

Genesis™ 500 AV-over-IP Streaming and Recording G501RH/G502RH



Document No. SD-MA-046

Document Version: 01

Content

| | |
|---------------------------------------|----|
| 1. Overview | 1 |
| 2. Specification..... | 2 |
| 3. Panel Layout..... | 3 |
| 3.1 Hardware Interface – G501RH | 3 |
| 3.2 Hardware Interface – G502RH | 4 |
| 4. Software Interface – G501RH | 5 |
| 4.1 Home Page | 5 |
| 4.2 Protocols 1 | 7 |
| 4.3 Protocols 2 | 8 |
| 4.4 RTMP | 9 |
| 4.5 Sources..... | 10 |
| 4.6 Net..... | 11 |
| 4.7 System..... | 12 |
| 4.8 More..... | 13 |
| 5. Software Interface – G502RH | 15 |
| 5.1 Home Page | 15 |
| 5.2 Network | 17 |
| 5.3 Operation Mode..... | 18 |
| 5.4 Encoder | 19 |
| 5.5 Decoder..... | 21 |
| 5.6 Transcoder | 22 |
| 5.7 Video Mixer..... | 23 |
| 5.8 Display..... | 25 |
| 5.9 Extensions | 26 |
| 5.9.1 Audio | 26 |
| 5.9.2 RTMP-HLS..... | 27 |
| 5.9.3 Recording Setting | 27 |
| 5.10 RS485 | 28 |
| 5.11 System..... | 29 |

1. Overview

G501RH/G502RH are the latest Genesis AV-over-IP streaming encoders/decoders, which offers multiple operation modes including encoding, decoding, transcoding, video mixing and recording of video/audio sources up to 4K using H264/H65 video codecs. Both units support multiple streaming protocols such as RTMP and RTSP, giving user the chance of easy streaming on live platforms like YouTube or decoding using any 3rd party device that supports the corresponding protocol. G501RH/G502RH also support simultaneous external recording via USB stick or SD card while streaming.

In addition, G502RH supports simultaneously encoding and decoding, making it possible to mix up 6 signals from 2 HDMI inputs and 4 transcoded streams in a dual live stream with one customised layout. G501RH/G502RH is a perfect solution for online training and lecture/meeting recording.

Key Features

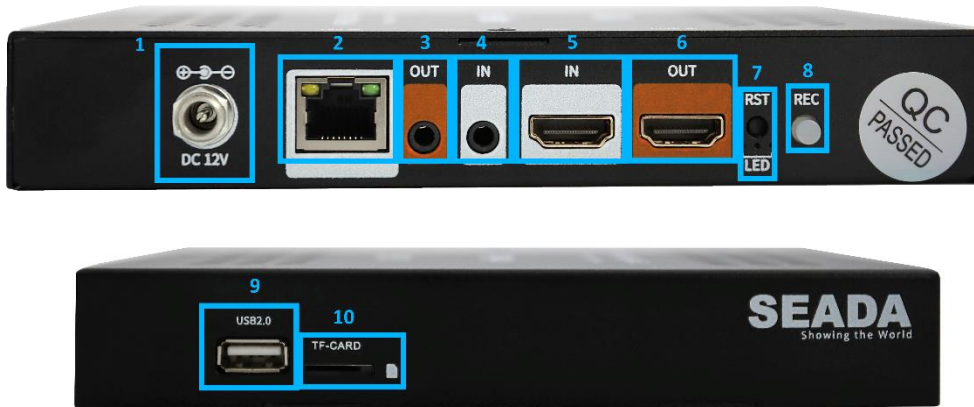
- Support multiple operation modes including encoding, decoding, transcoding, video mixing and recording
- Support multiple streaming protocols, including RTMP, HTTP, HLS, SRT, RTP, ONVIF, UDP Unicast/Multicast and RTSP over UDP/TCP
- Support encoding up to 2 HDMI inputs or transcoding up to 4 streams in dual stream channels with a resolution up to 4K
- Support decoding up to 8 streams and output via HDMI with an up to a 3x3 multiview for display
- Support mixing of 4 streams and 2 HDMI inputs in a dual encoding channel with one customised layout
- Support selectable audio input and output between 3.5mm mini jack and embedded audio or a mix of all
- External video storage on USB stick or MicroSD cards
- Support automatic replacement of old files during continuous recording
- Support uploading of recordings to FTP servers
- User-friendly WebUI for configuration
- Flexible power supply: PoE or AC adapters

2. Specification

| Model Name | G501RH | G502RH |
|------------------------------------|--|---|
| Video Port Interface | Input: HDMI x1 Output: HDMI x1 | Input: HDMI x2 Output: HDMI x1 |
| HDMI Input Resolution | Up to 1920x1080 | Up to 3840x2160 |
| HDMI Output Resolution | Up to 1920x1080 | Up to 1920x1080 (Max 8 windows) |
| Encoding Resolution | Up to 1920x1080 | Up to 3840x2160 |
| Encoding Format | H264/H265 | H264/H265 |
| Encoding Bitrate | 160-20000 | 16-20000 |
| Key Frame Interval | 30-180 | 5-200 |
| Simultaneous Encoding and Decoding | No | Yes |
| Decoding Resolution | Up to 1920x1080 | Up to 1920x1080 |
| Simultaneous Streaming | Up to 4 | Up to 2 per Transcoded Stream/HDMI Input |
| Simultaneous Decoding | Up to 1 | Up to 8 |
| Support Operation Mode | Encoding, Decoding, and Recording | Encoding, Decoding, Transcoding, Video Mixing and Recording |
| Support Protocol | RTMP, HTTP, HLS, SRT, RTP, ONVIF, NDI, UDP Unicast/Multicast and RTSP over UDP/TCP | RTMP, HTTP, HLS, SRT, RTP, ONVIF, UDP Unicast/Multicast and RTSP over UDP/TCP |
| Audio Input | Embedded HDMI or 3.5mm Jack | Embedded HDMI or 3.5mm Jack or mix of all |
| Audio Output | Embedded HDMI or 3.5mm Jack | Embedded HDMI or 3.5mm Jack or mix of all |
| Audio Codec | AAC/MP3 | AAC/MP3/OPUS |
| Storage | MicroSD, USB Stick | USB Stick |
| USB Interface | USB 2.0 Type A | USB 3.0 Type A |
| Recording Format | MPEG2-TS | MPEG2-TS |
| User Interface | WebUI | WebUI |
| Upload To FTP Server | Yes | No |
| IP Configuration | DHCP, Static (Default) | DHCP, Static (Default) |
| Dimension (W x D x H) | 180x100x30mm | 220x150x25mm |
| Weight | 0.46kg | 0.70kg |
| Operating Temperature | -4° ~ +140° F (-20° ~ +60° C) | -4° ~ +140° F (-20° ~ +60° C) |
| POE Standard | Yes | No |
| Power Supply | 12V3A or PoE | 12V3A |

3. Panel Layout

3.1 Hardware Interface – G501RH



| ID | Name | Description |
|-------------|---------------------|---|
| Front Panel | | |
| 1 | DC Power socket | 12V3A Power Socket |
| 2 | LAN Ethernet port | 1000Mbps Ethernet Port |
| 3 | Line Audio Input | 3.5mm Jack Analog Audio Input |
| 4 | Line Audio Output | 3.5mm Jack Analog Audio Output |
| 5 | HDMI Input | Connect an HDMI cable from this port to an HD or 4K video source |
| 6 | HDMI Output | Connect an HDMI cable from this port to an HD display |
| 7 | Reset | Reset button to restore to the factory default setting |
| 8 | REC Light | Indicate the status of the unit Slightly RED: the unit is booting up GREEN: the unit is ON Flash GREEN: the unit is ON and recording |
| Back Panel | | |
| 9 | Front USB Connector | USB 2.0 port for recording storage |
| 10 | TF-CARD | MicroSD card slot for recording storage |

3.2 Hardware Interface – G502RH

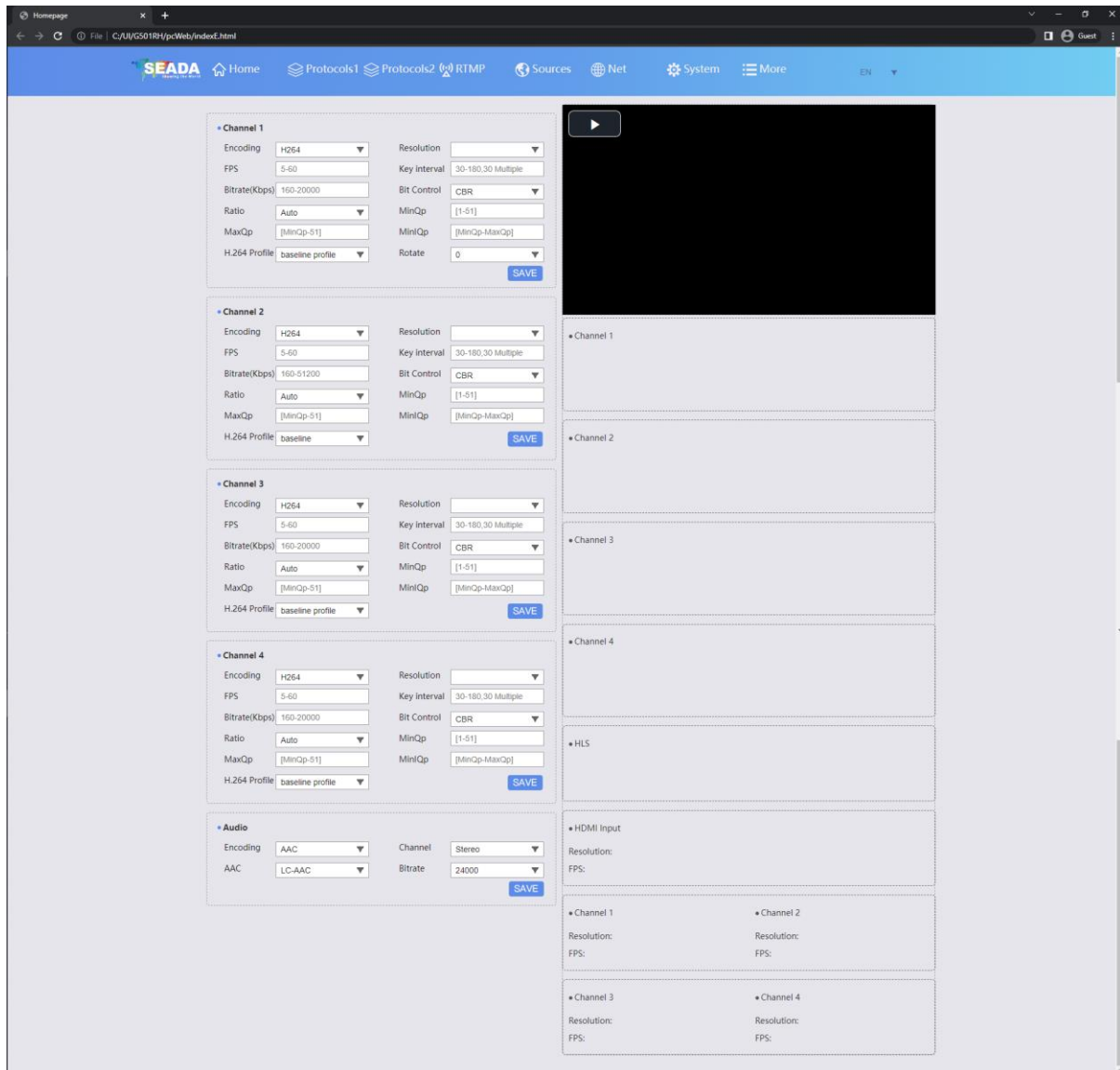


| ID | Name | Description |
|-------------|------------------------|--|
| Front Panel | | |
| 1 | DC Power socket | 12V3A Power Socket |
| 2 | LAN Ethernet port | 1000Mbps Ethernet Port |
| 3 | Line Audio Input | 3.5mm Jack Analog Audio Input |
| 4 | Line Audio Output | 3.5mm Jack Analog Audio Output |
| 5 | HDMI Input 1 | Connect an HDMI cable from this port to an HD or 4K video source |
| 6 | HDMI Input 2 | Connect an HDMI cable from this port to an HD or 4K video source |
| 7 | HDMI Output | Connect an HDMI cable from this port to an HD display |
| 8 | Reset | Reset button to restore to the factory default setting |
| Back Panel | | |
| 9 | Power Indicator | Indicate the status of power |
| 10 | LAN Ethernet Indicator | Indicate the status of LAN connection |
| 11 | HDMI 1 Indicator | Indicate the status of HDMI 1 connection |
| 12 | HDMI 2 Indicator | Indicate the status of HDMI 2 connection |
| 13 | Front USB Connector | USB 3.0 port for recording storage |
| 14 | RS485 Port | RS485 Port for External Control |

4. Software Interface – G501RH

By default, the IP address for G501RH is 192.168.1.168. Enter the IP address in any browser to enter the WebUI.

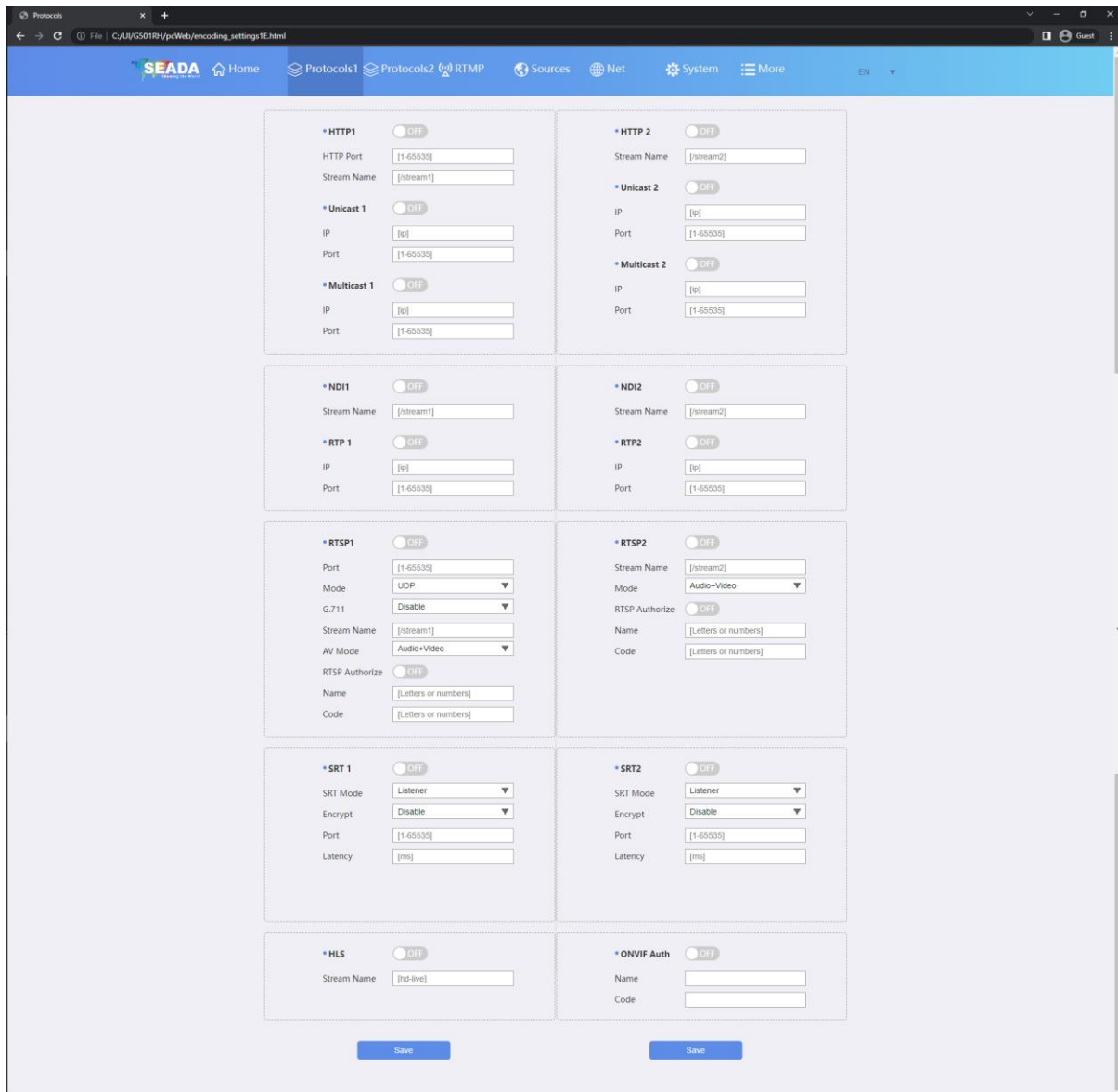
4.1 Home Page



In the 'Home' tab, user can set up parameters of the four encoded streams for the HDMI input. Each stream can be set up individually and has its own setting. The parameters of the encoded streams and stream URLs will be displayed on the right of the page. User can also have a HTML5 online preview of the input source (**HLS enable required**) and monitor its information on the right side of the page. The parameters that can be set for each stream is as below:

| Video Channel 1-4 | |
|-------------------|--|
| Encoding | Specify video encoding <ul style="list-style-type: none"> • H264 (AVC) • H265 (HEVC) |
| Resolution | Specify the encoded resolution |
| FPS | Specify the encoded frame rate |
| Key Interval | Specify the interval of intra frames (I-frames) |
| Bitrate (Kbps) | Specify the average video bitrate |
| Bit Control | Specify the video encoding control <ul style="list-style-type: none"> • VBR (variable bitrate) • CBR (constant bitrate) |
| Ratio | Specify the encoded aspect ratio |
| MinQp | Specify the minimum quantizer parameter (Only set under VBR) |
| MaxQp | Specify the maximum quantizer parameter (Only set under VBR) |
| MinIQp | Specify the minimum quantizer parameter for I-frame (Only set under VBR) |
| H.264 profile | Specify the syntax of the video codec <ul style="list-style-type: none"> • Baseline • Main • High |
| Rotate | Rotate the encoded video |
| Audio | |
| Encoding | Specify audio encoding <ul style="list-style-type: none"> • AAC • MP3 |
| Channel | Specify channel for the audio <ul style="list-style-type: none"> • Stereo • L • R |
| AAC | Specify AAC profile <ul style="list-style-type: none"> • LC-AAC (Low Complexity AAC) (Good for high (≥ 80 kbps) bitrates) • HE-AAC (High Efficiency AAC) (Good for lower (≤ 80 kbps) bitrates) |
| Bitrate | Specify the bitrate for audio encoding |

4.2 Protocols 1



The screenshot shows the 'Protocols 1' configuration page in a web browser. The page is organized into two columns, one for Stream 1 and one for Stream 2. Each column contains a series of protocol settings, each with a toggle switch and associated input fields. The protocols listed are HTTP, Unicast, Multicast, NDI, RTP, RTSP, SRT, HLS, and ONVIF Auth. The 'Save' button is located at the bottom of each column.

User can choose the encoding protocol for the 1st and 2nd stream, including HTTP, UDP Unicast/Multicast, NDI, RTP, RTSP over UDP/TCP, SRT, HLS and ONVIF. By turning the corresponding protocol on, the address of the stream will be available on the 'Home' page.

4.3 Protocols 2

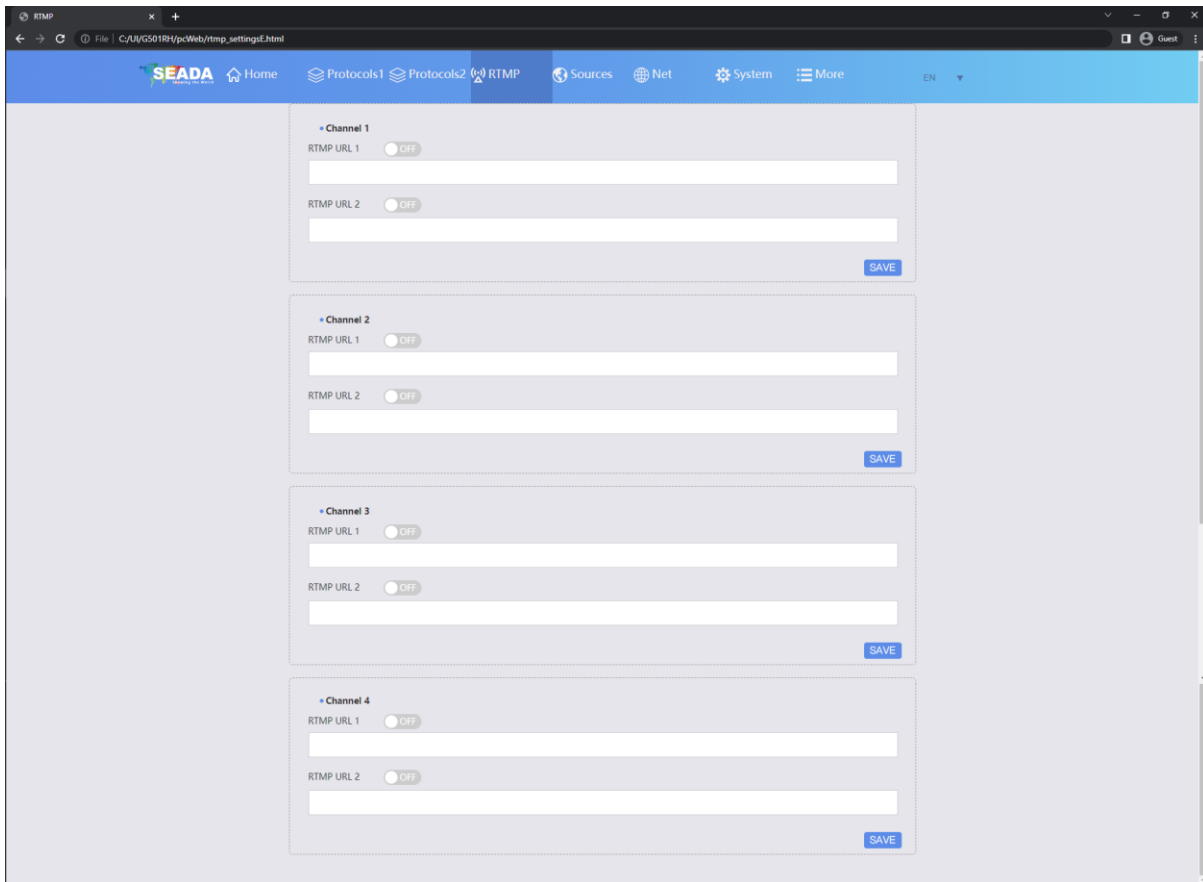
The screenshot displays the 'Protocols 2' configuration page in a web browser. The page is organized into a grid of 10 configuration panels, arranged in 5 rows and 2 columns. Each panel corresponds to a specific protocol for either the 3rd or 4th stream. The protocols shown are:

- Stream 3:** HTTP3, Unicast 3, Multicast 3, NDI3, RTP3, RTSP3, SRT 1, and HLS.
- Stream 4:** HTTP4, Unicast 4, Multicast 4, NDI4, RTP4, RTSP4, SRT4, and ONVIF Auth.

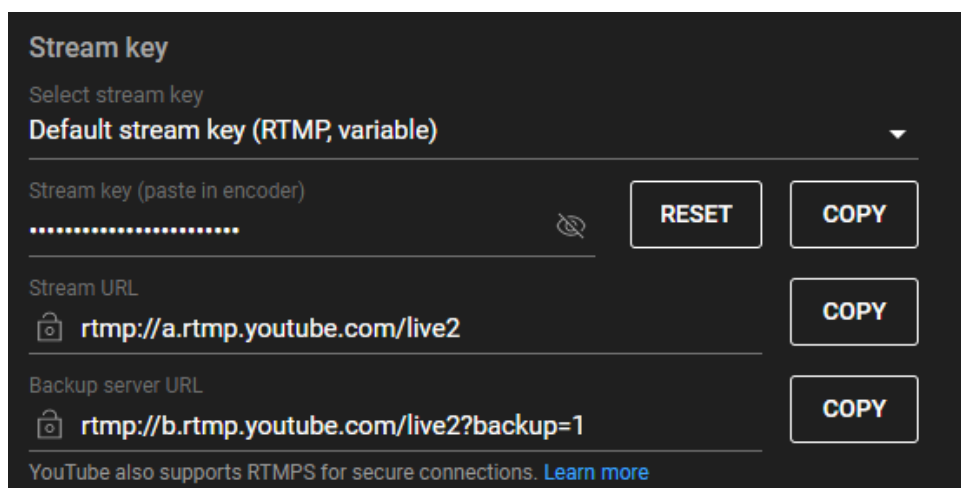
Each panel contains a toggle switch to enable or disable the protocol. Below the toggle are various input fields and dropdown menus, such as 'Stream Name', 'IP', 'Port', 'Mode', 'G.711', 'AV Mode', 'RTSP Authorize', 'Name', 'Code', 'SRT Mode', 'Encrypt', and 'Latency'. At the bottom of each column, there is a blue 'Save' button.

User can choose the encoding protocol for the 3rd and 4th stream, including HTTP, UDP Unicast/Multicast, NDI, RTP, RTSP over UDP/TCP, SRT, HLS and ONVIF. By turning the corresponding protocol on, the address of the stream will be available on the 'Home' page.

4.4 RTMP

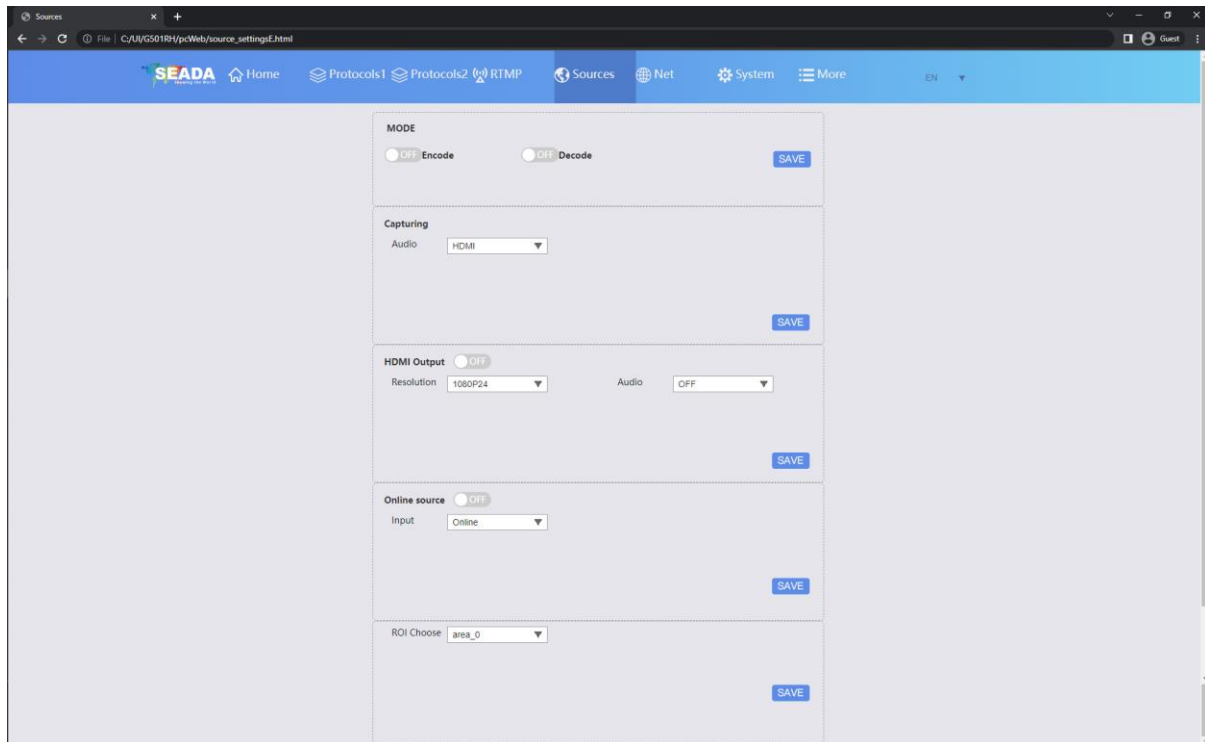


User can set up the RTMP online stream in this page. Each stream channel can have up to 2 RTMP streams. Taking YouTube RTMP as an example, user can fill in the stream URL, followed by the stream key with a symbol '/', which can be found on the user homepage of YouTube (rtmp://a.rtmp.youtube.com/live2/stream key).



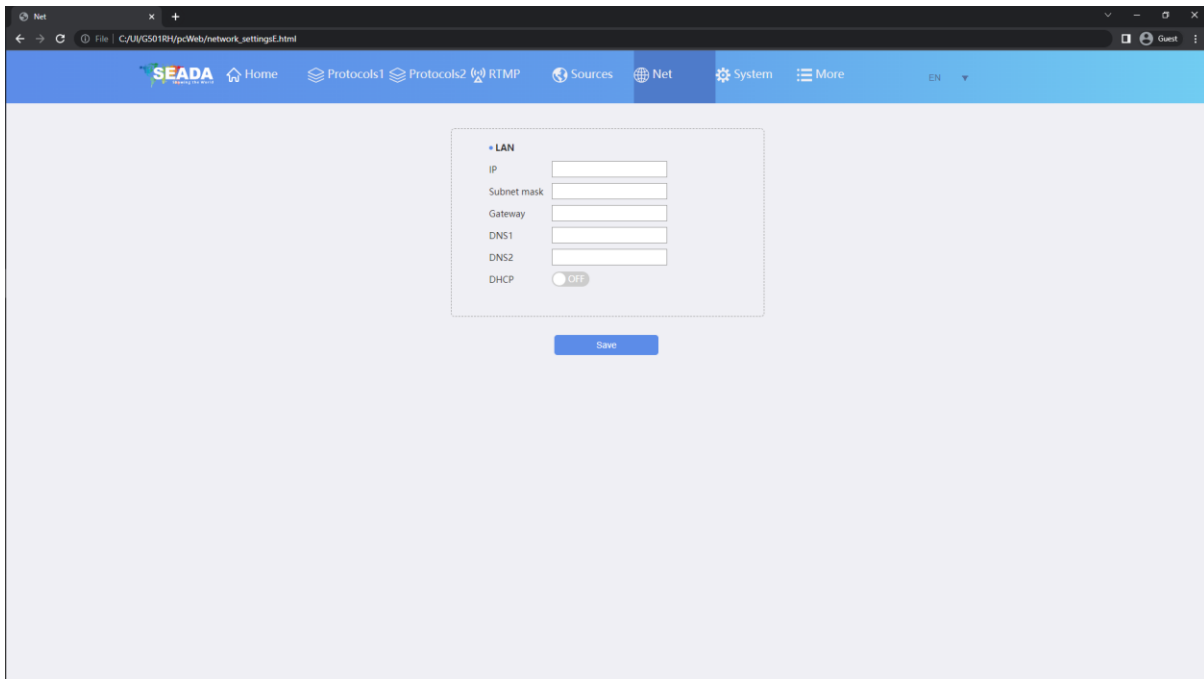
User can then turn the function ON and save the setting. After restarting the unit, the stream will start.

4.5 Sources



| Mode | |
|---------------|---|
| Encode | Choose to enable the 'Encoder' Mode |
| Decode | Choose to enable the 'Decoder' Mode |
| Capturing | |
| Audio | Specify the source of audio during encoding <ul style="list-style-type: none"> • HDMI • 3.5mm Jack • HDMI+3.5mm Jack |
| HDMI Output | |
| Resolution | Specify the output resolution via HDMI |
| Audio | Turn ON/OFF the audio via HDMI |
| Online Source | |
| Input | Specify the type of decoded signal: Local/Online |
| Online | Specify the type of the online stream <ul style="list-style-type: none"> • URL (For general use) • SDK (Only support specific encoding products) • P2P (no longer available) |
| URL | The address of the stream signal |
| ROI Choose | |
| ROI | Enable ROI (Region of Interest) during encoding |
| ABS QP | By default, Rel QP: QP (-51~51) the difference between the region of interest and the QP for I-frame If chosen, Abs QP: QP (0~51) the value of QP in the region of interest |

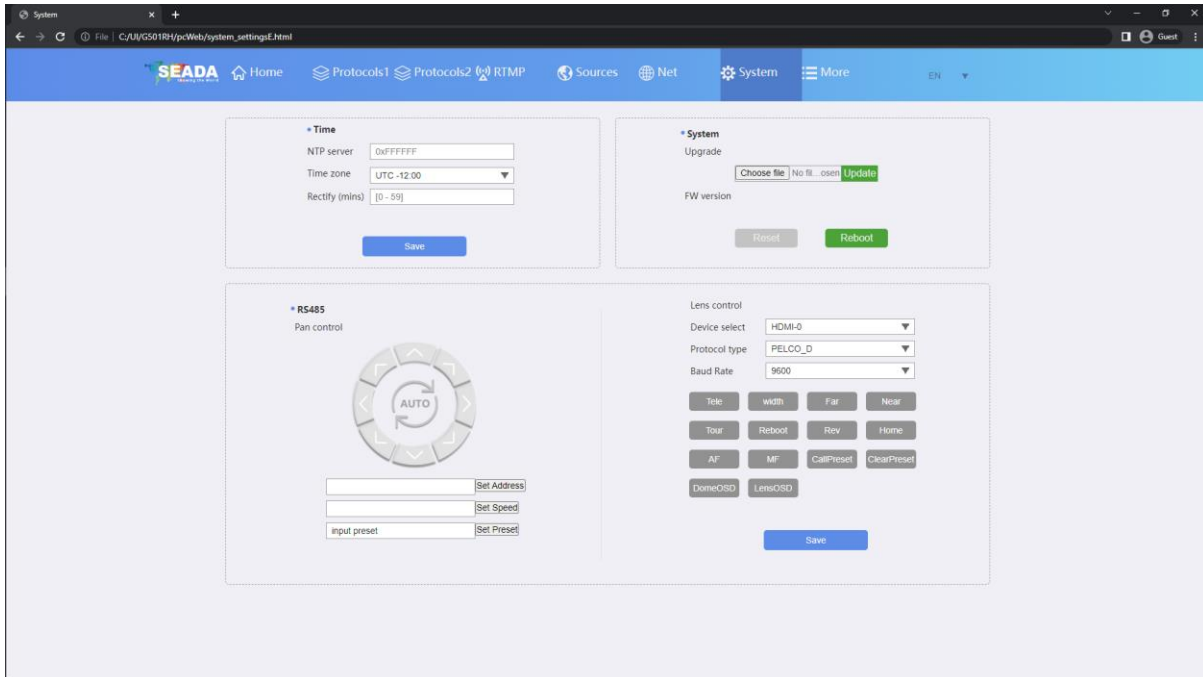
4.6 Net



User can set up the network configuration of G501RH in this page.

Note that it is recommended to change the DNS to 8.8.8.8 for online streaming purpose.

4.7 System



| Time | |
|-------------------------|---|
| NTP server | Specify to set up the NTP server for time display |
| Time zone | Specify the time zone |
| Rectify (mins) | Rectify frequency for time drift |
| RS485 | |
| Not supported on G501RH | |
| System | |
| Upgrade | Upgrade the firmware for the unit |
| FW version | <ul style="list-style-type: none"> Reset: reset the unit to factory default Reboot: reboot the unit |

4.8 More

The screenshot displays the SEADA web interface with several configuration panels:

- OSD Panel:** Includes options for 'Upload Logo', 'LOGO' (with file selection and 'Upload' button), 'Text' (with X/Y axis, size, transparency, and color), and 'Scrolling text' (with stepping, direction, and span).
- GB28181 Panel:** Features a toggle for 'GB28181', 'Audio' dropdown, and fields for 'Server Ip', 'Server Port', 'Server ID', 'Validity', 'HbTime', 'Local Port', 'Certification', and 'Password'.
- Time Panel:** Includes a 'Display' toggle, 'X axis', 'Y axis', 'Size', and 'Color' settings.
- Record Panel:** Contains 'Record' toggle, 'Choose' dropdown, 'SD Format', 'Mode', 'Timing', 'Source', and 'Space' settings.
- Score Panel:** Includes a 'Score' toggle, 'Team A' and 'Team B' score inputs, 'Time (min)' and 'Time (sec)' fields, 'Font Size', 'Font Alpha', 'Bg Alpha', and 'Font Color' settings. It also has buttons for 'Team A score (Click)' and 'Team B score (Click)' with values -1, +1, +2, +3.
- FTP Upload Panel:** Includes an 'FTP Upload' toggle, 'Upload Mode', 'Recod File', 'User', 'Code', 'IP', and 'Port' settings.

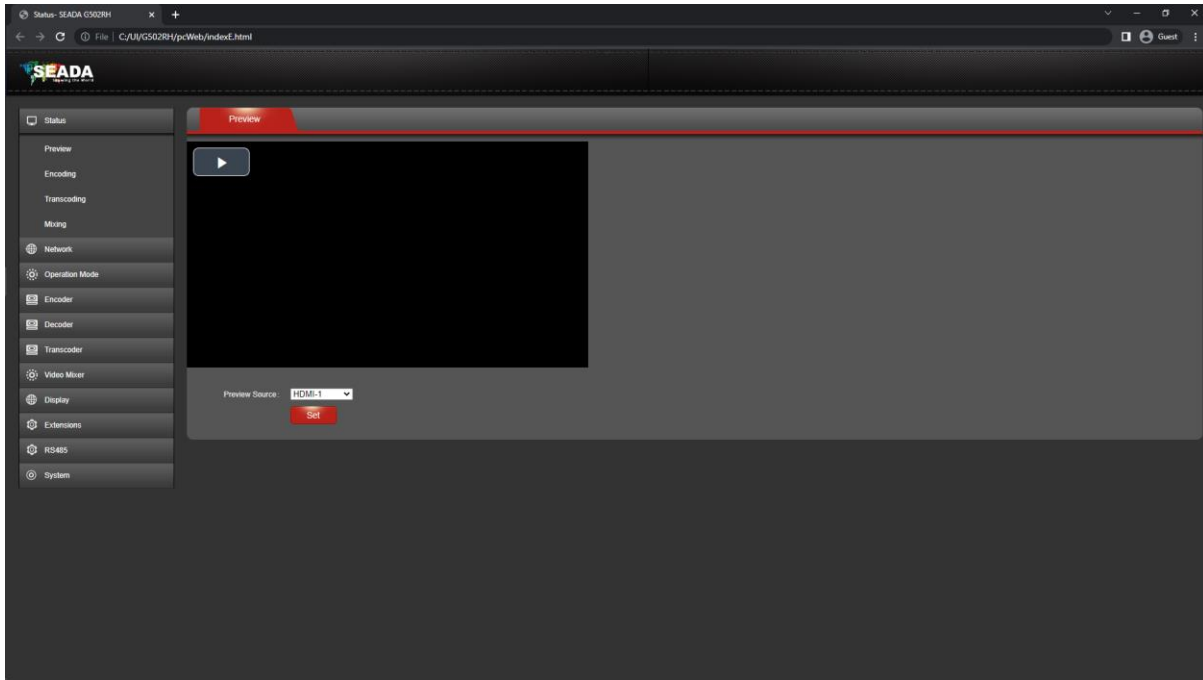
| OSD | |
|----------------|---|
| Upload Logo | Choose a file for logo (only support bmp and black color will be transparent) |
| LOGO | Choose to display the logo |
| X-axis/Y-axis | Specify the X and Y axis of the logo |
| Transparency | Specify the transparency of the logo |
| Text | Choose to display on-screen text |
| X-axis/Y-axis | Specify the X and Y axis of the text |
| Size | Specify the size of the text |
| Transparency | Specify the transparency of the text |
| Color | Specify the color of the text |
| Text | Specify the content of the text |
| Scrolling text | Choose to make the on-screen text scroll |
| Stepping | Specify the speed of the scrolling text |
| Direction | Specify the direction of the scrolling text |
| Span | Specify the distance the scrolling text moves each time |

| | |
|---------------------|--|
| Time | |
| Display | Choose to display the time |
| X axis/Y axis | Specify the X and Y axis of the time |
| Size | Specify the size of the time |
| Transparency | Specify the transparency of the time |
| Color | Specify the color of the time |
| Record | |
| Choose | Specify the external storage for the recording: USB stick/MicroSD card |
| SD Format | Specify the format of the USB stick/MicroSD card |
| Mode | Specify the operation mode for recording: <ul style="list-style-type: none"> • 'Replacing record': when there is no space in the storage device, G501RH will stop recording • 'Looping record': when there is no space in the storage device, G501RH will continue recording by looping back to the start of the storage device and replacing the oldest recordings. |
| Timing | Specify the length of each recording |
| Source | Specify the source channel of recording |
| Space | Display the remaining space of the external storage |
| GB2818 | |
| No longer supported | |
| Score | |
| Team A | Specify the name of Team A |
| Team B | Specify the name of Team B |
| Time (min) | Specify the counting down time (min) of the match |
| Time (sec) | Specify the counting down time (sec) of the match |
| Font size | Specify the size of the score |
| Font Alpha | Specify the transparency of the score |
| Bg Alpha | Specify the transparency of the background for the score |
| Font Color | Specify the color of the score |
| X | Specify the X axis of the score |
| Y | Specify the Y axis of the score |
| Team A score | Specify the score of Team A |
| Team B score | Specify the score of Team B |
| Setting | <ul style="list-style-type: none"> • Stop: Finish counting down • Start: Start counting down • Suspend: Suspend counting down |
| FTP Upload | |
| Upload Mode | Specify the uploading mode – upload the current or upload all |
| Record File | Specify whether to keep the recording after uploading |
| User | Specify the username of the FTP server |
| Code | Specify the password of the FTP server |
| IP | Specify the IP address of the FTP server |
| Port | Specify the port number of the FTP server |

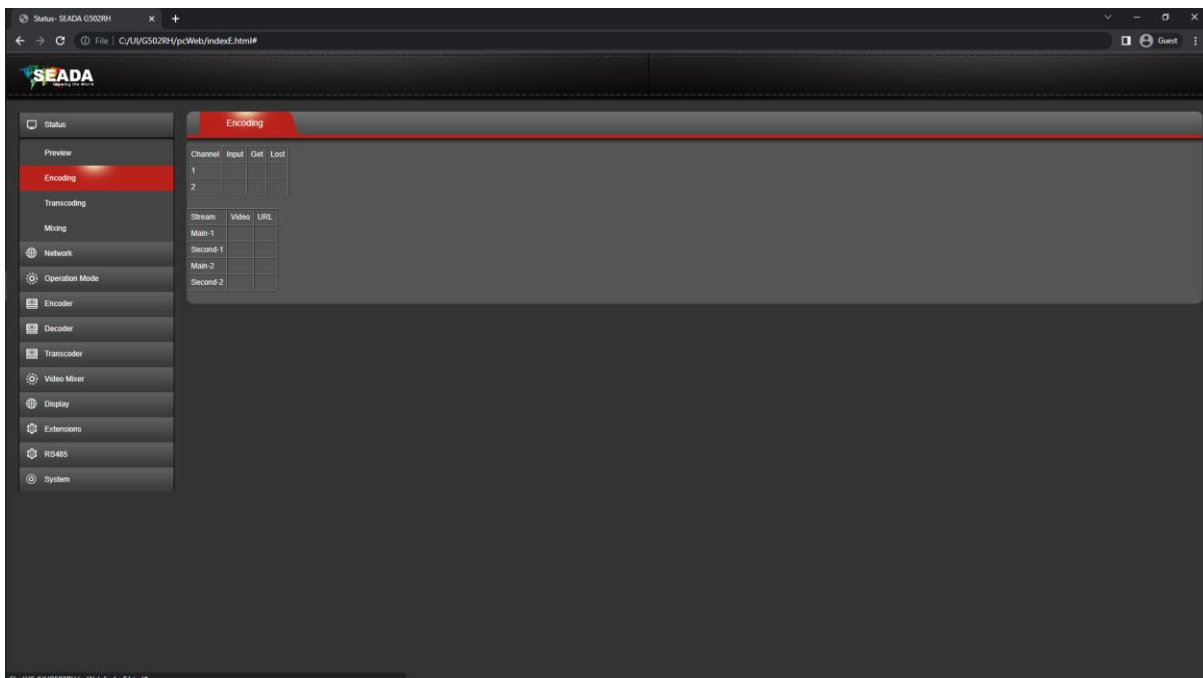
5. Software Interface – G502RH

By default, the IP address for G502RH is 192.168.1.168. Enter the IP address in any browser to enter the WebUI.

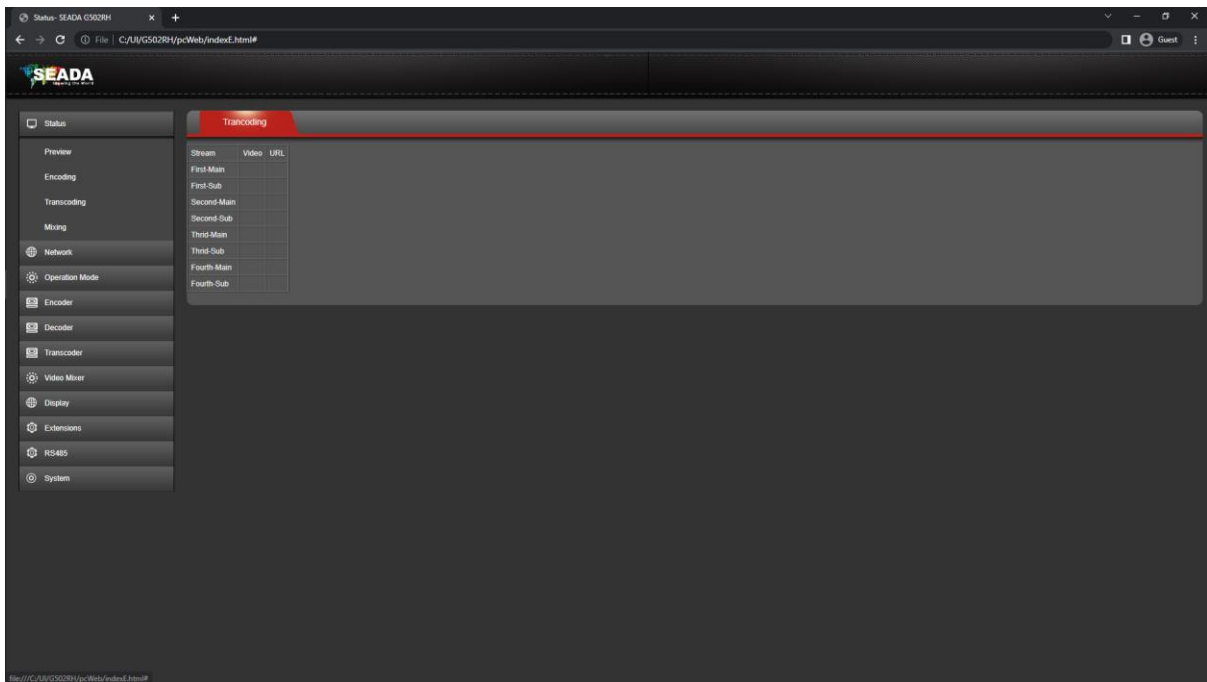
5.1 Home Page



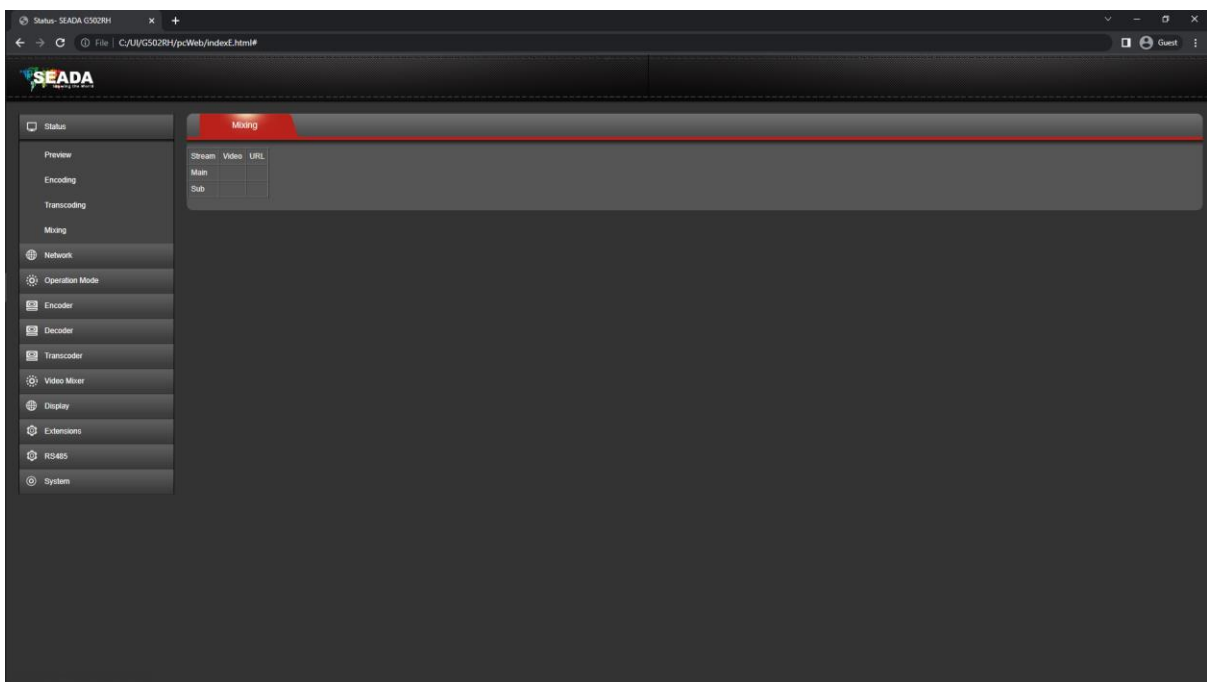
Preview: Show the preview of one HDMI or transcoded signal (**HLS enable required**)



Encoding: Show the resolution and FPS of the HDMI and encoded signals. The stream address of the encoded signals will be displayed.

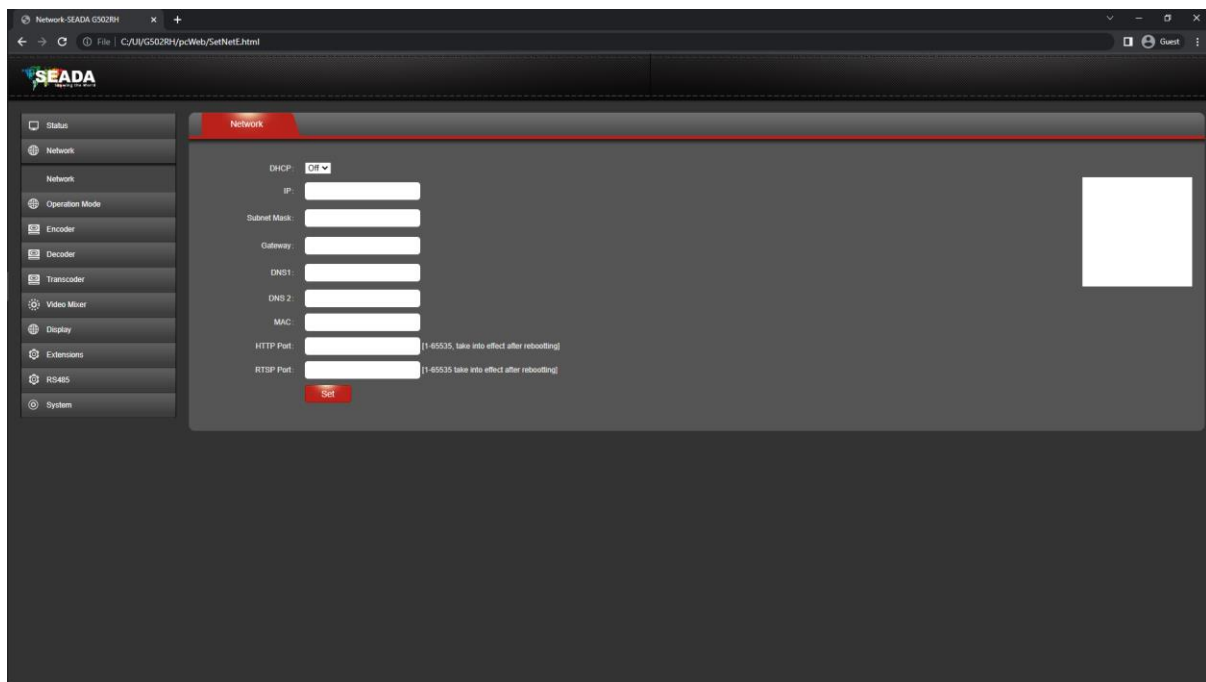


Transcoding: Show the resolution and FPS of the transcoded signals. The stream address of the transcoded signals will be displayed.



Mixing: Show the resolution and FPS of the mixed transcoded signals. The stream address of the mixed transcoded signals will be displayed.

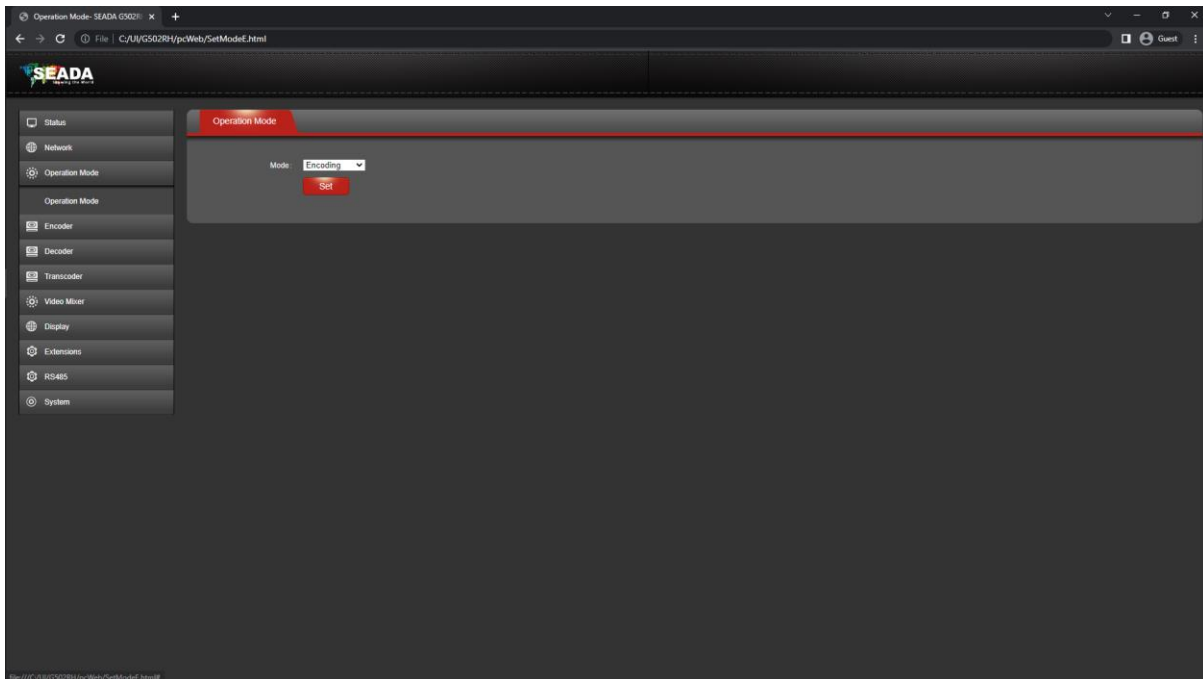
5.2 Network



User can set up the network configuration of G502RH in this page.

Note that it is recommended to change the DNS to 8.8.8.8 for online streaming purpose.

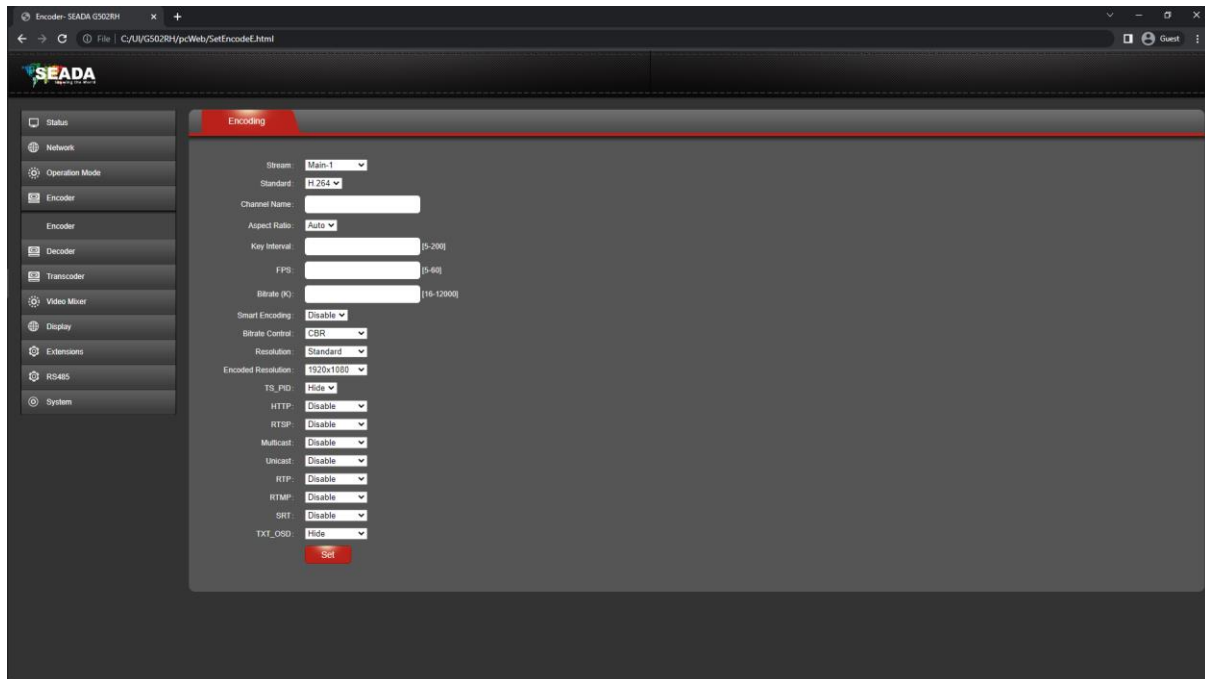
5.3 Operation Mode



Switch between different operation modes

| Operation Mode | Description |
|---------------------|--|
| Encoding | Encode 2 HDMI signals with up to 2 streams for each signal |
| Decoding | Decode up to 8 streams |
| Encoding + Decoding | Encode 2 HDMI signals with up to 2 streams for each signal and decode up to 8 streams at the same time |
| Transcoding | Decode up to 4 streams and encode these signals with up to 2 streams for each signal |
| Mixing | Decode up to 4 streams and mix these 4 signals with 2 HDMI signals in up to 2 streams |

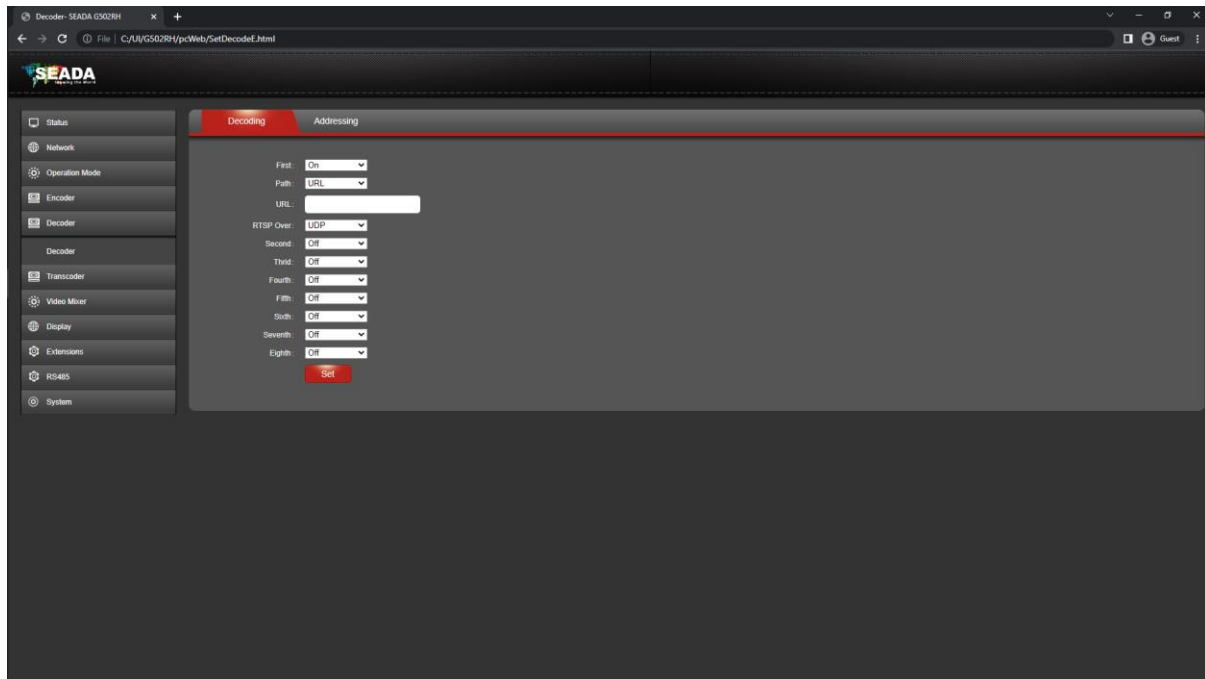
5.4 Encoder



| Encoder | |
|-----------------|---|
| Stream | Choose the stream to set up |
| Standard | Specify video encoding <ul style="list-style-type: none"> • H264 (AVC) • H265 (HEVC) |
| Channel Name | Specify the name of the stream |
| Key Interval | Specify the interval of intra frames (I-frames) |
| FPS | Specify the encoded frame rate |
| Bitrate (K) | Specify the average video bitrate |
| Smart Encoding | Enable smart encoding in the case if the encoded signal is blur and this will improve the performance of encoding |
| Bitrate Control | Specify the video encoding control <ul style="list-style-type: none"> • VBR (variable bitrate) • CBR (constant bitrate) |
| Resolution | Specify the encoded resolution <ul style="list-style-type: none"> • Standard: Choose from standard resolutions • Custom: Set up a customised resolution |
| TS_PID | Edit PID for the current stream |
| HTTP | Enable HTTP encoding |
| RTSP | Enable RTSP encoding |
| RTP | Enable RTP encoding |
| RTMP | Enable RTMP encoding |
| RTMP OM | Choose the RTMP mode: (for example for YouTube streaming) IP: Manually enter information for RTMP streaming |

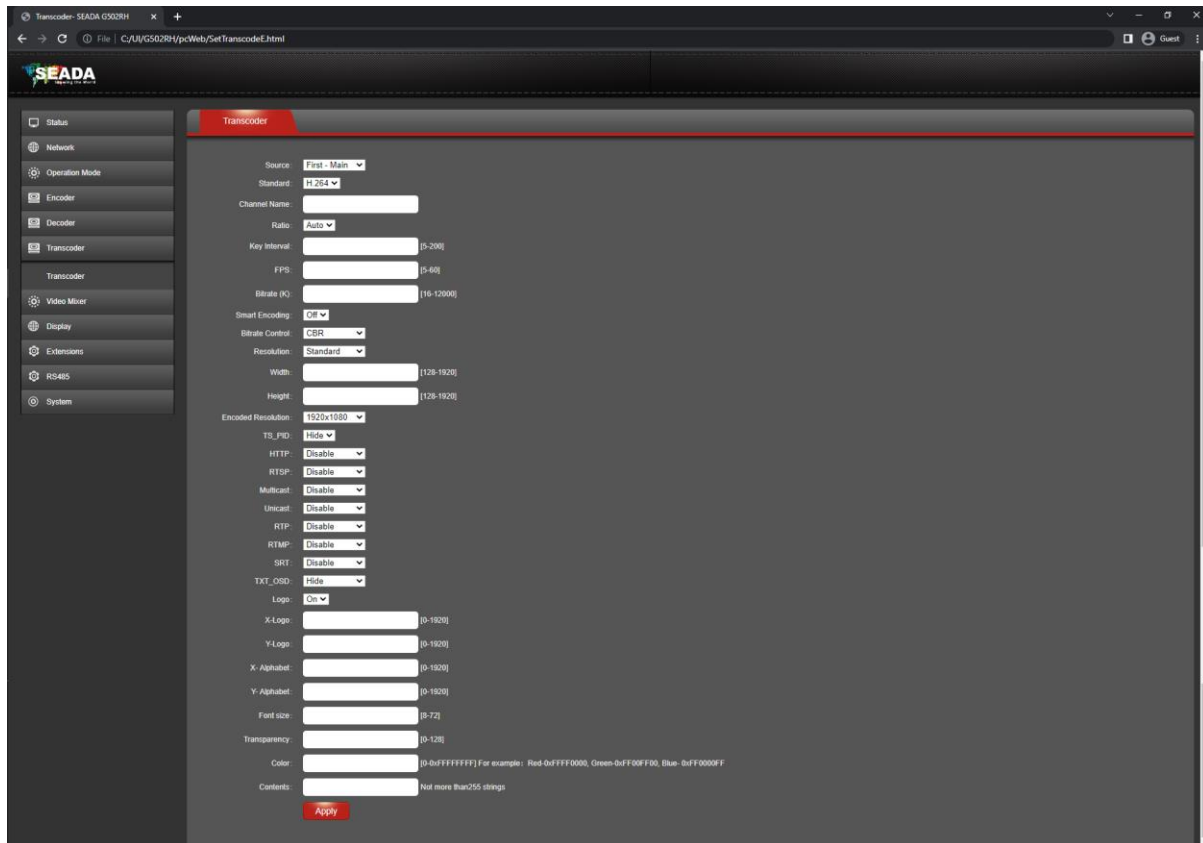
| | |
|--------------|--|
| | <ul style="list-style-type: none"> • RTMP mode: Choose the encoding video only, audio only or video and audio at the same time • RTMP server ip: a.rtmp.youtube.com (beginning of Server URL before '/') • RTMP server port: 1935 • RTMP user name: leave empty • RTMP password: leave empty • RTMP app name: live2 (end of Server URL after '/') • RTMP stream name: stream name/key on YouTube homepage URL: Enter the stream URL, followed by the stream key with a symbol '/' |
| SRT | Enable SRT encoding |
| TXT_OSD | Enable OSD |
| Logo | Choose whether to display the OSD |
| X-Logo | No longer supported |
| Y-Logo | No longer supported |
| X-Alphabet | Specify the X axis of the OSD |
| Y-Alphabet | Specify the Y axis of the OSD |
| Font size | Specify the size of the OSD |
| Transparency | Specify the transparency of the OSD |
| Color | Specify the color of the OSD |
| Contents | Specify the content of the OSD |

5.5 Decoder



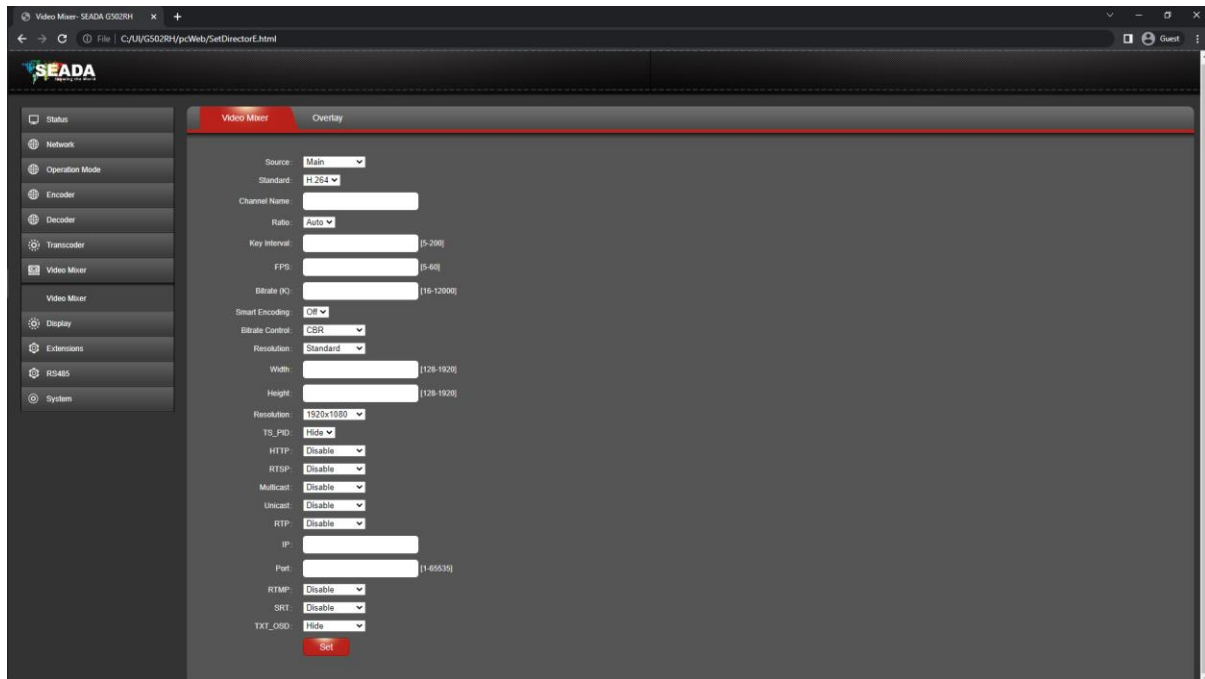
| Decoder | |
|---|--|
| First | Specify the activated decoding channel |
| Path | Specify the method of decoding <ul style="list-style-type: none"> • URL: Decode the stream by entering the URL • P2P: No longer supported • SDK: Decode stream directly from another G500 series unit, including G501RH, G501ES, G501EH and G502RH. |
| Specify up to 8 streams for decoding in the following options | |

5.6 Transcoder

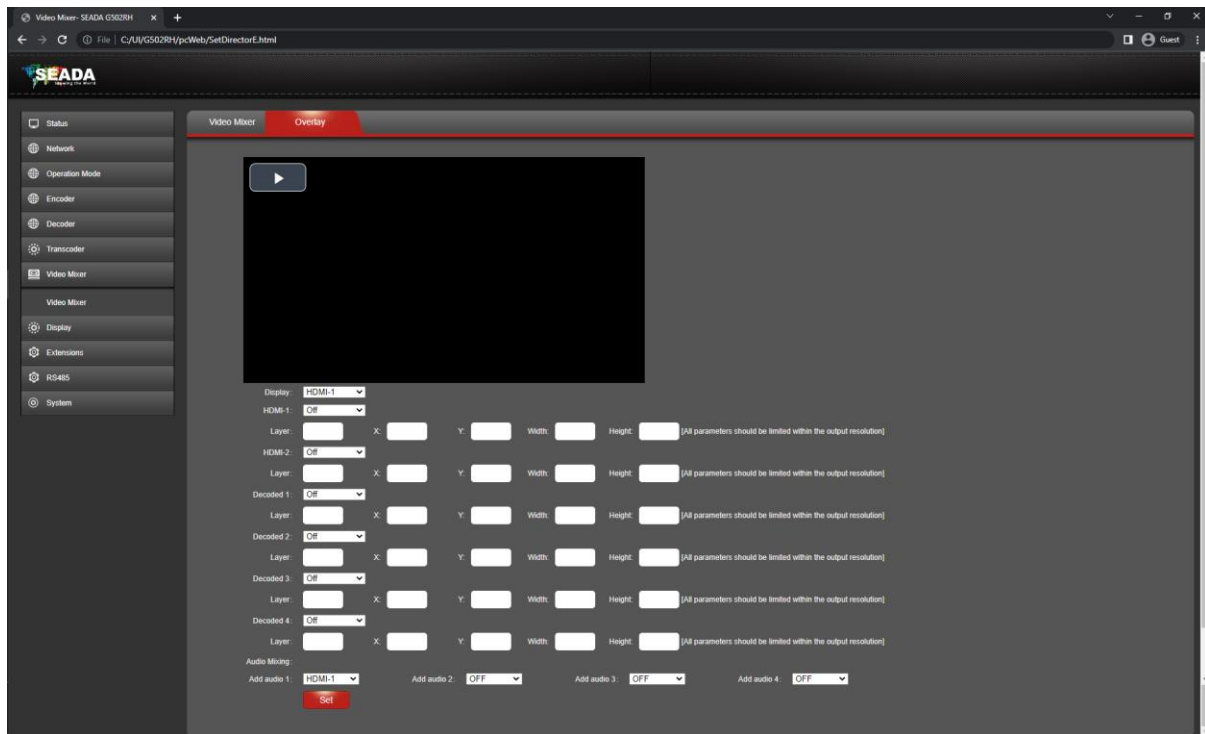


Most of the settings in this page are the same as in 'Encoder' page. The only difference is that user can encode 4 transcoded streams with up to 2 streams for each under this function.

5.7 Video Mixer



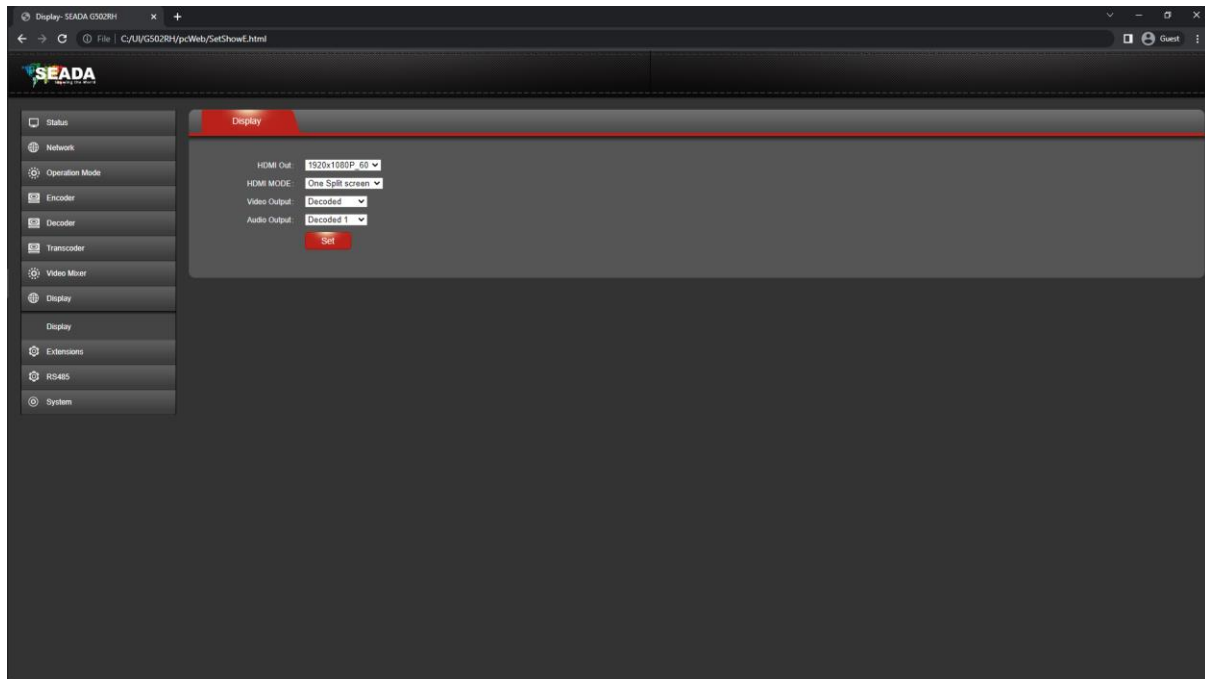
Most of the settings in this page are the same as in 'Encoder' page. The only difference is that user can encode up to 2 streams for the mixed signal under this function.



In the '**Overlay**' tab, user can customise the layout of the encoded mixing signal.

| Overlay | |
|--------------|---|
| Display | Choose the signal to be encoded, which will mostly be ' Multiview ' when using the video mixer function |
| HDMI-1 | <ul style="list-style-type: none"> • Layer: Specify the layer of signal from HDMI1 for adjustment when multiple windows are overlapped • X: Specify x axis of signal from HDMI1 • Y: Specify y axis of signal from HDMI1 • Width: Specify the width of signal from HDMI1 • Height: Specify the height of signal from HDMI1 |
| HDMI-2 | Same as HDMI-1 |
| Decoded 1 | Same as HDMI-1 |
| Decoded 2 | Same as HDMI-1 |
| Decoded 3 | Same as HDMI-1 |
| Decoded 4 | Same as HDMI-1 |
| Audio Mixing | Choose the audio in the encoded mixing signal with a mix of up to 4 sources |

5.8 Display

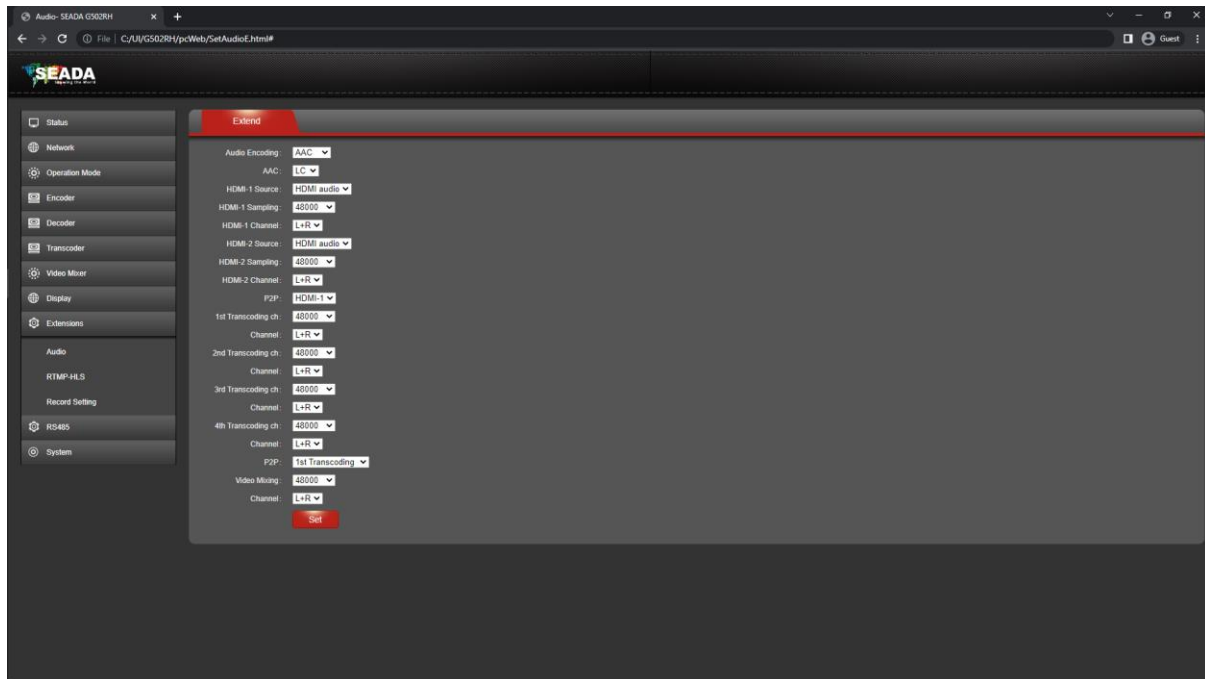


| Display | |
|--------------|---|
| HDMI Out | Specify the resolution and FPS of the HDMI output |
| HDMI Mode | <ul style="list-style-type: none"> One Split screen: the HDMI output will be a single decoded signal displayed in full-screen Four Split screen: the HDMI output will be 4 decoded signals displayed in a 2x2 multiview Nine Split screen: the HDMI output will be 8 decoded signals displayed in a 3x3 multiview (Note that in this mode, the right-bottom (9th window) of the screen will be black without content) |
| Video Output | <ul style="list-style-type: none"> Decoded: Display decoded signals on screen and it will decode the first signal that is filled in the 'Decoder' page under 'One Split screen' mode, the first four under 'Four Split screen' mode and all the eight under 'Nine Split screen' mode HDMI-1: loop out input signal from the first HDMI port HDMI-2 loop out input signal from the second HDMI port |
| Audio Output | Choose the audio that is outputted via the HDMI output |

Note: If it is necessary to preview the mixed signal via HDMI output, user can enter the stream address of the mixed signal for the first signal in '**Decoder**' page. In '**Display**' page, user can choose '**One Split screen**' and the mixed signal will be displayed on the HDMI output.

5.9 Extensions

5.9.1 Audio



| Extended | |
|--------------------------------|--|
| Audio Encoding | Specify audio encoding <ul style="list-style-type: none"> • AAC • MP3 • OPUS |
| AAC | Specify AAC profile <ul style="list-style-type: none"> • LC-AAC (Low Complexity AAC) (Good for high (>=80 kbps) bitrates) • HE-AAC (High Efficiency AAC) (Good for lower (<=80 kbps) bitrates) |
| HDMI-1 Source | Specify audio source |
| HDMI-1 Sampling | Specify the sampling rate for audio encoding |
| HDMI-1 Channel | Specify channel for the audio <ul style="list-style-type: none"> • L+R • L • R |
| Same for the following options | |

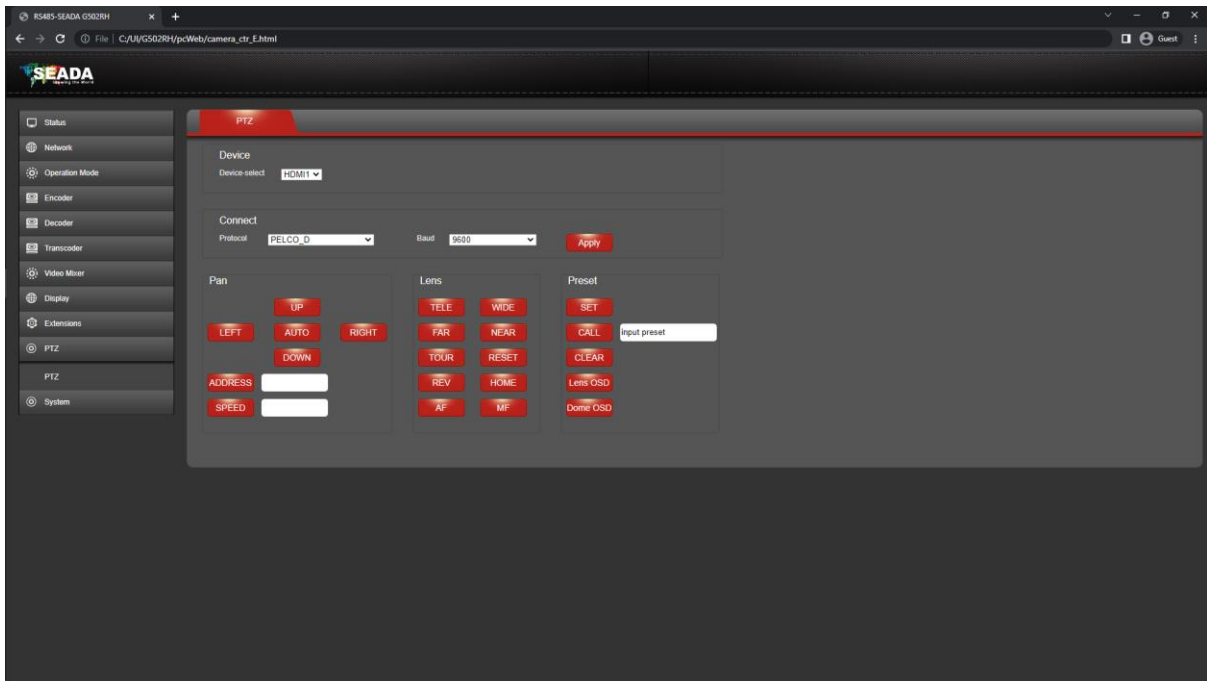
5.9.2 RTMP-HLS

Set up the HLS streaming.

5.9.3 Recording Setting

| Record | |
|-------------------------|---|
| Record | Choose to enable recording |
| Record Mode | Specify the operation mode for recording: <ul style="list-style-type: none"> • 'No-loop': when there is no space in the storage device, G502RH will stop recording • 'Loop': when there is no space in the storage device, G502RH will continue recording by looping back to the start of the storage device and replacing the oldest recordings. |
| One video file duration | Specify the length of each recording |
| U Disk available space | Display the remaining space of the external storage |
| U Disk free percent | Display the remaining space percentage of the external storage |

5.10 RS485



This function can be used to have a basic control over the RS485 port for a PTZ camera via VISCA or PELCO-D/P.

5.11 System

| | |
|----------------------------------|------------------------------------|
| System | |
| Timing Reboot | Specify reboot timing for the unit |
| Reset | Reset the unit |
| Reboot | Reboot the unit |
| Change Password | |
| New Password | Enter the new password |
| Confirm | Confirm the new password |
| Firmware version of the unit | |
| Upgrade the firmware of the unit | |