SMARTWITNESS

KP2
Video Telematics Camera

USER GUIDE
V1.0.0

WARNING: SmartWitness installations should be performed by a qualified indivi dual or installation professional only. Working with a vehicle's power system can be dangerous to both you and your vehicle. This installation is intended only to be a guide since vehicle designs and power/input sources can vary significantly from vehicle to vehicle.

If you need to schedule a professional installation service in the USA for your SmartWitness device(s), please visit smartwitness.com/request-install and submit the online form.

smartwitness.com

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CE &UKCA & FCC

CE & UKCA

Hereby, SmartWitness USA LLC declares that the radio equipment type KP2-GB is in compliance with Directive 2014/53/EU and with the relevant UK statutory requirements. The full text of the EU and UKCA declaration of conformity is available at the following internet address : https://www.smartwitness.com/

FCC Part 15.19

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Part 15.21

Any changes or modifications (including the antennas) to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment

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

SAFETY ADVICE

⚠ **CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,**
DO NOT REMOVE COVER.
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. ⚠

⚠ **Caution**
RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
Battery for RTC(Real Time Clock) inside

⚠ **Caution**
Install the product where it does not block driver's visibility and where there is no airbag installed. This could cause an accident or might injure passengers in case of accident

⚠ **Caution**
Damages due to production malfunction, loss of data, or other damages occurring while using this product shall not be the responsibility of the manufacturer. Although the product is a device used for recording videos, the product may not save all videos in the case of a malfunction. In the case of an accident, the sensor may not recognize the shock when the impact is light and as a result it may not begin recording automatically.

WARNING:
TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

GPS RECEPTION

1. **Activate the product in an area without large buildings to improve GPS reception.**

   The commercial purpose GPS has the average range error of more than 15 meters and the range error could be more than 100 meters due to environmental conditions like buildings, roadside trees etc.

2. **The temperature range for optimum operation of the GPS receiver in your car is -10 ~ 50°C.**

3. **When using the product for the first time or after a long period (more than three days), it may take a little longer to recognize your current location.**

   It may take between five and thirty minutes to get GPS reception.

GPS reception may be impaired under the following circumstances

1) If there is an object at the end of the GPS antenna

2) If your vehicle has metallic elements on the windshields

3) If equipment generating electromagnetic waves that interfere with the GPS signal is installed in the vehicle e.g.: Other GPS devices such as a certain type of wireless activated alarms, MP3 and CD players and camera alarms using GPS.

4) If you are using a receiver connected by cable, electric interference can be avoided by simply changing the location of the receiver (antenna).

5) On heavily overcast or cloudy days, if the vehicle is in a covered location such as under a bridge or raised roadway, in a tunnel, an underground roadway or parking area, inside a building or surrounded by high-rise buildings.

6) If GPS signal reception is poor, it may take longer to locate your current position when the vehicle is moving than when it is stationary.

CONTENTS

KP2
Vehicle Recorder

Sticker for Windscreen mounting
(One adhered to bracket, one extra pc)

Bracket & Wiring Harness

Alcohol Prep pad (x2)

Micro SD Card

Zip ties & adhesive tie-downs (x5)

Torx Screwdriver

# INTRODUCTION

FRONT

Bracket

Camera Lens

Lens Stopper
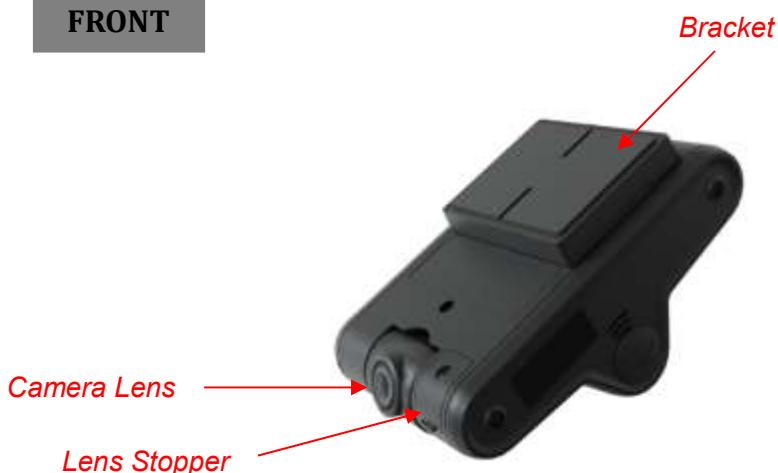
SIDE

Need to unscrew to remove the whole unit from the bracket or change the IR camera angle or insert/remove SIM/SD.

No need to unscrew Applied screws for design purpose only.

INTRODUCTION

After the side cover open

NANO SIM Slot

8.8mm

12.3mm

Nano SIM

Micro SD Memory Card Slot

2nd Camera

BACK

Bluetooth Pairing Button

Ecall Button

Warning LED
Red LED

Record LED
Blue LED
Communication LED
Green LED
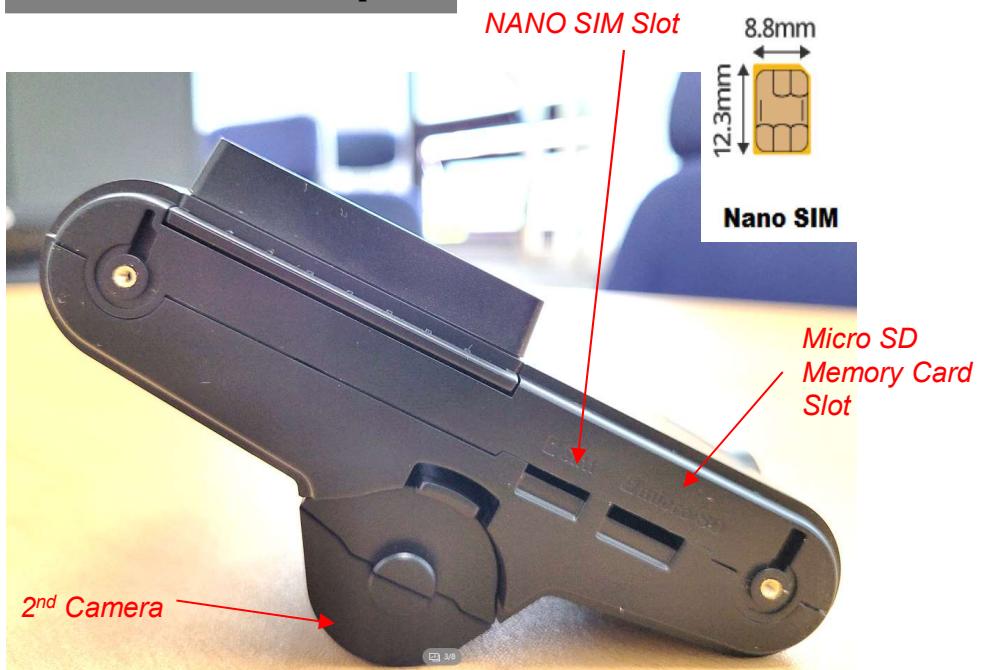
INTRODUCTION

POWER CABLE

━━━━━━ **Black (Ground (-))**

━━━━━━ **Red (Power Battery +)**

━━━━━━ **White (Power IGN +)**

━━━━━━ **Green (RX)**

━━━━━━ **Yellow (TX)**
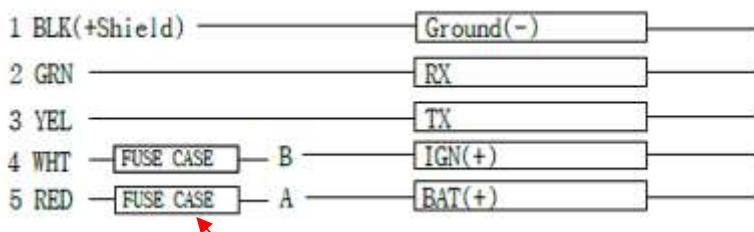
Power Specifications
Input: DC 12/24V, 1.5A

1 BLK(+Shield)	———————			Ground(-)
2 GRN	———————			RX
3 YEL	———————			TX
4 WHT	— FUSE CASE —	B		IGN(+)
5 RED	— FUSE CASE —	A		BAT(+)

2A Automotive Blade Fuse inside

External Panic Button (optional Item)

Line-of-sight range	up to 200m*
Indoor Range	up to 50m*
Battery Life	up to 3+ years
Customizable	Custom Printing Removable Stickers
Connectivity	All compatible apps
LED	Green, Yellow, Red
Surface Material	Soft Touch
Clip-on	Rigid metal clip
Size	h: 8.5mm d: 30mm
Chip	Bluetooth 5 LE Long Range

FUNCTIONS

Automatic Booting

Once the KP2 has been wired to your car power source the KP2 will be boot up, this will take around 1 minute for the unit to be ready to record.

The default setting for record is the continuous recording at 10fps, 720P resolution. On this setting the SD card storage may be used up quicker and depending on the settings, overwrite or stop recording when full. To avoid losing valuable data, back up data to a separate storage or PC device after any incidents.

> NOTE: The unit will not start recording immediately after power on. It takes around 1 minute for the built-in power backup system to charge. Thereafter, the internal flash memory will be ready to record.

Continuous Record (When Record mode set as "Continuous")

This is the default mode for recording. In this setting the unit will begin recording after boot up and record the entire time the unit is powered.
The resolution and frame rates can be set as per your requirements. You can change the configuration of the recording using the KP2 Software. To do this, please see the 'Settings' section on page 16.

Event Record (When Record mode set as "Event")

The unit will record when triggered by either an impact or a push of the 'PANIC' button. Each event file contains up to 20 seconds prior & up to 20 seconds post event. And the event file can be extended by 2nd trigger during event record.
When events are triggered continuously, for every event, 20 seconds post-recording from the time of the event will be added to the event data file with a maximum recording time of 3 minutes. When this 3 minutes is reached, the file will be split and a new file will be created but the data will be continuous.

Dual Record (Continuous & Event Record)

The continuous record fps is 1fps and the file will be stored on the "Normal" folder.
Event record will work according to the Fps setting for example 30frames per second recording and the file will be stored on the "Event" folder

Drive Data (DRV file)

The DRV (Drive Data) file will be recorded during driving even if there are no events or video. The DRV file consists of GPS and G-sensor data and it helps to find specific data or driving behaviors. The DRV file overwrites the oldest data. The DVR files will be made every 10 minutes.

FUNCTIONS

G-Sensor Calibration

G-Sensor Calibration is needed after installing the KP2.

1. Install the unit and park the vehicle on a flat surface .
2. Turn on the unit and press the small red button three seconds.
3. Then calibration will be done with "beep" sound.

Built-in power backup (Super Capacitor)

When power to the unit is interrupted, KP2 creates the last
file using the internal Super Capacitor.

Time and Date

There are no time and date settings as the KP2 get's this information from the GPS
satellite's.

SD Memory Card Format

Please format [initialize] the SD card using the "Configuration Tool KP2" software.

Safely Removing the SD Card

Power off vehicle and take out SD memory card

Turn off the power and then check the BLUE LED light. Once the LED light
 is OFF, you can safely remove the SD memory card.

Bluetooth Panic button

Pairing

NOTE: Please contact your supplier to buy a Flic Bluetooth Panic Button for KP2.

1. Press BT button one time.
2. Then Record(Blue) LED and Warning(RED)LED will blinking. (Pairing mode)
3. Press the Flic Bluetooth Panic button and wait a second.
4. The Flic Bluetooth Panic button GREEN LED will blinking after pairing.
5. Then Record(Blue) LED and Warning(RED)LED will change to previous mode.

Pairing Mode

To entering the pairing mode, Please set the Bluetooth panic as Flic in advance.
Pairing mode lasts up to 20 seconds; if not paired in time, pairing mode is canceled.
BT Button is ignored if Bluetooth panic is not set as Flic.

Ecall button

Press less than 2 seconds and release

1. When you are not on a call => Call / Receive / Cancel Call
2. When you are on a call => Hanging Up

Press more than 2 seconds and release

1. Decline incoming call

[Call to the Outgoing number]

1. You have to set the outgoing number in advance using the config tool.
2. Press ECALL button

[Cancel Call]

1. Press ECALL button when refuses to answer the phone or reach to a voice mail or hang up.

Receive Call from the receive number

1. You have to set the receive number in advance using the config tool.
2. Press ECALL button when you hear the incoming call sound.

To avoid any voice spam

The only receive number that preset can make a call to the KP2.

Wi-Fi

STA Mode (Station Mode)

Get the KP2 connected to a Wi-Fi network established by an access point.

AP Mode (for Wi-Fi Hotspot)

Support the AP Mode to allow Internet access to other devices via Wi-Fi.

AP Mode setting using the config tool

Wi-Fi
○ STA Mode   ◉ AP Mode
SSID
Password
Passwords must be at least eight characters.

1. Select AP Mode.
2. Set SSID and Password

NOTE: CP4S-W can be connected to the server using the KP2 Wi-Fi Hotspot.
The KP2 Wi-Fi SSID and Password should be set to the CP4S-W Wi-Fi setting.

4G LTE

KP2

Wifi

CLOUD SERVER

CP4S-W
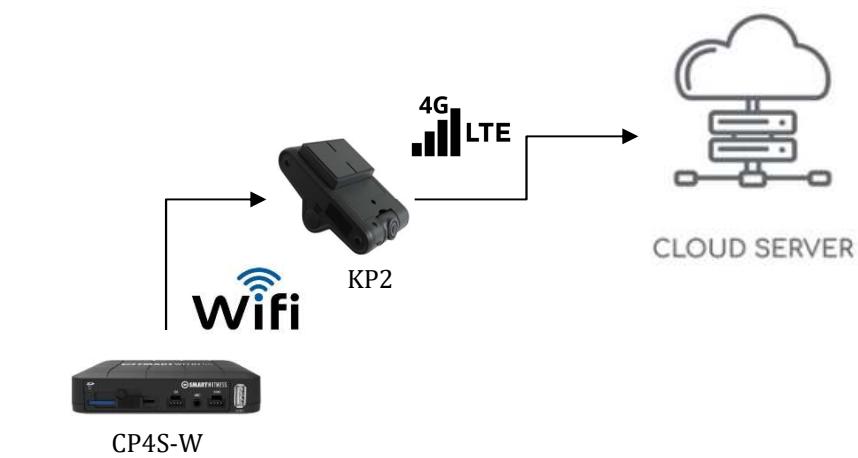
BATTERY PROTECT

Power off voltage

Automatically cut off the battery power when battery voltage dropped below the power off voltage.

Power on voltage

Turn on the KP2 when the battery voltage is higher than the power on voltage.

When it use at 12V vehicle

Battery Protect

☑ Use

Power Off Voltage (10000 ~ 50000)　　12000 mV

Power On Voltage (12000 ~ 15100)　　13000 mV

The Off voltage range should be between 11.6V(11600mV) to 12.4V(12000mV)
The On voltage range should be between 12.6V(12600mV) to 13.4V(13400mV)

When it use at 24V vehicle

Battery Protect

☑ Use

Power Off Voltage (10000 ~ 50000)　　23600 mV

Power On Voltage (23600 ~ 26700)　　24600 mV

The Off voltage range should be between 23.6V(23600mV) to 24.2V(24200mV)
The On voltage range should be between 24.6V(24600mV) to 25.2V(25200mV)

LEDS & BUZZER SPECIFICATION

RED LED (Warning), BLUE LED (Record), GREEN LED (Communication)

Status/Step			LED			Sound
			Warning	Record	Communication	
			(Red)	(Blue)	(Green)	
			⚠	○	📶	
Start-up & Power off	Booting step1		On	Off	Off	
	Booting step2		On	On and Off	Off	
	Booting step3		On	On	On and Off	
	Booting finished		On	On	On	Beep No.2
	Power off		Off	Fast Simultaneous On and Off		
	Power off finished		Off	Off	Off	
Record	Continuous Record	Recording		On		
	Event Record	Stand by		On		
		Recording		Fast On and Off		
	Dual Record	Continuous Recording		On		
		Event Recording		Fast On and Off		
	No record	No recording		Off		
Communication	3G Network Device Ready				On	
	Communication				On	
Function	SD Format		Off	Sequence On and Off		Continuously Beep No. 2
	G-Sensor Calibration					Beep No. 2
	FW Upgrade			Double Sequence On and Off		
Warning	System Warning	SD Card Full	Fast On and Off	Off		Beep No. 3
		Video loss	On			
Error	Record Error	SD error, No SD, Write fail	Slow On and Off	Off		Beep No. 3
	Communication Error	3G Network Device error SIM error			Off	
		Data Network connection error			Slow On and Off	
		DMS Communication error			Slow On and Off	
Event Trigger	G-Sensor, Panic button, Alarm-In					Beep No. 1
	Over Speed					Beep No.4 (2times)

INSTALLATION

WARNING: SmartWitness installations should be performed by a qualified individual or installation professional only. Working with a vehicle's power system can be dangerous to both you and your vehicle. This installation is intended only to be a guide since vehicle designs and power/input sources can vary significantly from vehicle to vehicle.

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Installation Guides can be viewed/downloaded at:
install.smartwitness.com

CONFIGURATION TOOL USER GUIDE

Configuration Tool KP2 Software

PC SYSTEM REQUIREMENT

Recommended PC specifications for Configuration Tool Software

OS	Windows 7/8/8.1/10
CPU	Core 2 Duo 2.5GHz or Higher
RAM	2GB or Higher
Interface	SD Memory Card Reader
HDD Free space	Install : 55MB or Higher Backup : 4GB or Higher
Display	1024 x 768 pixel/True Color or higher

If the PC does not meet the minimum system requirement, the
Configuration Tool Software may not function properly.

SOFTWARE INSTALLATION

The KP2 Configuration Tool Software is available on our website:
support.smartwitness.com

1. Double click [setup.exe].

2. Select the language and then follow the dialog box prompts.

3. The KP2 Config Tool icon will be displayed on your desktop.

> **NOTE: To Un-install the KP2 Configuration Tool Software**
> Make sure the program is not running and open the 'Control Panel'
> Select 'Remove Program' and remove the KP2 Configuration Tool Software.

INITIALIZE SD CARD

 This icon is located at the bottom of the configuration tool software.

To initialize the SD card quickly, click on the above icon and you will be presented with the following screen to choose the SD card to initialize. Click 'OK' when selected.

On the following screen, check the 'Quick Format' button and check options and Click 'Start' to begin initialization.
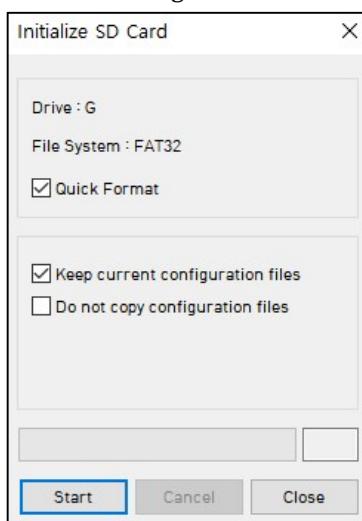
Options
- Keep current configuration files (Use setting.ini file from SD after Initialize SD card)
- Do not copy configuration files (There is no setting.ini file at config folder after Initialize SD card)

DEVICE SETTINGS
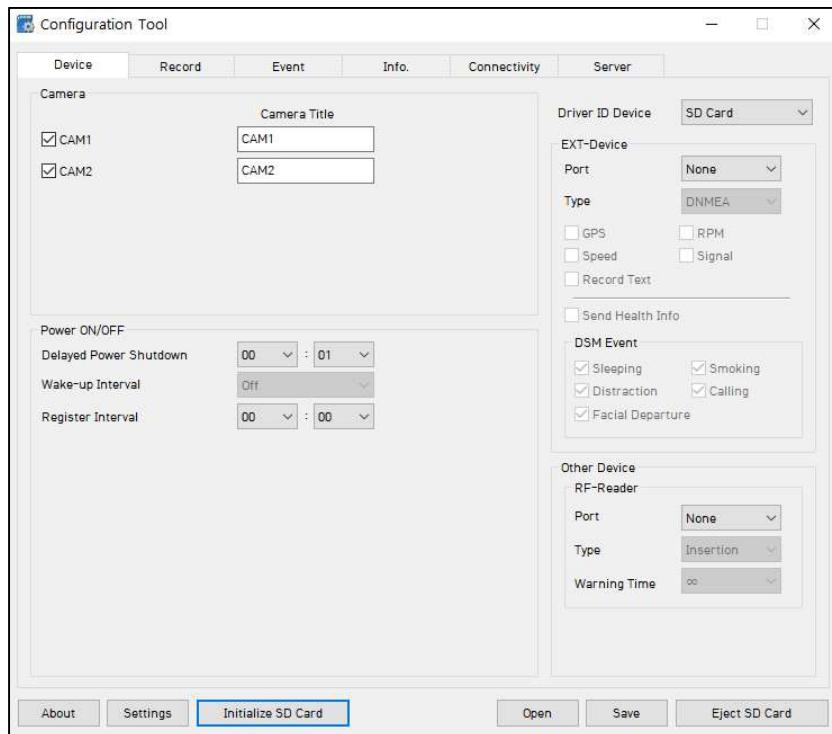
Camera check box
Check all the cameras you wish to use.
Camera Title
Use the alphabet and numbers to rename (max 10 digits) the cameras. The new names will be displayed on the live screen and all recordings.
Delayed Power Shutdown: Set delayed power shutdown time.

RECORD SETTINGS

Resolution
CH1: HD (1280x720), FHD (1920x1080)
CH2: HD (1280x720), FHD (1920x1080)
Frame Rate
CH1: Adjust the frame rate from 30fps, 15fps, 10fps, 5~1fps
CH2: Adjust the frame rate from 30fps, 15fps, 10fps, 5~1fps

Quality
Adjust the picture quality from Normal, High, Super

Maximum bitrate (Video Quality)				
Resolution	FPS	Bitrates (bit/sec)		
		Super	High	Normal
Full HD	30	6Mbps	5Mbps	4Mbps
HD	30	3Mbps	2.5Mbps	2Mbps

RECORD SETTINGS

Record Mode
- Continuous (Always recording when powered by DC 12/24V.)
- Event (Automatically starts recording by G-sensor or Panic button or Alarm In.)
- Continuous + Event (The continuous record fps is 1fps and Event record will work according to the Fps setting.)
- Off (Do not record)

Pre Rec Time / Post Rec Time
Adjust the Pre/Post Event time from 1 seconds to 20seconds

Record Audio: Check it for record audio

Parking Mode (Continuous Mode Only)
If your vehicle is parked for more than 5 minutes, recording FPS will be at 1fps. When the vehicle starts moving again, the recording FPS will return to its original setting.

Telematics Data
GPS data & G-Sensor data will be recorded with videos and at the same time, GPS data & G-Sensor data will be recorded separately, we call it as 'Drive data (DRV file)'. Check 'Driving Data Recordings' for this feature.

Encryption No. (Stream password)
An Additional password can be set for the recorded data using a 4 digit password from 1000~9999. If a password is set, keep a record in a safe place, Without the password, you will not be able to view the recorded video.

EVENT SETTINGS

Event settings
You can set the unit to record when triggered by the G-Sensor, Panic Button and Overspeed.
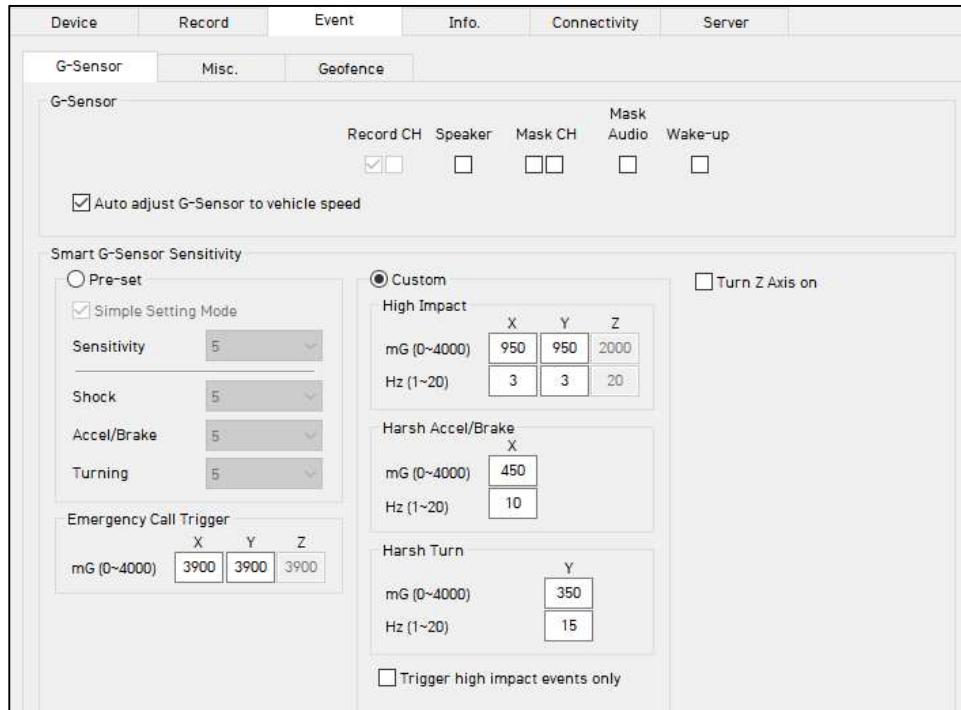
Auto adjust G-Sensor to vehicle speed
Once it checked, KP2 will automatically decrease the G-Sensor sensitivity at higher vehicle speeds to compensate for the naturally added G-forces that are experienced due to velocity.

Smart G-Sensor Sensitivity: The shock sensor sensitivity can be set to 'Simple setting Mode' or 'Custom'. Set to easy allows you to set the sensitivity to 9 (High), 5 (Medium) or 1 (Low).
In custom set, you can set 3 different shock sensor values individually.

EVENT SETTINGS

Select record channel

Channel1 (Camera1)

Channel2(Camera2)
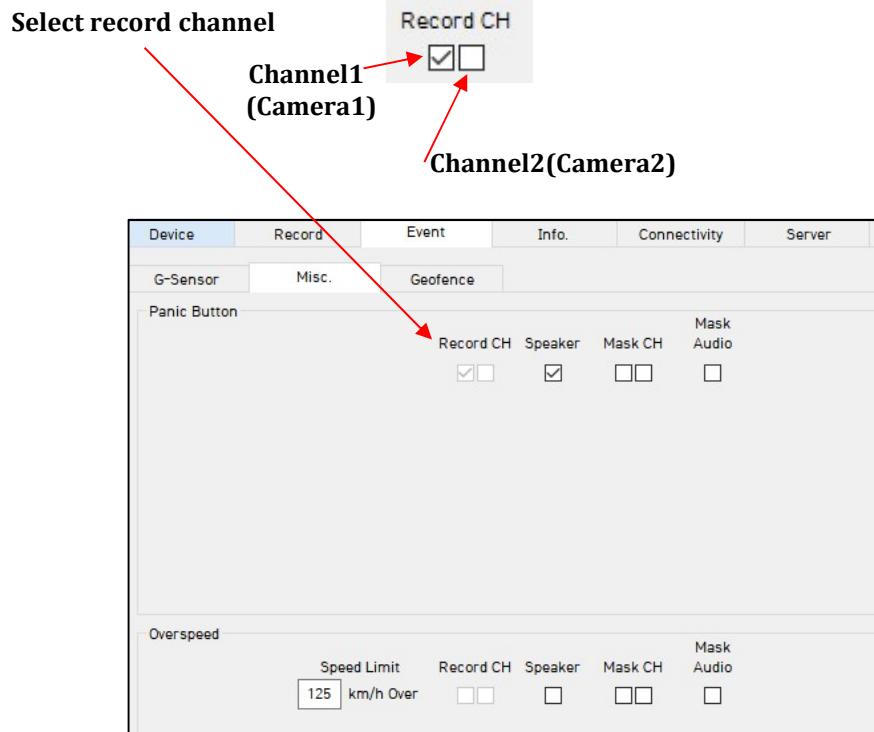
Over Speed: When the vehicle speed over the speed limit more than 5seconds.

GEOFENCE

Zone Selection: Add Geofence zone after click this button

INFO.

This option allows you to adjust the Time Zone, GPS Time synchronization, set your Vehicle No and also the Driver ID.

Auto Format Feature: When the KP2 recognize a new SD, the SD card will be formatted.

Connectivity

Check 'Enable' to use LTE connection.

Adjust the settings like Dial No., APN, User ID, password.

Please refer to the cellular service provider for these settings.

Support 10 x AP (Access Point)
SSID: The SSID of any wireless adapters must match the SSID you configure in here. If they do not match, you will not get a wireless connection.
Password: add AP password.
*AP must have a password and must be secure WPA/WPA2

Outgoing Number
• Add a phone number to receive an emergency call from the KP2.
Receive Number
• Add a phone number to call to the KP2.
• KP2 only can receive a call from this receive number.

SERVER

Set Domain/Static IP and Port number

And check the options

- Transmit Live Tracking Data
- Transmit Telematics Data (DRV)
- Transmit Event Data.

And then select events

Please contact your distributor for the correct server settings on this tab.

SOFTWARE USER GUIDE

SD Viewer Software
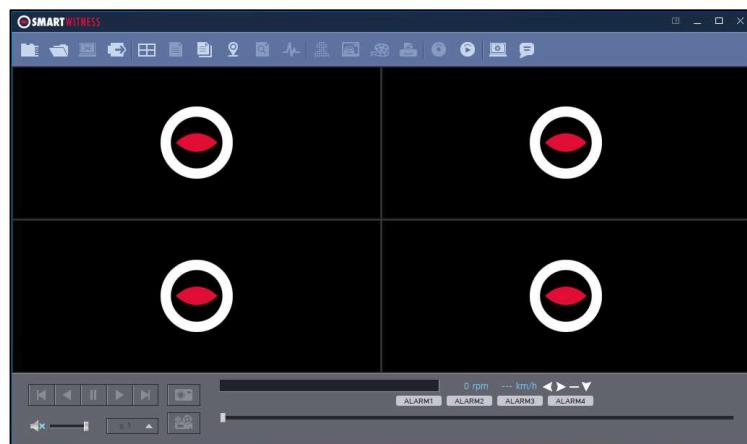
PC SYSTEM REQUIREMENTS

Recommended PC specifications for PC Viewer Software

OS	Windows 7/8/8.1/10
CPU	Core 2 Duo 2.5GHz or Higher
RAM	2GB or Higher
Interface	SD Memory Card Reader
HDD Free space	Install : 55MB or Higher Backup : 4GB or Higher
Display	1024 x 768 pixel/True Color or higher

If the PC does not meet the minimum system requirement, the PC Viewer Software may not function properly.

SOFTWARE INSTALLATION

The SD Viewer Software is available on our website.

1. Double click [setup.exe].

2. Select the language and then follow the dialog box prompts.

3. The SD Viewer icon will be displayed on your desktop.

| NOTE: To Un-install the SD Viewer Software |
| Make sure the program is not running and open the 'Control Panel' |
| Select 'Remove Program' and remove the SD Viewer Software. |

PC VIEWER SOFTWARE SETTINGS

[⚙] **Viewing settings**

This setting is for the PC Viewer Software itself. To set the Recorder, refer to page 16.
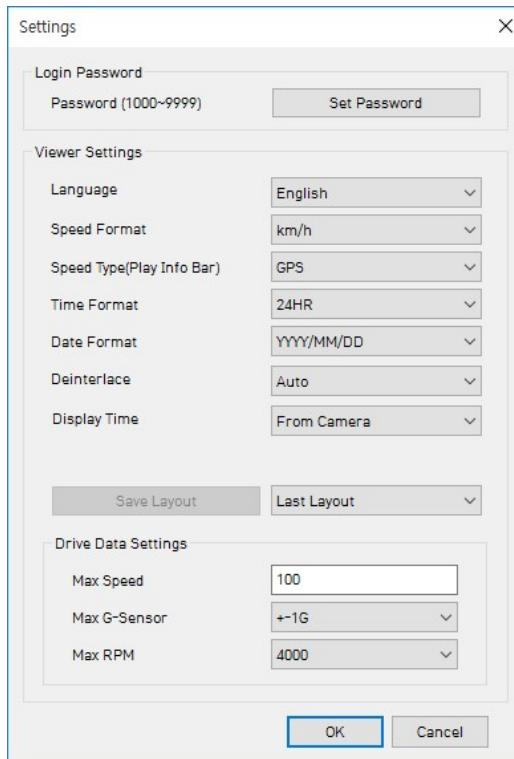
Click the 'Password' button. Password for the PC Viewer Software can be set with any number between 1000-9999.
The 'speed' & 'date' formats will be set automatically according to the PC Windows setting. However it can be changed with this software setting menu.
Display time: Select time to see. Recorded time by KP2 or your PC local time
**Last Layout**: The program will launch with the same layout as it was when it was closed.
Default Layout: The program will launch with the Default Layout
Drive Data Settings
The graph scales for the Drive Data Window will be modified according to the Settings.

OPEN THE SD CARD

Insert the SD card into your PC

① Click "Select SD Card" icon

② Select the SD card drive and click "OK"

③ Click "Open SD Card"
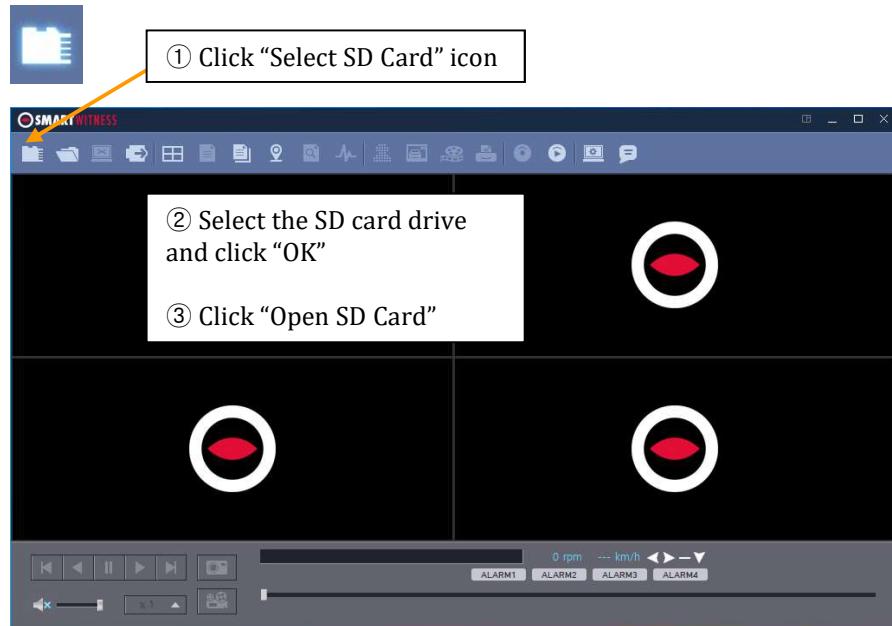
The playback file list and "Continuous" and "Event" tap is displayed on the right side of the screen.

You can hide the playback list by clicking the close icon.

The playback list can be displayed on the screen again by clicking the "File List" icon.

"Select SD Card" icon

You can end the video playback by clicking the "Close files" icon.

"Close files" icon

Continuous Play next file.

| Continuous	Event
98	2021.06.23 08:00:00
99	2021.06.23 08:10:00
100	2021.06.23 08:20:00
101	2021.06.23 08:30:00
102	2021.06.23 08:40:00
103	2021.06.23 08:50:00
104	2021.06.23 09:00:00
105	2021.06.23 09:10:00
106	2021.06.23 09:20:00
107	2021.06.23 09:30:00
108	2021.06.23 09:40:00
109	2021.06.23 09:50:00
110	2021.06.23 10:00:00
111	2021.06.23 10:10:00
112	2021.06.23 10:20:00
113	2021.06.23 10:30:00
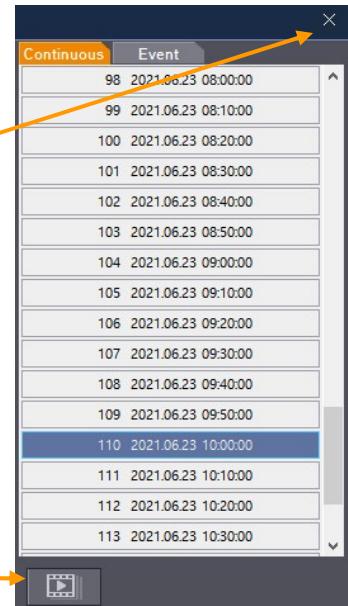
OPEN FILES

If you want to play a specific file that has been backed up on the PC or SD Card, Click the "Open files" icon

  "Open files" icon
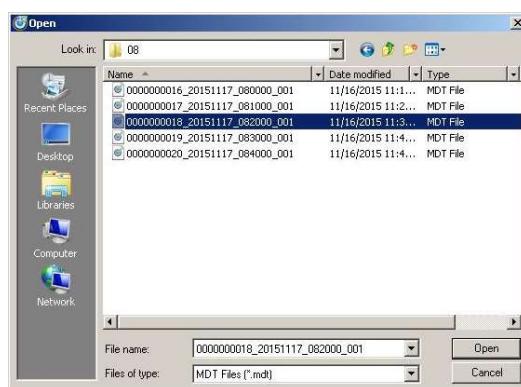
Select the MDT file you want to play and click "Open".
The image of the selected file will then be displayed and you can click the "Play" button to play the file.

  "Eject SD Card" icon

When finished, click "Eject SD Card" icon and remove the SD card from your PC.

Or please use "Safely Remove Hardware and Eject Media" button in your PC.

PLAYBACK

Camera title - Resolution

Record Mode

G-Sensor value
Time

GPS Speed
Display Frame / Total frames number

Vehicle No & Driver ID

PLAYBACK

Previous Image · Reverse · Pause · Play · Next Image · Capture Screen · Record Video · Volume · Playback Speed Control

Alarm Indicator

ALARM1   ALARM2   ALARM3

Playback control bar

19:30:00 (00:00)   19:31:14 (01:14)   19:39:59 (09:59)
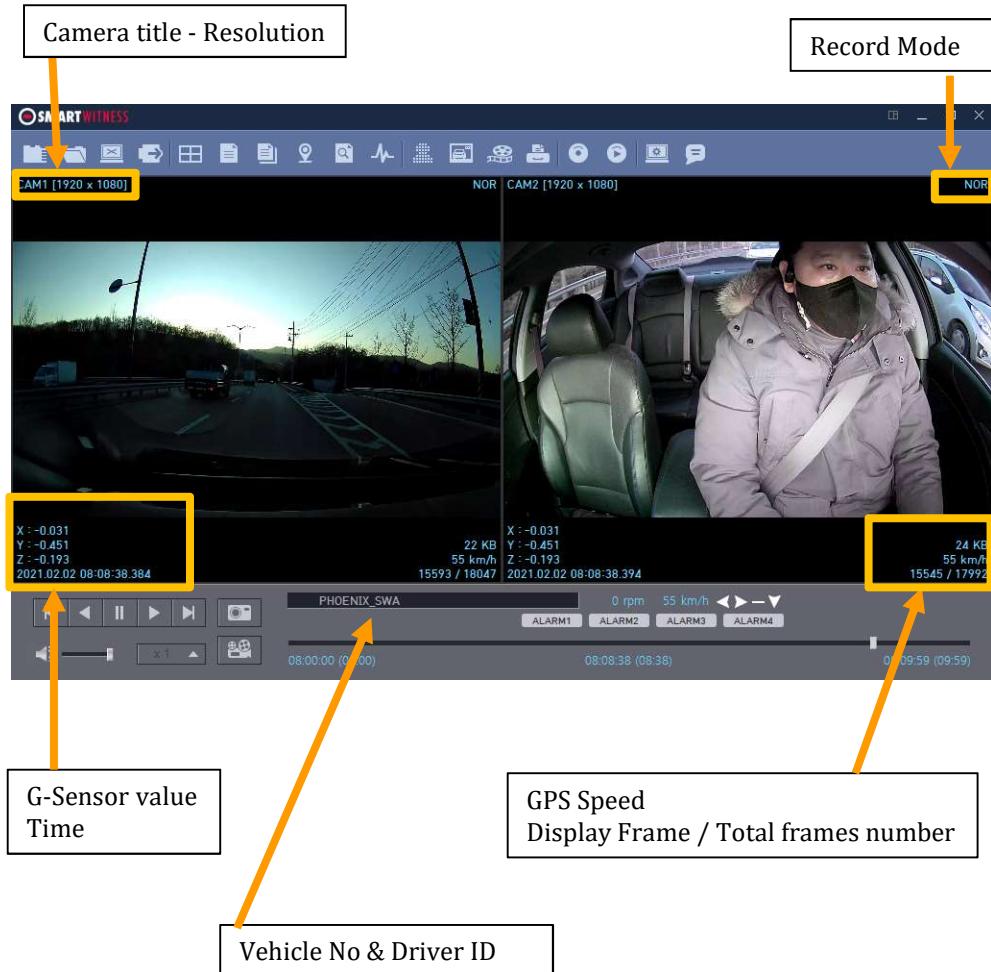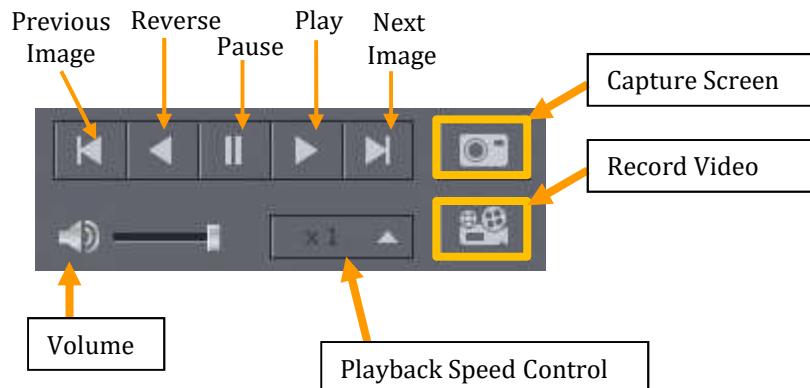
DRIVE DATA

 "Drive Data" icon

The default setting only displays the G-sensor graphs but other information may be added by checking the boxes in the upper part of the screen.
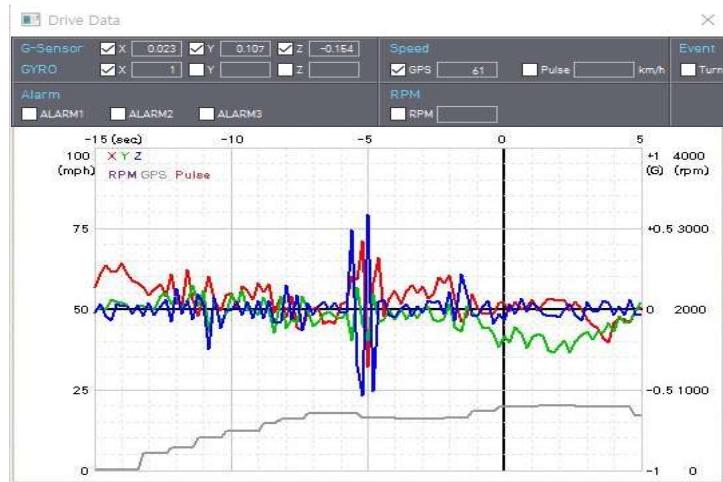
G-Sensor: (X axis: red, Y axis: green, Z axis: blue, based on the positioning of the main unit) is shown with the data reference point zero-point calibrated and positive shocks as (+) and negative shocks as (-).

    G sensor X value: Front & Back (like Quick brake or Quick Start)
    G sensor Y value: Left & Right (like Quick Turn)
    G sensor Z value: Up & Down (like prominence and depression)

GYRO: display the gyro value
Speed: GPS measured speed is displayed in grey. .
RPM: The RPM is displayed in purple.
ALARM: The alarms are displayed on the bottom of the screen with the grey bar meaning the trigger is activated.

TRACKING MAP

 "Tracking Map" icon

The route taken will be displayed on the Google map.

The playback position will be shown on the map with the orange arrow.
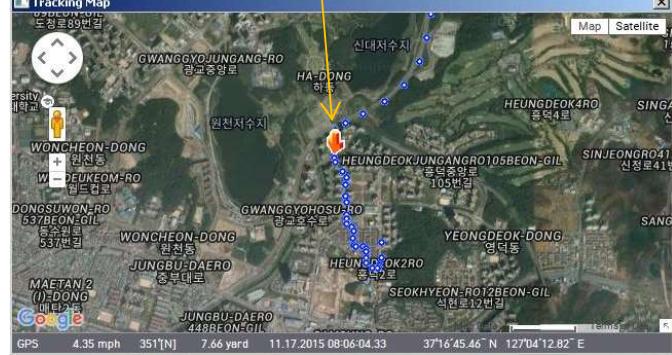
The blue markings show the route taken.

To see the route and position on the Google map, the GPS data should be recorded with video.

To see the map, the PC should be connected to the internet.

EVENT SEARCH

   "Event Search" icon

The "Event Search" help to find a specific data quickly.

Select "Search Range" and select "Search Conditions"

And then click Search button.

Choose an event from the searched list and click "Go to Video" to see the video.

PRIVACY SETTINGS

   "Privacy Settings" icon

Set the mosaic area on the video for privacy protection.

When backing up the data as a JPG or AVI format and playing in the Viewer software, you are able to make a mosaic processing on the area you have set.

To do this, put the pause the video and click the 'Privacy settings' button. The privacy setting screen will pop up.

Blur out the area you wish to protect by left-clicking on the sections. You can select multiple areas.
You can also unselect, selected areas by right-clicking the blurred areas.
To select all or clear all, click on the 'Select all' or 'UnSelect All' buttons on the bottom, respectively.

SAVE JPEG AND MP4 FILE

Pause the playback and click "Save JPG" icon to make JPG images.

     "Save JPG" icon
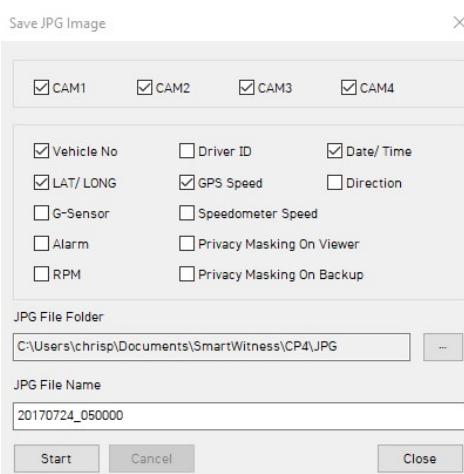
Pause the playback and click "Save MP4 Video" icon to make a MP4 file.

     "Save MP4 Video" icon

PRINT IMAGE

Pause the playback and click "Print Image" icon.

    "Print Image" icon
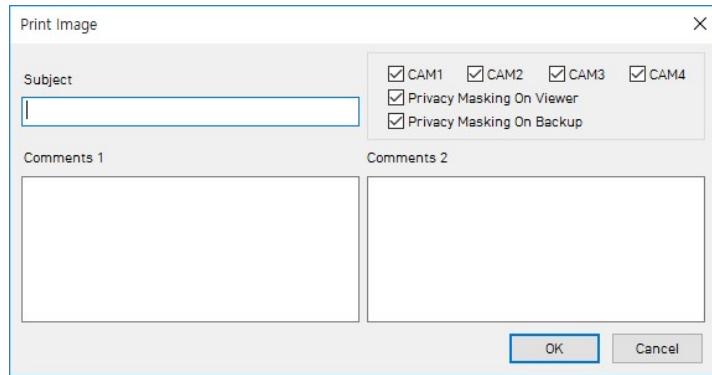
Type Subject and Comments1 and Comments 2
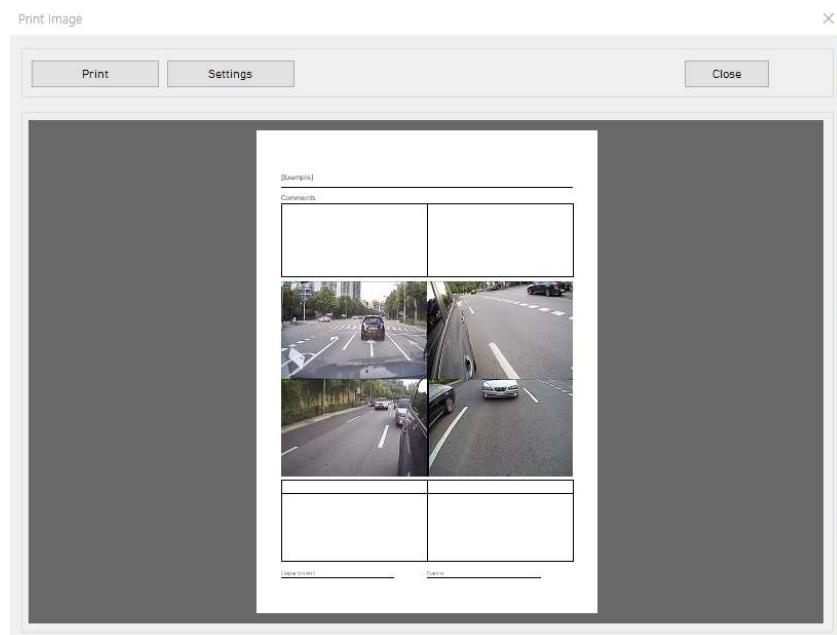
Alter the printer settings to change paper size/orientation etc.

BACKING UP FILES

Back up the recorded data on your PC.
There is an option to store data by type to easy management of data.

 "Backup Data" icon
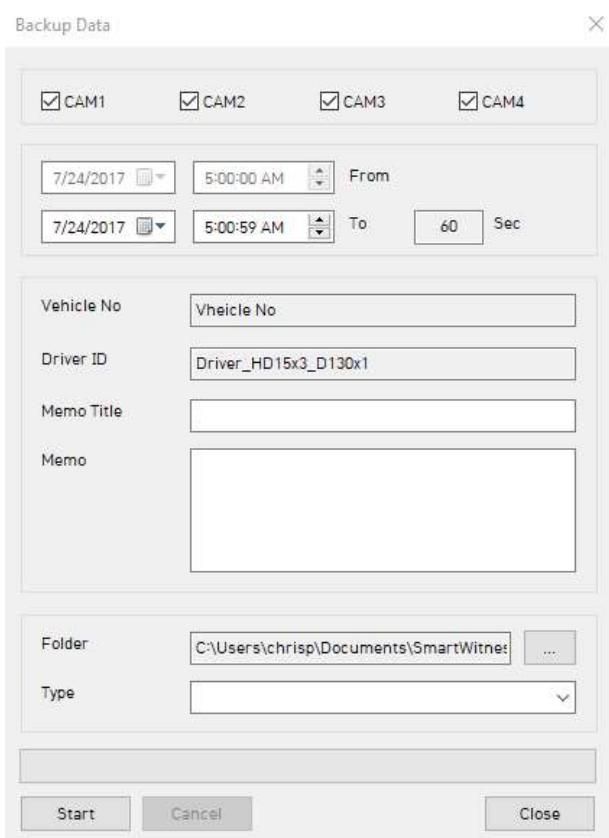
The start time is when the video was paused and cannot be changed once you start this process.
Set the time you wish to backup and input Title and Memo.
And input Type and then click [Start].
The maximum amount of time you can back up is one hour.

BACKUP DATA LIST AND EXPORT

You can use the data backup list to play data files easier that have been backed up.

    "Backup Data List and Export" icon
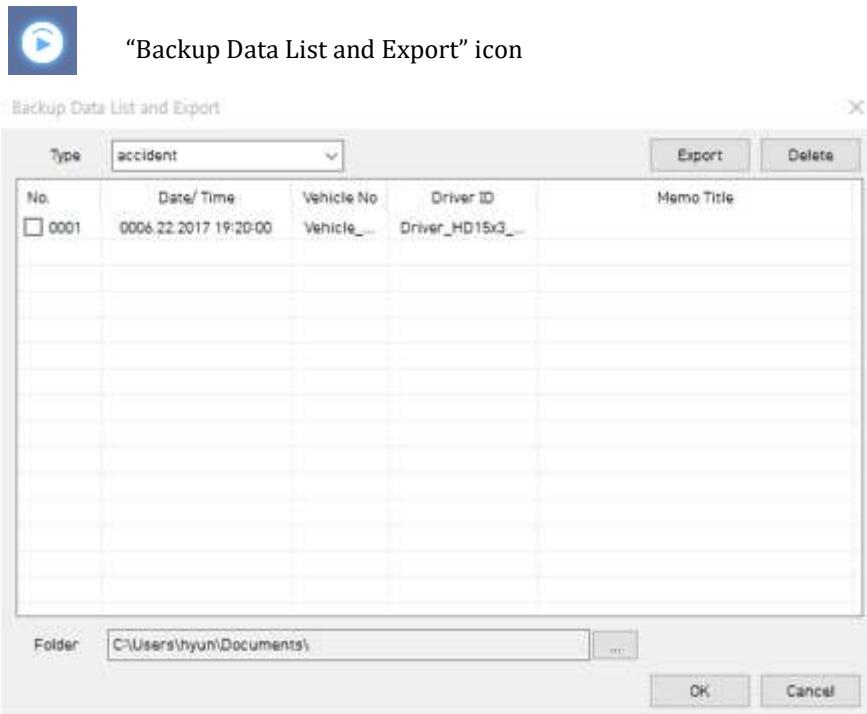
Choose the folder where the backup files are at the bottom of the screen.
(It will automatically show the last folder that was accessed.)
Then, select the type by scrolling down the options.
The files are listed showing the "Date/Time, Vehicle No, Driver ID, Memo Title".
Check the box next to the file you wish to play back and click 'OK'.

TECHNICAL SPECIFICATIONS

Image sensor	**2 Megapixel CMOS Sensor**
Angle of View	**Main camera: 140° (115°(H), 60°(V))** **2nd camera: 130° (104°(H) x 56°(V))**
Wireless	**LTE CAT6 (KP2-NA):** B2/B4/B5/B7/B12/B13/B14/B17/B25/B26/B41/B66/B71 **LTE CAT6 (KP2-GB):** B1/B3/B5/B7/B8/B20/B28/B38/B40 **WiFi** : 2.4G, 802.11 b/g/n, **Bluetooth**: BT2.1 + EDR/3.0/4.1 LE/ 4.2 BLE
Max Data Rate	**UL:50Mbps, DL: 300Mbps**
Video resolution	**Main camera: 1080p(1920x1080), 720p(1280x720)** **2nd camera: 1080p(1920x1080), 720p(1280x720)**
Recording Speed	**CH1 + CH2: FHD (30fps) +FHD (30fps)**
Recording Mode	**Continuous , Event, Dual Mode**
Memory	**Supports SD Cards up to 256GB (FAT32)**
GPS/GLONASS	**Internal GPS/GLONASS/BeiDou**
G-Sensor	**Internal 3-axis G-sensor**
Gyro	**3Axis(X,Y,Z), output rate:100 Hz,**
RTC	**Internal super capacitors**
Speaker	**Recording start, error, Ecall**
Audio	**Internal Microphone**
Serial port	**RS232 RX/TX**
LED	**3(Red, Blue, Green LED)**
Super Capacitor	**Enables recording of last file & safe shut down**
PC software	**Included**
Power input	**Input Voltage: DC 12V/24V, 1.5A**
Delayed Power Shutdown	**Supports Delayed Power Shutdown**
Power consumption	**4W**
Size / Weight	**126 x 82 x 64 mm/ 232.4g (Include 2nd Camera, exclude power cable)**
Operational Temp.	**-10℃ ~ 55℃**
Storage Temp	**-20℃ ~ 70℃**

APPENDIX: Recording time table

Channel1 Resolution	Channel2 Resolution	Quality	CH1 FPS	CH2 FPS	128GB	64GB	32GB
1080p HD	D1	Standard	10	0	124 hours	62 hours	30 hours
			10	15	94 hours	47 hours	23 hours
1080p HD	D1	High	10	0	101 hours	50 hours	25 hours
			10	15	73 hours	36 hours	18 hours
1080p HD	D1	Super	10	0	85 hours	42 hours	21 hours
			10	15	60 hours	30 hours	15 hours
720p HD	D1	Standard	10	0	167 hours	114 hours	56 hours
			10	15	145 hours	72 hours	35 hours
720p HD	D1	High	10	0	167 hours	94 hours	46 hours
			10	15	111 hours	55 hours	27 hours
720p HD	D1	Super	10	0	161 hours	80 hours	39 hours
			10	15	90 hours	44 hours	22 hours
VGA	D1	Standard	10	0	167 hours	161 hours	79 hours
			10	15	167 hours	88 hours	44 hours
VGA	D1	High	10	0	167 hours	116 hours	57 hours
			10	15	125 hours	62 hours	30 hours
VGA	D1	Super	10	0	167 hours	90 hours	44 hours
			10	15	96 hours	48 hours	23 hours

This table is a guideline only.
Actual results may vary depending on a variety of factors on the road.

KP2 Firmware Update Instructions via SD card

NOTE: If you're using KP2 with a SIM and connected service, please consult your telematics provider or SmartWitness before attempting to update you r device firmware. In this case, the firmware update can be much more easil y applied to your device using Smart API over-the-air update service.

1. Prepare Firmware

Create a folder called [program] on the SD root as shown below,

Save the "XXXXXX_x.x.x.img" file to the SD card inside the [program] folder.

2. Upgrading KP2

Insert the prepared SD card to KP2 unit and turn on the power.

The Blue & Red LED will blink while the unit is upgrading. It will also 'beep' continuously. Upgrading the unit usually takes about 30 seconds.

Warning: Do not turn off the power during upgrading. If the upgrade fails, the KP2 unit should be returned to your distributor.

Once the upgrading is finished, the unit will automatically reboot and power up as normal.

Technical Support & Warranty

TECHNICAL SUPPORT

For Technical Support, please contact your local distributor or visit support.smartwitness.com.

LIMITED WARRANTY

This product is supplied with 2 year warranty. The Warranty excludes products That have been misused, (including accidental damage) and damage caused by normal wear and tear. In the unlikely event that you encounter a problem with this product, it should be returned to the place of purchase.

Manufacturer

D-TEG Security Co., Ltd
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smartwitness.com