

Distributed Decoding System User's Manual

V 2.0.0

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Welcome

Thank you for purchasing our Distributed Decoding System!

This user's manual is designed to be a reference tool for the installation and operation of your system.

Here you can find information about features and functions, as well as a detailed menu tree.

Before installation and operation please read the following safeguards and warnings carefully!

Important Safeguards and Warnings

1 . Electrical safety

All installation and operation here should conform to your local electrical safety codes.
We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

2 . Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3 . Installation

Keep the device upwards. Handle it with care.
Do not apply power to the device before completing installation.
Do not place objects on the device.

4 . Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers.
We are not liable for any problems caused by unauthorized modifications or attempted repair.

5 . Environment

The device should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.

6. Accessories

Be sure to use all the accessories recommended by manufacturer.
Before installation, please open the package and check all the components are included.
Contact your local retailer ASAP if something is broken in your package.

7. Lithium battery

Improper battery use may result in fire, explosion, or personal injury!
When replace the battery, please make sure you are using the same model!

1 Product Overview

1.1 Introduction

The Distributed Decoding System is a new generation of independent R&D of the telecommunication-level of distributed decoding system. The system is flexible and stable in deployment, suitable for public security, banking, intelligent buildings, highways, coal, oil, electricity, subway, railway, prison, campus, court, conference system and other monitoring center construction. It can unify deployment and management of monitoring devices distributed in different locations / floor, with interoperability, to meet customer needs for the monitoring of various places.

Main Application: Support analog / HD cameras, network camera input; support HDMI, DVI and other output ports. Use these rich interface to achieve matrix switching, encoding, decoding; support network storage, to achieve centralized storage management; support network live preview.

1.2 Features

This product is digital video switch, multi-business access, centralized management, distributed deployment of digital video matrix system. It achieves analog, digital, HD network and HD digital video signal switch, HD image output to wall; video signal decode, data storage, network live preview and other management over network, scheme, log, user right, device maintenance. This distributed decoding system also achieves HD video command deployment and video conferencing systems.

1.2.1 Structural Feature

- System components: central decoding box, decoding box, encoding box, switch, interface software.
- Independent module design, baytrail processor.

1.2.2 HDD

- High-speed connector, x4 PCI-E gen2, 12V DC power supply on card to ensure high-speed data flow patency.
- Hot-swap buttons and indicators, so that users can expand the application flexibly and understand of the work of the card.
- There are various interfaces on card, such as USB, serial port, network port, HDMI, BNC, DVI, etc., to ensure that the device function at the same time also facilitate the user or technical staff of the deviceoperation and debugging..

1.2.3 Software

Embedded LINUX OS: distributed deployment, unified management.

Matrix Switch Control

- Analog camera, SDI camera, DVR, IPC, analog matrix, DVD, computer DVI/VGA signal.
- Support signal without compression direct exchange output.
- Support keyboard control switch.
- Modular input, output card design, according to the needs of a combination of a variety of digital video switching matrix.
- All signal networks are interoperable.
- Signal source and display unit can be added as needed.

A/V Encoding Input

- Adopt H.264 video compression standard, support dual stream technology, VBR, support composite streaming and video streaming encode, and during composite streaming, A/V sync
- A/V encoding card may support 4-ch BNC (CVBS signal), 4-CH HD-SDI, 1-CH VGA and DVI loop (support DVI, VGA, HDMI signal), 4-ch HDCVI.
- Max support 8-ch HD video encoding capacity or 4-ch SD video encoding capacity.
- Non-standard decoding.
- Support SVAC/MPEG4/H.264/MJPEG/H265
- Support 4K, H.256, SVAC.

A/V Decoding Output

- DVI, HDMI output display.
- 1/4/6/8/9/16 window split and free split.
- Fluency function, to double original video 25 fps or 30 fps into 50 fps or 60 fps respectively.
- Maximum support 4 Road 800W HD decoding capabilities, 16 1080p HD video decoding capabilities, 36 720p HD video decoding capabilities, 64-channel D1 standard definition video decoding capabilities and 64 960H standard definition video decoding capabilities.
- Support 1200W, 800W, 500W, 300W HD video decoding.
- 30 preset scenes; user may customize each TV wall layout.

Video Wall Splicing

- Support video wall splicing, window, roaming, overlay.
- Support at least 100 display unit composed of large-screen wall.
- Digital zoom in
- Open window and roaming, a single screen supports 16 windows.
- Combined window supports 1/4/6/8/9/16 splits.
- HD panorama splicing.
- Point-to-point HD background display.
- Virtual LED, adjust font, color, spacing, background color, roll speed.
- Support small spacing LED, max resolution: 2 × 1080p or 4K.
- A single display unit can simultaneously display 16 different 1080P signals in real time

Record and Storage

- Scheduled record, mobile detection record.
- Pre-record and delay record.
- Redundant record

- Support to lock and unlock record file.
- HDD disk management.
- IPSAN, ISCSI standard network protocol storage, support NVR, NAS, EVS and other centralized storages.

Network Function

- 4 RJ45 interfaces, 2 SFP+port.
- Support TCP/IP protocol including TCP, UDP, RTP, RTSP, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, ISCSI and etc.
- TCP / IP network transmission.
- Support network interconnection, support unicast and multicast.
- Remotely gets system operating status, system log.
- Support user rights management, support black and white list function.
- Support NAS, IP SAN network centralized storage.
- Support management software to remotely switch video wall signal of analog and digital video. Support keyboard control.
- Support remotely receiving and configuring parameter, remotely rebooting and remotely inputting/outputting parameters.

Other

- Mutli-alarm input/output.
- Audio talk.
- Main control support 2 SATA ports.
- Local output.
- Fisheye correction, 12-ch D1 or 800W fisheye camera.
- Complete set of operation, alarm, abnormality and log recording, simplifying user and technical staff's maintenance.
- Complete user authority management and storage management, while the authority can be subdivided into a channel and a single HDD, making the device more user-friendly.
- Support local and remote update, guaranteeing update to catch changing market demand.
- Support network storage to accommodate demand from medium to large monitoring systems.
- Multiple users and clients login, convenient for users to preview and manage monitoring whenever and wherever possible.
- Display is available with network, flexible layout.
- Single-point maintenance, hot sway plan.

1.3 System Networking

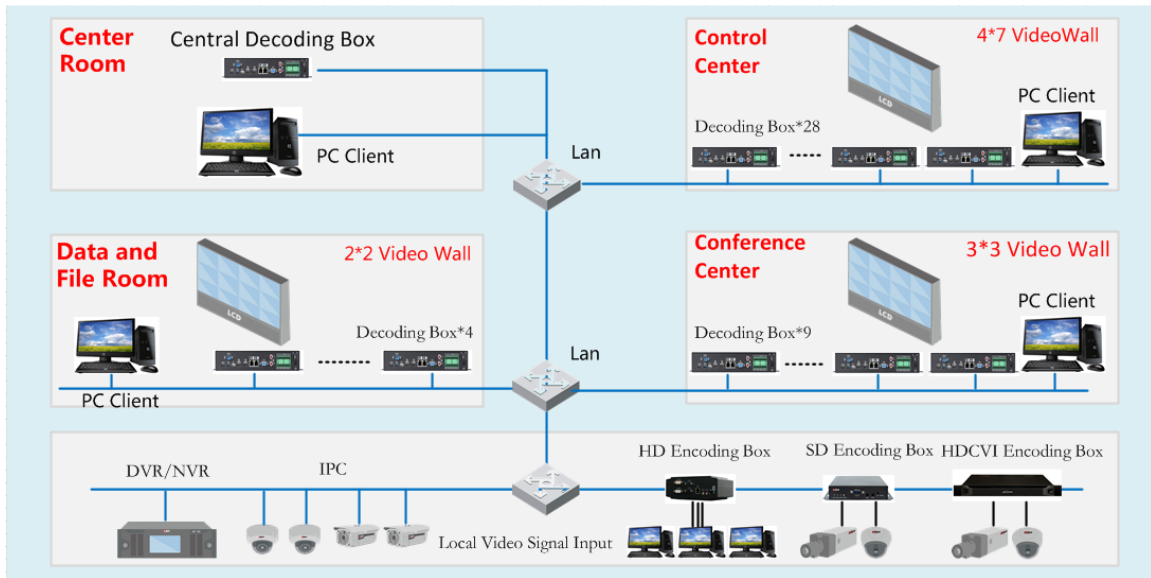


Figure 1-1

1.4 Introduction to Compression Cards in System

Name	Model	Functional Module	Description	Note
Input Module	0404SI	HD-SDI encoding box	<ul style="list-style-type: none"> 1-ch VGA output , 1-ch HDMI output, 1-ch BNC (1.0VPP , 75Ω) , TV/VGA/HDMI video sync output 2-ch RS485 port 4-chBNC audio input, 1-ch BNC audio output 4-ch alarm input , 3-ch alarm output 1-ch audio talk input and output 2 SATA port, 1 eSATA port 1 RJ45 port 1 standard 485 port, 1 standard 232 port 2 USB port 	Optional
	0404BI	BNC encoding box	<ul style="list-style-type: none"> 1 BNC a/v input port 1-ch audio talk input and output 1 SD card port 4-ch alarm input, 2-ch alarm output 1 RJ45 port 1 standard 485 port 1 antenna port 	Optional (support DVI, VGA, HDMI signal)

Name	Model	Functional Module	Description	Note
	0404CI	HDCVI encoding box	<ul style="list-style-type: none"> 1-ch VGA output , 1-ch HDMI same source output, HDMI/VGA video sync output 1-ch BNC audio input, 1-ch BNC audio output 4-ch BNC(1.0VP-P , resistance : 75Ω) video input, max 2-ch network IPC input (8M) 1 RJ45 port 1 USB port 1 standard 485 port 	Optional
	0104DI/ 0104DI -4K	DVI encoding box	<ul style="list-style-type: none"> 1 VGA and 1-ch DVI loop output 1-ch BNC audio input 1-ch audio talk input and output 4-ch alarm input , 4-ch alarm output 1 RJ45 port 1 standard 485 port , 1 standard 232 port 1 USB port 	Optional
Output Module	0204HO-H	HDMI central decoding box	2 HDMI video output port	Standard

Chart 1-1

1.5 Decoding Box

Central decoding box is responsible for management of HDMI distributed decoding box in the system. HDMI distributed box is responsible to receive server forwarded stream and decode to display.

1.5.1 0204HO-H Distributed Central Decoding Box

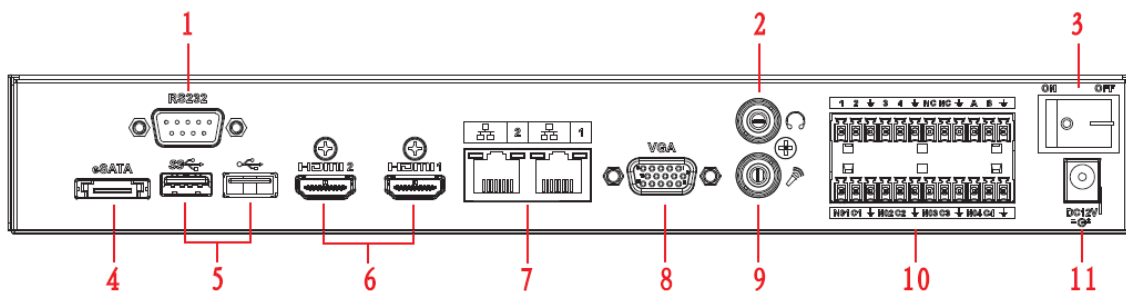


Figure 1-2

1.5.1.1 Port


No.	Port	Note
1	RS232 port	General serial debugging, set IP address. Transmit transparent serial data
2	Audio talk output port	Connect to headset and etc.
3	Power	Power up/off device
4	eSATA port	Connect to SATA HDD, with faster data transmission speed
5	USB port	Connect to mouse, USB storage device, disk and etc.
6	HDMI port	HD a/v signal output port, transmitting uncompressed HD video and multichannel audio data to HDMI port of display device
7	Network port	1000M Ethernet port
8	VGA port	Output analog video signal, may connect to monitor to view analog video output
9	Audio talk input port	Connect to MIC
10	Alarm input, alarm output, RS-485 port	1 ~ 4 : 4-ch alarm input, receiving external alarm source's switch signal
		 : Alarm input GND
		NO1C1 , NO2C2 , NO3C3 , NO4C4: 4-ch alarm output port, output alarm signal to alarm device <ul style="list-style-type: none"> ● NO1C1: NO alarm output 1 ● NO2C2: NO alarm output 2 ● NO3C3: NO alarm output 3 ● NO4C4: NO alarm output 4
		NC: Alarm constant
	A, B: RS485 port, connect to PTZ dome and other control devices.	
11	Power input port	Power port, input 12V DC

Chart 1-2

1.5.1.2 Technical Specification

Model	0204HO	
Video Output	2-ch HDMI 1.4 port	
Decoding Capacity	<ul style="list-style-type: none"> ● 4 800w@30fps (12M stream) ● 16 1080P@30fps (8M stream) ● 36 720P decoding output (4M stream) ● 64 D1 (2M stream) ● 64 960H (2.5M stream) 	
Decoding Format	MPEG4/H.264/H.265/MJPEG/SVAC	
Audio Output Channel	2-ch, HDMI embedded audio	
Talk	RCA(level 2Vrms, output resistance 10k ohms)	
Alarm Input/output	4 in 4 out (30V DC 1A, 125VAC 0.5A link output)	
Network Port	2 RJ45 10/100/1000M self-adaptive Ethernet port	
AUX	RS232	1 standard 232 port
	USB Port	1 USB2.0 port, 1 USB3.0 port
	RS485	1 485 port

Chart 1-3

1.5.2 0204HO 2-CH HDMI Distributed Decoding Box

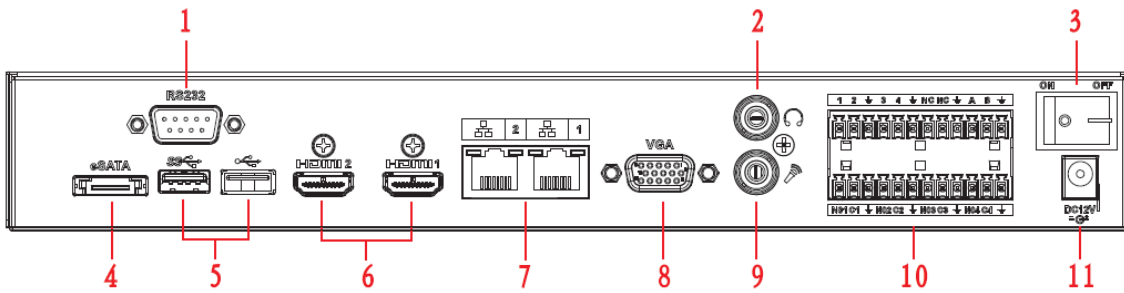


Figure 1-3

1.5.2.1 Port

No.	Port	Note
1	RS232 port	General serial debugging, set IP address. Transmit transparent serial data
2	Audio talk output port	Connect to headset and etc.
3	Power	Power up/off device
4	eSATA port	Connect to SATA HDD, with faster data transmission speed
5	USB port	Connect to mouse, USB storage device, disk and etc.
6	HDMI port	HD a/v signal output port, transmitting uncompressed HD video and multichannel audio data to HDMI port of display device
7	Network port	1000M Ethernet port
8	VGA port	Output analog video signal, may connect to monitor to view analog video output
9	Audio talk input port	Connect to MIC
10	Alarm input, alarm output, RS-485 port	<p>1 ~ 4 : 4-ch alarm input, receiving external alarm source's switch signal</p> <p>⏏ : Alarm input GND</p> <p>NO1C1 , NO2C2 , NO3C3 , NO4C4: 4-ch alarm output port, output alarm signal to alarm device</p> <ul style="list-style-type: none"> ● NO1C1: NO alarm output 1 ● NO2C2: NO alarm output 2 ● NO3C3: NO alarm output 3 ● NO4C4: NO alarm output 4 <p>NC: Alarm constant</p> <p>A, B: RS485 port, connect to PTZ dome and other control devices.</p>
11	Power input port	Power port, input 12V DC

Chart 1-4

1.5.2.2 Technical Specification

Model	DH-M70-D-0204HO
Video Output	2-ch HDMI 1.4 port
Decoding Capacity	<ul style="list-style-type: none"> ● 4 800w@30fps (12M stream)

Model	DH-M70-D-0204HO	
	<ul style="list-style-type: none"> • 16 1080P@30fps (8M stream) • 36 720P decoding output (4M stream) • 64 D1 (2M stream) • 64 960H (2.5M stream) 	
Decoding Format	MPEG4/H.264/H.265/MJPEG/SVAC	
Audio Output Channel	2-ch, HDMI embedded audio	
Talk	RCA(level 2Vrms, output resistance 10k ohms)	
Alarm Input/output	4 in 4 out (30V DC 1A, 125VAC 0.5A link output)	
Network Port	2 RJ45 10/100/1000M self-adaptive Ethernet port	
AUX	RS232	1 standard 232 port
	USB Port	1 USB2.0 port, 1 USB3.0 port
	RS485	1 485 port

Chart 1-5

1.6 Encoding Box

1.6.1 0404SI 4-CH SDI Distributed Encoding Box

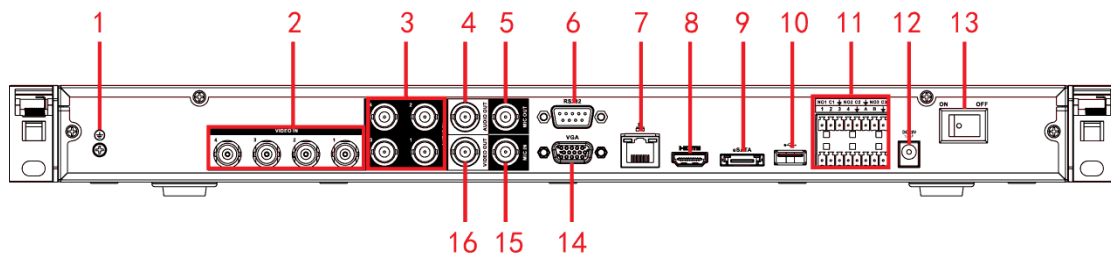


Figure 1-4

1.6.1.1 Port

No.	Port	Note
1	GND	GND
2	Video input port	Connect to SDI camera, video digital signal
3	Audio input port	Receive analog audio signal from pick up
4	Audio output port	Connect to audio output device
5	Audio talk output port	Connect to headset and other audio talk output device
6	RS232 port	General serial debugging, set IP address. Transmit transparent serial data
7	Network port	100M Ethernet port
8	HDMI port	HD a/v signal output port, transmitting uncompressed HD video and multichannel audio data to HDMI port of display device
9	eSATA port	Connect to SATA HDD, with faster data transmission speed
10	USB port	Connect to mouse, USB storage device, disk and etc.
11	Alarm input, alarm output, RS-485 port	1 ~ 4 : 4-ch alarm input, receiving external alarm source's switch signal


No.	Port	Note
		 : Alarm input GND NO1C1 , NO2C2 , NO3C3: 3-ch alarm output port, output alarm signal to alarm device <ul style="list-style-type: none"> ● NO1C1: NO alarm output 1 ● NO2C2: NO alarm output 2 ● NO3C3: NO alarm output 3 A, B: RS485 port, connect to PTZ dome and other control devices.
12	Power input port	Power port, input 12V DC
13	Power	Power on/off
14	VGA port	Output analog video signal, may connect to monitor to view analog video output
15	Audio talk input port	Connect to MIC
16	Video output port	Connect to display

Chart 1-6

1.6.1.2 Technical Specification

Model	0404SI
Video Input Port	BNC (1.0VP-P, resistance: 75Ω)
Signal Standard	HD-SDI standard 1.485Gbps
Encoding Capacity	Card 4-ch 1080P
Encode Resolution	1080P/720P/960H/D1/HD1/2CIF/CIF/QCIF
Video Output	1-ch VGA output, 1-ch HDMI output, 1-ch NC (1.0VPP, 75Ω) Support TV/VGA/HDMI video sync output
Audio Input	4-ch BNC audio input (BNC)
Audio Output	1-ch BNC audio output (BNC)
Audio Talk	Independent audio talk input, output (BNC)
Alarm Input/output	4-ch in 3-ch out
HDD Port □	2 SATA port, 1 eSATA port, 4T
Network	1 RJ45 port, 10M/100M/1000M self-adaptive Ethernet port
COM	1 standard 485 port, 1 standard 232 port
USB	2 USB port (front 1 back 1)

Chart 1-7

1.6.2 0404BI 4-CH CVBS Distributed Encoding Box

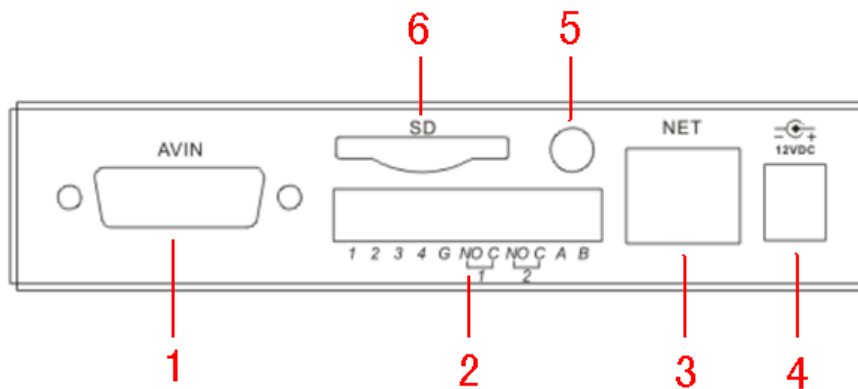


Figure 1-5

1.6.2.1 Port

No.	Port	Note
1	AVIN	Video input port: receive camera's analog video signal Audio input port: receive MIC's analog audio signal
2	Alarm input, alarm output, RS-485 port	1~4: 4-ch alarm input, receiving external alarm source's switch signal G: GND NO/C-1, NO/C-2: 2-ch alarm output port, output alarm signal to alarm device • NO/C-1: NO alarm output 1 • NO/C-2: NO alarm output 2 A, B: RS485 port, connect to PTZ dome and other control devices.
3	Network port	10/1000M self-adaptive Ethernet port
4	Power input port	Input 12V DC During POE, as power output port, output 12V DC to front analog camera. Front analog camera power shall not exceed 3W.
5	Wireless antenna port	Connect to wireless antenna, receive WIFI, 3G and etc.
6	SD card port	Place SD card

Chart 1-8

1.6.2.2 Technical Parameter

Model	0404BI
Video Input Port	BNC (1.0VP-P, resistance: 75Ω)
Video Resolution	960H/D1/HD1/2CIF/CIF/QCIF
Encoding Capacity	Card 4-ch 960H/D1
Audio Input	4-ch 200-2000mV 10KΩ (RCA)
Audio Talk	1-ch audio talk input and output, 3.5mm JACK MIC IN/OUT
Storage	1 SD card port
Alarm	4 in 2 out
Network Port	RJ45 10M/100M self-adaptive Ethernet port
RS485	1 PTZ control port, multiple protocol supported

Model	0404BI
Antenna	1 antenna port, may be for wireless module

Chart 1-9

1.6.3 0404CI 4-CH HDCVI Distributed Encoding Box

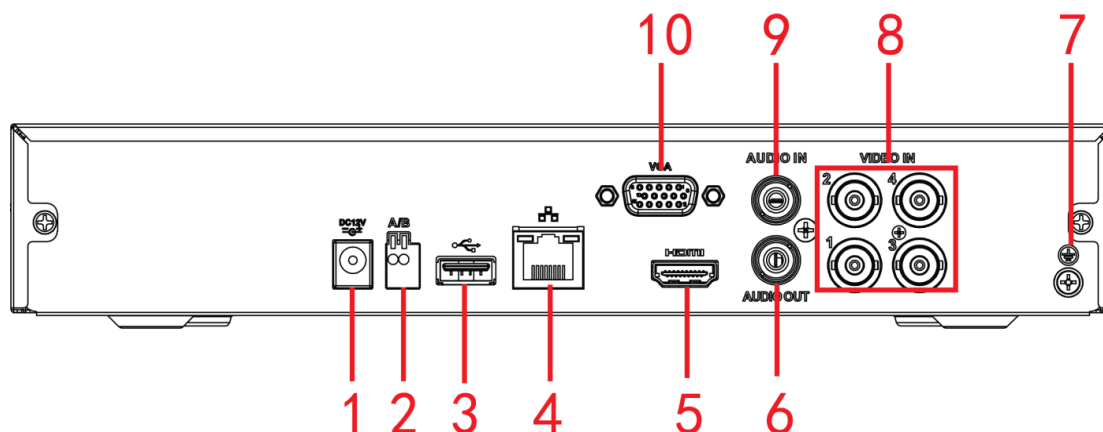


Figure 1-6

1.6.3.1 Port

No.	Port	Note
1	Power input port	Power port, input 12V DC
2	RS485 COM port	<ul style="list-style-type: none"> RS485_A port, control 485 device A line, used to connect external speed dome and etc. RS485_B port, control 485 device B line, used to connect external speed dome and etc.
3	USB port	Connect to mouse, USB storage device, disk and etc.
4	Network port	100M Ethernet port
5	HDMI port	HD a/v signal output port, transmitting uncompressed HD video and multichannel audio data to HDMI port of display device
6	Audio output port	Connect speaker and other audio output device
7	GND	GND
8	Video input port	Connect to analog camera, video digital signal
9	Audio input port	Receive analog audio signal from pick up
10	VGA port	Output analog video signal, may connect to monitor to view analog video output

Chart 1-10

1.6.3.2 Technical Specification

Model	0404CI	
Video Input Port	Input	BNC (1.0VP-P, resistance: 75Ω) , max 2-ch network IPC input (8M)
Audio Port	Input	BNC (1.0VP-P, resistance: 75Ω) (HDCVI embedded audio, co-axis transmission)
Signal		HDCVI, support co-axis anti control

Model	0404CI
Standard	
Encoding Capacity	Card 8-ch 1080P/720P
Audio Input/output	Each 1-ch, RCA port
Audio Talk	reuse
Image Resolution	1080P (non live) /720P/960H/D1/HD1/2CIF/CIF/QCIF 8/16-ch device: 720P (non live) /960H/D1/HD1/2CIF/CIF/QCIF
Video Output	1-ch VGA output , 1-ch HDMI same source output , HDMI/VGA video sync output
HDD Number	1 SATA port, not support eSATA port , card capacity max 6T (recommend 4T)
USB Port	2 USB port
Network Port	1 RJ45 port, 100M Ethernet port
RS485 Port	1

Chart 1-11

1.6.4 0104D1 1-CH DVI Distributed Encoding Box

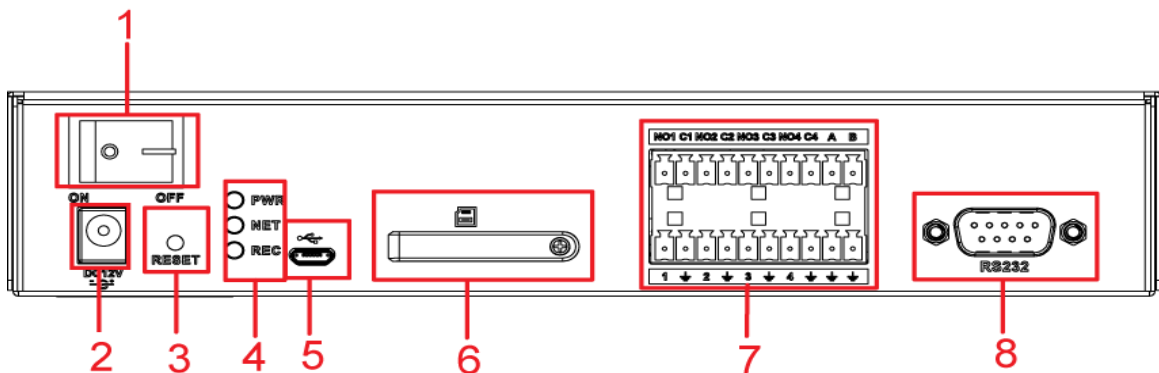


Figure 1-7 Front

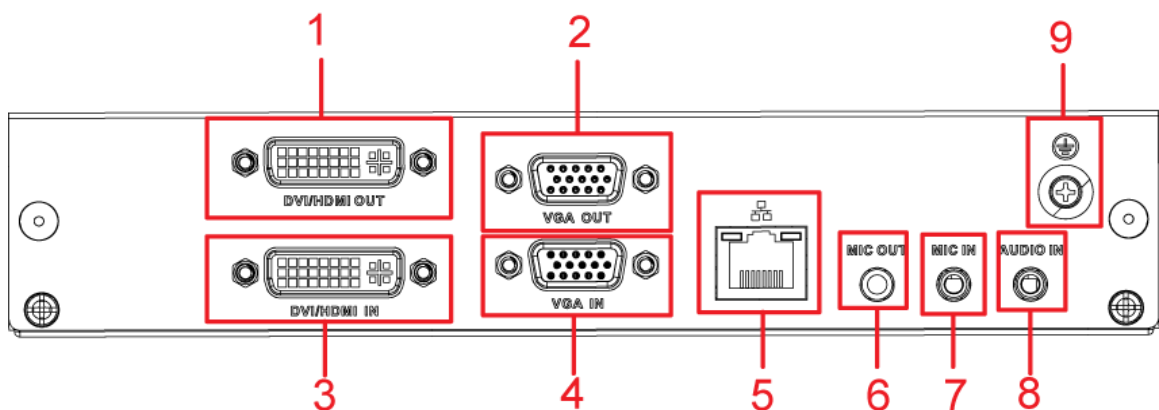


Figure 1-8 Rear

1.6.4.1 Port

No.	Port	Note
-----	------	------


No.	Port	Note
1	Power switch	Power on/off
2	Power port	Power port, input 12V DC
3	Reset	Clear config.
4	PWR	Display motherboard power status
	NET	Display network status
	REC	Record work status
5	USB port	Connect to mouse, USB storage device, disk and etc.
6	SD card port	Place SD card.
7	Alarm input, alarm output, RS-485 port	1 ~ 4 : 4-ch alarm input, receiving external alarm source's switch signal
		 : Alarm input GND
		NO1C1 , NO2C2 , NO3C3 , NO4C4: 4-ch alarm output port, output alarm signal to alarm device <ul style="list-style-type: none"> ● NO1C1: NO alarm output 1 ● NO2C2: NO alarm output 2 ● NO3C3: NO alarm output 3 ● NO4C4: NO alarm output 4
		A, B: RS485 port, connect to PTZ dome and other control devices.
8	RS232 port	Used for general serial debugging, set IP address, transparent serial data

Chart 1-12

No.	Port	Note
1	DVI/HDMI loop output	<ul style="list-style-type: none"> ● DVI: digital video output port, transmit digital video data to display device with DVI port. ● HDMI : HD A/V signal output port, transmit uncompressed HD video and multichannel audio data to display device with HDMI port
2	VGA loop output	Output analog video signal, may connect monitor to view analog video output
3	DVI/HDMI signal input	Input digital signal or HD A/V signal
4	VGA signal input port	Input analog video signal, may connect to analog camera
5	Network port	100M Ethernet port
6	Audio talk output port	Connect to headset and etc.
7	Audio talk input port	Connect to MIC
8	Audio input port	Connect to analog audio signal from pick or MIC
9	GND	GND

Chart 1-13

1.6.4.2 Technical Specification

Model	0104DI
Encoding Capacity	Max 1920×1080@60fps encode
Encoding Resolution	1920×1080/1600×1200/1280×1024/1280×960/1280×800/1280×720/1024×768/704×576
Video Frame Rate	1920×1080 and below 1-60fps
Video Output Port	1-ch VGA and 1-ch DVI loop output
Audio Input	1-ch, 3.5mm Jack port

Model	0104DI
Channel	
Audio Talk	3.5mm Jack port, input port: 3.5mm port (level 2.0V Line in/50mV Mic in, input resistance 10K) ; output port: 3.5mm port (level 2.0V, output resistance 16Ω)
Alarm Input/output	4 in 4 out
Network Port	1 RJ45 Ethernet port (10M/100M/1000M self-adaptive)
RS232	1 standard 232 port, DB9
USB Port	1 Mini USB 2.0 port
RS485	1 485 port, dual work

Chart 1-14

1.6.5 0104DI-4K 1-CH DVI Distributed 4K Encoding Box

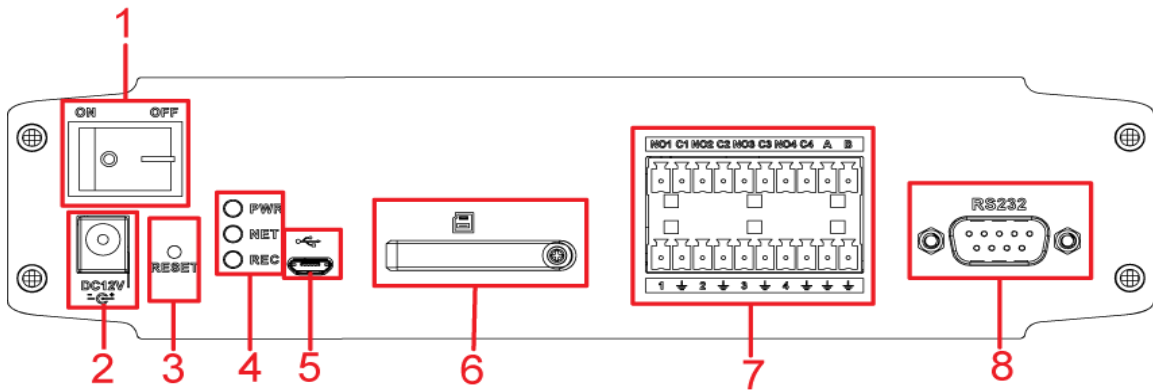


Figure 1-9 Front

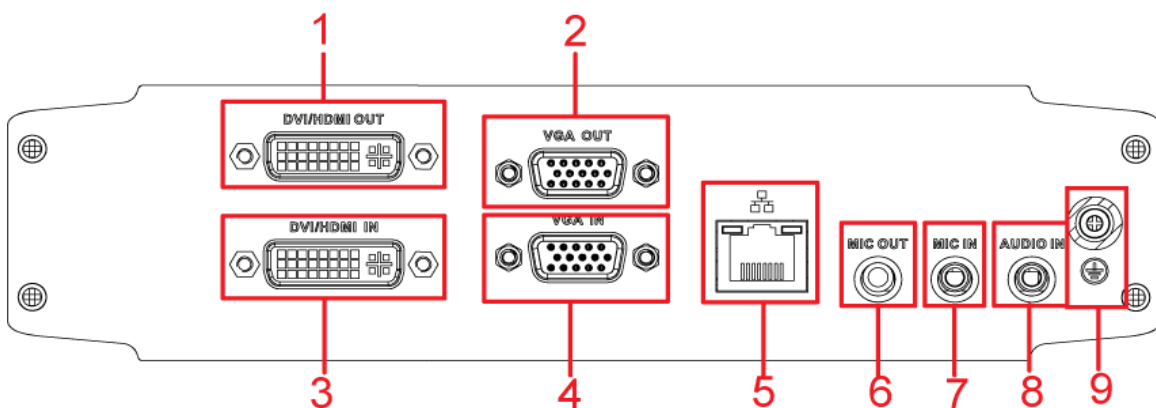


Figure 1-10 Rear

1.6.5.1 Port

No.	Port	Note
1	Power switch	Power of/off


No.	Port	Note
2	Power port	Power port, input 12V DC
3	Reset	Clear config
4	PWR	Display motherboard power status
	NET	Display network status
	REC	Record work status
5	USB port	Connect to mouse, USB storage device, disk and etc.
6	SD card port	Place SD card.
7	Alarm input, alarm output, RS-485 port	1 ~ 4 : 4-ch alarm input, receiving external alarm source's switch signal
		 : Alarm input GND
		NO1C1 , NO2C2 , NO3C3 , NO4C4: 4-ch alarm output port, output alarm signal to alarm device <ul style="list-style-type: none"> ● NO1C1: NO alarm output 1 ● NO2C2: NO alarm output 2 ● NO3C3: NO alarm output 3 ● NO4C4: NO alarm output 4
		A, B: RS485 port, connect to PTZ dome and other control devices.
8	RS232 port	Used for general serial debugging, set IP address, transparent serial data

Chart 1-15

No.	Port	Note
1	DVI/HDMI loop output	<ul style="list-style-type: none"> ● DVI: digital video output port, transmit digital video data to display device with DVI port. ● HDMI : HD A/V signal output port, transmit uncompressed HD video and multichannel audio data to display device with HDMI port
2	VGA loop output	Output analog video signal, may connect monitor to view analog video output
3	DVI/HDMI signal input	Input digital signal or HD A/V signal
4	VGA signal input port	Input analog video signal, may connect to analog camera
5	Network port	100M Ethernet port
6	Audio talk output port	Connect to headset and etc.
7	Audio talk input port	Connect to MIC
8	Audio input port	Connect to analog audio signal from pick or MIC
9	GND	GND

Chart 1-16

1.6.5.2 Technical Specification

Model	0104DI-4K
Encoding Capacity	Max 3840x2160@25fps encode
Encoding Resolution	3840x2160/1920x1200/1920x1080/1600x1200/1280x1024/1280x960/1280x800/1280x720/1024x768/704x576
Video Frame Rate	1920x1080 and below 1-60fps
Video Output Port	1-ch VGA and 1-ch DVI loop output

Model	0104DI-4K
Audio Input Channel	1-ch, 3.5mm Jack port
Audio Talk	3.5mm Jack port, input port: 3.5mm port (level 2.0V Line in/50mV Mic in, input resistance 10K) ; output port: 3.5mm port (level 2.0V, output resistance 16Ω)
Alarm Input/output	4 in 4 out
Network Port	1 RJ45 Ethernet port (10M/100M/1000M self-adaptive)
RS232	1 standard 232 port, DB9
USB Port	1 Mini USB 2.0 port
RS485	1 485 port, dual work

Chart 1-17

2 Open-Package Inspection and Wiring

2.1 Inspection Procedure

When you receive distributed decoding system:

Step 1. Please check for obvious external damage. The material of product package should be able to protect the product from majority impacts during transportation.

Step 2. Secondly please open the package, and check all accessories see if any part is missing. You may refer to accompanied accessory bag. After you have checked that all parts are included, you may remove protector on device.

Step 3. Thirdly, please open device case to check front panel's wiring, power line and see if the connection between mainboard and interface board is loose.

Warning:

Label at side of the device case has information of product SN, which is needed if you ask for after sales service. Please keep the label, and do not damage or abandon it.

2.2 Accompanied Assesory Bag

Accompanied assesory bag includes user's manual and disk. When you unpackage the product, please make sure all contents match the checklist.

2.3 Device Installation

2.3.1 Environment

Distributed decoding system device is a system-level surveillance device which is usually placed on central control room. Its installation location must follow relevant standards in corresponding nation.

Power Supply

Rated voltage: AC 100V~AC 120V, AC 200V~AC 240V, 50Hz/60Hz.

Anti-interference

- On-site power supply system shall have effective anti-interference method.
- Site never share equipment or lighting protection with other electricity devices, and keep it far from other devices.
- Keep away from powerful radio-transmitting station, radar and high-frequency stream equipment.
- Electromagnetic shielding is recommended if needed.

Environment

- Maintain room (where this system locates) at $-10^{\circ}\text{C}\sim 50^{\circ}\text{C}$.
- Maintain room (where this system locates) at 10%RH~90%RH.
- Maintain effective air ventilation surrounding the system.

2.3.2 Wiring

Central decoding box has two ports: Ethernet port 1 and Ethernet port 2, see Figure 2-1.

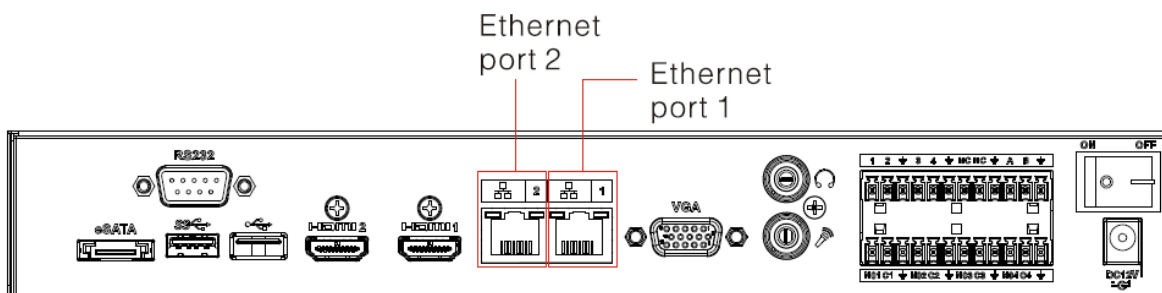


Figure 2-1

Step 1. Port 1 connects to WAN.

Step 2. Port 2 connects to switch.

Step 3. Central decoding box connects to internal general decoding box through switch and general decoding box uses port 1 to connect, see Figure 2-2.

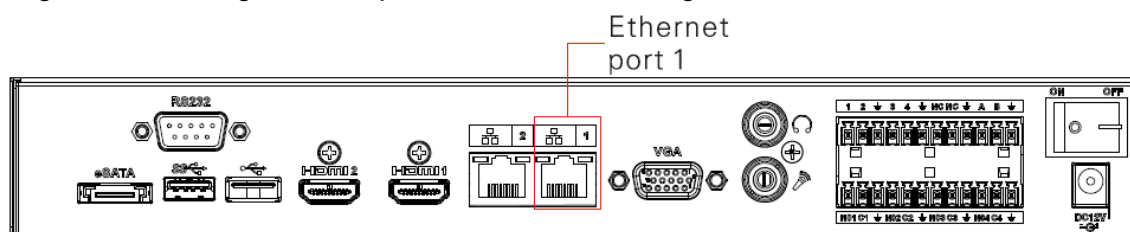


Figure 2-2

Note:

Central decoding box port 2 and general decoding box port 1 are connected through switch or vlan.

2.3.3 Boot Up/Shut Down

2.3.3.1 Boot Up Device

Plug in power line, and press power switch on front panel. Power indicator turns on and device boots up followed by boot interface which lasts for 90s.

When you boot up device, please keep the following in mind:

- 1) Make sure whether the supplied voltage is within 100~240V 47~63Hz. Turn on the device after you check power line connection.
- 2) We recommend you to use power supply with stable voltage and little interference (refer to international standard), which benefit the device to work stably and last longer. This will also benefit external devices such as camera. UPS is the best choice if possible.

2.3.3.2 Shut Down Device

1. Enter main menu → in shutdown system select shutdown device.
2. Press ON button on panel to shutdown.

Warning:

- **Method 1 is recommended.**
- **Stop all performance of the device, and then you may unplug the device from power supply.**

2.3.3.3 Outage and Recovery

When the device is working, and power supply is suddenly cut off or shut down. After re-plugging the device to power, it will auto recovers to status before the cut off and continue working.

2.3.3.4 Change Button Cell

Warning:

Export and save config before replacing button cell, otherwise all config will be lost!

We recommend you to replace with button cell in the same model as previously used. Please check system time regularly, and in general replace button cell on an annual basis.

- At time of inserting mainboard and Function Card into chassis, please remove the protection cover at connection interface of real panel.
- Connect Ethernet port 2 on main control panel to any Ethernet port on control panel via a cable.
- In case of beep, it may be that either one of power modules is not well fixed. You may press the small red button next to power module at the rear of device to cancel beep alarm.

3 Local Interface Config

Note:

Before you operate in Local Interface, you must connect monitor and other control device (i.e. mouse, keyboard) to the device.

3.1 Enter System Menu

After you properly turn on the device, system pops up the startup wizard. Click the Cancel button; you can go to the system login interface. Click the Next Step button; you can go to the startup wizard interface. Here you can set general, encode, schedule, record control, and network.

Please see Figure 3- 1.




Figure 3- 1

The system login interface is shown as in Figure 3- 2.

System consists of four accounts (defaulted):

- **Username:** admin. **Password:** admin. (administrator, local and network)
- **Username:** 888888. **Password:** 888888. (administrator, local only)
- **Username:** 666666. **Passwords:** 666666(Lower authority user who can only monitor, playback, backup and etc.)
- **Username:** default. **Password:** default(hidden user)

You can use USB mouse, front panel, remote control or keyboard to input. About input method:

Click  to switch between numeral, English character (small/capitalized) and denotation and click designated buttons on soft keyboard with the mouse.

Note:

For security reason, please modify password after you first login. To add user group, user and edit user please refer to User Account Section.

Within 30 minutes, three times login failure will result in system alarm and five times login failure will result in account lock!

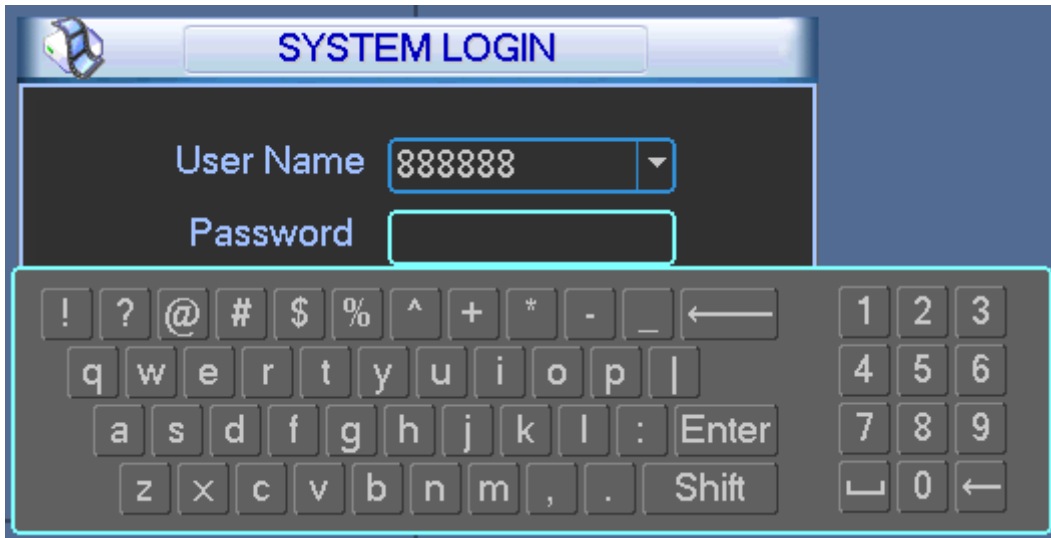


Figure 3- 2

3.2 Network

Network interface is shown below as in Figure 3- 3.

Figure 3- 3

- Network Mode: It includes multi-addresses, fault tolerance, load balance, net bridge and link aggregation.
- Aggregation Set: Under net bridge mode under.
- Net bridge Set: Under net bridge mode only. This setup can bind any two network cards to one net bridge as one network card can only bind one net bridge. Bound net bridge will be shown in Ethernet dropdown box. Bound network card as net bridge will be not shown.
- Ethernet Card Name: You can select from 1~~2.
- Default Ethernet port: You can select from 1~~2. Under multiple addresses and bridge mode only.
- Aggregation strategy: Under aggregation link mode only. Strategies available are MAC-address-based, IP-address-and-port-based, IP-address-and-MAC-address-based. IP-address-and-port-based.
- IP version: IPv4 and IPv6.

- IP address: Here you can input IP address and then set corresponding subnet mask and default gateway.
- DHCP: It is to auto search IP. When enable DHCP function, you cannot modify IP/Subnet mask /Gateway. These values are from DHCP function. If you have not enabled DHCP function, IP/Subnet mask/Gateway display as zero. You need to disable DHCP function to view current IP information. You must set IP-related parameters again if you disabled DHCP. Besides, when PPPoE is operating, you cannot modify IP/Subnet mask /Gateway.
- TCP port: Default value is 37777. You may set this port.
- UDP port: Default value is 37778. You may set this port.
- HTTP port: Default value is 80.
- RTSP port: Default value is 554. You may set this port.
- Max connection: connections: 0-128. System supports maximal 128 users. 0 means there is no connection allowed.
- Preferred DNS server: Set DNS server IP address.
- Alternate DNS server: Set DNS server alternate IP address.
- Transfer mode: Here you can select the priority among fluency/video qualities/self-adaption.
- LAN download: Under sufficient bandwidth, system can process the downloaded data first if you enable this function. The download speed is 1.5X or 2.0X of the normal speed.
- Master IP: Master server IP address.
- User Name: server username.
- Password: server password.
- Small box: shows status of server registration.
Red: registration failed.
Green: registration succeeded.
- Network Setting: Click to enter LAN service setting as shown in Figure 3- 4. Refer to Ch 3.2.4.5.1 to Ch 3.2.4.5.8.

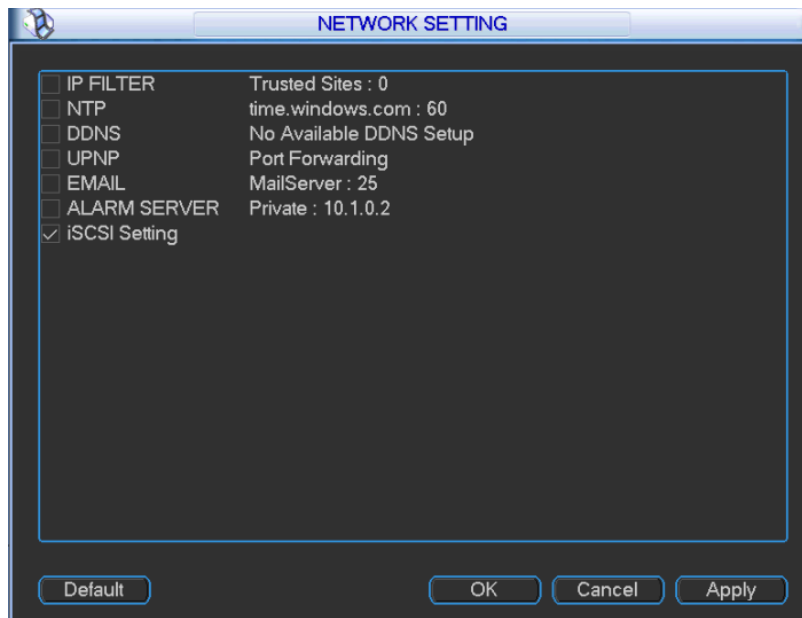


Figure 3- 4

3.2.1 IP Filter

Only IP listed on trusted sites can connect to this device. Trusted sites supports up to 64 IP addresses.

If you disable trusted sites, then there will be no limit for IP address to visits this device. Please see Figure 3- 5.

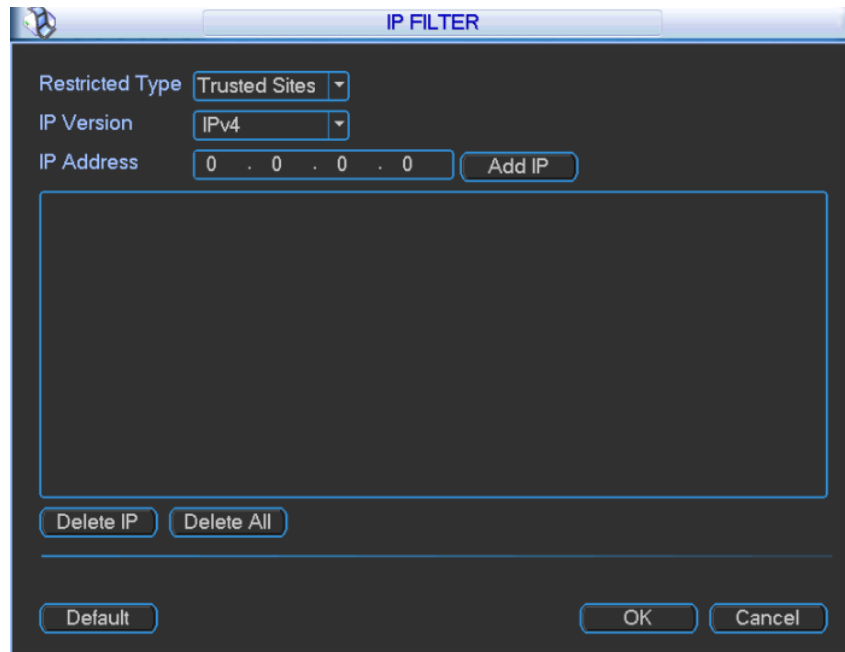


Figure 3- 5

3.2.2 NTP Setting

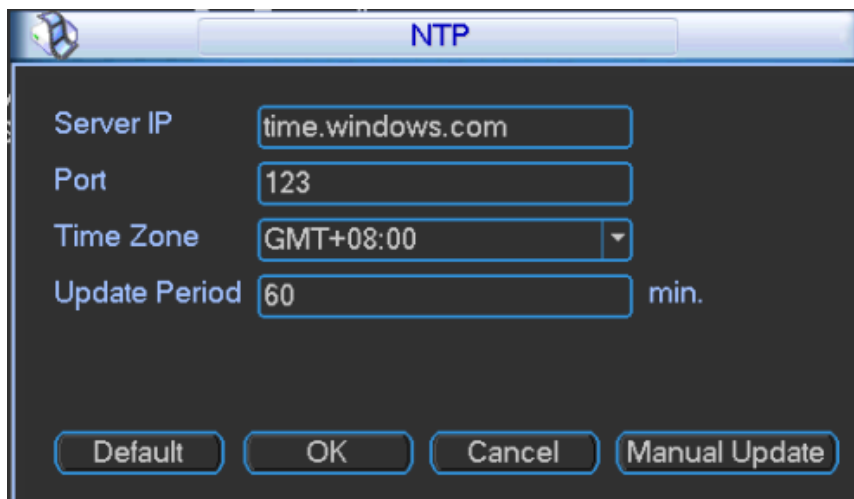


Figure 3- 6

You need to install SNTP server (Such as Absolute Time Server) in your PC first. In Windows 7 OS, you can use command “net start w32time” to boot up NTP service. NTP setting interface is shown as in Figure 3- 6.

- Host IP: Input your PC address where SNTP server is installed.
- Port: This SNTP supports TCP transmission only. Port default value is 123.
- Time zone: select your corresponding time zone here.

Here is a sheet for your time zone setting.

City /Region Name	Time Zone
London	GMT+0
Berlin	GMT+1
Cairo	GMT+2
Moscow	GMT+3
New Deli	GMT+5
Bangkok	GMT+7
Beijing (Hong Kong)	GMT+8
Tokyo	GMT+9
Sydney	GMT+10
Hawaii	GMT-10
Alaska	GMT-9
Pacific Time(P.T)	GMT-8
American Mountain Time(M.T)	GMT-7
American Central Time(C.T)	GMT-6
American Eastern Time(E.T)	GMT-5
Atlantic Time	GMT-4
Brazil	GMT-3
Middle Atlantic Time	GMT-2

- Update interval: minimum value is 1. Max value is 65535. (Unit: minute)

3.2.3 Multicast

After multicast is enabled, it will automatically get multicast address and add ins group. Open preview to monitor via multicast.

3.2.4 DDNS

DDNS setting interface is shown as in Figure 3- 7.

Figure 3- 7

You need a PC of fixed IP in the internet and there is the DDNS software running on this PC. In other words, this PC is a DNS (domain name server).

In network DDNS, please select DDNS type (currently support CN99 DDNS,NO-IP DDNS, Private DDNS and Dyndns DDNS which can coexist)and highlight enable item. In host IP, input DDNS name allowing you to connect to WEB search page of the device.

⚠ Note: Private DDNS function shall work with special DDNS server and special Professional Surveillance Software (PSS).

3.2.5 UPNP



Figure 3- 8

The UPNP protocol is to establish a mapping relationship between the LAN and the WAN. Please see Figure 3- 8.

- UPNP on/off : Turn on or off the UPNP function of the device.
- Status: Display UPNP function status, including success, fail and searching.
- Router LAN IP: It is the router IP in the LAN.
- WAN IP: It is the router IP in the WAN.
- PAT table: Display info of added ports.

You may add new port and delete existing port.

⚠ Note: Double clicke item; you can change the corresponding mapping information. Please see Figure 3- 9.

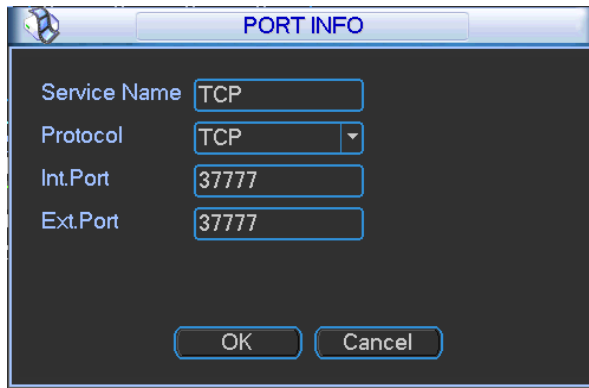


Figure 3- 9

3.2.6 Email

Email setting interface is shown as in Figure 3- 10.

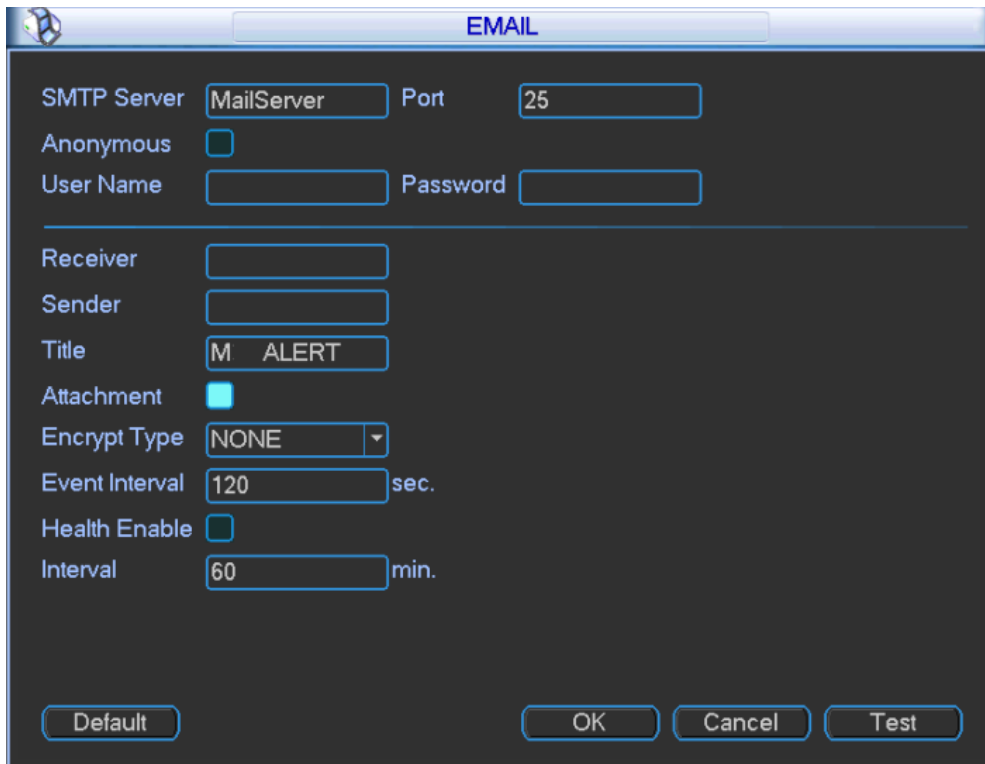


Figure 3- 10

- SMTP server: Please input your email SMTP server IP here.
- Port: Please input corresponding port value here.
- User name: Please input the user name to login the sender email box.
- Password: Please input the corresponding password here.
- Sender: Please input sender email address here.
- Title: Please input email subject here. System support English character and Arabic number. Max 32-digit.
- Interval: The send interval ranges from 0 to 3600 seconds. 0 means there is no interval.

Please note system will not send out the email immediately when the alarm occurs. When the alarm, motion detect or the Abnormality event activates the email, system sends out the email according to the interval you specified here. This function is very useful when there are too many emails activated by the Abnormality events, which may result in heavy load for the email server.

- Health email enable: Please check the box here to enable this function. This function allows the system to send out the test email to check whether the connection is OK or not. Select this function and then set interval for those test email. The send interval ranges from 30 to 1440 minutes.

⚠ Note: Click test button to test whether current EMAIL config is OK.

3.2.7 Alarm Center

This interface is reserved for you to develop. If alarm occurs locally, its alarm signal will be uploaded to alarm center. For you to use alarm center, please set server IP and port first. When alarm occurs, the device will send data according to protocol format and client will receive designated data. Please see Figure 3- 11.

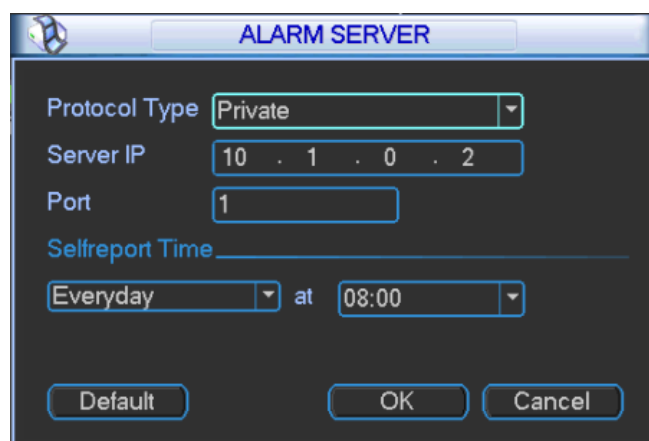


Figure 3- 11

3.2.8 iSCSI

- 1) Click system setting → network → network service setting → iSCSI setting. Set its parameter, including host IP, port.
- 2) Click storage path setting.
- 3) Select corresponding remote directory and then click OK to enable.
- 4) Input correct username and password. Click Add.
- 5) Click OK.

Please see Figure 3- 12 as guide.

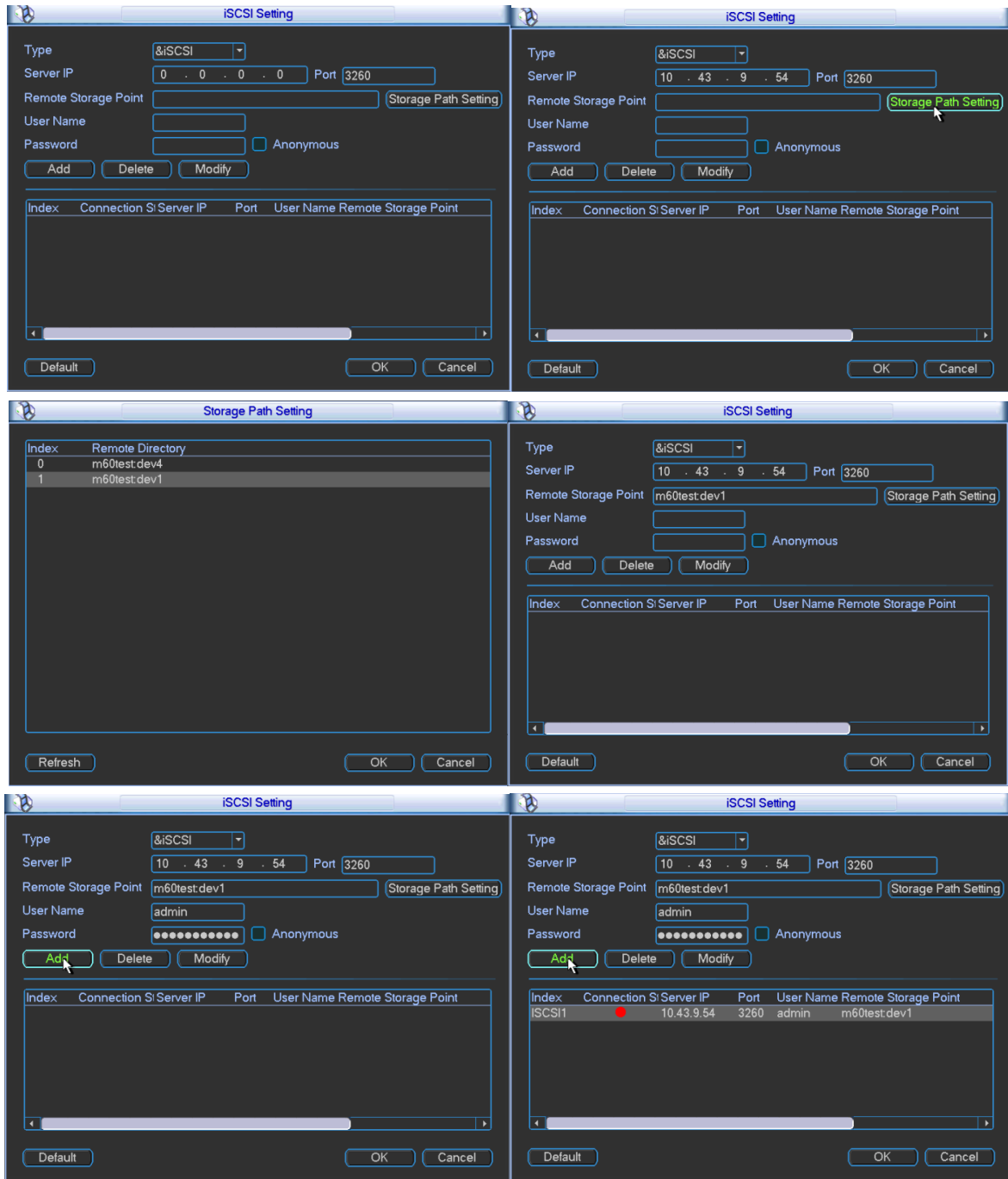


Figure 3- 12

3.2.9 Shutdown

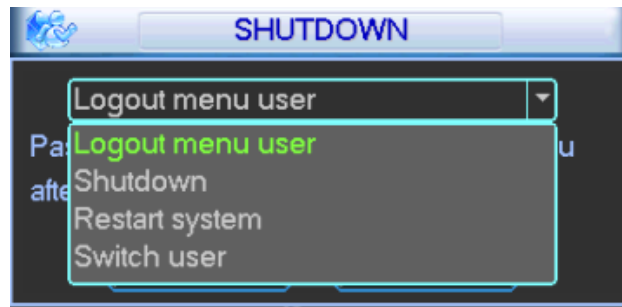


Figure 3- 13

Double click shutdown button, system pops up a dialogue box for you to select. Please see Figure 3- 13.

- Logout menu user: log out menu. You need to input password when you login the next time.
- Restart application: reboot .
- Shutdown: system shuts down and turns off power.
- Switch user: you can use another account to log in.

Shutdown menu includes the above four functions.

4 Web Operation

4.1 Network Connection

Before web client operation, please check the following items:

Step 1. Network connection is right for the device and PC.

Step 2. PC network setting is right, including IP address, subnet mask and gateway. (If there is no router in network, then allocate IP address in same net section. Otherwise, set gateway and subnet mask.) Please refer to Chapter 3: main menu→setting→network.

Step 3. Use order ping *****.***.***.*****(IP address) to check connection is OK or not. Usually the return TTL value equal to 64.

Step 4. Set Internet Explorer: Tools-Internet Option-Security-Custom Level. Enable or prompt ActiveX and plug-in. IE7 and IE8 are preferred.

Step 5. Open the IE and then input IP address.

Step 6. It pops up security box asking you whether you accept webrec.cab control unit, please select “accept”, and system will start to install.

If system forbid this download, please check if there is other plug-in blocking the download and meantime lower IE browser security level.

Note:

When device upgrades new program, and before you open WEB, you must delete original control unit and then open WEB.

To delete control: go to C:\Program Files and select “webrec” folder.

4.2 Login

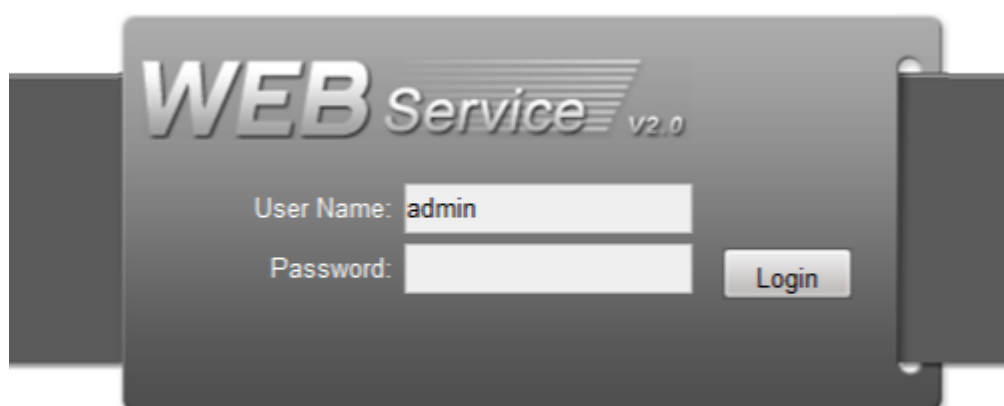


Figure 4- 1

Open IE and input address in the address field. For example, if your IP is 10.43.200.141, then please input **http:// 10.43.200.141** in IE address field and press enter. Please see Figure 4- 1.

Please input your user name and password. Default factory name is **admin** and password is **admin**.

Note: For security reasons, please modify your password after you first login.

4.3 Homepage

You will see the following interface after successful login in Figure 4- 2.

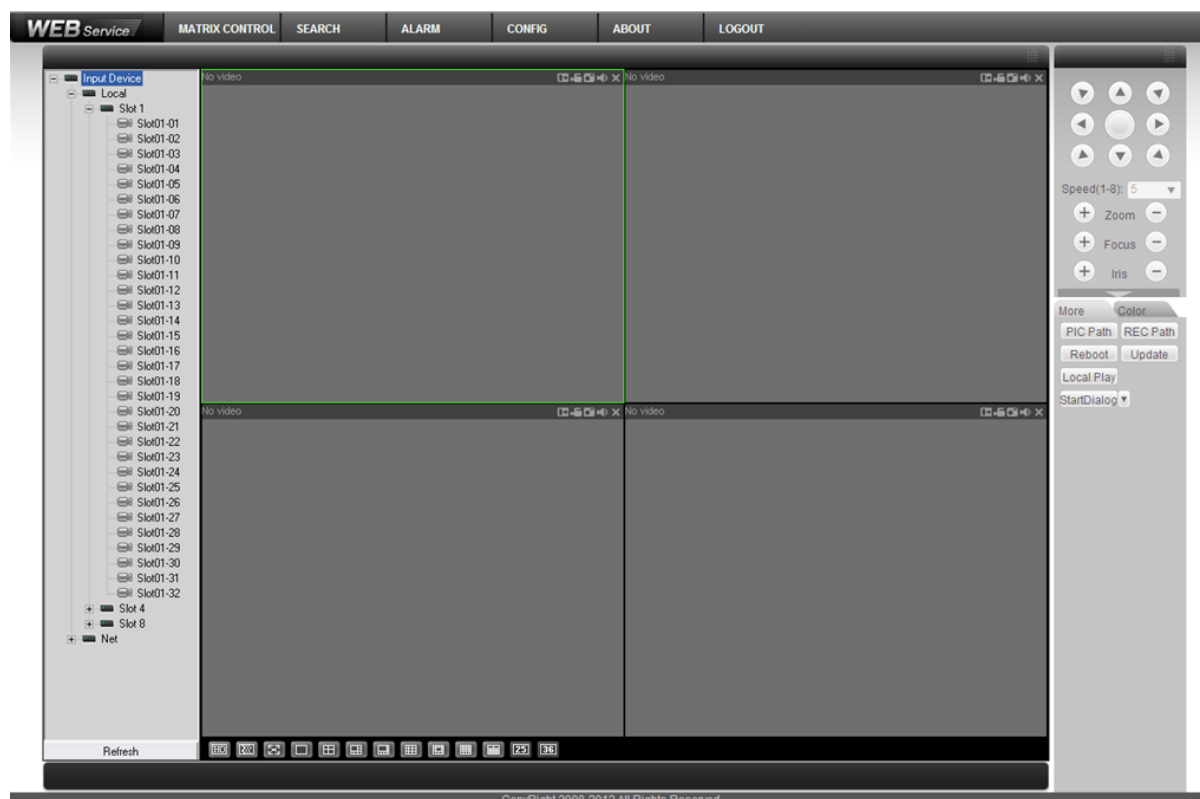


Figure 4- 2

System Menu



Figure 4- 3

The above Figure 4- 3 is system menu buttons.

Input List

Parameter	Note
Local	Device local connected input channel.
Network	Input channel add to Distributed Decoding System via network.
Refresh	Refresh local and network to add device input list.

Real-Time Monitoring

Click any channel to real-time monitor the channel. Monitoring window functions are summarized:

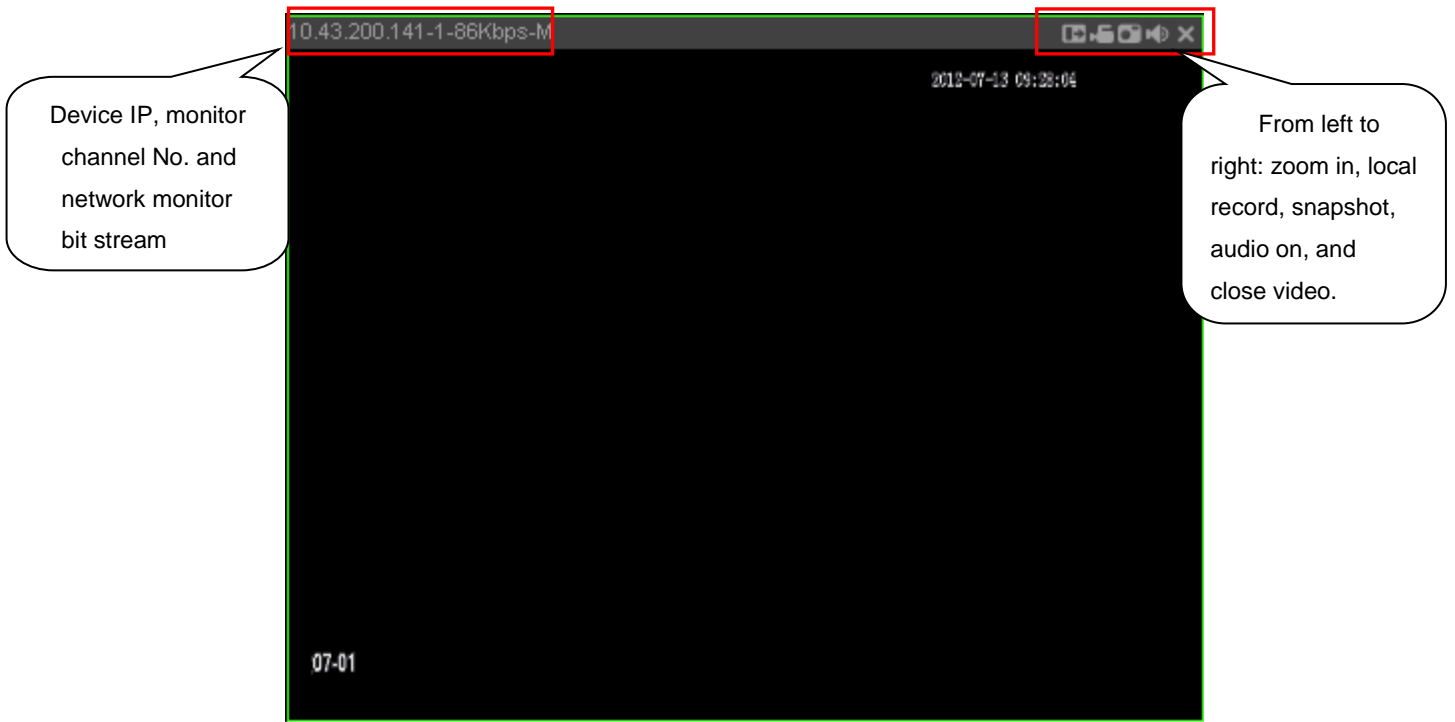


Figure 4- 4

Function	Note
Display device info	Display device IP, channel NO. and network monitor bit stream are displayed in playing video. Otherwise no video displays. (M is main stream, S is sub stream)
Zoom in	Click this button and drag mouse to select any part in window. The selected part will be zoomed in, and will return to original size with a right click.
Local record	Click this button to start recording. Records are saved in Record Download file in system disk as default.
Snapshot	Click this button to snapshot video. Snapshots are saved in Picture Download file in system disk as default.
Audio	Whether turn on audio or not. (Note: Audio here is not related to audio in system setting.)
Close video	Include monitor output, video input, matrix no. and video switch.

Monitoring Window Switch



Figure 4- 5

Please see Figure 4- 5. From left to right are:

- image quality
- fluency
- full screen
- single window

- four windows
- six windows
- eight windows
- nine windows
- thirteen windows
- sixteen windows
- twenty windows
- twenty-five windows
- thirty-six windows

You may flexibly adjust image fluency and real time performance.

PTZ Console

Before using PTZ Console, you must set PTZ protocol (please see PTZ setting in system settings), otherwise you cannot access PTZ control operation.

You may control the direction, step length, zoom, focusing, iris, preset, point-to-point tour, pattern, auto scan, lighting, wiper, horizontal rotation and other controls.

Step length: It is mainly used to control directions, for example rotation speed of step length 8 is much faster than of step length 1.

PTZ rotation: It supports 8 directions: up, down, left, right, upper left, upper right, lower left and lower right.

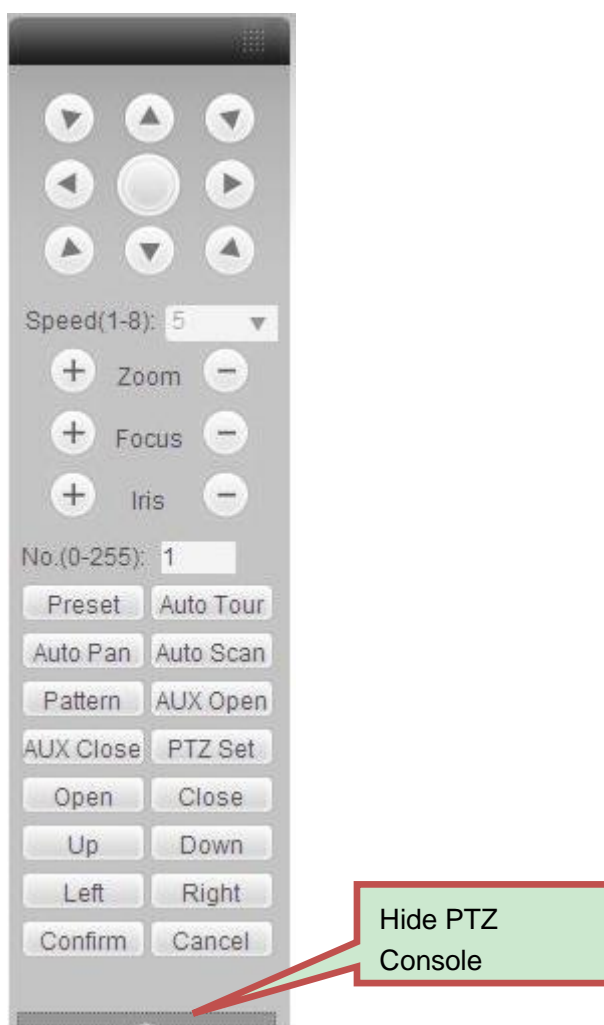


Figure 4- 6

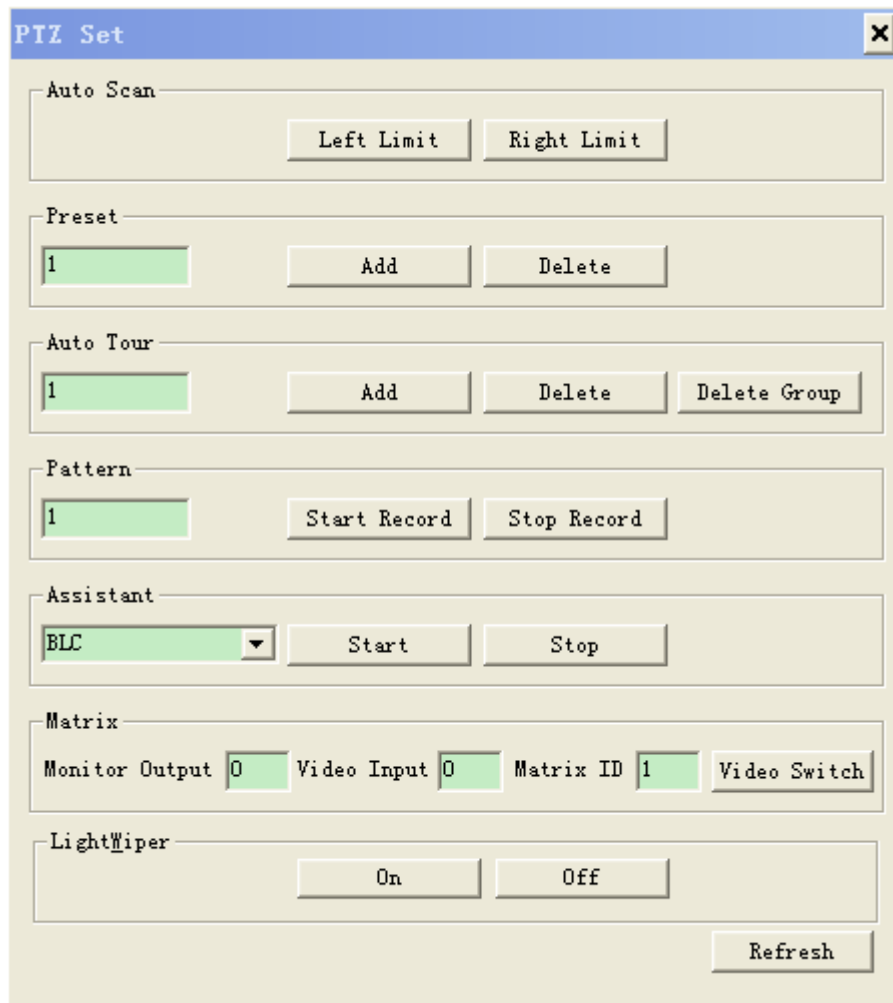


Figure 4- 7

Please see Figure 4- 6 and Figure 4- 7.

Auto scan: Select left border of camera auto scan via direction buttons, and click left border button to confirm. It is same for right border.

Preset: Rotate the camera to designated position via direction buttons. Input preset value in corresponding box, and click add button to save.

Auto tour: Input auto tour path value in point-to-point auto tour box. Input preset value in correspond box and then click add button. You may repeat this process to add multiple presets. You may delete preset by clicking on delete button.

Pattern: You may record down the above operations as Pattern X by click start to record button. Then you should refer to Figure 4- 6 to perform zooming, focusing, iris, direction and etc. You can stop recording by pressing stop button.

Assistant: select one item on assistant list and then click start or stop button. Please see Figure 4- 8.

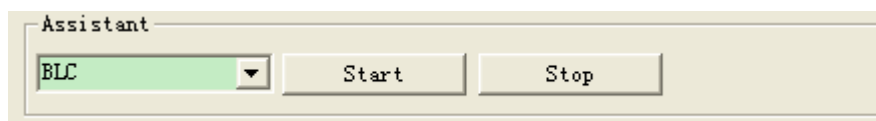


Figure 4- 8

Matrix: It includes monitor output, video input, matrix ID and video switch.

Light Wiper: Remote control over light and wiper.
On: Select speed dome image, click ON to overlay.
Off: Turn off overlay.
Up/down/left/right: Select menu item.

Image Settings

Image setting: select one channel with green box and you may set the brightness, contrastness, hue, and saturation. Please see Figure 4- 9.

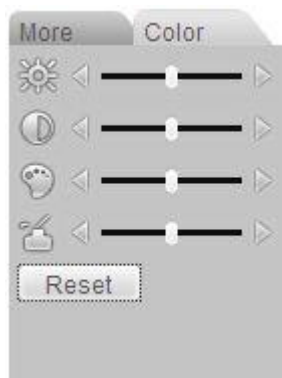


Figure 4- 9

Snapshot/Record Path

Click snapshot path or record path button to modify storage path. Please see Figure 4- 10.

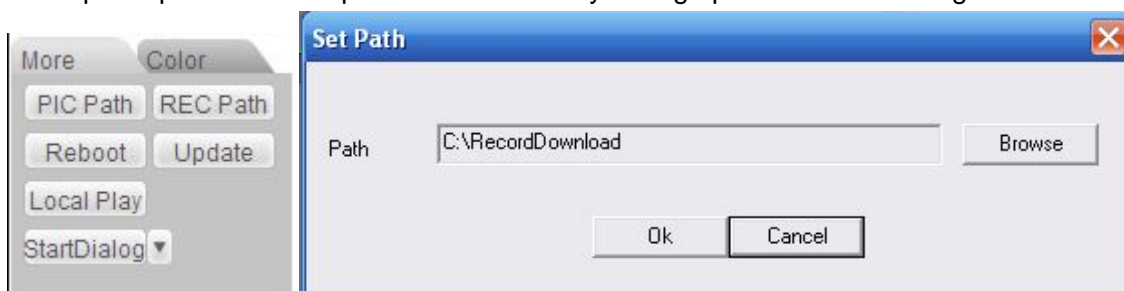


Figure 4- 10

Reboot Device

Click reboot device. You will see a pop-up box as in the left picture in Figure 4- 11 and click OK to reboot.

Note: Before you reboot please be notified:

- 1. You must have authority to reboot device;**
- 2. There is no other users logging in system menu locally.**

If someone is logging in system menu or you do not have the authority, you will see the following box as in the right picture in Figure 4- 11.



Figure 4- 11

Update

Step 1. Click update button,

Step 2. Select updating file. Please see Figure 4- 12, Figure 4- 13 and Figure 4- 14.

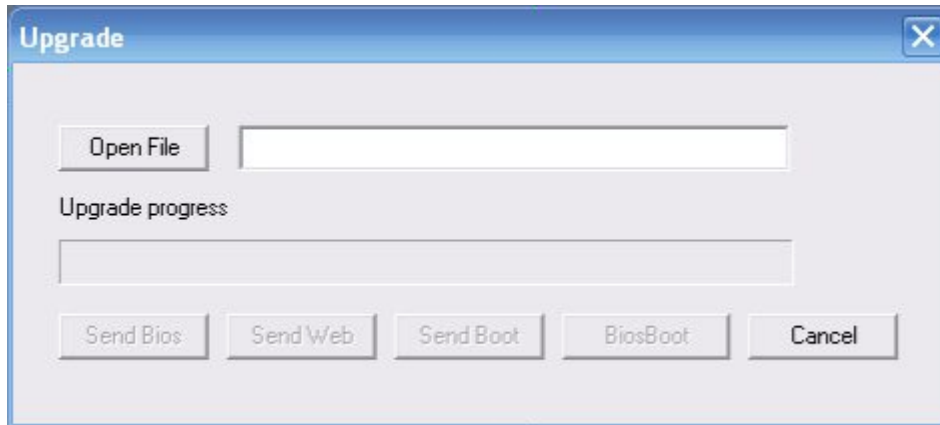


Figure 4- 12

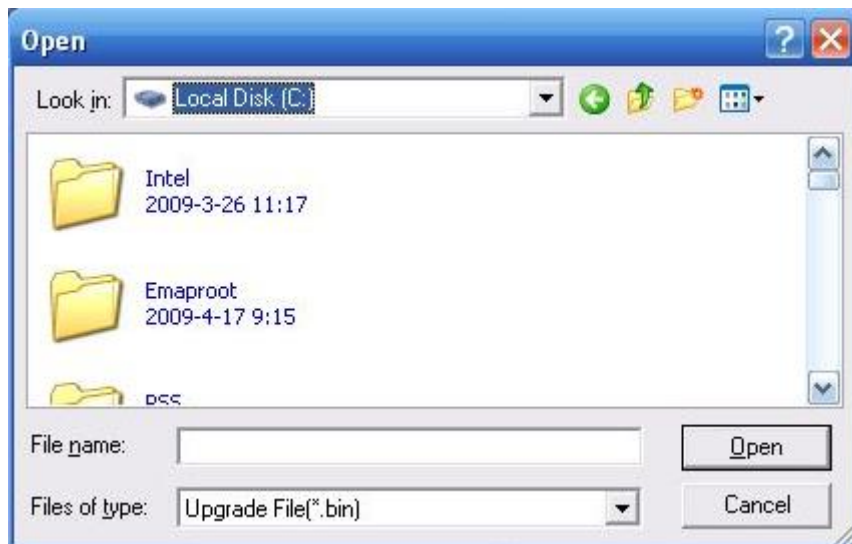


Figure 4- 13



Figure 4- 14

Step 3. Click BIOS to start updating.

Local Playback

Web support playback of record file saved on PC. Click local playback, you will see a prompt box as in Figure 4-16. You need to select file to playback.



Figure 4- 15

4.4 Splice Control

Via splice control, you can splice TV wall, and complete output and input config.

Step 1. Click splice control to enter interface in Figure 4- 16.

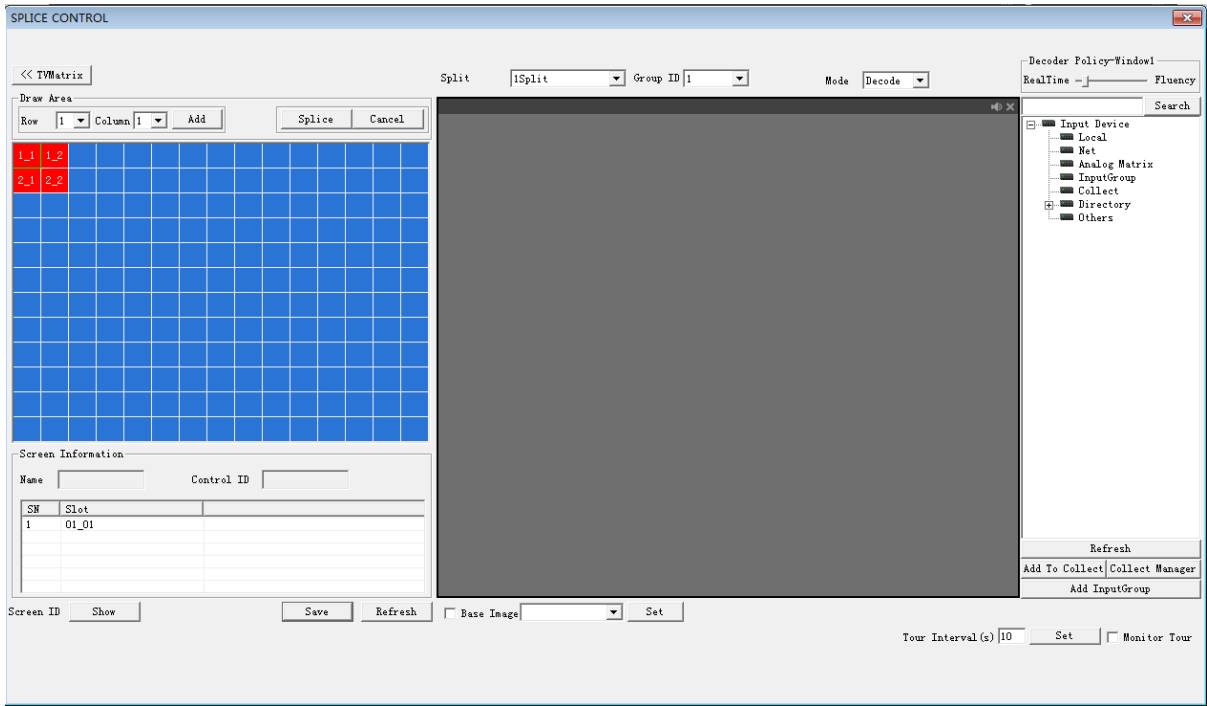


Figure 4- 16

Please see Figure 4- 16 and Figure 4- 17.If system has just upgraded, then click Save to see the following.

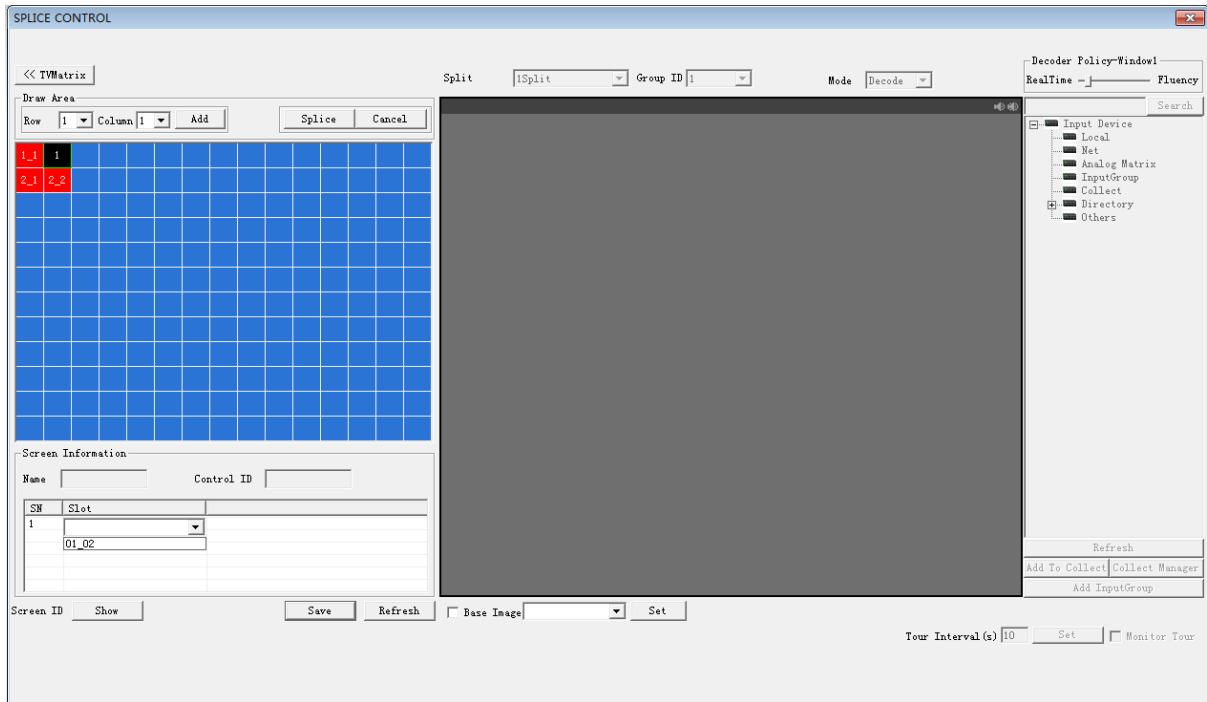
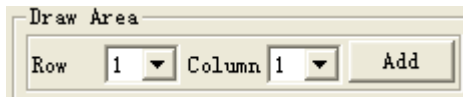


Figure 4- 17

Step 2. If you want to add new card or delete output screen and add again, please select



to add and click Save.

Step 3. Select slot to config. See Figure 4-19.

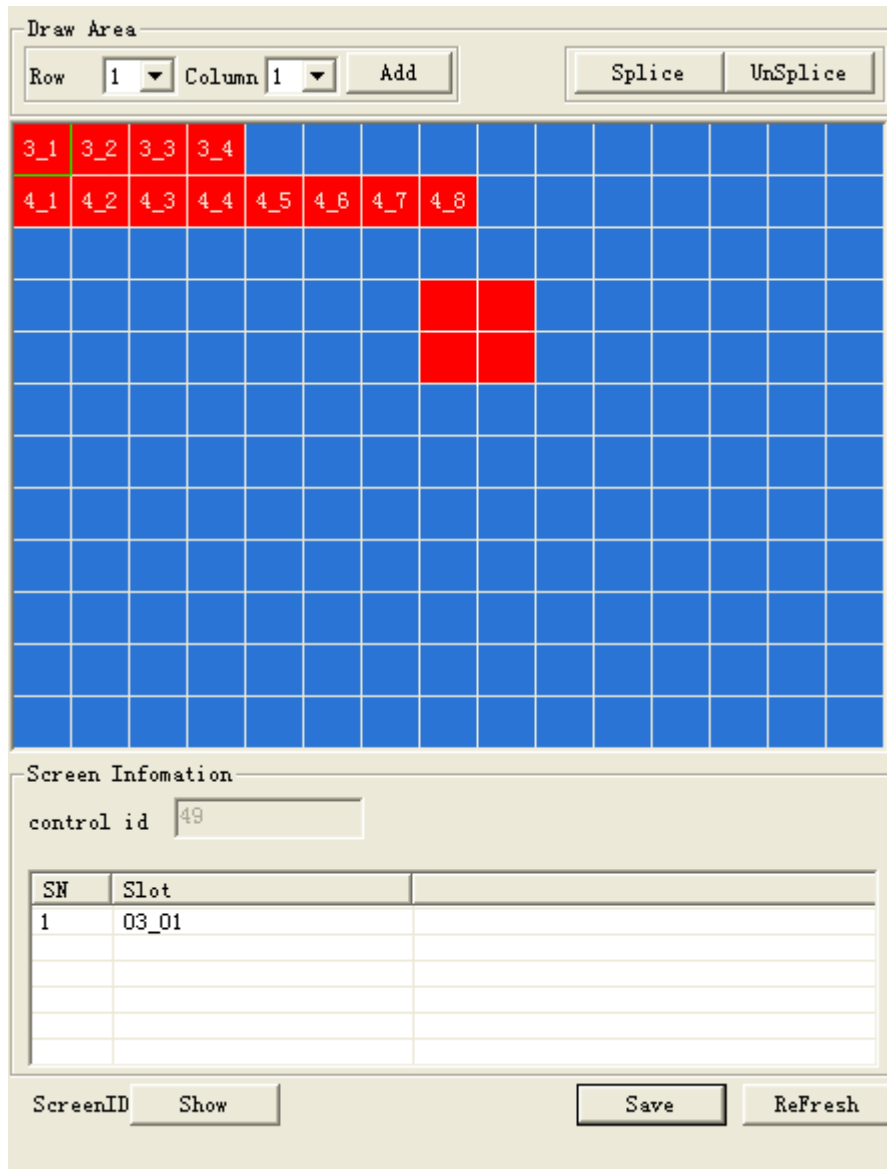


Figure 4- 18

The red area can be dragged to move.

Step 4. Click Splice, and select area to splice, click OK.

Step 5. Right click scheme to add. User can set splicing video wall accordingly.

Step 6. Click TV Matrix, see Figure 4-19.

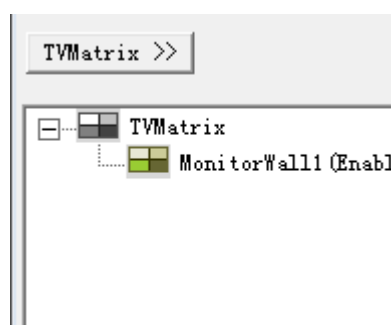


Figure 4- 19

Step 7. Right click a wall, see Figure 4-20.

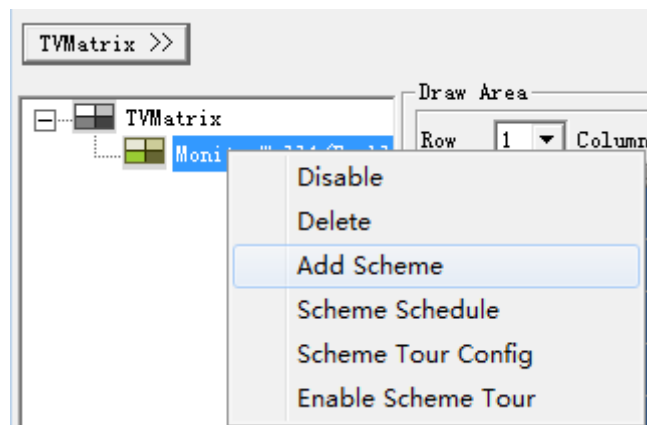


Figure 4- 20

Step 8. Click Add Scheme. See Figure 4-21.

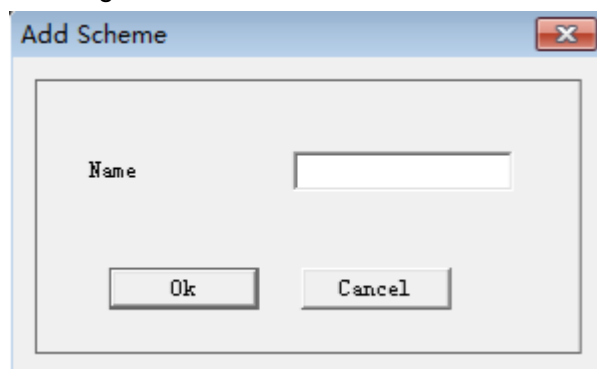


Figure 4- 21

Later, you can right click a certain scheme to rename and delete, or double click scheme to operate. This step may also be performed after all operations are complete. Output screen and input device config will not be lost.

Other Operation

- If you have uploaded background and would use this function, check background, and select picture to upload. All output screen without input device will show this background.
- Select screen or output screen on the left and then select split mode and group no. Cubeless video wall can split into 1, 4, 8, 9, 16 and free split (free split is for tour and can use auto alignment).
- You can modify decode strategy, and you may drag according to live to fluent.
- Input device list, including local, net, input group and favorites. Select input device and drag to window to decode. If input device supports e-zoom function, then click e-zoom.
- You can refresh, add to favorites, sort favorites and add input group. Click add to favorites and sort favorites.
- Enable tour. You can set tour interval time with 10-120s.

4.5 System Settings

4.5.1 System Info

4.5.1.1 Version Info

Here you can view hardware features, software version and its release date. Please see Figure 4- 22.

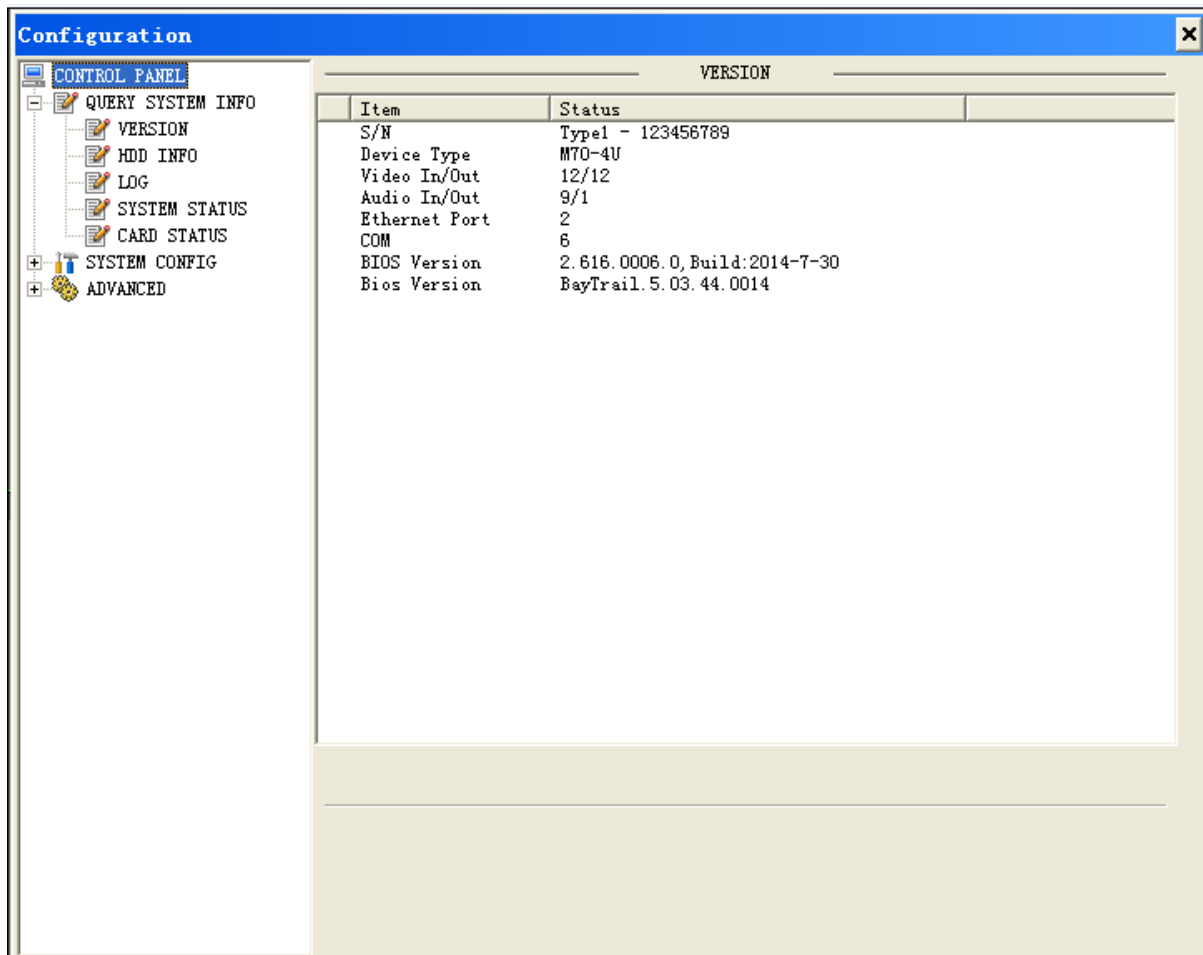


Figure 4- 22

4.5.1.2 HDD Info

Here you can view HDD status, free space and total space.

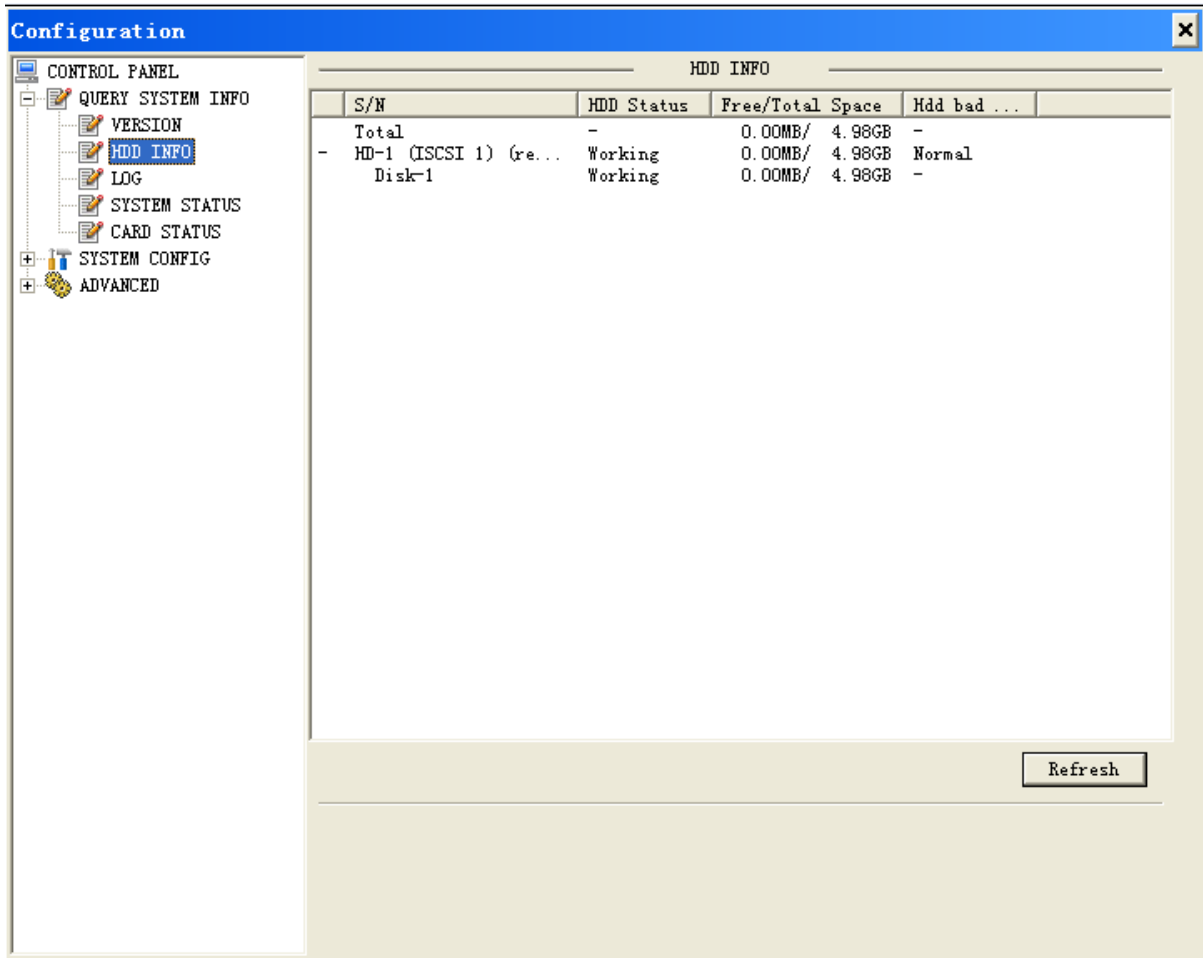


Figure 4- 23

4.5.1.3 Log

Here you can view system log.

System logs are classified into: system operation, config, data management, alarm event, record, user, and deleted log. You can select classification to search by directly clicking on search button.

The system will display logs in list format. You may click backup button to record log on PC. If you click delete button, the system will clear all log files.

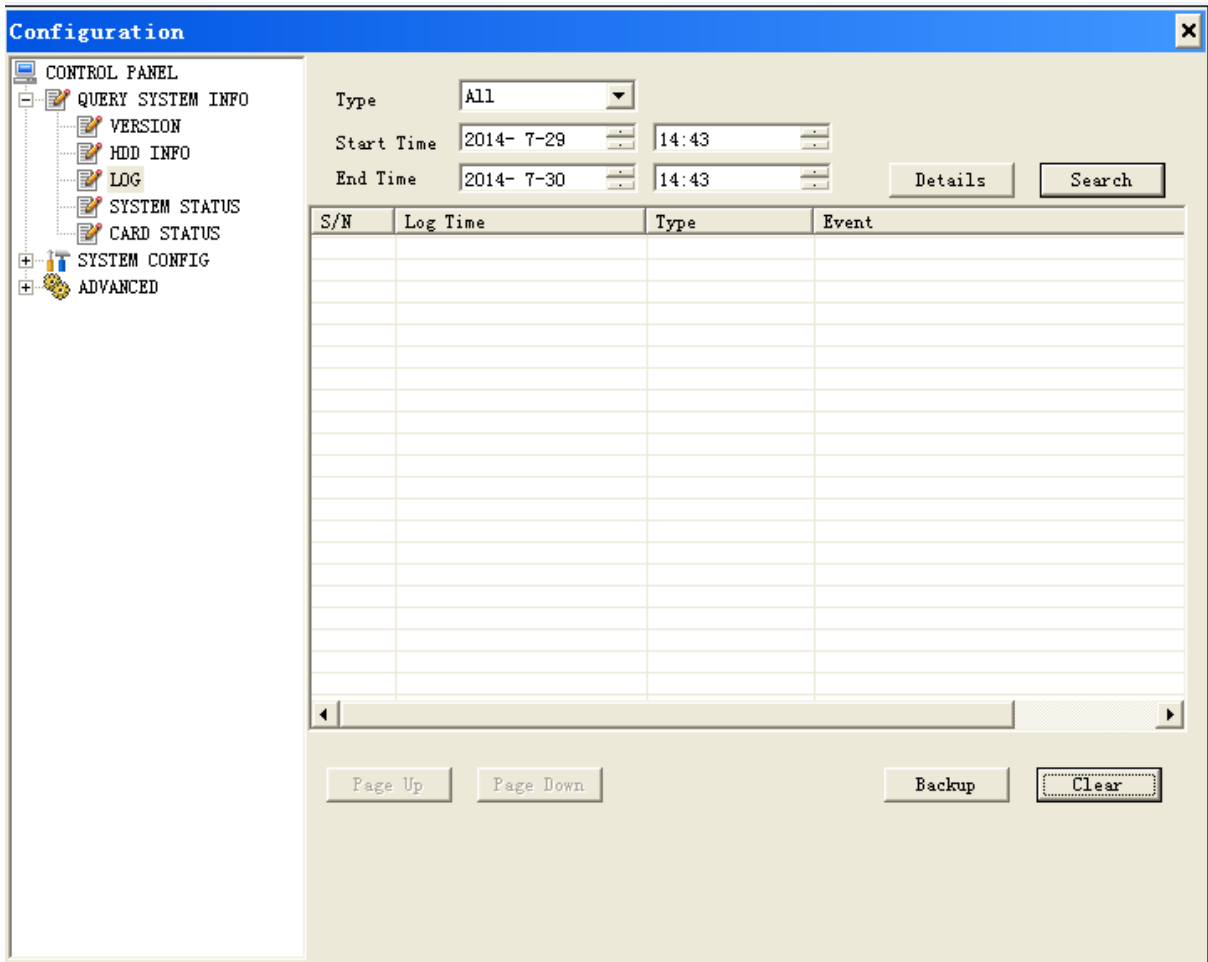


Figure 4- 24

4.5.1.4 System Status

Here you can view status of system CPU, memory, network, fan and power.

4.5.1.5 Sub Card Status

View sub card slot, type, temperature status and status.

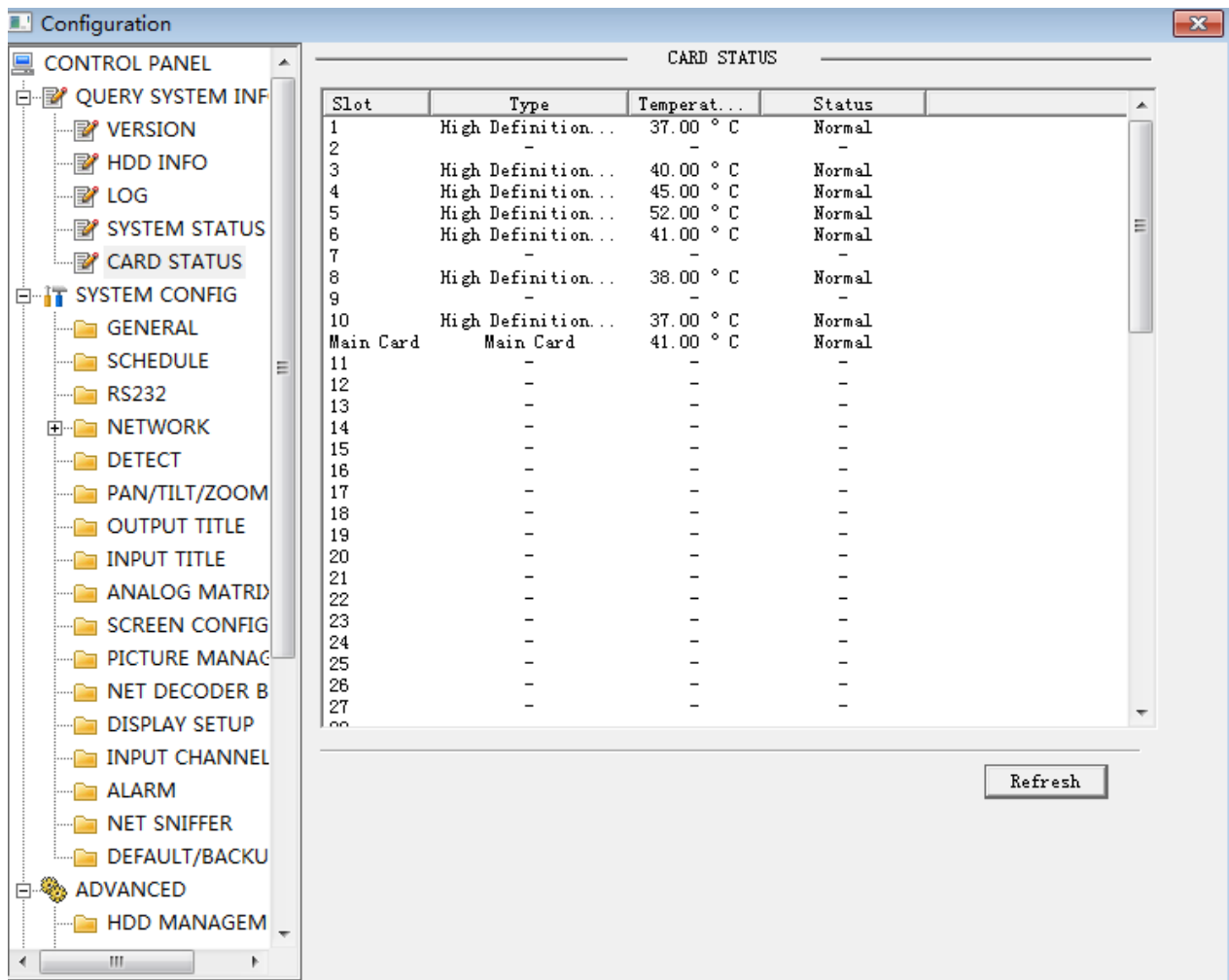


Figure 4- 25

4.5.2 System Config

4.5.2.1 General

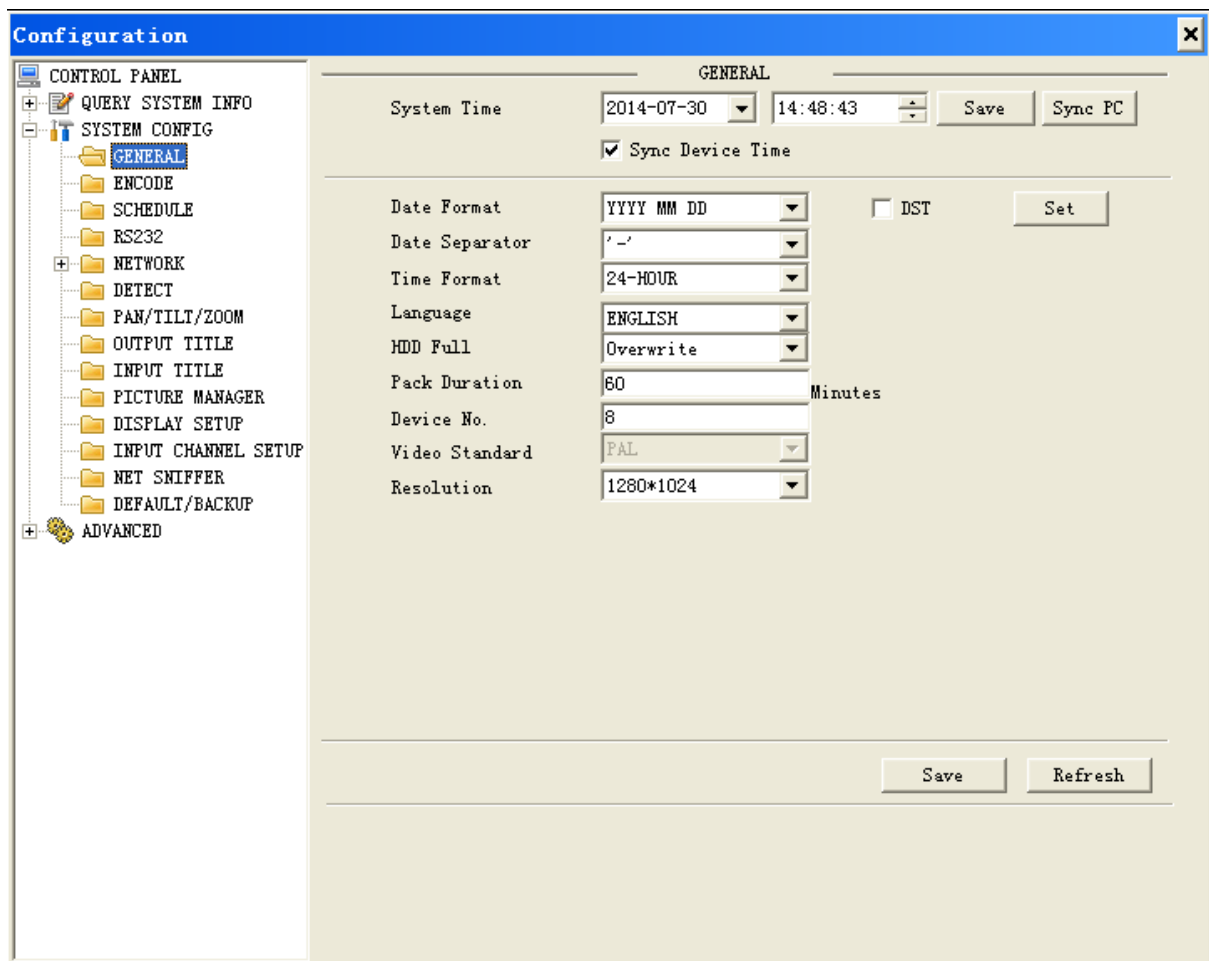


Figure 4- 26

Please see Figure 4- 26.

- System Time: Here is for you to modify system time. Please click Save button after your completed modification.
- Date Format: Y-M-D, M-D-Y or D-M-Y.
- Date Separator: ., - or /.
- Time Format: 12-hour or 24-hour standard.
- Language: Select language.
- HDD Full: There are two options: stop recording or overwrite the previous files when HDD is full. When current working HDD is overwriting or it is full now, system stops record. If current working HDD is full now, system goes to overwrite the previous file.
- Pack Duration: Here you can select file size. The value ranges from 1 to 120. Default setting is 60 minutes.
- Device No.: Set device no.
- Video Standard: There are two options: PAL/NTSC which will accord current video standard of the system. Please note, for the Web user, this information is for reference only. You cannot modify.
- Resolution: You can modify local output resolution to 1280*1024 or 1920*1080.
- DST: Check the box in front of DST to enable. You may set the start and end time of DST by week or date.

4.5.2.2 Encode

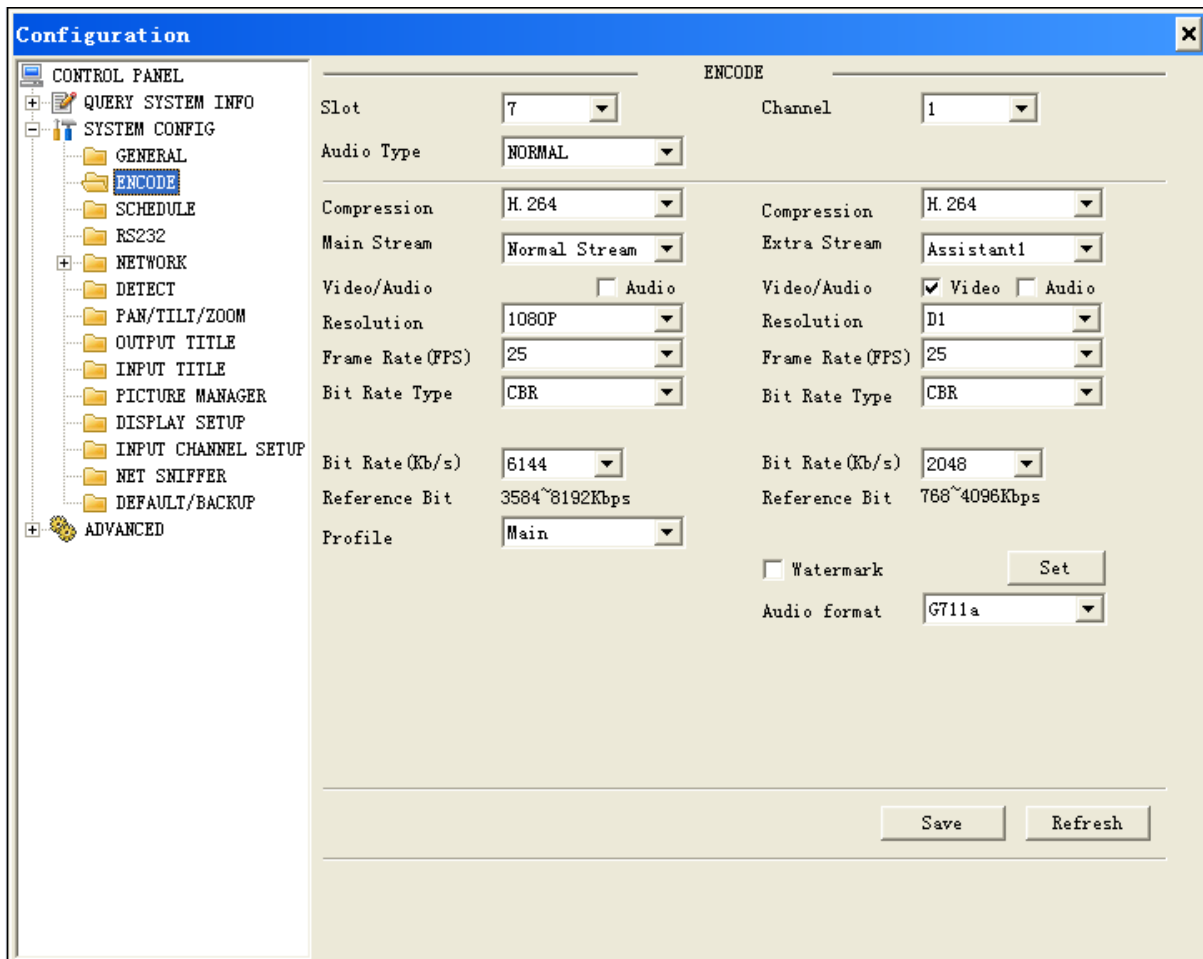


Figure 4- 27

Please see Figure 4- 27.

- Slot: Here is for you to select corresponding slot.
- Channel: Here is for you to select a monitor channel.
- Signal type: Select signal type of current slot.
- Compression: It supports H.264.
- Main stream: normal stream or dynamic stream.
- Extra stream: only assistant.
- Audio/Video: For the main stream, recorded file contains both video and audio by default. You need to check the box here to enable audio function. For extra stream, you need to check the box to select the video first and then select the audio if necessary.
- Resolution: SD compression board's main stream supports D1/HD1/BCIF/CIF/QCIF; HD compression board supports 1080P/720P/D1/HD1/BCIF/CIF/QCI.
- Frame rate: PAL: 1~25f/s; NTSC: 1~30f/s.
- Bit rate type: There are two options: VBR and CBR. Please note, you can set video quality in VBR mode only. The system support level 1~6 bit, the higher the number, the clear the image will be.
- Bit Rate:
 -

- Main stream: set bit rate to change quality of image. The higher the value, the better the quality will be. Please refer to recommend bit rate for the detailed information.
- Sub stream: under CBR, this bit rate is the upper limit of stream. When it is in dynamic video, if the system has to lower bit rate and quality in order to guarantee fluency, then bit rate shall not exceed this value in this case. Under VBR, this value is useless.
- Profile: Main and Baseline.

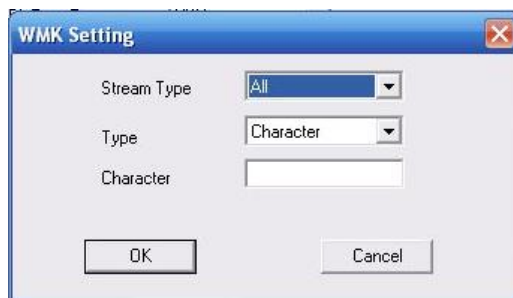


Figure 4- 28

- Watermark: Here you can insert watermark into display.
- Audio format: The system supports three formats: G711a, PCM, G711 μ .

4.5.2.3 Schedule

Here you can select local or remote channels to record video for different periods and dates. Users may set multiple periods. Please see Figure 4- 29.

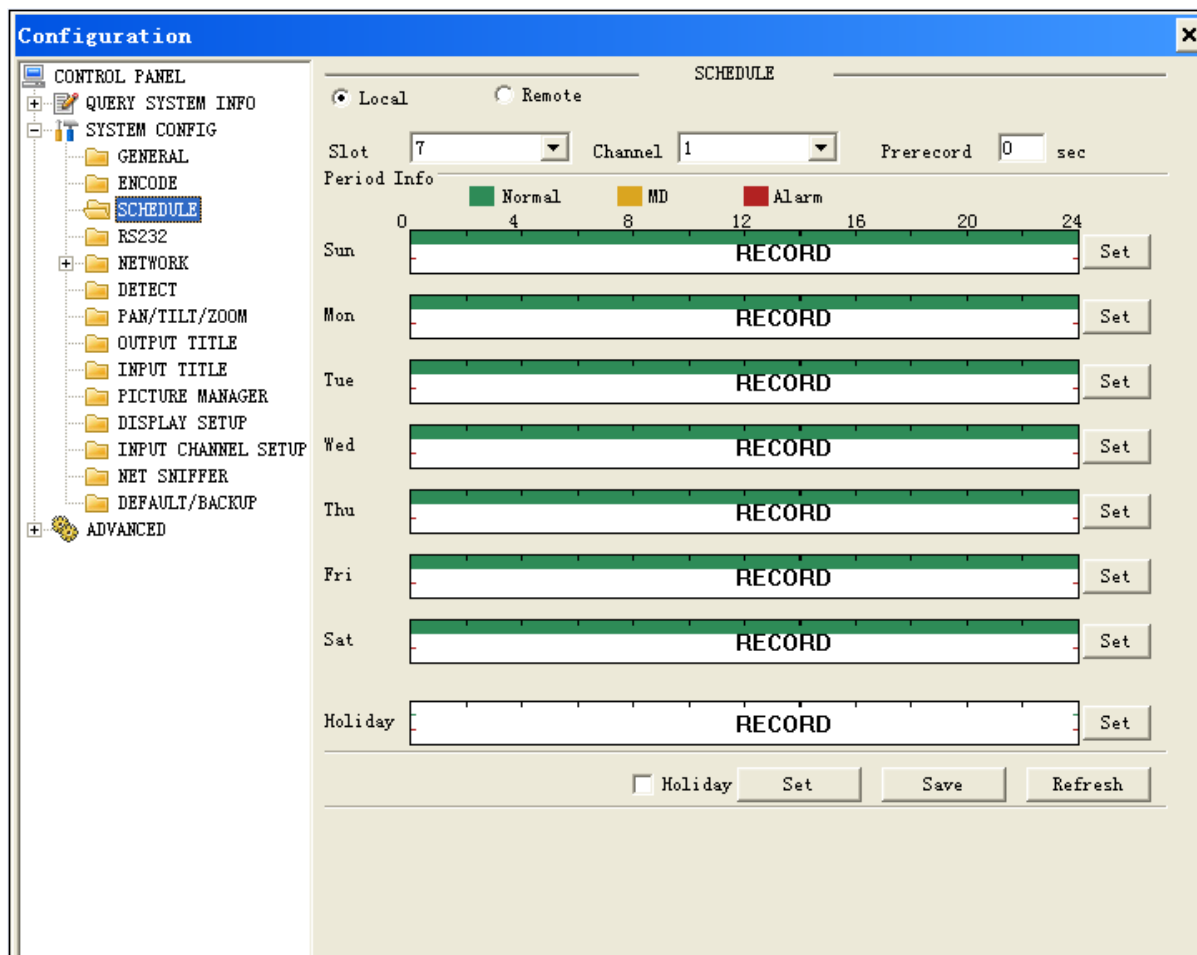


Figure 4- 29

Steps:

1. Click set button in interface as in Figure 4- 29, and a new interface will appear as in Figure 4- 30.
2. Set record period, and select designated day of week. (If you do not select, the setting is effective for the day only.)
3. After you finish settings, click OK to save. You will return to the above interface, and click OK to save.

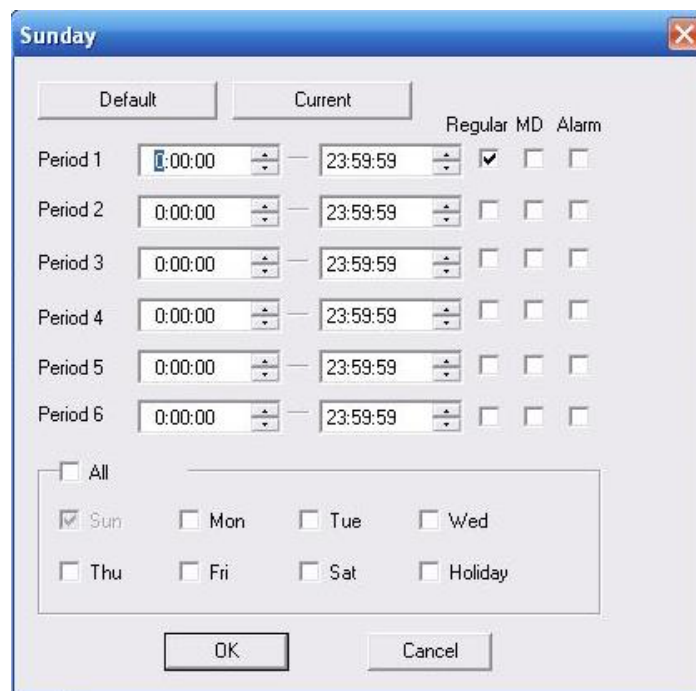


Figure 4- 30

4.5.2.4 RS232

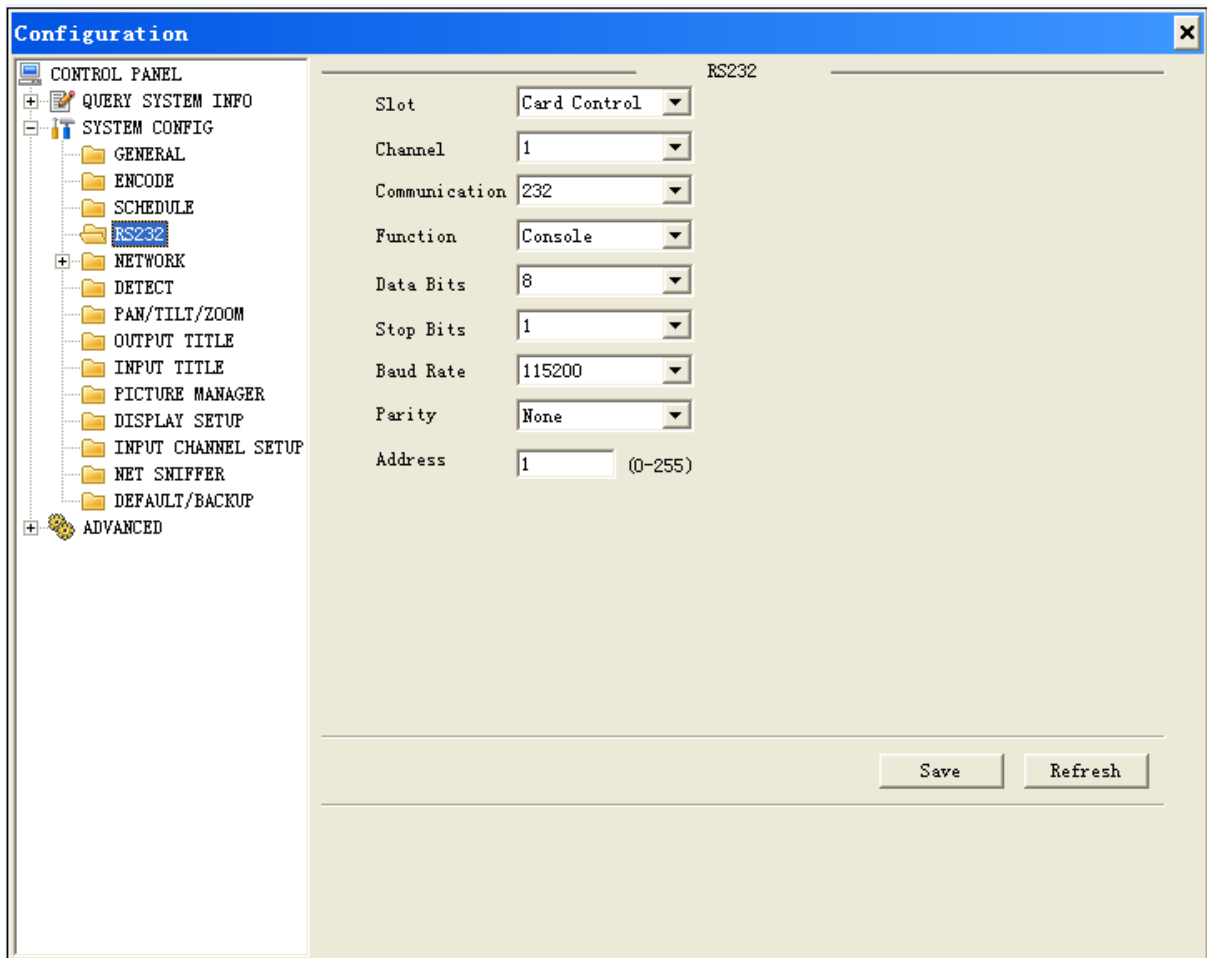


Figure 4- 31

Please see Figure 4-37.

- Slot: Select slot to configure RS232.
- Channel: Select channel to configure RS232.
- Communication: Serial type as RS232, RS422 and RS485. RS422 and RS485 are for alarm card only.
- Function: Select corresponding COM protocol.
- Data bit: You can select 5 to 8.
- Baud rate: Select corresponding baud rate.
- Parity: There are four parities.

System default COM is console; baud rate is 115200; data bit is 8; stop bit is; and parity is none.

- Address: Set address.

4.5.2.5 Network

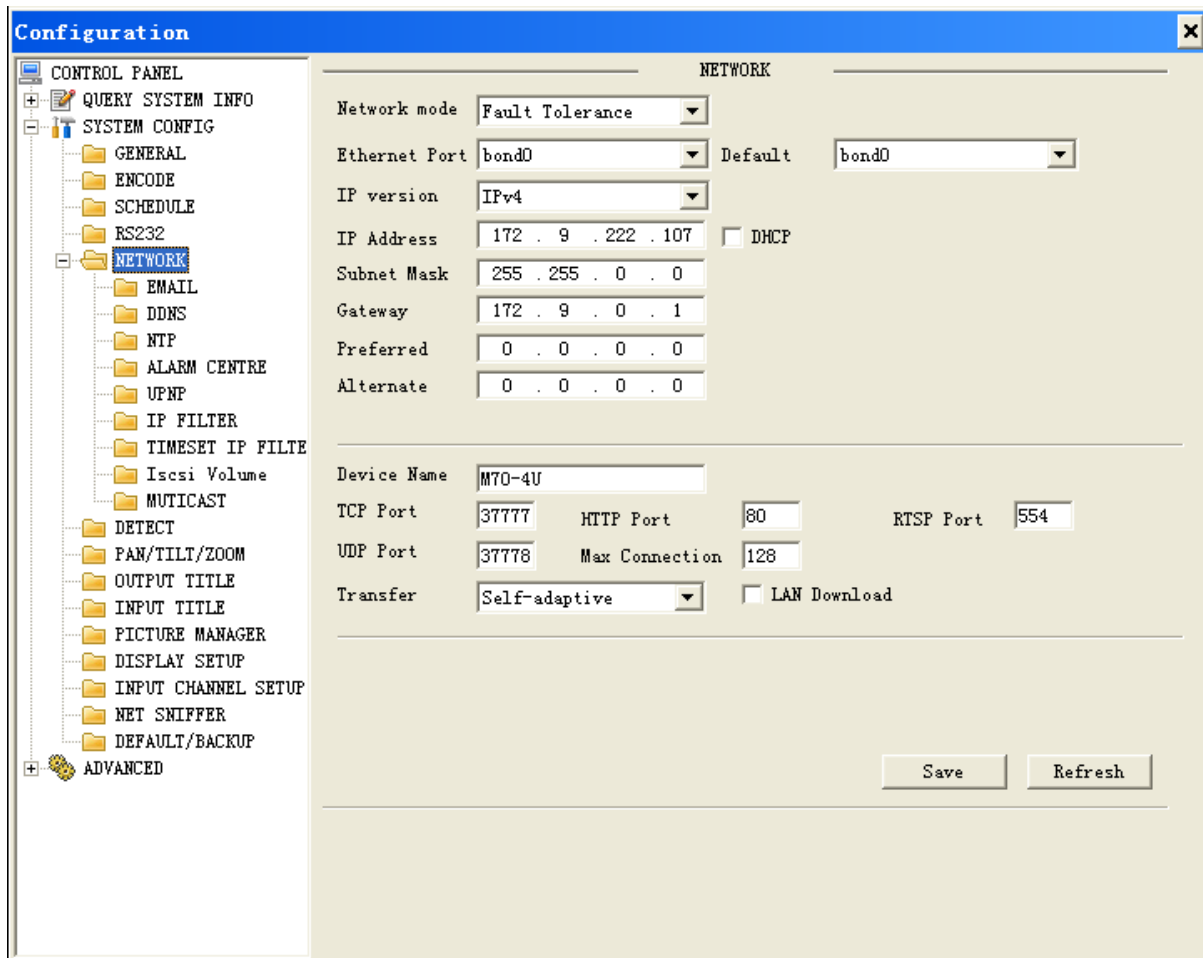


Figure 4- 32

Please see Figure 4- 32.

- Network mode: There are three modes of multiple, fault-tolerant and load balancing.
- Aggregation: Under net bridge mode only.
- Net Bridge: Under net bridge mode only.
- Bridge cycle set: Under net bridge mode only.
- Ethernet: Network card 1~2 available.
- Default network card: Network card 1~2 available.
- Aggregation strategy: Under link aggregation under.
- IP Version: IPv4 and IPv6.
- IP address: Input corresponding IP address, and then set its subnet mask and gateway.
- DHCP: It is to auto search IP. When enable DHCP function, you cannot modify IP/Subnet mask /Gateway. These values are from DHCP function. If you have not enabled DHCP function, IP/Subnet mask/Gateway display as zero. You need to disable DHCP function to view current IP information. Besides, when PPPoE is operating, you cannot modify IP/Subnet mask /Gateway.
- Device name: You can customize device name.
- Preferred: DNS server IP address.
- Alternate: DNS server IP address and DNS server alternate IP address.
- TCP port: Default value is 37777. You can change if necessary.
- HTTP port: Default value is 80.

- PRSP port: Default value is 554.
- UDP port: Default value is 37778.
- Max connection: system support maximal 128 users. 0 means there is no connection limit.
- Transfer QOS: You can prefer fluency, image quality or self-adaptive. Based on your selection, the stream will be automatically adjusted with QOS box checked.
- LAN download: High speed downloading 1.5 to 2 times faster than normal speed downloading with sufficient bandwidth.

4.5.2.6 Email

Here you can set SMTP server IP address, port, username, password and email address of sender and set interval between each outgoing email. You can input email title in CH/EN and Arabic numerals up to 32 digits. The email function allows up to 3 receiver addresses and SSL secured email boxes. Please see Figure 4- 33.

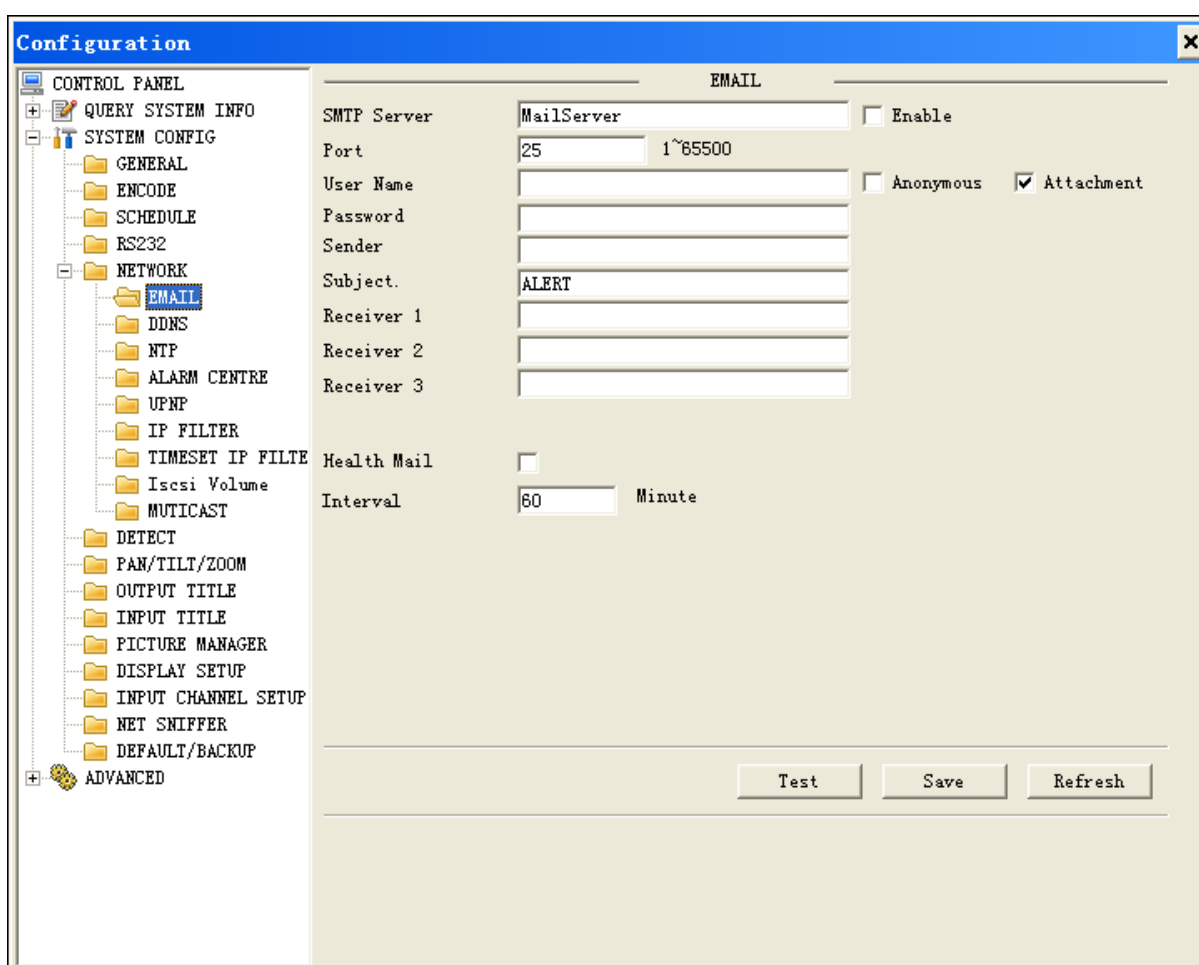


Figure 4- 33

4.5.2.7 DDNS

Please enable current function and then you need to select type of DDNS and set the following interface (Figure 4- 34) based on your DDNS type. Same with local config.

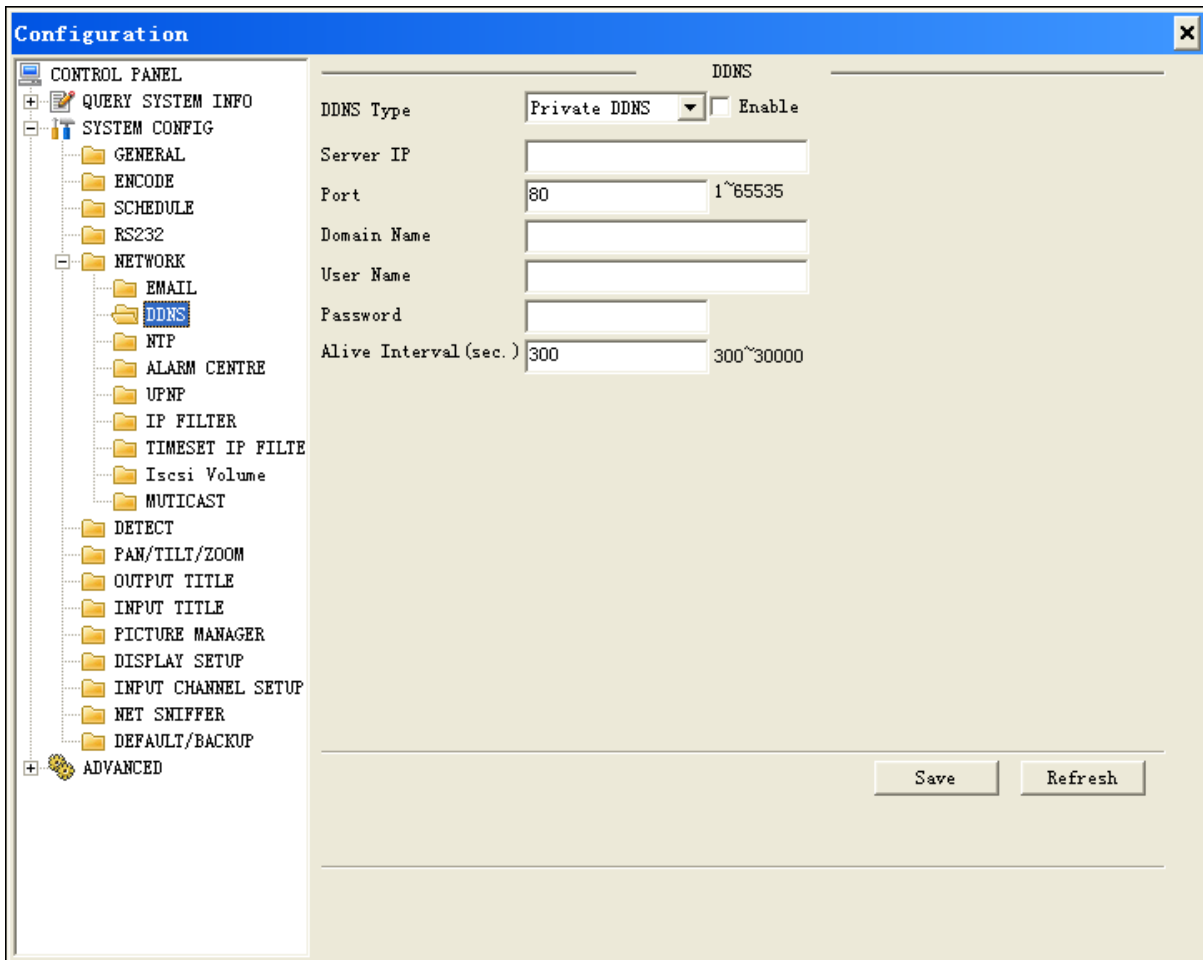


Figure 4- 34

4.5.2.8 NTP

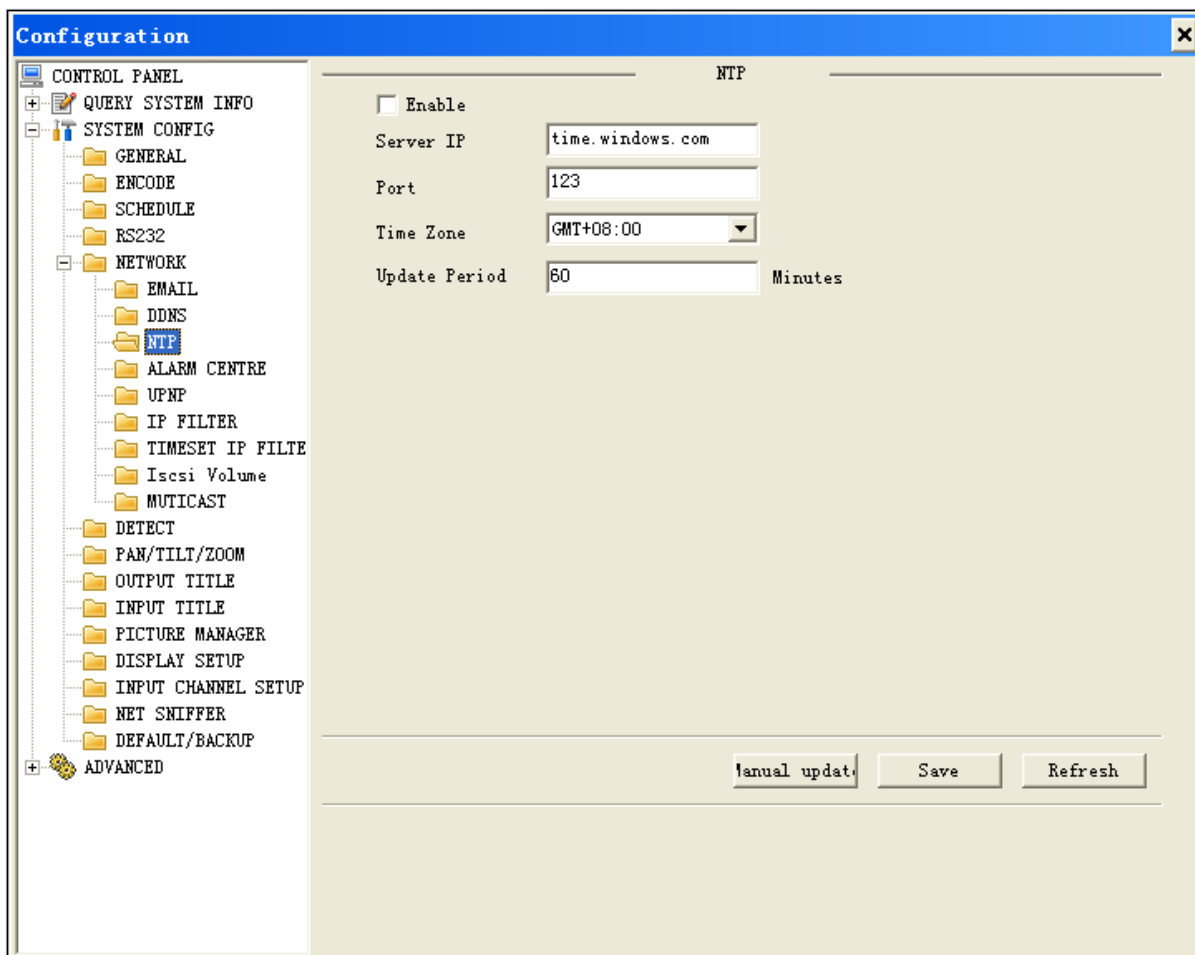


Figure 4- 35

Please see Figure 4- 35.

Here you can realize network time synchronization. Please enable current function and then input IP of the PC of SNTP server, port number, time zone and update interval. Please note the SNTP supports TCP transmission only and its port shall be 123. The update interval ranges from 0 to 65535. Default value is 10 minutes.

When you complete the above settings, click save button. If you have manually updated the time setting for twice and saved the changes, SNTP server will immediately sync system time.

You can refer to the following sheet for time zone information.

City /Region Name	Time Zone
London	GMT+0
Berlin	GMT+1
Cairo	GMT+2
Moscow	GMT+3
New Deli	GMT+5
Bangkok	GMT+7
Beijing (Hong Kong)	GMT+8
Tokyo	GMT+9
Sydney	GMT+10
Hawaii	GMT-10
Alaska	GMT-9
Pacific Time(P.T)	GMT-8
American Mountain Time(M.T)	GMT-7
American Central Time(C.T)	GMT-6
American Eastern Time(E.T)	GMT-5

Atlantic Time	GMT-4
Brazil	GMT-3
Middle Atlantic Time	GMT-2

Update period can be set to 0 to 65535 min. Default is 10 min. Click save when you are done. When first two update get successfully, SNTP server will sync system time immediately.

Note:

Check to enable item after setup.

4.5.2.9 Alarm Center

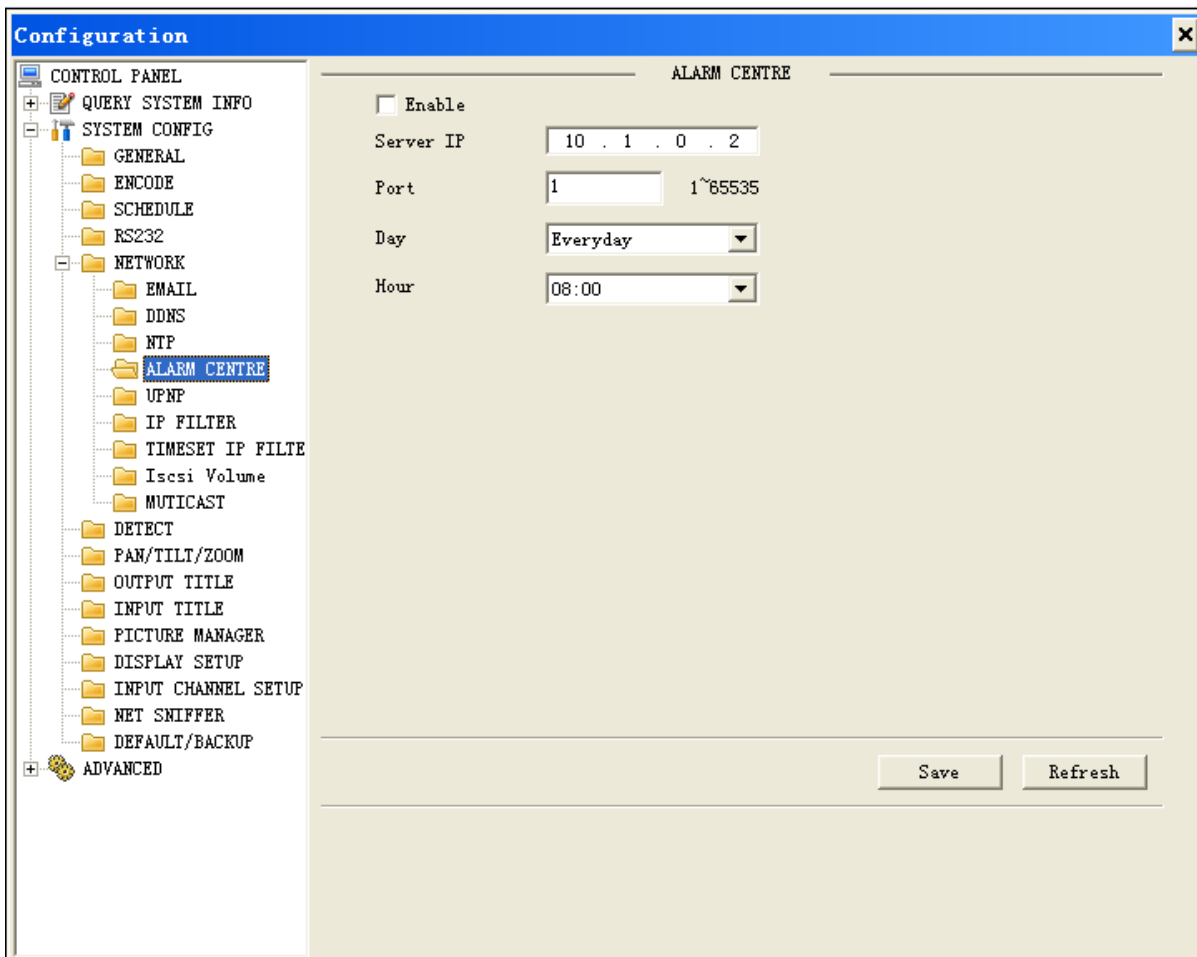


Figure 4- 36

Please see Figure 4- 36.

Please set the corresponding parameters:

Server IP: Input address of alarm receiver server.

Port: set range 1~65535.

Date: Never, everyday, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.

Time: range 0~23.

Please make sure you have enabled this function and saved the settings. When external alarm is triggered, the system will automatically submit alarm information.

4.5.2.10 UPNP

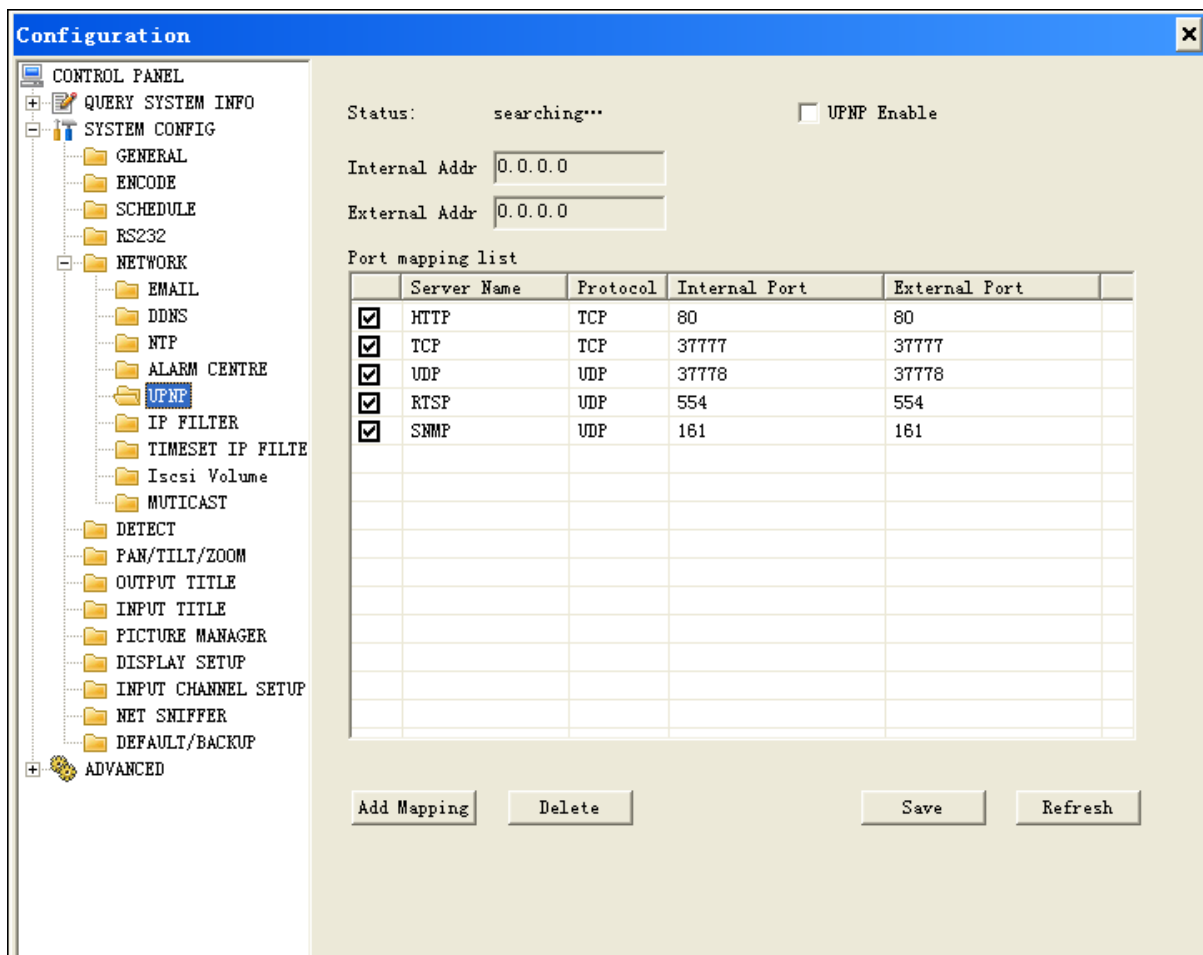


Figure 4- 37

Please see Figure 4- 37.

It allows you to establish the mapping relationship between the LAN and the public network. Same with local config.

Here you can also add, modify or remove UPNP item.

Port mapping: Enable UPNP function.

Status: Display UPNP function status: successful, failed and searching.

LAN IP: Set LAN IP address.

WLAN IP: Set WLAN IP address which is provided by telecommunication service provider.

Port Mapping List: Display info of added ports.

Note: Double click port to change its config.

4.5.2.11 IP Filter

You may classify valid log in IP and invalid log in IP by enabling white/black list. This is an IP filter function which can be activated by checking the enable box. Please see Figure 4- 38.

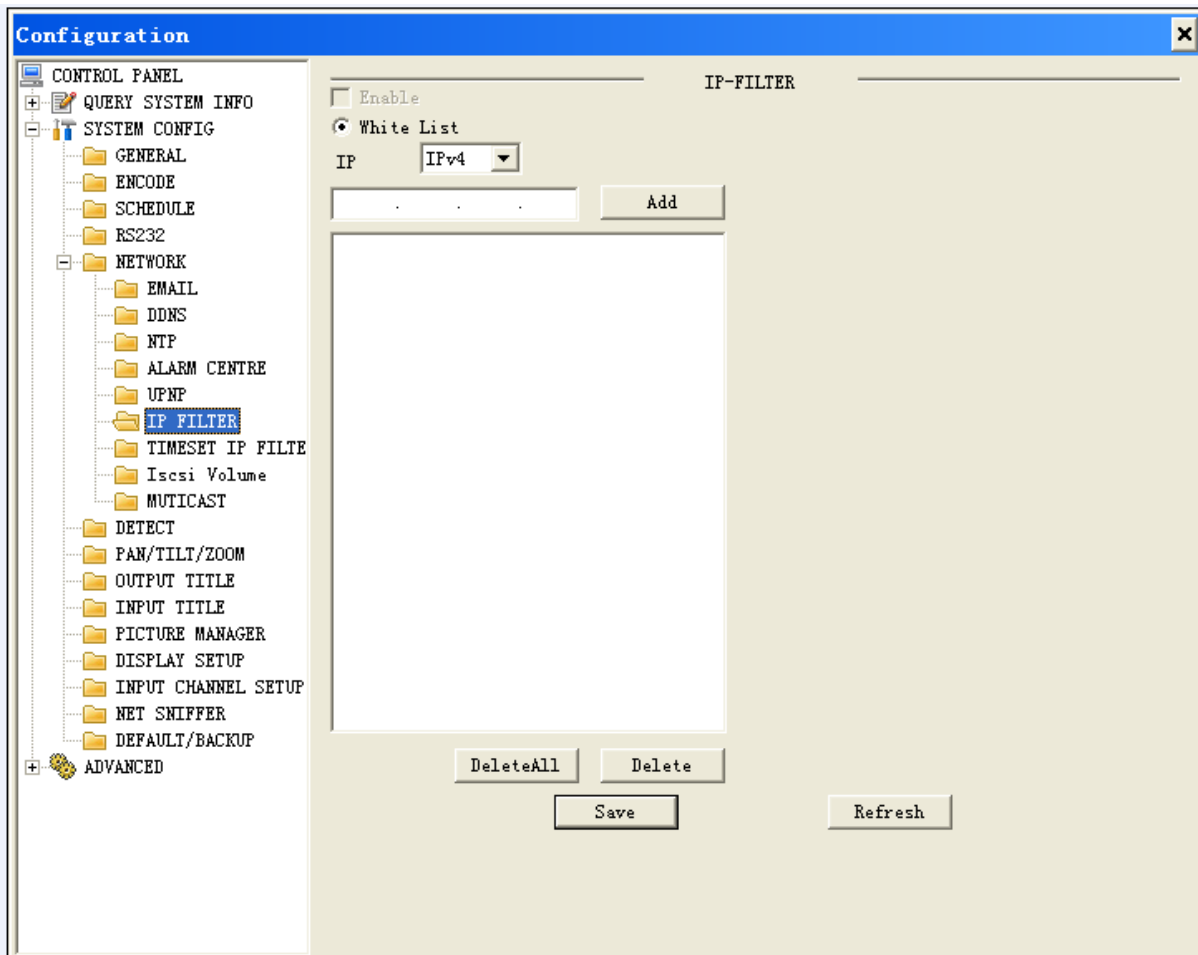


Figure 4- 38

4.5.2.12 Timeset IP Filter

After you enable Timeset IP filter, only when it filters devices on white list, it can modify time on the platform. See Figure 4- 39.

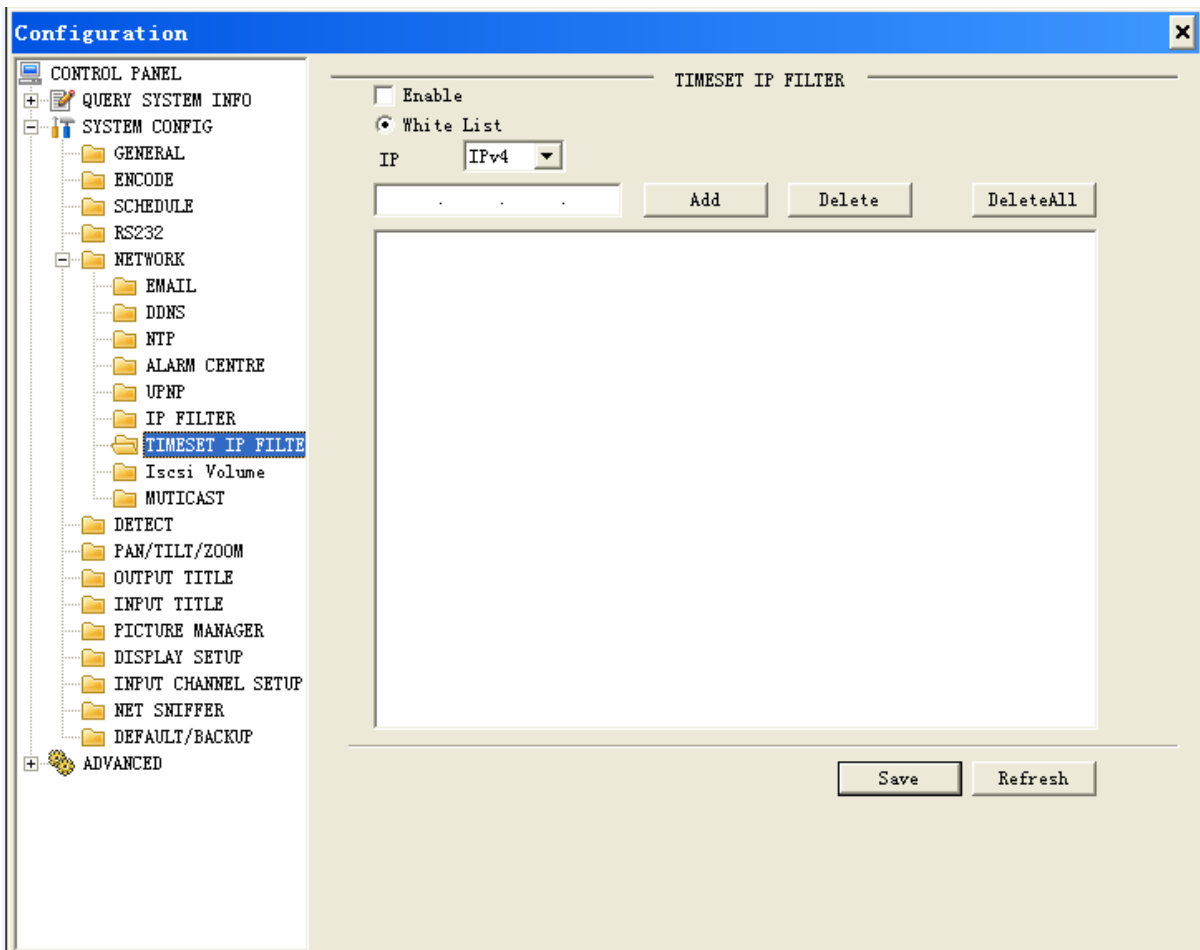


Figure 4- 39

4.5.2.13 ISCSI

Via ISCSI network storage protocol, you may save local and remote video record inputted on device to remote storage server. You may also add multiple SVRs which allows you to save image or video from different channels to different servers. Please see Figure 4- 40.

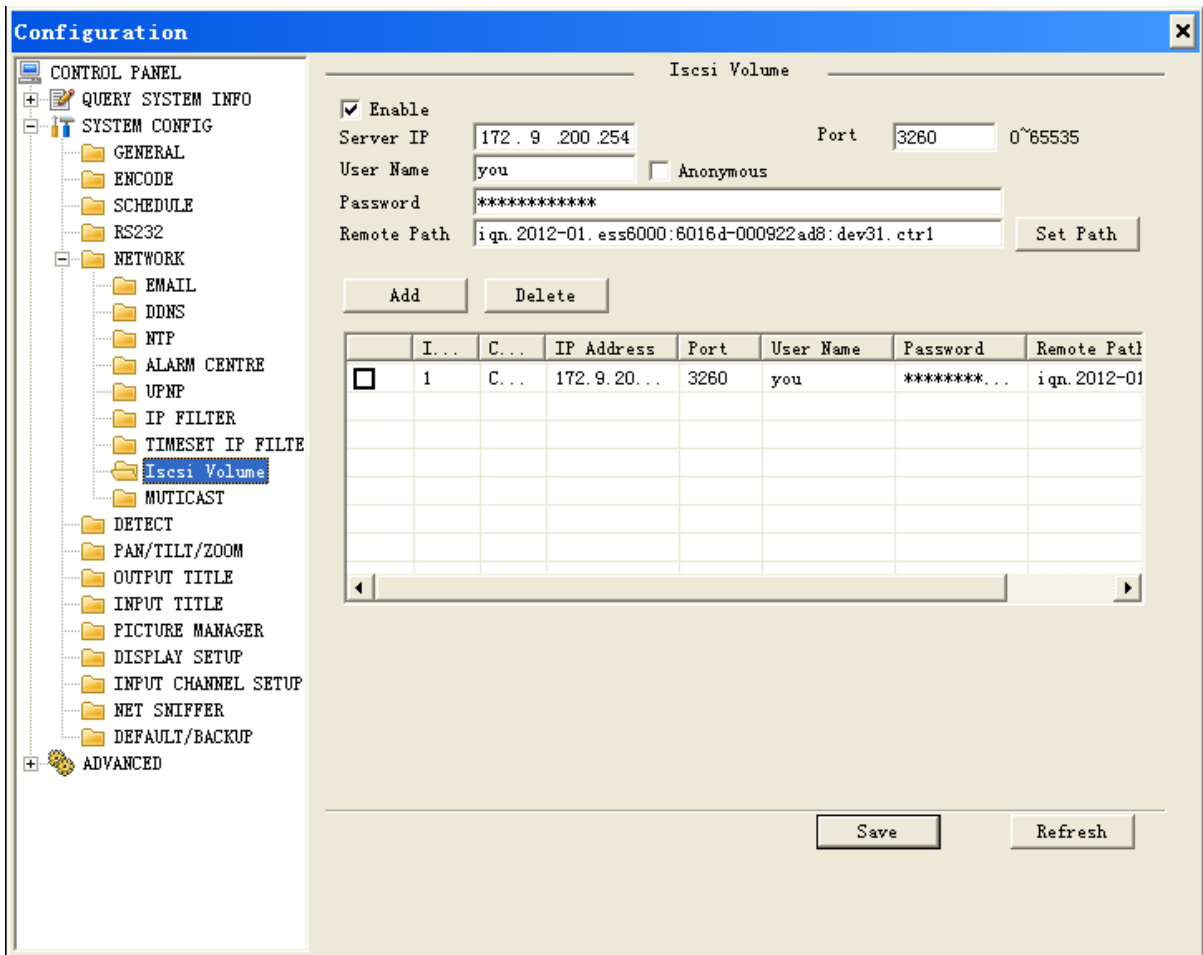


Figure 4- 40

4.5.2.14 Multicast

After multicast is enabled, login WEB, select multicast method. WEB will automatically get multicast address and add the group. Then you can monitor video via multicast. See Figure 4- 41.

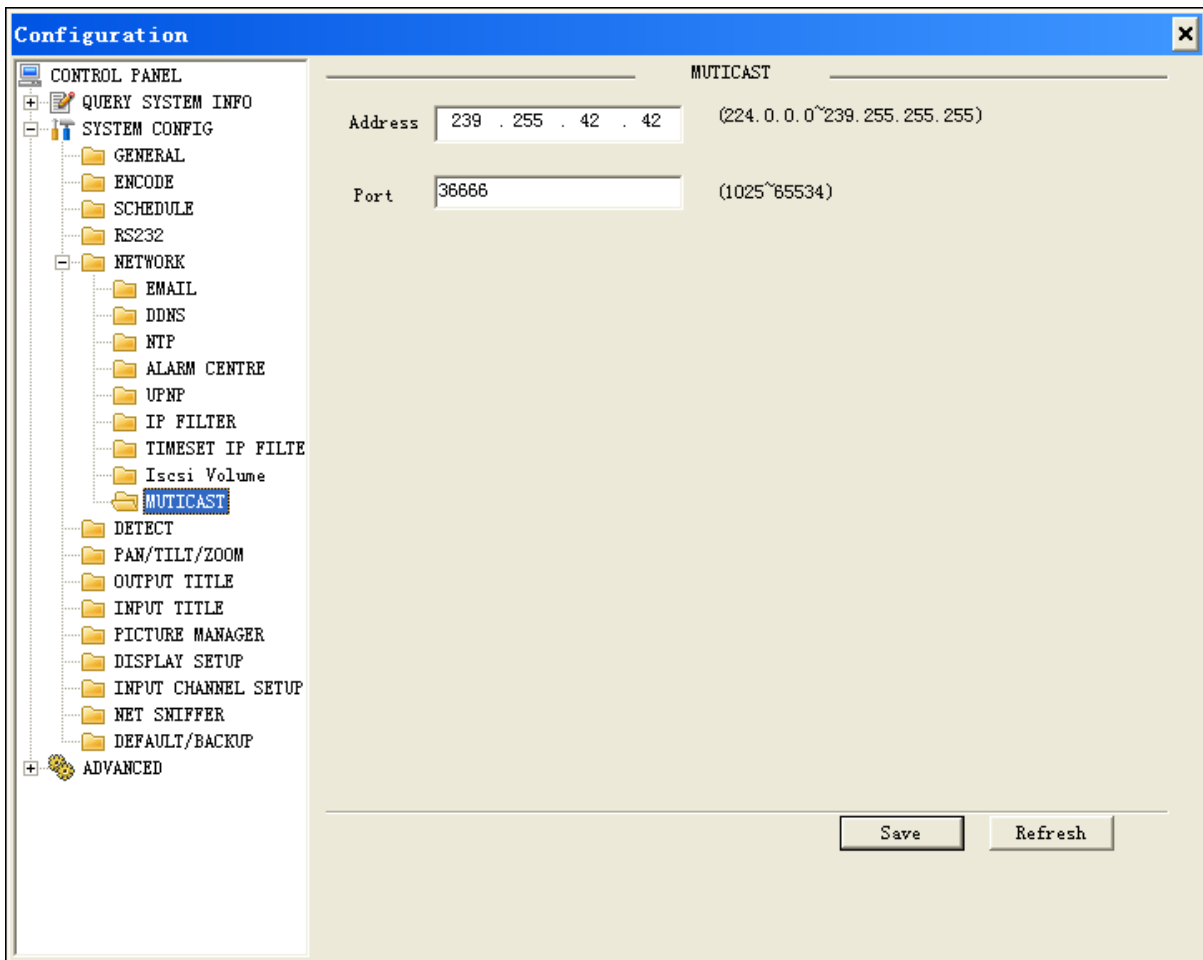


Figure 4- 41

4.5.2.15 Detect

By analyzing the video, system enable motion detection alarm when it detects the motion signal reached the specified sensitivity.

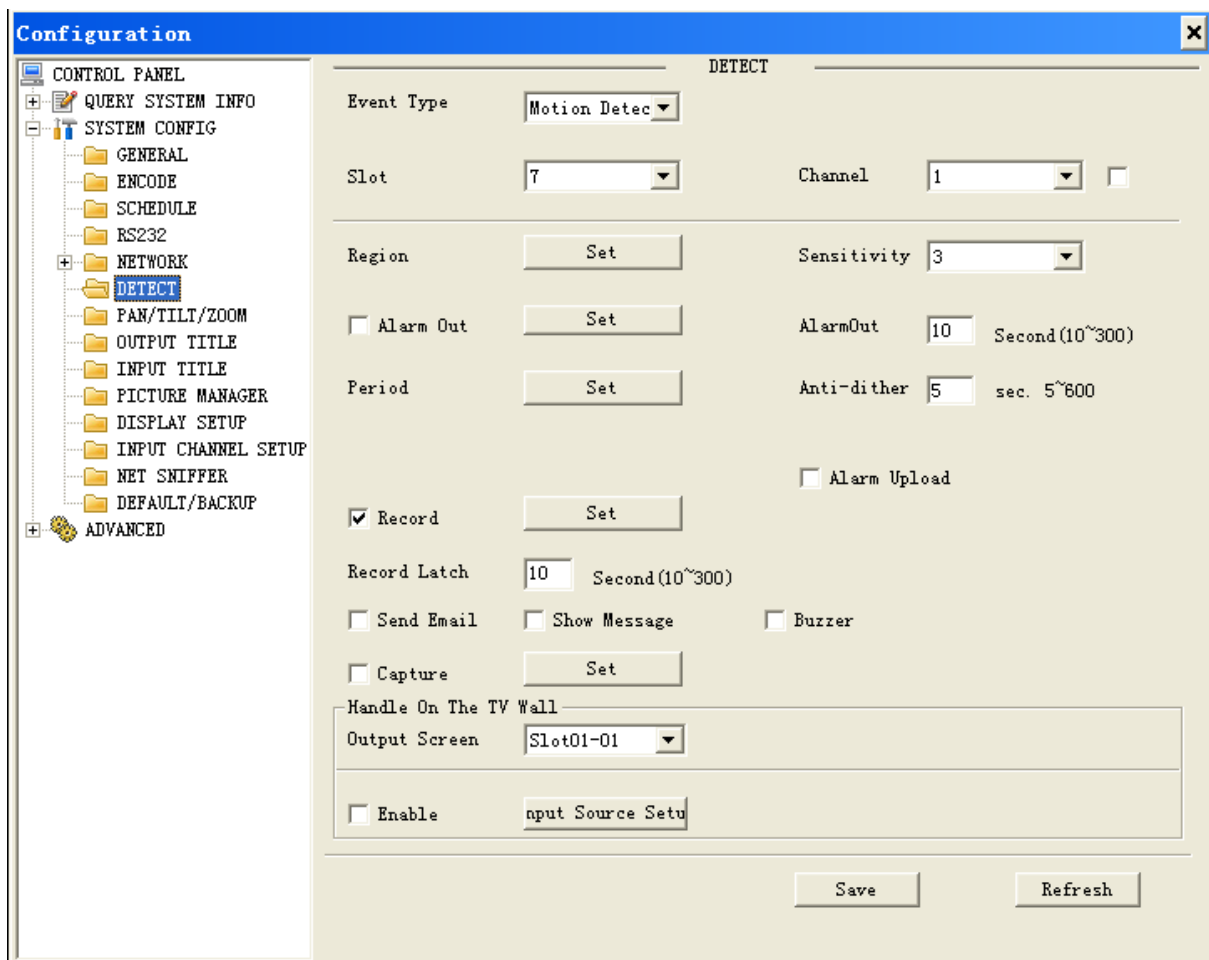


Figure 4- 42

Please see Figure 4- 42.

Event type: There are three types: Motion detection/video loss/Camera Masking.

Slot and Channel: Select channel name from the dropdown list.

Enable: You need to check box to enable motion detection function.

Region: You can set detect region. Video loss and video mask do not have this function.

Sensitivity: There are 1-6 levels as 6 is highest sensitivity.

Alarm out: You may set alarm output channel of motion detection signal.

Alarm out delay: After alarm event ends, alarm delays for this period within 10 to 300s.

Period: Here you can set alarm period while motion detection function becomes activated in the specified periods. There are six periods in one day. Please check box to enable corresponding period. Please click save button to exit. Please see Figure 4- 43.

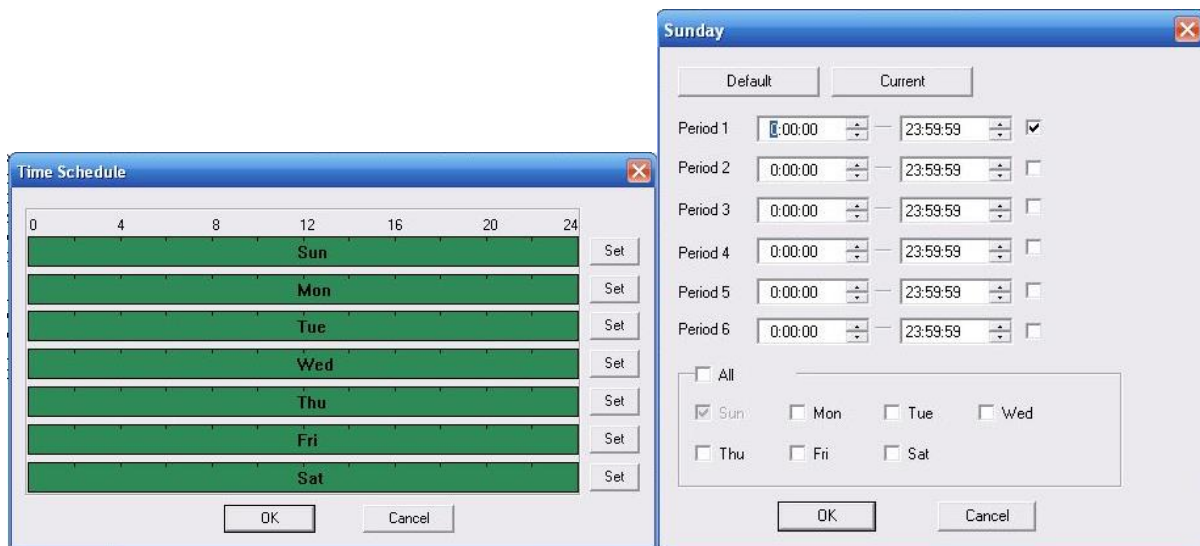


Figure 4- 43

Anti-dither: Anti-dither is duration of motion detect Its range is 5 to 600s. .

Record channel: Select channel (multiple choices) and system automatically activates motion detection function to record once alarm occurs (working with motion detection function). You need to set period of motion detection in schedule setting and select auto in local record control.

Record latch: System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.

Alarm upload: System can upload the alarm signal to the centre (Including alarm centre).

Email: If you enabled this function, system can send out email to alert you when alarm occurs

Shoe message: Show message on screen.

Buzzer: Check to enable buzzer, do device will buzzer when it alarms.

Snapshot: You can set to snapshot.

4.5.2.16 PTZ

Here you can set PTZ channel, protocol, address, baud rate and etc.

Please note, before operation please make sure you have set speed dome address. Make sure speed dome connection is OK. Please see Figure 4- 44.

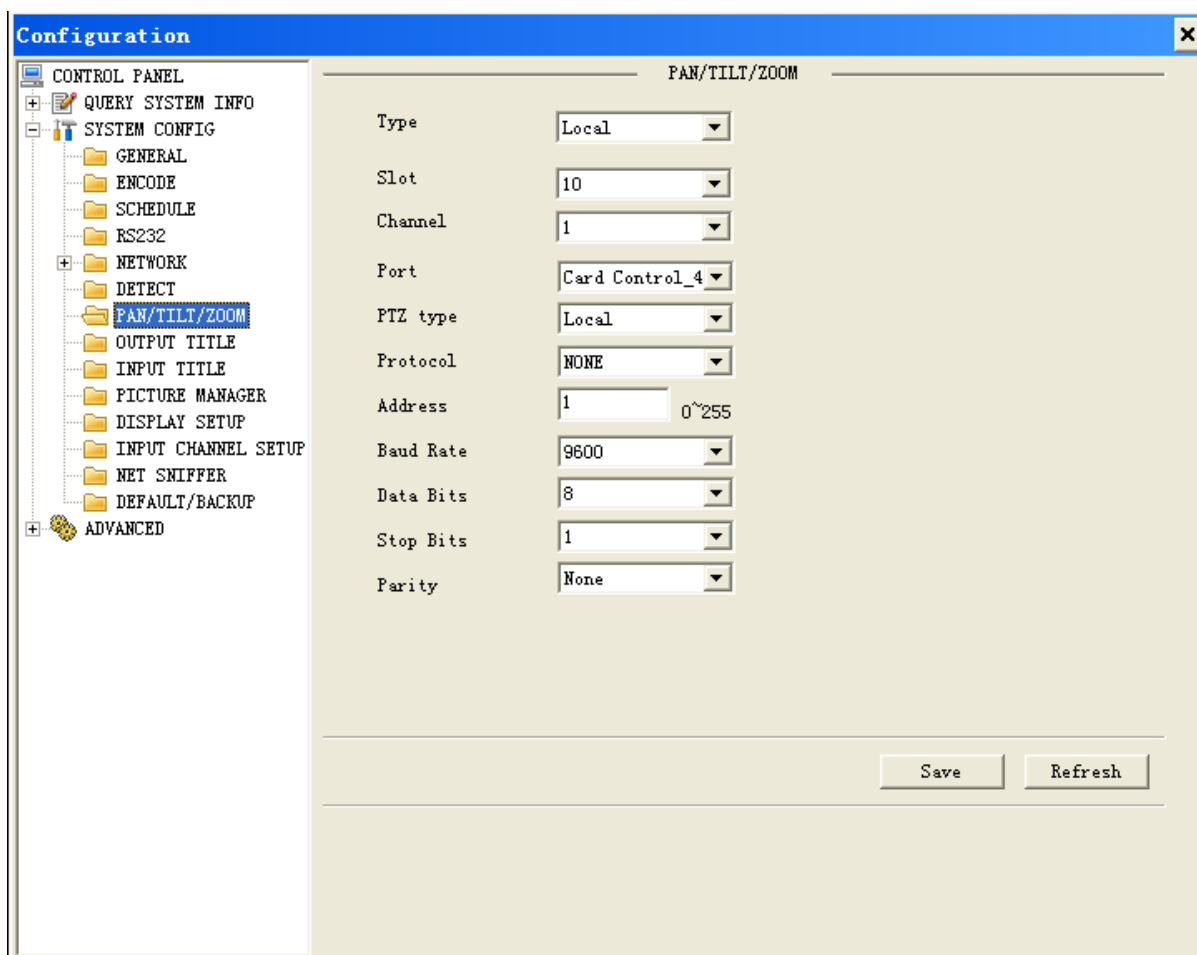


Figure 4- 44

Slot and channel: Select channel for speed dome input.

Port: Select port to control signal output.

PTZ type: Select either local or other PTZ.

Protocol: Select the corresponding dome protocol.(such as PELCOD)

Address: Set corresponding dome address. Default value is 1. Please note your setting here shall comply with your dome address; otherwise you cannot control the speed dome.

Baud Rate: Select corresponding dome baud rate for your speed dome. Default setting is 9600.

Data Bit: Default value is 8. Please set according to the speed dome dial switch setting.

Stop bit: Default value is 1. Please set according to the speed dome dial switch setting.

Parity: Default setting is none. Please set according to the speed dome dial switch setting.

When you completes all above settings, click save to return to monitoring interface.

When board card at corresponding slot is fiber encoding card, HDCVI encoding card, you may set countercharge front-end function. After above settings are finished, you can countercharge front-end via video line, like RS485 control.

4.5.2.17 Video Output Title

The interface can modify output channel name, control ID is no. of output channel. See Figure 4-45.

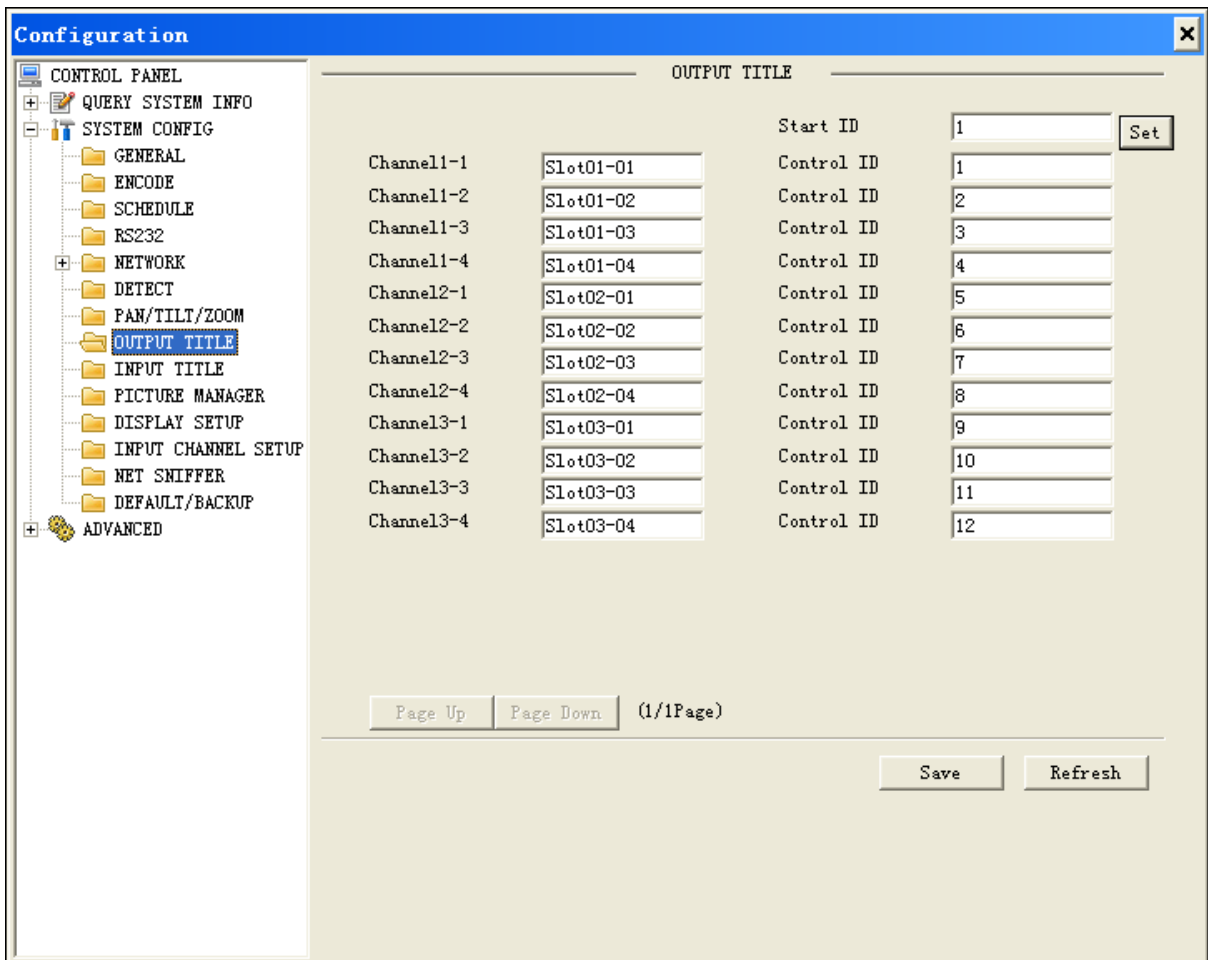


Figure 4- 45

4.5.2.18 Input Title

The interface may modify input channel name, name of remote device cannot be modifies by default. Control ID is no. of input channel. See Figure 4- 46.

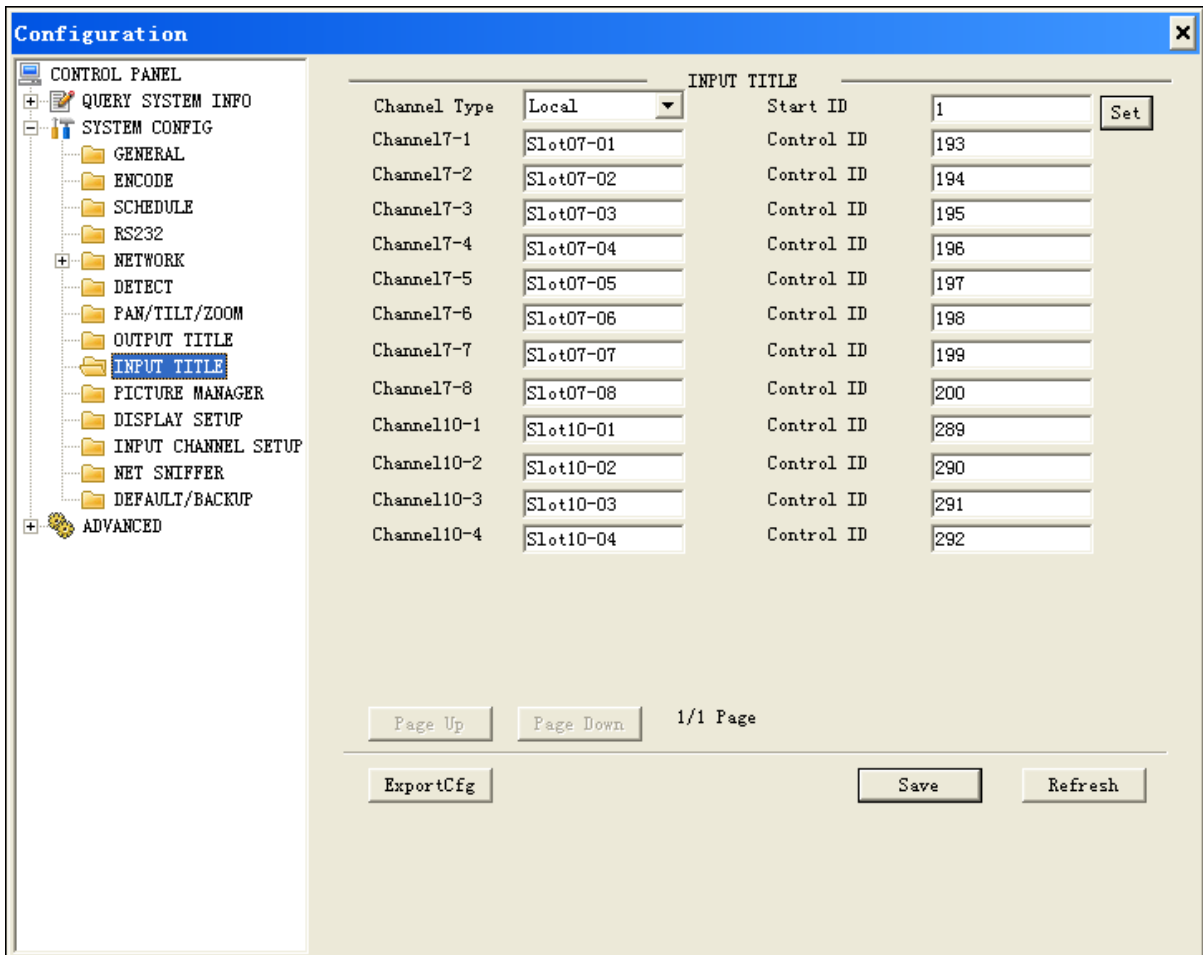


Figure 4- 46

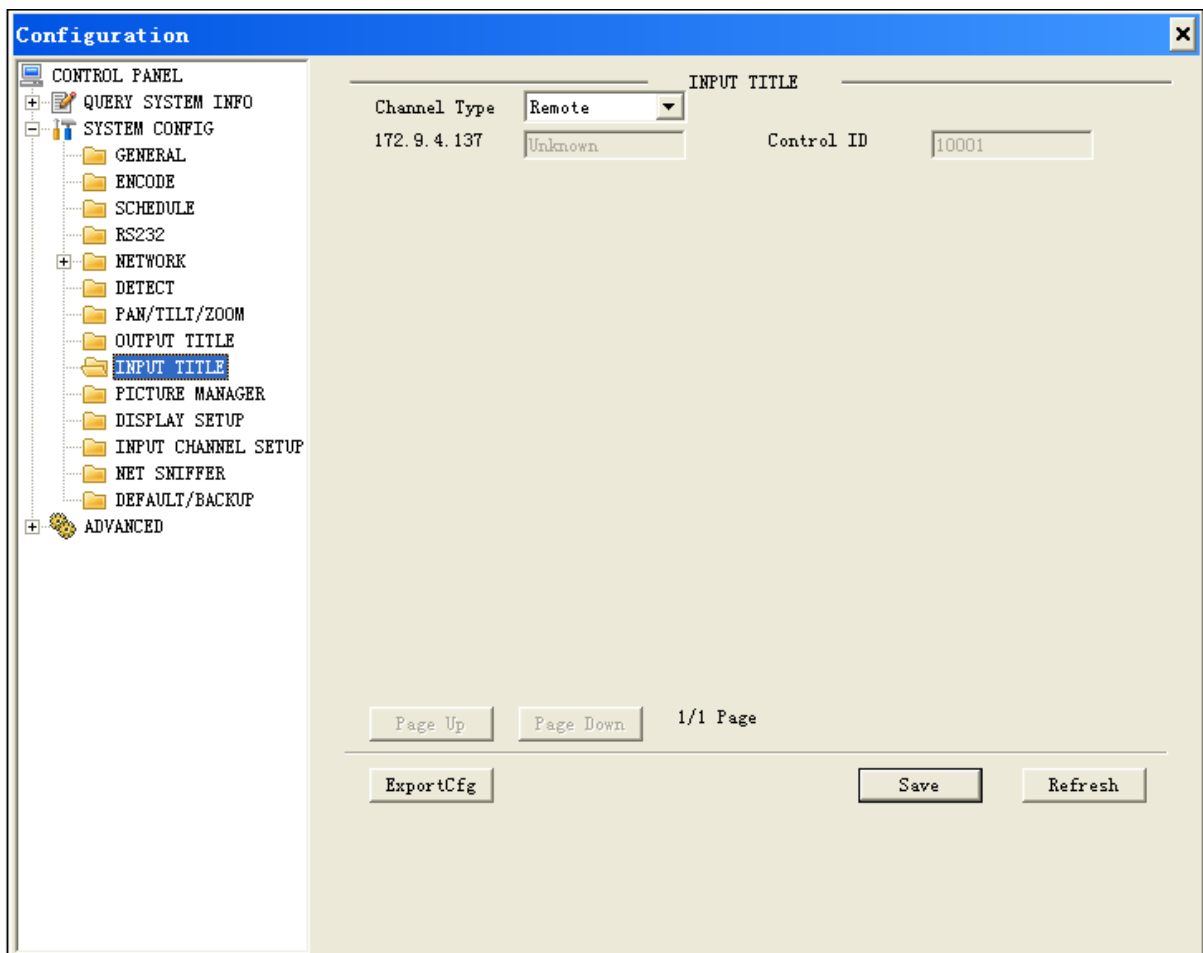


Figure 4- 47

4.5.2.19 Picture Manager

User can upload picture to the platform. Uploaded picture can be set as background of the platform. Picture size cannot exceed 8M with resolution of 4096*4096 and lower in JPG format. See Figure 4- 48.

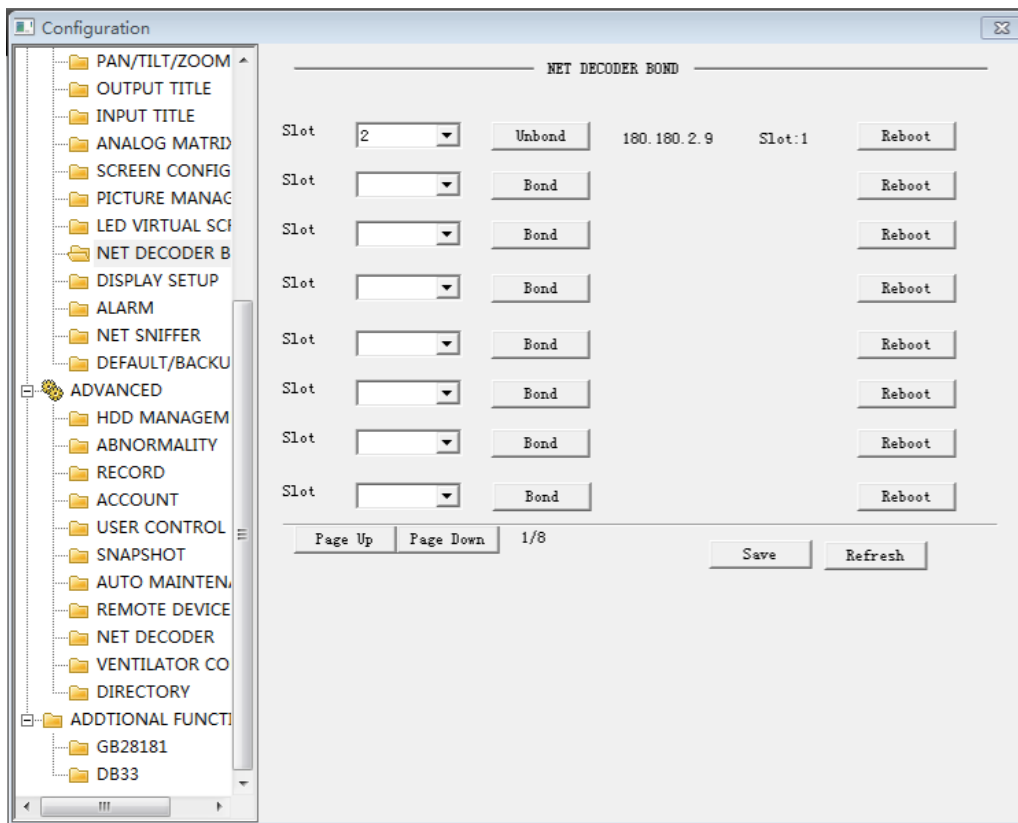


Figure 4- 49

Step 2. Select slot, click Bind.

Step 3. Select decoder you want to unbind, click OK.

Note:

You can unbind or reboot sub decoding box.

4.5.2.21 Display Setup

You can set corresponding slot-channel output, including resolution, display, HUE, brightness, contrast, left/right/top/bottom margin adjustment. Display includes hot swap and force. In global config, enable Keep last frame to show the last frame when there is no stream. If you do not enable this function, the screen will be dark, and show prompt as “video requesting...”. Use RTSP to connect platform, use pull mode of this protocol. If you enable RTSP, then it will uses RTSP protocol to exchange. Net TV push stream is push mode, it is disabled by default. Push mode: At device-end, each TV open one port, and Client connects to this port, send data over. Push stream is simpler compare to others.

See Figure 4- 50.

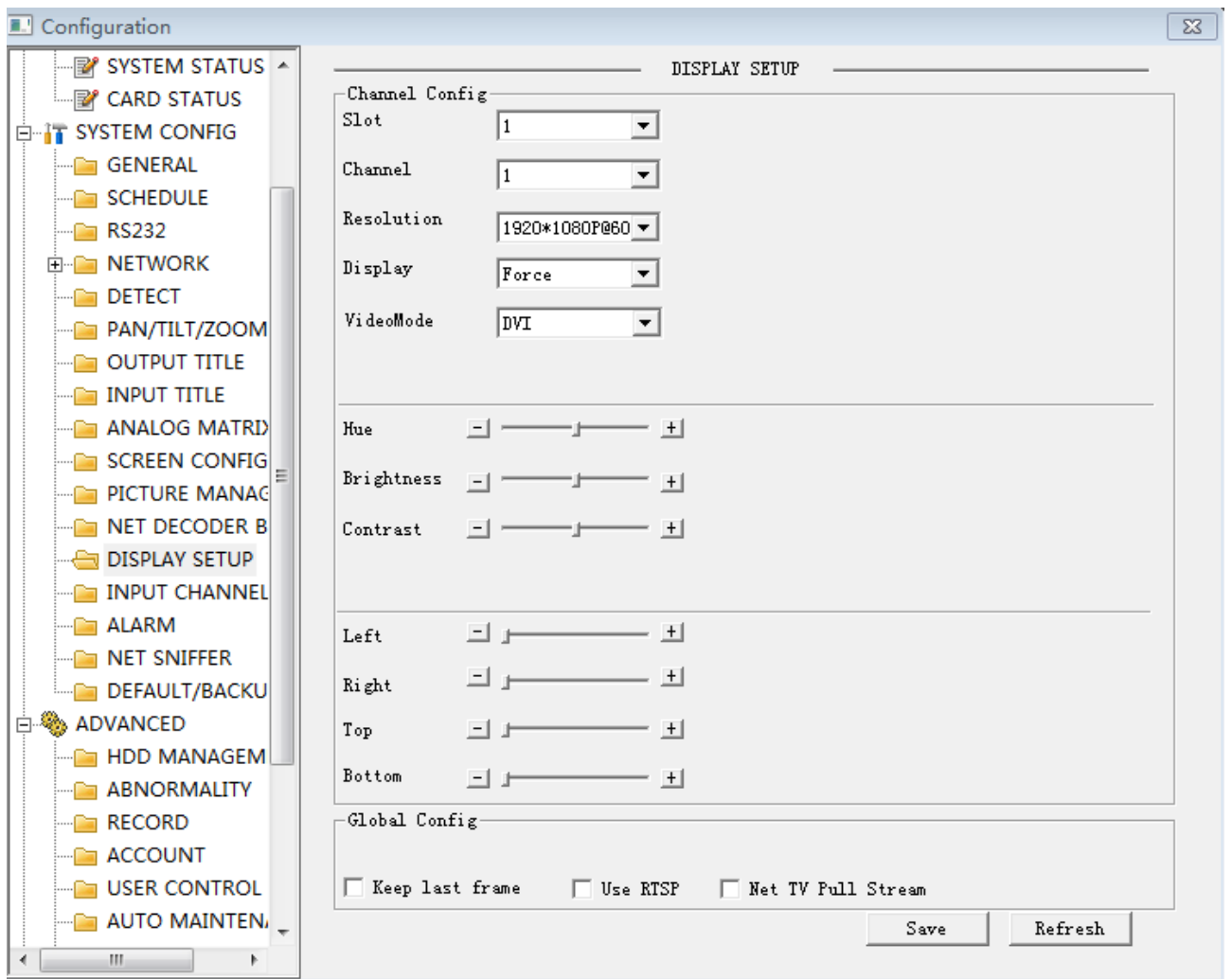


Figure 4- 50

4.5.2.22 Input Channel Setup

It adjusts DVI, VGA signal inputs. When input signal resolution is special resolution which causes input signal to be incomplete, you can adjust to make input signal complete. See Figure 4- 51.

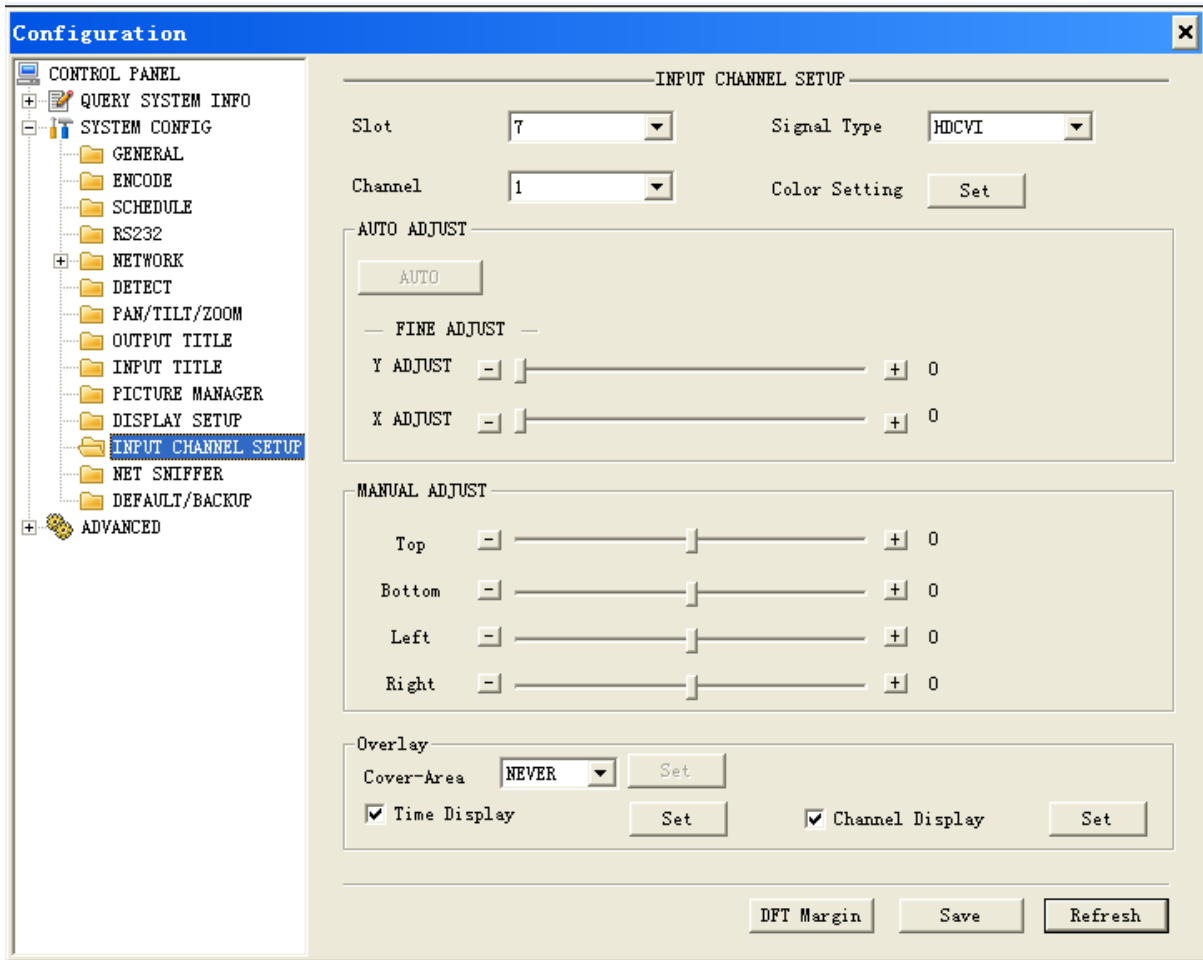


Figure 4- 51

Color Setting: It adjusts brightness, contrast, saturation, HUE, gain and phase of output image. See Figure 4- 52.

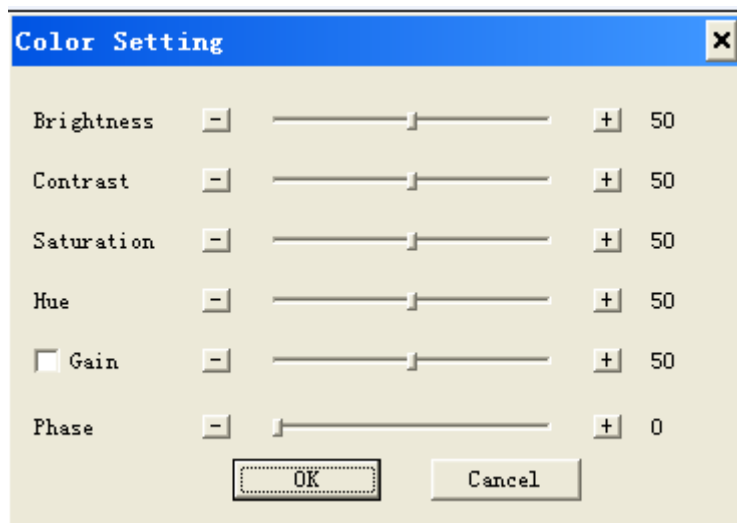


Figure 4- 52

Cover-Area: Select monitor option, and click the setup button to enter corresponding channel image. User can select area to be covered via mouse. One channel supports a max of 4 covered blocks. Select one covered block, click delete or right click to delete it. Single click to delete all covered blocks. When you finish setup, click Save.

There are four types of covers:

Never: Never cover block.

Preview: Set preview mode, no one can preview covered area.

Monitor: Set monitor mode, no one can monitor covered area.

All: Set preview and monitor modes, no one can preview or monitor covered area. See Figure 4-53.

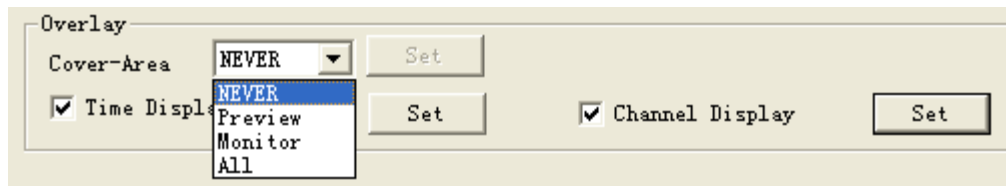


Figure 4- 53

Time title and channel title: Click setup button. Drag time title or channel title to designated position and save it. Title and channel info are shown in WEB live preview interface, local preview and record file playback interface. See Figure 4- 54 and Figure 4- 55.

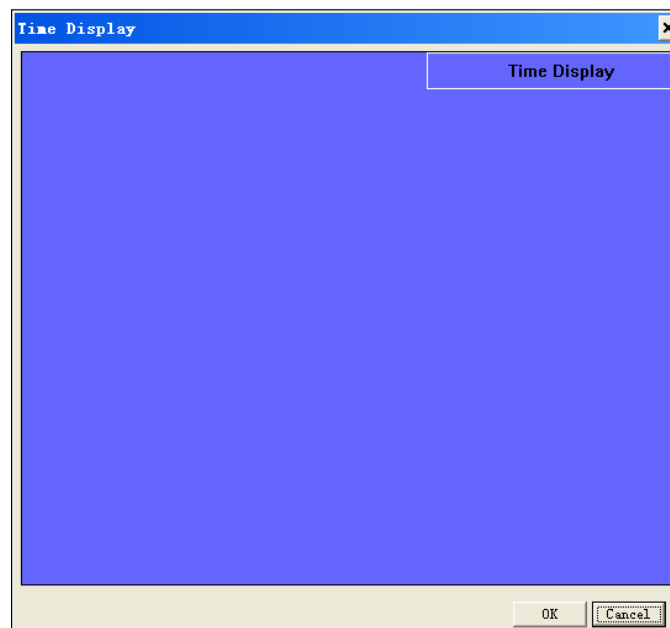


Figure 4- 54

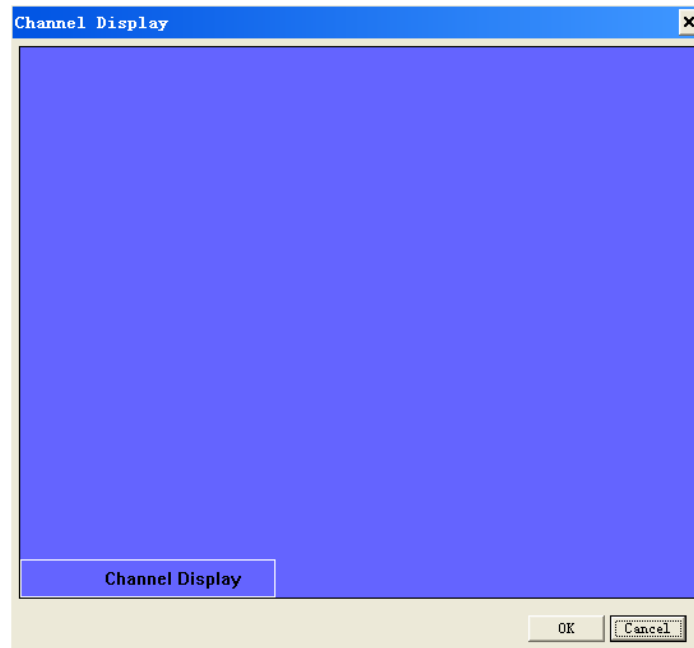


Figure 4- 55

4.5.2.23 NET Sniffer

When network error occurs, such as disconnection, video frame is not fluent and etc., you can sniff network data on device. It sniff via IP, port and protocol type. Sniffer data can be saved to Distributed Decoding System locally or USB. You can find problem with the sniffer data. See Figure 4- 56.

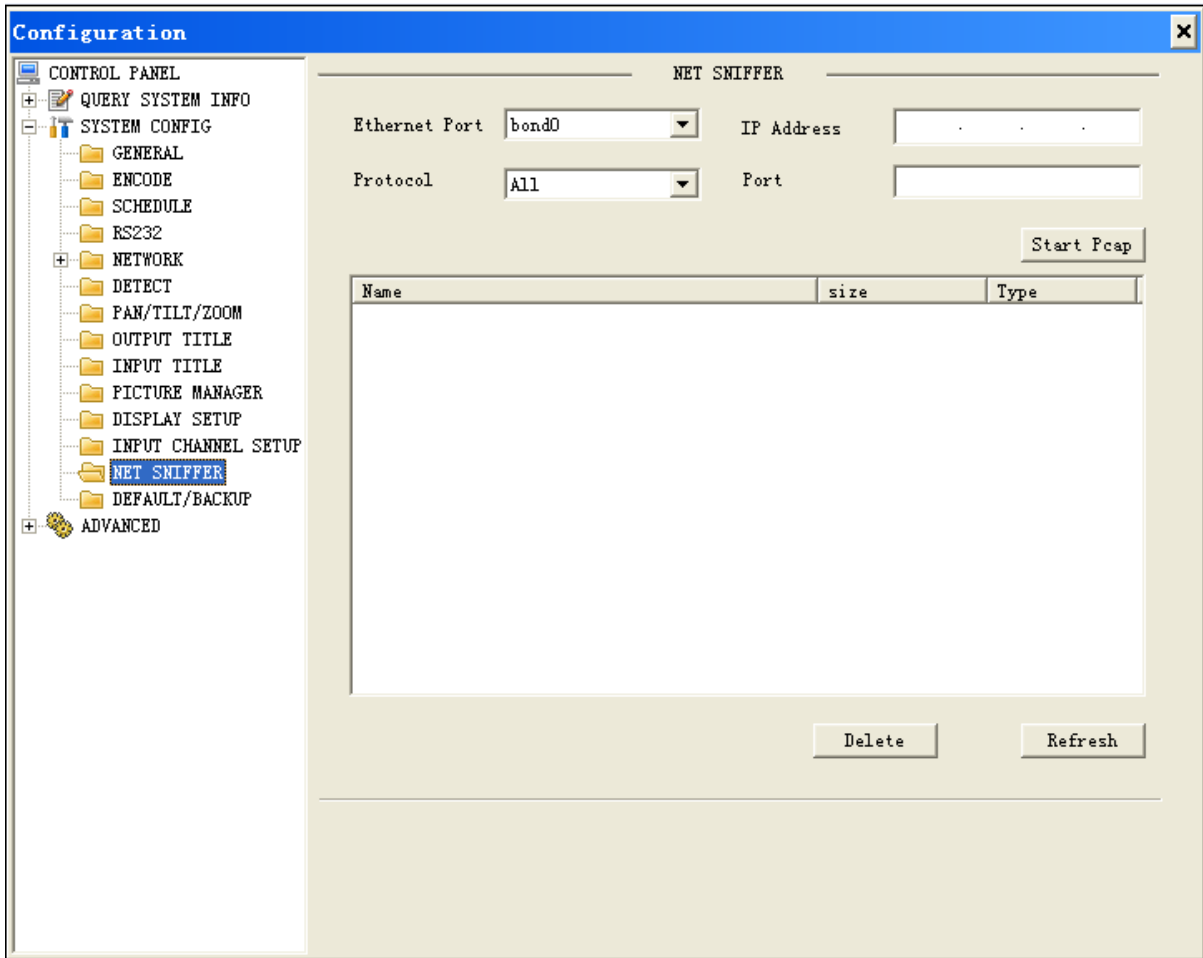


Figure 4- 56

4.5.2.24 Default/Backup

There are general, schedule, network, detect, display, encode, RS232, alarm, PTZ, and channel name as setup and output. You can select them separately or all. (You cannot select alarm.) See Figure 4-49.

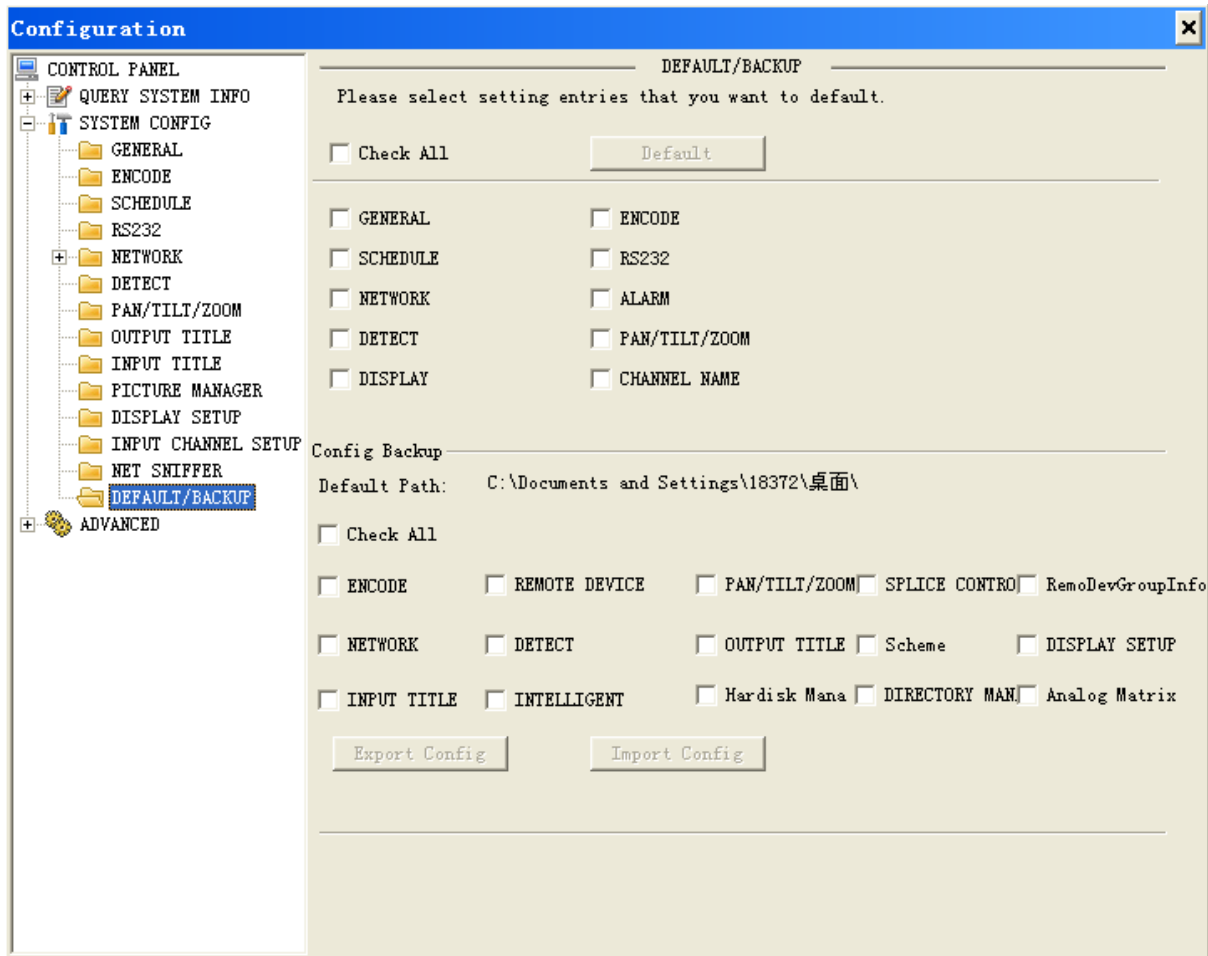


Figure 4- 57

There are encode, remote device, PTZ, matrix control, group info, network, detect, output title, scheme, display setup, input title and intelligent. You can select multiple items.

- Export config: Click export config and select backup path to export all config on web.
- Import config: Click import config and select backup path to import backed up configuration.

4.5.3 Advanced

4.5.3.1 HDD Management

Please select the storage device first and then you can see the items on your right become valid. Select one processing mode: format, read/write, or read only. And click control storage device. Please see Figure 4- 58.

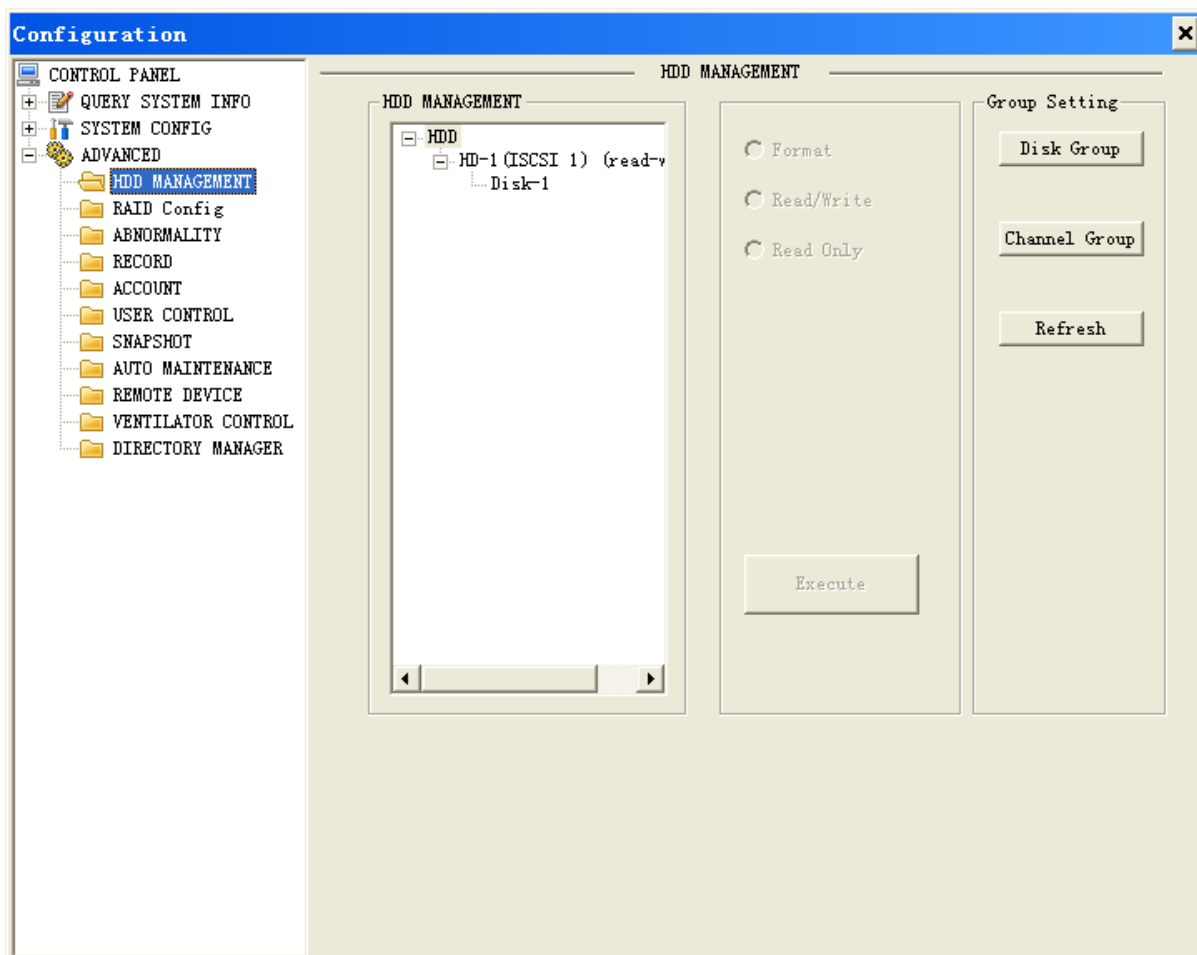
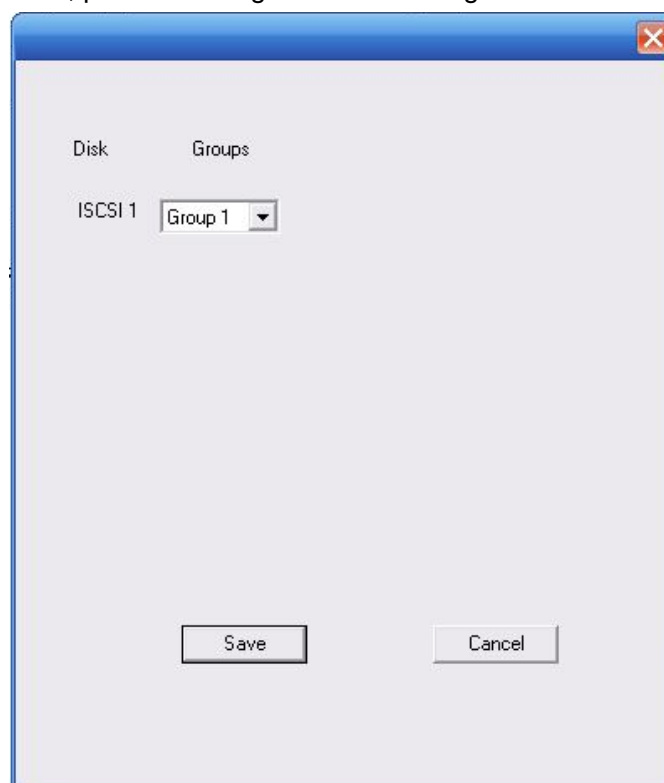


Figure 4- 58

Group setting is as follows; please see Figure 4- 59 and Figure 4- 60.



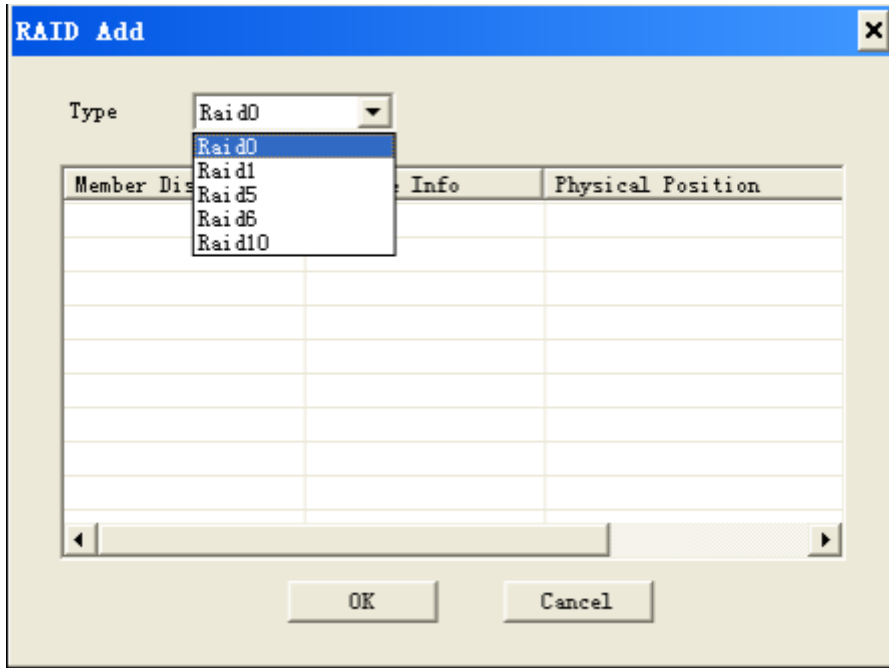


Figure 4- 62

Click hot spare management to set Raid hot spare disk which improves security.

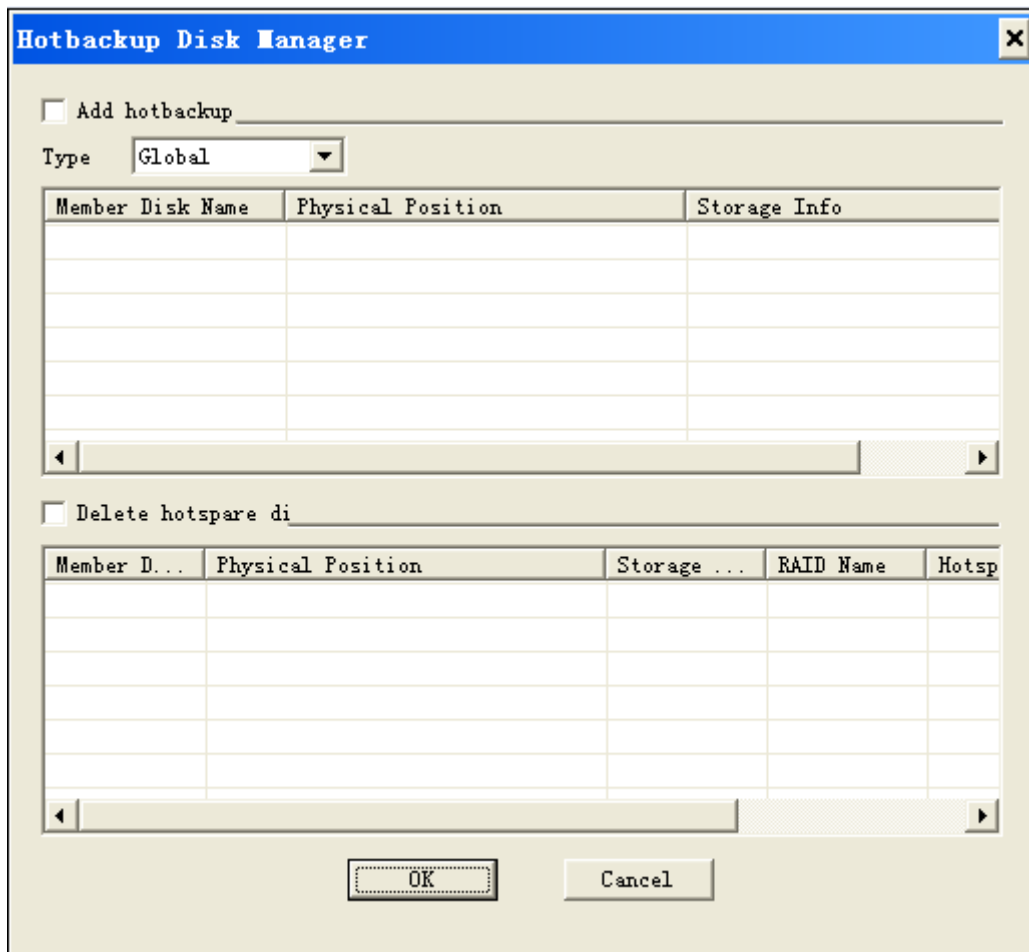


Figure 4- 63

4.5.3.3 Abnormality

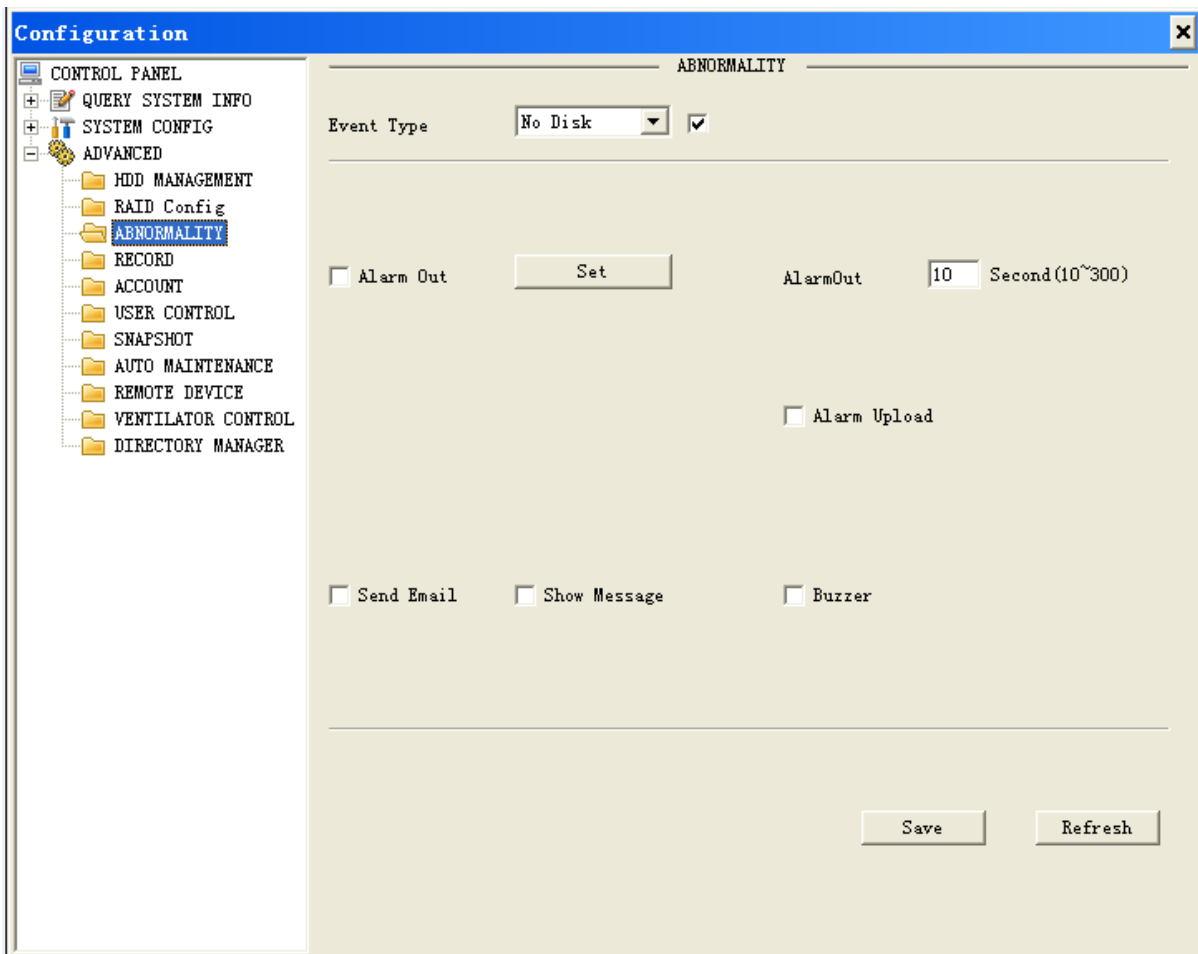


Figure 4- 64

Please see Figure 4- 64.

Event type: The abnormal events includes: no disk, disk error, capacity warning, net error, IP conflict and MAC conflict. You can set linkage among these events.

Enable: Check enable box.

Alarm out: You can set event alarm out channel to alarm.

Alarm out delay: After alarm out event ends, alarm delays within 10 to 300s.

Alarm upload: System can upload the alarm signal to the network (includes the alarm centre.)

Email: If you enable this function, system can send out email to alarm the specified user.

Show message: Show alarm message on local screen.

Buzzer: Check it to enable, device will buzzer when alarm occurs.

4.5.3.4 Record

Record has main stream and sub stream available to select. Here you can set mode in auto, manual and stop for each channel. Please see Figure 4- 65.

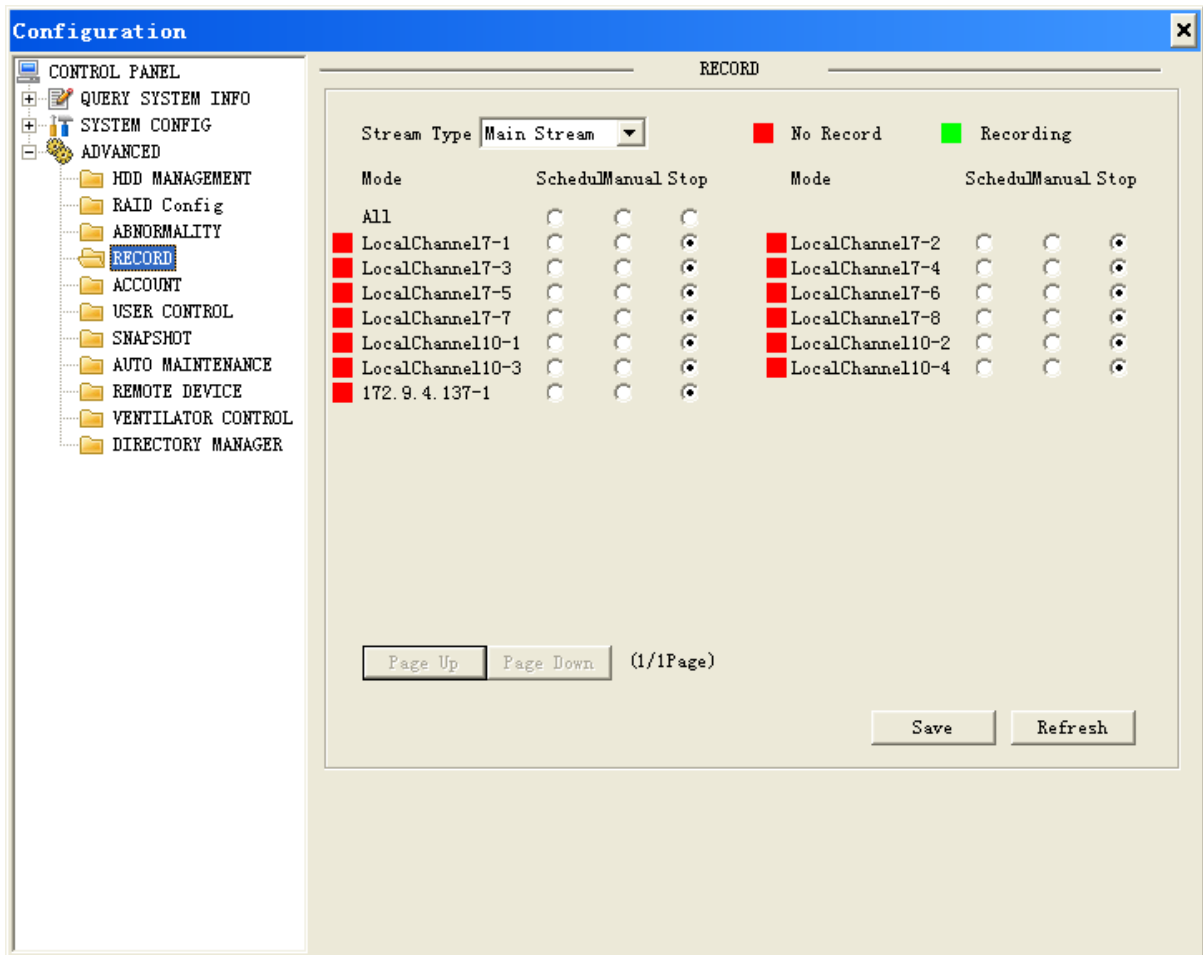


Figure 4- 65

Auto: System enables auto record function as you set in record schedule setting.

Manual: Enable corresponding channel to record no matter what period applied in the record setting.

Stop: Stop current channel record no matter what period applied in the record setting.

4.5.3.5 Account

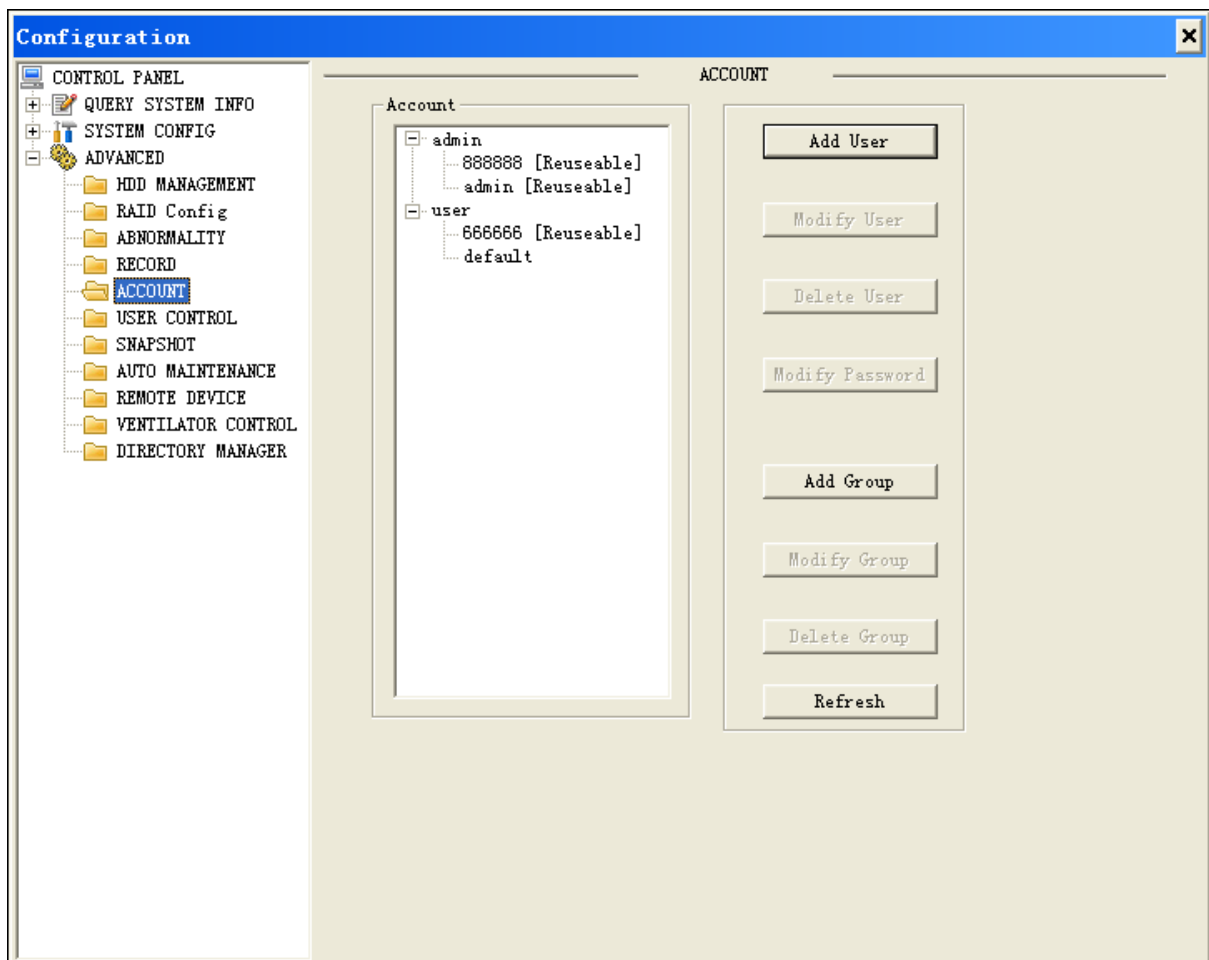


Figure 4- 66

Please see Figure 4-59.

1) Group

Add group

1. The initial interface is as in Figure 4- 66. Upper level is group which can be extended into user list by clicking on +.

2. Click add group button as in Figure 4- 67. Input group name and select authority group from list. Click save button if you want to save setting, otherwise click cancel.

Delete group

Click delete group button, and the confirmation box will appear.

Modify group

Click modify group button. and it displays corresponding information in modification box.

⚠ Note: You cannot delete group which contains users.

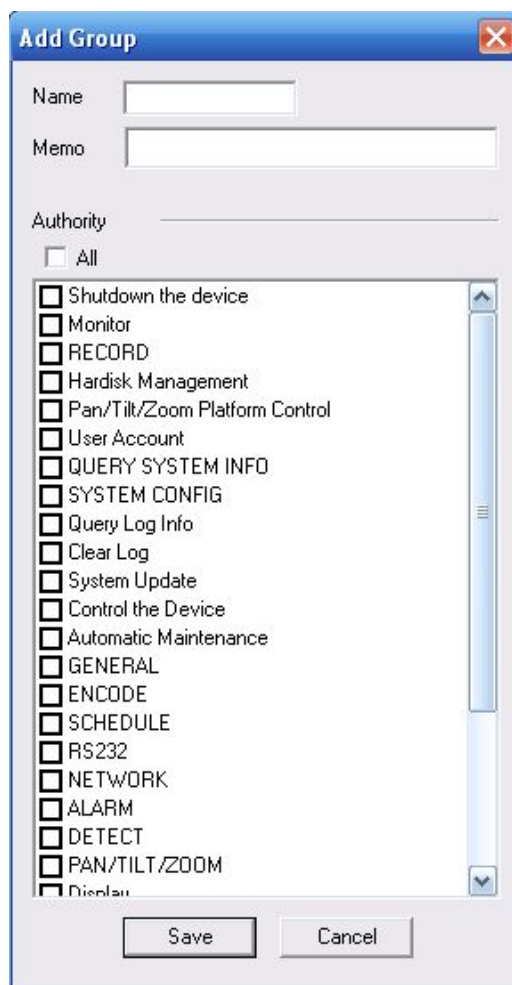


Figure 4- 67



Figure 4- 68

2) User Operation

Add user

1. Click add user button, and you will see interface as in Figure 4- 68. Input new username, password and its confirmation in the window, and then select authority for this user.
2. In authority list, set authority and group for this user.

Modify user

You can modify user here which is similar to add user except information of the user will be inputted automatically.

Delete user

Click delete user button, you will see a window as in Figure 4- 69. Click OK to delete user.

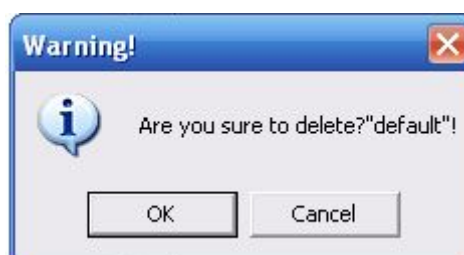


Figure 4- 69

3) Modify password

Select one user, and click modify password button, then you will see the following interface as in Figure 4- 70. Input current password, new password and its confirmation. Click save when you are done.



The image shows a 'Modify Password' dialog box with the following fields and controls:

- User Name: default
- Old Password: [Empty text box]
- New Password: [Empty text box]
- Confirm: [Empty text box]
- Group: user (dropdown menu)
- Buttons: Save, Cancel

Figure 4- 70

4.5.3.6 User Control

User control allows user to disconnect current online user or shield some user within a certain period of time. Click Refresh to see the most current user online status.

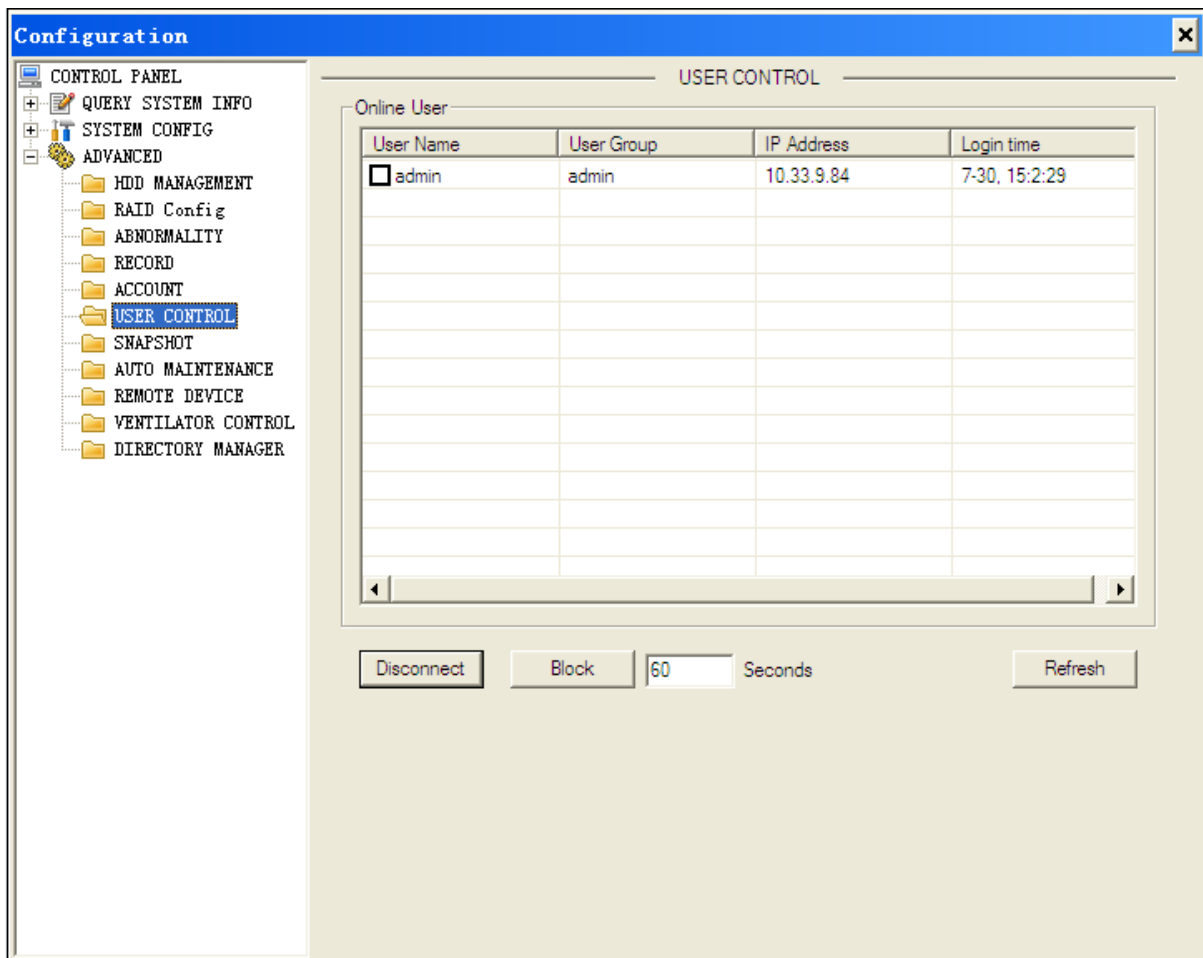


Figure 4- 71

4.5.3.7 Snapshot

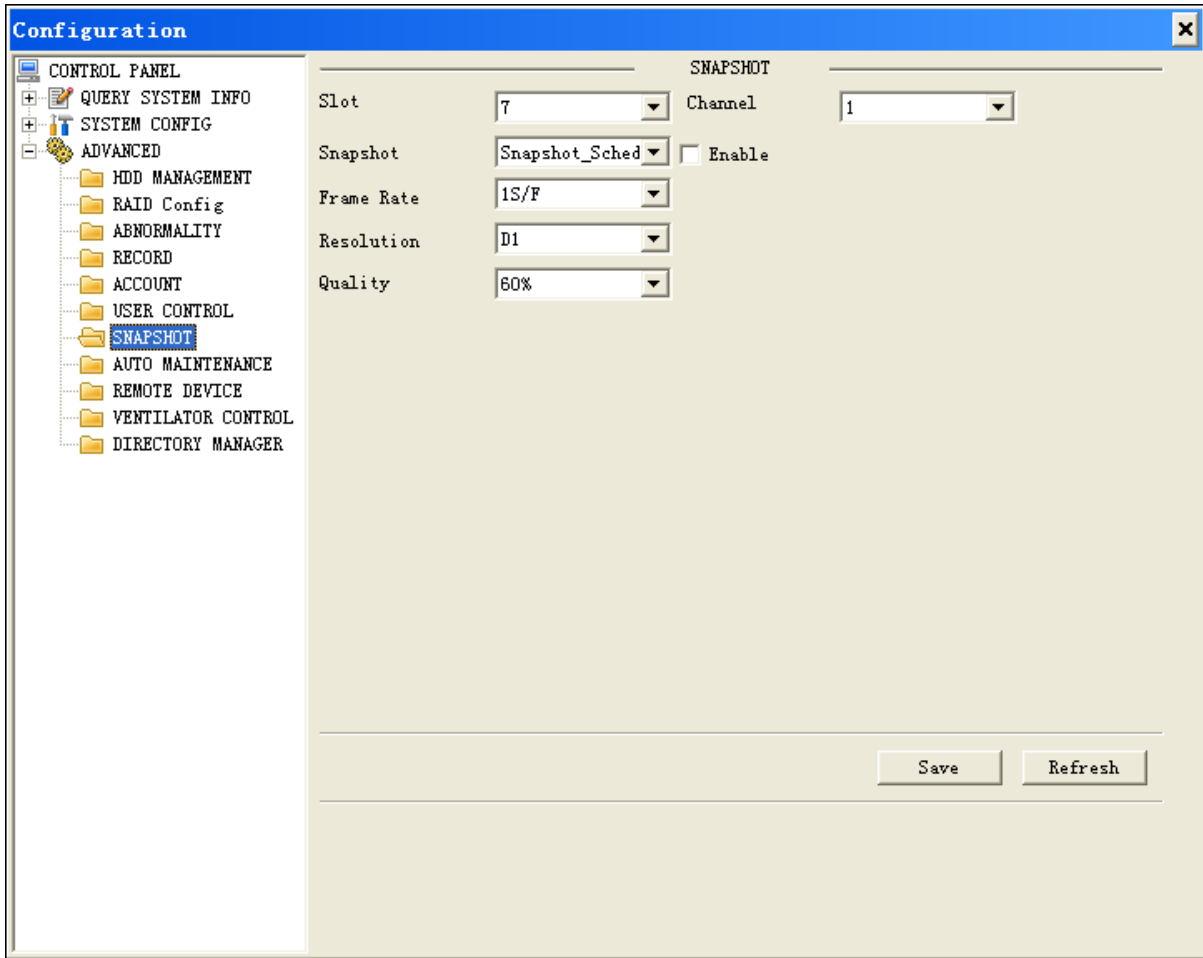


Figure 4- 72

Please see Figure 4-64.

Slot: Select slot to snapshot.

Snapshot mode: Select scheduled snapshot or trigger snapshot. You must check the box behind to enable scheduled snapshot.

Frame rate: Set snapshot frame rate, support 1~7s/pic.

Resolution: Channel support 1080P/720P/D1/HD1/BCIF/CIF/QCIF.

Quality: There are six levels of quality: 10%, 30%, 50%, 60%, 80%, 100%. 100% is the highest.

4.5.3.8 Auto Maintenance

Here you can select automatically reboot system and automatically delete old files while reboot system requires setting for time and interval from the dropdown list. Click save when you are done.

Please see Figure 4- 73.

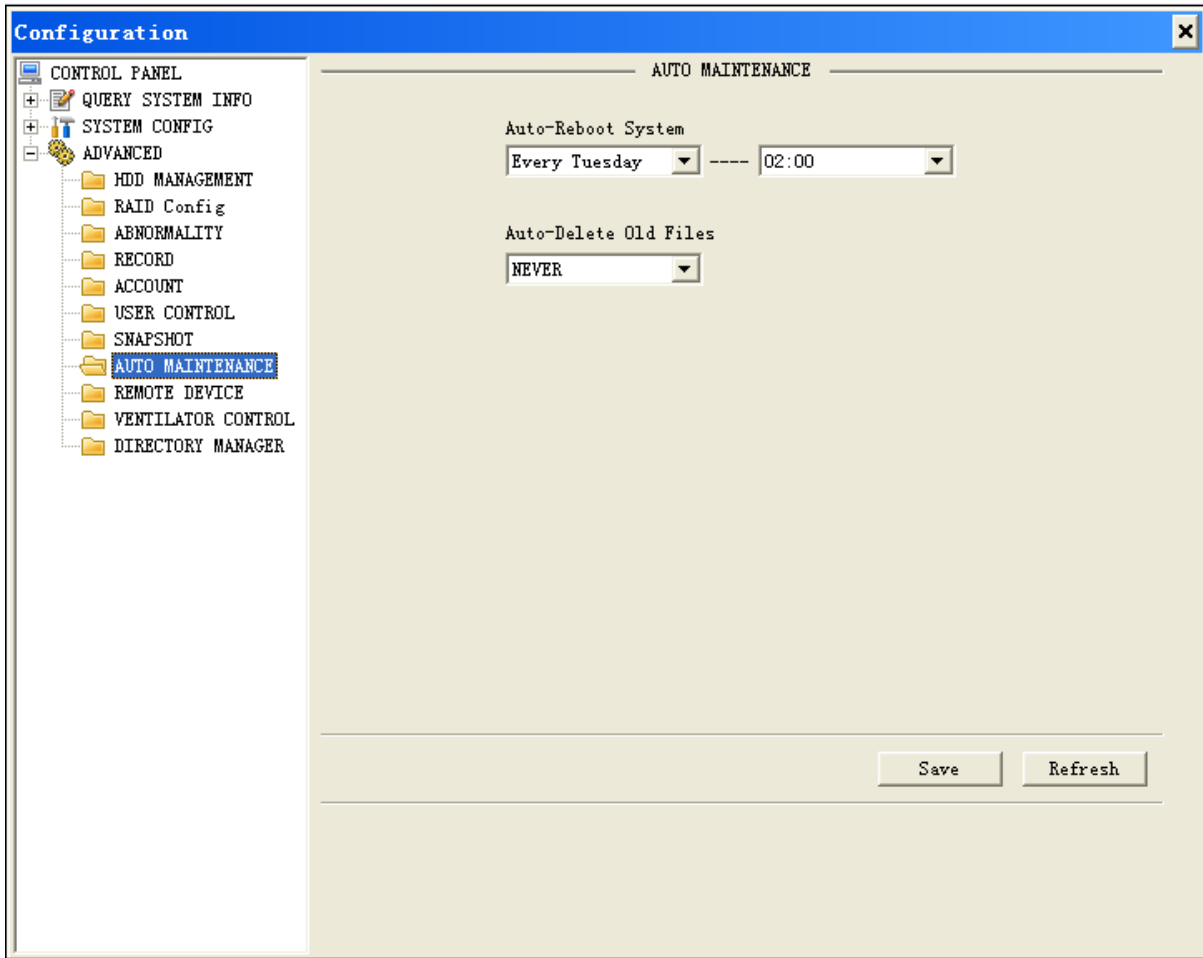


Figure 4- 73

4.5.3.9 Remote Device

Here you can add remote device via automatic search or manually adding. You also can modify and delete. Please see Figure 4- 74 and Figure 4- 75.

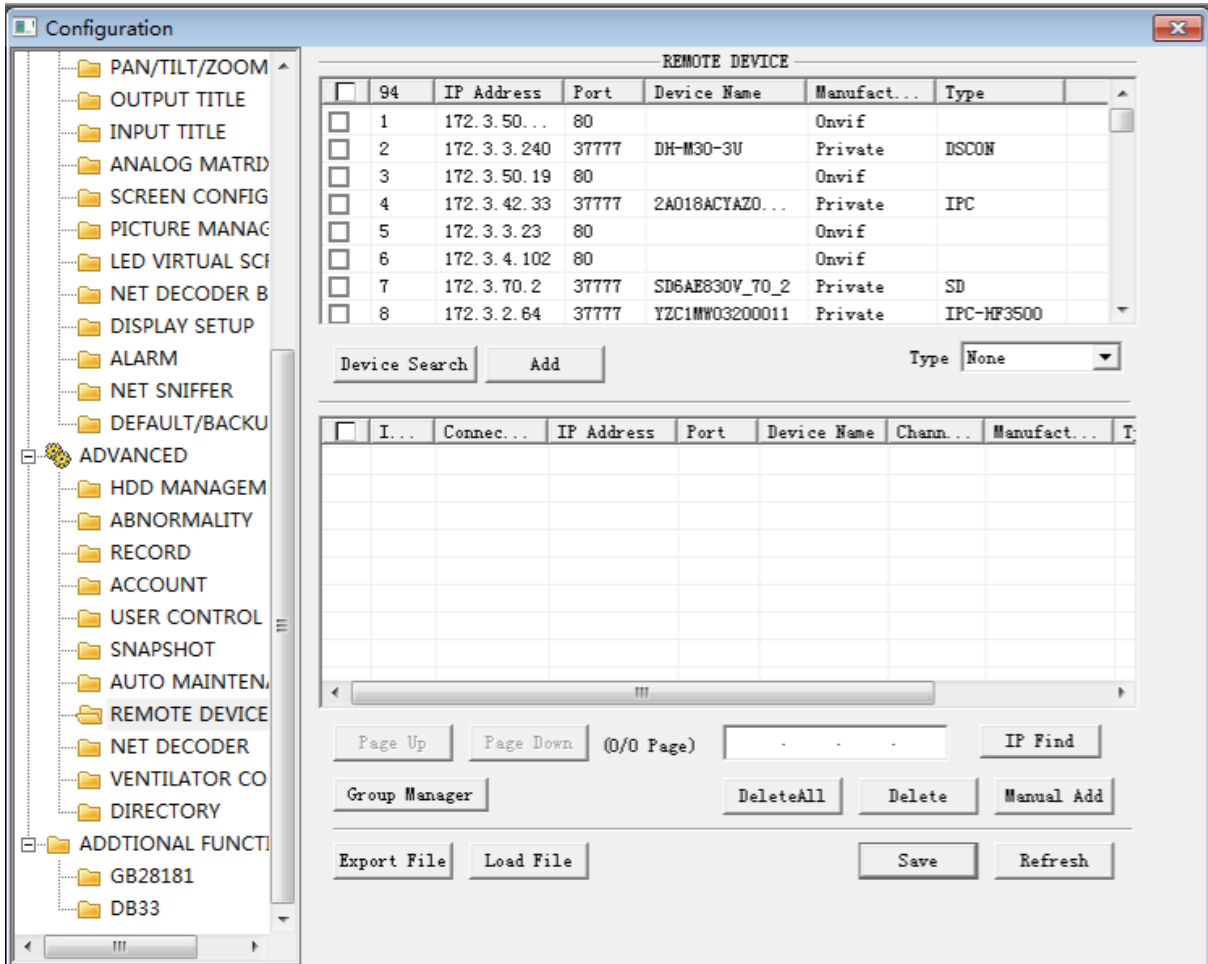


Figure 4- 74

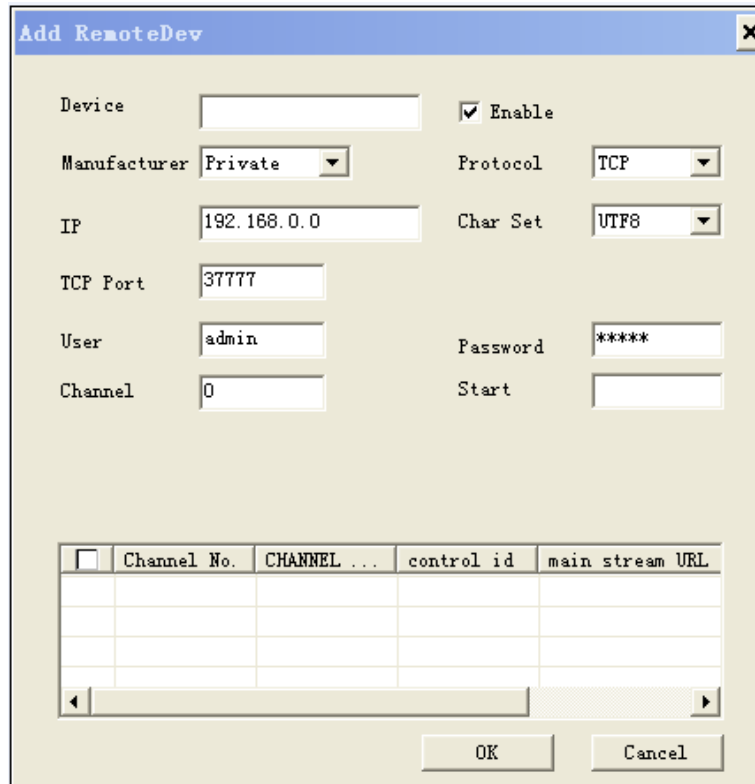


Figure 4- 75

By Group:

Step 1. Click Group Manager to see Figure 4- 76.

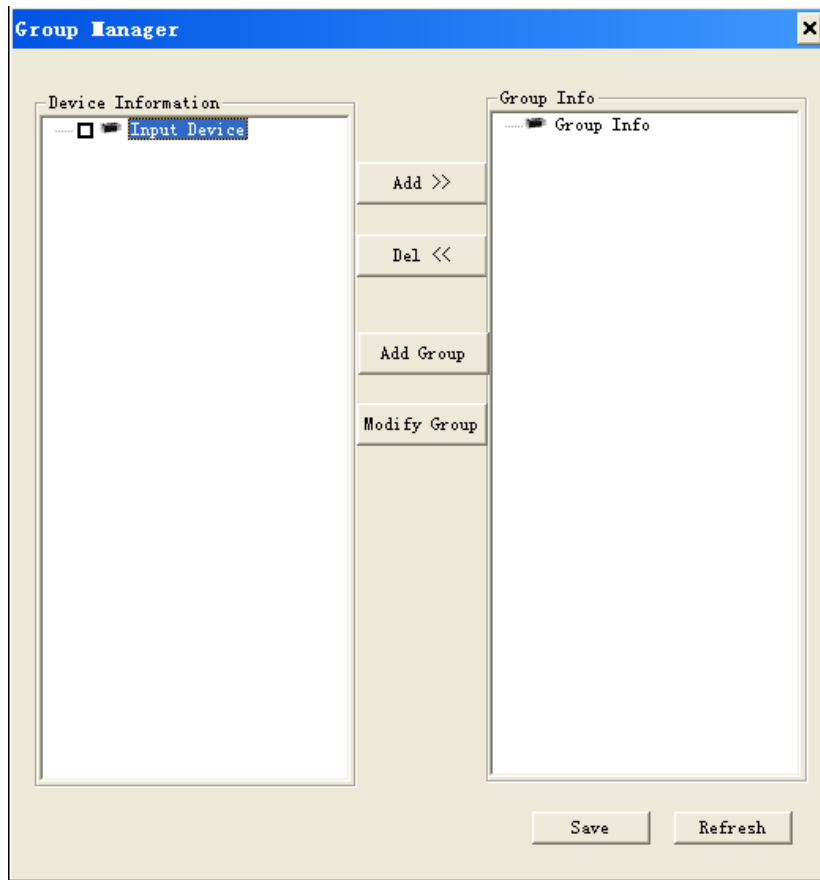


Figure 4- 76

Step 2. Select group, and click Add. See Figure 4- 77.

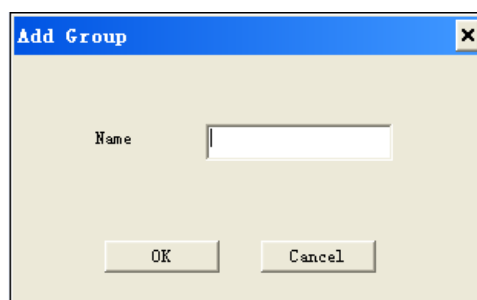


Figure 4- 77

Step 3. Enter name, click OK. See Figure 4- 78.

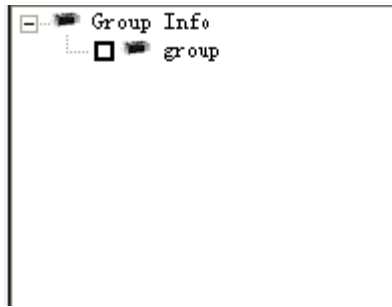


Figure 4- 78

Step 4. Check input device on the left to add into group 1 and check group 1. See Figure 4- 79.

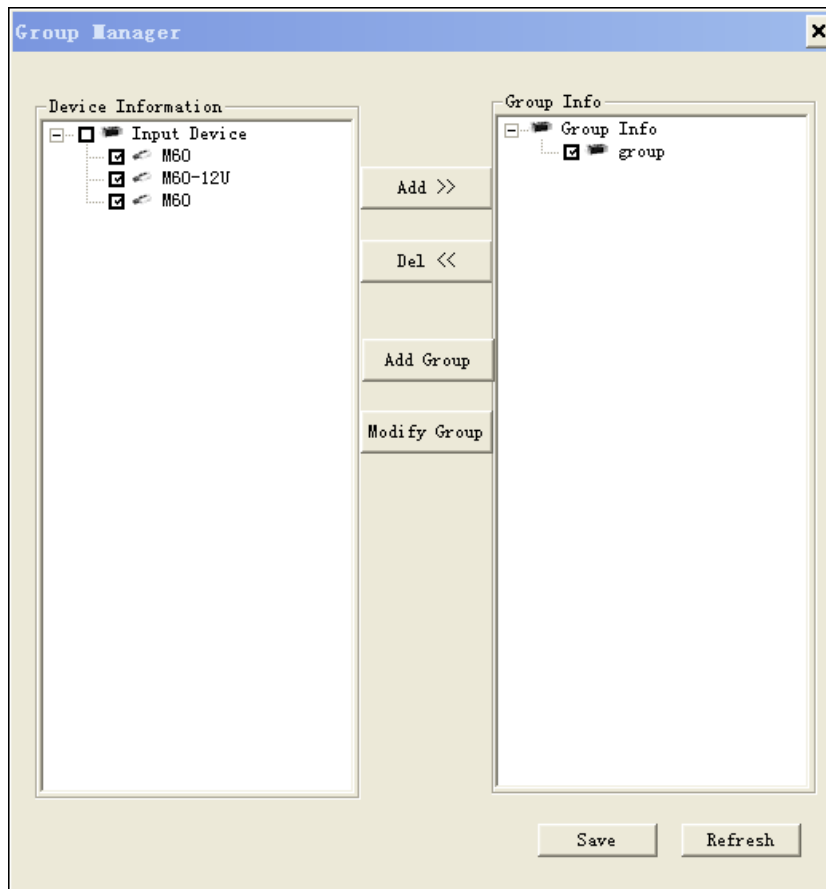


Figure 4- 79

Step 5. Click Add to add input device into group 1. See Figure 4- 80.

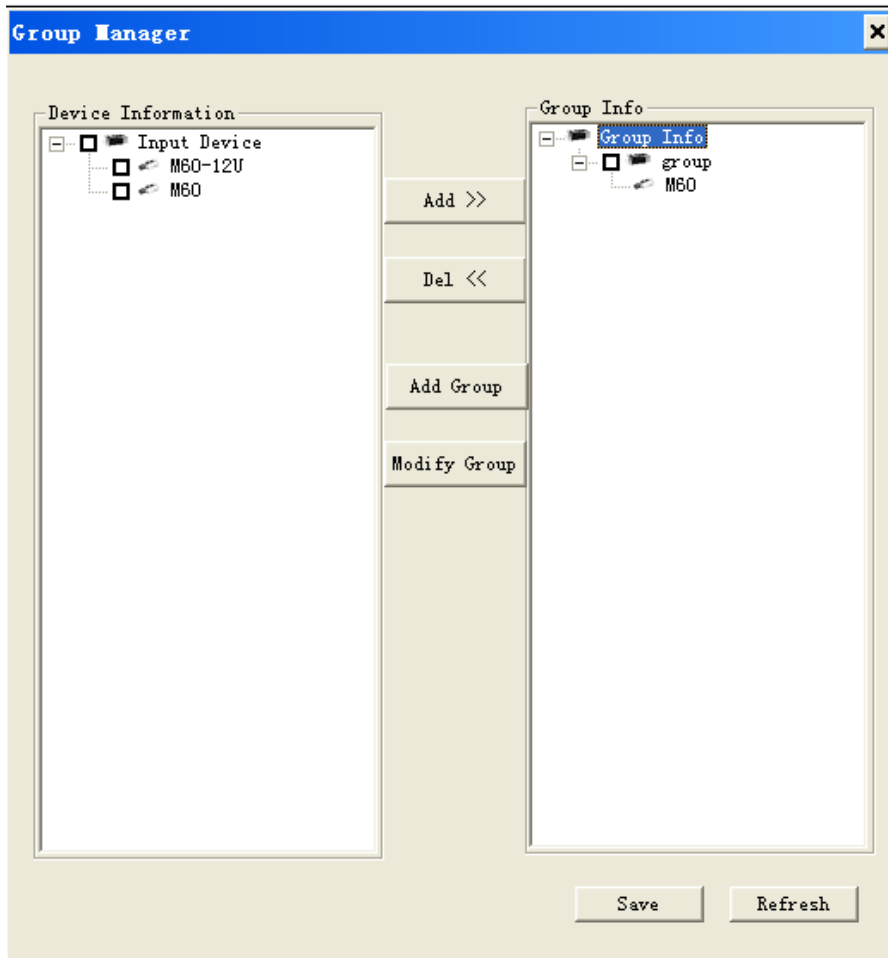


Figure 4- 80

Step 6. Click Save to input grouping of input device. You can add sub group under current group level.

4.5.3.10 Net Decoder

Step 1. Select Advanced>Net Decoder, see Figure 4-77.

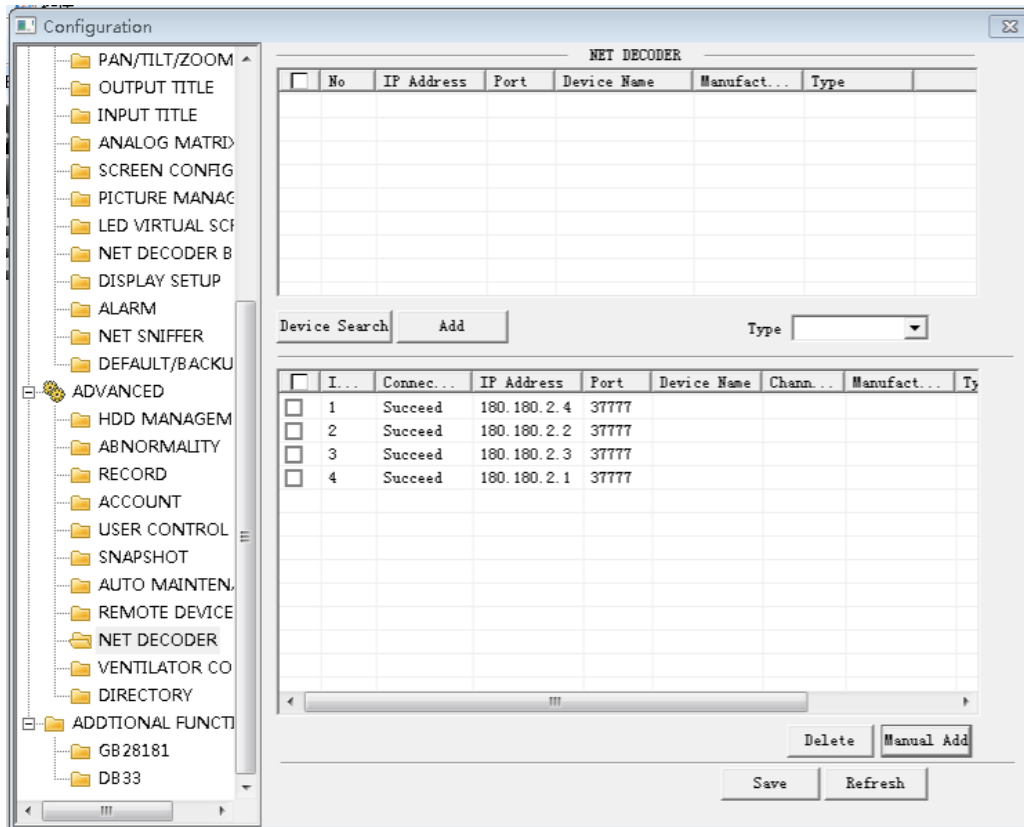


Figure 4- 81

Step 2. Add net decoder.

- Search device to add.
- Manually enter IP address and TCP port to add, see Figure 4-78.

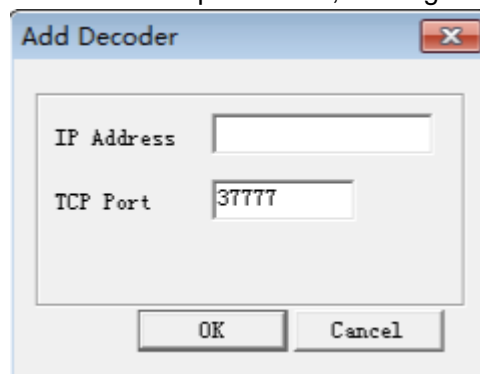


Figure 4- 82

Step 3. Click OK to save.

4.5.3.11 Ventilator Control

You can set temperature to control speed of ventilator. See Figure 4-68.

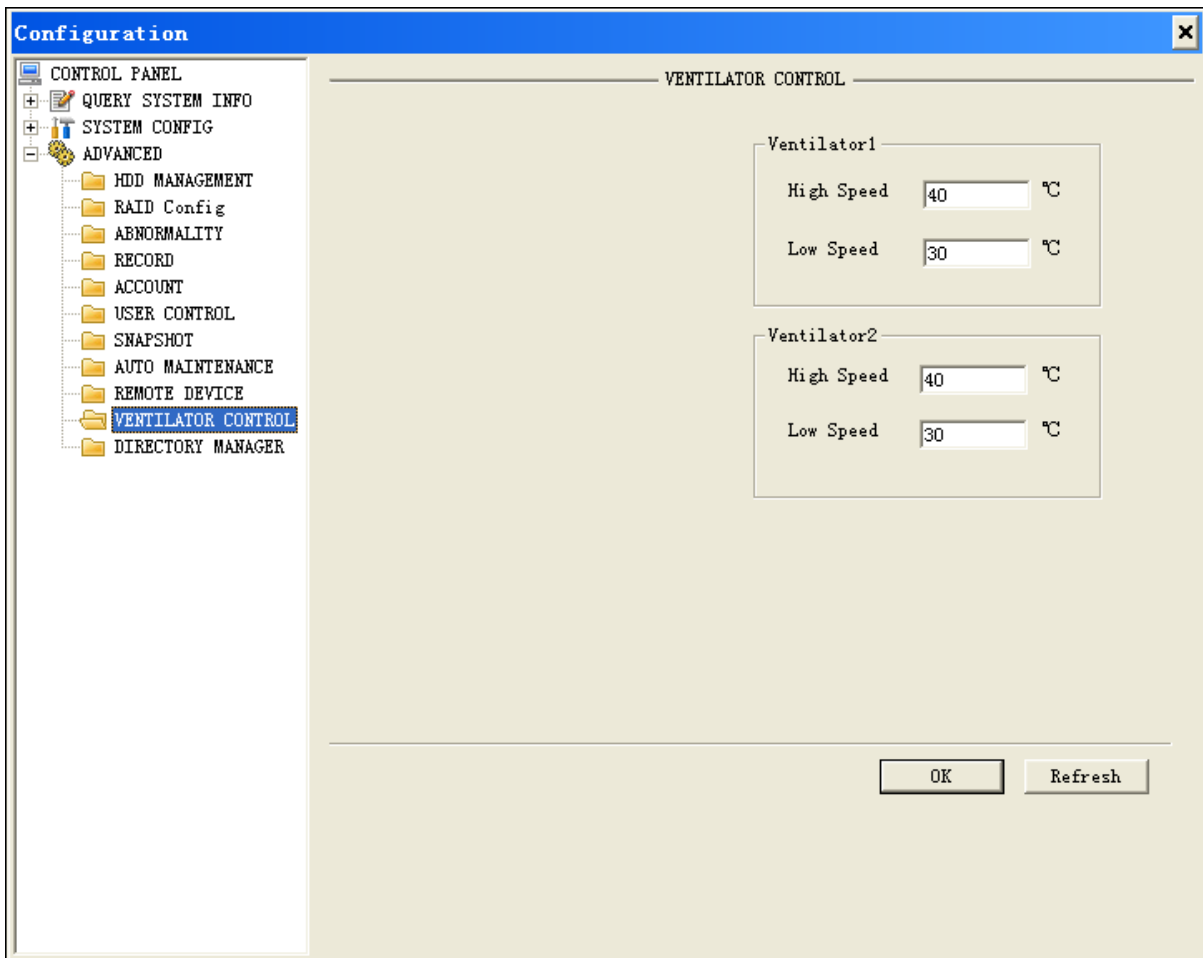


Figure 4- 83

4.5.3.12 Directory Manager

It is mainly for network keyboard to control matrix. See Figure 4-69.

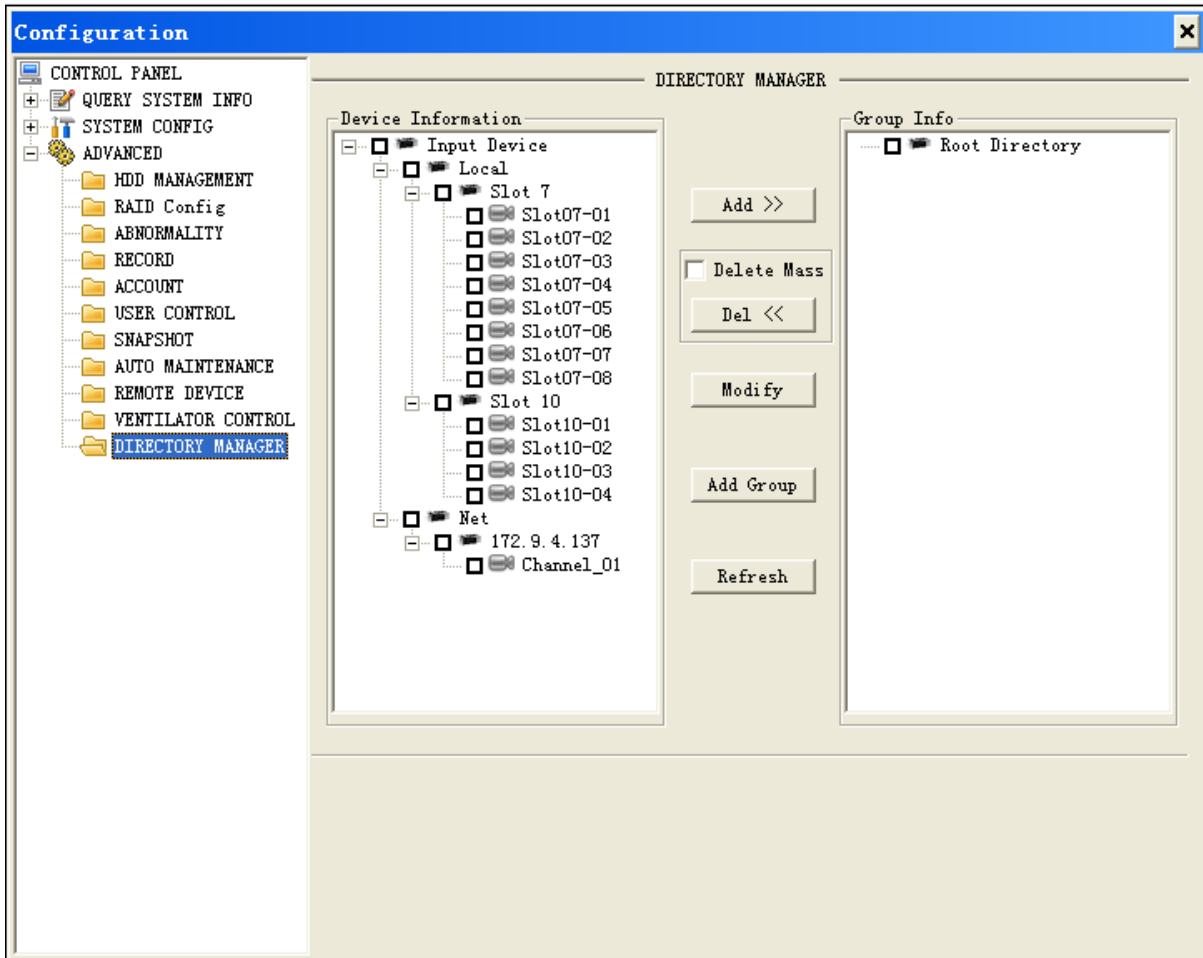


Figure 4- 84

Step 1. Select root directory, as check the box in front of root directory. Click Add. See Figure 4-85.

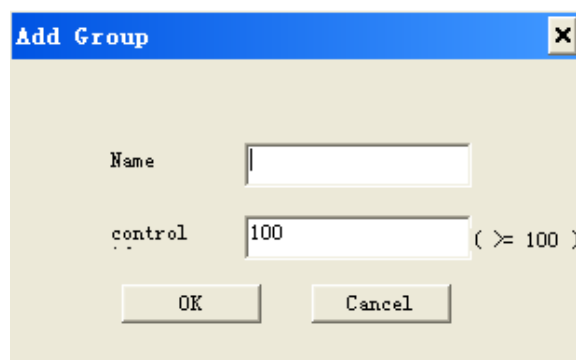


Figure 4- 85

Step 2. Input name, and fill in control no. Each group has different control no. If you enter same control no. for two groups, system will prompt.

Step 3. In device info list, select input device to add into group 1 and it may be local or network device. See Figure 4- 86.

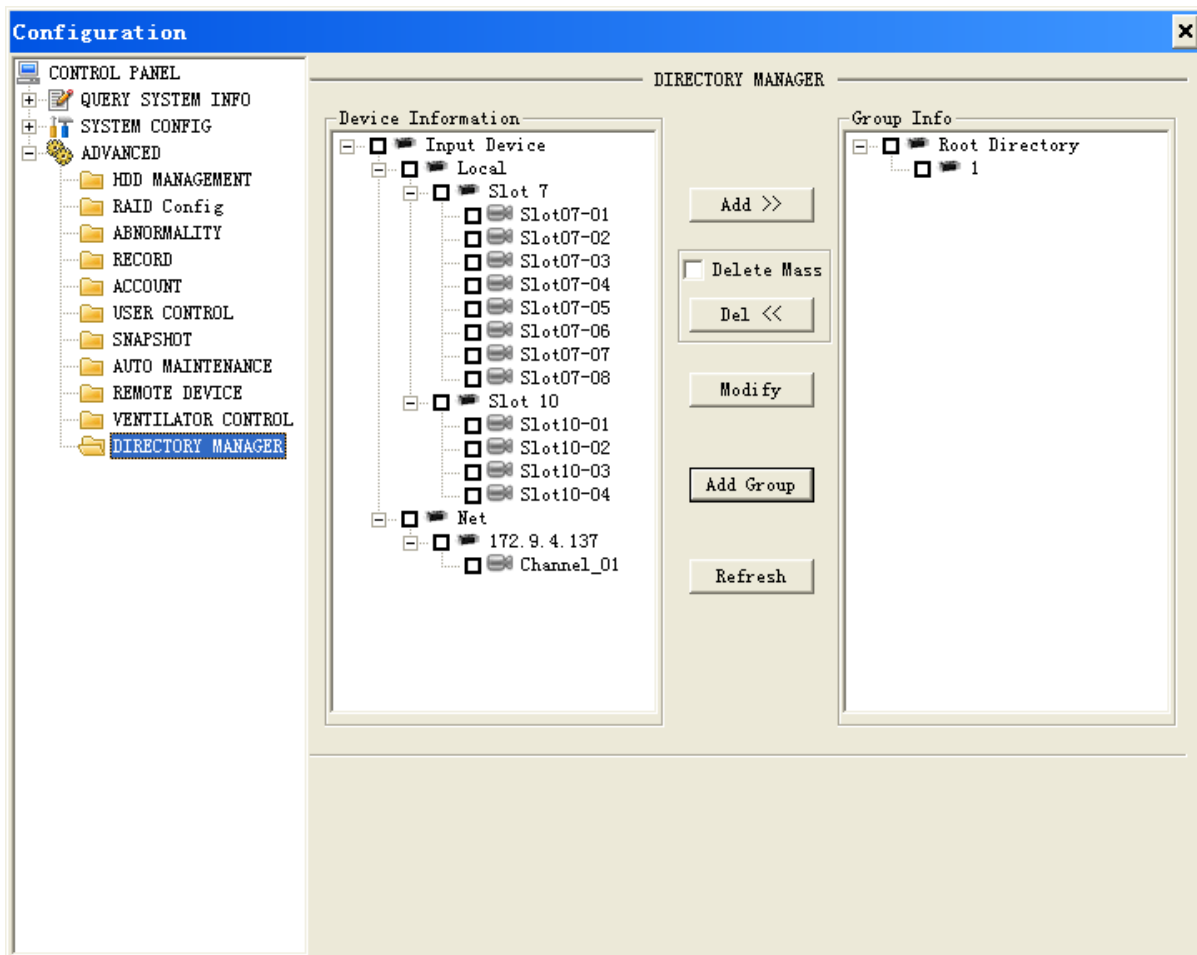


Figure 4- 86

Step 4. Click Add. See Figure 4- 87.

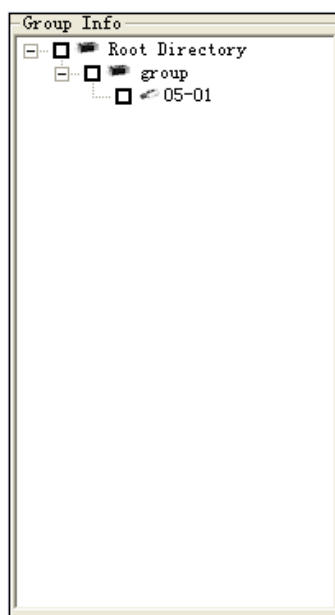


Figure 4- 87

4.6 Search

Click search button, you can see an interface is shown as in Figure 4- 88

The record type includes the record, alarm, motion, local, and picture.

Please select record playback mode, and then select start time, end time, slot and channel. Then please click search button, you can see the corresponding files in the list. Each page supports up to 100 records. You may flip pages by clicking on next page.

Select a single channel, click earliest record to search the earliest record in this channel.

Select the file(s) you want to play and then click play button or double-click the record, system will play the selected record. You may play in full screen and perform record backup at the same time. The backup record will be automatically saved to either Download file in where the system is installed or other designated locations. Please see Figure 4- 89.

The screenshot shows a web-based search interface titled "Search". It is divided into several sections:

- Type:** Radio buttons for Record (selected), Alarm, Motion, Local, and Picture.
- Parameter:** Fields for Begin Time (2014- 7-29 15:22:35), End Time (2014- 7-30 15:22:35), Stream Type (Main Stream), Local/Remote/All Channel radio buttons, Slot (10), and Channel (1). An "Earliest Record" button is located below these fields.
- Operation:** Search, Playback, Download Type (File), Download, and Open Local Record buttons.
- Refresh:** A button located below the Operation section.
- Table:** A table with columns: Imp..., S/N, File Siz..., Begin Time, End Time, and Type. The table is currently empty.
- Footer:** "Download process: 0 %" and "Page Up" / "Page Down" buttons.

Figure 4- 88

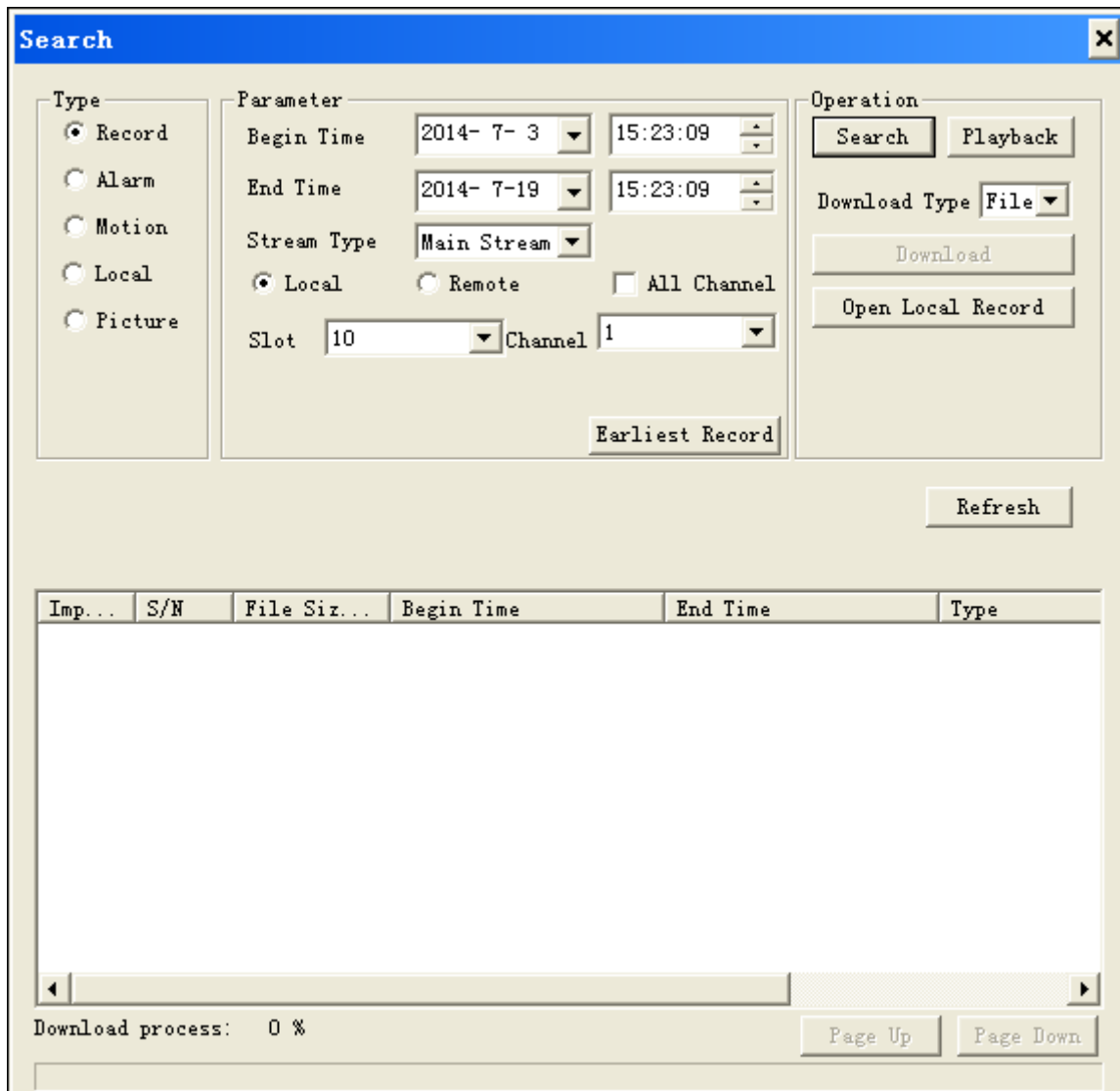


Figure 4- 89

Tip: in parameter setting, you may select date from the dropdown list and click search date. Please see Figure 4- 90. Red circle is current system date, and grey number is start time of search.



Figure 4- 90

During playback, you may play, pause, stop, slowly play and quickly play via corresponding buttons on control bar. The channel No. and device IP of this record are displayed in playback window.

Please see Figure 4- 91.

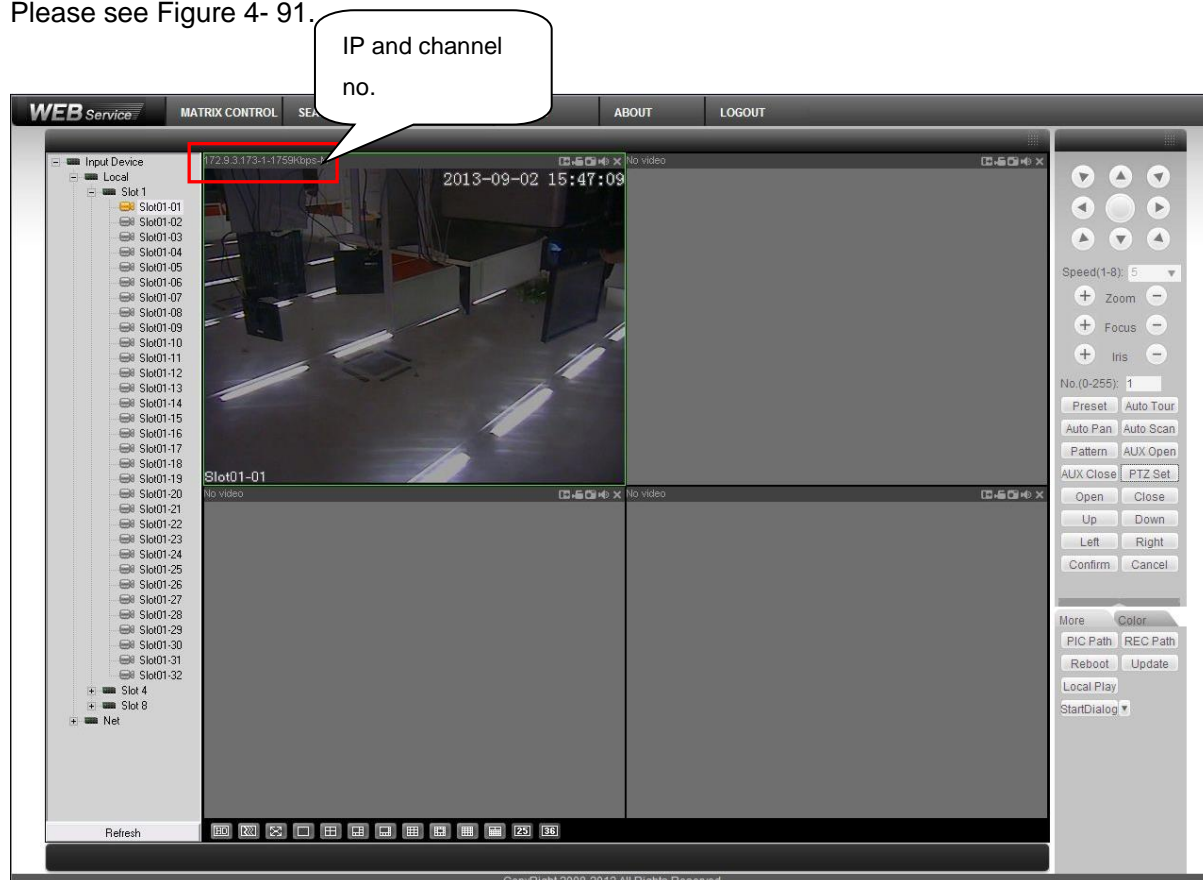


Figure 4- 91

Download: Select record, click download button, and the save dialogue pops up. Please see Figure 4- 92.

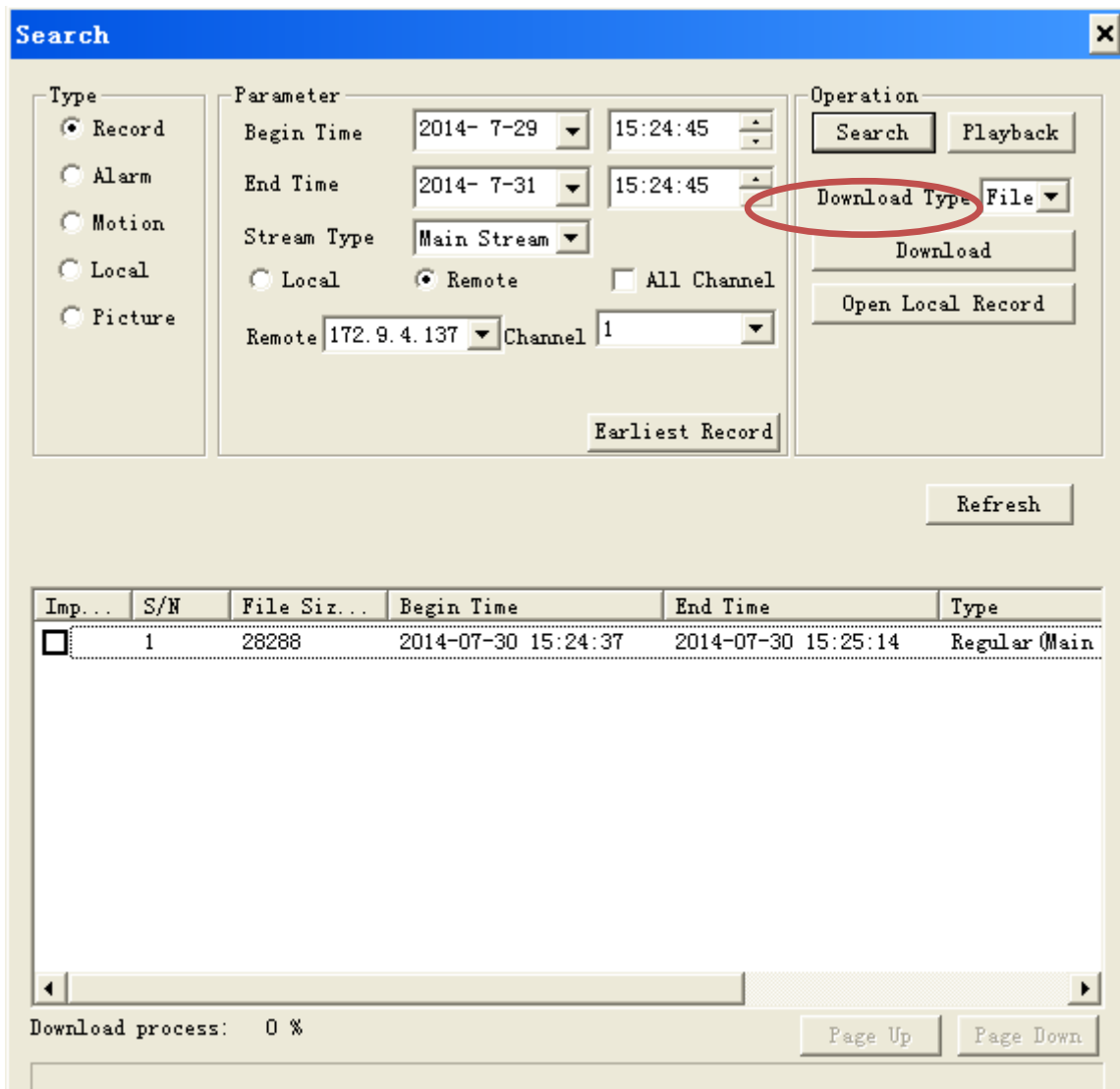


Figure 4- 92

You need to input record name, and click save button to start to download. The downloading progress bar will be displayed and the download button will change to a stop button. Please see Figure 4- 93 and Figure 4- 94.

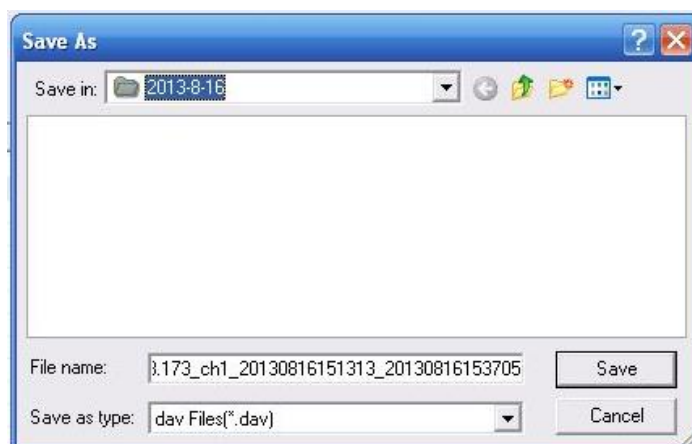


Figure 4- 93

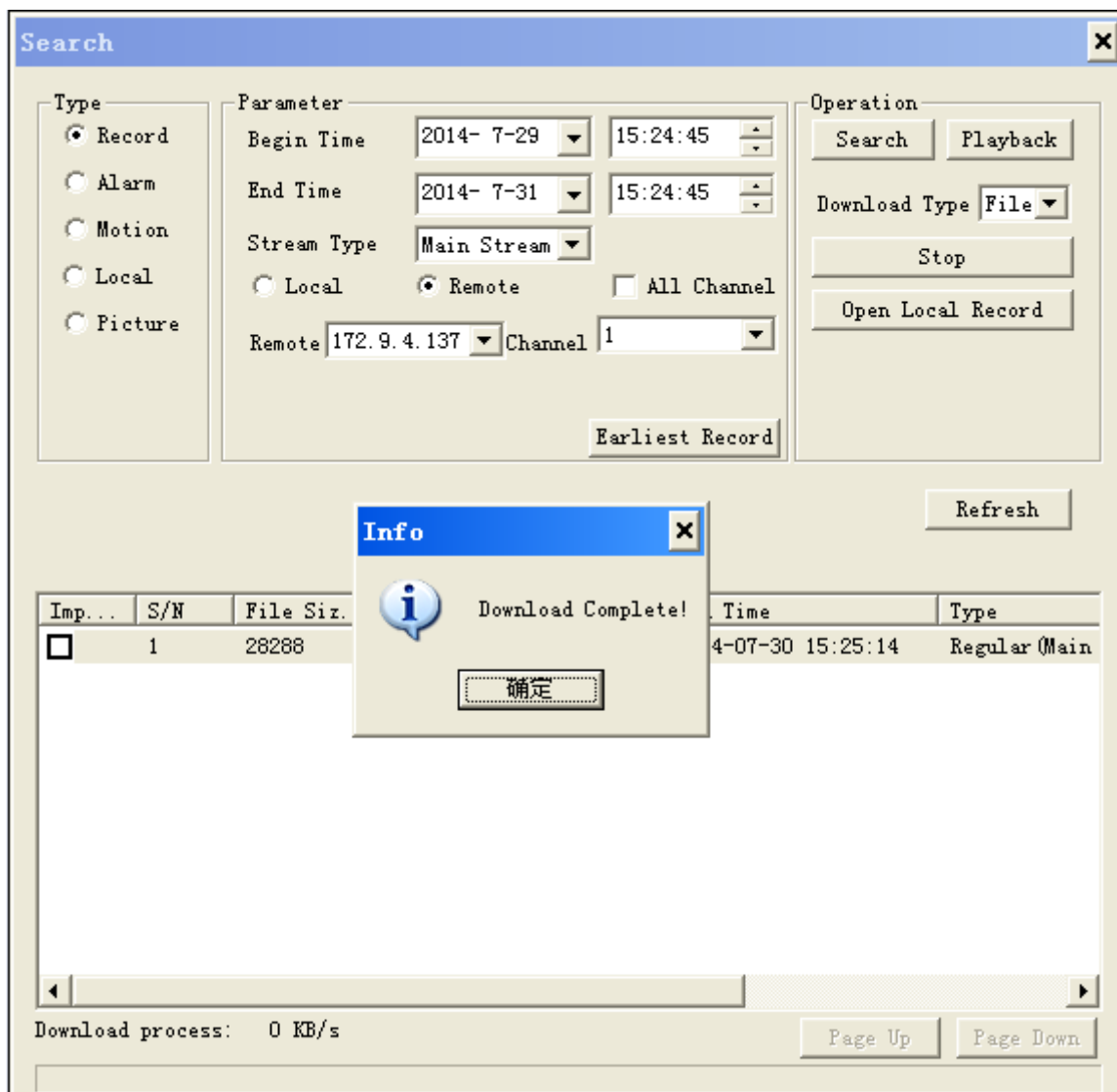


Figure 4- 94

Click open local record button, and select local record to play. Please see Figure 4- 95.

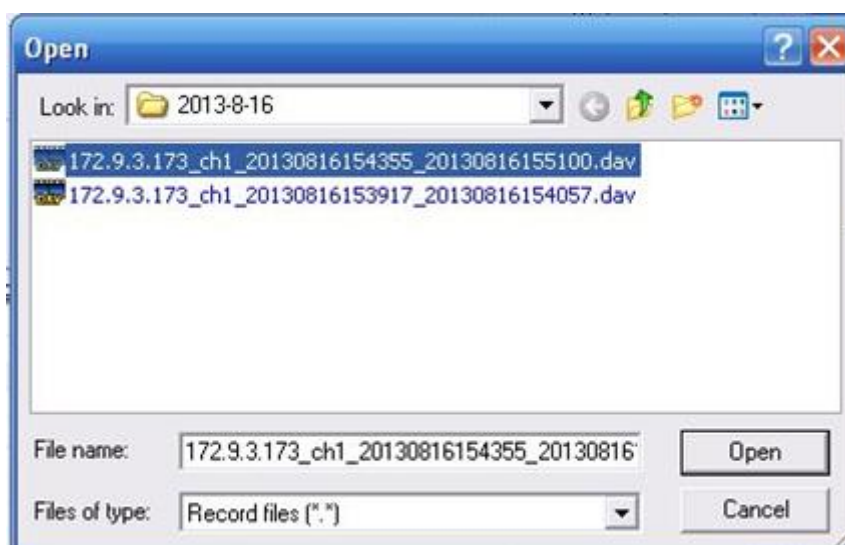


Figure 4- 95

4.7 Alarm

Here you can set WEB monitoring alarm type and alarm sound only if you enable alarm upload function. Please see Figure 4- 96.

In alarm type, select alarm event, check to enable event. When there are event checked, you can view alarm info below. In operation, you can check listen alarm and prompt. In alarm sound, check sound pop-up and you can select sound.

Figure 4- 96

Type	Parameter	Note
Event Type	Video Loss	When video is lost, it alarms.
	Motion Detect	When motion detect is ON, it triggers alarm.
	Disk Full	When disk is full, it triggers alarm.
	Disk Error	When disk error occurs, it triggers device alarm.
	Video Mask	When video is masked, it alarms.
Operation	Listen Alarm	Web subscribes alarm type checked above, when device alarms, it will notice WEB, and WEB will prompt user.
	Open Video	When alarm occurs, the system will auto enable video monitoring, and this is for alarm of alarm detection type, as motion detect, video loss and video mask.

Type	Parameter	Note
	Prompt	Auto pop up alarm prompt.
	Sound Pop-up	When alarm occurs, it generate alarm sound, which you maycustomize.
	Sound Path	Customize alarm sound storage path.

4.8 About

Click about button, you can view current web client information. Please see Figure 4- 97.

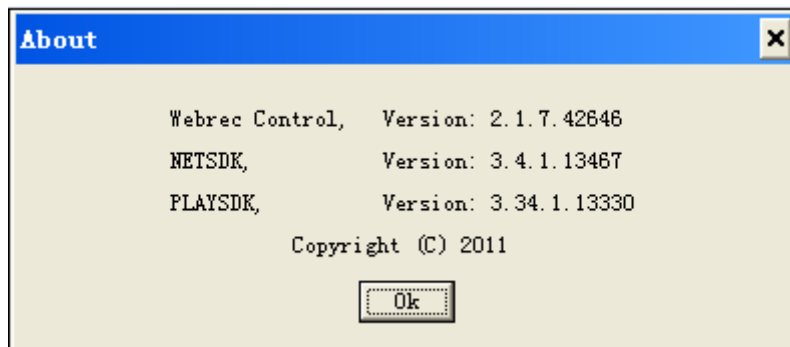


Figure 4- 97

4.9 Log Out

Click log out button, system goes back to log in interface. You need to input user name and password to login again.

5 DSS Operation

Besides web-based operation, you can log in device via Digital Surveillance System (DSS). For detailed instructions please refer to DSS user's manual.

6 FAQ

6.1 FAQ

1. Q: I cannot boot up the device properly after plug it to power supply.

A: When you plug to power supply after you properly turned it off, you must press the start button on the front panel in order to properly boot up the device.

2. Q: Device buzzer turns on when I press the start button.

A: supports dual power supplies. Therefore if you only plug in one power line, then the alarm beeper will turn on:

- a) Plug in the other power line;
- b) There is a red button next to the power plug; you may press it to cancel the alarm.

3. Q: There is no local operation display after I boot up the device.

A: This may be due to:

- a) The device requires about 1 min to boot up, please be patient and wait a bit longer.
- b) Make sure the interface board is well connected to the mainboard, otherwise the operation interface signal is not sent to the interface board. You should re-plug the interface board.
- c) Upgrade error, please upgrade again.
- d) The configurations have changes, so cannot boot up. Please press the reset button (the tiny hole on mainboard) with a needle (or equivalent) for a few seconds until reboot.
- e) X86 board is damaged.

4. Q: After video matrix boots up, there is no decoded outputs or preview.

A: This may be due to:

- a) is set to no output in default, so you have to set output in relevant channels manually.
- b) Make sure the front panel is well connected to the interface board, otherwise the VGA signal is not sent to the interface board. You should re-plug the front panel.
- c) There is error in front-end device.
- d) The screen of interest is not the one you configured.
- e) Display does not support decoding channel's output resolution.
- f) Network error.

5. Q: There is no video output whether it is one-channel, multiple-channel or all-channel output.

A: This may be due to:

- a) Program is not compatible. Please upgrade to the latest version.
- b) There is no video input signal or it is too weak.
- c) hardware malfunctions.

6. Q: Real-time video color is distorted.

A: This may be due to:

- a) Device is not compatible with the monitor resistance.

- b) Video transmission is too long or degrading is too huge.
- c) Device color or brightness setting is not correct.

7. Q: Decoding and wall mount process are not fluent.

A: This may be due to:

- a) Poor network environment.
- b) Front-end device setup or malfunction.
- c) Limit in decoding channel capacity.
- d) Decoding channel malfunction.

8. Q: Video flickers on wall with interference.

A:

- a) Display and matrix platform have no common grounding.
- b) Video cable quality is low or too long.

9. Q: There is no audio when monitor.

A: This may be due to:

- a) It is not a power picker.
- b) It is not a power acoustics.
- c) Audio cable is damaged.
- d) Hardware malfunctions.

10. Q: There is audio when monitor but there is no audio when system playback.

A: This may be due to:

- a) Setting is not correct. Please enable audio function.
- b) Corresponding channel has no video input. Playback is not continuous when the screen is blue.

11. Q: Time display is not correct.

A: This may be due to:

- a) Setting is not correct.
- b) Battery contact is poor or voltage is too low.
- c) Crystal is broken.

12. Q: Device cannot control PTZ.

A: This may be due to:

- a) Front panel PTZ error.
- b) PTZ installation is not correct.
- c) Cable connection is not correct.
- d) PTZ parameter setting is not correct.
- e) PTZ protocol is not compatible with device.
- f) The distance is too far.

13. Q: Motion detection function does not work.

A: This may be due to:

- a) Period setting is not correct.
- b) Motion detection zone setting is not correct.
- c) Sensitivity is too low.

14. Q: I cannot login client-end or web.

A: This may be due to:

- a) ActiveX control has been disabled.
- b) Network connection error.
- c) Network setting error.
- d) Username or password is invalid.
- e) Client-end is not compatible with program. Clear C:\Program Files\webrec.

15. Q: There is only mosaic or no video when preview or playback video file remotely.

A: This may be due to:

- a) Network fluency is not good.
- b) Client-end resources are limit.
- c) There is privacy mask or channel protection setting.
- d) Current user has no authority to monitor.
- e) Device local video output quality is not good.

16. Q: Network connection is not stable.

A: This may be due to:

- a) Network is not stable.
- b) IP address conflict.
- c) MAC address conflict.
- d) LAN switch malfunction or config
- e) Device network card malfunction.

17. Q: Alarm signal cannot be disarmed.

A: This may be due to:

- a) Alarm setting is not correct.
- b) Alarm output has been open manually.
- c) Input device error or connection is not correct.
- d) Some program versions may have this problem. Please upgrade your system.

18. Q: Alarm function is null.

A: This may be due to:

- a) Alarm setting is not correct.
- b) Alarm cable connection is not correct.
- c) Alarm input signal is not correct.
- d) There are two loops connect to one alarm device.

19. Q: Record storage period is not enough.

A: This may be due to:

- a) Camera quality is too low. Lens is dirty. Camera is installed against the light. Camera aperture setting is not correct.
- b) HDD capacity is not enough.
- c) HDD is damaged.

20. Q: I cannot playback the downloaded file.

A: This may be due to:

- a) There is no video player.
- b) No DXB8.1 or higher graphic acceleration software.
- c) There is no DivX503Bundle.exe control when you play the file transformed to AVI via media player.
- d) No DivX503Bundle.exe or ffdshow-2004 1012 .exe in Windows XP OS.



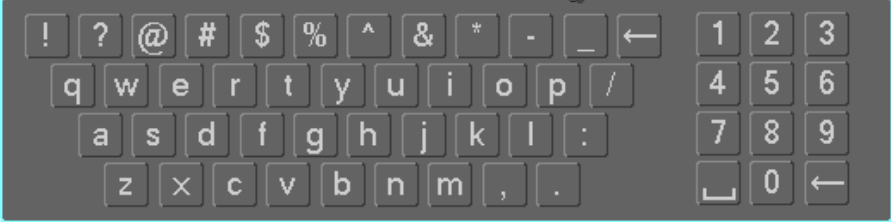






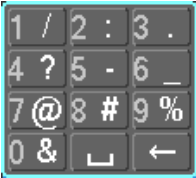
6.2 Maintenance

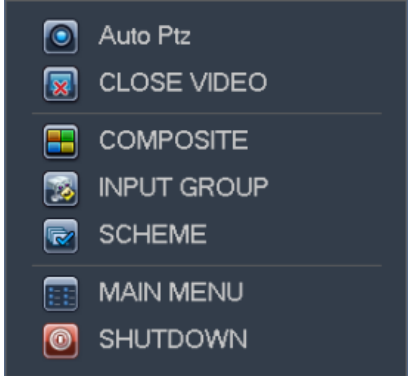
- Do not expose the device to lampblack, steam or dust. Otherwise it may cause fire or electric shock.
- Do not install the device at position exposed to sunlight or in high temperature. Temperature rise in device may cause fire.
- Do not expose the device to humid environment. Otherwise it may cause fire.
- The device must be installed on solid and flat surface in order to guarantee safety under load and earthquake. Otherwise, it may cause device to fall off or turnover.
- Do not place the device on carpet or quilt.
- Do not block air vent of the device or ventilation around the device. Otherwise, temperature in device will rise and may cause fire.
- Do not place any object on the device.
- Do not disassemble the device without professional instruction.
- Do not put any heavy objects on the device or insert any objects into the device.
- Do not use any hard or sharp objects to place the standard pen.
- Please take out batteries in the remote control if not used for long term. Please use standard battery only, and do not mix new and used batteries. Otherwise, it may cause battery liquid leakage, which may result in battery damage, fire, personal injury or product damage.
- For A/V signal cable and RS-232, RS-485 port, do not plug them when it is connected to power.
- Please inspect the device regularly.

Appendix A Mouse Control

Note: This section is designed for mouse operation with right hand.

User must connect a mouse to via USB interface in order to access the menu for mouse operation.

Left click mouse	System pops up password input dialogue box if you have not logged in.
	When you have selected one menu item, left click mouse to view menu content.
	Implement the control operation.
	Modify checkbox or motion detection status.
	Click combo box to pop up drop down list
	<p>In input box, you can select input methods. Left click the corresponding button on the panel you can input numeral/English character (small/capitalized) and symbols. Here  stands for backspace button.  stands for space button.</p>  <p>Click Shift to switch upper/lower cases.</p> <ol style="list-style-type: none"> 1) In English input mode:  stands for input a backspace icon and  stands for deleting the previous character. 2) In numeral input mode:  stands for clear and  stands for deleting the previous numeral. 3) In symbol input mode:  stands input a backspace icon and  stands for deleting the previous symbol. 
Double left click mouse	Implement special control operation such as double clicke item in the file list to playback the video.
	In multiple-window mode, double left clicke channel to view in full screen. Double left click current video again to go back to previous multiple-window view.

Right click mouse	<p>In real-time monitor mode, pops up shortcut menu: video off, cubeless screen, input,scheme, main menu, logoff and power off. Among which, video off applies to turn off video of selected window. Cubeless screen applies to combine video of different screens into one screen. Input applies to group input channels.</p> 
	Exit current menu without saving the modification.
Scroll Mouse Wheel	In numeral input box: Increase or decrease numeral value.
	Switch the items in the check box.
	Page up or page down
Move mouse	Select current control or move control
Drag mouse	Select motion detection zone.
	Select cover area.
	Drag input channel into target output channel.

Note:

- This manual is for reference only.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website for more information.