



CP4S-NA

CELLULAR ENABLED VEHICLE RECORDER

USER GUIDE

v1.2.1



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

If you need to schedule a professional installation service in the USA for your SmartWitness device(s), please visit <https://smartwitness.com/scheduleinstall> and submit the online form.

INDEX

SAFETY ADVICE	3
GPS RECEPTION	4
CONTENTS	5
INTRODUCTION	6
FUNCTIONS	8
LEDS &BUZZER SPECIFICATION	11
INSTALLATION	12
OPERATION – ON SCREEN	13
CONFIGURATION TOOL USER GUIDE	14
SOFTWARE INSTALLATION	15
INITIALIZE SD CARD	16
DEVICE SETTINGS	17
SOFTWARE USER GUIDE	19
PC VIEWER SOFTWARE SETTINGS	21
TECHNCIAL SPECIFICATIONS	34
APPENDIX RECORDING TIME TABLE	35
APPENDIX FIRMWARE UPGRADE	36
TECHNICAL SUPPORT AND WARRANTY	37

SAFETY ADVICE



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



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

Please make sure you follow the safety advice/instructions given in the user guide.

Caution

**RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.**

Battery for RTC(Real Time Clock) inside

Caution

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

Caution

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

WARNING:

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

GPS RECEPTION

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

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

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

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

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

GPS reception may be impaired under the following circumstances

- 1) If there is an object at the end of the GPS antenna
- 2) If your vehicle has metallic elements on the windshields
- 3) If equipment generating electromagnetic waves that interfere with the GPS signal is installed in the vehicle e.g.: Other GPS devices such as a certain type of wireless activated alarms, MP3 and CD players and camera alarms using GPS.
- 4) If you are using a receiver connected by cable, electric interference can be avoided by simply changing the location of the receiver (antenna).
- 5) On heavily overcast or cloudy days, if the vehicle is in a covered location such as under a bridge or raised roadway, in a tunnel, an underground roadway or parking area, inside a building or surrounded by high-rise buildings.
- 6) If GPS signal reception is poor, it may take longer to locate your current position when the vehicle is moving than when it is stationary.

CONTENTS



**CP4S-NA
Vehicle Recorder**



**Mounting Bracket
with 4x self-tapping screws**



**Remote Controller
(with double sided tape)**



Power Cable



GPS Antenna module



Audio/Video out cable



**Wire Splice clip, Velcro Sticker,
Torx Screw (x2), and Torx screwdriver**



Camera input cable



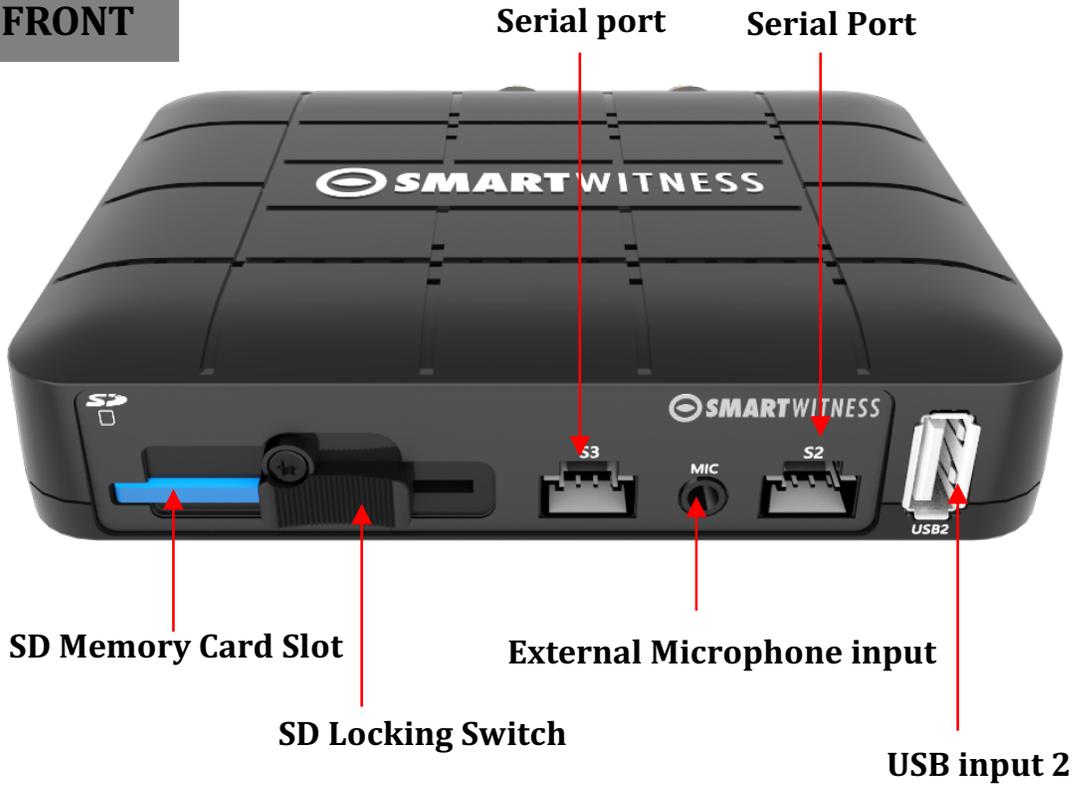
Audio Microphone



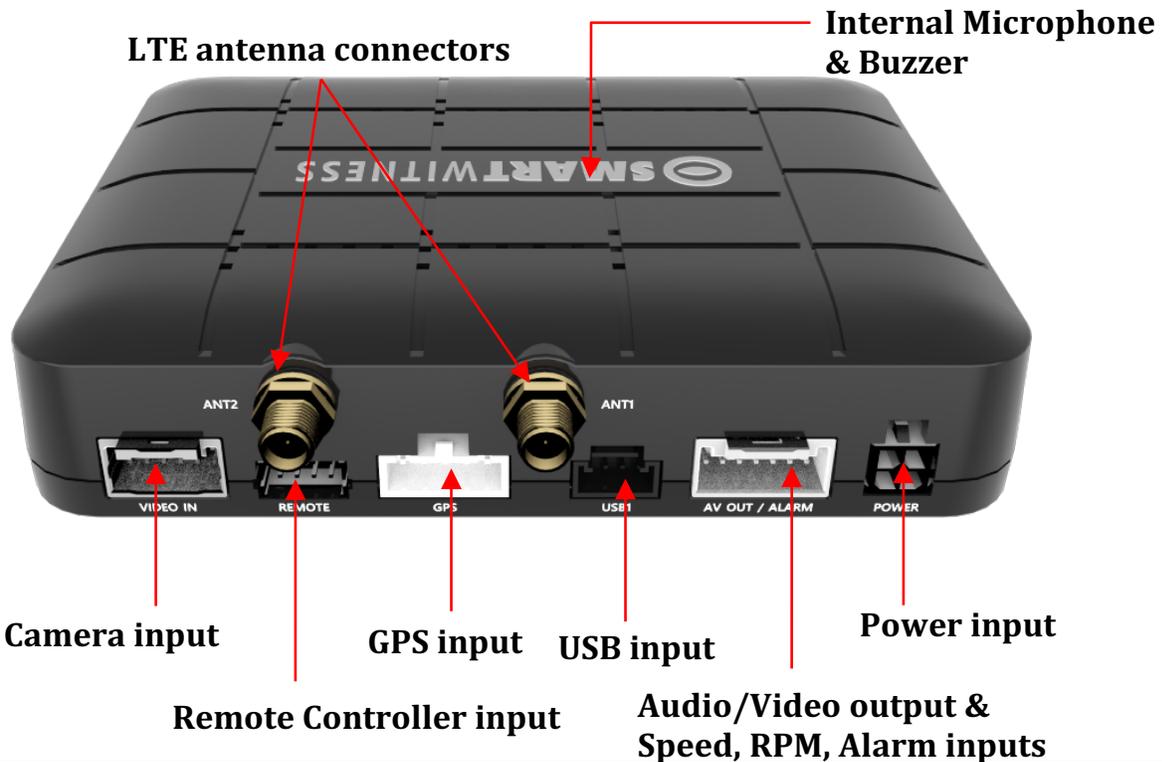
LTE Antennas

INTRODUCTION

FRONT

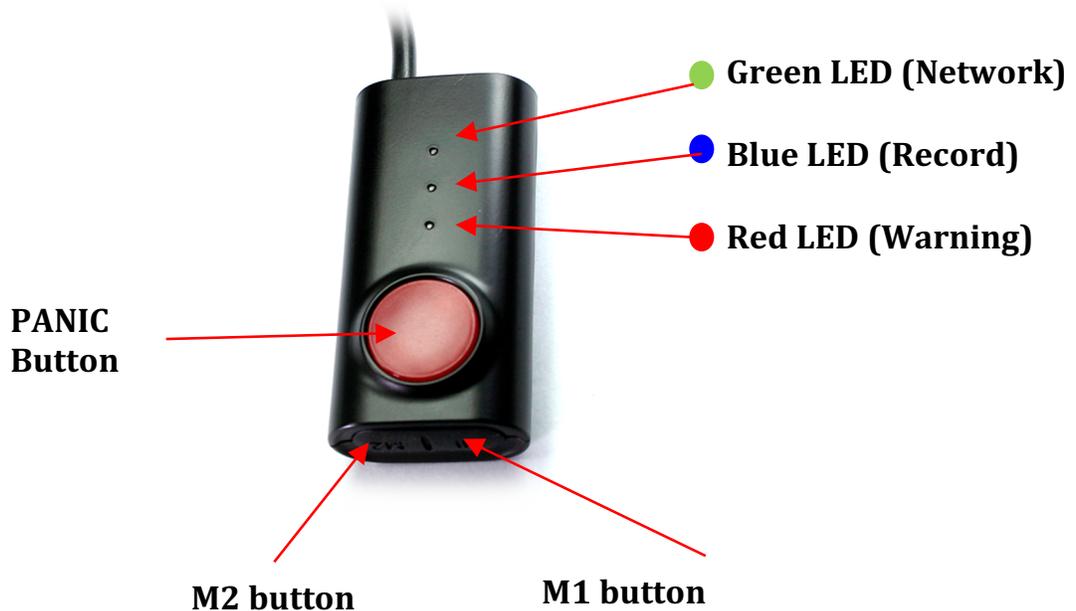


REAR



INTRODUCTION

Remote Controller



POWER CABLE

	Black (Ground/BAT -)
	Red (Power/BAT +)
	White (Power/IGN +)

Alarm in/out Cable

	White : Alarm In1, Voltage on/off (3~70V)
	Purple : Alarm In2, Voltage on/off (3~70V)
	Green : Alarm In3, Voltage on/off (3~70V)
	Orange : Alarm In4, NC/NO (open/close)
	Blue : Speed (TACHO)
	Gray : RPM (TACHO)
	Brown : Alarm Out, Low(0V) to High (5V)
	Black : Ground for Alarm In4 (NC/NO circuit)

FUNCTIONS

Automatic Booting

Make sure the main unit and all component are properly connected. Once the CP4S has been wired to your car power source the CP4S will be boot up, this will take around 30 seconds for the unit to be ready to record.

NOTE: The unit will not start recording immediately after power on. It takes around 30 seconds for the built-in power backup system to charge. Thereafter, the SD card will be ready to record.

Continuous Record (When Record mode set as “Continuous”)

This is the default mode for recording. In this setting the unit will begin recording after boot up and record the entire time the unit is powered.

The resolution and frame rates can be set as per your requirements. You can change the configuration of the recording using the CP4S configuration Tool. To do this, please see the ‘Settings’ section on page 21.

Event Record (When Record mode set as “Event”)

The unit will record when triggered by an impact(G-Sensor) or a push of the ‘PANIC’ button or Over speed or Alarm In1~3. Each event file contains up to 20 seconds prior & up to 20 seconds post event.

And the event file can be extended by 2nd trigger during event record.

When events are triggered continuously, for every event, 20 seconds post-recording from the time of the event will be added to the event data file with a maximum recording time of 3 minutes. When this 3 minutes is reached, the file will be split and a new file will be created but the data will be continuous.

Dual Record (Continuous & Event Record)

The continuous record fps is 1fps and the file will be stored on the “Normal” folder.

Event record will work according to the Fps setting for example 30frames per second recording and the file will be stored on the “Event” folder

Do not Record

The DRV (Drive Data) file will be recorded during driving at “Do Not Record” mode. And the unit can send limited API like live track to Server.

NOTE: The DRV file consists of GPS and G-sensor data and it helps to find specific data or driving behaviors. The DRV file overwrites the oldest data. The DVR files will be made every 10 minutes.

FUNCTIONS

G-Sensor Calibration

G-Sensor Calibration is needed after installing the CP4S.

1. Set G-Sensor Axis using the configuration tool.
2. "selfadj.ini" should be in the config folder of the SD card.
3. Install the unit and park the vehicle on a flat surface .
4. Turn on the unit and wait until it start record.
5. Press and hold the "M1" button more than 2 seconds.
6. You will hear "beep" when you press "M1" button and then you will hear another "beep" after 2seconds. Then release "M1" button.
7. Then calibration will be done within 2 seconds.

Built-in power backup (Super Capacitor)

When power to the unit is interrupted, CP4S creates the last file using the internal Super Capacitor.

Time and Date

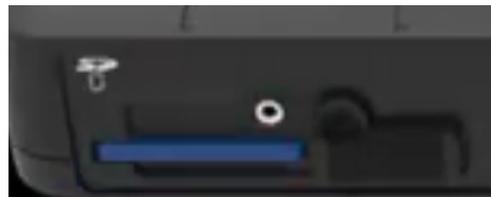
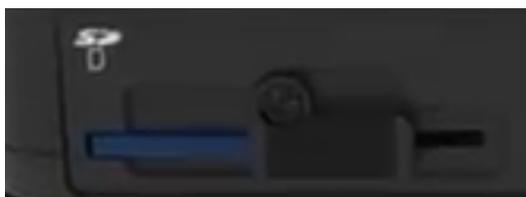
Set your time zone using the configuration tool then CP4S get's time from the GPS satellite's.

SD Memory Card Format

Please format [initialize] the SD card using the "CP4S Configuration Tool" software. A blank SD card will also automatically format but will take a few minutes to complete.

Safe Removal of SD Card

Remove the torx screw and then slide the SD door open, the blue LED on the remote will turn off, then you can safely eject the SD card by pressing in to eject it. After reinserting the SD card, close the door and attach the torx screw.



FUNCTIONS

Parking Mode Recording

With parking mode activated and on normal recording mode, the CP4S will change to parking mode when the vehicle is not moving for more than 5 minutes, recording at 1 FPS.

Live Screening

With an external monitor attached, the CP4S offers the option to screen video live.

Delayed Power Shutdown

Control the duration of time using the configuration tool. CP4S stays powered and recording/networking after shutdown.

Precautions for SD cards

To optimize use and prolong life of your SD cards please follow the below instructions.

1. Use only compatibly tested SD cards.
2. Only use dry and clean SD cards.
3. Format SD cards at least once every month or when the SD card seems corrupted. This will wipe all data, images, and file names on the card reducing recording errors.
4. Insert or remove SD cards only when the device is completely powered off. Wait until the blue LED is completed off before removing SD card.
5. SD cards used for continuously recording equipment such as a drive recorder, typically last only 6~12 months. Exchange SD cards periodically

LEDS & BUZZER SPECIFICATION

Status/Step		LED			Buzzer	Voice	
		Warning	Record	Network			
		(Red)	(Blue)	(Green)			
							
Start-up	Bootting step1 (0~20)		On	Off	Off		
	Bootting step2 (20~30)		On	On and Off	Off		
	Bootting Finished (30, 1second)		On	On	On	[Beep] (1000Hz, 200msec)	「Beep」(1time)
	Power off	During Power off		Off	Simultaneous Flashing(Blink rate: fast)		
		Power off finished		Off	Off	Off	[Beep] [Beep] (500Hz, 150msec)
Record	Continuous Record	Recording		On			
	Event record	Stand by		On			
		Recording		Flashing(Blink rate: fast)			
	Dual record	Continuous recording		On			
		Event recording		Flashing(Blink rate: fast)			
No record	Not record		Off				
Network	3G Network Device Ready				On		
	Communication				On		
Function	SD Initialize (Format)		Off	On and Off	Off and On	(Beep, 1time) continuously	
	G-Sensor Calibration					「Beep→(after 2 seconds) Beep、 Beep」	
	FW Upgrade			On and On and Off and Off	Off and Off and On and On		
	Button Press					[Beep] (2000Hz, 200msec)	「Beep」
Warning	System Warning	SD Card Full	Flashing(Blink rate: fast)	Off		「Beep x 4」(3times)	
		Video loss Video STD error	On				
Error	Record Error	SD error, No SD, Write fail	Flashing(Blink rate: Slow)	Off		「Beep x4」(3times)	
	Network Error	3G Network Device error SIM error			Off		
		Data Network connection error			Flashing(Blink rate: Slow)		
		DMS communication error			Flashing(Blink rate: Slow)		
Event Trigger	G-Sensor, Panic Button, Alarm-In					「dingdong x2」(1time)	
	Over Speed					「beep, beep x2」(1time)	

INSTALLATION

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

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



Operation – On Screen Display

The following displays can only be seen when a monitor is connected.

The default display is 2*2 with all cameras shown, to change, press [M2] button to select which camera to view. Each press will change the camera on display with the last option being all camera views.



4Cameras(2x2) => Camera1 => Camera2 => Camera3 => Camera4



CONFIGURATION TOOL USER GUIDE

Configuration Tool CP4S Software



PC SYSTEM REQUIREMENT

Recommended PC specifications for Configuration Tool Software

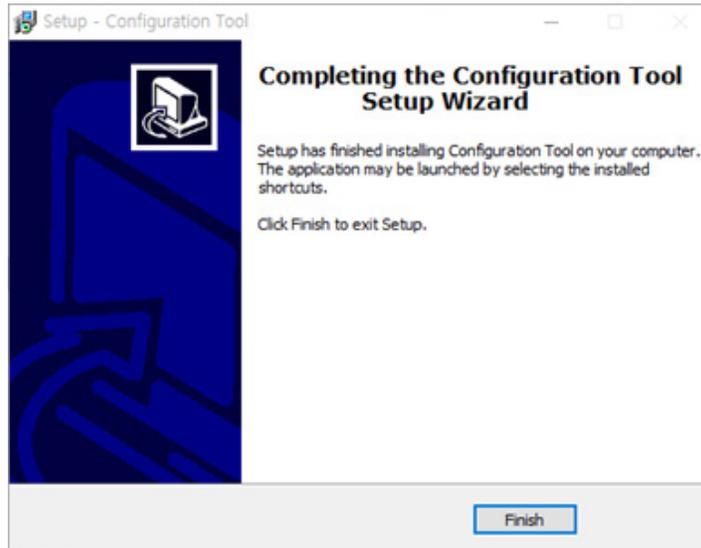
OS	Windows Vista. Windows 7, Windows 8/8.1
CPU	Core 2 Duo 2.5GHz or Higher
RAM	2GB or Higher
Interface	SD Memory Card Reader
HDD Free space	Install : 55MB or Higher Backup : 4GB or Higher
Display	1024 x 768 pixel/True Color or higher

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

SOFTWARE INSTALLATION

Please ask the Configuration Tool CP4S Software to your distributor.

1. Double click [setup.exe]
2. Select the language
3. Select destination location
4. Select Start Menu Folder then follow the dialog box prompts.



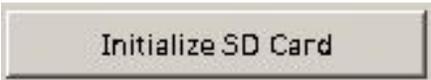
5. The "Configuration Tool CP4S" icon will be displayed on your desktop.



NOTE: To Un-install the Configuration Tool CP4S Software

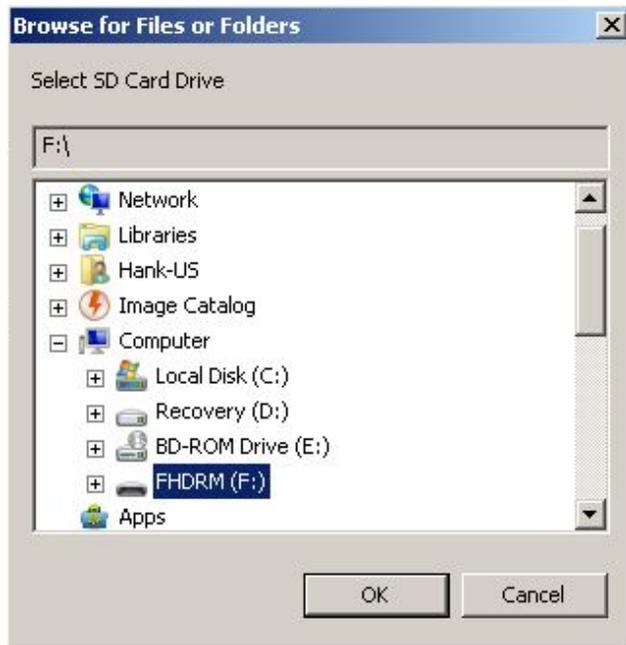
Make sure the program is not running and open the 'Control Panel'
Select 'Remove Program' and remove the Configuration Tool CP4S Software.

INITIALIZE SD CARD

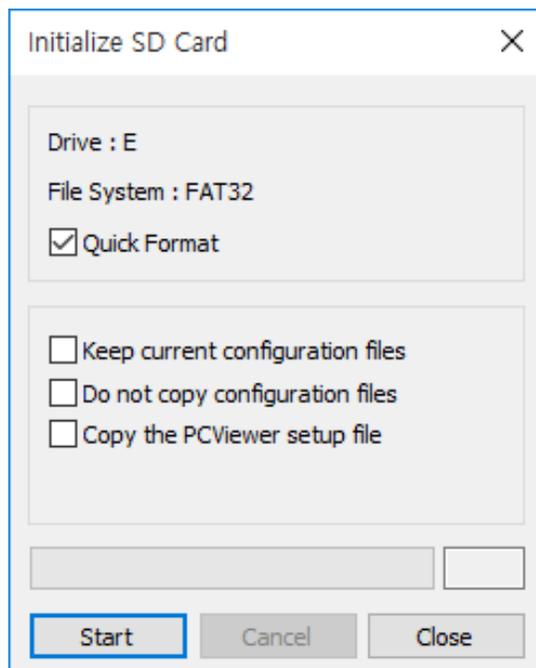


Click!

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



On the following screen, check the 'Quick Format' button and uncheck the 'Keep current configuration files' and Click 'Start' to begin initialization.

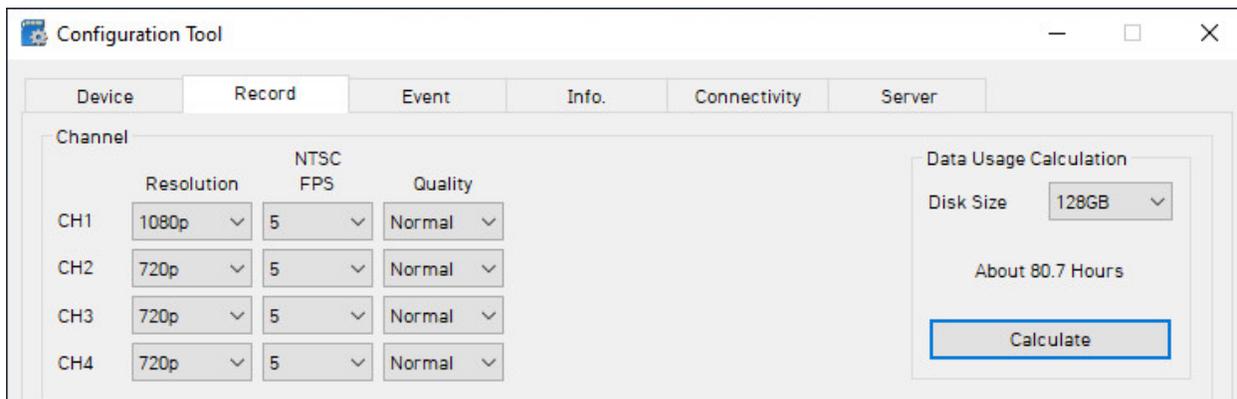


DEVICE SETTING CONFIGURATION



For device configuration guide, please download here
<https://smartwitness.com/pdf/CP4S-Configuration-Tool-Guide.pdf>

CP4S VIDEO RESOLUTION & FPS



Resolution

NTSC: D1 (720x480), HD (1280x720), FHD (1920x1080).

PAL: D1 (720x576), HD (1280x720), FHD (1920x1080).

FPS (Frame Rate)

Adjust the frame rate from NTSC: 30fps, 15fps, 10fps, 5~1fps

PAL: 25fps, 12fps, 10fps, 5~1fps

Quality (Bitrate)

Adjust the picture quality from Standard (lossy), High, and Super (lossless)

Recording Frame Rate (FPS) Rules

Connecting one 1080p camera and 3x 720p cameras

	Resolution	FPS
CH1	1080p	15
CH2	720p	10
CH3	720p	10
CH4	720p	10

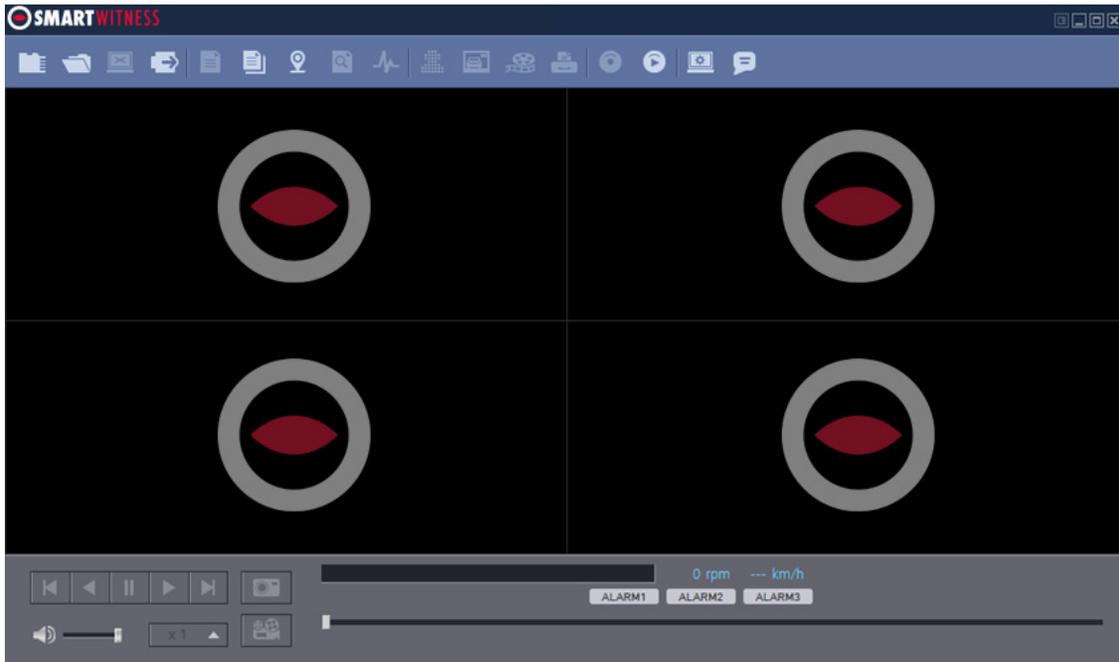
Connecting 4x 720p cameras

	Resolution	FPS
CH1	720p	15
CH2	720p	15
CH3	720p	15
CH4	720p	15

If using D1 camera, it must be connected to Ch4

	Resolution	FPS
CH1	720p	15
CH2	720p	15
CH3	720p	15
CH4	D1	30

PC Viewer Software



PC SYSTEM REQUIREMENT

Recommended PC specifications for PC Viewer Software

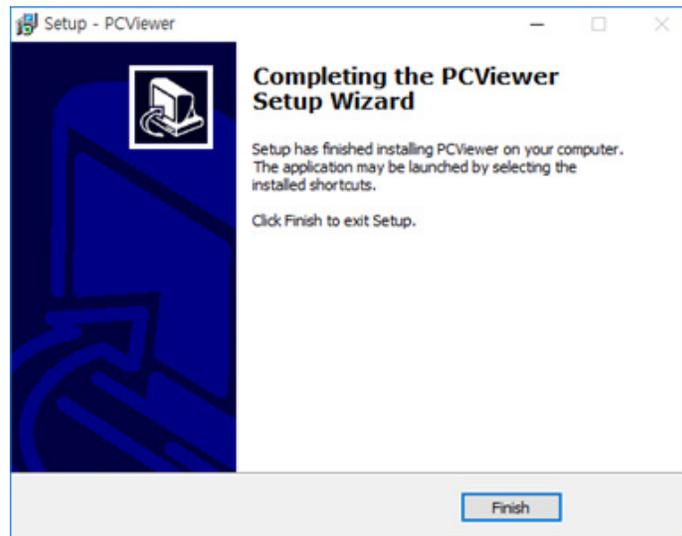
OS	Windows Vista. Windows 7, Windows 8/8.1
CPU	Core 2 Duo 2.5GHz or Higher
RAM	2GB or Higher
Interface	SD Memory Card Reader
HDD Free space	Install : 55MB or Higher Backup : 4GB or Higher
Display	1024 x 768 pixel/True Color or higher

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

SOFTWARE INSTALLATION

The PC Viewer Software is available on our website support.smartwitness.com

1. Connect the SD card into your PC (if your computer does not have and SD card slot use the USB SD card reader) and open the “My Computer”
2. Right-click the “FHDRM” drive and select [Open]
3. Double click [setup.exe] in the [pcsw] folder.
4. Select the language and then follow the dialog box prompts.



5. The “PC Viewer CP4S” icon will be displayed on your desktop.



NOTE: To Un-install the PC Viewer Software

Make sure the program is not running and open the ‘Control Panel’
Select ‘Remove Program’ and remove the PC Viewer Software.

PC VIEWER SOFTWARE SETTINGS



Software viewer settings

This setting is for the PC Viewer Software itself. To set the Recorder, refer to page 17.

Settings

Login Password

Password (1000~9999) Set Password

Viewer Settings

Language English

Speed Format km/h

Speed Type(Play Info Bar) GPS

Time Format 24HR

Date Format YYYY/MM/DD

Deinterlace Auto

Display Time From Camera

Save Layout Last Layout

Drive Data Settings

Max Speed 100

Max G-Sensor +-1G

Max RPM 4000

OK Cancel

Click the 'Password' button. Password for the PC Viewer Software can be set with any number between 1000-9999.

The 'speed' & 'date' formats will be set automatically according to the PC Windows setting. However it can be changed with this software setting menu.

Display time: Select time to see. Recorded time by CP4S or your PC local time

Last Layout: The program will launch with the same layout as it was when it was closed.

Default Layout: The program will launch with the Default Layout

Drive Data Settings

The graph scales for the Drive Data Window will be modified according to the Settings.

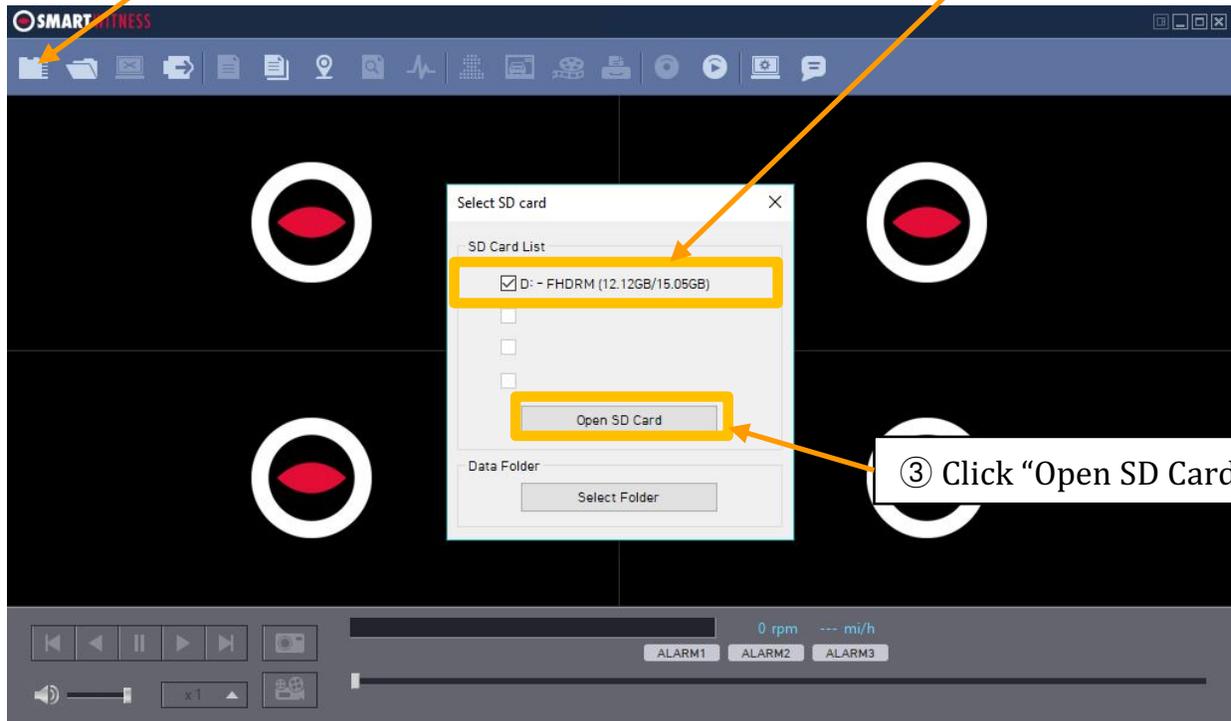
OPEN THE SD CARD

Insert the SD card into your PC



① Click "Select SD Card" icon

② Select the SD card drive and click "OK"



③ Click "Open SD Card"

The playback file list and "Continuous" and "Event" tap is displayed on the right side of the screen.

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

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



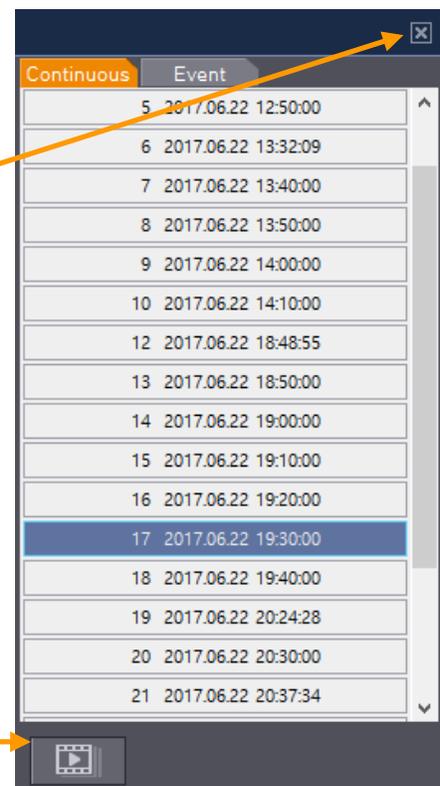
"Select SD Card" icon

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



"Close files" icon

Continuous Play next file.

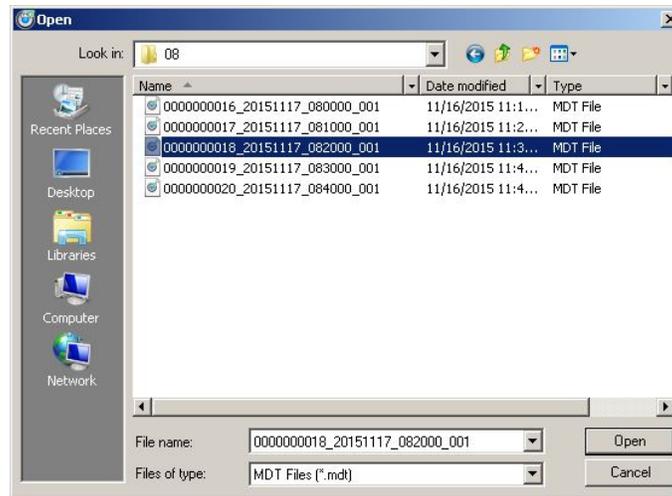


OPEN FILES

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



“Open files” icon



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



“Eject SD Card” icon

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

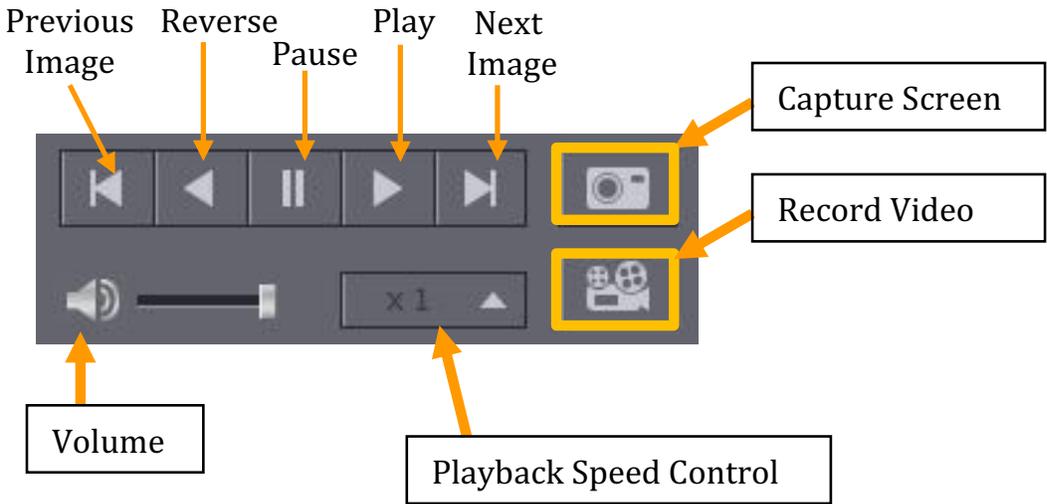
Or please use  “Safely Remove Hardware and Eject Media” button in your PC.

PLAYBACK

The screenshot shows the SMART WITNESS playback interface with four camera views. Callouts point to specific data elements:

- Camera title - Resolution:** Points to the text "CAM1 - 720p" in the top-left camera view.
- Record Mode:** Points to the text "NOR" in the top-right camera view.
- G-Sensor value Time:** Points to the G-sensor data (X: 0.030, Y: 0.162, Z: 0.030) and timestamp (2017.06.22 19:31:14.002) in the bottom-left camera view.
- Vehicle No & Driver ID:** Points to the text "Vehicle_HD15" and "Driver_HD15x" in the playback control bar.
- GPS Speed Display Frame / Total frames number:** Points to the text "0 km/h" and "2219 / 17983" in the bottom-right camera view.

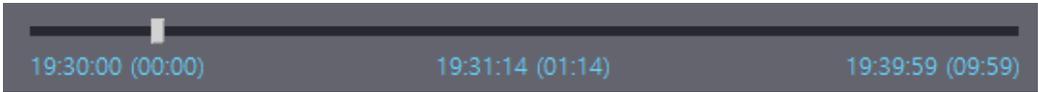
PLAYBACK



Alarm Indicator



Playback control bar

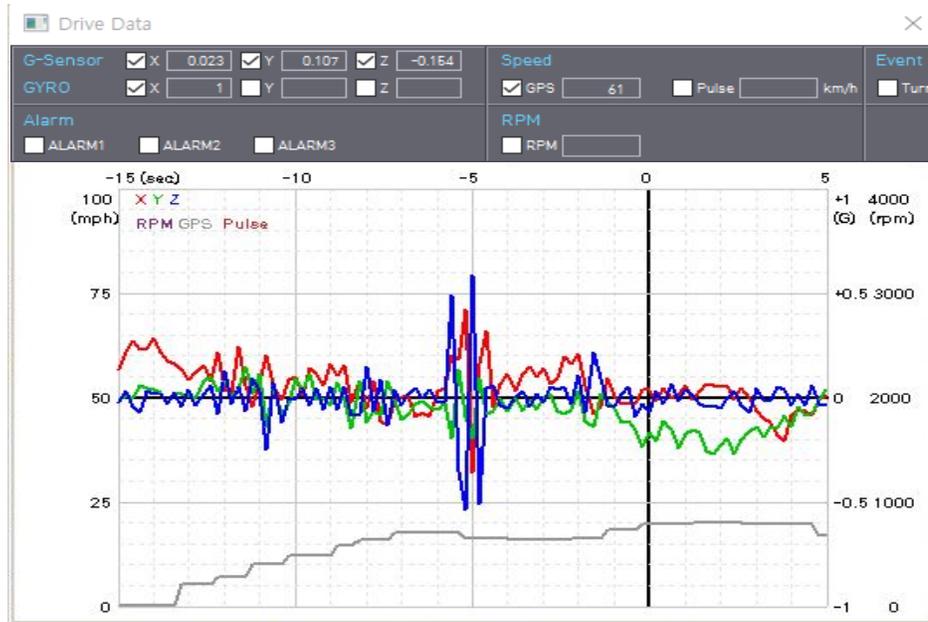


DRIVE DATA



“Drive Data” icon

The default setting only displays the G-sensor graphs but other information may be added by checking the boxes in the upper part of the screen.



G-Sensor: (X axis: red, Y axis: green, Z axis: blue, based on the positioning of the main unit) is shown with the data reference point zero-point calibrated and positive shocks as (+) and negative shocks as (-).

G sensor X value: Front & Back (like Quick brake or Quick Start)

G sensor Y value: Left & Right (like Quick Turn)

G sensor Z value: Up & Down (like prominence and depression)

GYRO: display the gyro value

Speed: GPS measured speed is displayed in grey. .

RPM: The RPM is displayed in purple.

ALARM: The alarms are displayed on the bottom of the screen with the grey bar meaning the trigger is activated.

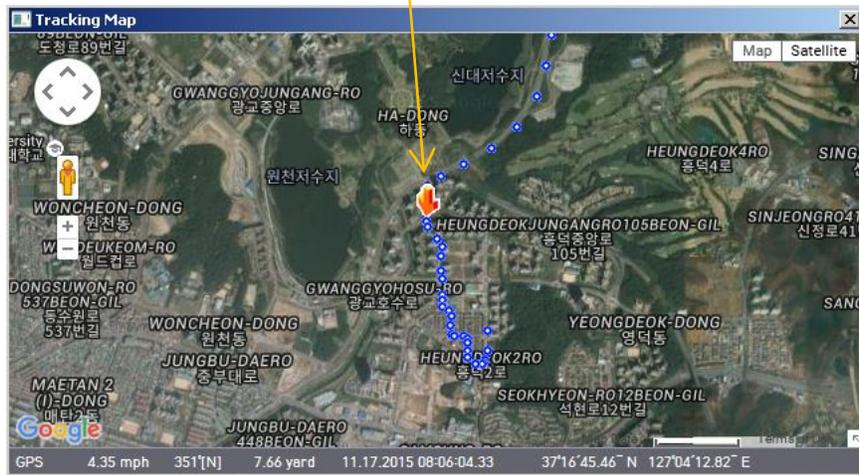
TRACKING MAP



“Tracking Map” icon

The route taken will be displayed on the Google map.

The playback position will be shown on the map with the orange arrow.



The blue markings show the route taken.

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

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

EVENT SEARCH



“Event Search” icon

The “Event Search” help to find a specific data quickly.

The screenshot shows the 'Event Search' window with the following settings:

- Search Range:** 2017-06-22 오후 12:32:55 ~ 2017-07-11 오후 4:13:25
- G-Sensor:** Turn, Accel, Brake, Shock
- Record:** Panic Button, Parking Mode
- Speed:** 50 km/h, GPS, Speedometer
- Alarm:** ALARM1, ALARM2, ALARM3
- Sudden Accel/Stop:** Sudden Accel/Stop, +/-0.4G

No.	Date/ Time	G-Sensor	Panic Button	Alarm	Speed	Sudden Accel/Stop	
13	2017.06.22 13:59:55				53/0	0.0000	C
14	2017.06.22 14:00:05				52/0	0.0000	C
15	2017.06.22 14:03:42				50/0	0.0000	C
16	2017.06.22 14:04:02				50/0	0.0000	C
17	2017.06.22 14:04:09	Accel,Shock			66/0	0.0000	C
18	2017.06.22 14:09:52				50/0	0.0000	C
19	2017.06.22 14:12:10				50/0	0.0000	C
20	2017.06.22 18:53:14				50/0	0.0000	C
21	2017.06.22 18:53:21				50/0	0.0000	C
22	2017.06.22 18:57:11				52/0	0.0000	C
23	2017.06.22 19:06:00				50/0	0.0000	C
24	2017.06.22 19:09:20				52/0	0.0000	C
25	2017.06.22 19:12:11				51/0	0.0000	C
26	2017.06.22 19:13:33				50/0	0.0000	C

Buttons: Search, Go to Video, Close

Select “Search Range” and select “Search Conditions”

And then click Search button.

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

PRIVACY SETTINGS



“Privacy Settings” icon

Set the mosaic area on the video for privacy protection.



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

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

Blur out the area you wish to protect by left-clicking on the sections. You can select multiple areas.

You can also unselect, selected areas by right-clicking the blurred areas.

To select all or clear all, click on the ‘Select all’ or ‘UnSelect All’ buttons on the bottom, respectively.

SAVE JPEG AND MP4 FILE

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



“Save JPG” icon

Save JPG Image

CAM1 CAM2 CAM3 CAM4

Vehicle No Driver ID Date/ Time
 LAT/ LONG GPS Speed Direction
 G-Sensor Speedometer Speed
 Alarm Privacy Masking On Viewer
 RPM Privacy Masking On Backup

JPG File Folder
C:\Users\chrisp\Documents\SmartWitness\CP4\JPG

JPG File Name
20170724_050000

Start Cancel Close

Pause the playback and click “Save MP4 Video” icon to make a MP4 file.



“Save MP4 Video” icon

Save as MP4 Video

CAM1 CAM2 CAM3 CAM4
 Audio

7/24/2017 5:00:00 AM From
7/24/2017 5:00:29 AM To 30 Sec

Vehicle No User ID Date/ Time
 LAT/ LONG GPS Speed Direction
 G-Sensor Speedometer Speed
 Alarm Privacy Masking On Viewer
 rpm Privacy Masking On Backup

MP4 File Folder
C:\Users\chrisp\Documents\SmartWitness\CP4\VIDEO

MP4 File Name
20170724_050000

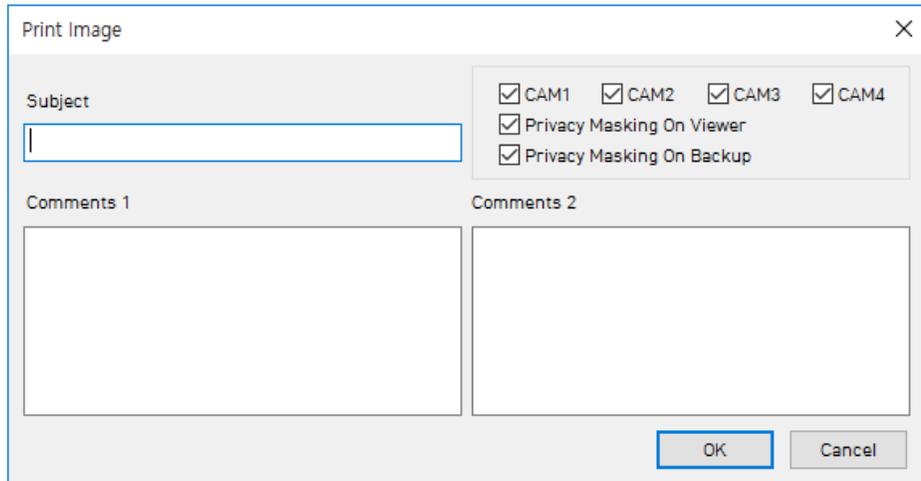
Start Cancel Close

PRINT IMAGE

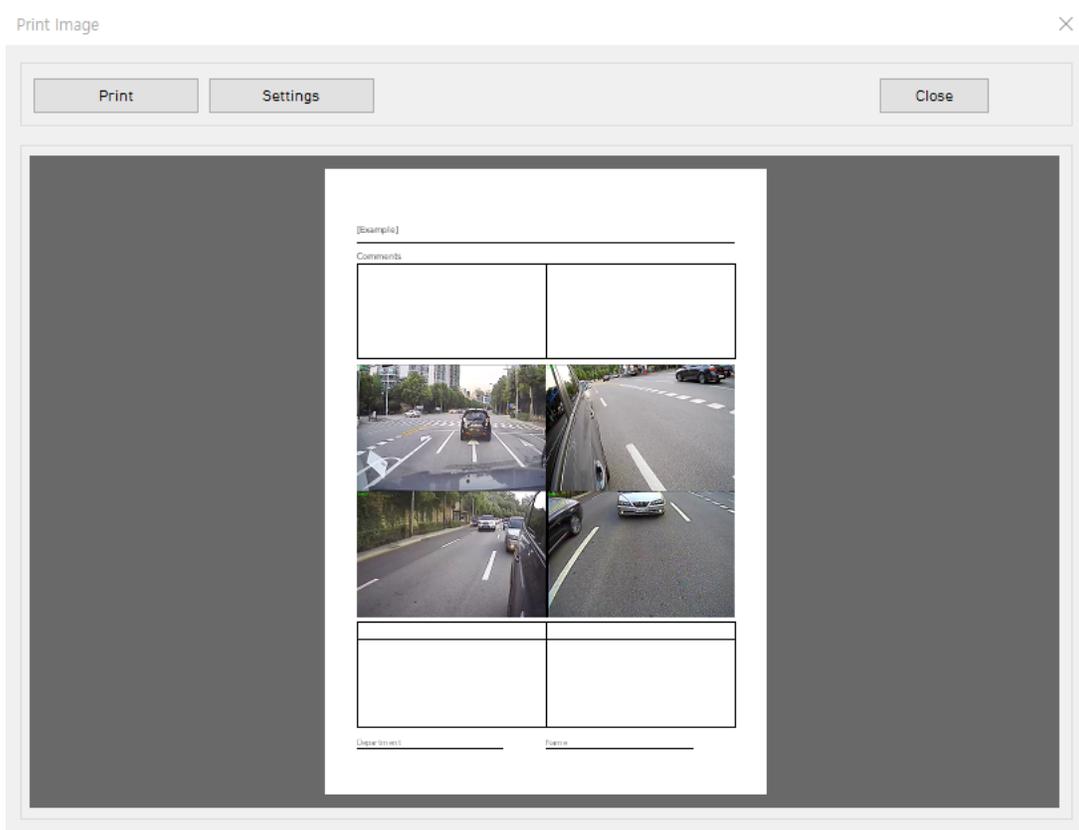
Pause the playback and click “Print Image” icon.



“Print Image” icon

A screenshot of the 'Print Image' dialog box. It features a 'Subject' text input field, two 'Comments' text input fields labeled 'Comments 1' and 'Comments 2', and a settings section with four checked checkboxes: 'CAM1', 'CAM2', 'CAM3', and 'CAM4', along with 'Privacy Masking On Viewer' and 'Privacy Masking On Backup'. 'OK' and 'Cancel' buttons are at the bottom right.

Type Subject and Comments1 and Comments 2



Alter the printer settings to change paper size/orientation etc.

BACKING UP FILES

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



“Backup Data” icon

A screenshot of a software dialog box titled "Backup Data" with a close button (X) in the top right corner. The dialog contains several sections: 1. Camera selection: Four checkboxes labeled CAM1, CAM2, CAM3, and CAM4, all of which are checked. 2. Time range: Two rows of time selection. The first row is labeled "From" and shows a date of 7/24/2017 and a time of 5:00:00 AM. The second row is labeled "To" and shows a date of 7/24/2017, a time of 5:00:59 AM, and a duration of 60 seconds. 3. Identification fields: Text input fields for "Vehicle No" (containing "Vheicle No"), "Driver ID" (containing "Driver_HD15x3_D130x1"), "Memo Title", and a larger "Memo" text area. 4. Folder and Type: A "Folder" field containing the path "C:\Users\chrisp\Documents\SmartWitnes" and a "Type" dropdown menu. 5. Action buttons: "Start", "Cancel", and "Close" buttons at the bottom.

The start time is when the video was paused and cannot be changed once you start this process.

Set the time you wish to backup and input Title and Memo.

And input Type and then click [Start].

The maximum amount of time you can back up is one hour.

SPECIFICATION

Video In	CH1: 12V 1080P or 720p AHD camera in CH2, CH3, CH4: 12V 720P AHD camera in
Audio In	1CH (Internal or External Microphone)
AV Out	1 Video out, 1 Audio out
Band support	CP4S-NA LTE-FDD CAT4: B2/B4/B5/B12/B13/B14/B66 WCDMA:B2/B4/B5 CP4S-EU LTE-FDD CAT4: B1/B3/B7/B8/B20/B28A LTE-TDD: B38/B40/B41 WCDMA: B1/B8
Max Data Rate	U/L:50Mbps, D/L : 100Mbps
Video resolution	1080p HD (1920x1080), 720P (1280x720), D1(NTSC:720x480, PAL 720x576)
Recording Speed	Full HD: 30fps(25fps), HD: 60fps(50fps) D1: Up to 120 fps (NTSC) or 100fps(PAL)
Recording Mode	Continuous , Event, Dual Mode
Memory	Support 32GB, 64GB(FAT32), 128GB(FAT32), 256GB(FAT32).
GPS/GLONASS	External GPS /GLONASS
G-Sensor	Internal 3-axis G-sensor
Gyro	3Axis(X,Y,Z), output rate:100 Hz,
RTC	Internal battery
Alarm In/Out	3 x Alarm In, 2 x Alarm Out
Remote controller	3x LED, Panic button, M1 & M2 button
LED	Green LED (Network), Blue LED (Record), Error (Red LED)
Super Capacitor	Enable recording of last file and shut down
Power input	DC 12V/24V 3A
Delay Power Shutoff	Yes
Power consumption	Max. 36W
Size / Weight	120mm X 28mm X 90mm / 166g
Operation Temp.	-10°C~55°C

APPENDIX Recording time table

DRV file size		Reserved space for overwriting	Space for Video / Audio (MB)				
hours	Size		16GB	32GB	64GB	128GB	256GB
24	106.8MB	300 MB	15,593	31,593	63,593	127,593	255,593
168	748 MB		14,952	30,952	62,952	126,952	254,952
240	1068 MB		14,632	30,632	62,632	126,632	254,632
336	1200 MB		14,500	30,500	62,500	126,500	254,500

resolution	quality	fps	16GB	32GB	64GB	128GB
FHD(1080P) 1920x1080	Super	30	5hours	10hours	19hours	39hours
		1	21hours	44hours	90hours	167hours
	High	30	6hours	11hours	23hours	47hours
		1	25hours	52hours	106hours	167hours
	Standard	30	7hours	14hours	29hours	58hours
		1	31hours	63hours	129hours	167hours
HD(720P) 12 80x720	Super	30	9hours	19hours	38hours	76hours
		1	39hours	80hours	163hours	167hours
	High	30	11hours	22hours	45hours	90hours
		1	45hours	93hours	167hours	167hours
	Standard	30	13hours	27hours	55hours	111hours
		1	53hours	110hours	167hours	167hours
D1 720x480	Super	30	13hours	27hours	55hours	111hours
		1	53hours	110hours	167hours	167hours
	High	30	17hours	35hours	71hours	144hours
		1	66hours	136hours	167hours	167hours
	Standard	30	24hours	50hours	101hours	167hours
		1	85hours	167hours	167hours	167hours

This table is a guideline only.

Actual results may vary depending on a variety of factors on the road.

CP4S Firmware Update Instructions via SD card

NOTE: If you're using CP4S with a SIM and connected service, please consult your telematics provider or SmartWitness before attempting to update your device firmware. In this case, the firmware update can be much more easily applied to your device using Smart API over-the-air update service.

1. Prepare Firmware

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



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

2. Upgrading CP4S

Insert the prepared SD card to CP4S unit and turn on the power.

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

Warning: Do not turn off the power during upgrading. If the upgrade fails, the CP4S unit should be returned to your distributor.

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

Technical Support & Warranty

TECHNICAL SUPPORT

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

LIMITED WARRANTY

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

CP4S Accessory Add-ons

Model	Descriptions
<p data-bbox="277 369 402 401">CP4S-LC</p> 	<p data-bbox="521 369 1214 447">Locking Steel Housing for CP4S Dimension : 155.00 x 130.00 x 24.00 mm, 330g</p>
<p data-bbox="250 642 431 674">SVA055-AM</p> 	<p data-bbox="521 642 1029 720">Road + Driver Facing Dual Camera (Road 1080p + Driver 720p)</p>
<p data-bbox="264 915 417 947">SVA027-A</p> 	<p data-bbox="521 915 1122 947">Weatherproof Side Mount Camera, 720p</p>
<p data-bbox="264 1188 417 1220">SVA037-A</p> 	<p data-bbox="521 1188 1105 1220">Weatherproof Rear View Camera, 720p</p>
<p data-bbox="264 1461 417 1493">SVA050-A</p> 	<p data-bbox="521 1461 922 1493">Driver facing camera, 720p</p>
<p data-bbox="250 1692 431 1724">SVA041-AM</p> 	<p data-bbox="521 1692 927 1724">Road Facing camera, 1080p</p>



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