

Thank you for purchasing our product.  
Please read this user's manual before  
using the product. Change without notice

# H.264 4/ 8/ 16 CH 960H DVR User's Manual

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## CAUTION

- Please read this user manual carefully to ensure that you can use the device correctly and safely
- We do not warrant all the content is correct. The contents of this manual are subject to change without notice
- This device should be operated only from the type of power source indicated on the marking label. The voltage of the power must be verified before using. If not in use for a long time, pull out the plug from the socket
- Do not install this device near any heat sources such as radiators, heat registers, stoves or other device that produce heat
- Do not install this device near water. Clean only with a dry cloth
- Do not block any ventilation openings. And ensure well ventilation around the machine
- Do not power off the DVR at normal recording condition! The correct operation to shut off DVR is to stop recording firstly, and then select “shut-down” button at the right of the menu bar to exit, and finally to cut off the power.
- This machine is indoor using equipment. Do not expose the machine in rain or moist environment. In case any solid or liquid get into the machine’s case, please cut off the power supply immediately, and ask for qualified technicians to check the machine before restart
- Refer all servicing to qualified service personnel. No any parts repaired by yourself without technical aid or approval.
- This manual is suitable for 4, 8 and 16 digital video recorders.

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## 1.1 Main Features

### COMPRESSION FORMAT

- Standard H.264 compression with low bit rate and better image quality

### LIVE SURVEILLANCE

- Supports HDMI/ VGA/BNC output
- Supports channel security by hiding live display
- Display the local record state and basic information
- Supports USB to make full control

### RECORD MEDIA

- Supports one SATA HDD to record for a longer time without any limitation

### BACKUP

- Supports USB 2.0 devices to backup
- Supports saving recorded files with AVI standard format to a remote computer through internet

### RECORD & PLAYBACK

- Record modes: Manual, Schedule, Motion detection and Sensor alarm recording
- Supports recycle after HDD full
- Resolution, frame rate and picture quality are adjustable
- 4CH DVR supports 4 CH 960H real-time recording
- 8CH DVR supports 960H @12/15frame recording or 8CH full D1/CIF real-time recording.
- 16CH DVR supports 960H @6/7frame recording
- Three record search modes: time search, event search and image search
- 4/8/16-CH screen playback simultaneously
- Supports deleting and locking the recorded files one by one
- Supports remote playback in Network Client through LAN or internet

### ALARM(for 4 and 8 CH DVR only)

- Supports schedule for motion detection and sensor alarm
- Supports pre-recording and post recording
- Supports linked channels recording once motion or alarm triggered on certain channel
- Supports linked PTZ preset , auto cruise and track of the corresponding channel

### PTZ CONTROL

- Supports various PTZ protocols
- Supports 128 PTZ presets and 8 auto cruise tracks
- Supports remote PTZ control through internet

### SECURITY

- Customize user right: log search, system setup, two way audio, file management, disk management, remote login, live view, manual record, playback, PTZ control and remote live view
- Supports 1 administrator and 63 users.
- Supports event log recording and checking, events unlimited

### NETWORK

- Supports TCP/IP, DHCP, PPPOE, DDNS protocol
- Supports IE browser to do remote view
- Supports setup client connection amount
- Supports dual stream. Network stream is adjustable independently to fit the network bandwidth and environment.
- Supports picture snap and color adjustment in remote live
- Supports remote time and event search, and channel playback with picture snap
- Supports remote PTZ control with preset and auto cruise
- Supports remote full menu setup, changing all the DVR parameters remotely
- Supports mobile surveillance by phones with iPhone/Android/
- Supports CMS to manage multi devices on internet

## 1.2 Front Panel Instructions

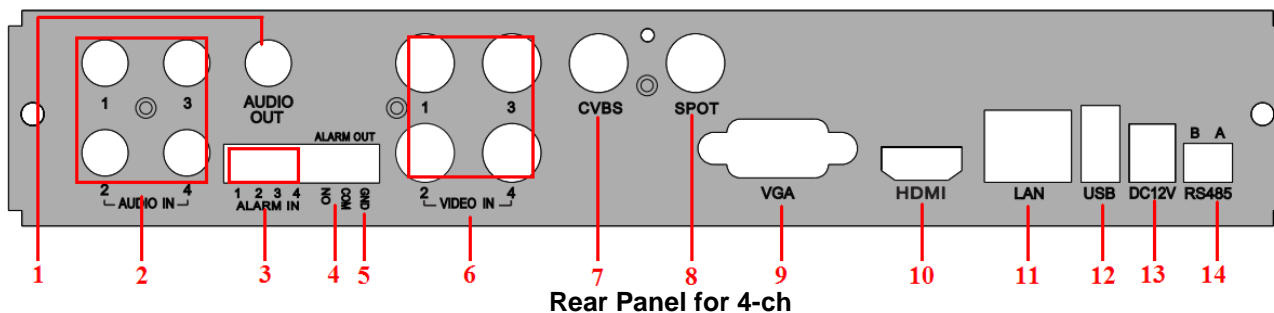


**Notice:** The pictures are only for reference; please make the object as the standard.

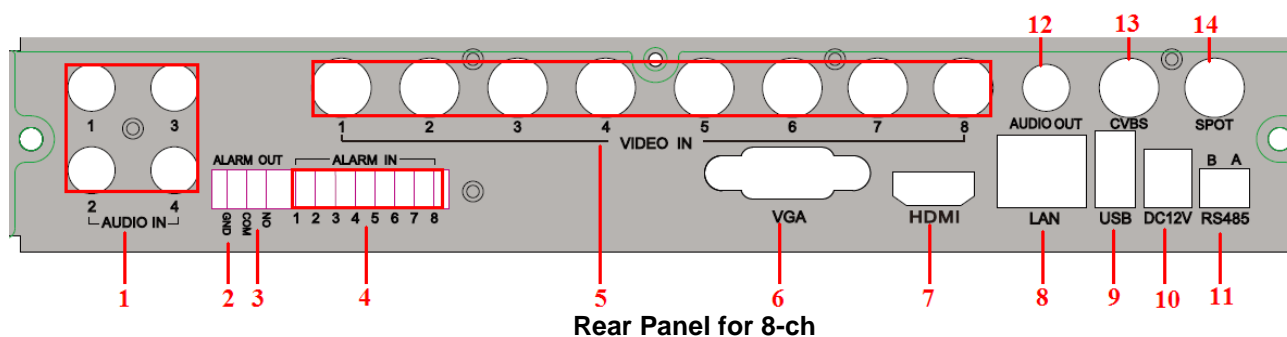


Label Name	Function
REC / FOCUS	Manual record / focus adjustment(PTZ)
PLAY / IRIS	Enter Playback/ iris adjustment (PTZ)
REW / SPEED	Fast rewind on playback mode /speed adjustment (PTZ)
FF / P.T.Z.	Fast forward on playback mode /enter PTZ mode
MENU / +	Enter menu page / increase value
BACKUP / -	Enter backup page / decrease value
STOP / ESC	Stop playback on playback mode / Exit menu or jump back to previous page
Split / Direction Key	Switch split / Move selected item
Enter	Validate action
USB	Connect USB thumb drive or mouse
IR receiver	Remote receiver

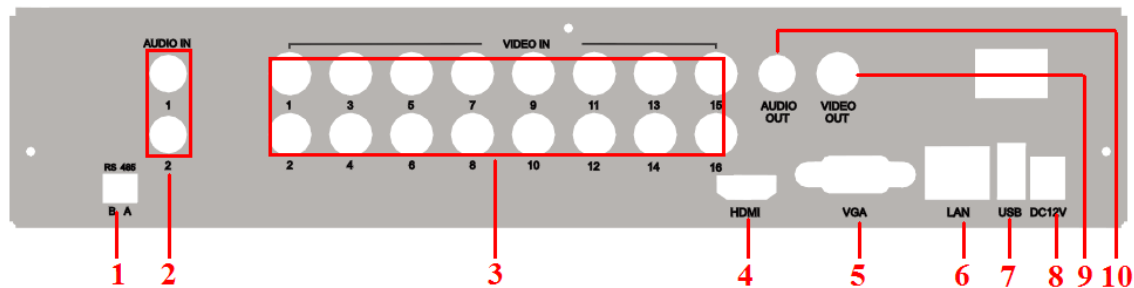
### 1.3 Back Panel Definition



Item	Name	Description
1	Audio out	Audio output, connect to the sound box
2	Audio in	4 CH Audio input
3	ALARM IN	Connect to external sensor 1-4
4	ALARM OUT	1-ch relay output. Connect to external alarm
5	GND	Grounding
6	Video in	Video input channels from 1-4
7	CVBS port	Connect to monitor
8	Spot out	Connect to monitor as an AUX output channel by channel. Video would be displayed without OSD.
9	VGA port	VGA output, connect to monitor
10	HDMI port	Connect to high-definition display device
11	LAN	Network port
12	USB port	Connect USB mouse or connect external USB devices
13	DC12V	POWER INPUT
14	RS485	Connect to speed dome or keyboard



Item	Name	Description
1	Audio in	4 CH Audio input
2	GND	Grounding
3	ALARM OUT	1-ch relay output. Connect to external alarm
4	ALARM IN	Connect to external sensor 1-8
5	Video in	Video input channels from 1-8
6	VGA port	VGA output, connect to monitor
7	HDMI port	Connect to high-definition display device
8	LAN	Network port
9	USB port	Connect USB mouse or connect external USB devices
10	DC12V	POWER INPUT
11	RS485	Connect to speed dome or keyboard
12	Audio out	Audio output, connect to the sound box
13	CVBS port	Connect to monitor
14	Spot out	Connect to monitor as an AUX output channel by channel. Video would be displayed without OSD.

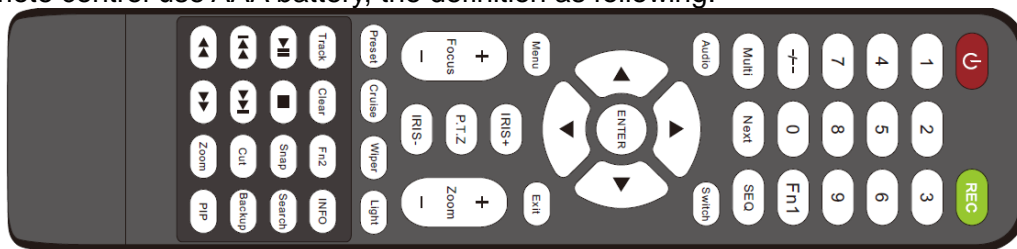


**Rear Panel for 16-ch**


Item	Name	Description
1	RS485	Connect to speed dome or keyboard ( A is TX+, B is TX- )
2	Audio in	2-CH Audio inputs
3	Video in	Video input channels from 1-16
4	HDMI port	Connect to high-definition display device
5	VGA port	VGA output, connect to monitor
6	LAN	Network port
7	USB port	Connect USB mouse or connect external USB devices
8	DC12V	POWER INPUT
9	Video out	Connect to monitor
10	Audio out	Audio output, connect to the sound box

## 1.4 Remote Controller (Optional)

This remote control use AAA battery, the definition as following:



**Fig 2.4 Remote Controller**

Button	Function
 Power Button	Switch off—to stop DVR. Use it before turning off the power
Record Button	To record manually
-/-- /0-9 Digital Button	Input number or choose camera
Fn1 Button	Unavailable temporarily
Multi Button	To choose multi screen display mode
Next Button	To switch the live image
SEQ	To enter into auto dwell mode
Audio	To enable audio output in live mode
Switch	To switch the output between BNC and VGA
 Direction button	To move cursor in setup or pan/tilt PTZ
Enter Button	To confirm the choice or setup
Menu Button	To enter into menu
Exit Button	To exit the current interface
Focus/IRIS/Zoom/PTZ	To control PTZ camera. Move camera/zoom/IRIS/Focus
Preset Button	To enter into preset setting in PTZ mode
Cruise Button	To enter into cruise setting in PTZ mode
Track Button	To enter into track setting in PTZ mode
Wiper Button	To enable wiper function in PTZ mode
Light Button	To enable light function in PTZ mode
Clear Button	To return to the previous interface
Fn2 Button	Unavailable temporarily
Info Button	Get information about DVR like firmware version, HDD information
	To control playback. Play/Pause/Stop/Previous Section/Next Section/Rewind/Fast Forward
Snap Button	To take snapshots manually
Search Button	To enter into search mode
Cut Button	To set the start/end time for backup in playback mode
Backup Button	To enter into backup mode
Zoom Button	To zoom in the images
PIP Button	To enter into picture in picture setting mode

### ◆ Switch Remote Control ID

Take remote control and point to DVR then continuously press “8”, “8”, “ID(0-65535)”, “Enter”.


\* The ID must be the same on DVR.

\* For example: If ID=1, please take remote control and point to DVR then press 8, 8, 1, Enter.

## 1.5 Control with Mouse

### 1.5.1 Connect Mouse

It supports USB mouse through the port on the rear panel, please refer to Fig 2.4 Remote Controller.

 **Notice:** If mouse is not detected or doesn't work, check below steps:

1. Make sure the mouse is connected to the USB mouse port not the USB port
2. try another mouse

### 1.5.2 System operation by mouse

The structure of the main menu is shown in Fig 2.4 Remote Controller.

#### In live:

Double-click left button on one camera to be full screen display. Double-click again to return to the previous screen display.

Click right button to show the control bar at the bottom of the screen as Fig 2.4 Remote Controller. Here are all control and setup. Click right mouse again to hide the control bar.

#### In setup:

Click left button to enter. Click right button to cancel setup, or return to the previous.

If want to input the value, move cursor to the blank and click. An input window will appear as Fig2.5. It supports digitals, letters and symbols input.



**Fig 2.5 Digital Numbers and Letters Input Window**

Users can change some value by the wheel, such as time. Move cursor onto the value, and roll the wheel when the value blinks.

It supports mouse drag. I.e. Set motion detection area: click customized, hold left button and drag to set motion detection area. Set schedule: hold left button and drag to set schedule time

#### In playback:

Click left button to choose the options. Click right button to return to live mode.

#### In backup:

Click left button to choose the options. Click right button to return to previous picture.

#### In PTZ control:

Click left button to choose the buttons to control the PTZ. Click right button to return to live.

 **Notice:** Mouse is the default tool in all the operation below unless Exceptional indication.



## 2 Basic Function Instruction

### 2.1 Power On/Off

Before you power on the unit, please make sure all the connection is good.

#### 2.1.1 Power on

Step1: connect with the source power; switch on the power button near the power port in the rear panel

Step2: the device will start to boot, and the power indicator will become blue

Step3: before start, a WIZARD dialogue box will pop-out (refer to below picture) and show some information about time zone and time setup, IP information, record quick setup and HDD information page.



After the device powers on, if there is no menu or only has live image display, user can long press ESC button to switch.

*Notice:* this serial device can only display menu on VGA monitor or BNC monitor at one time, if there is live image display without menu display, please check up whether other device has menu display firstly, or long press ESC key to wait for login dialog box to appear.

#### 2.1.2 Power off


User can power off the device by using remote controller, keyboard and mouse.

**By remote controller:**

Step1: press Power button, the shut down window will appear, click OK, the unit will power off after a while.

Step2: disconnect the power

**By keyboard and mouse:**

Step1: enter into  Menu, then select "System Shut Down" icon, the Shut down window will appear

Step2: click OK, the unit will power off after a while.

Step3: disconnect the power

### 2.2 Login

User can login and logout the DVR system. User cannot do any other operations except changing the multi-screen display once logout.

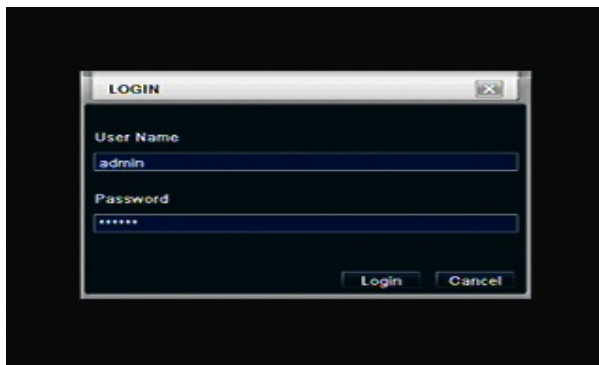


Fig 3-1 Login

*Notice:* the default user name and password is "admin" and 123456 "

*The concrete operation steps for change password, add or delete user please refer to Fig 3.7 User management configuration for more details.*

## 2.3 Live preview

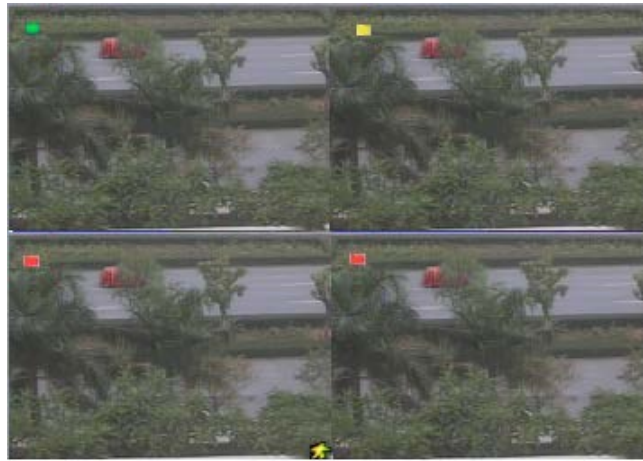


Fig 3-2 live preview interface

The explanation of symbol in the live preview interface:

symbol	meaning	symbol	meaning
Green	Manual record	Red	Alarm in trigger record
Yellow	Motion detection record	Blue	Schedule record

### 2.3.1 Live playback

Click Play button to playback the recorded video. Refer to Figure3-3. User can do concrete operation by click the buttons on screen.



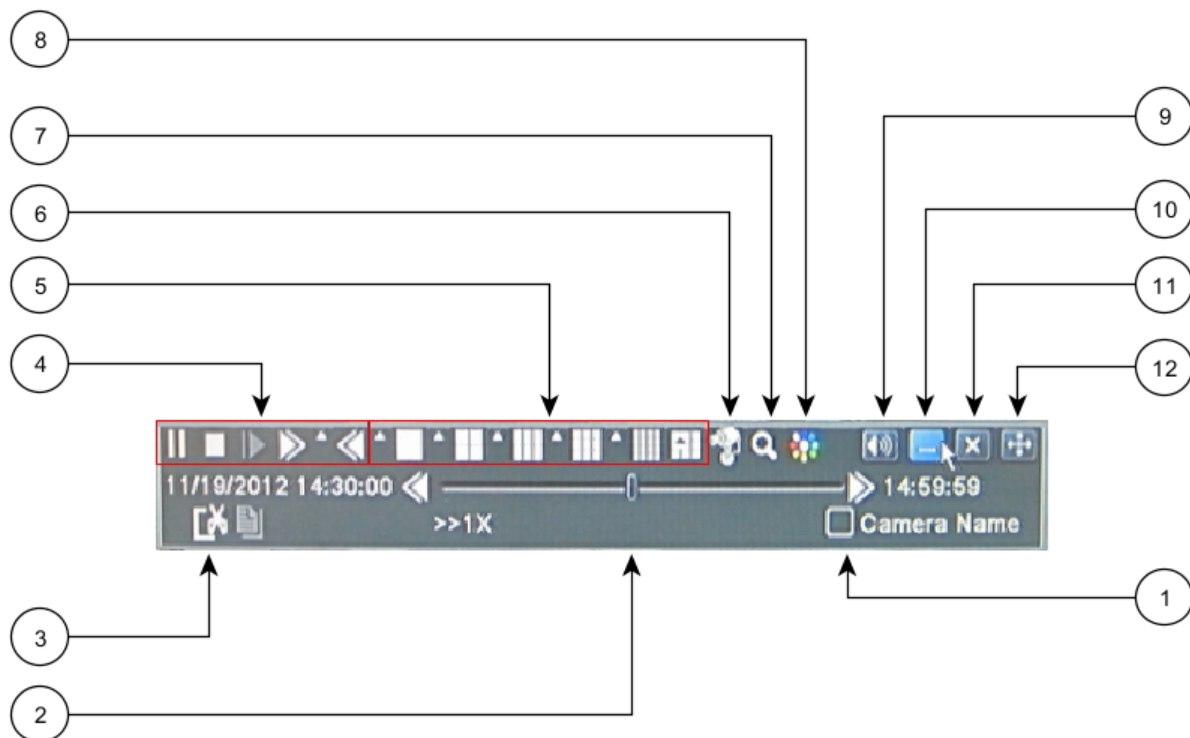


Fig 3-3 live playback

Item	Function	Description
1	Camera name	Enable or disable camera name display
2	Playback process bar	Last/next segment of record and time process
3	Cut	Enable to select a specific part of the video and back it up on usb drive
4	Playback basic function	Play/ Pause / Stop / frame forward / fast forward / fast rewind
5	Display mode	Choose among different display mode
6	Live view	Enable to see 4 camera in live during playback
7	Zoom	Screen digital zoom x2
8	Color	Setup picture color
9	Volume	Volume mute on/off
10	Reduce	Hide playback tool bar
11		Exit playback mode
12		Move the playback bar in the screen


### 3 Main menu setup guide

Click right mouse or press ESC button on the front panel, the control bar will display on the screen, refer to Fig 4-1:

Full channel switch, camera 1 ~ 4 or camera 1 ~ 8, camera 1 ~ 16



Fig 4-1 main menu toolbar

Click Menu  button, the interface will pop-up as Fig 4-2; press MENU button on the front panel or operate with remote controller also can display the main menu.

#### Main OSD



Fig 4-2 system setup



### 3.1 Basic configuration

Basic configuration includes three sub menus: system、date& time and DST.

#### 3.1.1 System

Step1: enter into system configuration→basic configuration→system; refer to Fig 4-3:

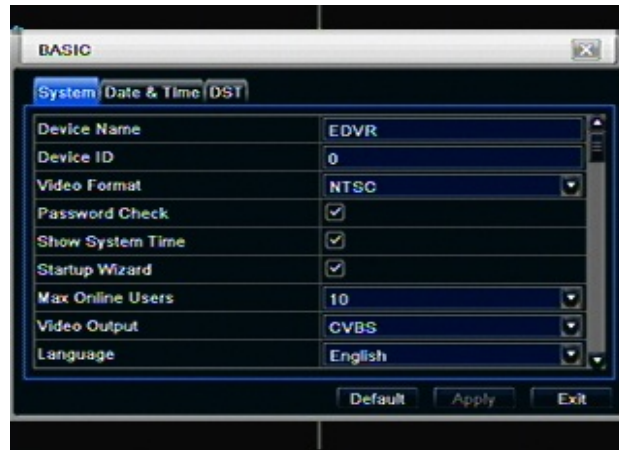


Fig 4-3 basic configuration-basic

Step2: in this interface user can setup the device name, device ID, video format, max network users, VGA resolution and language. The definitions for every parameters display as below:

**Device name:** the name of the device. It may display on the client end or CMS that help user to recognize the device remotely.

**Video format:** two modes: PAL and NTSC. User can select the video format according to that of camera.

**Password check:** enable this option, user needs to input user name and password can do corresponding operations with the relevant right in system configuration.

**Show time:** display time in live.

**Show wizard:** tick off this item, there will display an opening wizard with time zone and time setup information

**Max network uses:** set the max user amount of network connection

**VGA resolution:** the resolution of live display interface, range from: VGA800\*600、VGA1024\*768、VGA1280\*1024 and HDMI

**Language:** setup the menu language.

**Note:** after changed the language and video output, the device needs to login again.

#### 3.1.2 Time & date

Step1: enter into system configuration→basic configuration→time & date; refer to Fig 4-4:

16 CH



Fig 4-4 basic configuration-time & date

Step2: set the date format, time format, time zone in this interface; click off "sync time with NTP server" to refresh NTP server date; user also can adjust system date manually

Step3: click "default" button to resort default setting; click "apply" button to save the setting; click "exit" button to exit current interface.



### 3.1.3 DST

Step1: enter into system configuration→basic configuration→DST; refer to Fig 4-5:



Fig 4-5 basic configuration-DST

Step2: in this interface, enable daylight saving time, time offset, mode, start & end month/week/date, etc.

Step3: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

### 3.2 Live configuration

Live configuration includes four submenus: live, host monitor, SPOT and mask.

#### 3.2.1 Live

In this interface, user can setup camera name, adjust colors: brightness, hue, saturation and contrast.

Step1: enter into system configuration→live configuration→live; refer to Fig 4-6:



Fig 4-6 live configuration→live

Step2: tick off camera name; click “setting” button, a window will pop-up as Fig 4-7:



Fig 4-7 live-color adjustment

Step3: in this interface, user can adjust brightness, hue, saturation and contrast in live; click “default” button to resort default setting, click “OK” button to save the setting.

Step4: user can setup all channels with same parameters, tick off “all”, then do relevant setup.

Step5: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button

to exit current interface.

### 3.2.2 Main monitor



Step1: enter into system configuration→live configuration→host monitor; refer to Fig 4-8:



Fig 4-8 live configuration-host monitor

Step2: select split mode: 1×1、2×2、2×3、3×3、4×4 and channel

Step3: dwell time: the time interval for a certain dwell picture display switching to next dwell picture display

Step4: selected the split mode, then setup current picture group. Click  button to setup the previous channel groups of dwell picture, click  button to set the latter channel groups of dwell picture.

Step5: click "default" button to resort default setting; click "apply" button to save the setting; click "exit" button to exit current interface.

### 3.2.3 SPOT



Step1: enter into system configuration→live configuration→SPOT; refer to Fig 4-9:



Fig 4-9 live configuration-SPOT

Step2: select split mode: 1×1and channel

Step3: dwell time: the time interval for a certain dwell picture display switching to next dwell picture display

Step4: selected the split mode, then setup current picture group. Click  button to setup the previous channel groups of dwell picture, click  button to set the latter channel groups of dwell picture.

Step5: click "default" button to resort default setting; click "apply" button to save the setting; click "exit" button to exit current interface

### 3.2.4 Mask

User can setup private mask area on the live image picture, max three areas.

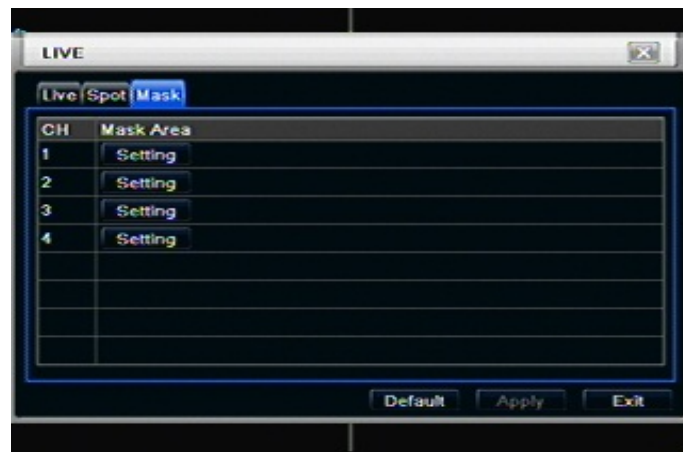
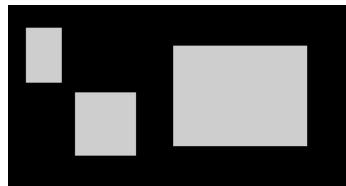


Fig 4-10 live configuration-mask

**Setup mask area:** click Setting button, enter into live image to press left mouse and drag mouse to set mask area, refer to below picture. Click Apply button to save the setting.

**Delete mask area:** select a certain mask area, click left mouse to delete that mask area, click Apply button to save the setting.



Setup mask area

Notice: The mask area will not be recorded on DVR. Please use this function carefully.



Live image mask area



### 3.3 Record configuration

Record configuration includes five sub menus: enable, record bit rate, time, recycle record and stamp.

#### 3.3.1 Enable

Step1: enter into system configuration→record configuration→enable; refer to Fig 4-11:



Fig 4-11 record configuration-enable

Step2: tick off record, audio and record time

Step3: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step4: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

#### Definitions and descriptions of Record:

Parameter	Meaning
Record	Record switch of every channels
Audio	Enable live record audio

#### 3.3.2 Record stream

Step1: enter into system configuration→record configuration→record bit rate; refer to Fig 4-10:

16CH



Fig 4-10 record configuration-record bit rate

Step2: setup rate, resolution, quality, encode and max bit stream

Step3: user can setup all channels with same parameters, tick off “All”, then to do relevant setup.

Step4: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

**Note:** if the rate value set is over high the maximum resources of the device, the value will be adjusted automatically.

If 960H mode is enabled, here are the following resolution available

Resolution: CIF and WD1

Frame rate

*Number of channel.resolution@NTSC frame rate(PAL frame rate)*

<b>4 CH</b>	4CIF@30(25)	4WD1@30(25)
<b>8 CH</b>	8CIF@30(25)	8WD1@15(12)

If 960H is disabled, here are the following resolutions available

Resolution: CIF, HD1 and D1

Frame rate

*Number of channel.resolution@NTSC frame rate(PAL frame rate)*

<b>4 CH</b>	4CIF@30(25)	4HD1@30(25)	4D1@30(25)
<b>8 CH</b>	8CIF@30(25)	8HD1@30(25)	8D1@30(25)

For 16 channel DVR

<b>16 CH</b>	16CIF@30(25)	16HD1@30(25)	16D1@15(12)	16WD1@7(6)
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Quality of recorded images. The higher the value is, the clearer the recorded image is. Six options: lowest, lower, low, medium, higher and highest.

Encode VBR and CBR

Max bit stream : range from: 256, 384, 512, 768, 1024, 1280, 1536, 1792, 2048 kbps

### 3.3.3 Time

Step1: enter into system configuration→record configuration→ time; refer to Fig 4-12:



Fig 4-12 record configuration-time

**Pre-alarm record time:** the record time before event happen i.e. record time before motion detection or sensor alarm is triggered.

**Post-alarm record:** set the post recording time after the alarm is finished, five options: 10s、15s、20s、30s and 60s.

**Expire time:** the hold time of saved records. If the set date is overdue, the record files will be deleted automatically.

Step2: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step3: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

### 3.3.4 Stamp

**Stamp :** User can overlap the channel name and time stamp on video.

Step1: enter into system configuration→ record configuration→ stamp; refer to Fig 4-13:



Fig 4-13 record configuration-stamp

Step2: tick off camera name, time stamp; click Set button, user can use cursor to drag the camera name and time stamp in random positions, refer to below Figures:



Step3: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step4: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

### 3.3.5 Recycle record

Step1: enter into system configuration→record configuration→recycle record;



Step2: tick off recycle record, the recycle record function will enable, it will cover the earlier recorded files and keep recoding when HDD is full; if disenable this function, it will stop recording when HDD is full.

Step3: click “default” button to reset default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

### 3.4 Schedule configuration

Schedule configuration includes three sub menus: schedule, motion and alarm.

#### 3.4.1 Schedule

The volume means the seven days of a week from Monday to Sunday, the row means 24 hours of a day. Click the grid to do relevant setup. Blue means checked area, gray means unchecked area.

Step1: enter into system configuration→schedule configuration→schedule; refer to Fig 4-14:

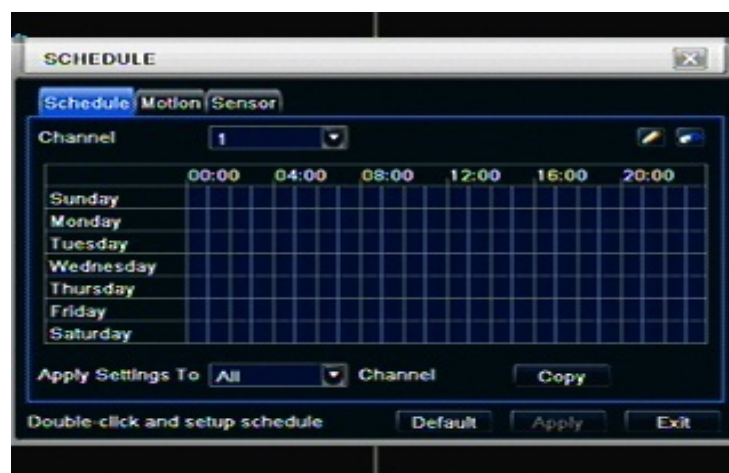


Fig 4-14 schedule configuration-schedule

Step2: select channel, double-click and a dialog box will pop-up as Fig 4-15, user can edit week schedule:



Fig 4-15 schedule-week schedule

- ① Click “add” button to add a certain day schedule; click “delete” button to delete the selected schedule;  
Copy: user can copy the specify schedule to other dates.  
Click “OK” button to save the setting, click “Exit” button to exit current interface.
  - ② User can apply the schedule setting of certain channel to other or all channels, just only select channel and click “Copy” button.
- Step3: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

### 3.4.2 Motion

Step1: enter into system configuration→schedule configuration→motion; refer to Fig 4-16:

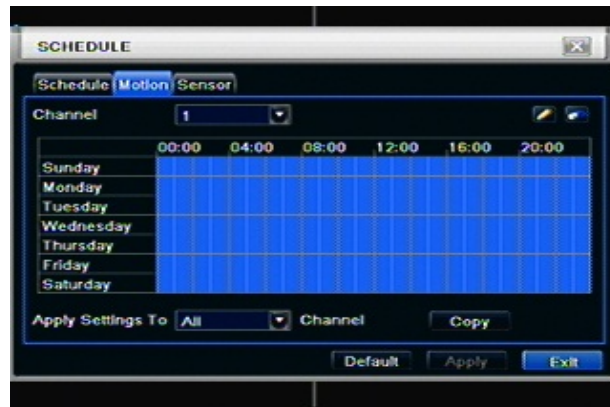


Fig 4-16 schedule configuration-motion

Step2: the setup steps of motion are familiar with schedule; user can refer to 4.4.1 Schedule for details.

**Note: the default schedule of motion detection is full-selected, that is, the color of schedule setting interface is blue.**

### 3.4.3 Sensor

Step1: enter into system configuration→schedule configuration→alarm; refer to Fig 4-17:

Step2: the setup steps of alarm are familiar with schedule; user can refer to 4.4.1 Schedule for details.

**Note: the default schedule of sensor is full-selected, that is, the color of schedule setting interface is blue.**



Fig 4-17 schedule configuration-sensor

## 3.5 Alarm configuration

Alarm configuration includes five sub menus: sensor, motion, video loss, other alarm and alarm out.

### 3.5.1 Sensor

Sensor includes three sub menus: basic, alarm handling and schedule.

#### ① Basic

Step1: enter into system configuration→alarm configuration→sensor→basic; refer to Fig 4-18:

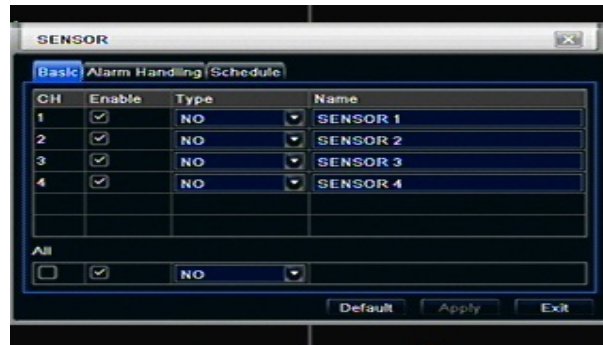


Fig 4-18 alarm configuration-sensor-basic

Step2: enable sensor alarm, set the alarm type according to triggered alarm type. Two option: NO and NC.

Step3: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step4: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

#### ② Alarm handling

Step1: enter into system configuration→alarm configuration→sensor→alarm handling; refer to Fig 4-19:



Fig 4-19 alarm configuration-sensor-alarm handling

Step2: select hold time, click Trigger button, and a dialog box will pop-up as Fig 4-20:

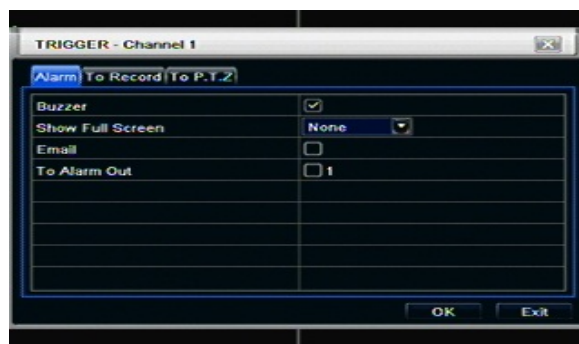


Fig 4-20 alarm handling-trigger

Step3: tick off Buzzer, there will be triggered buzzer alarm out;

**Full screen alarm:** when triggered alarm, there will pop up full screen alarm;

**To alarm out:** tick off the channel, there will be triggered alarm out in the designated channel. Click OK button to save the setting; click Exit button to exit the current interface.

**To record:** tick off recoding channels, it will record the camera when alarm triggered. Click OK button to save the setting; click Exit button to exit the current interface.

**To P.T.Z:** set linked preset and cruise for alarm. User can select any channel and multi channels as linked



channels. Click OK button to save the setting; click Exit button to exit the current interface.  
 Step4: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.  
 Step5: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

### ③ Schedule

Step1: enter into system configuration→alarm configuration→sensor→schedule; refer to Fig 4-21:



Fig 4-21 sensor-schedule

Step2: the setup steps of sensor schedule are familiar with schedule; user can refer to 4.4.1 Schedule for details.

**Note: the default schedule of sensor is full-selected, that is, the color of schedule setting interface is blue.**

## 3.5.2 Motion

Motion includes two sub menus: motion and schedule.

### ① Motion

Step1: enter into system configuration→alarm configuration→motion; refer to Fig 4-22:



Fig 4-22 alarm configuration-motion






Step2: enable motion alarm, set alarm hold time which means time interval between two adjacent detective motions. If there is other motion detected during the interval period which is considered continuous movement; otherwise, it will be considered that those two adjacent detective motions are two different motion events. Click Trigger button, a dialog box will pop-up:

Step3: the setup steps of motion trigger are familiar with alarm handling; user can refer to Chapter 4.5.1 Sensor →alarm handling for more details.

Step4: click Area button, a dialog box will pop-up as Fig 4-23:



Fig 4-23 motion-area

Step5: in the Area interface, user can drag slide bar to set the sensitivity value(1-8), the default value is 4. The higher the value is the higher sensitivity you get. Due to the sensitivity is influenced by color and time (day or night), user can adjust its value according to the practical conditions; click  icon, set the whole area as detection area; click  icon, the set detection area will be cleared; click  icon, user can test whether the sensitivity value and motion area are suitable accordingly ( refer to following picture ) ; Click  icon, to save the setting; click  icon, exit current interface.



**Note:** when user drag mouse to set motion detection area, they have to click  icon to clear all set detection area firstly, and then make the operation.

Step6: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step7: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

## ② Schedule

Step1: enter into system configuration→alarm configuration→schedule; refer to Fig 4-24:



Fig3-24 alarm configuration-schedule

Step2: the setup steps of alarm schedule are familiar with schedule; user can refer to 4.4.1 Schedule for details.

## 3.5.3 Video loss

Step1: enter into system configuration→alarm configuration→video loss; refer to Fig 4-25:



Fig 4-25 alarm configuration-video loss

Step2: the setup steps of video loss trigger are familiar with alarm handling; user can refer to Chapter 4.5.1



Sensor → alarm handling for more details.

Step3: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step4: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

### 3.5.4 Other alarm

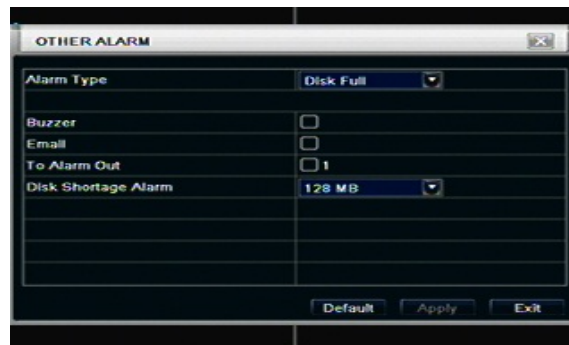


Fig4-26 other alarm

Step1: enter into system configuration→other alarm; refer to Fig 4-26:

Step2: select a hard disk in the pull down list box, when the disk capacity is lower than that value, there will appear some text information on the lower right of the live image.

Step3: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

### 3.5.5 Alarm out

Alarm out includes three sub menus: alarm out, schedule and buzzer

#### ① Alarm out

Step1: enter into system configuration→alarm out; refer to Fig 4-27:



Fig 4-27 system configuration-alarm out

Step2: in this interface, set relay alarm out name, select hold time which means the interval time between the two adjacent alarms.

Step3: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step4: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

#### ② Schedule

Step1: enter into system configuration→schedule;

Step2: the setup steps of alarm out schedule are familiar with schedule; user can refer to 4.4.1 Schedule for details.

**Note: the default schedule of motion detection is full-selected, that is, the color of schedule setting interface is blue.**

#### ③ Buzzer

Step1: enter into system configuration→buzzer; (if here sets is off, all event without buzzer)

Step2: tick off Buzzer, set buzzer alarm hold time

### 3.6 Network configuration

Network configuration includes two submenus: network and network stream.

### 3.6.1 Network

Step1: enter into system configuration→network configuration→network; refer to Fig4-28:

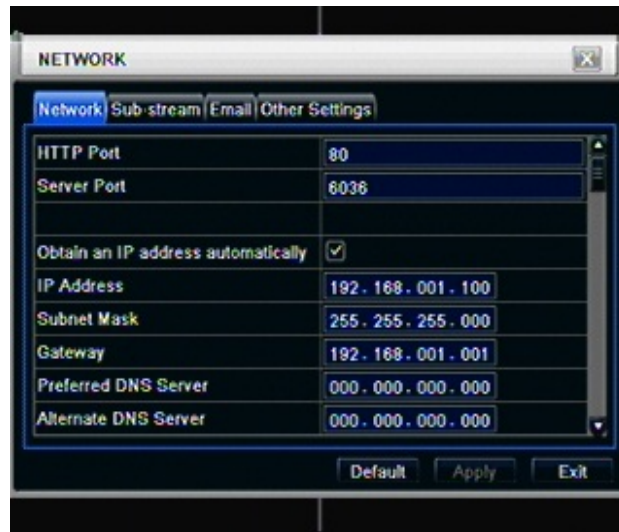


Fig 4-28 network configuration-network

Step2: HTTP port: the default value is 80. If the value changed, user needs to add the port number when typing IP address in IE address blank .i.e. set HTTP port to 82, IP address: <http://192.168.0.25>, user needs to input that address: <http://192.168.0.25:82> into IE browser.

Server port: communication port

There are 3 different types to connect internet, please select an appropriate type to fit your network environment.

1. STATIC (FIXED) IP: Input IP address, subnet mask, gateway and DNS server manually.
2. DHCP: Check the "Obtain IP address automatically", the device will acquire IP address, subnet mask, gateway and DNS service.
3. PPPOE: input the user name and password from ISP provider.

No matter which type you use, please click "Test" before you click "Apply" to make the setting work.

#### Definitions and descriptions of network configuration:

Parameter	Meaning
HTTP port	The port number of accessing IE browser. The default port is 80
Server port	The port number of data. The default port is 6036
<b>Static IP</b>	
IP address	The IP address of the server
Subnet mask	The subnet mask of the server
Gateway	The gateway of the server
DNS server	The address of DNS server
<b>PPPOE</b>	
User name	User name of broad band dial-up
Password	Password of broad band dial-up
<b>DDNS server</b>	
DDNS server	Website provided by dynamic domain name supplier. The optional: <a href="http://www.meibu.com">www.meibu.com</a> , <a href="http://www.dyndns.com">www.dyndns.com</a>
User name	User name for log in the website of domain name supplier
Password	Password for log in the website of domain name supplier

### 3.6.2 Network stream

Step1: enter into system configuration→network configuration→sub stream; refer to Fig 4-32:

16CH

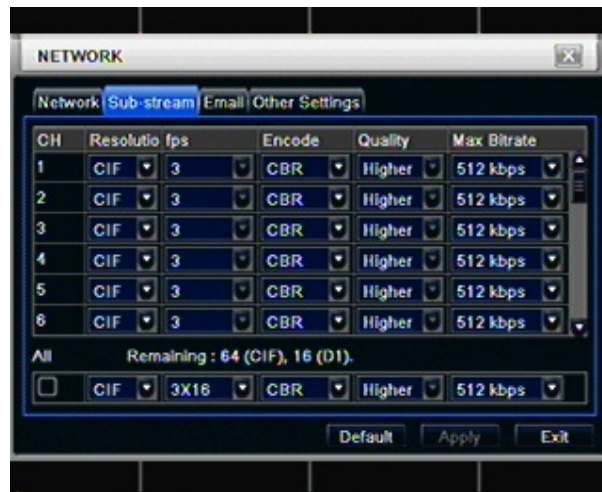


Fig 4-32 network configuration-sub stream

Step2: select fps, resolution, quality, encode and max bit rate

Step3: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step4: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

Definitions and descriptions of network stream:

Parameter	Meaning
Resolution	4 channels CIF@30(25) / 8 channels CIF@15(12)/ 16 channels CIF@7(6)
Quality	The quality of the clients' image. The higher the value is, the clearer the record image. Six options: lowest, lower, low, medium, higher and highest.
Encode	VBR and CBR
Max bit rate	Range from: 32, 64, 128, 256, 384, 512, 768 kbps

### 3.6.3 Email

Step1: enter into system configuration→network configuration→email; refer to Fig 4-31:



Fig 4-31 network configuration-email

**SMTP Server/Port:** the name and port number of SMTP server.

If your SMTP server supports the secure connection (SSL), like Gmail, please set the “Port” to 465 and check “SSL Check”

**Send address/password:** sender's email address/password

**Receive address:** receiver's email address. Here user can add at least three mail addresses.

Click TEST button to test the valid of the mailbox.

**Attaching image amount:** user can attach at most three images at one time.

**Snap Time Interval(s):** User can select snap time interval.

**“Strongly recommend to use Google mail (gmail)”**

For Example:

SMTP Server: smtp.gmail.com

Port: 465

SSL Check: V

Send Address: alan@gmail.com

Receive Address1: test@yahoo.com

### 3.6.4 Other settings

Step1: enable DDNS server: user needs to input user name , password and host domain name of the registered website, click TEST to test the effectively of relevant information.



Fig 4-32 network configuration-other settings

STEP2: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

**Note:** The domain name server that selected by user is a banding domain name of DVR. User should logon the website which provided by the server supplier to register a user name and password firstly, and then apply a domain name on line for the server. After the successful apply, user can access the server from the IE client by inputting that domain name.

**\*Please reference Appendix C to setup DDNS function.**

### 3.7 User management configuration

Step1: enter into system configuration→user management configuration; refer to Fig 4-33:



Fig 4-33 user management configuration

Step2: click Add button, a dialog box will pop-up as Fig 4-34:



Fig 4-34 add-general

- ① General: Input user name, password; select user type: normal and advance, input the MAC address of the PC; click OK button, this user will be added into the user list box; click Exit button to exit the current interface.

**Note:** when the default value of binding PC MAC address is 0, the user is not bind with the specify computer; the, the user can log in DVR on the binding computer after set the specific binding MAC address.

- ② Authority:
- a) Admin: Admin have full control of DVR. DVR could have only one admin account.
  - b) Advance: Besides "firmware upgrade", "reset factory default", "shut down" and "change other user's password", advance account could control DVR like an admin account.
  - c) Normal: Normal account can only do "live view", "playback", "search", "backup", "log off", "view DVR information", and "change his own password".

### 3.8 P.T.Z configuration

P.T.Z configuration includes two submenus: serial port and advance

- ① Serial port

Step1: enter into system configuration→P.T.Z configuration→serial port; refer to Fig 4-36:



Fig 4-36 P.T.Z configuration-serial port



Step2: tick off Enable, setup the value of address, baud rate and protocol according to the settings of the speed dome.

Step3: user can setup all channels with same parameters, tick off “all”, then to do relevant setup.

Step4: click “default” button to resort default setting; click “apply” button to save the setting; click “exit” button to exit current interface.

#### Definitions and descriptions of network stream:

Parameter	Meaning
Address	The address of the PTZ device
Baud rate	Baud rate of the PTZ device. Range form: 110、 300、 600、 1200、 2400、 4800、 9600、 19200、 34800、 57600、 115200、 230400、 460800、 21600.
Protocol	Communication protocol of the PTZ device. Range from: NULL、 PELCOP、 PELCOD 、 LILIN、 MINKING、 NEON、 STAR、 VIDO、 DSCP、 VISCA、 SAMSUNG、 RM110、 HY

#### ② Advance

Step1: enter into system configuration→ P.T.Z configuration→advance; refer to Fig 4-37:



Fig 4-37 P.T.Z configuration-advance

Step2: in the Advance interface, click preset “Setting” button, a dialog box will pop-up as Fig 4-38:



Fig 4-38 advance-preset setting

a. in the preset set interface, click Setting button, a dialog will pop-up as Fig 3-39:



Fig 3-39 preset set-setting

b. user can control the dome rotates up, up left, down, right down, left, left down, right and up right and stop rotating; adjust the rotate speed and the value of zoom, focus and iris of the dome;  
c. select the serial number of the preset point, set the preset name. Click Save button to save the settings, click icon to hide the tool bar, right-key can remerge it; click icon to exit the current interface.  
d. in the preset interface, click OK button to save the setting; click Exit button to exit current interface.  
Step3: in the Advance interface, click cruise "Setting" button, a dialog box will pop-up as Fig 4-40:



Fig 4-40 cruise set

a. click Add button to add cruise line in the list box (max 8 cruise line can be added); select a cruise line, click Setup button, a dialog box will pop-up as Fig 4-41:



b. click Add icon to set the speed and time of preset point; select a preset point, click Delete icon to delete that preset point; click Modify icon to modify the setting of a preset point. User can click those icons to adjust the position of preset point. Click Preview button to preview the cruise line, click OK button to save the setting, click Exit button to exit current interface.  
c. select a preset point in the cruise line list box, click Delete button to delete that cruise line; click Clear all button to clear all cruise line from the list box; click OK button to save the setting; click Exit button to exit current interface.

Step4: in the Advance interface, click track "Set" button, a dialog box will pop-up as Fig 4-42:

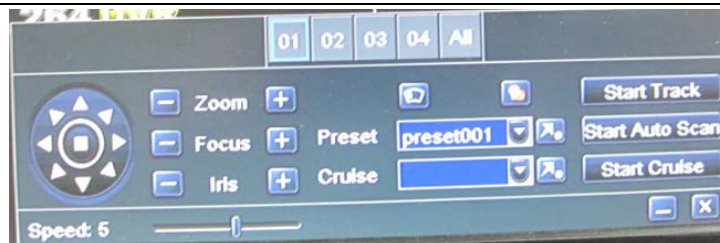




Fig 4-42 track set

a. user can control the dome rotates up, up left, down, right down, left, left down, right and up right and stop rotating; adjust the rotate speed and the value of zoom, focus and iris of the dome; click Start Record button to record the move track of PTZ, click this button again can stop record; click Start track button to play recorded track, click this button again can stop play.;

b. click  icon to hide the tool bar, right-key can remerge it; click  icon to exit the current interface.

Step5: in the Advance interface, click "default" button to resort default setting; click "apply" button to save the setting; click "exit" button to exit current interface.



## 4 Record search & playback and backup

Search configuration includes three submenus: time search, event search and file manager.

### 4.1 Time search

Step1: enter into Search configuration→time search; refer to Fig 5-1:



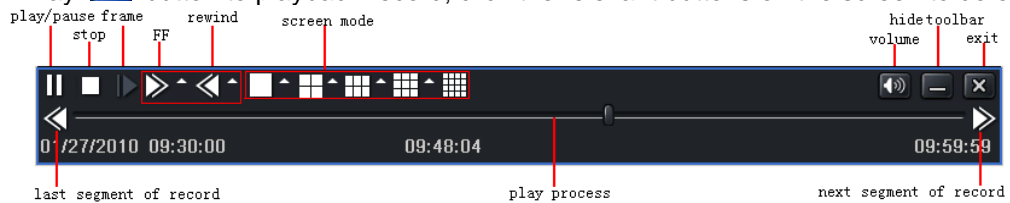
Fig 5-1 Search configuration-time search

Step2: select channel, screen display mode, the highlight date in the calendar means have record data

Step3: select a date, press Search button, click the time grid to set the play start time or input play record time manually. The selected time match the blue grid.

**Note: the vertical column means hours, horizontal column means channels.**

Step4: click Play button to playback record; click the relevant buttons on the screen to do operation:



Playback buttons

**Note: when the monitor resolution is VGA800\*600, the time search interface will appear a hide button, click this button, the whole interface can be expanded.**

### 4.2 Event search

Step1: enter into Search configuration→event search; refer to Fig 5-2:



Fig 5-2 Search configuration-event search

Step2: click Search button, the searched event information will displayed in the event list box, user can select date, channel, tick off Motion, Sensor or All accordingly.

Step3: double check a certain record file to playback.

**Note: when the monitor resolution is VGA800\*600, the event search interface will appear a hide button, click this button, the whole interface can be expanded.**

### 4.3 File manager

Step1: enter into Search configuration→file manager; refer to Fig 5-3:

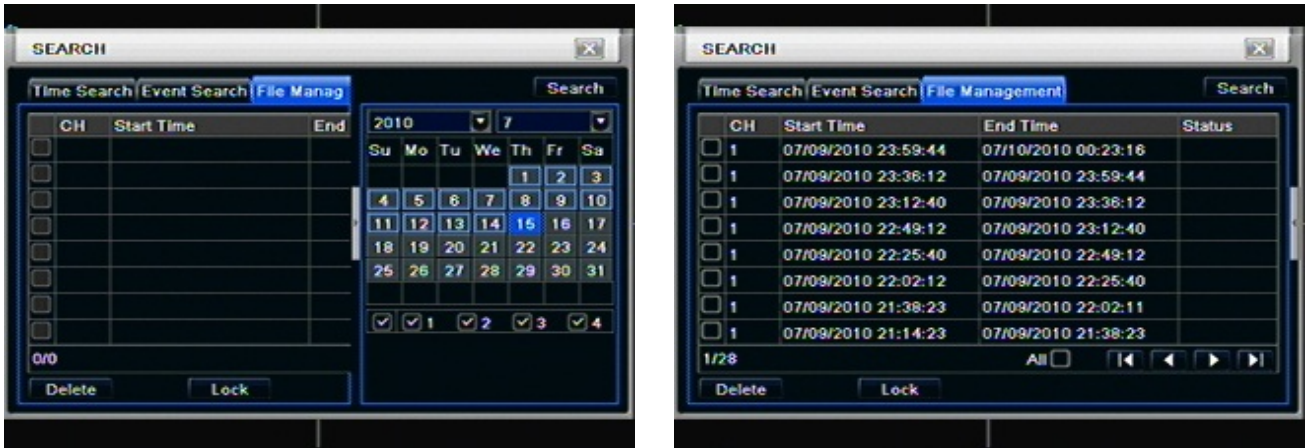


Fig 5-3 Search configuration-file manager

Step2: click Search button, the searched files will be displayed in the file list box, user can select date, channels accordingly.

- ① Lock: checked a file, click Lock button to lock this file, after that, that file will not be deleted or covered.
- ② Unlock: checked a locked file, click Lock button to unlock this file
- ③ Delete: checked an unlocked file, click Delete button to delete this file.

Step3: tick off "All" button; user can lock/unlock or delete all files in the file manager column.

Step4: double click an unlocked item to playback.

**Note: when the monitor resolution is VGA800\*600, the file manager interface will appear a hide button, click this button, the whole interface can be expanded.**

### 4.4 Backup

This unit supports backup by external SATA DVD Writer and USB Flash, through the USB port on the front panel. User also can make backup by IE browser via internet. Refer to 7.3.2 Remote backup.

Step1: enter into backup configuration; refer to Fig 5-4:

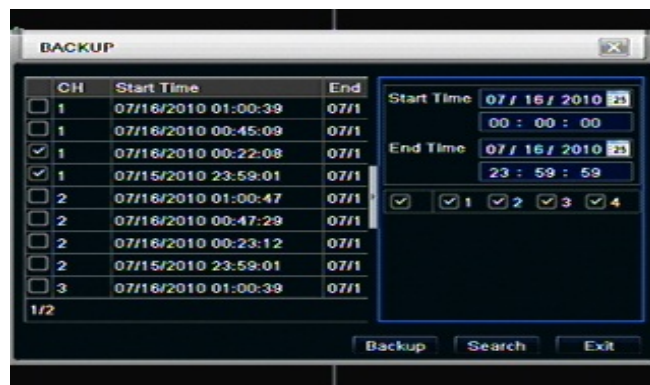


Fig 5-4 backup configuration

Step2: set the start & end time, select channels, click Search button, the searched data will be displayed in the data backup list box

Step3: checked a data file or tick off "All" to select all data files , click Backup button, a dialog box will pop-up as Fig 5-5:



Fig 5-5 backup information

Step4: in the backup information interface, user can check the relevant information of backup files, storage type, save file type, etc. click Apply button to starting backup.

**Note:** when the monitor resolution is VGA800\*600, the file manager interface will appear a hide button, click this button, the whole interface can be expanded.

**5**

## 5.1 Check system information

Check system information includes five submenus: system, event, log, network and online user.

### 5.1.1 System information

In this interface, user can check the hardware version, MCU version, kernel version, device ID, etc. refer to Fig 6-1:



Fig 6-1 system information

### 5.1.2 Event information

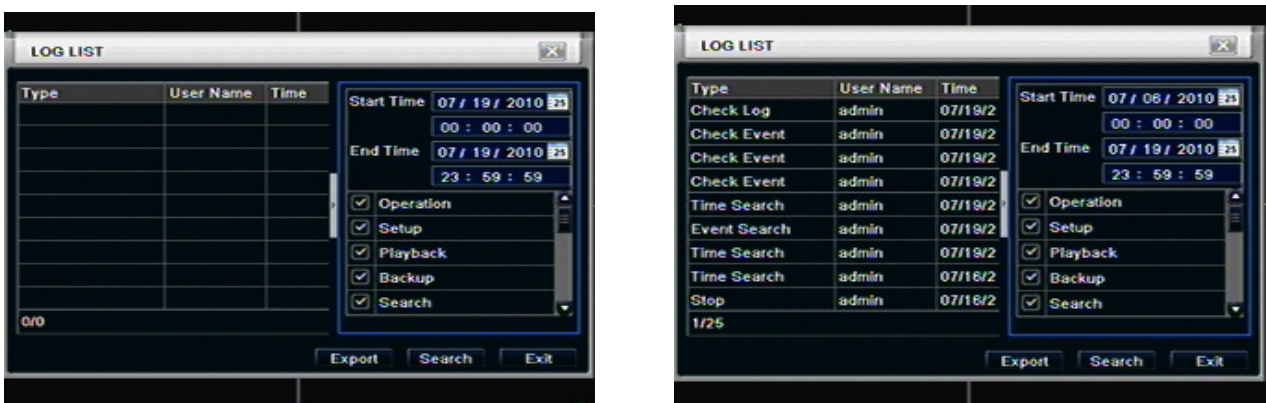
In this interface, user can check record events according to set date; refer to Fig 6-2:



### Fig 6-2 event information

### 5.1.3 Log information

In this interface, user can check relevant log information according to set date; refer to Fig 6-3:



### Fig 6-3 log information

#### 5.1.4 Network information

In this interface, user can check relevant parameters of network; refer to Fig 6-4:



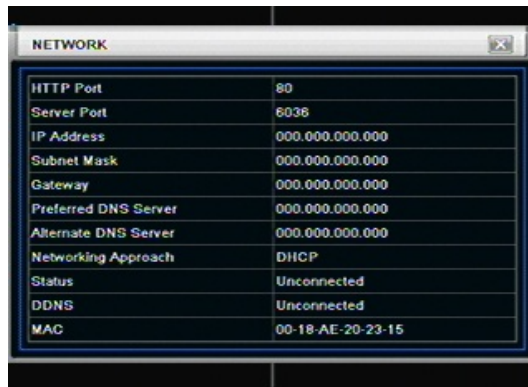


Fig 6-4 network information

### 5.1.5 Online information

In this interface, user can check the details of the current connection of online users; refer to Fig 6-5:



Fig 6-5 online information

### 5.1.6 Manual alarm

User can check the relevant parameters of manual alarm to active emergency warning



### 5.1.6 Disk manager

Step1: enter into disk manager interface; refer to Fig 5-7:



Fig 6-7 disk manager

**Note:** please format the hard disk before record. If not being formatted, it will show the status of the

---

**disk-free space, and total space show OM at the bottom of screen.**

Step2: click Refresh button to refresh the disk information of the list box; set the property of the disk then click Apply button to save the setting


Step3: checked a hard disk, click Format button to star format.

**Note: all recorded files in the hard disk will be lost after formatted.**

#### **5.1.7 Upgrade**

At present, it only supports USB update. Get the firmware from your vendor when there is a new firmware version, and make sure it is corresponding with the DVR. User can check the USB information in Disk manager.

#### **5.1.8 Logoff**

Click Log off icon, a log off dialogue box will popup, click OK button, the device will log off. If user wants to log in again, click  icon to enter into user name and password to relogin.

#### **5.1.9 Shut Down**

**Note: DVR going to power off**

### 6.1 Accessing DVR

If making remote view, the DVR must connect with LAN or internet. Then enable network server in the unit. Please refer to 4.6 Network Configuration.

This unit supports IE browser, without any client software installed. It supports Win 7, XP and Vista.

#### 6.1.1 On LAN

Step1: Input IP address, Subnet, Gateway. If using DHCP, please enable DHCP in both the DVR and router. Enter Menu—Information—Network, and user can check the network configuration of DVR.

Step2: Enter Video to set network video parameters like resolution, frame rate etc.

Step3: Open IE browser on a computer on the same LAN. Input the IP address of the DVR in IE address blank and enter.

Step4: IE will download ActiveX automatically. Then a window pops up and asks for user name and password.

Step5: Input name and password correctly, and enter. It will show the picture as below.

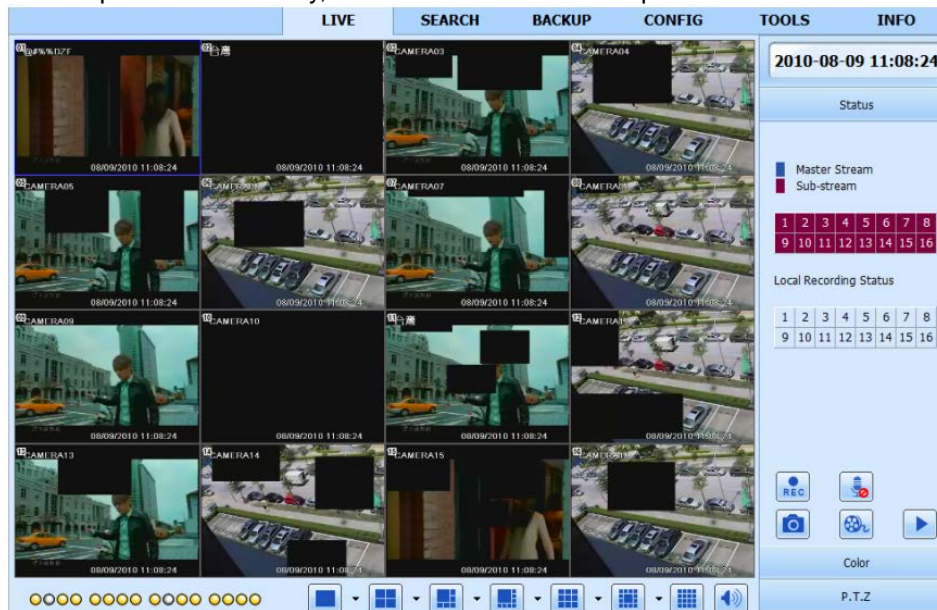


Fig 7-1 View with IE browser

**Notice:** If HTTP port is not 80, other number instead, need add the port number after IP address. For example, set HTTP port as 82, need input IP address like http://192.168.0.25:82.

User name and password here are the same with that used on the DVR. The default is admin and 123456.

#### 6.1.2 On WAN

There are two ways that the DVR is connected to internet.

1. Connect the DVR to internet through a router or virtual server.

Step1: Input IP address, Subnet, Gateway. If using DHCP, please enable DHCP in both the DVR and router.

Step2: Enter Video to set network video parameters like resolution, frame rate etc.

Step3: Forward IP address and port number in Virtual Server setup of the router or virtual server. Close firewall.

**Notice:** Forwarding block may be different in different routers and server, please check your router manual.

If users want to utilize dynamic domain name, need apply for a domain name in a DDNS server supported by the DVR or router. Then add to the DVR or router.

Now this unit only supports www.dns2p.com , www.88IP.net , www.meibu.com , www.dyndns.com , and www.no-ip.com

About the router, please check in the router manual.

Step5: Open IE browser, input IP address, or dynamic domain name and enter. If HTTP port is not 80, add the port number after IP address or domain name.

Step6: IE will download ActiveX automatically. Then a window pops up and asks for user name and password.

Step7: Input name and password correctly, and enter to view.

**Notice:** If you cannot download and install ActiveX, please refer to Appendix A FAQ Q7.

2. Connect the DVR to internet directly.

Step1: Input IP address, Subnet, Gateway gotten from your ISP. If using ADSL, please input user name and password, and click OK. The DVR will connect the server and show “connection succeeds”.  
 Step2: The following steps are the same as STEP4-7 of the connection way above.

6.2 The remote live preview interface as below:

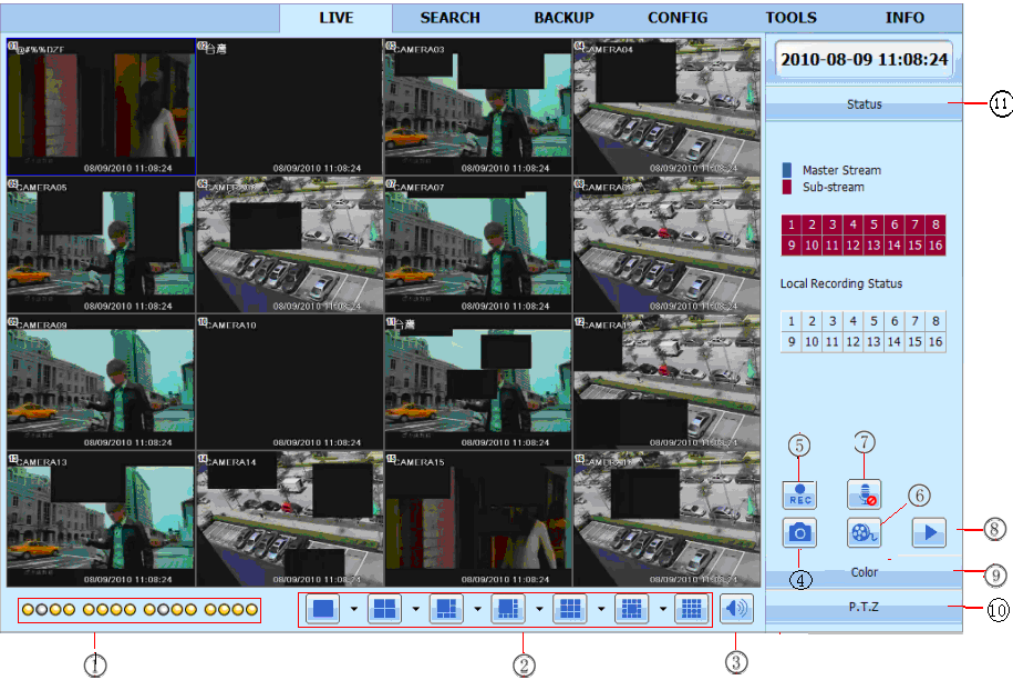


Fig 7-2 Remote live preview interface

Symbol and function Definitions:

①	Channel indicator	②	Screen display mode	③	Volume
④	Snapping picture	⑤	Start manual record	⑥	Start record IE
⑦	Bidirectional talk	⑧	Playback	⑨	Color
⑩	PTZ control	⑪	Master/sub stream status		




**Note:** click  button to record manual and the record file will be saved in user’s PC.  
 Screen display mode:  
 Click the  icon beside the screen display mode, channel select dialog will appear as below:



Fig 7-3 Channel select dialog

Take 8-channel DVR for example: user can tick off channels form 1-ch to 16-ch at random to display the live pictures, 8 channels can be selected at most. Then click OK button to confirm the setting.







**Snap pictures**

Click “Snap”  icon, the system will automatically capture pictures and save those pictures in the computer.  
 User should set up the save path for those picture in the Remote Preview interface→Configuration→Local configuration.

**Color adjustment:**

Drag the slide bar to adjust Brightness, Contrast, Hue, and Saturation. Click Default to reset them to original value.







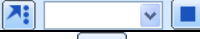




Buttons	Description
	Drag the scroll bar to adjust the brightness of channel
	Drag the scroll bar to adjust the contrast of channel
	Drag the scroll bar to adjust the saturation of channel
	Drag the scroll bar to adjust the hue of channel
	Click this button to recover the default value of brightness, contrast, saturation and hue.
	Save the adjustment

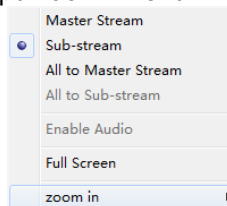
### PTZ control

Please connect speed dome to the device via RS485 firstly, make sure the protocol of the speed dome is supported by the device and set the relative parameters manually. User can control the dome up, down, right, left or stop rotating on Control Center, adjust rotation speed, Iris and zoom, focus on the dome, and set the presets, etc.

Buttons definition:

Buttons	Description
	▲ means the dome rotate up. ▼ means the dome rotate up left. ▽ means the dome rotate up right. ▴ means the dome rotate down. ▵ means the dome rotate left down. ▾ means the dome rotate right down. ◀ means the dome rotate left. ▶ means the dome rotate right. ■ means the dome stop rotating.
	Drag the scroll bar to adjust rotating speed of the dome.
	'Iris' button. Click + button near 'Iris' button to increase light of the dome. Click - button near 'Iris' button to decrease light of the dome.
	'Zoom' button. Click + button near 'Zoom' button to zoom in the locale picture of this camera. Click - button near 'Zoom' button to zoom out the locale picture of this camera.
	'Focus' button. Click + button near 'Focus' button to have long focus. Click - button near 'Focus' button to have short focus.
	Go to the Preset
	Select and do auto cruise
	Track
	Auto scan

Click the right mouse on the live interface, a pull-down menu will appear as below



**Fig 7-4 right key sub menu**

**Stream:** this DVR supports master stream and sub stream. Master stream has higher frame rate, max 25FPS ( PAL ) /30 FPS ( NTSC ) for every channel, but it needs higher network bandwidth simultaneously; second stream has low frame rate, max 6FPS ( PAL ) /7FPS ( NTSC ) for every channel, it requires low network bandwidth. Therefore, users can select the stream according to their bandwidth.

**All to master/sub stream:** set all channel to master stream or sub stream.

**Enable audio:** enable or disenable audio


**Full screen:** the live preview picture will display with full screen, the tool bar will be hided; double click left mouse or click right mouse to return

**Zoom in:** Single channel large screen electronic amplification

Left click the channel which needs to amplify; Click the right mouse, select Zoom in button and then click the left mouse to amplify the image. Press left mouse to drag the cursor, user can view the image. Double-click the left mouse to exit. Click the right mouse to return to the main interface.

## 6.3 Remote playback & backup

### 6.3.1 Remote playback

Click  button to enter into record playback interface, refer to Fig 7-5:  
Select the record date and channels; double-click the file name in the record file list box, user can play that file and preview the picture.

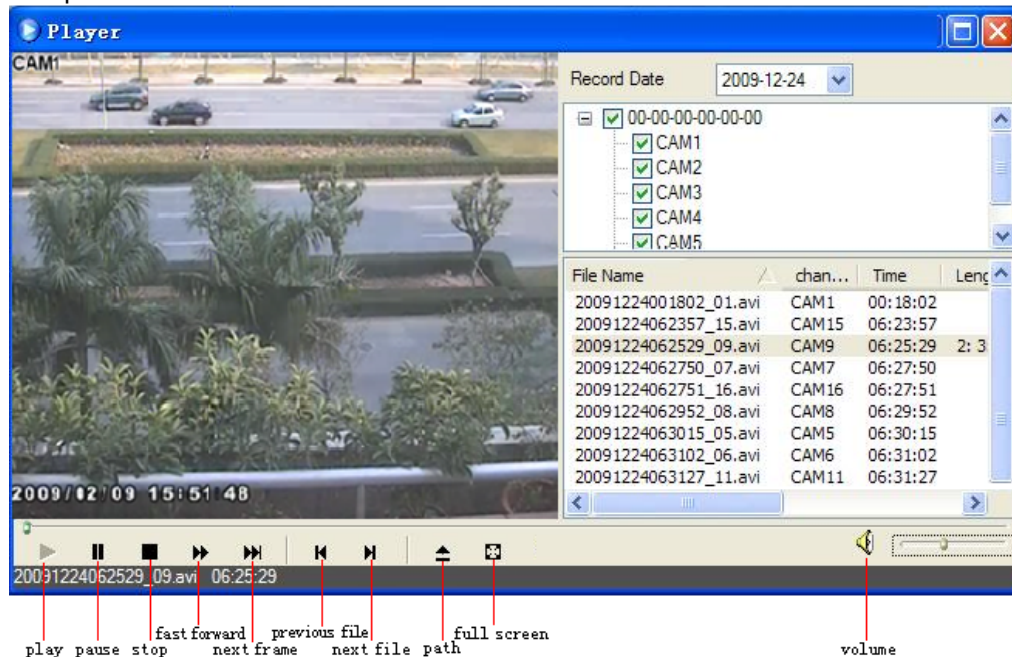


Fig 7-5 Play record file interface

This DVR supports remote time search, event search and file management.

#### By Time Search:

**Step1:** Enter into Search→time search; refer to Fig 7-6:

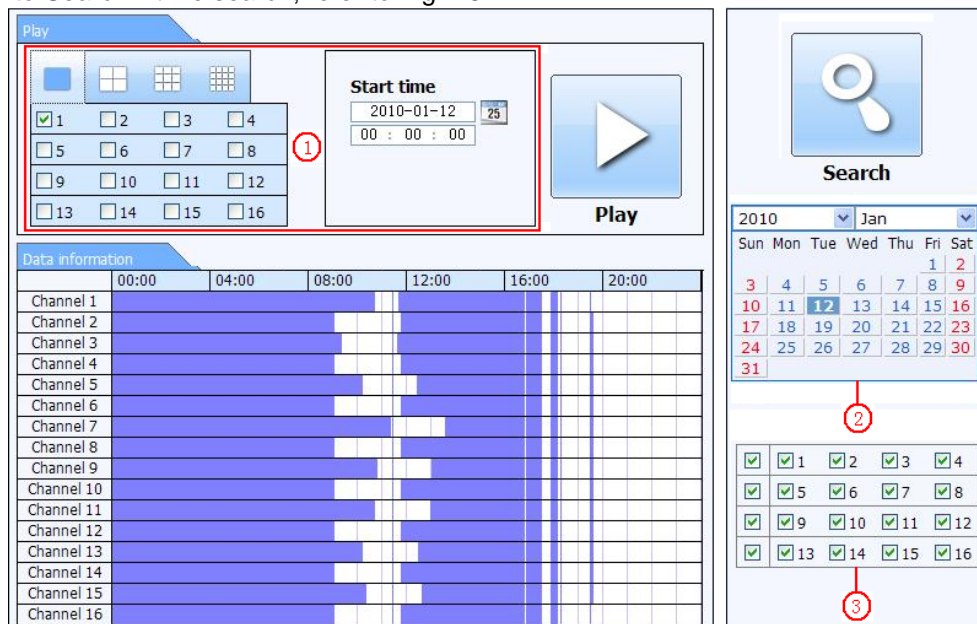


Fig 7-6 time search interface

**Step2:** click “Search” button. The record data will be displayed in the data information list box; the highlight date in the area② means have record data, click those data; select the record channels in area③

**Step3:** User can set the data playing time and display mode in the area① as required

**Step4:** Select certain item from the data information list box, click “play” button to playback

**Step5:** Click the relevant buttons in the interface; user can do some operations such as: FF, pause, change channel mode, research, etc. refer to Fig 7-7:

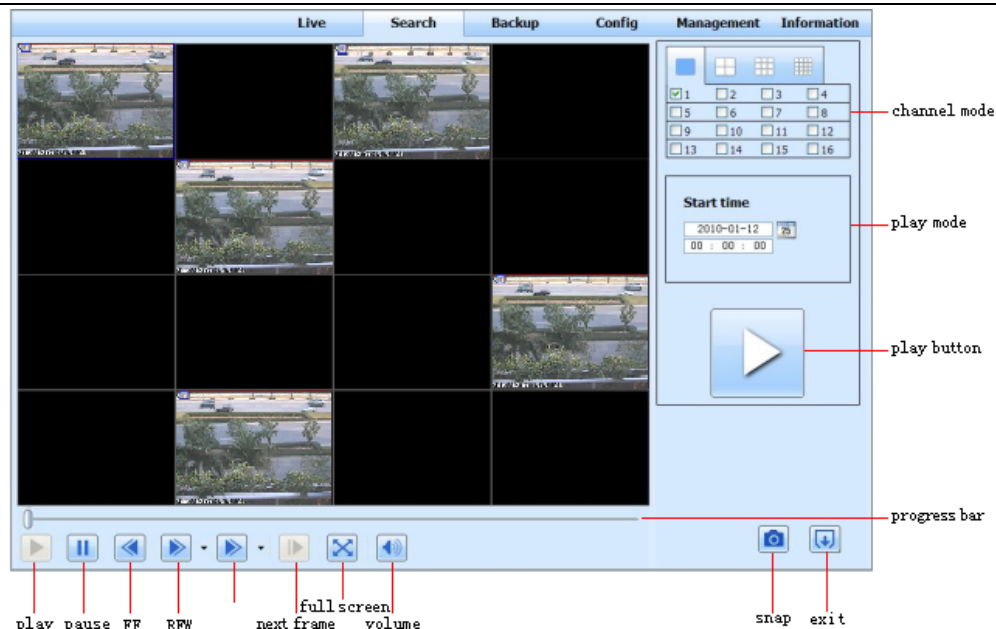


Fig 7-7 Time search playback

### By Event Search:

**Step1:** Enter into Search→event search; refer to Fig 7-8:

CH	Start time	End time	Type
1	2010-01-09 00:01:07	2010-01-09 00:02:16	motion
1	2010-01-09 00:03:28	2010-01-09 01:24:11	manual
1	2010-01-09 00:08:36	2010-01-09 00:09:31	motion
1	2010-01-09 00:10:10	2010-01-09 00:10:58	motion
1	2010-01-09 00:11:30	2010-01-09 00:12:15	motion
1	2010-01-09 00:14:48	2010-01-09 00:15:43	motion
1	2010-01-09 00:15:45	2010-01-09 00:17:09	motion
1	2010-01-09 01:24:11	2010-01-09 02:46:11	manual
1	2010-01-09 02:46:11	2010-01-09 03:19:45	manual
1	2010-01-09 17:39:52	2010-01-09 17:57:12	manual
2	2010-01-09 00:01:07	2010-01-09 00:01:53	motion
2	2010-01-09 00:02:18	2010-01-09 00:03:01	motion
2	2010-01-09 00:03:01	2010-01-09 00:04:12	motion
2	2010-01-09 00:03:32	2010-01-09 00:54:27	manual
2	2010-01-09 00:14:22	2010-01-09 00:15:03	motion
2	2010-01-09 00:21:54	2010-01-09 00:22:35	motion
2	2010-01-09 00:23:51	2010-01-09 00:24:33	motion
2	2010-01-09 00:25:12	2010-01-09 00:25:54	motion
2	2010-01-09 00:26:57	2010-01-09 00:28:43	motion
2	2010-01-09 00:31:48	2010-01-09 00:32:30	motion

1/31

**Search**

2010 Jan

Sun	Mon	Tue	Wed	Thu	Fri	Sat
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

☒ Motion

☒ Sensor

Fig 7-8 event search interface

**Step2:** click the highlight date and select record channels and then tick off the event type: motion and sensor, click “search” button

**Step3:** the events will be display in the event list box, double-click certain item to playback

### File Management

**Step1:** Enter into Search→file management; refer to Fig 7-9:

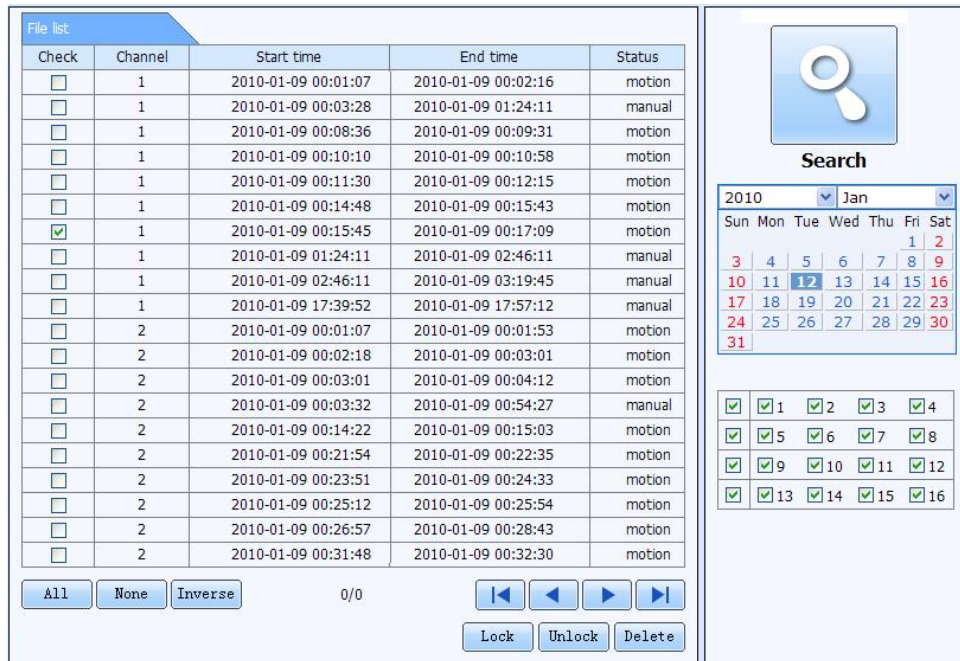


Fig 7-9 file management interface

Lock: select certain file item in the file list box, click “Lock” button to lock this file that ca not be deleted or overlaid

Unlock: select a locked file, click “unlock” button to unlock this file

Delete: select an unlock file, click “delete” button to delete this file from file list

### 6.3.2 Remote backup

Click Backup button to enter into backup interface, refers to Fig 7-10:

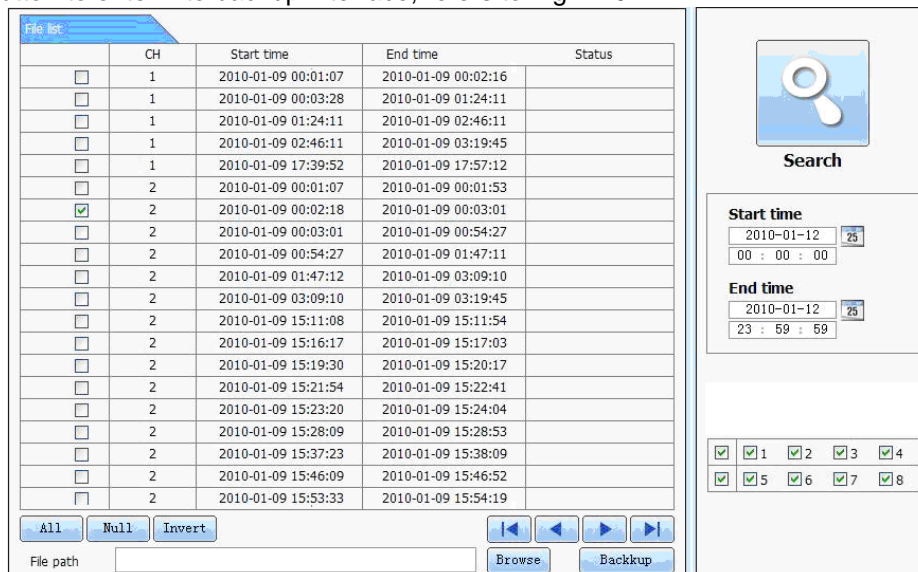


Fig 7-10 remote backup interface

Step1: select channels, set the start and end time, then click “search’ button, the file information will be displayed in the file list box

Step2: select backup files, click “browse” button to set the save path, and then click “backup” button to start backup. The backup files will be saved on user’s PC.

### 6.4 Remote System configuration

User can remote setup the parameters of the device. Functions of remote configurations include: basic configuration, live configuration, record configuration, schedule configuration, alarm configuration, network configuration, PTZ configuration and user configuration. User should firstly select an item in the menu list on the left, and then setup the relative parameters. When one user setup parameters of a certain item, others cannot setup this one. Click Config to enter into the below interface refer to Fig 7-11:



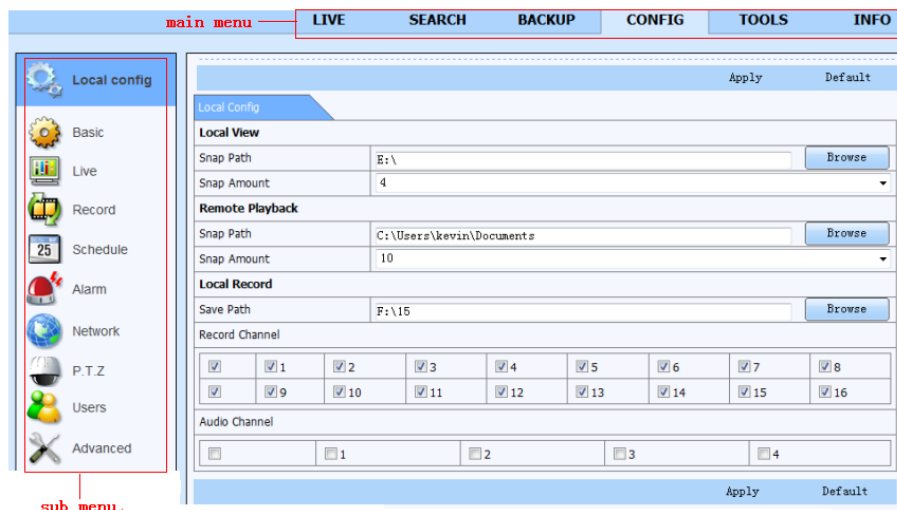


Fig 7-11 remote menu setup

The sub menu lists and the options in every item are similar with those on the DVR. Please refer to Chapter 3 Main Menu Setup Guide for more details.

Click “Apply” button to save above settings; click “default” button will recover the original settings.

## 6.5 Remote Management

### Remote Information Search

The system will automatically record the working condition and operation process during the period of work. User can view information, such as username, IP address and so on. Enter into INFO→Log, user can set the start time to view the log record as follows:

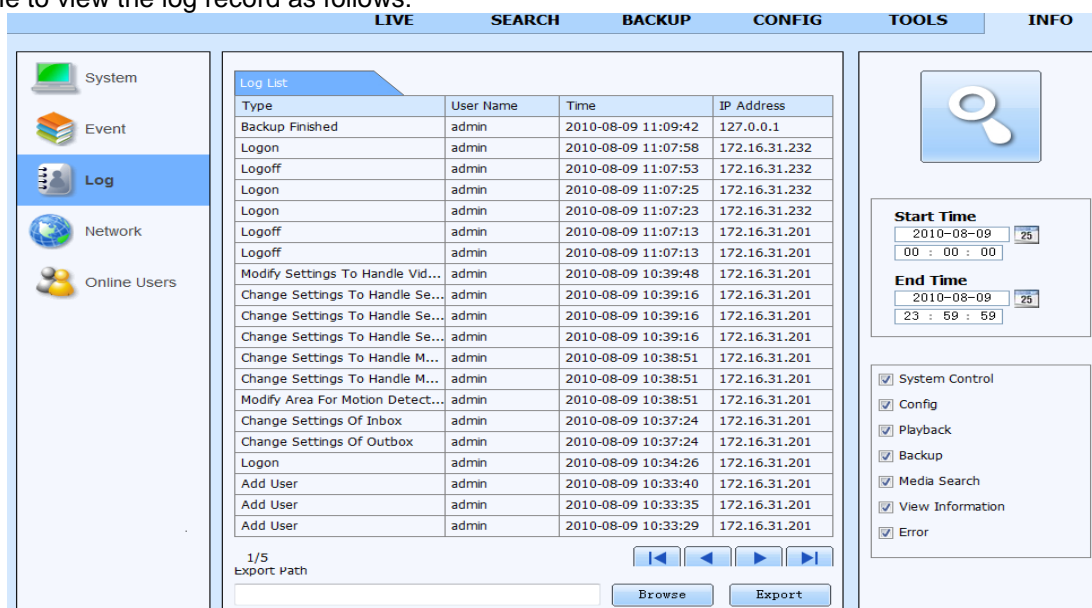


Fig 7-12 Remote information search

This DVR supports mobile surveillance on Iphone and android OS device, this section describes the installation of the program via the Smartphone

### 7.1 Installation procedure on Iphone device

At present, the software only supports version of Iphone iOS 3.1.2 and above, if phone firmware lower than this version please upgrade it. Below is the operation method for Iphone mobile clients:

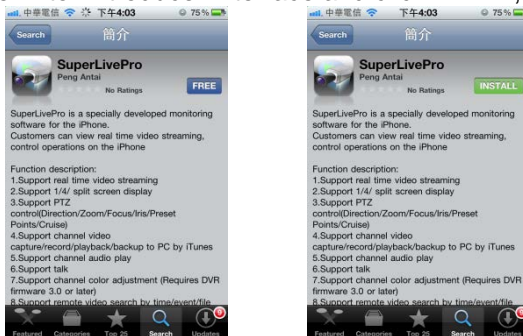
**Step1 :** Enter into App Store function of Iphone



**Step 2:** Enable “search”  function to search “SuperLivePro”, the required programs will be displayed on the top of search box



**Step 3:** Click SuperLivePro, enter into “introduce” interface and click “FREE”, it will change into “INSTALL”

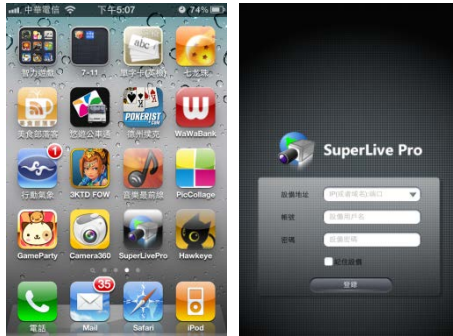


**Step 4:** Enter into iTunes Store password, click “OK” will display below interface

**Note:** if it was the first time for user to operate please enter into user ID; if there is no Store account, user need to apply one.





**Step 5:** Just be patient to download and install. After installed, "SuperLivePro", icon will display. Click this icon, a function interface will appear



**Step 6:** Key in server's IP address (or domain name), user's ID and password. Click Login to process.



**Step 7:** The default quad view window will be displayed. The functions descriptions as following,

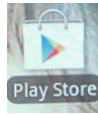
- 7.1 Click  or  to view different channel.
- 7.2 Click  then click "OK" to capture picture.
- 7.3 Click  to do local record.
- 7.4 Click  to get audio from DVR.
- 7.5 Click  to send voice to DVR
- 7.6 Click  to do camera color adjustment.
- 7.7 Click  to do PTZ operation.
- 7.8 Click  to view picture.
- 7.9 Click  to do local & remote playback.
- 7.10 Click  to do DVR remote setting.
- 7.11 Click  to view DVR information.
- 7.12 Click  to edit DVR list.
- 7.13 Click  to setup motion area.





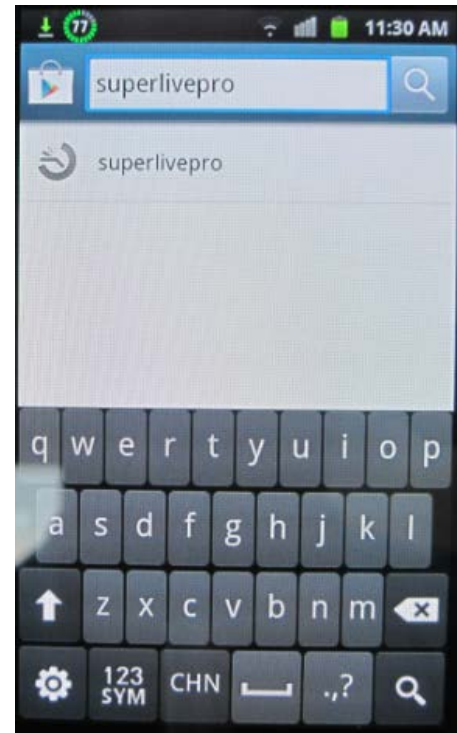
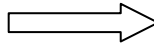
## 7.2 Installation procedure on Android OS Smartphone

On your Smartphone click on the Google play store icon



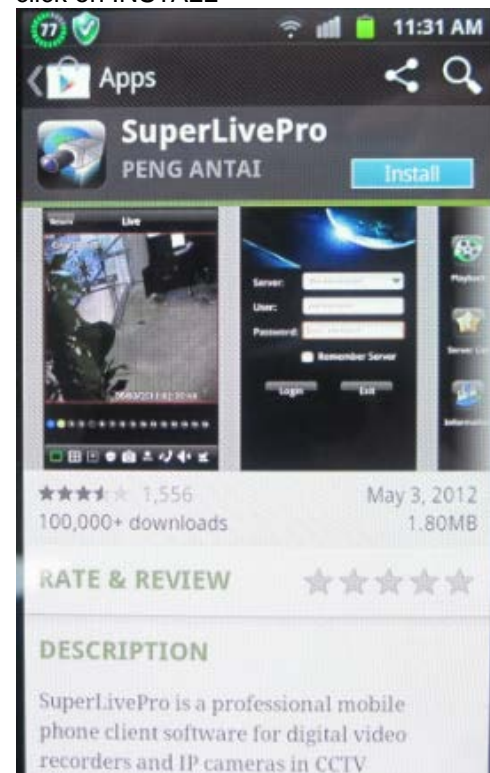
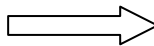
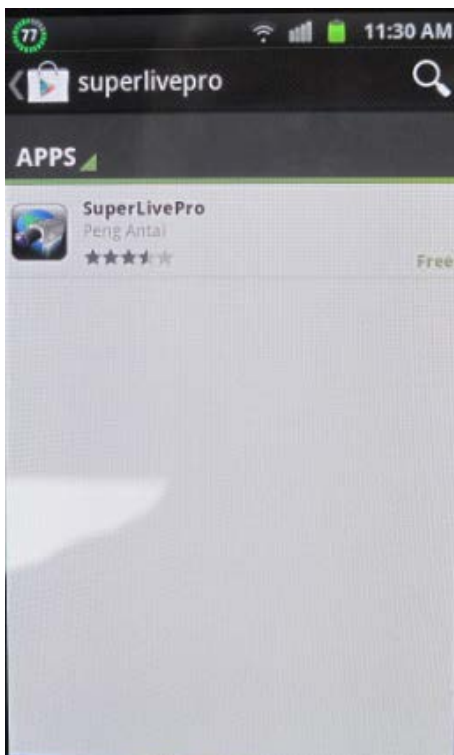
Then press on search icon on right

Type SUPERLIVEPRO with your virtual keyboard and press enter



The search result will show the available applications

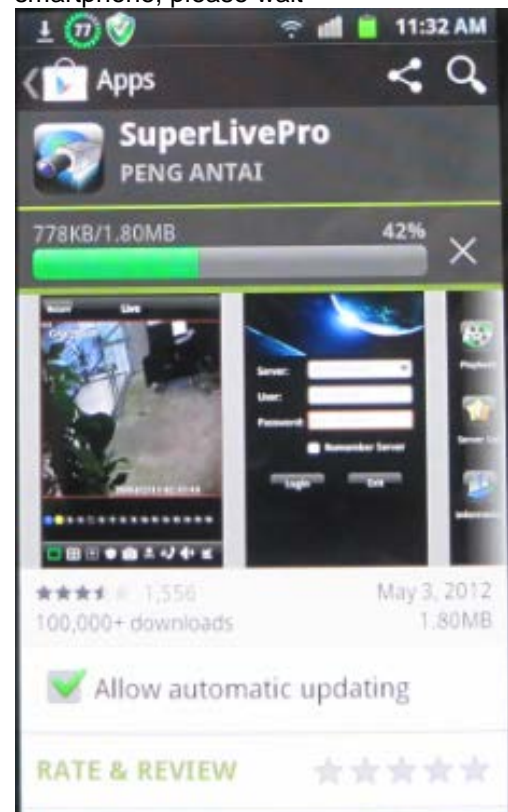
Click on SUPERLIVEPRO, a brief description of the program will be shown, click on INSTALL



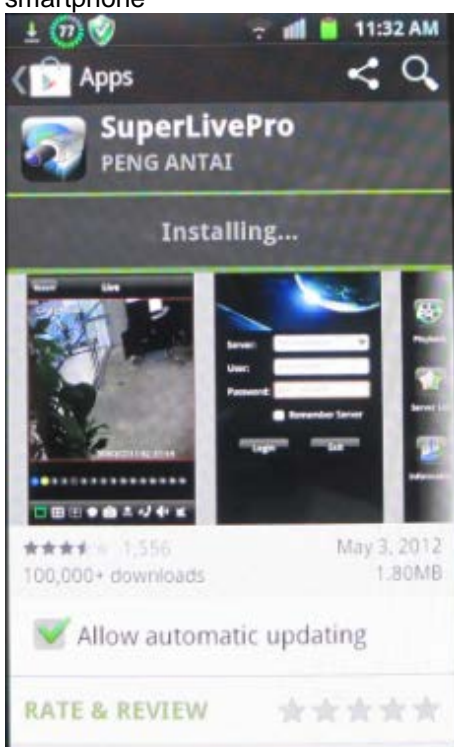
Click on ACCEPT & DOWNLOAD



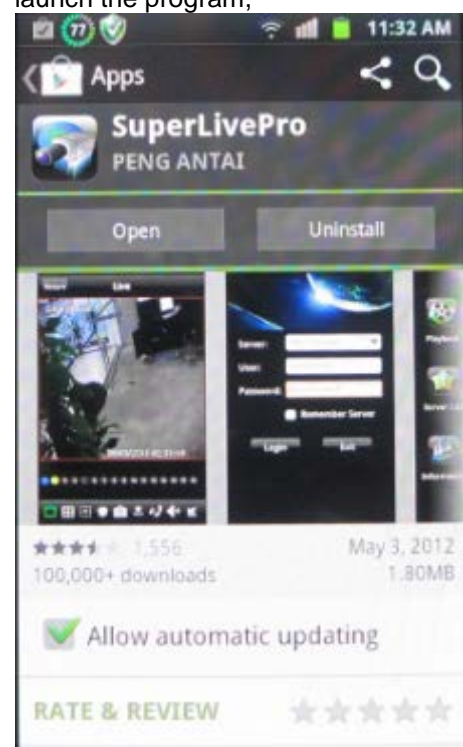
The program is being downloaded on your smartphone, please wait



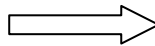
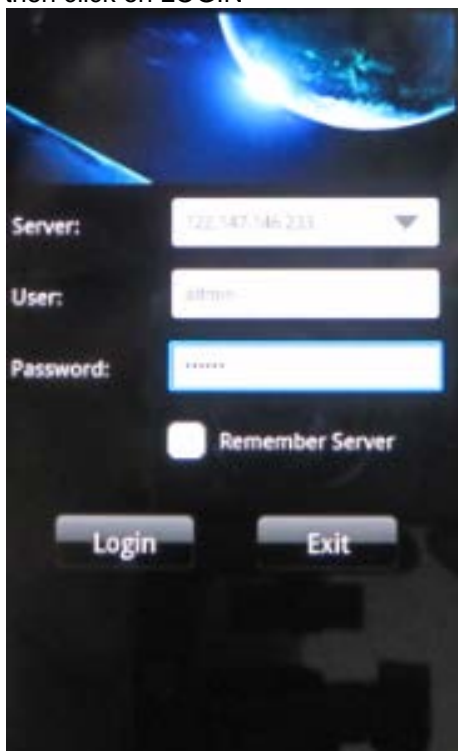
The program is being installed on your smartphone



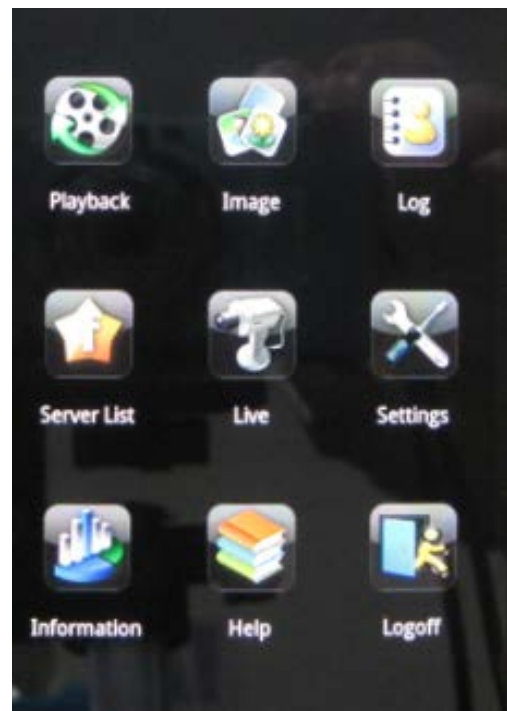
The installation is finished, click Open to launch the program,



Key your DVR IP, the username and password, if you want the program to keep in memory select REMEMBER SERVER, then click on LOGIN



You are connected to the DVR, you can see all the functions of the program












#### Main interface description

Item	Description
Playback	Video file playback
Image	Server photo browse
Log	Software log
Server list	View and edit server list
Live	View camera online
Settings	Software configure
Information	Server and software information
Help	Help Information about software and FAQ
Logoff	Log off from current server

## Live picture interface



Icon	Description
	One screen
	Four screen
	Channel configure
	PTZ control
	Capture
	Record
	Talk
	Channel audio
	Hide SuperLivePro



---

## Appendix A    FAQ

### Q1. Why the DVR cannot start after connected to the power?

- a. The adapter has been damaged. Please change an adapter
- b. The power of the adapter is not enough. Please remove the HDD to check
- c. Hardware problem

### Q2. There is not menu output or only has live image display

- a. Check up whether other devices can display menu or long press ESC key to wait for login dialog box to appear.

### Q2. The indicator of the DVR lights, but no output. Why?

- a. The power of the adapter is not enough. Please remove the HDD or change an adapter to try.
- b. The video format of the DVR is different from that of the monitor.
- c. Connection problem. Please check the cable and the ports of monitor and DVR.

### Q3. Why are no images displayed on parts or all of the channels of the DVR?

- a. Connection problem. Please check the cable and the ports of camera and DVR.
- b. Camera problem. Please check the cameras.
- c. The video format of the DVR is different from that of the cameras. Please change DVR system format.

### Q4. Cannot find HDD

- a. The power of the adapter is not enough. Please change an adapter to try.
- b. Connection problem. Please check the power and data cables.
- c. The HDD is damaged. Change a new one.

### Q5. Cannot record

- a. Don't format HDD. Please format it manually first.
- b. Don't enable record function or incorrect setup. Please refer to Chapter 5 Record search & playback and backup.
- c. HDD is full and not enables recycle function. Please refer to 4.3 Record configuration. Chang a new HDD or enable recycle.
- d. The HDD is damaged. Change a new one.

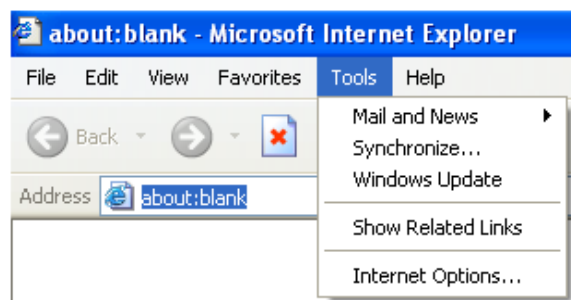
### Q6. Cannot use mouse.

- a. wait 1-2 minutes after mouse connected.
- b. Not detected. Plug/unplug several times.
- c. The mouse is incompatible. Please change a mouse.

### Q7. Cannot download ActiveX control.

- a. IE browser blocks activeX. Please do setup following below.

① Open IE browser. Click Tools-----Internet Options....



② select Security-----Custom Level...Refer to Fig 7-1

③ Enable all the sub options under “ActiveX controls and plug-ins” refer to Fig 7-2

④ Then click ok to finish setup.

- b. Other plug-ins or anti-virus blocks ActiveX. Please uninstall or close them.

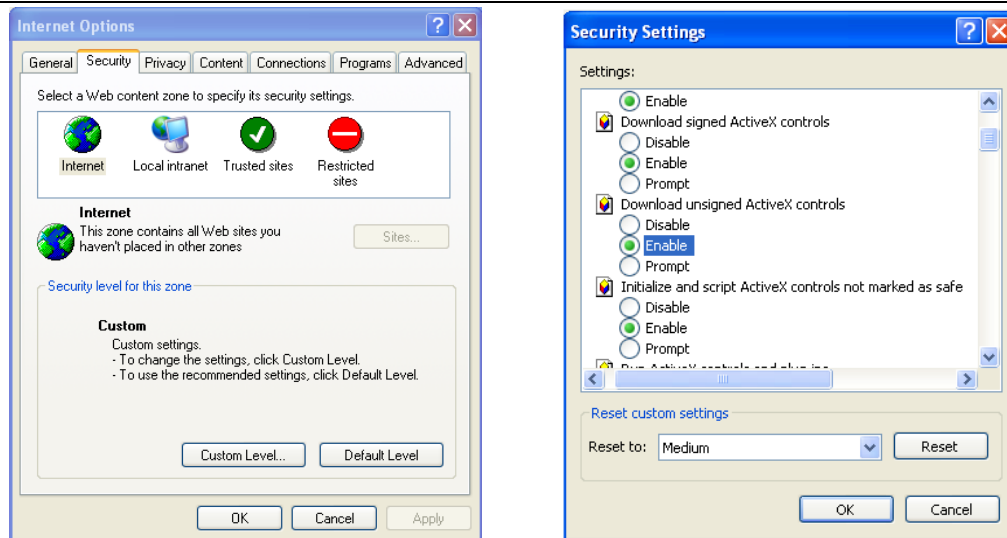


Fig7-1

Fig7-2

**Q8: How to deal with when DVR starts, it displays “please wait...”all the time**

First possible reason: hard-disk cable and data cable are not well connected.

Solution: Please check the connection of hard-disk cable and data cable and make sure they are well connected; If still not working, please unplug them and then try re-plugging again;

Second possible reason: It is forced to stop because hard disk has disabled track which causes the system checking hard disk cannot skip

Solution: Change another new hard disk or reformat the broken one

**Q9: How to input password and digital numbers**

The method to input password and digital numbers is to click the box behind *password* or *items* needing to input by numbers, and then the small keyboard will appear. Please select number or letter to input (the initial password is 123456), or you can use the digital keys in the front panel, or the digital keys on the remote controller.

**Q10: How to upgrade when added new functions or revised software**

After getting the upgraded software from manufacturer, please copy it into U disk, and then select “*upgrade*” in the menu. If upgrading the kernel procedure, please refer to the following method: firstly insert U disk into DVR, and then input “adwsws” in the password of system login and the system will upgrade kernel procedure automatically. After finished, please restart DVR to achieve.

**Notice: Do not power off in the system upgrading process! Otherwise, it may cause that DVR cannot start.**

**Q11: Why is the hard disk used in a DVR identified a new hard disk if directly used to another same type DVR? And why must we format it again?**

When DVR only uses one hard disk, the hard disk removed from one to another same type DVR can work normally without format. However, when a DVR adds to a new hard disk, it will identify the hard disk as a new one and inquire whether to format no matter whether this hard disk used or not in another same type DVR before. In this condition, it can be used normally after formatted according to the guide; if two or more hard disks used in different DVRs, when used in another DVR with the same type, they will be identified to be two or more new hard disks, and all of them need to format. In general, please do not try using more disks removed from different DVRs into another one in case the data lose.



---

**Q12: What are the minimum configurations of PC for clients connecting?**

PC Module	Parameters
CPU	Intel Celeron 2.4G
Motherboard	Intel 845
HDD	80G
RAM	512M
VGA	NVIDIA GeForce MX440/FX5200 ATIRADEON 7500/X300
OS	Windows 2000(SP4 above) /Windows XP(SP2 above) /VISTA/SEVEN
DirectX	9.0

**Q13: What are the PC configurations for 8-ch real time product with fully open channel mainstream?**

PC Module	Parameters
CPU	Intel Core(TM)2 Duo CPU E4600
Motherboard	G31/P31 chip
HDD	80G
RAM	1GB
VGA	GMA3100/NVIDIA GeForce 8400/ ATI RADEON HD3450
OS	Windows 2000(SP4 above) /Windows XP(SP2 above) VISTA/ SEVEN
DirectX	9.0

## Appendix B Calculate Recording Capacity

Users can calculate the size of hard disk according to the saving time and DVR recording settings. The DVR uses fixed video bit rate. The below are the details at different settings.

Video Format	Resolution	Frame Rate Totally(FPS)	Video Quality	Bit Rate (kbps)	Used Space(MB/h)
NTSC	CIF	30	Highest	1M	465
			Higher	768k	297
			Medium	512k	230
			Low	384k	173
			Lower	256k	115
			Lowest	128k	56
PAL	CIF	25	Highest	1M	466
			Higher	768k	295
			Medium	512k	235
			Low	384k	175
			Lower	256k	56.4
			Lowest	128k	45

The calculation format is:

**Total Recording capacity =Used space per hour (MB/h) (coverage rate of hard disk) × recording time (hour) ×channel numbers**

For instance, one customer uses PAL cameras, set resolution to CIF, video quality to Lower, frame rate to 25 fps for enabling total 16 channels. He wants the unit to record continuously in a month. Below is the calculation:

Total Recoding capacity =56.4 (mb/h) X 24(hours/day) X30(days) X16(channels)= 649728(MB)≈ 650(GB)

Therefore, customers just install two SATA HDDs with 320GB, it can almost record for one month.

---

## Appendix C Compatible Devices

### Compatible Devices

#### 1. Compatible USB drive after test.

Brand	Capacity
A-DATA	512MB, 1G, 2GB
Transcend	4GB
Kingston	2GB
Toshiba	2GB
SanDisk	4GB

#### 2. Compatible external USB CD/DVD writers after test

Brand	Model
LG	GH24NS90

### 3. Compatible HDD

Brand	Model number	Capacity
WESTERN DIGITAL	1600AAJS FW:00L7A0	160GB
	2500AVVS FW:73M8B0	250GB
	3200AVVS	320GB
	5000AVDS FW:63U7B0	500GB
	5000AVJS FW:63YJA0	500GB
	5000AVVS FW:63M8B0	500GB
	5000AAKS FW:00V1A0	500GB
	5000BUDT (2.5") FW:63G8FY0	500GB
	5000AUDX FW:63WNHY0	500GB
	10EURS FW:630AB1	1TB
	10EVDS FW:63U8B0	1TB
	15EARS FW:00Z5B1	1.5TB
	15EURS FW:63S48Y0	1.5TB
	20EVDS FW:63T3B0	2TB
	20EARS FW:00S8B1	2TB
	2001FASS FW:00U0B0	2TB
HITACHI	HDS721616PLA380	160GB
	HCT721025SLA380	500GB
	HCP725050GLA380	500GB
	HDP725050GLA360	1TB
SEAGATE	ST500DM002 (SATA3) FW:KC44	500GB
	ST3100528AS FW:CC38	1TB
	ST3100524AS (SATA3) FW:JC4B	1TB
	ST2000DL003 (SATA3) FW:CC32, CC3C	2TB
TOSHIBA	HCS5C1050DLE630 FW:620 DT01ABA050V	500GB
	DT01ABA100	1TB
	DT01ACA100	1TB

## APPENDIX D DDNS setup procedure (Take www.geekciti.com as an example)

1. Visit [www.geekciti.com](http://www.geekciti.com) and register new account by filling each line then press submit, you need to have a valid email which will be use as username

**Welcome to MintDNS**  
Create a user account or choose existing users below to begin

DDNS account creation.

NEW USER REGISTRATION	
EMAIL ADDRESS	<input type="text" value="dvrtest110@gmail.com"/>
PASSWORD	<input type="password" value="....."/> ?
PASSWORD CONFIRM	<input type="password" value="....."/>
FIRST NAME	<input type="text" value="aloun"/>
LAST NAME	<input type="text" value="chen"/>
SECURITY QUESTION	<input type="text" value="Favorite Food"/> ▼
ANSWER	<input type="text" value="pizza"/>
CONFIRM YOU ARE HUMAN	<div>1+4= New Captcha <input type="text" value="5"/> Solve the problem above</div>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

2. Create a domain name as your convenience and choose the extension among the list available, then click on REQUEST DOMAIN

**Domain Name Creation**  
Enter a new domain name below.

*You must create a domain name to continue.*

Domain name must start with (a-z, 0-9), Cannot end, nor start, but may contain a hyphen, and is not case-sensitive.

.  ▼

3. If the domain exists already you will have to choose another domain name, if not you will see the below screen

.....

*Your domain was successfully created.*

Search by domain

*Click a name to edit your domain settings*

NAME	STATUS	DOMAIN
SMARTDVR		smartdvr.myfreeip.me

Last Update: *Not yet updated* IP address: 59.124.207.207

Create additional domain names

[1]

4. Fill all setting on DVR then click "Test" to verify. Then click "Apply" to Finish DVR network setting. (Menu-> Network -> Other Settings)

NETWORK

Network Sub-stream Email Server Other Settings

DDNS ☒

DDNS Type mintdns

Server www.geekciti.com

User Name dvrtest110@gmail.com

Password .....

Host Domain smartdvr.myfreeip.me

DDNS Update [Hours] 3

Test

UPnP ☐

DDNS updates successfully. Default Apply Exit

DDNS: enabled  
DDNS Type: mintdns  
Server www.geekciti.com  
User Name: dvrtest110@gmail.com (your account on www.geekciti.com website, as step 1)  
Password: xxxxxx (your account password on www.geekciti.com website, as step 1)  
Host Domain: smartdvr.myfreeip.me (you create on www.geekciti.com website, as step 2)  
Update Interval [M]: 3 (a time period to sync with www.geekciti.com service)  
(3 means 3 hours)

Press TEST button, if it's ok you will see **DDNS updates successfully** message

5. You could also visit GEEKCITI website to check if the setting works.



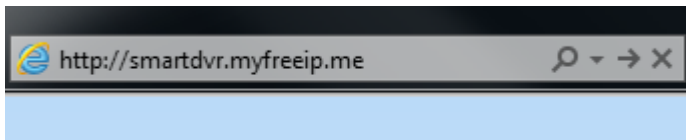
Click a name to edit your domain settings

NAME	STATUS	DOMAIN
SMARTDVR		smartdvr.myfreeip.me
Last Update: 1/16/2013 11:32:13 PM IP address: 60.250.221.50		

Create additional domain names

[1]

You can test with a computer with internet explorer browser by key in the new domain name



You will see the DVR main page, after key in the username and password as well the display language, you should be able see camera live display

