User Manual
For

A5-E0804 MDVR

Mobile Digital Video Recorder

For more information, please visit our website **www.en.streamaxtech.com**

Notice

The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without any notice.

The purpose of this manual is to kindly aid the user for the operation for our MDVR (especially for GUI setting). The user should have a basic understanding of computer operation and basic knowledge of how to connect peripherals and make some settings.

Copyright

Guarantee & Warnings

1) **Electrical Apparatus Safety**

   All installation and operation should comply with local electrical safety norms.

2) **Transportation**

   In the process of transportation, storage and installation, please avoid heavy stress, violent vibration, impact and water splashing.

3) **Installation**

   Install the equipment in accordance with the requirements, handle carefully. Do not heavily press the equipment before the MDVR installation is finished.

4) **Requirements on Engineers & Technicians**

   All the work of checking and maintenance should be done by qualified technicians and engineers. We do not undertake any responsibility caused by unauthorized modifications.

5) **Requirements on Environment**

   The equipment should be installed and stored in a cool and dry place, away from direct sunlight, flammable or explosive substances, etc. Keep gaps not less than 3cm around the device to facilitate ventilation for cooling.

6) **Accessories**

   Make sure to use accessories from the manufacturer recommended in the attachment.

   Insulate circuit ground and metal shell for all the peripherals.

   Before installation, please open the package and ensure that all parts are included.

   If there are any problems, please contact us as soon as possible.

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CONTENTS

1. PRODUCT CHARACTERISTICS

1.1. OVERVIEW

A5-E0804 is a cost-effective and function-extensive equipment specially designed for mobile surveillance and intelligent scheduling. It uses high-speed processor and embedded operating system, combined with H. 264 video compression/decompression technology, 3G/4G, WIFI, network technology and GPS locating technology. It can realize 720P, CIF, HD1 and D1 video recording, vehicle driving information recording and wireless data uploading. With center software it also achieves alarm linkage central monitoring, remote management and playback analysis. A5-E0804 is easy to use with modular design, multi-functions, superior anti-vibration, flexible installation and high reliability, etc.

1.2. FEATURES

1) All the modules are connected with exquisite connectors, supporting quick disconnection, which is safe and easy to maintain.
2) Each module (including waterproof fan modules) when a failure occurs, the system automatically detects and alarms.
3) Adopts explosion-proof and seal design for the outer shell.
4) Combines together three vibration-resistant technologies: mechanical anti-vibration, electronic anti-vibration and software anti-vibration.
5) Supports DC6~36V wide voltage input, suitable for 12V and 24V vehicles.
6) Monitor video streams coherence.
7) Watermark technology: prevents data tempering and guarantees the video authenticity and legal efficiency.

1.3. FUNCTIONS

1) Local recording and video playback: 720P/WD1/WHD1/WCIF/D1/HD1/CIF resolution optional.
2) Driving recording: provides statistics on speed, turning, brake, reverse, opening door, etc.
3) Network function: supports break point uploading continually, which can realize the remote video surveillance, video download, remote alarming and network timing of the equipment, network setting and remote upgrade, etc.
4) High-speed backup: support high-speed backup through USB2.0, as well as backup through SD card.
5) User log: on-off status of the device, video loss, recording start time / end time, user log in / log out, modification of the device parameters, checking the time, GPS status.
6) Import and export of the configuration file: thumb drive import/export device parameters.
7) Device upgrade: supports local upgrade and remote upgrade.
8) Alarm linkage: supports linkage switch value output, image display, etc.
9) Storage formatting: formatting SD cards and external USB devices.

1.4. SPECIFICATIONS

| Items		Technical Index
Product Series		A5-E0804
Function Overview		Preview, Recording, Network, Playback, Location tracking
System	OS	Linux 3.0.8
	Control Mode	IR remote control, control panel, network
Video	Input	8 channels WD1+4 channels IPC(720P)
	Output	2 channels
	Total Resource	300fps D1 @ PAL / 360fps D1 @ NTSC
	Video Signal Standard	Electrical level: 1Vpp; Impedance: 75Ω NTSC/PAL Optional
Audio	Input	12 channels
	Output	2 channels
	Audio Signal Standard	Electrical level: 2Vpp; Input impedance: 4.7Ω
Display	Display Split	1/4/9/16
	OSD	GPS information, alarm, temperature, acceleration, voltage, device information, software version, MCU version, network information
	Operation Interface	Semi-transparent GUI
Recording	Video/Audio Compression	H.264/ADPCM
	Image Resolution	PAL: WD1(960X576), D1(704X576), WHD1(960X288), HD1(704x288), WCIF(480X288), CIF(352x288) NTSC: WD1(960X480), D1(704x480), WHD1(960X240), HD1(704x240), WCIF(480X240), CIF(352x240) Digital: 720P(1280X720)
	Image Quality	4 Levels adjustable
	Recording Mode	Manual/Schedule/Alarm (sensor trigger, speed, acceleration, video loss, temperature)
	Pre-recording	0-60minutes
	Post-recording	0-30minutes
	Mirror recording	Yes
Playback	Playback Channel	1 channel by local playback, 1 channel by software playback, 4/8 channels playback
	Search Mode	Date/time, channel, event
Network	3G	EVDO/WCDMA/TDD/FDD
Locating	GPS	Location tracking, speed detection and time sync
Storage	Hard Disk	2.5" SATA HDD
Interface	USB	USB2.0 × 2

	SD	SD × 1
	Sensor	8 inputs, 2 outputs
	Speed	1 channel pulse speed detection
	Panel	Control panel CP4 (Optional accessory)
Power	Input	DC6-36V
	Output	1A@12V,1A@5V
	Consumption	Impact current: input 13.5V@7.8A Working current: input 13.5V@1.6A input 27V@0.7A Standby current: 0A
Physical Characteristic	Dimension (L x W x H)	313x176x119mm
	Weight	3.7Kg
Operating Environment	Temperature	-25℃- +60℃
	Relative Humidity	8%-90%
Certificates		CE, FCC, MIL-STD-810F

1.5. SYSTEM DIAGRAM
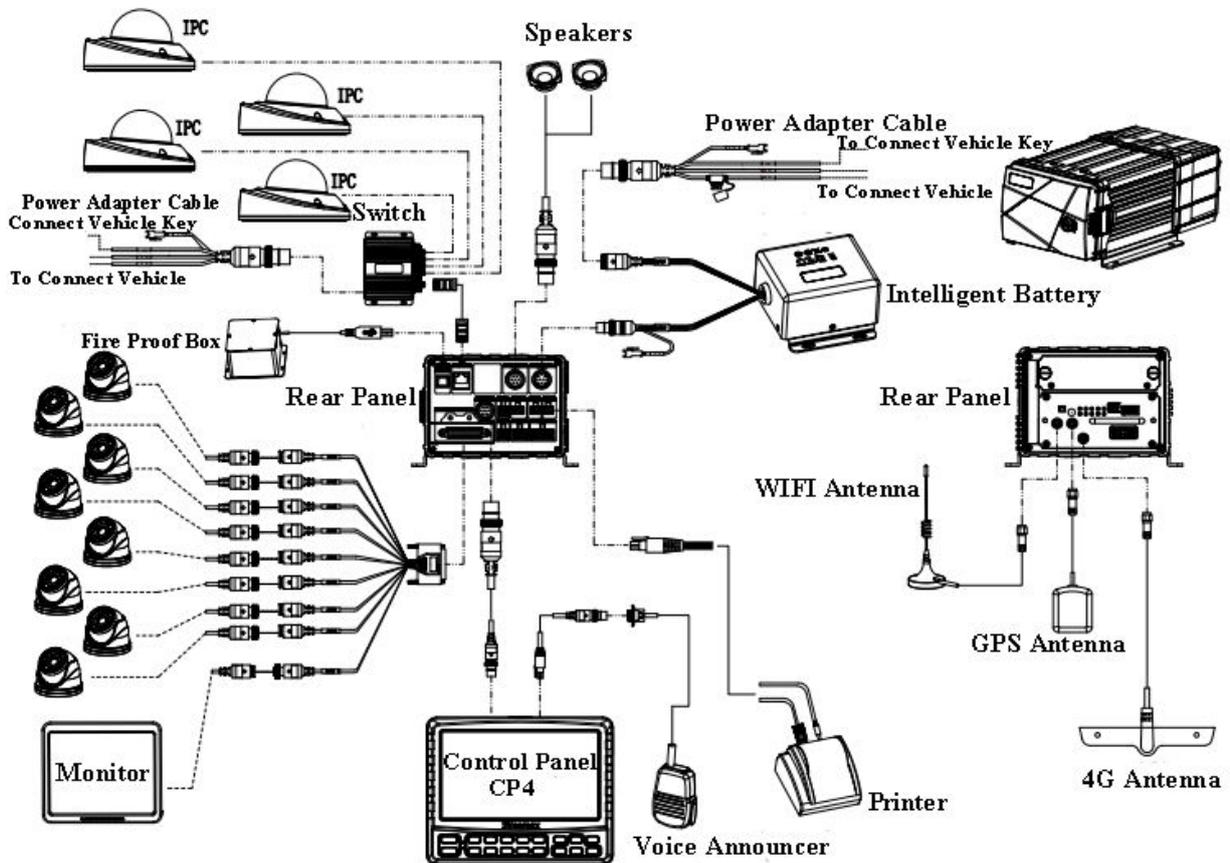
1.6. EXTERNALINTERFACE

DIMENSION
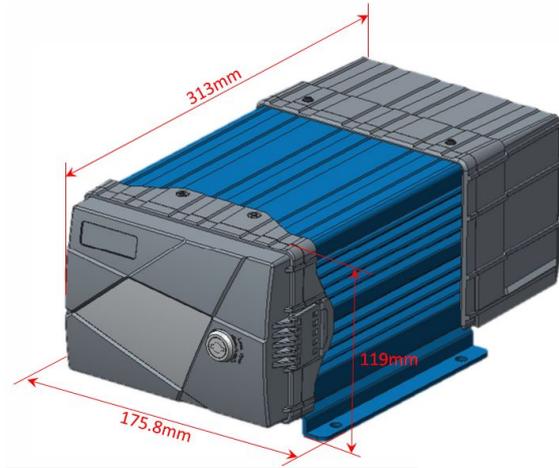
FRONT PANEL
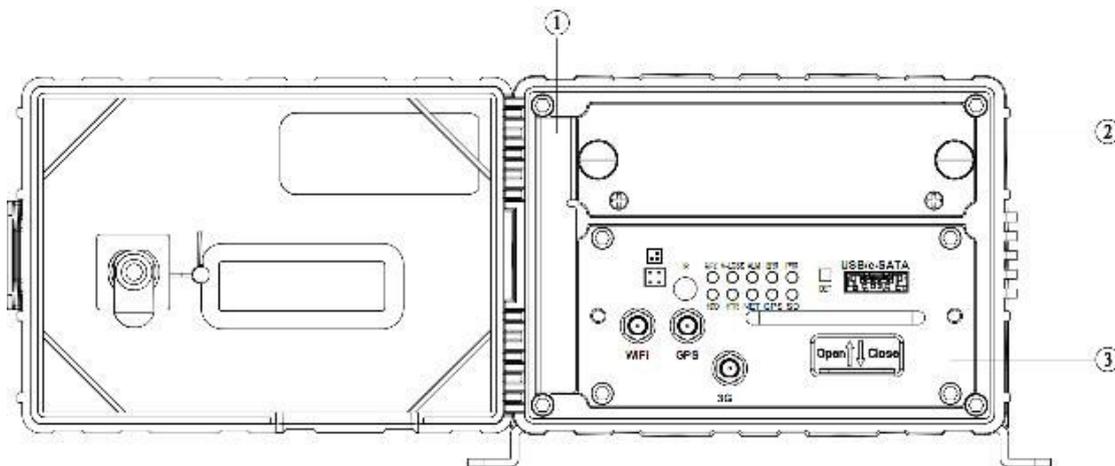
Serial No.	Print	Description
1	WiFi	WiFi antenna interface
2	GPS	GPS antenna interface
3	3G	3G antenna interface
4	USB/eSTAT	USB interface
5	⊡	Debug test interface
6	IR	Remote control receiver
7	SD Slot	Station announcement SD card/Image SD card slot

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REAR PANEL
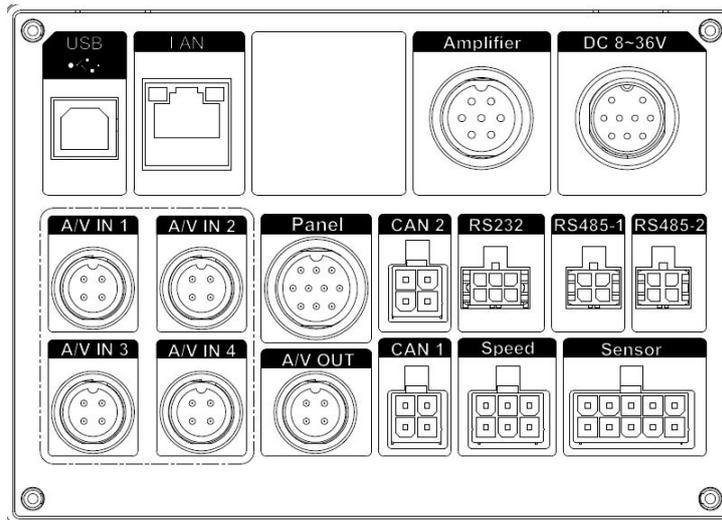
Serial No.	Print	Description
1	DC8-36V	Power input
2	CAN1/2	External CANBUS
3	USB	USB interface
4~7	A/V	Audio/Video input1~8, output 1 channel
5	Panel	Control panel(CP4)
6	Sensor	Sensor interface
7	RS485-1/2,RS232	232/485 serial port
8	Speed	Speed detection port
9	LAN	Network port
10	Amplifier	Amplifier port

1.7. HARD DISK INSTALLATION INSTRUCTION

Get out of the disk. ④

Revolve two screws and pull hard disk out. ③

Open it with the key clockwise. ①

Unfold the buckle and open the panel. ②

Revolve four screws and remove the front cover of hard disk. ⑤

Revolve four screws. ⑥

Hard disk is here. ⑧

Pull it out at this point. ⑦
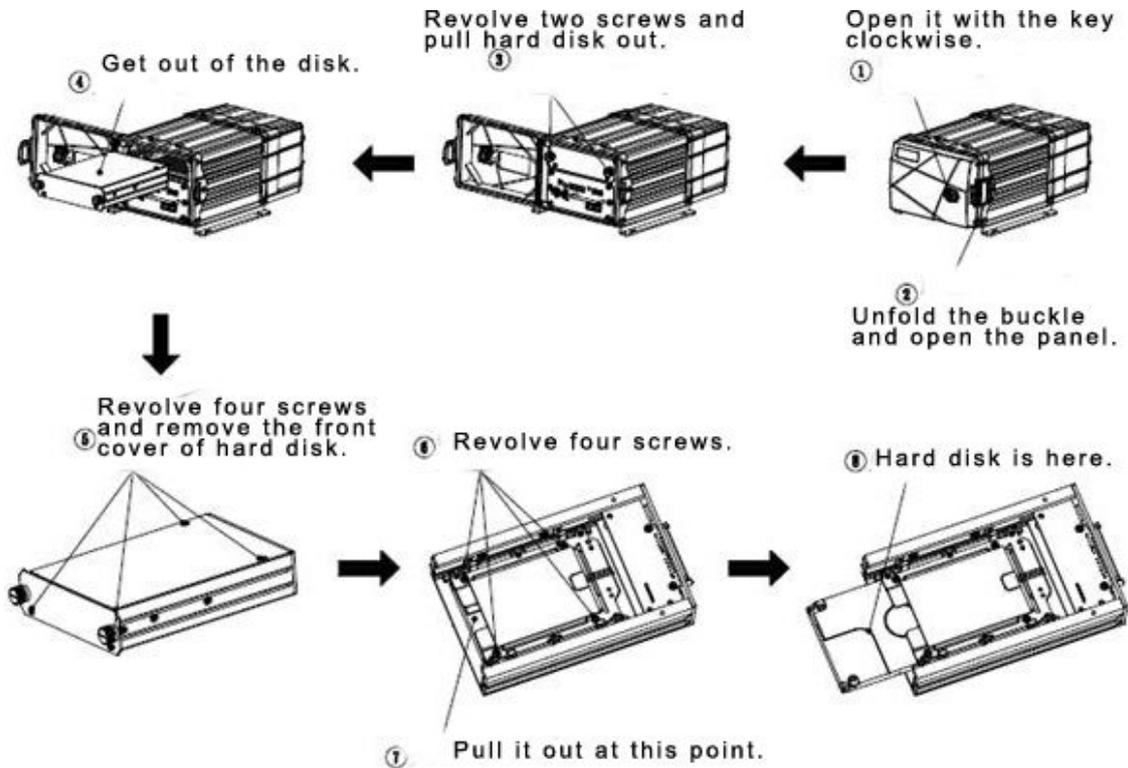
1.8. SIM CARD INSTALLATION INSTRUCTIONS

Get out of the main module. ⑤

Revolve two screws. ③

Open it with the key clockwise. ①

Catch the main module and pull it out. ④

Unfold the buckle and open the panel. ②

Revolve the screws and remove SIM card cover. ⑥

Insert SIM card here. ⑦
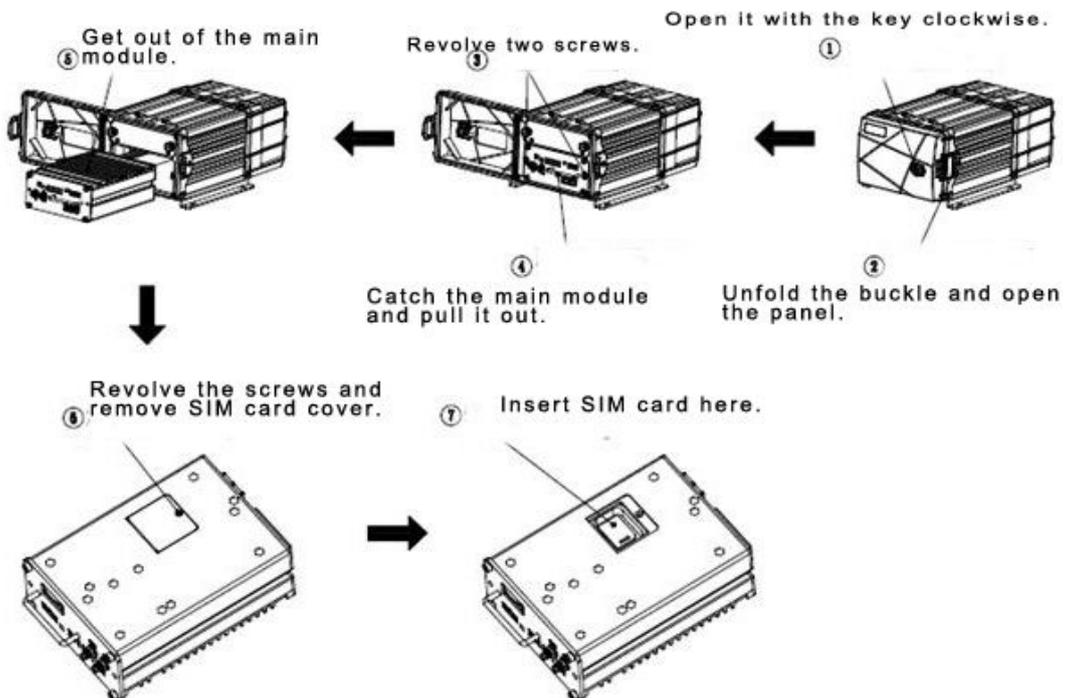
2. OPERATING INSTRUCTIONS

CP4 CONTROL PANEL and Easy Check

User can set parameter, preview, playback and export data via control panel CP4 or Easy Check. Easy Check can be installed in Android/IOS panel or phone.
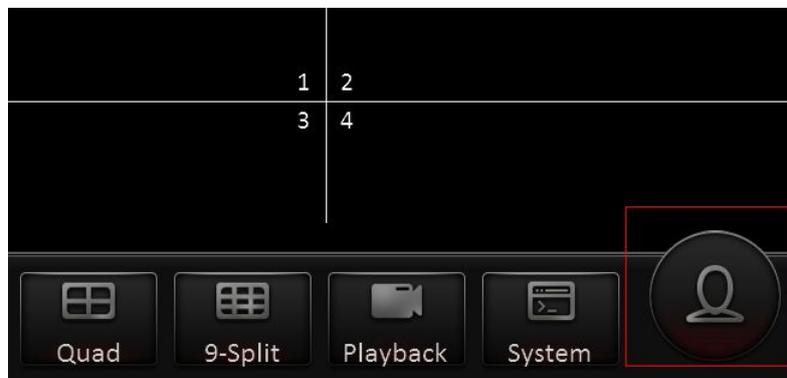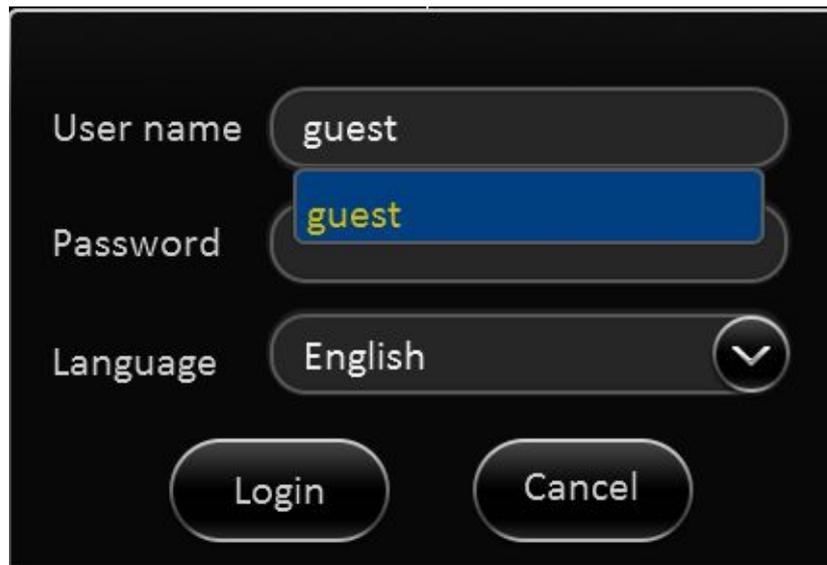

CP4   Easy Check

2.1. LOCAL LOGIN

Touch the screen then the menu will pop up. Click the button at the end of right side to enter the interface.

- ➢ **Login interface Introduction：**
- ■ **User name：**
1) Select users from the drop-down box. There are admin and user as defaults.
2) Currently, it can show two users and one admin at most.
- ■ **Password：**
1) User can enter the operation interface if entering the right password;
2) User must enter the right password again if entering the wrong ones;
3) Click cancel to exit the login interface;
- ■ **Language：**
1) Support the language switch. "language" (Lang) means the current interface adopts Chinese;
2) It will automatically switch once Selecting the language.
3) Currently, it supports Chinese and English;
4) After switching languages, it will not restore language option when user restores the factory Settings;

- ➢ **Default password and permission table is as follows:：**

Default Password	Related User	Related Authority
admin	admin	All Authorities
User	user	Search and playback

- ➢ **The password input Instruction：**
1. If the password are numbers,　user can enter it via CP4
2. User can click 【ENTER】　or the left click mouse on the remote control.
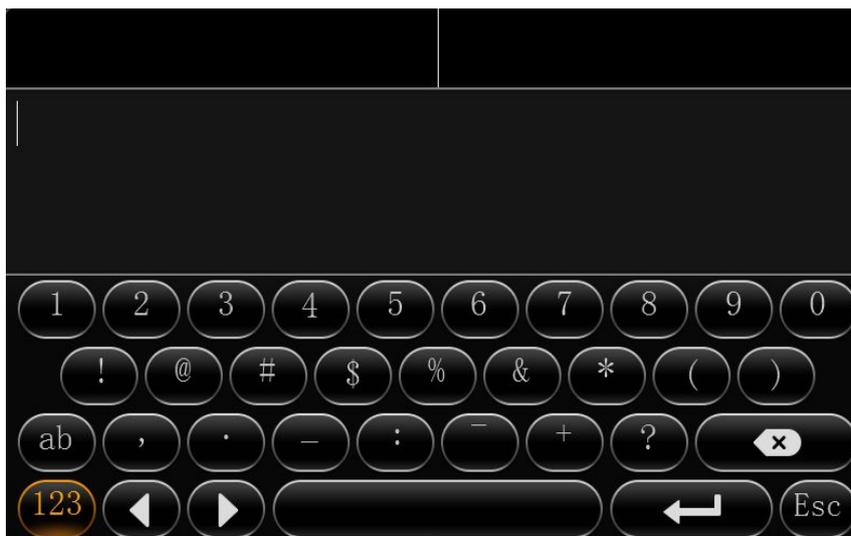
a. Move the cursor to the number position, press 【Enter】 or left click mouse button to select the corresponding number.

b. Move the cursor to 【123】, press 【Enter】 or mouse to choose input type, such as the Numbers, letters, or special characters.

【ab】 means lower case letters, 【123】 means numbers, 【AB】 means capital letters; the highlighted place of background refers to the current cursor position.

c. Move Cursor to , Press 【Enter】 or left click mouse to move between the contents that have entered.

d. Move Cursor to , Press 【Enter】 or left click mouse to delete the previous input contents.

e. Move Cursor to , Press 【Enter】 or the left click mouse to exit the keypad, the entered contents will be written to the edit box.

f. Move Cursor to 【Esc】 position, Press 【Enter】 or the left click mouse to exit the keypad, the entered contents will not be written to the edit box

2.2. RECORD SEARCH AND EXPORT

Video search interface contains video file search, video data backup and video playback function.

When there is a hard disk or SD card, enter the video search interface. Following is the REC Search interface:

In the calendar, the color below the dates means:

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a. No color means no video.
b. Green means common video.
c. Red means alarm video.
d. Yellow means there are alarms and the video files are automatically lock (lock video).

Source: select the source of the video, there are main video, sub video and mirror video.

The main record means HDD record while sub record and mirror record are dual-stream records.

Select the date with record, click next, then enter the following interface:

Following is the record search detail and record search result interface:

➤ Record search detail interface：
  ■ **Record Type:** User can choose all record, alarm record or normal record.
  ■ **Channel choose**：The channel is optional and mark with color that has record. The channel with gray cannot be chosen if there is no record. As to different record type, it will show different relates.

➤ Click search button in the record search detail page, user can enter then record search result page.
  ■ **Time Bar:** Time bar shows three time points, 0 o'clock, 12 o'clock, 24 o'clock. It shows what type of videos during the time according to the marked channel.
  ■ **Channel No:** According to the situation of video for each channel video the day , the video will be displayed on the time line. Tick the channel if user wants to playback the video.
  Note: channel number is displayed from 1~20, please up page up/page down button to change channel

➤ Button description
  ■ **Video playback:** Choose the channel No., select start time to play < default start from 0 >, click the playback button to playback the video.

In playback interface, user can choose fast forward or fast backward to play the video, the button in the middle of screen can switch the channels. The image stops and it will not exit automatically when playing to the last video of the day.

■   **Time period settings:** Click the time setting button, select start time and end time, it will backup or playback the video in the selected time period. Click clip to export the video, the file format can be.264< comprehensive file >, also can be.avi format.

■   **Video export:** Select the channel that has the video files, click this button, all the video files in the effective time period will be exported to the external USB peripherals, file format can be.264<comprehensive file >, also can be avi format.
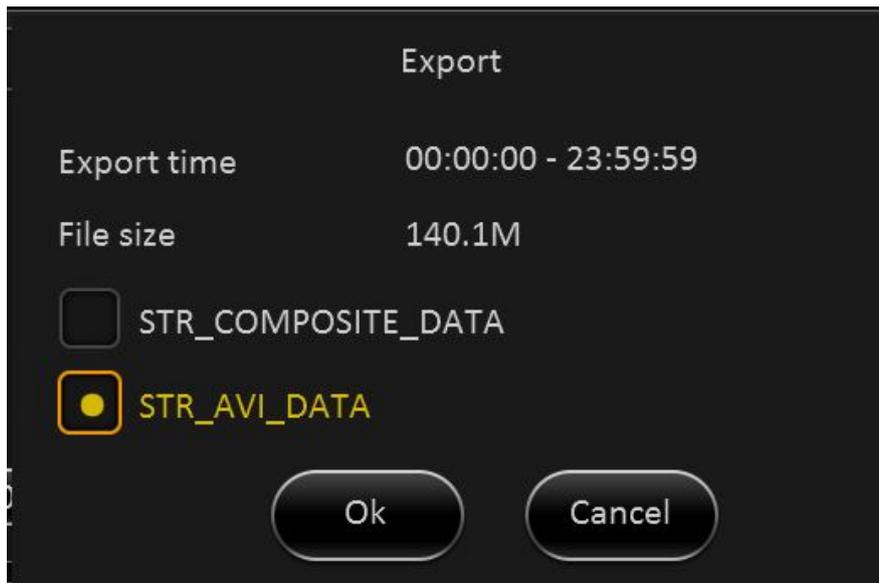
User can also pull out the hard drive or SD card, export and playback the video by professional software.

2.3. LOG SEARCH AND EXPORT

In the log search interface, it records and displays all alarm events and login operation log. Enter the "log query", the interface will be shown as following :

➢ Log Search interface instruction:
■ **Calendar**: the date with log will be marked on the calendar with green color.
 Remark: There is no color classification in the "log mark", and all are green ones.
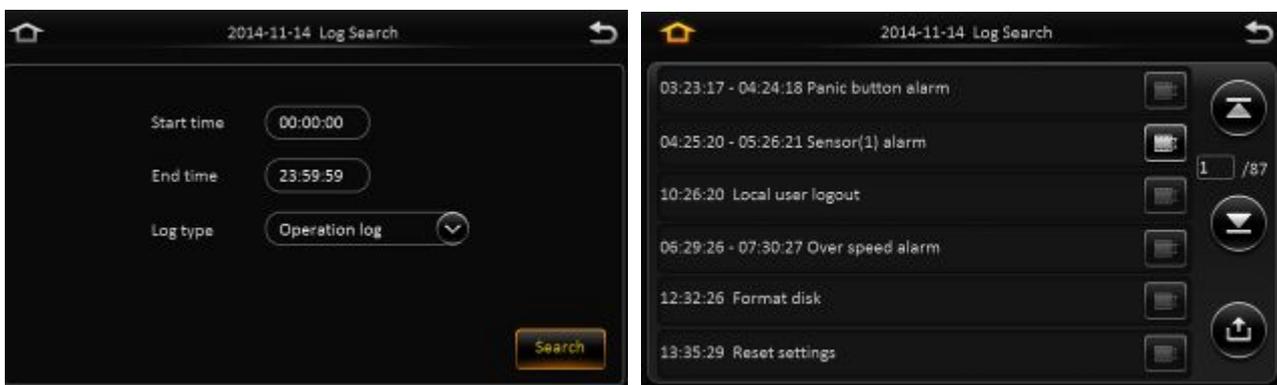
➢ Log search interface instruction:

- ■ Start time: the start time for searching log files
- ■ End time: the end time for searching log files
- ■ Log types: classification of log search, including the operation log and alarm log and locking log
- ➢ Operation log search interface instruction
    - ■ Log includes the following information:
        - ◆ Log time: the time when event is triggered
        - ◆ Log name: event content
    - ■ Supports page up/page down and export all log files of the specified date.
    - ■ Do not support link to video file.
- ➢ Log search
    - ■ **Alarm type:** It includes all alarms, IO alarm , panic alarm and over speed alarm.
    - ■ Log includes the following information:
        - ◆ Log time :the time when event is triggered
        - ◆ Log name：event content
    - ■ Supports page up/page down and export all log files of the specified date.
    - ■ Supports link to video file, click on button to playback video files
- ➢ Lock log search
    - ■ Log includes the following information:
        - ◆ Log time: the time of when event triggered.
        - ◆ Log name: event content
            Log will be recorded according to channel number, each channel will have a lock log file.
    - ■ Support page up and page down.
    - ■ Can't export all log files of the specified date.
    - ■ Can link to video file, click on button to playback video files.
    - ■ **Unlock:** Select log, and unlock it. Then the alarm log of lock will be cleared.
    Remark:
    When lock the video file, system will record alarm log and lock log. The locked video file can only be unlocked from alarm log.

2.4. SYSTEM STATUS

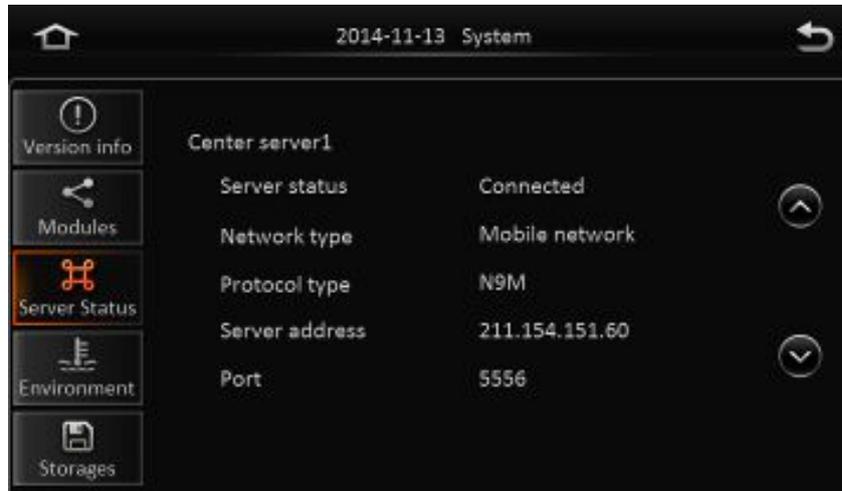User can login the interface with no access restrictions.
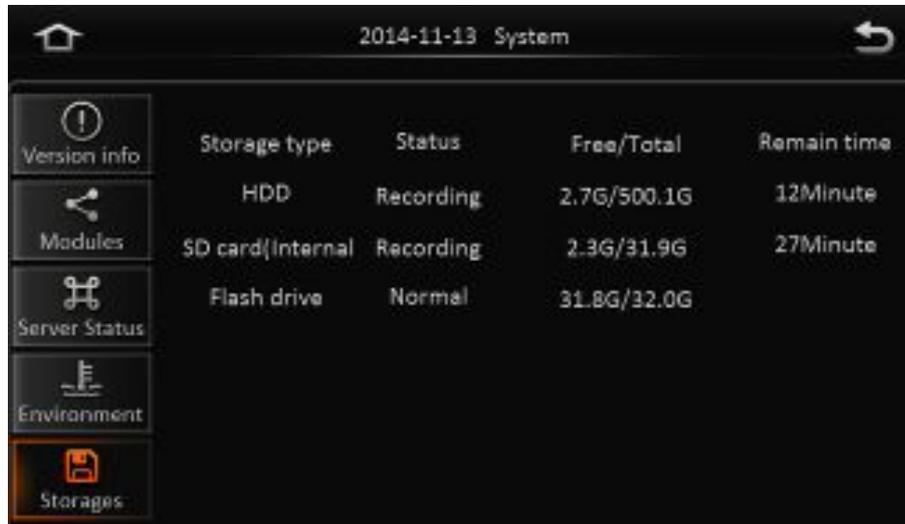- ➢ System- Version information

➢ System- Modules

➢ System-Server status

➢ System - Environment

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➢ System-Storage:

2.5. BASIC SETUP

Click setup button and enter the following interfaces:

2.5.1. REGISTER INFOMATION (SETUP VEHICLE INFORMATION)

➢ Register information-Device info:

- ➢ **Device ID: Currently, it is not useful.**
- ➢ Register information- Vehicle info

- ➢ **Vehicle Number**：When connected with PAD, the vehicle number is needed.
- ➢ **Vehicle plate**：Input manually.
- ➢ **Line number**：Input manually.
- ➢ Register information—About the driver's information:

➢ **Driver number:** Input manually.
➢ **Driver name:** Input manually.

2.5.2. TIME SETUP

➢ Time setup-General
  ➢ **Date format**: Setup the date format of device
  ➢ **Time format**: 24 hours or 12 hours
  ➢ **Time zone**: Range from -12th district ~ +13th district

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➢ Time-Time Sync
- ■ Date/Time: Device time, from 2000-01-01 to 2037-12-31
- ■ Satellite: Synchronize time with GPS satellite. Once GPS signal changes to valid, device will synchronize time
- ■ Center Server: synchronize time with center server
- ■ NTP server: synchronize time with NTP server

Remark:

1) Synchronize time according to time zone
2) Multi-mode can be selected for time synchronization. If one works, the others take no affect.

➢ Time setup-DST
- ■ Enable: Select to enable
- ■ Offset: After enabling DST, adjust the hour manually
- ■ Mode: Setup DST according to week or date
- ■ Start: Time to start DST
- ■ End: Time to end DST

2.5.3. START UP

➢ Start up-ON/OFF
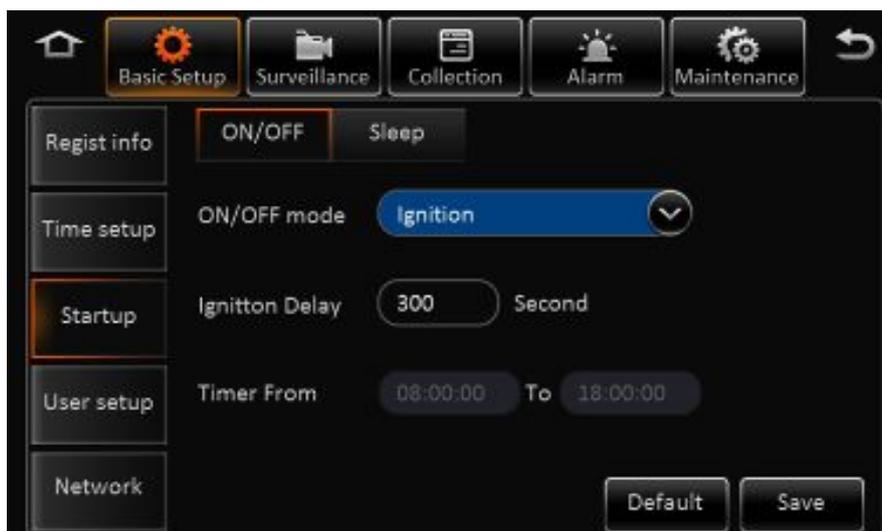
ON/OFF mode: 3 modes, including ignition, timer and ignition or timer.

Ignition: Input ignition delay time for shutdown delay function

Timer: When setup the start mode as Timer, please setup the start time and end time

Under this mode, MDVR's start up or shut down time will not affect the ignition.

Remark:

If use setup as Ignition or Timer Mode, Ignition ON or Timer start time can trigger MDVR start up.

And only when Ignition off and Timer end time, MDVR will shut down.

➢ Start-Sleep

- ■ **Sleep Mode:** Currently, there is only no consumption standby mode available.
- ■ **Low Voltage Protection:** Enabling the low voltage shutdown protection mode selected.
- ■ **Low Battery Protection:** Protect the vehicle battery. When consistently below the standard value, it will countdown shutdown. As for a 12V vehicle , the default is 9V, while a 24V vehicle is 21V.
- ■ **Recovery boot voltage values:** low-voltage protection, when the battery voltage is consistently greater than the standard value, it will automatically boot. As for a 12V vehicle , the default is 12.5V, while a 24V vehicle is 24.5V.
- ■ **Low voltage will be reported or not:** The low-voltage protection will be reported to the platform after it is ticked.

2.5.4. USER SETTING

In the basic settings, click user settings, enter the following interface, user can enter setting menu.

- ➢ **User name:** The default ones are admin and user.
- ➢ **User Group:** It is divided into administrator and ordinary user.

> ➤ Supports delete user function. Select the user and click "Delete User" button. Please be noted that the administrator can not be deleted.
> ➤ Supports add user function. Click "Add User" button, then enter the following interface
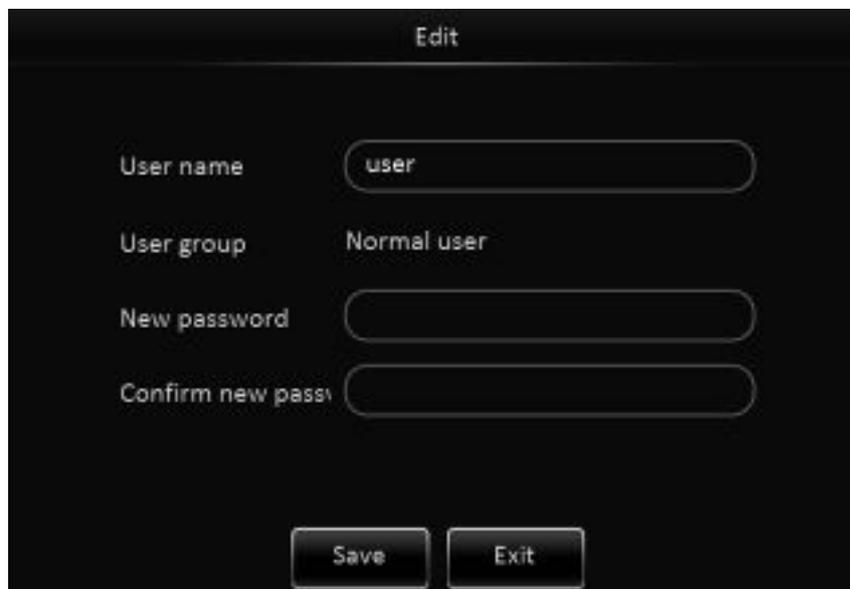

Remark:

1) Only administrators can add users.
2) Users can add up to two.
3) User name cannot be empty, not the same with the existed user name while the user password can be empty.

> ➤ User name and password can be modified. Select a user, click the "Edit User" button, enter the following interface:

Modify the user name and password to confirm the operation temporarily. There is no need to verify the old password, Administrator user name can no t be modified.

2.5.5. NETWORK SETTINGS

In the basic settings, click Network Settings, enter the following interface, user can set network parameters.

➢ Network Settings - wired network and port interface description

■ **Automatically obtain IP:** Dynamic acquisition, DNS can also be statically configured to dynamically obtain.

■ **Use the following IP:** Static IP, need to use a static DNS.

Remark:

Switch from static IP to automatically obtain IP mode, it can display dynamic IP, but the static IP parameters will not be covered, to restore the last saved static IP after switching back.

➢ Network Settings - Port Interface Description:

■ **WEB port No.:** The default is 80, will be used in IE to access this port.

■ **Media Port No.:** The default is 81, the forwarding server will use this port.

➢ Net working settings- Instruction of wifi network：

- **Enable :** Select to enable WIFI
- **ESSID：** Manually input the address of AP
- **Encryption:** It supports NONE, WEP and WPA
- **Password:** Manually input
- **Static IP**: Select to use static IP, or MDVR will get dynamic IP

➢ Network-3G/4G network interface:

Dialing wireless network, user needs to choose the module type and setup dialing parameters

- No Service. When entering the dialing setup interface, it search the wireless module type automatically. It shows No Service when ther is no module.
- **Network type:** The default one is Mix, 2G/3G ot 2G/3G/4G optional.
- **Dialing parameter：** It includes access point, user name, password, data service number, and enter SIM parameters provided by the manufacturer. The default is empty, the program comes with empty arguments by dialing.
- **Certification：** Supports PAP or CHAP.
  Remark:
  When there is SIM and normal 3G/4G signal, it will dial automatically.

➢ Network-server

Server's IP address and port are needed for device registering to server. Select CMS if there is wire or WIFI. Set up central IP and port, Select 4G CMS when dialing wireless network.

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By default, there is only one server, but user can add other server up to 6. Server 1 can't be deleted.

2.6. VIDEO SURVEILLANCE

2.6.1. LIVE VIEW SURVEILLANCE

Surveillance-->Live View

➢ Live View-Preview：

- ■ **Preview Audio:** Enable the audio when live view the video
- ■ **Image Setting:** Set the live-view parameters, including brightness, contrast, etc.
- ■ **Startup Screen:** Set the live-view screen, it can be single-screen or quad screen or nine screen
- ■ **Channel:** Set the channel when live-view

➢ Live View-Auto Loop:

- ■ **Screen:** Totally 32 screens can be added.。
- ■ **Mode:** 1x1, 2x2, 3x3 optional.
- ■ **Channel:** Included channel number.
- ■ **Duration:** Residence time for each screen.
- ■ **Setup:** Delete or Edit.
- ■ **Add Screen:** Add polling screen
- ■ **Auto Loop:** Enable the auto pulling

➢ Live View-Sub-stream:
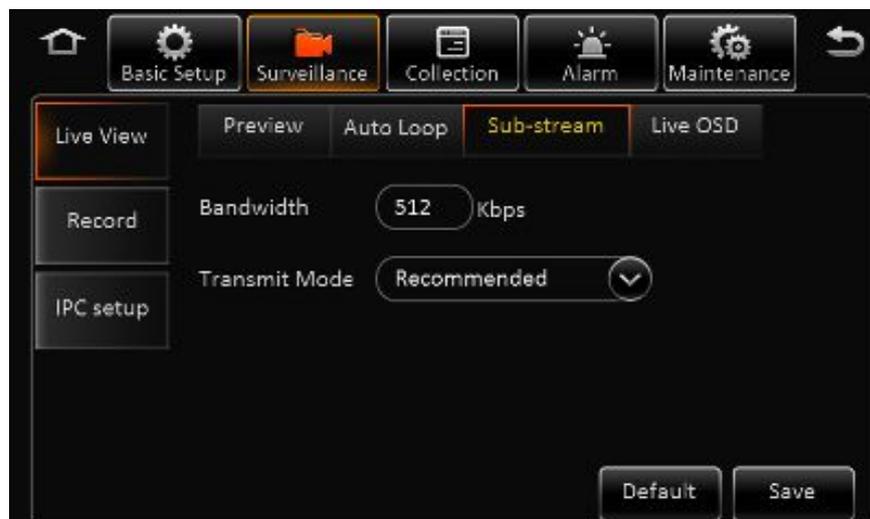
- ■ **Bandwidth:** Set the bandwidth, default is 500Kbps maximum 5M
- ■ **Transmit mode:** Default is the recommended (smooth + clear) mode, divided into five level.

➢ Live view-Live OSD:

Display the information on screen, default is only the time, and the position can not be set.

2.6.2. RECORD

Surveillance-->Record

➢ Record-General:

- ■ **System:** Default is PAL, NTSC optional
- ■ **Overwrite:** Enable the HDD to be overwritten when it is full
- ■ **Lock Duration:** Protect the record file to be deleted by fault, default is 7 days
- ■ **Pre-recording:** Pre-record before the alarm happens. Default is 15min, 0-60min optional.

➢ Record-General-Main Stream:

- **Channel:** 1-20 channels can be chosen and set the record parameters
- **Enable:** Enable the main stream record function
- **Resolution:** The analog channel supports D1/HD1/CIF/WD1/WHD1/WCIF while the digital one supports 720P
- **Frame Rate:** Frame Rate of the record
- **Picture Quality:** Picture Quality of the record
- **Record Type:** Ignition, Time, Event optional. Each channel can be set separately. The sub-stream and mirror record are the same
- **Audio:** Enable the audio. Note: Audio can not be record separately
- **I frame only without alarm**: Enable to let the frame rate invalid, record file is I frame only

➢ Record- Dual stream

- **Record Storage:** The storage type for second stream, internal SD, or external SD
- **Record Mode:** Mirror record, alarm back-up, and sub stream

    Mirror Record: Channel is selectable. Video resolution and frame rate are the same with main stream.

    Alarm Back-up: Channel is selectable. The parameters are the same with main stream

    Sub-stream: Channel is selectable. Recording parameters are configurable

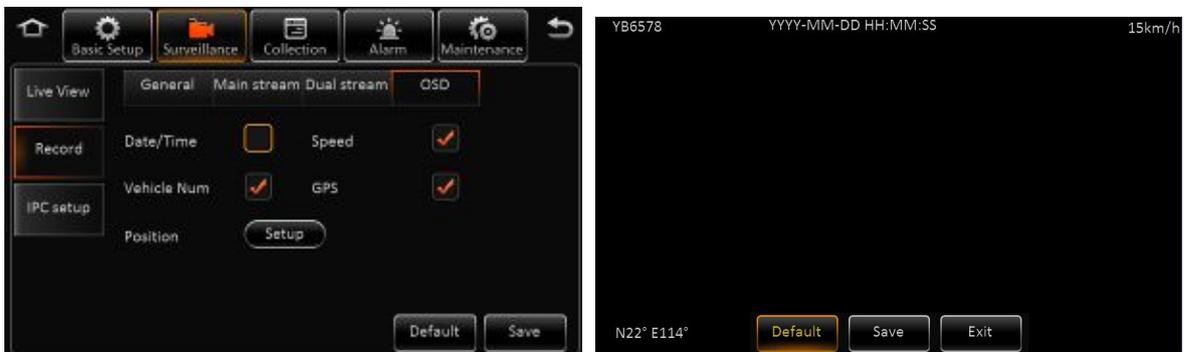- **Mirror channel:** It is selectable according record mode

➢ Dual stream-Sub-stream

Parameters includes channel number, enable or not, audio, resolution, frame rate and image quality
Can't record I frame only, record parameters is completely separated from main stream.

Remark:

Main stream +sub-stream total resource can't over 12M

➢ Record-OSD

Embedded key information to video file for easily check when playback.

2.6.3. IPC SETUP

➢ IPC setup:

- ■ **Channel:** 1-16 are default for analog cameras. If selected, then analog camera is invalid. 17-20 channel are for IP cameras
- ■ **Enable IPC**: Enable to operate
- ■ **IP and port:** Display channel number and port
- ■ **Setup:** Search and edit IP camera recording parameters
- ■ **Fast Setup:** Search all the IP cameras in LAN network, and auto assign IP address to IP

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camera

2.7. DATA COLLECTION
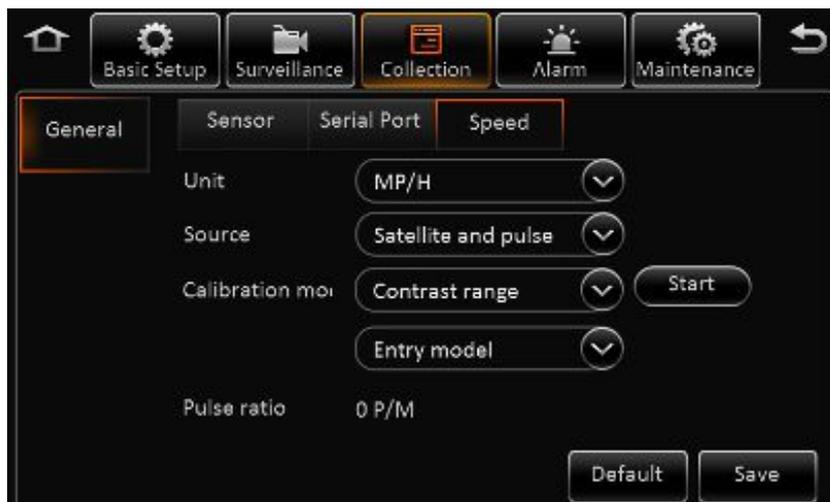
➢ General- IO sensor

- ■ **Sensor number:** 1~8 optional.
- ■ **Sensor name:** IO sensor name.
- ■ **OSD name:** The information embedded to video image.
- ■ **Copy:** Copy the configuration and use it for other sensors.

➢ General- Serial port:

➢ General- Speed

For more information, please visit our website **www.en.streamax.com**
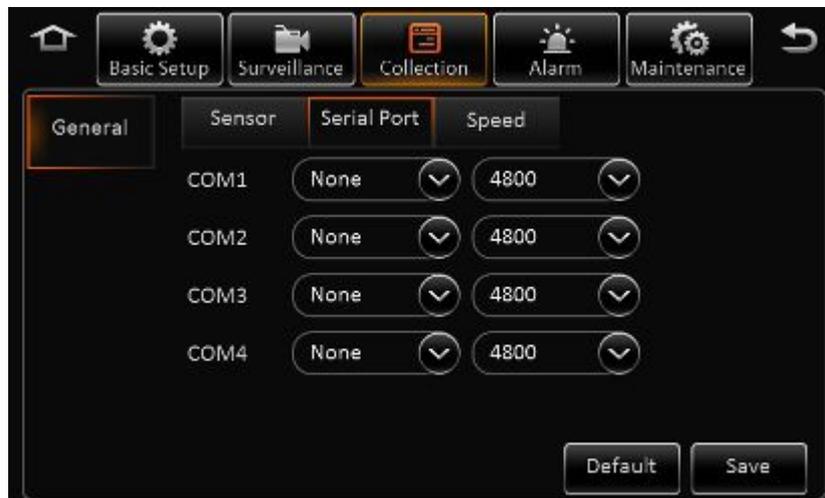
- ■ **Unit:** KM/H and MPH selectable.
- ■ **Source:** GPS, pulse or both optional.
- ■ **Calibration mode:** No need to calibrate if setup as satellite mode.

2.8. ALARM

➢ General --Speed alarm

- ■ **Name:** The current name is Overspeed
- ■ **Enable**：Enable or disable, tick to enable
- ■ **Alarm type:** 3 levels
- ■ **Trigger:** Low or high voltage to trigger alarm
- ■ **Linkage:** When alarm triggered, link to alarm output, full screen live video, report to server and so on

➢ General- Panic alarm :

- **Name**：The current name is panic.
- **Enable**：Enable or disable
- **Alarm type:** 3 levels
- **Trigger:** Low or high voltage to trigger alarm.
- **Linkage:** When alarm is triggered, link to alarm output, full screen live video, report to server and so on

➢ General – IO alarm interface:

- **Name:** From Sensor1 to Sensor8
- **Enable:** Enable this sensor or not, tick to enable
- **Alarm type:** 3 levels
- **Trigger:** Low or high voltage trigger alarm
- **Linkage:** Link to sensor out, report alarm or full screen

➢ IO sensor- Alarm linkage interface
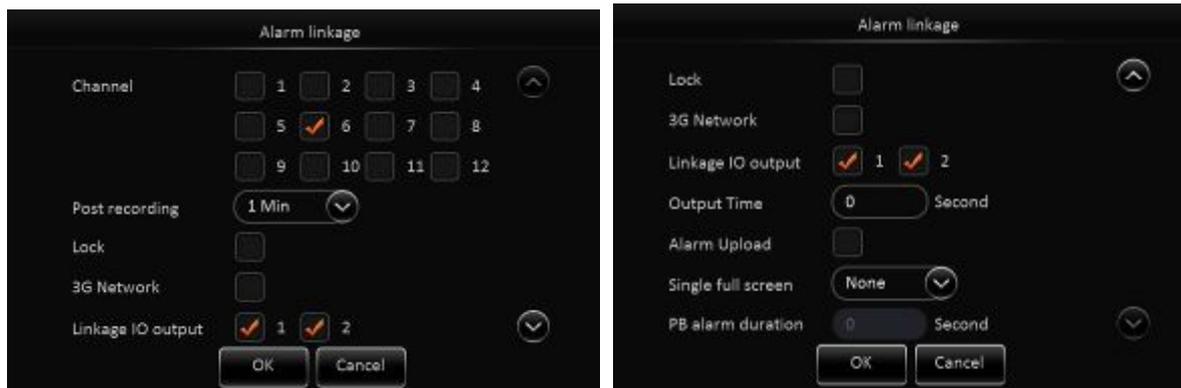
- **CH**：Associate recording, optional
- **Post-recording**：When the alarm is canceled, the time continue to record
- **Lock**：Only for alarm video
- **3G Network**: It means when the alarm triggered, should it active the 3G module to dial or not.
- **Linkage output**: When alarm triggered, associate with which sensor output
- **Output time**：It means when the alarm canceled, how long the sensor output can stand
- **Upload CMS**：Upload the alarm info to center server or not
- **Full screen**：When the alarm triggered, associate with a single channel to full screen or not
- **Alarm duration time:** When alarm canceled, the alarm duration time, during this time, if this alarm trigger again, It won't be record again

2.9. MAINTENANCE

After login, click setup>Maintenance, and then enter into the page as follow.

2.9.1. Configuration

In the configuration page, user can export and import the configuration file.

➢ Insert the USB drive, and then click "EXPORT", it will export the configuration file to the root folder of UDB driver, the file name is MDVFCFG.CFG
Import all the parameters
➢ Insert the USB drive that with configuration file into MDVR, and login this page and click the

"IMPORT" to import the parameters, and it will display the notice when import success.

➢ Remark: it won't import the register info and speed adaption info.

2.9.2. Data Export

In the Data export page, you can export the appointed file in any time, such as black box data, log file and so on.
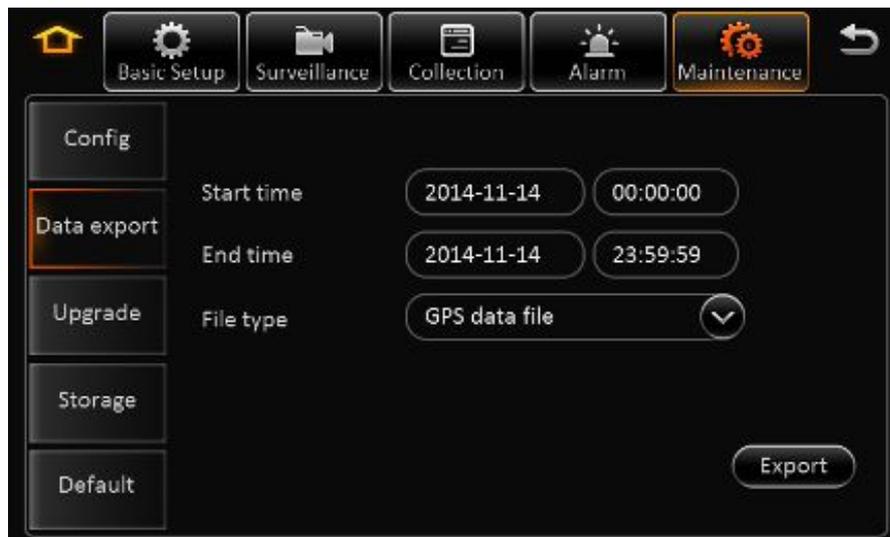
2.9.3. Upgrade

In the page of upgrade, you can upgrade the firmware, MCU for MDVR

Remark:

1)   Make sure don't power off during upgrading.

2)   Put the upgrade file into the folder "upgrade", which is at the root directory if the USB drive

3)   It support upgrade firmware, LOGO, MCU, and MCU for CP4.

4)   Firmware and MCU will package in one file, and it will upgrade MCU first, and then firmware.

5)   The name of the LOGO are: logo_update(10.12.15).jpg and logo_cvbs(11.12.15).jpg

6) Please don't put many files in the same folder when it is upgrading, otherwise, it will upgrade one randomly.

2.9.4. Storage

In this page, user can format all the storage.

➢ **Storage type:**

HDD, SD card (Internal), SD card(External), USB drive

➢ **Free/Total**

Not exist: Didn't find the HDD (not install or broken)

Unformatted: Means the HDD has been detected, but unformatted.(New HDD)

Capacity info: Display the correct info means HDD working fine

➢ **Format:**

Click the Format button to start format, if format successful, it will start to recording, and don't need to restart, the format time will be around 10 seconds.

Remark: The new HDD and SD card must be format manually at the first time.

2.9.5. Default

In this page, you can click the default button to reset the parameters to factory settings.

Remark:

For, language, MAC address, register info, CMS server info, speed adaption parameter will not change during default settings.

For more information, please visit our website **www.en.streamax.com**