H.265/H.264
HDMI Video Encoder
Quick Star Guide

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Preface

Thanks for purchasing our products. The video encoder is mainly used for CCTV surveillance, IPTV live broadcast, WeMedia broadcast, major sports broadcast, remote teaching, tele-medicine, wedding ceremonies, video conference etc. It adopts high performance SOC which is capable of collection, compression and transmission of video and audio together. Integrated with H.265 video encoding algorithm, it can be better to transmit and save the videos by halving storage space and bandwidth. The embedded web server allows users to easily monitor and remotely control front-end video from browsers like IE, Microsoft Edge, Google Chrome, Firefox, Safari etc. If possible, it's recommended to use Google Chrome directly.

The tested streaming media servers include Tencent Cloud, Alibaba Cloud, Baidu Cloud, 163Yun, QINIU, AUDIANYUN, LE Cloud, MUDU.TV, Youtube and Wowza etc. It's compatible with Hikvision's NVR & CMS (iVMS-4200) and Dahua's NVR & CMS (SmartPSS) by private protocols. Video protocols like TS stream, RTMP, HTTP, RTSP and ONVIF are all supported. It also supports AAC、G.711U and G.711A audio encoding.

NOTE: This document might be changed and updated at any time without notice. If you have any questions, please contact us directly.

1. **Preparation**
   1.1 Download and Install ActiveX
      - Name of ActiveX: IPCOCX_setup2.15
      - Download link as below:
        https://www.dropbox.com/s/f0447ye441o8fl0/ActiveX_IPC OCX_setup2.15.rar?dl=0

   1.2 Download and Install IPC Manager
      - Name of IPC Manager:
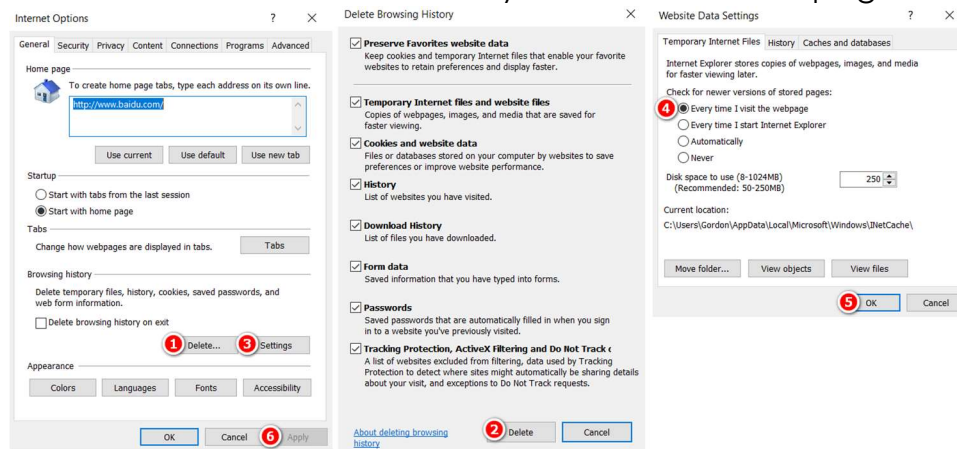   NEU_IPCManager_V4.02.28_win_x86
      - Download link as below:
        https://www.dropbox.com/s/ks1c66x3dxjknqe/NEU_IPCMa nager_V4.02.28_win_x86.rar?dl=0
      - Install IPC Manager
      NOTE: IPC Manager can only be used in Windows instead of MAC OS.

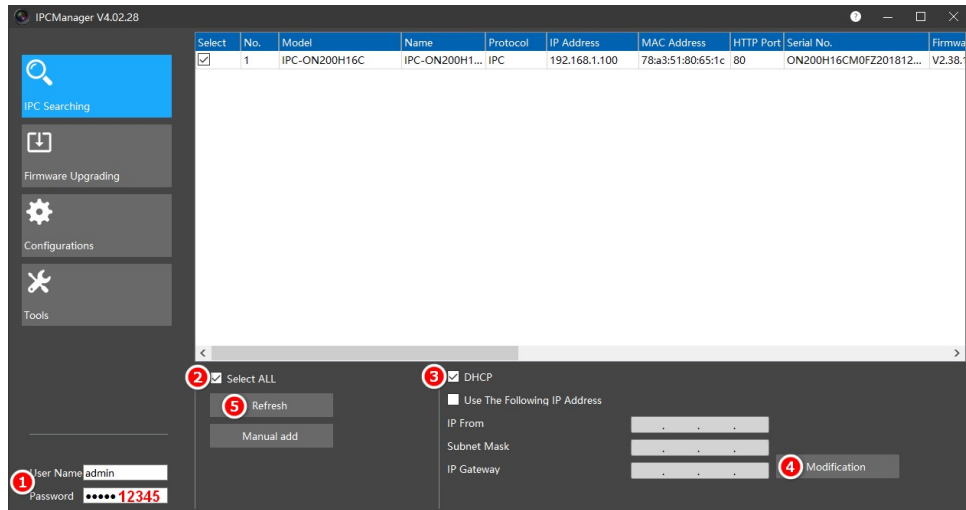   1.3 Clear Cache
      - Run IE>Tools>Internet Options
      - Delete corresponding browsing history
      - Click checkbox before "Every time I visit the webpage"

2. **Two Methods to Configure IP Address of HDMI Video Encoder**
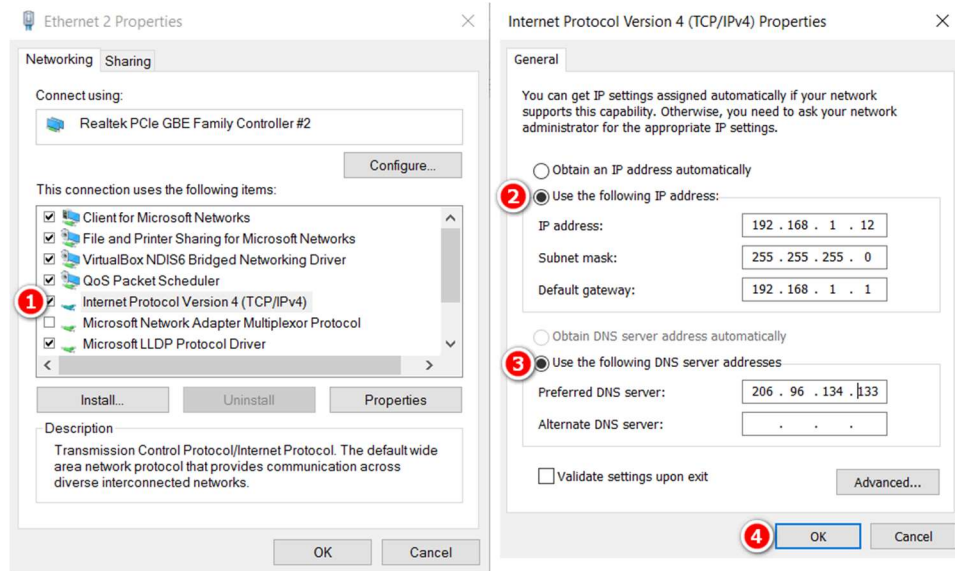   2.1 Power on with DC12V and connect it to the routers
      - Steps to obtain IP address by DHCP Server as below: Enter user name & password>Select All>DHCP> Modification>Refresh
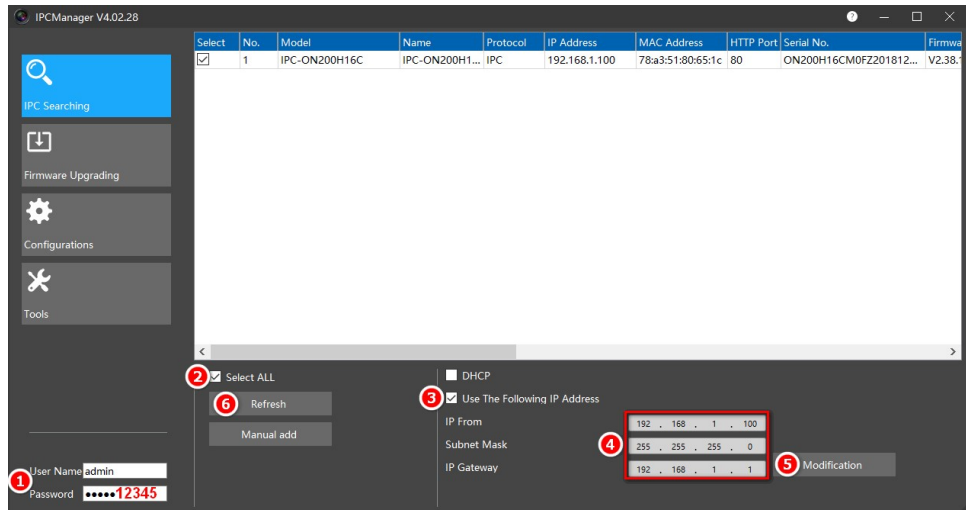
NOTE: please ensure the network camera and your PC are on the same segment if it's connected to the same router.

2.2 Connect HDMI Video Encoder to PC directly (direct connection)
- Set static IP address for PC

- Steps to obtain IP address by manual modification as below: Enter user name & password>Select All>Use The Following IP Address>Enter IP from/Subnet Mask/IP Gateway>Modification>Refresh
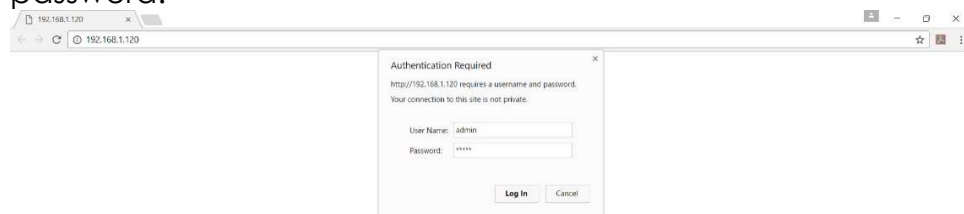
3. Access from a Browser

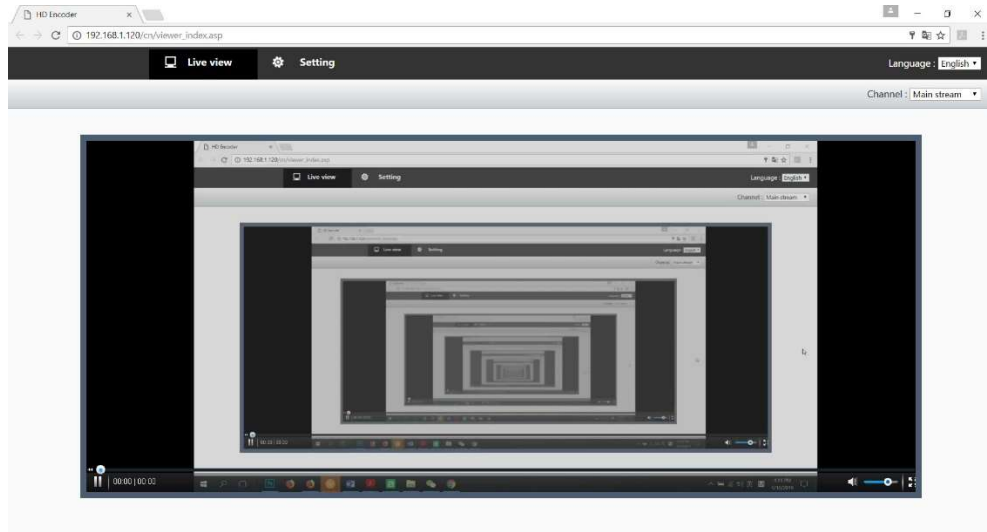3.1 Start a browser (Internet Explorer, Chrome, Firefox, Safari).

3.2 Enter the IP address or host name of the network camera or encoder in the browser's Location/Address field.

NOTE: The default IP address is 192.168.1.120. If you do not know the IP address, use IPCManager to locate the device in your network. For information about how to discover and assign an IP address, please see----

3.3 Enter your user name and password. If this is the first time the product is accessed, it's strongly recommended to set a new password.
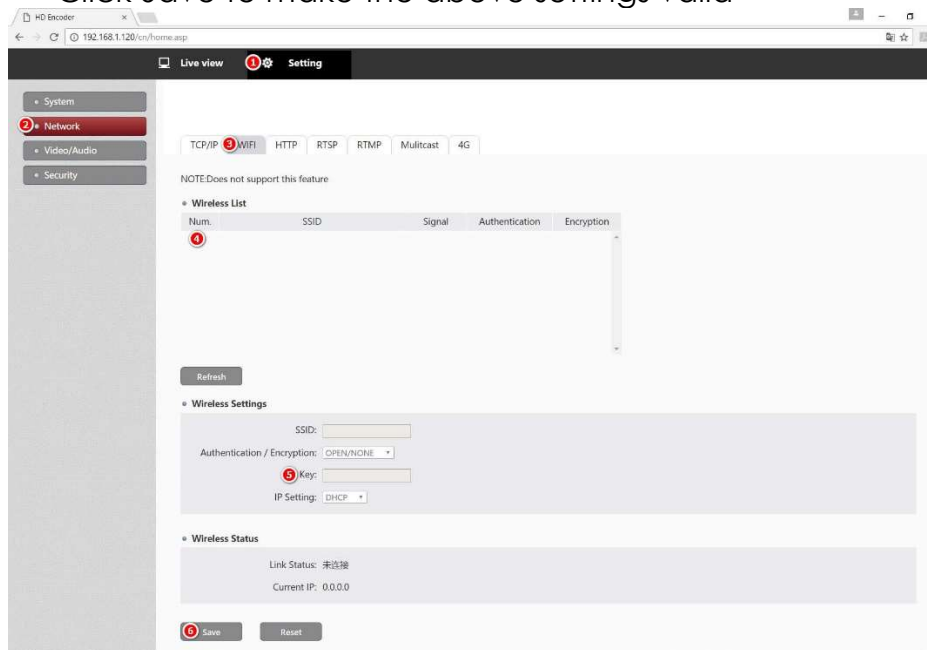

3.4 Click "Log In" and the Preview page opens in your browser.

4. **Configure Wireless Connection (Only available to Wireless Devices)**
   4.1 Connect to Wi-Fi
   - Click Settings>Network>WIFI
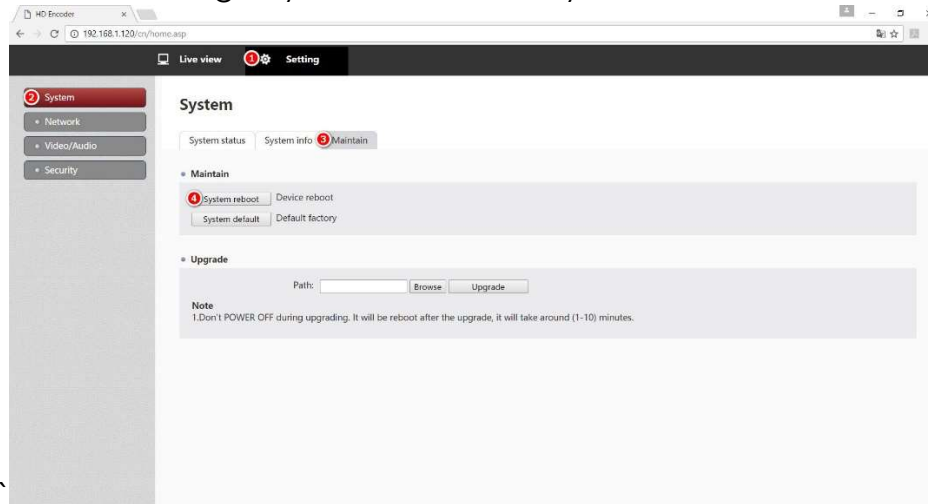   - Double click your wireless ID from the Wireless List
   - Enter your password of WIFI in the column of Key
   - Click Save to make the above settings valid

   NOTE: Check whether the device is connected to the WIFI from Settings>Network>WIFI>Wireless Status. If not connected yet, please try to re-configure the WIFI connection or reboot the device after your settings.
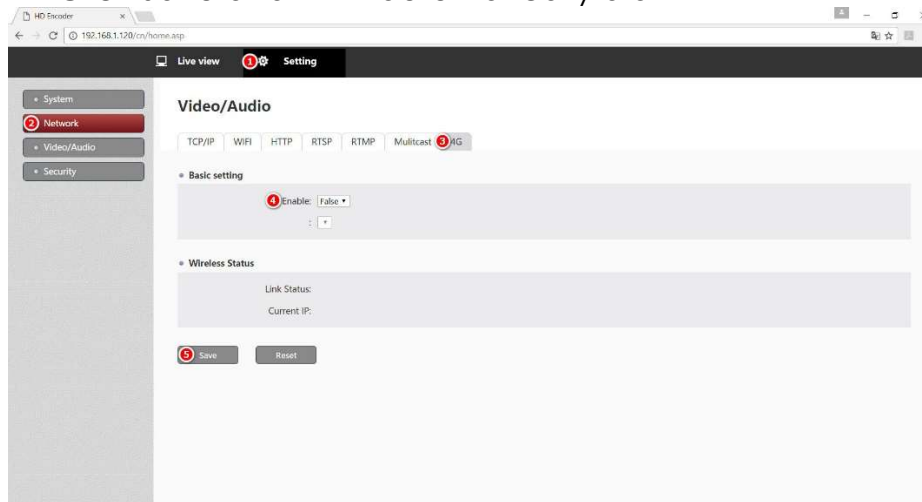
4.2 Reboot
- Click Settings>System>Maintain>System Reboot

NOTE: it will take a little time to reboot, please wait for a while after clicking System reboot button.

5. **Configure 4G Connection (Only available to 4G Devices)**
   5.1 Connect to 4G
   - Click Settings>Network>4G
   - Select True from the dropdown list to enable 4G
   - Click Save and it will automatically dial

NOTE: Check whether the device is connected to the 4G from Settings>Network>4G>Wireless Status. If not connected yet, please try to re-configure the 4G connection or reboot the device after your settings.
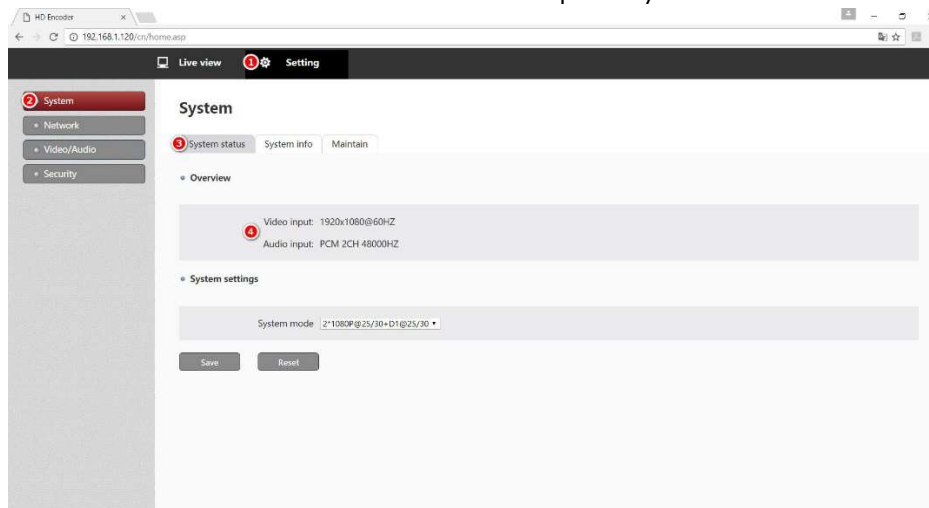
5.2 Reboot

Please see 4.2

6. Configure Encoder via IE & Chrome

NOTE: By IE, it's necessary to clear cache, or else all settings might not be shown correctly on IE or browsers powered by IE kernel. For details to clear cache, please see 2.2.
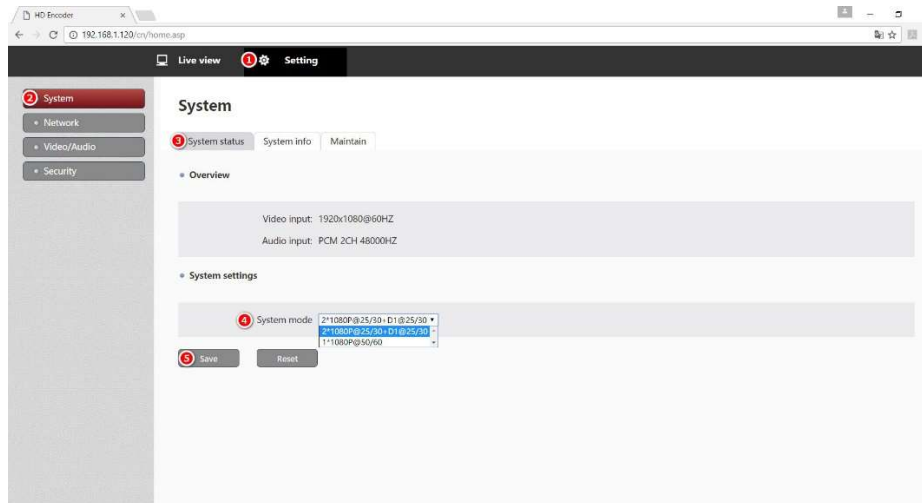
6.1 Check System Status
- Click Settings>System>System Status>Overview
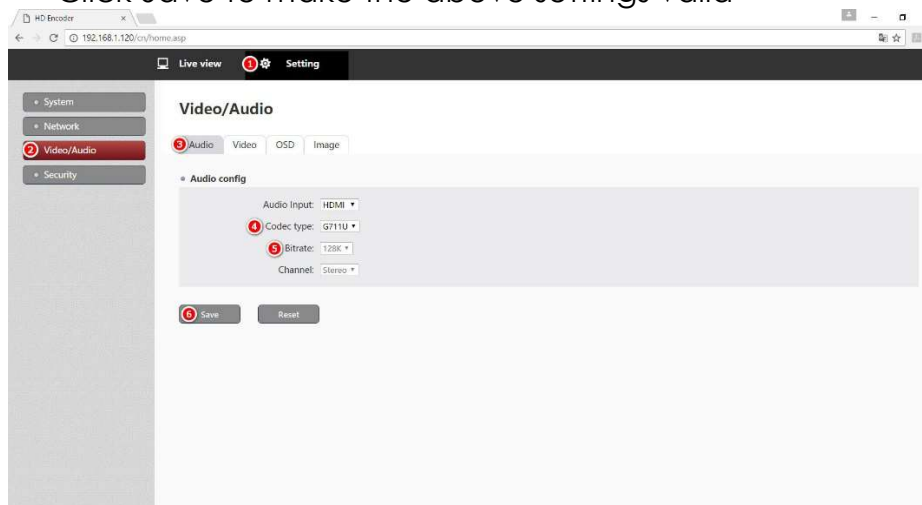- Check whether video & audio input by HDMI are correct?

6.2 Configure System Mode
- Click Settings>System>System Status>System Settings
- Select the needed system mode from drop-down list
- Click Save and it will automatically reboot

6.3 Configure Audio

- Click Settings>Video/Audio>Audio/Audio Config
- Select the corresponding Codec Type and Bitrate
- Click Save to make the above settings valid

NOTE:

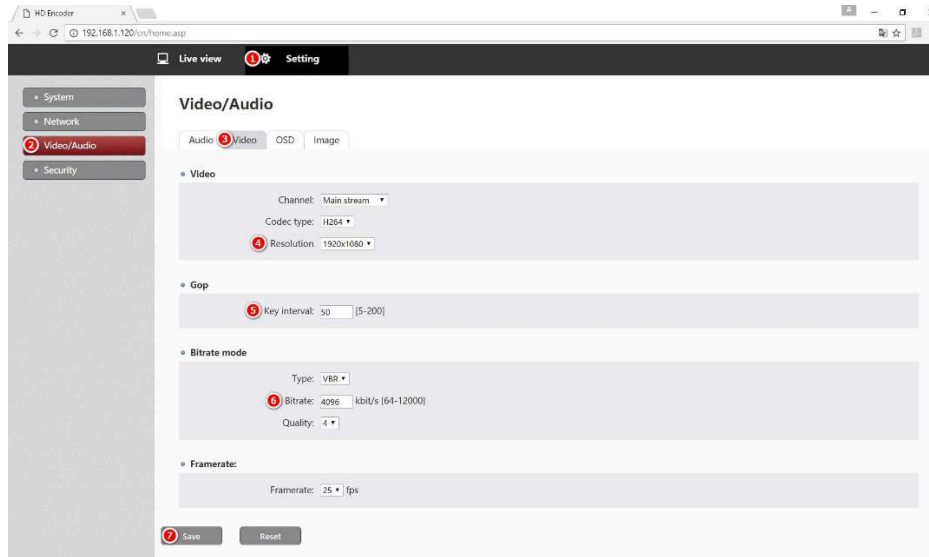a. Two types of coding for audio: AAC and G.711. Usually it's recommended to use AAC if you're trying to use streaming media server for live broadcast.

b. Usually use G.711U and G.711A if it's connected to NVR, audio sampling is 8000 by default.
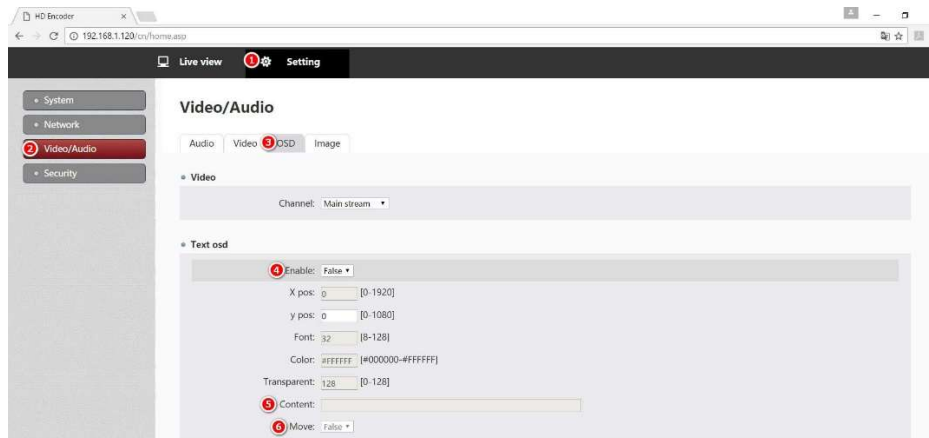
6.4 Configure Video

- Click Settings>Video/Audio>Video
- Configure Resolution/Key Interval/Bitrate
- Click Save to make the above settings valid

NOTE: if there are many moving objects in the image, it's strongly recommended to change the key interval with a smaller one like 5 or 10, then the image quality can be improved.

6.5 Configure OSD

- Click Settings>Video/Audio>OSD
- Add Text OSD
  a. Select True from drop-down list to enable Test OSD
  b. Enter corresponding content to enable channel name
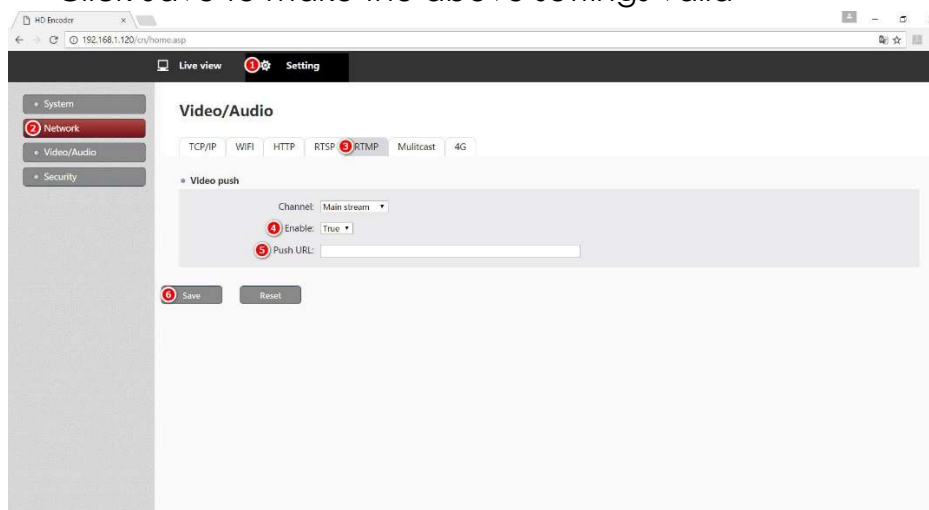 c. Select True to enable Move to let contents move in from the left side of screen

- Add Picture OSD
  a. Select True from drop-down list to enable Picture OSD
  b. Click Browse to select the corresponding images
  c. Click Upload to upload the above selected images

- Click Save to make the above settings valid

6.6 Configure RTMP address
- Click Settings>Network>RTMP>Enable
- Enter RTMP address in the column of Push URL
- Click Save to make the above settings valid

NOTE: if there are two lines of push address, the format is push address and live streaming code together like rtmp://push address/live streaming code/

7. FAQ

7.1 How many languages can be supported by default for UI?
A: two languages by default: Simplified Chinese and English.

7.2 What is the main difference for main stream and sub stream?
A: Main stream means higher resolution, primarily used for CCTV surveillance while sub stream means lower resolution for network transmission.

7.3 Can live broadcast and surveillance be used simultaneously?
A: Yes, RTMP protocol will be used for live streaming while RTSP for surveillance, so it won't be affected when simultaneously used.

7.4 Which kind of NVR can support live streaming and surveillance as well as sound?
A: as far as we learned, only NVR from TP-Link can support AAC, while traditional manufacturers only support G.711, not AAC because of intellectual property. Besides, right now our encoder can be compatible with Hikvision's NVR & CMS (iVMS-4200) and Dahua's NVR & CMS (SmartPSS).

7.5 Can we use H.265 encoding when pushing streams by RTMP?
A: No, RTMP can only support H.264 encoding. And Adobe said clearly before there is no more update and maintenance for RTMP, that's why RTMP and RTSP can only support H.264 encoding.

8. Contact

Any question, please contact us directly through below ways:
- Tell: +86-18923798767 (WhatsApp)
- Skype: wyliu007
- Email: wyliu@ssqvision.com