

the HDD. If there is no HDD, other types of logs are saved in the system memory too.

- The logs are safe when you format the HDD. But the logs may become loss once you removed the HDD.

4.11 Setting

4.11.1 Camera

4.11.1.1 Remote Device (For digital channel only)

Note

You can see this interface after you set IP channel in chapter 4.11.1.3.5. System supports ONVIF standard protocol.

4.11.1.1.1 Remote Device

In the main menu, from Camera ->Remote, you can go to an interface shown as in Figure 4-63. Here you can add/delete remote device and view its corresponding information.

- IP search: Click it to search IP address. It includes device IP address, port, device name, manufacturer, type. Use your mouse to click the item name, you can refresh display order. Click IP address, system displays IP address from small to large. Click IP address again, you can see icon, system displays IP address from large to small. You can click other items to view information conveniently.
- Add: Click it to connect to the selected device and add it to the Added device list. Support Batch add.

You can see the corresponding dialogue box if all digital-channel has connected to the front-end.

System can not add new device if the device you want to add has the same IP and TCP port as the device in the list.





- Show filter: You can use it to display the specified devices from the added device.
- Edit: Click button  or double click a device in the list, you can change channel setup.
- Delete: Please select one device in the Added device list and then click  to remove.
- Status:  means connection is OK and  means connection failed.
- Delete; Select a device on the Added device list, click Delete button, system disconnect device first and then remove its name from the list.
- Manual add: Click it to add the IPC manually. The port number is 37777. The default user name is admin and password is admin.



Figure 4-63

Click the Manual Add button; you can go to the following interface. See Figure 4-64. Channel number: The dropdown list here displays unconnected channel number. You can go to Figure 4-63 to set remote channel connection.

Please note:

- This series product supports the IPC from many popular manufactures such as Sony, Hitachi, Axis, Samsung, Dynacolor, Arecont, Onvif and Dahua.
- System default IP address is 192.168.0.0 if you do not input IP address. System will not add current IP address.
- You can not add two or more devices in the Manual Add interface (Figure 4-64). Click OK button, system connects to the corresponding front-end device of current channel on the interface.



Figure 4-64


- Show filter: It is to filter the searched device.
 - None: it is to display all searched devices.
 - IPC: It is to display all cameras.
 - DVR: It is to display all storage devices such as NVR, DVR.
- Change IP:
 - ✧ Click , you can change the information such as IP address, subnet mask, and default gateway of the checked device. See Figure 4-65.



Figure 4-65


- ✧ You can check several devices at the same time and then click the edit button . See Figure 4-66. Please check Batch modify button and then input start IP, end IP and default gateway.



Figure 4-66

- IP Export

System can export the Added device list to your local USB device.

Please insert the USB device and then click the Export button; you can see the following interface. See Figure 4-67.

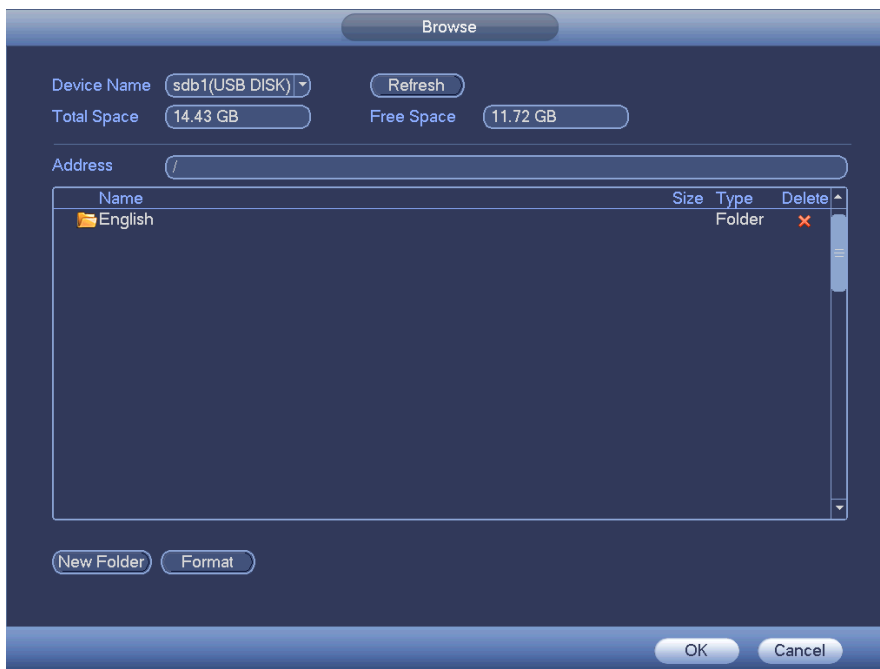


Figure 4-67

Select the directory and then click the OK button. System pops up a dialogue box to

remind you successfully exported. Please click OK button to exit.

Note

The exported file extension name is .CVS. The file information includes IP address, port, remote channel number, manufacturer, user name and password.

- IP Import

Click Import button, you can see the following interface. See Figure 4-68.

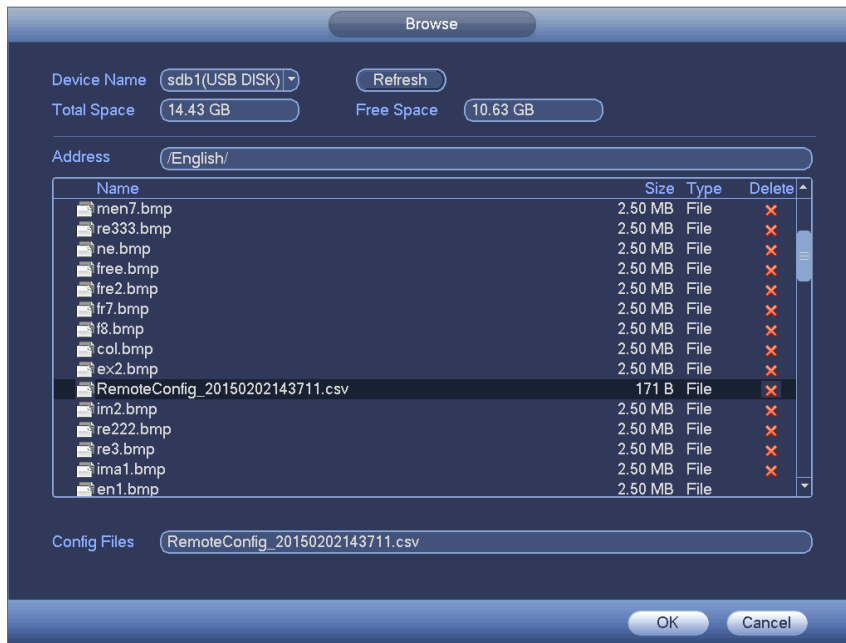


Figure 4-68

Select the import file and then click the OK button. System pops up a dialogue box to remind you successfully exported. Please click OK button to exit.

Note:

If the imported IP has conflicted with current added device, system pops up a dialogue box to remind you. You have two options:

- OK: Click OK button, system uses the imported setup to overlay current one.
- Cancel: Click Cancel button, system adds the new IP setup.



Important

- You can edit the exported .CVS file. **Do not change the file format; otherwise it may result in import failure.**
- Does not support customized protocol import and export.
- The import and export device shall have the same language format.

4.11.1.1.2 Channel Status

Here you can view the IPC status of the corresponding channel such as motion detect, video loss, tampering, alarm and etc. See Figure 4-69.






- IPC status: : Front-end does not support. : Front-end supports. : There is alarm event from current front-end.
- Connection status: : Connection succeeded. : Connection failed.
- Refresh: Click it to get latest front-end channel status.



Figure 4-69

4.11.1.1.3 Firmware

It is to view channel, IP address, manufacturer, type, system version, SN, video input, audio input, and etc. See Figure 4-70.



Figure 4-70

4.11.1.2 Image

For analog channel, the interface is shown as in Figure 4-71. For digital channel, the interface is shown as in Figure 4-72.

- Channel: Select a channel from the dropdown list.
- Saturation: It is to adjust monitor window saturation. The value ranges from 0 to 100. The default value is 50. The larger the number, the stronger the color is. This value has no effect on the general brightness of the whole video. The video color may become too strong if the value is too high. For the grey part of the video, the distortion may occur if the white balance is not accurate. Please note the video may not be attractive if the value is too low. The recommended value ranges from 40 to 60.
- Brightness: It is to adjust monitor window bright. The value ranges from 0 to 100. The default value is 50. The larger the number is, the brighter the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. You can use this function when the whole video is too dark or too bright. Please note the video may become hazy if the value is too high. The recommended value ranges from 40 to 60.
- Contrast: It is to adjust monitor window contrast. The value ranges from 0 to 100. The default value is 50. The larger the number is, the higher the contrast is. You can use this function when the whole video bright is OK but the contrast is not proper. Please note the video may become hazy if the value is too low. If this value is too high, the dark section may lack brightness while the bright section may over exposure. The recommended value ranges from 40 to 60.
- Sharpness: The value here is to adjust the edge of the video. The value ranges from 0 to 100. The larger the value is, the clearer the edge is and vice versa. Please note there is noise if the value here is too high. The default value is 50 and the recommended value ranges from 40 to 60.
- Mirror: It is to switch video up and bottom limit. This function is disabled by default.
- Flip: It is to switch video left and right limit. This function is disabled by default.
- BLC: It includes several options: BLC/WDR/HLC/OFF.
- ✧ BLC: The device auto exposures according to the environments situation so that the darkest area of the video is cleared
- ✧ WDR: For the WDR scene, this function can lower the high bright section and enhance the brightness of the low bright section. So that you can view these two sections clearly at the same time. The value ranges from 1 to 100. When you switch the camera from no-WDR mode to the WDR mode, system may lose several seconds record video.
- ✧ HLC: After you enabled HLC function, the device can lower the brightness of the brightest section according to the HLC control level. It can reduce the area of the halo and lower the brightness of the whole video.
- ✧ OFF: It is to disable the BLC function. Please note this function is disabled by default.
- Profile: It is to set the white balance mode. It has effect on the general hue of the video. This function is on by default. You can select the different scene mode such as

auto, sunny, cloudy, home, office, night, disable and etc to adjust the video to the best quality.

- ✧ Auto: The auto white balance is on. System can auto compensate the color temperature to make sure the vide color is proper.
- ✧ Sunny: The threshold of the white balance is in the sunny mode.
- ✧ Night: The threshold of the white balance is in the night mode.
- ✧ Customized: You can set the gain of the red/blue channel. The value reneges from 0 to 100.
- Day/night. It is to set device color and the B/W mode switch. The default setup is auto.
- ✧ Color: Device outputs the color video.
- ✧ Auto: Device auto select to output the color or the B/W video according to the device feature (The general bright of the video or there is IR light or not.)
- ✧ B/W: The device outputs the black and white video.
- ✧ Sensor: It is to set when there is peripheral connected IR light.
- Image enhancement: It is to enhance video quality. The larger the value is, the clearer the video is. But the noise may become large too.
- 2D NR: It is to process the noise of the single image. The video may become soft after process. The larger the value is, the better the effect is.
- 3D NR: it is to process the multiple-frame (at least two frames). It is to use the frame information between the following two frames to reduce noise. The larger the value is, the better the effect is.



Figure 4-71



Figure 4-72

4.11.1.3 Encode

It is to set video bit stream, picture bit stream, video overlay parameter and etc.

4.11.1.3.1 Video

Video setting includes the following items. See Figure 4-73.

- Channel: Select the channel you want.
- SVC: SVC is so called scaled video coding. Check the box to enable this function. During the network transmission process, system discards unimportant frames when the bandwidth is not sufficient or the decode capability is low. It is to guarantee video quality and transmission fluency.
- Type: Please select from the dropdown list. There are three options: regular/motion detect/alarm. You can set the various encode parameters for different record types.
- Compression: System supports H.264H, H.264, H.264B, and MJPEG.
 - ◇ H.264H: It is the High Profile compression algorithm. It has the high encode compression rate. It can achieve high quality encode at low bit stream. Usually we recommend this type.
 - ◇ H.264 is the general compression algorithm.
 - ◇ H.264B is the Baseline algorithm. Its compression rate is low. For the same video quality, it has high bit stream requirements.
- Resolution: System supports various resolutions, you can select from the dropdown list. Please note the option may vary due to different series.
- Frame rate: It ranges from 1f/s to 25f/s in NTSC mode and 1f/s to 30f/s in PAL mode.
- Bit rate type: System supports two types: CBR and VBR. In VBR mode, you can set video quality.

- Quality: There are six levels ranging from 1 to 6. The sixth level has the highest image quality.
- Video/audio: You can enable or disable the video/audio.
- Audio format: Please select from the dropdown list. There are three options: G711a/G711u/PCM.
- Audio source: Please select from the dropdown list. There are two options: normal/HDCVI. For normal mode, the audio signal is from the Audio In port. For HDCVI mode, the audio signal is from the coaxial cable of the camera.
- Audio sampling rate: The audio sampling rate refers to the device audio sampling rate per second. The options include: 8/16/32K. The higher the rate is, the more natural and impressive the audio is. The default setup is 8K.



Figure 4-73

4.11.1.3.2 Snapshot

Here you can set snapshot mode, picture size, quality and frequency. See Figure 4-74.

- Snapshot mode: There are two modes: regular and trigger. If you set timing mode, you need to set snapshot frequency. If you set trigger snapshot, you need to set snapshot activation operation.
- Image size: Here you can set snapshot picture size.
- Image quality: Here you can set snapshot quality. The value ranges from 1 to 6.
- Interval: It is for you to set timing (schedule) snapshot interval.



Figure 4-74

4.11.1.3.3 Overlay

Overlay interface is shown as in Figure 4-75.

- Cover area: Here is for you to set cover area. You can drag you mouse to set proper section size. In one channel video, system max supports 4 zones in one channel.
- Preview/monitor: privacy mask has two types. Preview and Monitor. Preview means the privacy mask zone can not be viewed by user when system is in preview status. Monitor means the privacy mask zone can not be view by the user when system is in monitor status.
- Time display: You can select system displays time or not when you playback. Please click set button and then drag the title to the corresponding position in the screen. System supports time display and channel display at the same time.
- Channel display: You can select system displays channel number or not when you playback. Please click set button and then drag the title to the corresponding position in the screen. System supports time display and channel display at the same time.
- Copy: After you complete the setup, you can click Copy button to copy current setup to other channel(s). You can see an interface is shown as in Figure 4-76. You can see current channel number is grey. Please check the number to select the channel or you can check the box ALL. Please click the OK button in Figure 4-76 and Figure 4-75 respectively to complete the setup.

Please highlight icon  to select the corresponding function.



Figure 4-75

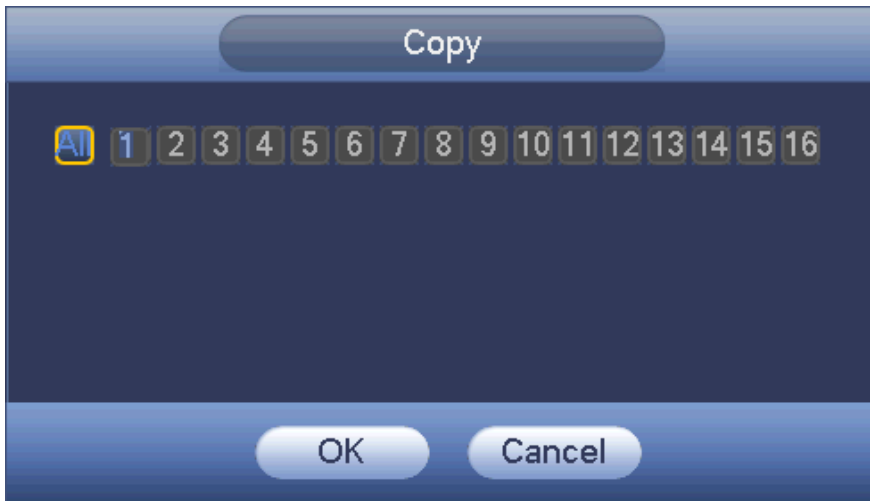


Figure 4-76

4.11.1.3.4 Channel Name

It is to modify channel name. It max supports 31-character. See Figure 4-77.



Figure 4-77

4.11.1.3.5 Channel Type

- **This function is for some series only. Some series products support analog standard definition connections/analog HD connection/network camera connection while some series products support analog HD connection/network camera connection only.**
- **For HDCVI signal and analog standard definition signal, system can auto recognize channel type, there is no need to set or restart. For analog channels, the interface here is to display channel type only. You can change cable mode (Coaxial/UTP) if you are using HDCVI.**
- **For analog channel, if there is no video connection, it only displays the previous connection record. It can auto display current connection type after you connect the camera.**

It is to set channel type. Each channel supports analog camera (analog standard definition/HDCVI) /network camera connection. Please note DVR needs to restart to activate new setup. The network camera connection shall begin with the last channel. For


the 16-channel (or higher) series product, please click  to go to the next page to set. See Figure 4-78.



Figure 4-78

Important

Add/cancel IP CAM function is for some 4/8/16-channel series product only.

- Add IP CAM: Click it; you can add corresponding X IP channels. Here X refers to the product channel amount such as 4/8/16 (For 16-channel series product, click once, it can add 16 IP channels). System needs to restart to activate new setup. See Figure 4-79.



Figure 4-79

For example, there is a 4-channel analog device, after the A/D switch, it can max supports 4 analog channels and 4 IP channels. Once it has become the 3+1 mode (3 analog channels+1 IP channel), you click **Add IP CAM** button, system becomes 3+5 mode (3 analog channels+5 IP channel).

- **Cancel IP CAM:** Click it, you can cancel IP channel. System needs to restart to restore original status.

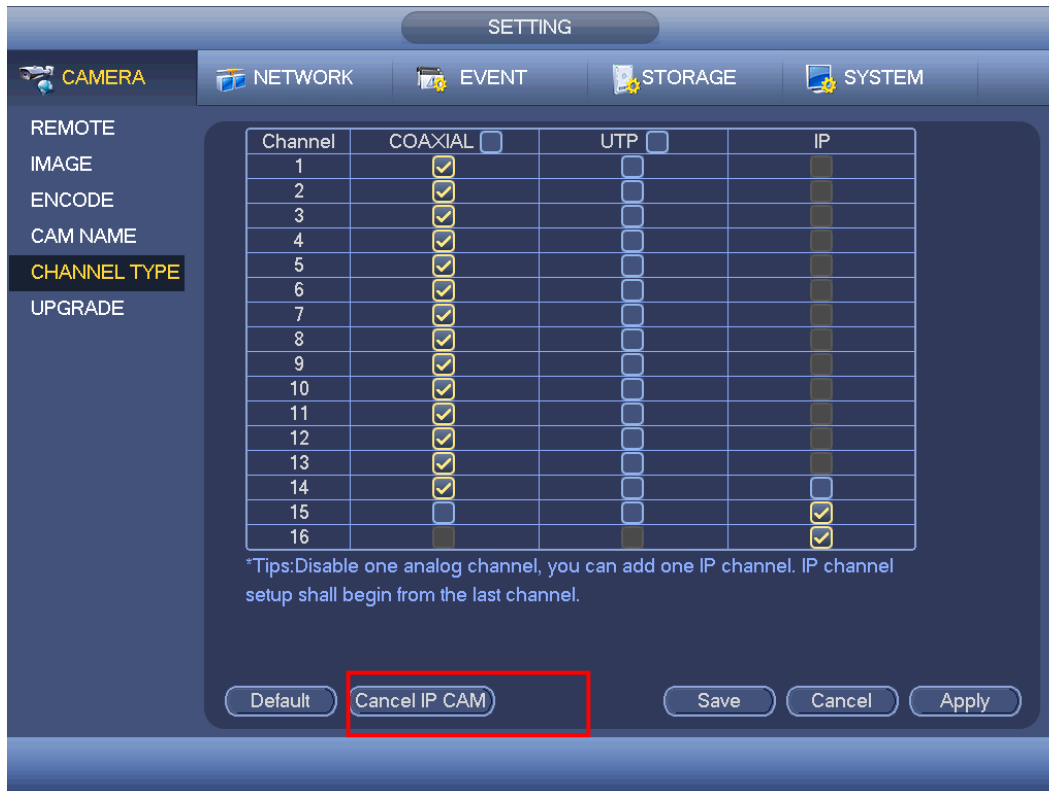


Figure 4-80

4.11.1.3.6 Upgrade

It is to update the camera.

From main menu->setting->camera->remote upgrade, the interface is shown as below. See Figure 4-81.

Click Browse button and then select the upgrade file. Then select a channel (or you can select device type filter to select several devices at the same time.)

Click Start upgrade button to update. You can see the corresponding dialogue once the upgrade is finish.



Figure 4-81

4.11.2 Network

4.11.2.1 TCP/IP

The single network adapter interface is shown as in Figure 4-82 and the dual network adapters interface is shown as in Figure 4-83

- Network Mode : Includes multiple access, fault tolerance, and load balancing
 - ✧ Multiple-address mode: eth0 and eth1 operate separately. You can use the services such as HTTP, RTP service via eth0 or the eth1. Usually you need to set one default card (default setup is eth0) to request the auto network service from the device-end such as DHCP, email, FTP and etc. In multiple-address mode, system network status is shown as offline once one card is offline.
 - ✧ Network fault-tolerance: In this mode, device uses bond0 to communicate with the external devices. You can focus on one host IP address. At the same time, you need to set one master card. Usually there is only one running card (master card). System can enable alternate card when the master card is malfunction. The system is shown as offline once these two cards are both offline. Please note these two cards shall be in the same LAN.
 - ✧ Load balance: In this mode, device uses bond0 to communicate with the external device. The eth0 and eth1 are both working now and bearing the network load. Their network load are general the same. The system is shown as offline once these two cards are both offline. Please note these two cards shall be in the same LAN.
- Default Network Card: Please select eth0/eth1/bond0(optional) after enable multiple-access function
- Main Network Card: Please select eth0/eth1 (optional).after enable multiple