J-TECH DIGITAL®

V1.0

USER MANUAL

IPTV H264 Encoder (Ver. 2)

JTD-3217 | JTECH-ENCH4

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HDMI HIGH DEFINITION MULTIMEDIA INTERFACE RoHS compliant CE FC

Scan the QR code below or visit
https://www.jtechdigital.com/product/3217
to view and access detailed digital resources regarding this unit.

Safety Instructions:

- Before using this product, please carefully read the following safety instructions to ensure its proper use and keep this manual for future reference:
- To prevent electric shock, do not attempt to open the product.
- Only qualified personnel should perform any repairs or maintenance.
- Always place the product on a stable, flat surface to prevent it from falling.
- Do not expose the product to water, moisture, or high-humidity environments to avoid the risk of damage.
- To prevent damage from direct sunlight or high temperatures, do not expose the product to such environments.
- Do no place the product near heat sources like radiators, heat registers, stove, or other heat-producing apparatus.
- Do not place any objects on top of the product to avoid damage.
- Use only the attachments and accessories specified by the manufacturer.
- During lightning storms or prolonged periods of disuse, unplug the power supply to prevent damage.

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Dear Customer

Thank you for purchasing the JTECH-ENCH4. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

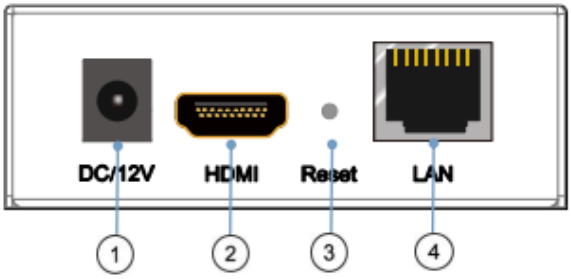
1. Features

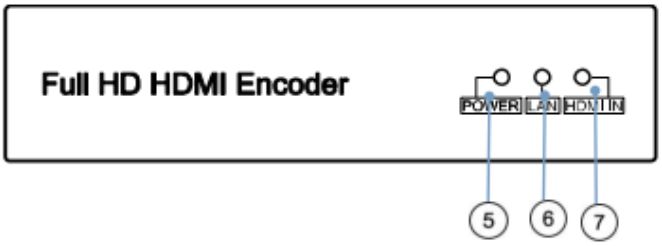
- Supports H.265 | H.264 | MJPEG Encoding
- Supports HDMI Input
- Supports UDP, HTTP, RTSP, RTMP, SRT,HLS,FLV,ONVIF Protocols
- Supports MPEG1 Audio Layer 2
- CBR/VBR Rate: 32Kbps~32Mbps
- 100M Network Interface (full duplex mode)
- Supports up to 1080p@60Hz HD Video Input
- Supports Image Parameter Settings
- Supports Remote Management in WAN (webGUI)
- Supports Customized Resolution Settings

2. Package Contents

- (1) x J-Tech Digital JTECH-ENCH4 Encoder
- (1) x Power Adapter DC12V 1A
- (1) x User Manual

3. Hardware Description





① Power Input Port ③ Reset Button ⑤ Power Input Indicator ⑦ HDMI Input Indicator

② HDMI Input Port ④ LAN Output Port ⑥ LAN Output Indicator

Note: 1 Reset to Factory Default Settings: press & hold “Reset” for 10 seconds until all three indicators go out.

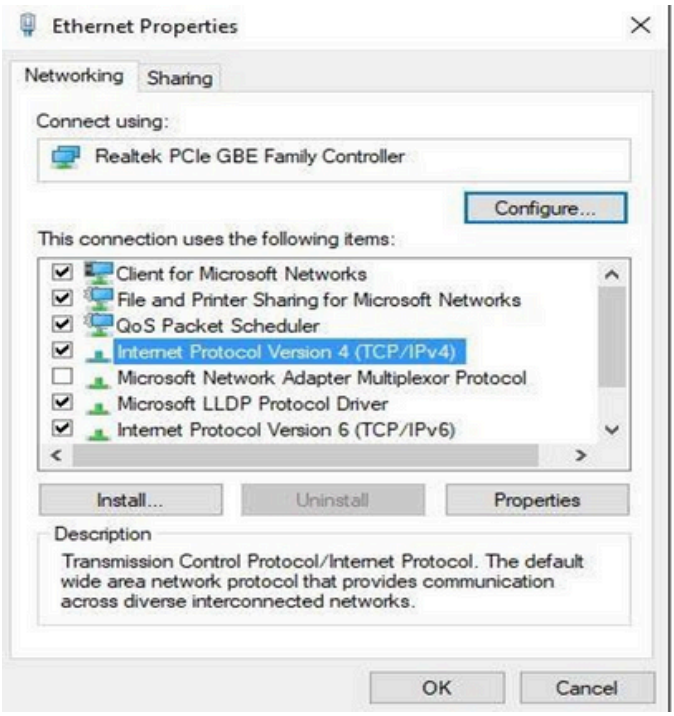
2 LAN: Default IP is **192.168.1.168**

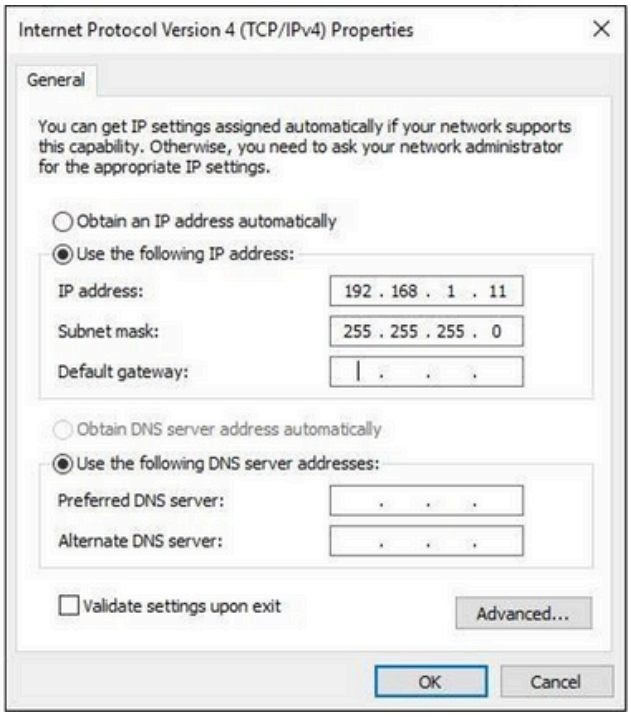
4. Typical Application

5. Connection Configuration

5.1 Change the IP Address of PC

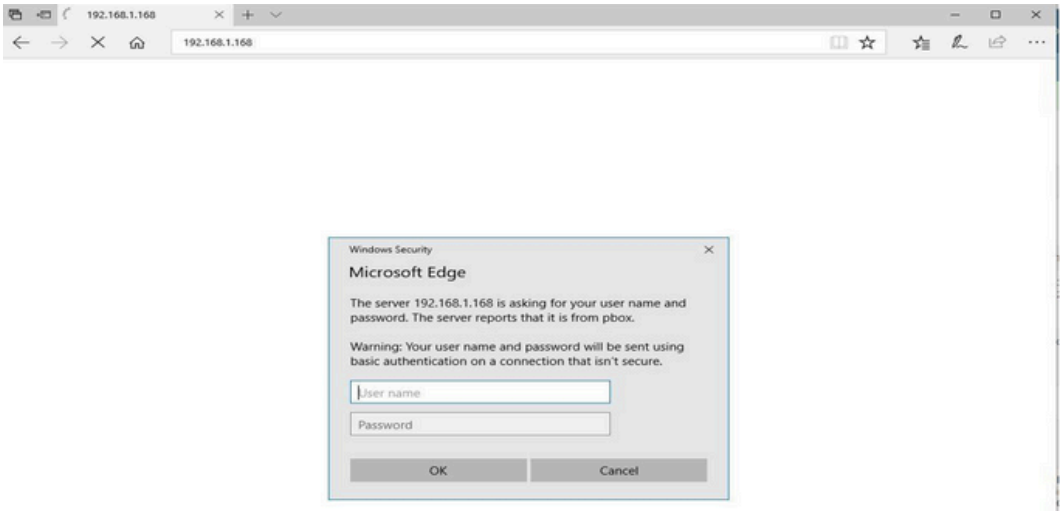
Assign the PC (or laptop) an IP address. On a Windows PC: Press the ⊞+ R on your keyboard →Enter "**control netconnections**" in the run box and press enter → Right click on your wired ethernet adapter → Select "**Properties**" → Double click "**Internet Protocol Version 4 (TCP/IPv4)**" → Enter the IP address with 192.168.1.11 (0-255) and Subnet mask 255.255.255.0. Press OK twice to save the configuration.





5.2 Login for Configuration

Enter the unit's IP address (192.168.1.168) in your browser's address bar, to open the web GUI. Login with the default credentials, **User Name – admin | Password – admin**



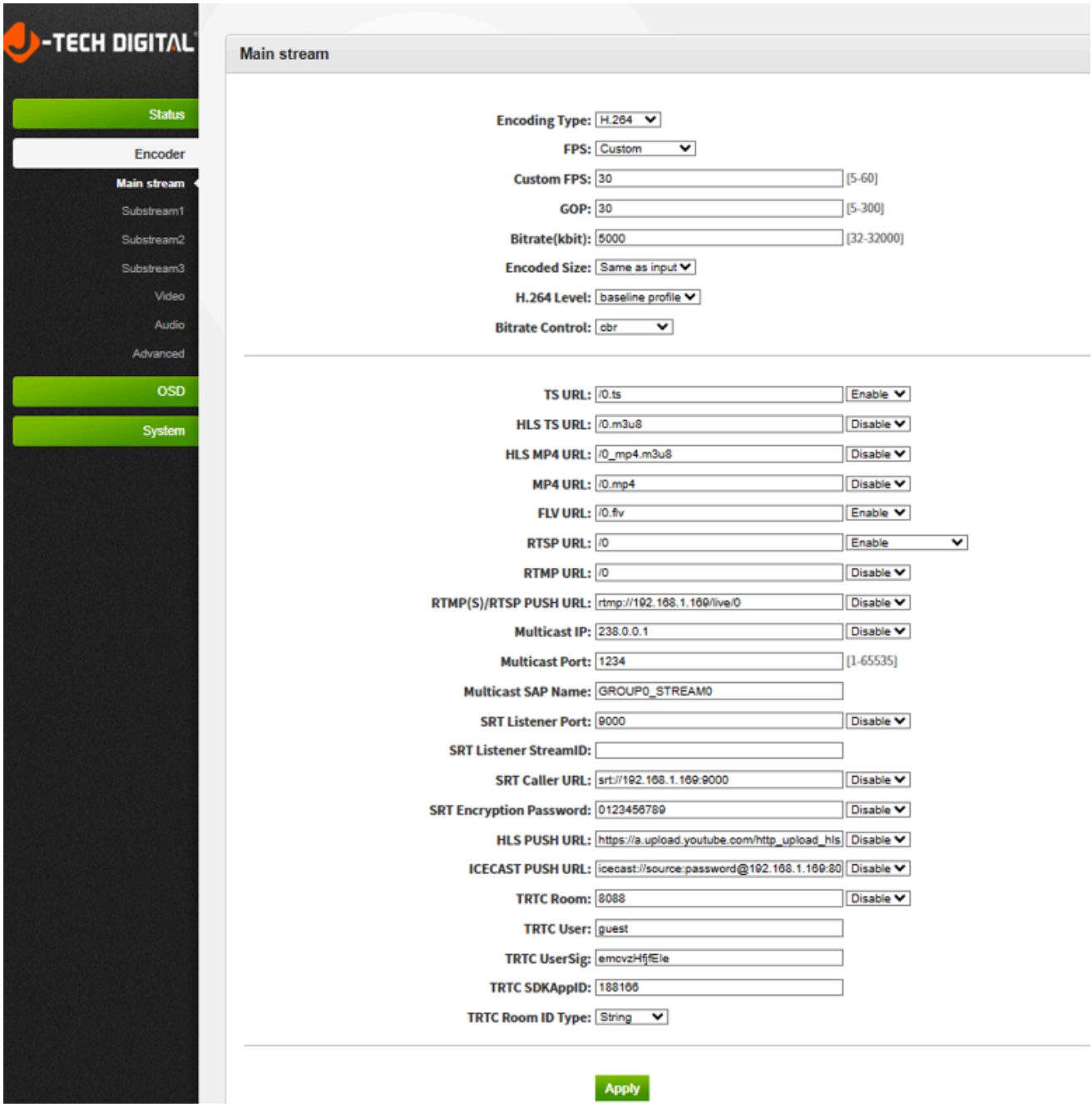
5.3 Check the Stream Address

Stream addresses populate in the “Main Stream” category of the encoders web GUI.

6. Encoder Setting

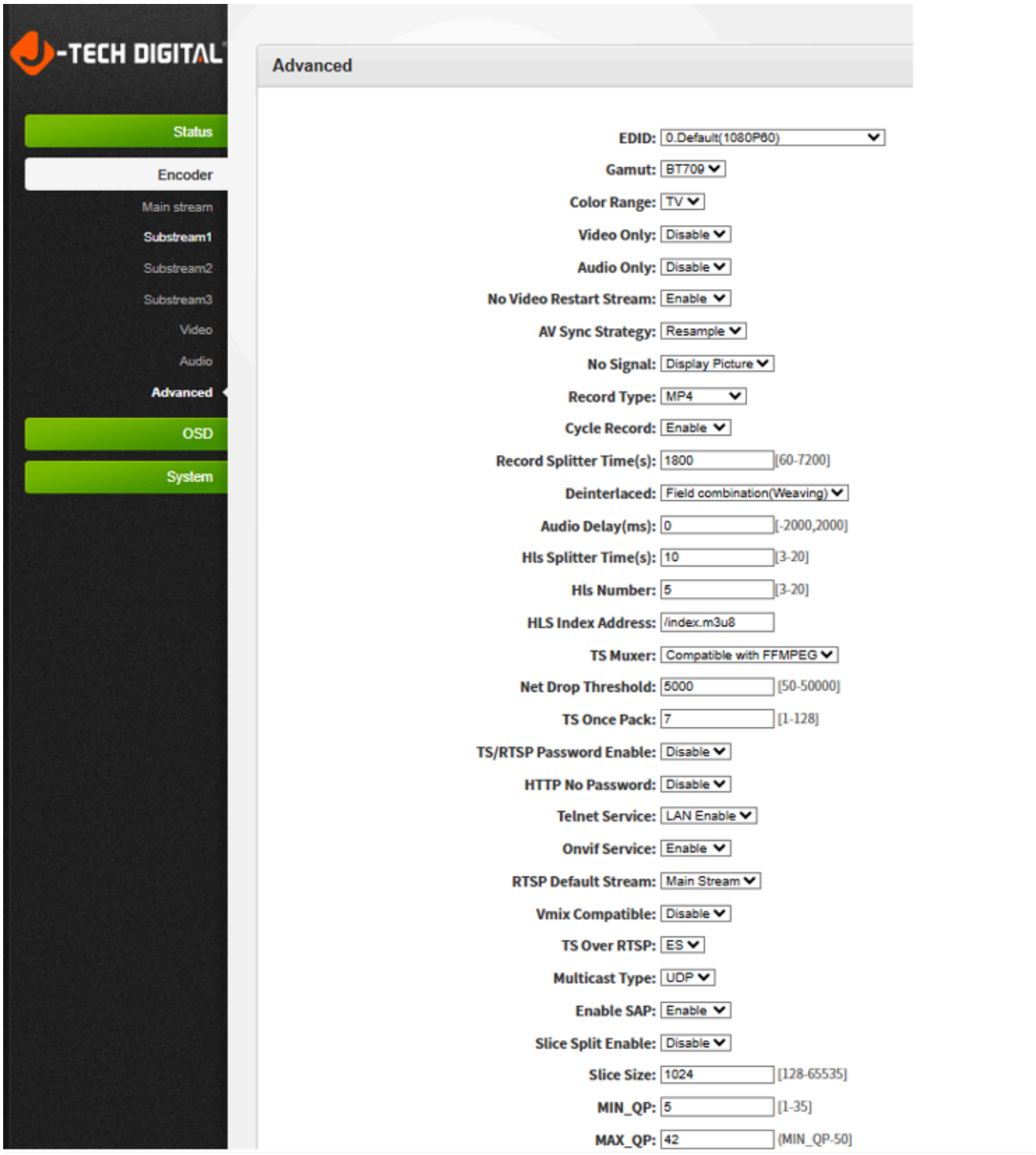
6.1 Encoder Setting

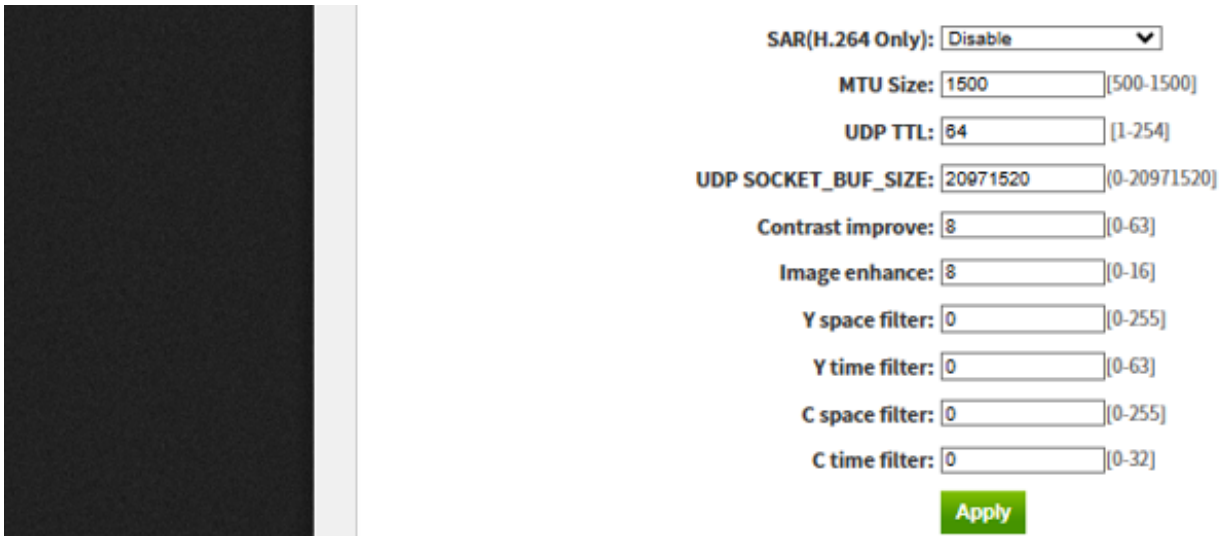
Click “Encoder” setting → “Main stream” → Configure your settings → Click Apply



6.2 Advanced

Click “Encoder” → “Advanced” → Configure your settings → Click “Apply”

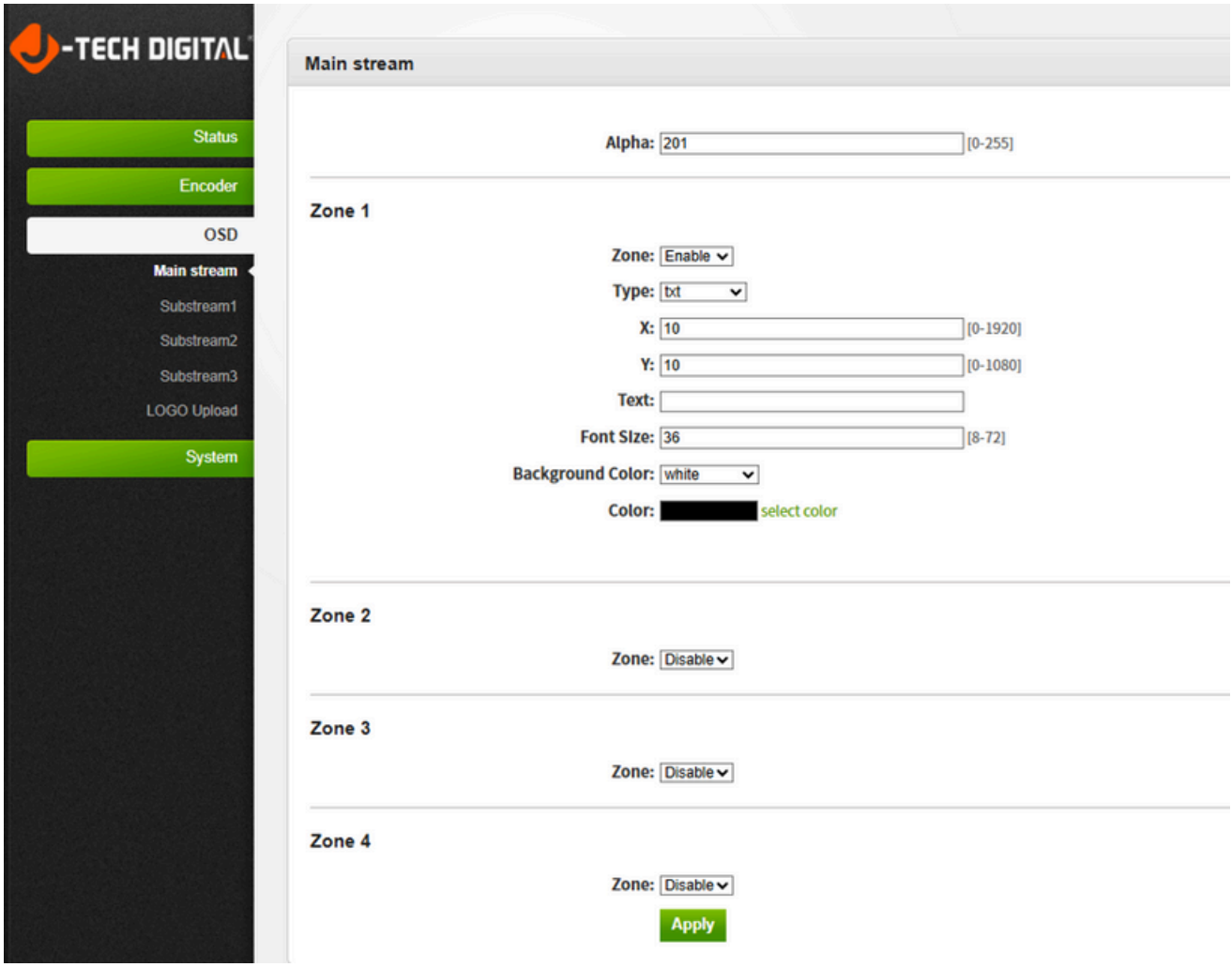




7. OSD Setting

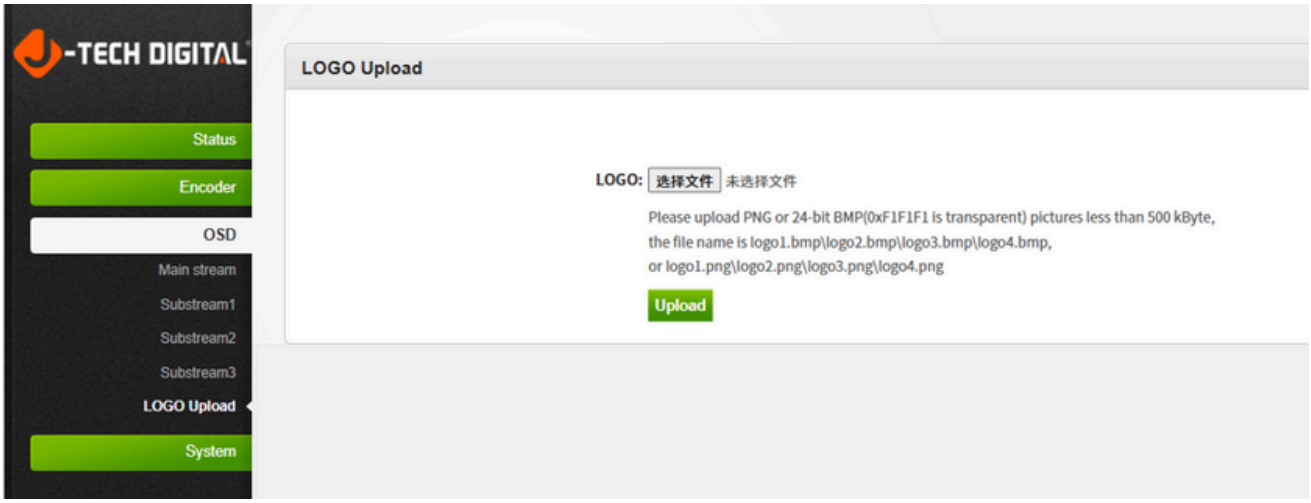
7.1 Streaming OSD Setting

Click “OSD” → Configure your settings → Click “Apply”



7.2 Logo Uploading

“LOGO upload” → Choose a bmp file that matches the requirements → Click “Apply”



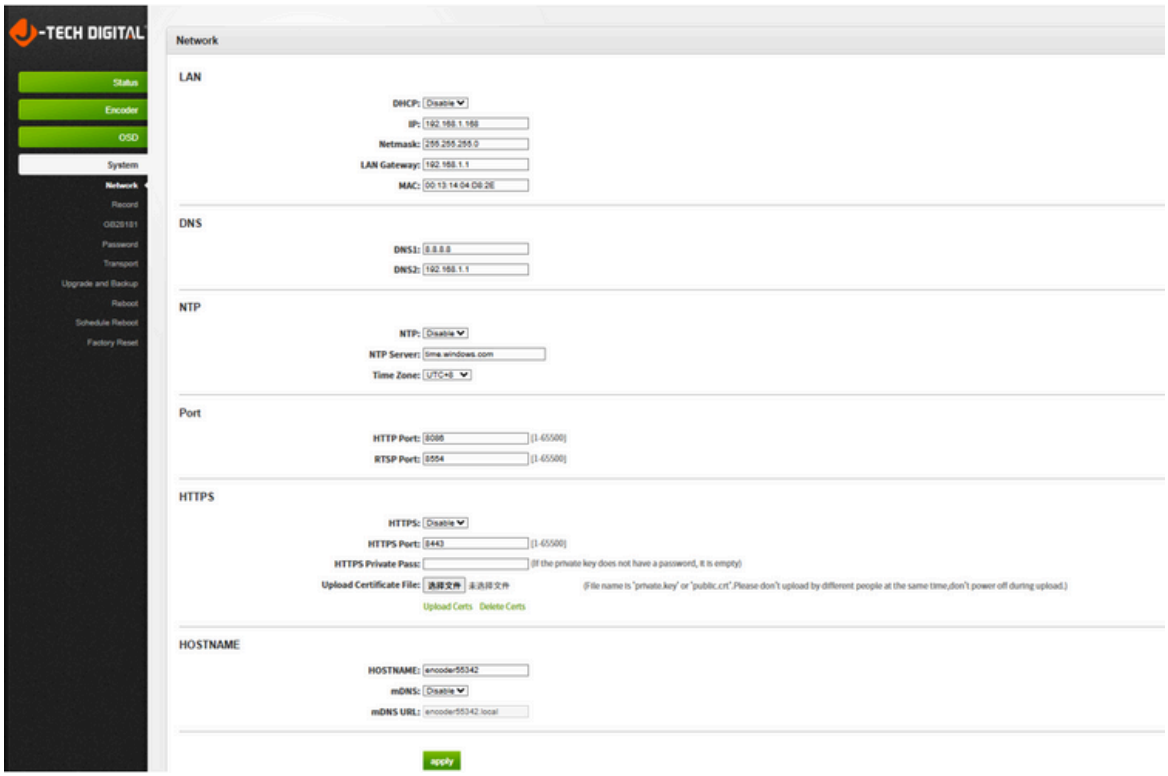
※ Note: The above interface screenshot examples may show a difference with actual operation interface due to software upgrades. All screenshots are for reference only.

8. System

8.1 Network

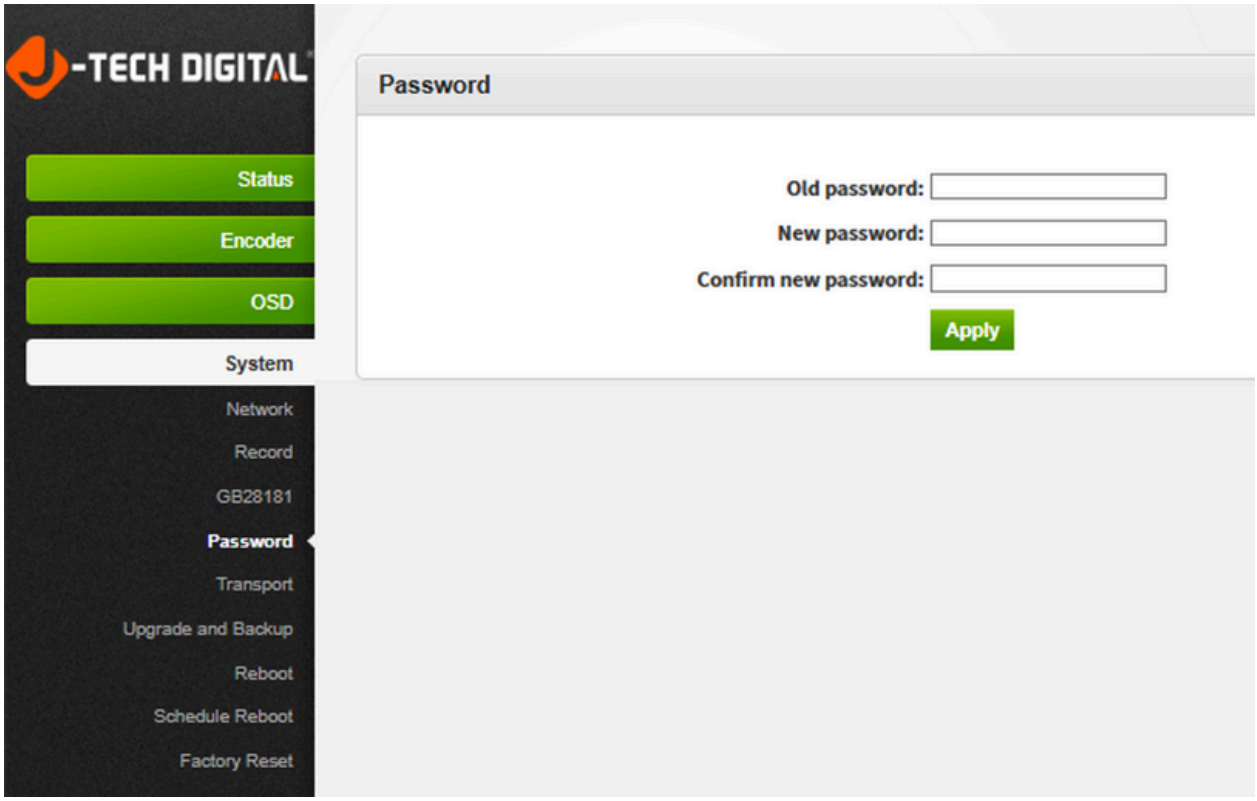
Click System → Network → Modify the network settings to match those of your network

Click apply. **Note: Please change your DNS server to use Google’s DNS servers. (Provided in the picture below.)**



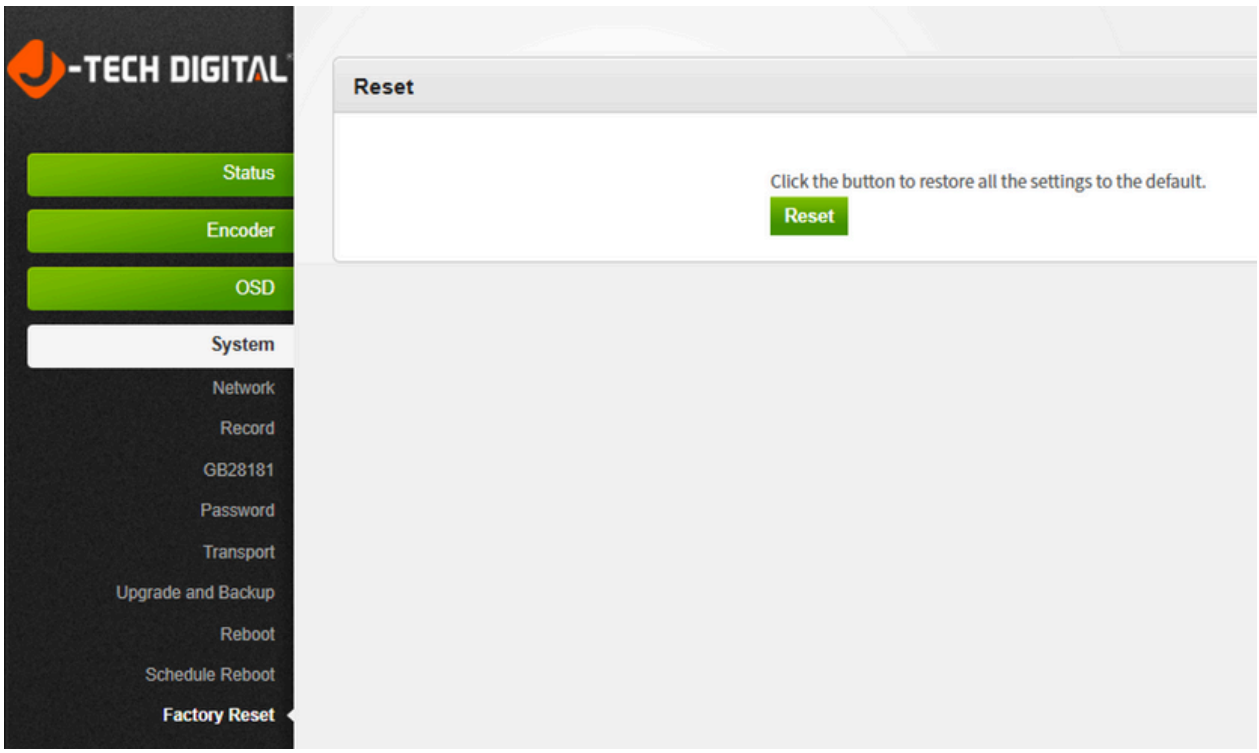
8.2 Change Password

System → Change password → Set your password → Apply



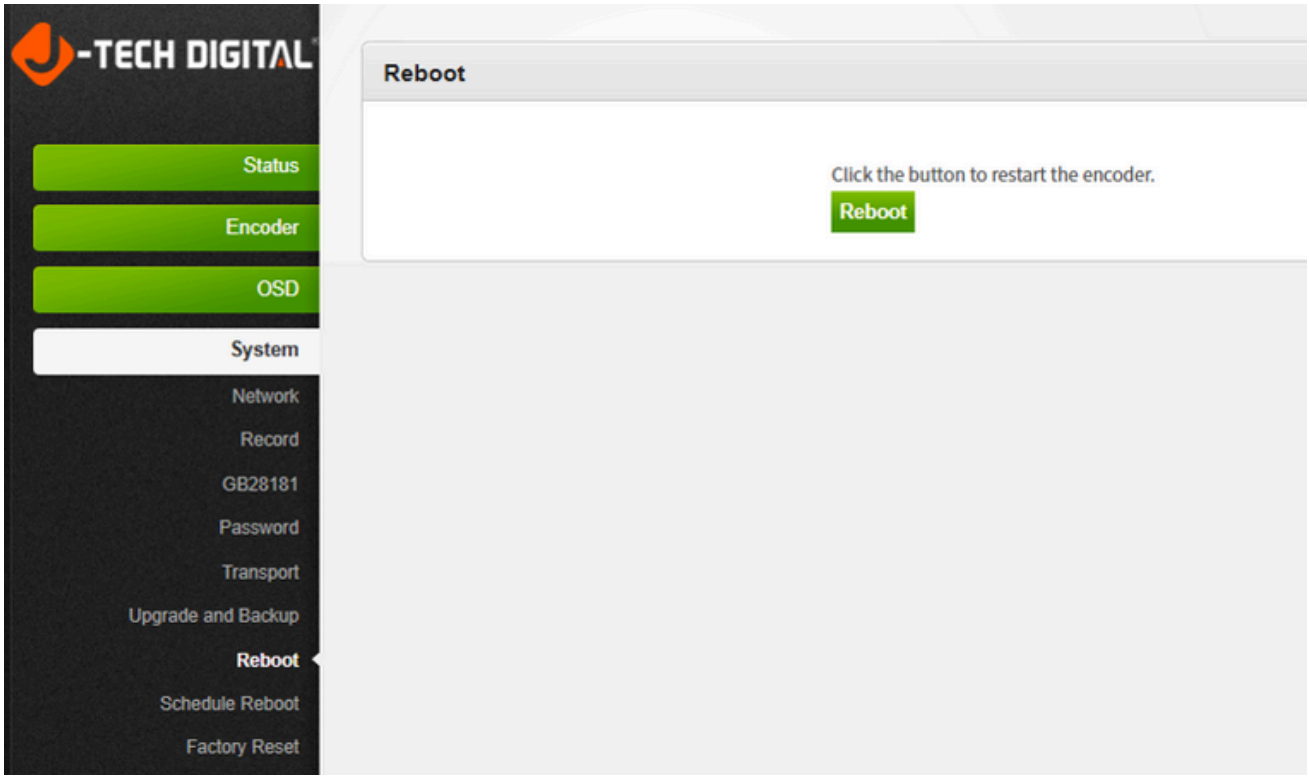
8.3 Reset

System → Factory Reset → Reset **Note: This will set your device to the factory defaults.**



8.4 Reboot

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



9. Application

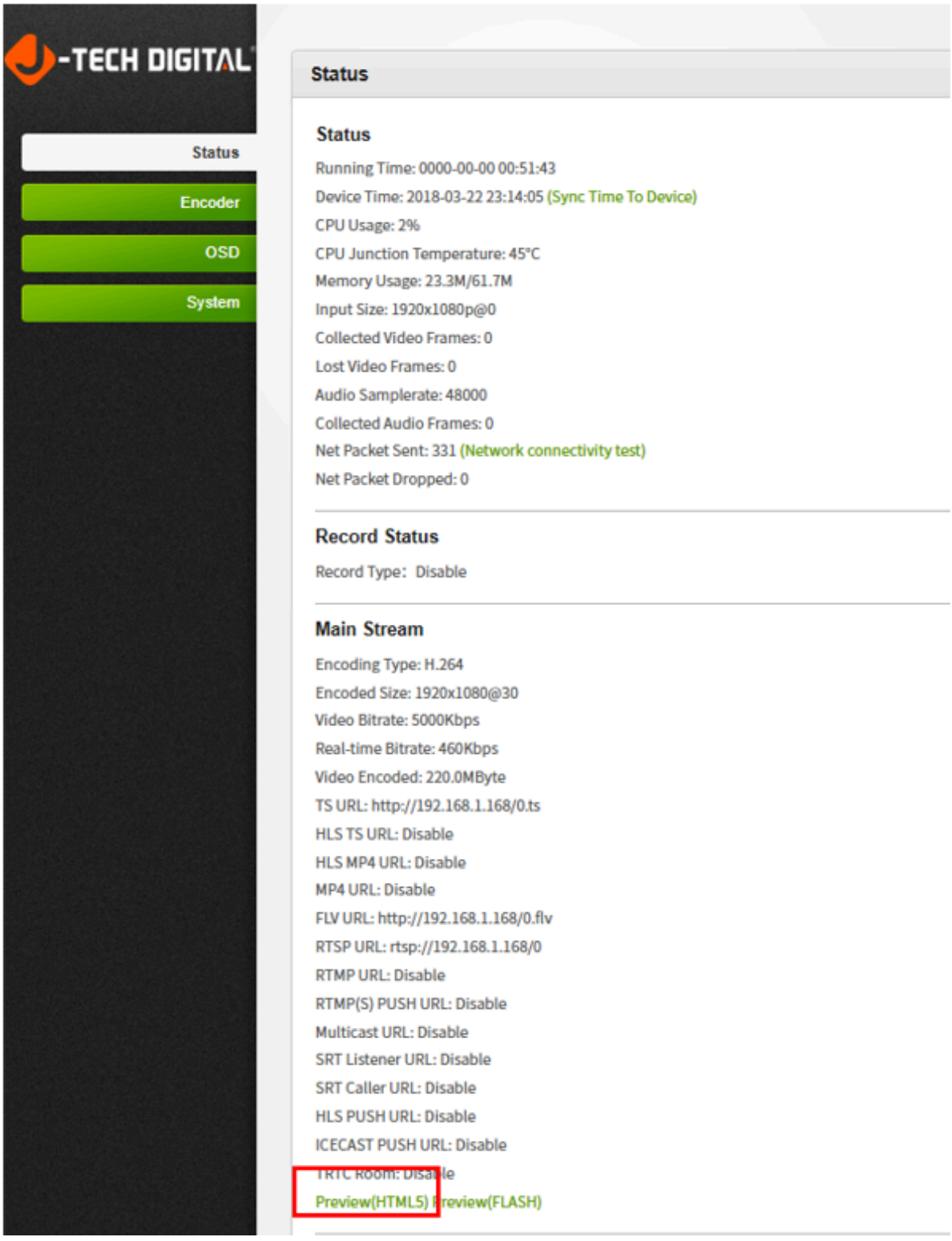
9.1 User Application Example

9.1.1 Web Video Preview

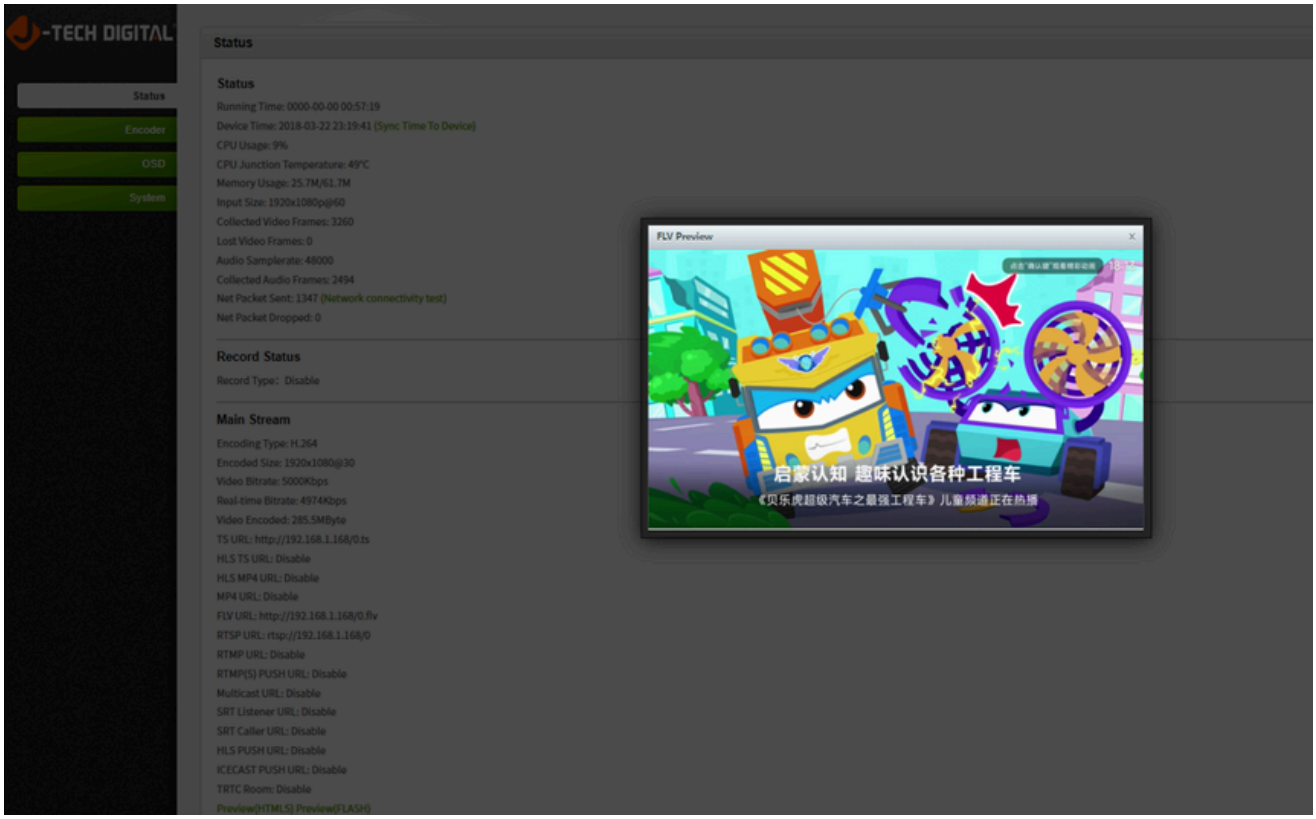
Status → Main Stream → Preview

Note: For Internet Explorer, you can get preview window directly.

For Chrome, you must install an extension called "Native HLS Playback" to get the preview window.

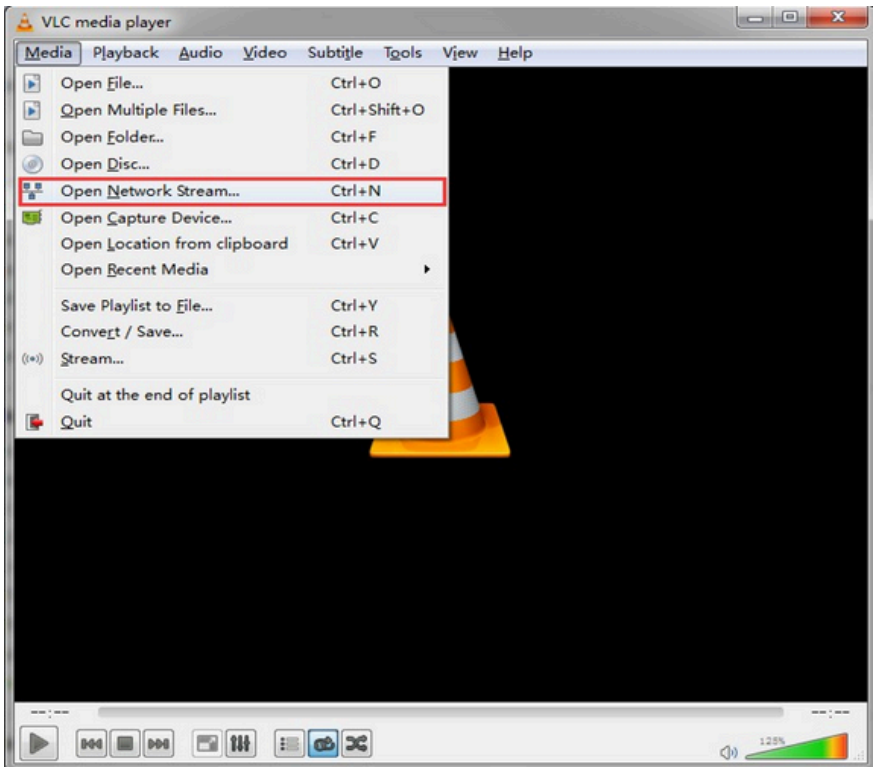

-TECH DIGITAL
Status
Encoder
OSD
System
Status
Status
Running Time: 0000-00-00 00:51:43
Device Time: 2018-03-22 23:14:05 (Sync Time To Device)
CPU Usage: 2%
CPU Junction Temperature: 45°C
Memory Usage: 23.3M/61.7M
Input Size: 1920x1080p@0
Collected Video Frames: 0
Lost Video Frames: 0
Audio Samplerate: 48000
Collected Audio Frames: 0
Net Packet Sent: 331 (Network connectivity test)
Net Packet Dropped: 0
Record Status
Record Type: Disable
Main Stream
Encoding Type: H.264
Encoded Size: 1920x1080@30
Video Bitrate: 5000Kbps
Real-time Bitrate: 460Kbps
Video Encoded: 220.0MByte
TS URL: http://192.168.1.168/0.ts
HLS TS URL: Disable
HLS MP4 URL: Disable
MP4 URL: Disable
FLV URL: http://192.168.1.168/0.flv
RTSP URL: rtsp://192.168.1.168/0
RTMP URL: Disable
RTMP(S) PUSH URL: Disable
Multicast URL: Disable
SRT Listener URL: Disable
SRT Caller URL: Disable
HLS PUSH URL: Disable
ICECAST PUSH URL: Disable
TRTC Room: Disable
Preview(HTML5) Preview(FLASH)

Picture below shows the stream preview

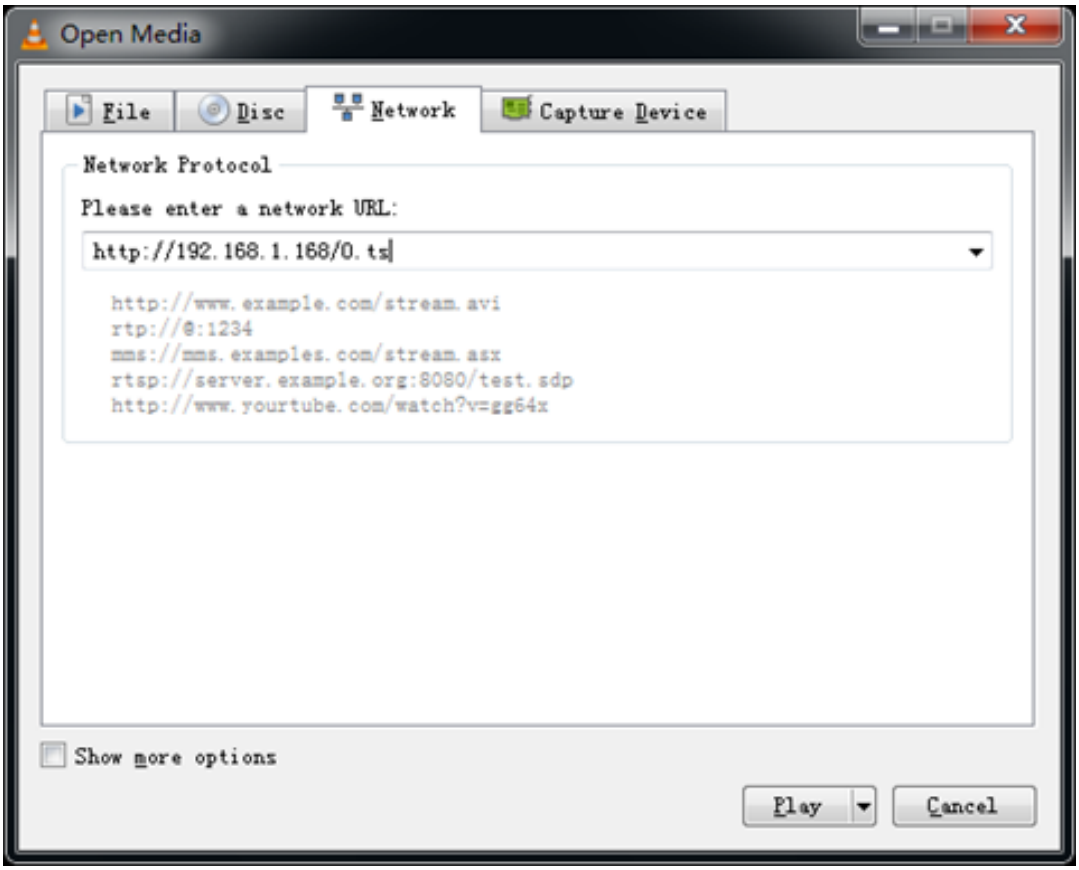


9.1.2 VLC

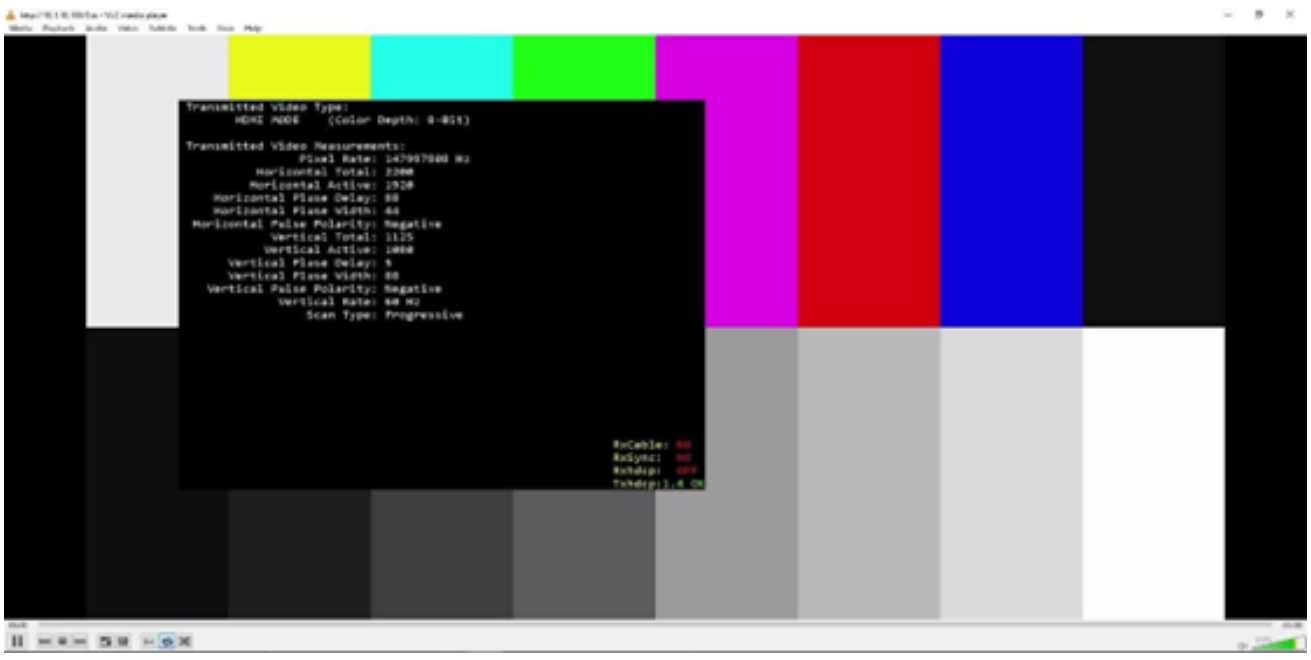
Connect an HDMI source to the JTECH-ENCH4 encoder. Open VLC media player (Download link: http://www.videolan.org/)，Click “Media”, then click “Open Network Stream”.



Enter the Stream URL from the page of “Main stream”, click “Play”. **Note: Please make sure that the stream type you choose is enabled in the encoder.**

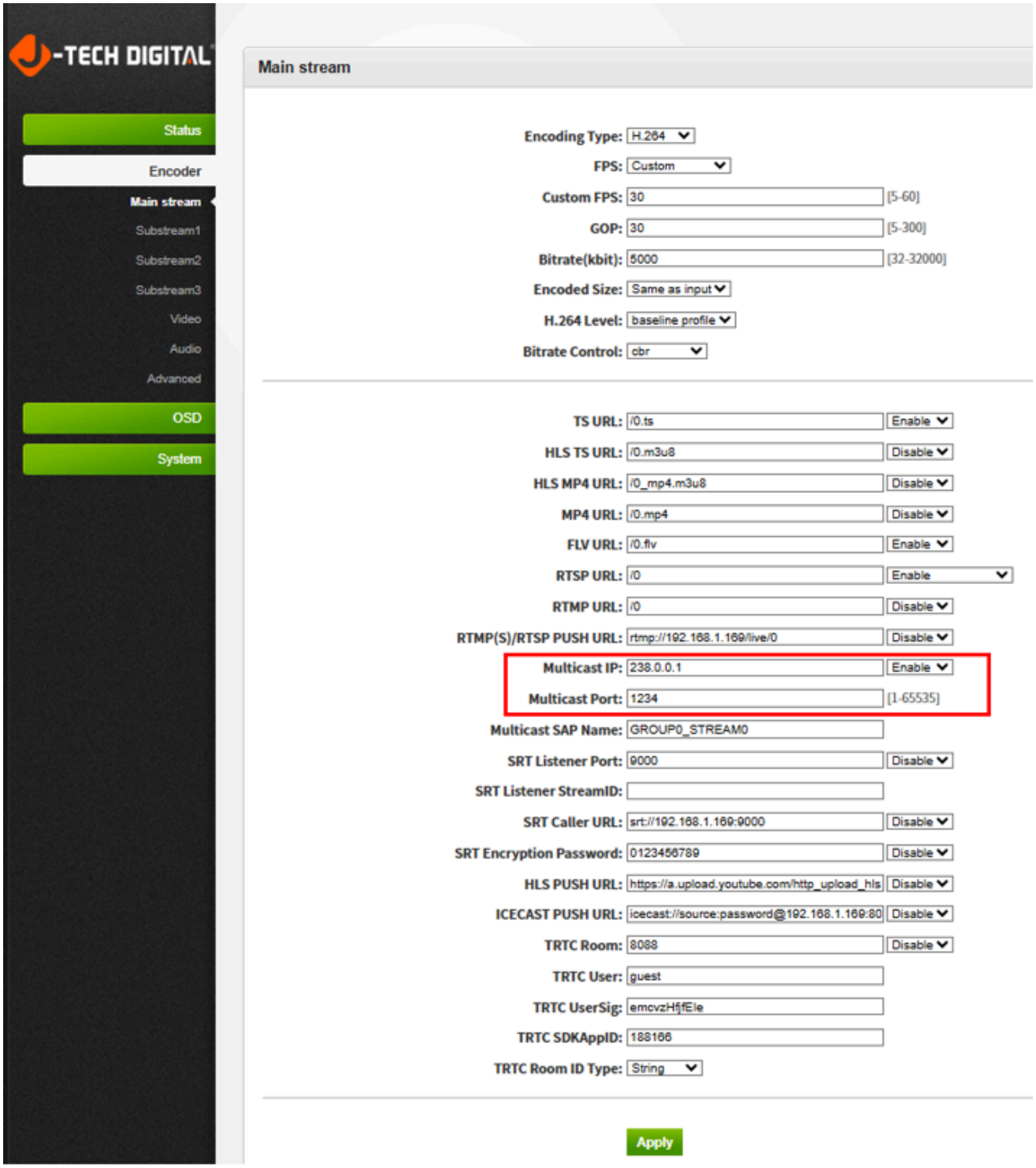


VLC Example:

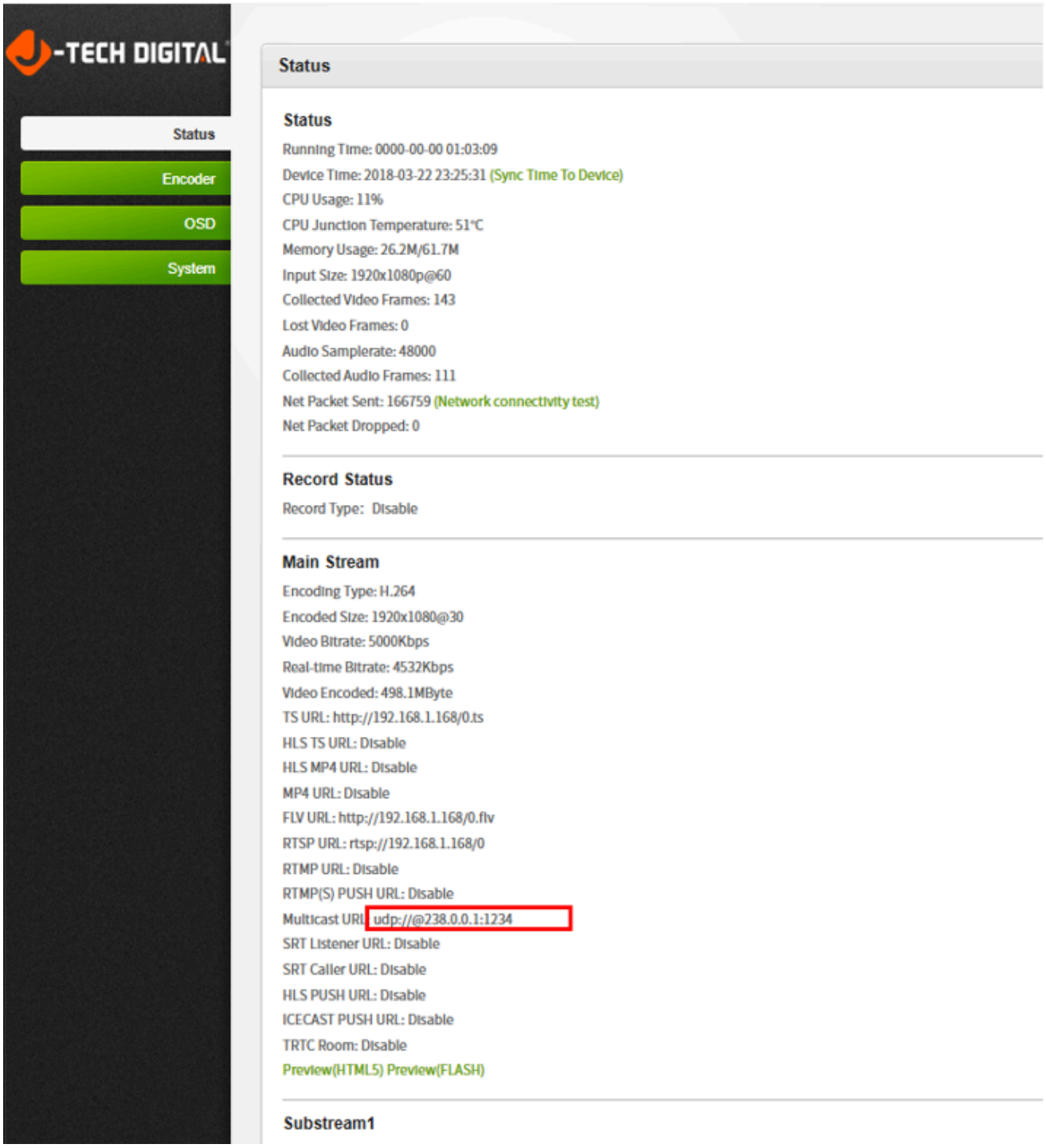


9.2 Multi Local User Application - Multicast

If more than one local user needs to stream the video of the encoder simultaneously, you may enable multicast IP, then reboot the JTECH-ENCH4 encoder.

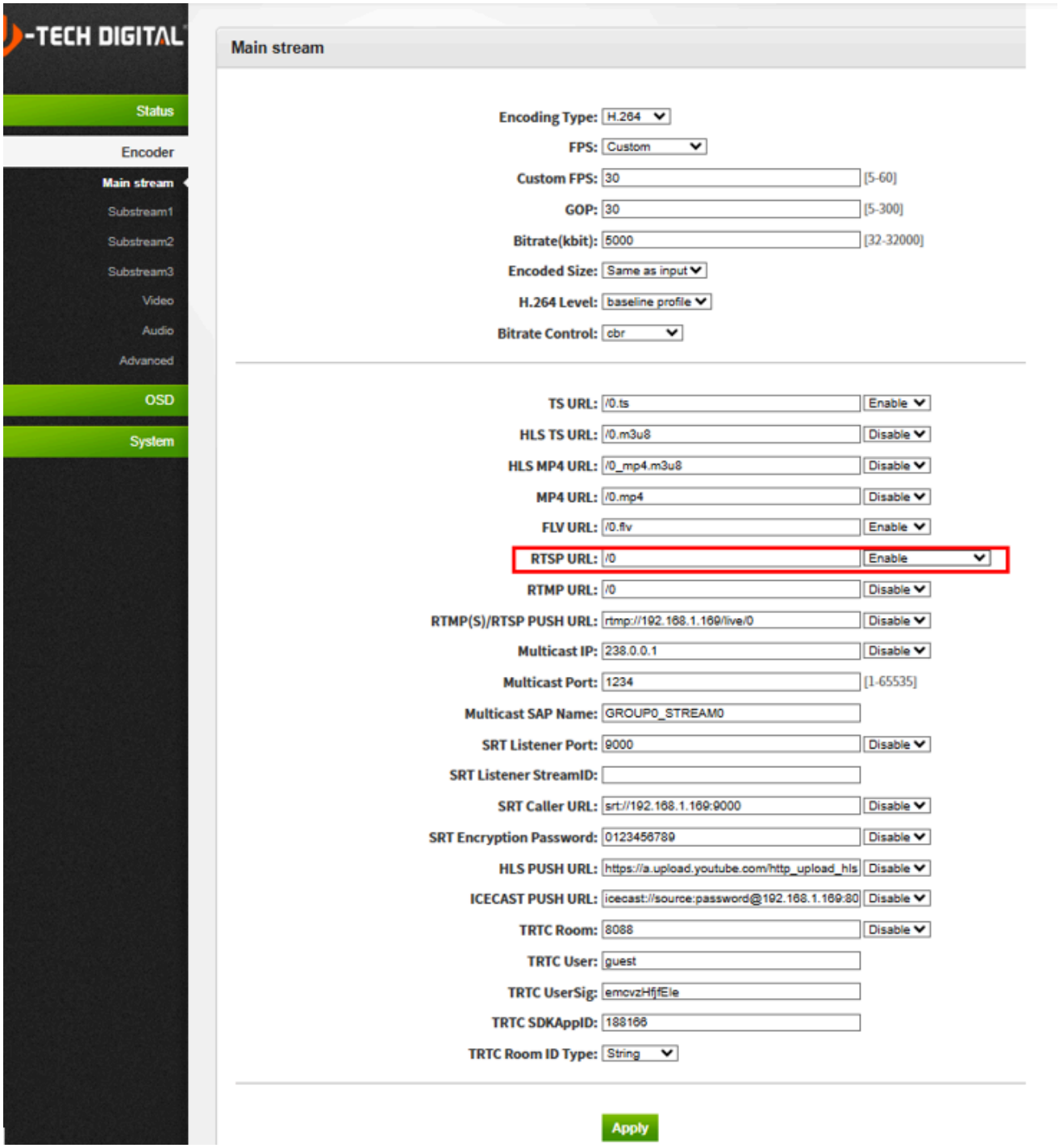


After the reboot, copy the multicast IP address from the Status page, and paste the IP address into VLC Player. This stream can be viewed by more than one user at the same time

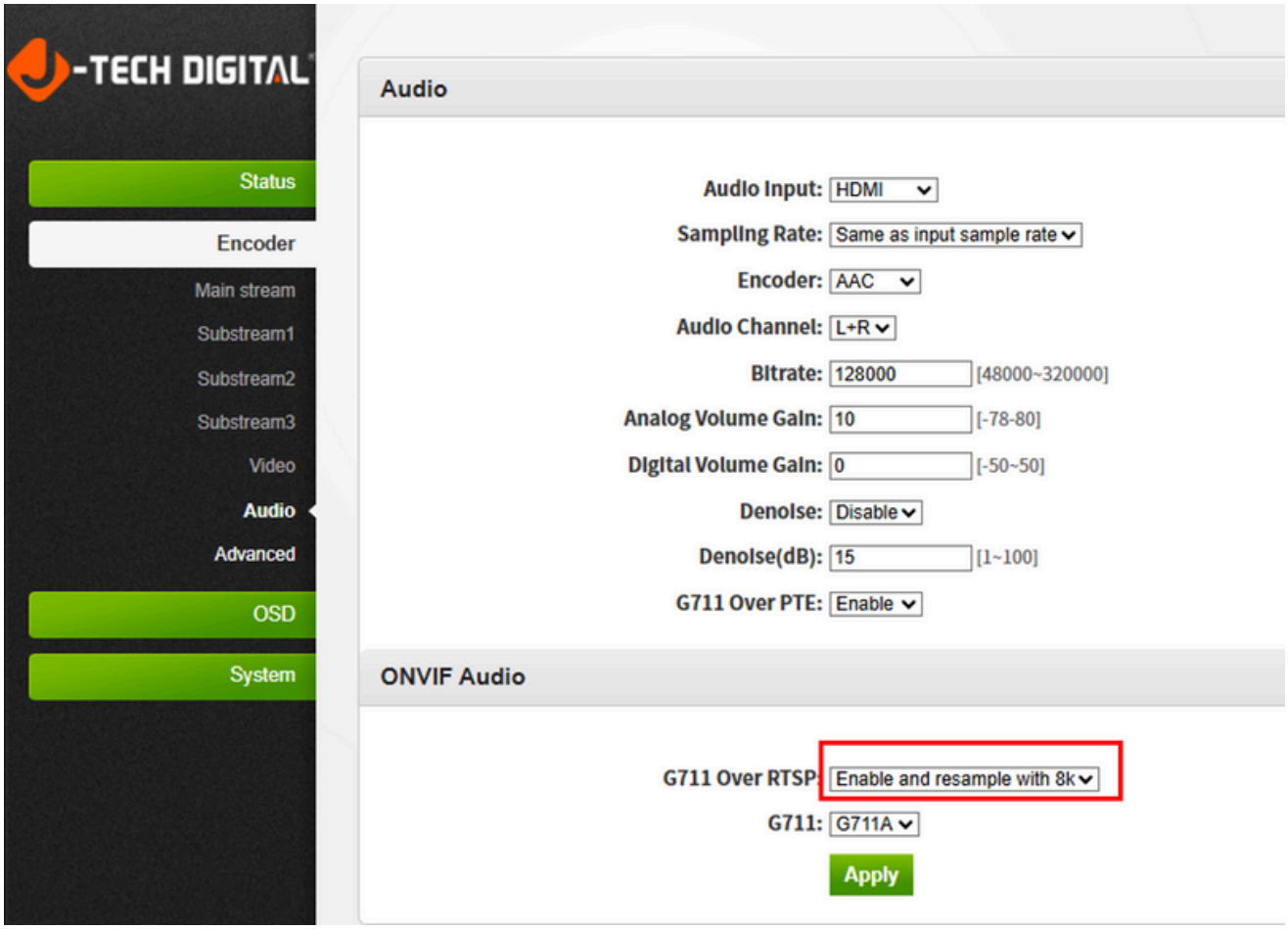


9.3 Local Surveillance System Application NVR Connection

1. Confirm if your NVR supports the H.264 codec. Since we're using ONVIF, you will need to enable the "RTSP" function as pictured below.



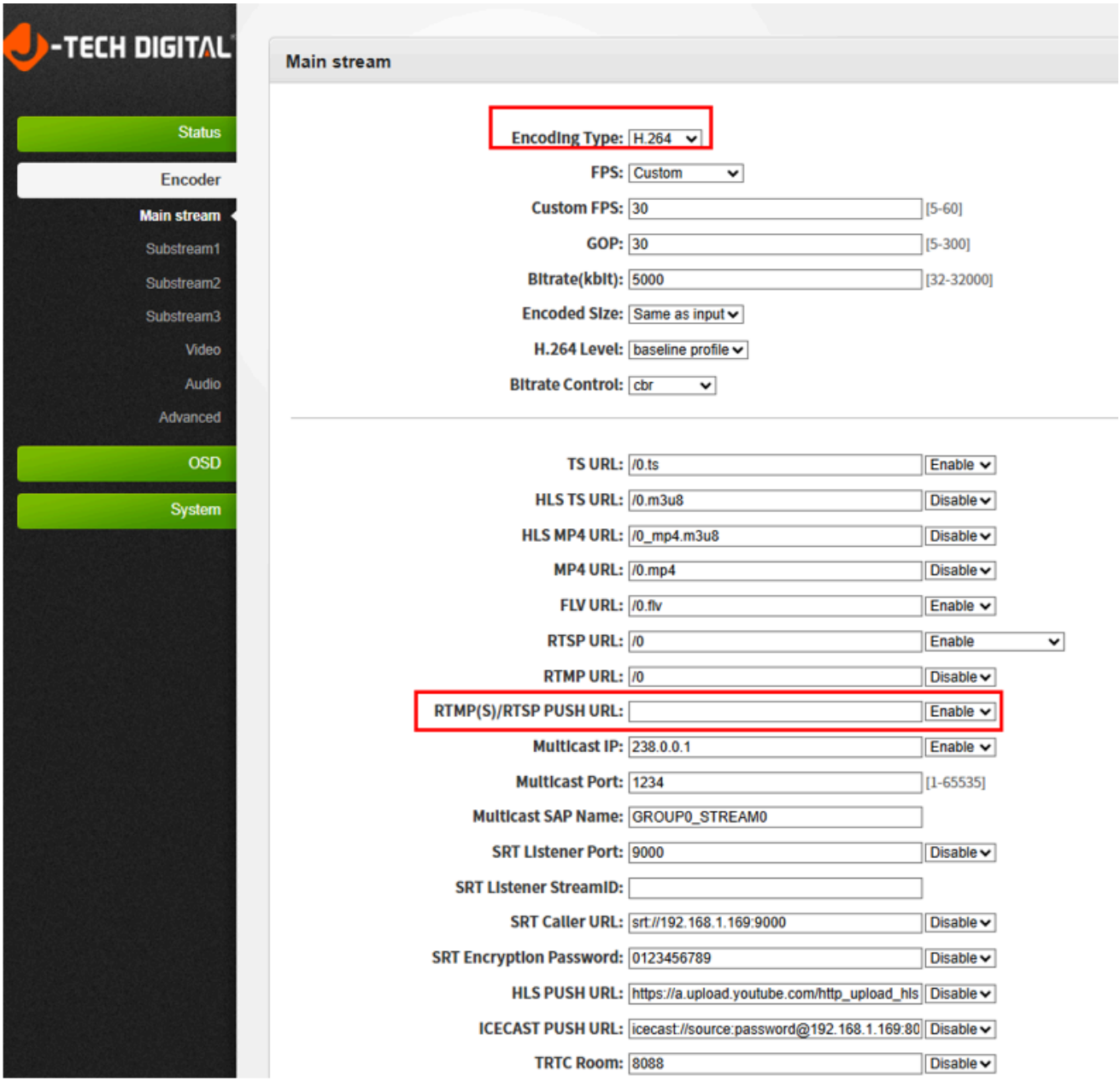
2. If you need the NVR to recognize the audio of the HD Encoder, you will need to enable the Audio as below picture:



Note: If you've enabled the ONVIF setting and still can't open the video, we suggest you download the ONVIF TEST tool.

9.4 Remote Multi User: RTMP Connection

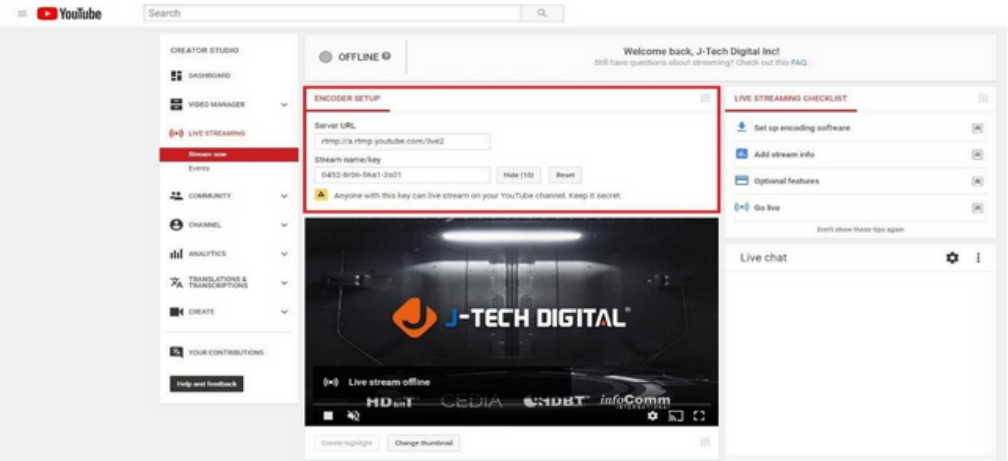
To stream over the web, to multiple locations, you may use RTMP. This encoder supports multiple platforms, including: YouTube Live, Facebook Live, DaCast, Red5, etc.



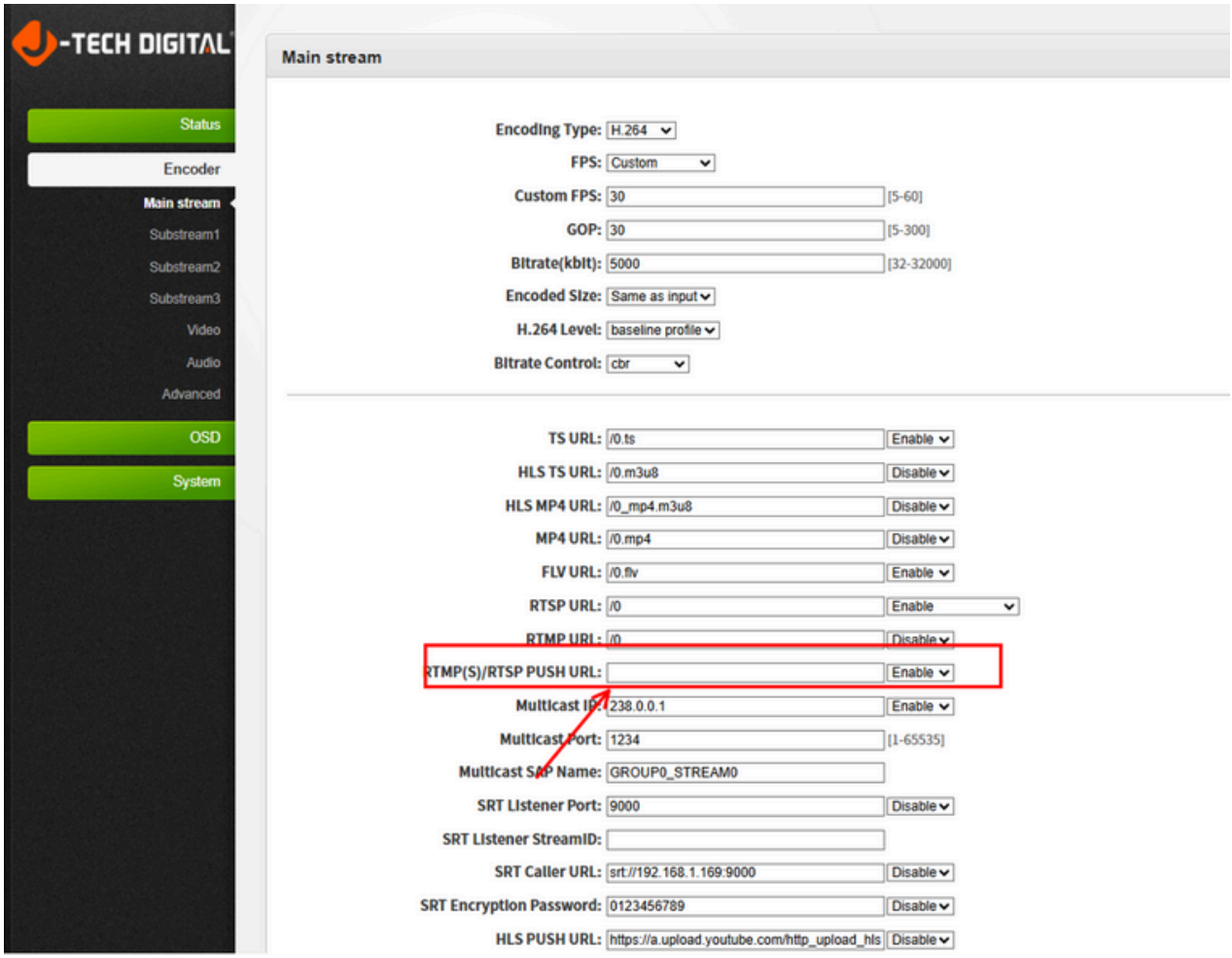
9.5 RTMP: Stream to YouTube Live

1. To stream to YouTube: access your YouTube Live settings (below) and combine your “Server URL” and “Stream name/key” (separated by a forward slash).

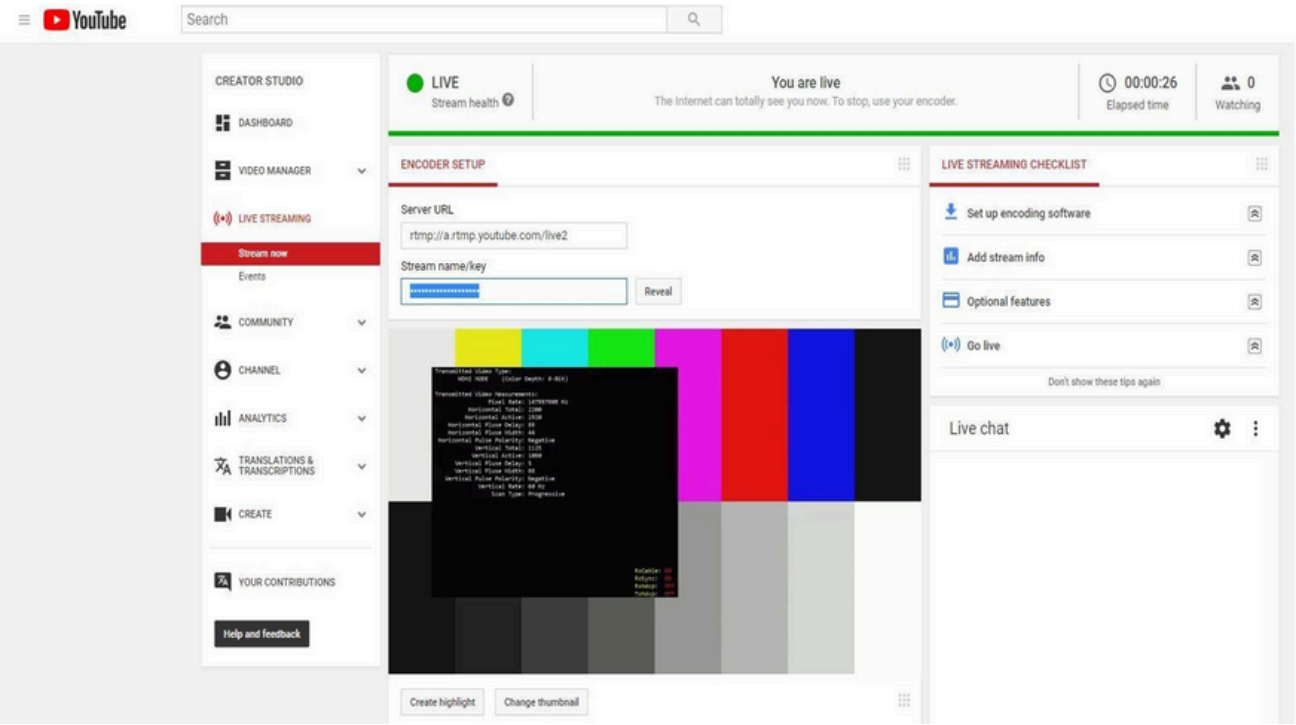
Full RTMP URL Example: rtmp://a.rtmp.youtube.com/live2/zc3e-yw22-bbdw-baeg



2. Enter the full RTMP URL into the “RTMP PUBLISH URL” setting of your J-Tech Digital Encoder; apply and reboot. **Note: For best results, check that “TS muxer” is set to “Compatible with FFMPEG”**



3. Check “Stream Health” in YouTube and adjust settings accordingly, per your specific stream requirements. **Note: Use Google’s DNS servers (8.8.8.8 and 8.8.4.4), in your encoder’s network settings for best results**



Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner of benzine to clean.

10. Product Service

1. Damage requiring service: The unit should be serviced by qualified service personnel if:

(a) The DC power supply cord or AC adapter has been damaged; (b)Objects or liquids have gotten into the unit;

(c) The unit has been exposed to rain;

(d) The unit does not operate normally or exhibits a marked change in performance;

(e)The unit has been dropped or the cabinet damaged.

2. Servicing Personnel: Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.

3. Replacement parts: When parts need replacing ensure the service uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.

4. Safety check: After repairs or service, ask the service to perform safety checks to confirm that the unit is in proper working condition.

11. Warranty

If your product does not work properly because of a defect in materials or workmanship, our Company (referred to as "the warrantor") will, for the length of the period indicated as below, (Parts(1)Year, Labor(90) Days) which starts with the date of original purchase ("Limited Warranty period"), at its option either(a) repair your product with new or refurbished parts, or (b) replace it with a new of a refurbished product. The decision to repair or replace will be made by the warrantor.
During the "Labor" Limited Warranty period there will be no charge for labor.
During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

12. Mail-In Service

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

13. Limited Warranty Limits and Exclusions

This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.) PARTS AND SERVICE, WHICH ARE NOT COVERED BY HIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

Extended Warranty:

With the registration of supported J-Tech Digital products, you extend the current warranty by 6 months. This extension is added to the warranty that starts at the purchase date of the device supported. Total product warranty with the extended period will equate to a total of 18 months of warranty from the date of purchase.

For extended warranties to be accepted, all warranty extensions must be claimed within 30 days of purchasing the eligible J-Tech Digital product. Extensions attempted to be claimed outside of the 30-day window will not be accepted. Visit **https://www.jtechdigital.com/get-warranty-extension** to register your extended warranty

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