

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

# 4/8/16 CH Analogue HD-(Hybrid) DVR Quick Guide

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## CAUTION

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

Default User name / Password

User Name : admin

Password : 123456

※If hard disk is included in this product, the warranty of hard disk will be 1 year (non-human damage) .

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# 1. Product Features

## 1.1 Main Features

- Real-time surveillance
- High resolution VGA output, HDMI output and BNC output
- 2 way audio
- 3G Mobile surveillance(iPhone/ iPad/ Android)  
Compression with latest H.264 video compression, better video quality and lower compression rate.
- Storage:  
Type1: Support 1 SATA HDD ; Type2: Support 2 SATA HDD FAT32 file system )  
to record for a longer time without any limitation.
- Data back with USB thumb drive or USB external DVD burner. Each backup file size is 128MB.
- Adjustable record resolution, frame rate and quality
- HA series : WD1(960H) / AHD&TVI 720P+1080P / IP 720P+1080P  
HH series : WD1(960H) / AHD&TVI 720P+1080P / IP 720P+1080P / 5MP Lite /4MP Lite (4CH+1 IP/8CH+1 IP/16CH+4 IP)
- Multi-record mode: manual, schedule, sensor and motion record.
- HDD recycle record.
- Single or Multi channel playback
- Record file lock protection
- With 4 Audio input / 1 audio output
- With 4 channel alarm input / 1 channel alarm output
- Motion detection
- Pre and Post event record
- Channel related trigger record
- PTZ control  
Multi PTZ protocol support  
Programmable 128 Preset points and 8 cruises  
Related trigger preset point control
- Authority account setup
- USB mouse control  
To use USB mouse to control on friendly GUI
- Playback search mode: by time or event
- Event log and search
- Support network function  
Multi connection type: STATIC (Fixed IP), DHCP, PPPOE  
Support DDNS / NAT (P2P network penetration function)  
Support event trigger to send E-mail  
Remote connection limitation  
Auto bandwidth adjustment by network status
- Support network remote control  
Remote record / Remote playback / Remote PTZ control  
Remote configuration / Remote IE surveillance  
Remote CMS control / Remote EMAP control  
Remote camera color adjustment / Remote snapshot  
Control over coaxial (COC)

## 1.2 Rear Panel Instructions

Type1:



Rear Panel for 4 CH



Rear Panel for 8 CH

Name	Descriptions
DC12V	DC12V Power Input.
USB	To connect external USB devices like USB mouse or USB storage device.
LAN	Network Port.
HDMI	HDMI Port. Connect to high-definition display device.
VGA	VGA Port. Connect to monitor.
VIDEO IN	4 / 8 CH Video Inputs.
AUDIO OUT	1CH Audio output, connect to the sound box.
AUDIO IN	4 CH Audio Input.
ALARM OUT	1-ch relay output. Connect to external alarm.
ALARM IN	support 4ch external sensor
CVBS	CVBS video signal output
RS485	Connect to keyboard or speed dome; A is TX/RX +; B is TX/RX -

Type2:



Rear Panel for 16-ch

Name	Descriptions
GND	Grounding
RS485	Connect to keyboard or speed dome; A is TX/RX +; B is TX/RX -
ALARM OUT	1-ch relay output. Connect to external alarm.
ALARM IN	support 4ch external sensor
HDMI	Connect to high-definition display device
VGA	VGA output, connect to monitor
LAN	Network port
USB	To connect external USB devices like USB flash, USB HDD for backup or update firmware; or connect to USB mouse
POWER INPUT	DC12V
AUDIO OUT	1CH Audio output, connect to the sound box.
AUDIO IN	4 CH Audio Input.

Name	Descriptions
CVBS	CVBS video signal output
VIDEO IN	16 CH Video Inputs
AUDIO OUT	1CH Audio output, connect to the sound box

### 1.3 Remote Controller (Optional)

It uses two AAA size batteries.

- Open the battery cover of the Remote Controller.
- Place batteries. Please take care of the polarity (+ and -).
- Replace the battery cover.



Remote Controller

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

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### ※ Switch Remote Control ID

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

\* The ID must be the same on DVR.

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

(Press 8,8,1,Enter will enable the IR function, if you want to avoid other remote controller affect the DVR, you can disable the IR function by press 8,8,2,Enter)

## 1.4 Mouse Control

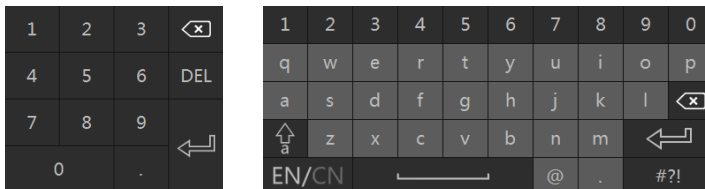
### ① Live Preview & Playback interface

In the live preview & playback interface, double click on any camera window to show the window in single screen mode; double click the window again to restore it to the previous size.

In the live preview & playback interface, if the interfaces display in full screen, move the mouse to the bottom of the interface to pop up a tool bar. The tool bar will disappear automatically after you move the mouse away from it for some time; move the mouse to the right side of the interface to pop up a panel and the panel will disappear automatically after you move the mouse away from it.

### ②Text-input

Move the mouse to the text-input box and then click the box. The input keyboard will pop up automatically.



## 2. Basic Operation

Please make sure all the connections are done properly before you power on the unit. Proper startup and shutdown are crucial to expending the life of your device.

### 2.1 Startup

Step1: Connect the output display device to the VGA/HDMI interface of the DVR.

Step2: Connect with the mouse and power. The device will boot and the power LED would turn blue.

Step3: A WIZARD window will pop up (you should select the display language the first time you use the DVR).

### 2.2 Shutdown

You can power off the device by using remote controller or mouse.

#### ①By remote controller:

Step1: Press Power button. This will take you to a shutdown window.

The unit will power off after a while by clicking “OK” button.

Step2: Disconnect the power.

#### ②By mouse:

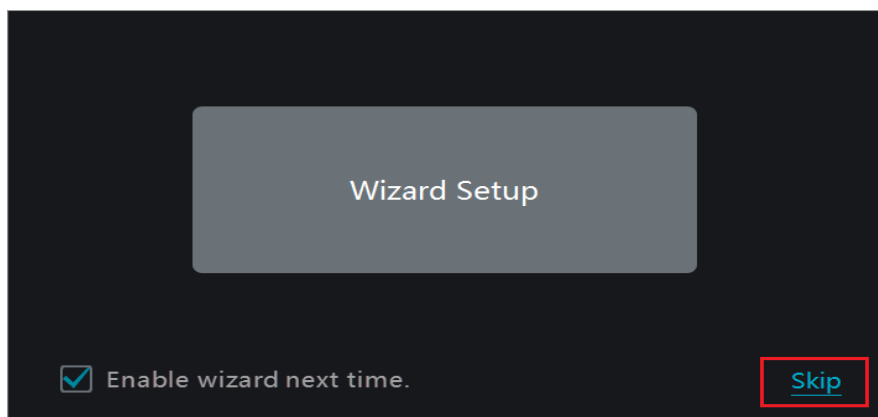
Step1: Click Start Shutdown to pop up the Shutdown window. Select “Shutdown” in the window.

The unit will power off after a while by clicking “OK” button.

Step2: Disconnect the power.

## 2.3 Wizard setup

You can quickly configure the DVR by wizard setup to make the DVR work normally. You must configure the wizard if you start the DVR for the first time (or click “Skip” to cancel the wizard next time).



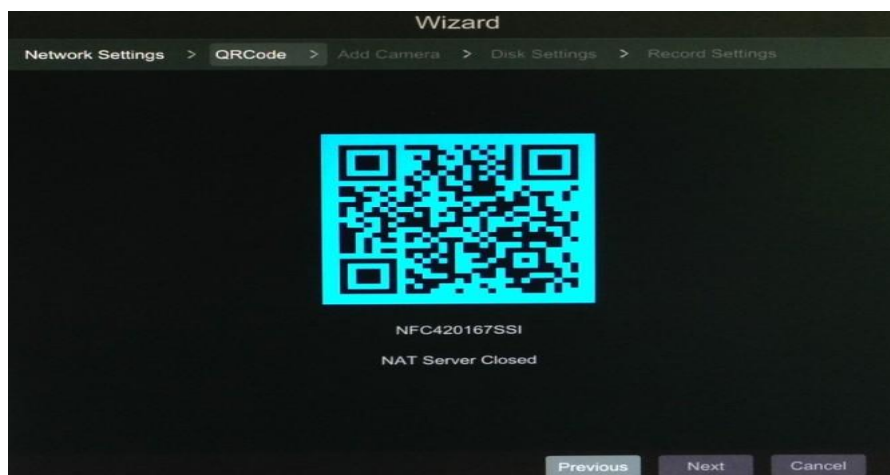
Click “Wizard Setup” to start wizard. The setting steps are as follows.



① **System Login** : Set your own password or use the default when you use the wizard for the first time (default username and password : **admin** and **123456**); select the login username and enter the corresponding password next time.

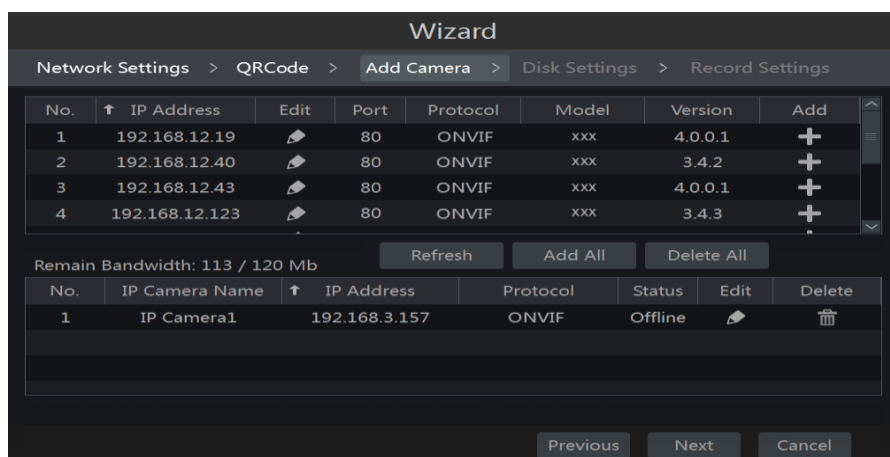
Click “Retrieve Password” to set questions and answers for password security of admin. Click “Next” to continue or click “Cancel” to exit the wizard.


② **Network Settings** : Check “Obtain an IP address automatically” and “Obtain DNS automatically” to get the IP address and DNS automatically (the DHCP function of the router in the same LAN should also be enabled), or manually input them. Input the HTTP port, RTSP port and Server port. Click “Next” to continue.

③ **QR Code** : You can scan the QR Code through mobile client which is installed in the mobile phone or PAD to log in the mobile client instantly.



④ **Add Camera** : Click “Refresh” to refresh the list of online IP cameras which are in the same local network with DVR and then click  to add the searched camera. Click “Add All” to add all the cameras in the list. Click to  delete the added camera. Click “Delete All” to delete all the added cameras.



Click  to edit the searched IP camera as shown on the below left. Input the new IP address, subnet mask, gateway, username and the password of the camera. Click “OK” to save the settings.

**Edit IP**

MAC Address: 00 : 18 : AE : 4F : B5 : E8

IP Address: 192 . 168 . 31 . 100


Subnet Mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 31 . 1

Username: admin

Password: \*\*\*\*\*

OK Cancel

Click  to edit the added camera as shown on the above right. Input the new camera name, IP address, port, username and the password of the camera. You can click “Test” to test the effectiveness of the input information. Click “OK” to save the settings. You can change the IP camera name only when the added camera is online. Click “Next” to continue.



**Edit IP Camera**

IP Camera Name: NB401B

IP Address: 192 . 168 . 31 . 172

Port: 9008

Protocol: IP camera

Model: HS-NB401B

Username: admin

Password: \*\*\*\*\*

☐ Display Password

Test OK Cancel

⑤ **Disk Settings** : You can view the disk number, disk capacity of the DVR and serial number, R&W status of the disk. Click “Formatting” to format the disk. Click “Next” to continue.

**Wizard**

Network Settings > QRCode > Add Camera > **Disk Settings** > Record Settings

Disk	Capacity[GB]	Disk Serial No.	Status	Operation
Disk1	7452	ZA10AEPL	RW	Formatting

Previous Next Cancel

⑥ **Record Settings** : Two record modes are available: auto and manual.

**Auto:** Select one auto mode in the interface as shown below and then click “OK” button to save the settings.

**Wizard**

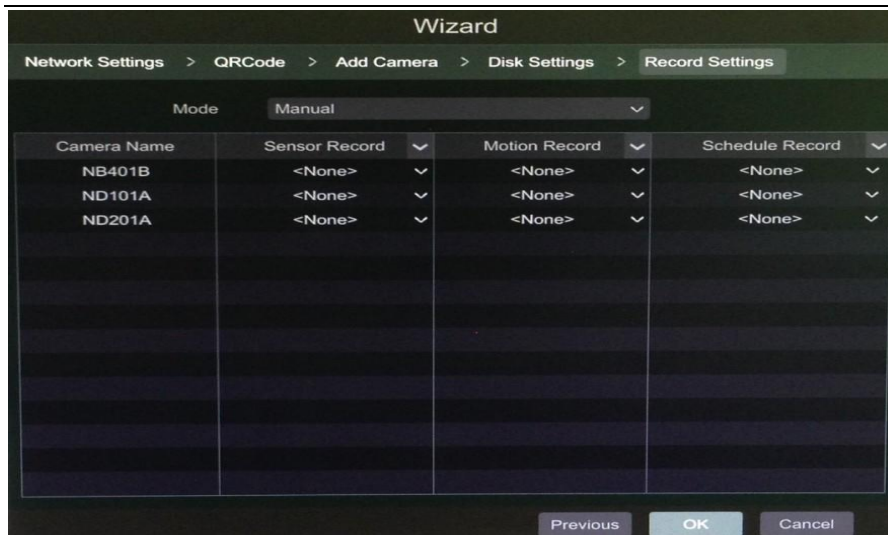
Network Settings > QRCode > Add Camera > Disk Settings > **Record Settings**

Mode: Auto

☐ Motion Record  
☐ Sensor Record  
☐ Motion Record+Sensor Record  
☐ Always(24x7) Record+Motion Record  
☐ Always(24x7) Record+Sensor Record  
☒ Always(24x7) Record+Motion Record+Sensor Record

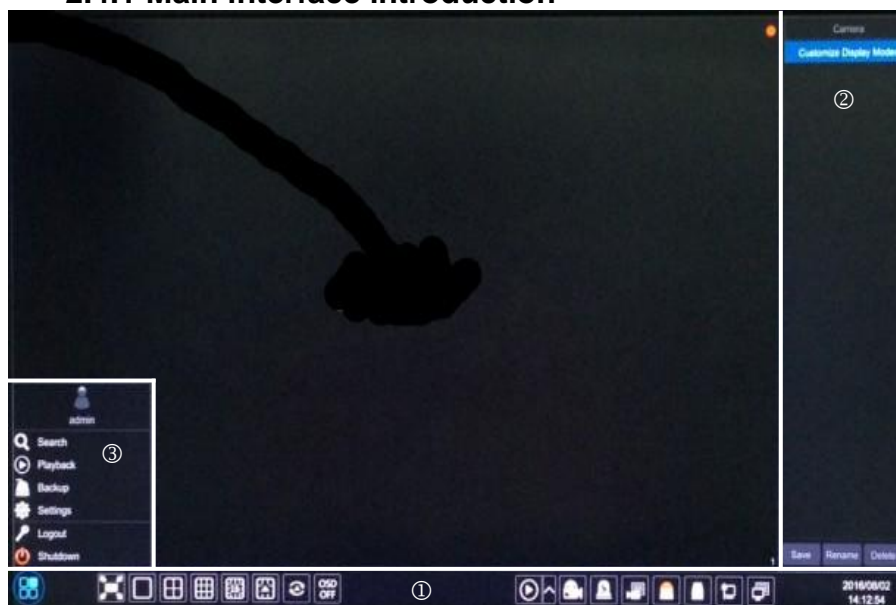
Previous OK Cancel

**Manual:** Set the “Sensor Record”, “Motion Record” and “Schedule Record” of each camera. Click “OK” to save the settings.






## 2.4 Main interface

### 2.4.1 Main interface introduction



The buttons in area ① are introduced in the table below.

Butto	Meaning
	Start button. Click it to pop up area ③.
	Full screen button. Click it to show full screen; click it again to exit the full screen.
	Screen mode button.(according to individual models)
	Dwell button
	Click it to enable OSD; click  to disable OSD.
	Click  to set the default playback time before starting instant playback or going to the playback interface for playback operations ; click  to go to the playback interface. For instance, if you choose “5 minutes ago” as the default playback time, you can playback the record from the past five minutes.
	Manual record button. Click it to enable/disable record.
	Manual alarm button. Click it to trigger or clear the alarm-out manually in the popup window.
	Record status button. Click it to view the record status.
	Alarm status button. Click it to view the alarm status.


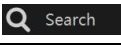
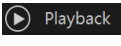

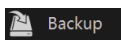
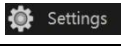

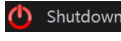
	Disk status button. Click it to view the disk status and RAID status.
	Network status button. Click it to view the network status.
	Information button. Click it to view system information.

Introduction of area ②:

Click “Camera” to view all the added cameras in the camera list. Select one camera window on the left side of the interface and then double click one camera in the list to preview the camera image in the selected window.

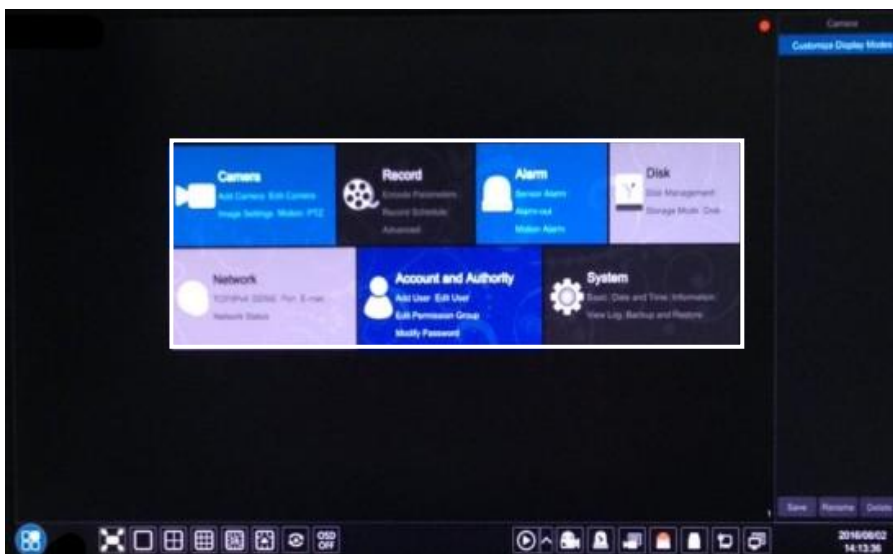
Click “Customize Display Modes” to view all the display modes in the display mode list. Double click one display mode in the list to switch to the display mode for previewing.

Introduction of area ③:

Icon / Button	Meaning
 admin	It shows the current login user.
 Search	Click it to go to record search interface.
 Playback	Click it to go to playback interface (click  on the tool bar at the bottom of the live preview interface to set the default playback time).
 Backup	Click it to go to backup interface.
 Settings	Click it to pop up the setup panel.
 Logout	Click it to log out the system.
 Shutdown	Click it and then select “Logout”, “Reboot” or “Shutdown” in the popup window.

## 2.4.2 Setup panel


Click Start → Settings to pop up the setup panel as shown below.

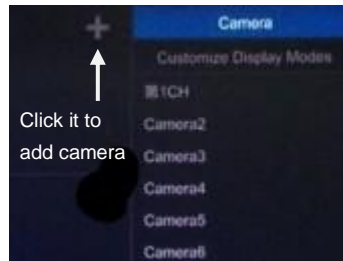
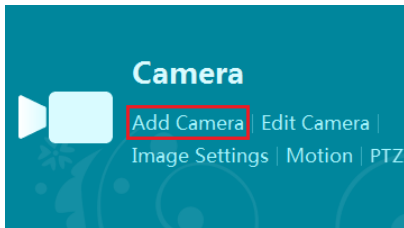


The setup panel includes seven modules. Each module provides some function entries with links for convenient operation.


## 3. Camera Management

### 3.1 Add camera

The network of the DVR should be set before adding IP camera. Refer to the pictures below. Click **Add Camera** in the setup panel or  in the top right corner of the preview window to pop up the “Add Camera” window as shown below. You can quickly add or add the IP camera manually.




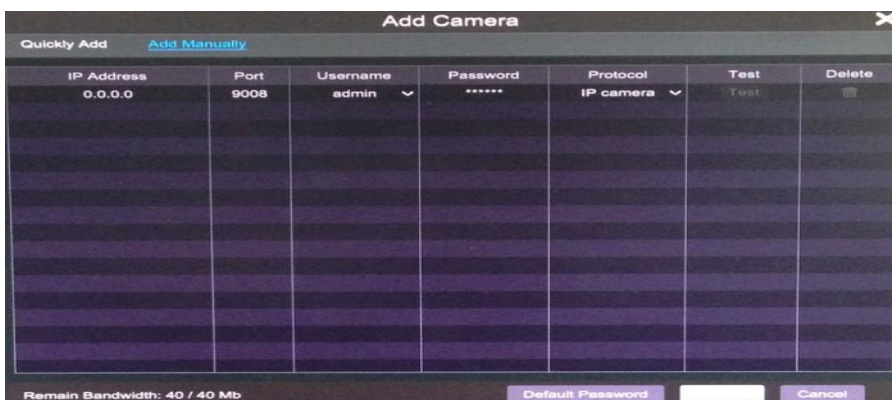
#### 3.1.1 Quickly add

Check the cameras and then click “Add” to add cameras. Click  to edit the camera's IP address, username and password and so on. Click “Default Password” to set the default username and password of each camera.






#### 3.1.1 Add manually

Input the IP address, port, username and password of the camera and then select the protocol. Click “Test” to test the effectiveness of the input information and then click “Add” button (you can input one camera's information or above such as IP address, username and password before clicking “Add” button). Click  to delete the camera. Click “Default Password” to set the default username and password of each camera.



### 3.2 Edit camera

Click “Edit Camera” in the setup panel to go to the interface as shown below. Click  to view the live image of the camera in the popup window. Click  to edit the camera. Click  to delete the camera.

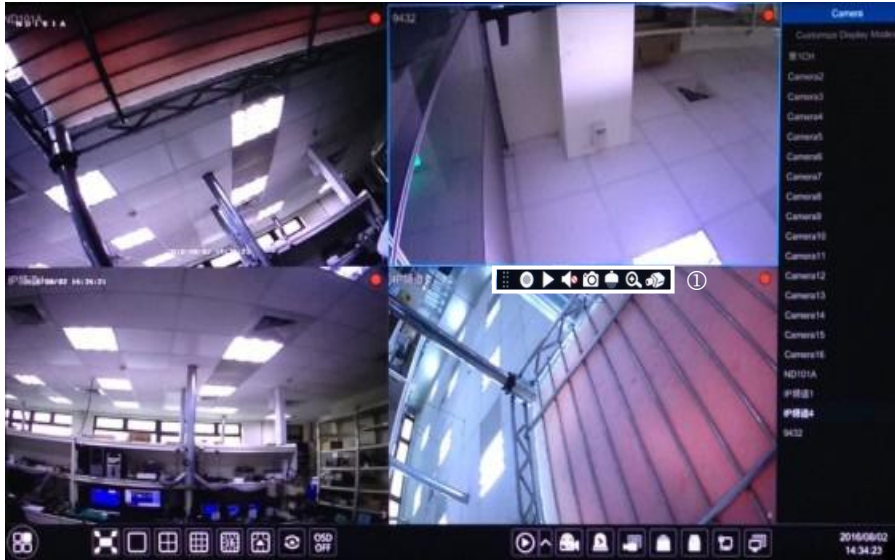


Edit Camera Group										
Search Camera										+
No.	Camera Name	IP Address	Port	Status	Protocol	Model	Preview	Edit	Delete	▼
1	[POE01]NB401B	192.168.31.100	9008	Online	IP camera	HS-ND301B				
2	[POE02]ND101A	192.168.31.125	9008	Online	IP camera	9534S1				
3	[POE03]ND201A	192.168.31.172	9008	Online	IP camera	HS-NB401B				

## 4. Live Preview

### 4.1 Preview interface



You should add camera first after logging on to the system. Refer to the interface as shown below, drag one camera in the preview window to another window for camera window exchanging.



Click the preview window to show the tool bar as shown in area ①; right click the preview window to show the menu list. The tool bar is introduced in the table below.

Butto	Menu List	Meaning
	--	Move tool. Click it to move the tool bar anywhere.
	<b>Manually Record On</b>	Click it to start recording.
	<b>Instant Playback</b>	Click  to playback the record; click "Instant Playback" to select or self-define the instant playback time.
	<b>Enable Audio</b>	Click it to enable audio. You can listen to the camera audio by enabling audio.
	<b>Snap</b>	Click it to pop up the snap window. Click "Save" in the window to save the image. Click "Export" to export the image.
	<b>PTZ Control</b>	Click it to go to PTZ control interface.
	<b>Zoom In</b>	Click it to go to single channel amplification interface.
	<b>Image Adjust</b>	Click it to go to image adjustment interface.



The single channel amplification interface is as shown below. Press and drag the blue box to select the zoom in area. Click  /  to zoom the image. Click the camera selection box to select other cameras for amplification. Click “Back” to return to the live preview interface.

## 5. Record & Disk Management

### 5.1 Record

Please format the HDDs before recording. Click Start→Settings→Record→Mode Settings to go to the mode settings interface. You can set the record time under the “Manual Record Settings” and then click “Apply” button to save the settings. There are two record modes: auto mode and manual mode.



#### 5.1.1 Auto mode

**Motion Record:** Motion alarm record will be enabled when motion alarm happens.

**Sensor Record:** Sensor alarm record will be enabled when sensor alarm happens.

**Motion Record+Sensor Record:** Motion/sensor alarm record will be enabled when motion/sensor alarm happens.

**Always(24x7) Record+Motion Record:** Normal record is enabled all the time; motion alarm record will be started when motion alarm happens.

**Always(24 x 7) Record+Sensor Record:** Normal record is enabled all the time; sensor alarm record will be started when sensor alarm happens.

**Always(24 x 7) Record+Motion Record+Sensor Record:** Normal record is enabled all the time; motion/sensor alarm record will be enabled when motion/sensor alarm happens.

Select one auto mode to pop up the corresponding window. Set the video encode, resolution, FPS, bitrate and audio of each camera and then click “OK” to save the settings.

Always(24x7) Record+Sensor Record												
Normal								Sensor Record				
Camera Name	Stream Type	Encode	Resolution	FPS	Bitrate	Audio	Record Stream	Resolution	FPS	Bitrate	Audio	Record Stream
9432	Main Stream	H.264	1920x1080	30	3072Kbps	ON	Dual Stream	1920x1080	30	3072Kbps	ON	Dual Stream

**Video Encode:** the available options will be H.265 and H.264 if the connected IP camera supports H.265, or the option will be H.264 only.

**Resolution:** the higher the resolution is, the clearer the image is.

**FPS:** the higher the frame rate is, the more fluency the video is. However, more storage room will be taken up.

**Bitrate:** the higher the image quality you choose, the more bit rate will be required.

### 5.1.2 Manual mode

If the manual mode is selected, you need to set the encode parameters and record schedules of each camera.

## 5.2 Disk management

Click Start→Settings→Disk→Disk Management to go to disk management interface. You can view the DVR's disk number and disk status and so on in the interface. Click "Formatting" button to format the HDD.



Disk Management					
Disk	Capacity[GB]	Disk Serial No.	Disk Model	Status	Operation
Disk1	7452	ZA10AEPL	ST8000VX0002-1Z6112	RW	Formatting

**Note:**

1. The new HDD should be formatted for normal use.
2. For normal use of the HDD which has been used in other DVR, if the DVR is of the same model with the new DVR, please import the configuration file of the DVR to the new DVR or format the HDD; if the models of the two DVRs are different, please format the HDD.



## 6. Playback & Backup

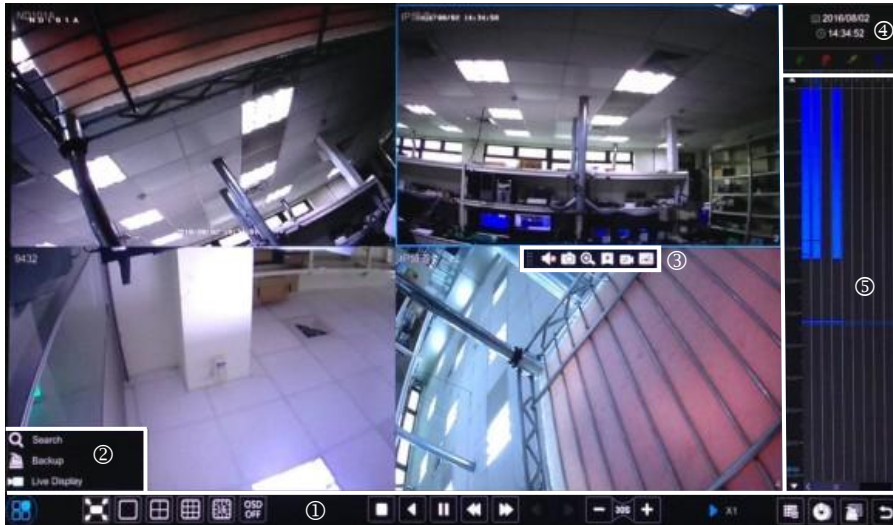
### 6.1 Instant playback


Click  on the tool bar at the bottom of the preview camera window to play back the record (click  on the tool bar at the bottom of the live preview interface to set the default playback time). Refer to the picture below. Drag the playback progress bar to change the playback time. You can also click the right-click menu "Instant Playback" in the camera window and then set the instant playback time to play back the record.























## 6.2 Playback interface

Click  on the tool bar at the bottom of the live preview interface or click Start→Playback to go to the playback interface as shown below (click  on the tool bar at the bottom of the live preview interface to set the default playback time).






The added cameras will playback their records in the playback interface automatically. You can also add the playback camera manually. Click  in the playback window to pop up the “Add Camera” window. Check the cameras in the window and then click “Add” to add playback camera. The system supports a maximum of 16 synchronous playback cameras.

The buttons on the tool bar (area ①) at the bottom of the playback interface are introduced in the table below.












Button	Meaning
	Start button. Click it to pop up area ②.
	Full screen button. Click it to show full screen; click it again to exit the full screen.
	Screen mode button (according to individual models).
	OSD ON button. Click it to enable OSD; click  to disable OSD.
	Stop button.
	Rewind button. Click it to play video backward.
	Play button. Click it to play video forward.
	Pause button.
	Deceleration button. Click it to decrease the playing speed.
	Acceleration button. Click it to increase the playing speed.
	Previous frame button. It works only when the forward playing is paused in single screen mode.
	Next frame button. It works only when the forward playing is paused in single screen mode.
	Click  to step backward 30s and click  to step forward 30s.
	Event list/tag button. Click it to view the event record of manual/schedule/sensor/ motion and the tag information.
	Backup button. Drag the mouse on the time scale to select the time periods and cameras, and then click the button to back up the record.
	Backup status button. Click it to view the backup status.
	Back button. Click it to return.











## Introduction of area ②:

Button	Meaning
 Search	Click it to go to record search interface.
 Backup	Click it to go to backup interface.
 Live Preview	Click it to go to live preview interface.






Click on the playback window to show the tool bar as shown in area ③; right click on the window to show the menu list. The tool bar and menu list are introduced in the table below.


Button	Menu List	Meaning
	--	Move tool. Click it to move the tool bar anywhere.
	<b>Enable Audio</b>	Click it to enable audio. You can listen to the camera audio by enabling audio.
	<b>Snap</b>	Click it to snap.
	<b>Zoom In</b>	Click it to go to the zoom in interface. The zoom in interface is similar to that of the camera window in the live preview interface. Click  to pause the record playing; click  to play the record. When the record is paused in forward playing mode, you can click  to view the previous frame and click  to view the next frame.
	<b>Add Tag</b>	Click it to add tag. You can play back the record by searching the added tag. Click it and then input the tag name in the popup window. Click "Add" to add tag.
	<b>Switch Camera</b>	Click it to switch the playback camera. Click it and then check the camera in the popup window. Click "OK" to change the camera.
	<b>Close Camera</b>	Click it to close the playback camera.

## Introduction of area ④:

Click  to set the date; click  to set the time and then the playback camera will play the record from the time you set. You can check the record type as required for record playback; first you should click  on the tool bar at the bottom of the interface to clear all the playback camera, then check the record type (: manual record; : sensor based record; : motion based record; : schedule record) and finally click  on the playback window to add camera for playback (the record time scale will show the record data of the checked record type only after the above operations).

## Introduction of the record time scale (area ⑤):

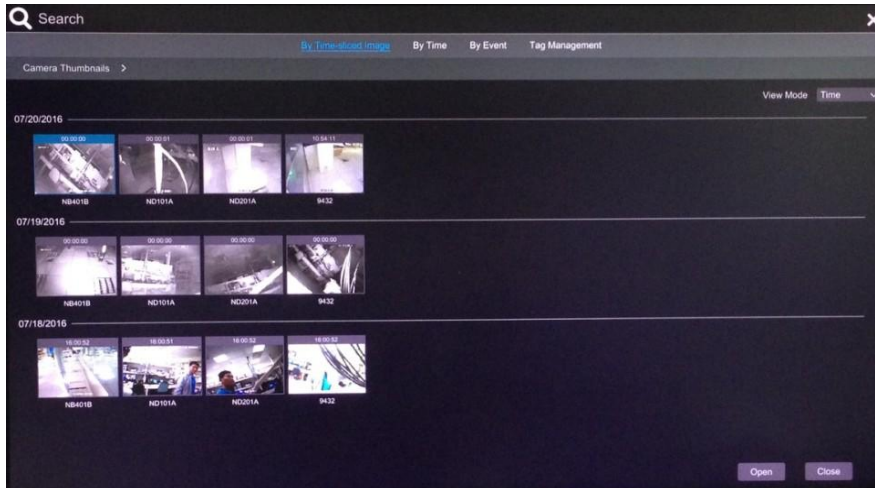
A tool bar will appear after moving the mouse to the record time scale. Click  /  to zoom the timeline; click  to recover the timeline to 24 hours' ratio. Drag the timeline or slide the scroll wheel of the mouse on the time scale to show the hidden time on the top or bottom of the timeline. You can also click  to show the hidden time on the top of the timeline or click  to show the hidden time on the bottom of the timeline. Drag the slider at the bottom of the time scale to show the hidden playback cameras. The record time scale shows different record types with different colors. The green block stands for manual record, red block stands for sensor based record, yellow block stands for motion based record and blue block stands for schedule record. Click the record block to set the time and then the playback camera will play the record from the time you set.

Drag the color block on the time scale to select the backup area and then right click the area or click  to pop up a backup information window. Click "Backup" button in the window to pop up the backup window. Select the device, backup path and backup format and then click "Backup" button to start the backup.

## 6.3 Record search & playback

### 6.3.1 Search & playback by time sliced image

① Click Start→Search→By Time-sliced Image to go to “By Time-sliced Image” tab. There are two view modes: by time and by camera. In the time view mode, a maximum of 64 camera thumbnails can be showed. If the camera thumbnail number is more than 64, the cameras will be listed directly by their camera name, not the thumbnail. A maximum of 196 camera names can be listed. If the camera name number is more than 196, the time view mode will be disabled and the camera view mode will be available only.



② Select one camera in the interface and then click “Open” button.

③ Click the image box to play the record in the small playback box on the left side of the interface (the box which has image inside indicates that the record data exist).

④ Refer to the picture below. Drag the color blocks on the time scale to select the record data and then click “Backup” button to pop up a window; select the device, backup path and backup format in the window and then click “Backup” button to start the backup.

⑤ Click “Playback” button to play the record in the playback interface. Click “Close” to close the interface.



#### Time Slice Mode Selecting:



**Method One:** Click “Year”, “Month” or “Day” button under the record time scale to select the time slice mode. In “Day” mode, click ◀ / ▶ on the left/right side of the time scale to

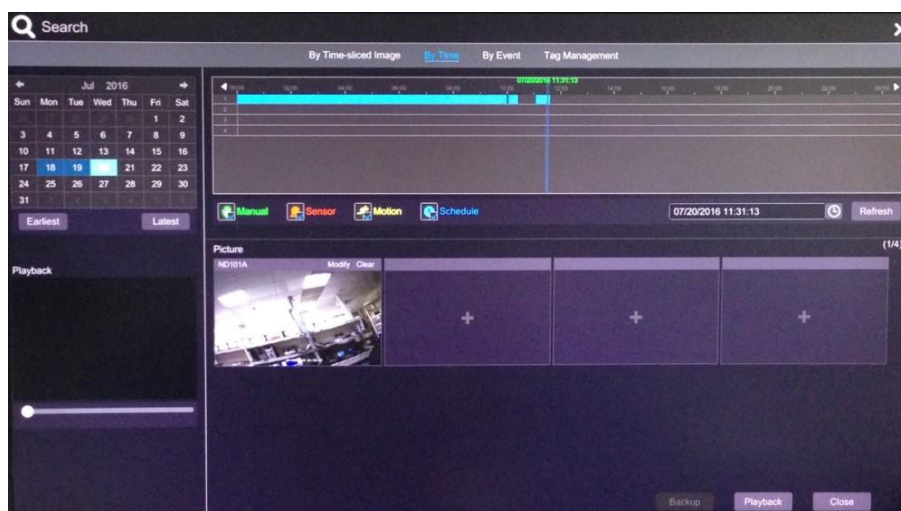
view the record of the last/next day; click “Minute” in the “Picture” option under the time scale to select “Minute” mode (in “Minute” mode, click the time scale to change the time of the 60 display windows) and click “Hour” to select “Hour” mode.

**Method Two:** Click ▶ beside “Camera Thumbnail” on the left top corner of the interface to select the time slice mode.

**Method Three:** Right-click the mouse on any area of the time-sliced interface to go back to the upper interface.

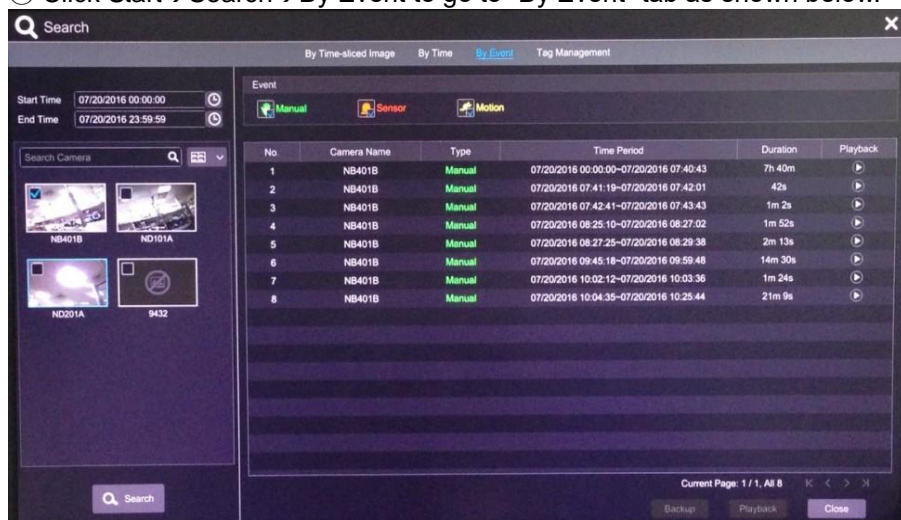
### 6.3.2 Search & playback by time




- ① Click Start→Search→By Time to go to “By Time” tab as shown below.
- ② Click  on the bottom of the interface to add playback camera. A maximum of 16 cameras can be added for playback. Click “Modify” on the top right corner of the camera window to change the camera and click “Clear” to remove the camera.
- ③ Click the camera window to play the record in the small playback box on the left side of the interface. You can set the date on the top left of the interface, check the event type as required and click  the time scale or click under the time scale to set the time. The camera window will play the record according to the time and event type you set.
- ④ Drag the color blocks on the time scale to select the record data and then click “Backup” button for record backup. Click “Playback” button to play the record in the playback interface.



### 6.3.3 Search & playback by event


- ① Click Start→Search→By Event to go to “By Event” tab as shown below.






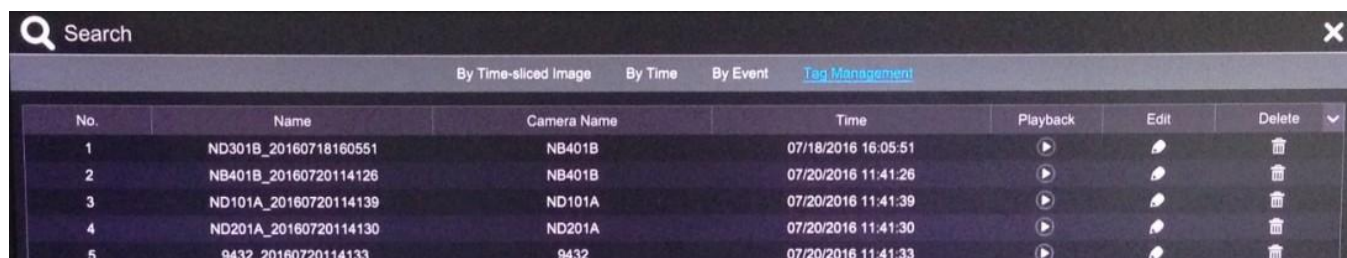
- ② Check the event type in the interface as required.
- ③ Click  to set the start time and end time on the top left of the interface.
- ④ Check cameras on the left side of the interface and then click  to search the record. The searched record will be displayed in the list.
- ⑤ Click  in the list to play back the record in the popup window. Select one record data in the list and then click “Backup” button for record backup.
- ⑥ Select one record data in the list and then click “Playback” button to play the record in the playback interface.


















### 6.3.4 Search & playback by tag management

Only if you add the tags can you play the record by tag search. Click Start→Playback to go to the playback interface and then click  on the bottom of the camera window to add tag when you want to mark the playback time point of the selected camera.

Click Start→Search→Tag Management to go to “Tag Management” tab. Click  in the interface to play the record. Click  to edit the tag name. Click  to delete the tag.



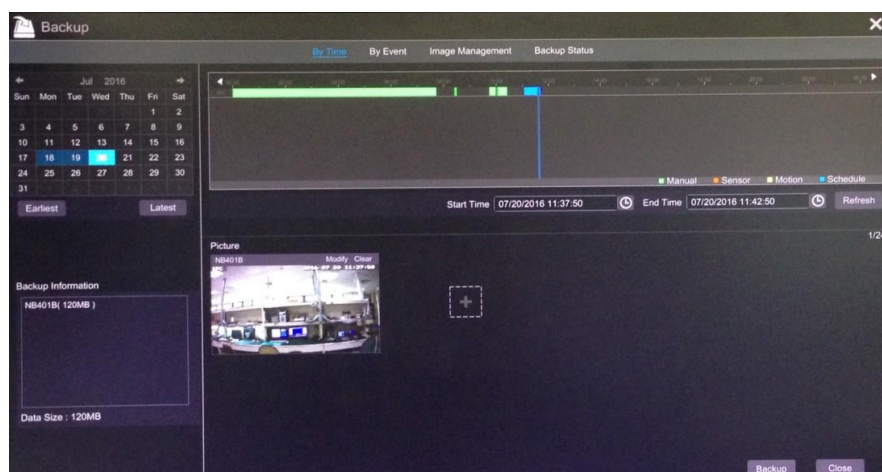
No.	Name	Camera Name	Time	Playback	Edit	Delete
1	ND301B_20160718160551	NB401B	07/18/2016 16:05:51			
2	NB401B_20160720114126	NB401B	07/20/2016 11:41:26			
3	ND101A_20160720114139	ND101A	07/20/2016 11:41:39			
4	ND201A_20160720114130	ND201A	07/20/2016 11:41:30			
5	9432_20160720114133	9432	07/20/2016 11:41:33			


## 6.4 Backup


The record data and the snapped pictures can be backed up through network, USB. The file system of the backup devices should be FAT32 format.

### 6.4.1 Backup by time

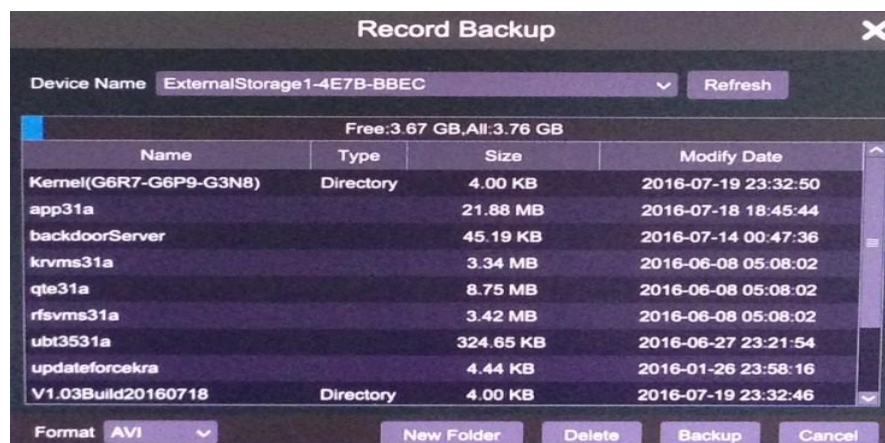
- ① Click Start→Backup→By Time to go to the “By Time” tab.







- ② Click  in the tab to pop up the add camera window. Check the cameras in the window and then click “Add” button. Click “Modify” on the top right corner of the camera window to change the camera and click “Clear” to remove the camera.

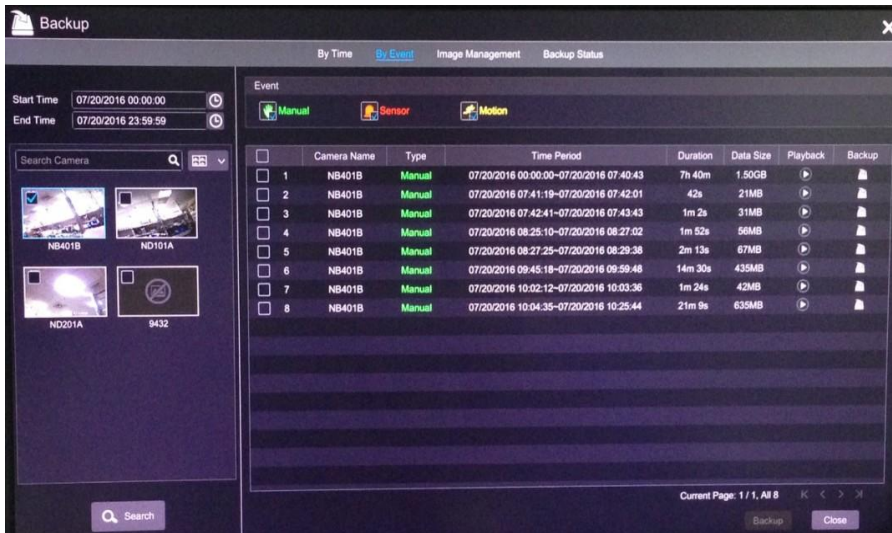
- ③ Set the date on the top left of the interface. Drag the time scale to set the backup time period or click  under the time scale to set the backup start time and end time.

- ④ Click “Backup” button to pop up the “Record Backup” window as shown below. Select the device name, backup format and path and then click “Backup” button to start the backup.



### 6.4.1 Backup by event

- ① Click Start→Backup→By Event to go to “By Event” tab.
- ② Click  to set the start time and end time on the left top of the interface.
- ③ Check the event types and cameras.
- ④ Click  to search the record. The searched record data will be displayed in the list. Click  in the list to play the record in the small popup playback window. Click  to back up the record. Check one record data or above in the list and then click “Backup” button to back up the record data.



# APPENDIX A\_Compatible Devices

## 1. Compatible USB drive after test.

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

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

Brand	Model
LG	GH24NS90

## 3. Compatible HDD

Brand	Model number	Capacity
Western Digital	1600AAJS FW:00L7A0	160GB
	2500AVVS FW:73M8B0	250GB
	3200AVVS	320GB
	5000AVJS FW:63YJA0	500GB
	5000AVVS FW:63M8B0	500GB
	5000AAKS FW:00V1A0	500GB
	5000BUDT (2.5") FW:63G8FY0	500GB
	5000AUDX FW:63WNHY0	500GB
	10EURS FW:630AB1	1TB
	10EVDS FW:63U8B0	1TB
	WD10PURX FW:64D85Y0	1TB
	15EARS FW:00Z5B1	1.5TB
	15EURS FW:63S48Y0	1.5TB
	20EVDS FW:63T3B0	2TB
	20EARS FW:00S8B1	2TB
	2001FASS FW:00U0B0	2TB
	WD20PURX FW:64P6ZY0	2TB
	WD30PURX FW:64P6ZY0	3TB
	WD40PURX FW:64GVNY0	4TB
	WD40EURX FW:64WRWY0	4TB
	*WD60PURX FW:64LZMY0	6TB
HITACHI	HDS721616PLA380	160GB
	HCT721025SLA380	500GB
	HCP725050GLA380	500GB
	HDP725050GLA360	1TB

SEAGATE	ST500DM002 (SATA3) FW:KC44	500GB
	ST3100528AS FW:CC38	1TB
	ST31000524AS (SATA3) FW:JC4B	1TB
	ST2000DL003 (SATA3) FW:CC32, CC3C	2TB
	ST3000VX002 FW:CV12	3TB
	ST3000VX000 FW:SV35	3TB
	*ST6000VX0001 FW:VN02	6TB
TOSHIBA	HCS5C1050DLE630 FW:620DT01ABA050V	500GB
	DT01ABA100	1TB
	DT01ACA100	1TB

**\*Power adapter should be requested more than 12V, 3A to support 6TB HDD.**

## APPENDIX B\_SPCIFICATION

Model		4CH	8CH	16CH
Compression format		H.264 Main Profile		
Video output		VGA × 1, HDM I× 1, CVBS × 1		
Video Input		BNC × 4	BNC × 8	BNC × 16
HDMI/VGA Resolution		1920 × 1080 / 1280 ×1024		
Record Resolution		HA series : 1080P (1920 × 1080) / 720P (1280 × 720) / 960H (960× 480) HH series : 1080P (1920 × 1080) / 720P (1280 × 720) / 960H (960× 480) / 4MP Lite / 5MP Lite		
Total Record Frame Rate AHD+TVI+960H	5MP Lite (HH series)	40FPS (PAL), 40FPS (NTSC)	80FPS (PAL), 80FPS (NTSC)	160FPS (PAL), 160FPS (NTSC)
	4MP Lite (HH series)	60FPS (PAL), 60FPS (NTSC)	120FPS (PAL), 120FPS (NTSC)	240FPS (PAL), 240FPS (NTSC)
	1080P	48FPS (PAL), 60FPS (NTSC)	96FPS (PAL), 120FPS (NTSC)	192FPS (PAL), 240FPS (NTSC)
	720P	100FPS (PAL) , 120FPS (NTSC)	200FPS (PAL) , 240FPS (NTSC)	400FPS (PAL) , 480FPS (NTSC)
	WD1(960H)			
Record Frame Rate IP	IP 960H	25FPS (PAL), 30FPS (NTSC)	25FPS (PAL), 30FPS (NTSC)	200FPS (PAL) , 240FPS (NTSC)
	IP D1			
	IP 720P			
	IP 1080P			
	IP 3M	N/A	12FPS (PAL), 15FPS (NTSC)	
Support IP camera		1 CH	1 CH	4 CH
Audio Input		RCA × 4		
Audio output		RCA × 1		
Alarm Input		4		
Alarm output		1		
Record Mode		Manual / Timer / Motion detection		
Network Interface		RJ45		
PTZ control		YES		
Communication interface		RS485, USB2.0 × 2 (one for backup, another for USB mouse)		RS485, USB2.0 × 1, USB3.0 × 1 (one for backup, another for USB mouse)
Disk info		SATA × 1 (10TB)		SATA × 2 (10TB)
Remote controller		Optional		
Power Supply		DC12V		
Temperature		0℃-50℃		
Humidity		10%-90%		