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Table of Contents

Thank you for purchasing an RP EyeP Guard Network Video Recorder (NVR). Included in the box, you should have received:

- **RP EyeP NVR**
- **Configuration Wizard – Walkthrough Guide**
- **Power Cord**
- **IR Remote Control**
- **USB Mouse**
- **Network Cable**
- **I/O Block for I/O installation**
- **Extra Screws for HDD installation**

This manual contains important information about setting up and configuring your RP EyeP Guard as well as important video search and playback instructions. If in doubt, please contact your installer, reseller or visit www.rpeyep.com.

1 Other Features and Functions NOT outlined in this Manual

This manual is intended to provide adequate information and instructions about the main functions of the RPEyeP Guard Network Video Recorder. Any features or functions not outlined in this manual (such as the remote connection software and web interface) can be found by going to www.rpeyep.com or by contacting your installer or reseller.

1.1.1 RP EyeP Guard – Front View

The front panel of the RP EyeP Guard is shown below in Figure 1-1.

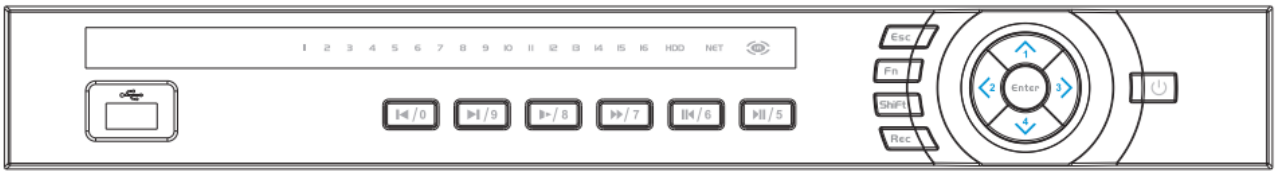


Figure 1-1

Please refer to the following sheet for front panel button information.

Name	Icon	Function
Power button	⏻	Power button, press this button for three seconds to boot up or shut down NVR.
Shift	Shift	In textbox, click this button to switch between numeral, English(Small/Capitalized),donation and etc.
Up/1 Down/4	▲、▼	Activate current control, modify setup, and then move up and down.
		Increase/decrease numeral.
		Assistant function such as PTZ menu.
		In text mode, input number 1/4 (English character G/H/I)
Left/2 Right/3	◄ ►	Shift current activated control,
		When playback, click these buttons to control playback bar. In text mode, input number 2(English character A/B/C) /3(English character D/E/F)
ESC	ESC	Go to previous menu, or cancel current operation.
		When playback, click it to restore real-time monitor mode.
Enter	ENTER	Confirm current operation
		Go to default button
		Go to menu
Record	REC	Manually stop/start recording, working with direction keys or numeral keys to select the recording channel.

Slow play/8	▮▸	Multiple slow play speeds or normal playback. In text mode, input number 8 (English character T/U/V).
Assistant	Fn	One-window monitor mode, click this button to display assistant function: PTZ control and image color.
		Backspace function: in numeral control or text control, press it for 1.5seconds to delete the previous character before the cursor.
		In motion detection setup, working with Fn and direction keys to realize setup.
		In text mode, click it to switch between numeral, English character(small/capitalized) and etc.
		Realize other special functions.
Fast play/7	▸▸	Various fast speeds and normal playback. In text mode, input number 7 (English character P/Q/R/S).
Play previous/0	|◀	In playback mode, playback the previous video In text mode, input number 0.
Reverse/Pause/6	||◀	In normal playback or pause mode, click this button to reverse playback In reverse playback, click this button to pause playback.
Play Next/9	▶|	In playback mode, playback the next video In menu setup, go to down ward of the dropdown list. In text mode, input number 9 (English character W/X/Y/Z)
Play/Pause /5	▶||	In normal playback click this button to pause playback In pause mode, click this button to resume playback. In text mode, input number 5(English character J/K/L).
USB port	⇽	To connect USB storage device, USB mouse.
Network abnormal indicator light	Net	Network error occurs or there is no network connection, the light becomes red to alert you.
HDD abnormal indicator light	HDD	HDD error occurs or HDD capacity is below specified threshold value, the light becomes red to alert you.
Record light	1-16	System is recording or not. It becomes on when system is recording.
IR Receiver	IR	It is to receive the signal from the remote control.

1.1.2 RP EyeP Guard – Rear View

The rear panel of the RP EyeP Guard is shown below in Figure 1-2.

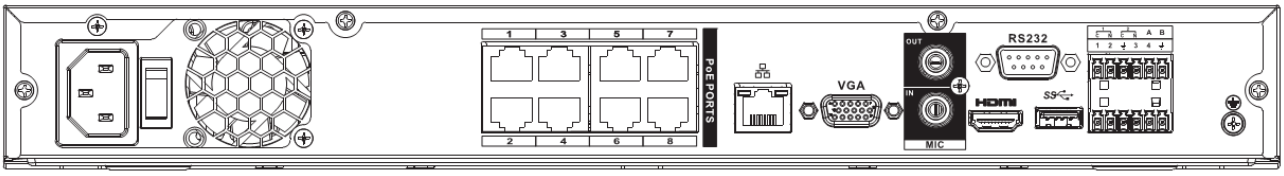


Figure 1-2

Please refer to the following table for rear panel port information.

Name		Function
Power switch	/	Power on/off button.
Power input socket	/	Input AC 100~240V. For NVR42-8P series product only.
MIC IN	Audio input port	Bidirectional talk input port. It is to receive the analog audio signal output from the devices such as microphone, pickup.
MIC OUT	Audio output port	Audio output port. It is to output the analog audio signal to the devices such as the sound box. ● Bidirectional talk output. ● Audio output on 1-window video monitor. ● Audio output on 1-window video playback.
1～4	Alarm input port 1～4	● There are two types; NO (normal open)/NC (normal close). ● When your alarm input device is using external power, please make sure the device and the NVR have the same ground.
⏚	GND	Alarm input ground port.
N1, N2	Alarm output port 1～2	● 2 groups of alarm output ports. (Group 1：port NO1～C1,Group 2:port NO2～C2).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. ● NO：Normal open alarm output port. ● C：Alarm output public end.
C1, C2		
A	RS-485 communication port	RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
B		RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.

Name		Function
	Network port	10M/100M/1000Mbps self-adaptive Ethernet port. Connect to the network cable.
	USB2.0 port	USB2.0 port. Connect to mouse, USB storage device, USB burner and etc.
RS-232	RS-232 debug COM.	It is for general COM debug to configure IP address or transfer transparent COM data.
HDMI	High Definition Media Interface	High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device. HDMI version is 1.4.
VGA	VGA video output port	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
PoE PORTS	/	Bult-in Switch. Support PoE. The 8 PoE series product supports total 48V 120W. One PoE port supports a maximum 15W.

1.2 Mouse Operation

The local interface is easily navigated by using the supplied mouse. In general:

1) Single-clicking the left mouse button will select and/or click on menu items, drop-down boxes, fields, etc.

2) Single-clicking the right mouse button will pop-up the main menu in live display, exit out of the current menu window or open the on-screen keyboard when clicking on a field.

3) Double-click the left mouse button will switch from multi to single window view in live display and playback and will start video playback from the file list in playback mode.

1.3 IR Remote Control

The IR remote control is shown below in Figure 1-3.

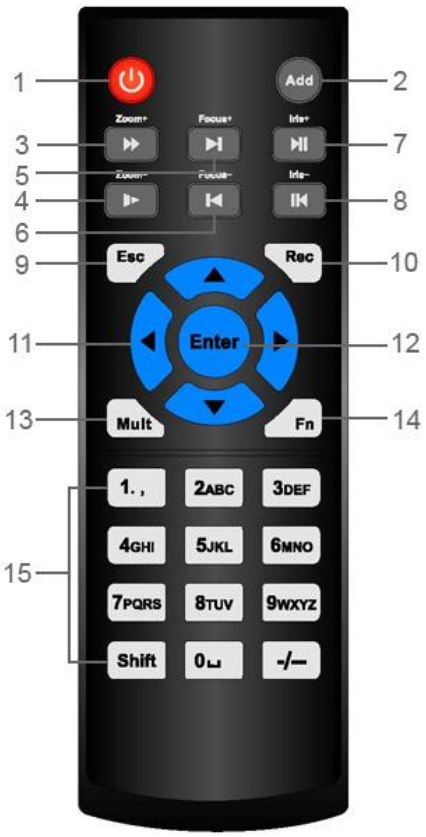


Figure 1-3

Please refer to the following table for information about the functions of the IR remote control.

Number	Name	Function
1	Power button	Turns the RP EyeP Guard on or off
2	Address	IR remote control address. You can find the Device number by going to the Main Menu → Setting → General (Device No.)
3	Forward	Fast forward
4	Slow play	Slow motion
5	Next record	Jumps to next video clip
6	Previous record	Play back previous video clip
7	Play/Pause	From the live monitoring view, click this button to enter video search. In playback, this button is the play/pause button
8	Reverse/pause	Reverse playback/pause button

9	Cancel	Go back to previous menu or cancel current operation
10	Record	Start or stop recording manually (Press and hold the button for at least 1.5 seconds)
11	Direction keys	Directional arrows are used to navigate menus, control the process bar in playback, control PTZs, etc…
12	Confirm /menu key	Enter button
13	Multiple-window switch	Switch between multiple channel and single channel displays
14	Auxiliary key	In single channel mode, activates the PTZ control and video color adjustment
15	0-9 number key	Number keys, used to input passwords and switch between video channels

1.4 Hard Drive Installation

Important:

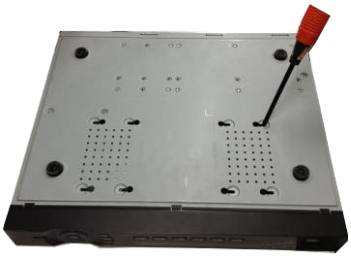
Please turn off the power before you replace the HDD. You will require a SATA cable.

The pictures listed below for reference only.

1. Loosen the screws of the upper cover and side panel.

2. Fix four screws in the HDD (Turn just three rounds).

3. Place the HDD in accordance with the four holes in the bottom.



4. Turn the device upside down and then turn the screws in firmly.	5. Fix the HDD firmly.	6. Connect the HDD cable and power cable.

7. Put the cover in accordance with the clip and then place the upper cover back.	8. Secure the screws in the rear panel and the side panel.

2 Graphical User Interface (GUI) Operation

The RP EyeP Guard's graphical user interface can be operated using the supplied mouse or IR remote control.

2.1 Login

After the RP EyeP Guard powers on, by default the system will be in multiple-channel display mode, refer to Figure 2-1 below (16ch display shown for reference only).

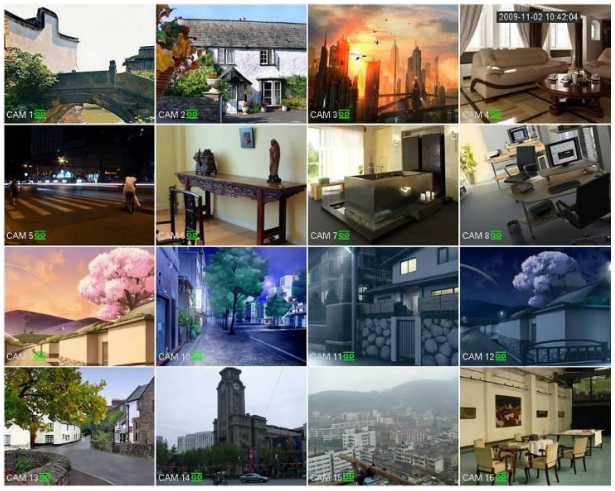


Figure 2-1

Please refer to the following table for a description of the channel status information icons displayed in the live view mode. These icons are displayed across the bottom of each live video channel.

1		Recording status	3		Video loss
2		Motion detection	4		Camera lock

Using the mouse or IR remote control, enter the default password (888888) and click/press the "OK" button, see figure 2-2 below. For added security, we recommend changing the admin password after you first login.

***Please Note:** If a wrong password is entered three times within 30 minutes an alarm will sound. If a wrong password is entered five times within 30 minutes, the account will be locked out.

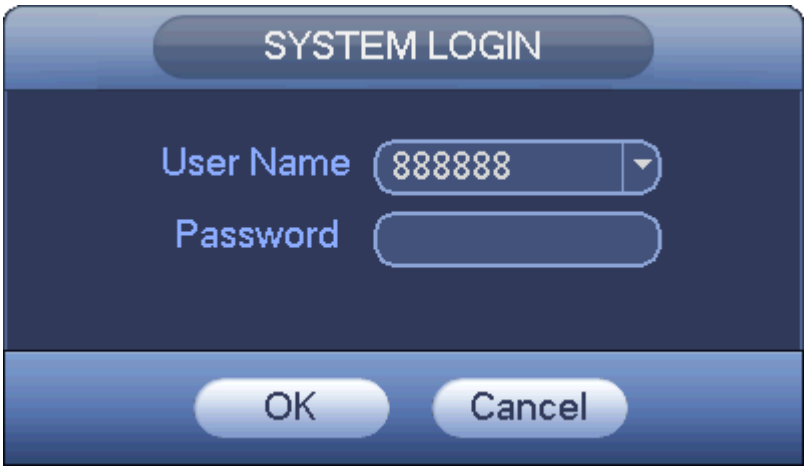


Figure 2-2

Preview Control Interface

Move the mouse pointer to the top corner of a video channel and the preview control interface shown in Figure 2-3 will pop up. If your mouse pointer does not move for more than 5 seconds, the control bar will automatically hide itself.

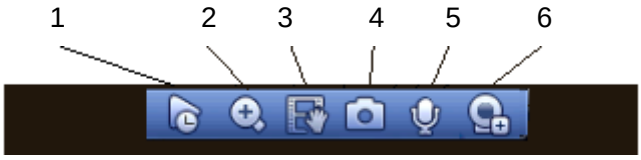


Figure 2-3

Please refer to the following table for more detailed information about the preview control interface functions.

SN	Name	Function
1	Real-time playback	Click this button to start Instant Playback. (real-time playback settings can be configured by going to the Main Menu→Setting→General to set real-time playback time from 5-60 minutes)
2	Digital zoom	Click this button and then select the area (hold down the left mouse button and drag) you wish to zoom in on.
3	Real-time backup function	Connect a USB backup device to one of the USB ports on the front of the RP EyeP Guard. Click the backup icon to start recording (icon will change to ) and then click it again to stop recording. Remove USB device and connect to a PC to view the recorded video.

4	Manual Snapshot	The snapshot file is saved on the USB device or HDD.
5	Bidirectional talk	If audio is being recorded, this button toggles the bidirectional talk feature. Please visit www.rpeyep.com for more information.
6	Remote Device	The remote device interface to add/delete remote devices or view its corresponding information

2.2 Open the View, Settings and Configuration Menu System

After you have successfully logged in, right-click the mouse or press the “Enter” key on the IR remote control to open the menu below shown in Figure 2-4. The first menu options have to do with the different local live views that can be selected:

View 1 – Single camera view: select which camera to view in full screen mode
View 4 – Quad view: select either to view cameras 1-4 of 5-9. Double click a camera view it in full screen and/or return it to the quad view
View 8 – One ¾ camera view with the remaining 7 cameras displayed from the top-right to bottom left. Double-click the smaller camera views to switch them to the ¾ view.
View 9 – Nine camera views: the ninth camera is disabled and contains camera bit rate information for cameras 1-8. Double-click a camera to view it in full screen and/or return it to the quad view.

Figure 2-4

2.3 Video Search and Playback

Select “search” from the main menu to open the search and playback interface, shown in Figure 2-5.

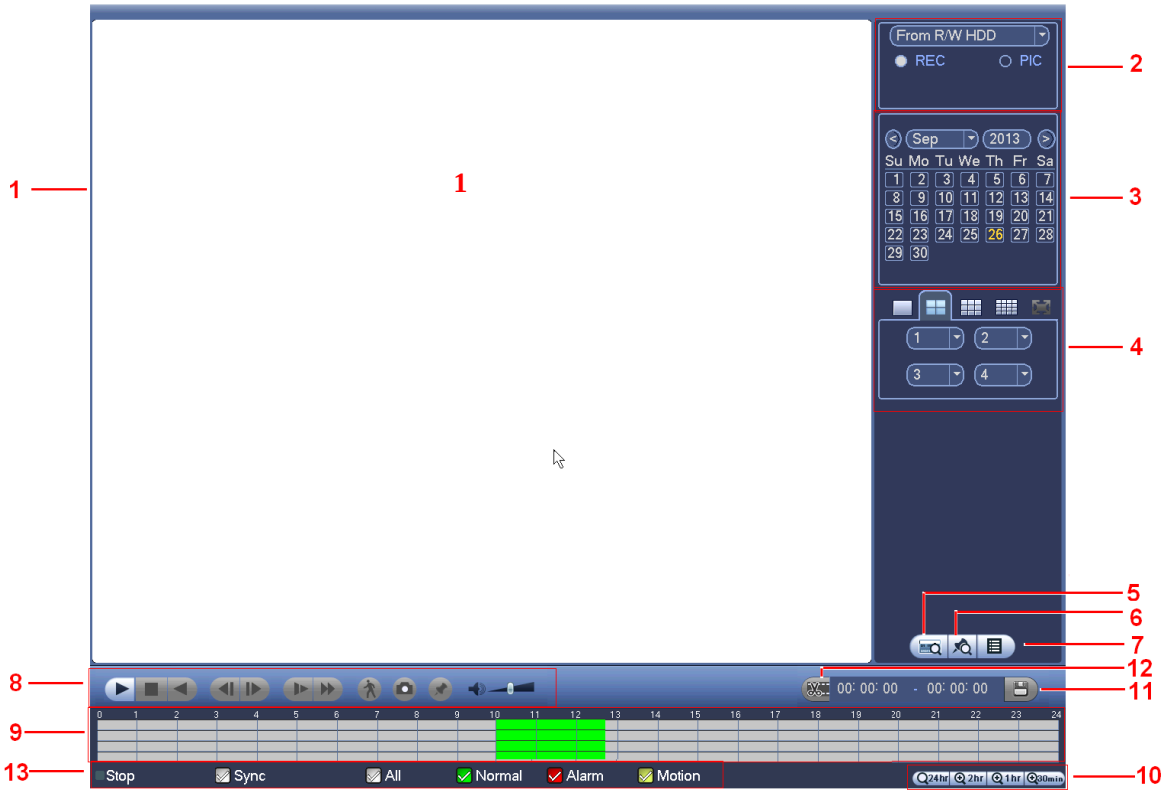


Figure 2-5

Please refer to the following sheet for more information.

SN	Name	Function
1	Display window	● Here is to display the searched picture or file. ● Support 1/4/9/16-window playback.
2	Search type	● Here you can select to search the picture or the recorded file. ● You can select to play from the read-write HDD, from peripheral device or from redundancy HDD. ● Before you select to play from the peripheral device, please connect the corresponding peripheral device. You can view all record files of the root directory of the peripheral device. Click the Browse button; you can select the file you want to play. **Important** ● **Redundancy HDD does not support picture backup function, but it supports picture playback function. You can select to play from redundancy HDD if there are pictures on the redundancy HDD.**
3	Calendar	● The blue highlighted date means there is picture or file. Otherwise, there is no picture or file. ● In any play mode, click the date you want to see, you can see the corresponding record file trace in the time bar.
4	Playback mode and channel selection pane.	● Playback mode：1/4/9/16. (It may vary due to different series.) ✧ In 1-window playback mode: you can select 1-X channels (X depends on the product channel amount). ✧ In 4-window playback mode: you can select 4 channels according to your requirement. ✧ In 9-window playback mode, you can switch between 1-8, 9-16 and etc channels. ✧ In 16-window playback mode, you can switch between1-16, 17-32 and etc channels. ● The time bar will change once you modify the playback mode or the channel option.
5	Card number search	The card number search interface is shown as below. Here you can view card number/field setup bar. You cam implement advanced search. **Current series product supports this function.**
6	Mark file list button	Click it to go to mark file list interface. You can view all mark information of current channel by time. Please refer to chapter **Error! Reference source not found.** for detailed information.

<table>
<tr><td>7</td><td>File list switch button</td><td colspan="2">● Double click it, you can view the picture/record file list of current day.
● The file list is to display the first channel of the record file.
● The system can display max 128 files in one time. Use the ◀| and |▶ or the mouse to view the file. Select one item, and then double click the mouse or click the ENTER button to playback.
● You can input the period in the following interface to begin accurate search.
● File type：R—regular record； A—external alarm record；M—Motion detect record.
 
● Lock file. Click the file you want to lock and click the button  to lock. The file you locked will not be overwritten.
● Search locked file: Click the button  to view the locked file.</td></tr>
<tr><td rowspan="9">8</td><td rowspan="9">Playback control pane.</td><td>►/ II</td><td>Play/Pause
There are three ways for you to begin playback.
● The play button
● Double click the valid period of the time bar.
● Double click the item in the file list.
In slow play mode, click it to switch between play/pause.</td></tr>
<tr><td>■</td><td>Stop</td></tr>
<tr><td>◀</td><td>Backward play
In normal play mode, left click the button, the file begins backward play. Click it again to pause current play.
In backward play mode, click ►/ II to restore normal play.</td></tr>
<tr><td>|◀/ ▶|</td><td>In playback mode, click it to play the next or the previous section. You can click continuously when you are watching the files from the same channel.
In normal play mode, when you pause current play, you can click ◀| and |▶ to begin frame by frame playback.
In frame by frame playback mode, click ►/ II to restore normal playback.</td></tr>
<tr><td>▶·</td><td>Slow play
In playback mode, click it to realize various slow play modes such as slow play 1, slow play 2, and etc.</td></tr>
<tr><td>▶▶</td><td>Fast forward
In playback mode, click to realize various fast play modes such as fast play 1,fast play 2 and etc.</td></tr>
<tr><td colspan="2">Note: The actual play speed has relationship with the software version.</td></tr>
<tr><td>  </td><td>Smart search</td></tr>
<tr><td>  </td><td>The volume of the playback</td></tr>
</table>

			Click the snapshot button in the full-screen mode, the system can snapshot 1 picture. System supports custom snap picture saved path. Please connect the peripheral device first, click snap button on the full-screen mode, you can select or create path. Click Start button, the snapshot picture can be saved to the specified path.
			Mark button. Please note this function is for some series product only. Please make sure there is a mark button in the playback control pane. You can refer to chapter **Error! Reference source not found.** for detailed information.
9	Time bar	● It is to display the record type and its period in current search criteria. ● In 4-window playback mode, there are corresponding four time bars. In other playback mode, there is only one time bar. ● Use the mouse to click one point of the color zone in the time bar, system begins playback. ● The time bar is beginning with 0 o'clock when you are setting the configuration. The time bar zooms in the period of the current playback time when you are playing the file. ● The green color stands for the regular record file. The red color stands for the external alarm record file. The yellow stands for the motion detect record file.	
10	Time bar unit	●The option includes: 24H, 12H, 1H and 30M. The smaller the unit, the larger the zoom rate. You can accurately set the time in the time bar to playback the record. ● The time bar is beginning with 0 o'clock when you are setting the configuration. The time bar zooms in the period of the current playback time when you are playing the file.	
11	Backup	● Select the file(s) you want to backup from the file list. You can check from the list. Then click the backup button, now you can see the backup menu. System supports customized path setup. After select or create new folder, click the Start button to begin the backup operation. The record file(s) will be saved in the specified folder. ● Check the file again you can cancel current selection. System max supports to display 32 files from one channel. ● After you clip on record file, click Backup button you can save it. ● For one device, if there is a backup in process, you can not start a new backup operation.	
12	Clip	● It is to edit the file. ●Please play the file you want to edit and then click this button when you want to edit. You can see the corresponding slide bars in the time bar of the corresponding channel. You can adjust the slide bar or input the accurate time to set the file end time. ● After you set, you can click Clip button again to edit the second period. You can see the slide bar restore its previous position. ● Click Backup button after clip, you can save current contents in a new file. ● You can clip for one channel or multiple-channel. The multiple-channel click operation is similar with the one-channel operation.	

		Please note: ● **System max supports 1024 files backup at the same time.** ● **You cannot operate clip operation if there is any file has been checked in the file list.**
13	Record type	In any play mode, the time bar will change once you modify the search type.

2.4 Information

Under "Info" from the main menu, there are four options: System, Event, Network and Log. Move the cursor or use the mouse to highlight the icon, then click or press enter on the remote to enter the sub-menu.

2.4.1 HDD Information

All relevant information about the hard drive(s) is listed in this window (see Figure 2-8) such as free space, total space, status, etc… If you see a "?" or the word "Error" in any of these fields, it may indicate a problem. Contact your installer, reseller or visit www.rpeyep.com for more information.

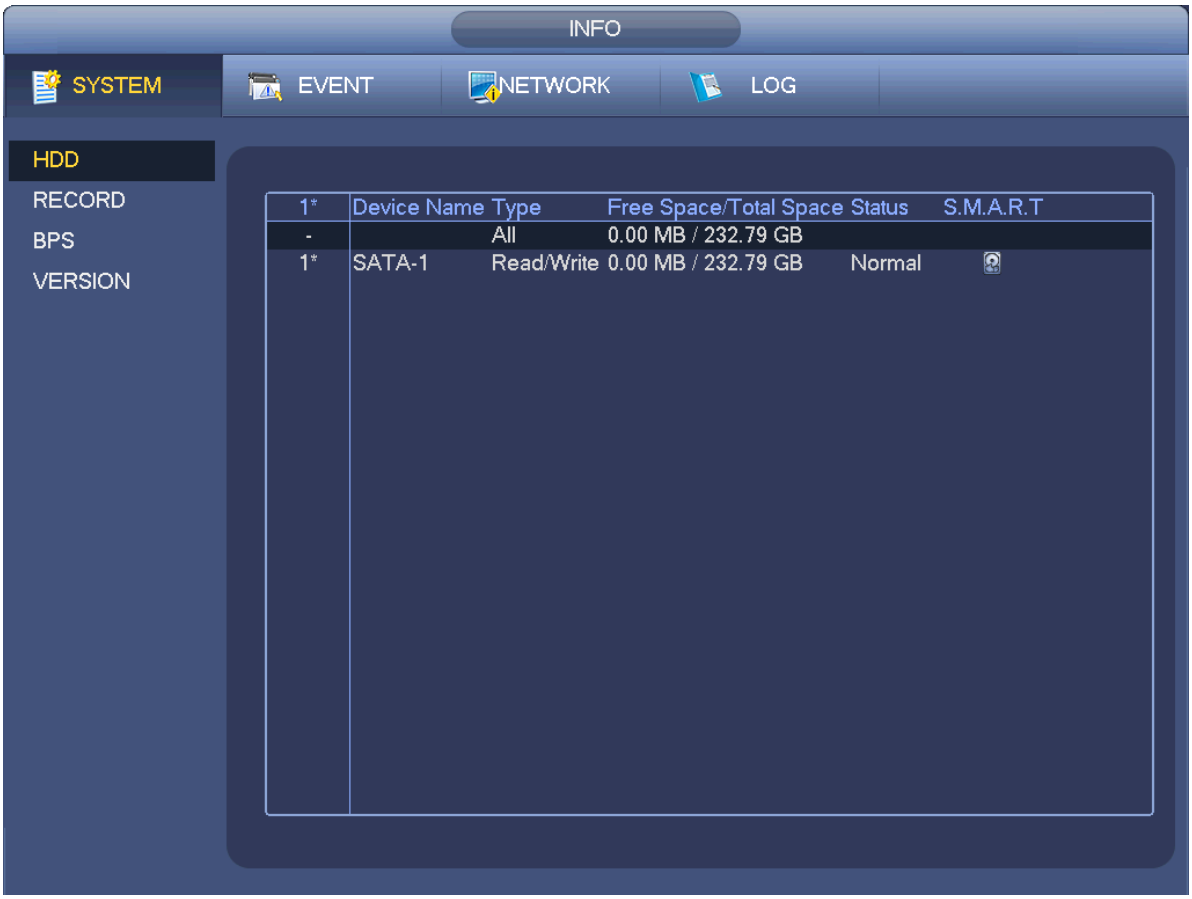


Figure 2-6

2.4.2 BPS

The BPS window, shown in 2-9 below, provides you with a screen showing the current video data stream (KB/s) and hard disk storage (MB/h) rates in real-time. This feature is for more advanced users and can help diagnose network issues or camera bit rate problems.

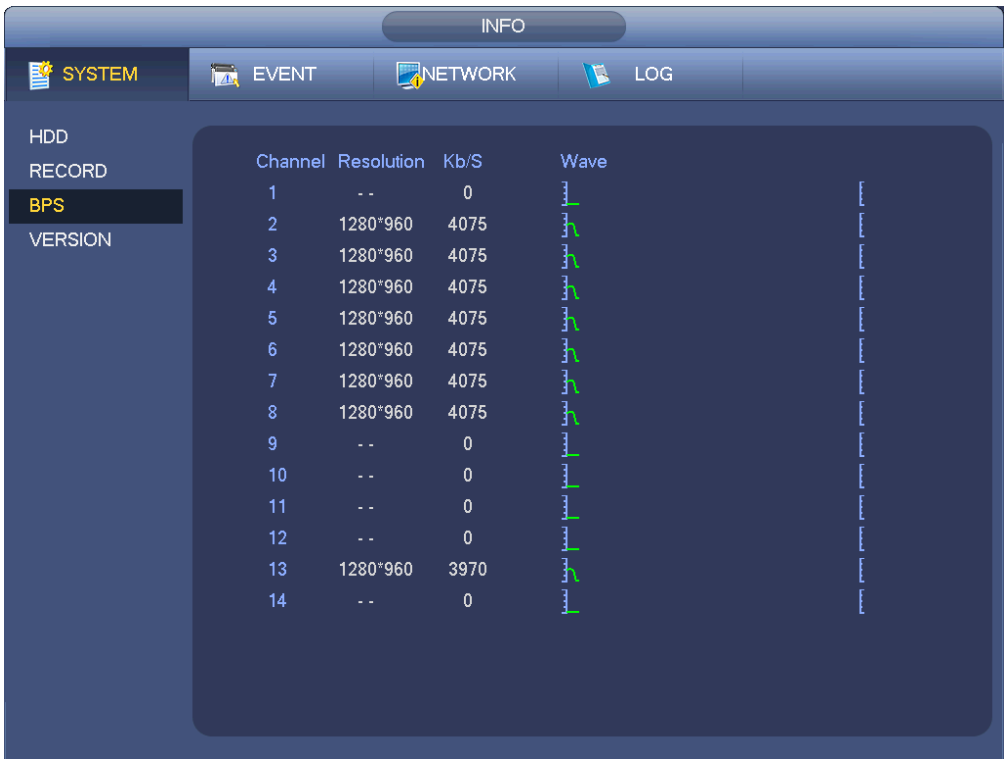


Figure 2-9

2.4.3 Log

The system log contains information about RP EyeP Guard system operation, configuration, record and alarm events and more. Double-click an event for more detailed information. The system log can be backed up to a USB device by clicking the backup button on the bottom right-hand side of the window. This feature is for advanced users and can help to track down system or camera problems.

Figure 2-10

2.4.4 Version

From main menu->Info->System->version, you can go to version interface. The version information shown in 2-11 below displays all relevant system version information. ***Warning:** Do not attempt to upgrade your system unless instructed to by a qualified installer or reseller.

Figure 2-11

2.4.5 Online Users

You are able to manage online users currently connected to your RP EyeP Guard system from this interface, shown below in Figure 2-12. You can disconnect and block users by selecting the user (check box on the left next to their username) and selecting to either disconnect or to block them.

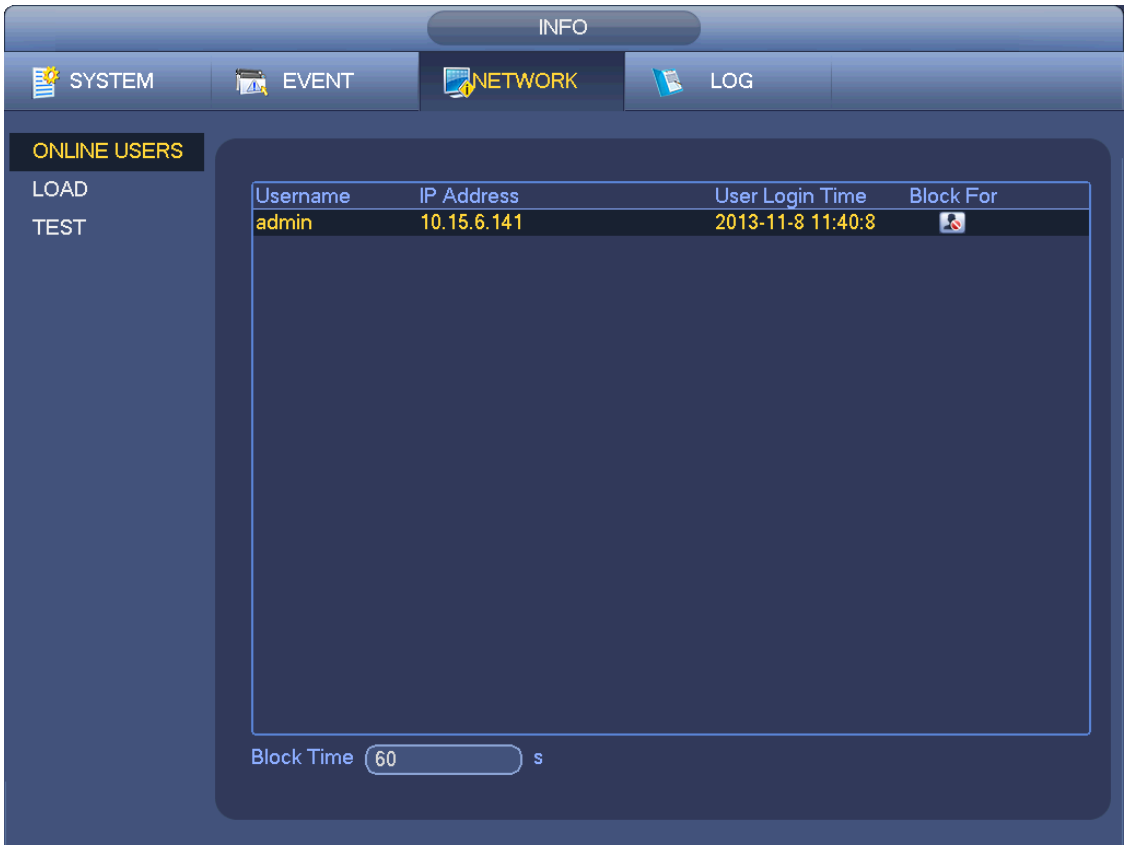


Figure 2-12

2.4.6 Remote Device (IP Camera) Information

The remote device (IP Camera) information interface provides an easy way to check the status of connected IP cameras, network load information and access the user connection log. This information can be especially helpful when diagnosing a network or bandwidth issue thought to be caused by the IP cameras or system. The menus and icons are self-explanatory to someone knowledgeable in networking and there are no settings or configuration that can be adjusted from this window. If in doubt as to what this reporting tool is displaying, please contact your installer,

reseller or visit www.rpeyep.com.

Figure 2-13

2.5 System Settings

2.5.1 General

The general settings tab includes the following options, shows below in Figure 2-15.


SETTING
CAMERA
NETWORK
EVENT
STORAGE
SYSTEM
GENERAL
DISPLAY
RS232
PTZ
ACCOUNT
AUTO MAINTAIN
IMP/EXP
DEFAULT
UPDATE
General
Date&Time
Holiday
Date Format
YYYY MM DD
Time Format
24-HOUR
Date Separator
-
System Time
2013 - 11 - 08
11 : 37 : 37
GMT+08:00
Save
DST
DST Type
Week
Date
Start Time
Jan
Last
Su
00 : 00
End Time
Jan
Last
Su
00 : 00
NTP
Server
time.windows.com
Manual Update
Port
123
Interval
60
Minute
Default
Save
Cancel
Apply


SETTING
CAMERA
NETWORK
EVENT
STORAGE
SYSTEM
GENERAL
DISPLAY
RS232
PTZ
ACCOUNT
AUTO MAINTAIN
IMP/EXP
DEFAULT
UPDATE
General
Date&Time
Holiday
Device ID
NVR
Device No.
8
Language
ENGLISH
Video Standard
PAL
HDD Full
Overwrite
Pack Duration
60
Minute
Realtime Play
5
Minute
Auto Logout
10
Minute
IPC Time Sync
24
Hours
Navigation Bar
Startup Wizard
Mouse Sensitivity
Slow
Fast
Default
Save
Cancel
Apply

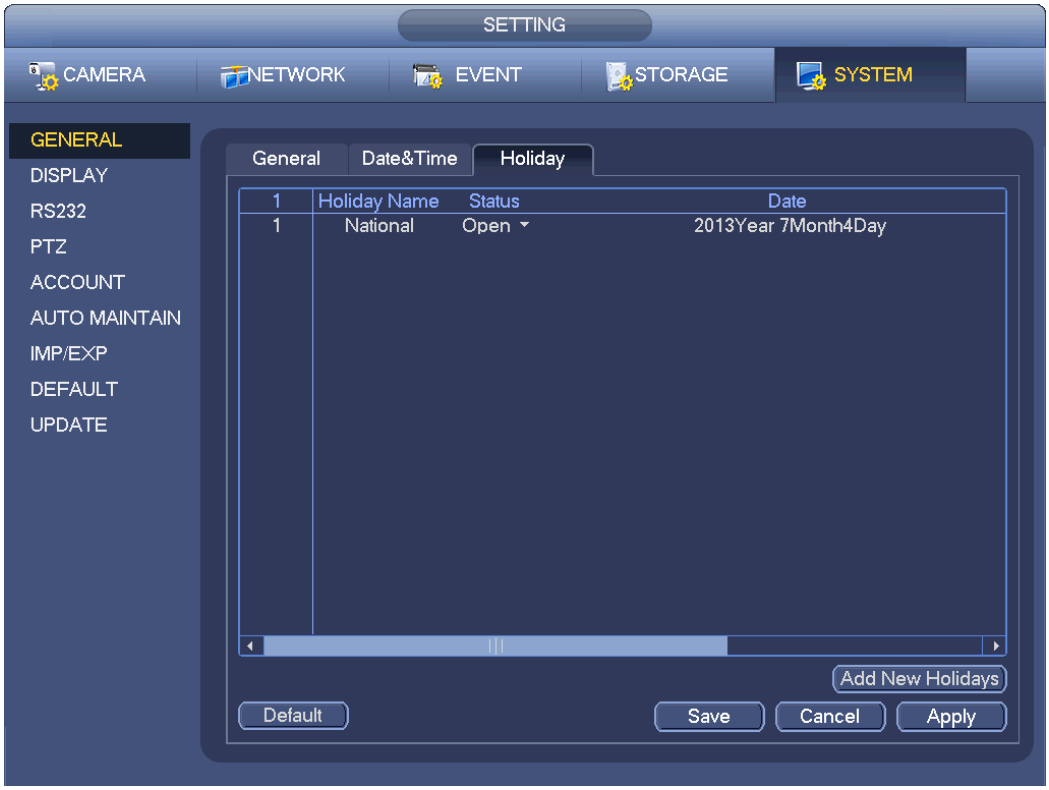


Figure 2-15

Most of the options and settings are self-explanatory such as setting the system date and time however the more advanced options are listed and explained below. When in doubt, please contact your installer, reseller or visit www.rpeyep.com.

- HDD full: The two options are “Stop Record” (stops recording when out of hard drive space) or “Overwrite” (automatically overwrites the oldest video file on the hard drive with the newest).
- Pack duration: Specify the maximum length of a recording file (the default value is 60 minutes, maximum value is 120 minutes).
- Device No: The IR remote control must be set to the same number in order to control the EyeP Guard using the IR remote control.
- Video standard: NTSC is the most common standard used in North America.
- Realtime play: The default real-time playback (See preview interface) setting can be set from 5 to 60 minutes.
- Startup wizard: When checked, the system will always start the startup wizard whenever the system is restarted. Otherwise, it will go directly to the login interface.
- Auto logout: Set the auto logout interval from 0 to 60 minutes.
- IPC Time Sync: Synchronizes the NVR and IP camera time at this specified interval.

2.5.2 Encode

The Encode settings configure the compression type used, frame rate, recording resolution as well as some more advanced settings such as the bit rate and audio format, see Figure 2-16 below.

Figure 2-16

Below are descriptions of the main settings with *suggested settings:

- Channel: Drop-down box to select which channel you would like to change the settings for
- Type: The options are: Regular, MD (motion detection) and Alarm. **We suggest - MD (motion detection)**
- Compression: **We suggest – H.264**
  - H.264 (recommended) - Increased recording time and better remote transmission speed.
  - MJPEG – Increased hard drive usage and higher video quality
- Resolution: The resolution settings are determined by the cameras used. For example, if you are using the RP EyeP 1.3MP cameras, the options are: D1 (lowest resolution), 720P or 1.3M (highest resolution).
- Frame rate: Depends on the type of camera and the number of cameras connected however in general:
  - D1: 1-30fps
  - 720P: 1-30fps
  - 1.3M: 1-15fps
- Quality: There are six levels ranging from 1 to 6 with 6 being the highest and 1 the lowest. **We suggest - 6**
- Video/audio: Enables or disables the video/audio.

***General Guidelines for configuring encode settings**

Here are some tips and points to consider when configuring the encode settings:

- High frame rates make the video less ‘jumpy’ and allow objects moving very quickly through the field of view to be captured, however use more video storage space.
- Configuring the “Extra Stream” settings with lower resolution, record quality and frame rate will help to optimize remote connection speed and capability.
- Adding video storage space is relatively inexpensive but not capturing the required detail can be costly. Starting at the highest settings for local recording and then moving them down to reach the desired record time is usually better than starting with the reverse.
- After changing the encode settings, test the video (both live and recorded) both locally and remotely to ensure you are capturing the desired detail.

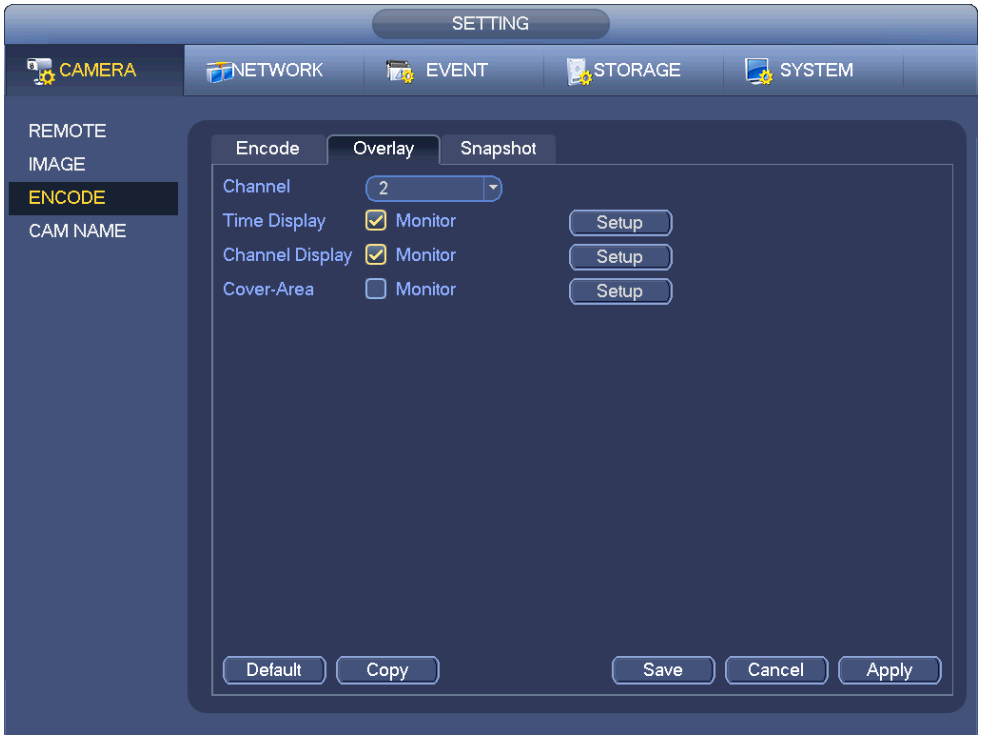


Figure 2-17

- Overlay Settings: Click the overlay button and the overlay interface as shown in Figure 2-17 will appear. Below are explanations for each overlay setting.
  - Cover area (Privacy mask): using the mouse, drag holding the left-mouse button to set proper mask size (maximum of 4 masks per channel).
  - Preview/monitor: The cover area (privacy mask) has two types:
    - Preview means the areas you mask out cannot be viewed by user when system is in preview status.
    - Monitor means the areas you mask out cannot be viewed by the user when system is in monitor status.
  - Time display: Click the set button and move the time display to the desired position.
  - Channel display: Click the set button and move the channel display to the desired position.

- Snapshot Settings: Click the Snapshot button and the interface as shown in Figure 2-18 will appear. Below are explanations for each overlay setting.
  - ✧ Snapshot Mode: There are two modes: Regular and Trigger. If you set regular mode, you need to set snapshot frequency. If you set trigger snapshot, you need to set the activation operation.
  - ✧ Image size: Here you can set snapshot picture size.
  - ✧ Image quality: Here you can set snapshot quality. The value ranges from 1 to 6.
  - ✧ Interval: It is for you to set timing (schedule) snapshot interval.

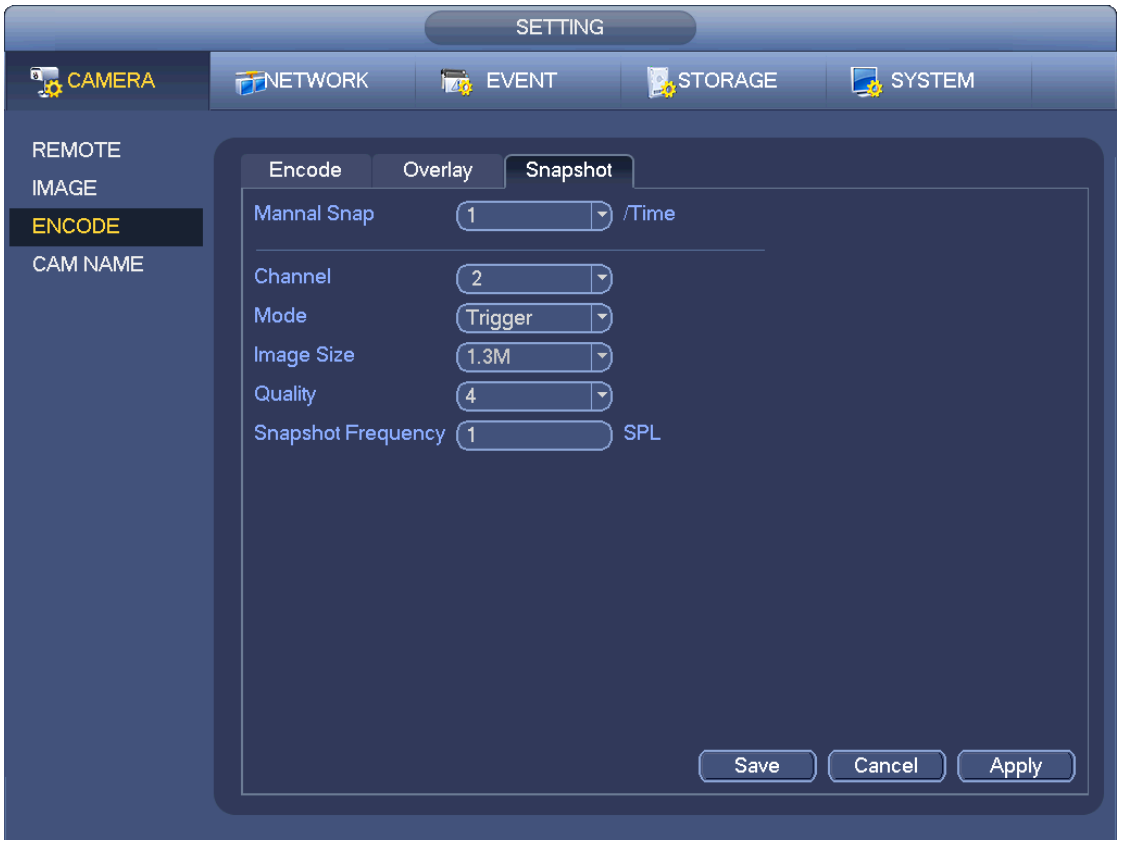


Figure 2-18

2.5.3 Schedule

Figure 2-19

The schedule defines when and how the system records video. Figure 2-18 shows the main recording schedule screen. The camera must be connected to configure the following:

- Channel: The schedule can be configured for each camera or for "all" cameras.
- Period: The schedule can be configured for each day or for "all" days of the week.
- Pre-record: Allows a period before an event occurred to be recorded, adjustable from 1 to 30 seconds.
- Redundancy: The redundancy backup function allows you to backup recorded video from one or more cameras to two hard drives. ***Please note:** before enabling this function, you must configure one hard drive as redundant (Main menu->Advanced->HDD Management) and this function is not available if you only have one hard drive in the NVR. This is an advanced feature and therefore we recommend contacting your installer, reseller or visit www.rpeyep.com.
- Snapshot: Enabling this feature takes a snapshot when recording is triggered which may be viewed through the playback interface.
- Record types: The options are regular (24/7), MD (motion detection), Alarm, MD & alarm.

2.5.4 RS232

From Main menu->Setting->System->RS232, RS232 interface is shown as below. The RS232 interface is used to configure devices that use serial communication such as PTZ (pan, tilt and zoom) cameras. This requires advanced knowledge and experience with these devices therefore we recommend contacting your installer, reseller or visit www.rpeyep.com.

- Function: There are various devices for you to select. Console is for you to use the COM or mini-end software to upgrade or debug the program. The control keyboard is for you to control the device via the special keyboard. Transparent COM (adapter) is to connect to the PC to transfer data directly. Protocol COM is for card overlay function. Network keyboard is for you to use the special keyboard to control the device. PTZ matrix is to connect to the peripheral matrix control.
- Baud rate: You can select proper baud rate.
- Data bit: You can select proper data bit. The value ranges from 5 to 8.
- Stop bit: There are three values: 1/1.5/2.
- Parity: there are five choices: none/odd/even/space mark.

System default setup is:

- Function: Console
- Baud rate:115200
- Data bit:8
- Stop bit:1
- Parity: None

After completing all the setups please click save button, system goes back to the previous menu.

Figure 2-20

2.5.5 Network

Figure 2-21

Basic network setup is completed via the RP EyeP Guard 4-Step Configuration Wizard (manual provided with RP EyeP Guard to help guide you through the wizard). Settings can be manually configured through the network setting interface, shown in Figure 2-19. Below are descriptions of the various key settings and options.

- IP Version: There are two options: IPv4 (screen shot on the left) and IPv6 (screen shot on the right).
- IP address, subnet and gateway: Here you can use the up/down button (▲▼) or input the corresponding number to input an IP address.
- DHCP: If you enable DHCP then you cannot modify the IP address, subnet and gateway information (the values will be assigned by the DHCP).
- TCP port: Default value is 37777
- UDP port: Default value is 37778
- HTTP port: Default value is 80
- RTSP port: Default value is 554

- Max connection: Set the maximum number of remote users. Enter 0 if you don't want a connection limit
- Preferred DNS server: DNS server IP address
- Alternate DNS server: DNS server alternate address

2.5.5.1 Network Setting

***Please Note:** Only the most common functions are defined in this manual. For further information, please go to www.rpeyep.com.

2.5.5.2 PPPoE

If your ISP uses PPPoE, enter your username and password (refer to Figure 2-21), click the save button and then restart the NVR to activate your configuration. After rebooting, the NVR will connect to the internet automatically and the IP address will be automatically filled in.

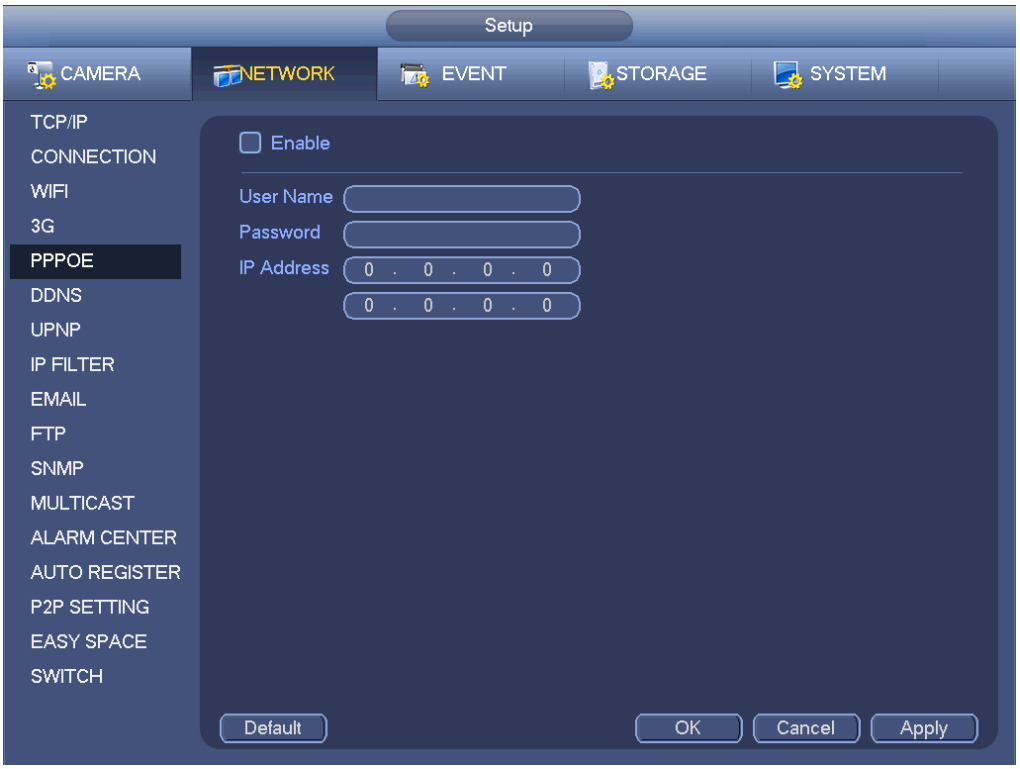


Figure 2-21

2.5.5.3 Email

Figure 2-22

The email interface is shown above (Figure 2-22). Below are descriptions of the various key settings and options.

- SMTP server: Enter SMTP server IP
- Port: Enter the mail server port, usually 25
- User name: Enter the user name of the senders email address
- Password: Enter the password for the corresponding email address here
- Sender: Enter the senders email address
- Title: Enter the default email subject line (Max 32 characters)
- Receiver: Enter the recipients email address
- SSL enable: Check if SSL is supported by the mail server
- Event Interval: The interval in which email messages will be sent on alarm (from 0 to 3600 seconds). 0 means there is no interval.
- Health email enable: Please check this box to enable the test email function to check if the connection is OK or not.
- Interval: Check the box above to enable this function and then set the corresponding interval. The system can send out emails as regularly as you set here

***Please note:** The RP EyeP Guard will not send the email immediately after the alarm occurs. When the alarm, motion detection or the abnormity event occurs, the system will send the email according to the interval you specified here. This function is very useful when there are lots of events which could result in many emails being sent at the same time.

2.5.6 Alarm

The alarm interface is used to configure the settings of either electronic or wired alarm triggers. This requires advanced knowledge and experience with these types of devices and therefore we recommend contacting your installer, reseller or visiting www.rpeyep.com for more information.

2.5.7 Detect

Go to Detect Menu

From Main menu->Setting->Event->Detect

The Detect interface will guide you through configuring the detection settings, shown below in Figure 2-24.There are three types of detection: motion detection, video loss and camera masking.

Figure 2-24

Event Type: Motion Detect

Below are descriptions of the various key settings and options.

- Channel: Select the camera number to activate recording, make sure you have set MD record in the encode interface (Main Menu->Setting->Schedule).
- Latch: When motion is no longer detected, the system will delay detecting for this specified period of time.

- Region: Click the select button, the interface is shown as in Figure 2-25. Here you can set motion detection zone. The green zone is the current cursor position. The grey zones are the motion detection zones. The **Black zones** are the disarmed zones. You can press the Fn button on the remote to switch between the arm mode and disarm mode. In arm mode, you can click the direction buttons to move the green rectangle to set the motion detection zones. After you have completed the setup, click ENTER on the IR remote to exit the current setup window.

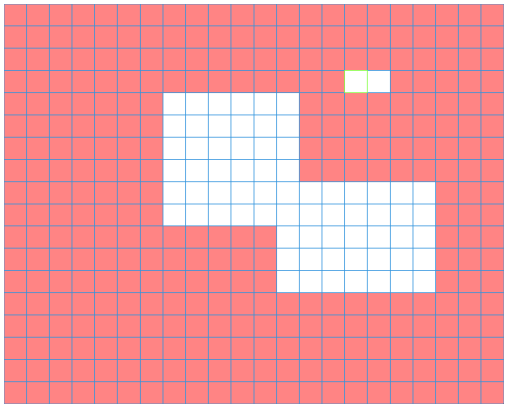


Figure 2-25

- Sensitivity: There are 6 levels, 6 being the highest and 1 the lowest
- Send email: Enable to send an email alert when motion occurs
- Snapshot: Enable this function to take a snapshot when motion occurs

Event Type: Video Loss & Camera Masking

Both the video loss and camera masking features are reserved for more advanced users. The video loss event type can send alarms if one of the cameras experience a “no video” situation. The camera masking function can send alarms if a camera is purposely covered up or tampered with. Both features, while useful, if not set up properly can cause system issues and other problems therefore we recommend contacting your installer, reseller or visiting www.rpeyep.com for more information.

2.5.8 Channel Name

The Channel Name setup interface is shown below, in Figure 2-33. From main menu -> Setting -> Camera -> Cam Name

Figure 2-33

It is to modify channel name. It supports a maximum of 31-characters. **Please note you can only modify the channel name of the connected network camera.**

2.5.9 Default

The Default interface is used to return various settings and configurations back to factory defaults. When you select Default, a window pops up and displays the options in the list below which you can highlight to restore each setting back to factory defaults. From Main Menu->Setting->System->Default.

- Select all
- Camera
- Network
- Event
- Storage
- System

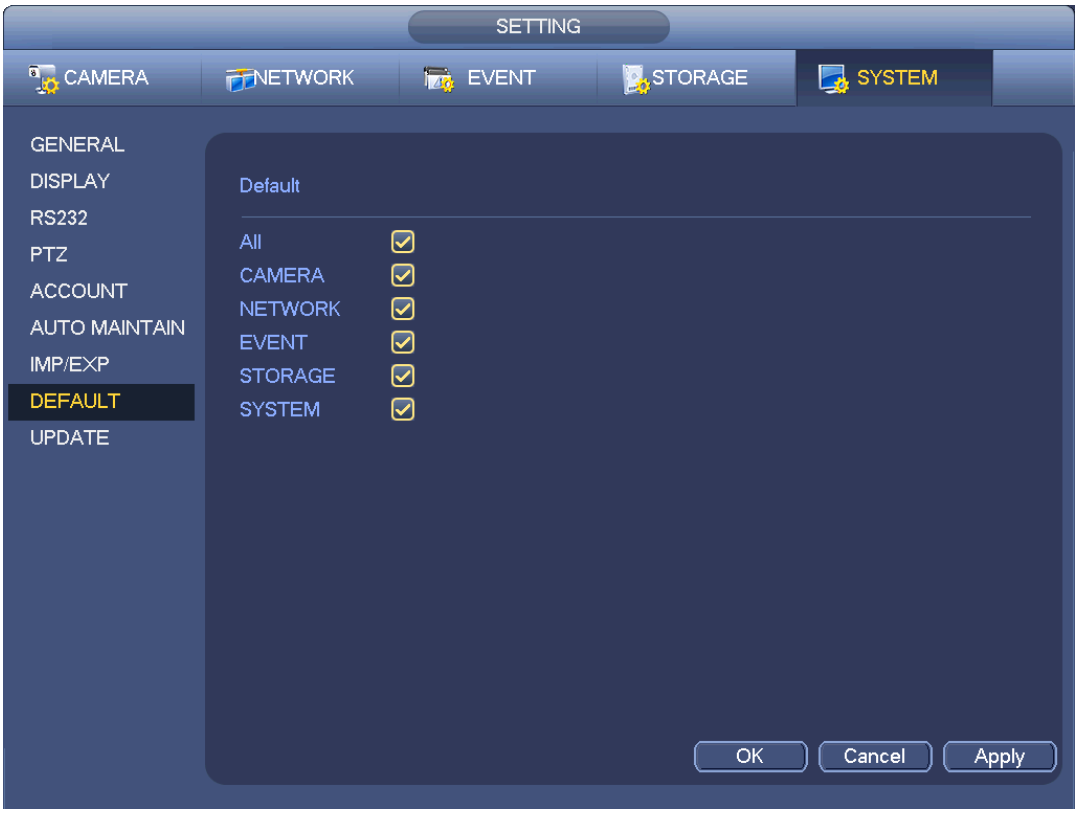


Figure 2-34

2.5.11 Smart Add

When the network camera(s) and the RPEyeP Guard are on the same router or switch, you can use the smart add function to add all of the network cameras at the same time.

There are two ways for you to go to the smart add interface.

- From the startup wizard, click Smart add button. See Figure 35.

Figure 2-35

- On the preview interface, right click mouse and then select Smart add. See Figure 6.

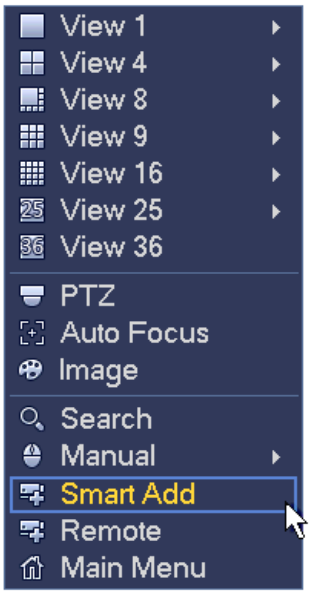


Figure 2-36

Now you can go to the smart add interface. See Figure 2-37.

Figure 2-37

Click the smart add button, the RPEyeP Guard will now search for IP Cameras. See Figure 2-38.

Figure 2-38

Now you can see system is auto adding IPC to the corresponding channels. See Figure 39.

Figure 2-39

You can see the following dialog box after system successfully added network cameras. See Figure 2-40.

Figure 2-40

2.5.12 Remote Device (Add/Edit/Remove IP Cameras)

From the main menu->Setting->Remote Device, or right click mouse on the preview interface and select remote device item.

Below are descriptions of the various key settings and options in the remote device interface.

- IP search: The IP search function will find all EyeP cameras connected to the network.
- Add: Highlight a camera found using the IP search function and click add to connect the camera to the NVR.
- Delete: Select a camera from the “Added Device” window and select delete to remove it from connecting to the NVR software.
- Manual add: The manual add function is designed to connect non-RP EyeP cameras to the NVR. Please visit www.rpeyep.com from a complete list of compatible 3rd party IP cameras.

Figure 2-41

***Please Note:** Alternatively, IP cameras may be added to the system by clicking the "+" symbol from an empty video channel in live view (see Figure 2-42) to access the remote device configuration (see Figure 2-30).

Figure 2-42

2.6 Advanced Settings

2.6.1 HDD Manage (Video Storage Management)

The HDD management provides an interface to configure the hard drive settings related to video storage management. The basic settings do not require advanced knowledge however changes

made to the settings can edit and/or erase existing video recordings. Unless a problem is suspected or you've been instructed to by your installer or reseller, we recommend leaving the settings as-is.

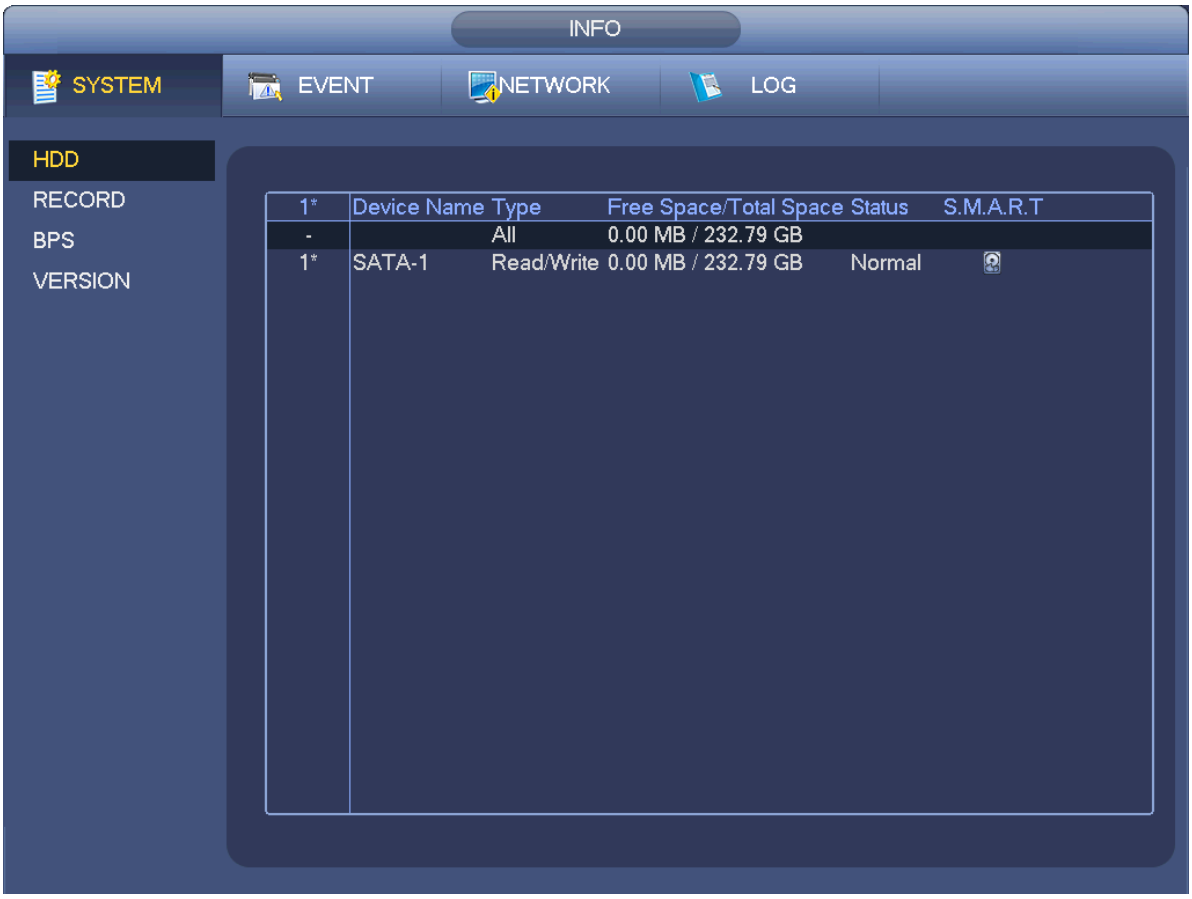


Figure 2-43

Below are descriptions of the various key settings and options in the HDD management interface. In general, the HDD type, status, capacity and recording time are shown in the main window (Figure 2-32). If the HDD(s) is working properly, an "O" will be displayed (top left of the screen) and if no, an "X" will be displayed. If you see an "X", please contact your installer or reseller.

- Alarm Set: There are various alarms that can be triggered when various alarm conditions are met such as a disk error, drive bay disconnected, etc… The default settings are recommended and therefore we do not suggest changing these settings. The Abnormality interface described in the next section is very similar; please refer to this section if you care to change any of the default settings.
- HDD Setting: Defines the group number for each hard drive.
- Alarm Release: Activating this function will clear all current alarms triggered from the HDD Manage interface.
- Channels Setting: This is where you can configure which cameras record to which hard drive, specified by the group you defined in the HDD Settings.

2.6.2 Abnormality

Main Menu -> Setting -> Event -> Abnormality.
Below are descriptions of the various key settings and options in the Abnormality interface, shown below in Figure 2-44.

Figure 2-44

- Event type: Each event type can have alarm triggers associated with it. Use the drop-down box to select the desired abnormality you wish to assign a trigger to.
- Latch: The latch time is the delay time the system will follow after the alarm has been cancelled or turned off.
- Show message: When enabled, an alarm message will pop up on the local system.
- Send email: Providing the email settings have been configured, the system will send an email notifying of the alarm.
- Buzzer: A buzzer sounds when the alarm is triggered if this is enabled.

2.6.3 Alarm Output

The alarm interface is used to configure the settings of either electronic or wired alarm triggers. This requires advanced knowledge and experience with these types of devices and therefore we recommend contacting your installer, reseller or visiting www.rpeyep.com for more information.

2.6.4 Manual Record

The manual record interface is rarely used however provides the ability to manually start and stop video recording. There are three statuses that can be set for each video channel:

- Manual: In this mode, you must manually start recording by pressing the record button on the remote or clicking the manual record button.
- Schedule: The channel records as to how you've set it in the recording setup (Main Menu->Setting->Schedule)
- Stop: Stops recording on this channel

Figure 2-45

2.6.5 Account

The Account interface is used to set up and configure system user accounts, both local and remote, see Figure 2-46 below. The instructions below will guide you through setting up both users and groups.

Figure 2-46

2.6.5.1 Add/Modify Group

A group can be set up and privileges assigned to this group can be associated with any number of users. For example, you could create a group called “Playback” and assign privileges to this group allowing for viewing and playback of video. This group could be assigned to store managers who would not need to change settings on the system but would need to view live video and playback recorded video.

Click the Add Group button and the interface as shown below in Figure 2-47. From here, you can enter a group name and then assign the desired privileges to this group by checking or unchecking the box next to each. The modify group interface is very similar to this interface and is used should the group privileges need to be modified.

Figure 2-47

2.6.5.2 Add/Modify User

The process is very similar to creating a group as in the previous section. Click the Add User button and the interface shown below in Figure 2-48 will appear. Enter a name, password, etc.. and select by either checking or unchecking the privileges you would like to set for the given user. Please note that while you have to select a group from the drop-down, you are still able to configure privileges.

Figure 2-48

2.6.6 Auto Maintenance

From the Auto Maintenance screen, you can specify an auto-reboot time and/or when to auto-delete old files, see Figure 2-49 below. Neither of these functions are critical to the performance or reliability of the RP EyeP Guard as regular system reboots are not required and old files do not need to be deleted on a regular basis. Some customers do schedule a regular reboot to cut off connections with remote clients that have been left unattended however this is not necessary for most applications.

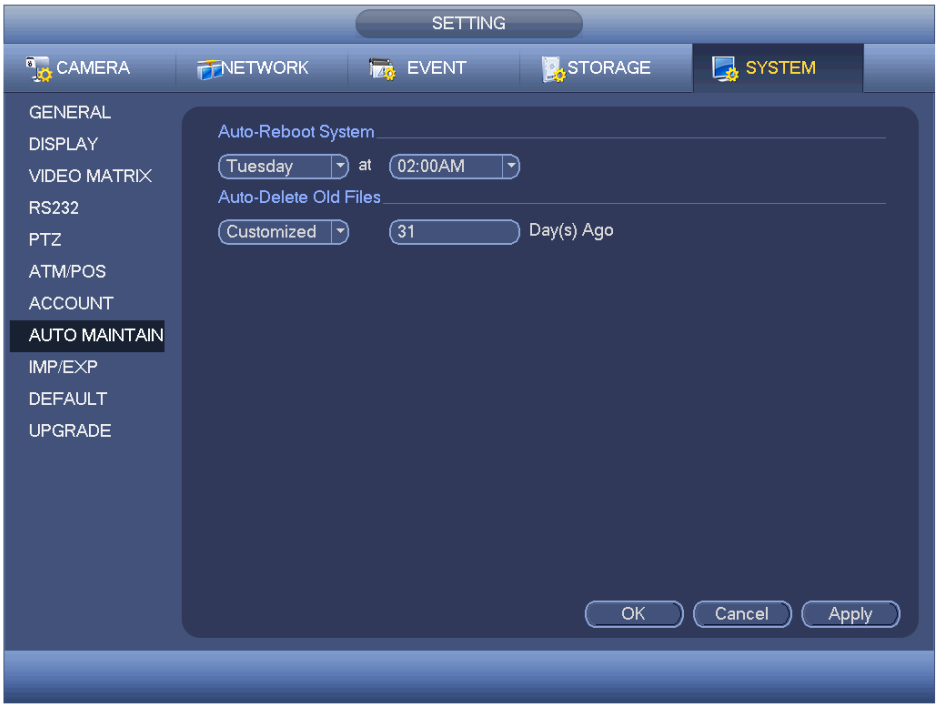


Figure 2-49

2.6.7 Backup

In this interface, you can backup record file to the USB device.

a) Connect USB burner, USB device or portable HDD and etc to the device.

b) From Main menu->Backup, you can go to the Backup interface. See Figure 2-502-50

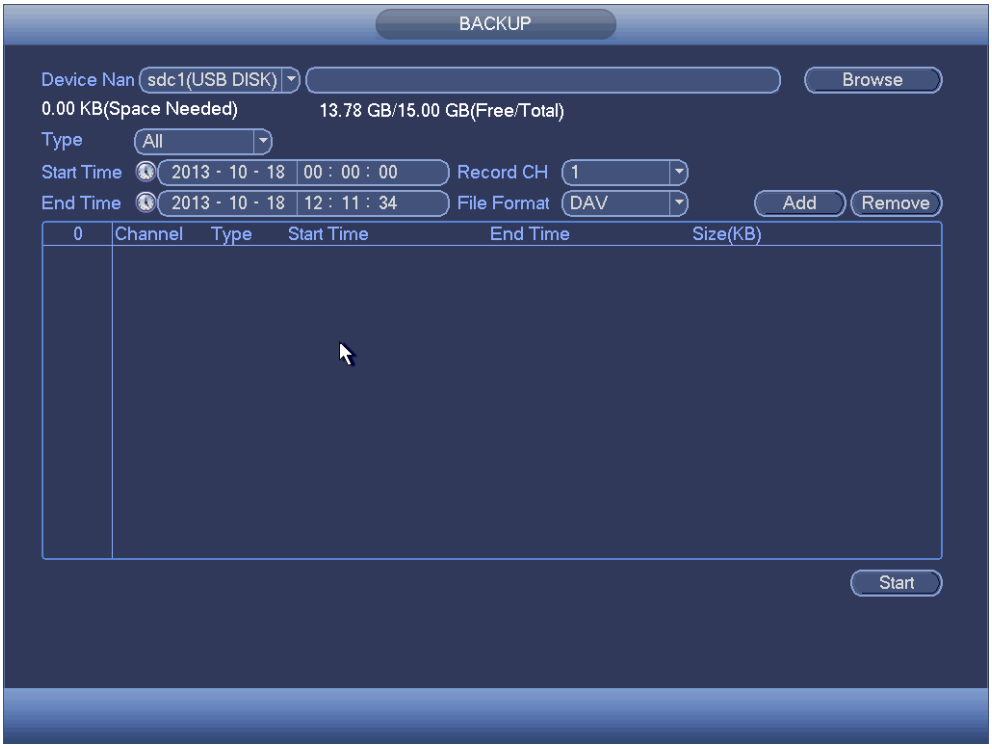


Figure 2-50

c) Select backup device and then set channel, file start time and end time.

d) Click add button, system begins search. All matched files are listed below. System automatically calculates the capacity needed and remained. See Figure 2-51.

e) System only backup files with a √ before channel name. You can use Fn or cancel button to delete √ after file serial number.

f) Click backup button, you can backup selected files. There is a process bar for you reference.

g) When the system completes backup, you can see a dialogue box prompting successful backup.

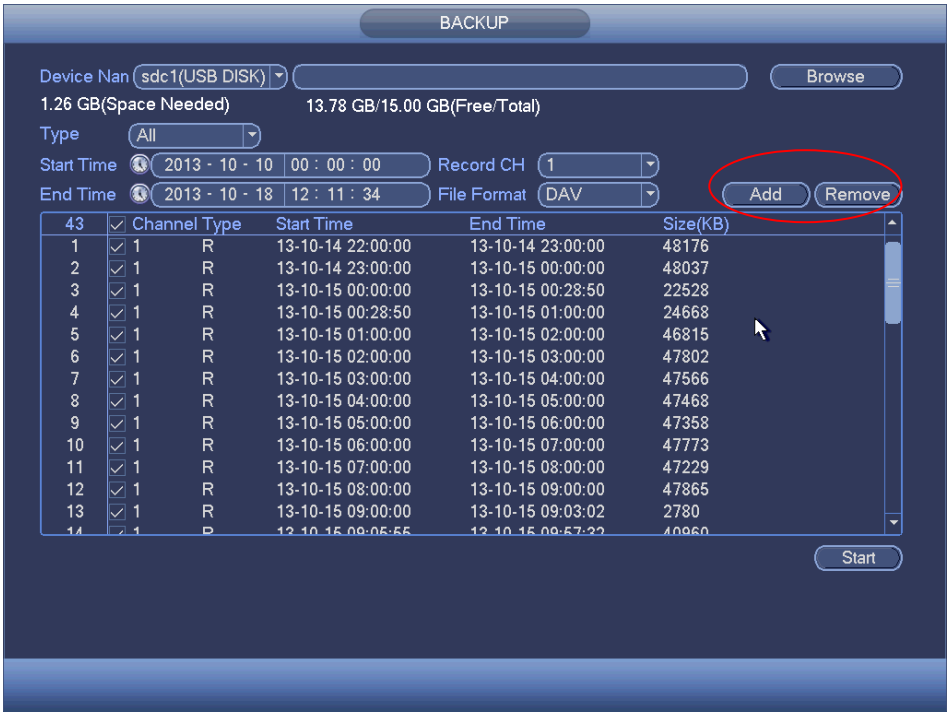


Figure 2-51

h) Click backup button, system begins backing up. At the same time, the backup button becomes a stop button. You can view the remaining time and process bar at the bottom left.

The file name format usually is: Channel number+Record type+Time. In the file name, the YDM format is Y+M+D+H+M+S. File extension name is .dav.

2.7 Shutdown

The shutdown interface, as shown in Figure 2-39, offers you these options:

- Logout menu user: log off the curent user
- Shutdown: system shuts down and turns off power
- Restart system: system begins rebooting
- Switch user: Log off current user and log in with another user

Figure 2-50