

INNOVV™

INNOVV CAMERAS



INNOVV MOTO CAM

INNOVV K2 | Dual- channel camera system/
Wifi connection to phone/ 1080 P30 with
near 360 degree view/ Waterproof

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INNOVV K2 CAMERA



Independent apps for
iOS and **Android**



K2 Dual-channel

Dual 1080P Full HD



Dual Full HD
(front + back)



SONY Exmor
Sensor



WiFi
Built-in



GPS
Built-in



Up to 256GB
microSD



Weatherproof
camera



Weatherproof
DVR



Parking
Mode



IP65 (dust & water protection) – DVR IP Rate
IP67 (dust & water protection) – Camera IP
Rate



GPS Module
Explore, Track and Share

INNOVV K2 User Instructions

1. INNOVV K2 Package



1 x DVR

1 x Front Camera (3 meter long video cable)

1 x Rear Camera (1.5 meter long video cable)

2 x Mount Set

1 x microSD Card Reader

1 x GPS Module

1 x Converter (12 volts to 5 volts)



INNOVV K2 User Instructions

2.Choosing your SD card

Please purchase the branded SD card from reputable reseller.

The brands like Samsung, Sandisk has too many fake SD cards.

The resellers like INNOVV dealers, Samsung Amazon Store or trusted resellers.

The size of SD card can be 32GB, 64GB, 128GB, 256GB.

The speed of SD card is more than Class 10, U1, U2, U3.

Click below link to get more knowledge about SD card.

<https://www.sdcard.org/consumers/faq/index.html#speedclass>

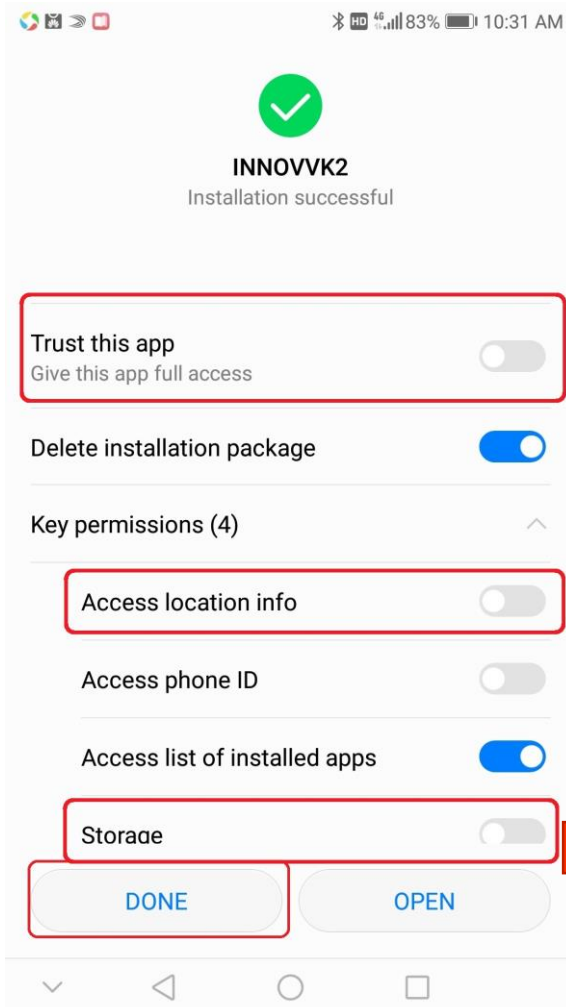
The K2 will take up to a 256gb card. You can expect appx the hours on chart below for each size card.

256GB	19 Hours
128GB	10 Hours
64GB	5 Hours
32GB	2.5 Hours

INNOVV K2 User Instructions

3. Install the INNOVV K2 App

Download the Innovv K2 App to your mobile device. Available from App Store or Google Play. You can search INNOVV K2 or use QR Scanner.



INNOVV K2 App Logo



QR for iOS Devices



QR for Android Devices

Min Requirements

iOS 8.3

Android 7.0

Windows Phone Not Available

App Permission

App need to be trusted and is allowed to access location & storage. If not, App does not work.

INNOVV K2 User Instructions

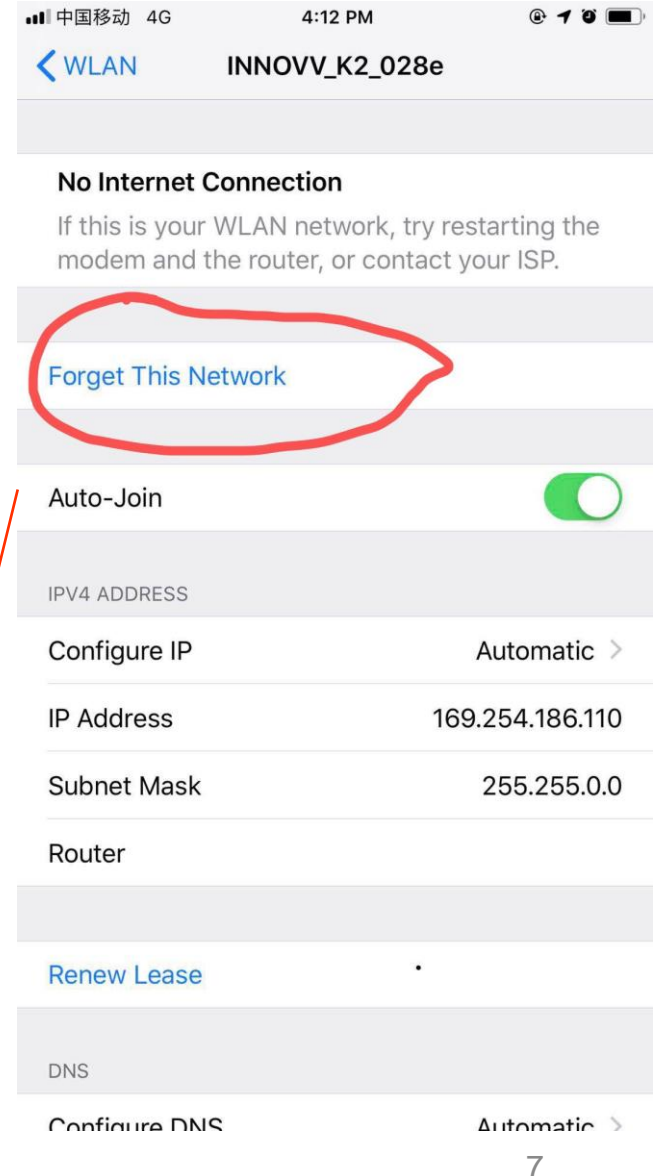
4.1. Connect to the K2 App

Now to get your DVR connected to your mobile device via WiFi. The blue light will be steadily flashing. Go to the settings on your mobile device, select the Innovv wifi and insert the code 12345678 (if you change the password it must be 8 digits) Your mobile device will now be connected to the Innovv DVR and you will get a solid blue light.

https://www.youtube.com/watch?time_continue=5&v=7ikXjH_Jtrs

If you have any issues with connection to the Innovv K2 Wifi please see below:

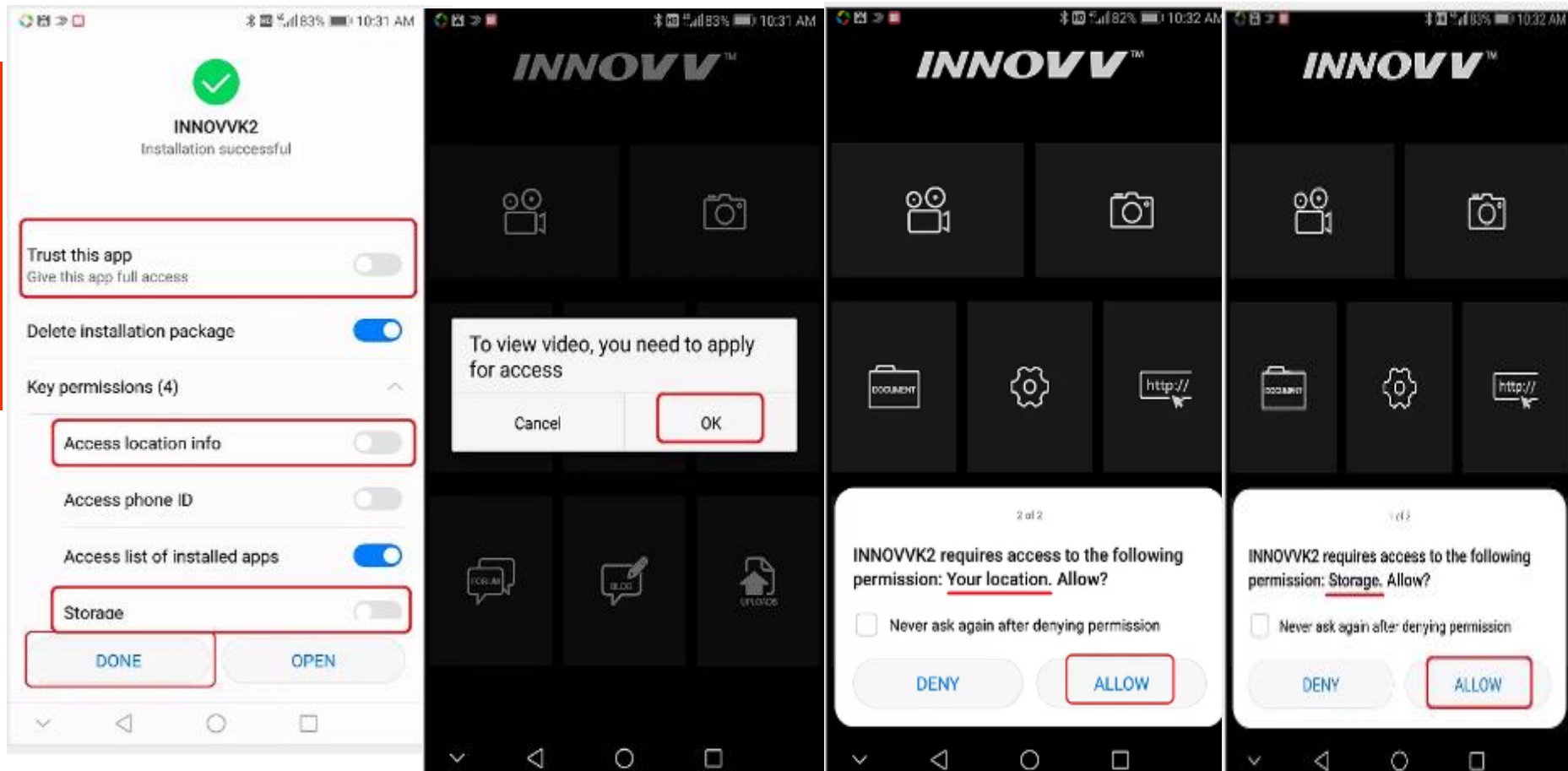
1. Turn on the location service of phone and set phone to airplane mode, then enable WiFi connection only, reconnect WiFi and access setting again.
2. Refer the the photo to forget INNOVV K2 WiFi network, and re-input password and reconnect.
3. Update the last firmware & re-install the App, and Set phone to airplane mode and enable WiFi to connect.



INNOVV K2 User Instructions

4.2 App Permissions

Trust the App, Give this app full access. or,
Allow it to access your location & storage, if not, App can not work properly.



INNOVV K2 User Instructions

5. Before Fitting to your Bike

Before full installation to your bike we advise that you familiarise yourself with the system, get to know and understand the basics and its operation. For it to fully operate you will need to connect up all items i.e Gps and both front and rear lenses. Ensure everything is tightened and connected properly and SD card is inserted before powering up the K2 system.

Now you need to power up. You have 3 options :

- 1 – Fully connect the converter to your battery terminals(positive and negative) and yellow to a switched live. In line with full install guidelines
- 2 – Connect up black to your negative battery terminal and both the red and yellow to the positive. This will power the unit up for the purpose of testing only. For full install the yellow will require connecting to a switched live.
- 3 – Connect via mains power using a micro usb lead(min 1A). A good quality micro USB lead (min 2A) will be required.

Please note there will be a 10 second start delay (option 1) before the DVR fires up. So don't panic this is normal.

How LED flashes when power supplied.

After few minutes recording, you can check SD card on your PC to see the video clips.

https://www.youtube.com/watch?time_continue=8&v=OwPXUGma1Dg

INNOVV K2 User Instructions

6. Installation Hints and Tips



6.1 Converter Connection

Red wire is to the positive terminal of battery,
Black wire is to the negative terminal of battery,
Yellow wire connects to a switched power source
from your bike such as ignition, head light, tail
light etc.

For testing only, Join the yellow & red wires to get
power supply,

For installing on the motorcycle, Yellow wire
should connect to the switched power source, if
not, the last video clips can not be well saved.

Features:

Consistent power supply. Won't drain the bike battery during riding.
Fit and Forget. Auto recording on/off with ignition
10 seconds start delay to avoid power spike when bike switched on
10 seconds delay off to protect and save last video file
Fused converter will protect the camera system.
Suitable with CAN bus Systems

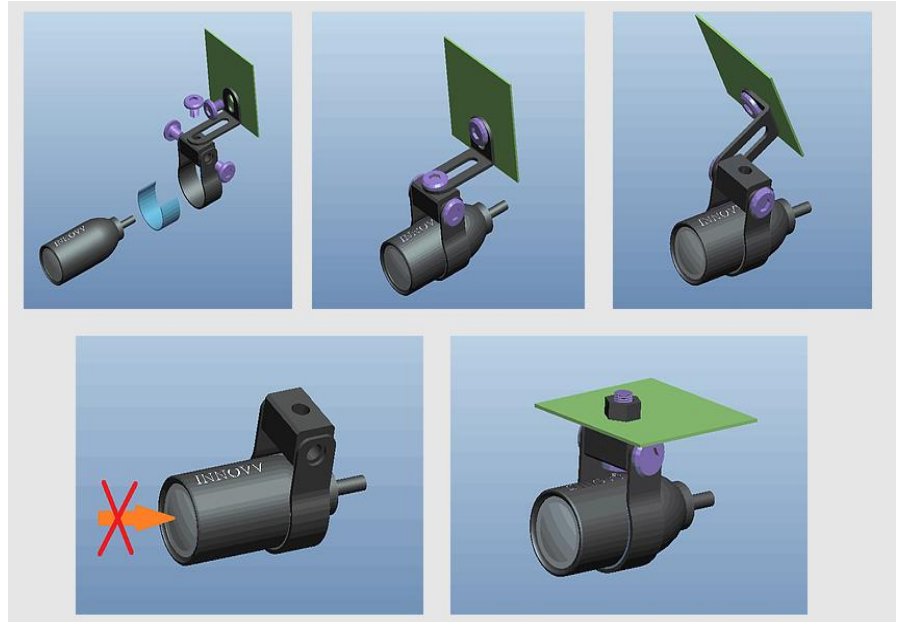
INNOVV K2 User Instructions

6.2 Camera Installation

The camera mount was designed for versatile mounting options. Refer below photos to see how the best way for your need.

The mounting location should be firm, and camera should be secured down well to less vibration.

Routing video cable carefully, avoid bending or direct heat, and being tight and tension.
INNOVV logo on lens is to up.
Do not push the glass on lens.



INNOVV K2 User Instructions

6.3 Installation Video for reference

<https://www.youtube.com/watch?v=PRMuyqW-EXQ>

https://www.youtube.com/watch?time_continue=3&v=stbvMGw6Sxl

<https://www.youtube.com/watch?v=hF3tpKbomgl>

6.4. CAN bus System for BMW

Installing your camera system via the 12v/5v converter will not interfere with your Can bus system. The current draw from the camera power unit is very small and will not interfere with the CAN bus system. Many Innovv systems have been installed to bikes with CAN bus systems without any issue. The pick up for the switched live source is generally the tail/rear light.

However, if in the future want to add auxiliary lights, horns or other accessories or you do not want to connect the camera direct via switched live source you can look to install a CANbus controller. This makes a lot of sense as any future additions are quicker and easier to add and you will gain added functionality. Suggested CAN bus controllers are Volocan and DENALI, both offer similar functionality. The Volocan product offers a lower price point and is perfect if you are looking at basic two wire lights. The Denali option is a smaller form factor (easier to find a home for) and offers plug and play integration of the DENALI range of lights and Soundbomb horns etc.

INNOVV K2 User Instructions

6.5. Connecting Camera to Canbus Controller

We get a lot of questions from customers with CAN bus controllers fitted to their motorbikes that want to integrate an INNOVV camera system. But not sure how to connect these to the CAN bus controller.

Irrespective of which CAN bus controller you have fitted, you are sure to either have a “spare port” or the ability to convert a CAN bus channel into a switched 12V supply via the user interface. The most common are DENALI and VOLOCAN. These two brands have different methods for adding accessories.



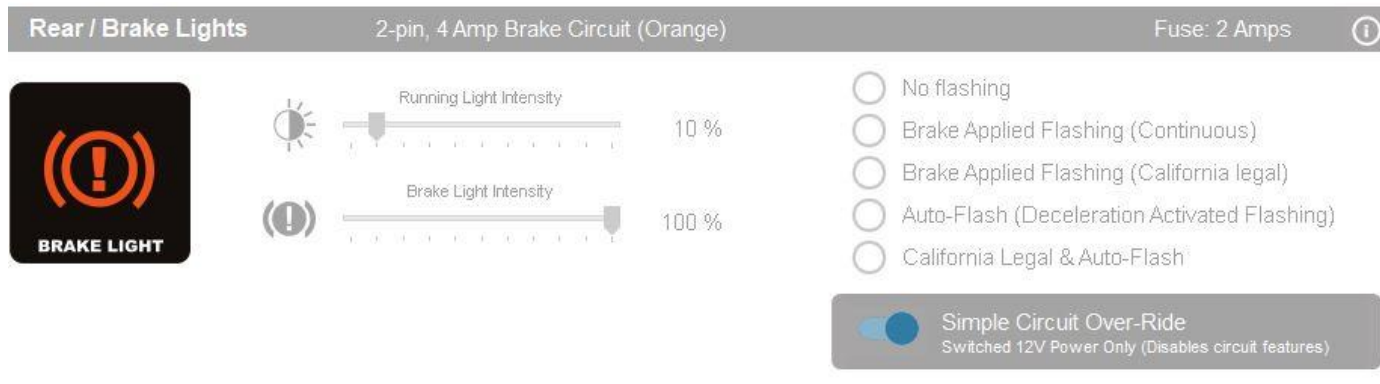
CAN bus controller – how to connect Innovv Cameras

If you are using a DENALI controller you need to connect the controller to your laptop, switch the ignition on and open the web interface. Once the interface is open you simply select the “Single circuit override” for the CAN bus channel you wish to use. This turns the channel into a switched 12V live to power your accessories.

See this screenshot:



INNOVV K2 User Instructions



VOLOCAN

The VOLOCAN controller uses a range of DiP switches to configure the unit but has a dedicated spare port that can handle a current up to 10A load. This can be used to power any accessories. The spare port is enabled when the device powers on.



INNOVV K2 User Instructions

So how do I connect my INNOVV Camera to the CAN bus controller?

INNOVV Cameras require a permanent battery connection and a switched live, the first thing to do is to connect the battery terminals, ensuring you have the correct polarity.

Next is the switched live connection which goes to either the spare port or to the connector for the channel you want to use. Please note that several CAN bus controllers use their own specific connectors to connect to the channels.

Depending on the brand a CAN bus controller can have specific connectors

Some controllers come with what are called “pig-tails”. These are mating connectors with wires that you can use to connect to. Other controllers come with complete sealed leads with connectors on both ends. In this case you will need to cut the lead, insulate any wires you are not using. And then connect to the positive or if required positive and negative wires directly to the accessory.

Ignition live trigger or power – which channel will you need to use?

Depending what you are connecting to the controller may well dictate which channel you need to use based on the required current. If for instance you are connecting an INNOVV camera system, you only need a 12V trigger. So a low current rated channel (rear light) is fine to use.

INNOVV K2 User Instructions

7.DVR & GPS Module Guide

DVR should be fixed firmly without movement and vibration and it is easy to access SD card. G-sensor is inside of DVR, DVR movement can case too many files protected. Keep Mic hole on DVR to be covered or blocked.



INNOVV K2 User Instructions

GPS Installation

GPS Module Location – The module needs to be located in an external location to ensure communication with a satellite. Ideally the module needs to be as close to horizontal as possible. We strongly suggest it is tested in desired location before securing. The module should be located at least 30cm from the main DVR unit.



Note - We have a number of customers that have located the module within the bike and have reported that it works 100%. Whilst we cannot guarantee this, we suggest you test different locations if this is preferred.

INNOVV K2 User Instructions

GPS – INNOVV K2 - General

The Innovv K2 comes loaded with great GPS functions.

Play your INNOVV videos while watching your bikes speed, distance, position, bearing, and shock-sensor data update on graphs, data displays, and maps. Providing you had your GPS switched on when recording you will be able to view GPS data along with the video content via your mobile device.



INNOVV K2 User Instructions

GPS - Playback via App - Mobile Device

Providing that the GPS was switched on during recording you can easily access the GPS mapping via your mobile device (Mobile phone/Tablet).



Take a look at the video on the below links to see how this is done. There are 2 videos, for Android and IOS devices.

https://www.youtube.com/watch?v=NISBw_2i-1Y

https://www.youtube.com/watch?v=0_LOzcWjrjc

INNOVV K2 User Instructions

GPS - Computer - Playback via Dashcam Viewer



What Dashcam Viewer can do for you?

Play your dashcam videos on the main screen while watching your vehicle's speed, distance, position, bearing, and shock-sensor data update on graphs, data displays, and maps.

“Geotag” points of interest along your route. Export these to a file. Or import them back in.

Export your GPS tracks to common file formats such as comma-separated value (CSV),

Google

Earth KML, and GPS-exchange (GPX) for further data analysis.

Export portions of videos to new clips

Combine multiple videos into a single video

Download Dashcam Viewer

<https://dashcamviewer.com/>



Download Dashcam Viewer for Mac



Download Dashcam Viewer for Windows

System Requirements:

Mac OS X 10.10 or higher

System Requirements:

64-bit Windows 10 recommended for best performance

New Users for INNOVV K2

Want to learn more about what Dashcam viewer can do take a look the full features, video tutorials and full user guide on links below.

Features

<https://dashcamviewer.com/features/>

Video Tutorials

<https://dashcamviewer.com/videos/>

Full User Manual

<https://s3.amazonaws.com/aws-website-dcv-downloads-c8kwd/dcv/Dashcam+Viewer+Users+Manual.pdf>

Sample Video/GPS Data View Below



INNOVV K2 User Instructions

8.LED blinking & Status



GPS

Indicator	Status	Function
WiFi Indicator (Green)	Flashes once per second	Camera is ready for WiFi connection
	Solid on	Camera connected to Mobile device via WiFi
Recording Indicator (Blue)	Flashes once per second	Recording
	Solid on	Recording stop
	Quick flash 3 times per second	No SD Card in DVR
	Red Light stops once and light on again	SD Card Formating
Photograph (Red)	Quick flash 3 times per second	Photographing
GPS (Yellow)	Flashes once per second	Camera is ready for WiFi connection
	Solid on	Camera connected to Mobile device via WiFi
	4 Indicators flash same time	Firmware Upgrading

INNOVV K2 User Instructions

9.APP Settings

https://www.youtube.com/watch?v=7ikXjH_Jtrs

App	Features	Settings
WiFi	WiFi Name	INNOVV_K2_****
	WiFi Passworkd	12345678(Default)
Settings	Resolution	1080p 30fps, 720p 60fps, 720p 30fps
	Loop Video	3min (Default), Off, 1min, 5min, 10min
	Time Lapse	Off, 100ms, 200ms, 500ms
	Frequency	50Hz / 60Hz
	G-Sensor	Off, Low, Mid, High
	Video Flip	On / Off
	Audio	On / Off
	Date & Time Display	On / Off
	Memory Card State	Inserted / Empty
	Remain Space	Un-occupied Memory card space
	Memory Card Formatting	Yes
	Video Stamp	Click to input
	Power Off	Shutt off the camera
	Time Sync	Sync camera time with your device time
	File Path	the path of the files store on your device
	Firmware Version	the current firmware version
	App Version	the current app version
	System Rest	Reset to factory settings

INNOVV K2 User Instructions

10.Firmware Update Guide

Updating your firmware on your Innovv K2 is straight forward. Follow steps below

1 - Select K2.bin Firmware File

<https://www.dropbox.com/sh/2egugwrdz2hvdgw/AAoX-ACurOOha9k8pSSIRHZa?dl=0>

2 - Download the K2.bin file and save to your computer (please note that you will not be able to actually open this file) which is correct. Note if you have downloaded the file more than once a number will be inserted into the file name i.e K2(1).bin. The camera will not recognise the file unless it is exactly K2.bin, so you would need to amend.

3 - Insert your Sd card direct into your computer. Drag/save the K2.bin file to the root level of your SD card. Sounds simple enough right? That is, unless you don't know what the root level of an SD card is. Just in case you don't, here's an explanation of what we mean by that. The "root level" is another way to say the "main", "parent" or "top" folder of your SD card. Here are steps for how to access the root level:
Insert SD card to your computer.

Locate the SD card on your computer and open, you are now at the root level of the sd card. If the SD card has already been placed into the DVR the window will appear as below. If it is the first time the SD card has been used with the Innovv the window will be blank

INNOVV K2 User Instructions



Now Download/drag K2.bin to the root of SD card (Not in any folder). Please see below



INNOVV K2 User Instructions

4 - Remove the sd card from your computer (follow correct process to eject the sd card)

5 - Insert the Micro SD card into your INNOVV DVR.



6 - Power on camera system.. The blue video recording light will be flashing erratically whilst the DVR is updated.. The update should take no longer than 45 seconds. Watch Firmware update video to see the correct light sequence.

Once update is successful the blue light will be flashing on a regular basis appx once a second.

Note - You can perform the format process by inserting the card into the DVR and attaching the DVR direct to you computer via micro usb lead and follow same process.

If for any reason the update was not successful, please repeat the update

INNOVV K2 User Instructions

11. Playing/Downloading Your Video

Now for the fun part, watching your video. There are several ways in which to review your video.

1 – Via the Innovv Wifi App on your Mobile Device

Select documents on the App home page you then have 2 choices ‘Files in Camera’ and ‘Files in device’

Files in Camera – Once selected you will see a preview list of all files currently saved on the SD card that’s inserted into the DVR. Select the file required and you can either delete, stream online or save. To stream on line you need to maintain the wifi connection with the DVR to watch the video. If you want to save your video and watch at a later time away from your bike select save. See below

Files in Device – Once you have saved the video file this is where you can review/watch the video without being connected to the Innovv Wifi. Video saved to here will not be over written by the DVR if set to loop record.

INNOVV K2 User Instructions

2 – Review Video on your Computer

Remove the Micro SD Card from your DVR, place into the SD Card Adapter and insert in to your computer or laptop. Open the external/flash drive that should auto populate and select the video file.

Download video files direct to your computer via a micro USB lead. Please note below

Innov K2 Technical Support

You will need to have the latest firmware version installed on your K2 DVR.

A quality Micro USB will be required similar to below link

Anker Micro USB Lead

Note – You will need a media player installed on your computer that will play MP4 files. Note – the majority of computers will have a compatible media player already installed.

GPS Data/Split Screen Viewing(Front and Rear Video). For advanced users who want to create split screen viewing, intergrating GPS data, please refer to the GPS section of our tech support page as Dashcam Viewer Software will be required.

INNOVV K2 User Instructions

12.Managing Video Files

Managing the files on your Micro SD Card is important to its health and will increase the life of the Micro SD Card plus ensuring the K2 DVR functions 100%

G Sensor and Parking Mode – Switched On

Managing video files Via the WiFi App.

Standard video files will appear as a normal thumbnail (Documents/Files in Camera). Any files that have been locked down by the G Sensor function will appear with a small padlock in the bottom right hand corner of the thumbnail.

Standard video files can be deleted within the App. All locked down files are protected to ensure they are not over written when loop recording and these files can only be deleted by managing files via your computer (see below) or by completing reformat of the card in the App. Please be aware that when reformatting all video files will be deleted on the card. If locked files are left in the parked folder these will build up over time and if not deleted will fill up the SD card and the camera will no longer record.

INNOVV K2 User Instructions

Managing Video Files Via your Computer.

When the SD card is placed into your computer and opened you will have 2 files appear, Video and Parked. Standard video files will be located in the Video folder and all locked down files triggered by the G Sensor will be located in the park folder.

To view all video for an entire ride, files may be located in either of the files. If the G Sensor/Parking Mode is not required, turn the feature off and all video files will appear in the standard video folder.

Please note that locked video files in the park folder will not be over written by camera but can be deleted when SD card is managed in your computer. If locked files are left in the parked folder over time these will build up and if not deleted will fill up the SD card and the camera will no longer record.

INNOVV K2 User Instructions

G Sensor and Parking Mode – Switched Off

Managing Video Files Via the WiFi App.

All video files will appear as a normal thumbnail (Documents/Files in Camera). All files can be deleted/saved individually within the App.

Managing Video Files Via your Computer.

All video files will be located in the standard video folder and can be saved or deleted as required.

IMPORTANT.

Performing a regular Re Format of your SD card will maintain its health, extending its life at the same time as ensuring the smooth running of your Innovv Camera System.

INNOVV K2 User Instructions

13. Loop Recording Explained

Loop recording is a great feature for a safety camera. When selected the camera will loop record around the sd card so no need to manage video files. Fit and Forget

You will have the option of 1, 3, 5 and 10 min segments. When your SD card is full it will start to overwrite the oldest video segments first.

As an example if you are using 256gb micro sd card and you have selected 3 min segments, you will always have the last 19 hours stored on the card, segmented into 3 minute files.

If you turn loop record off, the camera will not operate once the card is full. Please note that when it is off video files are segmented into 15 minute files.

INNOVV K2 User Instructions

14.Forgotten Password

Easily done..

To reset the password you will need to complete a firmware update. Full step by step guide can be found on this Tech Support page. Once completed the password will be reset back to 12345678

New Users for INNOVV K2

15. Parking Mode

Parking mode is extra security when you are away from your motorcycle. If your bike is hit, moved etc this movement will trigger the G Sensor and the unit will record for a number of seconds and then switch back off again. Video files triggered by the G Sensor will appear with a padlock on them when viewed via the App or located in the Park Folder if viewing files on your computer.

For the Park Mode to be operational both this and the G Sensor need to be turned on via App settings

Please note that the Smart 12/5v converter monitors your battery level and controls the DVR.

Added indicator light

When the battery voltage is greater than 12.7V, the light is on, and the parking monitoring mode can be used normally;

When the battery voltage is less than 12.7V, the light does not light, and the parking monitoring mode cannot be used.

Other functions can be used normally in both cases

New Users for INNOVV K2

16.Smart 12/5v Converter - Bikes Battery Draw

When the bike is turned off the smart converter manages power to the DVR

2mA when bikes battery voltage level is more than 12.7V

0.08mA when bikes battery voltage is less than 12.7V.

Please note that when you battery drops below 12.7v, draw is reduced to 0.08mA. This is to protect the battery, but the Parking Mode feature will not function