

# G501RH Quick Start Guide

This quick start guide provides basic instructions for setting up and operating the G501RH in this quick start guide. All the G501RH can be set up via WebUI.

## Note:

1. Do not fix the devices to any surface which is a heat source to avoid overheating.
2. Do not cover the surface or ventilation grills of the devices to avoid overheating.

## 1. Set up G501RH

G501RH can be either operated as an encoder or a decoder. When used as an encoder, the unit can encode maximumly 4 streams in different formats and protocols (up to 1080P60) for a single HDMI input and when under the decoder mode, it can decode 1 stream (up to 1080P60) and output 1 signal (up to 1080P60). User can switch the function of G501RH via its WebUI.

### Option 1. Set up G501RH for Encoding

1. Use CAT6 (or higher) to connect G501RH with an IP switch with PoE (optional).
2. Connect G501RH with any input source, such as media player, to 'IN' on the back panel.
3. Connect control PC to the same IP switch as G501RH is connected to.
4. **Optional:** Plug in either a USB stick or microSD card into the front panel for recording.

### Option 2. Set up G501RH for Decoding

1. Use CAT6 (or higher) to connect G501RH with an IP switch with PoE (optional).
2. Connect G501RH with any output screen, such as a monitor or TV, to 'OUT' on the back panel.
3. Connect control PC to the same IP switch as G501RH is connected to.

## 2. Access G501RH WebUI on the control PC through LAN

The default static IP address of G501RH is **192.168.1.168**. User needs to change the IP address of the control PC to the same network segment as the unit at TCP/IPv4 in 'Ethernet Properties'.

- **IP address:** any address between 192.168.1.2 and 192.168.1.254 except the address which has been taken by G501RH.
- **Subnet Mask:** 255.255.255.0
- **Default Gateway:** 192.168.1.1

When logging in for the first time, the default 'Username' and 'Password' are both 'admin'.



- **Home:** In the 'Home' tab, user can set up the parameters for the four encoded streams, such as resolution, FPS, and bitrate. 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.
- **Protocols1:** User can choose the encoding protocol for the 1<sup>st</sup> and 2<sup>nd</sup> 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.

- **Protocols2:** User can choose the encoding protocol for the 3<sup>rd</sup> and 4<sup>th</sup> 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.
- **RTMP:** User can set up the RTMP online stream in this page. Each channel can support up to 2 RTMP stream. 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.trmp.youtube.com/live2/xxxxxxx**). User can then turn the function ON and save the setting. After restarting the unit, the stream will start.
- **Sources:** User can set up the function of G501RH by choosing either 'Encoder' or 'Decoder'. When the unit is acting as a decoder, by turning on the 'Online source' function and entering the address for the input source, user can decoder the signal via G501RH. User can also set up the output resolution and its audio in the 'Capturing' and 'HDMI Output' section. In the last section, up to 8 Region of Interest (ROI) areas can be set up for better computation and data transfer efficiency with pre-defined Quantization Parameter (QP) chosen by the user.
- **Net:** User can set up the network configuration of G501RH in this page. **It is recommended to change the DNS to 8.8.8.8 for online streaming purpose.**
- **Systems:** General settings for G501RH
  - **Time:** Set up the time server for time display and this function works with 'Time' function in 'More' page.
  - **RJ485:** A standard preset operating panel for controlling a PTZ camera via RJ485 port.
  - **System:** To update firmware or reboot G501RH.
- **More:** Additional functions that supported by G501RH
  - **OSD:** User can set up OSD and scrolling text on screen. User can also upload a customised image onto the screen as a logo.
  - **Time:** User can display the time information on screen, and it will only be displayed after the 'Time' section in 'System' page is set up.
  - **Record:** G501RH supports either recording via USB stick or MicroSD card. There are two modes supported – 'replacing record': when there is no space in the storage device, G501RH will stop recording and 'looping record': when there is no space in the storage device, G501RH will continuing recording by looping back to the start of the storage device and replacing the oldest recordings. After turning the function on, user needs to restart the unit and it will start recording. User can check if the recording is on-going by refreshing the page and check if the remaining space is changing.
  - **GB2818:** A special technical requirement for information transport, switch, and control in video surveillance network system for public security, which is only used within China. There is no need to enter any information while used in other countries.
  - **Score:** A score board function which can be used as a simple real-time score board. Two teams with their names and scores will be displayed on the screen along with count-down timing. User can use the WebUI to add/remove scores for each team.
  - **FTP Upload:** G501RH supports uploading recorded files to FTP servers.