
NVSS6XXX system

USER' S GUIDE



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Introductions

Thank you for purchasing our NVSS6XXX! This user's manual is designed to be a reference tool for the installation and operation of the system. Here you can find information about this series NVSS features and functions, as well as a detailed menu tree. Before installation and operation please read this manual thoroughly and carefully!

Feature

Live view	<ul style="list-style-type: none"> ● Support maximal 64 channels; ● Preview auto switch sub/main stream; ● Support PTZ and DO control in the live view interface; ● Support Group manage to arrange the display channel; ● Support to manage the layout according to your need; ● Support to grab picture in the live view.
Record	<ul style="list-style-type: none"> ● Support maximal 64 channels high definition IP camera recording simultaneously according to your configuration; ● Support Normal / motion / sensor / normal + motion / motion or sensor record; ● Support recording while playback.
Playback	<ul style="list-style-type: none"> ● Support maximal 16 channels playback simultaneously; ● Support Time/date and ICON search playback; ● Support fast playback.
Backup	<ul style="list-style-type: none"> ● Backup video to the USB flash disk directly, the type of backup video is AVI.
Remote view	<ul style="list-style-type: none"> ● Android/iPhone/iPad client view; ● IE browser remote directly view; ● CMS client remote view.
Alarm	<ul style="list-style-type: none"> ● Write alarm log, and pop up the log in the live view; ● Send an email to notify the user when an alarm occurred; ● Trigger the alarm output and call PTZ preset when an alarm occurred according to your setup.
Storage	<ul style="list-style-type: none"> ● Support 4T HDD for each enclosure; ● Support Hot-swap, you can replace the HDD without shutdown.
Network	<ul style="list-style-type: none"> ● Support dual network adapters;
Peripheral	<ul style="list-style-type: none"> ● Support serial port (RS232/RS485) transparent data transmission;

	<ul style="list-style-type: none">● 2 alarm output and 4 alarm input connectors;● 2 HDMI and 1 VGA connector.
Other	<ul style="list-style-type: none">● Support system and HDD information real-time display;● Support log real-time display and log search;● Support to check the HDD and recording status;● Support preview and setup the connected IPC / DVR / NVR.

Specification

Model	NVSS6716(08)-64	NVSS6516(08)-48	NVSS6316(08)-32
System			
Main Processor	Intel® Core™ i7 Processors	Intel® Core™ i5 Processors	Intel® Core™ i3 Processors
Operating System	Embedded LINUX		
Motherboard	SV6-B75A6		
Memory	8GB DDR3		
Case	Super 1.0mm/SGCC refined ,stable structure, 19" standard rackmount hot-swap case		
Fan	4 independent 6000rpm coolers.		
Interface	Local GUI &WEB GUI		
Video & Audio			
Input	64ch@1080p/720p/D1		
Transmission	64ch@1080p/720p/D1		
Recording	64ch@1080p/720p/D1		
Preview	64ch@D1(CIF) / 16ch@720P/8ch@1080P	48ch@D1(CIF) / 12ch@720P/6ch@1080P	32ch@D1(CIF) / 8ch@720P/4ch@1080P
Playback	4ch@1080P/8ch@720P/16ch@D1		
Recording Resolution	8M, 5M, 3M, 1080P, 720P, 960H, D1, CIF, QCIF, VGA		
Audio	1ch audio & 1ch Mic in, 1ch audio out		
Recording			
Recording Mode	Manual, Schedule(Continuous, Motion detection, Sensor, Normal & Motion, Normal & Sensor, Stop		
Alarm Recording	Motion detection, Sensor		
Backup Mode	Network download / USB HDD		
Display			
Video Output	3-screen output: 2 HDMI + 1 VGA		
Multi-screen Display	The 1st screen: 1/4/6/8/9/13/16/20/28/33/36/49/64		

Hard Disk		
Hard Disk	4 SAS ports support to connect 16(8) SATAII, each HDD can be 4TB	
HDD Mode	Single	
HDD Installation	Independent HDD rack, support hot swap	
Network		
Interface	2 independent 1000M RJ-45 ports	
MD & Alarm		
Alarm Input	4ch, low level effective, green terminal interface	
Relay Output	2ch, low level effective, green terminal interface	
Interface		
Front cover	Support 16 HDD hot swap	
USB	4 USB ports	
General		
Power Supply	100V-240Vac, 47-63Hz	100V-240Vac, 47-63Hz, Redundant
Power Consumption	Max. 800W (Include HDD)	
Working Environment	-10°C~55°C	
Working Humidity	10%~80% (non-condensation)	
Dimension	650mm×440mm×133mm (W×D×H)	
Weight	About 28Kg	
Installation	Rack-mounted	

Front and Rear panel

1. Front panel

The front panel of NVSS6X16 series is shown as the following picture:



Please refer to the following sheet for detailed information:

SN	DESCRIPTION	SN	DESCRIPTION
1	Power button	2	Reset button
3	Power LED	4	HDD LED
5	LAN1 LED	6	LAN2 LED
7	USB 2.0 port	8	USB 2.0 port
9	The indication light of each HDD		

You can see there are 16 HDDs' places in the front panel. From the left to the right and from the top to the bottom, it ranges from 1~4, 5~8, 6~12, 13~16.

You can see the indication lights on the HDD bracket:

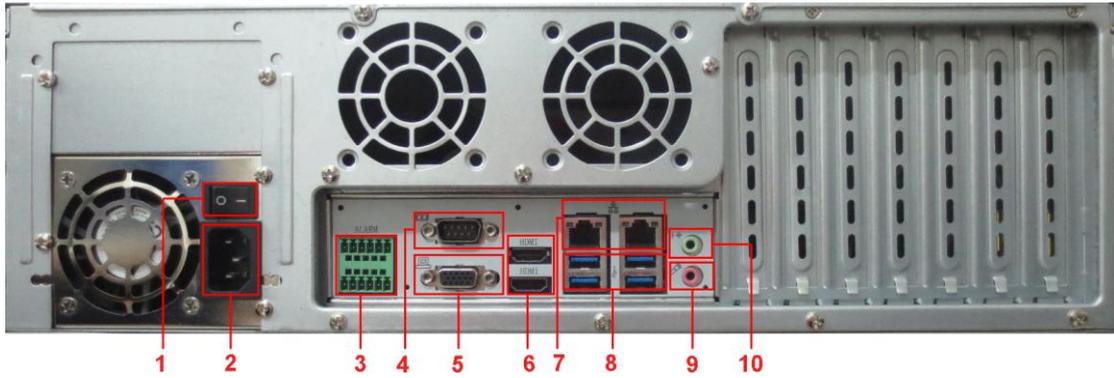
- When you connect the device to the power, the light becomes green.
- The green light would be twinkle-twinkle, if the HDD is reading or writing.
- The green light would be turned dark or twinkle when the HDD is formatting.

Note:

- Please don't unmount the HDD which is reading or writing.
- Please don't unmount the HDD which is formatting.
- You need wait for about 20 seconds before see the HDD icon when you inset one new HDD.
- It would spent about 300s to search the whole day's video data when the total recording video data stream is about 300M/s.
- Enable the hot plug function in BIOS, users can check the [appendix B](#) for details.

2. Rear Panel

The rear panel of NVSS6XXX series is shown as the following picture:

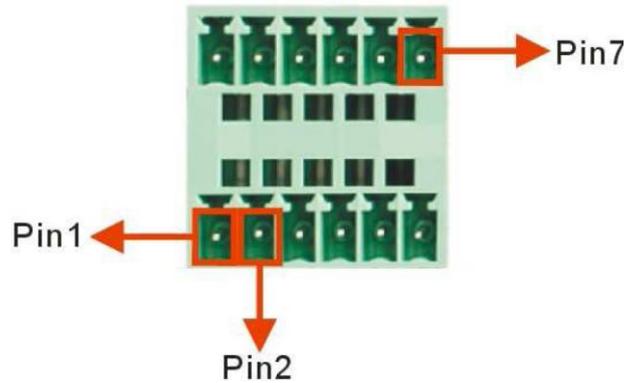


Please refer to the following sheet for detailed information:

SN	DESCRIPTION	SN	DESCRIPTION
1	Power switch	2	Power socket
3	Alarm port connector	4	COM1 connector
5	VGA connector	6	HDMI connectors
7	LAN connectors	8	USB 3.0 connectors
9	Audio input connector	10	Audio output connector

3. Alarm input and output connection

The sequence of alarm port:



The definition of each port:

Pin	Definition	Pin	Definition
1	ALMOUT_RLY1 GPO35(0xA02 Bit5)	2	ALMIN_ISO1 GPI30(0xA02 Bit0)
3	ALMOUT_COM1 GPO35(0xA02 Bit5)	4	ALMIN_ISO2 GPI31(0xA02 Bit1)
5	ALMOUT_RLY2 GPO34(0xA02 Bit4)	6	ALMIN_ISO3 GPI32(0xA02 Bit2)
7	ALMOUT_COM2 GPO34(0xA02 Bit4)	8	ALMIN_ISO4 GPI33(0xA02 Bit3)
9	RS485_A	10	GND
11	RS485_B	12	+ 5V

ALMIN_ISO1/2/3/4:

Alarm 1 to alarm 4, the alarm becomes activity in low voltage.

ALMOUT_RLY1/COM1 and ALMOUT_RLY2/COM2:

Two groups of normal open activation output (on/off button).

RS485_A/B:

The A/B cable to control the RS485 devices.

GND: GND cable.

+5V: +5V cable.

Chapter1 Guide

Setup1:

By default, when you connect the device to the monitor, insert the mouse and connect the power cable, press the ON/OFF button, the Guide Interface will be showed automatically as pic1-1.



pic1-1

The Guide setup can lead you to setup some important setting of the NVSS. You can setup the system language at this page.

If you don't want to use the Guide setup at that moment, please click the **Cancel** button. You can also choose to use it next time by checking the “**Start Up When Power On**” .

It is worth nothing that if it is your first time to open the NVSS system, you should not cancel the guide, because you can finish the network settings in the guide to help you register your system in the interface of register after the guide.

Setup2:

Click **Next** button to continue the Guide setup, you will enter the Login window as pic1-2.

The screenshot shows a 'Guide' window with a dark grey background. At the top, the title 'Guide' is centered. Below it, there is a table with two columns: 'Language' and 'English', with a dropdown arrow on the right. Underneath, there are two rows: 'User Name' with the value 'admin' and 'Password' with the value '*****'. A checkbox labeled 'Modify Password' is checked. Below this, there are two more rows: 'New Password' and 'Password Confirm', both currently empty. At the bottom right, there are three buttons: 'Back', 'Next', and 'Cancel'.

pic1-2

The default username and password is **admin**, you have to input the username and password to login in the system. You can also change the password by checking the “Modify Password” check-box.

Note:

1. For security reason, please modify password after your first login.
2. You have to input the new password for twice correctly, then the new password will be valid.

Setup3:

Click **Next** button to continue. You can modify the system Timezone, system Date and Time in this Interface, showed as pic1-3.

The screenshot shows the 'Guide' window with system configuration options. The title 'Guide' is at the top. Below it, there is a table with two columns: 'Language' and 'English', with a dropdown arrow on the right. Underneath, there are three rows: 'Timezone' with the value 'America/Metlakatla', 'System Date' with the value '2013-08-30', and 'System Time' with the value '17:10'. Each of these rows has a dropdown arrow on the right. At the bottom right, there are three buttons: 'Back', 'Next', and 'Cancel'.

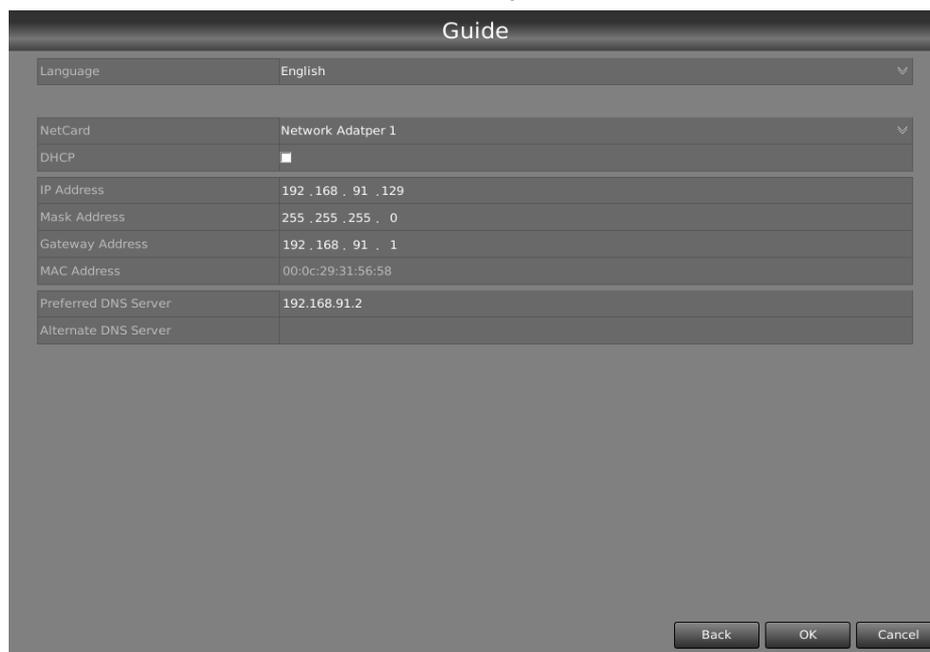
pic1-3

Note:

In general, please do not modify the system date too earlier than the time you get it, because if you do this, the system will not be started successfully when you start it next time, if you have done so, you must restart the NVSS system and enter the BIOS to modify the system date, for the specific steps, please refer to the [Appendix A](#) for details.

Setup4:

Click **Next** to continue, you will enter the network setup as pic 1-4. Please input the correct IP Address, Mask Address, Gateway Address, and DNS Server.



The screenshot shows a network configuration window titled "Guide". It contains a table with the following fields and values:

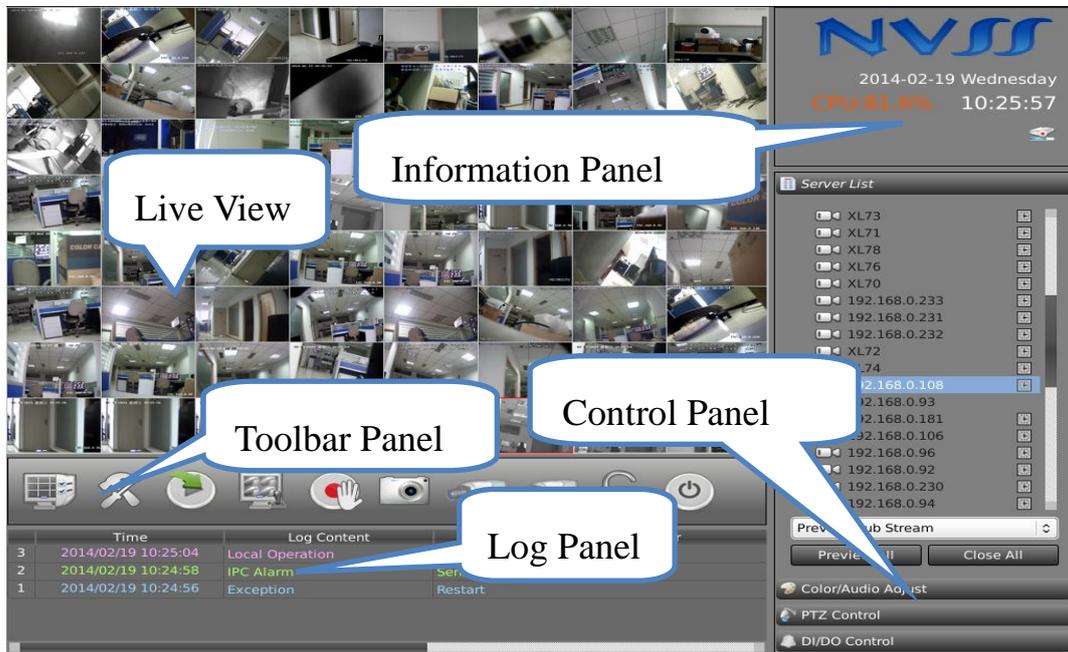
Language	English
NetCard	Network Adatper 1
DHCP	<input type="checkbox"/>
IP Address	192 . 168 . 91 . 129
Mask Address	255 . 255 . 255 . 0
Gateway Address	192 . 168 . 91 . 1
MAC Address	00:0c:29:31:56:58
Preferred DNS Server	192.168.91.2
Altemate DNS Server	

At the bottom right of the window, there are three buttons: "Back", "OK", and "Cancel".

pic1-4

Click **OK** to complete the startup Setup Wizard.

Chapter2 Main Interface



pic2

The main interface contains five parts: Information Panel, Live View, Toolbar Panel, Log Panel, Control Panel. Shown as pic2.

2.1 Device Management



pic2-1

The main function of the NVSS is to connect the network cameras and record the video. So, before you can get a live view or record of the video, you should add the network cameras to the connection list of the device first, showed as pic2-1.

There are three ways to go into the **device management** to add IPC: select the **Add Device** of context menu; select the **Device** of the **Main menu**; click the button



in toolbar panel.

The **Device Management** include add IP devices to NVSS system, modify or delete IP devices from NVSS system and IPC search. For resource limitation, you can add max 64 channel 1080P(1920*1080) IP cameras, including DVS / DVR and NVR.

Now our NVSS supports the following types of IP products: DG Series IPC, DH Series IPC, DK Series IPC, DT Series IPC, DX Series IPC, NV Series IPC, DZ Series IPC, ONVIF Protocol IPC.

2.1.1 Add IP Device

1. Add IP Device manually

Press  button, it will pop up a sub window, showed as pic2-1-1(a), you can add an IP Camera manually:

A screenshot of the 'Add Device' dialog box. It has a title bar 'Add Device' and a dark background. The form contains several fields: 'Server Name' (empty), 'IP Address' (empty), 'Connect Port' (37777), 'Login User's ID' (admin), 'Login Password' (admin), 'Device's Type' (DH Series IPC), 'Stream Type' (Double Stream), and 'Max. Cameras' (Unlimited). At the bottom right, there are 'Add' and 'Exit' buttons.

Server Name:	<input type="text"/>	Device's Type:	DH Series IPC
IP Address:	<input type="text"/>	Stream Type:	Double Stream
Connect Port:	37777	Max. Cameras:	Unlimited
Login User's ID:	admin		
Login Password:	admin		

pic2-1-1(a)

【Server Name】 Set a name for the new IP camera, the server name you set will be showed as camera name at the preview channel.

【IP Address】 Input the IP address of the camera, it is an IP address or IP alias of an IP camera which is connected through DNS Server.

【Connect Port】 Set the port through which connects to IP Camera.

【Login User's ID/Login Password】When the user want to visit IP Camera and the server has used the function of rights management, login user ID and password will be checked. If the user has no right to visit that camera, the connection will be cut down automatically.

【Device's Type】 Select the corresponding type for the IP camera. Now our NVSS system supports the following types of IP products: NV Series IPC, DH Series IPC, DT Series IPC, DG Series IPC, DK Series IPC, DX Series IPC, DZ Series IPC, ONVIF IPC.

【Stream Type】 Select Main-stream, sub-stream or double stream for the device. If you want to use the record sub stream function in the IP device, you should select the data stream type as Double Stream.

【Max. Cameras】 Select the number of channels you want to get from the IP device(1 by default, and it is used when add standalone DVR / NVR). The max is 32 channels.

2. Auto Search and Add Device

Press **Auto Search&Add Device** button, you will see the following interface.

The screenshot shows a web-based interface for configuring an auto-search and add device. The title bar reads "Auto Search&Add Device". The interface is organized into two columns of settings. The left column includes: "Adapter IP Address" (text box with "192.168.0.114"), "Device Named Type" (dropdown menu with "Name as IP Address"), "Generated IP Start Address" (text box), "Stream Type" (dropdown menu with "Double Stream"), and "Login User" (text box with "admin"). The right column includes: "Device Type" (dropdown menu with "NV Series IPC"), "Device Custom Name" (text box), "Generated IP End Address" (text box), "Connect Port" (text box with "8000"), and "Login Password" (text box with "12345"). At the bottom of the settings area are two buttons: "Start Auto Search&Add" and "Stop Auto Search&Add". A separate "Exit" button is located at the bottom right of the window.

pic2-1-1(b)

【Adapter IP Address】 Our NVSS system has two network adapters, please select one which you want to search firstly. The adapter's IP address has been set in the guide.

【Device Type】 Select the corresponding type for the IP camera. Now our NVSS system supports the following types of IP products: NV Series IPC, DH Series IPC, DT Series IPC, DG Series IPC, DK Series IPC, DX Series IPC, DZ Series IPC, ONVIF_V2.3 IPC.

【Device Named Type】 It has two kinds of naming: *Name as IP address* and *Name Device Customizable*.

1) **Name as IP address:** Software will take the IP address of the camera as its

device name;

- 2) **Name Device Customizable:** In this mode, please input the name which you want to set for the cameras into Customize Name blank.

【Customize Name】 In *Name Device Customizable* mode, input the customize name for the series of IP cameras. Then the system will assign this name as a prefix for each IP camera of this series. E.g. input DT Series IPC, then the cameras will be named as:

DT Series IPC_1
DT Series IPC_2
DT Series IPC_3 etc..

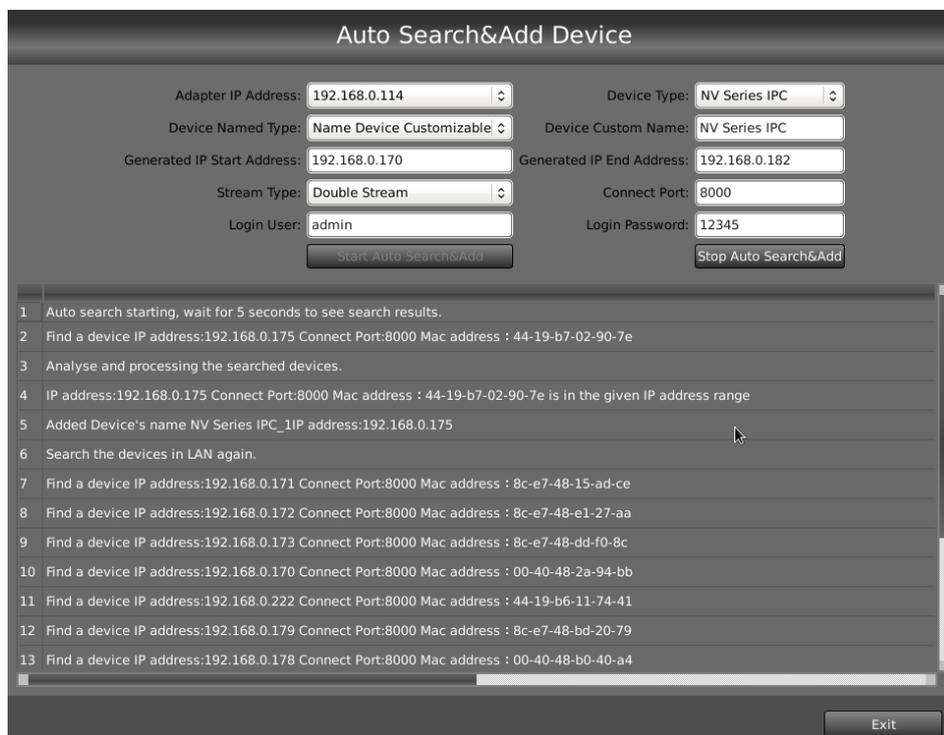
【Generated IP Start Address】【Generated IP End Address】 Before you start searching, please set a range of IP address for the IP cameras to be generated, the starting IP address and the end IP address should be filled into these two bars.

【Stream Type】 There are three types to select : main-stream, sub-stream and double stream for the devices.

【Connect Port】 Set the port through which connects to IP Camera.

【Login User/Login Password】 Please input the ID and password for the series of IP cameras, they will be checked by the IP cameras when the system is modifying their IP address and accessing them.

After the configuration are finished, press **Start Auto Search&Add** button to start auto search & add the devices, and press this button **Stop Auto Search&Add** to stop. Showed as pic2-1-1(c).



pic2-1-1(c)

Note:

It will keep searching till the given range of IP address is finished.

3. Manual Search and Add Device

Press  button to add IP device. Then you can see this interface, showed as pic2-1-1(d).



pic2-1-1(d)

Our NVSS system has two network adapters, please select the "**Adapter IP Address**" which you want to search firstly. The adapter's IP address has been set in the guide.

Then the system will display all the IP devices can be searched and connected. When there is a new IP device connected but you can't find its IP address in the list, please press Update IP List button. Also, you can press Clear IP List to clear the IP devices from the list. You also can click  to change the device's type to search different kinds of cameras.

You can set the server name, stream type, login user's ID, password, IP address, mask address, gateway address and connect port according to your own needs, click

 button to add the device into NVSS system. If IP address repeated, add the first to system only.

You can also sequence the searched IPC by clicking the head of any column.

Note:

1. For searching DH Series IP cameras, users have to connect them to switches under a router, and connect the router to one network port of the NVSS. you can only

search the IPC which connected to the one as **Network listen adapter**.you can't search the ones which have the same network segment of the unchecked router.

2. Please select different **Adapter IP Address** to search cameras under different routers connected in different network port of NVSS.

3. The whole NV Series IPC can be searched whichever **Adapter IP Address** you selected, no matter the cameras are connected under which network port of NVSS.

2.1.2 Modify IP camera

Press  button to modify IP camera information, the interface is the same as **Add IP Camera**, showed as pic2-1-1.

2.1.3 Delete IP camera device

Press  button to delete a connected server.

2.2 Live View and Screen Menu

2.2.1 Live View

Live view shows the real-time video getting from the cameras. Users can setup the display split mode & camera in each window in the **Preview Group Setting** which will be introduced in the **Screen Menu**.

You can drag the camera in server list to any live view window in monitor 1 to preview its video. You also can scroll the mouse to magnify the selected image, eight times largest, in the magnified screen, you can long press the left mouse button and move to convert the perspective, if you want to restore the enlarged image, you should click the right mouse button.

The NVSS also support multiple display. it can support 3 monitors if your motherboard is SV6-B75A6 as pic2-1-1 shown, it can only support 2 monitors when your motherboard is GA-B75-D3V as pic2-1-2 shown.

The motherboard is SV6-B75A6:



pic2-1-1

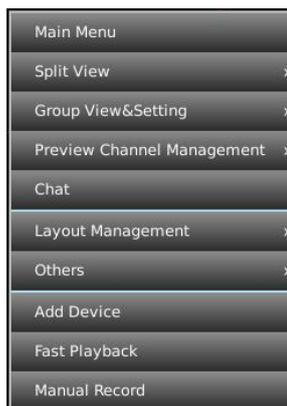
The motherboard is GA-B75-D3V:



pic2-1-2

2.2.2 Screen Menu

User can Single-Right-Click image area to pop up the screen menu, showed as pic2-2:



pic2-2

1. Main Menu

Single right click Main Menu, the system will pop up the sub window, showed as pic2-2-1. There are 8 icons: **System Setting**, **Channel Setting**, **Device Management**, **Playback**, **Backup**, **HDD Management**, **Lock Screen(ON/OFF)** and **Power Management**. You can move the mouse to highlight the icon, then click mouse to enter the sub-menu.



pic2-2-1

Note:

If you disabled the "Local Password" in "System Setting-->User Management", the icon  would be hidden.

2. Split View

Move your mouse to highlight Split View, it will pop up the sub menu, showed as pic2-2-2, you can select the window split mode in the pop-up menu.



pic2-2-2

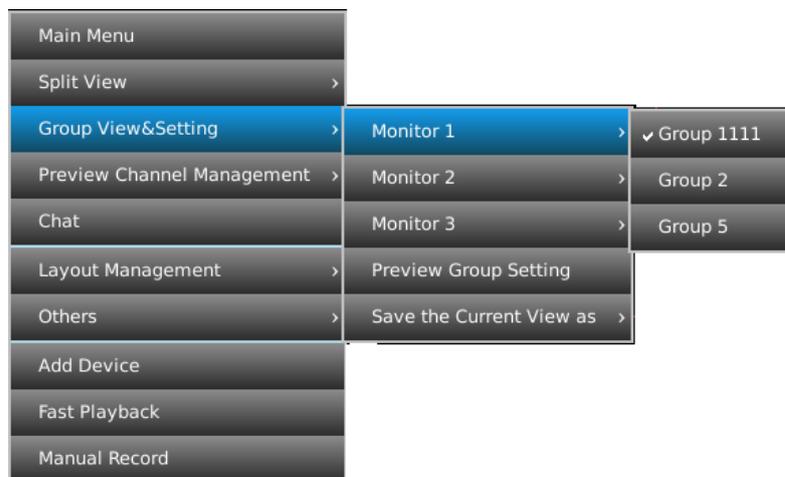
3. Group view & Setting

a. Group view

You can single click **Group View & Setting**, it will pop up the sub menu, showed as pic2-2-3(a), you can step into the Preview Group Setting to set and save the preview group, and you can also save the current preview group of monitor 1 to

any group by clicking **Save the Current View as** like pic2-2-3(b) shown.

After you set and saved the preview group, you can call any preview group by single clicking the group name as pic2-2-3(a) shown.



pic2-2-3(a)



pic2-2-3(b)

b. Preview Group Setting

You can step in the **Preview Group Setting** sub window, showed as pic2-2-3(c).

Device List--It will list all the servers & cameras connected to the system, and when your mouse stop above the camera name, you will see the detail information of the camera. You can drag any cameras in device list to any display window. If you want to cancel the display of one camera in one window, you can double click it to

remove.



pic2-2-3(c)

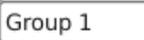
Default Stream Type--The default stream type can be selected between “Main Stream” and “Sub Stream”. If you select a default stream type in the drop-down list, each camera you dragged to the window will be displayed as the selected stream.

Note:

You can also change the stream type of each camera manually by modifying the **stream type** in each window.

Monitor --The system can connect 3 monitors in the meantime, you can select any one to setup its preview group. If there is only one monitor, this option would be not selectable.

Group --You can select a group from the drop-down list to setup, support maximum 16 groups.

Group Name  **Window View** --You can also define the group's name and partitions.

System Start Display Group--Check the box of any preview group, then the system will display this group automatically when the NVSS startup next time.

Interval --Users can drag several cameras into the same window to do sequence, and you can set the display interval as 5, 10, 15 and 20 seconds etc. from the drop-down list.

enable expand mode

--When the NVSS system start without recognizing other monitors, you can press this button to enable expand mode, it may be possible to fix the problem, after enable this function, restart the system to take effect.

4. Preview Channel Management

Select a video window and single right click on main interface and choose the **Preview Channel Management**, it will pop up the sub menu, showed as pic2-2-4.



pic2-2-4

Full Screen: make the live view area full screen;

Capture image: capture image of the selected window;

Hide Video Title: hide the selected window's video title;

Close video window: close display of the selected window's video;

Hide All Video Title: hide the all video's title;

Show All Video Title: display the all video's title;

Close All Preview Window: close all video preview.

5. Layout Management



pic2-2-5

You can manage the layout in **Layout Management** setting.

Load the Default Interface: Default interface is showed as pic2;

Load the Classical Interface: Classical interface only shows video in full screen mode;

Show Control Panel: You can check (uncheck) to display (hide) the control panel;

Show ToolBar Panel: You can check (uncheck) to display (hide) the toolbar panel;

Show Log Panel: You can check (uncheck) to display (hide) the log panel.

6. Others



pic2-2-6(a)

Camera Data Stream Statistics: It will pop up sub window, showed as pic2-2-6(b), there are 4 columns Server Name, Instant Value, Record Average Value and Record Loss. They show the instant data value / Average data value / accounts of the lost data package for corresponding cameras. Record loss will cause the video to jump when playback.

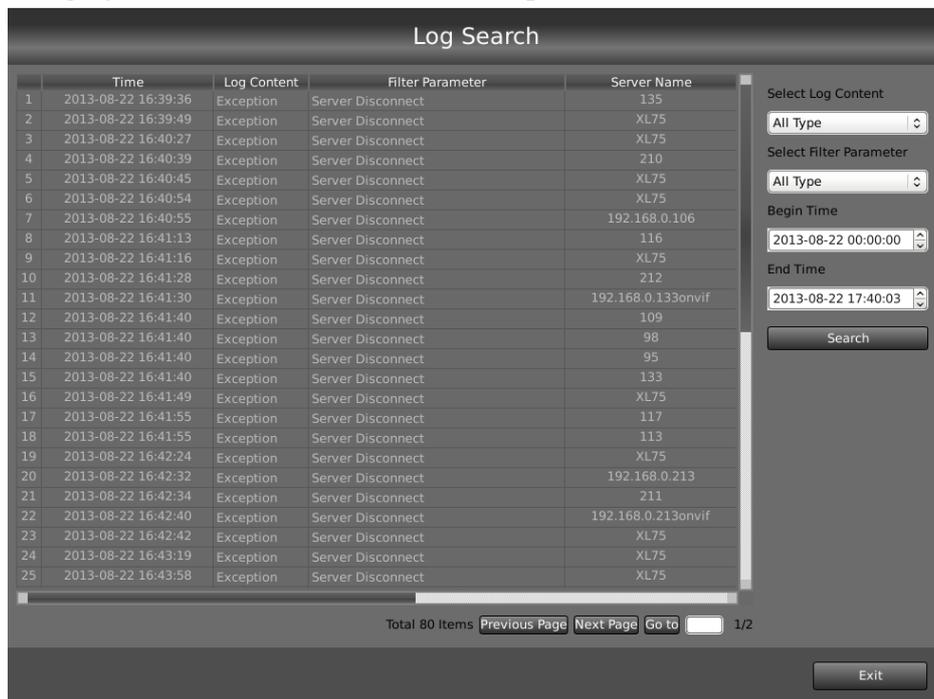
	Server Name	Instant Value	Record Average Value	Record Loss
1	115	1.007Mbyte/s	1000Kbyte/s	0
2	109	932Kbyte/s	911Kbyte/s	0
3	181	556Kbyte/s	502Kbyte/s	0
4	112	1.052Mbyte/s	995Kbyte/s	0
5	210	988Kbyte/s	989Kbyte/s	0
6	211	1.039Mbyte/s	1006Kbyte/s	0
7	108	1.024Mbyte/s	1001Kbyte/s	0
8	113	1.040Mbyte/s	997Kbyte/s	0
9	212	1.084Mbyte/s	996Kbyte/s	0
10	133	750Kbyte/s	579Kbyte/s	0
11	134	752Kbyte/s	748Kbyte/s	0
12	135	859Kbyte/s	752Kbyte/s	0
13	116	1.098Mbyte/s	997Kbyte/s	0
14	117	1.097Mbyte/s	1001Kbyte/s	0
15	192.168.0.106	1.586Mbyte/s	994Kbyte/s	0
16	192.168.0.217	558Kbyte/s	541Kbyte/s	0
17	XL73	1.061Mbyte/s	1.002Mbyte/s	0
18	ipcamera	1.068Mbyte/s	1.003Mbyte/s	0
19	XL70	1.028Mbyte/s	866Kbyte/s	0
20	XL75	34Kbyte/s	32Kbyte/s	0
21	192.168.0.109onvif	905Kbyte/s	911Kbyte/s	0
22	192.168.0.181onvif	510Kbyte/s	510Kbyte/s	0
23	192.168.0.116onvif	1002Kbyte/s	1003Kbyte/s	0
24	192.168.0.108onvif	1.032Mbyte/s	1011Kbyte/s	0
25	192.168.0.213onvif	501Kbyte/s	503Kbyte/s	0

Total Instant Value: 48.730Mbyte/s Total Record Value: 46.510Mbyte/s

Exit

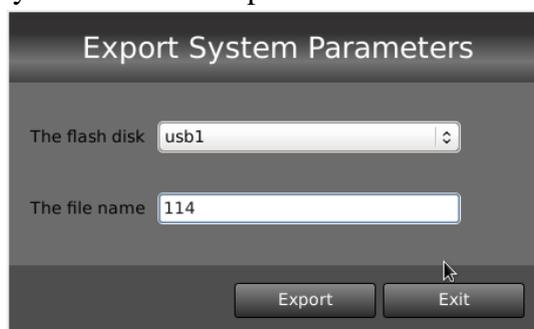
pic2-2-6(b)

Log Search: It will pop up the Log Search sub menu, showed as pic2-2-6(c). There are three log contents: IPC Alarm, Local Operation and Exception. You can filter the log by the three contents and its filter parameter.

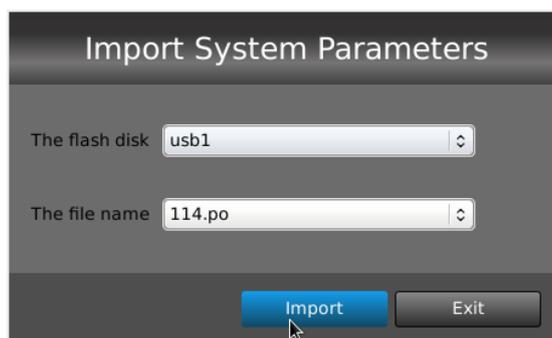


pic2-2-6(c)

Export system parameters: It will pop up the Export System Parameters shown as the following picture. Just please input the file name and click the button Export, the parameters of the system has been exported to the selected USB flash disk.



Import system parameters: It will pop up the Import System Parameters interface as shown blow. Just select the file you want to import and click the button Import, you can import the parameters what you want.

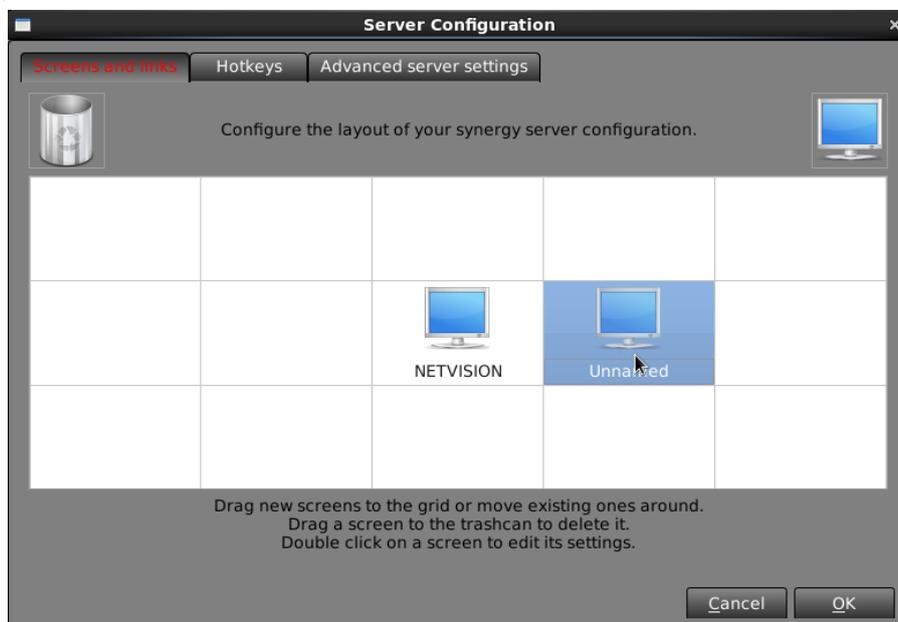


Synergy configuration: It will pop up the synergy configuration interface. You can share your multiple NVSS on your the server's desktop just move your mouse off the edge of one NVSS screen on to another.

a. Configure a server



The server will share its keyboard and mouse with clients. It need to know about all clients that will connect to it. To tell server about these clients, click "Configure Server".



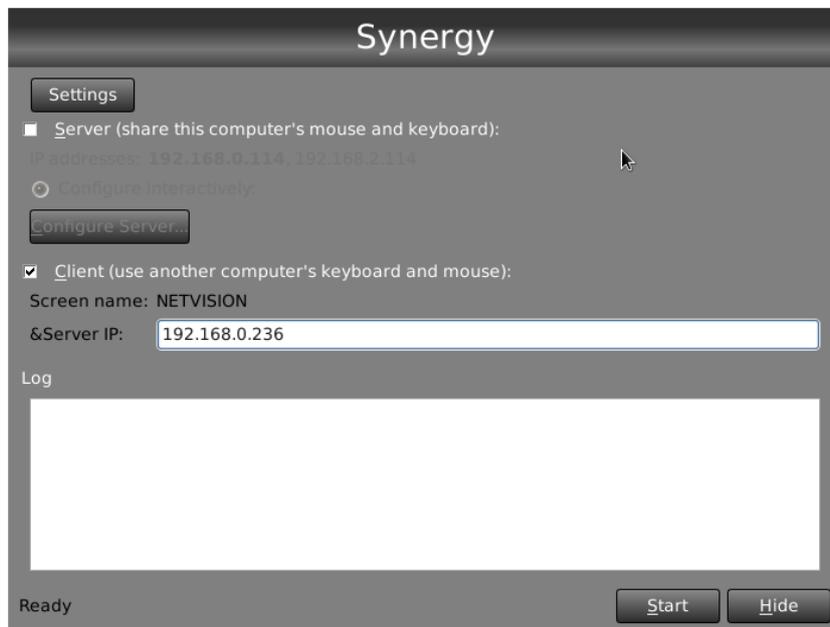
- To add a new client, drag a screen (top right) on the grid;
- To remove a client, drag the screen to the trash can (top left);
- To move a client, drag the existing screen to another cell.

Once you have added a client to your grid, it will have the name "Unnamed".

double click the icon to change its name to the name of your client, you can find or modify the client name by clicking its "Setting". You can add every client which you want to add by repeating the process.

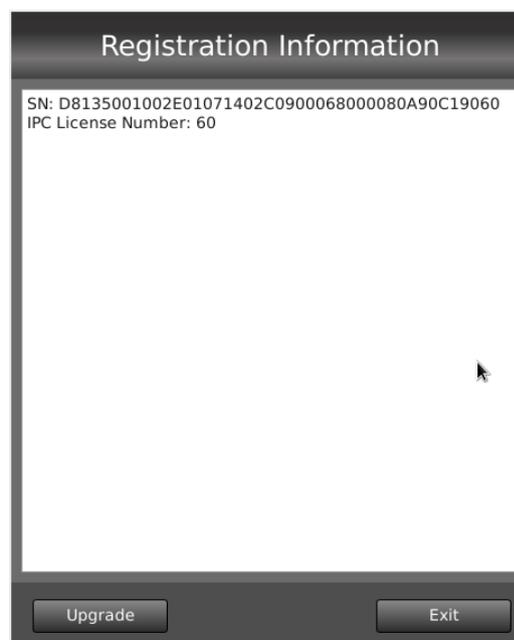
b. Configure a client

After you've configured your server, you need to connect each client to the server. In the "Server IP" text box, enter the IP address of the server.



Restart the Synergy: you can restart the synergy by click this item.

About Register: you can get the device's S/N and IPC License Number, showed as pic2-2-6(e). You can also upgrade by pressing "Upgrade" button to upgrade the license number of the system.



pic2-2-6(e)

7. Add Device

When you single click the Add Device, it will pop up the **Device Management**, showed as pic2-1. You can add, modify, delete and search IPC in the sub window.

8. Fast Playback

After you click **Fast Playback** in the context menu, it will pop up the Fast Playback shown as pic2-2-8(a).



pic 2-2-8(a)

 -- Press this button to open all playback windows in sequence according to the order of the cameras. When you start playing the records, the upper right of the interface will change to the interface like pic2-2-8(b) showed. You can also click the  button for each window to select camera to play.



pic2-2-8(b)

 -- Adjust the audio. The volume has been closed in default, you can click the  button to open the audio.

 -- press this button to close all cameras;

 -- press this button to pause;

 -- press this button to play;

 -- press this button to play next frame;

 --you can press these buttons to jump to the previous 1min/10min/60min video to continue to playback.

 ---you can press these buttons to jump to the next 1min/10min/60min video to continue to playback.

 -- -- Press this button to grab a picture, when a picture is grabbed, there will be a dialog pop up to ask for a file name.

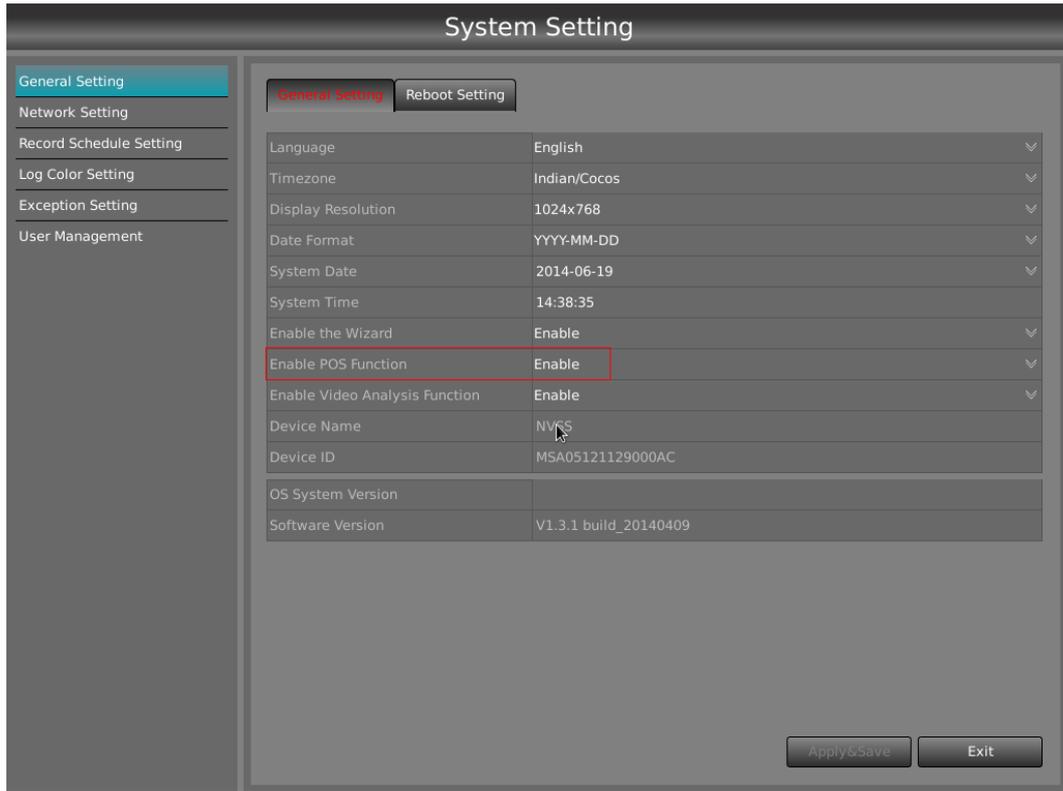
 -- Adjust playing speed. Click the  button to resume normal play speed.

9. Manual Record

Users can start or stop the manual record function by selecting **Manual Record**.

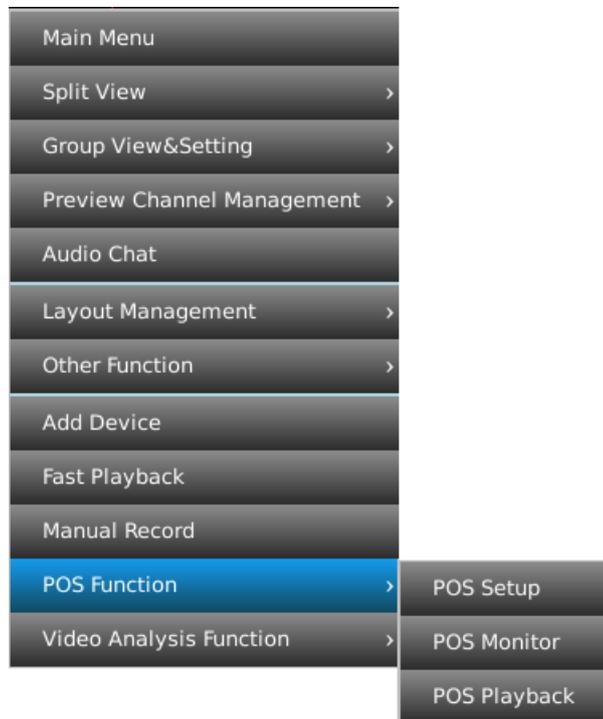
10. POS Function

Please enable “POS Function” in system setting first, showed as pic2-2-10(a).



pic2-2-10(a)

Then enter POS function setup interface by clicking “POS Function” in screen menu, showed as pic2-2-10(b).



pic2-2-10(b)

- **POS Setup**

Please select the POS Setup in screen menu, showed as pic2-2-10(b), press



button, you will enter the interface of POS setup.

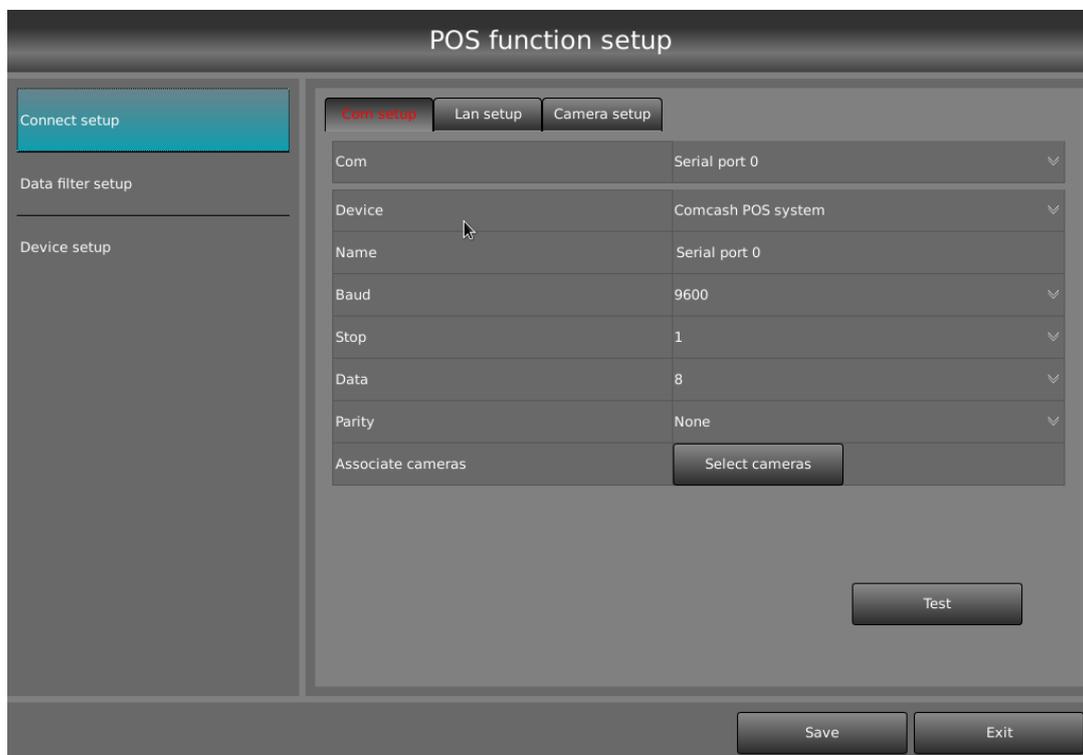
1. Connect Setup

There are two kinds of connection methods: *COM* and *LAN*.

COM: Use COM ports to connect the POS devices and the NVSS, transfer POS information through COM ports of the NVSS;

LAN: Use LAN network to connect the POS devices and the NVSS, transfer POS information through network.

a. COM setup



pic2-2-10(c)

All available Com ports are listed in tree view. Select the COM Port you used to connect the POS device.

Device: Select the Device connect to this COM Port.

Name: Set a name for current connection.

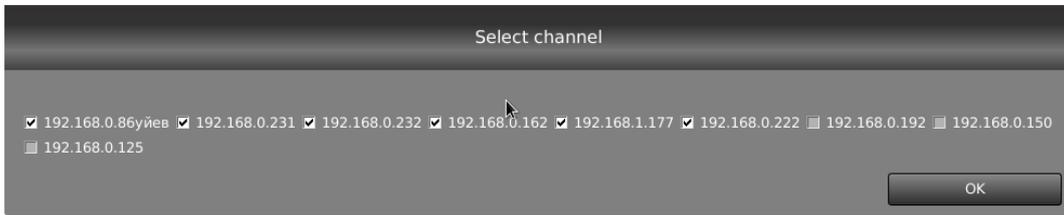
Baud: Set the baud rate for this COM Port.

Stop: Set the stop bit. It includes two: 0, 1.

Data: Set the data bit. It includes four: 5, 6, 7, 8.

Parity: Set the parity. It includes none, odd or event.

Associated cameras: Camera on which the POS information will be overlaid, please choose the Associated Camera / Cameras by pressing  button, showed as pic2-2-10(d).

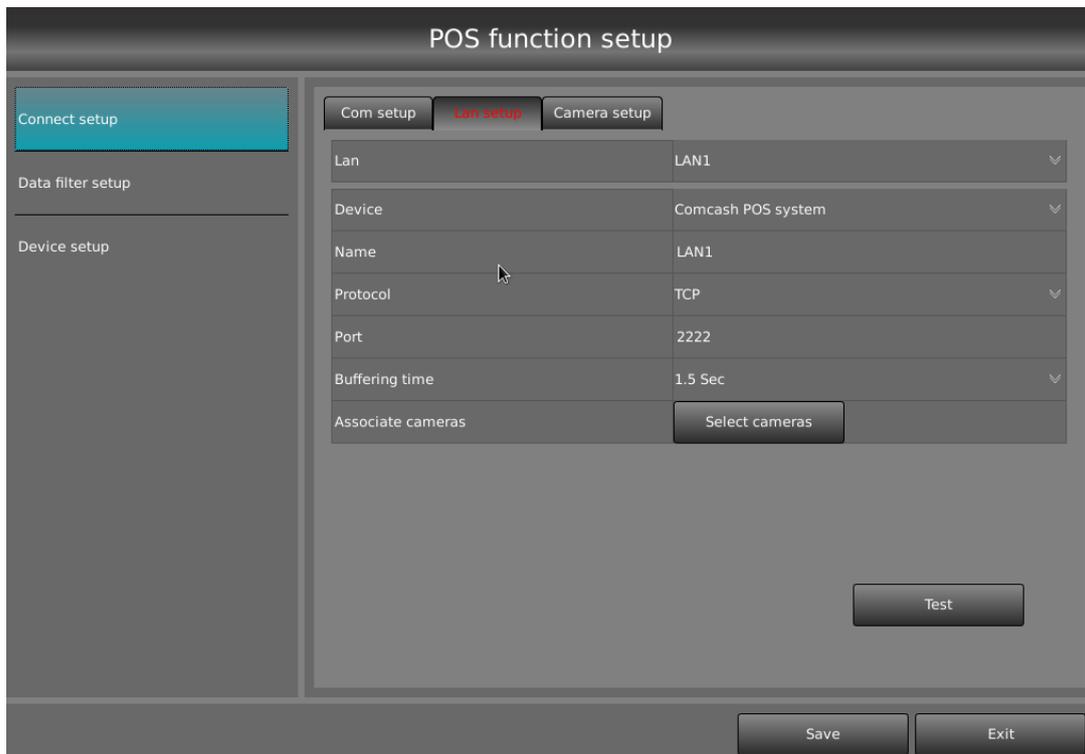


pic2-2-10(d)

 --This channel status means it was selected by other COM or LAN.

 -- This channel status means it is selected by current COM or LAN.

b. LAN setup



pic2-2-10(e)

In this mode, you can set Max.32 LAN networks at the same time to connect POS devices if it is necessary.

Device: Select the device connect to this LAN.

Name: Set a name for current connection.

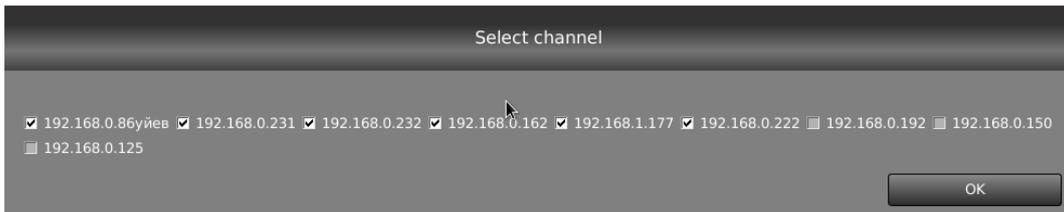
Protocol: Select a protocol from TCP, UDP.

Port: Set a port to connect.

Buffering Time: Set the buffering time as you want.

Associated Cameras: Camera on which the POS information will be overlaid,

please choose the Associated Camera / Cameras by pressing  button, showed as pic2-2-10(f).



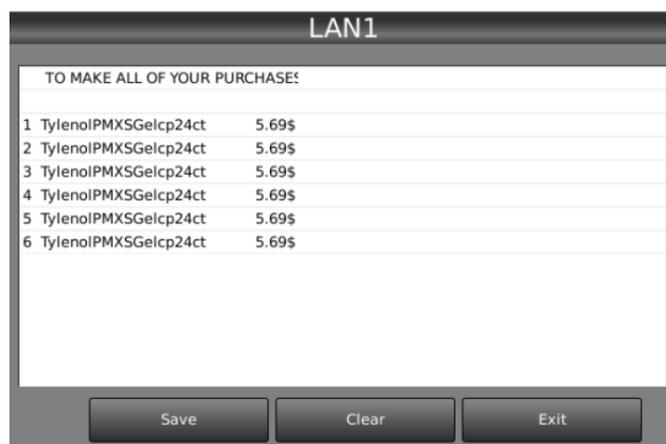
pic2-2-10(f)

 --This channel status means it was selected by other COM or LAN.

 -- This channel status means it is selected by current COM or LAN.

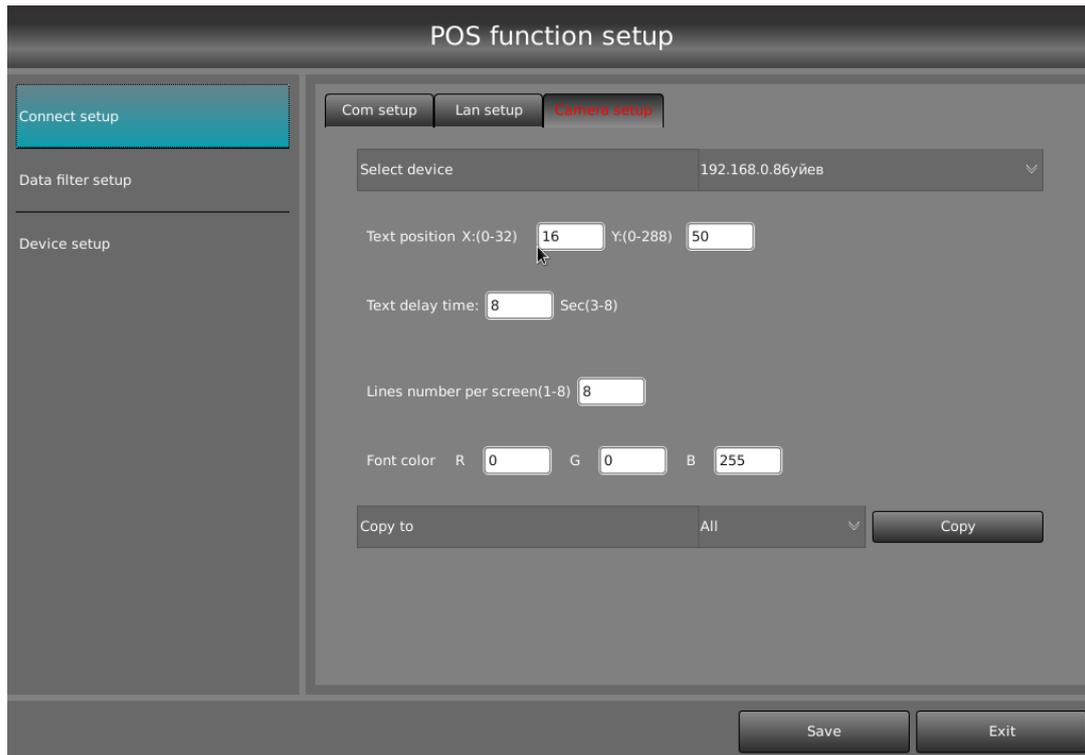
Press  button on the **Connect** interface, if system popup a window, that is to say, the connection is OK.

When text data is sent from POS, the data will be shown on the window, showed as pic2-2-10(g), user can press  button to begin saving and press it again to end saving. Press  button to exit.



pic2-2-10(g)

c. Camera Setup



pic2-2-10(h)

Firstly, choose camera number that you want in **Select device** list.

Text Position: Set the position of text. Default is set to upper left of the screen. As number increases, text will be displayed farther from the top.

Text delay time: Set time (sec 3-8) for text to stay on screen.

Lines number per screen: Set the desired lines (1-8) to display text. Disabled if “by transaction” is displayed.

Font Color: Set the color of the font by setting the different value of RGB.

Copy to: Users can copy the current setup to other channels. It can copy to any other camera or all devices.

2. Data Filter Setup

Press **Data filter setup** button and select the device (you want to set, such as Comcash POS System) to set POS text filter rule:

a. Line Break



pic2-2-10(i)

Set a rule for separating each line.

Priority: Default priority 1, user can't modify it.

Type: Choose a type of data. Data types must be either 'Hex' or 'ASCII'.

Position/Offset: Select a position to search the data string (ex. Start to search from begging ---- not useful right now)

Operation: Select an operator to be used when comparing 'Data' with data from POS.

Data: Set Data that will trigger the operation.

When system receives the character or string, which is equal to the setting here, system will process these characters as below:

Only line break character or string set here – discard;

Any other characters and string before line break character or string set here – discard line break character or string and display the other characters or strings and change to new line.

b. Include

Set a rule for a line with a string or character to be displayed.

Priority: Set the priority of this rule.

Type: Choose a type of data. Data types must be either 'Hex' or 'ASCII'.

Position/Offset: Select a position to search the data string (ex. Start to search from begging ---- not useful right now)

Operation: Select an operator to be used when comparing 'Data' with data from POS.

Data: Set Data that will trigger the operation.



pic2-2-10(j)

c. Exclude



pic2-2-10(k)

Set a rule for a line with a string or character to be not displayed.

Priority: Set the priority of this rule.

Type: Choose a type of data. Data types must be either 'Hex' or 'ASCII'.

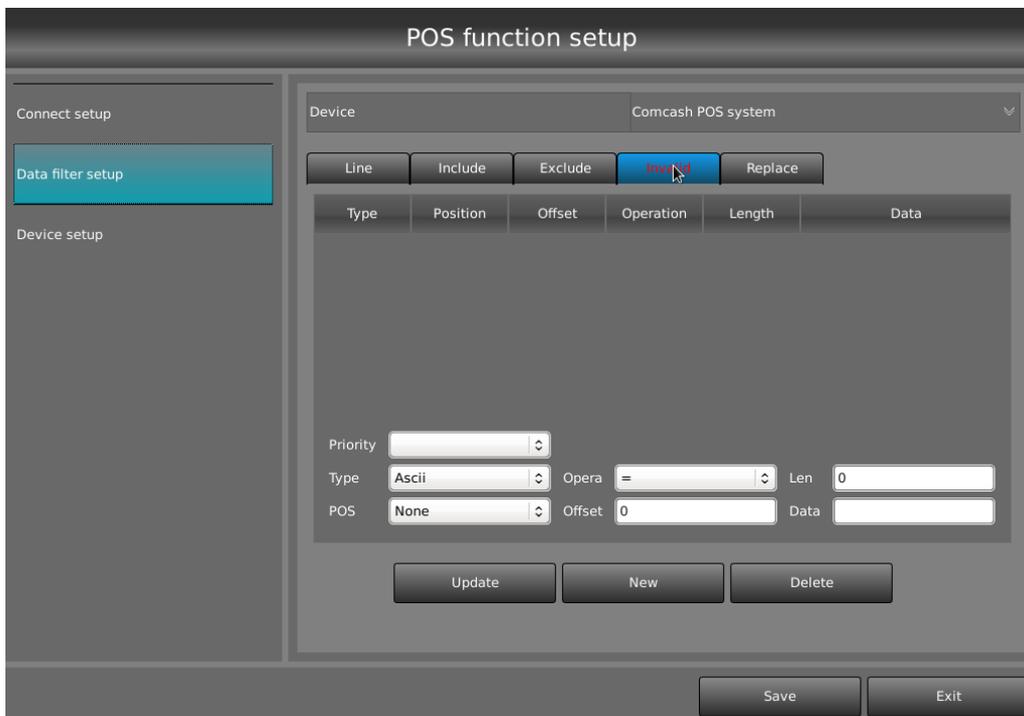
Position/Offset: Select a position to search the data string (ex. Start to search

from begging ---- not useful right now)

Operation: Select an operator to be used when comparing 'Data' with data from POS.

Data: Set Data that will trigger the operation.

d. Invalid



pic2-2-10(1)

Set a rule to discard a string or character.

Priority: Set the priority of this rule.

Type: Choose a type of data. Data types must be either 'Hex' or 'ASCII'.

Position/Offset: Select a position to search the data string (ex. Start to search from begging ---- not useful right now)

Operation: Select an operator to be used when comparing 'Data' with data from POS.

Data: Set Data that will trigger the operation.

e. Replace

Set a rule to make the character or string to be replaced.

Priority: Set the priority of this rule.

Type: Choose a type of data. Data types must be 'Hex' or 'ASCII'.

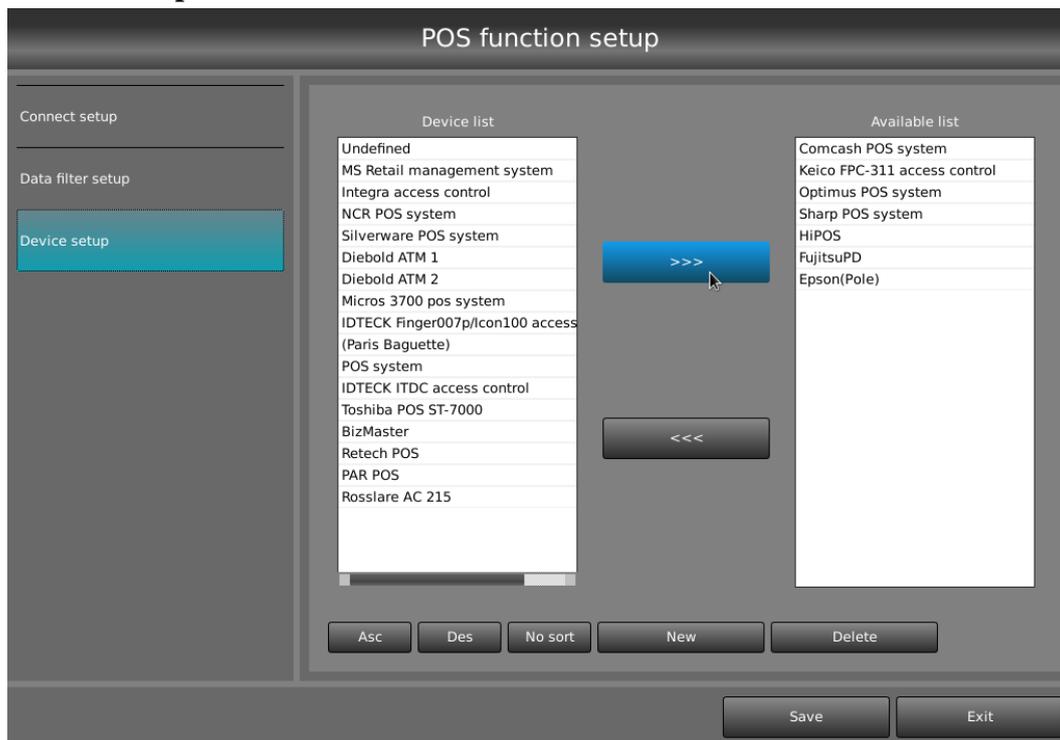
Old: Enter data string that needs to be replaced.

Data: Enter a new data string that will take a place of the Old Data.



pic2-2-10(m)

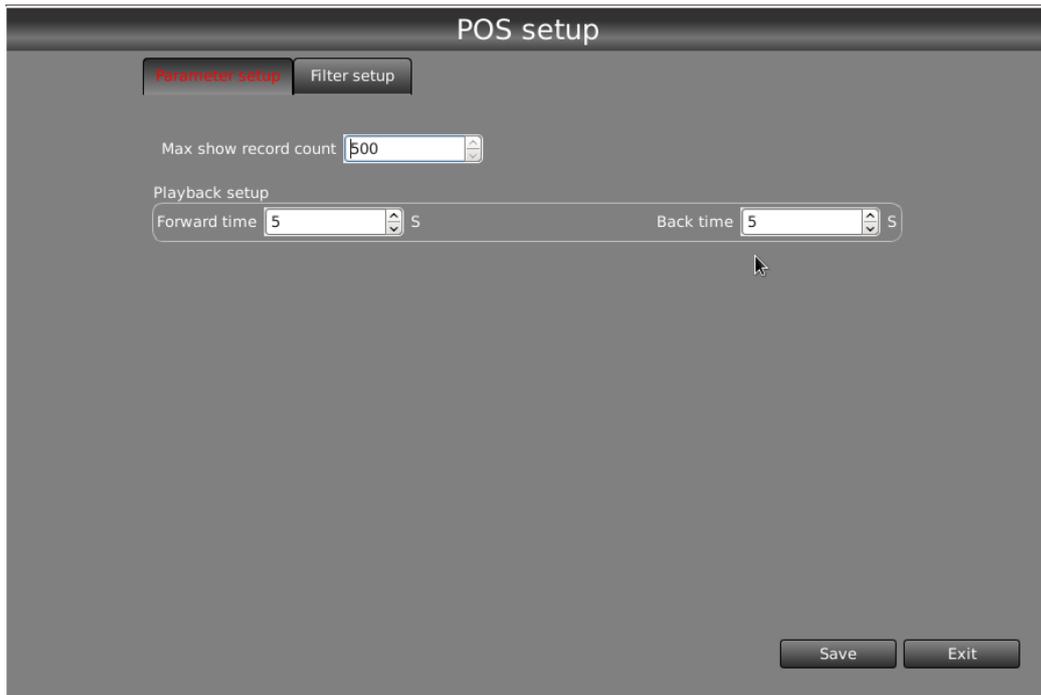
3. Device Setup



pic2-2-10(n)

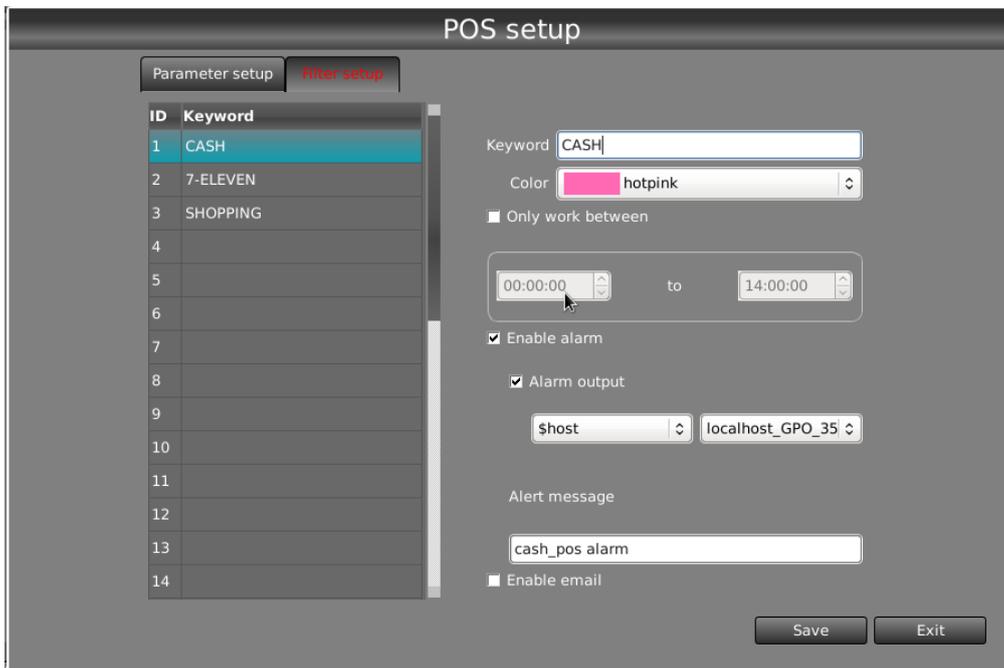
Press this button **Device setup** to open device setup interface, showed as pic2-2-10(i), user can add/delete device in the left list.

Press **New** button, system will add a device named “New



pic2-2-10(p)

2. Filter Setup



pic2-2-10(q)

User can set the POS Field Filter in this interface, showed as pic2-2-10(l).

Keyword: Users can set keyword here, such as CASH.

Color: Set the color for the keyword that you set.

Only work between: Set the work time, such as: if set the color of SHOPPING to be green and the work time between 00:00:00 and 23:59:59, when the SHOPPING

appears in this period, it will be displayed in green on screen, showed as pic2-2-10(m).

Enable alarm: After enable it and set the alert message what you want to display, when the keyword appear, it will trigger the alarm out, and display the message, showed as pic2-2-10(n).

Enable email: Users can click the check box to enable it, when the keyword appeared, it will send email automatically.

POS monitor

ID	Time	Alarm	Content
1	2014/6/19 16:24:23	2222	THANK YOU FOR SHOPPING AT
2	2014/6/19 16:24:24	11111111...	YOUR LOCAL 7-ELEVEN
3	2014/6/19 16:24:25		**** REPRINT ****
4	2014/6/19 16:24:26		T#02 OP25 TRN4986 04/04/06 02:00 pm
5	2014/6/19 16:24:27	11111111...	7-ELEVEN
6	2014/6/19 16:24:28		1339 N VASCO RD
7	2014/6/19 16:24:29		LIVERMORE CA 945509287
8	2014/6/19 16:24:30		9256067751
9	2014/6/19 16:24:31		STORE#: 32266
10	2014/6/19 16:24:32	11111111...	USE YOUR 7-ELEVEN CONVENIENCE CARD
11	2014/6/19 16:24:33		TO MAKE ALL OF YOUR PURCHASES!
12	2014/6/19 16:24:34		
13	2014/6/19 16:24:35		--== RET URN TRANSACTION ==--
14	2014/6/19 16:24:36		1 TylenolPMXSGelcp24ct -5.69\$
15	2014/6/19 16:24:37		
16	2014/6/19 16:24:38		SUBTOTAL -5.69\$
17	2014/6/19 16:24:39		SALES TAX ON -5.69 -0.47\$
18	2014/6/19 16:24:40		REFUND DUE -6.16\$
19	2014/6/19 16:24:41	cash pos ...	CASH -6.16\$

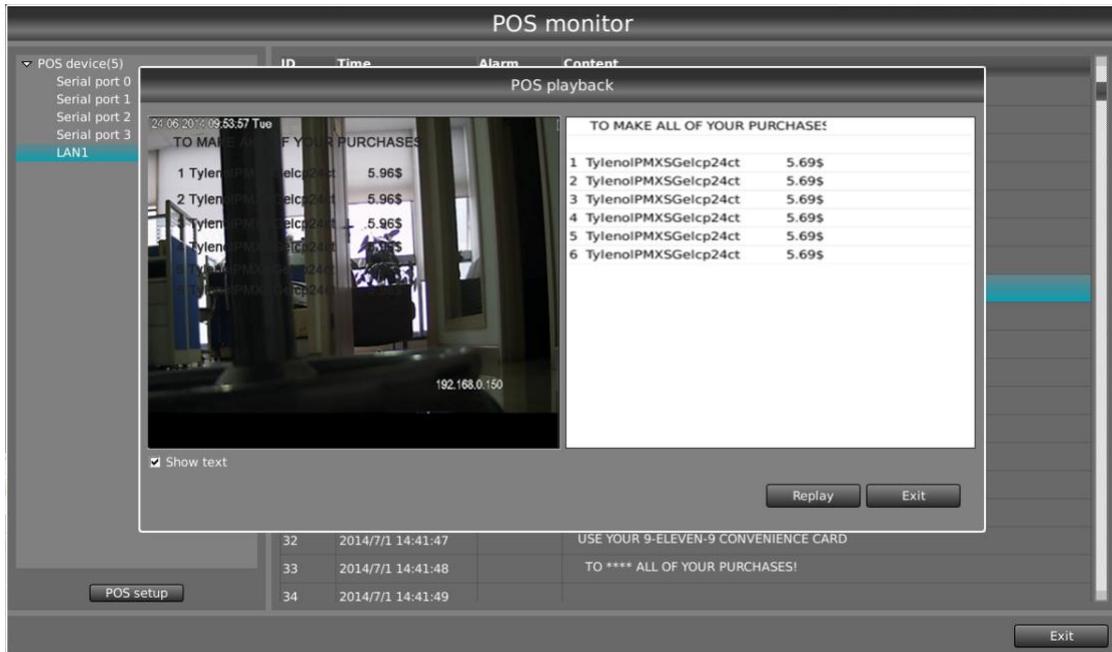
pic2-2-10(r)

POS monitor

ID	Time	Alarm	Content
1	2014/6/19 16:24:23	2222	THANK YOU FOR SHOPPING AT
2	2014/6/19 16:24:24	11111111...	YOUR LOCAL 7-ELEVEN
3	2014/6/19 16:24:25		**** REPRINT ****
4	2014/6/19 16:24:26		T#02 OP25 TRN4986 04/04/06 02:00 pm
5	2014/6/19 16:24:27	11111111...	7-ELEVEN
6	2014/6/19 16:24:28		1339 N VASCO RD
7	2014/6/19 16:24:29		LIVERMORE CA 945509287
8	2014/6/19 16:24:30		9256067751
9	2014/6/19 16:24:31		STORE#: 32266
10	2014/6/19 16:24:32	11111111...	USE YOUR 7-ELEVEN CONVENIENCE CARD
11	2014/6/19 16:24:33		TO MAKE ALL OF YOUR PURCHASES!
12	2014/6/19 16:24:34		
13	2014/6/19 16:24:35		--== RET URN TRANSACTION ==--
14	2014/6/19 16:24:36		1 TylenolPMXSGelcp24ct -5.69\$
15	2014/6/19 16:24:37		
16	2014/6/19 16:24:38		SUBTOTAL -5.69\$
17	2014/6/19 16:24:39		SALES TAX ON -5.69 -0.47\$
18	2014/6/19 16:24:40		REFUND DUE -6.16\$
19	2014/6/19 16:24:41	cash pos ...	CASH -6.16\$

pic2-2-10(s)

Select a line of POS text and double-click it. It will popup a window to play the video with this text overlaid, showed as below:



pic2-2-10(t)

The left side of window will display the image of camera, the right side of window will display the text, you also can show the text on the image of one camera by checking the Show text .

The video will display the period bases on the Forward time and Back time which be set in parameter setup.

● POS Playback

Click  in screen menu to enter multi-channel POS playback page, showed as below:

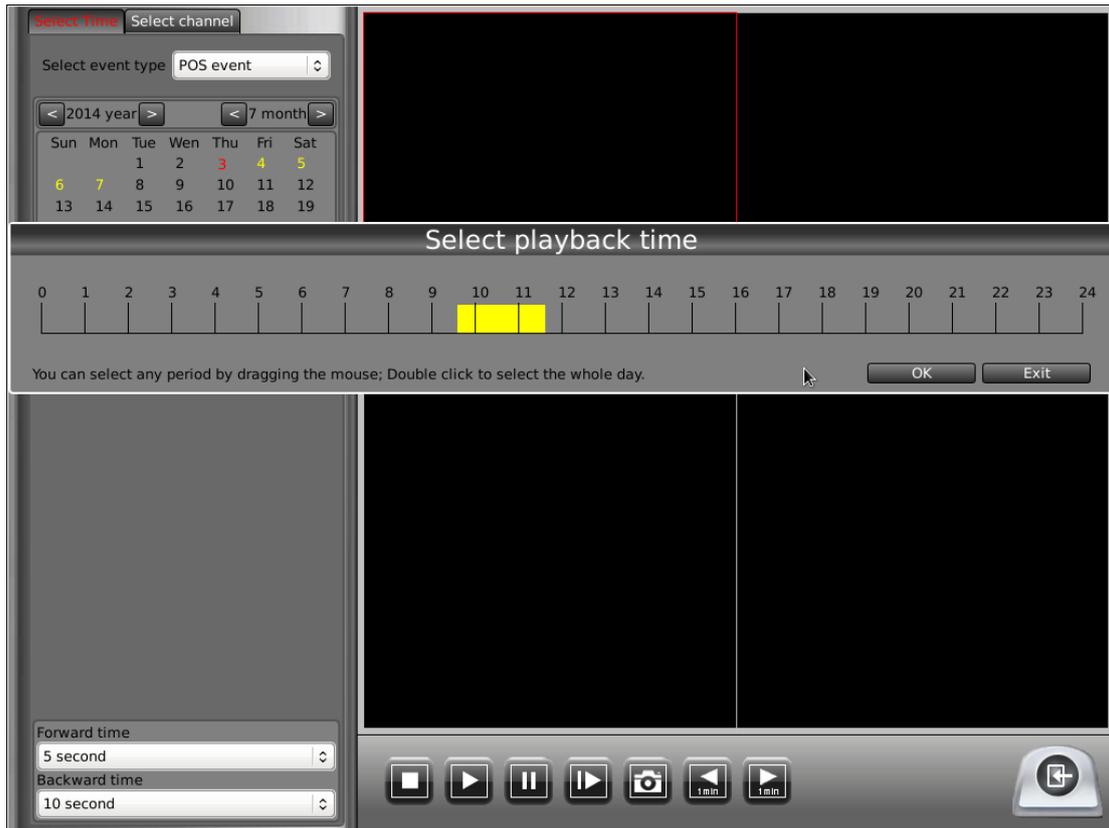
At first, select one event type to search.

Then, select the date, you can select the year, month and day which you want to search. The yellow days means it has records, you can click the yellow date to select the assigned period as pic2-2-10(u) shown.

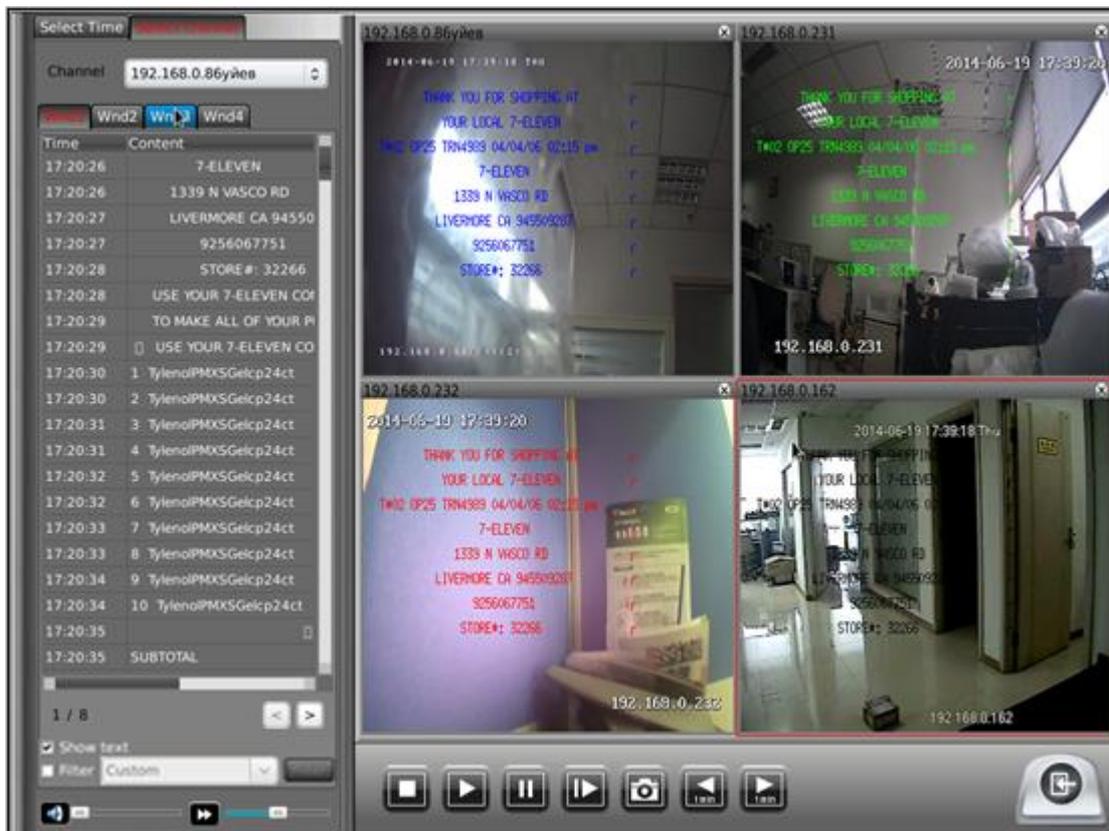
Forward Time: set the forward time of the video.

Backward Time: set the backward time of the video.

You can search as many as four channels together in several days. After one window is selected via clicking the black window on the right, you can double click the camera in the frame to display its video and text. You can display any camera in any window as pic2-2-10(v) shown.



pic2-2-10(u)



pic2-2-10(v)

Channel: Select one channel to playback its POS data;

Show Text: when you check-in, it will show POS text on the playback window;
Filter: It will list all the keywords you set in **Filter Setup** (refer to pic2-2-10(q)), users can select one to search the POS message contain this keyword. Also users can input any word you want to filter.



-- Adjust the audio;



-- Adjust the playing speed;



-- Press this button to close all cameras;



-- Press this button to play;



-- Press this button to pause;



-- Press this button to play next frame;



-- Press this button to grab a picture, when a picture is grabbed, there will be a dialog pop up to ask for a file name.

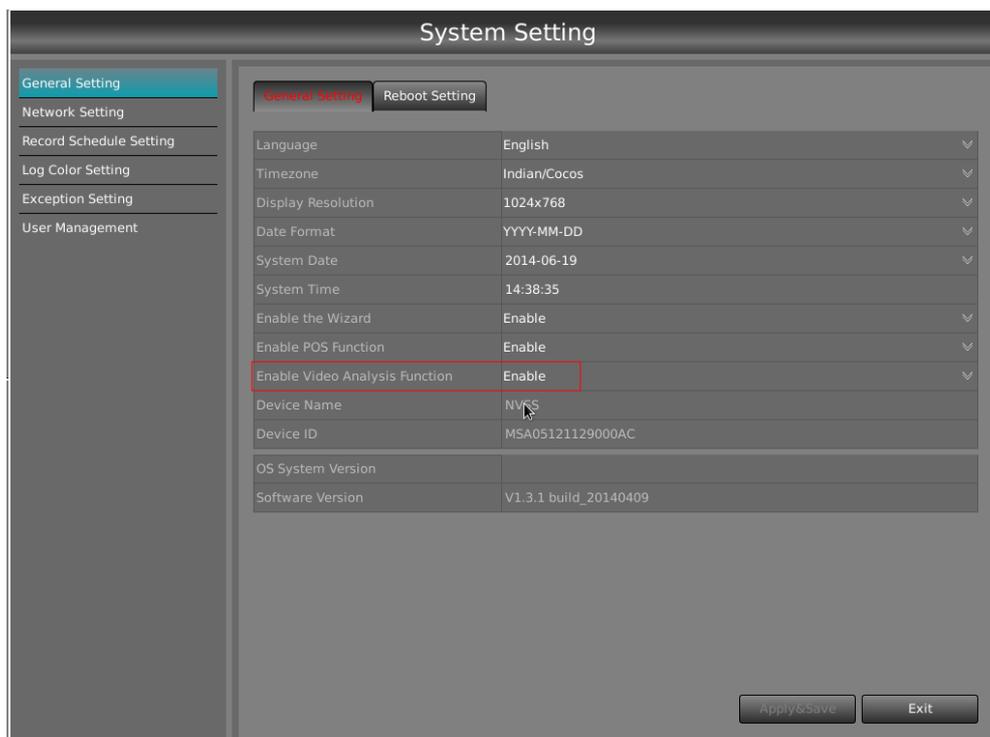


-- Preview 1min;



-- Next 1min.

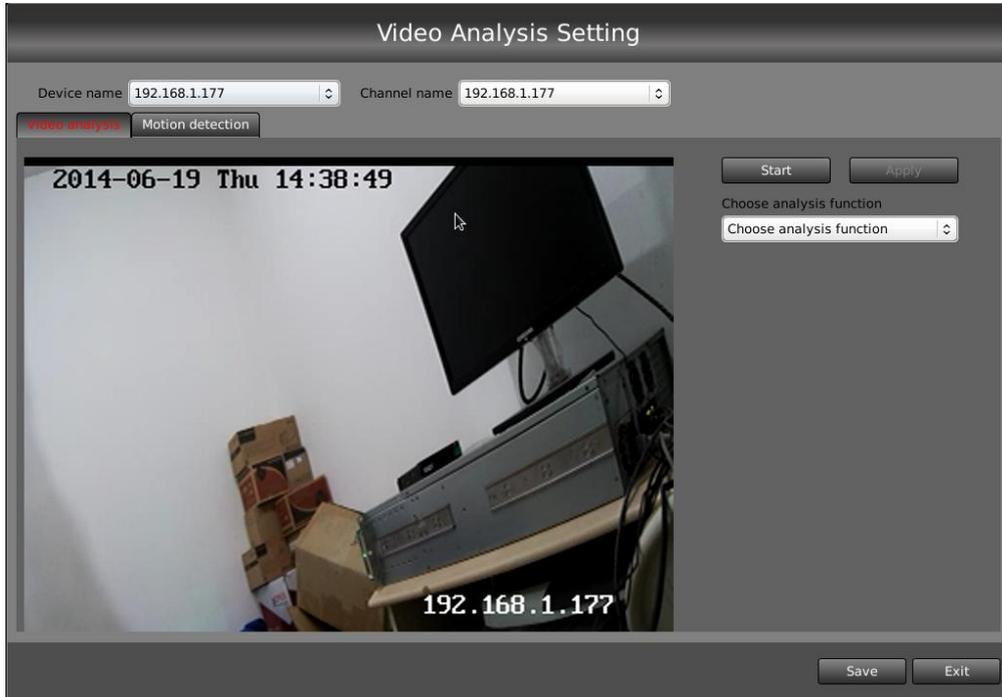
11. Video Analysis Function



pic2-2-11(a)

After you enter the system setting to enable the video analysis function, showed as pic2-2-11(a) shown.

Then you can single right click to enter the interface of video analysis setting. Showed as pic 2-2-11(b) shown.



pic 2-2-11(b)

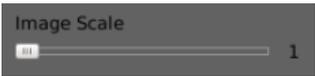
- **Video Analysis**

There are 7 intelligent video analysis functions: Unattended Object Detection, Missing Object Detection, Movement Direction Detection, Intrusion Detection, Tripwire Detection, Face Detection, Object Counting.

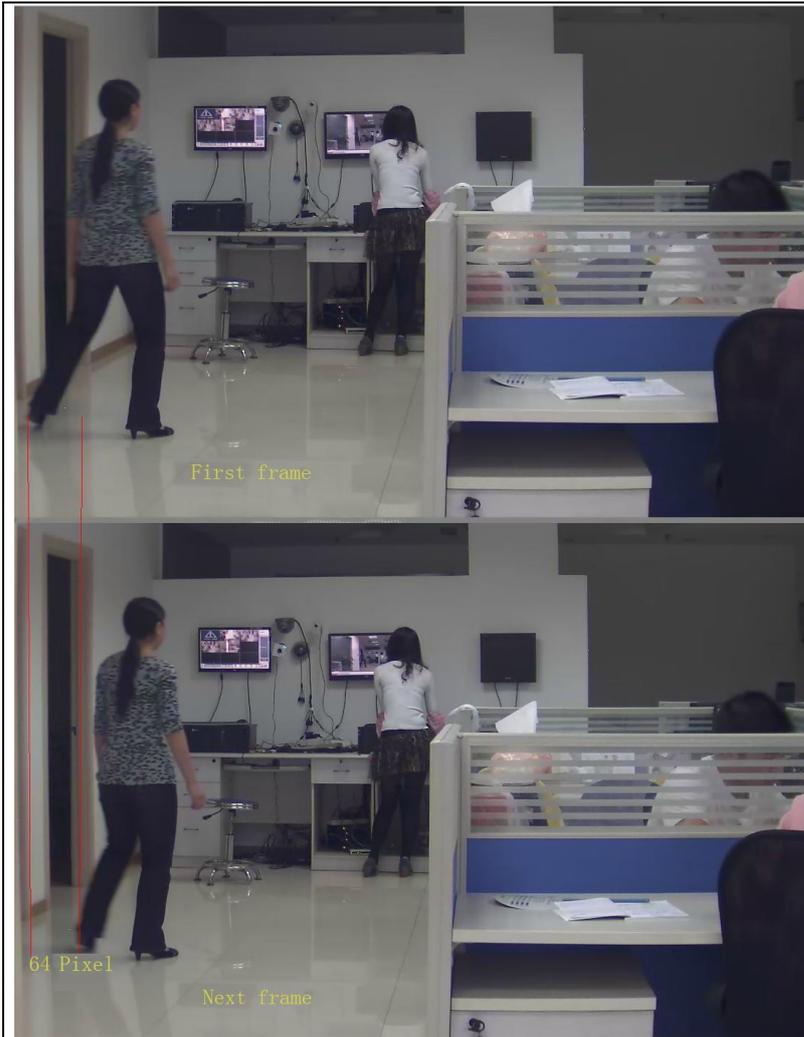
Notes:

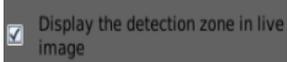
You can only select Video Analysis Function from the drop-down list by checking the .

a. Parameters Introduction

1		The image scale bar is used to adjust the resolution of the image for video analysis. The lower the value, the more close to the original image resolution. For example: the resolution of the source video is 1024*768 , you set the image scale as 2, then the length and width will be shrunk to 1/2 of original resolution, about 512*384 for detection. It is 1 by default.
---	---	--

2		<p>The sensitivity bar is used to adjust the sensitivity of the area you selected. The lower the value, the more sensitive the system. It is 10 by default.</p>
3		<p>The volume ratio bar is used to set the minimum acreage of detection zone to trigger alarm. Its unit is percent, if the acreage of missing or unattended area exceeds the setting value of the areas you selected, system will trigger alarm. The default value is 2%</p>
4		<p>The Sub grid ratio bar is used to set the minimum acreage of each 32*32 pixel. Its unit is percent, if the acreage of motion object exceeds the setting value of a 32*32 unit. The unit will be active. The default value is 10%.</p>
5		<p>This option allows you to specify the duration time of an object missing or unattended to invoke the detection</p>
6		<p>The minimum area can be detected. You can click the  button, then use the mouse to outline the minimum detection region on the screen.</p> <p>Click the  button again to get the minimum detection region.</p>
7		<p>The maximum area can be detected. The opposite settings as minimum size setting.</p>
8		<p>The direction you have set. Click the  button, use the mouse to outline the arrow on the screen, the arrow indicates direction.</p> <p>Click the  button again to get the direction value.</p> <p>Notes: Only the last draw direction is available.</p>
9		<p>The Pixel offset value, Its unit is pixel, allow a certain of object movement offset. For example you set the value 3, if one object moves in a range of 3 pixels, it will be seen as did not move, on the opposite it will be seen as moved.</p>



9		<p>If the view of camera is outside door, please set the mode as Out Door, on the opposite please set the mode as In Door.</p>
10		<p>The Movement Speed value bar is used to adjust the objects' movement speed. If the detected objects move fast, please set the value faster. On the opposite please set the value slower.</p>
11		<p>Enable the software to start Intelligent Video Analysis function. Click the  button to set the time schedule for intelligent video analysis function.</p>
12		<p>Enable the software to trigger an alarm output. Click the  button to assign output device.</p>
13		<p>You can display the detection zone in live image by checking “V” in .</p>

b. Unattended Object Detection



pic Unattended object detection

To detect any unattended objects within the camera view, following the steps below:

1. Click  and select Unattended Object Detection from the drop-down list.
2. Click the  button then single-left-click on the video to start drawing the detection area, you should left-click mouse at each corner, and single-right-click to stop drawing, you can draw any irregular zone as you like and you can draw several detection zones.
3. You can delete the detection zone by clicking the  button.
4. Setup the suitable Image Scale, Sensitivity, Volume Ratio, Duration Time, it is suggested to keep the default value.(Reference: Parameters Introduction)
5. Choose Trigger Output for application. (Reference: Parameters Introduction)
6. Click the  button to start the function.
7. If you have modified the parameters, please click the  button to save them.
8. While you click the Start or Apply button, the system will automatically capture the image for reference, you can see the image by clicking the  button.

When any unattended object appears and remains stationary for the duration time, a warning message will appear and its location will be highlighted with red box in live video, the selected alarm audio and output will be activated, and the event will be recorded as unattended object in system Log for later retrieval.

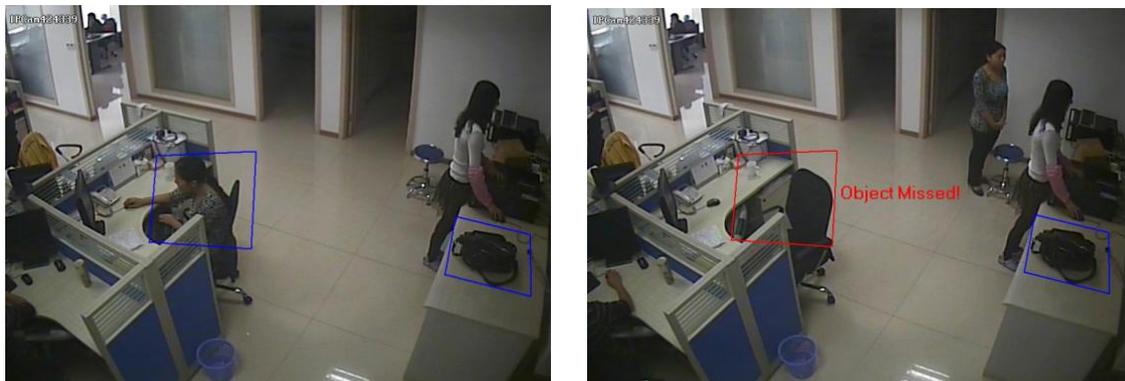
Application: Applied in airport, oil field and other high-risk fields.

Note:

You can also stop the alarm manually by single-right-click its preview screen and

click the “Clear Alarm” option.

c. Missing Object Detection



pic Missing object detection

To detect any missing objects within the camera view, follow the steps below:

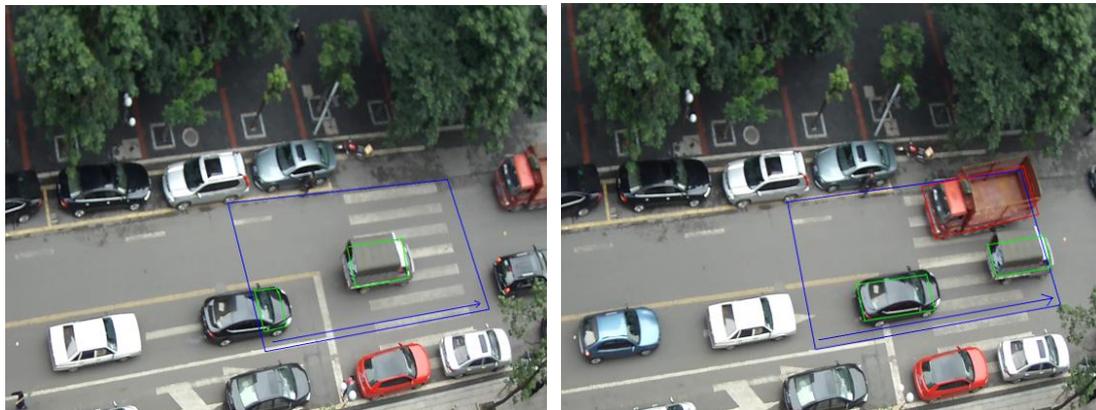
1. Click  and select Missing Object Detection from the drop-down list
2. Click the  button then single-left-click on the video to start drawing the detection area, you should left-click mouse at each corner, and single-right-click to stop drawing, you can draw any irregular zone as you like and you can draw several detection zones.
3. You can delete the detection zone by clicking the  button.
4. Setup the suitable Image Scale, Sensitivity, Volume Ratio, Duration Time, it is suggested to keep the default value.(Reference: Parameters Introduction)
5. Choose Trigger Output for application. (Reference: Parameters Introduction)
6. Click the  button to start the function.
7. If you have modified the parameters, please click the  button to save them.
8. While you click the Start or Apply button, the system will automatically capture the image for reference, you can see the image by clicking the  button.

When any object, which you have outlined the regions for, disappears from the camera view for 3 seconds, a warning message will appear and its location will be highlighted with red box in the live video, the selected alarm and output will be activated, and the event will be recorded as missing object in system Log for later retrieval

Application: Applied in the museum, the exhibition and other places which have

the valuable things.

d. Movement Direction Detection



pic Movement direction detection

To detect movement direction within the camera view, follow the steps below:

1. Click and select Movement Direction

Detection from the drop-down list

2. Click the button then single-left-click on the video to start drawing the detection area, you should left-click mouse at each corner, and single-right-click to stop drawing, you can draw any irregular zone as you like and you can draw several detection zones.

3. You can delete the detection zone by clicking the button.

4. Setup the suitable Image Scale, Sensitivity, Volume Ratio, Duration Time, it is suggested to keep the default value. (Reference: Parameters Introduction)

5. Choose Trigger Output for application. (Reference: Parameters Introduction)

6. Click the button to start the function.

7. If you have modified the parameters, please click the button to save them.

when any object appear in the detection zone, move reverse direction of the arrow you have drawn, its location will be highlighted with red box in the live video, the selected alarm audio and output will be activated, and the event will be recorded as movement direction alarm in system Log for later retrieval

Notes:

In live image, the Red box meaning there are alarm objects in detection zone, green box meaning there are objects in detection zone.

Application: Applied in road and other places which allow one-way movement.

e. Intrusion Detection



pic Intrusion detection

To detect intrusion within the camera view, follow the steps below:

1. Click  and select Intrusion Detection from the drop-down list
2. Click the  button then single-left-click on the video to start drawing the detection area, you should left-click mouse at each corner, and single-right-click to stop drawing, you can draw any irregular zone as you like and you can draw several detection zones.
3. You can delete the detection zone by clicking the  button.
4. Setup the suitable Image Scale, Sensitivity, Volume Ratio, Duration Time, it is suggested to keep the default value.(Reference: Parameters Introduction)
5. Choose Trigger Output for application. (Reference: Parameters Introduction)
6. Click the  button to start the function.
7. If you have modified the parameters, please click the  button to save them.

When any object intrude the detection zone you have drawn, its location will be highlighted with red box in the live video, the selected alarm audio and output will be activated, and the event will be recorded as Intrusion detection alarm in system Log for later retrieval.

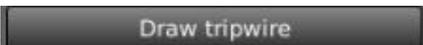
Application: Applied in the heavily guarded military centers or bank, the museum and other places which need prevention appear suspicious characters.

f. Tripwire Detection



pic Tripwire detection

To detect tripwire within the camera view, follow the steps below:

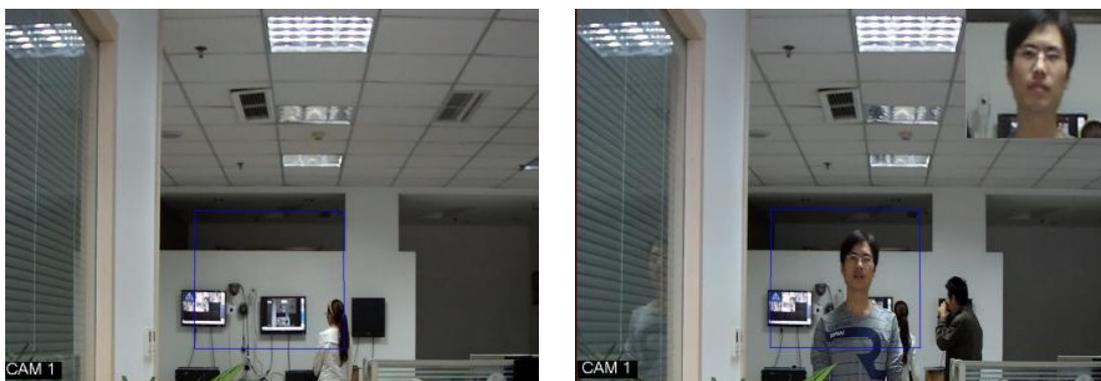
1. Click  and select Intrusion Detection from the drop-down list
2. Click the  button then single-left-click on the video to start drawing the detection area, you should left-click mouse at each corner, and single-right-click to stop drawing, you can draw any irregular zone as you like and you can draw several detection zones.
3. You can delete the detection zone by clicking the  button.
4. Click the  button draw tripwire, only the last draw tripwire is available.
5. Click the  button, use the mouse to outline the arrow on the screen, the arrow indicates direction. Click the  button again to get the direction value. Only the last draw direction is available.
6. Setup the suitable image scale, sensitivity, minimum size, maximum size, angle, minimum offset. It is suggested to keep the default value.(Reference: Parameters Introduction)
7. Choose Trigger Output for application. (Reference: Parameters Introduction)
8. Click the  button to start the function.
9. If you have modified the parameters, please click the  button to save them.

When any object step on the tripwire and move reverse direction of the arrow you have drawn, its location will be highlighted with red box in the live video, the selected alarm audio and output will be activated, and the event will be recorded as

tripwire detection alarm in system Log for later retrieval

Application: Applied in prevention through border, fence, through the subway route and other places.

7. Face Detection



pic Face detection

To detect face within the camera view, follow the steps below:

1. Click  and select Face Detection from the drop-down list
2. Click the  button then single-left-click on the video to start drawing the detection area, you should left-click mouse at each corner, and single-right-click to stop drawing, you can draw any irregular zone as you like and you can draw several detection zones.
3. You can delete the detection zone by clicking the  button.
4. Setup the suitable Image Scale, Sensitivity, Volume Ratio, Duration Time, it is suggested to keep the default value.(Reference: Parameters Introduction)
5. Choose Trigger Output for application. (Reference: Parameters Introduction)
6. Click the  button to start the function.
7. If you have modified the parameters, please click the  button to save them.

When people appear in the detection zone, the face detection works and detects and records human faces. Then the thumbnail images will appear on the live image.

Notes:

1. Face contour must be clearly seen, especially the eyes.
2. If you wearing sunglasses or black box glasses, it may influence face detection accuracy.



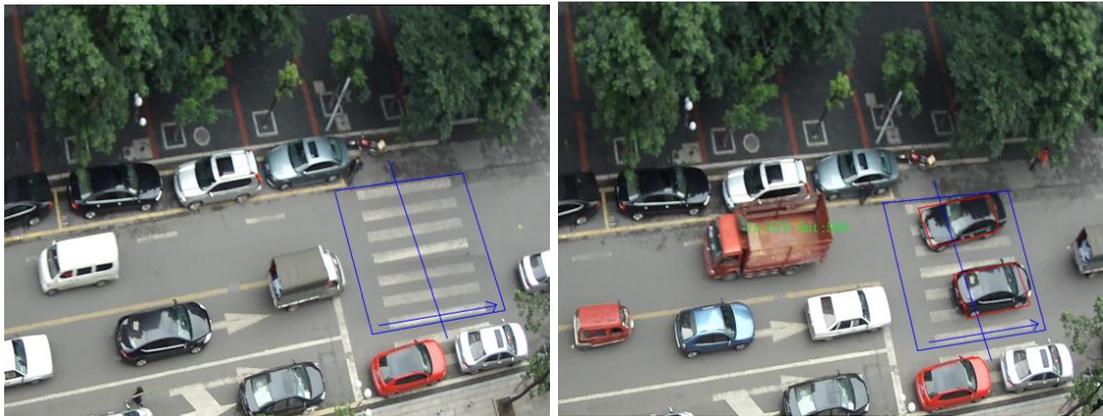
3. If you look at the camera like this:



recognizes the face. But if you look at an angle, like 45 degrees then the software can not recognize the face.

Application: Applied in the entrance guard system, bank and other places which need record the people's faces.

8. Object Counting



pic Object counting

To count object within the camera view, follow the steps below:

1. Click and select Object Counting from the drop-down list

2. Click the button then single-left-click on the video to start drawing the detection area, you should left-click mouse at each corner, and single-right-click to stop drawing, you can draw any irregular zone as you like and you can draw several detection zones.

3. You can delete the detection zone by clicking the button.

4. Click the button draw tripwire, only the last draw tripwire is available.

5. Click the  button, then use the mouse to outline the arrow on the screen, the arrow indicates direction. Click the  button again to get the direction value. Only the last draw direction is available.

6. Setup the suitable image scale, sensitivity, minimum size, maximum size, angle, minimum offset. It is suggested to keep the default value. (Reference: Parameters Introduction)

7. Choose Trigger Output for application. (Reference: Parameters Introduction)

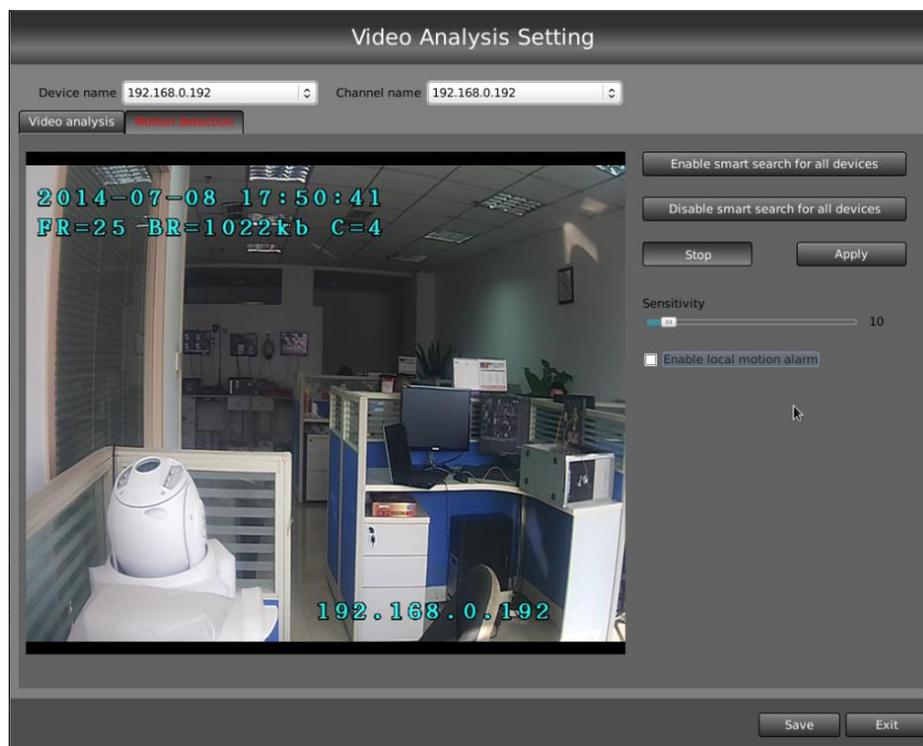
8. Click the  button to start the function.

9. If you have modified the parameters, please click the  button to save them.

The object counting provides bi-directional counting of objects under the surveillance area. The arrow indicates direction, when an object appears in the detection zone, step on the tripwire and moves along the direction of the arrow, it will be counted as 1 out, when an object appears in the detection zone, step on the tripwire and moves reverse direction of the arrow, it will be counted as 1 in.

Application: Applied in the market, the highway and other places which need monitoring flows.

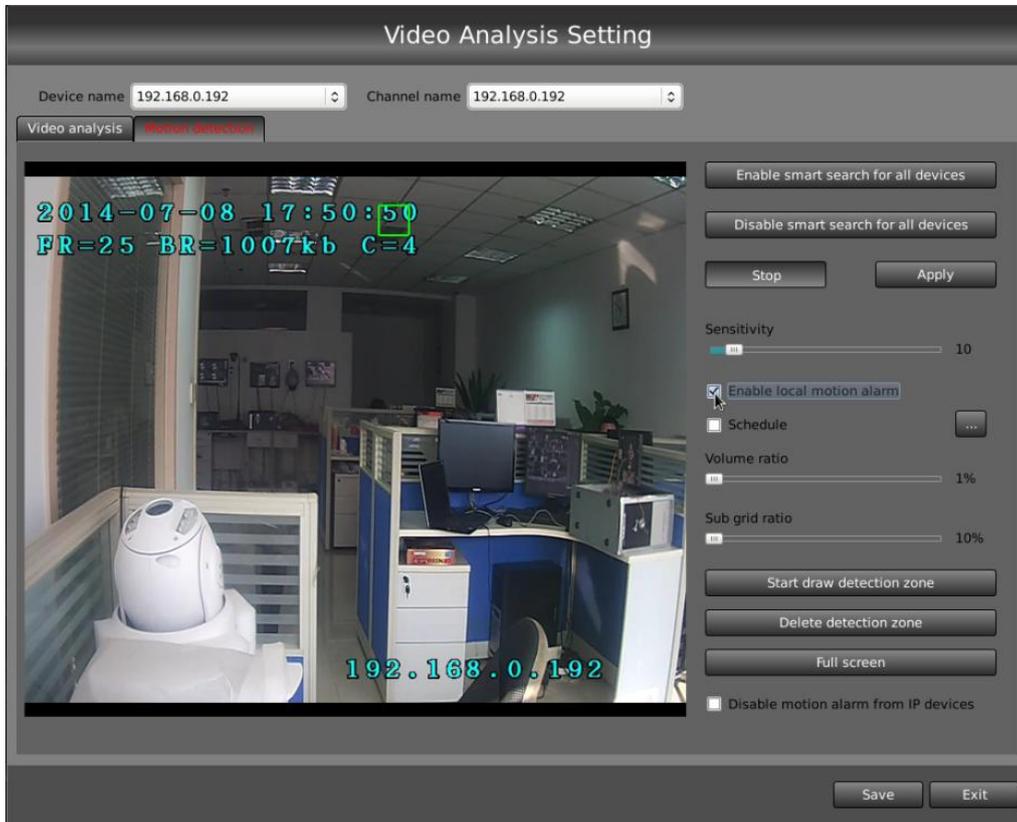
- **Motion Detection**



pic2-2-11(c)

 --start all devices' motion detection for smart search.

Disable smart search for all devices --stop all devices' motion detection for smart search
 You can enter the motion detection parameter setting interface by checking the **Enable local motion alarm**, the specific interface is showed as pic2-2-11(d).



pic2-2-11(d)

① **Parameters Introduction**

1		<p>The volume ratio bar is used to set the minimum acreage of detection zone to trigger alarm. Its unit is percent, if the acreage of motion area exceeds the setting value of the areas you selected, system will trigger alarm. The default value is 2%.</p>
2		<p>The sensitivity value bar is used to adjust the sensitivity of the area you selected. The lower the value the more sensitive the system. The default value is 10.</p>
3		<p>The pixel with motion area/the pixel unit, it is similar to the volume ratio, its detection area is smaller. The default value is 10%.</p>

② **Motion Detection Setting**

To detect any motion detection within the camera view, please follow the steps

below:

1. Click the  button then single-left-click on the video to start drawing the detection area, you should left-click mouse at each corner, and single-right-click to stop drawing, you can draw any irregular zone as you like and you can draw several detection zones.

2. You can delete the detection zone by clicking the  button.

3. You can click the  button to choose the full screen as the detection zone.

4. Setup the suitable sensitivity, volume ratio, it is suggested to keep the default value. (Reference: Parameters Introduction)

5. Click the  button to start monitoring for the application.

6. If you have modified the parameters, you shall click the  button to save them.

7. Check-in  to disable motion alarm from IP devices.

Enable local motion detection can trigger the corresponding motion alarm records.

● Video Analysis Playback

Click “Video Analysis Playback” option in screen menu to enter multi-channel video analysis playback page.

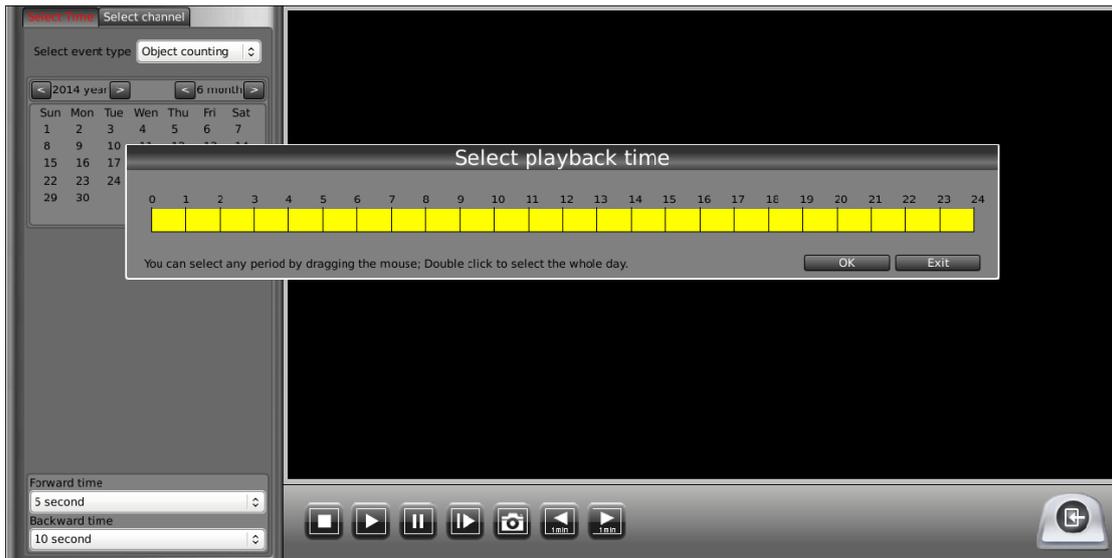


At first, select one event type to search from the drop-list

Secondly, select the date, you can select the year, month and day which you want to search. The yellow days means it has records, you can click the yellow date to select the assigned period as pic2-2-11(e) shown.

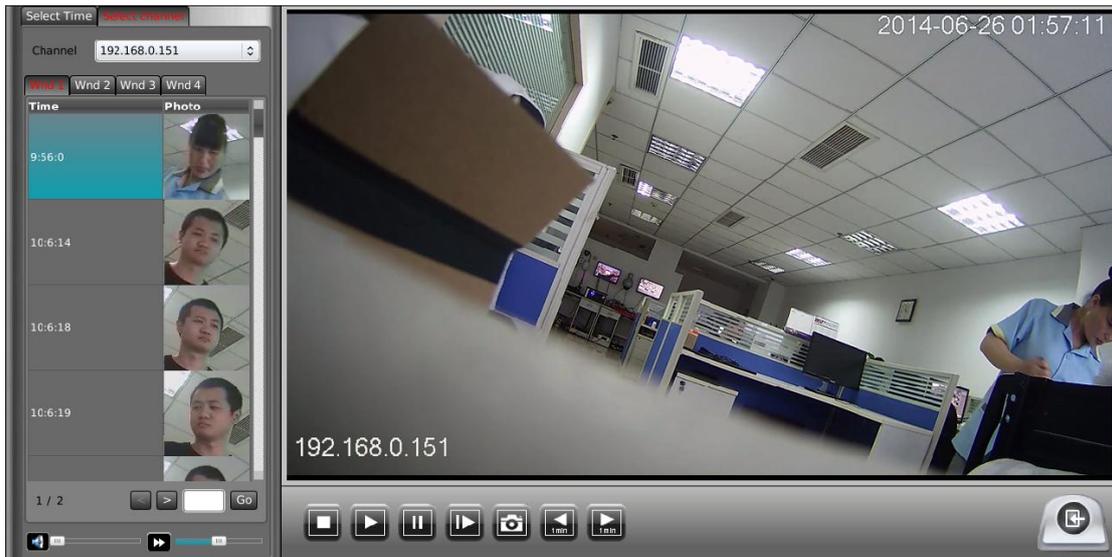
Forward Time: set the forward time of the video.

Backward Time: set the backward time of the video.



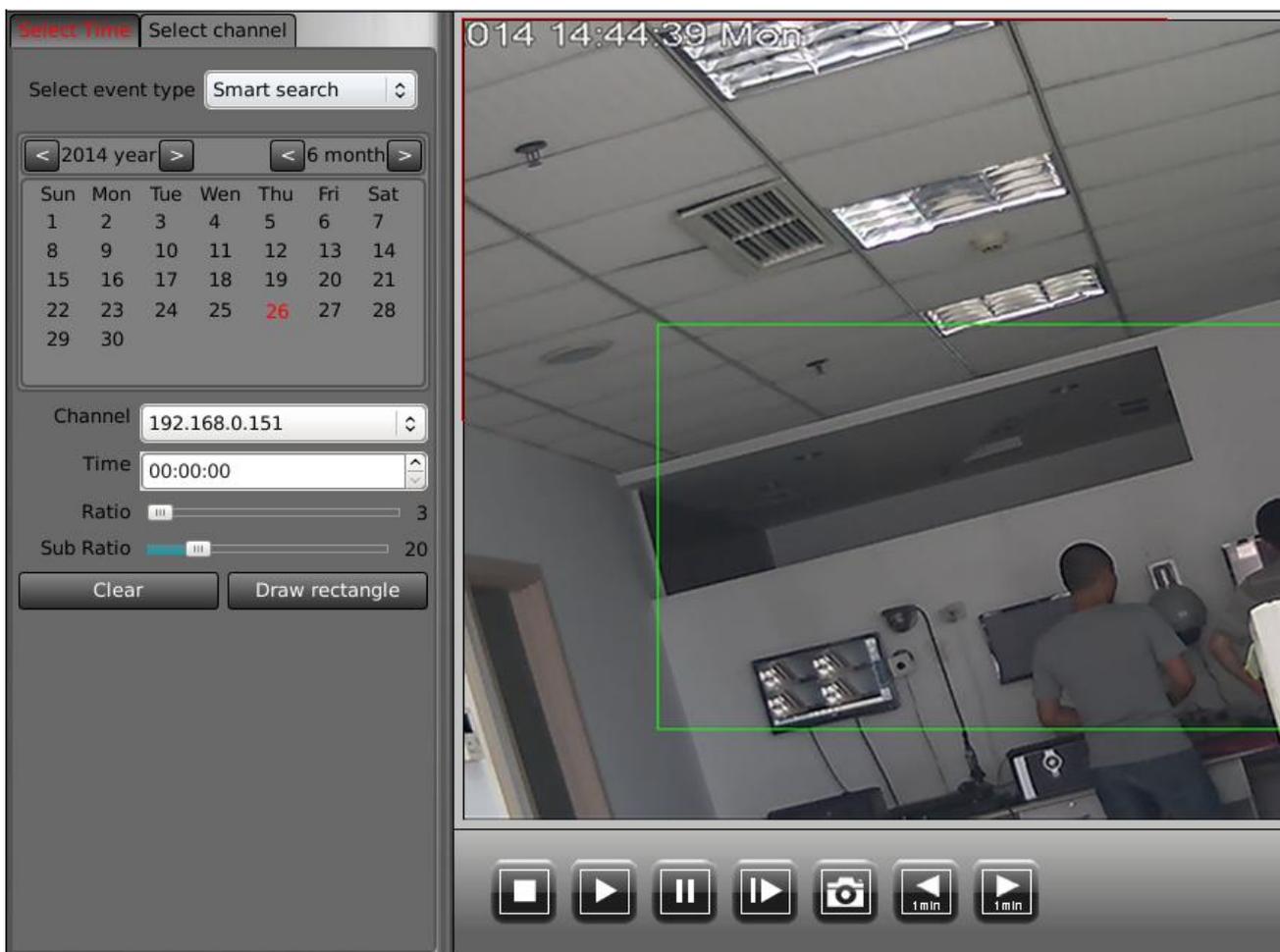
pic 2-2-11(e)

For example, if you select “Face detection alarm” as event type, and select the yellow date to search an assigned period. We can see the search result as pic 2-2-11(f) shown. You can double click the face photo to playback.



pic 2-2-11(f)

If you select “Smart search” as event type, you can the interface as pic 2-2-11(g) shown. You need to set Ratio and Sub Ratio firstly and draw a rectangle on the playback window. Then you can get the video data when there is motion in the rectangle.



pic 2-2-11(g)

Channel: Select one channel to playback its motion data;



-- Adjust total Ratio to trigger a motion in the set area;



-- Adjust the Ratio to trigger a motion in each sub squares of Motion Detection;



-- Press this button to close all cameras;



-- Press this button to play;



-- Press this button to pause;



-- Press this button to play next frame;



-- Press this button to grab a picture, when a picture is grabbed, there will be a dialog pop up to ask for a file name.



-- Preview 1min;

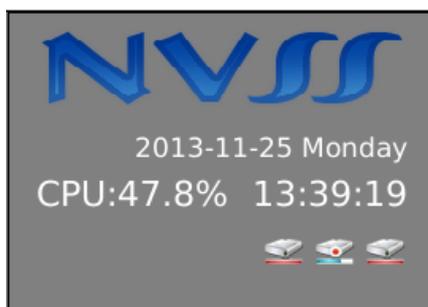


-- Next 1min.

12. Lock Screen

Users can lock the Screen by selecting **Lock Screen**. Then you have to input the ID and password to unlock the screen.

2.3 Information Panel



pic2-3

This panel shows product's logo, current date, current system time, CPU occupancy rate, the information about HDD as pic2-3 shown.

The color of CPU percentage would be changed according to its value. 0-70% the text color would be 123; 70-80% the text color would be 123; 80-90% the text color would be 123; 90-100% the text color would be 123.

You will get the SN , the used percentage and its record begin,end time of each HDD, when the mouse move closely or stop above the flag. It would be added one more flag when the added HDD has been formatted and mounted, you can also get the HDD status from the flag.

HDD status:



--The HDD is waiting for formatting;



-- The HDD is formatting;



--The HDD is empty;



--The HDD is writing;



--The HDD is full;

 --The HDD is used, but it is not full;

 --The HDD is error.

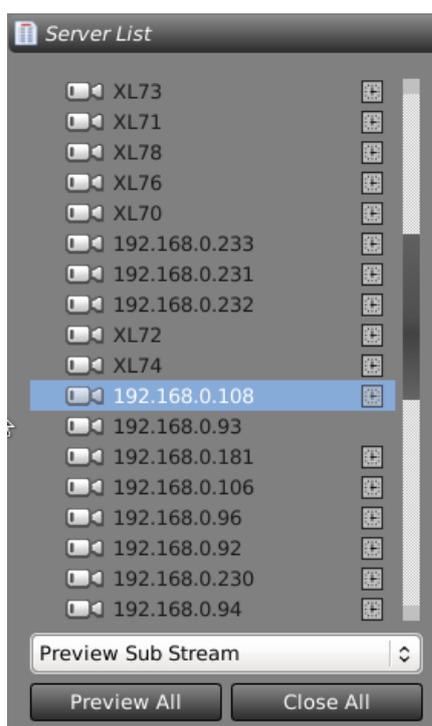
Note:

1. A 1TB HDD would cost about 2 minutes to format and mount to the system.
2. Don't unmount the HDD which is writing or formatting, it would cause bad track and damage its file system.
3. You need wait for about 20 seconds before see the HDD icon when you inset one new HDD.

2.4 Control Panel

2.4.1 Sever List

All the connected IP devices will be showed in the Sever List, showed as pic2-4-1. Users can get the detailed connection information when the mouse stops above the device flag.



pic2-4-1

You can also know the connection and recording status about the server from its server and recording flag.

Server status:

-  --The IPC connected successfully;
-  --The IPC connected failed;
-  --The NVR/DVR connected successfully;

 --The NVR/DVR connected failed.

Recording status:



-- The camera is recording continuously;



-- The camera is recording manually;

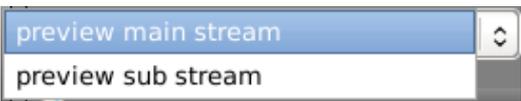


-- The camera is recording in motion detection alarm;



-- The camera is recording in event alarm.

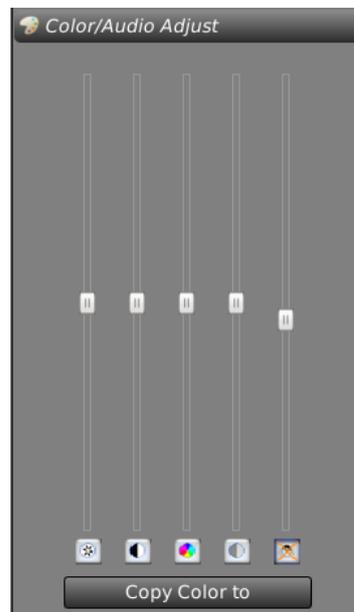
Users can preview any video of the server list by dragging the camera to any live

view window. The drop-down box  gives the choice of main stream or sub stream for the preview of the camera.

 -- you can open the all connected cameras' sub stream or 8 channels main stream by clicking this button.

 -- you can close the all preview camera by clicking this button.

2.4.2 Color/Audio Adjust



pic2-4-2

The detailed function of each button:



-- Drag the white and small button to adjust the brightness of the image

which you selected, click this button will resume its default value;



-- Drag the white and small button to adjust the contrast of the image which you selected, click this button will resume its default value;



-- Drag the white and small button to adjust the hue of the image which you selected, click this button will resume its default value;



-- Drag the white and small button to adjust the saturation of the image which you selected, click this button will resume its default value;



-- Drag the white and small button to adjust the volume, click this button will turn off the audio.



-- Click this button and select cameras to copy the color and audio adjustment to them.

2.4.3 PTZ Control



pic2-4-3

The detailed function of each button:



-- Please set the presets for the cameras in **Channel Setting**, then you can select the camera and press this button, it will pop up this menu



for you to call a preset or tour group of the selected camera.

Note:

Only when you selected the video is dragged to the live view directly from the

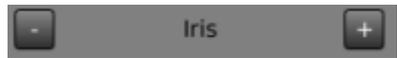
Server List, you can control the PTZ in the main interface; video set in preview group can't be controlled.



-- Users can drag the slider bar to adjust the speed of PTZ. Its range is from 1 to 255, the bigger number the faster speed.



-- Zoom function of the PTZ camera control.



-- Overrides the PTZ cameras auto-iris and brighten or darken the image.



-- Auto-focus setup of the PTZ camera overrides, adjusted to focus the image.



-- you can move up, down, left, right as well as other directions by pressing and holding these buttons.



-- Users can press this button to start the selected PTZ camera to do an automatic tour of 360, but for speed dome, many PTZ factorizes forbid this command.

2.4.4 DI/DO Control

Users can get the name of DI/DO when the mouse stops above the number button, showed as pic2-4-4.

Users can set the DO status in Channel Setting. When there is no alarm triggered out, users can press the number button to output alarm forcibly and the button will turn to blue. Press it again, the output will be closed and the button will turn back.

The status of DI:

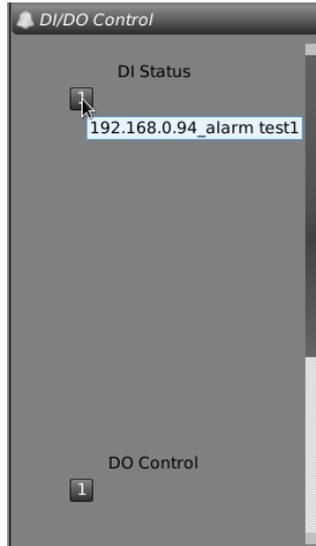
-- Input channel 1 has no alarm input.

-- Input channel 1 has an alarm input.

The status of DO:

-- Input channel 1 has no alarm output.

-- Input channel 1 has an alarm output.



pic2-4-4

2.5 Toolbar Panel

1. Split view

Press  button to set the window's partition mode of the main screen.

There are many types of partitions, showed as pic2-5-1:



pic2-5-1

2. System Setting

Press  button to enter the **System Setting** window, please refer to [Chapter3](#) for details.

3. Playback

Press  button to enter **Playback** submenu to search local video/audio data. You can get the detailed information from [Chapter4](#).

4. Group view&Setting

Press  button to enter **Preview Group setting** to set preview group; choose the group which you want to view; and save the current view in monitor 1 to any preview group. When you press this button, it will pop up a submenu, showed as pic2-5-2.



pic2-5-2

5. Manual Record

Press  button to record manually and press it again to stop manual recording for all cameras. The record status will change to  when you start manual record.

6. Capture

Press  button to grab a picture of a selected camera to local hard disk. you can view and download the capture picture in the [capture picture and view](#) of playback.

Note:

If the size of all the captured pictures beyond 2G, it would delete about half of them to save new one.

7. Channel Setting

Press  button to enter **Channel Setting** window.

8. Device management

Press  button to enter **Device Management** sub window.

9. Lock NVSS (ON/OFF)

Firstly, make “Local Password” enable in **System Setting**.

Press  button to prevent unauthorized user to operate system. Press this button again, the unlock dialog box will be displayed. Input your User ID and password then press OK to unlock it.

Default User ID is “admin”, password is “admin”.

Note:

If you disabled the local password, the button  would be hidden.



The image shows a 'Login' dialog box with a dark background. At the top, the word 'Login' is centered in white. Below it, there are two input fields: 'User Name' with the text 'admin' and a dropdown arrow, and 'Password' which is empty. At the bottom, there are two buttons: 'OK' and 'Exit'.

pic2-5-3

10. Power

Press  button to enter the power management submenu, when you press this button, it will pop up this window, showed as pic2-5-4.



pic2-5-4

You can logout, restart or shutdown this system in the sub window.

Note:

If the buffer of data is writing to the HDD, it will spend a little more time to shut-down the system.

2.6 Log Panel

	Time	Log Content	Filter Parameter
3	2014/02/19 10:25:04	Local Operation	Login
2	2014/02/19 10:24:58	IPC Alarm	Sensor Alarm
1	2014/02/19 10:24:56	Exception	Restart

pic2-6

All the real-time log information will be displayed in the log panel. showed as pic2-6.

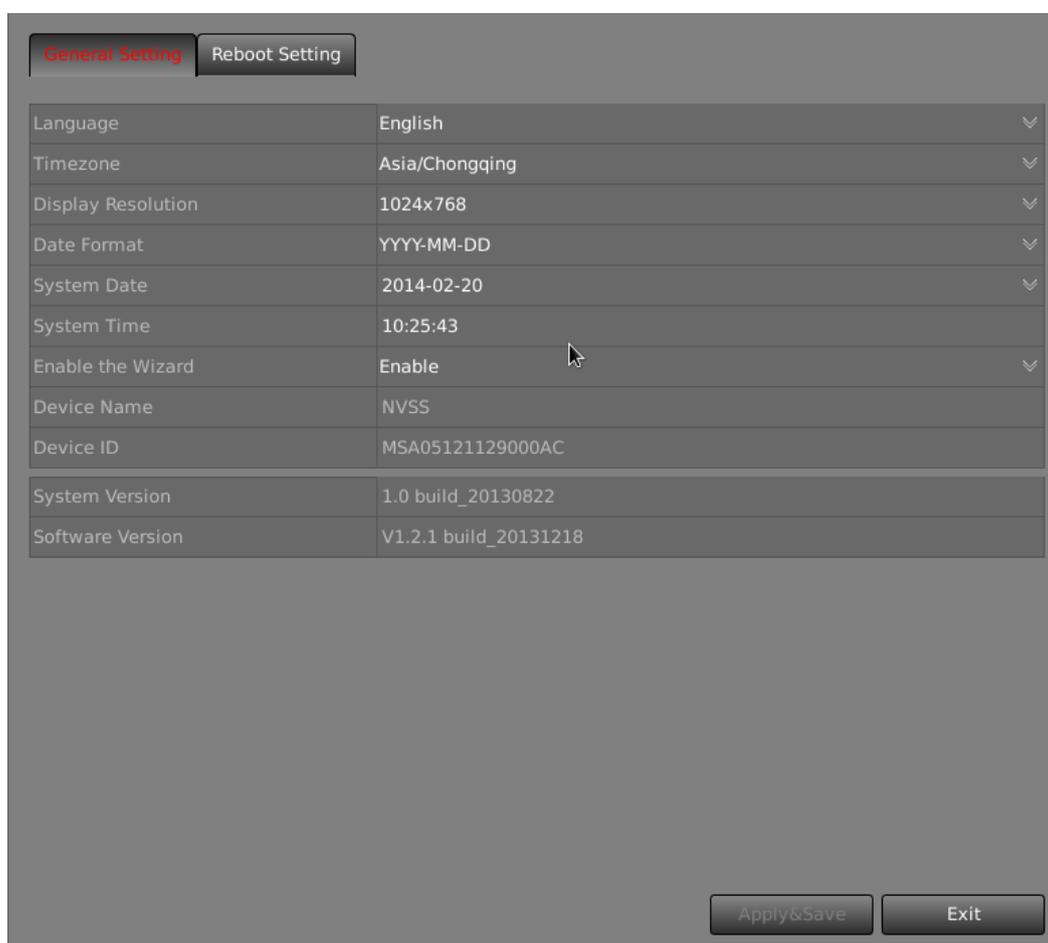
Users can search all logs in [Log search](#). Users can also set different color for different log information in the [Log Color setting](#).

Chapter3 System Setting

The NVSS System Setting includes 5 partitions: **General Setting**, **Network Setting**, **Record Schedule Setting**, **Log Color Setting**, **Exception Setting** and **User Management**.

3.1 General Setting

3.1.1 General Setting



pic3-1-1

【Language】 Display the current system language, users can also choose the other language in the drop-down box.

【Timezone】 Display the current system timezone, users can also modify it according to your requirement.

【Display Resolution】 Display the current system display resolution, the software will adjust its display resolution according to the monitor's resolution. You can also choose other resolution which the monitor supports in the drop-down box.

【Date Format】 Display the current date format. You can also change it, there

are three modes YYYY-MM-DD, MM-DD-YYYY, DD-MM-YYYY. It decides the date display mode of system, including the information panel on the main interface.

【System Date】 Display the current system date. You can also change the date here.

【System Time】 Display the current system time, you can also change the time here.

【Enable the Wizard】 Enable or disable the wizard when the system starts up.

【Device Name】 Display the name of NVSS.

【Device ID】 Display the ID of NVSS.

【System Version】 Display the system version.

【Software Version】 Display the software version.

3.1.2 Reboot Setting



pic3-1-2

【Reboot】 You can enable the reboot function by checking the Reboot checkbox, or unchecking to disable it.

【Reboot At】 Set auto-reboot date here.

【Reboot Time】 Set auto-reboot time here.

3.2 Network Setting

3.2.1 Network Setting

Network Setting	
NetCard	Network Adatper 1
DHCP	<input type="checkbox"/>
IP Address	192 . 168 . 91 . 129
Mask Address	255 . 255 . 255 . 0
NetGate Address	. . .
MAC Address	00:0c:29:31:56:58
Preferred DNS Server	192.168.91.2
Alternate DNS Server	
Network listen adapter	Network Adatper 1
Server Port	5100
HTTP Port	80

pic3-2-1

【Netcard】 There are two network adapters on the motherboard, you can choose one network adapter and configure it. You can set one for IP video input and the other for transferring video to clients, you can get the detailed setup from Dual Network Adapters IP Surveillance Solution.

【DHCP】 Enable this function by checking the box, and the NVSS will then get an IP address automatically.

【IP Address】 If you don't use the function of DHCP, please setup the IP address here.

【Mask Address】 Please input the mask address, actually it can get the correctly mask address automatically.

【Gateway Address】 Please input the correctly gateway address here .

【MAC Address】 Display the mac address of the configuring network adapter.

【Preferred DNS Server】 You need input the Preferred DNS Server here when the NVSS is connected under a router.

【Alternate DNS Server】 You can input the address of alternate DNS server here.

【Network Listening Adapter】 Please choose the network adapter which can be connected by clients.

【Server Port】 Display the data port of the server, you can modify it here.

【HTTP Port】 Display the HTTP port of the server, you can modify it here.

3.2.2 Email Setting

Field	Value
SMTP Server	smtp.gmail.com
SMTP Port	465
Login User ID	suzen1120@gmail.com
Login Password	*****
Auth.Type	Simple Login
SSL Security	SSL
Email Title	alarm_test
Sender Address	suzen1120@gmail.com
Send To	suzen1120@hotmail.com
Copy To	513977217@qq.com
Send Attachment	<input type="checkbox"/>

pic3-2-2

【SMTP Server】 SMTP server address, e.g.: mail.jstHybridNDVR.com.

【SMTP Port】 SMTP listening port for connect request.

【Login User ID】 The ID of mailbox.

【Login Password】 The password of Mailbox.

【Auth. Type】 Login mailbox, operator should select SMTP authentic type. Or select “simple login”.

【SSL Security】 Security protocol for Mailbox.

【Email Title】 Enter title of the E-Mail to be sent.

【Sender Address】 Enter email address of sender. It should be the same with Login User ID.

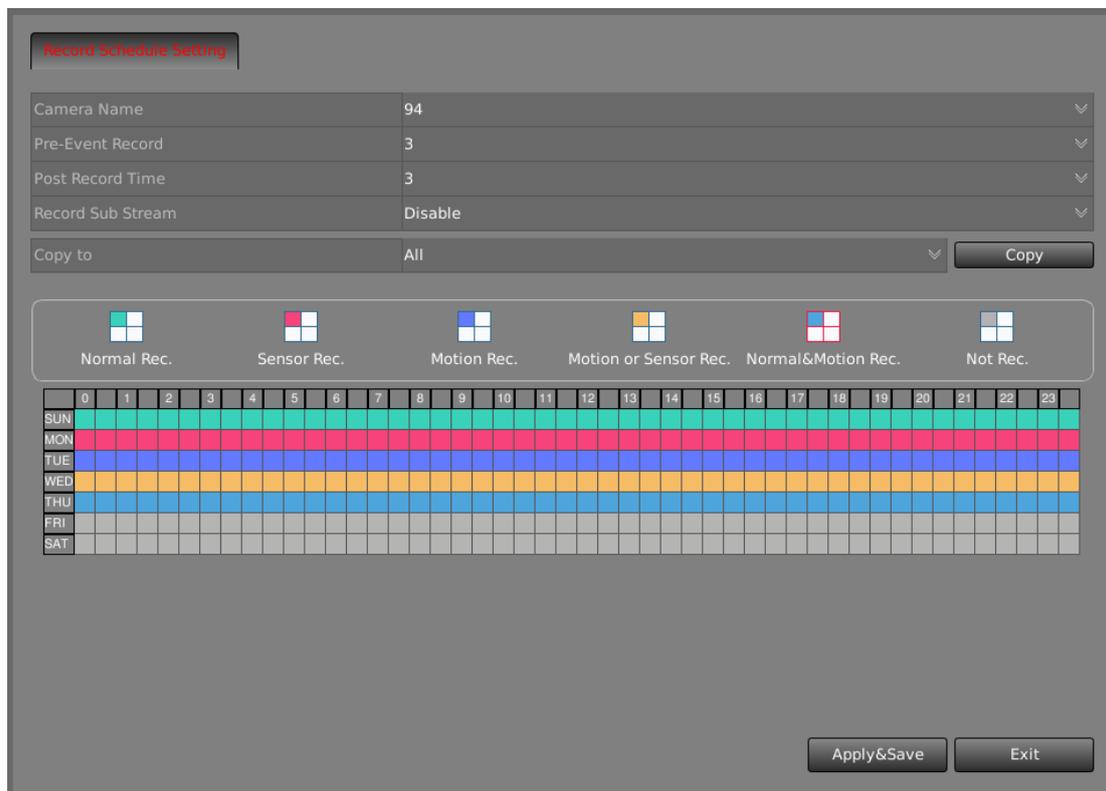
【Send To】 Set the address of receiver.

【Copy To】 Set another address of receiver.

【Send Attachment】 You can select whether send an attachment of the E-mail or not.

When the setup is finished, user can press  to test the function.

3.3 Record Schedule Setting



pic3-3

【Camera Name】 Select the cameras that you want to set.

【Pre-Event Record】 Select the pre-event record time for alarm record, when there is an alarm, the NVSS will record video seconds earlier than the alarm is triggered.

【Post Record Time】 Select the post record time for alarm record, when there is an alarm, the NVSS will record video seconds later after the alarm ended.

【Record Sub Stream】 Select to enable / disable record sub stream, if you select enable, you can view the sub stream in clients.

【Copy to】 Select the cameras you want to copy to, and press the button



to paste the same record schedule to the selected camera .

【Recording Schedule Setup】



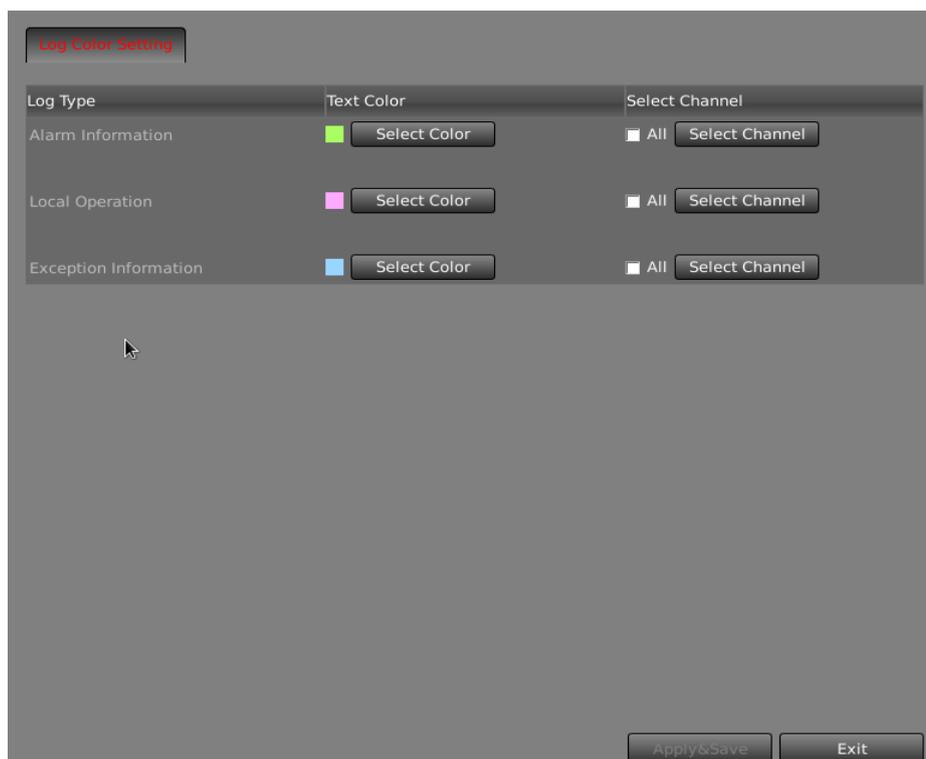
Note:

One block of pane  means half an hour. Firstly, click record mode icon , then click schedule diagram, hold down the mouse and move it to select large area (Drag & Drop).

The record mode:

-  -- Normal record, system will always record video;
-  -- Sensor record, system will begin to record only when there is sensor alarm or POS data;
-  -- Motion record, system will begin to record video only when it receives motion alarm from cameras;
-  -- Motion or Alarm record, Combine with above 2 and 3 function;
-  -- Normal&motion record, system records in motion when it receives motion alarm and in normal record when there is no motion;
-  -- Not record, system records no video.

3.4 Log Color Setting



pic3-4

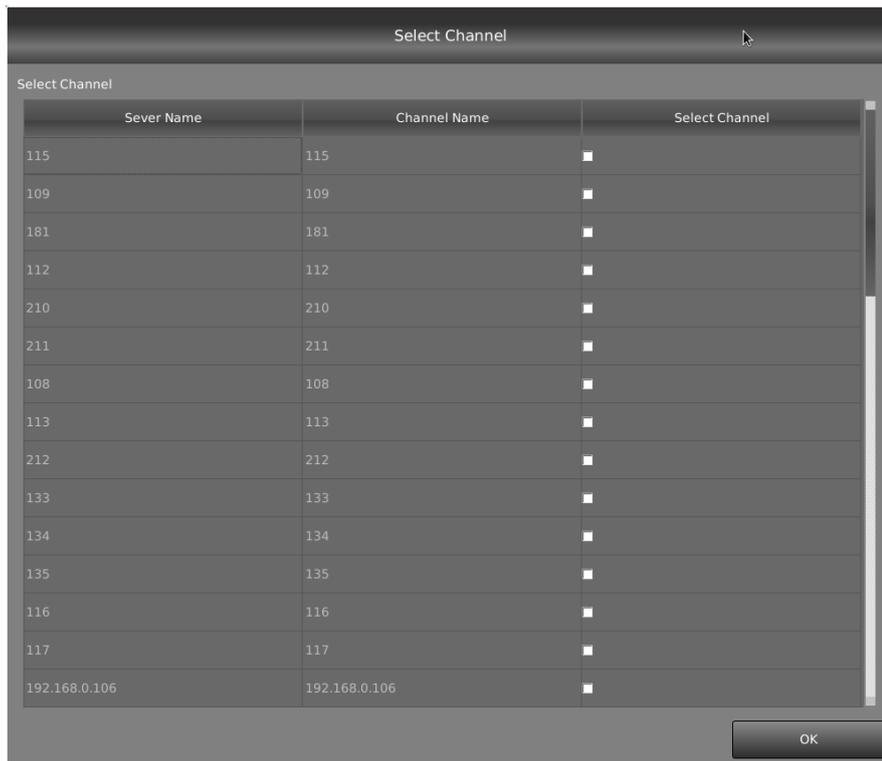
【Log Type】 There are three types which you can set the text's color. Including Alarm Information, Local Operation, Exception Information.

【Text Color】 Users can set different color for different log type, when you press the button , a sub window will pop up, showed as pic3-4-1. You can select any color you like in the window.



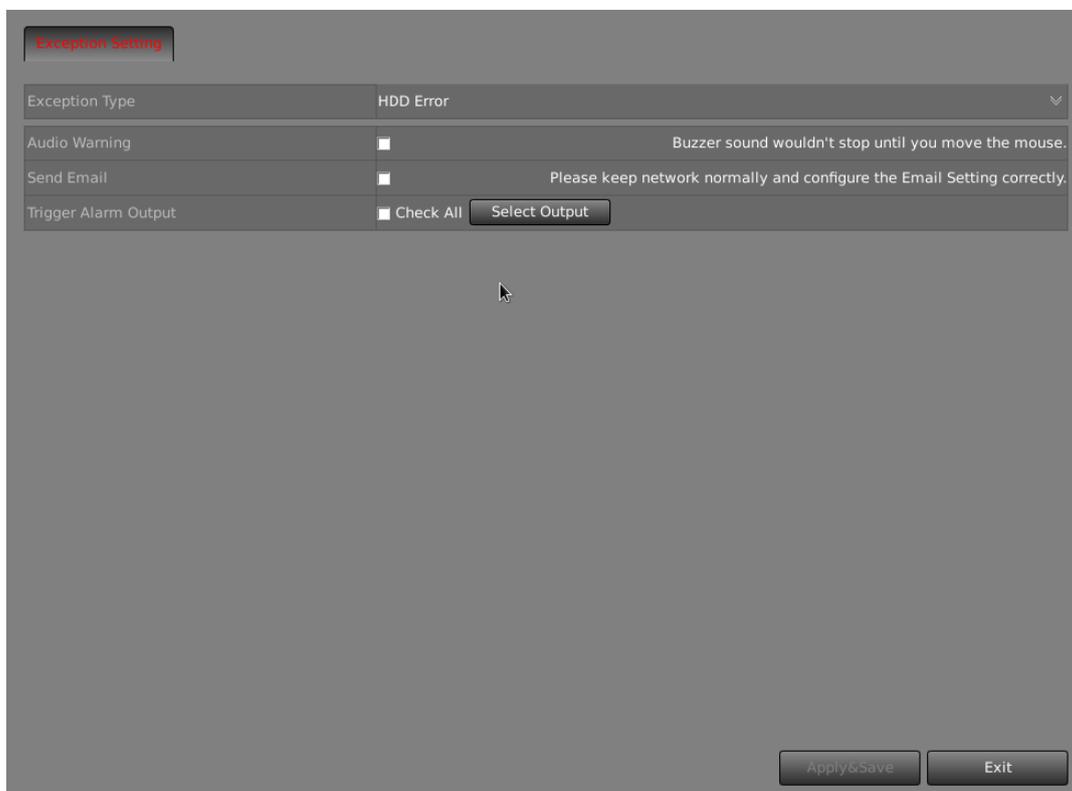
Pic3-4-1

【Select Channel】 You can select the all channel which connect to the system, or press the button  to choose the channels you want to set their log color in the pop-up window, showed as pic3-4-2.



pic3-4-2

3.5 Exception Setting



pic3-5

【Exception Type】 There are four types of exception types, it includes HDD Full, Reboot Exception, Record Exception, Device Disconnected.

【Audio Warning】 Users can click the checkbox to enable audio warning, it will indicate the alarm with voice. Only you move the mouse in main interface, the buzzer sound will stop.

【Send Email】 Users can click the checkbox to enable it, when exception happened, it will send email automatically.

Note:

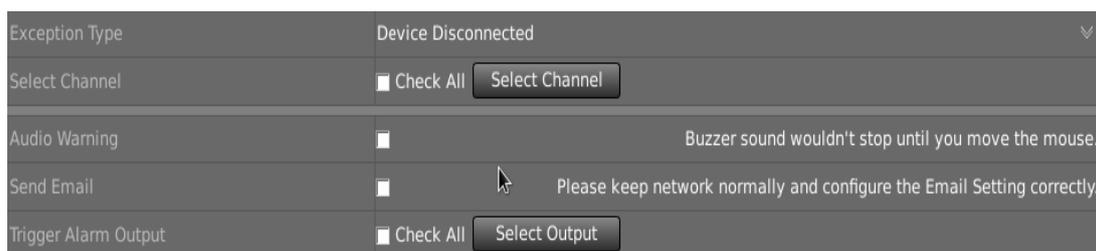
In order to send email successfully here, please keep the network normally and users must have configured the email settings. For more detail information of the email setting, please query [3.3.2 Email Setting](#).

【Trigger Alarm Output】 Users can click the checkbox Check All to select to trigger all alarm outputs, you also can select output you want by pressing the button, showed as pic3-5-1.



pic3-5-1

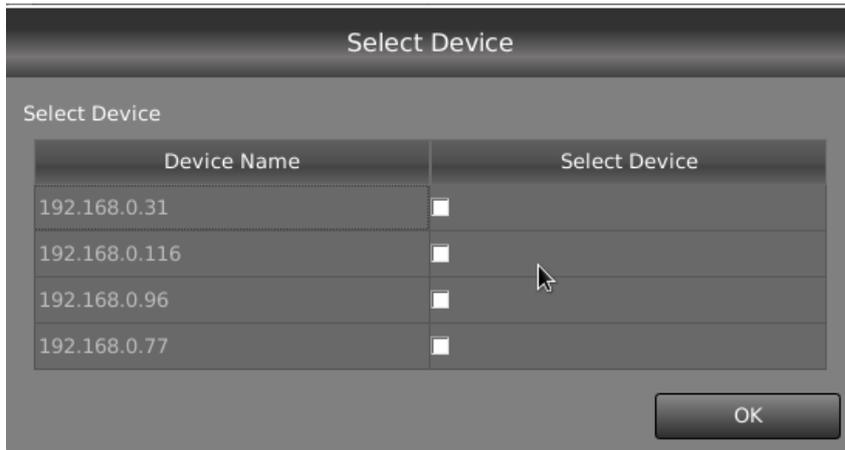
The Device Disconnected exception can Select Cameras, showed as pic3-5-2.



pic3-5-2

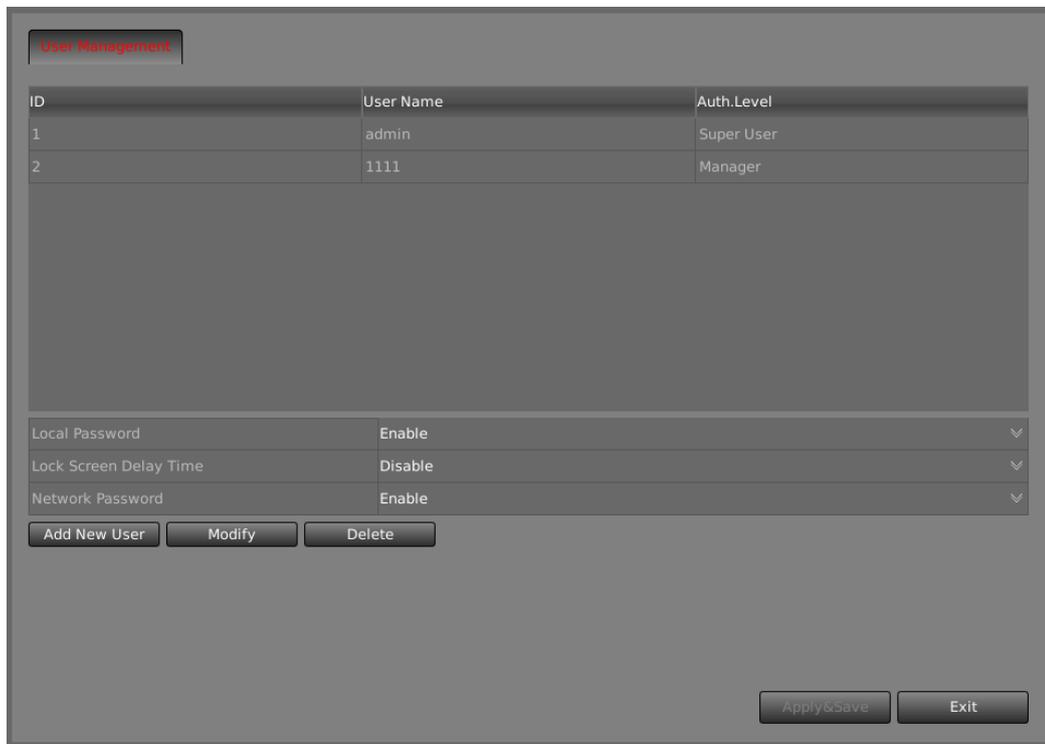
you can select the channel you want to set by pressing the button, showed as pic3-5-3.





pic3-5-3

3.6 User Management



pic3-6

【ID】 It displays the number of users.

【User Name】 It displays the name of all users.

【Auth. Level】 Display the level type of users.

【Local Password】 Select “Enable” to enable User Manage mode for local



NVSS, and activate the lock button in main window. Only authorized user can log into NVSS at User Manage Mode.

【Lock Screen Delay Time】 Select “Disable” to disable the automatically lock screen function, or you can select 3,6,9,12,15 minutes interval to lock the NVSS

automatically.

【Network Password】 Select “Enable” to enable User Manage mode for Client. When you enable this function, client must pass the authentication in order to connect the NVSS.

【Add New User】 Click  icon to add new user you edited to user list.it will pop up the sub window User Information, showed as pic3-6-1.



The image shows a 'User Information' dialog box with the following fields and options:

- User Name:
- Password:
- User Level:
- Password Confirm:
- System Setting:
- Device Management:
- Check HDD information:
- Local DO Control:
- Check Camera Data Stream Statistics:
- Import/Export System Parameter:
- Upgrade Register Information:
- Audio Chat:
- POS setup:
- Video Analysis:
- Group View&Setting:
- Power Management:
- Backup:
- Layout Management:
- Log Search:
- Synergy:
- Manual Record:
- Display/Hide Video Title:
- POS monitor:
- Channel Setting:
- All:
- Select Channel:
- OK:
- Cancel:

pic3-6-1

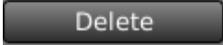
In the **User Information** window, you can input the new ID, select its user level type, set its password. The user rights include system setting, group view and setting, device management, power management, check the HDD information, backup, local DO control, layout management, check the camera data stream statistics, log search, import/export system configuration, synergy, upgrade register information, manual record, chat, display/hide video title, POS setup, POS monitor, Video analysis.

You can also set permission for each channel in the **Chanel Setting** option, you can select the camera you want to set by pressing the  button.

The **channel setting** includes playback, capture picture , channel setting , preview video , PTZ control .

【Modify】 Select a user from user list, then click  button to

modify it.

【Delete】 Select a user from user list, then click  button to delete it.

Note:

1. Only the admin has the right to add or delete a user, the admin also has the right to manage the password for each user.

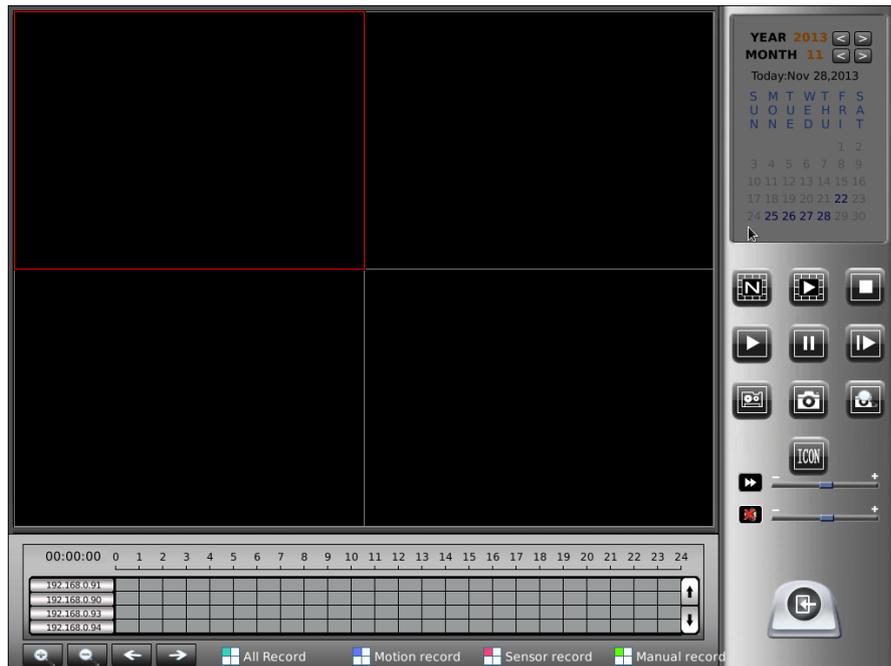
2. The admin's default password is admin, only the admin ID can modify it. The other users except admin can only modify their own password.

Chapter4 Playback

There are two ways to go into the **Playback** to search record data: select the

Playback from Main menu; or press the icon  in the toolbar panel.

When you click the playback button, it will pop up the playback interface, showed as pic4. The default split view is four window views.



pic4

4.1 Select Date

Before you open the videos, the upper right of the playback interface is the date panel, it includes year, month, and the current date, showed as pic4-1-1. Users can select the date which they want to do playback.



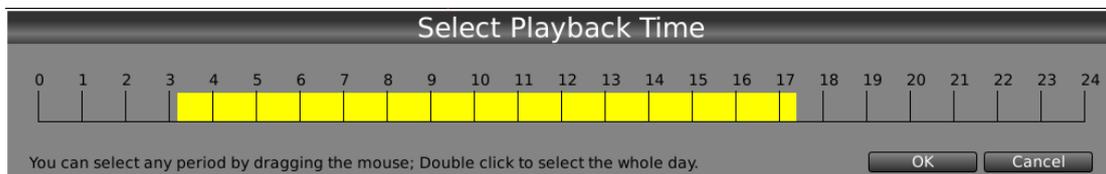
pic4-1-1

Click the   to change month and year to search the data which you want.

In the process of playback, the first step is to select the date you want to playback, when they are selected, it will pop up the dialog box to select playback time, shown as pic4-1-2 . You can just select any period to playback by dragging the mouse; double click to select the whole day; right-click to cancel the selected period.

The advantage of this feature displays in three aspects:

- It can reduce the search time
- It can be more accurate positioning
- When there are large amounts of the video data , it can reduce the possibility of packer loss caused by the search.

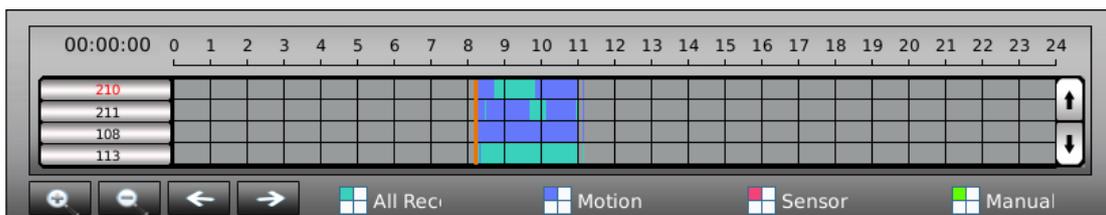


pic4-1-2

Note:

It would spent about 300s to search the whole day's video data when the total recording video data stream is about 300M/s.

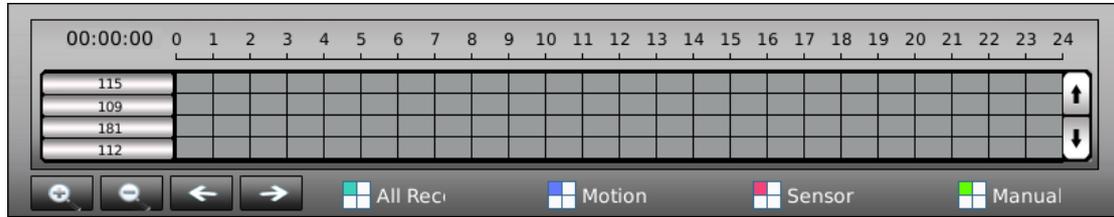
4.2 Select Record Type



pic4-2-1

Press the icon , you can check all records, press the  icon when you only want to playback motion recording, other record will be filtered. Sensor, Manual buttons are the same.

If there is no record data of the selected record type, it will show like pic4-2-2.



pic4-2-2

Press the  button, you can zoom in the time bar, and press the  button to zoom out. Users also can scroll the mouse to zoom in / out the time bar.

After zoom in the time bar, press the  button you can check the previous period records, and press the  button you can check the next period records.

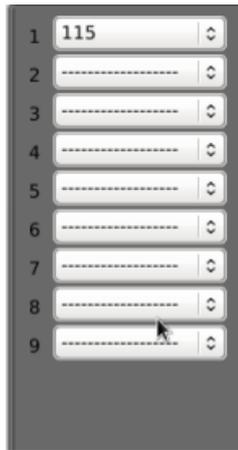
Press  button or  button to view the record data of other cameras.

4.3 Play Files and Related Operations

You can select the camera in server list to any live view window to preview its video. You also can scroll the mouse to magnify the selected image, eight times largest, if you want to restore the enlarged image, you should click the right mouse button.

 --Press this button to set partition mode of playback windows, there are 1, 4, 9 and 16 splits;

 --Press this button to open all playback windows in sequence according to the order of the cameras. When you start playing the records, the upper right of the interface will change to the interface like pic4-3 showed. This is the nine divided, others are similar. You can click the  button for each window to select camera to play.



pic4-3

Note:

If you press this button after entered the playback interface, all the cameras will start to play from the first record data of the day. If you select a point of time on the time bar and press this button, then, all the cameras will start to play from the selected time point.



-- Press this button to close all cameras;



-- press this button to play;



-- press this button to pause;



-- press this button to play next frame;



-- Adjust playing speed. Click the  button to resume normal play speed;



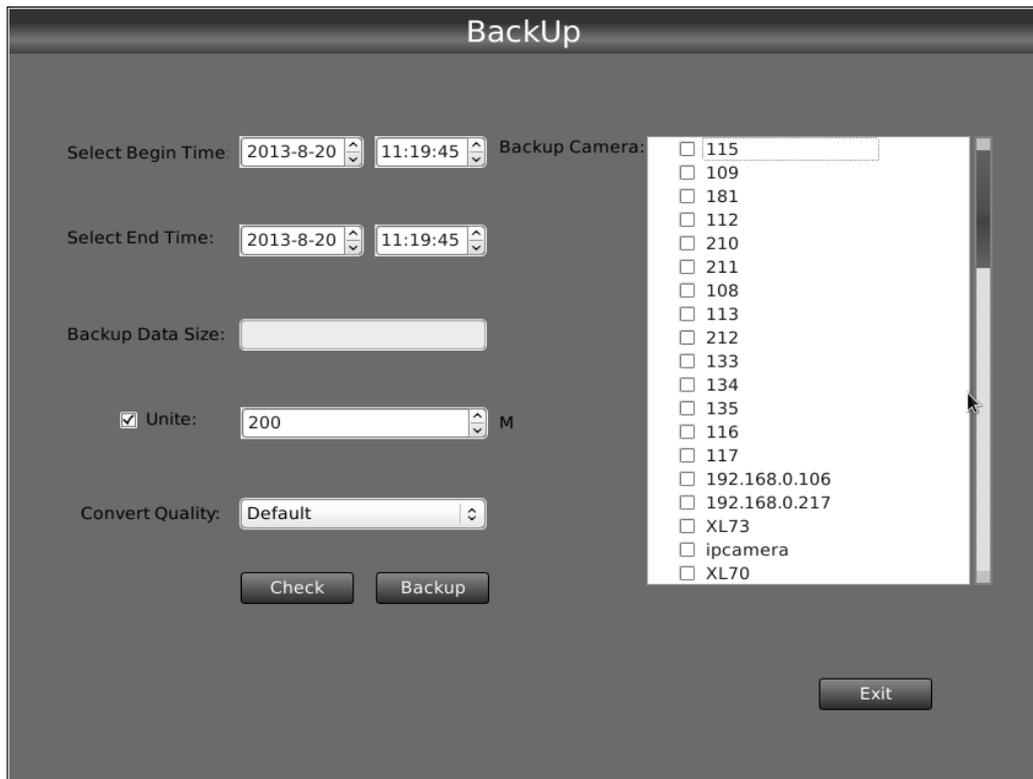
-- Adjust the audio. Click the  button to close the audio.

4.4 Backup



-- Press this button to enter the backup interface, showed as pic4-4. You

can also run the backup by pressing the icon  in the **main menu**.



pic4-4

【Backup Camera】 Select the backup camera. Users can select more than one camera at one time.

【Select Begin Time】【Select End Time】 Select the begin time and end time to backup.

【Backup Data Size】 Show the size of the backup file for the selected cameras between the begin and end time. You can check the file's value by pressing



button to show the total value.

【Unite】 Set the size for each file to be backup. You can set it to be 200M to 999M.

【Convert Quality】 Select among High, Default and Low.

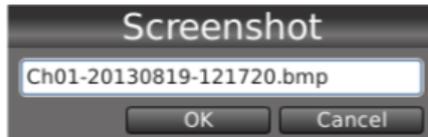
Note:

1. Before back up, please make sure that you have inserted a flash disk with enough space.
2. The end time must later than the begin time.

4.5 Capture Picture and View



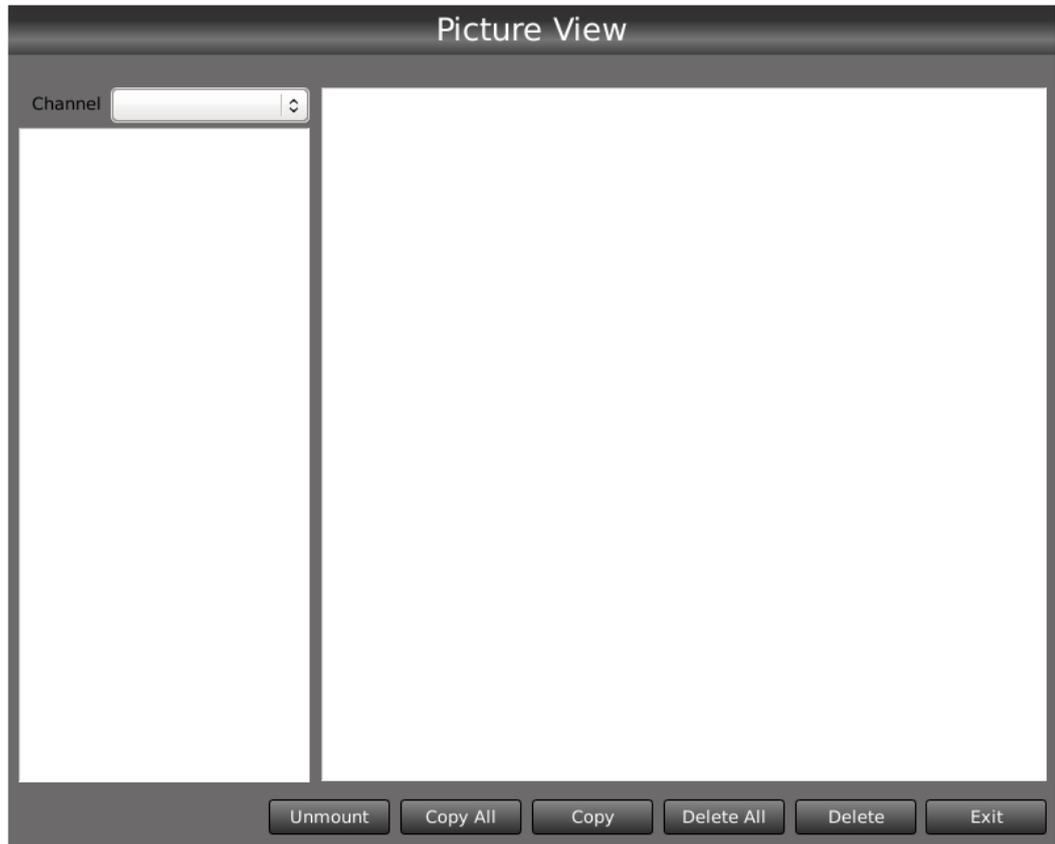
-- Press this button to grab a picture, when a picture is grabbed, there will be a dialog pop up to ask for a file name, showed as pic4-5-1. The size of the image is resolution of the video be played.



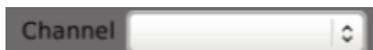
pic4-5-1



-- Click this button to enter the window of Picture View, showed as pic4-5-2.



pic4-5-2



-- Select the channel which you want to view its grabbed picture in the drop list. Then all grabbed images of selected channel will be listed on the left side. You can double click the image name to display it on the right side.



-- Click this button to unmount your flash disk.



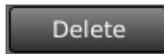
-- Click this button to copy all the pictures in the list to the flash disk.



-- Click this button to copy the selected pictures to the flash disk.



-- Click this button to delete the all pictures in the list.



-- Click this button to delete the selected pictures.

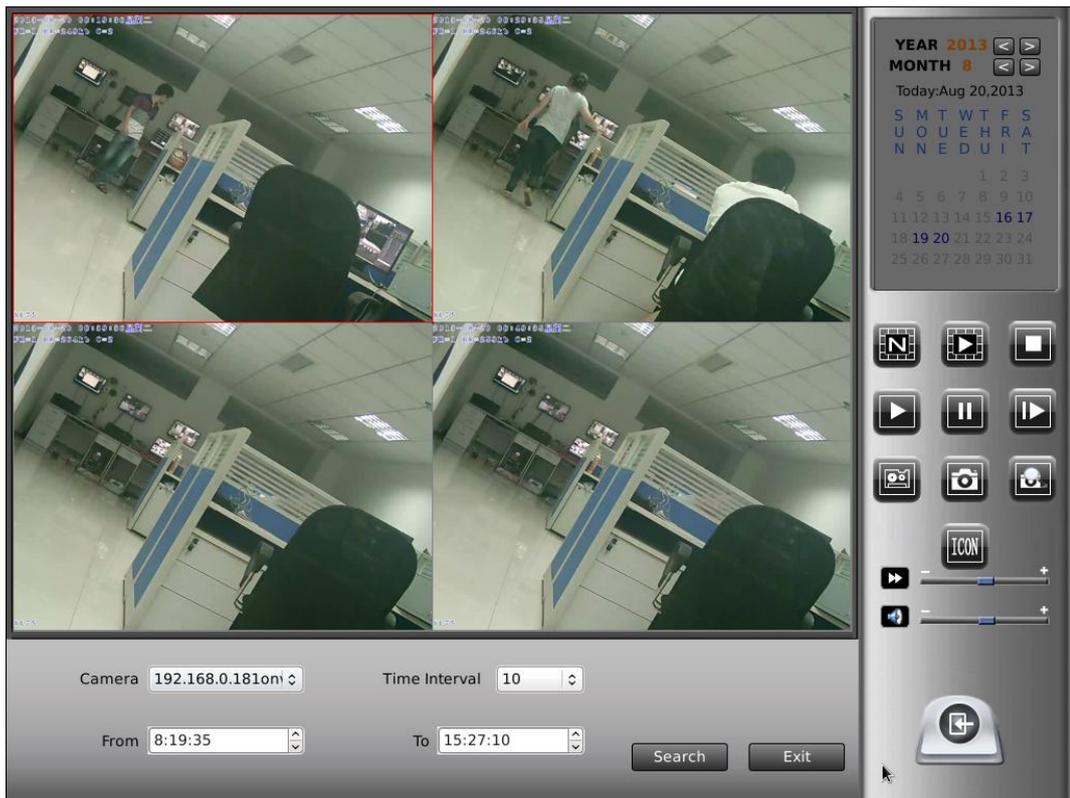


-- Click this button to exit the **Picture View**.

4.6 Icon Search



-- Press this button to run the icon search function, showed as pic4-6.



pic4-6



-- Select the camera you want in the drop list.



-- Set the time of each window plays for.



-- Set the begin

time and the end time of the record.

Chapter5 Channel Setting

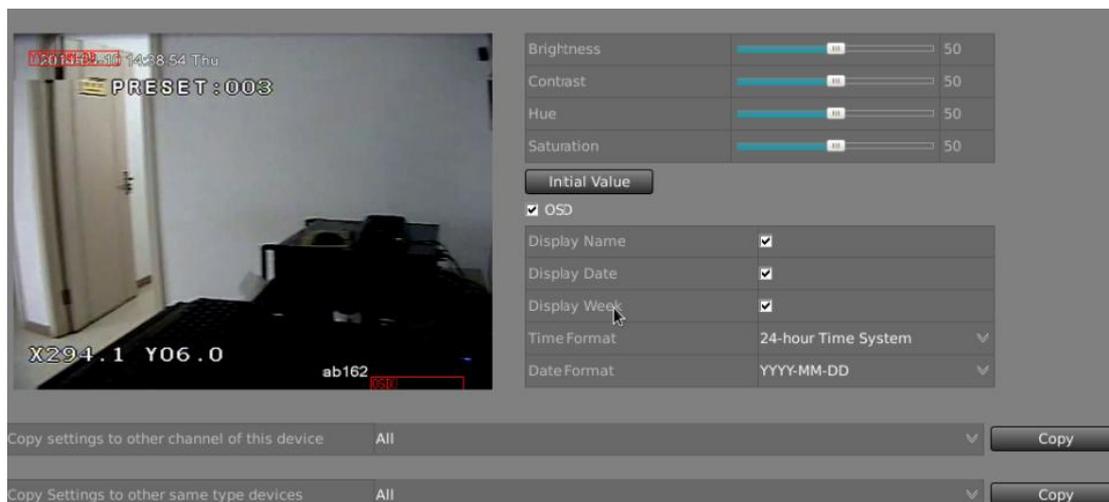
There are two ways to go into the Channel Setting: select Channel in Main menu;

click the button  in the toolbar panel.

The NVSS Channel Setting includes 7 partitions: **Display Setting**, **Video Setting**, **Motion Detection**, **Privacy Mask**, **Alarm Input Setting**, **PTZ Setting** and **Linkage Setting**.

You can check and modify any camera's setup in the window by selecting the camera in the drop-down list of **Select Device** column.

5.1 Display Setting



pic5-1

【Channel NO.】 It displays the channel number of selected device. Users can also select the camera you want to set from the drop-down list.

【Channel Name】 It displays the name of the selected channel.

Note:

1.If the selected device is an IPC, its **Channel NO.** and **Channel Name** are the same.

2.The channel name of multi-NVR should be set in the device's IE client, it can't be modify in the **Channel Setting**.

【Brightness】【Contrast】【Hue】【Saturation】 Users can set the image parameters by dragging the label, the value range from 0 to 100.you can also press the button  to restore the initial image parameter.

OSD --you can configure the OSD setting by clicking the checkbox or cancel

the OSD by unchecking.

【Display Name】 【Display Date】 【Display Week】 Users can display these parameters by clicking their checkbox or cancel them by unchecking.

【Time Format】 【Date Format】 Users can select the time format and date format in the drop-list.

【Copy settings to other channel of this device】 After finishing one channel, if you want to set any other channels' configuration of this device as the same as this channel, you can select channel number from drop-list, and press  button to copy it.

【Copy settings to other same type devices】 After finishing one camera, if you want to set the same configuration to other cameras which are same types, you can select the devices number from drop-list, or select all to finish configuration copy by pressing the  button.

Click the **Apply&Save** button to apply the settings. Users can also press the **Refresh** button to see the result

5.2 Video Setting

Stream Type	Main Stream	Sub Stream
Resolution	704*576	352*288
Bit Rate Type	CBR	CBR
Image Quality	Highest	High
Frame Rate	25	25
I Frame Interval	50	50
Bit Rate Limitation	2MB	1024KB
Enable Video	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Enable Audio	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Copy settings to other channel of this device	All	
Copy Settings to other same type devices	All	

pic5-2

【Stream Type】 It shows the steam type of each column.

【Resolution】 Set the main stream resolution (The NVSS will record at this resolution) and sub stream resolution. The higher the resolution is, the more record disk space needed.

【Bit Rate Type】 Select bit rate type from Variable Bit Rate (VBR) and Constant Bit Rate (CBR):

VBR range= Poorest, Poor, Medium, Good, Best.

CBR range = 45 Megabytes/Hour to 400 Megabytes/Hour.

【Image Quality】 Set the quality of the image to be recorded. Select from Lowest, Lower, Low, High, Higher and Highest.

【Frame Rate】 Set the frame rate of camera from drop-list.

【Bit Rate Limit】 Input the maximum bit rate for the camera's video stream.

【I Frame Interval】 Select the I Frame Interval from drop-list. Usually, the number of I Frame interval should be twice of the Frame Rate.

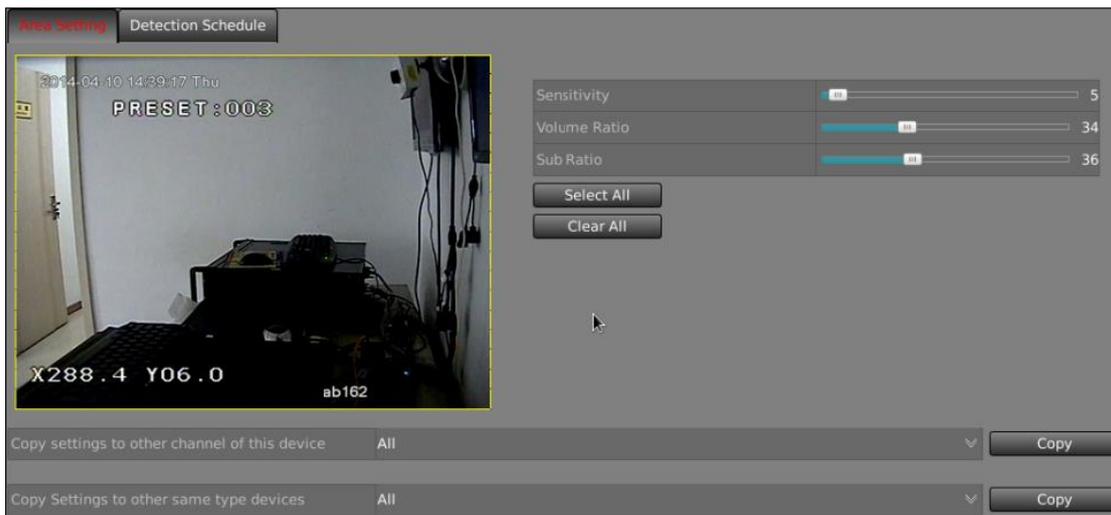
【Enable Video】 You can enable the video by clicking the checkbox, the audio of main stream has been enabled in by default.

【Enable Audio】 You can enable the audio by clicking the checkbox.

5.3 Motion Detection

Click the check box be in front of Enable to enable the motion detection function, then you can set the detection area and schedule.

5.3.1 Area Setting

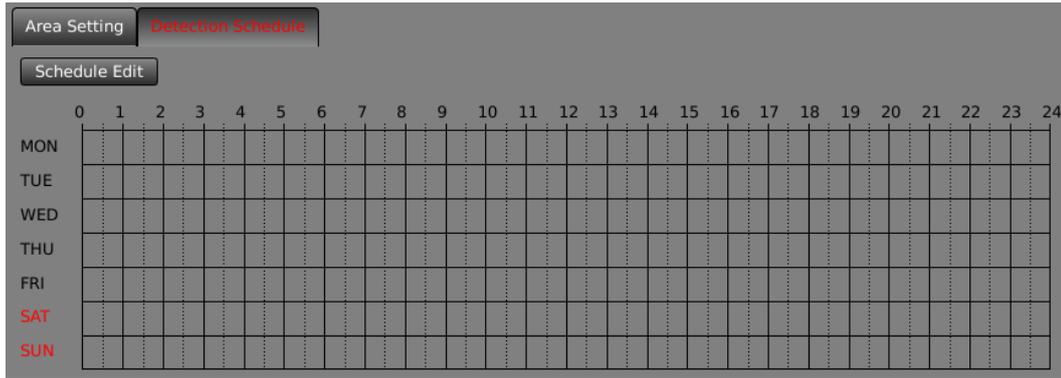


pic5-3-1

Left-click mouse and drag it on the video to set a motion detecting area, multi-areas are supported. You can also set the whole area by pressing the

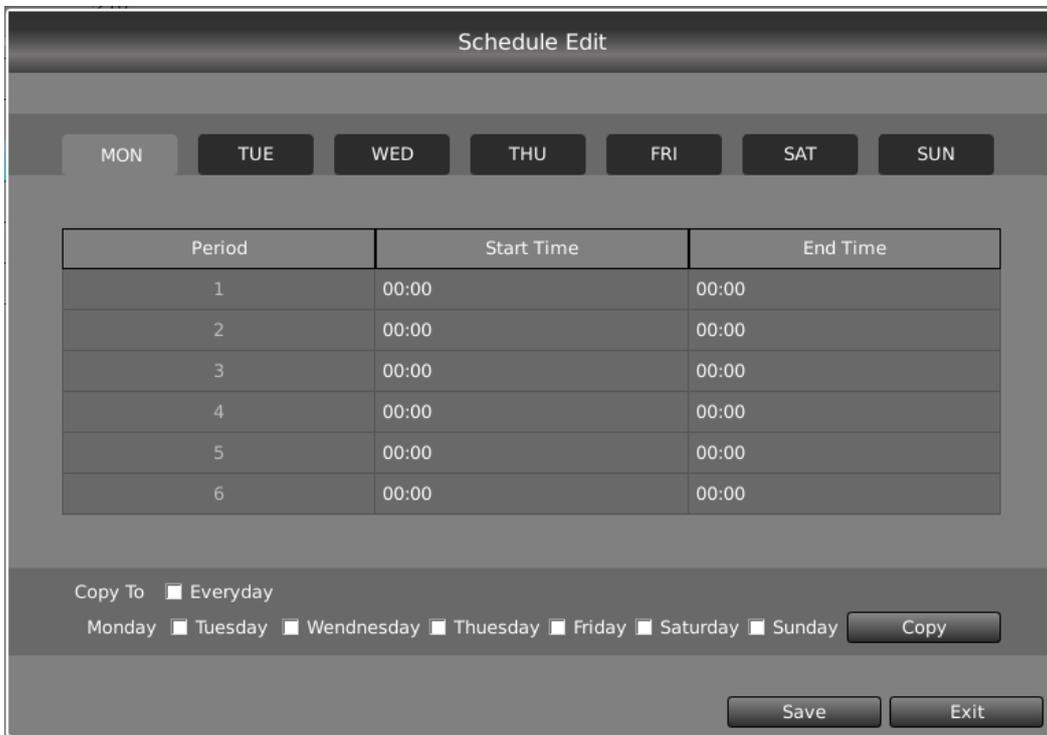
Select All button, or clear all areas by pressing the **Clear All** button.

5.3.2 Detection Schedule



pic5-3-2(a)

Press the button **Schedule Edit**, it will pop up the sub window, showed as pic5-3-2(b), you can set the schedule in this window.



pic5-3-2(b)

Select date firstly, then set time segment according to the sequence. After the precaution time of a certain day is set, you can copy the parameter to other dates by selecting a day and press the copy button.

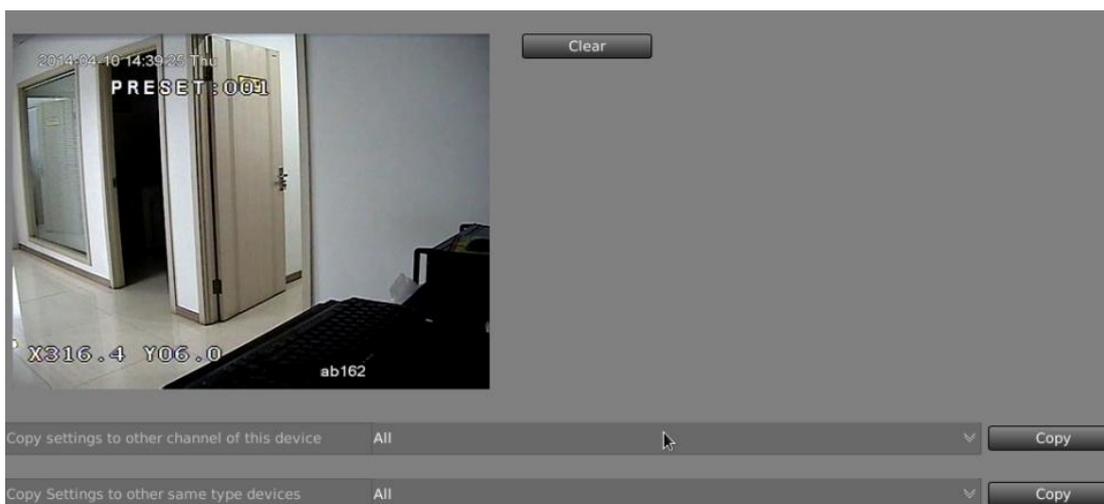
Note:

The time of each segment should not be overlapped.

5.4 Privacy Mask

Click the check box of Enable to enable the Privacy Mask function. Users are allowed to setup several four-sided privacy mask zones that cannot be viewed by the operator. The privacy mask can prevent certain surveillance areas to be viewed or

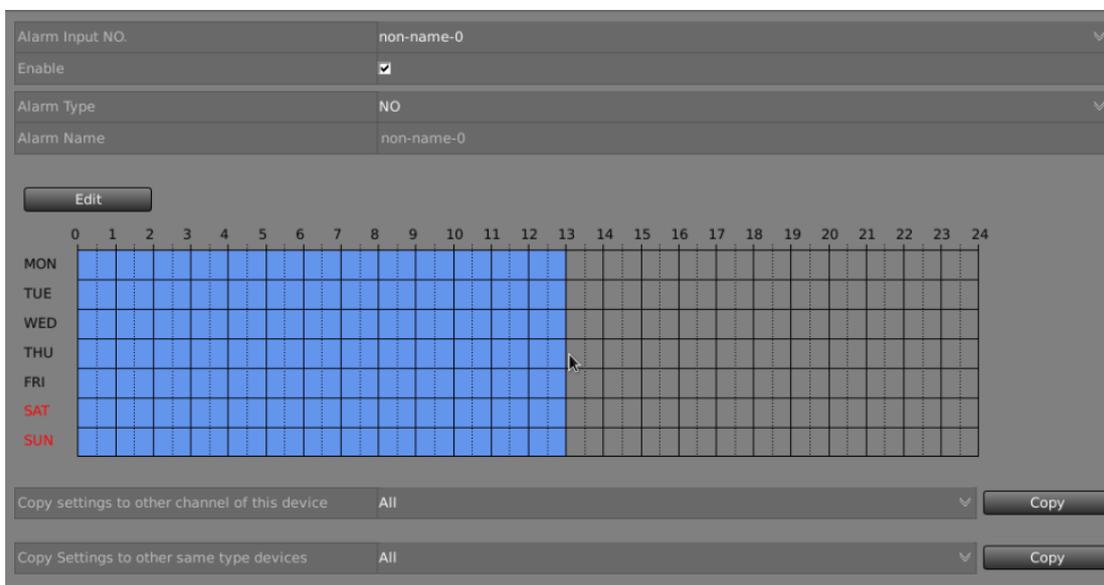
recorded.



pic5-4

Left-click mouse and drag it on the video to select several privacy mask areas, multi-areas are supported. You can also clear the zones by pressing  button.

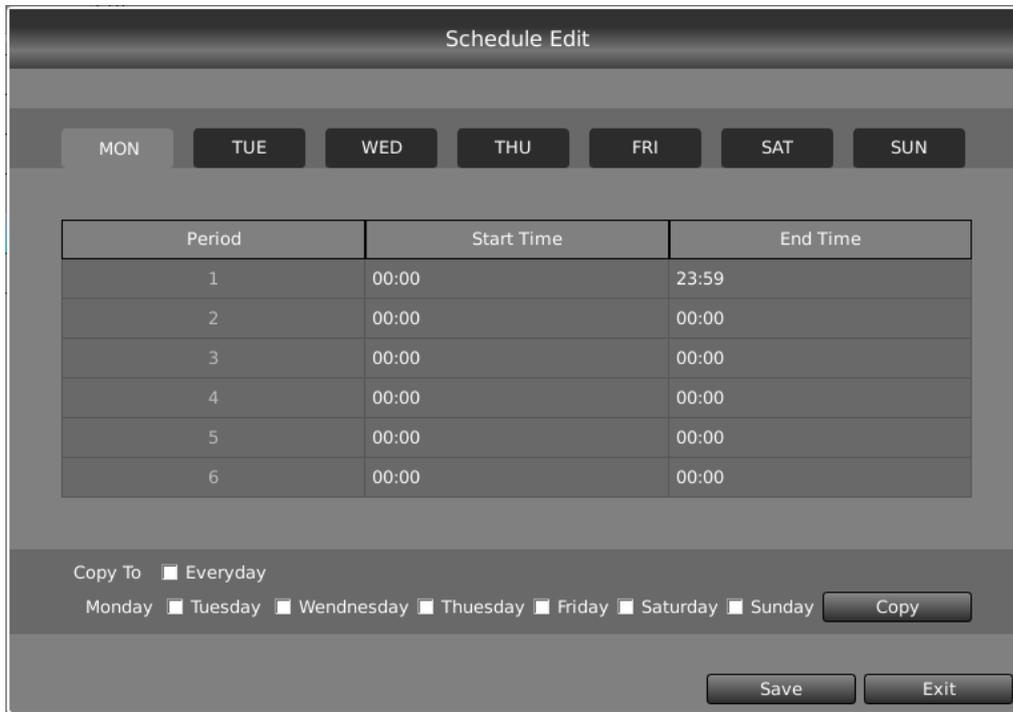
5.5 Alarm Input Setting



pic5-5

- 【Alarm Input NO.】** Select one alarm input to be set.
- 【Enable】** Enable the selected alarm input by clicking the checkbox
- 【Alarm Type】** Select alarm type (sensor type) from “NO”(Normally Open) or “NC”(Normally Closed).
- 【Alarm Name】** Display the name description of the sensor.

Press the  button, it will pop up the sub window, showed as pic5-5-1, you can set the time schedule in this window.



pic5-5-1

Select date first, then set time schedule. After the arm schedule of a certain day is set, you can copy the parameter to other dates by selecting the dates and press the copy button.

Note:

The time of each schedule should not be overlapped.

5.6 PTZ Setting

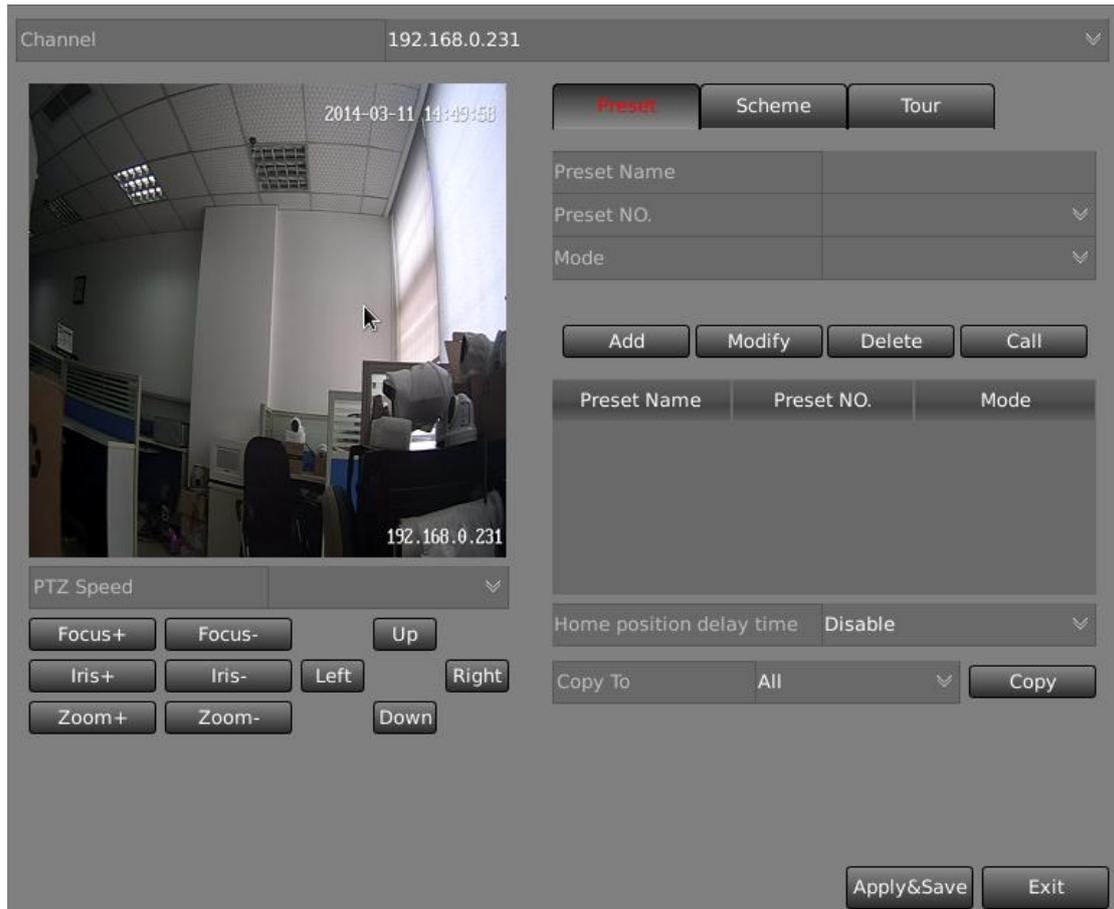
In the **PTZ Setting** window showed in pic5-6, users can define the PTZ Presets as well as the tour group to cruise them.

【Channel】 Select the camera to be set from the drop-list.

 -- Set the speed of PTZ, users can select the speed form the drop-list.



-- Users can adjust the PTZ camera's image in the PTZ setting by these 10 buttons.



pic5-6

5.6.1 Preset

When you step in the PTZ setting, the system will stay at Preset Setup interface by default, showed as pic5-6-1, users can set presets in this window.

【Name】 Set the name for the current preset.

【Preset】 Set the preset number for the current preset.

【Mode】 Set the Mode of preset, includes Call Preset and Save Preset two modes. .

Add -- Add the preset follow current configuration.

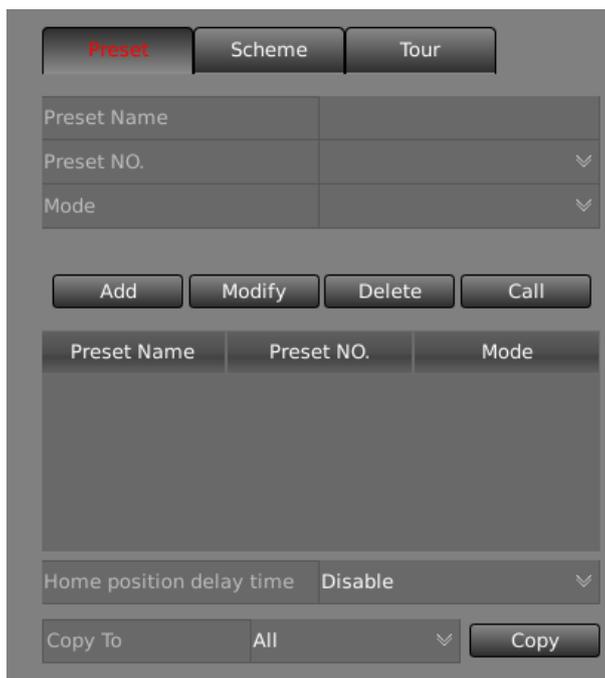
Modify --Modify the preset you selected.

Delete -- Select a preset from the list and delete it.

Call -- Call the Preset if the Mode is Call preset. If the mode is save preset, you would save the preset and could not call the preset.

Home position delay time **Disable** -- Set the time interval for the camera to return to the home position when there is no PTZ action or

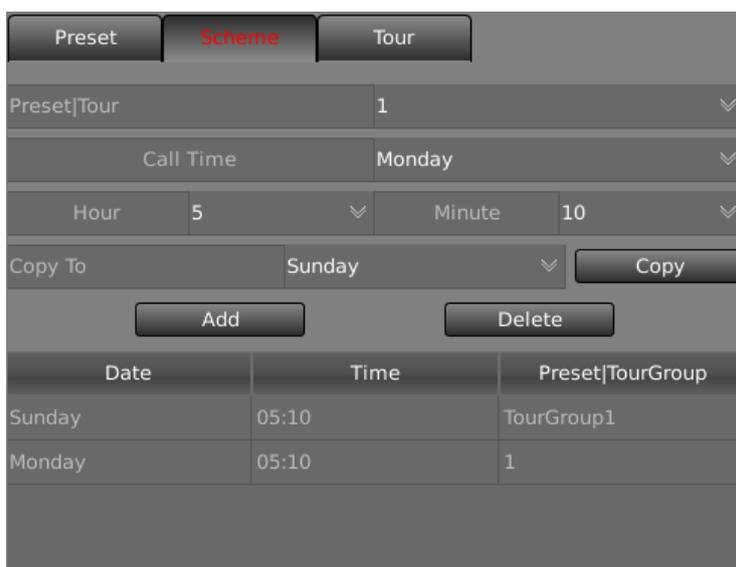
disable the auto return function. Users can select the Home Position from the drop-list, the home position includes all Tour Groups and Presets.



pic5-6-1

5.6.2 Scheme

When you press the **Scheme** button, the right interface will convert, showed as pic5-6-2. Users can set the scheme of the PTZ camera here.



Pic5-6-2

【Preset|Tour】 Set a preset or TourGroup and click **Add** to add it to the Preset Schedule or select one from the list and press **Delete** to

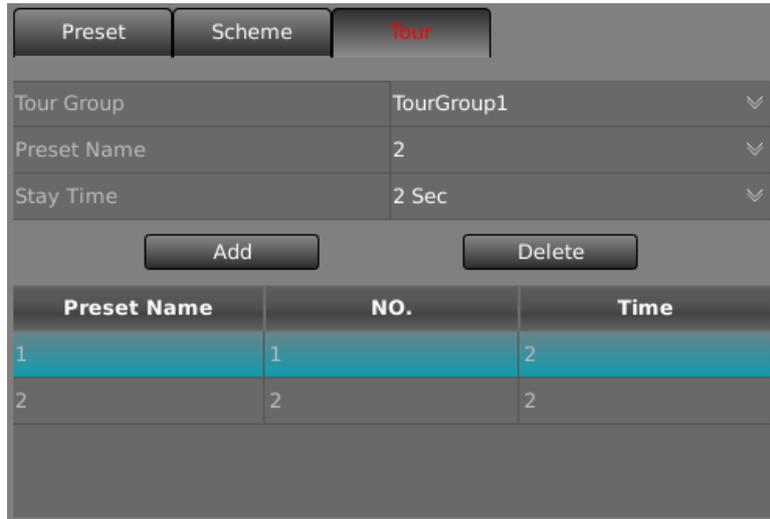
delete from the Preset Schedule.

【Call Time】【Hour】【Minute】 Set the time when the preset / TourGroup will be called.

【Copy To】 you can copy the setting of Preset|Tour, Hour and Minute to other dates.

5.6.3 Tour

When you press the  button, the right interface will convert, showed as pic5-6-3. Users can set the TourGroup of the PTZ camera here.



pic5-6-3

【Tour Group】 Select the TourGroup you want to set in the drop-list.

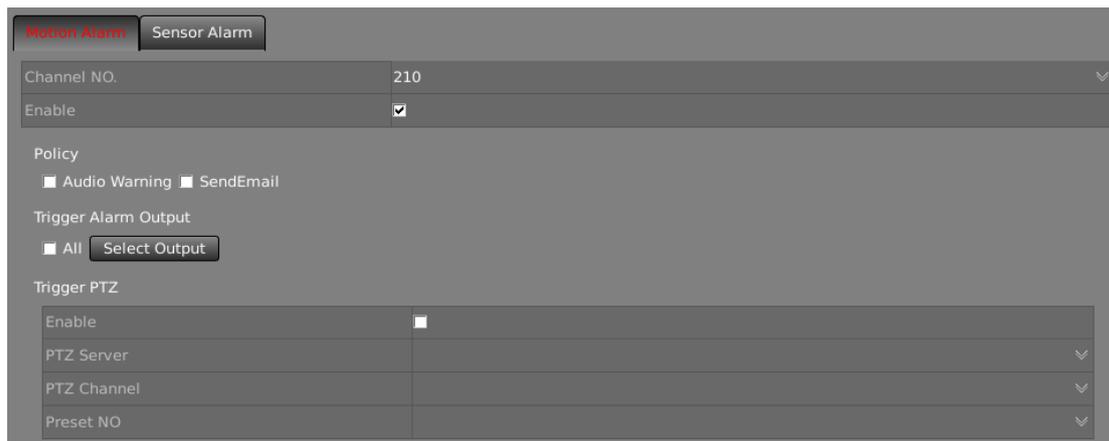
【Preset Name】 Select the preset which you set in **Preset Setting** and add it into the selected TourGroup.

【Stay Time】 Select the Stay Time for the selected preset in the drop-list.

Press the button  to add the preset into the Tour Group, select a preset from the list and press the button  to delete it from the TourGroup.

5.7 Linkage Setup

5.7.1 Motion Alarm



pic5-7-1(a)

【Channel NO.】 It displays the channel number of selected device. Users can also select the camera you want to set from the drop- list.

【Enable】 Users can click the checkbox to enable the motion alarm linkage function or disable this function by unchecking.

【Policy】 Handling policies will be available as follows:

【Audio Warning】 Indicate the alarm with voice;

【SendEmail】 Send an email when the alarm triggered to the email address which you set in “**system setting-network setting-Email Setting**”.

【Trigger Alarm Output】 Set the trigger alarm output, Users can click the checkbox **All** to select to trigger all alarm outputs, or press the **Select Output** button it will pop up a sub window, showed as pic5-7-1(b), you can select the output you want to trigger here.

【Trigger PTZ】 Users can enable the function to trigger a PTZ camera to call a special preset by clicking the checkbox of Enable.

【PTZ Server】 Select the PTZ server you want to set in the drop-list.

【PTZ Channel】 Select the channel of the selected PTZ server in the drop-list.

【Preset NO.】 Select the Preset of the Channel you selected.

Alarm Out Setting		
Server Name	Alarm Out Name	Alarm Out Linkage
181	non-name-0	<input type="checkbox"/>
112	non-name-0	<input type="checkbox"/>
211	non-name-0	<input type="checkbox"/>
108	non-name-0	<input type="checkbox"/>
212	non-name-0	<input type="checkbox"/>
117	non-name-0	<input type="checkbox"/>
192.168.0.106	non-name-0	<input type="checkbox"/>
XL73	non-name-0	<input type="checkbox"/>
XL76	non-name-0	<input type="checkbox"/>
XL70	non-name-0	<input type="checkbox"/>
XL75	non-name-0	<input type="checkbox"/>
192.168.0.94	alarm output1	<input type="checkbox"/>
192.168.0.113	non-name-0	<input type="checkbox"/>
210	non-name-0	<input type="checkbox"/>

OK

pic5-7-1(b)

5.7.2 Sensor Alarm

Motion Alarm

Sensor Alarm

Alarm Input NO.

non-name-0

▼

Enable

Policy

Audio Warning SendEmail

Trigger Alarm Output

All Select Output

Trigger Record Camera

All Select Camera

Trigger PTZ

Enable

PTZ Server

▼

PTZ Channel

▼

Preset NO

▼

pic5-7-2

【Alarm Input NO.】 It displays the alarm input number of the selected device. Users can also select other input you want to set from the drop- list.

【Enable】 Users can click the checkbox to enable the motion alarm linkage function or disable this function by unchecking.

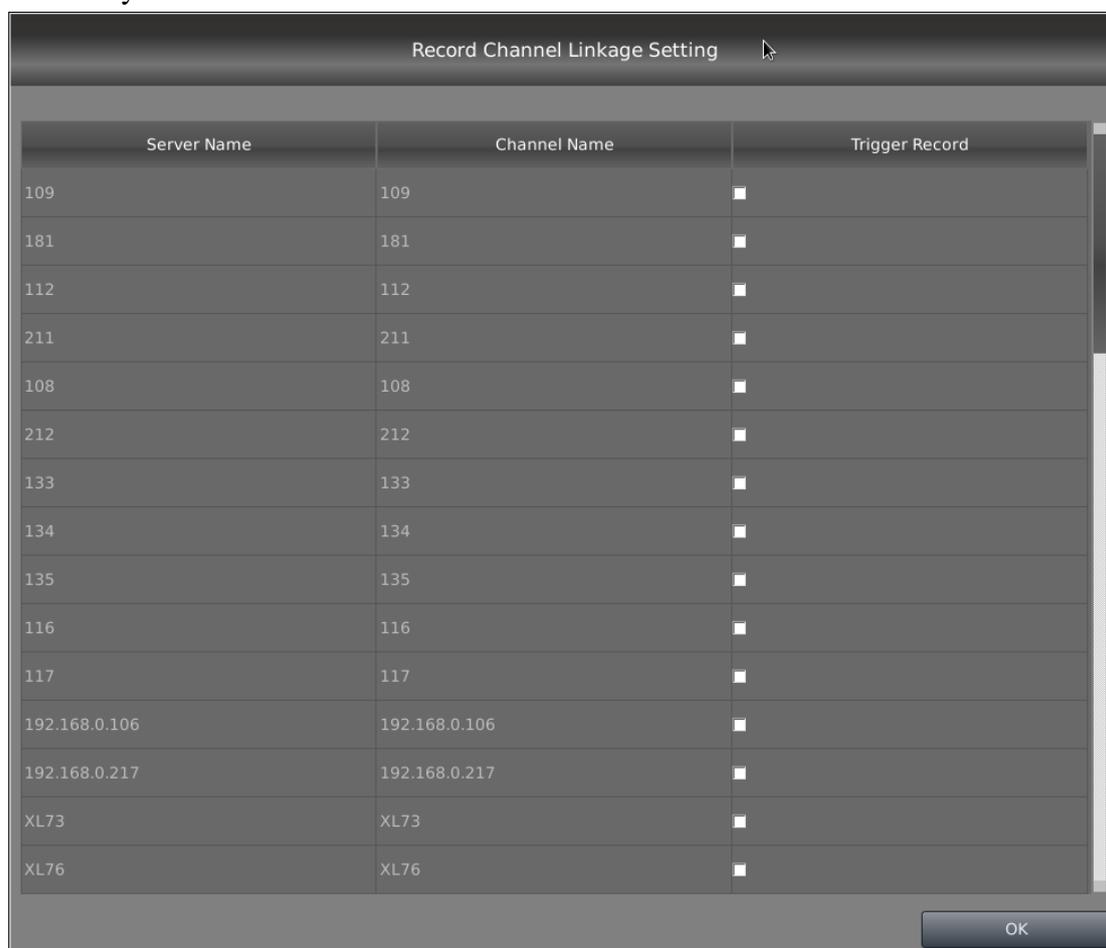
【Policy】 Handling policies will be available as follows:

【Audio Warning】 Indicate the alarm with voice;

【SendEmail】 Send an email when the alarm triggered to the email address which you set in “system setting-network setting-Email Setting”.

【Trigger Alarm Output】 Set the trigger alarm output, Users can click the checkbox All to select to trigger all alarm outputs, or press the **Select Output** button it will pop up a sub window, showed as pic5-7-1(b), you can select the output you want to trigger here.

【Trigger Record Camera】 Set the record cameras when alarm triggered, click the checkbox All to select the all cameras to record, or press the button **Select Camera** to pop up a sub window, showed as pic5-7-2(b), to select the cameras you want to record.



pic5-7-2(b)

【Trigger PTZ】 Users can enable the function to trigger a PTZ camera to call a special preset by clicking the checkbox of Enable.

【PTZ Server】 Select the PTZ server you want to set in the drop-list.

【PTZ Channel】 Select the channel of the selected PTZ server in the drop-list.
【Preset NO.】 Select the Preset of the Channel you selected.

Chapter6 Web Client

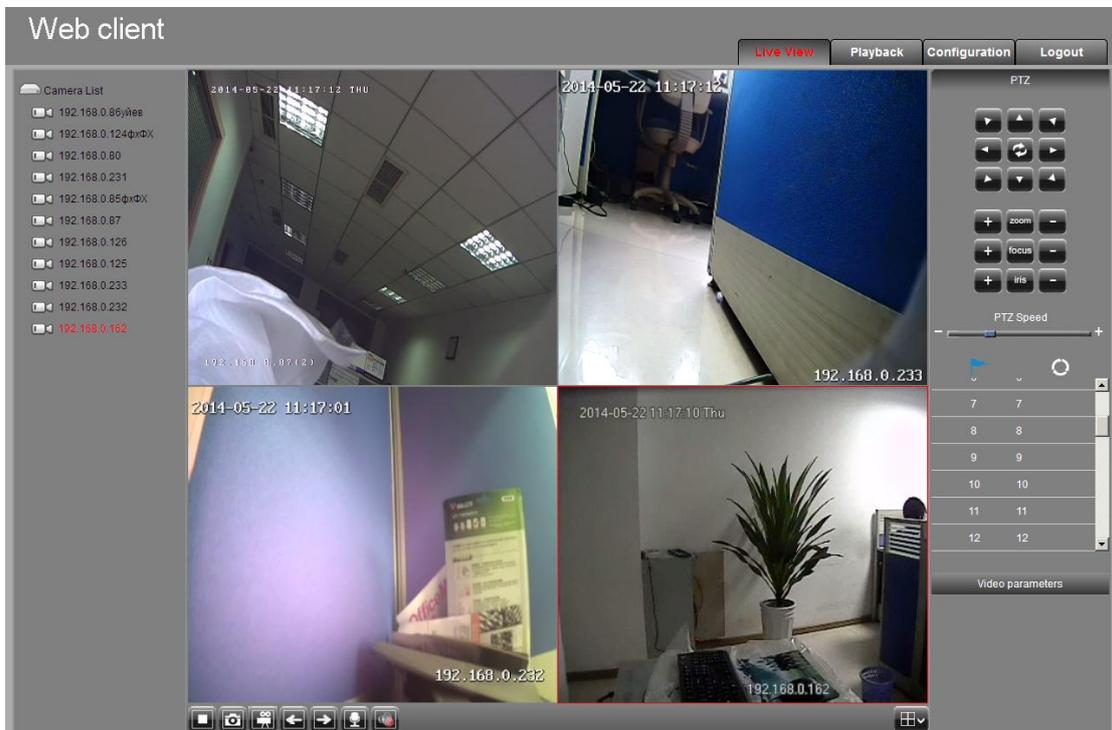
Users can view videos of NVSS Server remotely through the NVSS Web Client. We can support five kinds of browsers, include IE, Google Chrome, Mozilla Firefox, Opera,Safari. The default web server port is 80, you can change the port in the “**System Setting-->Network Setting**”. If you changed it to other port, please add this port number after the IP or domain name of the NVSS when visit through internet explorer. E.g.: http://192.168.0.43:1280.

After inputting the correct IP address and port, you will see the interface like pic6-1, you should input the valid User ID and password to acquire the corresponding rights that you have, the you can see the preview interface of web client.

6.1 Live View

Live view shows the real-time video getting from the cameras, and you can scroll the mouse to magnify the selected image, eight times largest, if you want to restore the enlarged image, you should click the right mouse button.

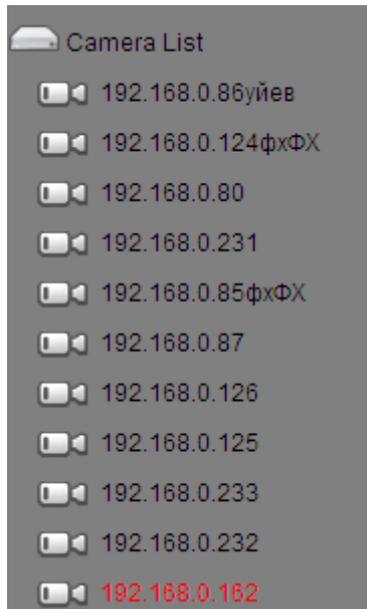
Users can setup the display split mode & camera in each window , the interface of live view contains four parts: **Camera List**, **PTZ**, **Video Parameters** and **Toolbar Panel**. Showed as pic6-1.



pic6-1

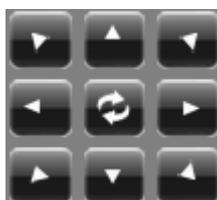
6.1.1 Camera List

All the connected IP devices of your NVSS system will be showed in the camera list, showed as pic6-1-1. You can press  icon to start or stop the video of the current channel.



pic6-1-1

6.1.2 PTZ



-- It supports eight directions for PTZ cameras to move up, down, right, right-up, right-down, left, left-up, left-down.



--Press this button to initiate the connected PTZ camera to do an automatic tour of 360, but for speed dome, many PTZ factories forbid this command.



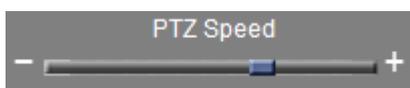
-- Zoom function of the PTZ camera control.



-- Auto-focus setup of the PTZ camera overrides, adjusted to focus the image.



-- Overrides the PTZ cameras auto-iris and brighten or darken the image.

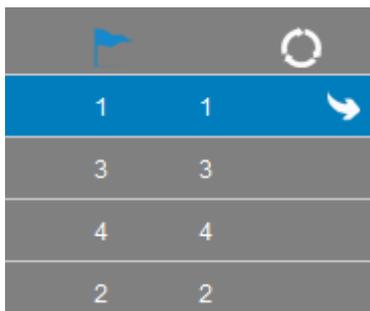


--Users can drag the slider bar to adjust the speed of PTZ. Its range is from 1 to 255, the bigger number the faster speed.



--If you have set the preset for the camera in the NVSS, you can see the set

preset here , showed as pic 6-1-2(a), if you don not set , it will null.



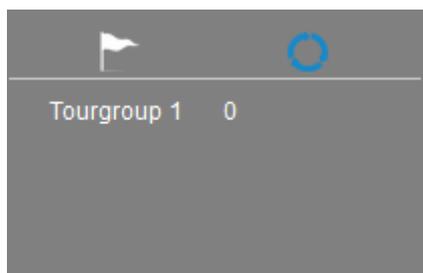
pic 6-1-2(a)

When you select one preset, you can call the preset, showed as pic 6-1-2(b).



pic 6-1-2(b)

--If you have set the tour group for the camera in the NVSS, you can see the tour group here , showed as pic 6-1-2(c), if you don not set , it will null.

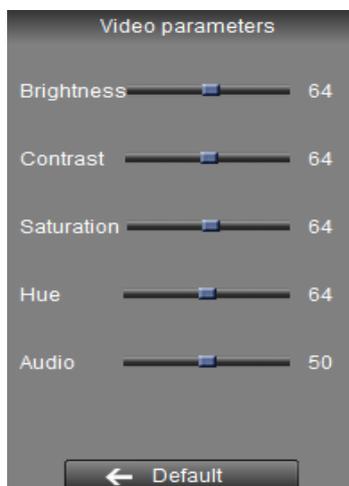


pic6-1-2(c)

Note:

Only when you selected the video is dragged to the live view directly from the **Camera List**, you can control the PTZ in the main interface.

6.1.3 Video Parameters



pic6-1-3

Drag the small button  to adjust the brightness, contrast, saturation, hue, audio of the camera which you selected, its range is from 1 to 128, click this button



will resume its default value. Shown as pic6-1-3.

6.1.4 Toolbar Panel



--Press this button to open or close all video of the connected cameras.



--Press this button to grab a picture, the size of the image is resolution of the video be played. The default directory of picture is D:\test\Capture Files, you also can set it in local configuration.



--Press this button to start all connected channels to record at the same time.



-- Press button to the previous page.



-- Press button to the next page.



--Press this button to enable the speak.



--Press this button to enable the audio for the connected cameras.



--Press this button to set partition mode of window, there are 1, 4, 9and 16 splits. Shown as pic6-1-4.



pic6-1-4

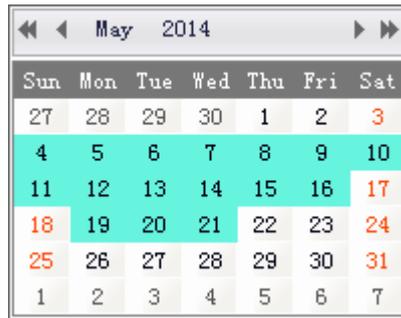
6.2 Playback



Press button to the interface of playback , showed as pic6-2.

6.2.1 Select Date

Before you open the videos, the upper right of the playback interface is the date panel, it includes year, month, and the current date, showed as pic6-2-1(a). Users can select the date which they want to do playback.

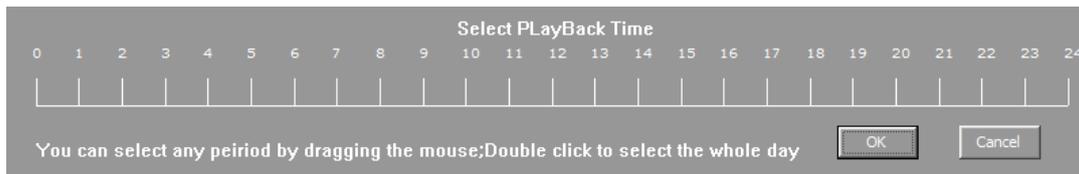


pic6-2-1(a)

Click  and  to change month and year to search the data which you want.

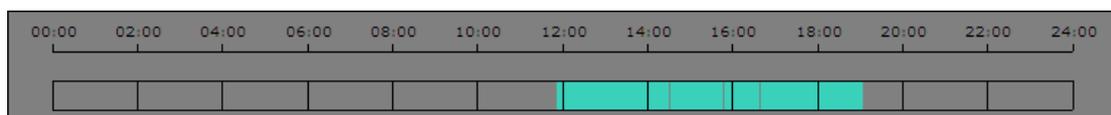
In the process of playback, the first step is to select the date you want to playback, the blue dates means it have record data, when they are selected, it will pop up the dialog box to select playback time, showed as pic6-2-1(b) .

You can just select any period to play by dragging the mouse; double click to select the whole day; right-click to cancel the selected period.



pic6-2-1(b)

6.2.2 Record Type



pic6-2-2

There are four types of record, different record type have different color to show, specific as follows:

- --Command record.
- --Schedule record.
- --Alarm record.
- --Manual record.

6.2.3 Play Files and Related Operations

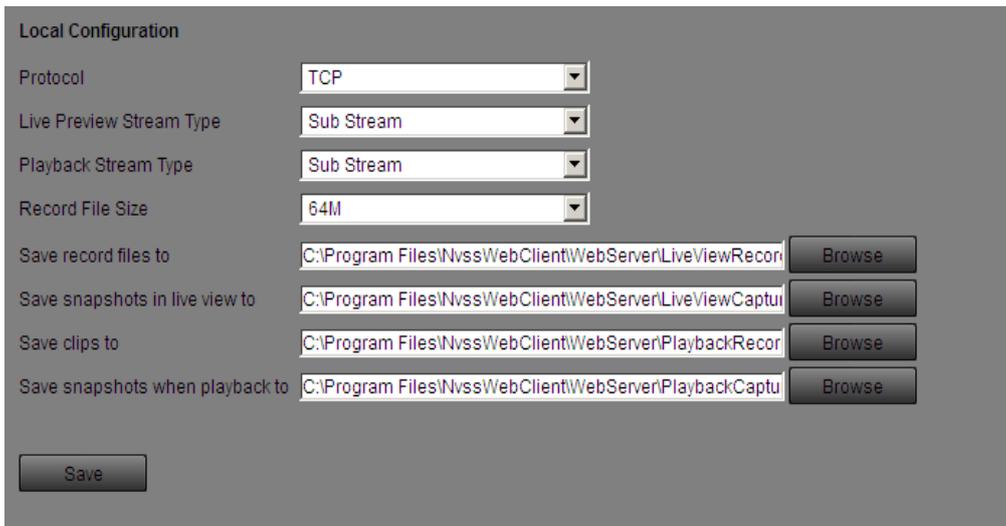
You can select the camera in camera list on the left to any window to preview its video. You also can scroll the mouse to magnify the selected image, eight times largest, if you want to restore the enlarged image, you should click the right mouse button.

-
-  --Press this button to pause;
 -  --Press this button to close the current cameras;
 -  --Press this button to play slowly;
 -  --Press this button to play fastly, up to four times, click slow button to back to normal.
 -  --Press this button to play the next frame;
 -  --Press this button to open or close all playback windows;
 -  --Press this button to grab a picture, the default directory of picture is D:\test\Capture Files, you also can set it in configuration;
 -  --Press this button to create file clip;
 -  --Press this button to enable the audio of cameras.
 -  --Press button to set the window's partition mode of the main screen.

There are four types of partitions: 1, 4, 9 and 16.

6.3 Configuration

6.3.1 Local Configuration



Local Configuration

Protocol: TCP

Live Preview Stream Type: Sub Stream

Playback Stream Type: Sub Stream

Record File Size: 64M

Save record files to: C:\Program Files\NvssWebClient\WebServer\LiveViewReco... [Browse]

Save snapshots in live view to: C:\Program Files\NvssWebClient\WebServer\LiveViewCaptu... [Browse]

Save clips to: C:\Program Files\NvssWebClient\WebServer\PlaybackReco... [Browse]

Save snapshots when playback to: C:\Program Files\NvssWebClient\WebServer\PlaybackCaptu... [Browse]

[Save]

pic6-3-1

【Stream Type】 Select Main-stream or sub-stream for the device.

【Record File Size】 You can set the record file size as 32M, 64M, 128M.
【Save Record File to】 This is the directory of local record.
【Save Snapshots in Live View to】 The directory of snapshots.
【Save Clips to】 This directory is used to save the clips from playback.
【Save Snapshots when playback to】 The directory of snapshots which are from playback.

6.4 Logout

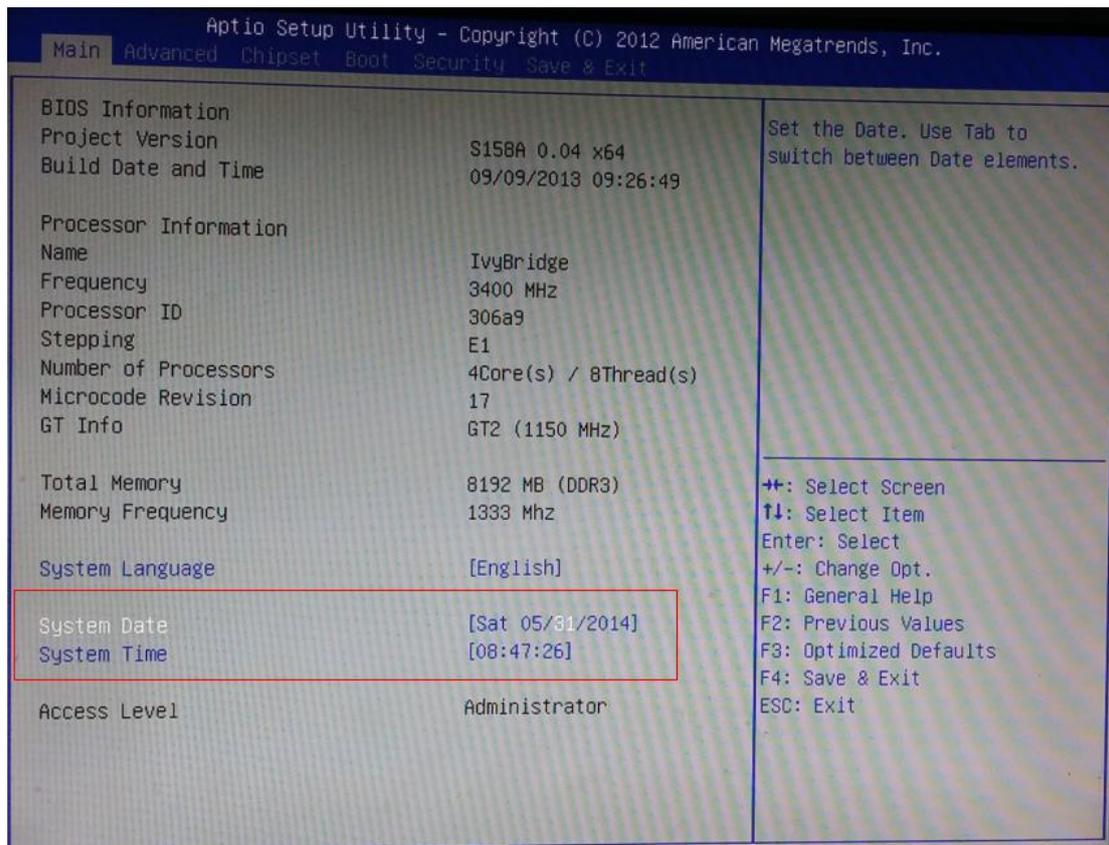
Press  button, you can logout the web client of your NVSS and back to the login screen.

Appendix A: Modify the System Date in BIOS

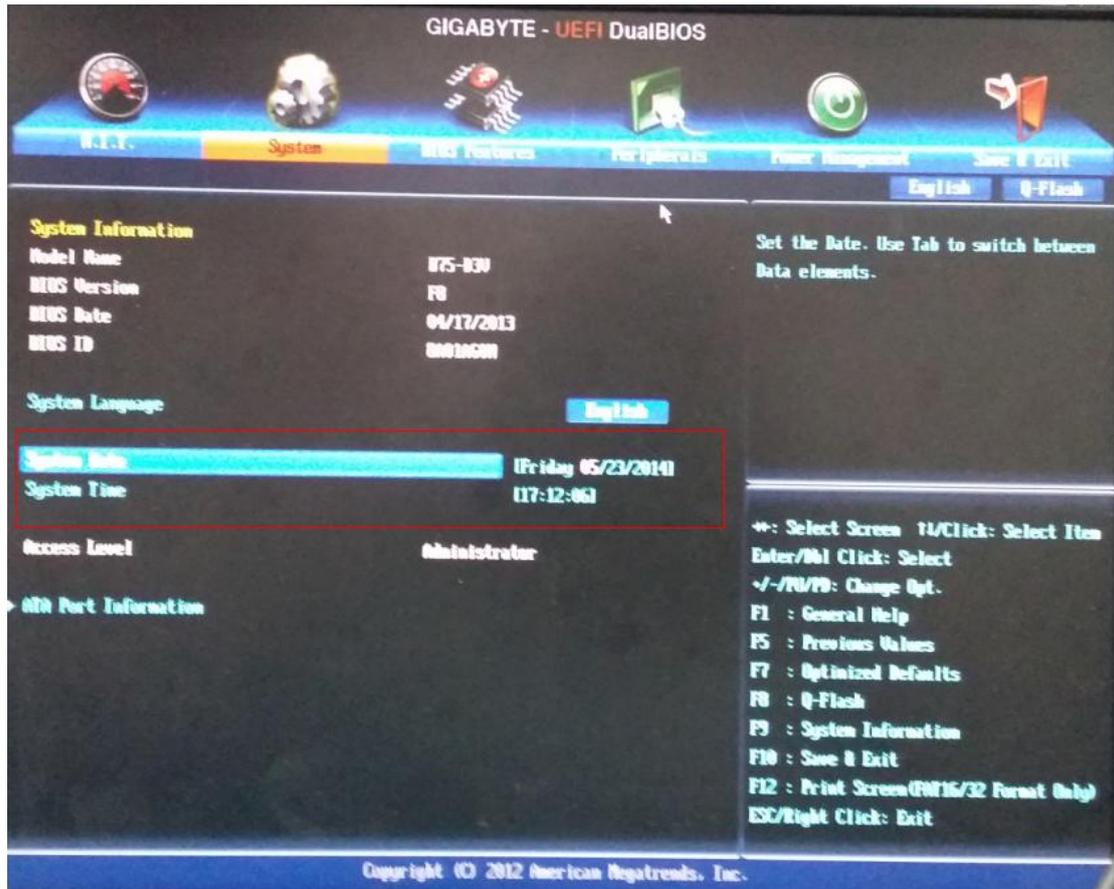
1. Enter BIOS

Restart the system, press DEL key constantly to enter the BIOS when the system is being started. Our NVSS system includes two kinds of motherboard:

The motherboard of SV6-B75A6:



The motherboard of GA-B75-D3V:



2. Modify the System Date

After you enter the main interface of BIOS, then select the row of System Date by pressing **↑** and **↓** keys.

Set the date that you want by using the TAB key to switch between data elements.

3. Save and Exit

If you have set your system date successfully, now, press F4 to save and exit for SV6-B75A6 motherboard, for GA-B75-D3V motherboard press F10.

Then the NVSS system will start.

Appendix B: Enable the Hot Plug

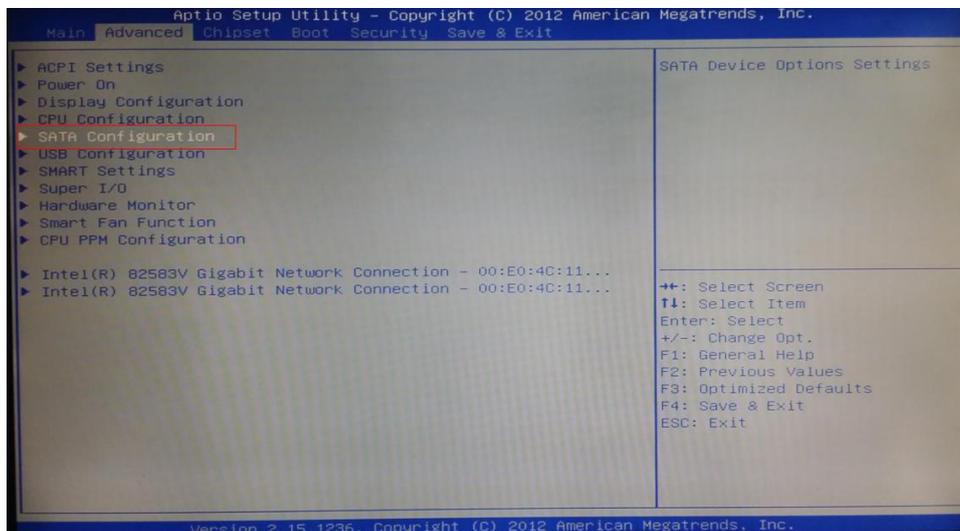
1. Enter BIOS

Restart the system, press DEL key constantly to enter the BIOS when the system is being started.

We introduce the SV6-B75A6 motherboard as example here, other motherboards are similar.

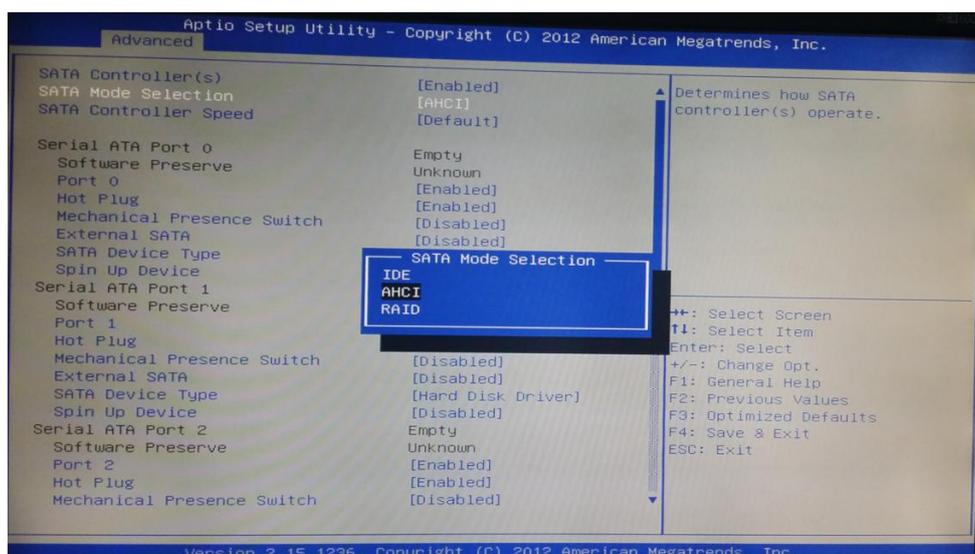
2. Enable the Hot Plug

Press “←” or “→” to switch the screen and select the **Advanced** screen, showed as pic2-1:



pic2-1

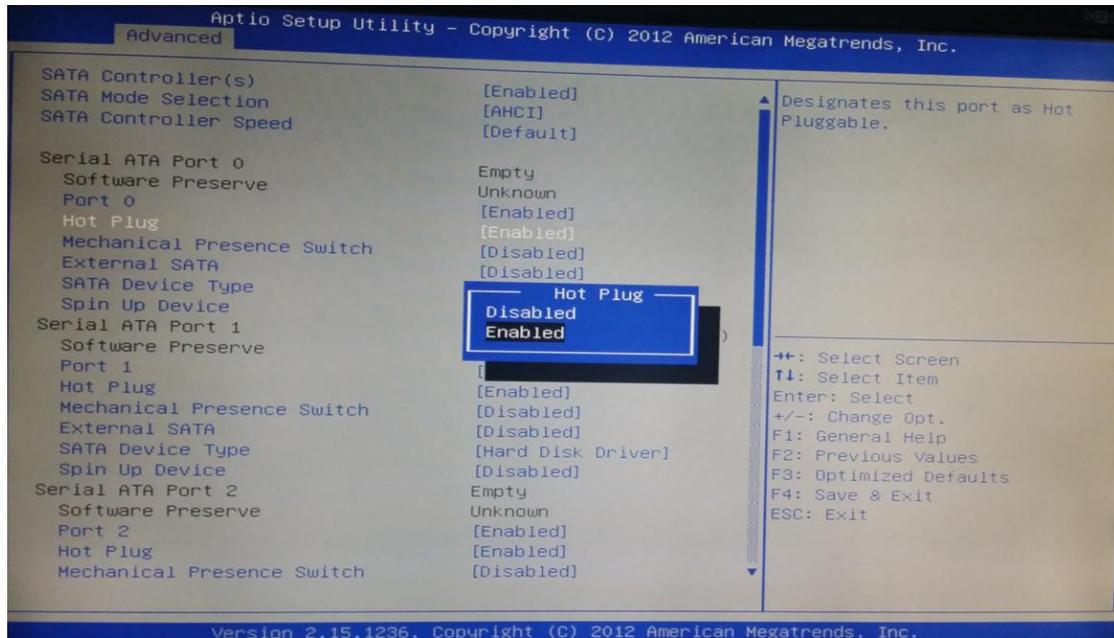
Select the “SATA Configuration” and Enter it. Shown as pic2-2.



pic2-2

Enter the “SATA Mode Selection” and select the “AHCI” mode, showed as pic2-2.

Then there are many “Serial ATA Port”,select the “Hot Plug”option and enter it , and enable the hot plug here. Showed as pic 2-3.



pic2-3

Repeat this step to enable all hot plug of every serial ATA port.

3. Save&Exit

Press “F4” to save and exit, the system will restart.