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

8 CH MOBILE DVR

User Manual

Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK

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.

RoHS conform

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.

⅄ 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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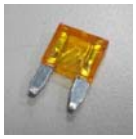
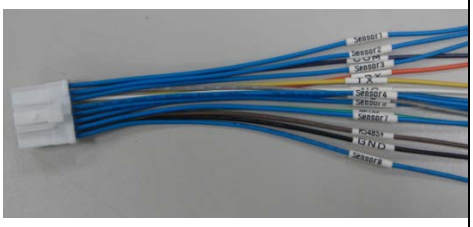
6 Vehicle Management Software (VMS) 57

7 Register Server Installation instructions 58

1. Package Contents

Description	Picture	MR8000	MR8001
Power cable (6 pin/6m) + 5A fuse X 2		V	V
I/O cable		V	V
3G antenna (Female)	Pictures for reference only, actual delivery-based	V	-
G-Mouse (Male/5m)		V	V
Wifi antenna (Female)	Pictures for reference only, actual delivery-based	V	-
Remote Controller + battery		V	V
Screw x 6		V	V

Hard disk rack locker key		**V**	**V**
Cable with 4 video input and one usb port (2 pieces)		**V**	**V**
External Indicator		Optional	Optional

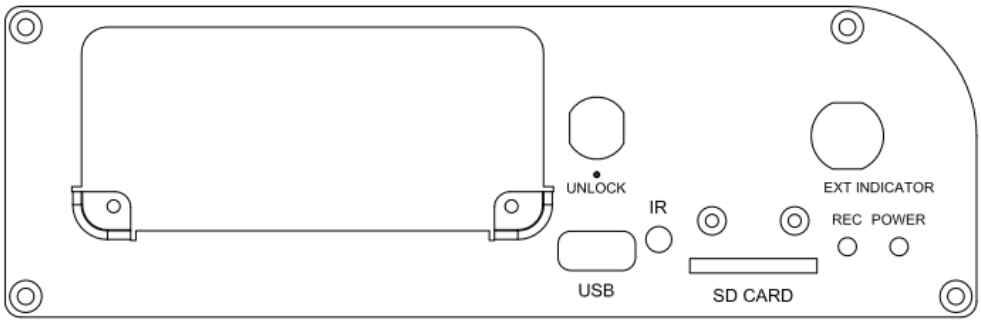
CD Contents

Description	Model	
	MR8000	MR8001
MRPlayer	**V**	**V**
MRVMS RegisterServer_Setup ServerDBInstall	**V**	**Optional**

2. Product Overview

Front Panel

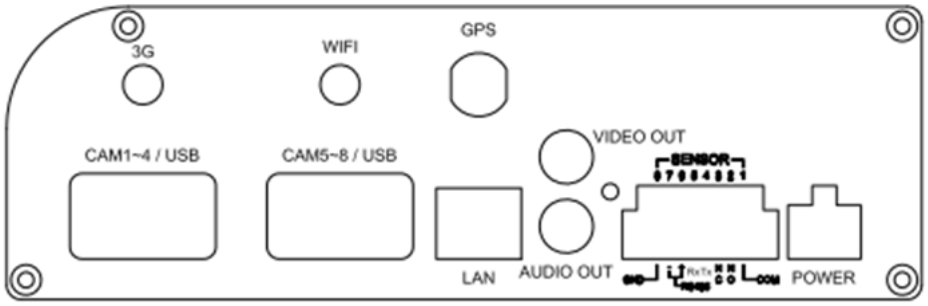
MR8000 / MR8001



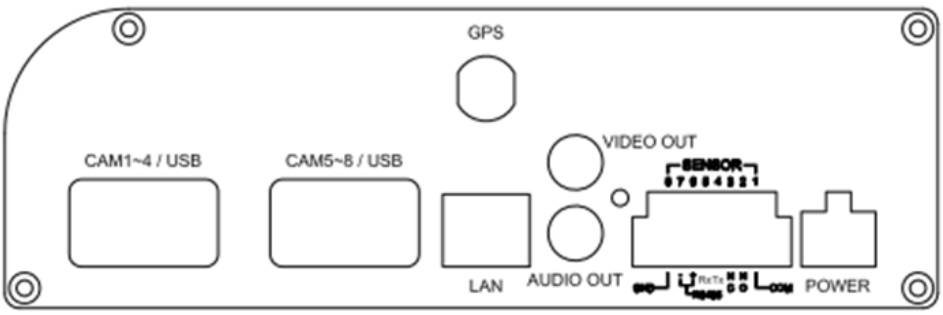
(※ Front panel USB port recommended only for USB storage, mouse recommended use the back Cable wire's USB port)

Back Panel

MR8000: with 3G (4G) / WIFI function

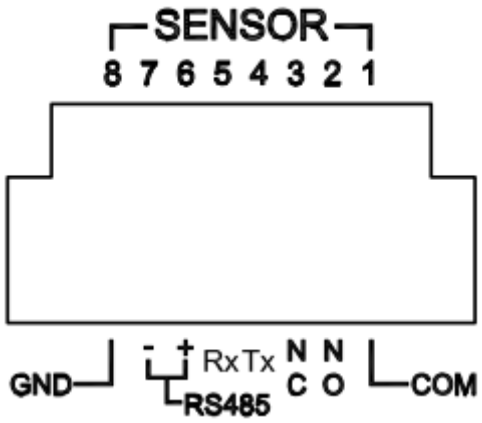


MR8001: without 3G (4G) function

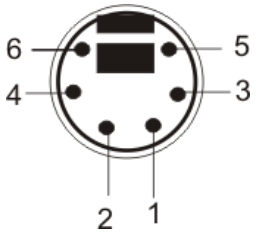


Cable pin definition

I/O cable pin definition



Mini din type



Pin number	Description
1	Not used
2	Not used
3	Audio
4	GND
5	+12V
6	Video

The function button of this IR remote controller as below

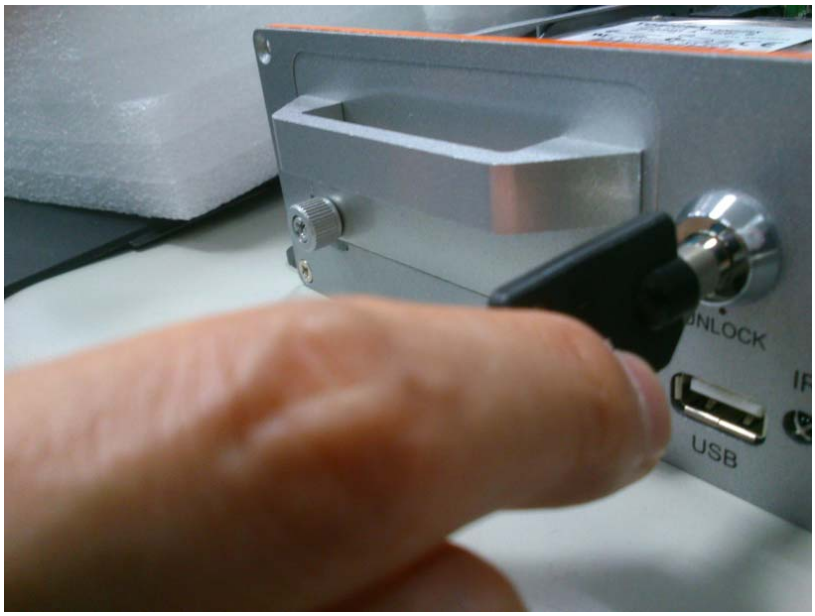
Lock	Lock the DVR system need a password to unlock it
Panic	Panic record button
Menu	Go to 'MENU' mode to setup the system
Search	Search recorded video
Backup	Backup the recorded data to other device
Direction (▲,▼,◄,►)	Move cursor or control PTZ camera
ENTER	Select sub item in system setup mode
ESC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

3. Physical Connection

Hard disk installation

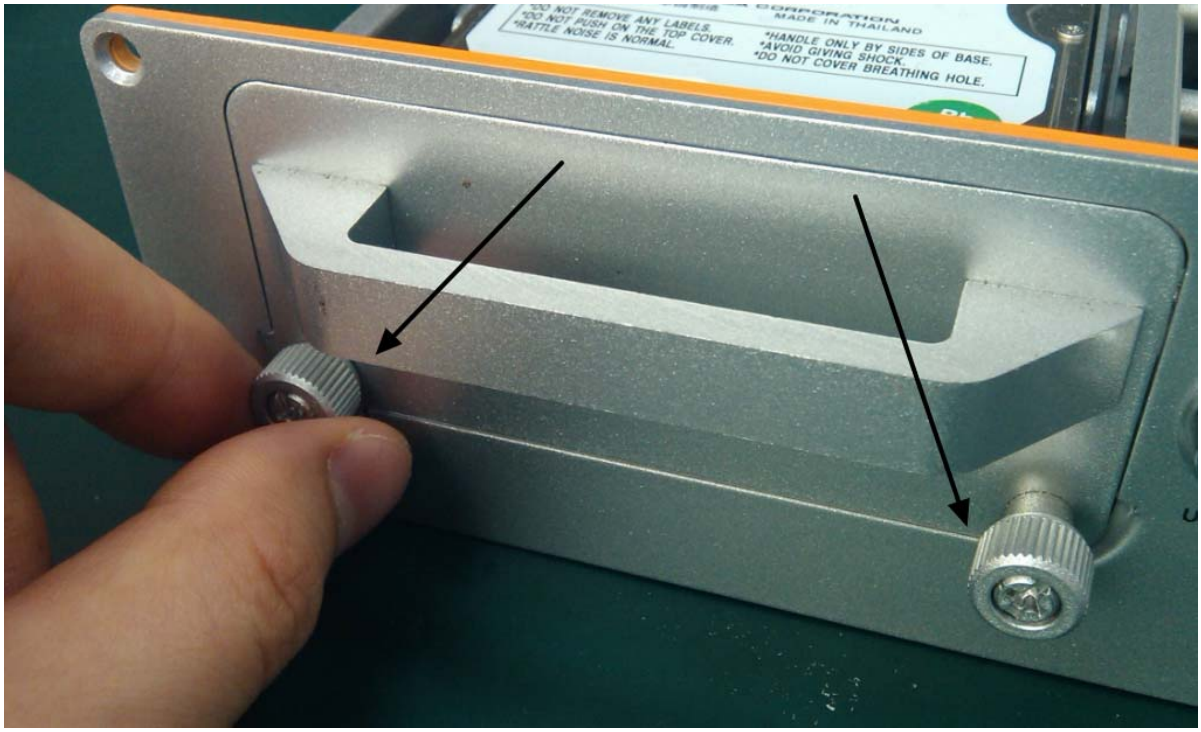
Remove the mobile DVR hard cover and insert the locker key in the front of the device,

To unlock please turn counter clock wise 90°,



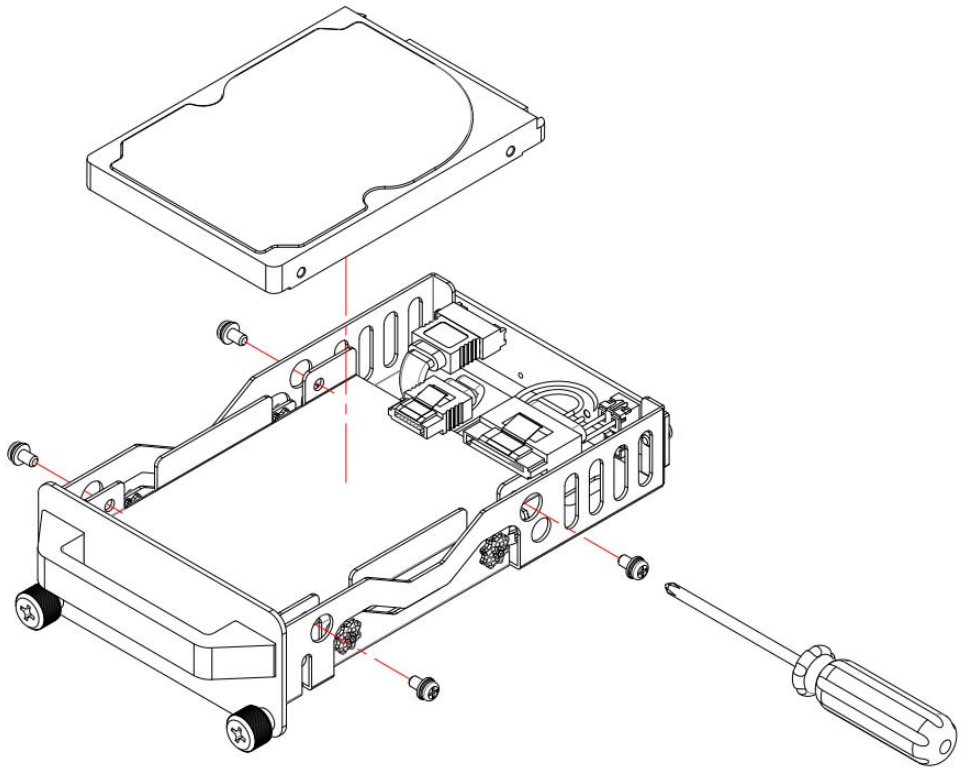
To lock it please turns clock wise 90°

Then turn counter clock wise the two screw



Pull the rack out in order to install your hard disk, note that only 2.5 inch hard disk can be installed

Screw the hard disk as shown on the below drawing, notice DO NOT press the hard disk from the top as it may damaged the anti vibration system



Then connect the SATA and power cable on the back of the hard disk it should look like this :

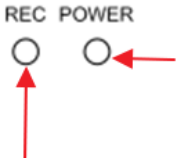
After you installed the hard disk put back the rack into the mobile DVR and tighten the two front screws and use the key to lock the rack. If the lock is not correctly done, the system won't be able to boot and the power led will flash.

※ **After installed the HDD, the bottom screen will display this**

ICON.
And if SD card has installed, the bottom screen will display this

ICON.

Light Description



Green light: When device is booting, the led light will flash.
(When the PWR light is keeping lit indicates the system to normal)

Red light: When device can't record、Vloss or HDD Initial fail, the led light will flash. (When the REC light is keeping lit indicated the record to normal)

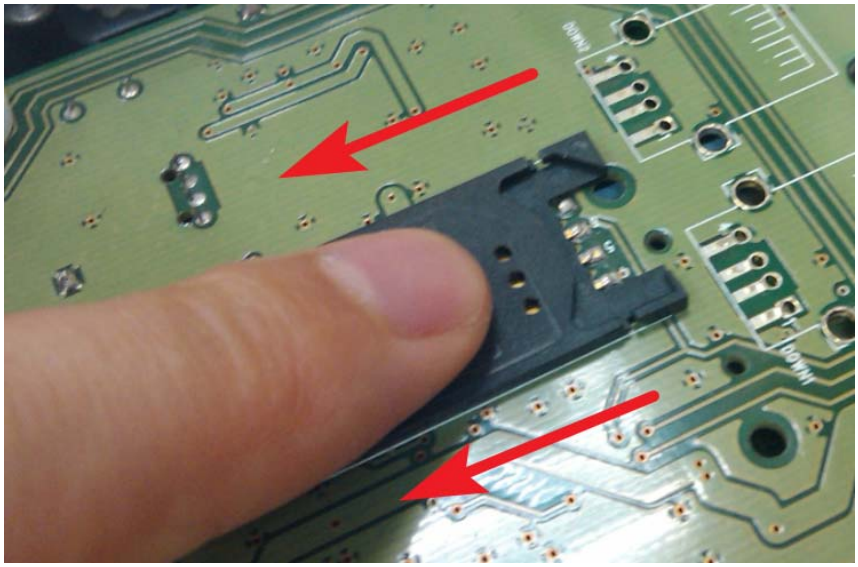
※ When system is booting, Un-Lock the hard disk cover action will not directly turn off the device, and the green light will flashing till the device turn off, the green light will stop lighting.

※ When the hard disk cover is on" Un-Lock " status, although ACC is on, but system won't booting.

Sim card installation (MR8000)

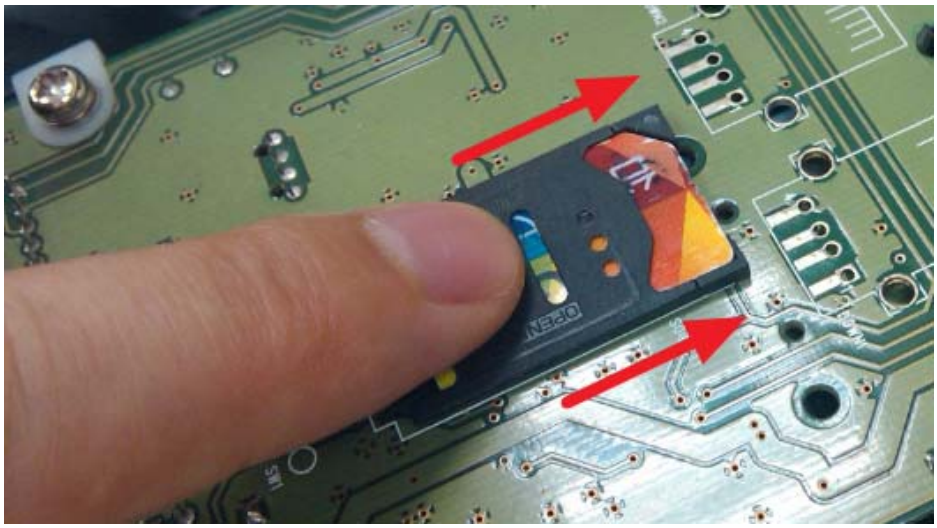
When you purchase your sim card to your telecom provider, please make sure that it meets one of the following standards in order to work:
GSM 850 900 1800 1900
WCDMA 850 1900 2100

Pull the sim card socket



Insert the sim card with its gold contact facing down and the notched corner oriented to the upper right of the slot as shown

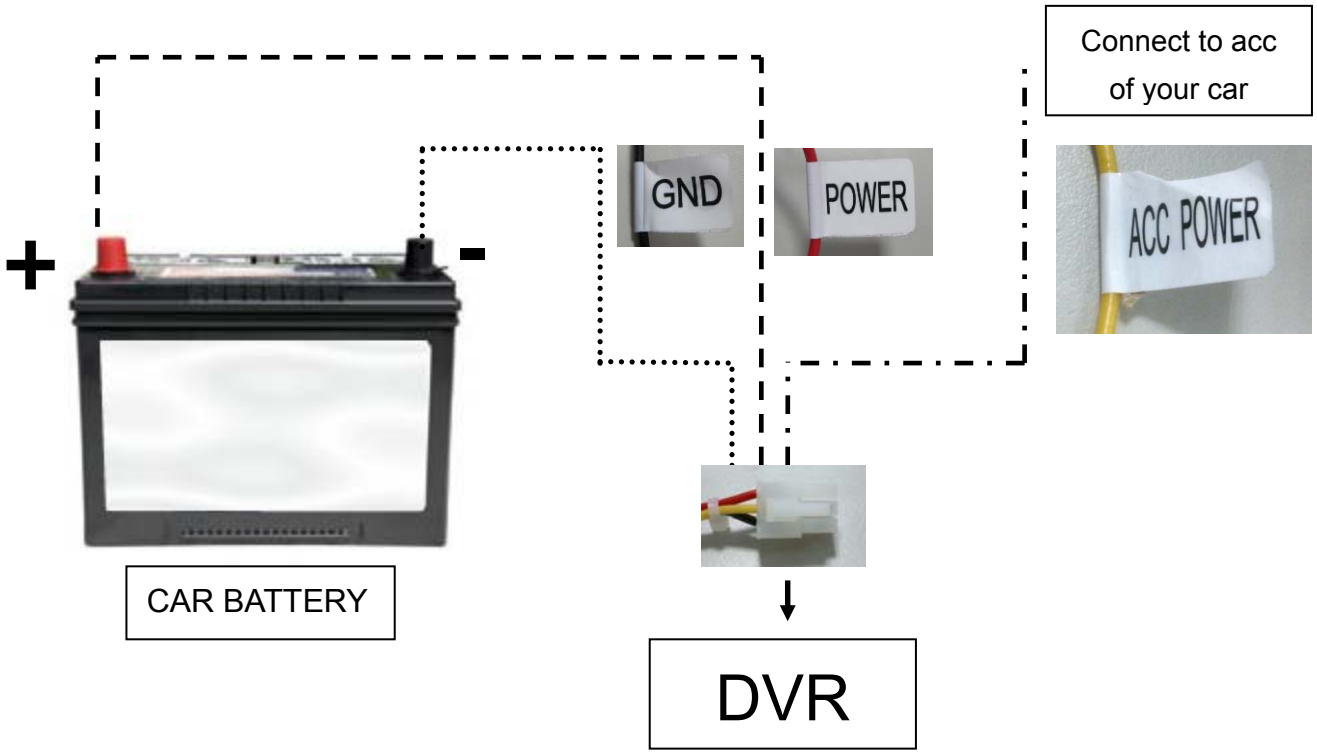
Then put back the lid to the slot and push to lock it



At final your mobile DVR should look like this

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 hard drive 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 HDD Initial fail
	Power	Green	System ready	Power off	System booting

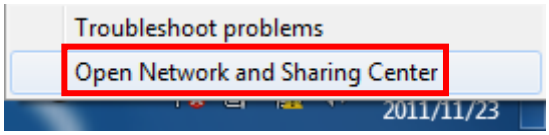
4. Setup

In order to access to the 8CH mobile DVR with a notebook, you need to have RJ45 cross cable

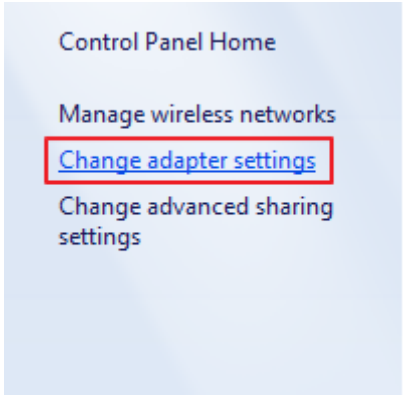
Link the notebook to the DVR with the LAN cable

Under windows 7

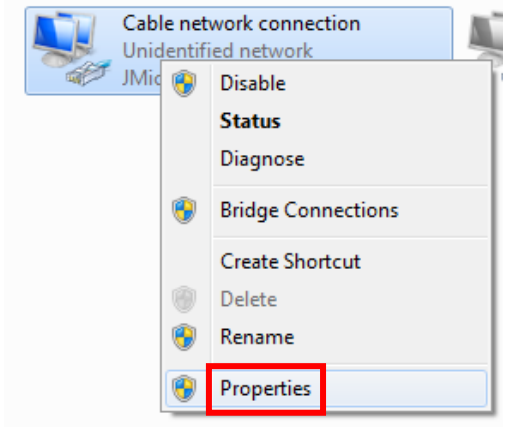
On the desktop bottom right, right click mouse on network icon then select **open network and sharing center**



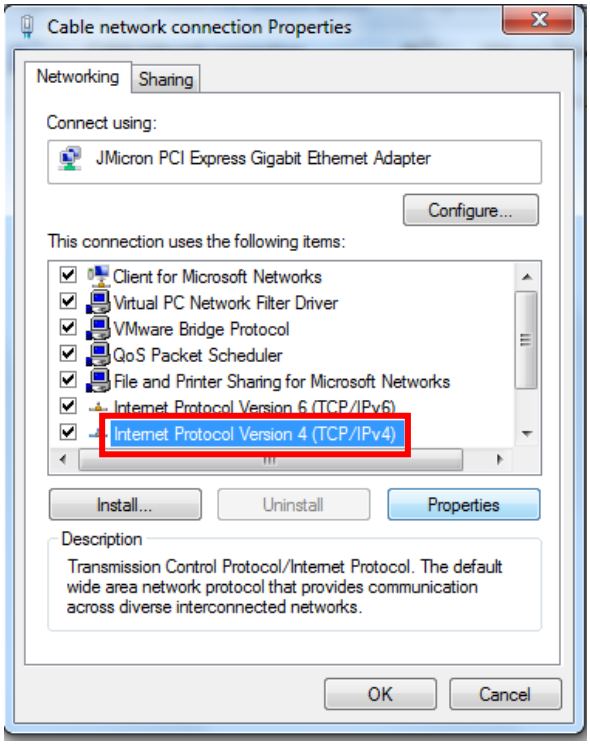
Then on the left select **Change adapter settings**



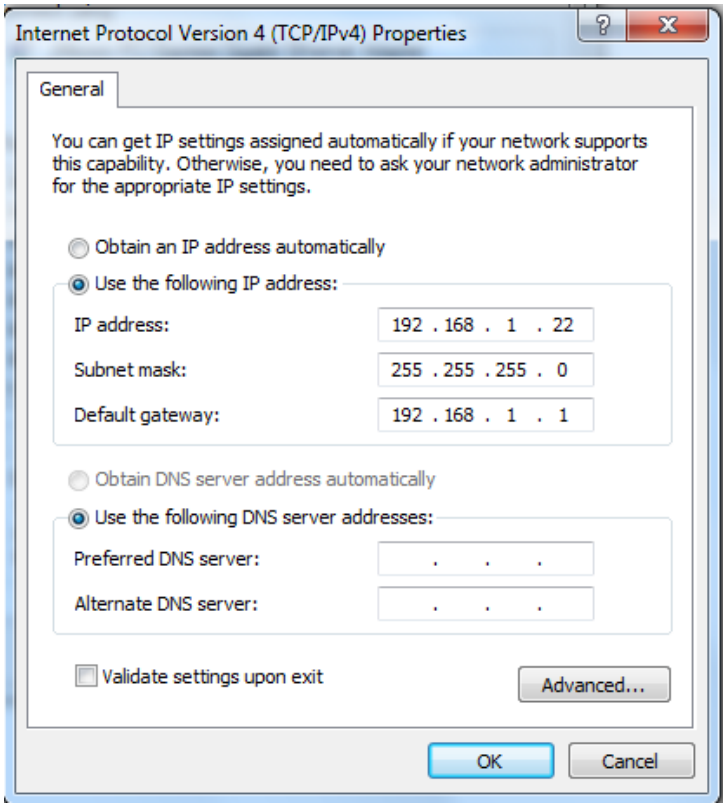
Choose your lan wired connection then mouse right click and select properties



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

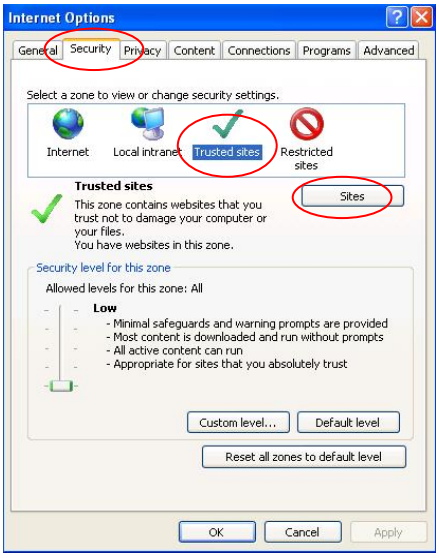
Our device supports **Internet Explorer 7, 8, 9**(32bits) **and 10**(64bit) **only**

The default IP address of the mobile DVR is **192.168.1.99**

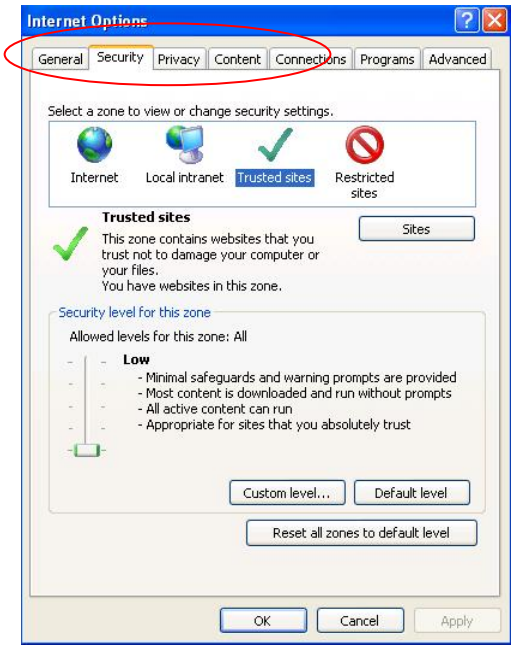
In order to install the active X you need to change your Internet Explorer settings

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

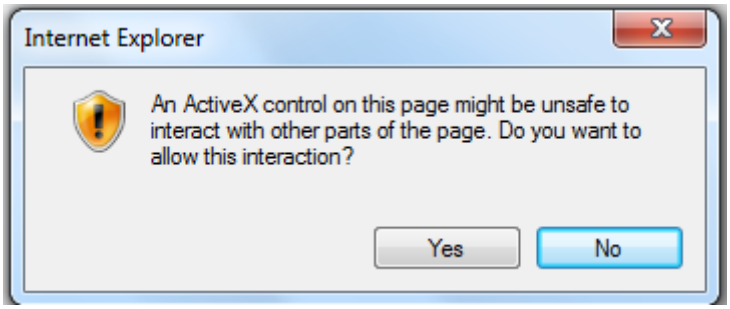
Default administrator username/password is “**admin**”/ “1111”

Default guest username/password is “**guest**”/ “1111”

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

You will have a pop up message

A pop up message will display, press Yes to continue

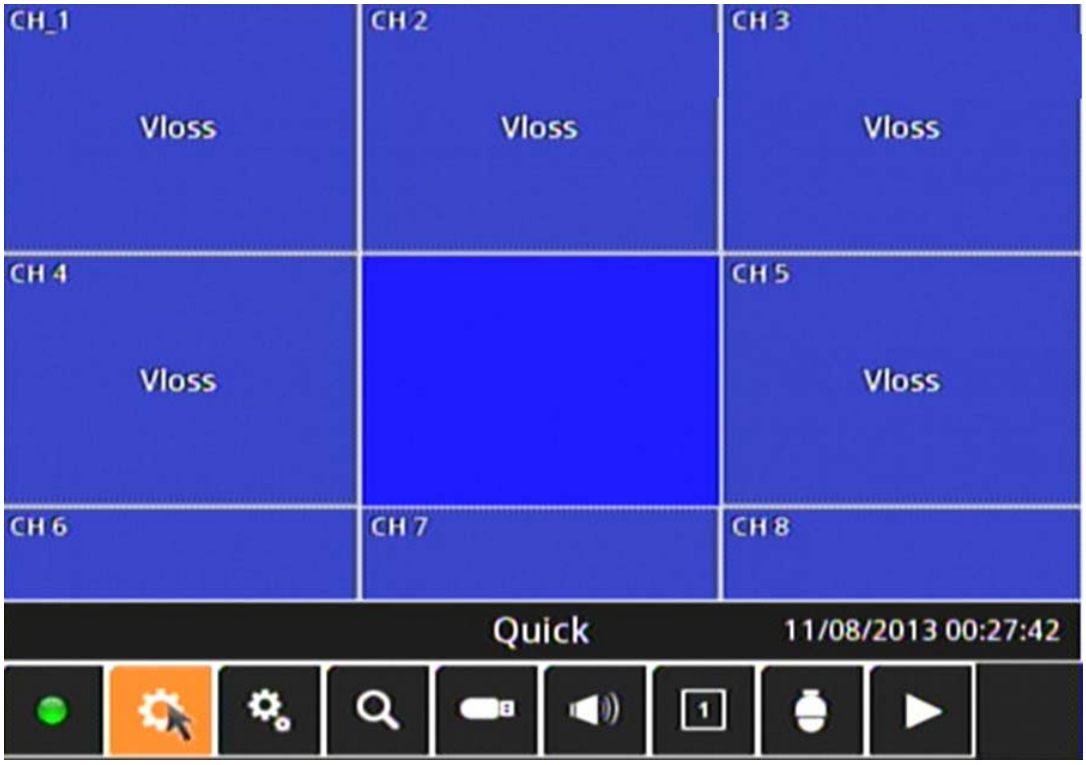


5. DVR operation via video out

Mouse right click → Quick

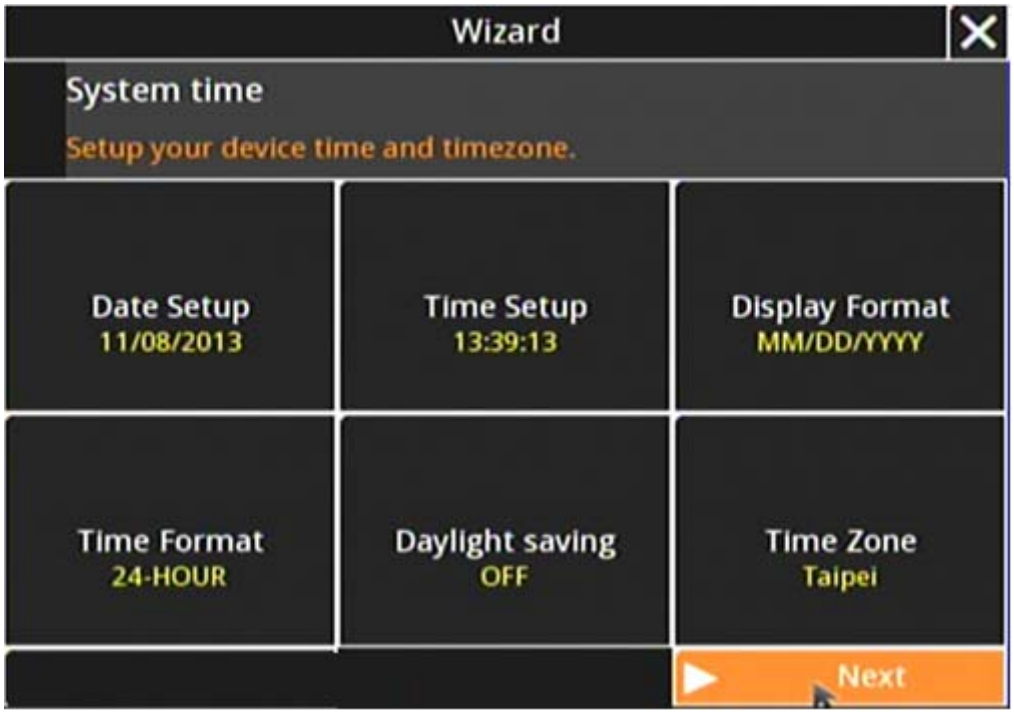
Quick setting

After click the “Quick” icon, the wizard will take you to fill out all needed information to setup the mobile DVR.

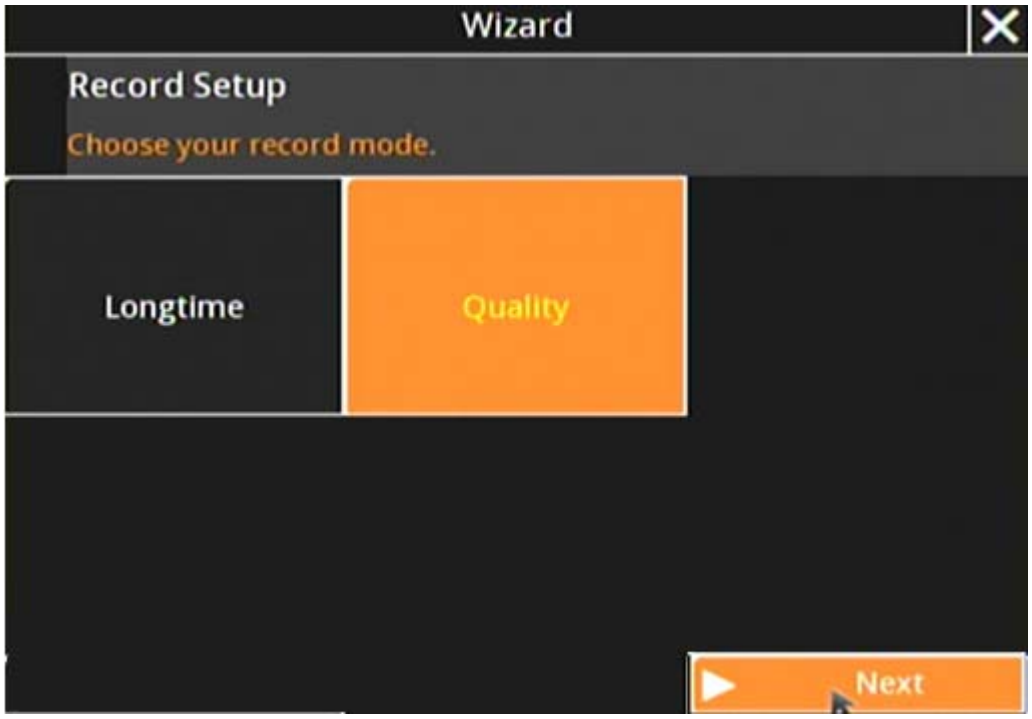


Language: There are 6 options at here, including “English”, “Traditional Chinese”, “Japanese”, “Deutsch”, “French”, “Portugues”.

System time: There are 6 options at here, including “Date Setup”, ”Time Setup”, “Display Format”, “Time Format”, “Daylight saving”, “Time Zone”.



Record Setup: Choose your record mode here, including “Longtime”, and “Quality” 2 options longtime setup will extend record time but image quality will be reduced whereas QUALITY mode will give the best quality picture with a shorter recording time.



Network Setup: There are 6 options at here, including “LAN”, “Wifi”, “3G network”, “Center IP”, “Register Timing”, “E-mail” etc.
User can setup according to network environment

Ignition Off: Setup Ignition off record mode this function is to setup when ignition is off post recording time, including 14 options can be selected. Including “Off”, “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”.

Car Info Setup: 4 options here for selection, including “Device Number”, “Company Name”, “Driver Name”, “Car Number”. Then “Save” & quit.

Advanced Setup

Record Setup:

- **Record setup**
  - **Channel: 8** channel totally. From 1~8.
  - **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”.
  - **Keyframe:** 1 sec ~ 10 sec. “Save”, then quit automatically.

Device:

- **Color Setup**
  - **Camera:** 1~8
  - **Camera Title:** edit the camera name.
  - **PTZ Setup**
    - **PTZ Protocol: “**PELCO_D”, “PELCO_P”.
    - **PTZ ID:** 1~255.
    - **PTZ baud rate:** “110”, “300”, “1200”, “2400”, “4800”, ”9600”, “19200”, “38400”, “57600”, “115200”.
  - **Color Setup**
    Brightness: 0~10
    Contrast: 0~10
    Saturation: 0~10
    “Click “ X “, return to Device page..

- **Storage:** Installed HDD’s information will be located and listed here. Including HDD’s **“Name”, “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 HDD overwirte action can be set when HDD was fully used for the record file. Please if you insert already used hard disk, the hard disk will be formatted

- **IR:** IR ID can be set here and there are “Not assigned”, “1-1~1-9”, “2-1~2-9”, “3-1~3-9”, “4-1~4-9”.
- **Keyboard:**
  - **ID:** 1~15
  - **Baudrate:** 2400、4800、9600.
- **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”, “Critical”, “Warning”. Default is Critical
  - **Video Loss: “**OFF”, “Critical”, “Warning”. Default is Warning
  - **HDD: “**OFF”, “Critical”, “Warning”. Default is Critical

Event Setup:

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

- **Video Loss:**
  - **Camera**: 1~8
  - **Enable:** “ON”, “OFF” . if the status is “ON”, below 3 items can be setup at the same time.
  - **Dwell:** 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 1~8 camera can be set.
  - **Enable:** “ON”, “OFF”.
  - **Dwell:** “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**: High/OFF
  - **Dwell**: 0 ~ 9 seconds
  - **Priority:** 1~8
  - **Email**: ON~ OFF
  - **Alarm out**: ON ~ OFF
  - **Event record**: 1~8
  - **Event popup**: 1~8

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

Dwell 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

G Sensor

Enable: ON/OFF

Threshold : OFF ~ 5g

Dwell 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

※ If GPS mouse has already connect to the device, the bottom screen will 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: CMS 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 more fastly the ip of the dvr using 3g connection

Stream:

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

※ **If use LAN connect network, the bottom screen will display this** **ICON**

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 (only for MR8000)

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 ICON**

WIFI (only for MR8000)

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.

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

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
- Network Icon

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 this 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.

Car Info Setup

User can add car info such as: device number, company name, driver name, car 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, Uboot version, UID SN (Internet connection identification code, only MR8000 models)

Network Info:

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

Storage info:

status mention if the hard disk 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.**

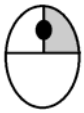
3G info/4G info:

Enable, signal, IP address, Netmask, Gateway

Wifi info:

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

Search

 Mouse right click → Search

Backup

User can make a backup of specific period on any usb device such usb key, external usb hdd

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, if that day has video record in blue typeface represents**

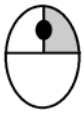
Event List

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

Log List

Select the channel
Define start and end time.
MR8000vailable: 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

 Mouse right click → 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 to disable sound

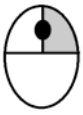
Split screen

User can choose 1、2、3 or 4ch to display

PTZ

User can control the ptz during live display

Playback

 Mouse right click → Playback

User can playback last recorded file

Fast Rewind

Pause

Play

Fast Forward

Slow forward: it will forward frame by frame

Stop and return to main display

Split screen

Volume adj

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 car (serial number, company, driver name, licence plate number), and also control PTZ
5 is audio on/off

OSD operation

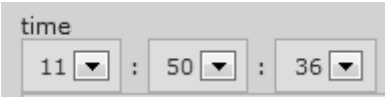
Video

Live *please check page 11 for more information*

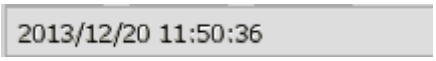
Playback

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

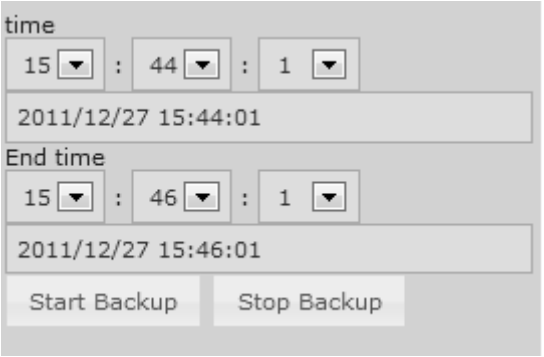


Check on below line if it is the period you need



If data are available a

will appear, then press PLAYBACK,



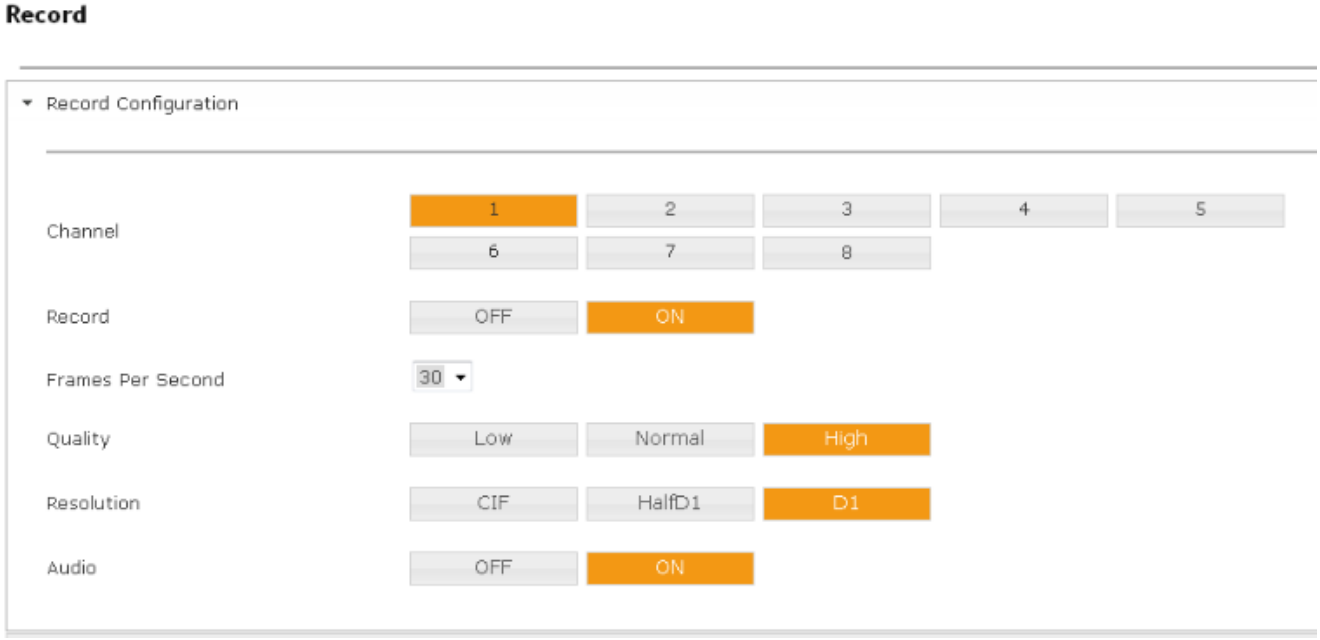
if you press BACKUP then you have the specify the period then press START BACKUP
you will have to specify the folder destination

The backup process in % will appear in each channel

When backup is finished, a confirmation message will display.

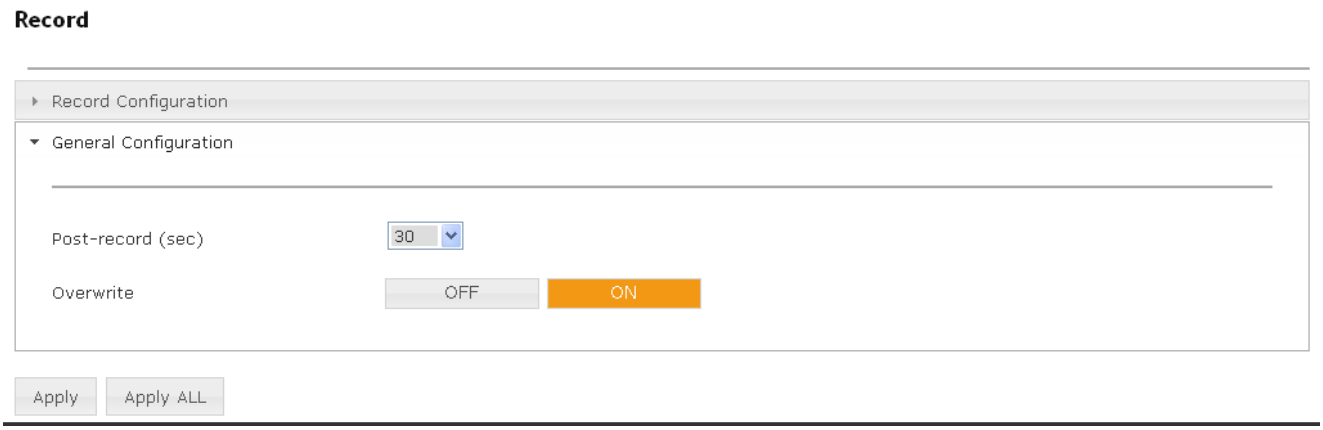
Then press Live display to return to normal operation

Record



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 HDD storage is damage or record fail, the SD CARD will automatically doing the record.
(※ SD CARD can support up to 32GB and need to format FAT32 before using.)
(※ Does not support hot-swappable SD card, do not remove the SD card while in use)

General configuration

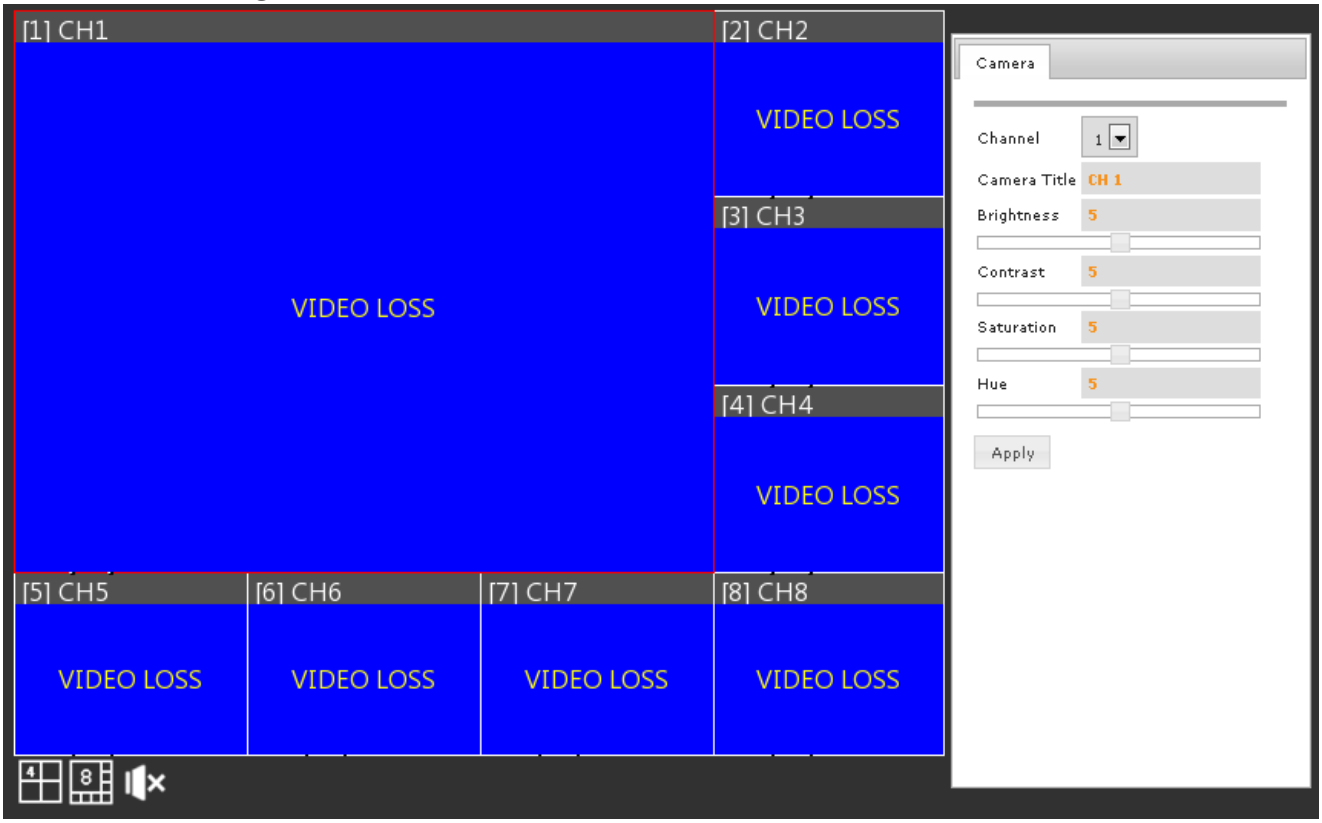


Post record 0~30 sec
Enable or disable overwriting on hard disk

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

Streaming setup

Camera setting

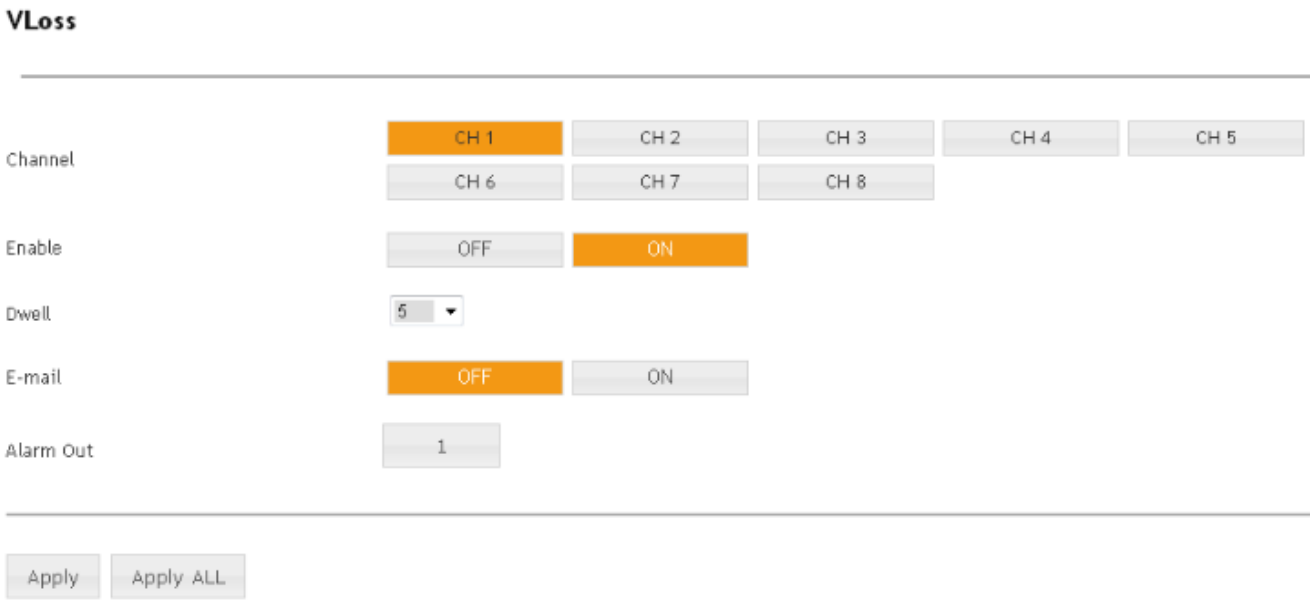


User can change camera title

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

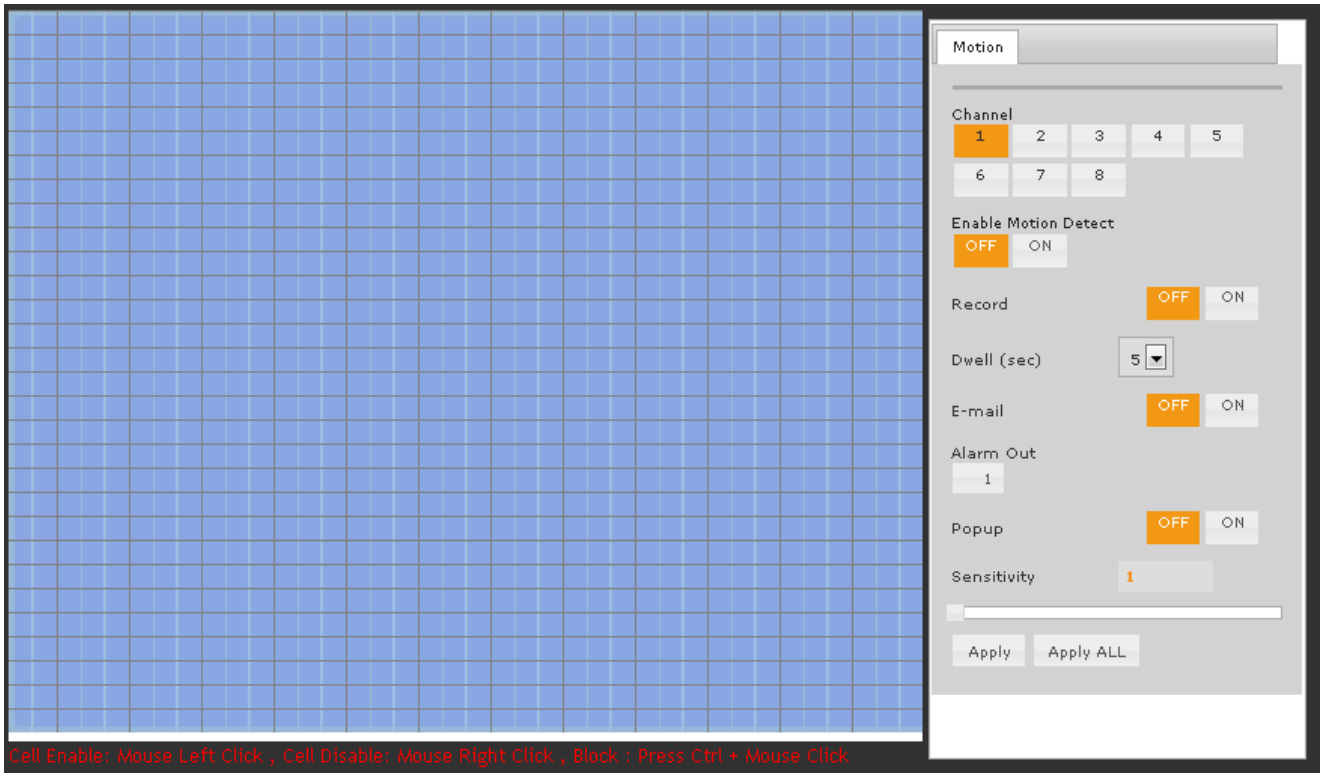
Event

VLOSS



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

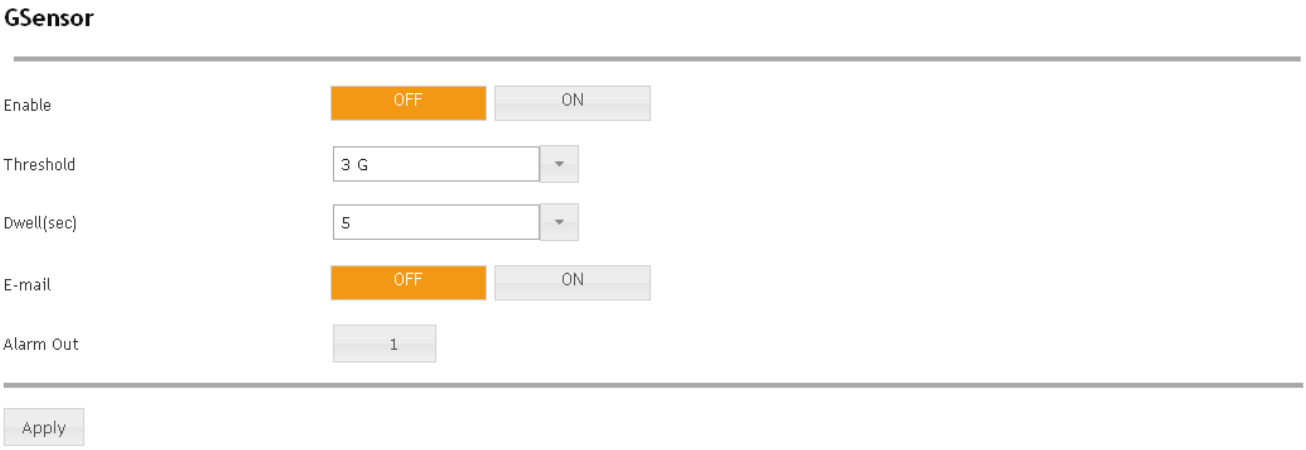


User can setup motion detection one by one or all at the same time
To select a cell: Mouse Left Click, / To deselect a cell: Mouse Right Click,
To select or deselect a block: Press Ctrl + Mouse Click
Blue area means selected /No color area means not selected
User can setup which camera to record in case 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

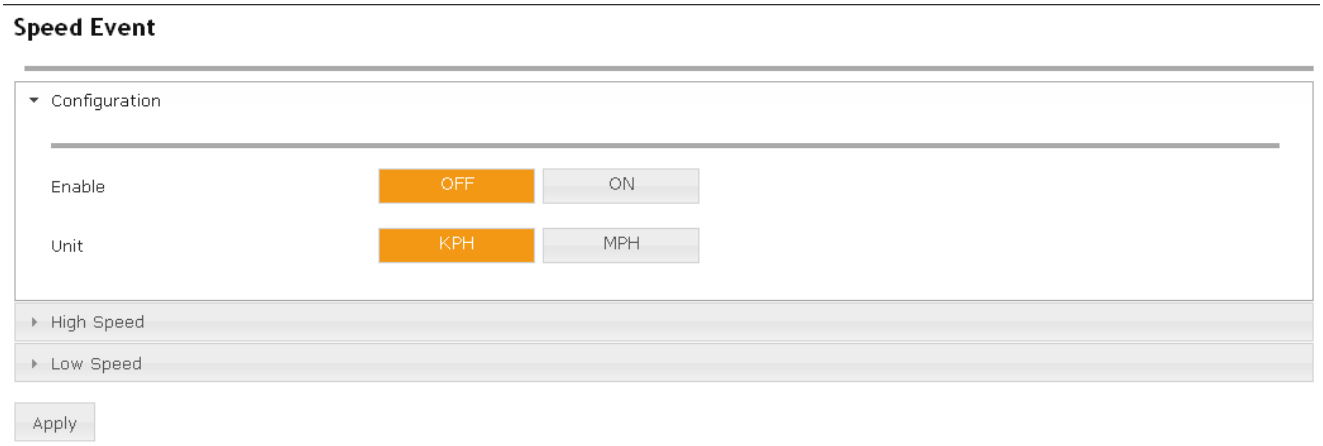
Sensor: 1 to 8
Enable: setup the status of the sensor OFF / NC/ NO
Record CH: select which camera to record in case of sensor trigger
Dwell time: define the length of the buzzer after each sensor trigger 0 ~ 9 seconds
Pop up priority
Email: disable or enable
Alarm out: in case of sensor trigger, DVR will send a signal via alarm out like a buzzer or flashing red light
Popup: 1 ~ 8

G sensor



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

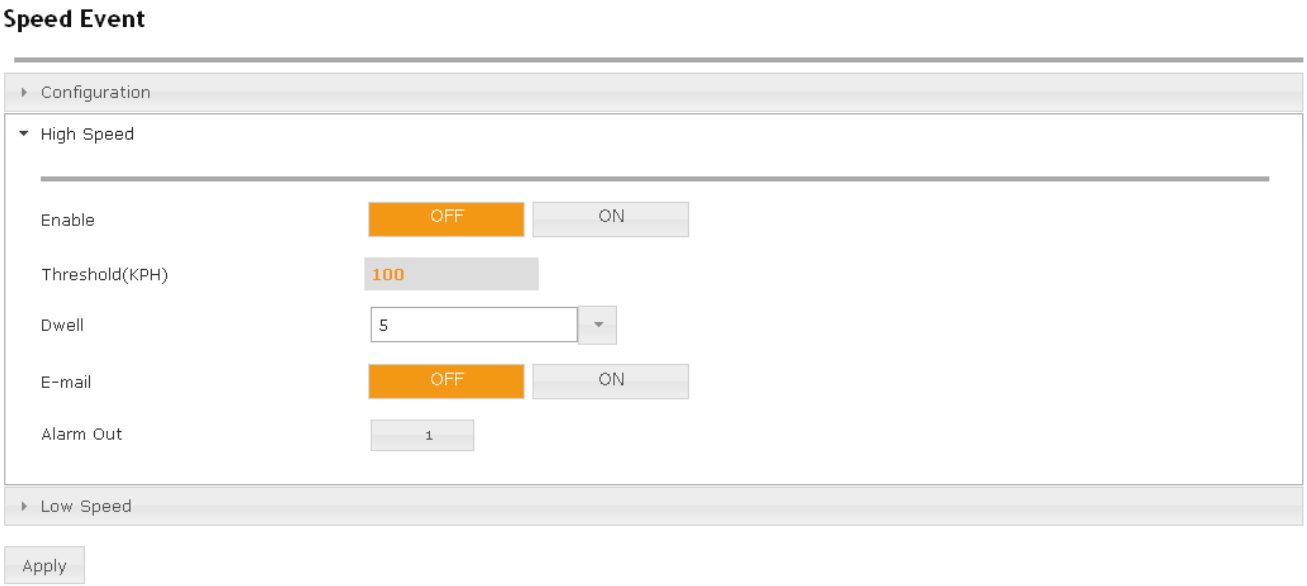
Speed event



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

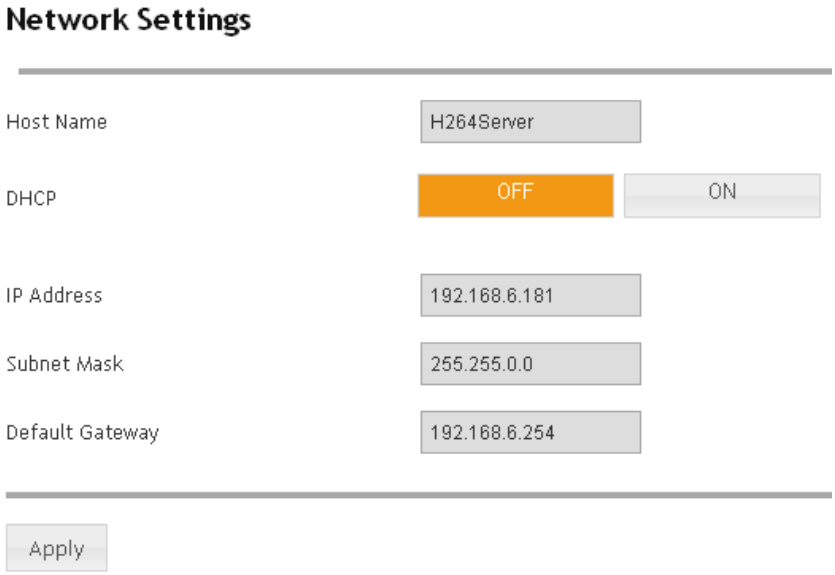
User can enable or disable high speed detection, specify the highest speed threshold, its dwell time from 0 to 9 seconds, if send email or not and if enable the alarm out or not

High Speed



Same setting applies for Low Speed detection

Network



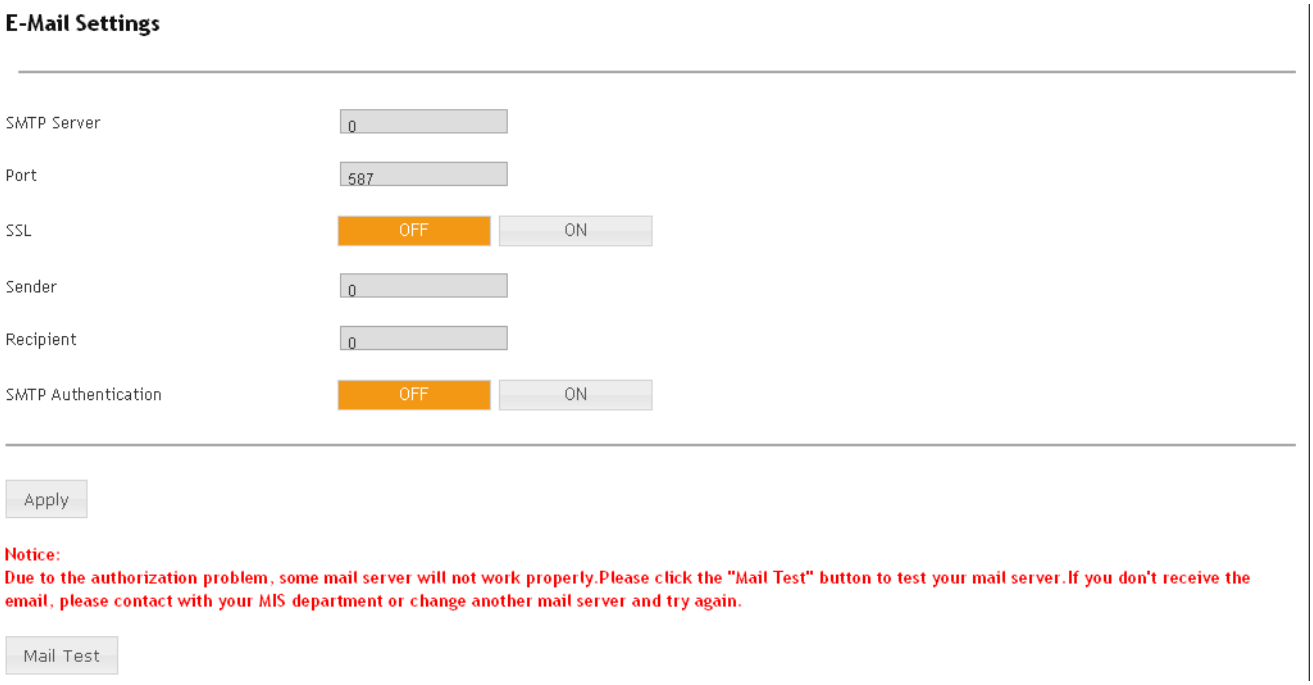
This side enables user to setup network in order to remotely connect to it for example with a notebook for maintenance.
If the network has a DHCP server, you can enable this function.
Please make sure that gateway and subnet mask are the same on both side.

Register timing

Streaming

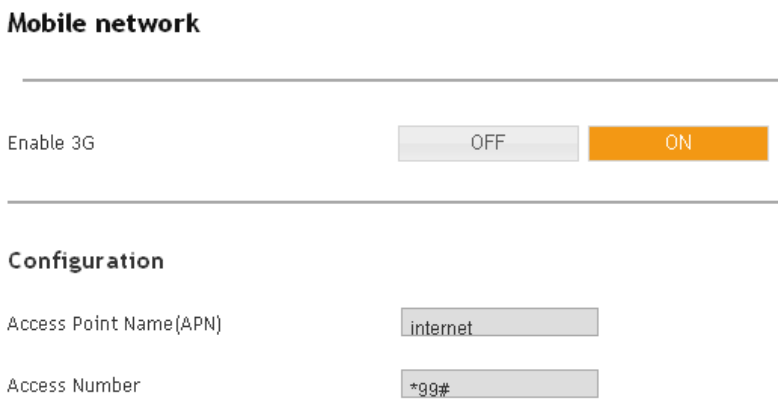
If your network has a router, please make sure to open these ports in order to enable smooth access to the dvr via browser or vms software.
All these port can be customized according to your needs

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



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

Here you can enable or disable the wifi

7. Configuration

Information

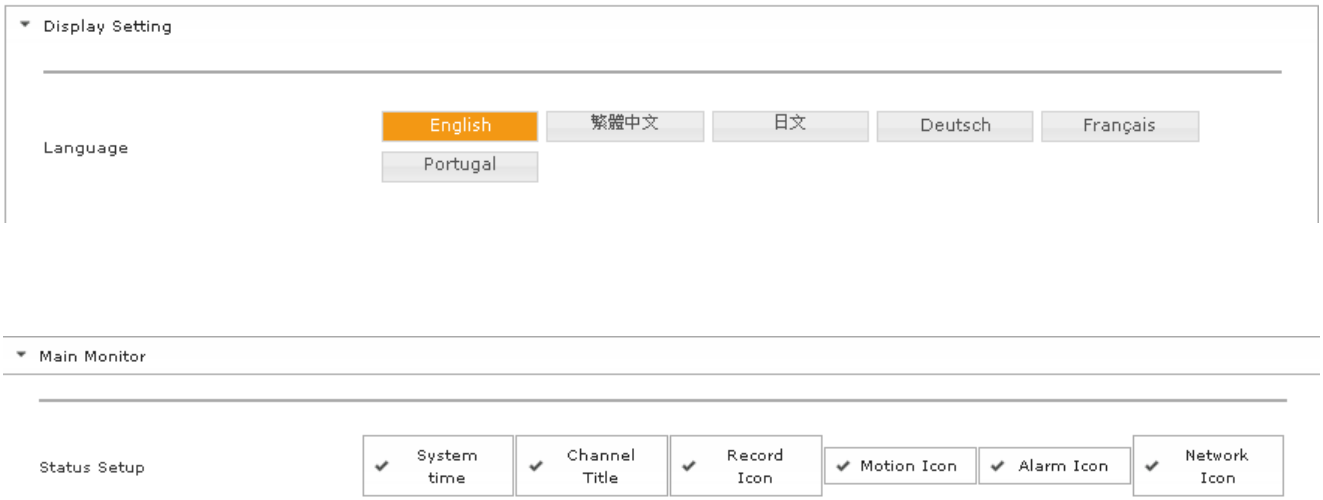
This section shows three type of information:

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

System

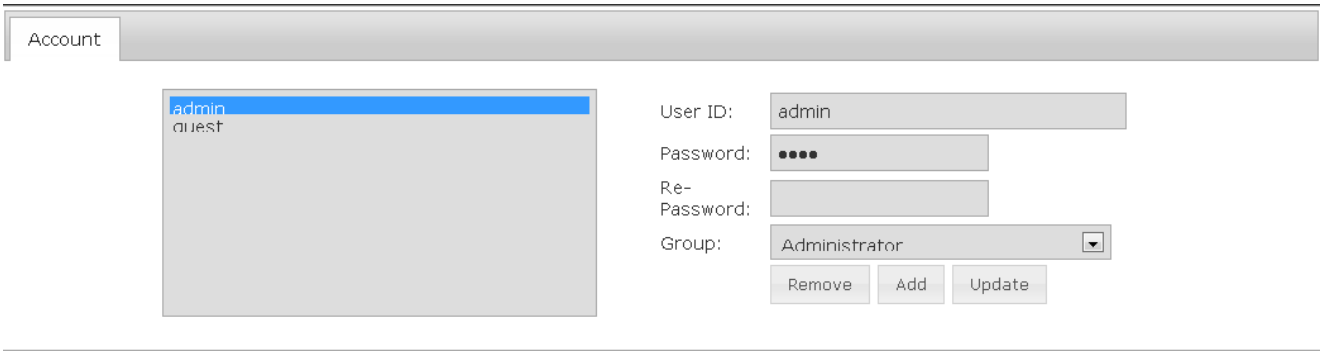
Network: displays current network setting and MAC address
HDD: displays hard disk brand, model number, size and occupation percentage

Display



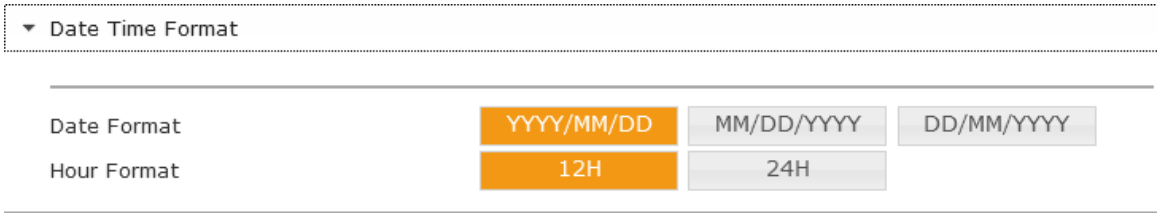
User can select which items to display

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
Cell phone and Email are just for reference and optional

Date and time



Select your prefered date format and hour format here

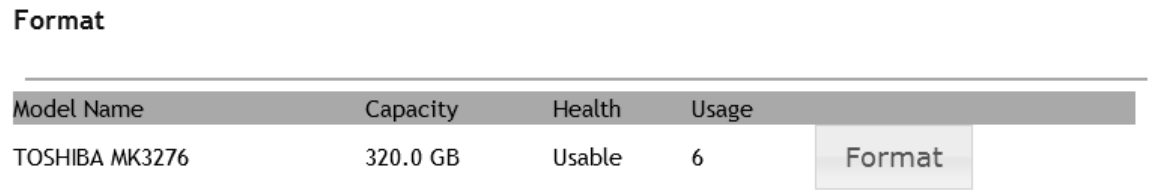
Enable or disable daylight saving, according to the time zone, it will automatically turns it on and off at the right time

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

Car information

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

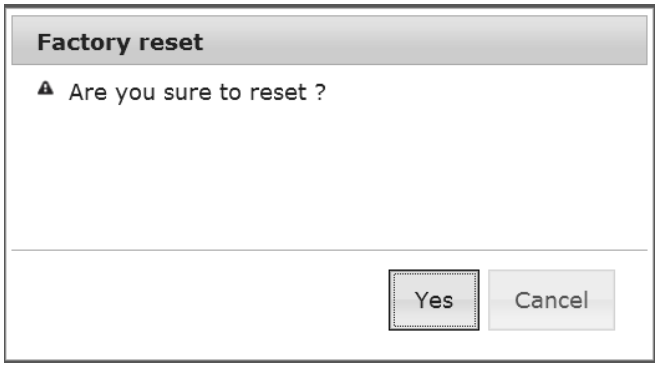
Format

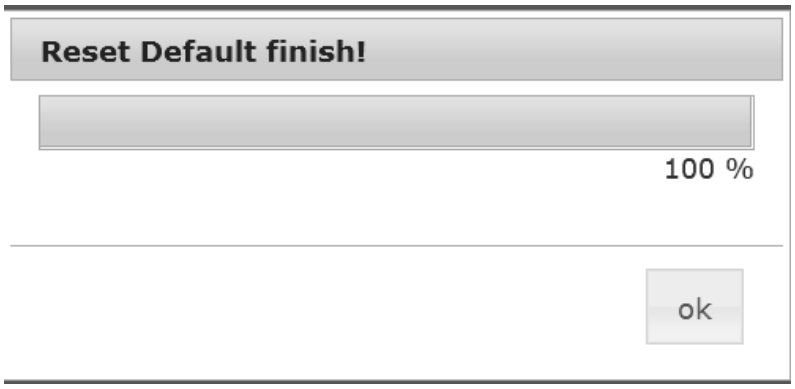


User must format the hard disk before start recording

Factory reset

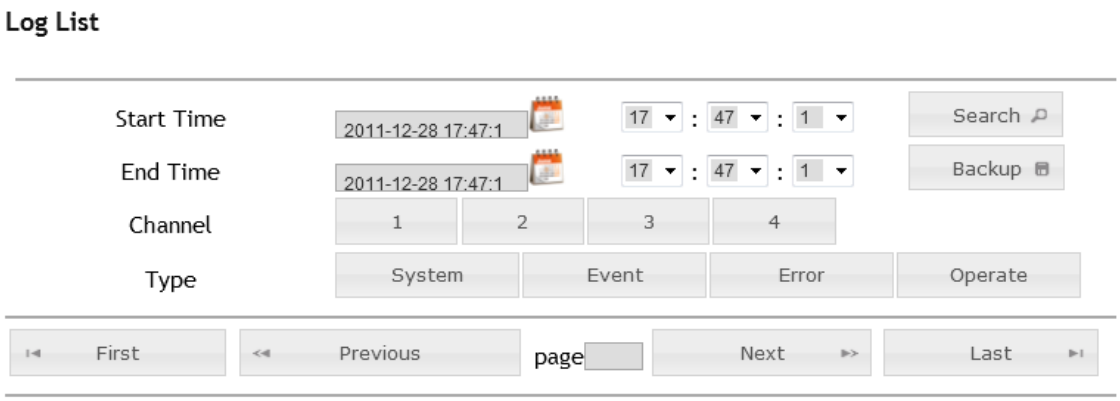
Once press this option a warning message will appear asking you if you want to reset, press YES to apply





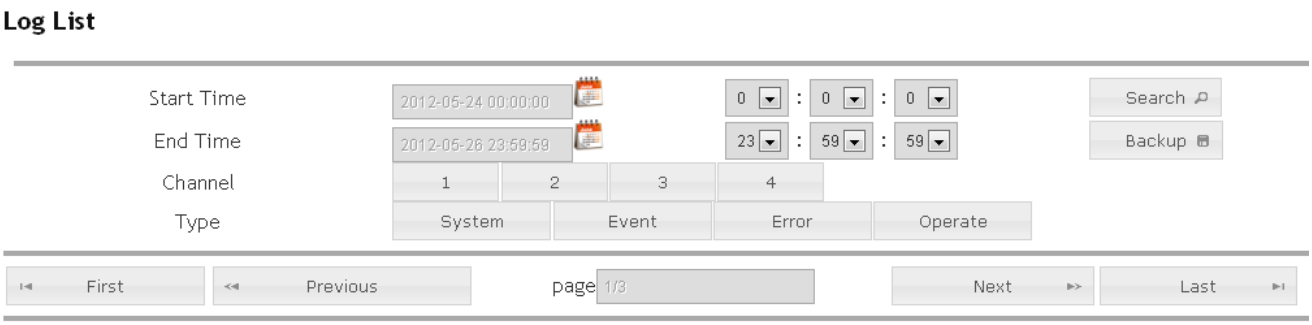
Press ok

Log



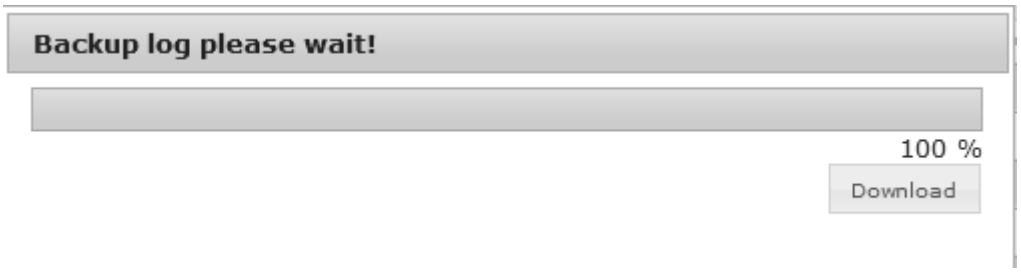
For troubleshooting purpose, you can browse the log

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.



Type	Information	Start Time	End Time	Description
Operate	Login	2012-05-26 15:41:41	2012-05-26 15:41:41	192.168.10.64
Operate	Logout	2012-05-26 15:41:22	2012-05-26 15:41:22	192.168.10.64
Operate	Login	2012-05-26 14:20:05	2012-05-26 14:20:05	192.168.10.64
Operate	Login	2012-05-25 21:21:56	2012-05-25 21:21:56	192.168.10.64
Operate	Login	2012-05-25 21:21:54	2012-05-25 21:21:54	192.168.10.64
Operate	Logout	2012-05-25 21:21:37	2012-05-25 21:21:37	192.168.10.64
Operate	Login	2012-05-25 20:25:36	2012-05-25 20:25:36	192.168.10.64
Operate	Login	2012-05-25 17:49:17	2012-05-25 17:49:17	192.168.10.64
Operate	Login	2012-05-25 17:03:52	2012-05-25 17:03:52	192.168.10.64
Operate	Host/Car Setup	2012-05-25 17:01:22	2012-05-25 17:01:22	192.168.10.64

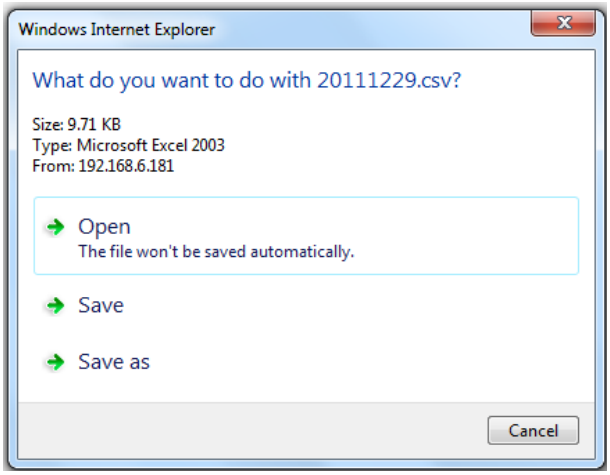
If you want to backup the log, press BACKUP,



Then press download

it will export all the events in one csv file

Choose **Save**



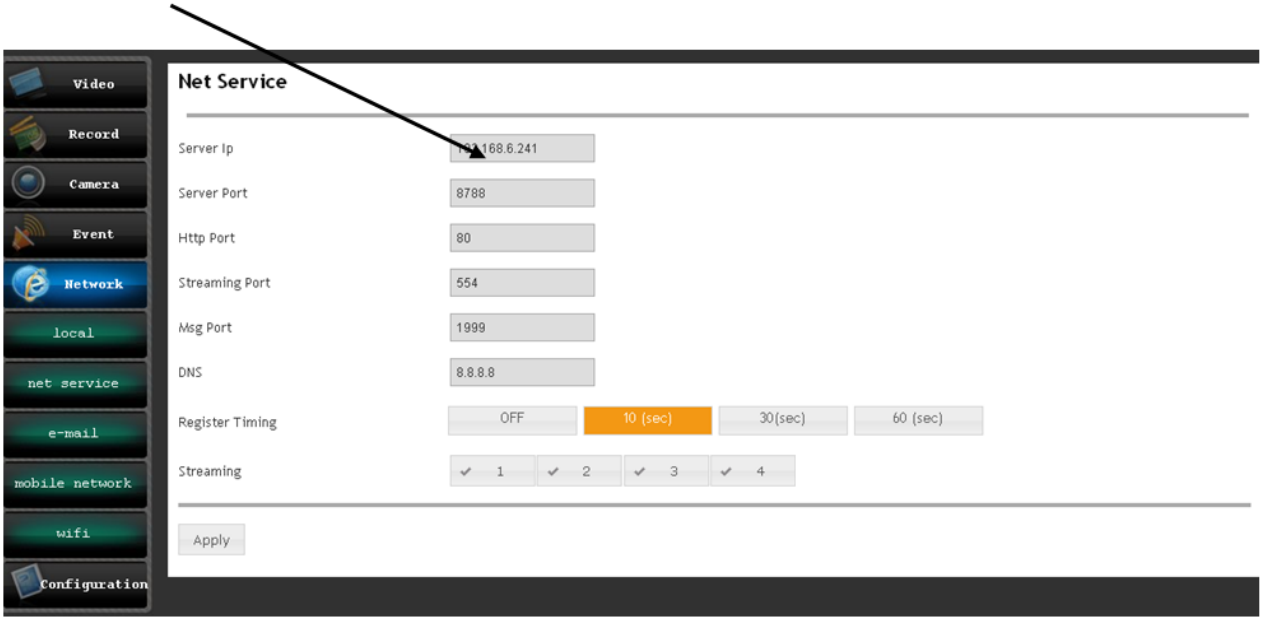
Then open the file with Microsoft Excel or any program supporting csv file

8. Vehicle Management Software (VMS) *works only for MR8000*

Our VMS is composed :
A client called MR VMS
A pc viewer called MR PLAYER,
A server software please follow below instructions

Server software installation

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

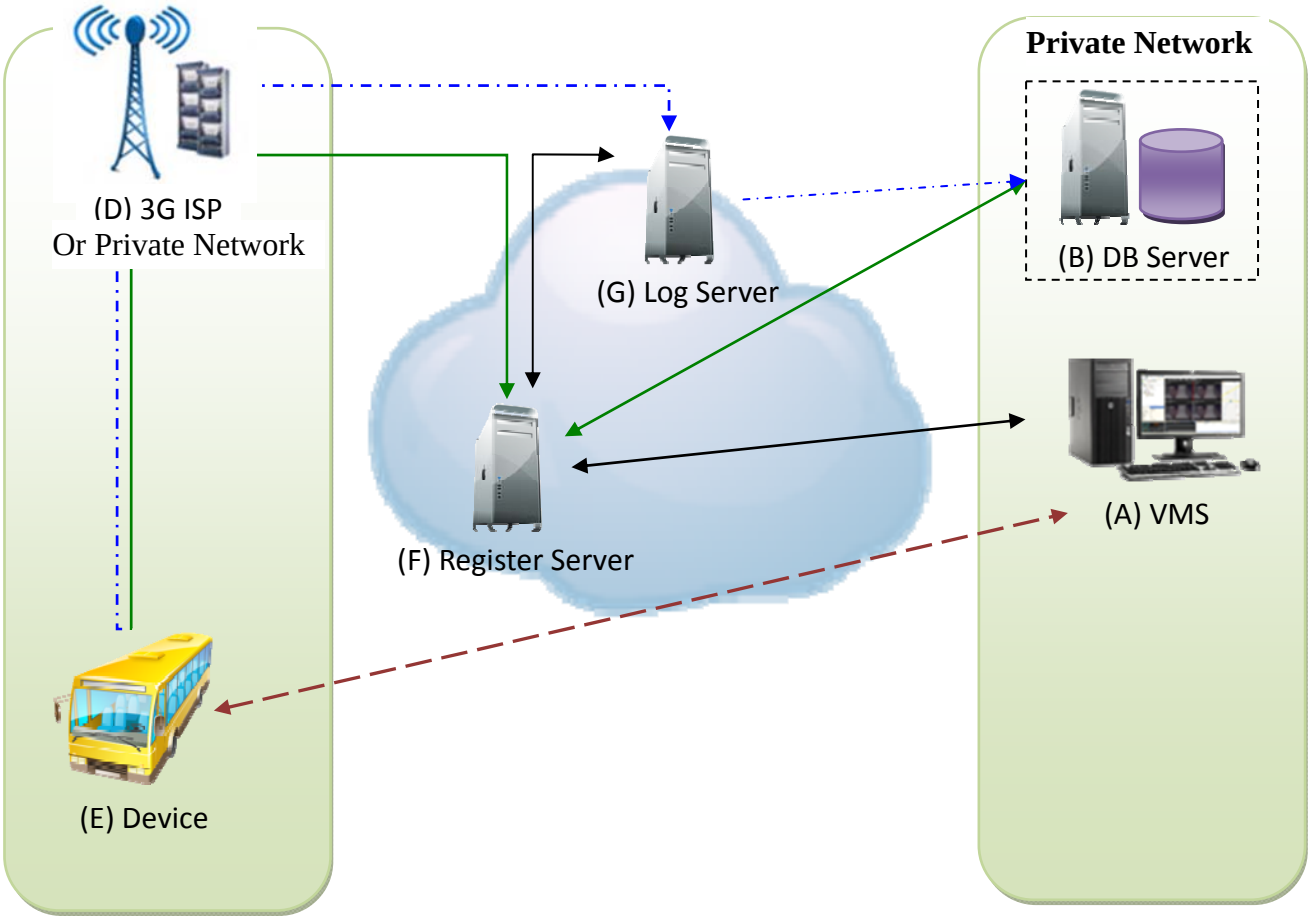


7. Register Server installation instructions

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

7.1 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	
Hard disk 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

7.2 Database Server setting

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

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

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

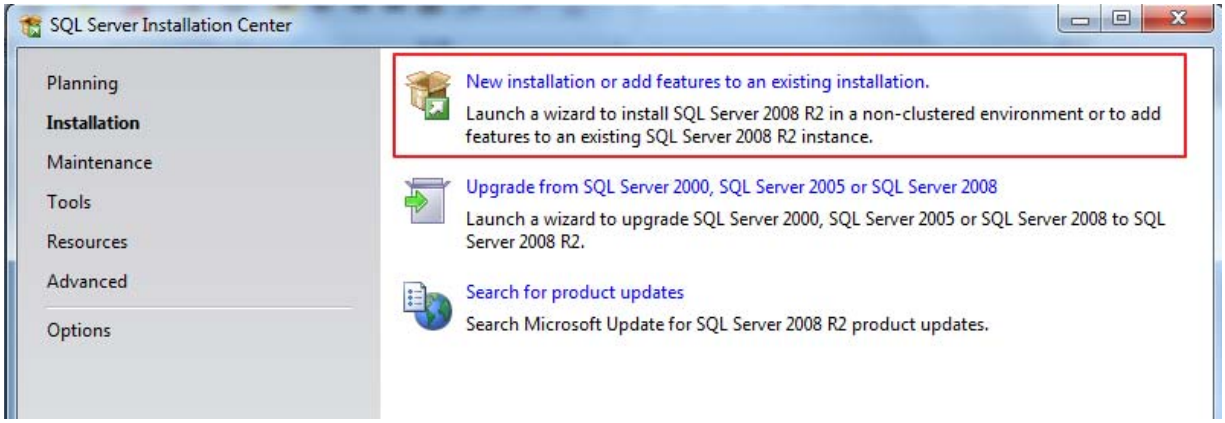
7.4 Go to Microsoft website and download SQL Server 2008 R2 SP2 Express or click the following link

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

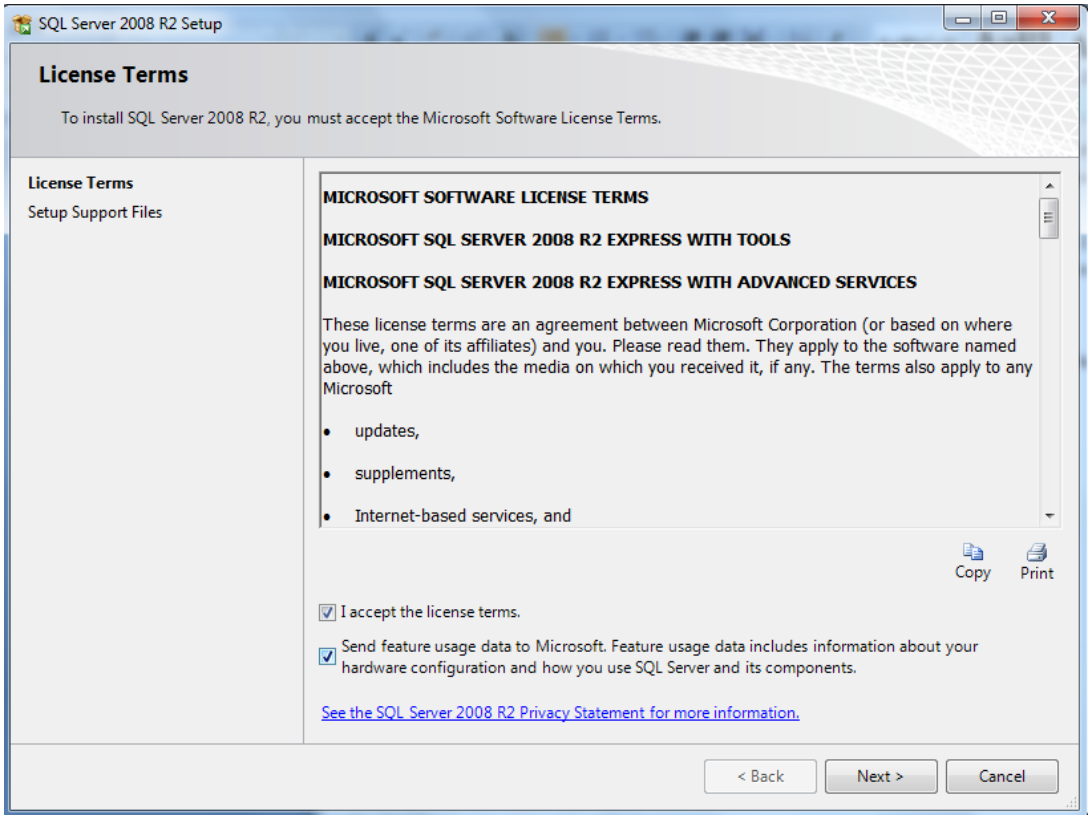
Click on download and select the file SQLEXPRWT_x86_ENU.exe then click on NEXT

7.5 Database server installation with SQL Server 2008 Express

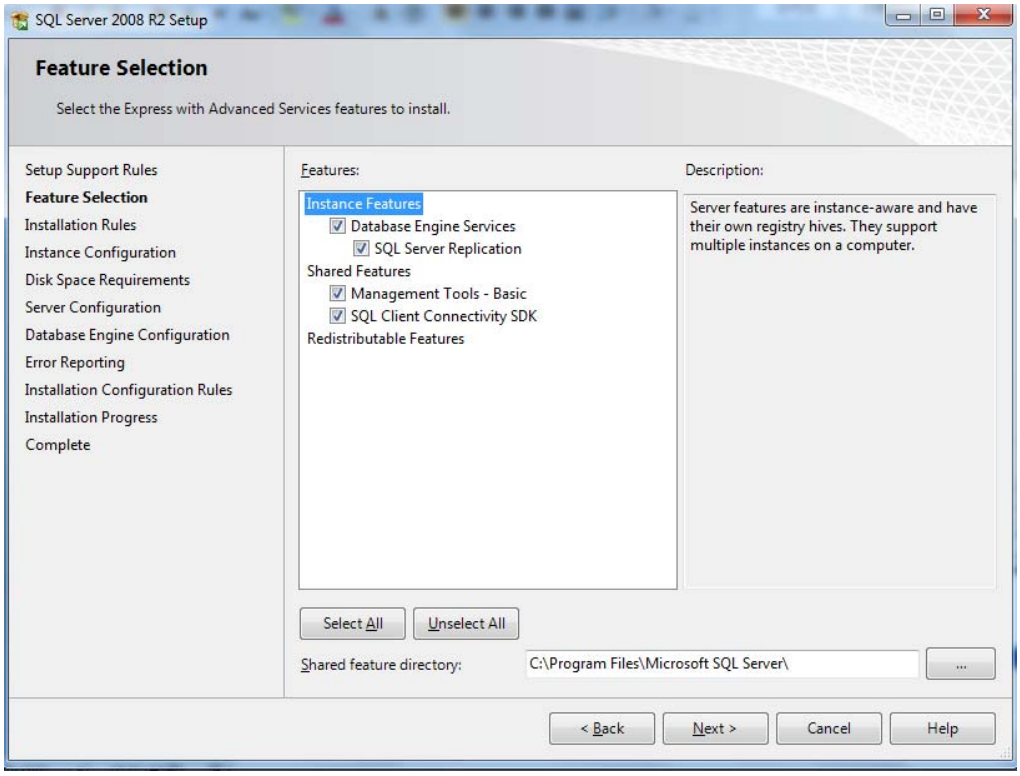
7.5.1.1 Launch the application called SQLEXPRWT_x86_ENU



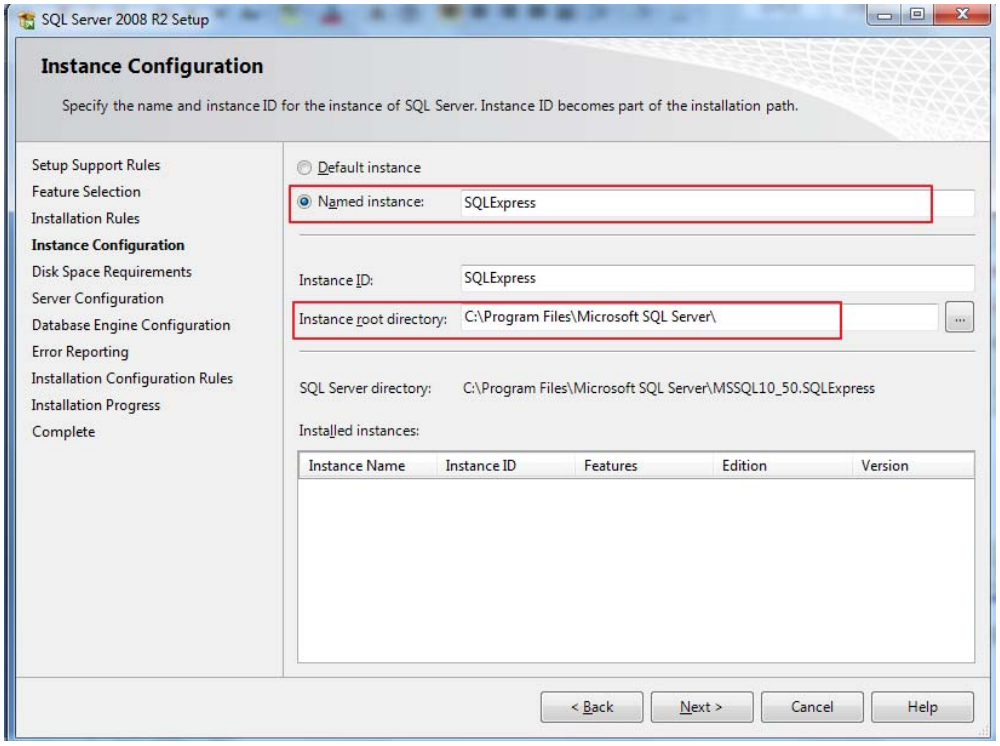
7.5.1.2 Accept the licence term and click on next



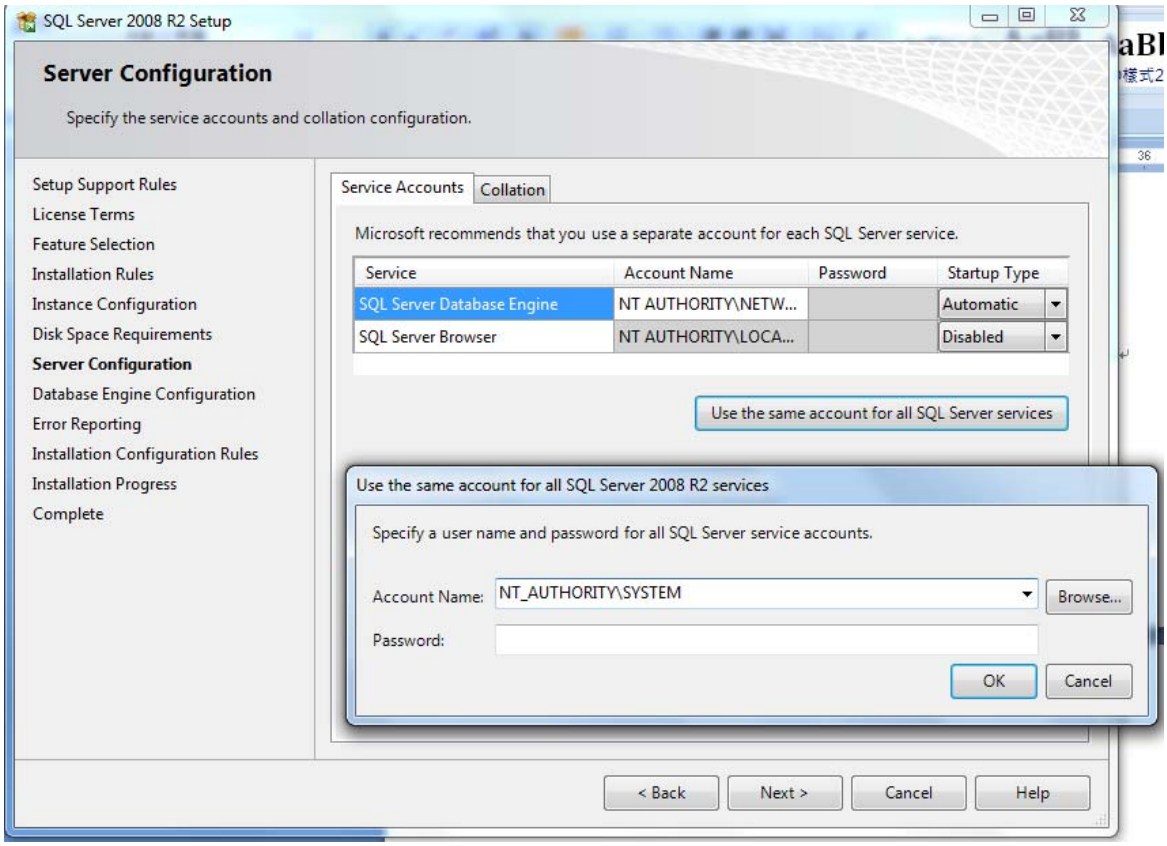
7.5.1.3 Select all then click on Next

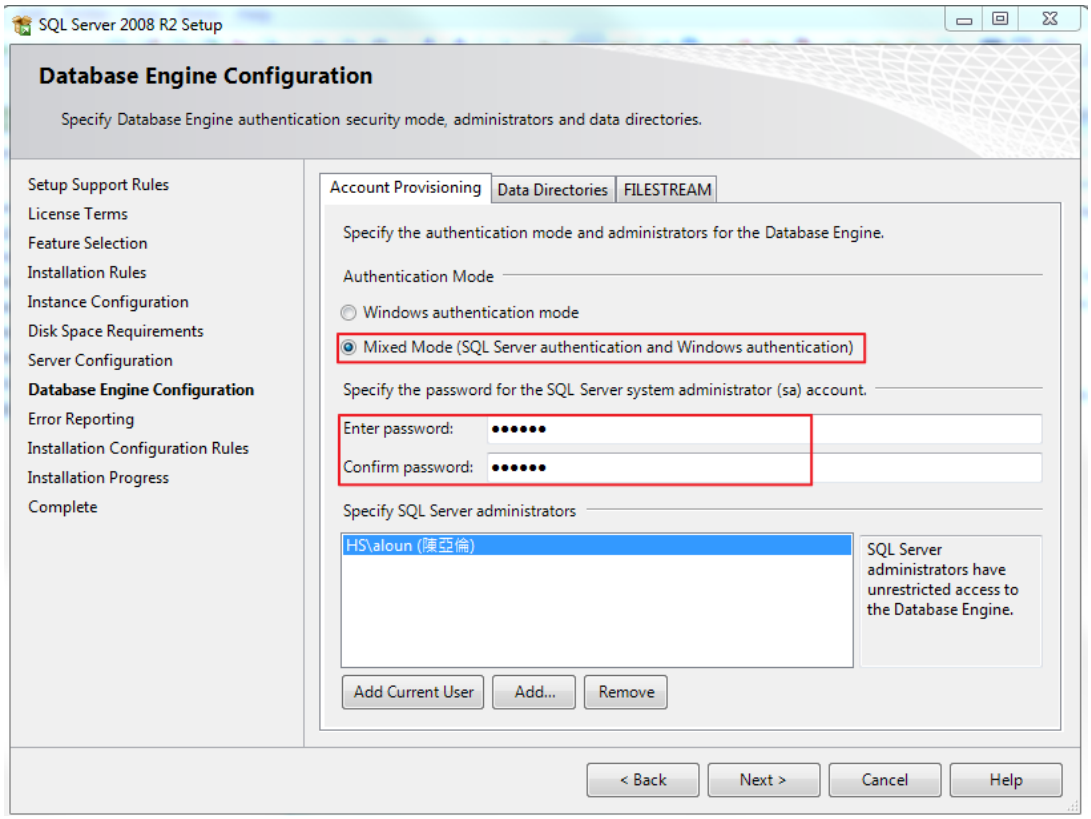


7.5.1.4 Setup database server name and path route

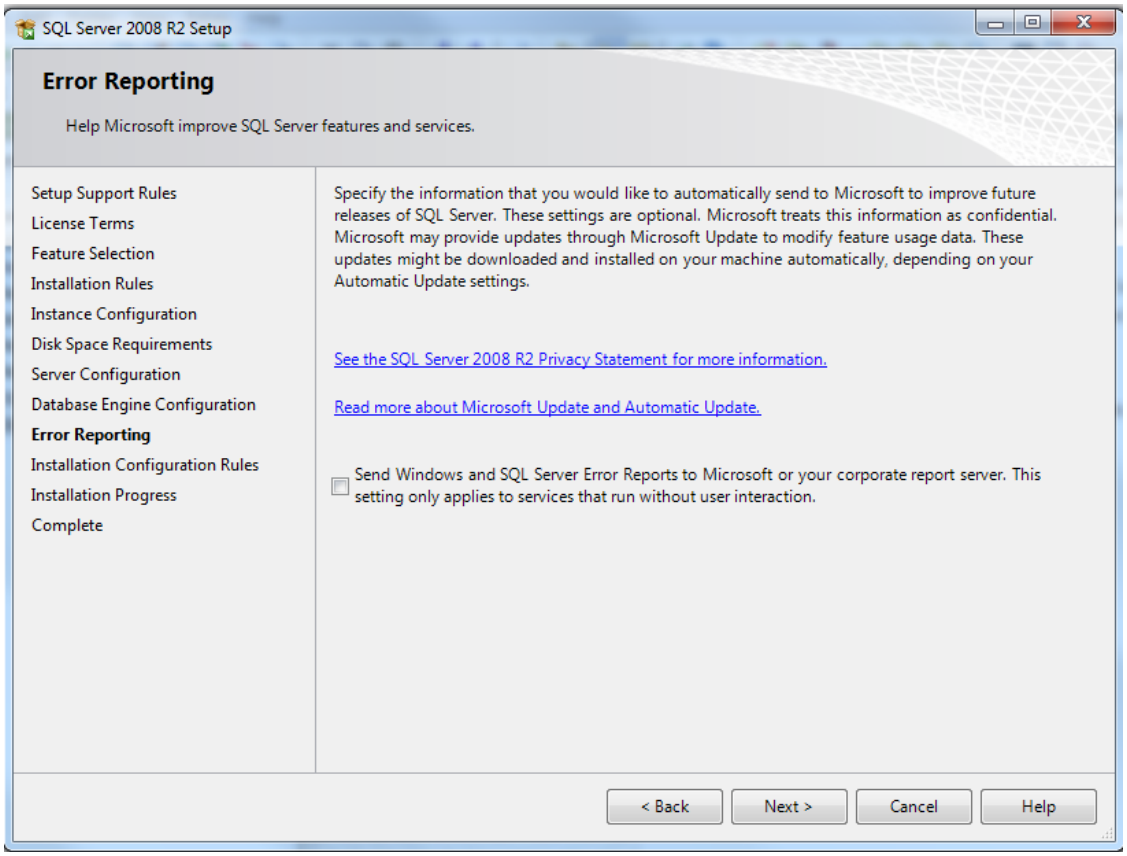


7.5.1.5 Set the database server account and specify the account name NT_AUTHORITY\SYSTEM

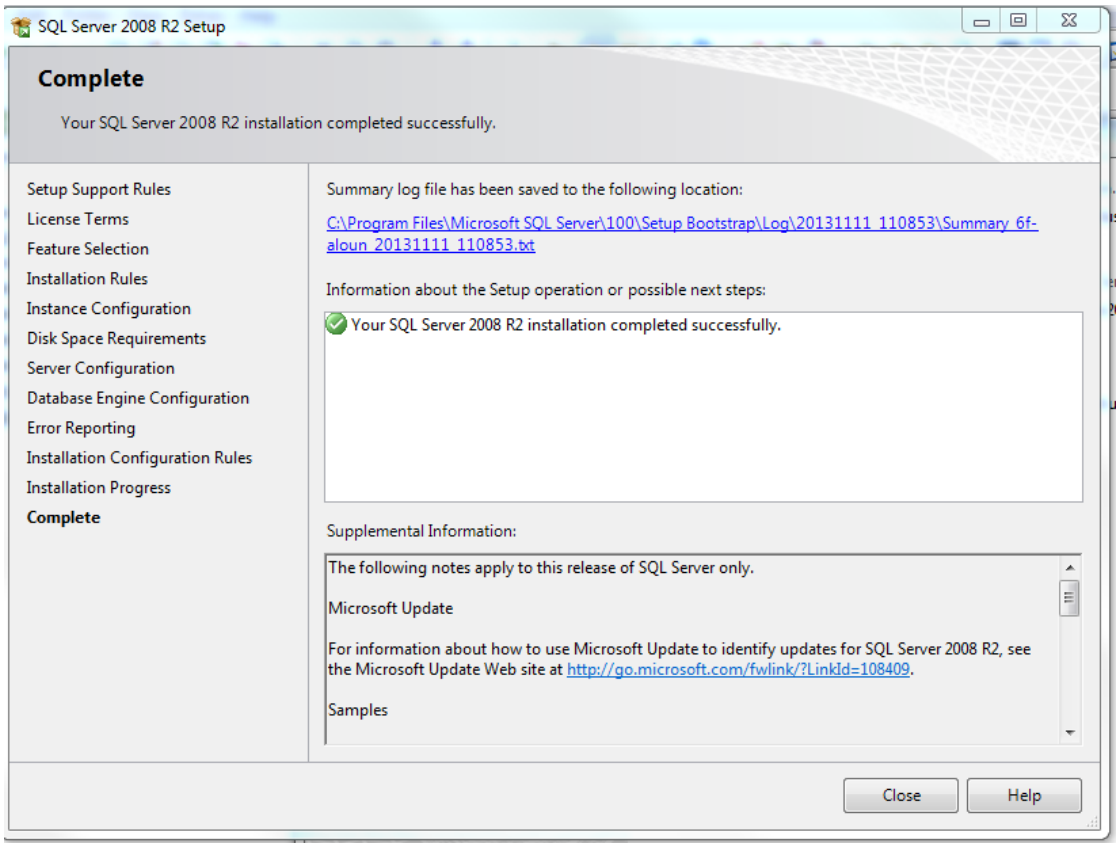




7.5.1.6 Choose Mixed mode and key a passwordfor database server purpose



7.5.1.7 Click on next the installation is finished

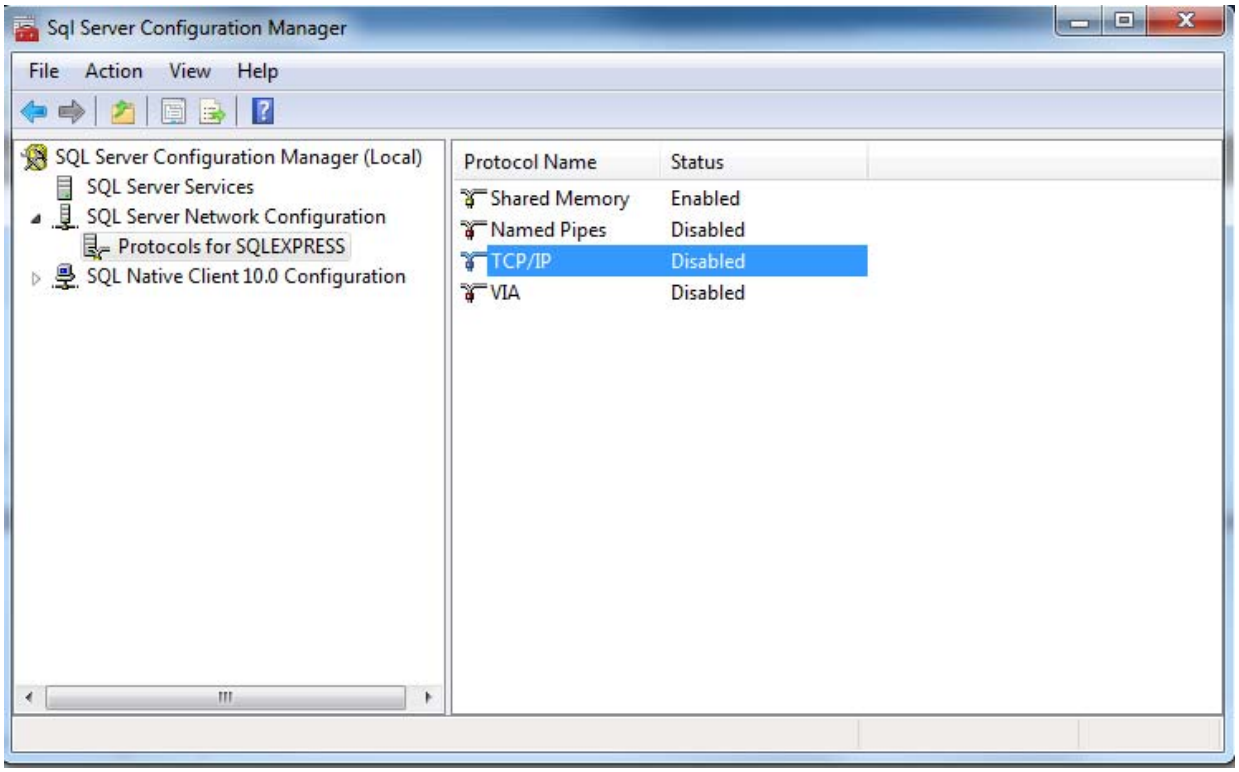


7.6　Setting database server in order let the client connect to it

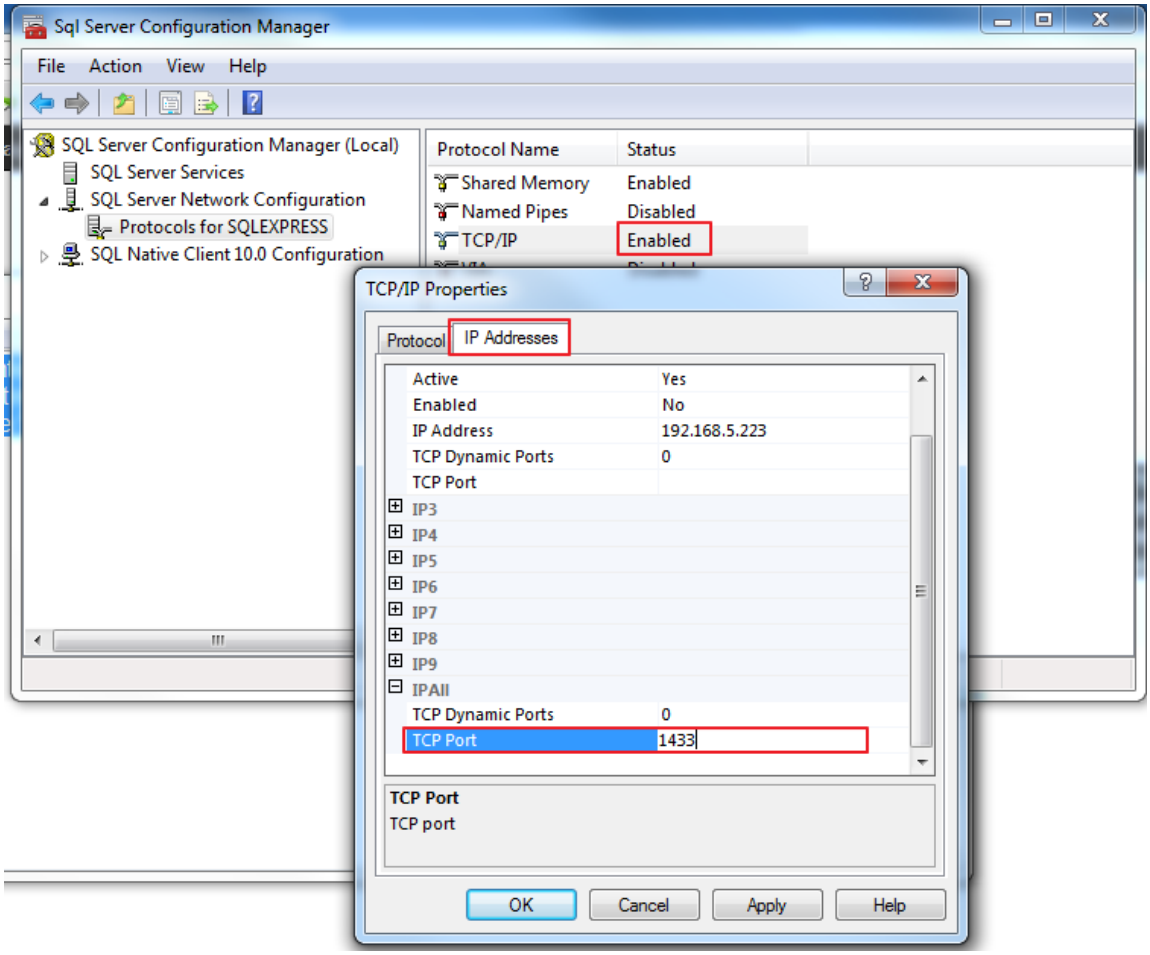
In windows bar, click on start→ all program →Microsoft SQL Server 2008 R2→

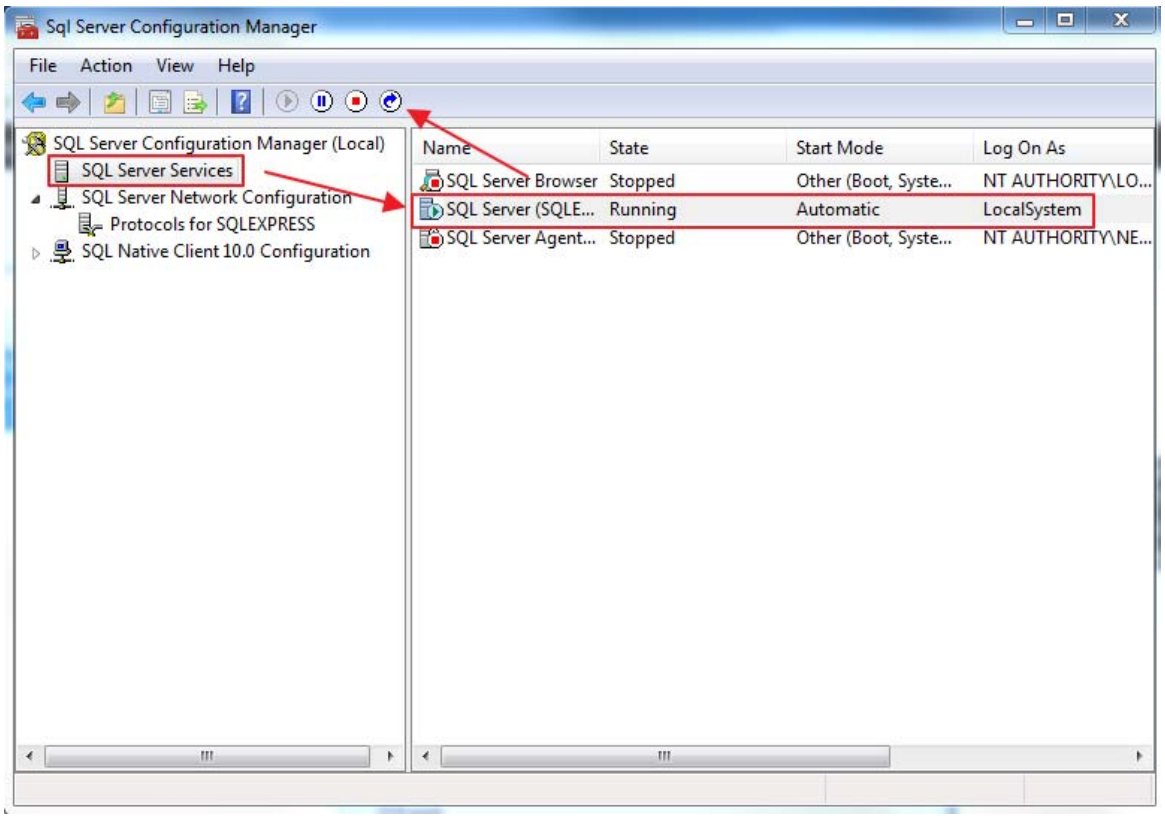
Configuration tools → SQL Server configuration manager in TCP/IP option，mouse right

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


Sql Server Configuration Manager
File Action View Help
SQL Server Configuration Manager (Local)
SQL Server Services
SQL Server Network Configuration
Protocols for SQLEXPRESS
SQL Native Client 10.0 Configuration
Protocol Name
Status
Shared Memory
Enabled
Named Pipes
Disabled
TCP/IP
Enabled
TCP/IP Properties
Protocol
IP Addresses
Active
Yes
Enabled
No
IP Address
192.168.5.223
TCP Dynamic Ports
0
TCP Port
IP3
IP4
IP5
IP6
IP7
IP8
IP9
IPAll
TCP Dynamic Ports
0
TCP Port
1433
TCP Port
TCP port
OK
Cancel
Apply
Help

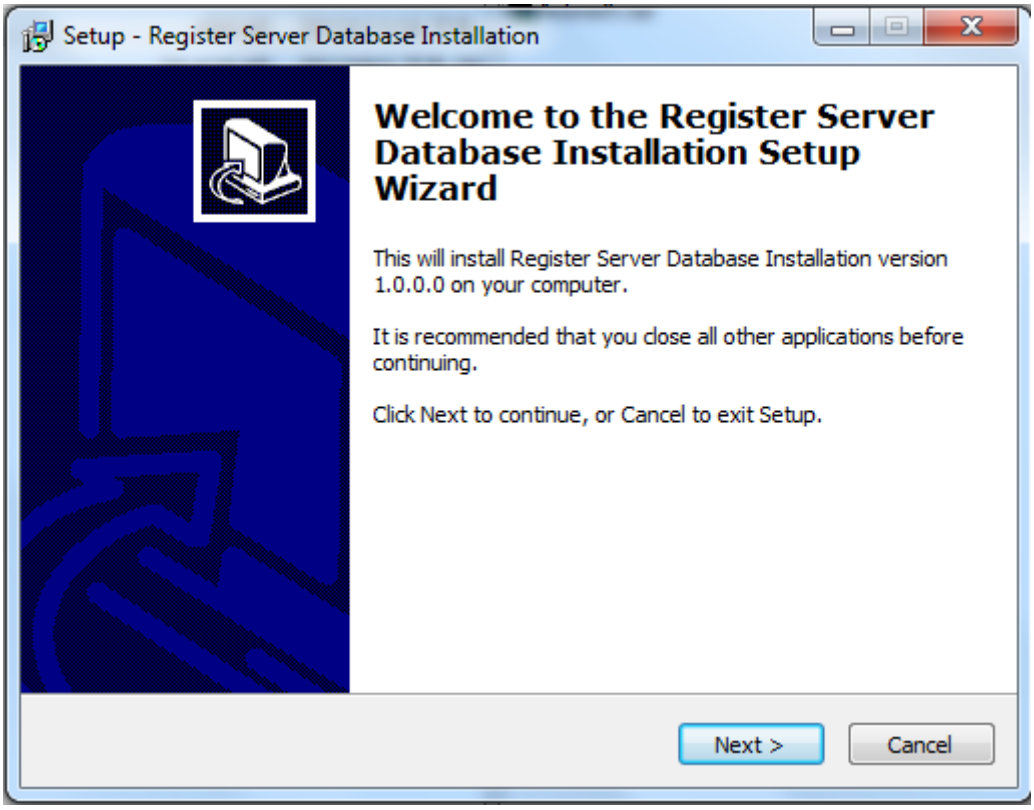

Sql Server Configuration Manager
File Action View Help
SQL Server Configuration Manager (Local)
SQL Server Services
SQL Server Network Configuration
Protocols for SQLEXPRESS
SQL Native Client 10.0 Configuration
Name
State
Start Mode
Log On As
SQL Server Browser
Stopped
Other (Boot, Syste...
NT AUTHORITY\LO...
SQL Server (SQLE...
Running
Automatic
LocalSystem
SQL Server Agent...
Stopped
Other (Boot, Syste...
NT AUTHORITY\NE...

Install Server database

This software is located on the software cd folder called Environment

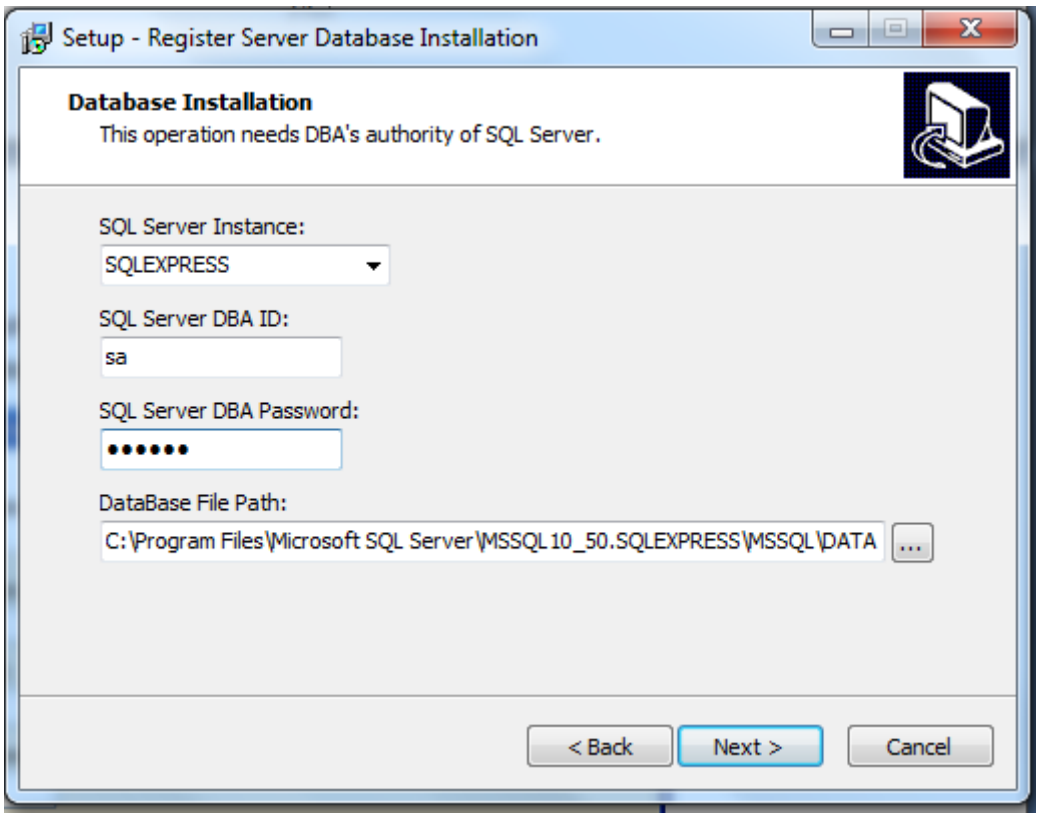
Launch ServerDBInstall.exe, this installer must enter Database administrator (sa) password and automatically creates the necessary databases and tables, and generate the database dedicated management accounts ddadmin, the default password is 1111, for the first time after installation, please Be sure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



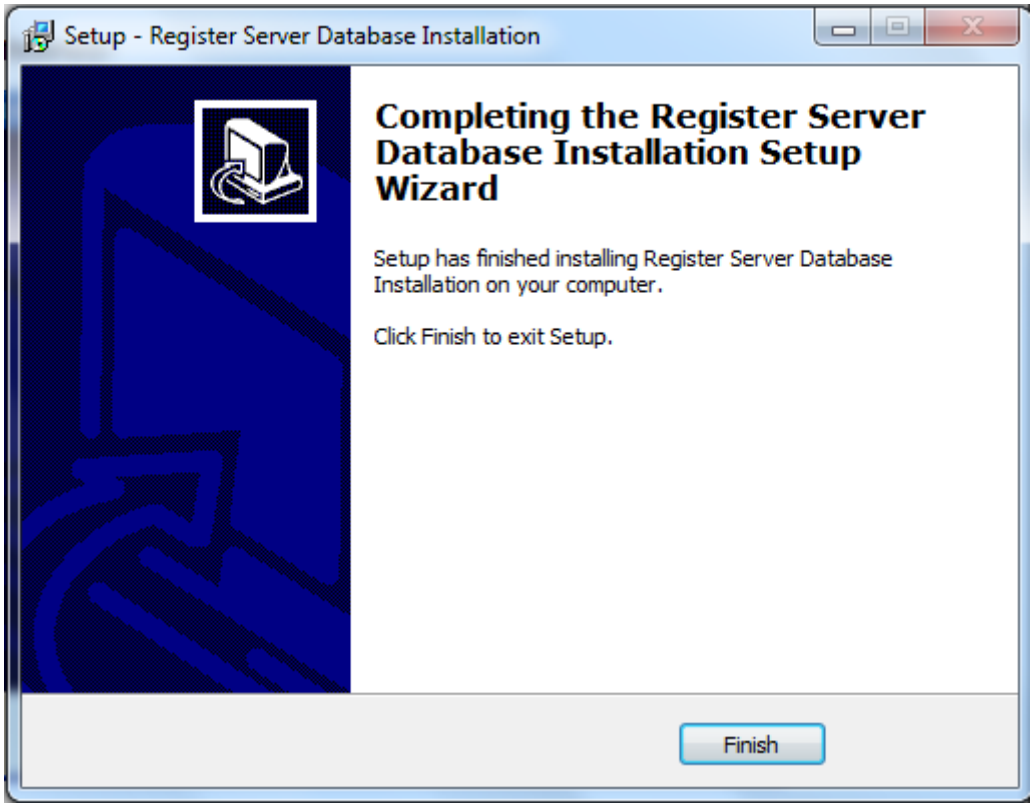
Enter the required information

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



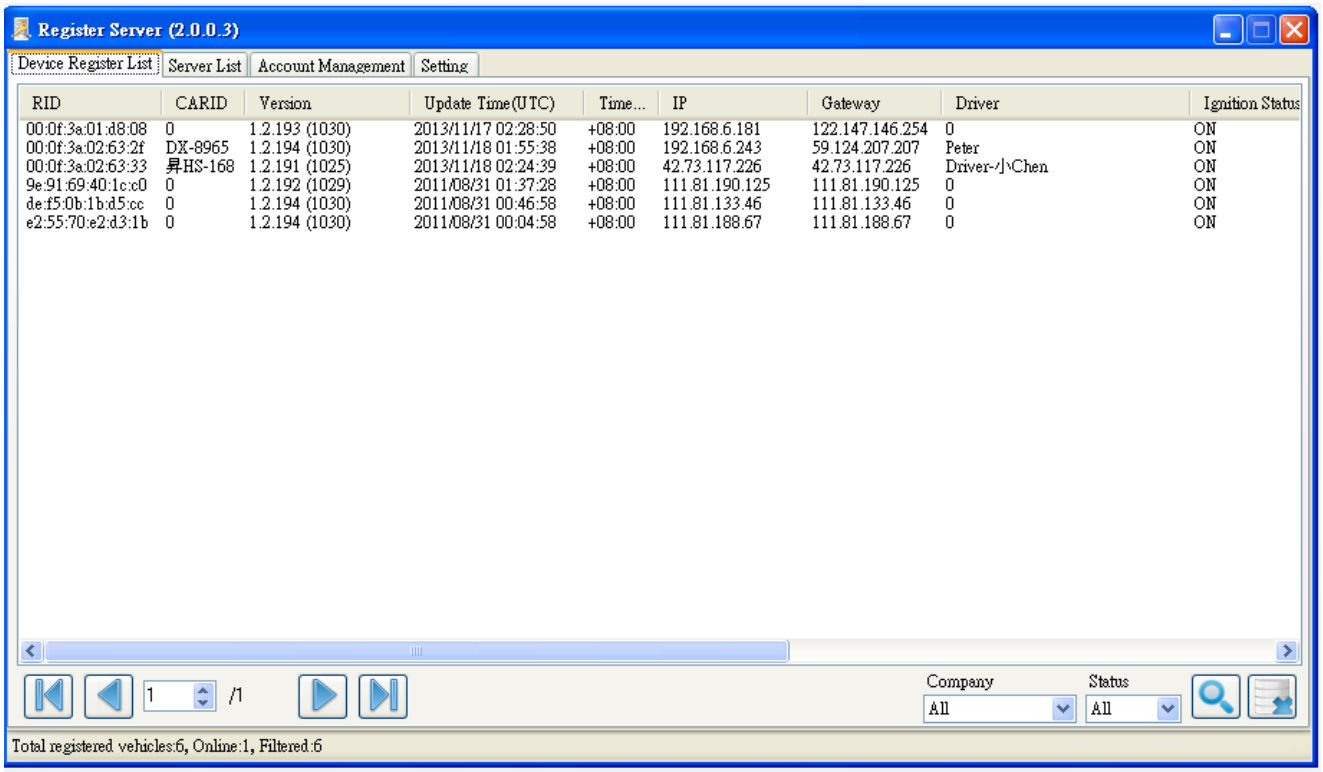
Install Register server software located in the cd Setup folder on the server pc and follow instructions

Then install the MRVMS software on the client pc and follow instructions

Operation

Server side: launch the application named register-server

Default account and password are admin / 1111

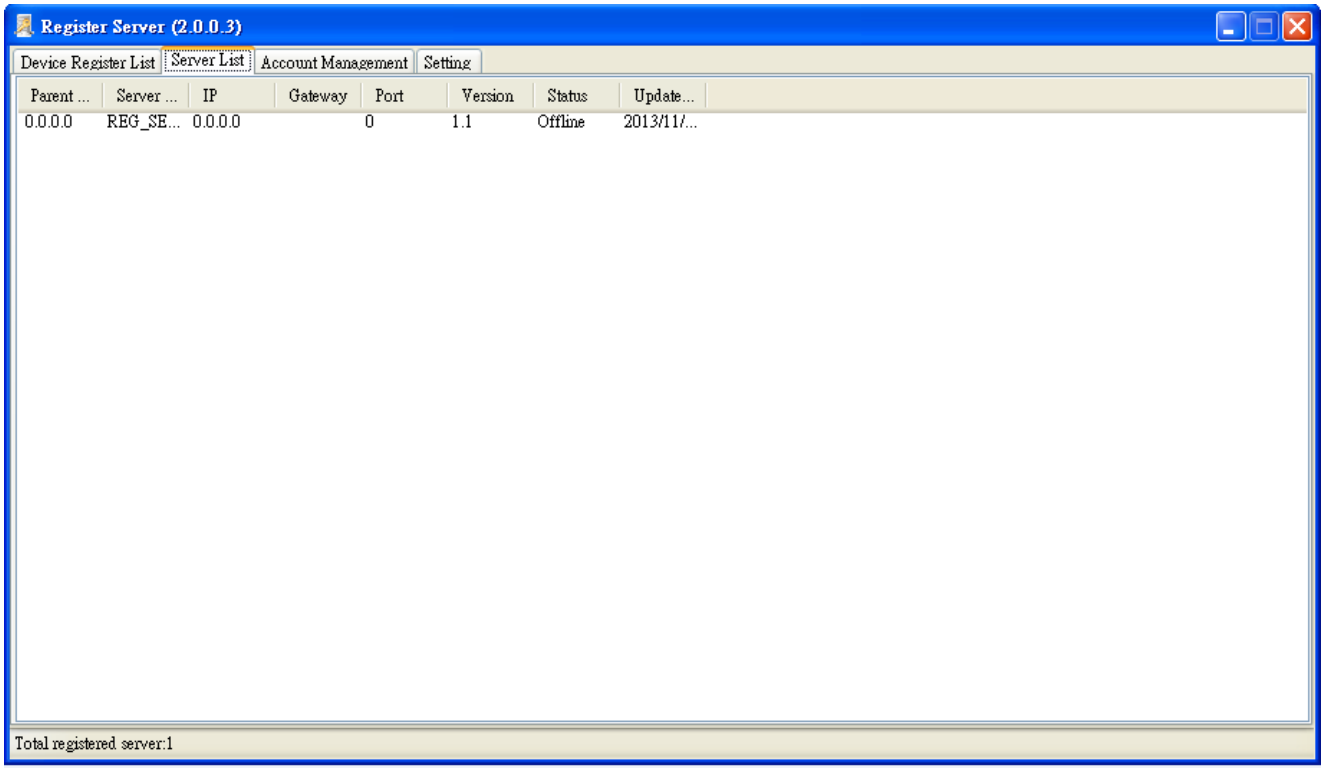


Then you will access to a page showing device connection status

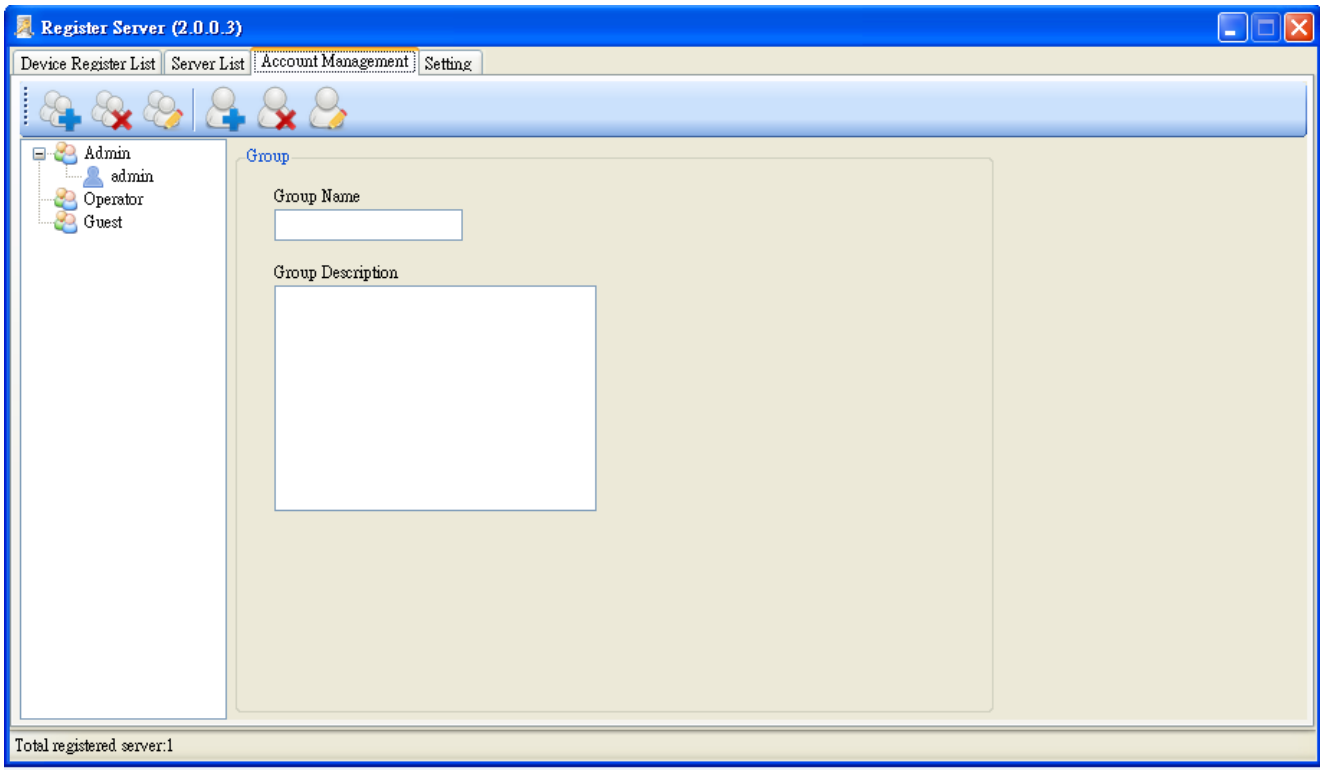
At this page you can see each device registered ID(RID),Car ID, Version of the firmware, Update time, network information and Status

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

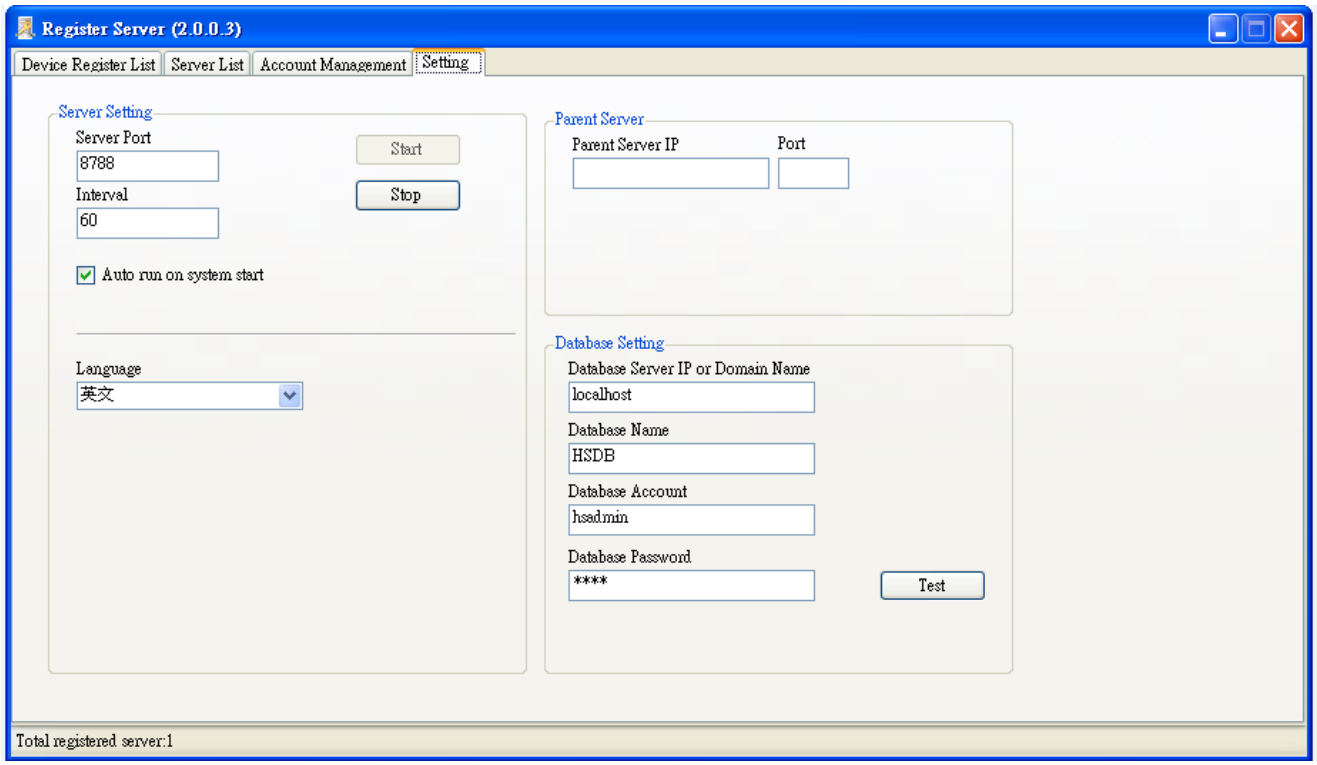


Click on the third tab will let you access to the account management



There are 3 level of account, Administrator, Operator and Guest each can be customized on the right side. This concerns loggin 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 MRVMS

Default account and password are admin / 1111

Specify the server IP, Specify the server streaming port

Tool bar description

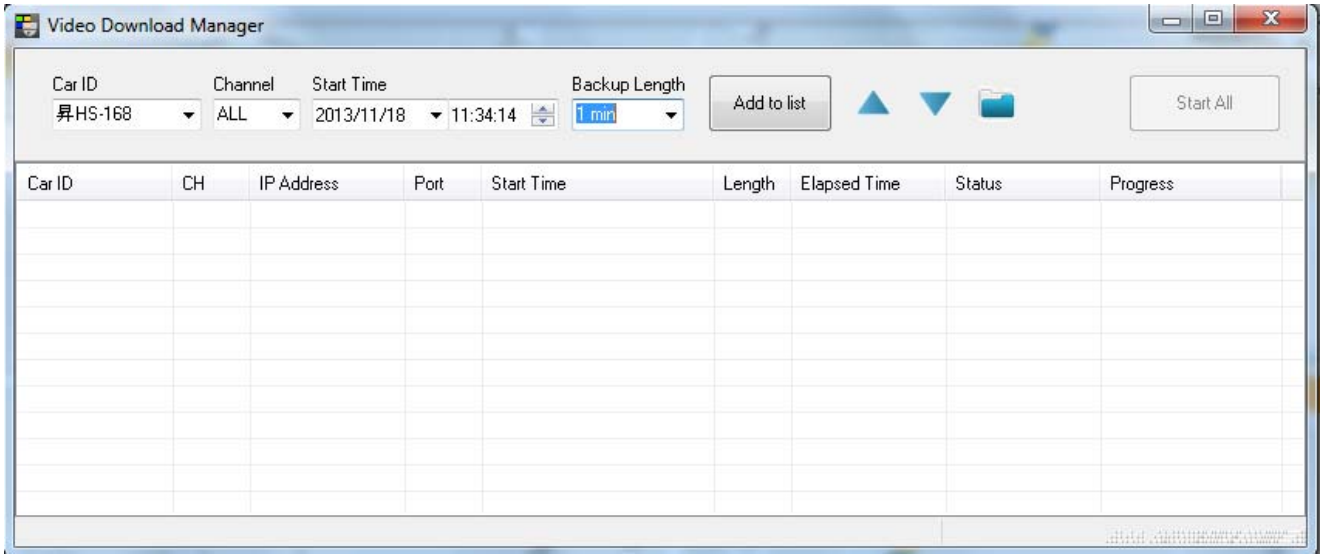
Full Screen

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 car ID, the channel , the date and time and the backup length and do multiple backup

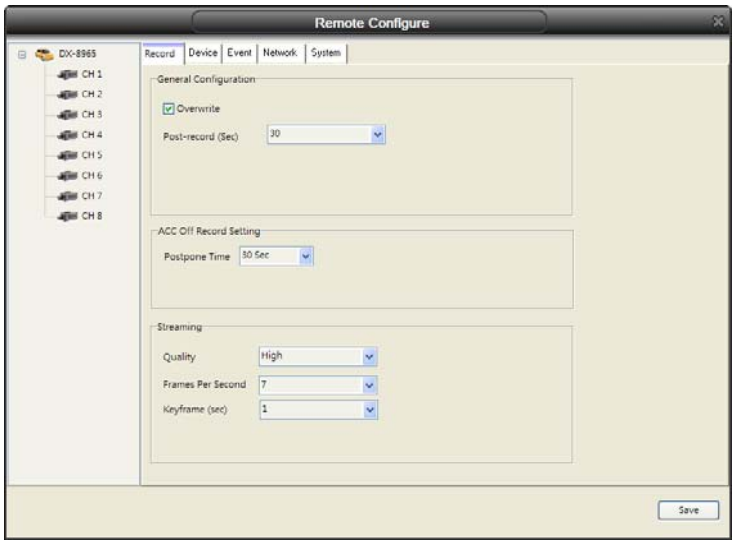
We recommend to be in LAN or WIFI environment to download the data and avoid be in 3G mode to download as the risk of failure is very high



Remote setting

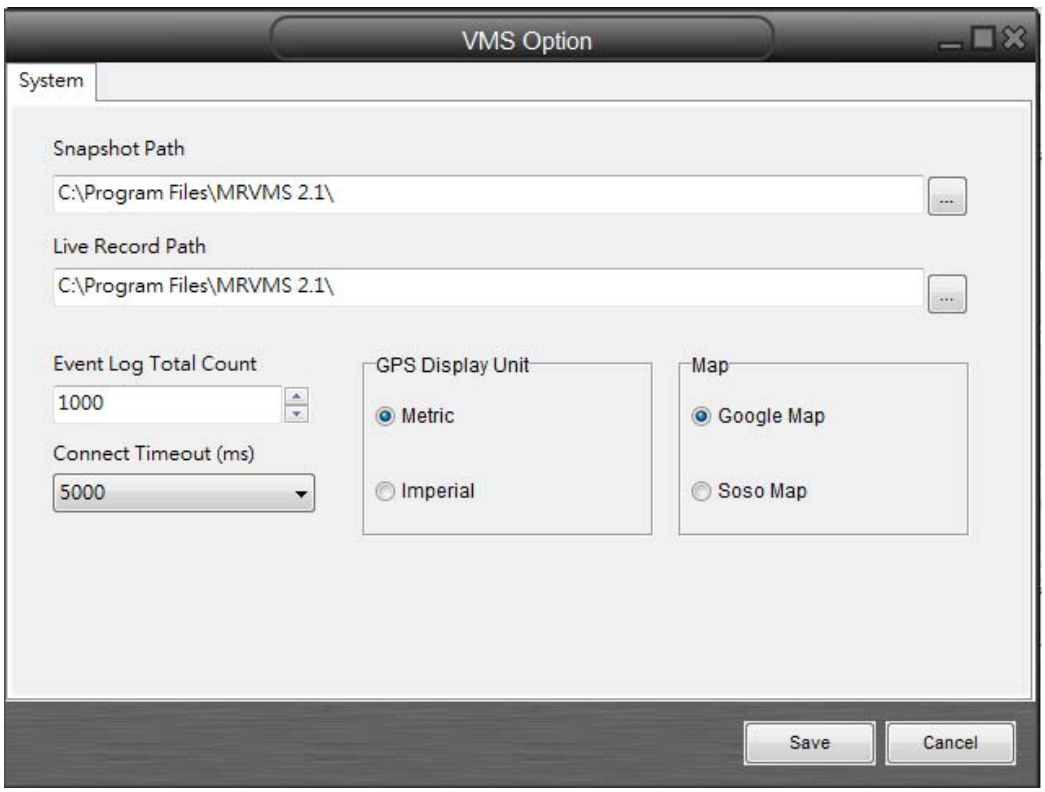
let you remotely setup mobile dvr features

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

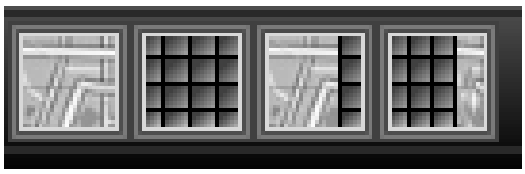
Let you setup the snapshot path folder, live record path folder, event log number, GPD displayed unit, and used map



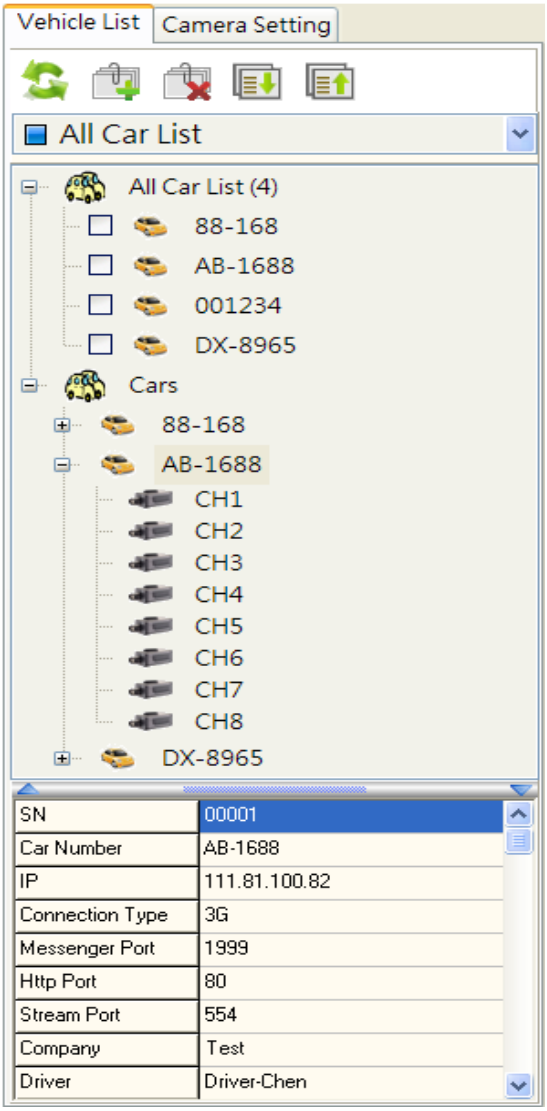
Vehicle list

Display or hide the vehicle list

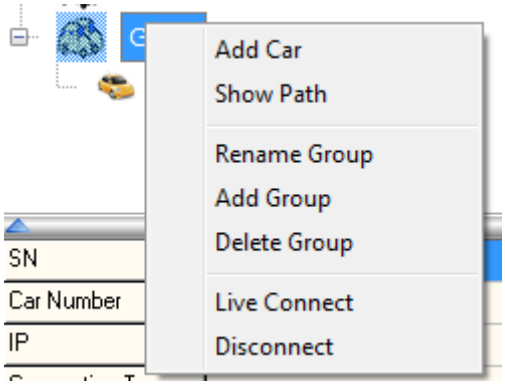
4 type of display are available select the one according to your preference



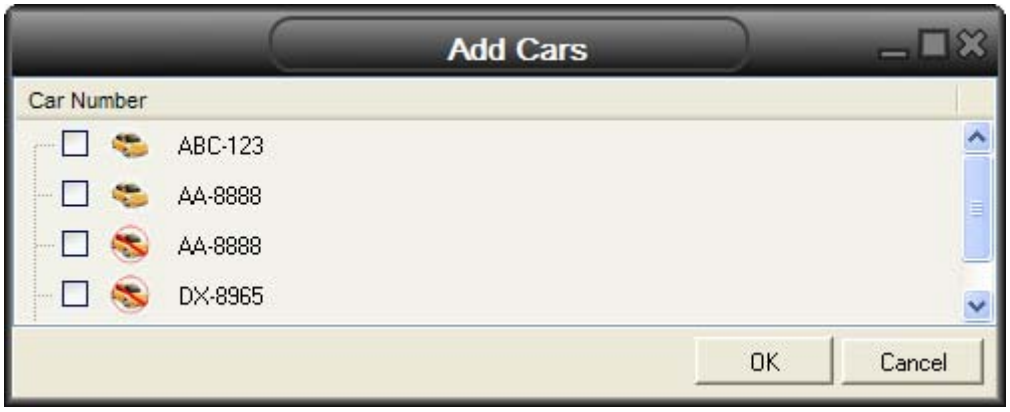
Car list: the program will show connected device with additional information, you can create or delete group for better management and pull one device to a group



Before to see live picture, you need to create a group. Click on , a car icon will appear, right click on the mouse to display the functions

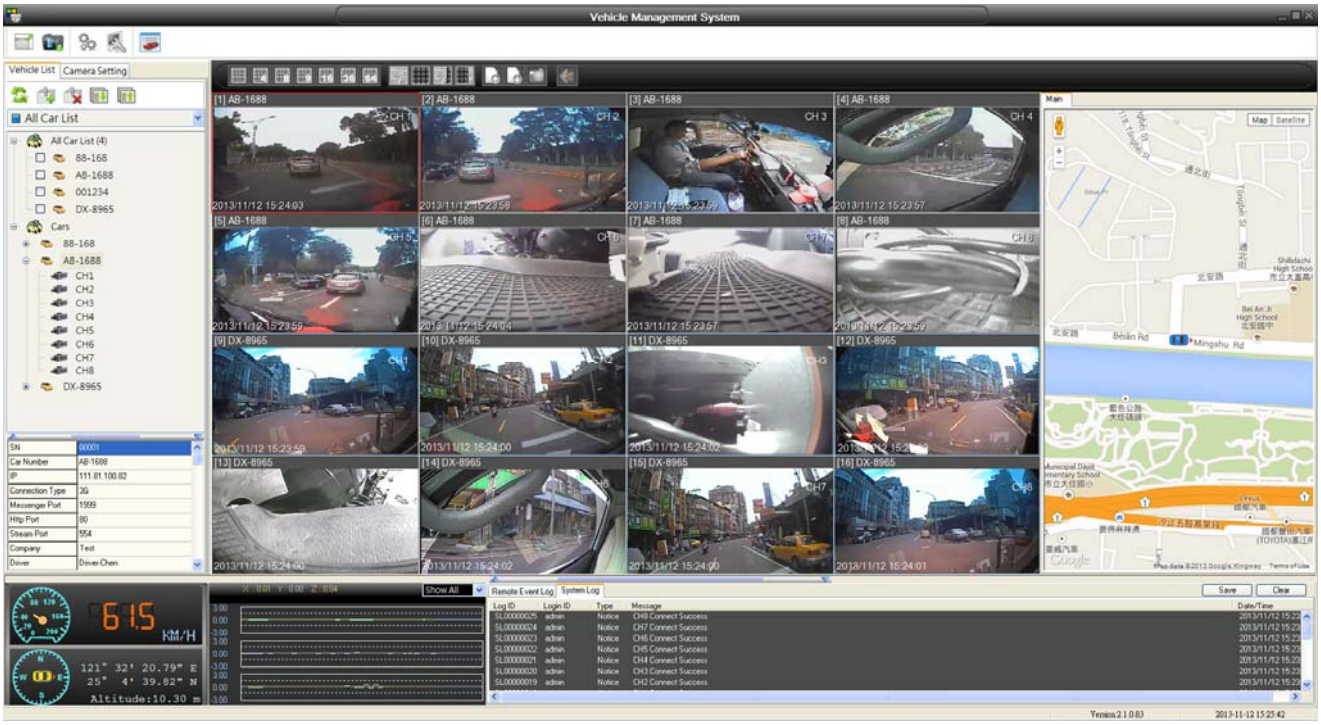


Add car: choose the car you want to add by selecting them

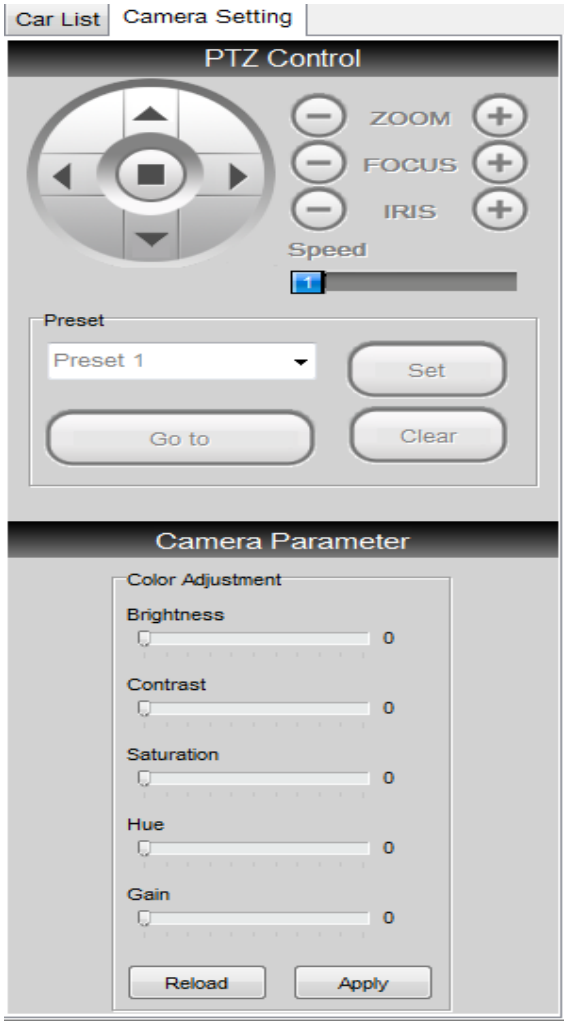


Then valid by pressing OK

Here you can see live picture with gps information



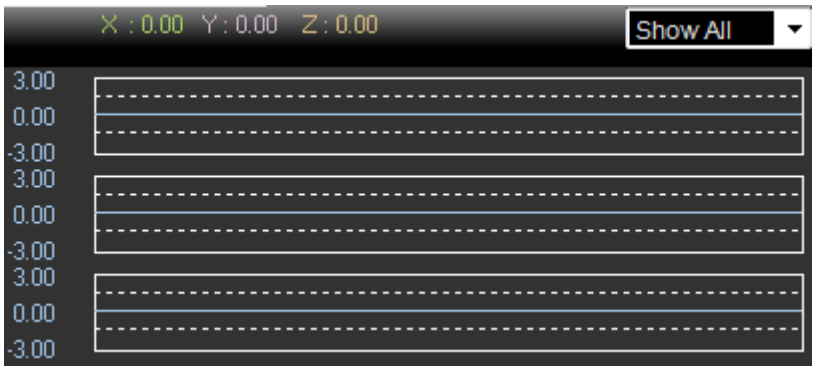
This section allows you to control the ptz camera and adjust the camera quality



This figure show the g-sensor information

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

This figure shows the real time speed of the car

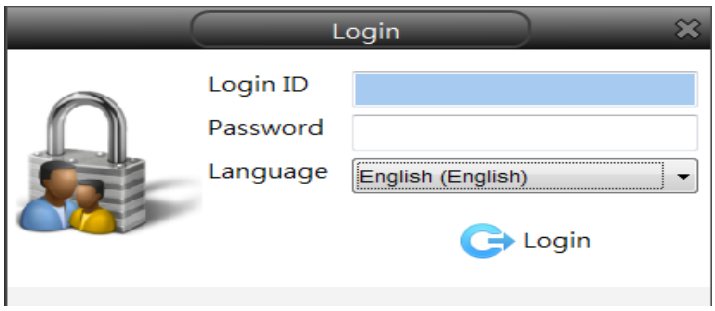


This section shows real time information such as event, vloss, relay out or motion detection

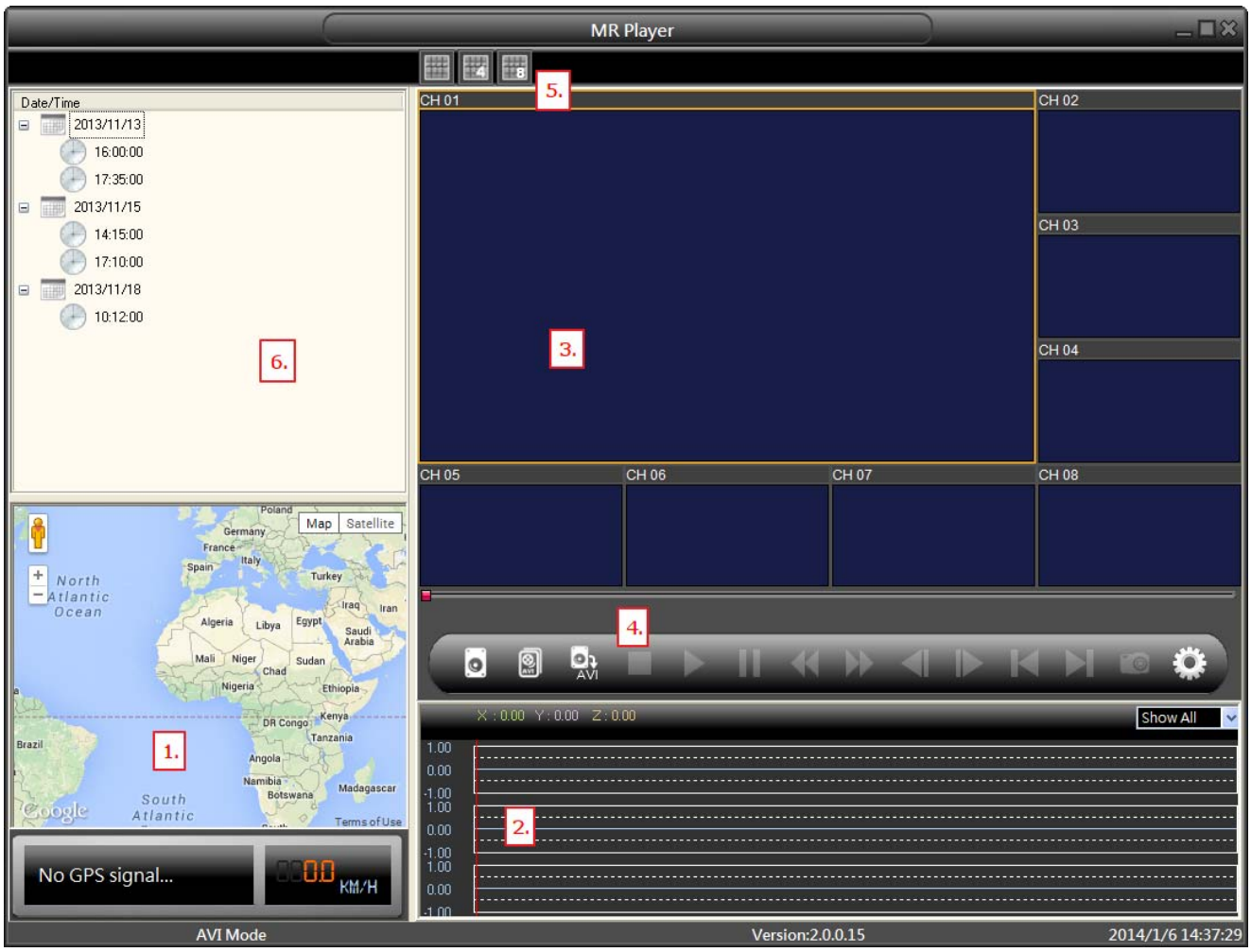
MR player application operation

Default id/password is admin/1111

At this stage you can select between English or Chinese interface


Login
Login ID
Password
Language
English (English)
Login

Program interface



1 is showing the position of the car according to Google map database

2 is showing G-Sensor information and current speed

3 is displaying video

4 is the playback bar

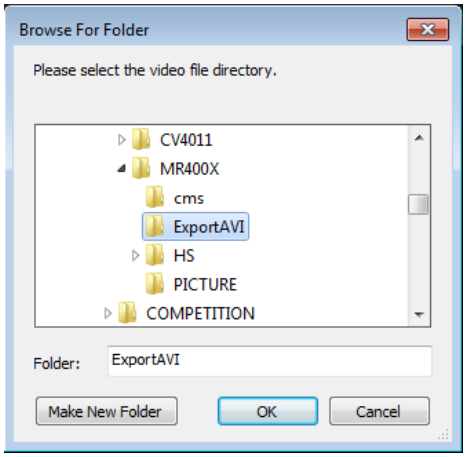
5 is the video display mode

6 is displaying video by date

There are two ways to open a file:

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 HDD

After you select the hard disk you will see this display

you can export the video into avi file by pressing the third icon

Control bar description

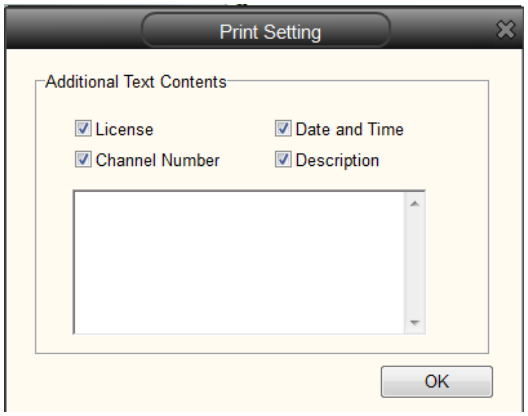
Icon	Description
	Open a avi file in a folder
	Open hard disk containing the video
	Convert a period from the hard disk into AVI format
	Stop the playback
	Playback
	Pause
	Fast Rewind
	Fast Forward
	Step Backward
	Step Forward
	Playback previous file
	Playback next file
	Take snapshot of current video
	System setting

Snapshot

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

You can save manually or auto save the picture

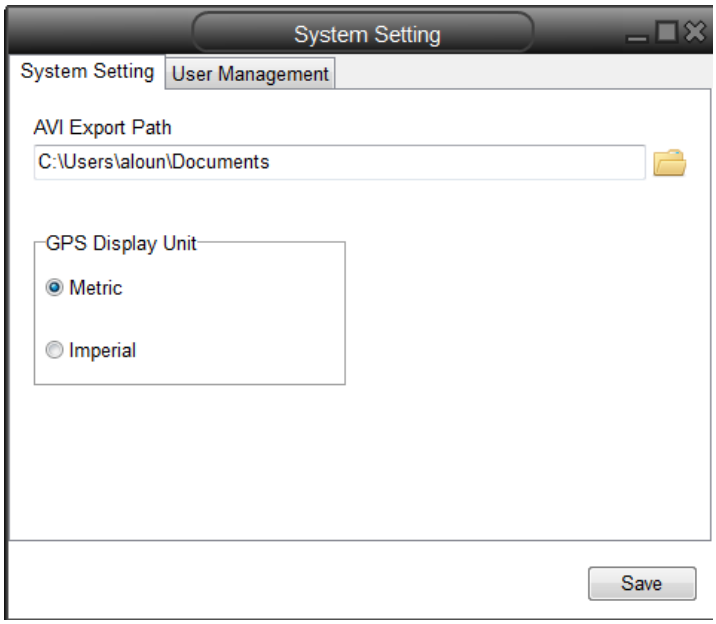
You can adjust print setting by pressing SETUP button, another window will come out



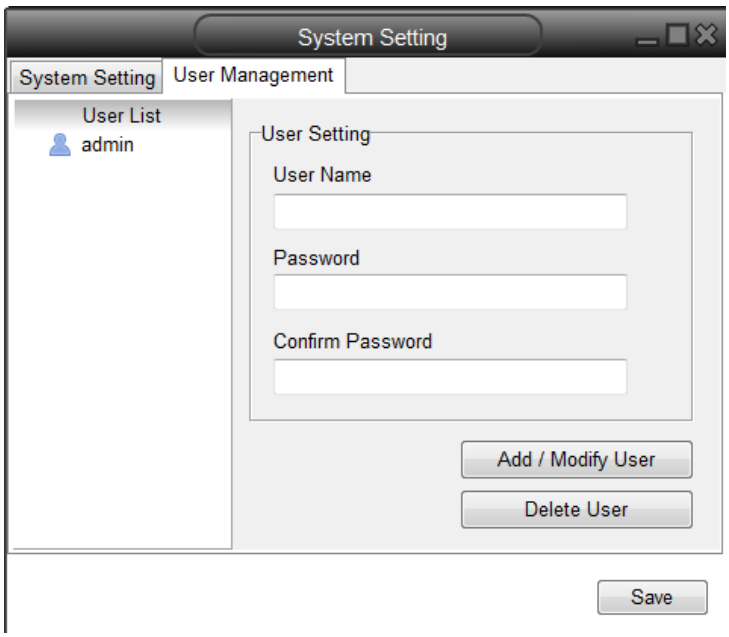
You can add in your picture print license number, plate number, date and time, and also description (by adding text)

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

Setting



Here user can select GPS display unit and also which map use
If you are in China, please select soso map



In this section you can manage your different account, by changing administrator password or add new account. There are no limits of number of account
You can also delete user.