

2CH

Driving Video Recorder



User Manual



※ The features and design are subject to change without prior notice in order to improve the quality and functions.



PRINTED IN KOREA

Ver.1.0

Warranty and responsibility's range

Thank you for purchase our products

Notice

- ⊙ You should read this important statement that has manual about product and right using way, consumer rule, warranty and responsibility's range.
- ⊙ Manufacturer has all right of this manual and it is protected by copyright law.
- ⊙ This manual is written by standard of 2CH-DVR and there may be technological, editing error or omission.
- ⊙ Some functions might be changed in order to product's upgrade without prior notice.
- ⊙ According to firmware version, there might be functional difference.
- ⊙ This product is for car safety assistant product. If you have accident, all responsibility head to consumer. So use it right way.

Warranty and responsibility's range

- ⊙ This product is recording modem of car accidents and we are not guarantee to recording all image and voice.
- ⊙ We do not have responsibility about related with this product damages as its breakdown, data loss.
- ⊙ The general memory save equipment has available lifespan and there might be data loss by static electricity or outer voltage.
- ⊙ This product is assistant equipment to record car moving video. Can not be recorded due to the operating environment So, Please use only as a guide for travel video check.

NOTICE FOR SAFETY

This notice want to protect misapply of this product may cause accident danger and property damage and the consumer can use it in very better safe condition. Also, we mark two things, “notice” and “warning” in the very easy to mistake parts. This is very important to your safety and use it after knowing very well about it and keep it in a very easy to find place.



NOTE

There is a must know things to use this product and to help things.



WARNING

The information is for preventing damage or shorten the life time of the products.



CAUTION

The information is for preventing bodily harm or even death and use should follow this safety rules.



CAUTION



Put away from air bag place

- The air bag might be worked or it could cause serious injury.



Wipe often the dust of cable part

- It causes electric shock fire by bad connection.



Do not put the metal like pin and needle between the gaps.

- If you put them in there, stop use it. It cause fire, electric shock and product's breakdown.



When you install in your car, stop the engine and after installation, restart it.

- It cause electric shock and breakdown.



The information is for preventing bodily harm or even death and use should follow this safety rules.

NOTICE FOR SAFETY

WARNING

-  Do not shock to the product.
- It may cause damage or malfunction for product.
-  Do not place near magnet
- It may cause malfunction and trouble.
-  Keep the internal GPS without any obstacle near of it like high pass, navigation.
- It may cause problem on GPS signal receipt rate.
-  GPS function needs loading time when it power on.
- It needs from few seconds to minutes depending on signal receipt environment.
-  The vehicle which has metallic tinting on front window could be caused poor GPS reception
-  When rapid brightness is changed as like tunnel in/out, in the strong backlight, no light at night might be have bad recording quality.
-  If you turn on the support light(fog light) driving, you can save better video.
-  If you want to connect with constant power supply, you should ask to specialized service shop.
-  If the product is connected with constant power supply or some cigajacks are used in constant power supply, you should turn it off.
- It causes a discharge.
-  Keep clean on the car window surface or camera lens of the product.
- There will be diffused reflection or bend phenomenon by dust or foreign object so you can't get clean video.
-  Only the person in charge can do decomposition or repair/convert.
- It causes breakdown and you can't get warranty about it.

NOTICE FOR SAFETY

Read the following precautions should be use SD card.

About Data Loss or damage arising from failing to observe the following precautions we do not undertake any responsibility.

-  Only use warranty over 10 original SD card.
- If you use below class 10 SD card, there may be problem to save video.

-  Do not put any object in the SD card slot.
- If you put something in there, it causes breakdown

-  Do not touch SD card with wet or oily hands.
- It causes SD card damage and breakdown.

-  When you put a SD card inside, watch the direction and push it the end.
- If SD card is not the right place, it might be causes miss working.

-  If it's file closing in front of switch or it is power off, just take out SD card.
- It might be causes data loss when you take SD card out in the power on.

-  The SD card is a consumable item. Once the memory sectors are part of the warranty period may be damaged. The warranty period of the SD card before using it determine whether defects.

-  When you're carry or storage the SD card, just put in the case.
- It might be causes data loss when you're carry or storage by outer environment.

-  When you recording, just unlock the SD card's data lock.
- When the SD card data is locked, it might be not recorded at all.

-  Generally SD Card has available lifespan.(Depand on SD card company)
- When you have a disorder in case of long time using, just exchange the new SD card.

-  If you have a very important data, just backup the other place.
- You can lose your data with outer environment and long time use.

-  Do not disconnect the data backup, format and operation of the product to the SD card.
- Get serious damage to the SD card might no longer be available.

-  Frequently check the data stored on the SD card, back it up. Please use the format on a regular basis (once a week).
- Due to the external environment and the long-term use may result in data loss.

-  Do not break down or convert the SD card randomly.
-Get serious damage to the SD card might no longer be available.

-  Do not drop or give strong shock.
- It causes damage and data loss in SD card.

-  If the SD card purchased separately, please purchase after confirming the supported models of the manufacturer.
- This product supports up to 128GB

NOTICE FOR SAFETY



This product complies with the Electromagnetic Compatibility registered products.

FCC Compliance Statement Caution :

Any change, or modification in construction of this device which are not expressly approved the party responsible for compliance could avoid the user's authority to operate the equipment .

NOTE :

This equipment has been tested, and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules.

This limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, can radiate radio frequency energy, and , if not installed, and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which cause the user will be required to convert the interference at his own expense.





CONTENTS

1. Specifications

2. Package Contents

3. Names and Functions

4. Installation Guide

- Connections
- Power Cable wiring
- Parking mode
- Low voltage settings
- SD card operation

5. Operation

- PUSH switch operation
- Recording time
- Buzzer and LED
- OSD Display Information
- Split Display
- Display by trigger signal
- Display by push switch signal

6. PC Viewer Manager

- Recommended PC specifications
- What PC VIEWER MANAGER?
- PC VIEWER INSTALLATION
- Interface Introduction
- Interface Information
- Software Settings
- User password
- Factory settings

7. Firmware Upgrade

8. AS guidance and regulations

9. Guarantee

1. Specifications

Features

2 channel, high quality

- Front: D1 (720 X 576) Rear: D1 (720 X 576)

Excellent recording system

- Dual Recording(Normal and event recording)

Built-in Supercapacitors

- Built-in supercapacitors, safely store the last image

Support High-capacity SD card, sd card removal prevention

- Max 128G SD CARD
- Built-in SD card removable cap prevents application, Preventing the SD card by shock.

Support external GPS

- Support GPS and GLONASS

Support parking mode, and set the cut-off voltage

- Recording parking mode with the cut-off voltage
- Automatically power is turned OFF to prevent battery discharge when the cut-off voltage

Live screen output by trigger and display switch signal

- Split , Rear screen by trigger signal
- Split , Rear screen by display switch signal

Support Free Voltage

- DC 11V ~ 36V

Excellent durability and heat dissipation

- Case of aluminum and steel in shock, a good temperature characteristics
- Camera detachable structure, Allows normal operation in a high temperature environment

1. Specifications

Common Specifications

Items	Specifications	remark
Resolution	Front: 720 X 576 / Rear: 720 x 576	
Support Channel	2ch	
Image Format	H.264(AVI)	
Analog video inputs	1 ch composite interface	
A/V outputs	1ch composite interface(RCA)	
Display	Split screen, Live screen by trigger & switch signal	
Voice Recording	Support Rear camera MIC	
Recording mode	Driving mode(Dual recording) Pre 5sec , post 20sec	Normal+ Shock event + Rear signal
	Parking mode (Event recording) Pre 5sec, post 20sec	Normal+ Shock event + Rear signal
Storage	MLC scheme SD CARD 8 ~128GB	More than CLASS10
GPS	Support external GPS(GPS+GLONASS)	
Shock Sensor	Built-in 3-axis acceleration sensor	
Time set	Internal RTC /Automatic synchronization GPS	
Internal battery	Built-in Supercapacitor	
Event Display	Buzzer, LED display	
Parking Mode	Set Low voltage cut-off voltage	
PC software	Dedicated software	
Allowed current (main)	Max 2A	
Allowed current (Camera)	Max 300mA/ Each	
Operating temperature	-10 Degrees to 60 degrees	
Storage temperature	-20Degrees to 70 degrees	
Operating voltage	DC 11V ~ 36V	
Power Consumption	DC 12V @ 200mA (About)	Based on main set / Except camera

1. Specifications

2CH

SPLIT SCREEN	MODEL		D1 CAM	D1 CAM
	2CH-DVR	Camera Connection	O	O
		Recording Resolution	720X576	720X576

2. PACKING CONTENTS

MODEL : 2CH-DVR



DVR MAIN



Power cable



Tape



SCREW

OPTION



SD card



Cam cable
(DIN)



Cam cable
(DIN)



A/V output cable



Trigger cable



GPS

- ※ If upon purchase does not contain the body and the following accessories, please contact your dealer.
- ※ The shape of each component are subject to change without prior notice for quality improvement.

3. NAMES AND FUNCTIONS

MODEL: 2CH-DVR

FRONT



REAR



- | | |
|------------------|--|
| ① USB 2.0 | ⑦ POWER(B+/B-/ACC/TRI OUT/ EMERGENCY BUTTON) |
| ② SD Card Cover | ⑧ D1 CAMERA INPUT PORT |
| ③ Push switch | ⑨ D1 CAMERA INPUT PORT |
| ④ GPS LED | ⑩ A/V OUTPUT |
| ⑤ EVENT REC LED | ⑪ GPS INPUT PORT |
| ⑥ NORMAL REC LED | ⑫ TRIGGER SIGNAL INPUT PORT
(REAR) |

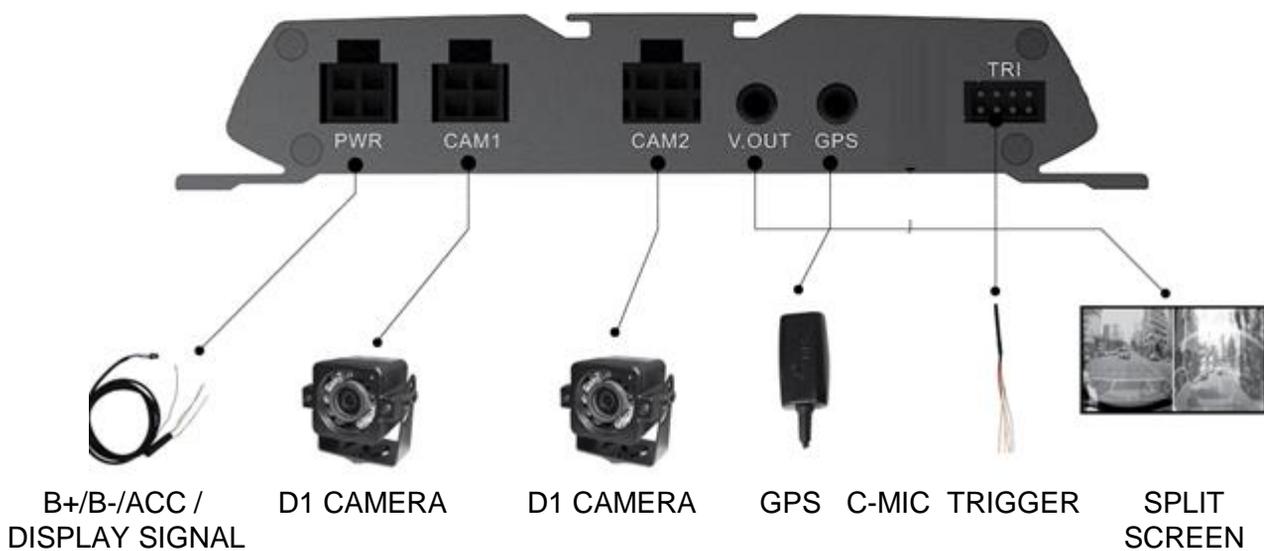
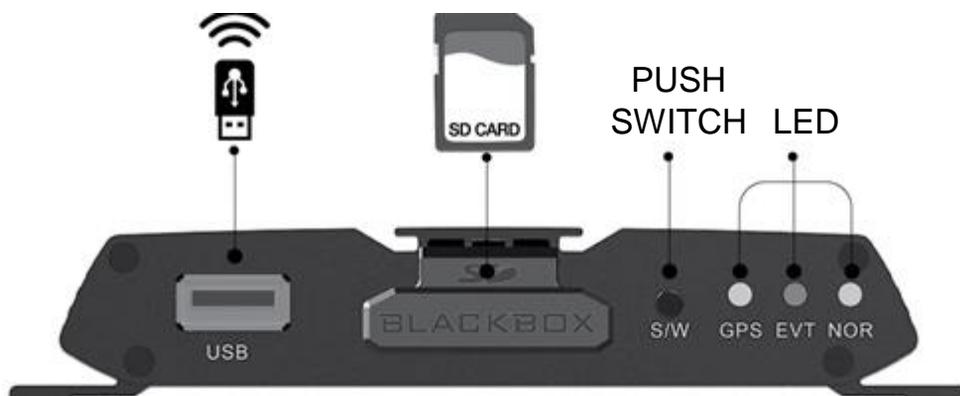


NOTE

The trigger signal will be linked only to analog cameras.

4. INSTALLATION GUIDE

Connections - MODEL: 2CH-DVR



4. INSTALLATION GUIDE

Power cable wiring



NAMES	FUNCTIONS
Battery+	Connect regular or the ACC power
Battery-(Green)	Connect GND
ACC Signal(Purple)	It recognizes while
Trigger Out	Trigger Out
Emergency button	Not Used

Trigger Out wiring



NAMES	FUNCTIONS
Signal L	NOT USED
Signal R	NOT USED
Speed	NOT USED
RPM	NOT USED
Rear	USED
Brake	NOT USED
Empty	NOT USED
Disable	NOT USED
C-MIC	NOT USED



NOTE

HD camera is not working the trigger signal

4. INSTALLATION GUIDE

Parking mode

Parking monitoring mode is a feature that can be recorded continuously, even parking a vehicle powered by a battery.

To prevent battery discharge, contains low voltage disconnect switch

Low voltage blocking settings

- You can set the voltage cut off by a DIP switch on the back of the unit.

	12V Vehicle	24V Vehicle	3	4
	Disable protection	Disable protection	OFF	OFF
	11.8V power off	23.6V power off	OFF	ON
	12.0V power off	24.0V power off	ON	OFF
	12.2V power off	24.4V power off	ON	ON

NOTICES

1. Parking monitoring mode using the battery life will be shortened.
In addition, the voltage block for Discharge Normally, even if you can not take the start, depending on the battery aging. We parked monitoring mode Does not recommend the use and sincerely hope you sure you wish to use as a spare battery is recommended.
2. The installation and use parking monitoring mode, you will need the appropriate expertise, please contact the installation shop.
3. Based on the cut-off voltage of the unit is a voltage reference that is measured at the input terminal of the product, may be higher than the actual battery voltage.
4. If you do not use for long periods of time (3 days or more), please be sure to disconnect the power.
5. Recording time varies. Vehicle battery capacity, state of charge (mileage), aging degree, by the temperature
6. In winter, battery efficiency drops sharply. Hope you like using group by increasing the cut-off voltage settings.
7. We hope you connect the power to the fuse box in the vehicle for installation, it should not be connected directly to the battery.

4. INSTALLATION GUIDE

SD card operation

- ⊙ Please check the following before using an SD card.
 - Use only original Class 10 or more SD cards are guaranteed.
Can be a problem when using of Class 10 or less.
 - Insert the SD card is available, regardless of the power ON / OFF
The operation to insert and then reset the internal software at the same time.
 - SD card, be sure to press the switch next to removal.
After confirming that the LED is turned off, and remove the (up to 20 seconds).
When removing the power is on, can't save the recorded data

How to insert an SD card



Open the SD card cover



Insert as shown



I feel it takes till
Slide the card.



Insert to be in
close contact with the
SD card cover case

How to Remove the SD card



Pressing the S / W
switch for 3 seconds,
the buzzer sounds occur.
after switch Releasing
All three LED is lit.
After the file closing is
completed, all three LED off
occurs while
the buzzer sounds.



Open the SD card
cover comes out
after pressing.



Away from the SD card
completely Remove.



Away from the SD card
completely Remove.



CAUTION

- If the card is not fully inserted into the product may cause a malfunction.
- For the card connection terminal care not to get debris.
Data may be lost.
- Data loss due to user's carelessness is not responsible for any company.

5. OPERATION

PUSH switch operation



How to insert an SD card

- After close recording and make a condition of SD card separation
- When you press the switch for 3 seconds, you can hear buzzer sound. After then if you hand off, three LED are all off.

SD card amount : long key (3sec)

- If you press the switch, you can hear one buzzer sounds(there are sound in 3seconds) After then when you hand off, it starts off the LED lights.

SD card format : long key (6sec)

- If you press the switch, you can hear two buzzer sounds(there are sound in 3,6 seconds) After then when you hand off, it starts rebooting off the LED lights.
- During the re-start, the data format is automatically, after the boot is completed, normally start recording.



- The format progressing very quickly.
- You can feel like the format is not done, you should watch it very carefully.

Video on/off : long key (9sec)

- When you hear buzzer sound three times(3,6,9 seconds), do not do any motion. If you do not want to format or end recording, just press the switch for 9 seconds. It's kind of cancel motion.



- After closing the file does not record if you do not remove the SD card. Make sure about recording after remove SD card and put it again.
- We do not have any responsibility about data loss after SD card format.

5. OPERATION

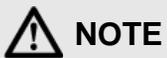
Recording time

N: 65% G: 25% R: 10% Standard

Unit: MIN

Model	Storage	HIGH			MIDDLE			LOW		
		N	G	R	N	G	R	N	G	R
2CH-DVR(D1+D1)	16G	310	120	45	680	260	100	1500	600	220

N: Normal Recording / G: Impact Recording / R: Rear camera Recording



NOTE

- The recording time table is data that is recorded in inner experiment and it could be differ with real recording time.
- Just refer the upper recording time table

5. OPERATION

Buzzer and LED

Condition	Buzzer	Normal REC (GREEN)	Event REC (RED)	GPS (Yellow)	Remark
Input Power	600ms BEEP / 1time	ON	ON	ON	
Firmware update	600ms BEEP	Flashing	Flashing	Flashing	Complete Update
No SD card	300ms BEEP/ 60sec	Flashing	Flashing	Flashing	
Start Recording	600ms BEEP/1time	Flashing			
Receiving GPS data				ON	
Event while driving	600ms BEEP/1time	Flashing	Flashing	-	-
Start parking mode	-	ON	-	-	-
Event while parking	600ms BEEP/1time	ON	Flashing	-	-
Press push Switch(3sec)	600ms BEEP/1time	ON	ON	ON	Of file closing
	600ms BEEP/1time	OFF	OFF	OFF	Complete file closing

! CAUTION

- ! During firmware updating, If you removable SD card or cut off power does not work. Please contact your dealer or manufacturer of this case.
- ! If there is no SD card or error occurs, have a fast beep for 1 minute. Insert a new SD card.
- ! GPS LED will light when receiving. If LED is off, Please check Connection port and Ensure that the ambient interference factors. If this does should not, consult your dealer or the manufacturer
- ! If you are installing the parking mode, the manufacturer shall not be held responsible. Please be sure to install a specialist.
- ! When the SD card detachable
 - Be sure to press the switch 3 seconds
 - After all the LED is off, pull the sd card If you remove the SD card from the state of the file closing
 - The loss of recorded data.
 - We can not responsible for data loss and SD card failure.

5. OPERATION

OSD Display Information

If you connect the external monitor, displayed as follows:



NO	OSD DISPLAY	REMARK
①	Displays the current time	2014/12/01 09:05:34
②	D:N–Normal recording in driving mode	D : G
	D:G–Shock recording in driving mode	
	P:R–Rear recording in parking mode	
②	P:G–Shock recording in parking mode	
	P:N– recording in parking mode	
③	Displays the voltage applied	13.75V
④	Displays the firmware version	0-3-3
⑤	Displays the current GPS Speed	0KM/H

5. OPERATION

Split Display

If an external monitor is connected to each model, the screen will display as follows:

MODEL: 2CH-DVR



WARNING

- The image of the split screen is not a LIVE video.
- There are approximately 0.3 to 0.4 seconds time delay.

5. OPERATION

Display by trigger signal

- If you connect a trigger signal for each channel, the monitor can display a LIVE video as follows
- The trigger signal will be applied only to an analog camera

Model	Connection			CAM1	CAM2	CAM3	CAM4
2CH-DVR	Camera				O		
	Trigger signal				rear		

Ex) 2CH-DVR



Rear signal
→
Live output



6. PC Viewer Manager

Recommended PC specifications

- CPU : More than Pentium 4 3.0Ghz, Memory : More than 2GB
- Support OS : WINDOWS XP / VISTA / 7 / 8
(Don't support Linux and MAC OS)
- HDD: 1GB or more of free space, VIDEO: Geforce FX 5 series or higher recommended

What PC VIEWER MANAGER?

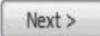
The dedicated software for recorded video confirmation / travel path verification / GPS info / shock graph

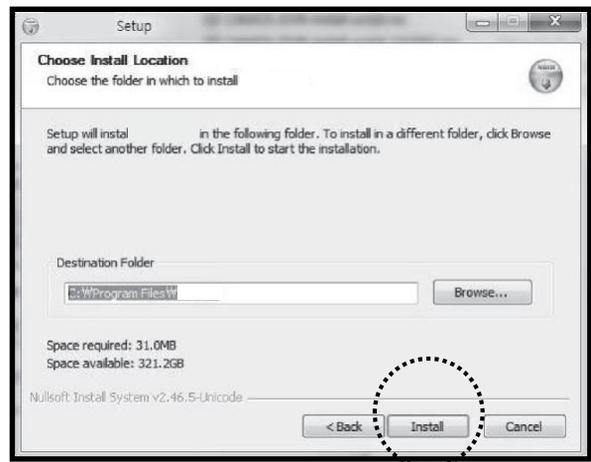
PC VIEWER INSTALLATION

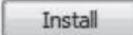
PC VIEWER MANAGER needs separate installation. Put the enclosed CD in your PC, double-click the setup.exe file and go on the following installation.

1. Double-click the setup.exe file
 - If this is not the output or error messages are executed, one will pop up a window by pressing the right mouse button on the executable file.
Click on the "Run as administrator" Here you will solve the problem.

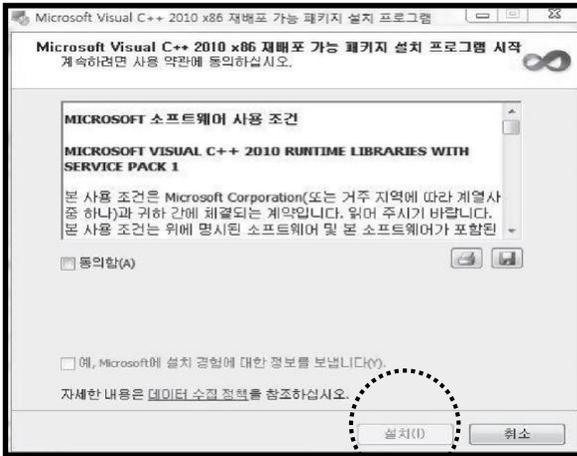


2. When run, the following screen will be displayed  Select

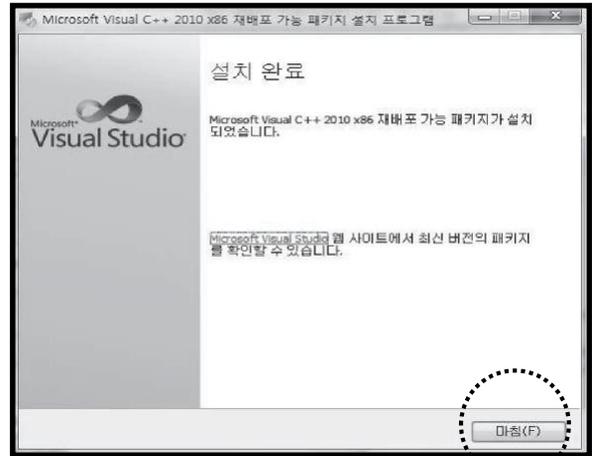


3. Sets the path where you want to install.
The default path "c:\Program File\2CH-DVR"
 Select

6. PC Viewer Manager



4. In the following window will pop up to install it. "agree(A)" select
(The required packages at runtime viewer, please just installed.)



5. When the installation is complete, the following window appears. Select. Install the viewer.



6. When the installation is complete, the following window will appear. Select

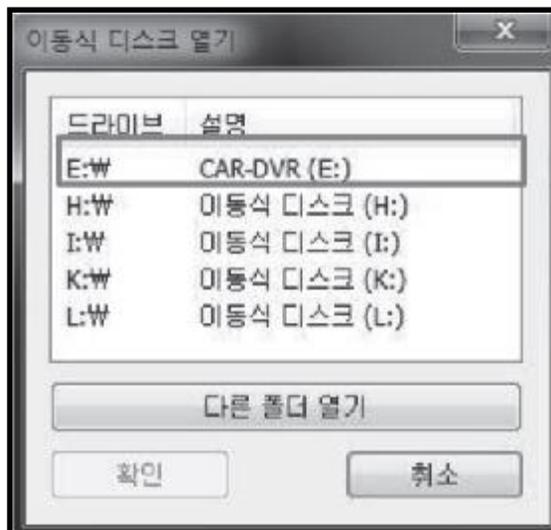
6. PC Viewer Manager

PC VIEWER MANAGER

2CH-DVR by double-clicking the  icon on your desktop, if you run the program, the following screen Appears and the PC VIEWER MANAGER is running.



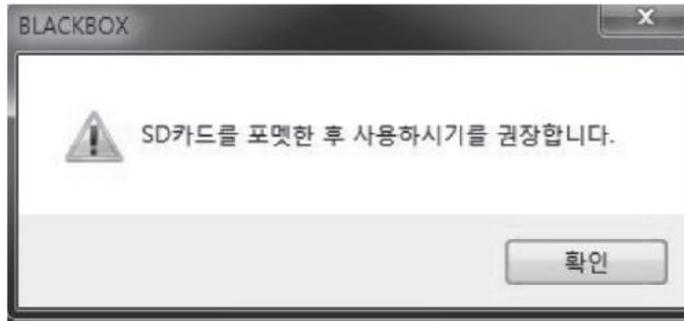
- Clicking on the icon  will appear a window where you can select the SD card.
- The following window will be opened. Then press OK after selecting a connected SD card Will bring up the images stored on the SD card.



6. PC Viewer Manager

Interface Introduction

When you import an image if the following message is output, we recommend the SD card format.



* Images stored on the SD card, a week later than the current PC time
After a message is displayed



WARNING

- Please format the SD card on a regular basis.
- When an SD card error, it does not work properly.

If you import an image of a normal SD card, a list appears in the left windows and, when you double-click the video is playing.



Do not have a recording list, please check the SD card.

(If you have an external hard or USB connection on your PC may have been a bad choice.)

6. PC Viewer Manager

Interface Introduction



- ① Displays the saved drivers name and car number
- ② Will be displayed in 2 split.(2CH-DVR model is displayed on a single screen.)
- ③ 3-axis G-SENSOR (shock) is displayed
- ④ Volume Control
- ⑤ Previous file/Prior frames/Playback (pause)/After frame/Next file/" playback speed
- ⑥ The list of recorded files.
- ⑦ Displays the list of recorded files in separate windows.
- ⑧ Displays GPS information on a google map
- ⑨ Displays GPS information in separate windows
- ⑩ Displays the recording time, speed, GPS location information.
- ⑪ Print the document that is currently playing screen.
- ⑫ Back up the images on the SD card to your PC.
- ⑬ Change the settings of the SD card
- ⑭ Displays the viewer and firmware information (version).

6. PC Viewer Manager

Interface Introduction

File List



- ① Brings the SD card with the recorded images
- ② Year-Month-Day
- ③ Hour
- ④ Double-clicking it plays. (Start time)
- ⑤ Display all images recorded on the SD card.
- ⑥ Display event images recorded on the SD card.
- ⑦ Writes the log on system operation.
- ⑧ Displays a list of files in separate windows.

6. PC Viewer Manager

Interface Information

Description of the folders created on the SD card

 gsensor	2019-01-07 오전...	파일 폴더	
 normal	2019-01-07 오전...	파일 폴더	
 rear	2019-01-07 오전...	파일 폴더	
 config.dat	2019-01-07 오전...	DAT - MPEG 동영상...	4KB
 log.txt	2019-01-07 오전...	텍스트 문서	4KB

gsensor → The impact recording directory

normal → The continuous recording directory

rear → The rear recording directory

config.dat → The config recording directory

log.txt → The log recording directory

! CAUTION

- Do not change or delete the absolute content.
- Will be malfunction or not the record

Description of the folders created on the SD card

이름	수정된 날짜	유형	크기
 20150105_03	2014-01-14 오전 7:30	파일 폴더	
 20150105_04	2015-01-05 오전 5:01	파일 폴더	
 20150105_05	2015-01-05 오전 6:01	파일 폴더	
 20150105_06	2015-01-05 오전 7:01	파일 폴더	
 20150105_07	2015-01-05 오전 8:01	파일 폴더	
 20150105_08	2015-01-05 오전 9:01	파일 폴더	
 20150105_09	2015-01-05 오전 10:01	파일 폴더	
 20150105_10	2015-01-05 오전 10:18	파일 폴더	
 list.txt	2014-01-14 오전 7:32	텍스트 문서	19KB

- After creating the time to manage the recorded file folder.

20140113_20 (20:00 _ January 13, 2014.)

- List.txt → Recording list.

! CAUTION

- Do not change or delete the absolute content.
- Will be malfunction or not the record

6. PC Viewer Manager

Interface Introduction

Description of the recorded image to the SD card

이름	수정된 날짜 ^A	유형	크기
 ch1_1314_20150105_070114_688_299907_N.avi	2015-01-05 오전 7:06	AVI 파일	45,349KB
 ch2_1314_20150105_070114_845_299166_N.avi	2015-01-05 오전 7:06	AVI 파일	120,496KB

Ch1(Channel number)_1314(File number)_20150105(Year / month / day)_070114(hour, minute second)_688_299907_N(Recording format).avi
Never should not be arbitrarily change the file name. Not played by the viewer.

Playback icon



- ① Volume Control: Adjust the volume that is being played.
- ② Previous file : Play the previous fire
- ③ Previous frame : Play the previous frame
- ④ Playback / Phuse
- ⑤ Next frame: Play the next frame
- ⑥ Next file: Play the next file
- ⑦ 1/4 PB : 1/4 play slow
- ⑧ 1/2 PB : 1/2 play slow
- ⑨ 1 PB : Normal Playback
- ⑩ X2 PB : 2 play fast
- ⑪ X4 PB : 4 play fast.

6. PC Viewer Manager

Interface Introduction

Change screen mode



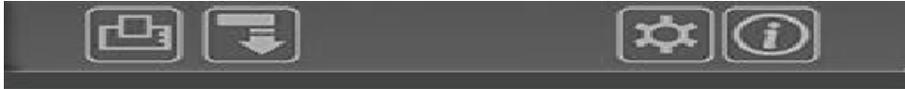
If you double click the mouse cursor to the desired channel.
Screen mode is switched to a screen.



6. PC Viewer Manager

Interface Introduction

Image Capture and Print



During playback, you can click the  icon to capture the desired image. Clicking on the image will be output.  if you click the icon, will be printed



If you enter the information in the memo field is printed

6. PC Viewer Manager

Interface Introduction

G-SENSOR (shock recording)



Displays the G-SENSOR sensitivity of recording time.
A lot of different graph as shown above, event occurs in places.
X-axis: sensitivity front and rear
Y-axis: left sensitivity
Z-axis: vertical sensitivity

GPS (Google map)



- ① The icon that displays the coordinates of your current location.
- ② The GPS window appear larger in a separate window

6. PC Viewer Manager

Software Settings



- ① Speed limit, Set speed units
- ② Video Quality: Determines the recording quality. High is the best quality
- ③ Video frame: Determines the recording FPS
- ④ G sensor sensitivity: the higher the value, the more sensitive the G-sensor (shock).
- ⑤ AUDIO: Determines the audio recording. When the check recording
- ⑥ Buzzer: Determine the on / off of the buzzer sound.
- ⑦ Video Output: Determine whether to output the video
- ⑧ Parking Mode:
 - 1hr === Power off after 1 hour in parking mode.
 - 6hr ==== Power off after 6 hour in parking mode.
 - 12hr==== Power off after 12 hour in parking mode.
- ⑨ Time set : The user will be set to the desired time.
 - “Time application” Check the time will be applied.
- ⑩ Sync => Displays and get the current PC time.
- ⑪ zone => Sets the state of the zone being used. (In the case of Korea UTC + 09:00)
- ⑫ Summer Time => Daylight saving time set.
- ⑬ Enter the model number
- ⑭ Enter the password
- ⑮ Enter the company name
- ⑯ Enter the driver ID
- ⑰ Enter the license plate number.
- ⑱ SD card format :The dedicated viewer, this Format is only 32GB SD card
If a larger capacity SD card must be a Format from the PC.
- ⑲ DEFAULT : Sets the settings to the default settings.
- ⑳ SAVE : Saves the changed value to the config.dat file.

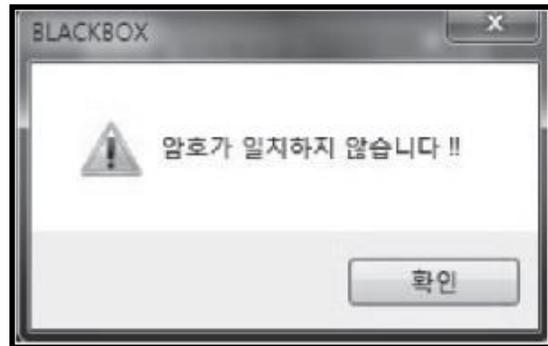
6. PC Viewer Manager

User password

If you set a user password, enter the password must match the password in the viewer window OPEN when you can play the recorded video.



Password input error windows



Password Settings windows

Factory settings

category	Setting range	Factory Defaults
Speed unit	km/h, MPH	km/h
Video Quality	HIGH, MIDDLE, LOW	HIGH
Video frame	Low, Middle, High	High
G Sensor	1 ~ 5	2
AUDIO	ON / OFF	ON
BUZZER	ON / OFF	OFF
Video output	ON / OFF	ON
Parking Mode	1hr / 6hr /12hr	6hr
Time set	Displays the time of the PC	
Zone	UTC range	UTC +09: 00, Seoul, Tokyo
Model	Displays the currently used models (2CH-DVR)	
User password	16 characters	none
Company name	16 characters	CAR-DVR
Driver ID	16 characters	USER
Vehicle number	16 characters	0000

! CAUTION

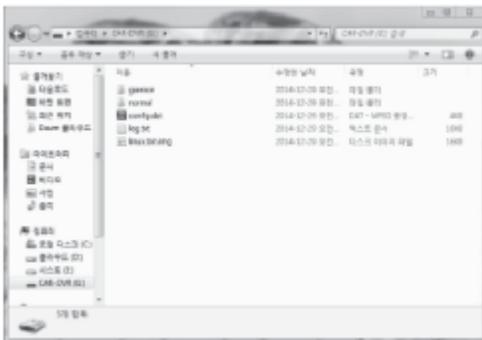
- Please note the ACC setting of the parking mode. If the settings are not connected to the ACC signal in the vehicle after the set can cause damage to the equipment while it continues to operate in parking mode.
- Please set the settings after the ACC wire connection.

7. Firmware Upgrade

1. Download the latest version of the firmware on the PC
2. Removing the SD card from the product to connect to a PC using the supplied SD card reader



3. Copy the downloaded the latest firmware file on the SD card linked highest root directory.
* Should not be copied to the folder directory.



4. When the copy is complete, remove the SD card from the PC into the product.
5. After a while, if the product turns off automatically after about 10 seconds BEEP sound and the LED will blink and start the upgrade.
6. It takes about 1 minute to upgrade
7. When the boot is complete to start recording



WARNING

- Never Do not turn OFF the power or remove the SD card during the update. Black Box does not work.
- In the case of a new SD card, be sure to connect the product and format (automatically format) should be used.
- If the upgrade goes wrong, the product do not work. Important files on the SD card, please make a backup before upgrading.

AS guidance and regulations

Consumer compensation regulations

Item	Product repair type	Warranty	
		Within the warranty period	After the warranty period
If a malfunction occurs in normal use	Within 10 days after purchase, in case of defective	Replacement or refund	None
	Within 1 month after purchase, in case of defective	Warranty or Replacement	None
If you repeat repair	Different defective / Four times with the same defective	Warranty	Onerous repair
	Different defective / Five times with the same defective(180days)	Exchange and Refund	Onerous repair
If you can not be repaired	Producer's loss, repair invisible by parts shortages	Replacement or refund	Cum depreciation
If not a repair	Simple adjustments without disassembling the products	Onerous repair	Onerous repair
If negligence of the consumer	In the event of failure due to the consumer's negligence and self-repair	Onerous repair	Onerous repair
	Disassemble the product, modifications to malfunctioning		
	Producer's loss, repair invisible by parts shortages		
	Producer's loss, repair invisible by parts shortages		
In other cases	Natural calamity (lightning, water, waterfront, etc.) in the event of failure	Onerous repair	Onerous repair

- ⊙ The warranty period for this product is 12 months from the date of purchase
- ⊙ Accessories is a guarantee for 6 months.
- ⊙ Memory card warranty period is 6 months from date of purchase.
- ⊙ The costs incurred during the installation or detachment of the product and can not be held responsible.
- ⊙ Body within 180 days after the purchase
Accessories and memory cards within 90 days
Returns and refunds will not be in any case.