

T9

IROAD T9 INSTRUCTION

Read user manual carefully in order to protect the user's safety
and ensure the accurate use of the product.

Contents of the manual might be modified without prior notice.

IROAD

Made in Korea

JAEWONCNC

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THANK YOU FOR CHOOSING JAEWONCNC IROAD VEHICLE RECORDER.

This manual contains how to operate product and guide you to use correctly, Please read carefully before using product.

This manual is based on IROAD T9 model. Please be informed that there might be some unintended errors.

Contents of the manual might be modified without prior notice.

■ Guarantee and Supporting

- Please visit our website at <http://www.iroadkr.com>
- Dedicated viewer, latest firmware and other product information are available for download from the website.
- JAEWONCNC is not responsible for any problem that occurs if the device is used or obtained illegally.
- Though this product records and saves footages in the event of accident, it does not guarantee every single accident scenes are fully recorded.
- Accidents scenes may not be recorded if there is minor impact on the vehicle so that the impact sensor cannot detect.
- The recordings obtained from the product might be used as a proof of accident. However, JAEWONCNC will not be responsible for any gain or loss caused by the accident.

■ Copyrights and Trademark

- This manual is legally protected by copyrights, all copyrights reserved to JAEWONCNC.
- This manual is the property of JAEWONCNC, no one is allowed to attempt to make an unauthorized copy, edit and translate the manual.
- IROAD is the trademark of JAEWONCNC. JAEWONCNC has rights to IROAD (Name, Design, Brand image), any unauthorized use of IROAD will results in prosecution.

2. PRECAUTION

■ Voltage related issues

- Please make sure to use recommended/stable voltage only. Otherwise, misusing may cause product failure and fire accidents, explosion or damage to the vehicle.
- Do not arbitrarily disassemble and modify the product. Otherwise it might cause damage of the product and electric shock. It should be considered user's fault and void the warranty.
- Make sure that the power cable is not cut or damaged when attaching other electronic gadgets on the vehicle, otherwise it can cause product failure or danger of electric shock, and please use qualified power cable which is produced by JAEWONCNC.
- It is highly recommended not to arbitrarily connect the uninterrupted power cable to vehicle as it can cause malfunction of the product by different conditions of vehicle and surrounding environments. (Please contact professional engineer if you need to install it).

■ Installation

- Do not mount Vehicle Recorder on where sight might be disturbed. It may cause an accident.
- Connect all the cables provided into right slots. Misusing would cause malfunction.

■ The Right Use

- Do not use Vehicle Recorder while driving. Park vehicle in safe place to use it.
- Do not force a product or its lens, otherwise it may cause product malfunction.
- Keeps the device away from flammable or explosive stuff causing explosion and fire.
- Do not cover the device with fabric or other tools. Malfunction or fire would cause once it is overheated.
- In case the device is used for too long, it could cause skin burns.
- The quality of image could deteriorate while the car is passing through tunnel or at very dark night with no light.
- Recording quality might be reduced by excessive tint.
- Image quality could deteriorate when the temperature of the device exceeds the optimal operating temperature.

■ Management

- Turn Recorder off when exposed to direct sunlight or used for too long. Otherwise, malfunction or breakdown would occur.
- Please check whether the device is working before driving a car.
- Do not remove SD card or turn off the power cable during the firmware update. It may cause malfunction or loss of data.

■ Memory Card and Precaution

- There is the lifetime of memory card for rewriting which is expendable product.
Some errors could occur if the lifetime of memory card reached or being stayed in high temperature environment. Periodic care is required.
- The device must be turned off when ejecting memory card.
It may cause to erase data or malfunction of memory card when forcing switch-off while it is running.
- Keep memory card in case all the time when not in use. Please avoid places where is humid and very hot.
- Genuine IROAD memory card is recommended. Failure to use a genuine one may cause error or malfunction of product.
Memory card is expendable. Memory card's warranty is 6 month period after purchase.
It may cause to reduce life cycle of memory card if using with constact power cable.
- Please format a memory card 2 times every month for its stability.
(Format function supported by a dedicated viewer is recommended)
- Product is only permitting recording files and V9 program, any other files will be deleted in order to keep stability.
(Please use the SD card for the product only, otherwise it will be deleted.)
- It takes up to 5 minutes depending on the memory capacity to use SD card if is the first time of using it.
Please do not remove the SD card while the device is running or when it is being turned off.

4. PRODUCT OVERVIEW

IROAD **T9**
QUALIFIED VIDEO RECORDER OF VEHICLES

IROAD™ T9



3.5inch Touch LCD

Wide View 3.5inch Touch LCD
Outstanding viewing angle and color with IPS panel



High Definition Vivid Front/Rear 2CH

Front : Full HD 1920x1080p 30frames
Rear : HD 1280x720p 30frames



Wi-Fi Support

Real time view and playback is supported via Wi-Fi.
Settings and automatic upgrade is supported.



ADAS

Advanced Driver Assistance Systems
LDWS, FCWS, FVDW



SAFEGUARD for All Your Safety

Automatic low voltage cutoff function is embedded
in the device for the safety of the car battery.



Remarkable hardware supporting high performance

2.0 Mega Pixel image sensor
ARM Cortex-A7 MP Core Processor V40



Memory Card Automatic Recovery Function

In case any error occurs,
data is automatically recovered.



Night Vision

It specialized for more clear recording at night time.
It can be controlled On/ Off.



Variable Recording Mode

Automatic Parking Mode and Motion Detection function
Impact, 24 hours Recording Mode



High Intensity Security LED

High intensity LED makes it possible to check outside
whether product is working.



Voice Recording & Voice Guidance

High quality Sound Recording
Clearer Voice Guidance by built-in speaker



External GPS

Driving information through external GPS
Time, driving path, direction with recorded video



Dedicated PC Viewer & Smartphone Playback

Playback recorded data, set various functions on dedicated PC
viewer. Playback on PC and Smartphone playback available.



Firmware Update

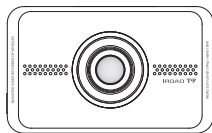
Continuous improvement and performance maintain
product stability. Easy and simple upgrade through
website www.iroadkr.com or smart directly.

5. PACKAGE COMPONENT

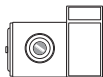
IROAD **T9**
QUALIFIED VIDEO RECORDER OF VEHICLES

Basic Components

- The picture of this package may differ from the real.
- The images of components can be different from the real and some can be changed.



Front Camera



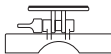
Rear Camera + Cradle



Uninterrupted
Fuse Cable



User Manual



Cradle



IROAD Genuine
Micro SD



Rear Camera Cable

Optional Components

- The picture of this package may differ from the real.
- The images of components can be different from the real and some can be changed.



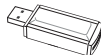
Wi-Fi Dongle



Cigar Jack
Power Cable



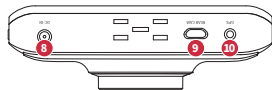
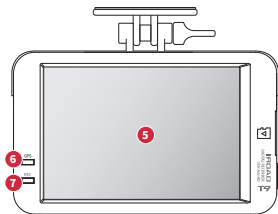
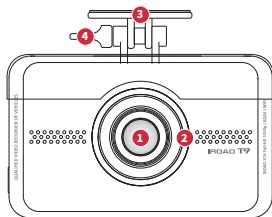
External GPS Antenna



SD Card Reader

6. NAME OF EACH PART

ROAD T9
QUALIFIED VIDEO RECORDER OF VEHICLES



- | | | | |
|----------------------|--------------------------------|-----------------------|---------------------------|
| 1 Camera Lens | 6 GPS LED | 11 Micro SD Card Slot | 14 Rear Camera Cable Slot |
| 2 Security LED | 7 REC LED | 12 Power Button | 15 Security LED |
| 3 Transparent Cradle | 8 Power Connector(DC-IN) | 13 Wi-Fi USB Slot | 16 Camera Lens |
| 4 Cradle Screws | 9 Rear Camera Cable Slot(V-IN) | | 17 Transparent Cradle |
| 5 3.5inch Touch LCD | 10 External GPS Connector | | |

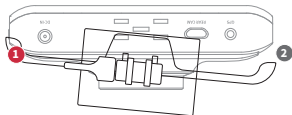
7. SPECIFICATION

• Specifications above can be changed without prior notice in order to improve performance of the product.

Model	IROAD T9
Image Sensor	2.0 Mega Pixel Image Sensor
CPU	ARM Cortex-A7 Quad-Core Processor V40
Resolution/Frame/Viewing Angle	Front : Full HD 1920x1080p 30fps/ 142° , Rear : HD 1280x720p 30fps / 125°
ADAS	LDWS, FCWS, FVDW
LCD	480x320 Resistive IPS panel
Wi-Fi	Wi-Fi supported - Smartphone playback/settings, Firmware automatic upgrade
Wi-Fi Button	Registration stand-by mode ON/FF
Audio Input	MIC embedded
Video/Audio Compression	H.264 / ADPCM
Vibration Sensor	3-axis acceleration sensor (Start recording when it senses external impact)
External GPS Sensor	Synched with Google map, inform the location and travelling speed of the vehicle.
Storage Medium	Micro SD 16GB ~ 128GB (MLC Class 10)
Recording Mode	Driving, Event(Impact), Parking(Motion detection)
Uninterrupted Power	Low voltage cut-off, overheating prevention is embedded
Power Supply / Power Consumption	DC 12V - 24V / 2.6W
Operating Temperature	-30° ~ 80°c (Storage temperature : -30° ~ 90°c)
Humidity	10~95%
LED	Security LED embedded
Viewer	IROAD T9 Viewer : Windows XP/Vista/7/8 (32bit-64bit support)
Application	IROAD App (More than Android 2.3, iOS 5.0 and higher version)

8. INSTALLATION

■ Mounting a Cradle for Front Camera



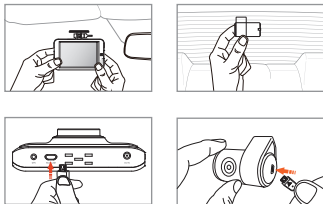
Tuck a transparent cradle (1) into both side slots and the push (2) like cover cradle in.

■ Placing Cameras



- Use dry fabric to wipe out the spot where the product will be attached on the windscreen.
- Make sure to install the product on where sight is not disturbed.

■ Product Installation



1. Use soft cloth to wipe out the spot where the product will be attached (Wipe out with soft cloth or tissue)
2. Attach product (Remove the protective film from the adhesive tape of front/rear camera)
3. Connect the cable of rear camera (Connect the rear camera cable V-IN slot)

9. INSTALLATION

■ Product Installation



4. Connect power cable to DC-IN slot

5. Other side of cable connect to vehicle fuse or cigar jack power

In order to install uninterrupted power cable, refer to the website www.iroadkr.com or look at this instruction page 10

6. Make sure that the product is operating normally

7. Clean up the power cable and rear camera wiring with cable holder or using edge part of vehicle

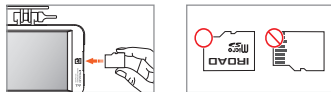
■ Connect External GPS



Connect external GPS to GPS slot of the top
It provides vehicle speed, location and other additional
information if connect external GPS

Please make sure to have some distance
between main product and GPS

■ Inserting SD Memory Card



• Make sure to insert sd card in the right way

Push the sd card into the memory card slot until you hear clack sound.

When using memory card for the first time or when the memory
card is reused after format. The system will be in standby mode for
3~5 minutes to create system files and checking the memory card.

Recording starts with voice guide saying "Start recording"

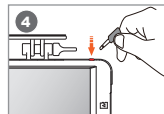
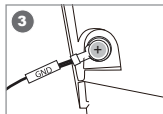
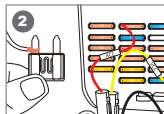
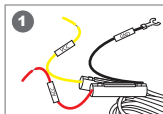
■ Uninterrupted power function?

It prevents battery discharge beforehand while in parking mode. The uninterrupted power function ensures your battery is protected. The discharge of battery voltage will be prevented in advance for 24 hours if the battery level goes down the minimum preset level.

(There might be able to occur natural battery discharge caused by the long term parking hours or each vehicle status.

Please change voltage level up to high especially in winter season, refer to the instruction).

■ How to install Uninterrupted Fuse Cable



- 1 Find right fuse using electric tester from fuse box of the vehicle.
 - 2 [ACC]Line (Red Line) : Make sure engine's off and connect to a current flowing fuse.
[VCC]Line (Yellow Line) : Connect to fuse which should be not electric current.
 - 3 Connect GND line to vehicle itself which has to connect iron part of vehicle itself.
Do not connect bolt of dash board where current is not flowing.
 - 4 Connect the power cable to confirm the operation of product, then neatly organize cables to finish installation work.
- Before installation must check for wire color. Sometime switch (VCC,ACC,GND) wire color.
Please refer to website www.iroadkr.com for the details of uninterrupted power installation, contact a technician for accurate installation,

11. PRODUCT OPERATION

■ Product Operation

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

Power ON	<ul style="list-style-type: none">- All LED will be turned on when the engine is on.- Normal recording starts along with Voice Guidance- External GPS LED will be turned off if there is no GPS connection.
Power OFF	<ul style="list-style-type: none">- All LED will be turned off when the engine is off or the constant cable is disconnected.
External GPS	<ul style="list-style-type: none">- GPS LED flickers while external GPS is connected (GPS LED will be on constantly while connected to satellite).- Please recheck the connection if there isn't LED on despite external GPS installed.
Wi-Fi User Registration	<ul style="list-style-type: none">- There is voice guidance to switch to standby mode of "User Registration Mode" if you press Wi-Fi button.- If there is no Wi-Fi request, it will change to normal recording mode(Press the button again to switch standby mode).

12. RECORDING MODE

■ Recording Mode

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

Normal Recording	<ul style="list-style-type: none">- It starts recording when power is connected.- Security LED flickers once every 1 Seconds
Event Recording	<ul style="list-style-type: none">- It will be recorded for event recording mode if it detects any shock(REC LED flickers).- It will return to Normal recording mode after finishing event recording.
Parking Recording	<ul style="list-style-type: none">- It will switch to parking mode if G sensor doesn't detect movement for 5 minutes.- It is recorded with 10 frame in order to extend recording time.- Security LED flickers every 2 second.- Switch to normal recording mode when the car is on the move.
Motion Detection Recording	<ul style="list-style-type: none">- It records if there is any movement within a range of 3 meters distance.- Security LED will blink faster.- If the movement finishes, it returns to parking mode again.

13. VIDEO FORDERS IN SD MEMORY CARD

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ Saving Directory



Config



Data



Event



Update



Viewer

Config System Managing Folder

- Log.txt : Save product status
- System.cfg : Save product settings
- Version.ini : Save version information

Data Nomal(Driving) Recording Folder

- Normal recordings are saved. The number of files saved differ depending on the memory capacity.

Event Event(Impact) Recording Folder

- There are recorded data of event(Impact, parking, movement) recording.

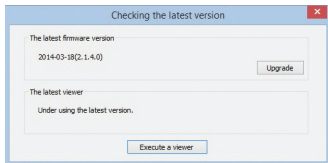
Updata Firmware Folder

- Put the latest firmware here to automatic upgrade.

Viewer Viewer Setup Program

■ Automatic Update via PC Viewer Program

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

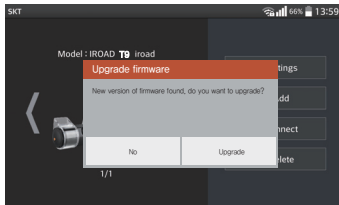


- 1 . Message window pop up as picture shown when install PC viewer program for the first time.
(That can upgrade only when there is internet connection and memory card inserted)
- 2 . If click the upgrade icon of latest firmware tab, it automatically copy upgrade file to memory card.
- 3 . Insert memory card to the product after copying files. Make sure the power of the device is disconnected.
- 4 . Connect power to the product after inserting the memory card and then start the engine.
- 5 . Upgrade starts with LED flickering and voice guidance.
- 6 . The device is rebooted once update is finished

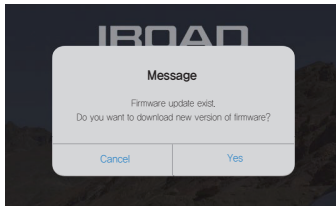
15. FIRMWARE UPDATE

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ Automatic Update on Smart Device via Wi-Fi



[Android Message Pop-up]



[iOS Message Pop-up]

- 1 . Register smart device on [Refer to registration page].
- 2 . Message pop-up window appears when select the product after running IROAD application.
- 3 . Upgrade begins automatically when pressing upgrade button.
- 4 . Please do not turn off smart device or product power while upgrading.
- 5 . The device is rebooted once update is finished and start recording as usual.

| 16. FIRMWARE UPDATE

■ Manual Update



Update

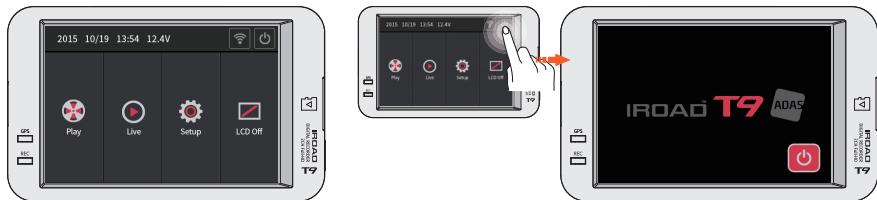
1. Disconnect the power cable.
2. Remove SD card from the product, put it into card reader and then insert the reader onto PC.
Once it is done, copy the downloaded firmware to the sd card under the folder named "update".
3. Insert SD card back onto the device.
4. Connect the power cable to the cigar jack.
5. Turn on the engine. Make sure the engine is on.
6. Update starts with LED flickering and voice guidance.
7. The device is rebooted once update is finished.

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

17. MAIN SCREEN

■ Main Screen

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



When the system is booted, the camera starts recording with voice saying 'start recording' and you will see the above footage on the LCD screen.

- **Playback** Play back the saved recordings
- **Live screen** Check live screen
- **Setting** Change various settings
- **LCD OFF** Touch LCD OFF button to turn on the screen. The screen is turned back on by touching the black screen.
- **Wi-Fi** Tap on WI-FI button, then you will hear voice guide saying 'standby registration'. The registration is to be done within 2 minutes, otherwise it will be automatically disconnected.
- **Safety mode** System will be shut down to safely remove SD card.

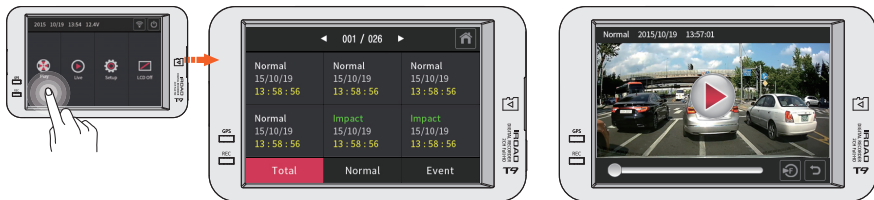
When you see the rebooting screen (refer to the right) after touching safety mode button, then you can safely remove sd card out of IROAD T10. Put the SD card back, then press restart button to reboot the system.

※ Safety mode does not turn off the power, but only recording. Therefore, Staying in safety mode for longer than 1 hour may cause battery discharge.

18. PLAYBACK

■ Playback

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



Tap on Playback button, then the list of saved recordings are shown

※ While watching previous recordings, recording is deactivated for the stability device. Return to the main screen to resume recording.

- | | | |
|-------|--------|-------|
| Total | Normal | Event |
|-------|--------|-------|

 Press the 'tab' button on top to arrange saved files in timely order.
- | | |
|---|---|
| ◀ | ▶ |
|---|---|

 Press the left/right arrow to move to the previous/next page
- Tap on the file you wish to play, then the chosen file will be played (refer to the right)

| 19. LIVE SCREEN


■ Live Screen

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



Tap on the live button on the main screen

※ Real-time PIP function is not supported during ADAS running.

- Once touching on the screen while playing back a front camera recording, it will be converted to a rear camera recording and vice versa.
- Press previous  button to return to main screen

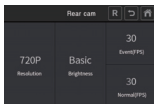
■ Camera1

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



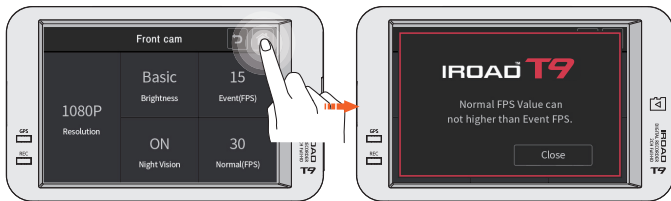
Tap on the settings button on the main screen.

- Press 'Front cam' button to adjust the resolution, brightness of the camera, Night Vision and FPS of event and normal mode.
- Night vision is configurable only at the front camera and improves the recording definition at night time.
- IROAD T9 has a 'fixed resolution' of 1080P for front , 720P for rear camera.
- Rear images are mirroring recorded when Press **R** button from the rear set-up



■ Camera2

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



- The value of Normal FPS(Frame per second) cannot exceed the value of Event FPS.

If you set the formal one higher than the latter, the values will be automatically set identically.

Changes made will be saved when returning to the main screen.

Please press 'home'  button to return to the main screen to save the changes.

Once the changes are made, the system will be rebooted and then the changes will be applied after that.
(Change of LCD hibernation time is applied right away without rebooting.)

| 22. TIME SETTING

■ Time Setting

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



Tap on time button on the setup screen to adjust date/time, auto rebooting time and timezone setting.

- **Date/Time setting** Tap on date/time button to adjust them. Touch the button once, then arrows will appear. Use them to adjust.
- **Automatic reboot** Activate/deactivate automatic reboot by toggling it and the time for rebooting can be scheduled by keying it in.
- **Timezone setting** Touching time zone button, you can set the configuration to adjust the time zone for country or region.

■ Sound

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

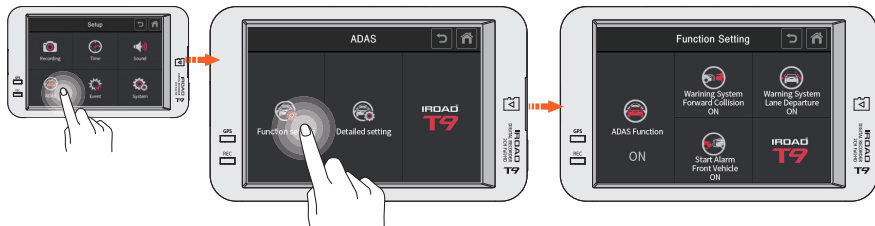


Tap on Sound button on the setup screen to activate/deactivate audio recording and voice guidance

- Volume setting Choose among Low/Basic/High
- Audio recording Toggle it to turn on/off audio guidance
- Voice guidance Toggle it to turn on/off voice guidance

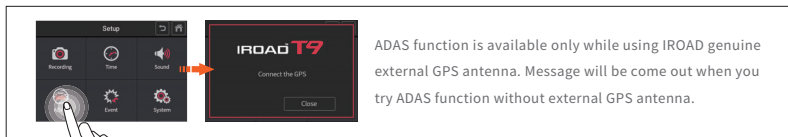
■ Function setting

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



It can be controlled touch a setting button to Use or Not Use [ADAS, FCWS, FVDW, LDWS]

- ADAS Function (Advanced Drivers Assistant Systems) ADAS Use / Not Use
- FCWS Function (Front Collision Warning Systems) FCWS Use / Not Use
- FVDW Function (Front Vehicle Departure Systems) FVDW Use / Not Use
- LDWS Function (Land Departure Warning Systems) LDWS Use / Not Use



ADAS function is available only while using IROAD genuine external GPS antenna. Message will be come out when you try ADAS function without external GPS antenna.

■ Detailed setting

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



It can set-up the sensitivity of LDWS, FCWS and the speed for LDWS. Thereby touch a detailed setting button as above picture.

- FCWS sensitivity Select to Low, Basic, High
- LDWS sensitivity Select to Low, Basic, High
- LDWS sensitivity Select to 50, 60, 70km/h
- Guide screen setting Set blue and red guide line to the intersection of the edge of bonnet



■ Event

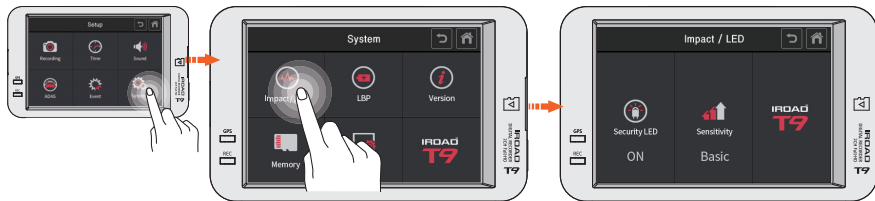
• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



Tap on Event button on the setupscreen to adjust buzz sound, parking/impact/motion settings and recording time (recording time after event occurred)

- Recording time Steer the arrow shown to increase/decrease the recording time.
- Parking mode Toggle it to activate/deactivate continuous recording during parking.
- Impact mode Toggle it to activate/deactivate impact mode.
- Motion detection Toggle it to activate/deactivate motion detection function during parking.
- Buzz sound Toggle it to turn on/off buzz sound.

■ Impact / LED



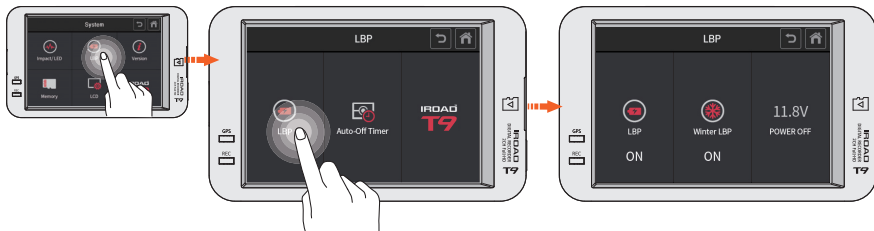
• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

Tap on Impact/LED button on the system screen to adjust security LED and sensitivity while a car is parked.

- **Security LED** Toggle it to activate/deactivate security LED mode.
- **Sensitivity** Choose among Low/Basic/High.

LBP

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



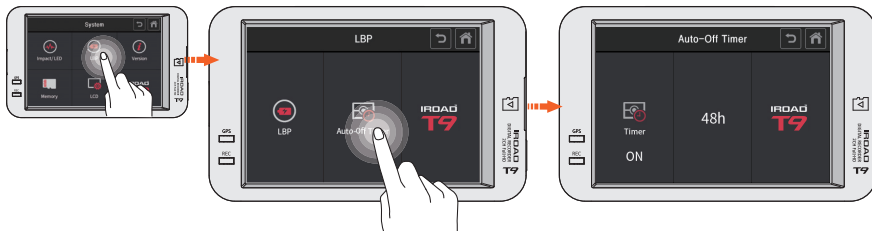
Tap on LBP button on LBP setting to adjust LBP, Winter LBP and voltage value

- LBP Toggle it to activate/deactivate LBP function
- Winter LBP Toggle it to activate/deactivate Winter LBP function (The cut-off voltage is fixed on 12.3V from Nov to Mar.)
- POWER OFF Tap on the Power button to adjust the power off voltage value.

	Voltage				
Power Off	11.3	11.5	11.8	12	12.3

■ Auto-off Timer

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



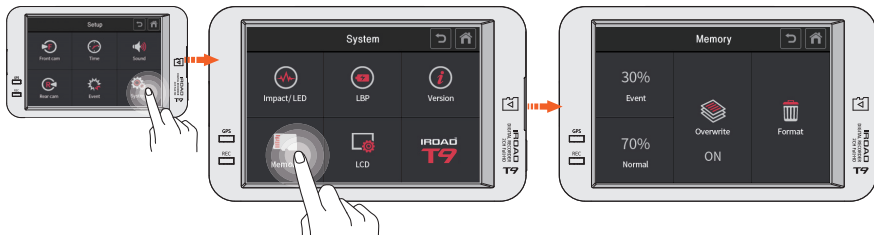
Tap on Auto-Off Timer button on LBP setting to adjust timer setting and auto-off time

- Timer Toggle it to activate/deactivate Timer function
- Auto-off time Touch the button once, then arrows will appear. Use them to adjust.

30. MEMORY

■ Memory

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

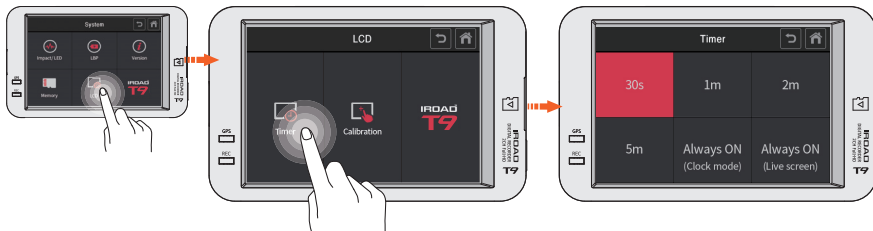


On the system screen, tap on the Memory button to steer the following :
Memory allocation, overwriting toggle and format

- **Event & Normal** Change the percentage of memory space allocated between event folder and normal folder.
※Be aware that all the data will be lost once the setting is changed.
- **Overwriting** Toggle it to activate/deactivate loop recording.
- **Format** All the data on SD card will be removed and the system will be rebooted.

LCD

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



Tap on Timer button on LCD screen to do auto hibernation setup

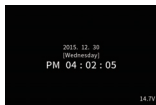
Auto hibernation

Touch what you want and it will be ticked, and press back button to save the configuration.

After choosing Always ON(clock) mode, it will be converted to a page that enables to check date, time and voltage.

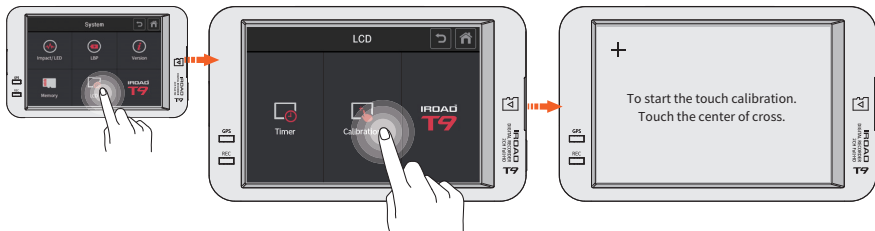
After choosing Always ON(live screen) mode, it will be converted to a page that enables the real time recording.

※ If choosing constant on mode, turning off function on the main menu is disabled and LCD lifespan may be shortened.



■ Calibration

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



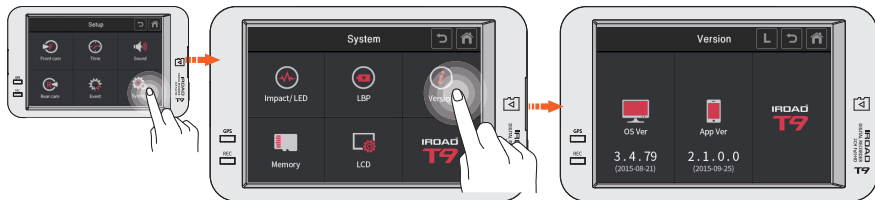
Tap on Calibration button on LCD screen to touch correction

- **Calibration** Run touch correction when tapping on the screen is not smooth and well. Follow the instruction shown on the screen.

33. Version

Version

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



You can check the version of the application and the firmware installed on IROAD T9

Tap on the LOG **L** button to see the history of all the previous events happened when the camera was in use.

34. DEDICATED PC VIEWER

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ Program Installation

1. The viewer software is not pre-setup in the memory card.
2. Connect power to the product after inserting Micro SD card. Recording time could differ depending on the capacity of SD card.
3. Take 3~5 minutes to initialize and create the file system when first use.
(All LED flicker while initializing, There will be REC on when it starts recording after finishing)

Insert the SD card onto PC.

4. run viewer.exe which is saved in the memory card.




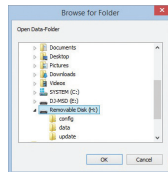
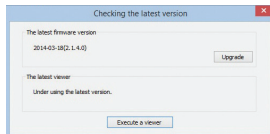
■ Running the Program

1. Confirmation pop-up window appears if there is internet connection as picture shown.

If there is no internet connection, IROAD wifi dedicate viewer will run directly.

2. Press “run a viewer” icon to start viewer program.

3. Open File - Click the icon  in the viewer to browse folder window as shown in the picture. Select removable disk, press “OK” button.



35. DEDICATED PC VIEWER

IROAD **T9**
QUALIFIED VIDEO RECORDER OF VEHICLES

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ Overview



1 Recording File List

2 GPS signal receiving window

(Start operating when connected to an external GPS)

3 G-Sensor(Acceleration) Graph

4 Playback speed adjustment

5 Speed indicator

(Start operating when connected to an external GPS)

6 Volume Control

7 Google Map

(Start operating when connected to an external GPS)

8 Front/rear image playback screen

9 Front/rear image related

	Front/Rear image switch
	Cutting Front/Rear image in half
	Front/rear image PIP
	Color/Black&white mode switch

10 Playback Recording

	Play backwards, Playback
	Pause
	Repeat event
	Previous/Next event
	Step Reverse, Step

11 Video Control

	Thumbnail		Backup
	Drawing a lane		Setup
	Print		Open


| 36. DEDICATED PC VIEWER

IRROAD
QUALIFIED VIDEO RECORDER OF VEHICLES **T9**


■ Watching Front/Rear Image

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



 Click the icon to watch front/rear image



 Click the icon to watch both front/rear in half



 Click the icon to watch front/rear PIP

37. DEDICATED PC VIEWER

IROAD
QUALIFIED VIDEO RECORDER OF VEHICLES **T9**

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

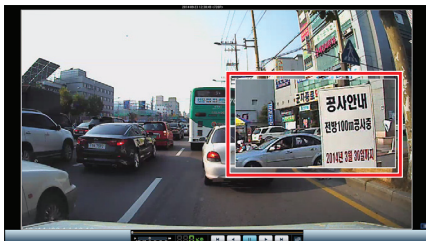
■ Enlarging a Screen



Double-click the left button of mouse on the main menu screen to expand to full screen.

Click the left button of mouse to return to previous screen again.

■ Partial Enlargement of a Screen



Magnifier will appear, if double-click the right button of mouse in playback screen. You can move the enlarged screen by pressing the left button of mouse and drag the screen.


The Magnifier will disappear if click the right button of mouse.

38. DEDICATED PC VIEWER

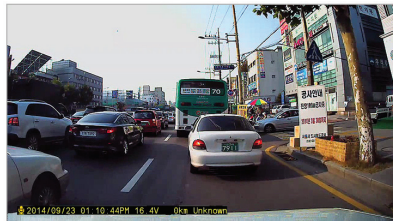
- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ Repeating Event Playback



- Click "repeat event" icon  to activate repeat function from the main viewer screen. Section bar is activated.
- Select start and end point to playback repeatedly.
- This function is only available in a playback section.

■ OSD





- Display the information of speed, date and time in the lower left section of the viewer.
- Date and time notation is applied to all of the backup files.



39. DEDICATED PC VIEWER

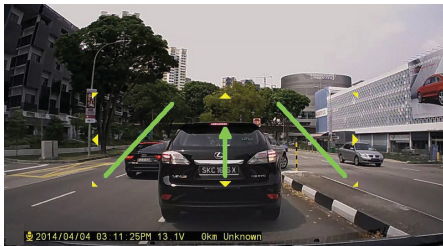
■ Thumbnail




- Switch to thumbnail function if click the icon  in the main viewer screen.
- This screen is composed of 16 pictures in total and each of the screen shows one scene.
- It show enlarged full screen if double-click the specific each of scene.
- Playback, Play backwards also show 1 to 16 pictures sequentially.
- Return back to normal mode if click the icon  again.

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

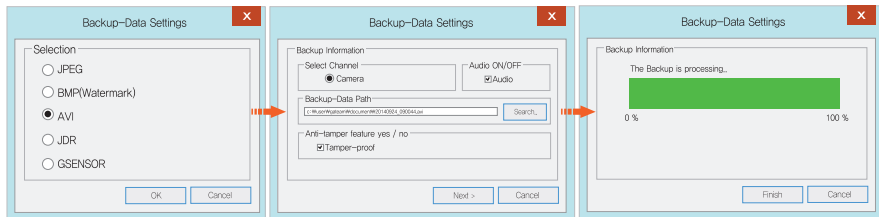
■ Drawing a Lane




- Click to the icon  to "Drawing a lane" mode.
- User can apply the lane manually.
- Click the icon and choose 'deactivating lane drawing' to deactivate it.

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

Backup



- Click the “Backup” icon  in main screen menu.
- Backup function provides various type of backup such as JPEG, BMP, AVI, JDR, G-SENSOR.
- AVI video file can be played on Windows Media Player or other Third-party Player.
- JDR Backup can be played back with dedicated viewer only.
- Images can be opened with Image viewer or Microsoft paint.
- Images with AVI, JDR extension - Click backup button after choosing the desired timezone.
- Backup begins after assigning a data path and then choose 'next' button. You may also save audio by ticking 'audio save' button.
- AVI backup is available to use tamper-resistant function.
- Whether backup files have been modified can be checked by clicking 'open' button on Watermark Proofer software.

41. DEDICATED PC VIEWER SETTING

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ System Setting

Setup(H:/config/system.cfg)

System | Event | User Settings | Removable Disk Version

Camera Settings

Front camera

Normal(fps) 30 1

Event(fps) 30 2

Brightness Normal 3

Rear camera

Normal(fps) 30

Event(fps) 30

Brightness Normal

4 Audio Recording

Audio enabled Audio disabled

5 Overwrite

Use Not Use

6 Standard time zone

(GMT +09:00) Seoul, Osaka, Tokyo

Automatically adjust dock for daylight saving changes

7 Auto Reboot

AM 03:00

SYSTEM will be rebooted every day for stability of operation.

8 Buzzer

On Off

9 Km / Miles

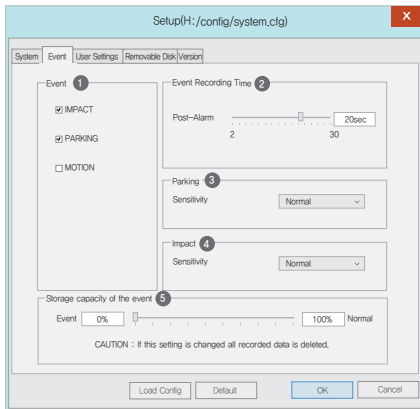
Km Miles

Load Config Default OK Cancel

- 1 Normal(fps) - Setup the frame for 1 second
- 2 Event(fps) - Setup the frame for 1 second
- 3 Brightness - Adjust the brightness of recording
There are 3 steps such as Darkness / Default /Bright
- 4 Audio Recording - Available to select Enable/Disable audio
- 5 Security LED - Select on/off
- 6 Standard Time Zone - Select exact time zone
- 7 Auto Reboot - Reboot the product when get preset time
in order to check memory card checkup
- 8 Buzzer - Alarm sound when event occur (Available ON/OFF)
- 9 Change distance notation, KM or Miles

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ Event Settings



- 1 Event - Activate/Deactivate Impact/Parking/Motion function
- 2 Event Recording Time
- Recording after event: Setup the recording time after event happened (Available between 2~30 seconds)
- 3 Parking - Set the sensitivity while in parking mode(G-Sensor)
- 4 Impact - Set the sensitivity (G-Sensor)
- 5 Storage Capacity of the Event - Set the capacity of Event and Normal recording

43. DEDICATED PC VIEWER SETTING

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ User Settings

Setup(H:/config/system.cfg)

System Event **User Settings** Removable Disk Version

Vehicle Info

Vehicle info 1

Driver info 2

License plate No 3

Use info 4

User ID admin

Password

LBP 5

Power On 12.4V/24.4V 12.7V/24.7 12.9V/24.9V 13.1V/25.1V 13.3V/25.3V

Power Off 11.3V/23.3V 11.5V/23.5V 11.8V/23.8V 12.0V/24.0V 12.3V/24.3V

Time set 6

2014-09-24 PM 03:18

Load config Default OK Cancel

1 Vehicle Info - Save vehicle information

2 Driver Info - Save drivers information

3 Serial Info - Enter product serial number

4 User Info

- No one can check the information if set password here.

- User ID - Enter login ID (Default: admin)

- Password - Set password for login (Default-None)

5 LBP(Constant power/Low voltage cut-off function)

Voltage discharge prevention function

- Adjust the optimal voltage for the safety of your car

6 Time setting

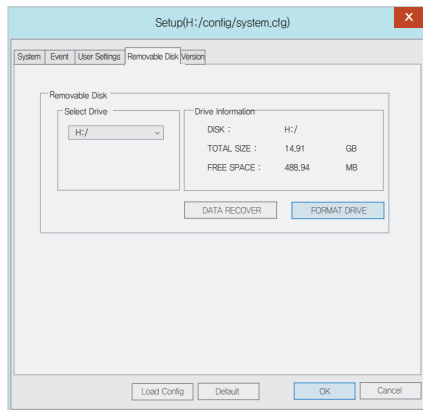
Set the exact time if not connected to an external GPS.

Set the time few minutes ahead considering travelling distance between PC and your car.

※ This is a personal information area. Please keep secure for information leaking.

Be aware that you won't be able to watch images if you fail to login when password is forgotten.

■ Portable Disk



- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

This function is for format or recover memory card when there occur errors or other problems. Please consider data loss before work, so it is necessary to backup in advance

- Select the right drive for SD memory card
- Select the function
- All of data will be deleted if format the drive

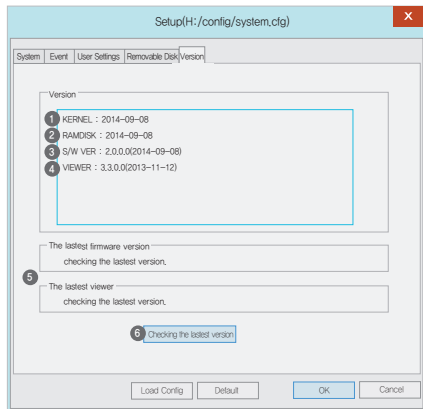
The performance of memory card could be slowed when used for too long. Properly managing sd card is important.

Please format or check the memory card once a week or 2~3 times a month in order to keep stable recording condition and long memory card use.

45. DEDICATED PC VIEWER SETTING

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

Version Info



- 1 KERNEL - Display kernel information
- 2 RAMDISK - Display RAMDISK information of product
- 3 S/W VER - Display Software information
- 4 VIEWER - Display viewer version information
- 5 Latest Firmware / Viewer
- 6 Click "Checking the latest version" to confirm the latest program version for the product.

- Make sure the internet is connected before firmware upgrade.

- If downloaded the firmware without SD card, Please copy the firmware file to "Update" folder directly.

| 46. SYNCING WITH Wi-Fi

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ IROAD Smart Manager Application

- It provides Android and IOS platform.
- Please search "IROAD" on Google play Store or App Store.



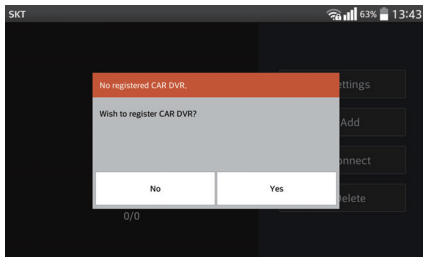
■ Before using it

- Real-time recording and playback via Wi-Fi could be delayed depending on specification of Smart device.
- Do not handle the product while driving, it causes some serious accident. (Please operate the product in safe place after parked)
- Wi-Fi USB Dongle is sold separately.
- Press Wi-Fi button on the device and check if guidance voice ("Registration standby mode") is played.
- Check the reception of wifi or settings on your smartphone if your phone is unable to detect the device.
Please retry by pressing "Off" of pass point in "Wi-Fi advanced setting" menu, if that value is "On".
Please retry with the value of "All" in "Wi-Fi Signal Strength" menu.
- There could be dropouts of Wi-Fi signal depending on receiving sensitivity.
- Recommend to connect inside vehicle for stable usage.
- Frames when files are saved may differ on Wi-Fi depending on which smartphone is used.
When Wi-Fi is off, the frames return to normal frame.

■ How to connect - Android



- Run IROAD app icon after installation to smart device.



STEP 1

The screen of IROAD app is shown horizontally.
Appears to guide registration when first use as left picture.
If select "No", it terminates the application,
or select "YES" to go product registration page.

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



STEP 2

A device close to the smartphone is searched and shown on the screen.
- The image, SSID and the name of model of the device found are shown.
Those having good reception sensitivity will be placed on top of the screen.

■ How to connect - Android

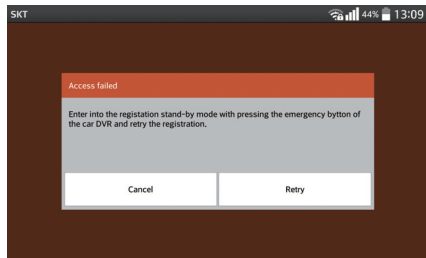


STEP 3

Press the Wi-Fi registration button of product, there will be voice guidance and select the product on the list that you want to register by tapping on "Search" button. Press 'search' button if you want to search the device again.

The registration has to be done within 2mintues.

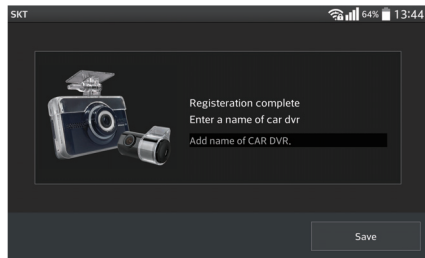
•The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



STEP 4

In case of registration is not active or connection is failed in standby mode, voice guidance is played.

Press Wi-Fi button to activate registration mode again.
(If re-registering, it automatically registers last installed smartphone)



STEP 5

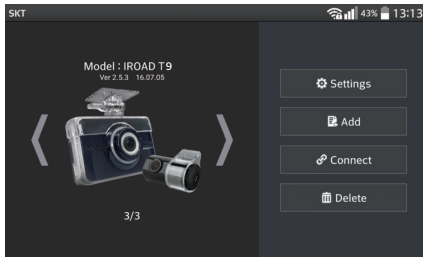
Registration process is finished as right picture shown above.

Register DVR name, it can be useful when you need several product connections.

49. SMARTPHONE - ANDROID

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ Main Menu / Real-time Image



Main menu overview



Tapping on the setting button let you change settings simply & easily. (Once change is saved, the app is rebooted)



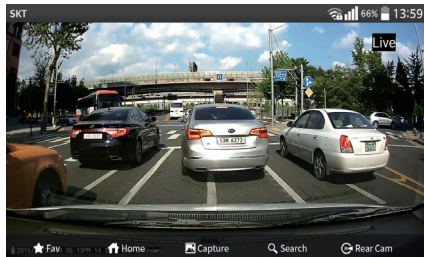
Pressing 'add' button will navigate to the camera registration page.



Real time image is shown after Pressing 'connect' button.



Click 'delete' button to delete existing camera info.



Real time image menu

- Click on the picture of the device to watch real-time image.
- Tap on the screen gently to view settings menu on the bottom.
- Magnifying glass disappear by double clicking right mouse.



Return to main menu



Rear view screen



Return to main menu



Front view screen



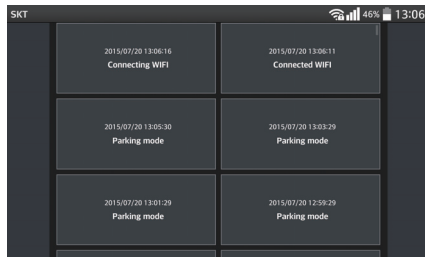
Save screen captures



Watch saved front/rear images

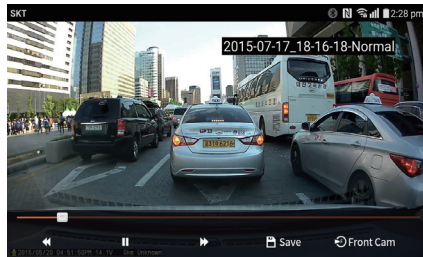
- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ Front / Rear Image Playback, Backup



List of playbacks

- Tap on play button to navigate to playback list.
- List of playback shown in order of time.
Choose the one you want to watch.



Front/Rear image playback, backup

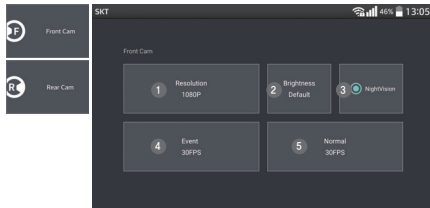
- Choose a video clip on the list to watch the image.
- Use R and F button to switch one screen to another.
- Use backup button to save the image on the smartphone.
The file is saved under (/storage/emulated/0/DCIM/IROAD)

 Save Backup button

 Rear Cam R button - Rear view playback

 Front Cam F button - Front view playback

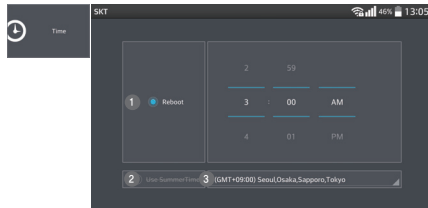
■ Settings - Camera, Time



Setting - Camera

- 1 Front/Rear camera resolution setting
- 2 Brightness
- 3 Night Vision
- 4 Frame setting for event(impact, parking, motion) recording
- 5 Normal recording frame setting

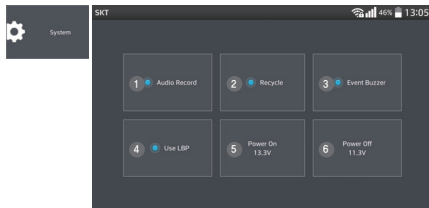
- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



Setting - Time

- 1 Time interval for automatic rebooting
The device automatically reboots at the set time.
(Untick the box to deactivate automatic reboot.)
- 2 Summer time On/Off
- 3 GMT setting

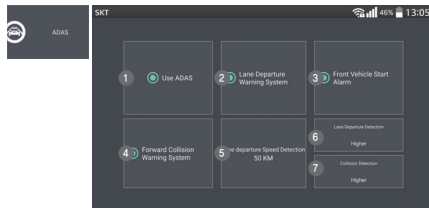
■ Settings - System, ADAS



Setting - System

- 1 Audio recording On/Off
- 2 Rewriting On/Off
- 3 Event Buzzer On/Off
- 4 Tick on a voltage control then the power is cut off at the set voltage point. Power is turned on at the set voltage point. Power is turned on at the set voltage.
- Recommended to use voltage cut-off function for the safety of your car battery
- 5 Power On setting
- 6 Power Off setting

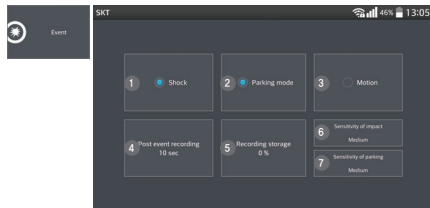
• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



Setting - ADAS

- 1 ADAS On/Off
- 2 LEWS On/Off
- 3 FVDW On/Off
- 4 FCWS On/Off
- 5 LDWS speed detection setting
- 6 LDWS sensitivity setting
- 7 FCWS sensitivity setting

■ Settings - Event



- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

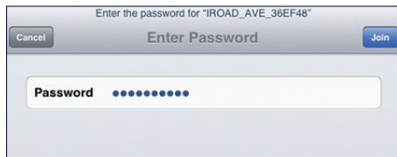
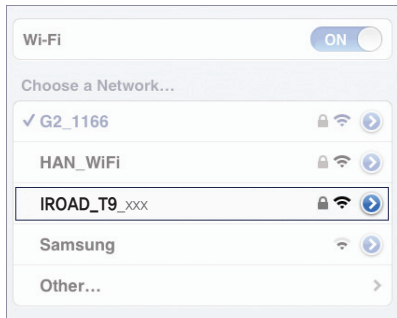
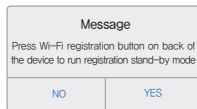
Setting - Evnet

- 1 Shock On/Off
- 2 Parking mode On/Off
- 3 Motion On/Off
- 4 Setting recording time after event occurs
- 5 Saving memory allocation - Allocate memory capacity to normal and event folder. Once the ratio is set, reboot the device and format the memory card.
- 6 Impact sensitivity setting
- 7 Parking sensitivity setting

• The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ How to connect - Apple iOS

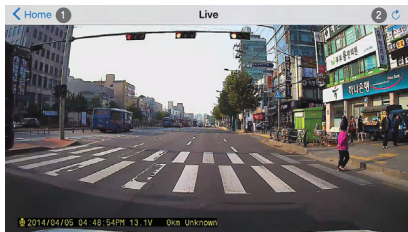
1. Turn on Wi-Fi function of smart device.
2. Select IROAD_T9_XXX in the list.
3. Write [qwertyuiop] in the password box and touch the "Join" button.
(The password is on the second row of the keyboard.)
4. Press the Wi-Fi registration button of product to activate register standby mode. (Voice guidance)



55. SMARTPHONE - Apple iOS

■ Front/Rear Real-time Image and Main Menu

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly



Front/Rear real-time image

- Run the application to watch front/rear real time image

- 1 Tap on the top right icon  to watch front/rear playback
- 2 Tap on the top left icon  HOME to return to main screen



- 1 Real time image can be viewed
- 2 Play recordings
- 3 Tap on settings button to change settings using Smartphone
- The device reboots when the settings is changed and return to main menu.

- The function can be changed for firmware upgrade or product enhancement without prior notice, please visit website regularly

■ List of Recordings, Front/Rear Recordings Playback, Save

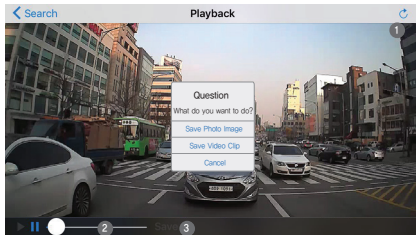
< Home	Search	Q
2015/11/18 03:19:02	Normal	>
2015/11/18 03:19:45	Normal	>
2015/11/20 16:35:01	Normal	>
2015/11/20 16:36:10	Normal	>
2015/11/20 16:36:20	Wi-Fi Connected	>
2015/11/20 16:47:06	Wi-Fi Connected	>
2015/11/20 16:47:11	Wi-Fi Connecting	>

List of recordings


Tap on list of recordings button to navigate to playback screen.

The list is shown in order of time.

Choose the one you want to watch.



Front/Rear recording playback and save

- 1 Tap on top right icon  to switch from front view image to rear view.
- 2 Playback bar
- 3 "Save" button is shown when playback is paused.
"Tap on "save" button then it navigates to backup recording data screen. Choose the saving type then save the data.

■ Settings - Camera/Event Settings

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USER INFORMATION	
Driver Name	Write here.
Car Plate No.	Write here.

FEATURES	
Forward Camera 1	>
Backward (Inner) Camera	>
Event Control	>
ADAS	>
Power Control	>
Audio Recording	<input checked="" type="checkbox"/>
Recycled Recording	<input checked="" type="checkbox"/>

BLACKBOX INFORMATION	
Model Name	IROAD V7
F/W Version	2.1.6.0

Front/Rear camera settings

- 1 Adjust frame and brightness of image

EVENT FILTERS	
1 Impact	<input checked="" type="checkbox"/>
2 Parking	<input type="checkbox"/>
3 Motion Detection	<input checked="" type="checkbox"/>

SENSITIVITY	
4 Parking	Medium
5 Impact	Medium

POSTALARM RECORDING PERIOD	
20 seconds 6	<input type="button" value="-"/> <input type="button" value="+"/>

EVENT RECORDING CAPACITY	
7	0 %

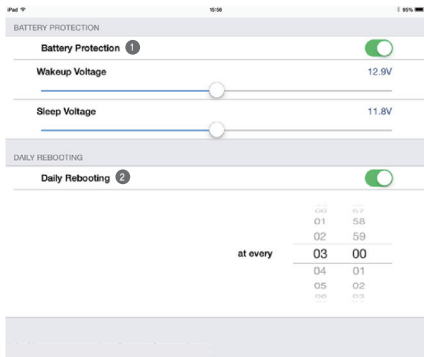
Warning: If this setting is changed, all recorded data will be removed.

Event settings

- | | |
|--|--|
| 1 Impact detection On/Off | 2 Parking mode detection On/Off |
| 3 Motion detection On/Off | 4 Parking mode sensor sensitivity |
| 5 Impact detection sensor sensitivity setting | 6 Recording time setting after event occurs |
| 7 Saving memory allocation | |
- Allocate memory capacity to normal and event folder. Once the ratio is set, reboot the device and format the memory card.

■ Settings - Voltage Control and Restart

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- 1 Tap on "On" button, then the power is automatically cut off at the set voltage and the power is turned on at the voltage.
- 2 Auto reboot timer setting
(The device reboots at preset time.)
(Untick a box on the timer setting to deactivate it.)

■ Product is not working

1. Recheck if power cable is connected.
2. Check whether the authentic power cable is connected.
3. Make sure constant power cable is connected to correct fuse. (professional installation is recommended)

■ Unable to run playback

1. Recordings can be played using a dedicated viewer and IROAD app on smartphone.
2. Some player does not support images from the rear camera.
3. If error occurs on recordings, contact for After sale Service.

■ Unable to run rear camera recordings

1. Rear images are shown on the dedicated viewer or via IROAD app on smartphone. Install a dedicated pc viewer to run playback.
2. If error occurs, tune off power, disconnect rear camera cable, then reconnect and try again.

■ The quality of recorded video is not good

1. Check if there is any dust or dirt on front and rear camera lenses.
2. If windscreen is tinted, it may reduce video quality.
3. Tinted windscreen, backlight may reduce quality of video.

■ No power when engine is off (After long term parking)

1. Power will be disconnected by safety guard voltage if it goes down below set up voltage.
2. Battery discharging period might be shorten by battery condition or outside temperature.

■ Video is not recorded at all

1. Make sure recorder is powered on
2. Make sure SD card is inserted correctly
3. Format memory card and try again

■ PC cannot find memory card

1. Check if card reader is faulty
2. Insert a card reader onto other usb port on PC
3. Using USB multiport or assembled computer might have problem with reading USB

■ The device is unable to recorded. Power cannot be turned on

1. The device is turned off when engine is off given the cable is connected to a cigar jack
2. Connecting to uninterrupted power cable is recommended in order to use parking mode (ignition is off)

IROAD™ T9

A CLASS DEVICE (Official telecommunication Device)

Seller or user need to be noted that this is device has been officially registered as passed the sutability test for the requirement of electromagnetic wave and should be used at the area other than home