SE1217

H.265/ H.264 HDMI STREAMING ENCODER

USING THE UNIT SAFELY

Before using this unit, please read below warning and precautions which provide important information concerning the proper operation of the unit. Besides, to assure that you have gained a good grasp of every feature of your new unit, read below manual. This manual should be saved and kept on hand for further convenient reference.

Warning and Cautions

※ To avoid falling or damage, please do not place this unit on an unstable cart, stand, or table.

※ Operate unit only on the specified supply voltage.

※ Disconnect power cord by connector only. Do not pull on cable portion.

※ Do not place or drop heavy or sharp-edged objects on power cord. A damaged cord can cause fire or electrical shock hazards. Regularly check power cord for excessive wear or damage to avoid possible fire / electrical hazards.

※ Ensure unit is always properly grounded to prevent electrical shock hazard.

※ Do not operate unit in hazardous or potentially explosive atmospheres. Doing so could result in fire, explosion, or other dangerous results.

※ Do not use this unit in or near water.

※ Do not allow liquids, metal pieces, or other foreign materials to enter the unit.

※ Handle with care to avoid shocks in transit. Shocks may cause malfunction. When you need to transport the unit, use the original packing materials, or alternate adequate packing.

※ Do not remove covers, panels, casing, or access circuitry with power applied to the unit! Turn power off and disconnect power cord prior to removal. Internal servicing / adjustment of unit should only be performed by qualified personnel.

※ Turn off the unit if an abnormality or malfunction occurs. Disconnect everything before moving the unit.

Note: due to constant effort to improve products and product features, specifications may change without notice.

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1. BRIEF INTRODUCTION

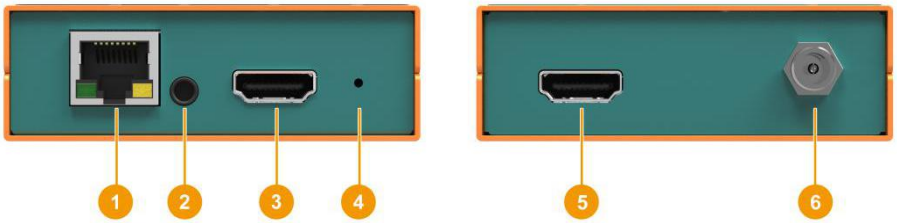
1.1. Overview

SE1217 is a HD audio and video encoder which can encode and compress HDMI video and audio source into IP stream, and then transmit it to streaming media server via network IP address to live broadcast on platforms like Facebook, YouTube, Ustream, Twitch, Wowza etc.

1.2. Main Features

- 1×HDMI input, 1×HDMI loop out, 1×Analog audio input
- Up to 60fps at 1920x1080 streaming
- H.265/ H.264 Stream Protocol
- Dual-stream (Main stream and Sub stream)
- RTSP/RTP/RTMP/HTTP/UDP/SRT unicast and multicast protocol
- OSD Image and Text overlay
- Mirror Image & Upside-down Image
- Replace the capture, no computer to achieve the push stream.
- Live stream without a computer connection

1.3. Interfaces



1	LAN PORT FOR STREAM
2	AUDIO INPUT
3	HDMI INPUT
4	RESET/ LED INDICATOR
5	DC 12V IN
6	HDMI LOOPOUT

2. SPECIFICATIONS

CONNECTION	
Video	Input: HDMI Type A ×1; Loop Out:HDMI Type A ×1
Analog Audio	3.5mm line in ×1
Network	RJ-45×1(100/1000Mbps self-adaptive Ethernet)
STANDARDS	
HDMI In Format Support	1080p 60/59.94/50/30/29.97/25/24/23.98/23.976, 1080i 50/59.94/60, 720p 60/59.94/50/30/29.97/25/24/23.98, 576i 50, 576p 50, 480p 59.94/60, 480i 59.94/60
Video Coding	H.265/ H.264
Video Bitrate	16Kbps ~ 12MKbps
Audio Coding	ACC/ MP3/ MP2/ G711
Audio Bitrate	24Kbps ~ 320Kbps
Encoding Resolution	1920×1080, 1680×1056, 1280×720, 1024×576, 960×540, 850×480, 720×576, 720×540, 720×480, 720×404, 720×400, 704×576, 640×480, 640×360
Encoding Frame Rate	5-60fps
SYSTEMS	
Network Protocols	HTTP, RTSP, RTMP, UDP, Multicast, Unicast, SRT,
Configuration Management	Web configuration, Remote upgrade
OTHERS	
Consumption	5W
Temperature	Working temp: -10℃~60℃, Storage temp: -20℃~70℃
Dimension (LWD)	104 × 75.5 × 24.5mm
Weight	Net weight: 310g, Gross weight: 690g
Accessories	12V 2A power supply; Mounting bracket for optional

3. OPERATIONS GUIDE

3.1. Network Configuration and Login

Connect the encoder to network via a network cable. The default IP address of the encoder is 192.168.1.168. The encoder can auto obtain a new IP address when it is using DHCP on the network,

Or disable DHCP and configure the encoder and computer's network in the same network segment. The default IP address as below.

IP Address: **192.168.1.168**
Subnet Mask: **255.255.255.0**
Default Gateway: **192.168.1.1**
Visit encoder's IP address **192.168.1.168** through an Internet browser to login the WEB page for setting up. The default Username is **admin**, and password is **admin**.

3.2. Management Web Page

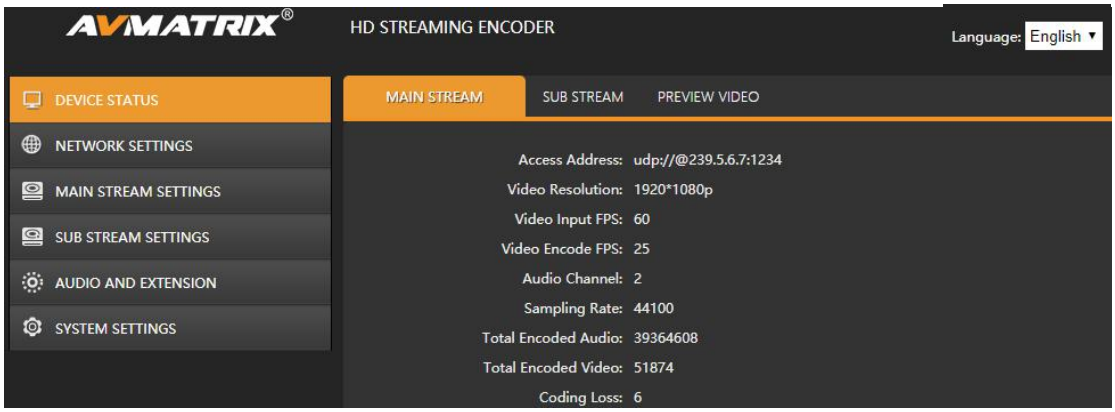
The encoding settings can be set on the encoder management web page.

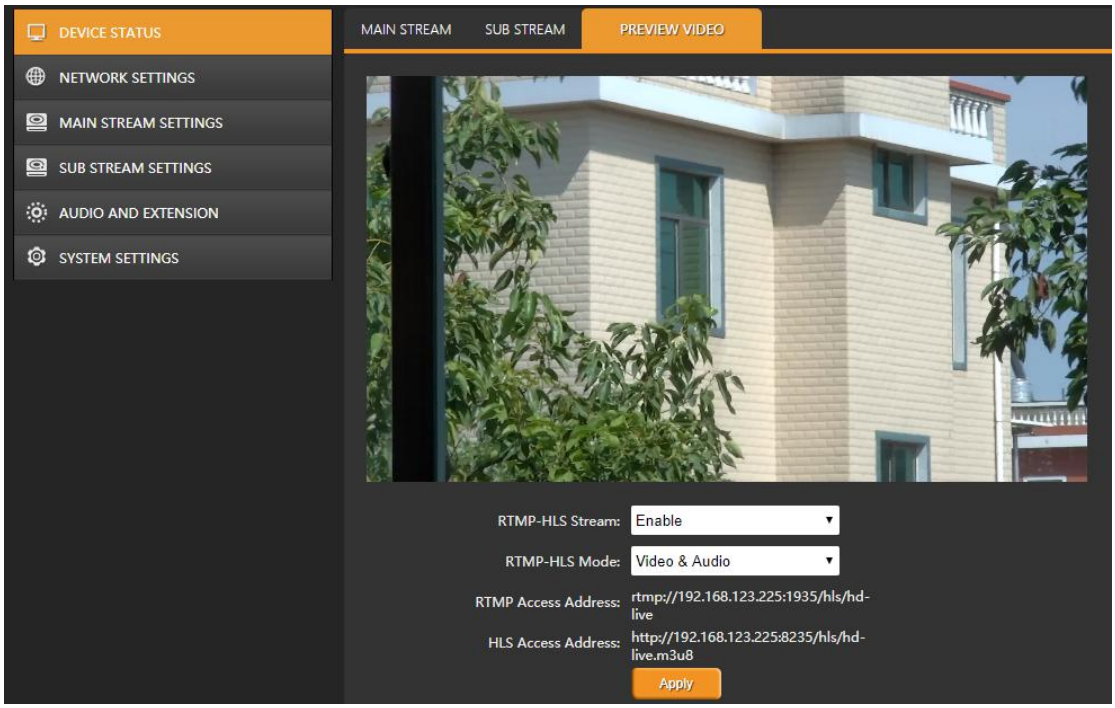
3.2.1. Language Settings

There are languages of Chinese (中文), Japanese (日本語) and English for option on the top-right corner of the encoder management web page.

3.2.2. Device Status

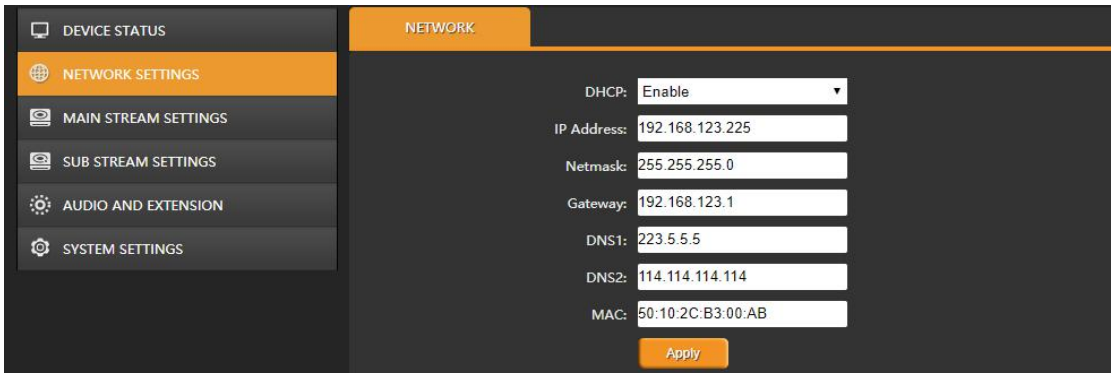
The status of MAIN STREAM and SUB STREAM can be checked on the web page. And we also can have a preview on the streaming video from PREVIEW VIDEO.





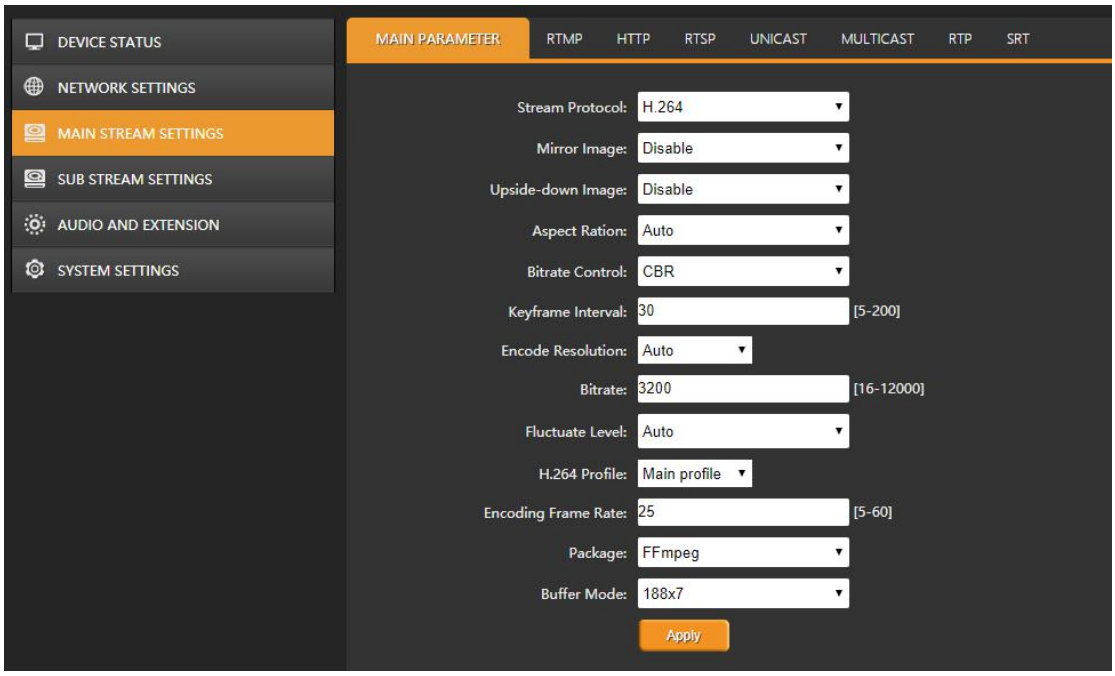
3.2.3. Network Settings

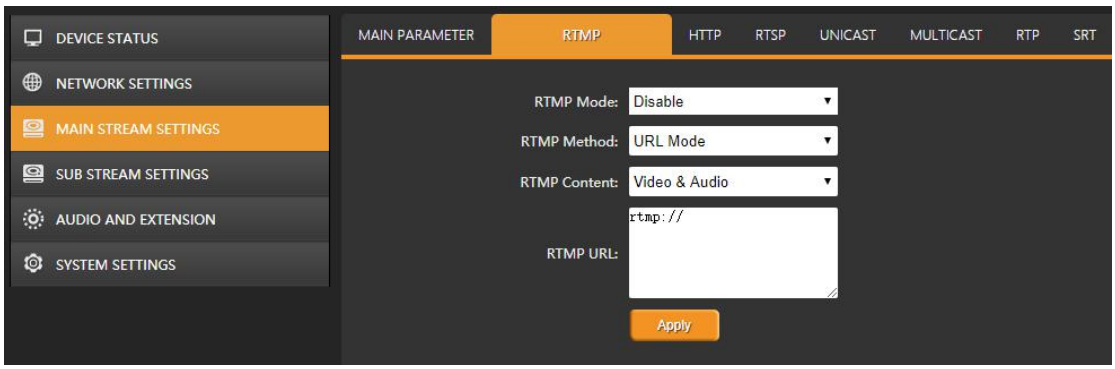
The network can be set to dynamic IP (DHCP Enable) or static IP (DHCP Disable). The default IP information can be checked in Part 3.1.

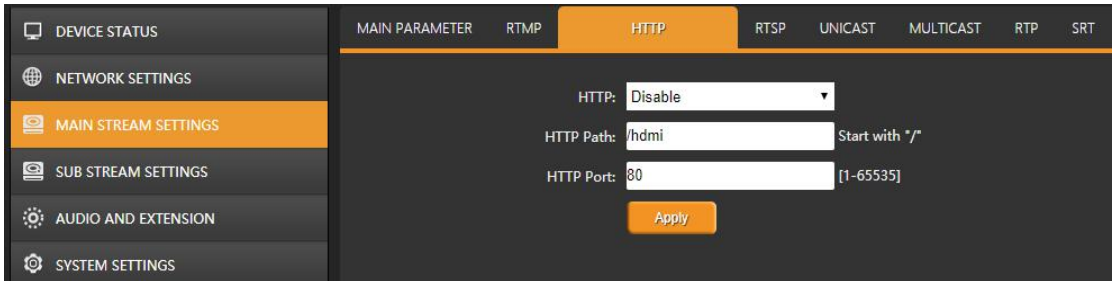


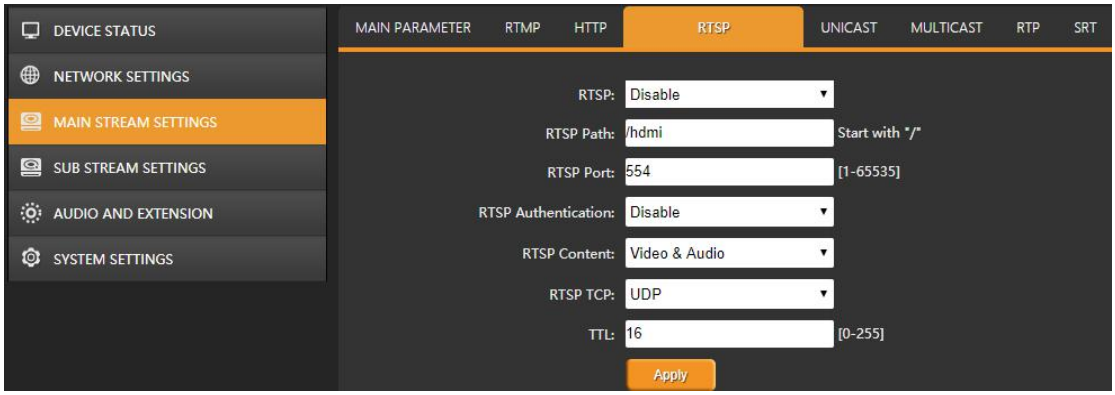
3.2.4. Main Stream Settings

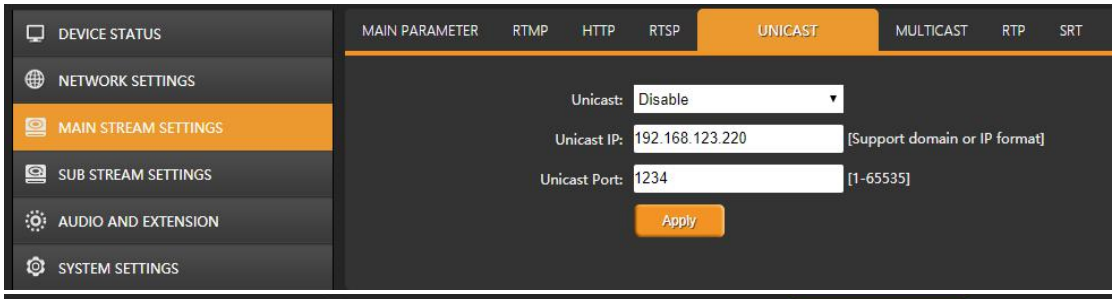
The main stream can be set to mirror image and upside-down image from MAIN PARAMETER tab. Configure main stream network protocol RTMP/ HTTP/ RTSP/ UNICAST /MULTICAST/ RTP/ SRT accordingly. Please note that only one of HTTP/ RTSP/ UNICAST /MULTICAST/ RTP can be enable at same time.

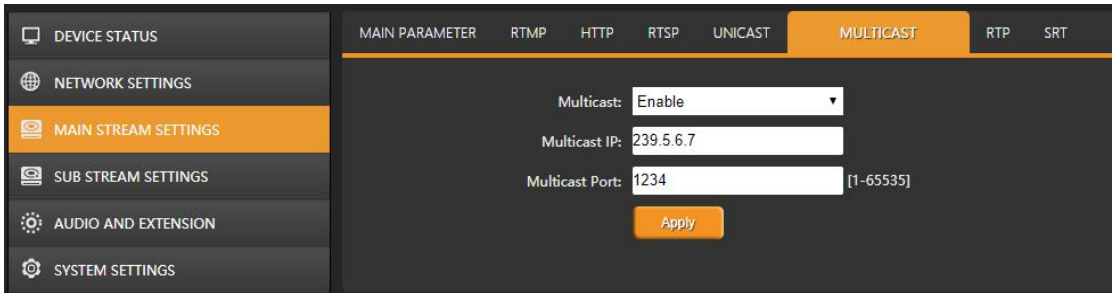


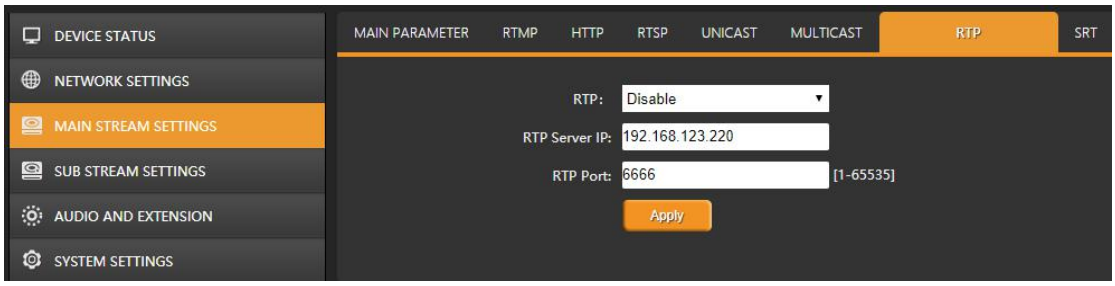


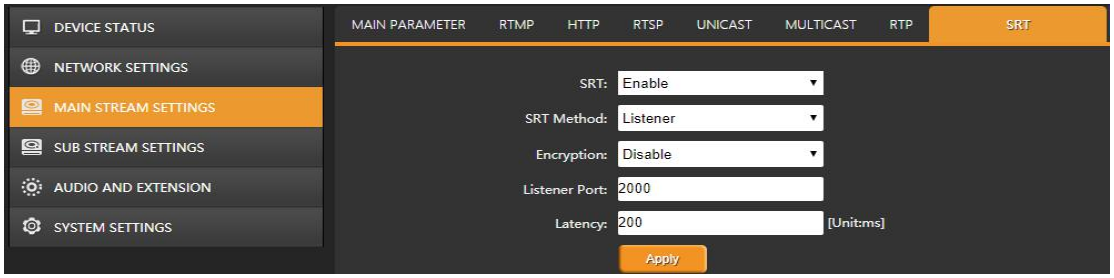

DEVICE STATUS
NETWORK SETTINGS
MAIN STREAM SETTINGS
SUB STREAM SETTINGS
AUDIO AND EXTENSION
SYSTEM SETTINGS
MAIN PARAMETER
RTMP
HTTP
RTSP
UNICAST
MULTICAST
RTP
SRT
HTTP: Disable
HTTP Path: /hdmi
Start with "/"
HTTP Port: 80
[1-65535]
Apply


DEVICE STATUS
NETWORK SETTINGS
MAIN STREAM SETTINGS
SUB STREAM SETTINGS
AUDIO AND EXTENSION
SYSTEM SETTINGS
MAIN PARAMETER
RTMP
HTTP
RTSP
UNICAST
MULTICAST
RTP
SRT
RTSP: Disable
RTSP Path: /hdmi
Start with "/"
RTSP Port: 554
[1-65535]
RTSP Authentication: Disable
RTSP Content: Video & Audio
RTSP TCP: UDP
TTL: 16
[0-255]
Apply


DEVICE STATUS
NETWORK SETTINGS
MAIN STREAM SETTINGS
SUB STREAM SETTINGS
AUDIO AND EXTENSION
SYSTEM SETTINGS
MAIN PARAMETER
RTMP
HTTP
RTSP
UNICAST
MULTICAST
RTP
SRT
Unicast: Disable
Unicast IP: 192.168.123.220
[Support domain or IP format]
Unicast Port: 1234
[1-65535]
Apply

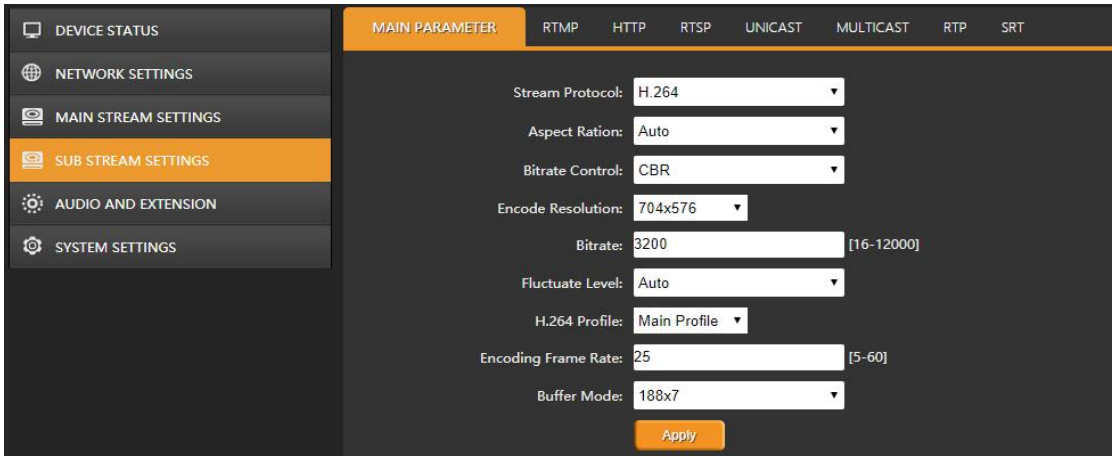

DEVICE STATUS
NETWORK SETTINGS
MAIN STREAM SETTINGS
SUB STREAM SETTINGS
AUDIO AND EXTENSION
SYSTEM SETTINGS
MAIN PARAMETER
RTMP
HTTP
RTSP
UNICAST
MULTICAST
RTP
SRT
Multicast: Enable
Multicast IP: 239.5.6.7
Multicast Port: 1234
[1-65535]
Apply

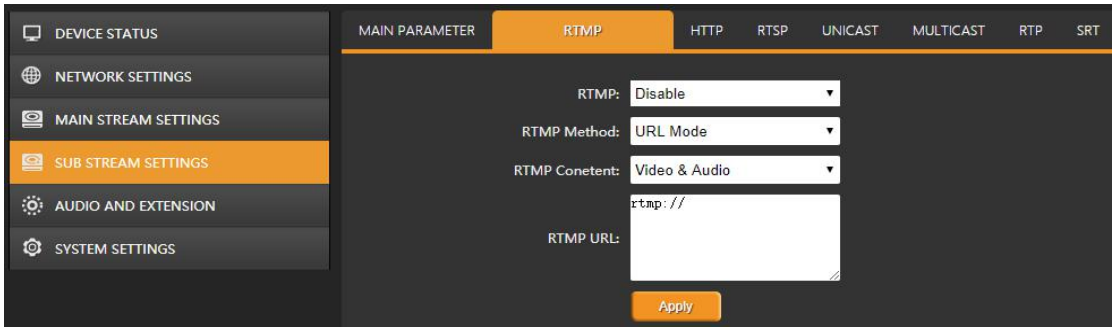

DEVICE STATUS
NETWORK SETTINGS
MAIN STREAM SETTINGS
SUB STREAM SETTINGS
AUDIO AND EXTENSION
SYSTEM SETTINGS
MAIN PARAMETER
RTMP
HTTP
RTSP
UNICAST
MULTICAST
RTP
SRT
RTP: Disable
RTP Server IP: 192.168.123.220
RTP Port: 6666
[1-65535]
Apply

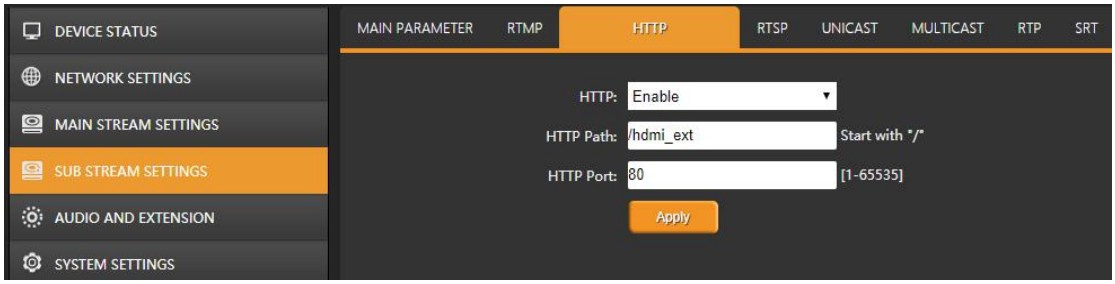

DEVICE STATUS
NETWORK SETTINGS
MAIN STREAM SETTINGS
SUB STREAM SETTINGS
AUDIO AND EXTENSION
SYSTEM SETTINGS
MAIN PARAMETER
RTMP
HTTP
RTSP
UNICAST
MULTICAST
RTP
SRT
SRT: Enable
SRT Method: Listener
Encryption: Disable
Listener Port: 2000
Latency: 200
[Unit:ms]
Apply

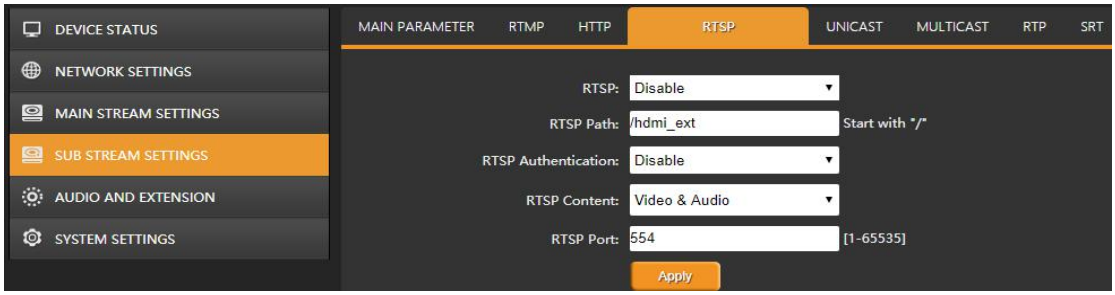
3.2.5. Sub Stream Settings

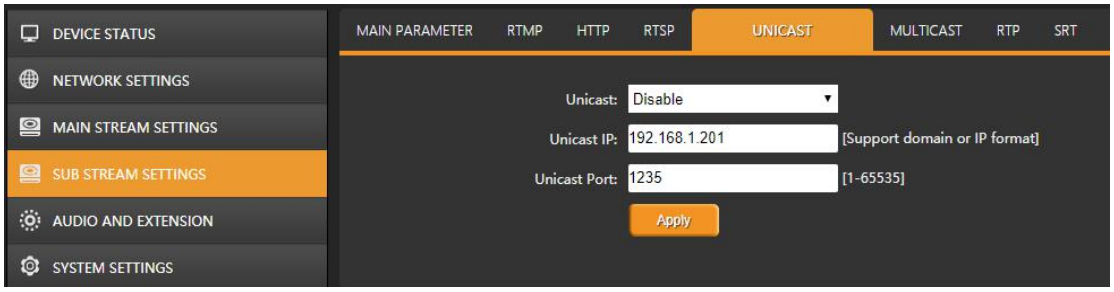
Configure sub stream network protocol RTMP/ HTTP/ RTSP/ UNICAST/ MULTICAST/ RTP/ SRT accordingly. Please note that only one of HTTP/ RTSP/ UNICAST/ MULTICAST/ RTP can be enable at same time.

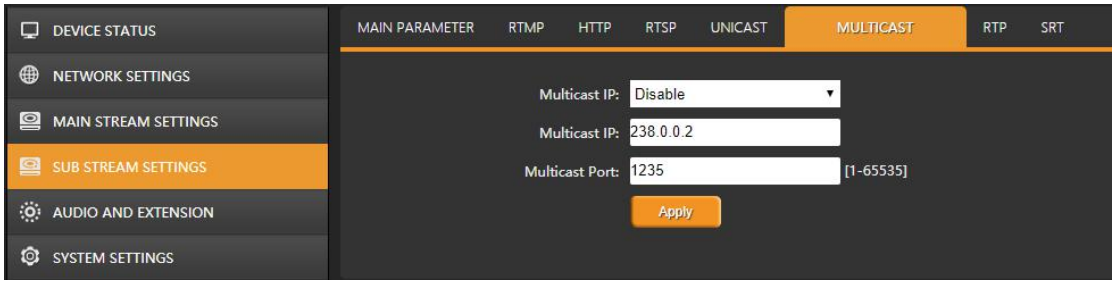


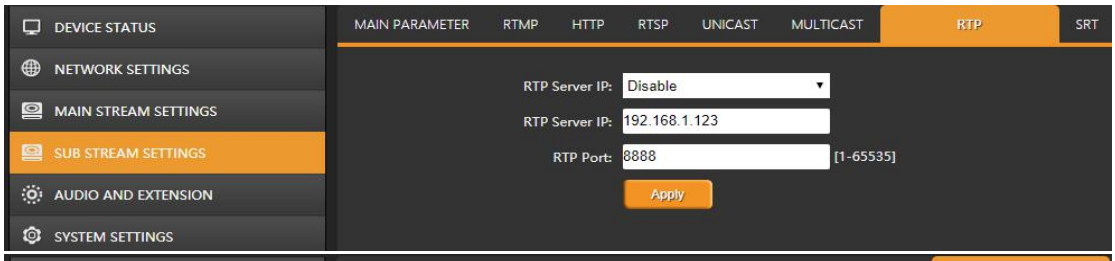


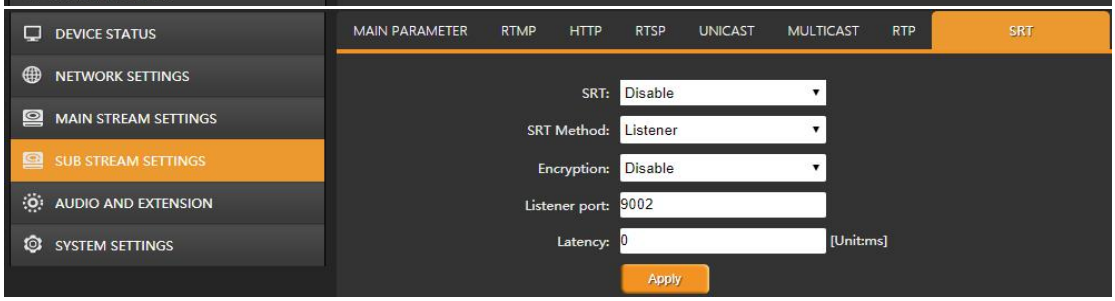






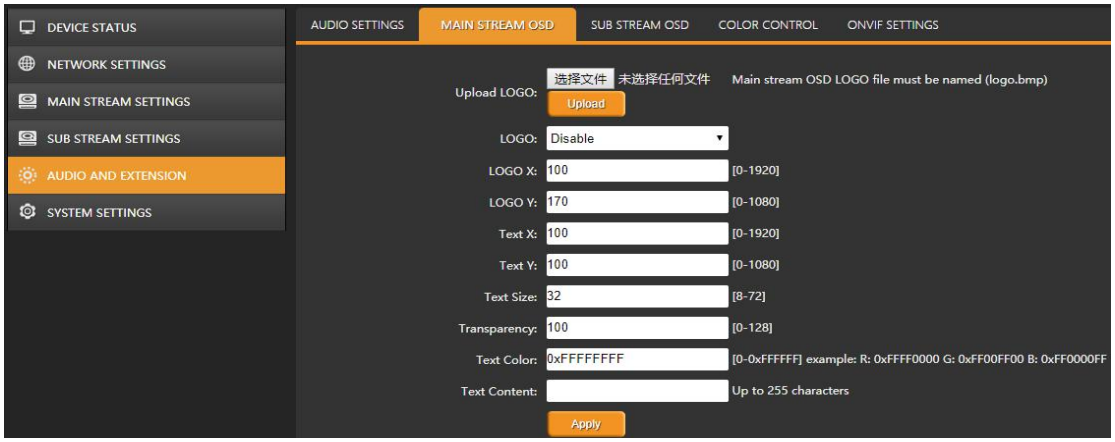


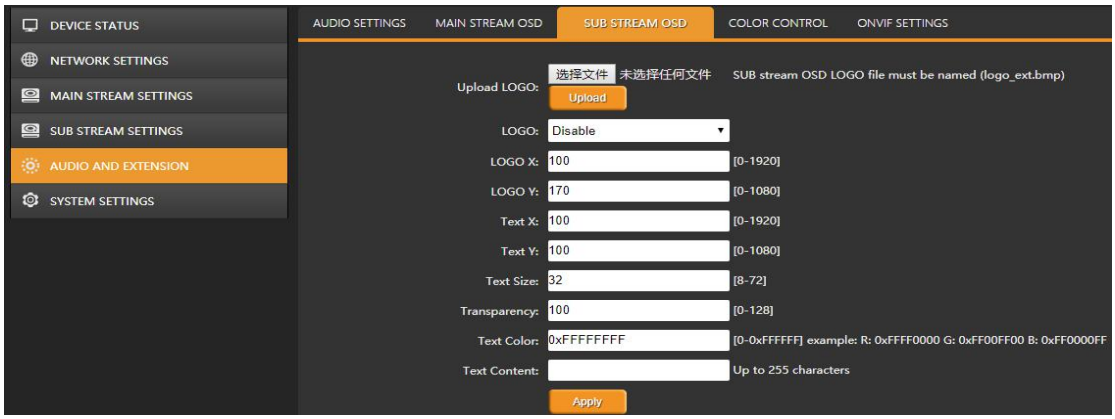


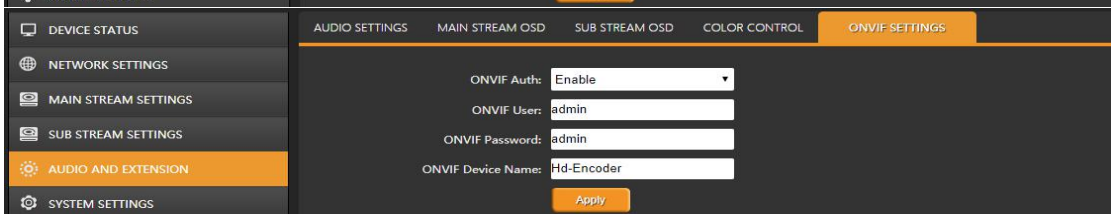
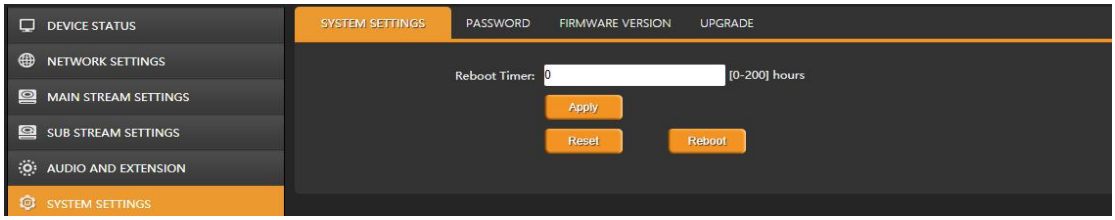
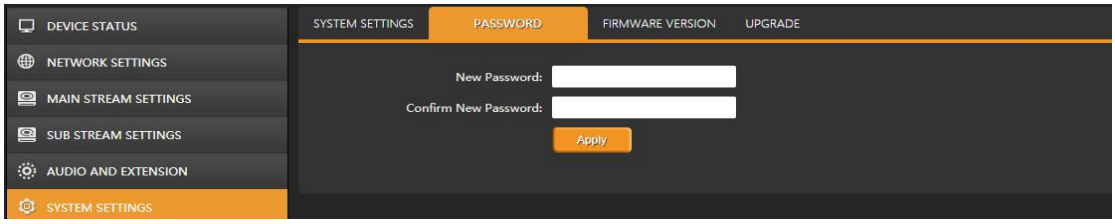
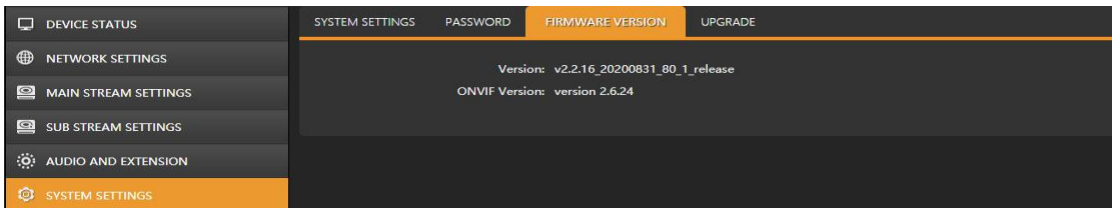


3.2.6. Audio and Extension

The audio can be from HDMI embedded audio or analog Line in audio. Audio Encode Mode can be ACC/ MP3/ MP2.







3.2.7. System Settings