



Figure 4-155

Click , you can set corresponding disk to the hotspare disk.

- Private hotspare: Please select the RAID disk to be added. It becomes the hotspare disk of the specified RAID.
- Global hotspare: It is not for just one RAID. It is for all RAID disks.

#### Tips

Click the  to delete the hotspare disk.

## 4.11.5 System

### 4.11.5.1 General

#### 4.11.5.1.1 Device

General setting includes the following items. See Figure 4-156.

- Device ID: Please input a corresponding device name here.
- Device No: Here you can set device number.
- Language: System supports various languages: Chinese (simplified), Chinese (Traditional), English, Italian, Japanese, French, Spanish (All languages listed here are optional. Slight difference maybe found in various series.)
- Video standard: There are two formats: NTSC and PAL.
- HDD full: Here is for you to select working mode when hard disk is full. There are two options: stop recording or rewrite. If current working HDD is overwritten or the current HDD is full while the next HDD is no empty, then system stops recording, If the

current HDD is full and then next HDD is not empty, then system overwrites the previous files.

- Pack mode: It is for you to specify record duration. There are two modes: Time length/File length.
  - Time length: It is to pack according to time length. The value ranges from 1 to 60 minutes. Default value is 60 minutes.
  - File length: It is to pack according to file length. The value ranges from 128M to 2048M. Default value is 1024M.
- Real-time playback: It is to set playback time you can view in the preview interface. The value ranges from 5 to 60 minutes.
- Auto logout: Here is for you to set auto logout interval once login user remains inactive for a specified time. Value ranges from 0 to 60 minutes.
- IPC Time Sync: You can input an interval here to synchronize the DVR time and IPC time.
- Navigation bar: Check the box here, system displays the navigation bar on the interface.
- Startup wizard: Once you check the box here, system will go to the startup wizard directly when the system restarts the next time. Otherwise, it will go to the login interface.
- Mouse property: You can set double click speed via dragging the slide bard. You can Click Default button to restore default setup.



Figure 4-156

4.11.5.1.2 Date and Time

The interface is shown as in Figure 4-157.

- Date format: There are three types: YYYY-MM-DD: MM-DD-YYYY or DD-MM-YYYY.
- Date separator: There are three denotations to separate date: dot, beeline and solidus.
- DST: Here you can set DST time and date. Here you can set start time and end time by setting corresponding week setup or by setting corresponding date setup.
- NTP: It is to set NTP server information.



Figure 4-157

#### 4.11.5.1.3 Holiday

Holiday setup interface is shown as in Figure 4-158. Click Add new holiday button, you can input new holiday information. See Figure 4-159. Here you can set holiday name, repeat mode and start/end time.

#### Note

- When you enable Holiday settings and schedule setup at the same time, holiday setting has the priority. If the selected day is a holiday, then system records as you set in holiday setting. If it is not a holiday, system records as you set in Schedule interface. Please note
- Please note, there is no year setup on the holiday setup. For example, if you set 30th Oct, 2012 as a holiday, then the date of 30th Oct in each year will be set as a holiday.

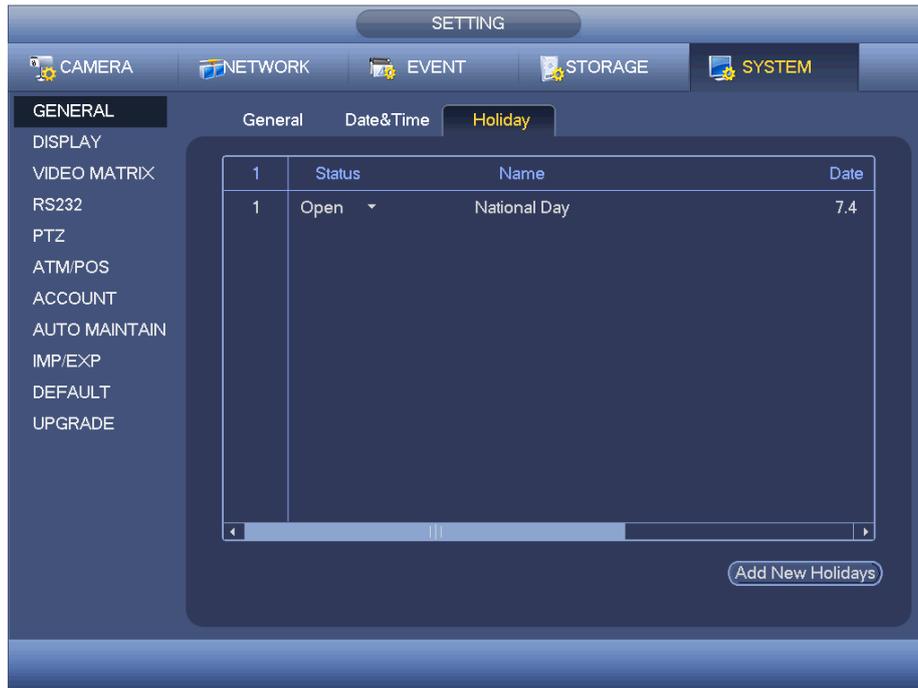


Figure 4-158



Figure 4-159

#### 4.11.5.2 Display

##### 4.11.5.2.1 Display

Display setup interface is shown as below. See Figure 4-160.

- Time display: You can select to display time or not when system is playback.
- Channel display: You can select to channel name or not when system is playback.

- Image original rate: Check the box here, the video can be displayed at its actual size.
- Transparency: Here is for you to adjust menu transparency. The higher the value is, the more transparent the menu is.
- Resolution: There are four options: 1920×1080, 1280×1024(default),1280×720,1024×768. Please note the system needs to reboot to activate current setup.
- Preview enhance: Check the box; it can optimize the video quality of the preview video.

Please highlight icon  to select the corresponding function.

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

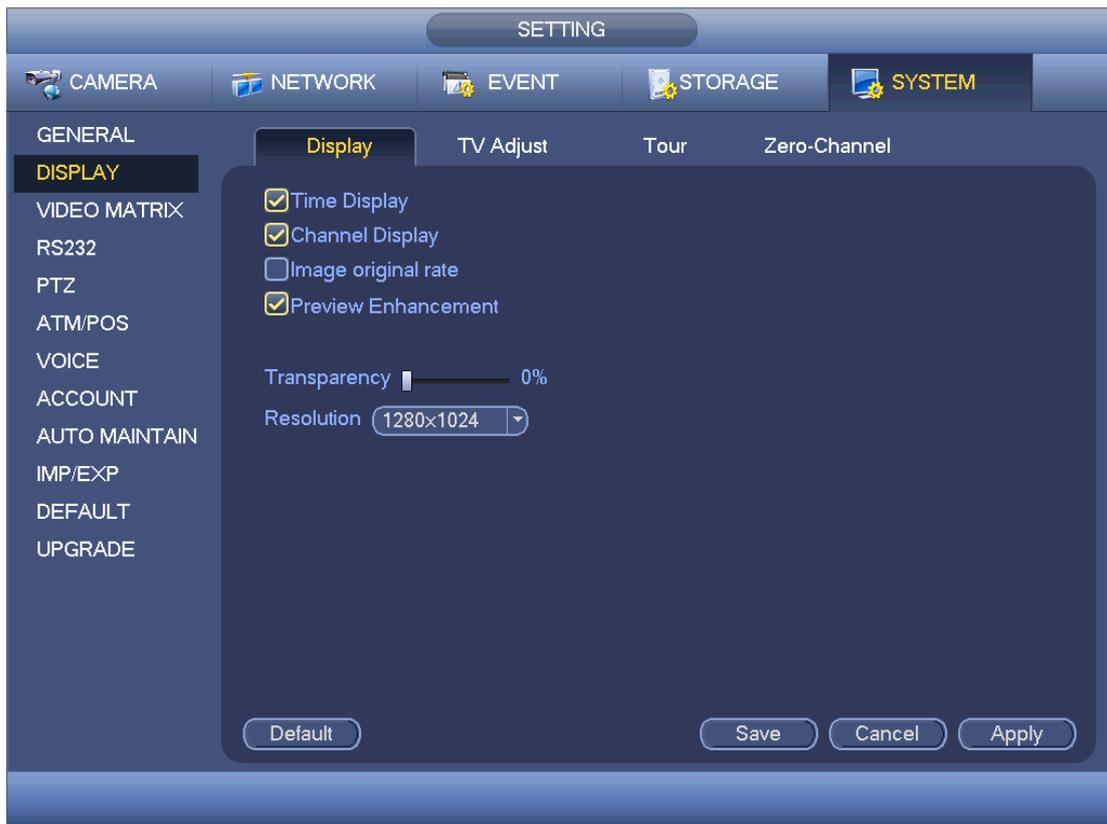


Figure 4-160

#### 4.11.5.2.2 TV Adjust

Here is for you to adjust TV output setup. See Figure 4-161.

Please drag slide bar to adjust each item.

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



Figure 4-161

#### 4.11.5.2.3 Tour

Here you can activate tour function. Click Setup button, you can see an interface shown as in Figure 4-162

- Enable tour: Highlight box here to enable this function.
- Interval: System supports 1/8/-window tour. Input proper interval value here. The value ranges from 5-120 seconds. It is for schedule tour/alarm/motion detect tour.
- Split: You can select window split mode from the dropdown list.
- Channel group: It is to display all channel groups on current split mode. You can edit and delete a channel group here. Double click an item in the list; you can edit its channel group setup. Right now system max supports 32.
- Add: Under specified window split mode, click it to add channel group.
- Delete: Click it to remove selected channel group.
- Move up: Click it to move current selected channel up.
- Move down: Click it to move current selected channel down.
- Default: Click it to restore default setup.

**Tips:**

- Use mouse or Shift button to switch  and  button to enable /disable tour. 

 means the tour function is enabled and  means the tour function is disabled.

- On the navigation bar, click  or  to enable/disable tour function.



Figure 4-162

#### 4.11.5.2.4 Zero-channel Encoding

Click zero-channel encoding button, you can go to the following interface. See Figure 4-163. Here you can enable and set zero-channel encoding function so that you can view several video sources at one channel.

- Enable: This function is disabled by default. Check the box here to enable this function so that you can control the zero-channel encoding function at the WEB.
- Compression: System default setup is H.264. You can set according to device capability.
- Resolution: The resolution value may vary due to different device capabilities. Please select from the dropdown list.
- Frame rate: The frame rate value may vary due to different device capabilities. Please select from the dropdown list.
- Bit Rate: The bit rate value may vary due to different device capabilities and frame rate setups. Please select from the dropdown list.
- Save: Click the Save button to save current setup. If this function is disabled, you can not operate zero-channel encoding function at the WEB, the video is black or null even you operate when the function is disabled. After you enabled this function, login the Web and you can select zero-channel encoding mode at the right corner of the

interface . Select a mode; you can view the local preview video.



Figure 4-163

#### 4.11.5.3 Video Matrix

Here you can set matrix output channel and its interval. You can set HDMI2 port tour and its interval See Figure 4-164.

- Enable tour: Check the box here to enable this function.
- Interval: Input proper interval value here.
- Resolution: The resolution of the tour window. Please note this function is for HDMI only.
- Split: You can select window split mode from the dropdown list. For BNC, it supports 1-split mode only. For HDMI, it supports 1/4/9/16-split mode.
- Add: Under specified window split mode, click it to add channel group. See Figure 4-165.
- Modify: Double click a channel or select a channel and then click Modify button, you can change current channel setup. See Figure 4-166.
- Delete: Click it to remove selected channel group.
- Move up: Click it to move current selected channel up.
- Move down: Click it to move current selected channel down.
- Default: Click it to restore default setup.



Figure 4-164



Figure 4-165



Figure 4-166

#### 4.11.5.4 RS232

RS232 interface is shown as below. There are five items. See Figure 4-167.

- 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.

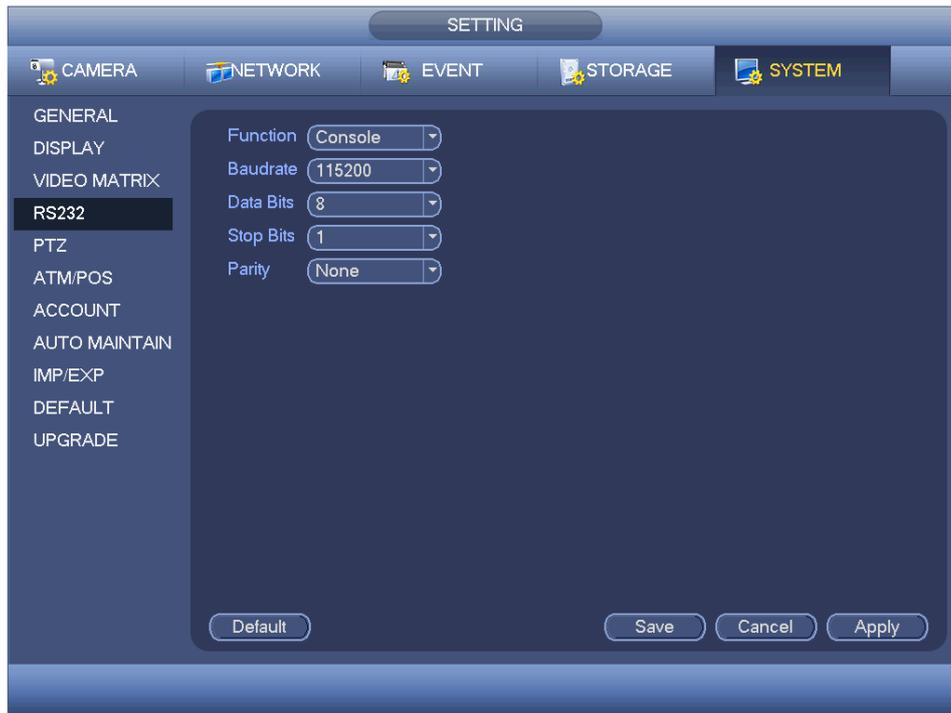


Figure 4-167

#### 4.11.5.5 PTZ

The pan/tilt/zoom setup includes the following items. Please select channel first. See Figure 4-168.

- PTZ type: There are two options: local/remote. Please select remote if you are connecting to the network PTZ. See Figure 4-169.
- Control mode: You can select control mode from the dropdown list. There are two options: Serial/HDCVI. For HDCVI series product, please select HDCVI. The control signal is sent to the PTZ via the coaxial cable. For the serial mode, the control signal is sent to the PTZ via the RS485 port.
- Protocol: Please select HD-CVI if the control mode is HDCVI.
- Address: input corresponding PTZ address.
- Baud rate: Select baud rate.
- Data bit: Select data bit.
- Stop bit: Select stop bit.
- Parity: There are three choices: none/odd/even.

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



Figure 4-168

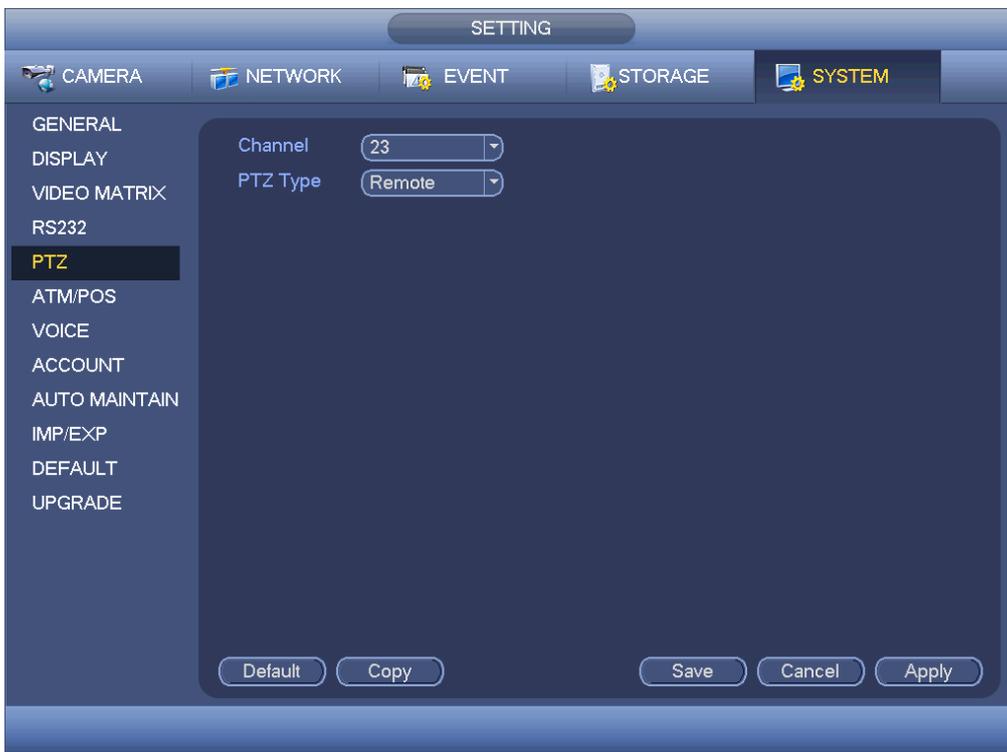


Figure 4-169

#### 4.11.5.6 ATM/POS

The ATM/POS function is for financial areas. It includes Sniffer, information analysis and title overlay function. The Sniffer mode includes COM and network.

#### 4.11.5.6.1 COM Type

The COM interface is shown as below. See Figure 4-170.

- Protocol: Please select from the dropdown list.
- Overlay channel: Please select the channel you want to overlay the card number.
- Overlay mode: There are two options: preview and encode. Preview means overlay the card number in the local monitor video. Encode means overlay the card number in the record file.
- Overlay Position: Here you can select the proper overlay position from the dropdown list.

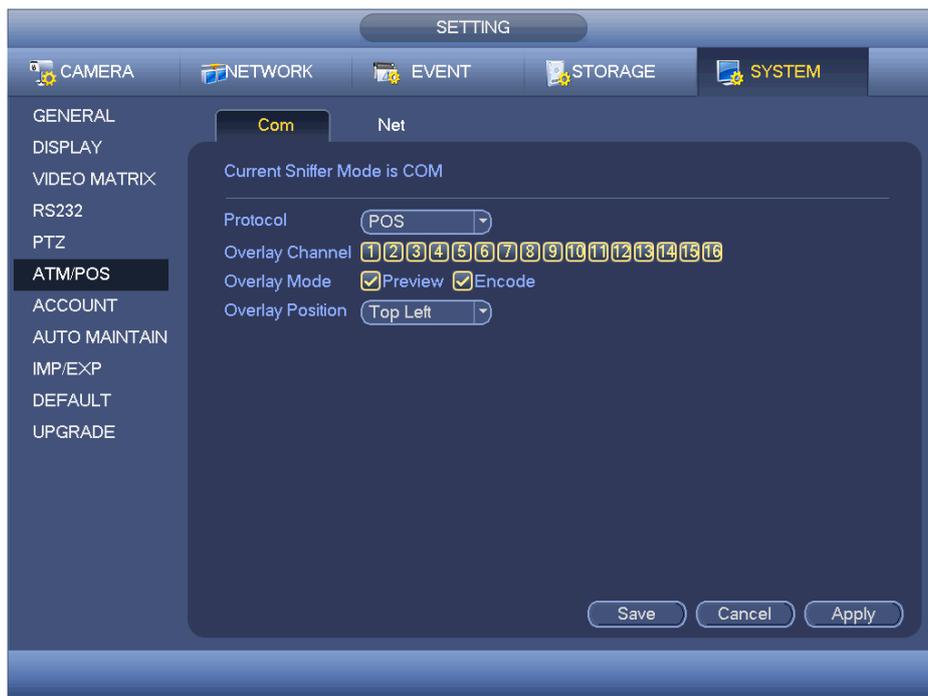


Figure 4-170

#### 4.11.5.6.2 Network Type

The network type interface is shown as below. See Figure 4-171.

Please use network type if you using network to connect to the device. The interface is generally the same as the COM mode. The protocol depends on your self-developed protocol. The setup may vary since connected device or the protocol is not the same.

Here we take the ATM/POS protocol to continue.

- Protocol: It is to set COM sniffer protocol. You need to select protocol according to your own development situation.
- Overlay mode: There are two options: preview and encode. Preview means overlay the card number in the local monitor video. Encode means overlay the card number in the record file. You can view the corresponding information when playback.
- Overlay Position: Here you can select the proper overlay position from the dropdown list.
- Data group: There are total four groups IP.

- Source IP: Source IP refers to host IP address that sends out information (usually it is the device host.)
- Destination IP: Destination IP refers to other systems that receive information.
- Source port/destination port: Please input according to your own situation.
- Record channel: It is for you to check record channel. The record channel applies to one group (optional) only.
- Frame ID: Six frame ID groups verification can guarantee information validity and legal. You need to input start position, length, key and etc according to your communication protocol and data packet contents.



Figure 4-171

In Figure 4-171, click data button after frame ID, you can see an interface shown as in Figure 4-172. Here you can set field start position, length, and overlay title.



Figure 4-172

#### 4.11.5.7 Voice

The audio function is to manage audio files and set schedule play function. It is to realize audio broadcast activation function.

##### 4.11.5.7.1 File List

Here you can add audio file, listen to the audio file, or rename/delete audio file. Here you can also set audio volume. See Figure 4-173.



Figure 4-173

Click Add button, you can add audio file and import the audio file via the USB device. See Figure 4-174.

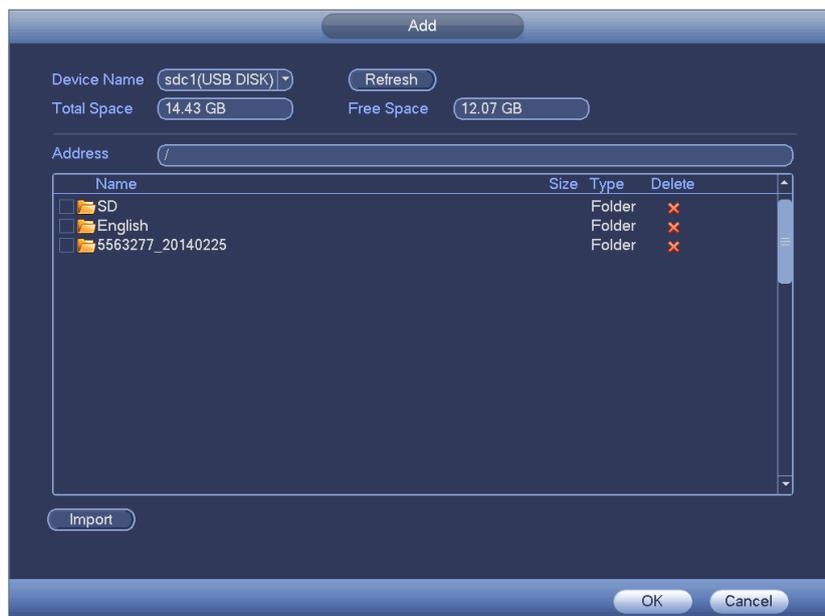


Figure 4-174

The audio file can be saved on the HDD or on the USB device.

- In Figure 4-173, when it is HDD mode, the newly added audio file can be saved on the HDD automatically. You do not need to connect to the USB device if you want to use it the next time.
- In Figure 4-173, when it is USB mode, after you imported, you need to connect the USB device all the time; otherwise, the audio link function may fail. So, if you want to use the audio trigger function, please make sure the audio file is on the UBS device and the USB device has connected to the DVR before the DVR boots up. You need to make sure the USB device connection is always there if you want to manage and use the audio file function.
- If there is a USB device (containing the audio file) and the HDD (containing the audio file) at the same time, the HDD mode has higher priority. That is to say, DVR uses the audio file from the HDD.

#### 4.11.5.7.2 Schedule

It is to set schedule broadcast function. You can play the different audio files in the specified periods. See Figure 4-175.

- Period: There are six periods. Check the box to enable current setup.
- File name: Select audio file you want to play.
- Interval: It is the audio file repeated interval in the specified period.
- Repeat: It is to set audio file repeat times in the specified period.
- Output port: There are two options: MIC (default)/audio. When reuse the MIC port and bidirectional talk port, the bidirectional port has the higher priority. Please note some series product does not support audio function.

#### Note

- The audio file end time depends on the audio file size and the interval setup.
- Priority: Bidirectional talk>Event trigger alarm>Trial listening>Audio schedule broadcast.



Figure 4-175

#### 4.11.5.8 Account

Here is for you to implement account management. It includes three interfaces: User/group/security question. See Figure 4-176.

Here you can:

- Add new user
- Modify user
- Add group
- Modify group
- Modify password.
- Reset security questions.

For account management please note:

- For the user account name and the user group, the string max length is 6-byte. The backspace in front of or at the back of the string is invalid. There can be backspace in the middle. The string includes the valid character, letter, number, underline, subtraction sign, and dot.
- The default user amount is 64 and the default group amount is 20. System account adopts two-level management: group and user. No limit to group or user amount.
- For group or user management, there are two levels: admin and user.
- The user name and group name can consist of eight bytes. One name can only be used once. There are four default users: admin/888888 and hidden user "default".
- Hidden user "default" is for system interior use only and can not be deleted. When there is no login user, hidden user "default" automatically login. You can set some rights such as monitor for this user so that you can view some channels without login.
- One user should belong to one group. User right can not exceed group right.
- About reusable function: this function allows multiple users use the same account to login.
- About user account and MAC. When you add a new user, you can input the MAC address of current user. Only the user of the same MAC address can access the device remotely. (MAC address is for the device of the same LAN.) If you leave MAC address item in blank when you add a new user, the user of any MAC address can access the device remotely. You can set or change MAC address when you add or modify a user. The MAC address function is also valid for PSS login. **Please note current function does not support IPV6.**



Figure 4-176

## 4.11.5.8.1 Add User

Click modify user button  in Figure 4-176, the interface is shown as in Figure 4-177. Please input the user name, password, select the group it belongs to from the dropdown list.

Then you can check the corresponding rights for current user.

For convenient user management, usually we recommend the general user right is lower than the admin account.

- **Username:** admin. **Password:** admin. (administrator, local and network)
- **Username:** 888888. **Password:** 888888. (administrator, local only)
- **Username:** default. **Password:** default (hidden user). Hidden user "default" is for system interior use only and can not be deleted. When there is no login user, hidden user "default" automatically login. You can set some rights such as monitor for this user so that you can view some channels without login.

Add User

User Name

Password  Confirm Password

Memo  User MAC

Group

Period

Authority

System	Playback	Monitor
<input checked="" type="checkbox"/> All		
<input checked="" type="checkbox"/> ACCOUNT	<input checked="" type="checkbox"/> SYSTEM	<input checked="" type="checkbox"/> DISCONNECT USER <input checked="" type="checkbox"/> DEFAULT&UPGRADE
<input checked="" type="checkbox"/> PTZ	<input checked="" type="checkbox"/> INFO	<input checked="" type="checkbox"/> MANUAL CONTROL <input checked="" type="checkbox"/> BACKUP
<input checked="" type="checkbox"/> COLOR	<input checked="" type="checkbox"/> STORAGE	<input checked="" type="checkbox"/> EVENT <input checked="" type="checkbox"/> NETWORK
<input checked="" type="checkbox"/> CAMERA	<input checked="" type="checkbox"/> CLEAR LOG	<input checked="" type="checkbox"/> SHUTDOWN

Save Cancel

Figure 4-177

When you create a new user, you can input the corresponding MAC address of current user. If you leave this item in blank, any MAC address user can share this user account to login. Please note system needs to check the validity of MAC. Only the 12-digit 0-f format address can pass the validity verification. System only saves small character even you input capitalized one. You can see the corresponding prompt if there is any illegal input.

Click the Set button after the period, you can set valid period to use current account. See Figure 4-178.



Figure 4-178

Click Set button, you can set six periods in one day. See Figure 4-179.  
Check the box after the period, you can enable current setup.



Figure 4-179

#### 4.11.5.8.1 Modify user

Click , you can go to the following interface to change user information. See Figure 4-180.

For admin, 888888, and default (hidden user), you can not change period setup.

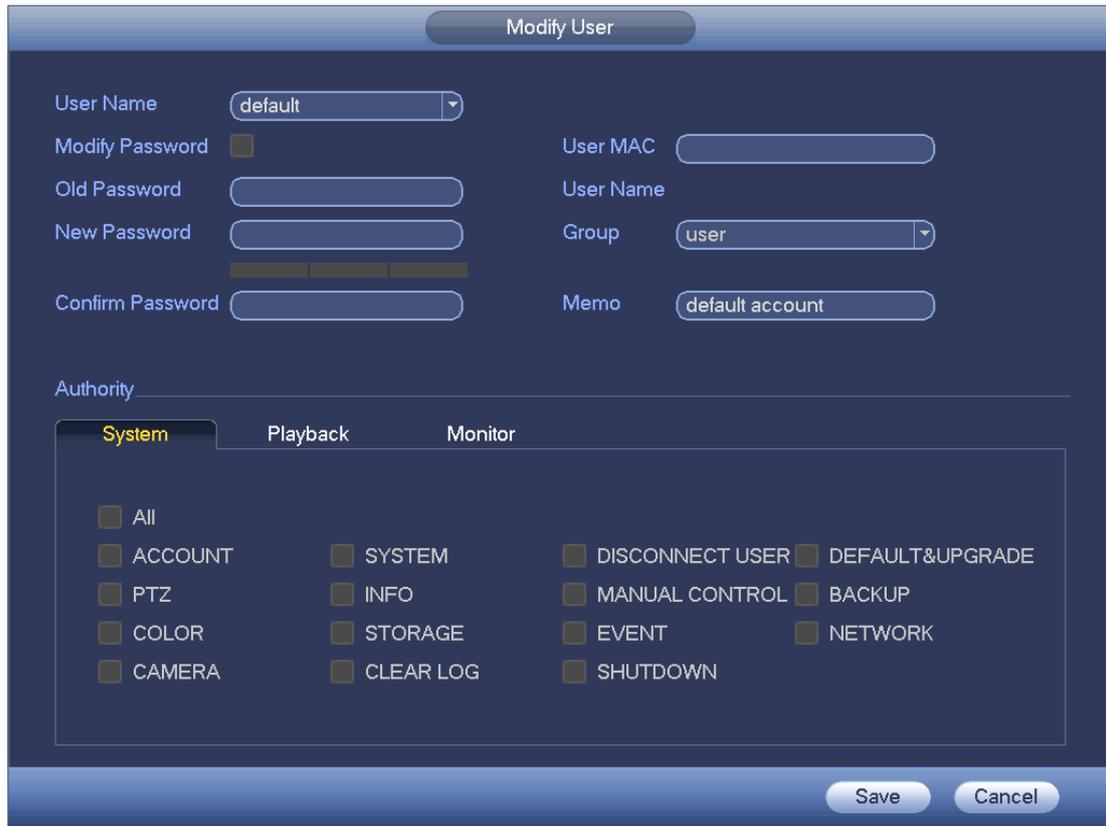


Figure 4-180

#### 4.11.5.8.2 Change Password

In Figure 4-180, check the Modify password box, you can change password. Please input old password, and then input new password twice to confirm.

The password can contain 32-byte and the space at the begin or at the end of the password are null. It can contain in the middle of the password. For the user of account right, it can change the password of other users.

#### 4.11.5.8.1 Add/Modify Group

In Figure 4-176, click Group button, you can see the following interface. See Figure 4-181.



Figure 4-181

Click add group button in Figure 4-181 , the interface is shown as below. See Figure 4-182.

Here you can input group name and then input some memo information if necessary. There are total 98 rights such as control panel, shut down, real-time monitor, playback, record, record file backup, PTZ, user account, system information view, alarm input/output setup, system setup, log view, clear log, upgrade system, control device and etc.



Figure 4-182

#### 4.11.5.8.1 Security Question

The security question is shown as below. See Figure 4-183. Here you can change security questions.

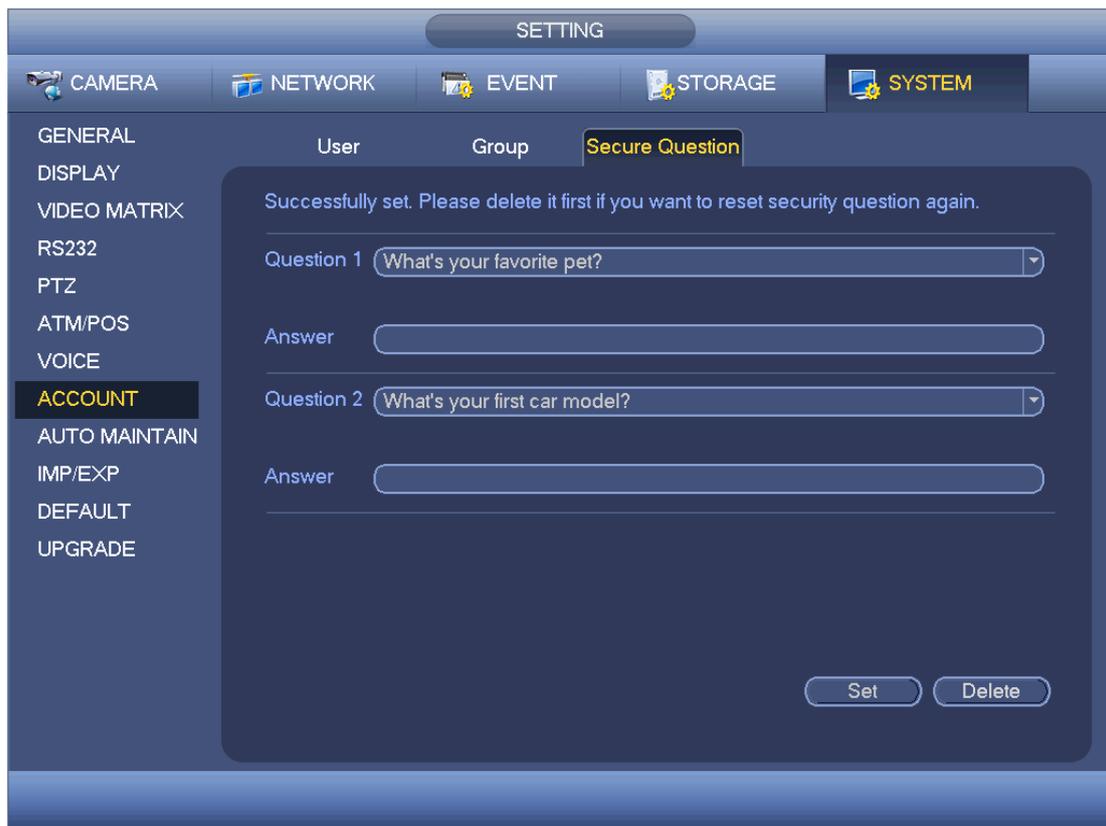


Figure 4-183

#### 4.11.5.9 Auto Maintain

Here you can set auto-reboot time and auto-delete old files setup. You can set to delete the files for the specified days. See Figure 4-184.

You can select proper setup from dropdown list.

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

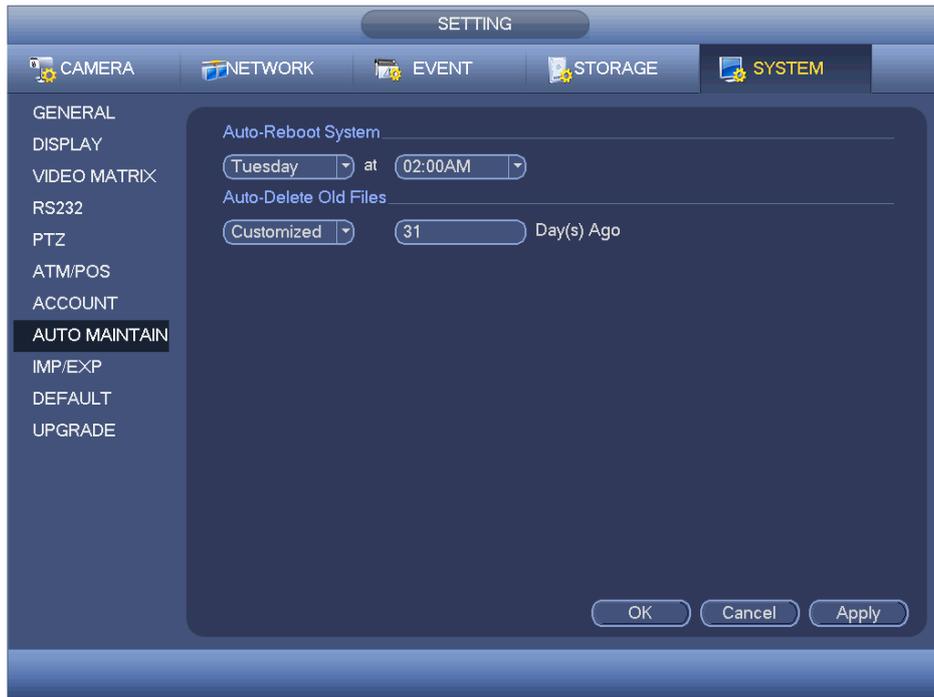


Figure 4-184

#### 4.11.5.10 Config Backup

The configuration file backup interface is shown as below. See Figure 4-185.

This function allows you to import/export system configuration. You can use this function when there are several devices need the same setup.

- **Export:** Please connect the peripheral device first and then go to the following interface. Click Export button, you can see there is a corresponding "Config\_Time" folder. Double click the folder, you can view some backup files.
- **Import:** Here you can import the configuration files from the peripheral device to current device. You need to select a folder first. You can see a dialogue box asking you to select a folder if you are selecting a file. System pops up a dialogue box if there is no configuration file under current folder. After successfully import, system needs to reboot to activate new setup.
- **Format:** Click Format button, system pops up a dialogue box for you to confirm current operation. System begins format process after you click the OK button.

**Note:**

- System can not open config backup interface again if there is backup operation in the process.

- System refreshes device when you go to the config backup every time and set current directory as the root directory of the peripheral device.
- If you go to the configuration backup interface first and then insert the peripheral device, please click Refresh button to view the newly added device.

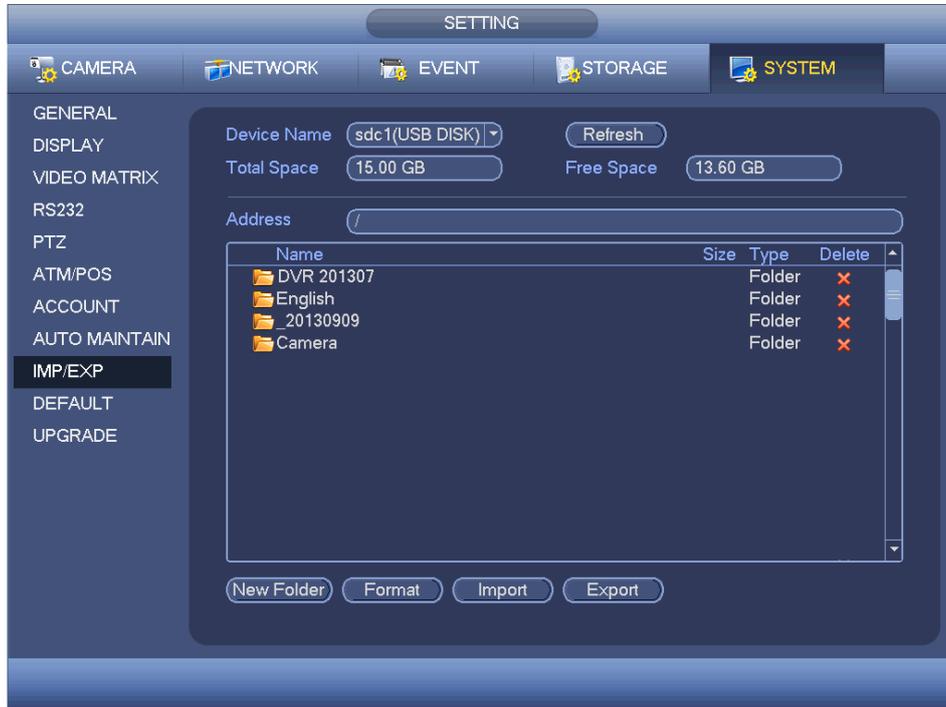


Figure 4-185

#### 4.11.5.11 Default

Click default icon, system pops up a dialogue box. You can highlight  to restore default factory setup. See Figure 4-186.

- Camera
- Network
- Event
- Storage
- System

#### Tips

Click Factory default button, system pops up a dialogue box to remind you. Click OK button to restore factory default setup.

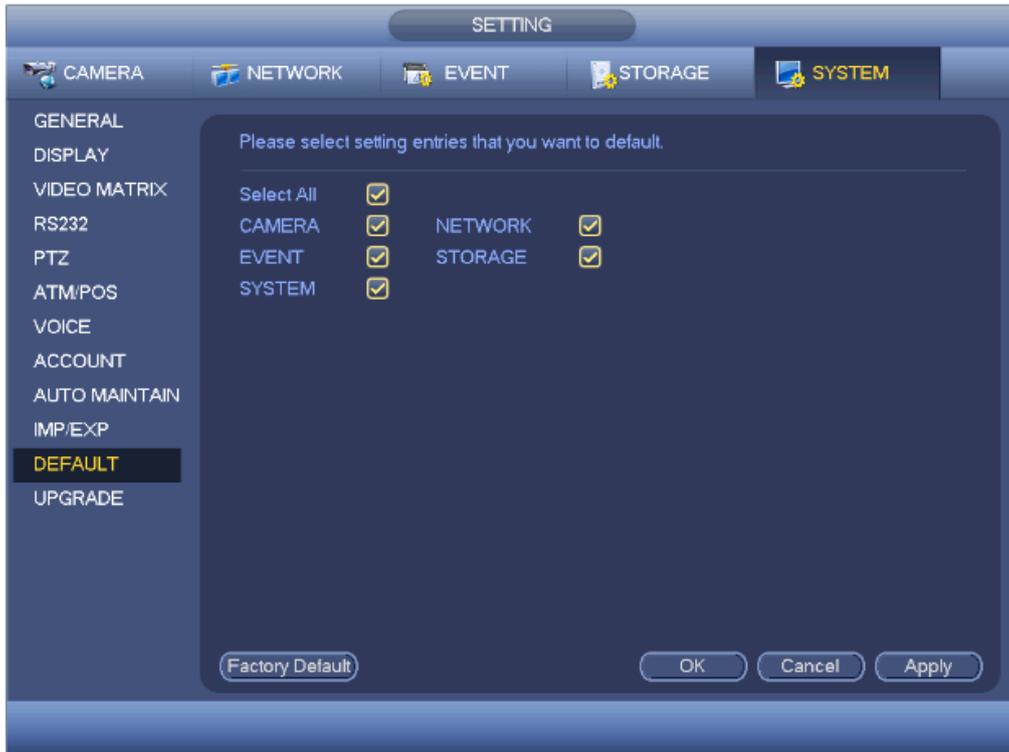


Figure 4-186

#### 4.11.5.12 Update

Here is for you to view hardware features, software version, built date, release SN information and etc. You can also update system here. See Figure 4-187.

- Start: Please insert the USB device that have the update file to the device and then click the Start button to begin the update.

#### Important

**Please make sure the upgrade file name shall be update.bin.**



Figure 4-187

When DVR boots up, during the uboot process, it can auto detect the USB device and its corresponding file. System can auto upgrade if it detects the upgrade file.



**Important**

- In the USB device, there shall be two files: “u-boot.bin.img” and “update.img”
- The USB device shall at the front panel of the device, otherwise, system can not upgrade properly. .