

Pro.2

H.264 HD HDMI Encoder for IP TV

Model: HE01

Operation Instructions



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Dear Customer

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

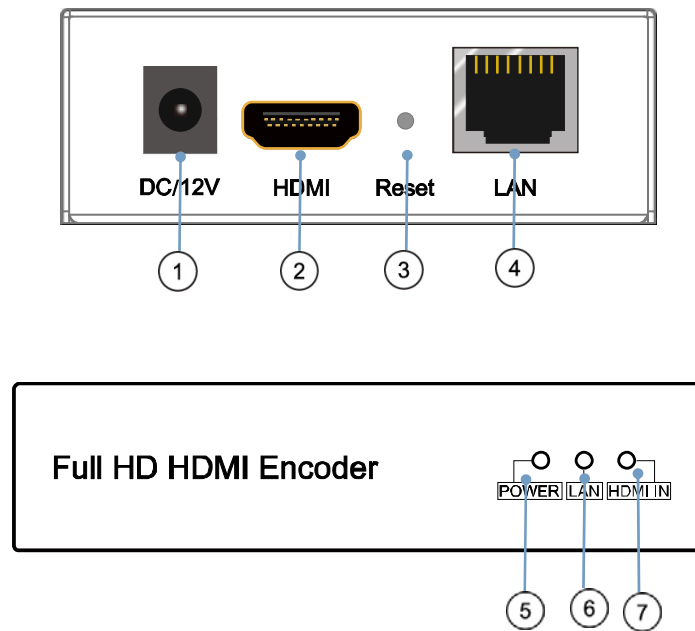
1. FEATURES

- Support H.264 encoding.
- Support UDP, HTTP, RTSP, RTMP, ONVIF protocol.
- Support MPEG1 Audio Layer 2.
- CBR/VBR rate: 16Kbps~16Mbps.
- 1000M network interface uses full duplex mode.
- Support up to 720p, 1080p@60HZ HD video input.
- Support image parameter settings.
- WEB interface management authority.
- Support remote management in WAN (WEB).
- Support resolution customized settings.
- Support one key to restore the factory configuration.

2. PACKAGE CONTENTS

- 1). Main Unit. H.264 HD HDMI Encoder
- 2). 1x Power adapter DC 12V
- 3). Operating Instruction manual

3. HARDWARE DESCRIPTION



- ① Power input port
- ② HDMI input
- ③ Reset button **1**
- ④ LAN output **2**
- ⑤ Indicator of power input
- ⑥ Indicator of LAN output
- ⑦ Indicator of HDMI input

Note: **1** . Reset to the factory default setting: press “Reset” for 10 seconds till all three indicators go out.

2 . LAN: default IP is 192.168.1.168 for the unit.

4. Typical Application

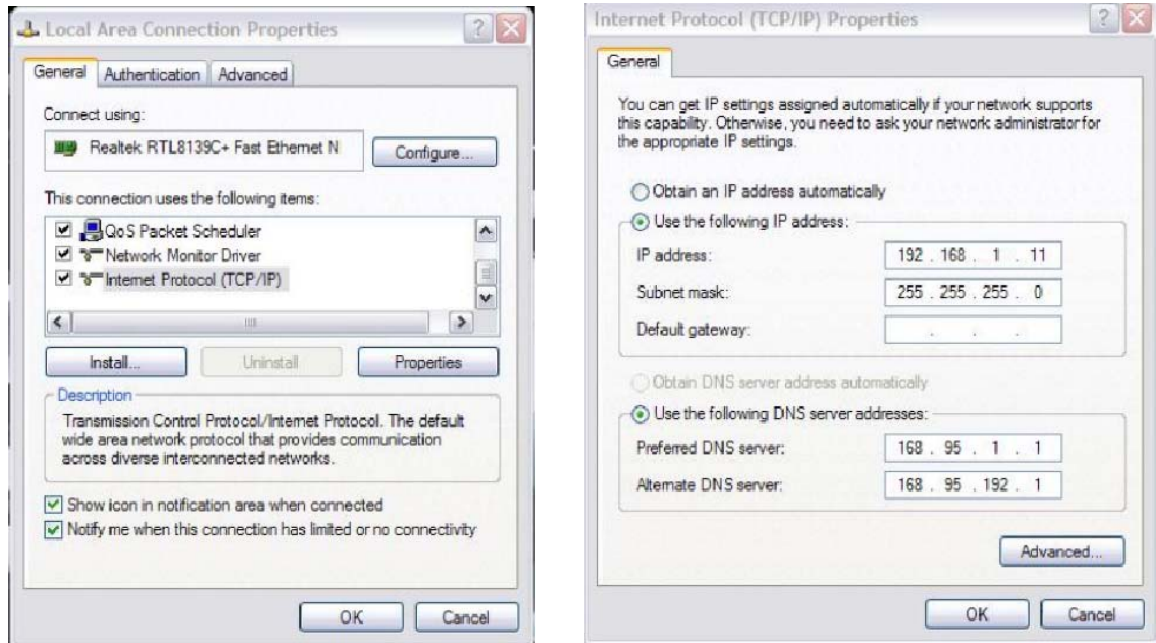


5. Environment Configuration

5.1 Software

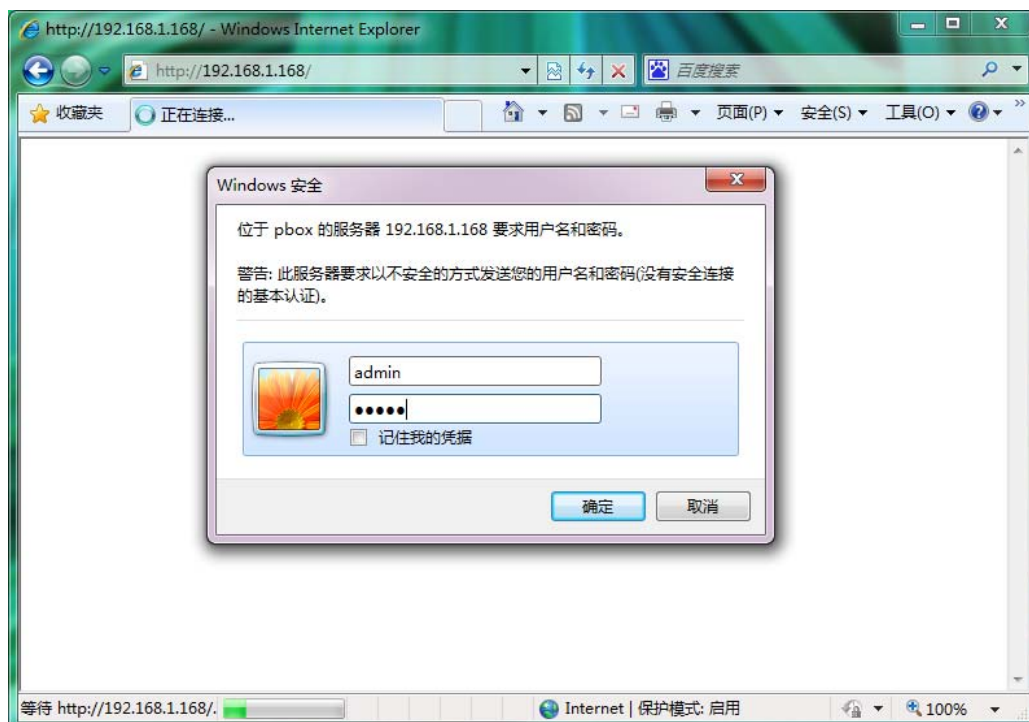
5.1.1 Change the IP Address of PC

Assign the PC (or laptop) IP address on the computer: “Control Panel”→ “Network Connections”→ “Local Area Connections Status”→ “Properties”→ “Internet Protocol (TCP/IP)”→Type the IP address with 192.168.1.XX (0-255) and Subnet mask with 255.255.255.0. After that press OK to save the configuration.



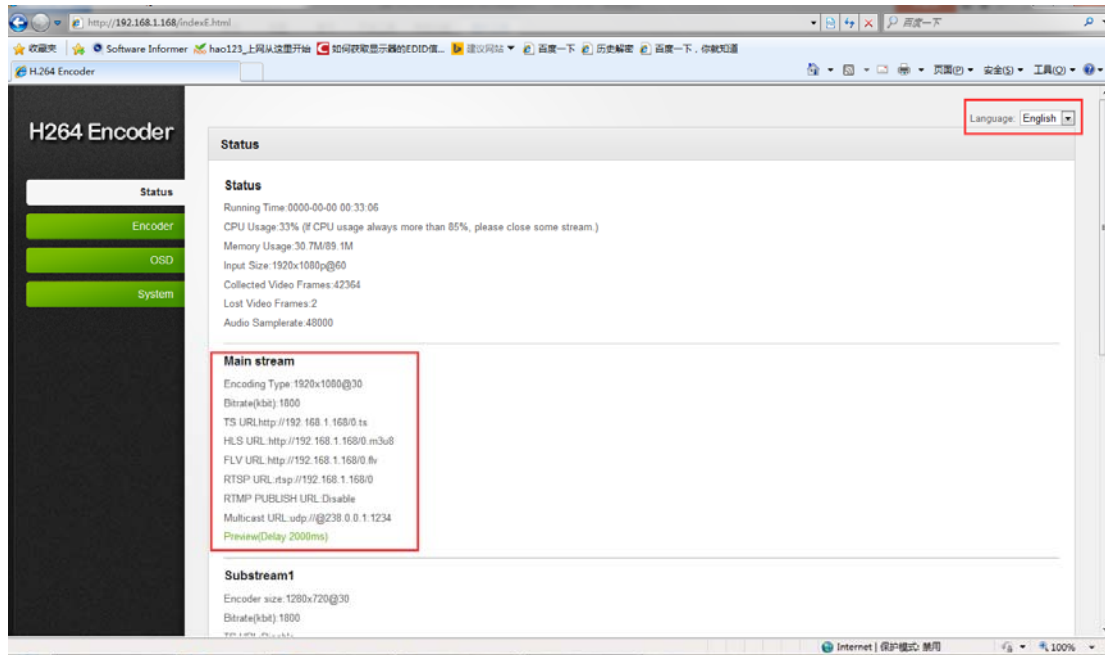
5.1.2 Login for configuration

Enter the unit IP 192.168.1.168 on browser, to open the web GUI. Login with default user name and pass word as admin. Like below, into the home page.



5.1.3 Check the stream address

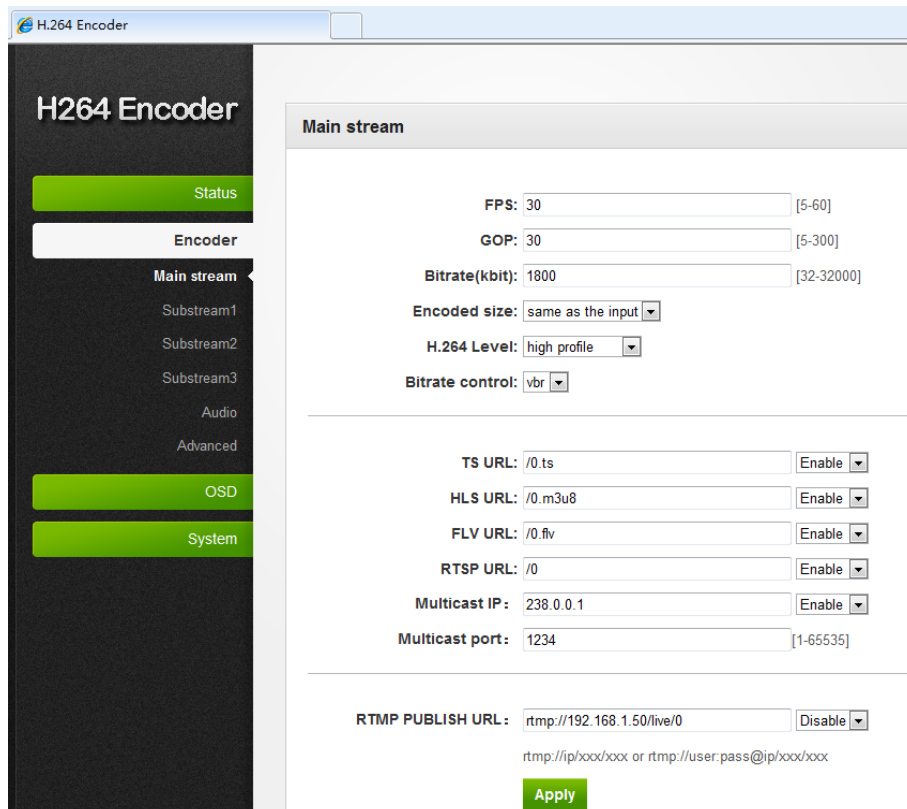
As below, the stream address is in the red frame.



6. Encode Setting

6.1 Encode Setting

Click Encode setting → Main stream → Setting the parameters → Click Apply



6.2 Audio setting

Click encode→Audio→Setting the parameters→Click apply

The screenshot shows the 'H.264 Encoder' web interface. On the left is a dark sidebar with a menu: 'Status' (highlighted in green), 'Encoder' (with sub-items: Main stream, Substream1, Substream2, Substream3), 'Audio' (highlighted with a white arrow), 'Advanced', 'OSD' (highlighted in green), and 'System' (highlighted in green). The main content area has a light blue header with 'H.264 Encoder' and a search box. Below the header are two sections: 'Audio' and 'ONVIF Audio'. The 'Audio' section contains: 'Samplerate: 44100' (dropdown), 'Encoder: AAC' (dropdown), 'Bitrate: []' (input field), and an 'Apply' button. The 'ONVIF Audio' section contains: 'G711A Over RTSP: Disable' (dropdown) and an 'Apply' button.

6.3 Advanced

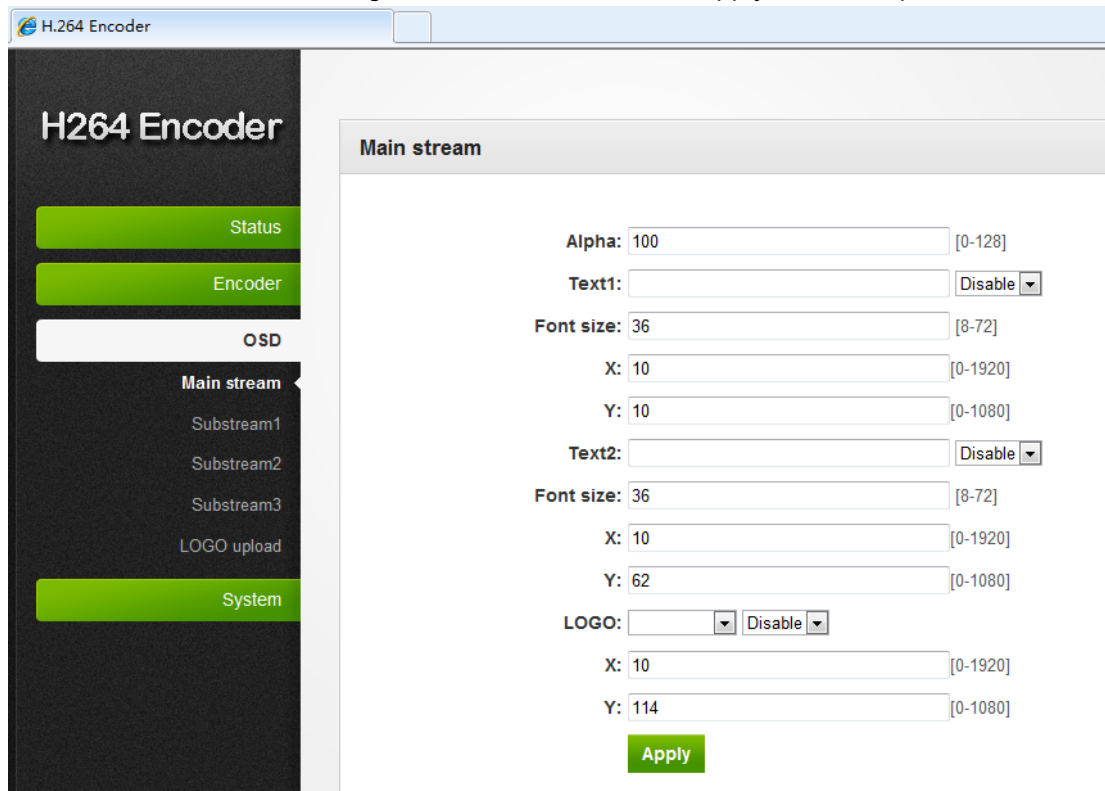
Click Encoder→Advanced→Setting all the parameter→Click apply.

The screenshot shows the 'H.264 Encoder' web interface with the 'Advanced' menu item selected in the sidebar. The main content area has a light blue header with 'H.264 Encoder' and a search box. Below the header are two sections: 'Audio' and 'CSC'. The 'Audio' section contains: 'TS Muxer: Compatible with VLC' (dropdown), 'TS once pack: [] [3-128]' (input field), 'TS Password Enable: Disable' (dropdown), and an 'Apply' button. The 'CSC' section contains: 'CSC: Disable' (dropdown), 'Contrast: [] [0-255], Default: 64' (input field), and an 'Apply' button.

7. OSD Setting

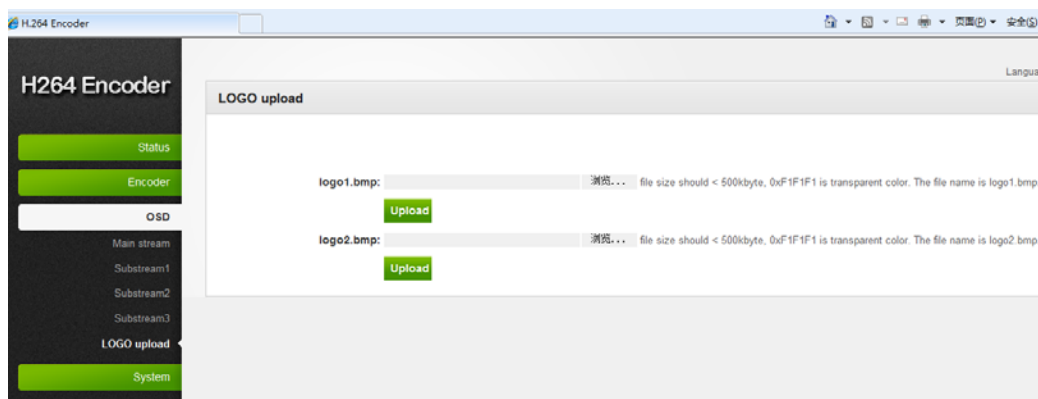
7.1 Streaming OSD Setting

Click OSD→Network→Setting all the Parameter→Click apply, as below picture show



7.2 LOGO uploading

Click logo upload→provide the logo picture as the requirements→Click Apply



※Note: The screenshots might have some difference with actual operation interface due to software upgrade, all the screenshots are for reference only, please follow up the real operation interface.

8. System

8.1 Network

Click system→Network→Setting all the parameter→Click apply.

The screenshot shows the H.264 Encoder web interface. The browser title is "H.264 Encoder". The left sidebar contains the following menu items: Status, Encoder, OSD, System, Network, Change Password, Serial to TCP, Upgrade, Reset, and Reboot. The "Network" menu item is selected. The main content area is titled "Network" and contains the following sections:

- internet access**
 - DHCP:
 - IP:
 - Netmask:
 - Gateway:
 - MAC:
- DNS**
 - DNS1:
 - DNS2:
- Port**
 - HTTP Port: [1-65500]
 - RTSP Port: [1-65500]

An "Apply" button is located at the bottom of the form.

8.2 Change password

System→Change password→Set your password→Apply

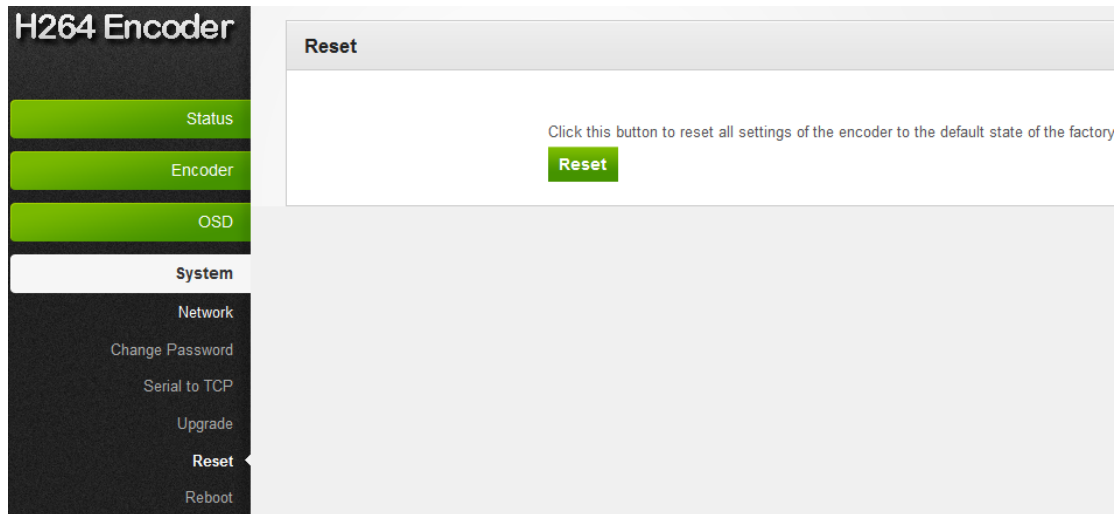
The screenshot shows the H.264 Encoder web interface. The left sidebar contains the following menu items: Status, Encoder, OSD, System, Network, Change Password, Serial to TCP, Upgrade, Reset, and Reboot. The "Change Password" menu item is selected. The main content area is titled "Change password" and contains the following fields:

- Old password:
- New password:
- Confirm new password:

An "Apply" button is located at the bottom of the form.

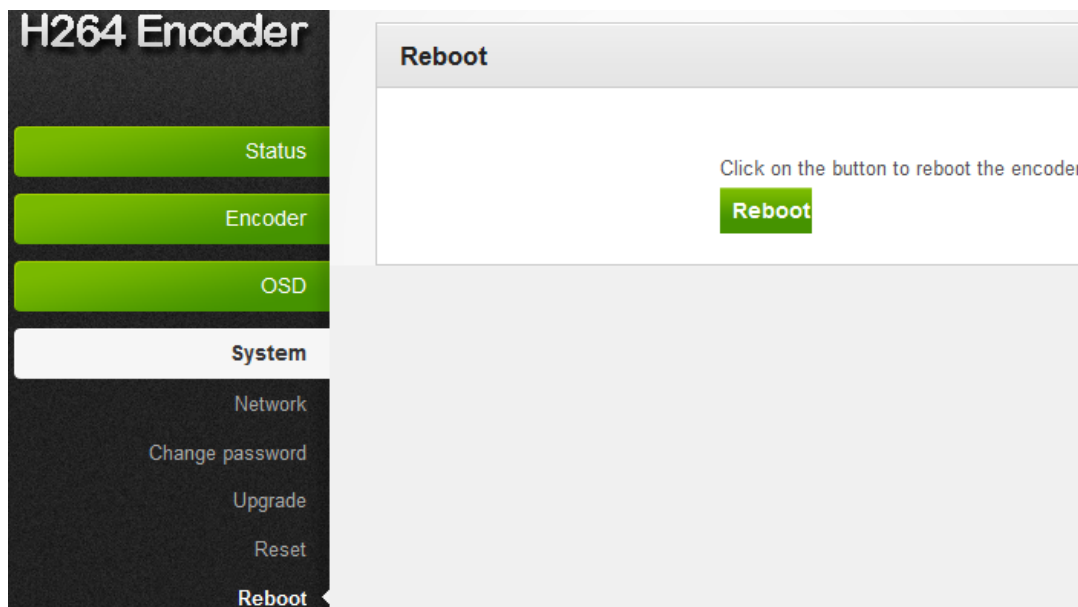
8.3 Reset

System→Reset→Reset



8.4 Reboot

System→Reboot→Reboot (please refresh the web after 1 minute)

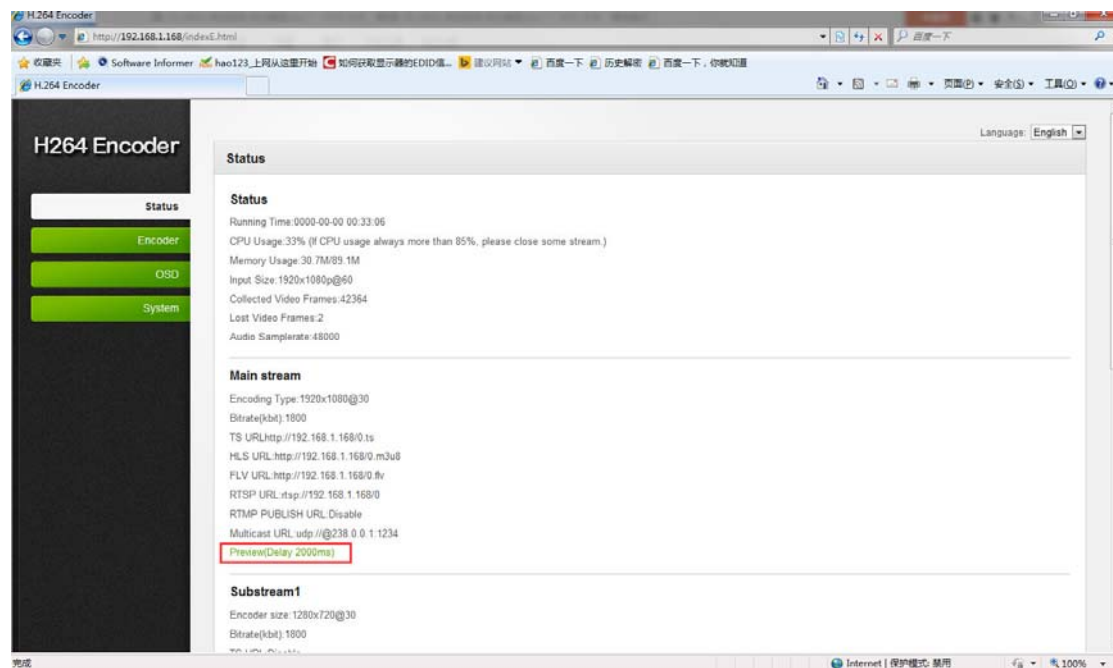


9. Application

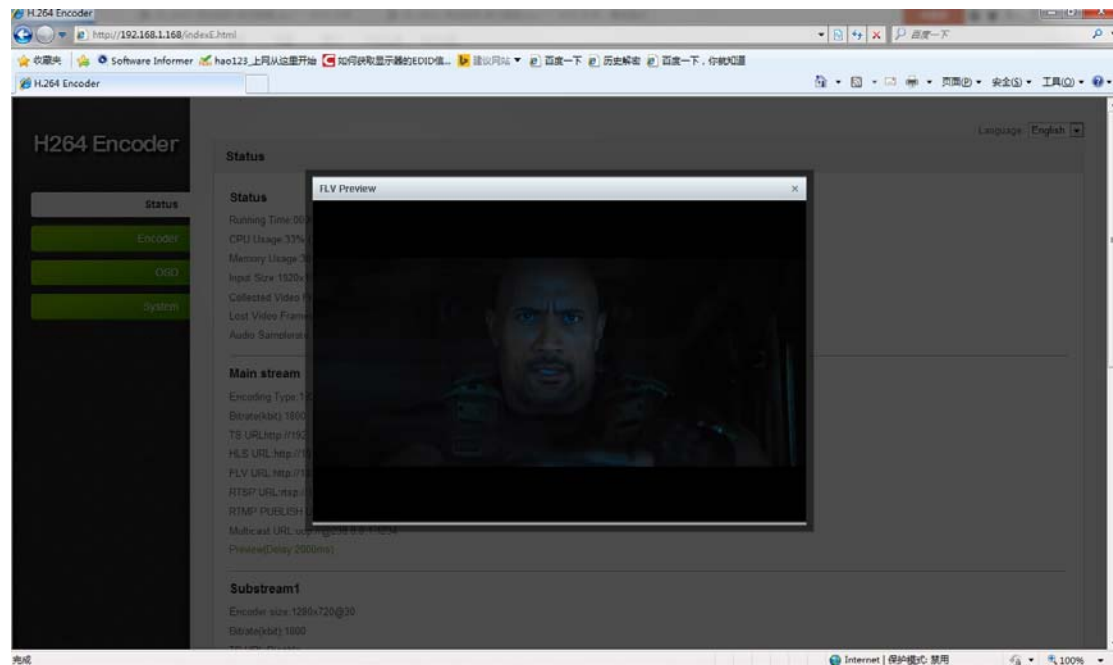
9.1 Application Example

9.1.1 Web Video Preview

Status→Main stream→Preview

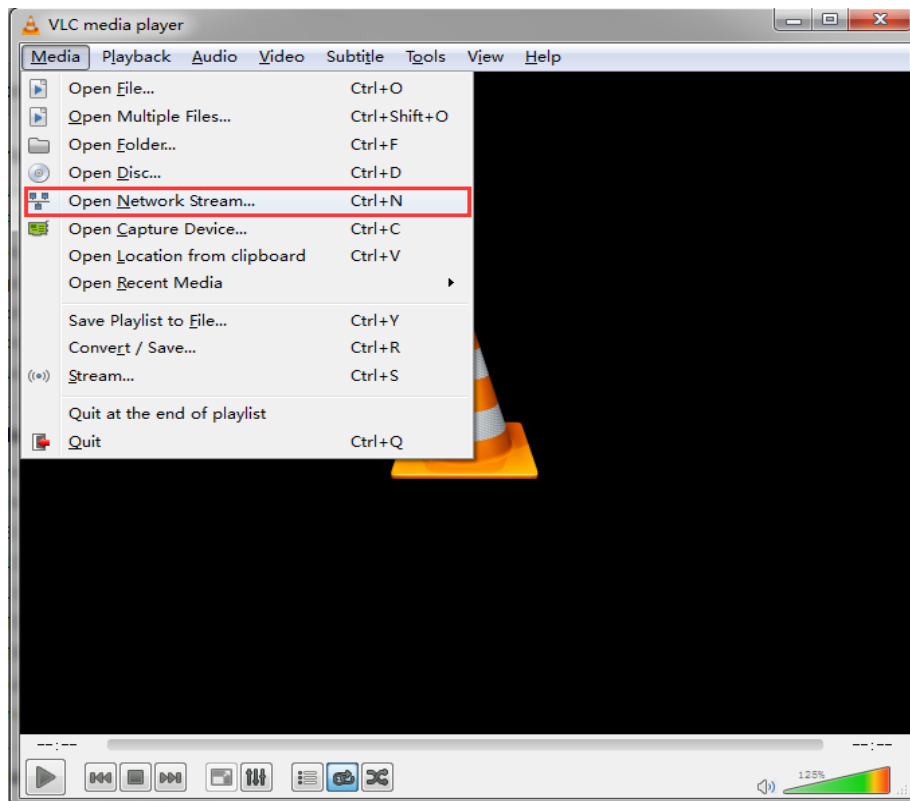


Belowing picture is the preview effect:

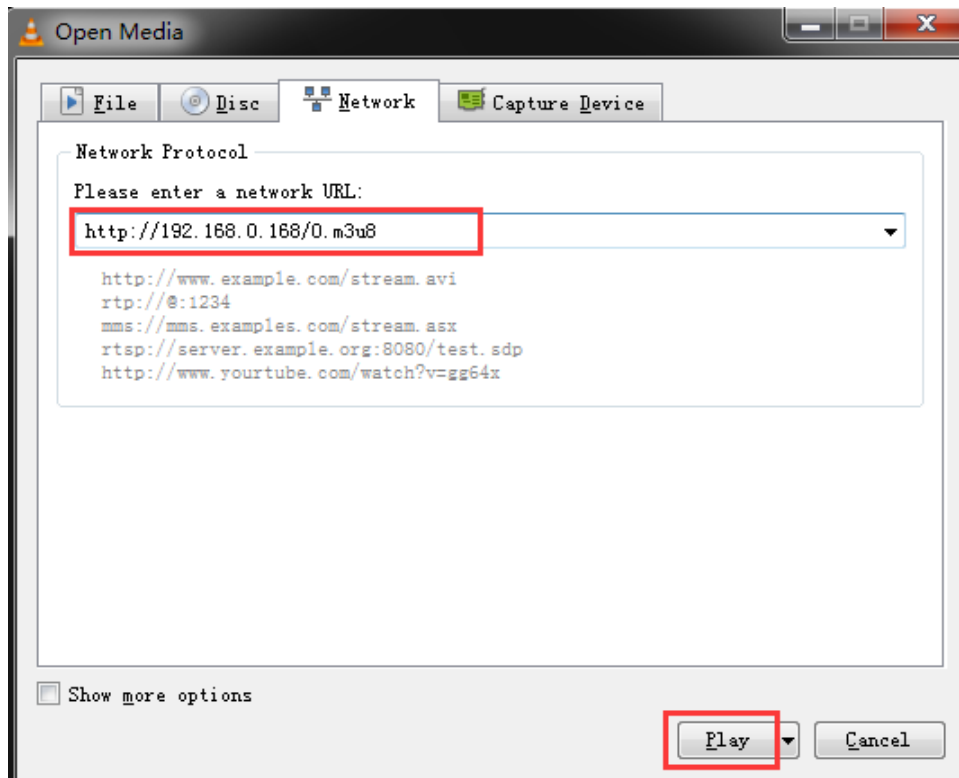


9.1.2 VLC Play

Connect HDMI source to the HD encoder, open VLC media player (Download website: <http://www.videolan.org/>), Click “Media”, then click “Open Network Stream”.



Enter Stream URL which showed from the page of Main stream. Click “play”, You can successfully play the video stream encoded from this device.





9.2 Multi Local User Application Multicast Way

If many local users need watch the video of same HD encoder at the same time, we suggest using multicast. Enable the multicast IP, then re-power the HD encoder.

H264 Encoder

- Status
- Encoder
- Main stream**
- Substream1
- Substream2
- Substream3
- Audio
- Advanced
- OSD
- System

Main stream

FPS: [5-60]

GOP: [5-300]

Bitrate(kbit): [32-32000]

Encoded size:

H.264 Level:

Bitrate control:

TS URL: Enable

HLS URL: Enable

FLV URL: Enable

RTSP URL: Enable

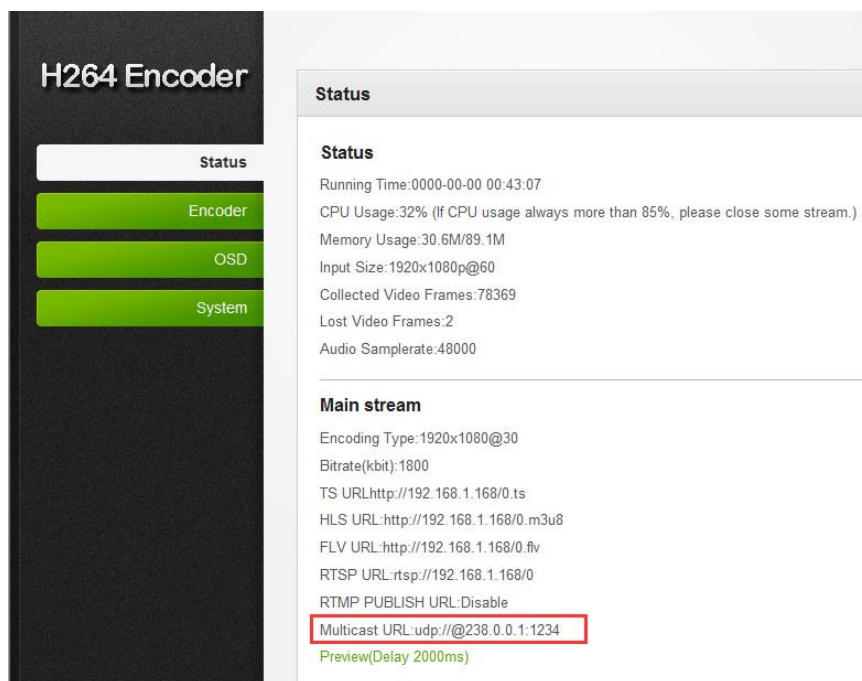
Multicast IP: Enable

Multicast port: [1-65535]

RTMP PUBLISH URL: Enable

rtmp://ip/xxx/xxx or rtmp://user:pass@ip/xxx/xxx

There is a multicast URL in the Status page, copy it into the VLC Player.
This address can be visited by many visitors at the same time

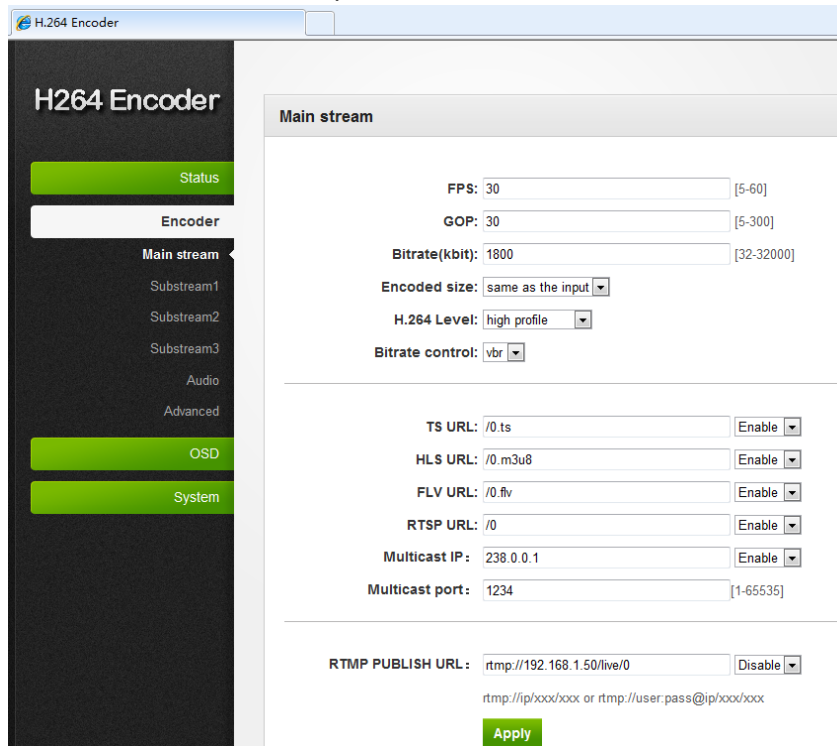


The screenshot shows the 'H264 Encoder' web interface. On the left is a navigation menu with 'Status' selected. The main content area is titled 'Status' and displays the following information:

- Status**
 - Running Time: 0000-00-00 00:43:07
 - CPU Usage: 32% (If CPU usage always more than 85%, please close some stream.)
 - Memory Usage: 30.6M/89.1M
 - Input Size: 1920x1080p@60
 - Collected Video Frames: 78369
 - Lost Video Frames: 2
 - Audio Samplerate: 48000
- Main stream**
 - Encoding Type: 1920x1080@30
 - Bitrate(kbit): 1800
 - TS URL: http://192.168.1.168/0.ts
 - HLS URL: http://192.168.1.168/0.m3u8
 - FLV URL: http://192.168.1.168/0.flv
 - RTSP URL: rtsp://192.168.1.168/0
 - RTMP PUBLISH URL: Disable
 - Multicast URL: udp://@238.0.0.1:1234** (highlighted with a red box)
 - Preview(Delay 2000ms)

9.3 Local Surveillance System Application NVR Connection

1. Confirm if NVR support H.264 decoder. Since using ONVIF, you need enable the "RTSP" function as below picture.

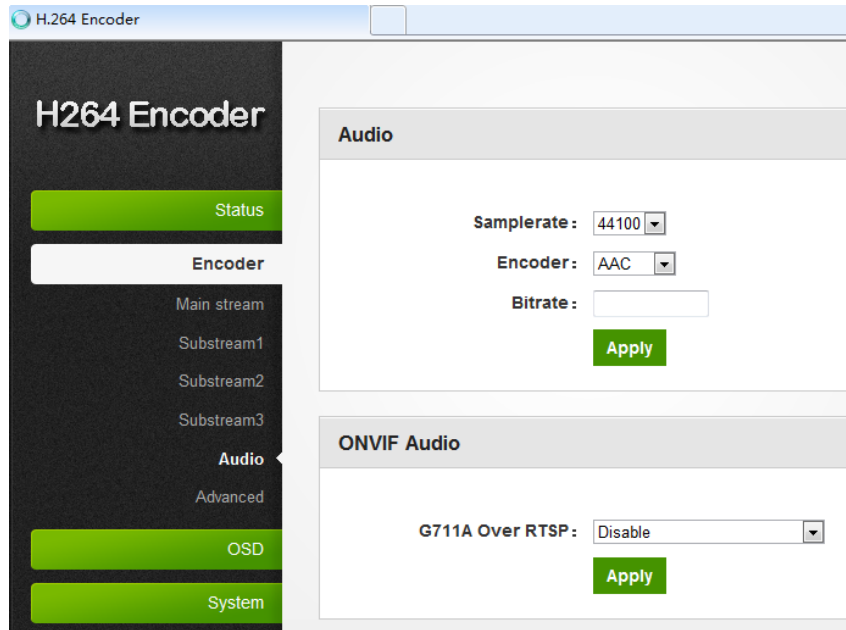


The screenshot shows the 'H264 Encoder' web interface with the 'Main stream' configuration page selected. The configuration includes the following fields:

- FPS: 30 [5-60]
- GOP: 30 [5-300]
- Bitrate(kbit): 1800 [32-32000]
- Encoded size: same as the input
- H.264 Level: high profile
- Bitrate control: vbr
- TS URL: /0.ts [Enable]
- HLS URL: /0.m3u8 [Enable]
- FLV URL: /0.flv [Enable]
- RTSP URL: /0 [Enable]
- Multicast IP: 238.0.0.1 [Enable]
- Multicast port: 1234 [1-65535]
- RTMP PUBLISH URL: rtmp://192.168.1.50/live/0 [Disable]

Below the RTMP PUBLISH URL field, there is a small text: `rtmp://ip/xxx/xxx or rtmp://user:pass@ip/xxx/xxx`. An 'Apply' button is located at the bottom of the configuration area.

2. If you need the NVR recognize the Audio of HD Encoder, you still need enable the Audio as below picture:



Note: If you've finished above setting and still can't open the video, we suggest you download the standard testing tool to test the ONVIF function of HD Encoder (Download address <http://url.cn/2ESQRcn>)

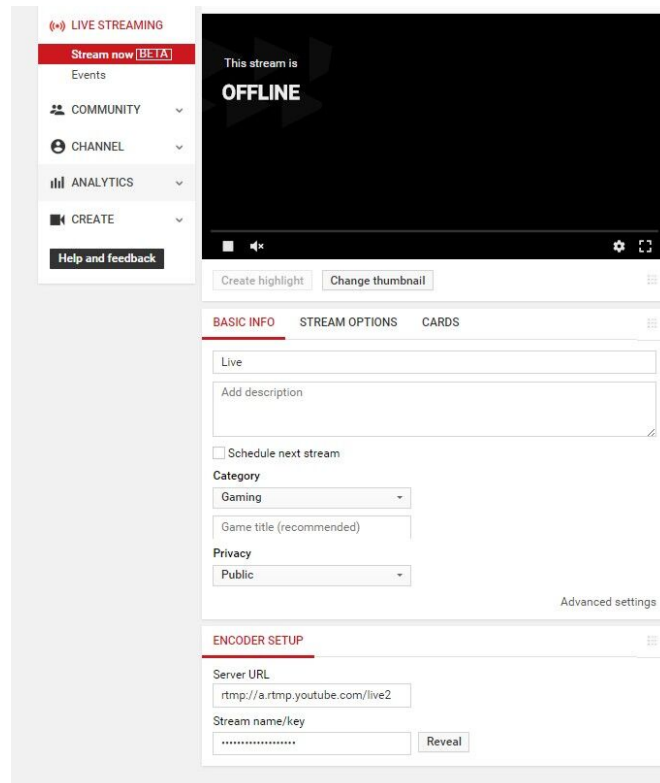
9.4 Remote Multi User Application RTMP Connection

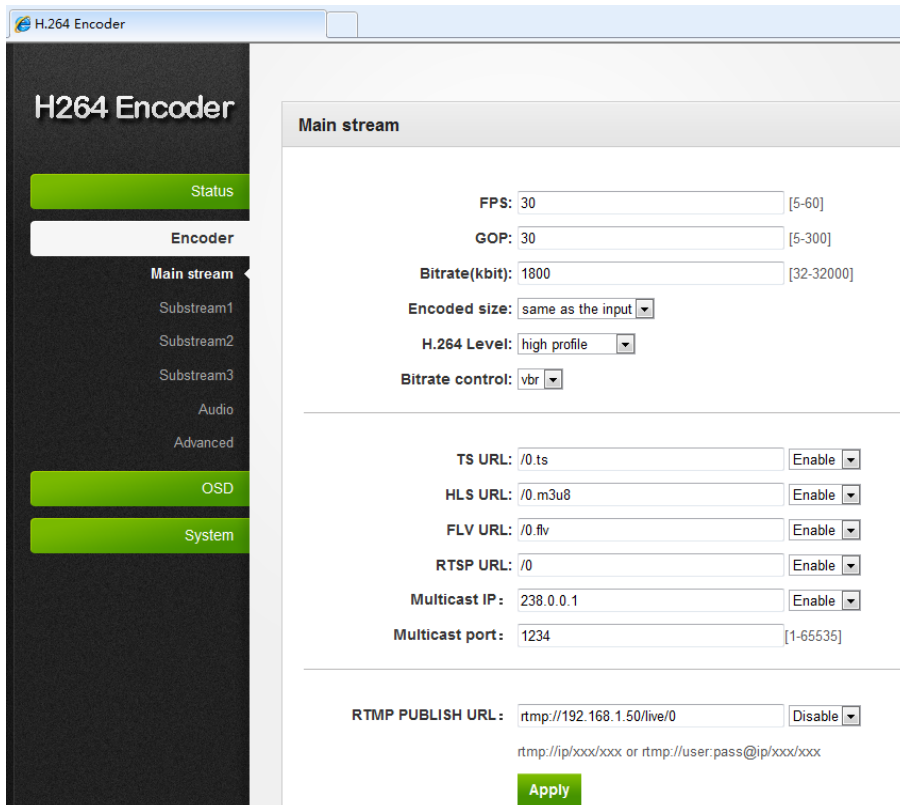
If many users from different location need watch the source of the same HD Encoder, we suggest you use RTMP.

Our product support belowing Free platform: NGINX, RED5 MEDIA SERVER etc.

Charged platform: ADOBE MEDIA SERVER5 and <http://mudu.tv/> etc.

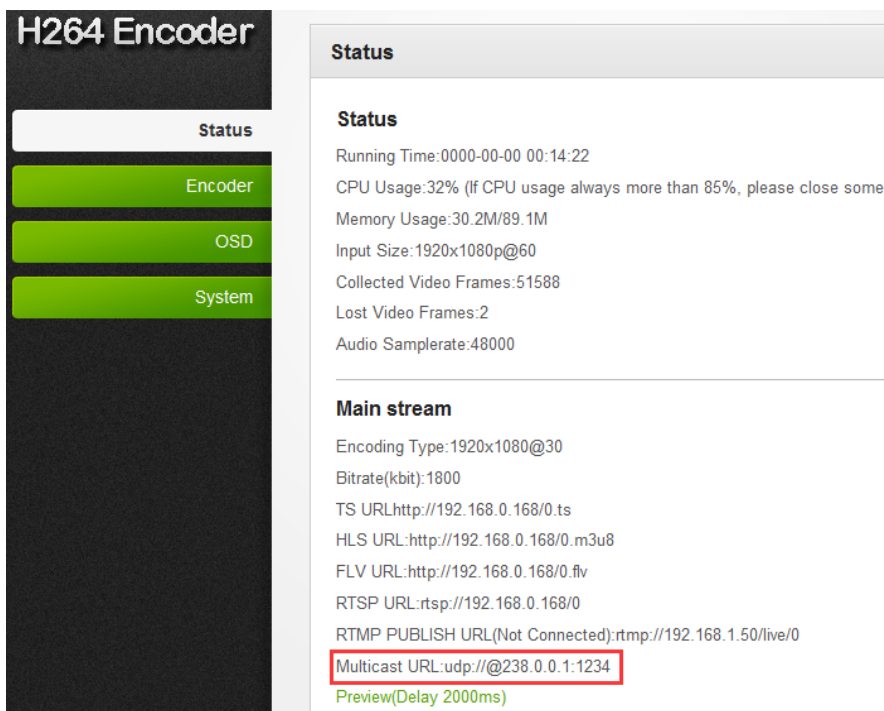
Since the current RTMP protocol only support H.264 function, you need set the HD Encoder as H.264, set the RTMP Address and enable it as below picture. Re-Start the HD encoder after finishing the setting.





Note: If you have finished above setting and still can't open the video, please check as below:

1. Check the collected data of HD Encoder, if it shows 0, then the HD Encoder connection is failed; you need check if the hardware connection is correct.
2. Check the RTMP connection status, if it shows unconnected, you need check if the Network setting is correct (You need set the IP Address to have access to the internet)





CUSTOMER CARE CENTRE



- 1 THIS PRODUCT IS WARRANTED FOR 12 MONTHS FROM THE DATE OF PURCHASE.**
Subject to the conditions of this warranty, the Customer Care Centre will perform necessary service on the product without charge for parts, or labour if, in the opinion of the manufacturer/ manufacturer's agent, the product is found to be faulty within the warranty period.
- 2** This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care. The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltage, accident, misuse, neglect, build-up of dirt or dust, abuse, mis-adjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
- 3** If warranty service is required you should:
 - Telephone the Customer Care Centre on 1300 662 946
 - Provide a copy of your purchase receipt that shows retailer's identity and date of purchase.
 - Send or bring the product to your Customer Care Centre.
Please note that freight to and/or from your Customer Care Centre must be arranged by you.
- 4** The warranties hereby conferred do not extend to any costs associated with the delivery, handling, freighting or transportation of the product or any part thereof or replacement of and do not extend to any damage or loss occurring during, or associated with transit.

**THIS WARRANTY CARD AND THE PURCHASE DOCKET
(OR SIMILAR PROOF OF PURCHASE)
SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES**

**TROUBLE SHOOTING HELP LINE
1300 662 946**

Customer Care Centre
562 Spencer Street, West Melbourne
VICTORIA 3003

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Providing AV Solutions

This advice does not limit, override or later your guaranteed rights under the Australian Consumer Law, including remedies for any failure of the Consumer Guarantees, which may include repair or replacement or it a Major Failure (as defined under the Australian Consumer Law) a replacement or refund. These guaranteed rights cannot be varied by Pro.2 or retailers of its products and have no set time limit.