Voyager

DVR4100 MOBILE DIGITAL VIDEO RECORDER User Manual



Thank you for purchasing our product.
Please read instructions before operation.
Change without Notice.



Safety Precautions



CAUTION





CAUTION:

To reduce the risk of electric shock, do not expose this apparatus to rain or moisture. Only operate this apparatus from the type of power source indicated on the label. The company shall not be liable for any damages arising out of any improper use, Even if we have been advised of the possibility of such damages.

Graphic Symbol Explanation



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user of the presence of insulated dangerous voltage within the product's enclosure that may be sufficient magnitude to constitute risk of electrical shock to persons.



This exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.

The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste. Contact your local dealer for procedures for recycling this equipment.

Attention: installation should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE UNITS NOT SPECIFICALLY DESIGNED FOR OUTDOOR USE TO RAIN OR MOISTURE.

FCC STATEMENT

WARNING

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received including interference that may cause undesired operation."

WARNING

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- A You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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1. Package Contents

Description	Picture
Power cable (6 pin/6m) + 5A fuse X 2	
I/O cable	yestell yestel
G-Mouse (Male/5m)	
Wifi antenna (Female)	Pictures for reference only, actual delivery-based
Remote Controller + battery	
Screw x 6	
SSD rack locker key	

Cable with 4 video input and one usb port (1 pieces)	E CHECK CONTRACTOR OF THE CONT
External Indicator (optional)	

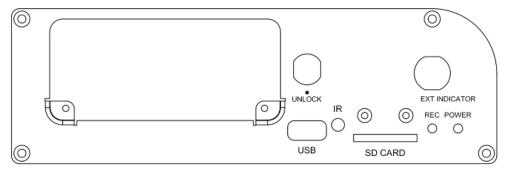
CD Contents

Description	
Voyager Player	
Voyager VMS RegisterServer_Setup ServerDBInstall	

2. Product Overview

Front Panel

DVR4100



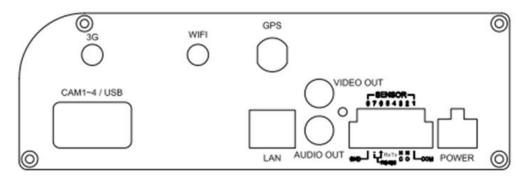
(% Front panel USB port recommended only for USB storage, mouse recommended use the back Cable wire's USB port)

Notice: The warning sticks in front panel. The content is show as below:

Please turn key to lock position to start DVR

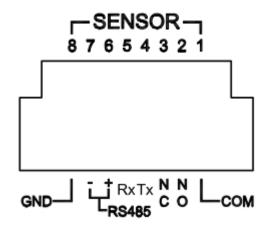
Back Panel

DVR4100: with 3G (4G) / WIFI function

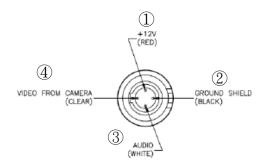


Cable pin definition

I/O cable pin definition



Female connector



Pin number	Description
1	+12V
2	GND
3	Audio
4	Video

The function button of this IR remote controller as below

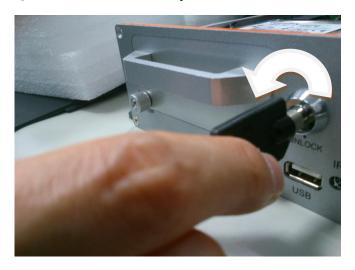


Lock the DVR system need a passwor unlock it			
Panic Panic record button			
Menu Go to 'MENU' mode to setup the system			
Search	Search recorded video		
Backup	Backup the recorded data to other device		
Direction			
(▲,▼,◄,►) Move the cursor			
ENTER	Select sub item in system setup mode		
ESC	Exit the dialog window		

3. Physical Connection

SSD installation

① Please insert the key in the front of the device and turn counterclockwise 90° to unlock.



② Loosen the two screws and take off the cover.



③ Pull the rack out to install SSD.



④ Turn the rack over to install SSD. Please take note of the direction and tighten SSD up by the four screws.





5 Set the SSD back to DVR. Please be sure you it is locked.



After you installed the SSD, please put the rack back into the mobile DVR, tighten the two front screws and lock the rack. If the lock is not correctly done, the system won't be started up and the power led will flash.

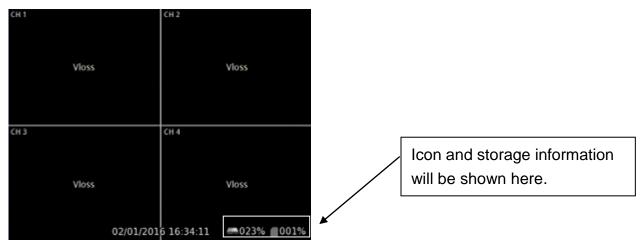
※When SSD is installed, the bottom screen will display an Icon as □

SD card installation



- 1. Shut the power down
- 2. Loosen screws and open the cover
- 3. Insert SD card in the slot properly

***When SD card is installed, the bottom screen will display an Icon as**Please refer to below photo.



- DVR only supports SD card formatted by FAT32. If use other format to record files, read/write problems may happen.
- ※ If the SD card is damaged, DVR will not be able to perform normal functions as recording, playback and so on.
 - For the time being, please use computer to format the SD card. If it is still a problem, please contact the manufacturer of SD card for overhauling or data rescuing.
- * Supports SD, SDHC.

SIM card installation

When you purchase your SIM card to your telecom provider, please make sure that it meets one of the following standards in order to work:

GSM 850 900 1800 1900 WCDMA 850 1900 2100

① Loosen 4 bolts of the top cover and open it.



② Pull the SIM card socket.



③ Insert the SIM card with its gold contact facing down and as below shown.



④ Put the lid back and push it to lock.

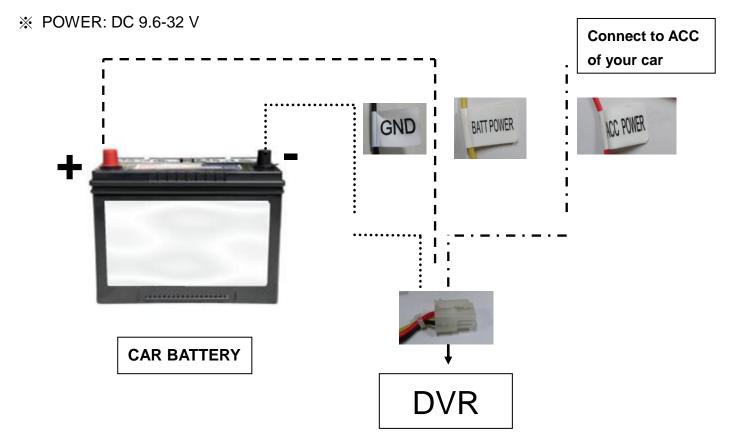


Indicator light

LED Color	Description	Always ON	Always OFF	Flashing
Red	Record	recording (Normal/Event)	No recording	Warning: device can't record · Vloss or SSD Initial fail
Green	Power	System ready	Power off	System booting

Power Setup

Cable type	Meaning
•••••	Ground -
	Power +
	ACC power



For your information ground and power + cable are protected with a 5A fuse. Note that, do not pull the power connector when the DVR is recording to avoid the SSD be damaged. First unplug all cameras, wait that yellow led turn off then unplug the power.

Event Box description



Icon	Description	Color	Always ON	Always OFF	Flashing
•	Record	Red	recording (Normal/Event)	No recording	Warning: device can't record · Vloss or SSD Initial fail
(1)	Power	Green	System ready	Power off	System booting

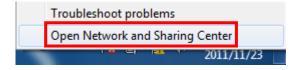
4. Setup

In order to access to the 4CH mobile DVR with a notebook, you need to have RJ45 cross cable

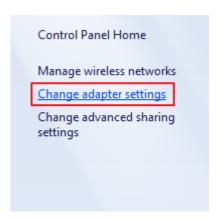
Link the notebook to the DVR with the LAN cable

Under windows 7

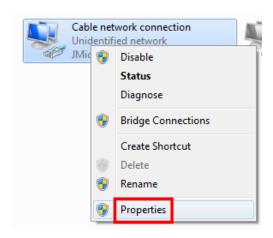
On the desktop bottom right, right click mouse on network icon then select **open network** and sharing center



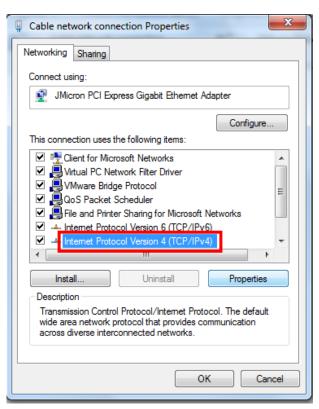
Then on the left select Change adapter settings



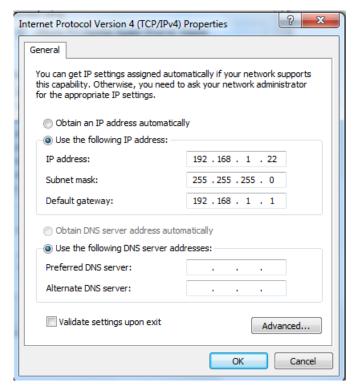
Choose your lan wired connection then mouse right click and select properties



Then click on Internet Protocol IPV4 and click properties



Assign an IP address to your notebook as the DVR default IP is 192.168.1.99



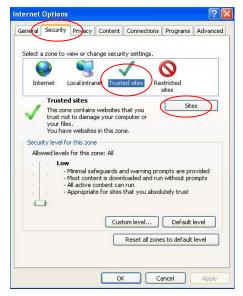
Valid by pressing ok

Internet Explorer setting

Our device supports Internet Explorer 7, 8, 9(32bits) and 10,11(32,64bits)

The default IP address of the mobile DVR is 192.168.1.99

In order to install the active X you need to change your Internet Explorer settings Open Internet Explorer, Click the Tools button, and then click Internet Options. Click the Security tab, and then click a security zone Trusted sites. Click Sites.



The DVR IP should be shown in the *Add this website to the zone* field. Please make sure that the below option 'require server verification' is disabled Click Add and close.



Then turn the Security level to Low and press apply Return to Internet Explorer main page

Press Install

The icon must be in blue color then please login in the DVR

Default administrator username/password is "admin"/ "1111"

Default guest username/password is "guest"/ "1111"

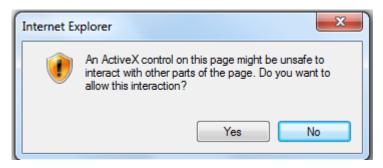
If you don't operate the vehicle dvr after a period of time (30 minutes) you will be automatically logged out, then you need to login again with your account and password



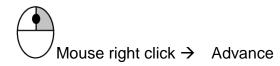
You will have a pop up message

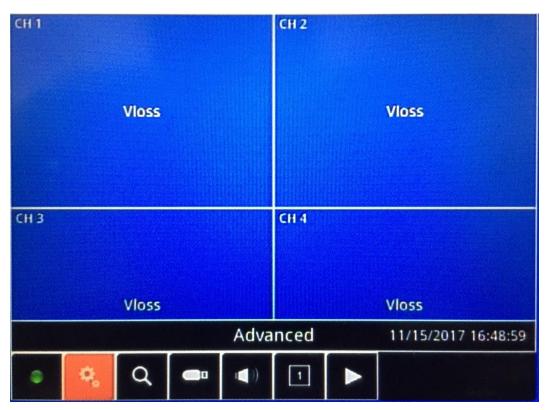


A pop up message will display, press Yes to continue



5. DVR operation via video out





Advanced Setup



Record Setup:

- Record setup
 - Channel: 4 channels total. From 1~4.
 - Start Record: "ON", "OFF"
 - Frame Rate: 1fps~30 fps (NTSC)/ 1fps~25 fps (PAL)
 - Quality: 5 options can be selected; "highest", "high", "normal", "low", "lowest".
 - Resolution: "320X240", "720X240", "720X480". (NTSC)
 "320X288", "720X288", "720X576". (PAL)
 - Audio: "ON", "OFF"
 - Post Record: can be setup from "OFF", "30 sec", "1 min", "2 min", "5 min", "15 min", "30 min", "1 Hour". Finally, "Apply ALL", "Save", & "Exit".
- Ignition Off: postpone time can be set from "30 sec", "5 min", "10 min", "15 min", "20 min", "25 min", "30 min", "35 min", "40 min", "45 min", "50 min", "55 min", "60 min". After setup this section, click "Save" and this page will be automatically exited.
- Streaming:
 - Frame Rate: From 1~15.
 - Quality: "Highest", "High", "Normal", "Low", "Lowest".

Device:

- Camera Setup
 - Camera: 1 ~ 4
 - Camera Title: edit the camera name.
 - Color Setup

Brightness: 0~10 Contrast: 0~10 Saturation: 0~10

Hue: 0~10

Mirror: "ON","OFF" Flip: "ON","OFF"

"Click " X ", return to Device page...

• Storage: Installed SSD & SD information will be located and listed here. Including SSD's "Name" (The name of SSD will be Main storage), "Size", "Format".

After click "Format" pop-out message would ask & make sure user want to do the "Format" action. Check "Yes" or "No" button for your choice. Meanwhile, the SSD overwirte action can be set when SSD was fully used for the record file. Please note that if you insert a SSD that has been used prior, the SSD will be formatted.

* SSD as main storage device for continuos recording data & SD as event data storage device

- Battery detector:
 - Enable: "ON", "OFF"

- Voltage type: 12v or 24v.
- * Battery voltage detection function: when the voltage is too low, will alert user.
- Buzzer:
- Sensor: "OFF(No suggest)", "Critical", "Warning". Default is OFF
- Video Loss: "OFF(No suggest)", "Critical", "Warning". Default is Critical
- SSD: "OFF(No suggest)", "Critical", "Warning". Default is Critical
- **G- Sensor :** "OFF(No suggest)", "Critical", "Warning". Default is Critical.

• Event Setup:

Including the "Video Loss", "Motion", "Sensor", "Speed Event", "G-Sensor".

- Video Loss:
 - Camera: 1~4
 - Enable: "ON", "OFF".

If the status is "ON", below 3 items can be setup at the same time.

- **Delay Time:** OFF, "1 sec", "2 sec", "3 sec", "4 sec", "5 sec", "6 sec", "7 sec", "8 sec", "9 sec", "10 sec".
 - **E-mail:** setup the receiver's E-mail.
 - Alarm out: Click the icon if need.
- Motion:
 - Camera: specific 1~4 camera can be set.
 - Enable: "ON", "OFF".
 - **Delay Time:** "OFF", "1 sec", "2 sec", "3 sec", "4 sec", "5 sec", "6 sec", "7 sec", "8 sec", "9 sec".
 - E-mail: "ON", "OFF"
 - Alarm Out: click the box if need.
 - Event Record: "ON", "OFF"
 - Event Popup: "ON", "OFF"
 - Sensitivity: 1~5
- Area Setup: setup the area we want to monitor. In green color area, "motion function is turned on,
- Sensor:
 - Sensor:1 ~ 8
 - Enable: ON/OFF
 - **Delay Time:** 0 ~ 9 seconds
 - **Priority:** 1 ~ 8
 - Email: ON~ OFF
 - Alarm out: click the box if need
 - Event record: 1 ~ 4

● Event popup: 1 ~ 4

Speed Event

Enable: ON/OFF

Unit: you can choose between Km/h or MPH

Type: High speed / Low speed

Enable: ON/OFF

Threshold: 1 ~ 300

Delay Time: define the length of the buzzer after each motion detection OFF ~ 9 seconds

Email: can send an email to predefined address in case of the event

Alarm out: in case of detection, DVR will send a signal via alarm out like a buzzer

Event Record: 1 ~ 4.

G Sensor

Enable: ON/OFF

Threshold: OFF ~ 5g

Vibration Boot: ON / OFF

Delay Time: define the length of the buzzer after each motion detection OFF ~ 9 seconds

Email: can send an email to predefined address in case of the event

Alarm out: in case of detection, DVR will send a signal via alarm out like a buzzer

Event Record: 1~4

display this



ICON

Network Setup

LAN

Host Setting: user can choose between STATIC IP, DHCP and OFF status

For static IP you need to key manually the IP, GATEWAY and NETMASK.

For DHCP, the DVR will retrieve the information from the network

Net Service

Center IP: VMS server IP address.

Center Port: default is 8788 but can be changed according to customer need

Register timing: "OFF", "10 sec", "30 sec", "60 sec".

Http Port: default is 80 but can be changed according to customer need

Streaming Port: default is 554 but can be changed according to customer need

Messenger Port: default is 1999 but can be changed according to customer need

DNS: if the user specifies a DNS, it will help the CMS to find the ip of the DVR more faster via using 3G connection

Telnet: "ON", "OFF".

Warning: make sure that these port are open in your router if you use a LAN network

E-Mail

SMTP Server: E-mail service mail server.

Port: E-mail service port.

SSL: ON/OFF

Sender: sender mail

Recipient: recipient mail

Enable SMTP Auth: ON/OFF

(some mail server need user authentication.)

Account: mail service account.

Password: mail service password.

E-mail test: Due to the authorization problem, some mail server will not work properly. Please click the "E-mail test" button to test your mail server. If you don't receive the email, please contact with your MIS department or change another mail server and try again.

3G Network/4G Network

Enable: ON/OFF

Access Point Name (APN): default is Internet.

Access Number: default is *99#

Username

Password

* If use 3G (or 4G) to connect network, the bottom screen will display this



WIFI

Enable: ON/OFF

SSID: input your WIFI AP name.

Authentication: input your WIFI AP connect key.

※ If use WIFI to connect network, the bottom screen will display this ☐ ICON

Remote connection supports up 2 people log in

Example:

x1: Represent there 1 person is using LAN connection now.

x1: Represent there 1 person is using 3G(or 4G) connection now.

(a) x1: Represent there 1 person is using WIFI connection now.

Account

authentication
User Auth: ON/OFF
account
Group: Administrator/Guest
Password User can setup administrator and guest password
System tools
Time Setup
Date: Year- Month-Day
Time: Hour-Minute-Second
Display format available: MM/DD/YYYY, DD/MM/YYYY, YYYY/MM/DD
Time format: 12 hour or 24 hour
Daylight Saving : ON or OFF, after user selects the time zone, if daylight saving is enable, the DVR will automatically adjust the time
GPS Time Calibration :
Time Zone:

Display

Select language

CVBS X Adj: 0~9

CVBS Y Adj: 0~9

CVBS Height adjustment: 0 ~ 9

CVBS Width adjustment: 0 ~ 9

Video format: PAL ~ NTSC

You can enable or disable the following function by click or unclick them

- System time
- Channel title
- Record Icon
- Motion Icon
- Alarm Icon
- Save split mode

Upgrade

After you received the new firmware which name is *image.bin*, just copy it to a USB solid disk formatted in FAT32, insert in the USB port and click upgrade, you will notice following message

Message	Description
waiting	Starts the upgrade process
Are you sure to upgrade?	The USB key is being initialized, the
, , , ,	yes/no will appear after few second
search file	If press yes it will look for the file in
	the USB key
upgrade system please wait	
1/4 (3/3)	
Upgrade complete. the system will reboot	Press ok to reboot the device

Notice: After the new firmware update, we recommend user to reset the DVR to factory default.

Truck Info Setup

User can add vehicle info such as: device number, company name, driver name, vehicle number

Import

User can import or restore setting

Message	Description
waiting	Starts the process
Are you sure to import config	The USB key is being initialized, the yes/
	no will appear after few second
Import complete! The system will reboot	Press ok to reboot the device

Export

User can export or backup setting

Message	Description
waiting	Starts the process
Are you sure to export config ?	The USB key is being initialized, the yes/ no will appear after few second
Export finish!	Press ok to leave the export mode

Notice: The export file name is *Config*, you can rename it for archive purpose but you must rename it as *Config* if you want to use it to restore setting in your combo DVR

Default

This enables user to reset setting to default.

Message	Description
waiting	Starts the process
Are you sure to reset default?	Yes to validate, No to cancel
Reset Default Finish!	Press ok to reboot the system

System Info

System info:

Firmware Version, MCU version, U-boot version, UID SN

Network Info:

DVR's IP address, MAC address, netmask, gateway

Storage info:

Status mention if the SSD is correctly working, its model name and storage utilization

GPS info:

Time, Longitude, Latitude, Speed, Height, Direction, Viewable, In use, Fixed status.

The GPS function is only for satellite positioning.

3G info/4G info:

Enable, Signal, IP address, Net Mask, Gateway

Wifi info:

Enable, SSID, IP address, Netmask, MAC address, Gateway, Signal

Search



Backup

User can make a backup of specific period on any USB device such USB key, external USB SSD

Time Search

Key in specific time to playback the data, select the camera and click go search

When you use the calendar to select a date, blue typeface indicates that there is recorded video for that day.

Event List

User can select the channel, define start and end time, and click the search Icor

Log List

Select the channel

Define start and end time.

DVR4100 available: system, motion, sensor, video loss, network remote access And click on Search it will display the results, and then select the event to play it back

Backup



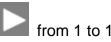
Insert your USB solid disk and

Select the channel you want to backup, define the time period and after the OSD display your USB key free space memory, press *GO BACKUP!*

Sound

You can adjust the sound volume with or from 1 to 15





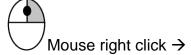
Select the channel you want to listen by selecting the channel or press mute sound



Split screen

User can choose 1 \cdot 2 \cdot 3 or 4ch to display

Playback



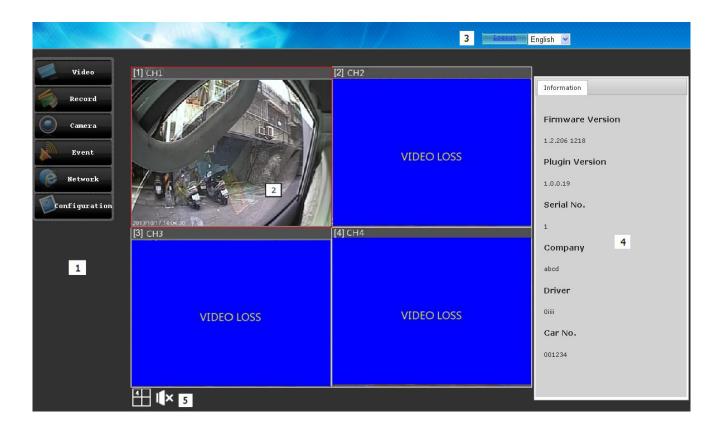


User can playback last recorded file

- Fast Rewind
- Pause
- Fast Forward
- Slow forward: it will forward frame by frame
- Stop and return to main display
- Split screen
- Volume adjustment

6. DVR operation via browser

Live preview



After you log in, you will access to live picture, there are 5 areas:

- 1 is all the function of the DVR function are same as main video out
- **2** is the main display of the camera, to see a camera in full screen, just double click on it. To return to quad mode, please go to VIDEO/LIVE
- 3 is the log out function and language setting, you can choose English, Chinese, Francais and Portugal.
- **4** is the information regarding the system (firmware, plugin) and regarding the vehicle (serial number, company, driver name, licence plate number).
- 5 is audio on/off

OSD operation

Video

Live

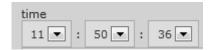
Please check page 11 for more information

Playback

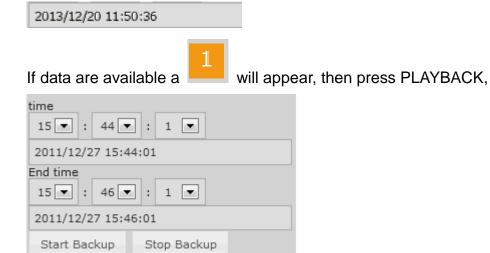
After you make sure that you have enabled video recording, you can playback a video. Select the date on the calendar



Then select the time you want to watch



Check on below line if it is the period you need



If you press BACKUP then you have the specify the period then press START BACKUP you will have to specify the folder destination

The backup process in % will appear in each channel

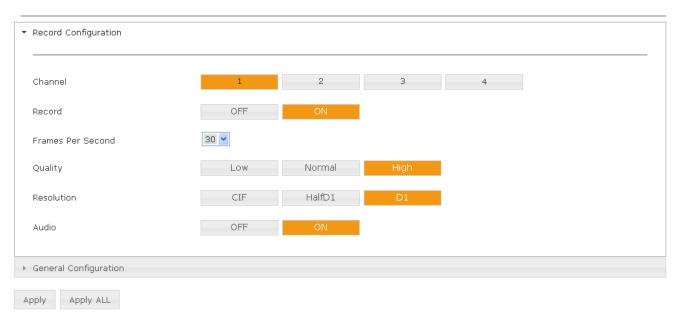


When backup is finished, a confirmation message will display.

Then press Live display to return to normal operation

Record

Record



User can choose to record one specific channel or all channel.

User can enable or disable record.

Quality level: you can select between low, normal and high quality

Enable or disable audio recording on all channel

When SSD storage is damage or record fail, data will automatically be recorded on SD vehicled. (** SD VEHICLED can support up to 32GB and need to format FAT32 before using.)

(* Does not support hot-swappable SD vehicled, do not remove the SD vehicled while in

use)

General configuration

Record



Post record 0~30 sec

Enable or disable overwriting on SSD

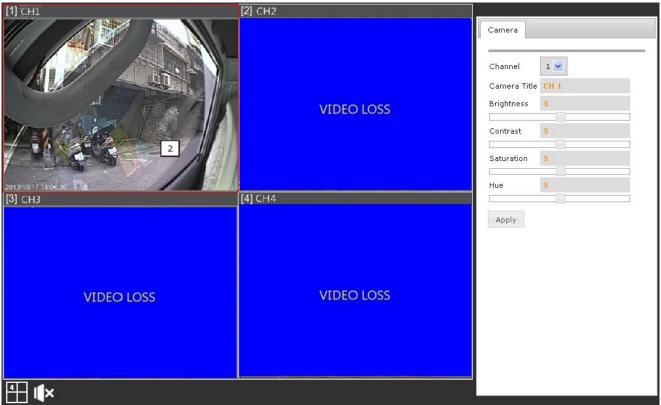
Ignition off: After you switch off the power, the user can setup ignition off time **Ignition OFF**



Streaming setup



Camera setting



User can change camera title

User can adjust camera brightness, contrast, saturation and Hue. Press apply to validate your choice

Event

VLOSS

VLoss

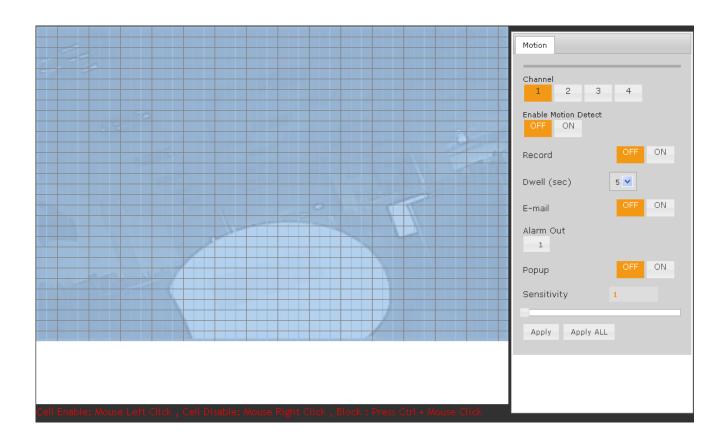
Channel	CH 1	CH 2	CH 3	CH 4
Enable	OFF	ON		
Dwell	5			
E-mail	OFF	ON		
Alarm Out	1			
Apply ALL				

Select the channel you want to display video loss message.

Dwell time: 0 to 9 seconds Email: disable or enable

Alarm out: if user wants send alarm out when video loss, click on the 1 so it has a click

Motion detection



User can setup motion detection one by one or all at the same time

To select a cell: Mouse Left Click, / To deselect a cell: Mouse Right Click,

To select or deselect a block: Press Ctrl + Mouse Click

Blue area means selected /No color area means not selected

User can setup which camera to record in case of motion detection

Dwell time: 0 to 9 seconds Email: disable or enable

Alarm out: if user wants send alarm out when motion detection, click on the 1 so it has a click

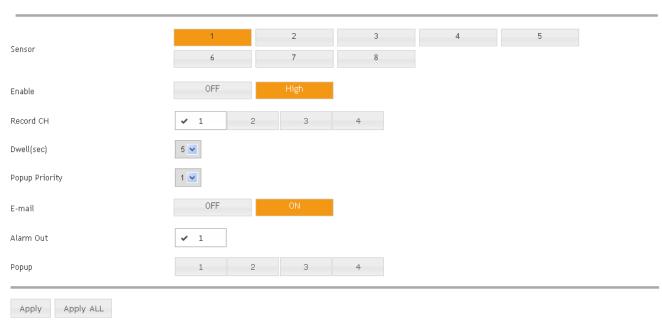
Popup: displays a selected camera when motion detection occurs

Sensitivity: 1 to 5

Press apply to validate your choice

Sensor

Sensor



Sensor: 1 to 8

Enable: setup the status of the sensor OFF / HIGH

Record CH: select which camera to record in case of sensor trigger

Dwell time: define the length of the buzzer after each sensor trigger 0 ~ 9 seconds

Pop up priority

Email: disable or enable

Alarm out: in case of sensor trigger, DVR will send a signal via alarm out like a buzzer or

flashing red light

Popup: 1 ~ 4

G sensor

GSensor

Enable	OFF	ON
Threshold	3 G	-
Dwell(sec)	5	•
E-mail	OFF	ON
Alarm Out	1	
Apply		

Enable: ON/OFF

Threshold: OFF ~ 5g

Dwell time: define the length of the buzzer after each motion detection 0 ~ 9 seconds

Email: can send an email to predefined address in case of the event

Alarm out: in case of G-Sensor detects a variation, DVR will send a signal via alarm out like a buzzer or flashing red light

Speed event

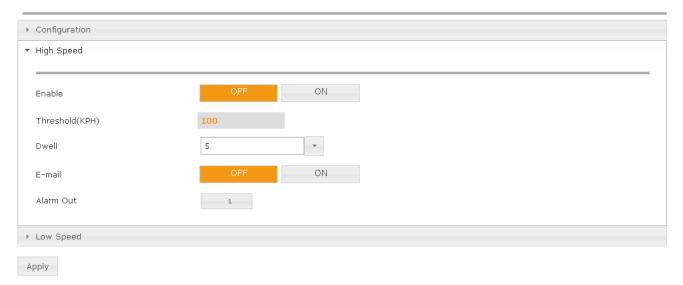


This page let user to enable or disable the speed event detection Unit can be kilometer per hour KPH or mile per hour mph

User can enable or disable high speed detection, specify the highest speed threshold, its dwell time from 0 to 9 seconds, whether to send an email or not and whether to enable alarm out.

High Speed

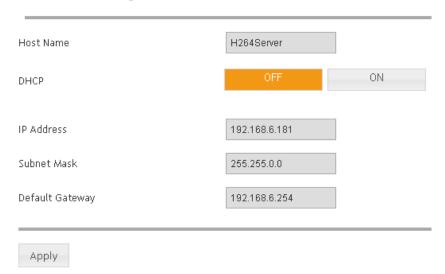
Speed Event



Same setting applies for Low Speed detection

Network

Network Settings



This side enables user to setup network in order to remotely connect to it for example with a notebook for maintenance.

If the network has a DHCP server, you can enable this function.

Please make sure that gateway and subnet mask are the same on both side.

Net Service 192.168.6.241 Server Ip 8788 Server Port Http Port Streaming Port 554 1999 Msg Port 8.8.8.8 DNS 30(sec) Register Timing Streaming Apply

Register timing

Streaming

If your network has a router, please make sure to open these ports in order to enable smooth access to the DVR via browser or VMS software.

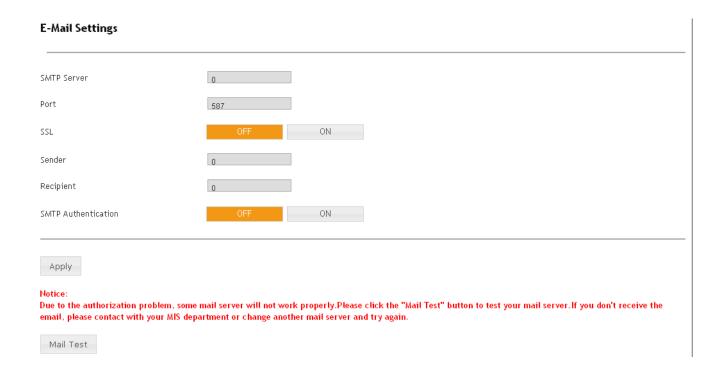
All these port can be customized according to your needs

Server software installation

Server main purpose is to receive data from each mobile DVR, so user needs to tell to DVR the **server IP**, open internet explorer and key in the DVR IP, then go to Network then Port



Email



SMTP server: we recommend to use gmail

Port: check with port your SMTP server is using

SSL: enable or disable according to your SMTP server

Sender: key in the email of the sender

Recipient: key in the email of the person who will receive notification in case of event.

SMTP authentication: enable or disable according to your smtp server if it's enable user need

to provide the mail account and password

Mobile network setting

Mobile network Enable 3G OFF ON Configuration Access Point Name (APN) internet *gg#

Here you can enable or disable 3G.

Provide information of how to connect to the 3G network (please check your operator for dial up procedure)

WIFI setting

WIFI



Here you can enable or disable the wifi

7. Configuration

Information

This section shows three type of information:

- Network such IP, http port, streaming port, MAC address and gateway
- Wireless network such as connection type, IP and gateway
- SSD such brand size and occupation ration

System

Network: displays current network setting and Mac address

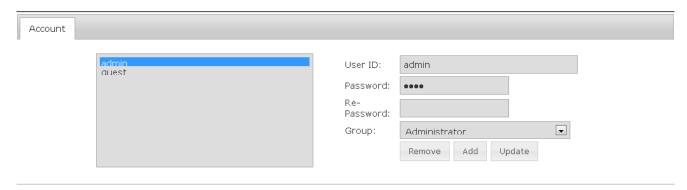
SSD: displays SSD brand, model number, size and occupation percentage

Display



User can select which items to display

Account



Two level of user can be define and unlimited account can be created Guest can only see live picture

Administrator as full authority on the device

Date and time

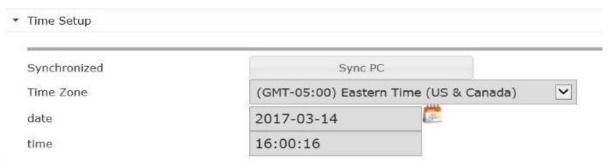


Select your prefered date format and hour format here

Cell phone and Email are just for reference and optional



Enable or disable daylight saving, according to the time zone, it will automatically turns it on and off at the right time



Here you can manually setup your device time or synchronize with your computer time **Vehicle information**

Modify Serial number, Company name, Driver name and License number

Format

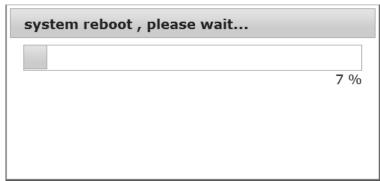
Format

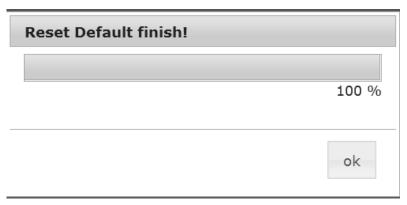


User must format the SSD before start recording Factory reset

Once press this option a warning message will appear asking you if you want to reset, press YES to apply



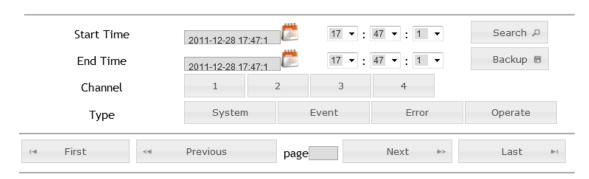




Press ok

Log

Log List

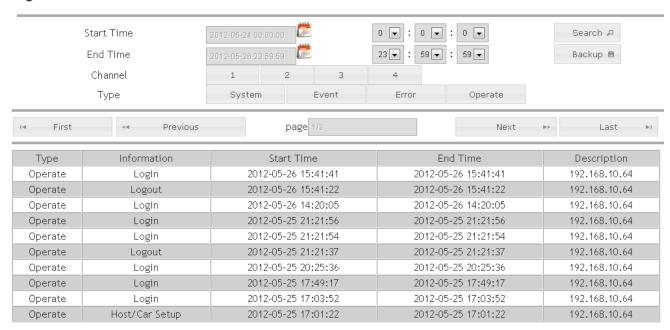


For troubleshooting purpose, you can browse the log

Select the starting and ending time, the channel concerned and use our 4 filters to reduce the number of event then press SEARCH. If you don't select channel, it will display system event.



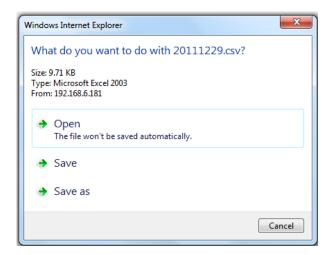
Log List



If you want to backup the log, press BACKUP,



Then press download it will export all the events in one csv file Choose **Save**



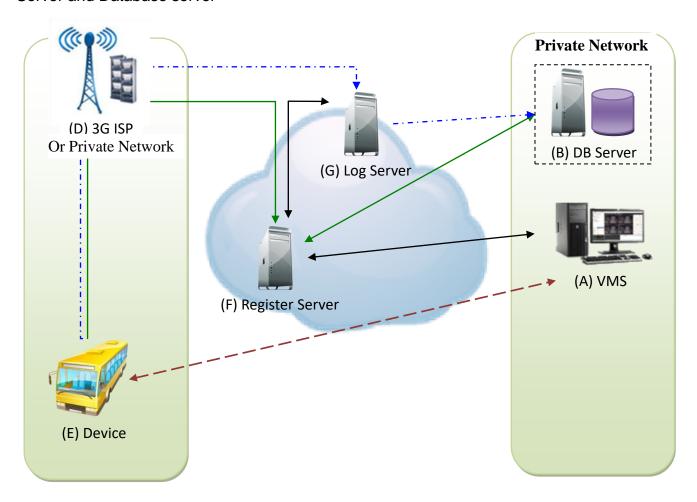
Then open the file with Microsoft Excel or any program supporting csv file

8. Register Server installation instructions

This guide is aim to install database and server application for mobile DVR •

Achitecture

mobile dvr server and system architecture is based on three server Register Server, Log Server and Database server



System architecture

8.1 Basic requirements

Although the server can be built on the same computer, to have the best performance, we recommend that each individual can have a separate server software hardware environment. Database server and application server farm proposal meet the following basic requirements to achieve the best performance.

System hardware basic requirements

Item	Minimum requirements	notice
CPU	32/64bit · above four core · each one at least 1.5GHz	
Memory	Above 4GB	
SSD storage	At least 500GB	
Network	Ethernet 100/1000M	Need static IP from telecom
		provider or setup in the
		firewall Port Forwarding

Minimum requirements of the software

8.2 Database Server setting

(notice: if MS SQLServer is already installed please bypass this step

8.3 Before install SQL Server 2008 Express please make sure you installed below software

Server type	item	Minimum requirements
Database	Operating	Windows XP above 32/64 bits
Server	System	.Net Framework 2.0 and above
	Database	SQL Server 2008 Express R2 or
	system	above
Register Server	Operating	Windows XP above 32/64 bits
_	System	.Net Framework 2.0 and above
Log Server	Operating	Windows XP above 32/64 bits
	System	.Net Framework 2.0 and above

Step 1: download and install Microsoft .Net Framework 3.5 SP1

Step 2: download and install Windows Installer 4.5

Step 3: download and install Windows PowerShell 1.0

8.4 Go to Microsoft website and download SQL Server 2008 R2 SP2 Express or click the following link

http://www.microsoft.com/en-us/download/details.aspx?id=30438



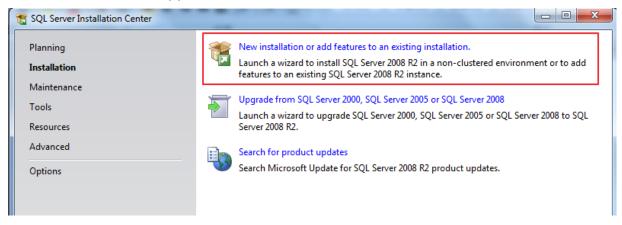
Click on download and select the file SQLEXPRWT_x86_ENU.exe then click on NEXT

Choose the download you want

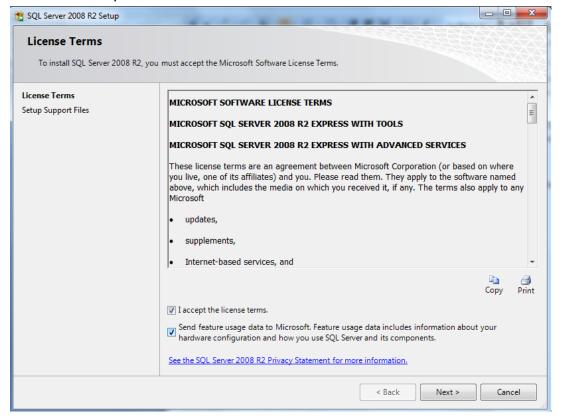


8.5 Database server installation with SQL Server 2008 Express

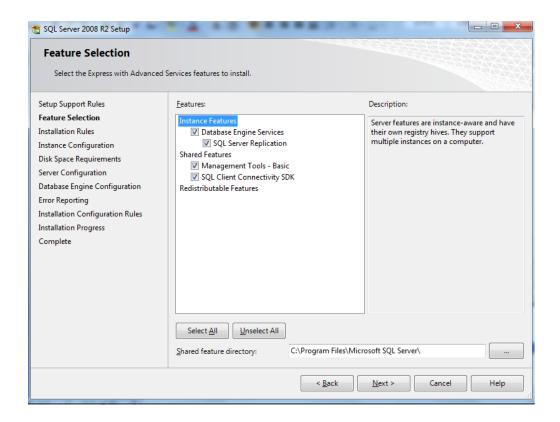
8.5.1.1 Launch the application called SQLEXPRWT_x86_ENU



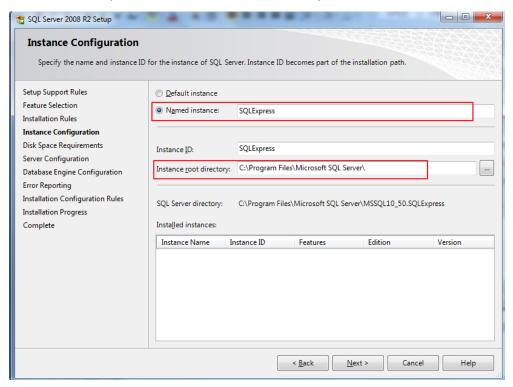
8.5.1.2 Accept the licence term and click on next



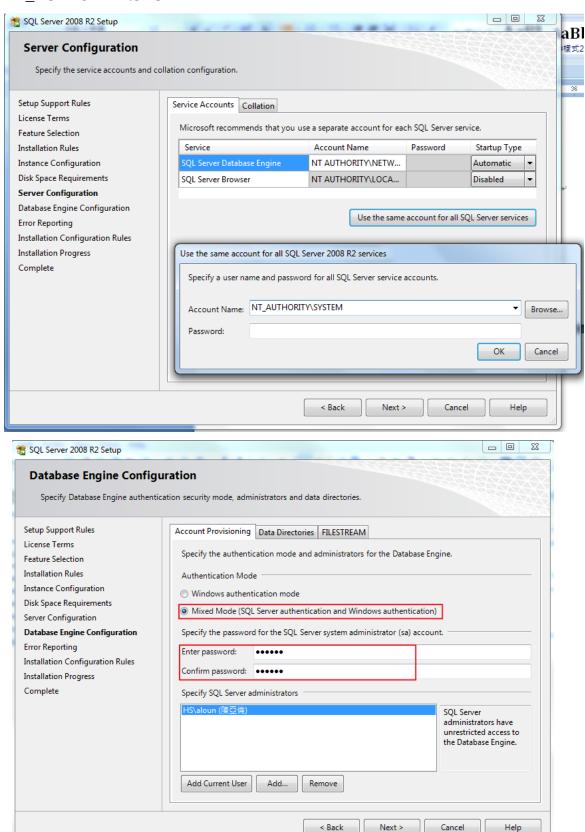
8.5.1.3 Select all then click on Next



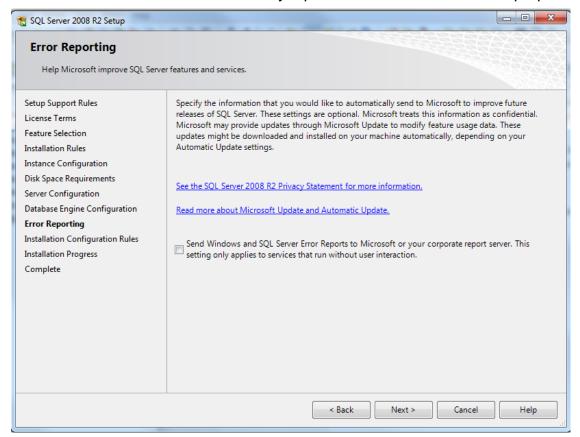
8.5.1.4 Setup database server name and path route



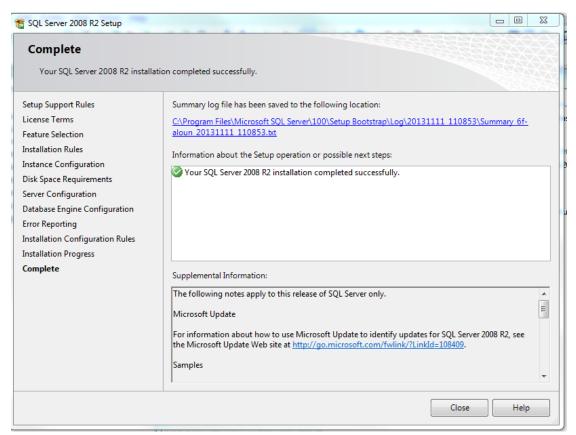
8.5.1.5 Set the database server account and specify the account name NT_AUTHORITY\SYSTEM



8.5.1.6 Choose Mixed mode and key a passwordfor database server purpose

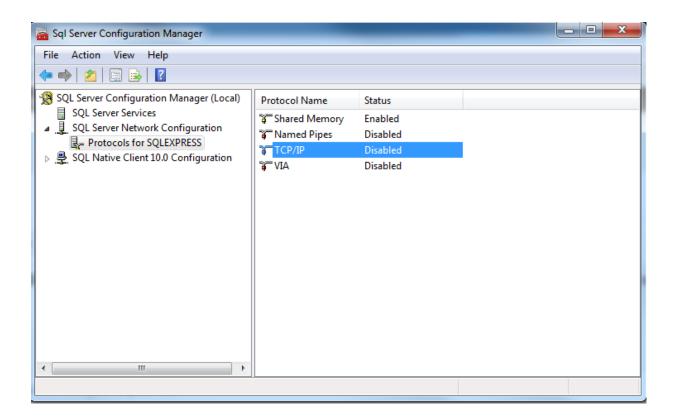


8.5.1.7 Click on next the installation is finished

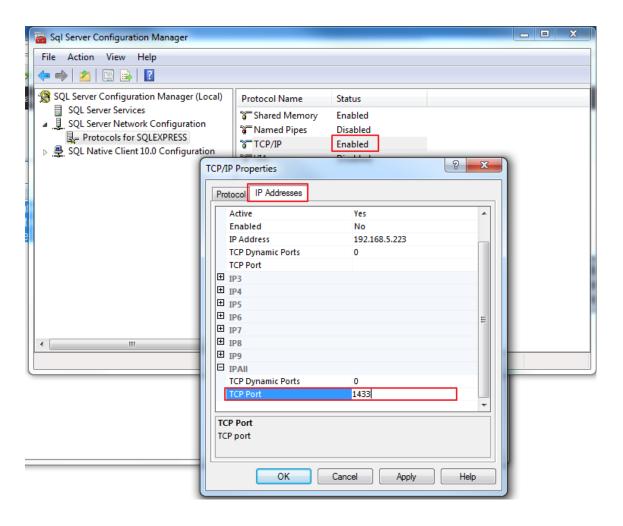


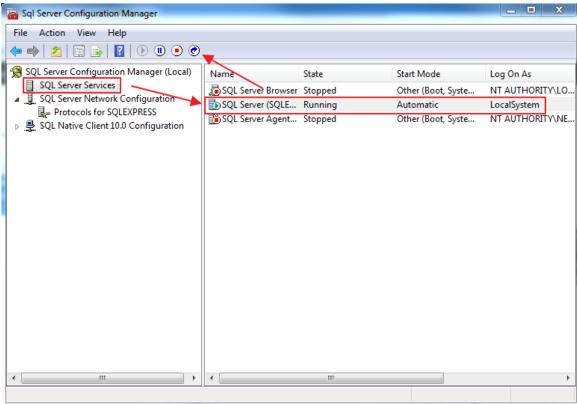
8.6 Setting database server in order let the client connect to it
In windows bar, click on start→ all program → Microsoft SQL Server 2008 R2→

Configuration tools → SQL Server configuration manager in TCP/IP option · mouse right click TCP/IP choose **Enable**



Then right-click on "Properties" to enter the "TCP / IP Properties" settings, switch to the "IP Addresses" tab in the Properties list, go to the last one "TCP port" setting is 1433. Then restart the SQL Server, click the "SQL Server Services" and then select "SQL Server" to restart its services to ensure the changes take effect





Install Server database

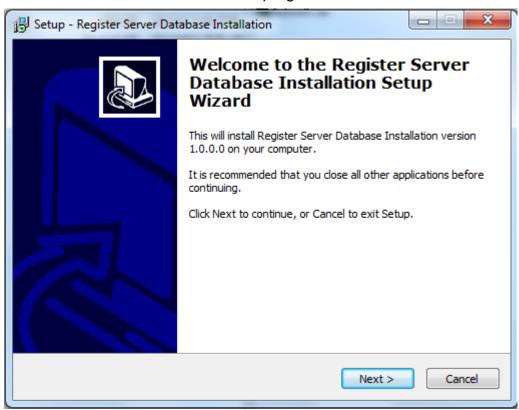
This software is located on the software cd folder called Environment



Launch ServerDBInstall.exe, this installer must enter Database administrator (sa) password and automatically creates the necessary databases and tables, and generate the database dedicated management accounts ddadmin, the default password is 1111, for the first time after installation, please Be sure to modify the password.

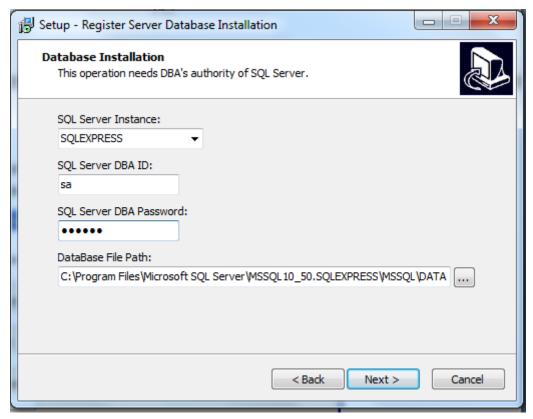
The installer only for database installation, delete function does not provide a database, the database administrator shall be manually deleted, if the repeated execution of the program, the original database data will be cleared, please exercise caution.

Launch Server database installation program



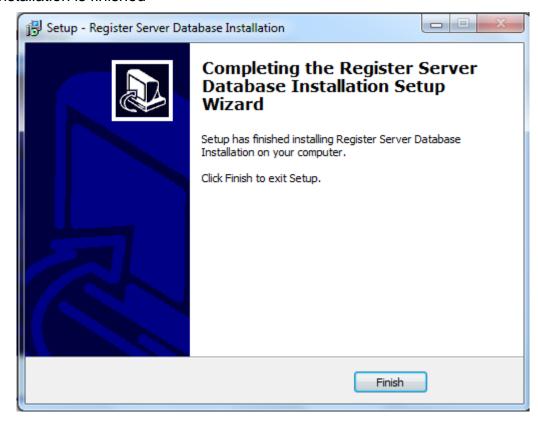
Enter the required information

If the system is not installed MS SQL Server can not continue with the installation, they already exist, the database server can be used, it is in the "SQL Server Instance" field appears optional server name. Please enter a database and the highest privilege management account and password. If you need to change the actual data storage paths can modify "Database File Path" held only recommended default options.



confirm whether you want to continue the installation

Installation is finished



9. Vehicle Management Software (VMS)

Our VMS is composed :
A client called Voyager VMS
A pc viewer called Voyager PLAYER,

A server software please follow below instructions

Install Register server software located in the cd Setup folder on the server pc



and follow instructions

RegisterServer_2.2.1.0

Then install the Voyager VMS software on the client pc and follow instructions



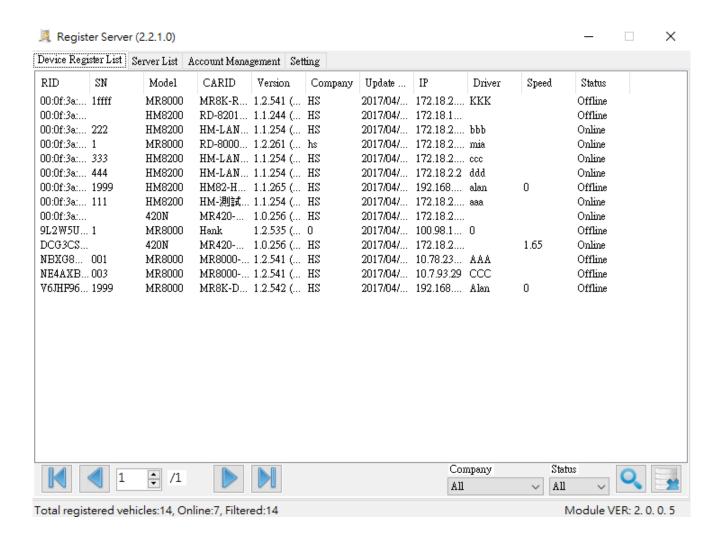
VoyagerVMS_1.0.0.0

Operation

Server side: launch the application named register-server



Default account and password are admin / 1111



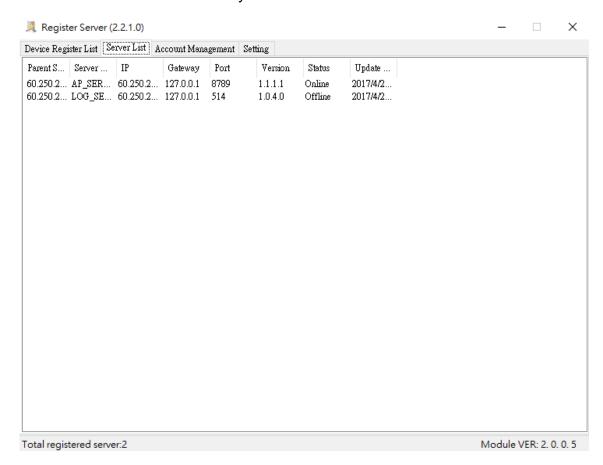
Then you will access to a page showing device connection status

At this page you can see each device registered ID(RID), Vehicle ID, Version of the firmware,

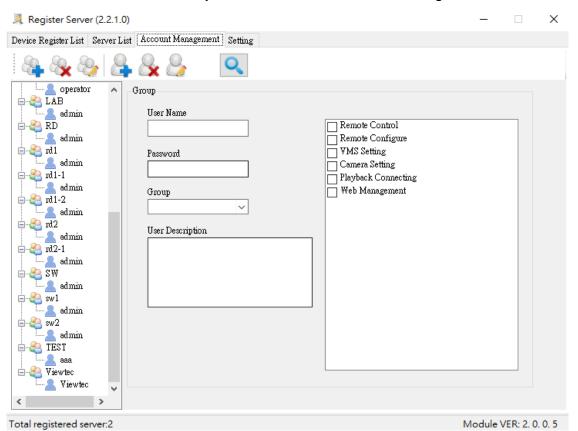
Update time, network information and Status

Clear button enables clear the current list, the server will then updates automatically the mobile DVR that can be linked

Click on the second tab will let you access to server list

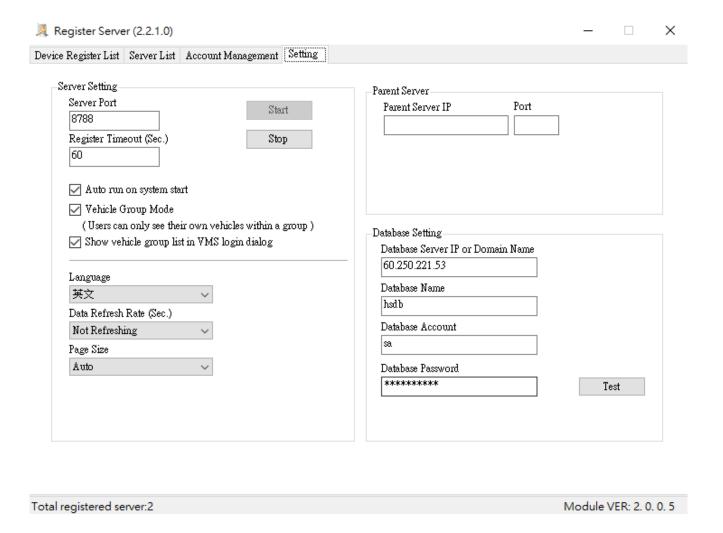


Click on the third tab will let you access to the account management



There are 3 level of account, Administrator, Operator and Guest each can be customized on the right side. This concerns login from cms client,

Click on the fourth tab will let you access to the server setting



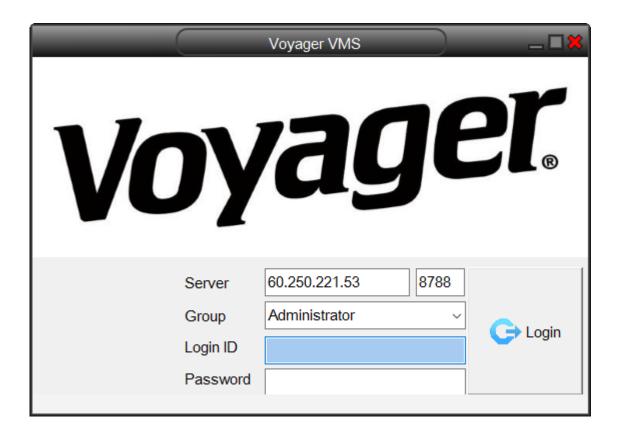
Server setting: default port is 8788, you need to double check on the mobile dvr that the port is the same otherwise the server wont be able to see the device

Start / Stop the service: the default setting is set on enabled but you can manually stop the server

Client side: launch the application called Voyager VMS

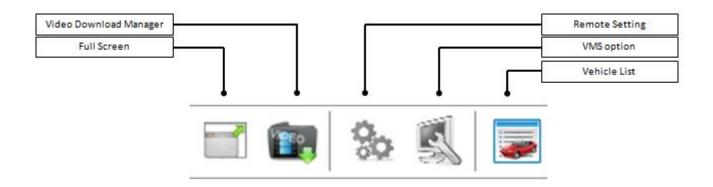


Fill in Login ID and password



Specify the server IP, Specify the server streaming port

Tool bar description





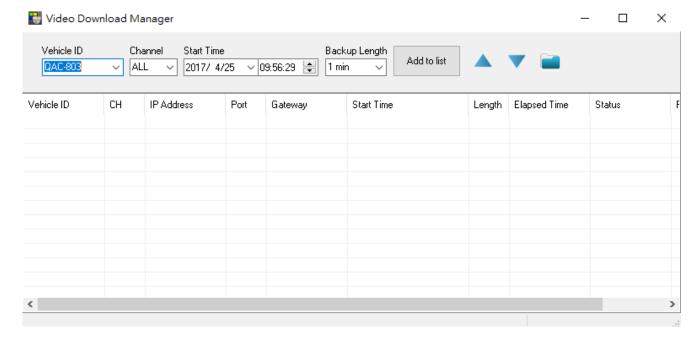
Displays the video in full screen on your monitor, to return to normal mode press ESC button on your keyboard



Video download Manager

Download recorded data from the dvr remotely, you can choose the vehicle ID, the channel , the date and time and the backup length and do multiple backup

We recommend to be in LAN or WIFI environment to download the data and avoid be in 3G mode to download as the risk of failure is very high

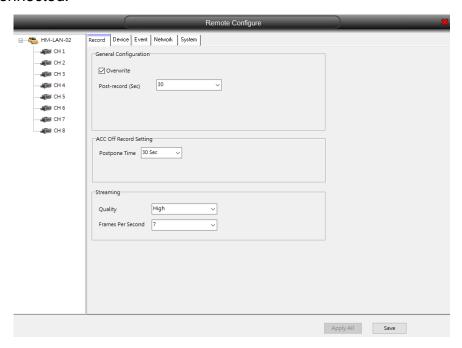




Remote setting

let you remotely setup mobile dvr features

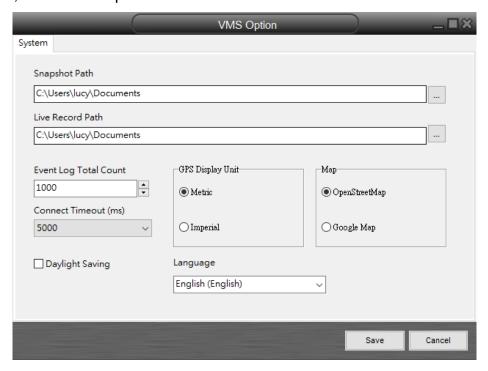
all the functions are the same of the mobile dvr itself, to be able to access to the setting, the dvr must be connected.





VMS option

Lets you setup the snapshot path folder, live record path folder, event log number, GPS displayed unit, and used map





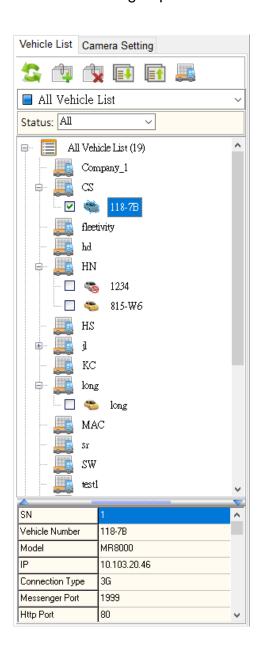
Vehicle list

Display or hide the vehicle list

4 type of display are available select the one according to your preference

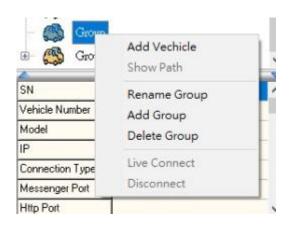


Vehicle list: the program will show connected device with additional information, you can create or delete group for better management and pull one device to a group

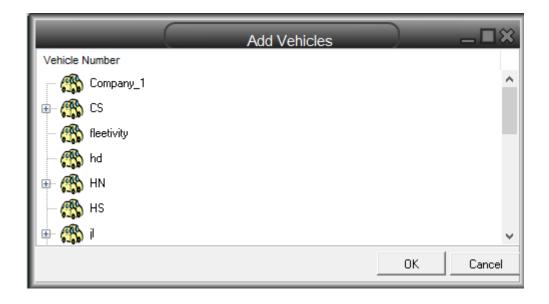


Before you can see live video, you need to create a group. Click on appear, right click on the mouse to display the functions

, a vehicle icon will

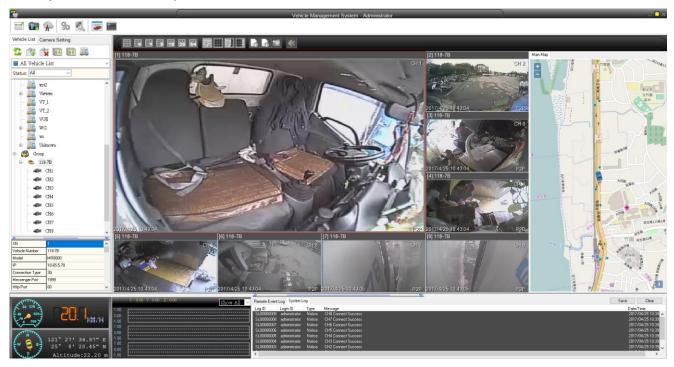


Add vehicle: choose the vehicle you want to add by selecting them



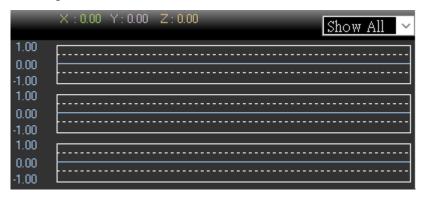
Then confirm by pressing OK

Here you can see Live picture and GPS information

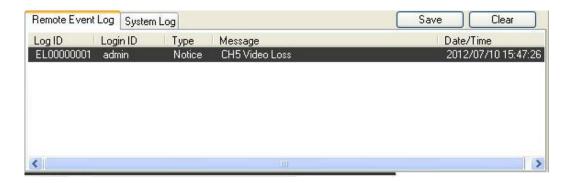


***** The GPS function is only for satellite positioning.

This figure shows G-Sensor information

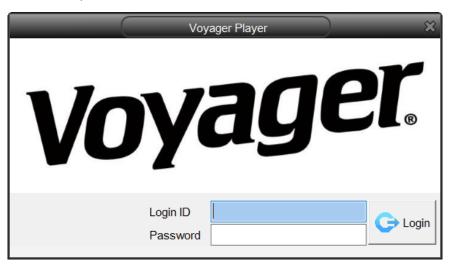


This section shows real time information such as event, vloss, relay out or motion detection



Voyager player application operation:

Default id/password is admin/1111



Program interface



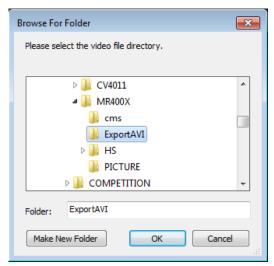
Item	Description
1	Position of the vehicle according to OpenStreetMap
2	G-Sensor information and current speed
3	Display video by date
4	Playback bar
(5)	Video display mode
6	Display video by date
7	Sensor trigger status

There are two ways to open the files:

Open AVI



To open a file press the first icon and find the folder you store the avi file



You will be able see the recorded files displayed by date To play a file just double click on the date then a specific time



Open SSD



After you select the SSD you will see this display





Control bar description



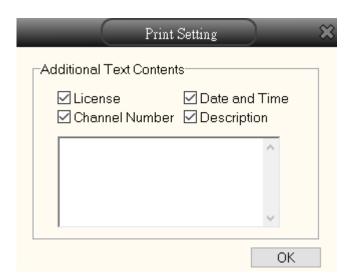
Icon	Description
0	Open SSD containing the video
	Open a avi file in a folder
SDF	Open SD card containing the video
AVI	Convert a period from the SSD into AVI format
	Stop the playback
	Playback
П	Pause
*	Fast Rewind
>>	Fast Forward
4	Step Backward
	Step Forward
M	Playback previous file
Ы	Playback next file
0	Take snapshot of current video
*	System setting

If you press the snapshot icon , a window will pop out



You can save manually or auto save the picture

You can adjust print setting by pressing SETUP button, another window will come out

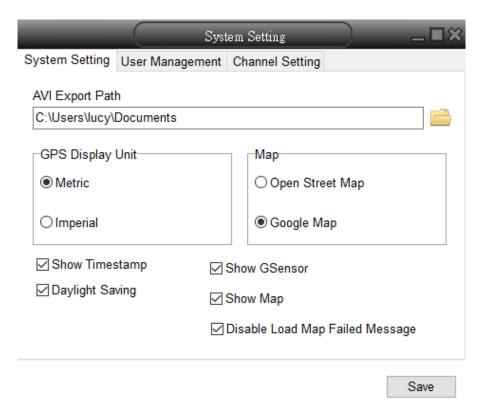


You can add in your picture print license number, plate number, date and time, and also description (by adding text)

If you press PRINT button, the computer will send the picture to your connected printer.



Setting

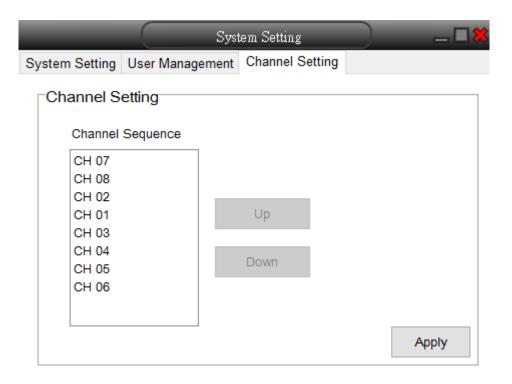


Here user can select GPS display unit and Map.

If you select "disable load map failed message, Voyager player do not show this warning.



In this section, you can manage your different account, by changing administrator password or add new account. You can also delete user.



In this part, you can change channel sequence by clicking UP and Down.