0.7, +1.0, +1.3, +1.7, +2

#### 16. IMAGE STABILIZATION:

This feature allows the image stabilizer function to reduce blurring of a captured image.

- OFF
- · ON (Default)

#### 17. QUICK IMAGE PREVIEW:

This feature will allow you to review each image immediately after capture for desired setting before taking next image.

- · OFF (Default)
- 2-Seconds
- 5-Seconds

# PLAYBACK SETTINGS:

# To Enter Photo Setting:

To Enter Photo Setting:

- 1. Press & Hold "M" button two times to enter Playback Mode.
- 2. Press "M" button ONCE to enter Play Settings.
- 3. Press "DOWN" button to access Play settings.
- Now use "UP" or "DOWN" buttons to scroll through > then press "OK" button to enter particular setting > then press "OK" button again to confirm that setting and exit to Play setting's menu.

#### 1. DELETE:

This menu will allow you to delete current video or Delete All.

- · Delete Current (Delete current video file on LCD)
- Delete All (CAUTION: This will Delete Entire Video & Photos from memory card – Except the protected files)

#### 2. PROTECT:

This feature will allow you make desired changes to saved video & photo files on memory card.

- Lock Current
- Unlock Current
- Lock All
- Unlock All

#### 3. SLIDE SHOW:

This feature allows you to view slide show of your captured photo images from memory card.

- 2 Seconds
- 5 Seconds
- 8 Seconds

# **SYSTEM SETTINGS:**

#### 1. WIFI:

This feature will allow you to turn WiFi broadcast ON from the camera so you can connect your phone with ROVE R2-4K Dash Cam to access videos, photos and settings.

WiFi Name SSID: ROVE R2-4K Dash Cam WiFi (Security PWA2)

Password: 12345678

You can also turn WiFi ON/OFF by pressing & holding "Emergency Lock" button.

# To View/Save Video Files to your Phone via WiFi: (Download ROVE App first)

- 1. Turn ON this WiFi feature.
- Go to your phone's WiFi Settings & Select "ROVE R2-4K Dash Cam WiFi" & enter password as above.
- Now open "ROVE" app to access your camera settings, view videos/ photos or even download them on your phone directly.
- When Done: To disconnect WiFi, press and hold "Emergency Lock" button for 2-seconds to return to the video mode.

## 2. DATE / TIME:

Here you can choose your custom date and time to be stamped with video. You can also choose the Date format here.

- MM/DD/YY (Default)
- DD/MM/YY
- YY/MM/DD

#### 3. TIME ZONE SETTING:

Here you can choose your desired or local time zone setting based on UTC/GMT value. Please make sure to adjust time zone setting during standard vs. daylight savings time.

- UTC/GMT -8:00 (Default)

# 4. AUTO POWER OFF:

This feature allows the device to be turned OFF automatically based on desired setting below when video is not being recorded.

- · OFF (Default)
- 3 Minutes
- 5 Minutes
- 10 Minutes

## 5. LCD ON/OFF SETTING:

This feature allows you to select the time duration for device's LCD to be turned OFF after recording starts. Please note that this feature only turns OFF LCD (camera function stays ON) to prevent from distraction at night/day.

- OFF (Default)
- 1 Minute
- 3 Minute
- 5 Minute

#### 6. BEEP SOUND:

This feature allows you to turn ON/OFF camera button's beep sound confirmation when each button is pressed.

- OFF
- ON (Default)

#### 7. LANGUAGE:

This setting allows you to choose your desired language setting for camera's firmware.

- · English (Default)
- French
- Spanish
- Portuguese
- Deutsch
- Italian
- Simplified Chinese
- Traditional Chinese
- Russian
- Japanese
- Thai
- Polish

#### 8. TV MODE:

Here you can choose your TV mode based on your country's TV setting.

- NTSC (Default)
- PAL

#### 9. LICENSE PLATE:

This feature will allow you to insert custom vehicle ID or Driver ID to be stamped on video.

- User UP/DOWN button to select desired character.
- To add more characters' press "M" button to switch to next character.
- When Done press OK button to confirm & exit.

#### 10. FREQUENCY:

Here you should choose the frequency accordingly to your power supply specification used in your country based on your geographical location.

- 60 Hz (USA North America)
- 50 Hz (Europe Most Asian Countries)

#### 11. STORAGE SPACE:

This feature will allow you to check the storage of inserted memory card into the camera.

- · Total: (Memory Card Capacity)
- Free: (Free Space in memory card)
- Event: (Occupied space from Locked/Protected Video Files)
- Movie: (Occupied space from normal video files)
- · Picture: (Occupied space from photo images)

## 12. FORMAT:

This feature will allow you to format inserted memory card, all the data will be deleted.

- Cancel
- OK

#### 13. DEFAULT SETTING:

Here you can restore all the settings to factory default settings.

- Cancel
- OK

#### 14. VERSION:

Here you can check the current firmware version installed on your camera. You will need this information in the future to check if newer version of firmware is available.

Please visit: www.rovedashcam.com for latest firmware upgrade instructions

ROVE-R2-4K-06102017 (First - Original Firmware)

# **BUTTONS AND INTERFACE INSTRUCTIONS**

Chipset / Sensor	NOVATEK 96660 / OV4689 – 4MP CMOS
Indicator LED Light	Blinking RED= Camera is Recording Video + Charging Solid RED = Internal Battery is Charging + Camera OFF Blinking GREEN = Recording + Internal Battery Fully Charged Solid GREEN = Camera ON (Video NOT recording) + Battery Fully Charged
LCD Screen	2.4 Inch
Lens	150° A+ Ultra HD Wide Angle
Video Resolution	2880x2160P @24fps (4K) 2560x1440P @30fps 2304x1296P @30fps 1920x1080P @60fps (FULL HD) 1920x1080P @30fps 1280x720P @120fps (Can Play: SLOW-MOTION VIDEO) 1280x720P @60fps 1280x720P @30fps
Photo Resolution	VGA, 1.3M, 2MHD, 3M, 5M, 8M, 10M, 12M
Light Sensor	4.0 MP
Lens Aperture	F 1.8
GPS	Built-in GPS Geo-Tagging Support
WiFi	Built-in
Photo / Video Format	JPEG / MP4
AV Interface / TV Mode	AV Out, HDMI Out / NTSC- PAL
Memory Card	TF Card Class 10 or Higher, Max Support 128 GB
G-Sensor	Built-in 3-Axis Impact Accelerometer Gravitational Sensor to lock & protect current video.

Multi Language Support	English, French, Spanish, Portuguese, Deutsch, Italian, Simplified Chinese, Traditional Chinese, Russian, Japanese, Thai, Polish	
Anti Flicker	60 Hz, 50 Hz	
Color	Color / B&W / Sepia	
Loop Recording	Support – seamless recording	
Motion Detection	Support	
Parking Mode	Support	
Year/Month/DateHour/ Minute	Support	
Mic / Speaker	Built-in Micro Phone & Speaker	
Mini USB Function	1. Storage, 2. Charging	
Auto Power ON/OFF	Support	
Power Interface	5V, 1.5A	
Battery	Built-in Li-ion battery 180mAh	
Temperature Guideline	Operating Temperature -20°C to 60°C (-4°F to 140°F), Working Humidity: 10 – 90%	

# **LED STATUS LIGHT INDICATOR:**

BLINKING RED	Camera is recording video + internal battery is charging
SOLID RED	Camera is turned OFF + Internal battery is charging
BLINKING GREEN	Camera is recording video + Internal battery is fully charged
SOLID GREEN	Camera is standby (Video NOT Recording) + Internal battery is fully charged

#### BATTERY INFORMATION

This Product contains Lithium-ion inbuilt battery. With a full charge battery should last upto 8 minutes. Internal battery is NOT meant to last long time. The higher the video resolution you choose the more power it will consume, hence it will last short duration, and the lower video resolution you choose the less power it will consume, hence it will last longer. The purpose of in-built battery is to save the last video file safely without any data loss and turn off the camera when power gets disconnected e.g. when you turn off your car. Another purpose is parking mode. When your car vibrates by impact and vibration activates G-sensor setting range then camera will turn on and start recording on battery for 1-minute, lock video file and then auto turn off automatically.

# Following are approximate internal battery lasting time when it is fully charged.

Video Resolution	Approximate Time
2160P @24fps	2- 3 Minutes
1440P @30fps	3-5 Minutes
720P @30fps	7-8 Minutes

#### Temperature:

- Standard Operating Temperature: -22°F (-30°C) ~ 176°F (80°C)
- StorageTemprature: -4°F (-20°C) ~ 158°F (70°C)
- Standard Working Humidity: 10 ~ 90%

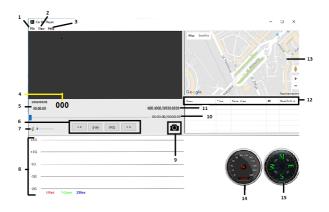
#### Caution:

- If you leave your car for long time we advise that you remove the camera from the car becuase the temprature inside the car can exceed specified range above depending upon your geographical and weather conditions.
- Do not expose this camera to extreme high heat, direct sunlight, cigerattes, cigars, candles or low temperatures or crush or break.
- Do not use in humid, wet and/or corrosive environment.
- Do not expose battery to extreme temperatures abouve 176°F/80°C.
   Just like any other battery, it could explode or cause fire. It is user's responsibility to operate it correctly.
- Please adhere to your local or state laws for recycle of Li-Ion battery properly.

#### **GPS & CAR DV PLAYER INSTALLATION**

# GPS player software Installation and Use Instruction:

- Before viewing your video with GPS trace, Please install Car DVD Player from your ROVE™ R2-4K Dash-Cam first.
- Please visit www.rovedashcam.com to download FREE Car DV Player.
- Click File Menu > Click Open to select the video file, you like to play. You
  can also drag and drop your video file into the video play area to play the
  video also.



1 FILE

Click to open desired video file to be played.

2 VIEW

Configure: Language, Maps & Speed Units

3 HELP

About. Contains software version & copyright date.

4 Driving Speed

This is where your driving speed will be displayed.

5 Date & Time

Shows Date & Time of video was recorded

# 6 Playback Controls

- Reverse
- Plav
- Stop
- Fast Forward

# 7 Volume Control

Slide Right or Left to Increase or Decrease Volume

# 8 G-Sensor Indicator

This is where you can measure camera movement that is caused and recorded by G-sensor force. I.e. when vehicle hits pot-hole or bump you can see it here.

# 9 Snap Shot

- Here you can Pause the Video, then click Camera/Snap Shot button to take a snap shot.
- To View the snap shot please go to, C: / USERS / PUBLIC / PICTURES / S NAPSHOTS
- Click on Snapshots to view your snap shot.

# 10 Playback Time

This is where your video play back time is shown.

# 11 GPS Coordinates

These are your coordinates longitude and latitude recorded by GPS Geo Tagging Device.

# 12 Past Viewed Files

These are you previously viewed files. Click on it to view them again.

# 13 Map Location

Maps showing vehicle's driving route recorded by GPS Geo Tagging Device based on coordinates.

## 14 Vehicle Speed

Speed of vehicle recorded at specific point of time.

#### 15 Vehicle Direction

Direction at vehicle was driving at specific point of time.

#### ONE YEAR LIMITED WARRANTY:

We at ROVE™ would like to provide One (1) full year of limited warranty for your product from the date of purchase to be free from defects in materials and craftsmanship.

**IMPORTANT:** Please save your warranty/serial number card as an evidence. Proof of original purchase is required for any warranty service. (Online order receipt is also accepted)

#### **Warranty Terms Conditions:**

- The warranty is confined to the first purchaser of the product and is not transferable.
- 2. Service / Repairs during warranty period shall be carried out by company authorized personal only.
- 3. It is the responsibility of the purchaser to bring the product to the authorized service center at purchaser's cost and risk.
- The company will not be liable for any hardware and / or data loss arising from the use of any third party software whether downloaded or otherwise.
- In the event of repairs and / or replacement of any part(s) of the product this warranty will remain in force only for the unexpired period of the warranty.
- 6. In case of any physical damage to the product and / or misuse detected by the Authorized service center personal, the warranty be void and service / repairs will be done on chargeable basis only and subject to availability of parts.
- 7. The company's obligation under this warranty shall be limited to repair or providing replacement of part(s) only. The maximum claim(s) if entertained by the company will be subject to the maximum retail price of the product purchased or the purchase price, whichever is lower and on production of original proof of purchase.
- 8. During the warranty period in the event of any unforeseen circumstances where spares not available a commercial solution in lieu of repairs will be calculated based on company's prevailing depreciation rules and the same will be binding on the purchaser.

9. Product specifications are subject to change without notice. All trademarks, logos, brands and product names are properties of their respective owners. All product features specified are as per ideal test conditions. No claims / damages shall arise directly or indirectly for nonperformance / under performance of one or more features specified. MRP is subject to change from time to time due to various factors.

#### LIMITATIONS / DISCLAIMER OF WARRANTY / LIABILITY:

- 1 Company shall not be liable/responsible directly or indirectly for any claim for compensations, damages, any losses etc. under this "Limited Warranty" due to inconvenience, loss of time, loss of profits, loss of business opportunity, loss of data, loss of goodwill, work stoppage, any personal and / or commercial loss, compensation for mental agony, anxiety etc. resulting from the use of the product(s) or any direct or indirect loss of any nature whatsoever (incl. any personal injury or death).
- 2 Except for the warranties set forth herein, company disclaims all other warranties, expressed or implied or statutory, including but not limited to the implied warranties of merchantability or fitness for a particular purpose.

  3 The maximum liability of company under any circumstances shall be limited to an amount equal to the invoice amount paid by the purchaser to company or a company authorized reseller for the Product(s).
- 4 Company shall not be liable directly or indirectly for any claim for compensation if the Product has been exposed to moisture and / or dampness and / or extreme thermal and / or extreme environmental conditions or to rapid changes in such conditions, to corrosion, to oxidation, to spillage of food or liquid or to influence from external chemical products.

ROVE<sup>™</sup> (hereinafter referred to as "the company") guarantees to the purchaser that this product carries a warranty for the period mentioned above, commencing from the date of purchase.

#### SAFFTY & LEGAL ASPECTS:

All rights are reserved. Reproduction, transfer, distribution of the contents herein in any manner without the prior written permission of ROVE™ is prohibited. ROVE™ reserves the right to add, modify or delete, any of the contents herein or withdraw this documents at any time without prior notice and without assigning any reasons thereof. For detailed terms and conditions refer www.rovedashcam.com

- Please check your local or state laws before using in car recording device.
   It is user's responsibility to comply with all local and state laws.
- ROVE™ R2-4K Dash Cam must be placed at proper location so it does not obstruct your view while driving.
- Do not use or manipulate any functions or any accessories of ROVE Dash-Cam while driving. Distraction is a leading cause of accidents.
- \* By purchasing ROVE Dash Cam, you agree with all the terms and conditions of warranty, warnings and precautions. If for any reason you do not agree with these terms, you may return the product in its original packaging unused within its return window for a full refund.

#### TROUBLE SHOOTING YOUR ROVE™ R2-4K

#### Camera does not turn ON

Please make sure you charge camera for 6 hours before first use. Make sure memory card is inserted properly. Then plug in power cable which should turn on camera and it should start recording.

# Error/Message "Card Full"

Format card by going into system settings > format > OK > Select Yes > OK. Then Go to Video Mode settings > Split Record Mode > Choose either 1-min, 3-min, 5-min. This will allow loop cycle function to be turn ON and it will keep recording over and over.

# Camera Freezing/Lagging or Crashing.

Please make sure you are only using class 10 or above microSD memory card. Insert paper clip into reset. Restart with another microSD card and try again.

# Video is fuzzy

Please make sure the lens of camera is clean and there is no dirt on windshield also.

# Camera gets HOT

It is normal for your camera to run slightly hot. Please see temperature guidelines on page 29.

# Camera turns ON / OFF frequently automatically.

Please reset your camera. Please make sure that "Motion Detection" is set to OFF. Also Please make sure "Parking Mode" is also set to OFF.

# My oldest video files are missing.

Your ROVE Dash Cam has split record mode. When it is set to either 1, 3 or 5-min, it will delete oldest files and record newer files over and over when the memory card is full.

## Camera Locks many videos automatically.

Please make sure you increase your G-sensor setting. If you choose higher setting then it can trigger even with smaller bump. This setting depends on type of car or truck you are driving and how much vibration your car/truck is creating based on suspensions and road condition.

# Micro SD Card is crooked or not going in slot easy

Please make sure you align microSD card correctly with gold contacts facing lens inserting. See quick start guide for more details.

# My Video playback on PC is lagging.

You are viewing high-bit rate version of video files. Slower PC may have problem with faster data processing. Please record videos at lower resolution and try again. Contact us if problem still persists.

# Camera showing "Memory Error" or "Please Insert Micro SD Card" even though memory card is already installed into the camera.

- 1. Please make sure memory card is at least Class 10, U3 and purchased from trusted vendor such as Walmart, target, best buy, Ship & Sold by Amazon" etc. (there are many fake cards out there Online, remember if it's cheap, its fake.
- 2. Now go to camera's system settings and FORMAT your memory card. (make sure to backup your videos first before formatting the memory card.) After formatting memory card, please press and hold power button to turn the camera off. Now unplug power cable, and re-plug the power cable, camera should now turn ON automatically and start recording.

# My date and time is not staying the same even after I set date and time.

Please go to camera's system settings > Time Zone Setting > Set your correct GMT value > OK to confirm. Thats it. Now every-time you have GPS signal, you will always have correct date and time.

Please visit "https://greenwichmeantime.com/time-zone/usa/" to find your correct GMT time zone based on your location.

# Still Need Help or Have Questions?

Please feel free to contact our world class support at help@rovedashcam.com. Most e-mails are typically replied within 4-6 hours. However all quesitons are answered within 24 Hours. No Exceptions !! For customer service PHONE SUPPORT number please visit http://www.rovedashcam.com

# **Package Contents:**

- ROVE™ R2-4K Dash-Cam
- USB Car Charger + Long Car Charging Cable
- · Mini USB Data Cable
- · 360° Rotating Windshield Suction Mount
- · 3M Sticky Windshield Mount
- 5 x Cable Clips
- · Car wiring tool
- User Manual
- · Warranty Card
- Quick Start Guide

#### A BIG THANK YOU!!

Thank you for purchasing your new ROVE $^{\rm IM}$  R2-4K Dash Cam. We hope you find your new dash cam useful and fun to use.

If you are having difficulties setting it up, please email us at help@ rovedashcam.com. 99% of all setup problems can easily be resolved and should be able to get you up and running in no time.

In the unlikely event that we can't help, we're always happy to provide full, hassle-free refund. We just want our customer to be happy and proud to use ROVE™ Dash Cam!

There is no perfect product, however we will always do our best to provide perfect customer service to you.

A Great care was taken while creating this user manual. It is possible that there are minor typos are there. Please visit our website for latest and updated user manual if available. We also frequently update other great contents that is very useful to our customers.

Camera upgrades, firmware, box contents can be changed without notice. Always see up to date information by visiting our website.





Got a question? Have a problem?





# **CUSTOMER SERVICE:**



help@rovedashcam.com (Response in just 6 hours)



For faster response text us 1 (401) 484-ROVE(7683) Hours: Mon - Fri 9am-5pm PST

www.rovedashcam.com