ROVE R3 Ultimate
3-LEAD HARDWIRE KIT
USB TYPE-C

USER MANUAL

Please Read

- Automatic Input Voltage Detection DC12V/24V
- Universal Kit, Compatible with most Dashcams
- Constant Power Supply
- Suitable for Cars, Vans, Truck And Buses
- Includes 2 Sets of 4 Types of Fuses & Piggy Back Fuse Cables
- Voltage Cut-Off to Prevent Battery Drain

www.rovedashcam.com

EXPERIENCING PROBLEMS ?

- Item NOT as described?
- Damaged or defective?
- Missing items?
- Any issues what so ever?

CONTACT US BEFORE RETURNING THE ITEM

WE WILL HELP YOU IN RESOLVING ANY ISSUES ASAP

CUSTOMER SERVICE

Hours: Mon - Fri 9am-5pm PST

Email Us — Response in just 6 hours — help@rovedashcam.com

Text Us — For faster response text us — 1 (401) 484-ROVE(7683)

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WATCH

HOW TO INSTALL

Visit our website

www.rovedashcam.com/pages/videos

Understanding

ROVE R3 Ultimate 3-Lead Hardwire Kit
USB Type-C

Watch HOW-TO INSTALL to learn & understand all the features so you can get the maximum benefit out of it.

INDEX

WHAT IS HARDWIRE KIT?

ROVE R3 Ultimate 3-lead Hardwire Kit is a power management device that provides power to your R3 dash cam and most other dash cams with a USB Type-C connector from your car's battery via fuse box to keep your device continuously running even after your car's engine is turned OFF to utilize the 24-HR Parking Monitor feature.

FEATURES

LOW VOLTAGE PROTECTION

The **ROVE R3 - Ultimate 3-Lead Hard Wire Kit - USB Type-C** will monitor your voltage status and cut-off the power to the dashcam if the voltage drops below the configured value. This minimum voltage cut-off is 11.8VDC for a 12VDC battery and 23.6VDC for a 24VDC battery. This protects the vehicle's battery. And reserves enough power so you can start your car for the next time. You have four different configuration choices that you can select when you want the power to be disconnected to the dash cam when the battery's voltage reaches certain level.

Four Options of Low Voltage Protection:				
For 12V Battery:	12.4V	12.2V	12.0V	11.8V
For 24V Battery:	24.8V	24.4V	24.0V	23.6V

BATTERY DRAIN PROTECTION SWITCH:

Fig: Battery Drain Protection Switch

OVER CURRENT/SURGE PROTECTION

The **ROVE R3 - Ultimate 3-Lead Hard Wire Kit - USB Type-C** can detect abnormal over voltage status and cut off power to prevent any damage to your dashcam. Additionally, the ROVE Hardwire Kit has built-in extra fuse box (2A) to have extra protection.

UNIVERSAL COMPATIBILITY - USB Type-C Dash Cams

The ROVE R3 Ultimate 3-lead Hardwire kit is custom designed for the ROVE R3 dash cam and compatible with most other dash cams with a USB Type-C connector.

MULTI INPUT POWER DC 12V/24V

Automatically detects voltage input whether your vehicle is running DC 12V or 24V

PARKING MODE SWITCH

For **ROVE R3 dash camera**, keep this switch set to the (Default) RIGHT position. (See the photo below)

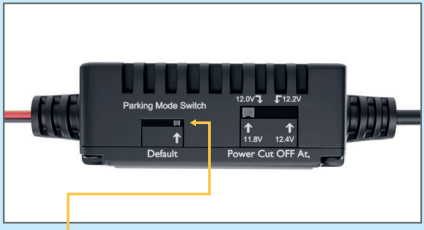


Fig: Parking Mode Switch

Most OTHER Dash Cams will work with the switch either on the Right side or Left side.

When to slide the switch to the LEFT side?

ANSWER: *If you find the camera recording in Parking Guard Video while driving and Normal Continuous Video Recording while parked, then flip this switch to the opposit side.*

SPECIFICATIONS

- **Total Cable Length:**
  4 Meters (input 1 meter, output 3 meters)
- **Input Wires:**
  POWER/GROUND/ACC
- **Input Voltage:**
  Typical DC 12/24V, MAX DC 36V, auto detecting
- **Output:**
  Type-C USB plug, DC 5V, 2A
- **Battery Drain Protection Options:**
  11.8V/12.0V/12.2V/12.4V for 12V Battery
  23.6V/24.0V/24.4V/24.8V for 24V Battery
- **Working temperature:**
  -20° C to 60° C (-4° F to 140° F)
- **Control Box Dimension:**
  40 X 25 X 15mm
- **Net Weight:**
  0.6 lbs (0.27kg)
- **Other Protection:**
  Reverse connect protection, Short circuit protection, Overtemperature protection, Overload protection.

UNIVERSAL COMPATIBILITY CHART

Connection Method	The Camera With Parking Guard Function Will	
	While Driving	While Parked
Constant Power Ground ACC Power	Normal Continuous Recording	Record In Parking Guard Video
Constant Power Ground X	Record In Parking Guard Video	Record In Parking Guard Video
Constant Power Ground Constant Power	Normal Continuous Recording	Normal Continuous Recording
ACC Power Ground ACC Power	Normal Continuous Recording	Power OFF While Parked
ACC Power Ground X	Record In Parking Guard While Driving	Power OFF While Parked
ACC Power Ground Constant Power	Normal Continuous Recording	Power OFF While Parked
X Ground Any Power	Camera will Never Power ON	Camera will Never Power ON

** X Means No Connection or Connect to Ground*

Record in Parking Guard Video = This will make your camera record based on your camera's parking guard setting.
(i.e. Motion Detection, Time-Lapse Parking Guard etc.)

WARNINGS

⚠ WARNING

Failure to comply with safety warnings and precautions can result in serious injury or death.

BEFORE YOU BEGIN - We recommend that this type of HARD WIRE KIT installation should be performed by a qualified individual or professional business only. Working with your vehicle's power system can be dangerous to both you and your vehicle's safety. If you do not know what you are doing or If you have any doubts, please consult a professional.

HANDLING & PRECAUTIONS

- Handle your device with care.
- If your device is damaged, do not continue using it, as it may cause injury.
- Use the correct input voltage.
- Do not spray cleaning products on the device.
- If the product gets damaged or the power supply is interrupted due to an accident or any other circumstances, then the video may not be recorded.
- 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.
- Refer and follow recommendations from your car's owner's manual before you begin the installation.
- Do NOT expose this product to rain, moisture or water under any circumstances or it will result in external or internal damage.

- Do NOT drop, puncture or disassemble this product.
- Keep out of reach of children.
- Do NOT try to open or repair it yourself. If the accessories, or the device has any problems, then contact the seller for assistance.
- Secure the device well with included cable ties to make sure it is not loose or fall down. This may create obstruction in operating your vehicle.
- The company is NOT responsible for the loss of any data or your content during operation or in any circumstances.

NOTE: *In this user manual the photos and images are only for the reference guide and general illustration purpose only. We have used Honda Civic's fuse box as an example and some other stock photos of the fuse box to give you an idea of how to install a hard wire kit.*

⚠ IMPORTANT:

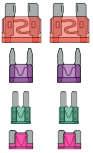
Please make sure to study and follow your car's user manual for the fuse box location, how to access it and which fuse provide ACC power and which fuse provides Constant Power before proceeding.

IN THE BOX

ROVE R3 - Ultimate 3-Lead Hard Wire Kit - USB Type-C

30V Voltage Meter
To check and find ACC Power & Constant Power Fuse

4 x 2 Piggy Back Fuse Taps/Cable
You will only need two out of included 8



4 x 2 Fuse Type
Pre-Installed for you on the piggyback Fuse Taps

Fuse Puller/Removal

4x Wire Ties

Trim Tool & 4x Cable Clip

User Manual

BATTERY DRAIN PROTECTION

The Hardwire Kit will protect your dashcam from draining your vehicle's battery. If battery voltage gets too low, ROVE Hardwire Kit will stop powering your camera to save enough power, so you can start your car for the next time.

Now once you start to drive your car and when the battery starting to charge and when the voltage reaches higher than the set cut-off voltage protection, then the hardwire kit will resume it's function normally, untill again the voltage reaches the cut-off level.

SETTING THE CUT OFF VOLTAGE

Make sure to test and identify the minimum necessary battery voltage you will need to start your car for the next time before you set to the lowest setting.

There are 4 protecting bands set in the hardwire kit, you can switch according to your requirement.

We recommend that you start with the highest setting, and then test and move down each step to find the happy medium that will give you enough battery power left over vs. recording time between your drives.

a) For 12V Batteries

The protecting voltages are 11.8V / 12.0V/ 12.2V / 12.4V. 12.2V recommended for most users in general driving conditions.

b) For 24V Batteries

The protecting voltages are 23.6V / 24.0V/ 24.4V / 24.8V. 24.4V recommended for most users in general driving conditions.

The **ROVE R3 - Ultimate 3-Lead Hard Wire Kit - USB Type-C** will identify the lead-acid battery type automatically (12V or 24V) and protect your battery from draining accordingly.

INSTALLATION

There are 2 main stages in the hardwire kit installation.

- Connecting input cables to your fuse box and grounding.
- Connecting output cable to your dashcam.

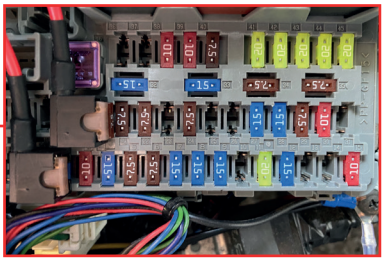
WHAT YOU'LL NEED FOR INSTALLATION

- Hardwiring Kit and Accessories
- Pliers
- Socket Wrench
- Electrical Tape
- Car Manual

1 LOCATE YOUR FUSE BOX

Locate your fuse box using your Fuse Box Diagram. This information can usually be found in your vehicle's Owner's User Manual or from your manufacturer's website.

Fuse box is located behid this panel. (Example Shown: Honda Civic)



***NOTE:** To Determine the location of your vehicle's fuse box refer to the vehicle owner's manual.*

It will instruct you on how to get access to your fuse box. In above case, we have removed the top panel to get access to the fuse box.

You probably need to remove trim or open some panels to gain access to your car's fuse box. On most cars, you can access the fuse box simply by lifting a tab or pulling a panel with your fingers, while some others may require you to pry with an included trim tool.

See the how to video for more details about this.

2 FIND THE CORRECT FUSE SLOT FOR YOUR HARDWIRE KIT

The next thing to do is to understand which fuse slot to use. You will need to find two fuse slots to be used in this step.

1. A fuse Slot that provides constant power (RED wire will go here)
2. A fuse Slot that only provides power when you turn your key to ACC position (YELLOW wire will go here)

Make a note of these as you will need to refer this back in step 4 part 2, and step 5.

⚠ IMPORTANT:

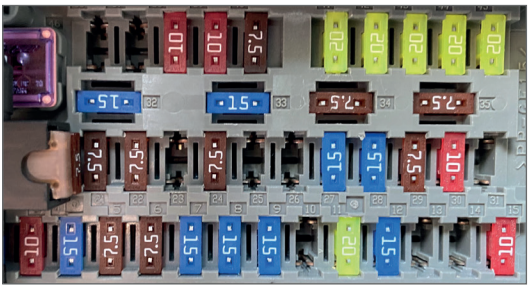
We recommend choosing fuse slots rated between 10A - 30A so they can provide enough power to the dash cam. (Don't use 5A or 7.5A, as this will not provide enough power to the camera)

⚠ WARNING

Always refer to the vehicle owner's manual to avoid fuse slots that could pertain to important safety features within your vehicle.

For example, avoid fuses that controls airbags, stability control programs, etc.

Fuses that control certain elements such as the radio, garage door opener, sunroof, etc. are usually safe to use.



For **ROVE R3 - Ultimate 3-Lead Hard Wire Kit - USB Type-C**, there are 3 wires that need to be connected:

RED Wire

Attaches to the Constant Power Fuse Slot (Always Hot - means this fuse always provides power even when your car key is locked and turned off).

YELLOW Wire

Attaches to the ACC Power [Ignition-Switched Fuse - Means this Fuse slot only provide power when you turn your car's key from LOCK position to ACC position].

BLACK Wire

Attaches to the Metal Grounding Screw/Bolt. [Grounding to complete circuit and prevent sparking or electrical shock]. See step 5 for details.

TIP: *Use the voltage meter included in the box or equivalent to test which fuse is constant and which is ACC/ignition-switched.*

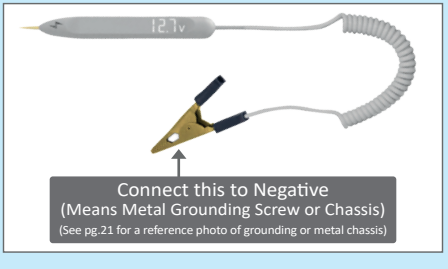


Fig: 30V Voltage Meter, included into the box.

3 IDENTIFY THE CORRECT TYPE OF FUSE FOR YOUR CAR

Now, once you have identified which fuse slots you need to use, let's find out the type of Add-A-Fuse / Piggy-Back Fuse Tap to use for your car's model.

As you can see in the below pictures, there are mainly four types of fuse used for American cars.

There are few quick and easy way to identify the type of fuse that your car uses.

1. Remove one of the fuses from your car's fuse box and match it with one of the fuses in the picture below. Make sure to insert it back where you removed it from.

   Or

2. You can refer to the owner's manual for your car to find out the specific type of fuse that you will need to use.

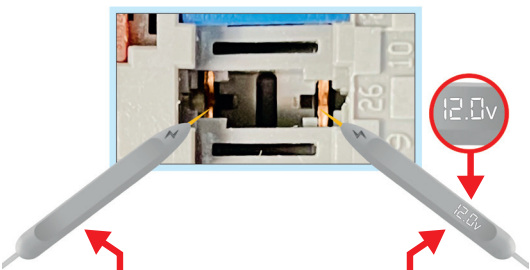
Add-A-Fuse or Piggy Back Fuse Tap	Types of fuse
 ATO (Standard) Fuse Cable	 ATO (Regular) Fuse
 Mini Fuse Cable	 Mini Fuse
 Micro2 Fuse Cable	 Micro2 Fuse
 Micro Fuse Cable	 Micro Fuse

4 IDENTIFYING INPUT & OUTPUT SIDE OF A FUSE SLOT

Now, let's identify which side (left or right) of the fuse slot is the voltage INPUT and voltage OUTPUT side.

NOTE: *Make sure that the fuse slot that you are testing has the power to get the correct voltage reading. For example, if you are testing the ACC fuse, make sure the car key is turned to the ACC before testing. And if you are testing the always HOT fuse slot, make sure the key is turned OFF and removed before testing to find the correct fuse slot.*

- Use the included voltmeter to test each side of the fuse slot connector to determine the voltage reading.
- If the voltage reading is near +/-12.0V / 24.0V, then mark this side as an INPUT side.
- If the voltage reading is 0.0V (No Voltage will be displayed), then mark this side as an OUTPUT side.



0.0V
(No Voltage will be displayed)

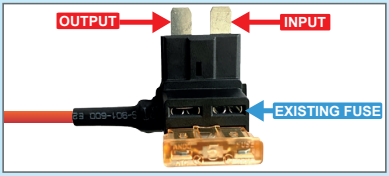
This side shows **0.0V** (No Voltage will be displayed), therefore this is a voltage **OUTPUT** side.

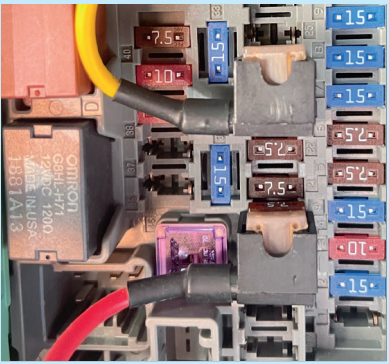
12.0V / 24.0V

This side shows **+/-12.0V** or **+/-24.0V** coming in, therefore this is a voltage **INPUT** side.

5 INSERTING THE RED AND YELLOW FUSE TAPS

- Now make sure to rotate the fuse tap orientation correctly so INPUT goes into INPUT and OUTPUT goes into OUTPUT.





See this example (Left = Output, Right = Input)

REMINDER

If you are using the previously identified fuse slot that has an existing fuse in it, then insert that existing fuse into the lower empty slot of the Add-A-Fuse with correct orientation. (See **BLUE** Arrow in the above image (Fig: top image).

However, if your previously identified slot is empty and there is no existing fuse in it, then you can just install the Add-A-Fuse directly without needing to install 2nd fuse into the empty slot of an Add-A-Fuse tap.

6 TEST THE INSTALLATION FOR YELLOW & RED ADD-A-FUSE

NOW before connecting and crimping Let's TEST to ensure we have the RED and YELLOW Add-A-Fuse cables installed correctly using the include voltmeter.

NOTE: *During testing the voltmeter, make sure the alligator clip is connected to the proper ground (See Grounding Photo on pg. 21)*

TESTING THE YELLOW Add-A-Fuse:

1. Turn OFF the car Keys and remove them. Now touch the voltmeter to the aluminum end of YELLOW Add-A-Fuse. - You should **NOT** see any voltage reading here. If no voltage reading here, then great, now go to #2. **(If you see a positive voltage reading here, then you don't have this installed correctly. Go back and check previous steps again)**
2. Now turn your car keys to ACC position. Now touch the voltmeter to the aluminum end of the YELLOW Add-A-Fuse to check the voltage. Your voltmeter should read the incoming voltage of either +/- 12.0V or +/- 24.0V. If YES, then great job. You have installed the YELLOW cable correctly, and it is getting power through the ACC fuse slot.

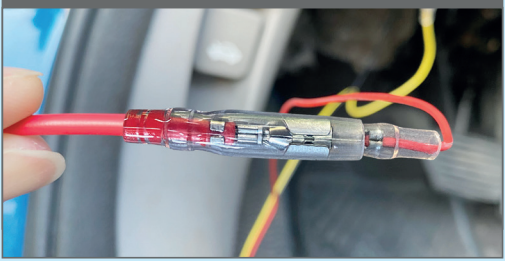
TESTING THE RED Add-A-Fuse:

Turn OFF the car Keys and remove them. Now touch the voltmeter to the aluminum end of RED Add-A-Fuse. Your voltmeter should read the incoming voltage of either +/- 12.0V or +/- 24.0V. If YES, then great job. You have installed the RED cable correctly, and it is getting power through the always hot fuse slot. **(If you don't see a positive voltage reading, then check your connections and previous steps over again)**

7 CONNECTING THE RED AND YELLOW PIGGYBACK FUSE TAPS TO THE HARDWIRE KIT

Now, let's connect the RED and YELLOW Wires securely with piggyback fuse-taps using a crimp tool or a pair of pliers.

Connect the hard wire with Add-A-Fuse



Crimp the Add-A-Fuse to secure the connection

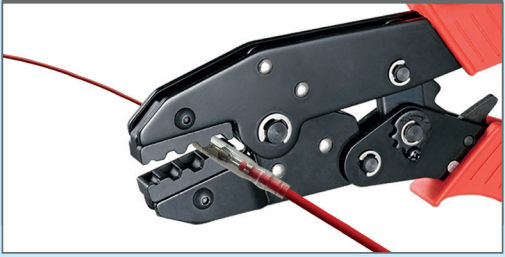


Fig: Crimp the fuse taps with Red & Yellow wires

8 LOCATING A GROUND POINT

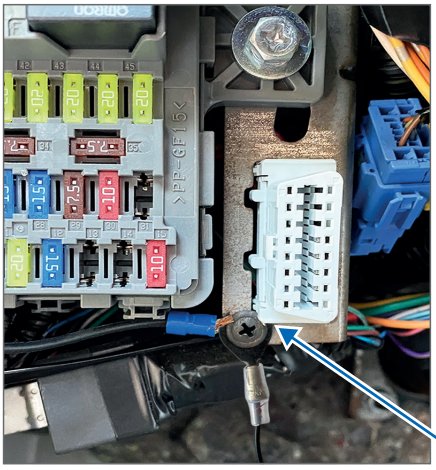
Now, let's connect the BLACK Wire to the Grounding Screw or Bolt.

⚠ IMPORTANT:

There are GOOD ground points, and there are BAD ground points. It is important to choose the proper ground point so the circuit is properly completed.

If you choose a bad ground point, the dash cam will NOT detect the hardwire kit.

Bad Grounding Choice (Screw on Plastic)



GOOD GROUNDING CHOICE (Screw on Metal Chassis)

NOTE: *See the picture above for reference. We recommend that you choose the metal Chassis Grounding Screw, or it may cause your dash cam to not function properly and restart/reboot when power does not flow properly.*

9 TEST THE DASH CAM

Once you have installed all three wires (RED, YELLOW, and BLACK) to proper slots and positions, now let's test it.

⚠ IMPORTANT:

Do NOT plug in the power cable to R3 Dash Cam yet.

You can NOT turn ON parking mode while the car's engine is turned OFF. If you try to turn ON parking mode while the car's engine is OFF, the dash cam will say the "Hardwirekit Is NOT Detected."

Please follow the steps below for a proper understanding of how the parking mode is designed to work automatically when using the ROVE R3 HWK.

How to test the Parking Mode?

How to TEST and ensure if the dash cam is working properly using the Hardwire Kit and Parking Mode feature?

STEP 1

Turn ON car's engine first. Then while the car engine is turned ON, please plug in the USB-C HWK Cable into the mount of R3.

Then the dash cam will turn ON and wait until it says "Recording Started".

Fig: Connecting the USB TYPE-C cable to the R3

STEP 2

Now go to the Video Settings Menu > then Parking Mode > then **YES Turn ON** > And if you see **Three Options** then you have installed the HWK correctly.

STEP 3

Now, for the testing purpose, please select the “Time Lapse + Collision Detection” option. Then Select Back…Back… until you go back to the home screen and until the dash cam says “Recording Started.” Your dash cam home screen should look like this.

STEP 4

Now, let's turn OFF your car's engine and remove the key, and then open the door and close it gently to let the car think that you have exited the vehicle. Now observe your dash cam's home screen. You should see the dash cam go into the parking mode automatically, and you should see the Yellow Parking Mode and Time-Lapse icon on the Left Side. See the photo below...

NOTE: *The screen is designed to turn OFF every 5 seconds when in parking mode. To wake up the screen, simply touch it gently.*

If you see the above Parking Mode & Time Lapse icon, then Congratulations and great job. You did it. You have successfully installed your ROVE R3 Dash Cam & Hardwire Kit Correctly.

STEP 5

Now turn ON your car's engine, and you should see the camera go back to the normal recording mode, and those Yellow Parking Mode and Time-Lapse icons will go away. This means your dash cam is recording in normal continuous mode, which is what you want.

10 TUCKING UP AND ROUTING ALL THE CABLES NEATLY.

If the test passes and the dash cam works properly, then Voila! You did it. Great job!

Now you can run and tuck all the wires into your car; we recommend taping or zip-tying the excess wires out of the way in your vehicle, so it doesn't block any access to your fuse box.

Make sure wires are not loose or hanging where they may be kicked when you are getting in and out of the car as this can be dangerous and cause damage to your to hardwire kit or vehicle and can also cause unsafe driving conditions.

⚠ WARNING

If your vehicle has side curtain airbags please be very careful when running any cables along your vehicle windows. Ensure you are not running cable past any of the airbags as this can prevent the airbags from deploying.

TROUBLESHOOTING YOUR ROVE R3 - ULTIMATE 3-LEAD HARD WIRE KIT - USB TYPE-C

Hardwire Kit not powering the dash camera

- Make sure that old fuse is plugged into piggy back fuse cable and all fuse cables are connected to the fuse box and on the correct spot.
  - **RED** WIRE should be tapped into a fuse slot that supplies constant power.
  - **YELLOW** WIRE should be tapped on an ACC fuse slot.
  - **BLACK** WIRE, which is the ground wire. It should be securely bolted on a metal ground connection.
- Make sure that the taps' fuse slots are connected to have at least 10A to 30A.
- Flip the fuse taps 180 degrees and re-connect them to the fuse slot/s.
- Please try other slots on the fuse box that is for continuous power and ACC slots.
- Check if the parking mode switch is switched over to the RIGHT and make sure the voltage cut off switch is set to the lowest setting of 11.8V for the testing purpose. (You can adjust this later)
- Lastly, if it still doesn't power on with the above steps, then you should make sure your car's battery is fully charged. The car's battery's voltage should read higher than the voltage cut-off setting; otherwise, the HWK will not provide power to the dash cam. This might be the reason your dash cam is not getting power. You should also go to page 19 and do the full step of testing the Yellow and Red Add-a-fuse to make sure you have voltage coming through.

Camera constantly rebooting

- Make sure that the black cable is securely bolted to a good metal ground connection.

Hardwire kit is not detected when turning ON the 24-HR Auto Trigger Parking Mode.

- Make sure your car's engine is turned ON before turning ON the parking mode.
- Check GROUND Connection: Most of the time, this is a simple issue due to incorrect ground screw position. Because the hardwire kit can't complete the circuit, it will not be detected by the dash cam. So please connect the black grounding cable to the CORRECT grounding metal screw and try again. (See page 21 for photo)
- Go to Page 19, and TEST the STEP 6 connection as directed.

The camera does NOT go into the parking mode instead it continuously recording:

- Check the YELLOW cable to ensure that it is NOT plugged into always HOT/Constant power supply. The Yellow cable should be plugged into the fuse that provides power only when the car is in ACC (Accessory). This accessory fuse will disconnect the power when the car's key is turned OFF and Locked and Removed. If this is not the case, then please find the correct ACC fuse slot and then try again.

A BIG THANK YOU!!

Thank you for purchasing your **ROVE R3 - Ultimate 3-Lead Hard Wire Kit - USB Type-C**. We hope you find your Hardwire Kit useful and fun to use.

If you are having difficulties setting up this hardwire kit, please fell free to reach out to our customer care below. 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 a full, hassle-free refund. We just want our customers to be happy and proud to use ROVE Products.

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

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

CUSTOMER SERVICE

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