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

## 4/8/16/32 CH

 NVR
## Quick Guide

## 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 $4 / 8 / 16 / 32$-channel digital video recorders.

Default User name / Password
User Name : admin
Password: 123456

## 1. Product Features

### 1.1 Main Features

- Real-time surveillance
- High resolution VGA output and HDMI output
- 2 way audio
-4G Mobile surveillance(iPhone/iPad/ Android)
- Adjustable record resolution, frame rate and quality
- Data back with USB thumb drive. Each backup file size is 128 MB .
- Storage :

4 / 8 CH : Support 1 SATA HDD ; 16 CH : Support 2 SATA HDD ;
32 CH : Support 8 SATA HDD ;
FAT32 file system to record for a longer time without any limitation.

- Compression with latest H. 265 video compression, better video quality and lower compression rate.
- Multi-record mode : manual, schedule, sensor and motion record.
- HDD recycle record.
- Single or Multi channel playback
- Record file lock protection
- 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

Support network function
Multi connection type : TCP / IP, PPPoE, DHCP, DNS, UPnP, NTP, SMTP, HTTP, HTTPs, RTSP, ONVIF, etc.

Support DDNS / NAT (P2P network penetration function)
Support event trigger to send E-mail
Remote connection limitation
Auto bandwidth adjustment by network status

- Event log and search
- 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

### 1.2 Rear Panel Instructions

## $4 / 8 \mathrm{CH}$ :



Rear Panel for 4/8 CH

| Name | Descriptions |
| :--- | :--- |
| DC12V | DC12V Power Input. |
| USB | To connect external USB devices like USB flash, USB HDD for <br> backup or update firmware; or connect to USB mouse |
| LAN | Network port |
| HDMI | Connect to high-definition display device |
| VGA | VGA output, connect to monitor |

16 CH :


Rear Panel for 16-ch

| Name | Descriptions |
| :--- | :--- |
| DC12V | DC12V Power Input. |
| USB | To connect external USB devices like USB flash, USB HDD for <br> backup or update firmware; or connect to USB mouse |
| LAN | Network port |
| HDMI | Connect to high-definition display device |
| VGA | VGA output, connect to monitor |
| AUDIO IN | 1CH Audio Input. |
| AUDIO OUT | 1CH Audio output, connect to the sound box. |
| ALARM IN | support 8CH external sensor |
| ALARM OUT | 4CH relay output. Connect to external alarm |
| RS485 | Connect to keyboard or speed dome; A is TX/RX + ; B is TX/RX - |

## 32 CH :



Rear Panel for 32-ch

| Name | Descriptions |
| :--- | :--- |
| Power Supply | ATX 250W |
| USB | To connect external USB devices like USB flash, USB HDD for <br> backup or update firmware; or connect to USB mouse |
| LAN | Network port |
| HDMI | Connect to high-definition display device |
| VGA | VGA output, connect to monitor |
| AUDIO IN | 1CH Audio Input. |
| AUDIO OUT | 1CH Audio output, connect to the sound box. |
| ALARM IN | Support 16CH external sensor |
| ALARM OUT | 4CH relay output. Connect to external alarm |
| RS485 | Connect to keyboard or speed dome; A is TX/RX +; B is TX/RX - |
| E-SATA | External HDD for backup |

1.3 Remote Controller (Optional) 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.
$86800 \mathrm{Ci}+0 \sim 080000^{\circ}$
$88080080-1080000$

Remote Controller

| Button | Function |
| :---: | :---: |
| U Power Button | Switch off-to stop DVR. Use it before turning off the power |
| Record Button | To record manually |
| -/-- /0-9 Digital Button | Input number or choose camera |
| Fn1 Button | Unavailable temporarily |
| Multi Button | To choose multi screen display mode |
| Next Button | To switch the live image |
| SEQ | To enter into auto dwell mode |
| Audio | To enable audio output in live mode |
| Switch | To switch the output between BNC and VGA |
| Direction button | To move cursor in setup or pan/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 | To enter into track setting in PTZ mode |
| Wiper Button | To enable wiper function in PTZ mode |
| Light Button | To enable light function in PTZ mode |
| Clear Button | To return to the previous interface |
| Fn2 Button | Unavailable temporarily |
| Info Button | Get information about DVR like firmware version, HDD information |
| А | To control playback. Play/Pause/Stop/Previous Section/Next Section/Rewind/Fast Forward |
| Snap Button | To take snapshots manually |
| Search Button | To enter into search mode |


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

```
※ Switch Remote Control ID
Take remote control and point to DVR then continuously press " " ", " ", " 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.

## (2)Text-input

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

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| q | w | e | r | t | y | $u$ | i | $\bigcirc$ | p |
| a | s | d | $f$ | g | h | j | k | 1 | < |
| 令 | z | x | c | v | b | n | m |  | - |
| EN |  |  | $\square$ |  | @ |  |  | \#?! |  |

## 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 NVR.
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 NVR).

### 2.2 Shutdown

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

## (1)By 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.

## (2) By 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

1. Choose the language and locality as needed if it is the first time for you to use the wizard. Click "Next" to continue.

2. Read the privacy statement and then click" I have read and agree". Click "OK" to continue.

## Privacy statement

We fully respect your privacy, so we hereby prepare this Application Privacy Statement
(hereinafter referred to as th is statement) so that you can understand how we collect, use,
disclose, protect, store, and transmit your personal data. Please read this statement carefully. If
you have any questions, please let us know.
Personal information refers to all kinds of information recorded electronically or otherwise that can verify the personal identity of a natural person, either independently or in combination with other information. This statement describes how we process your personal information but does not cover all scenarios. The products or services discussed. mentioned. and introduced in this
statement are not all available to everyone or in all geographical locations. How specific products or services process your personal information is published by us in a special privacy notice or supplemental statement for that product or service. In addition to this statement, it is
recommended that you read the privacy notice or supplementary statement when using specific products or services.
This statement applies only to personal and enterprise products, including computer applications, mobile internet applications, software, toolkits, and services that display or refer to this statement.

This statement will help you understand the following:

1. How we collect and use your personal information
2. How we use cookies and similar technologies
3. Date and Time Configuration :The date and time of the system need to be set up if you use the wizard for the first time. Refer to the following figure. Set the time zone, system time, date format and time format. The DST will be enabled by default if the time zone selected includes DST. Click "Next" to continue.

| Wizard |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Time Zone | GMT+88 Beijing. Hong Kong, Shanghai, $\mathrm{T}_{\mathrm{z}}$ V |  |  |  |
| Systern Time | 2019:10V99 12:86:3 |  | (1) |  |
| Date Format | YearMonth/Day |  | $\checkmark$ |  |
| Time Format | 12-Hour |  | $\checkmark$ |  |
| DST | OFF |  | $\checkmark$ |  |
| Synchronous | Manual |  | $\checkmark$ |  |
| NTP Server | bime.windowsioam |  | $\checkmark$ |  |
| Video Format | NTSC |  | $\checkmark$ |  |
|  |  | Previous |  | Next |

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


Enable pattern lock and click "Edit" to set the pattern lock.


Click "Edit Security Question" to set questions and answers for password security of admin. Click "Next" to continue or click "Cancel" to exit the wizard.

5. Disk Settings : You can view the disk number, disk capacity of the NVR and serial number, R\&W status of the disk. Click "Formatting" to format the disk. Click "Next" to continue.

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

7. 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.

8. Add Camera : Click "Refresh" to refresh the list of online IP cameras which are in the same local network with NVR and then click + to add the searched camera. Click "Add All" to add all the cameras in the list. Click to 哣 delete the added camera. Click "Delete All" to delete all the added cameras.


Click $\Delta$ to edit the searched IP camera as shown on the below. Input the new IP address, subnet mask, gateway, username and the password of the camera. Click "OK" to save the settings.


Click $\Delta$ to edit the added camera as shown on the above. 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.

9. Disk Mode(Only 32CH) : Click "Enable RAID" to enable the RAID function. Click "Next" to continue.

10. 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.

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

11. QRCode : 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.


## 12. Cloud Upgrade :

Enable "Cloud Upgrade" and then click "OK" to save. If this function is enabled, you can get the latest version from the cloud server. (This function is still in the testing stage and will be available after subsequent firmware upgrades.)


### 2.4 Main interface

### 2.4.1 Main interface introduction



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

| Button |  |
| :--- | :--- |

Introduction of area (2) :
Area (2) is hidden by default. Move the cursor to the right to reveal this area. 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 on the top right corner and then select "Single Channel Sequences" to view all the added groups in the group list; click one group in the list to view all the added cameras in the group. Select one camera window on the left side of the interface and then double click one group in the group list to preview the cameras' images one by one in the selected window.

Click on the top right corner and then select "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.

Click on the top right corner and then select "Face Match" to go to face recognition interface. (This function is only available for models with face recognition function).

Introduction of area (3) :

| Icon / Button | Meaning |
| :---: | :---: |
| $\underset{\text { admin }}{8}$ | It shows the current login user. |
| (33) Intelligent Analytics | Click it to go to the intelligent analytics interface |
| Q Search and Backup | Click it to go to record search interface. |
| (-) Playback | Click it to go to playback interface (click on the tool bar at the bottom |
| Sottings | Click it to pop up the setup panel. |
| $\rho$ Logout | Click it to log out the system. |
| (1) Shutdown | Click it and then select "Logout", "Reboot" or "Shutdown" in the |

### 2.4.2 Setup panel

Click Start $\rightarrow$ 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

## 3. Camera Management

### 3.1 Add camera

The network of the NVR should be set before adding IP camera. Refer to the pictures below. Click Add Camera in the setup panel or $\boldsymbol{+}$ 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.


### 3.1.2 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 亩 to delete the camera. Click "Default Password" to set the default username and password of each camera.


### 3.1.3 Add Recorder



Quickly Add : Select the searched NVR/DVR and the click "Add" to add NVR in the same local network. Manually Add: Click "Manual Add" and then enter the IP address or domain name, port, username and password of the NVR/DVR. Check the added remote channel number and click "Test" . Then click "OK" to return to the previous interface.


Note: Only the local NVR has unoccupied channels, may the IPC of other NVR/DVR in the same local network be added. And the added IPC supports previewing and recording.

### 3.2 Edit camera

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


## 4. Live Display

### 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 (manually record on, instant playback, enable audio, snap, zoom in, PTZ control and camera info). The tool bar is introduced in the table below.

| Button | Menu List | Meaning |
| :---: | :---: | :---: |
| : ${ }_{\text {: }}$ | -- | Move tool. Click it to move the tool bar anywhere. |
| O | Manually Record | Click it to start recording. |
| $D$ | Instant Playback | Click $\triangle$ to playback the record; click "Instant Playback" to select or self-define the instant playback time. |
| 4 | Enable Audio | Click it to enable audio. You can listen to the camera audio by enabling audio. |
| \% | Snap | Click it to pop up the snap window. Click "Save" in the window to save the image. Click "Export" to export the image. |
| $\bigcirc$ | PTZ Control | Click it to go to PTZ control interface. |


| © | Zoom In | Click it to go to single channel amplification interface. |
| :---: | :---: | :---: |
| ()) $=$ | Image adjust | Click it to go to image adjustment interface. |
| U | Start/Close Talk | Click it to start talk. |
| 2) | Face Recognition | Click it to go to single channel face comparison interface ( only applicable to some |

The single channel amplification interface is as shown below. Press and drag the blue box to select the zoom in area. Click $Q / \mathbb{Q}$ 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(24×7) 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(24x7) Record+Motion Record+Sensor Record: Normal record is enabled all the time; motion/sensor alarm record will be enabled when motion/sensor alarm happens.
Always(24 x 7) Record+Motion Record+Sensor Record+Analytics Record : Normal record is enabled all the time; motion/sensor/analytics alarm record will be enabled when motion/sensor/analytics 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.

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 Type : CBR and VBR are optional. CBR means that no matter how much change is seen in the video scene, the compression bitrate will be kept constant. VBR means that the compression bitrate will be adjusted according scene changes. For example, for scenes that do not have much movement, the bitrate will be kept at a lower value. This will help to optimize the network bandwidth.
Quality : When VBR is selected, you need to choose image quality. The higher the image quality you choose, the more bitrate will be required.
Max Bitrate : 32Kbps $\sim 10240 \mathrm{Kbps}$ are optional.
GOP : group of pictures.

### 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 $\rightarrow$ Settings $\rightarrow$ Disk $\rightarrow$ Disk Management to go to disk management interface. You can view the NVR' s disk number and disk status and so on in the interface. Click "Formatting" button to format the HDD.


## Note :

1. The new HDD should be formatted for normal use.
2. For normal use of the HDD which has been used in other NVR, if the NVR is of the same model with the new NVR, please import the configuration file of the NVR to the new NVR or format the HDD; if the models of the two NVRs 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 |
| :---: | :---: |
| 圆 | Start button．Click it to pop up area（2）． |
| 回 | Full screen button．Click it to show full screen；click it again to exit the full |
| 田 | Screen mode button． |
| － | OSD ON button．Click it to enable OSD；click \％to disable OSD． |
| $\square$ | Stop button． |
| 4 | Rewind button．Click it to play video backward． |
| $\nabla$ | Play button．Click it to play video forward． |
| II | Pause button． |
| $\pm$ | Deceleration button．Click it to decrease the playing speed． |
| － | Acceleration button．Click it to increase the playing speed． |
| 4 | 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－${ }^{\text {－}}$ to step backward 30s and click＋${ }^{+}$to step forward 30s． |
| 앙） | Play back by Smart event． |
| Pos | Open／close POS information． |
| 盶 | 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． |
| － | Back button．Click it to return． |

Introduction of area（2）：

| Button | Meaning |
| :--- | :--- |
| （2．Intelligent Analytics | Click it to go to the intelligent analytics interface． |
| Q Search and Backup | Click it to go to record search and backup interface． |
| Live Display | 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 |
| :--- | :--- | :--- |
| E- | Move tool. Click it to move the tool bar anywhere. |  |
| $\boldsymbol{B}$ | Snap | Click it to snap. |
| $\boldsymbol{Q}$ | Zoom In | 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 |  |  |

Introduction of area (4) :
Click 뜹 to set the date; click (ㄴ) 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
 intelligence record; : POS 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 Q / Q to zoom the timeline; click (22) 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 $\Delta$ to show the hidden time on the top of the timeline or click $\nabla$ 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 $\rightarrow$ Search and Backup $\rightarrow$ 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 / $\boldsymbol{D}$ 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 $\rightarrow$ Search and Backup $\rightarrow$ By Time to go to "By Time" tab as shown below.
(2) Click $\ddagger$ 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 requir (©) 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 $\rightarrow$ Search and Backup $\rightarrow$ By Event to go to "By Event" tab as shown below.

(2) Check the event type in the interface as required.
(3) Click (ㄷ) 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 $a$ 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 $\rightarrow$ Playback to go to the playback interface and then click $\star \star$ 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 $\rightarrow$ Search and Backup $\rightarrow$ Tag Management to go to "Tag Management" tab. Click in the interface to play the record. Click to edit the tag name. Click 會 to delete the tag.


### 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 Search and Backup By Time to go to the "By Time" tab.

(2) Click $\mp$ 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 Search and 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 $a$ 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 | $512 \mathrm{MB}, 1 \mathrm{G}, 2 \mathrm{~GB}$ |
| Transcend | 4 GB |
| Kingston | 2 GB |
| Toshiba | 2 GB |
| SanDisk | 4 GB |

2. Compatible external USB CD/DVD writers after test

| Brand | Model |
| :--- | :--- |
| LG | GH24NS90 |

## 3. Compatible HDD

| Brand | Model number | Capacity |
| :---: | :--- | :---: |
| Western <br> Digital | WD10PURX FW : 64D85Y0 | 1 TB |
|  | WD20PURX FW : 64P6ZYO | $2 T B$ |
|  | WD30PURX FW : 64P6ZY0 | 3TB |
|  | WD40PURX FW : 64GVNY0 | $4 T B$ |
|  | WD40EURX FW : 64WRWY0 | $4 T B$ |
|  | *WD60PURX FW : 64LZMY0 | $6 T B$ |
| SEAGATE | ST1000VX005 FW : CV12 | 1 TB |
|  | ST2000VX007(SkyHawk Lite) FW : CV11 | $2 T B$ |
|  | ST2000VX008 FW : CV12 | $2 T B$ |
|  | ST3000VX002 FW : CV12 | $3 T B$ |
|  | ST4000VX000 FW : CV11 | $4 T B$ |
|  | ST6000VX0003 FW : SC60 | $6 T B$ |
|  | ST8000VX0002 FW : AV01 | 8TB |
|  | ST10000VX0004 FW : AV01 | 10 TB |

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

## APPENDIX B_SPCIFICATION



