ToC

How to set the optimal Keyframe frequency / I-Frame Interval (s) for YouTube & Facebook Live by our IP Video Encoder?

BLANKOM Video Encoder Settings for I-Frame-keyframe-Interval (s) for YouTube or Facebook Live

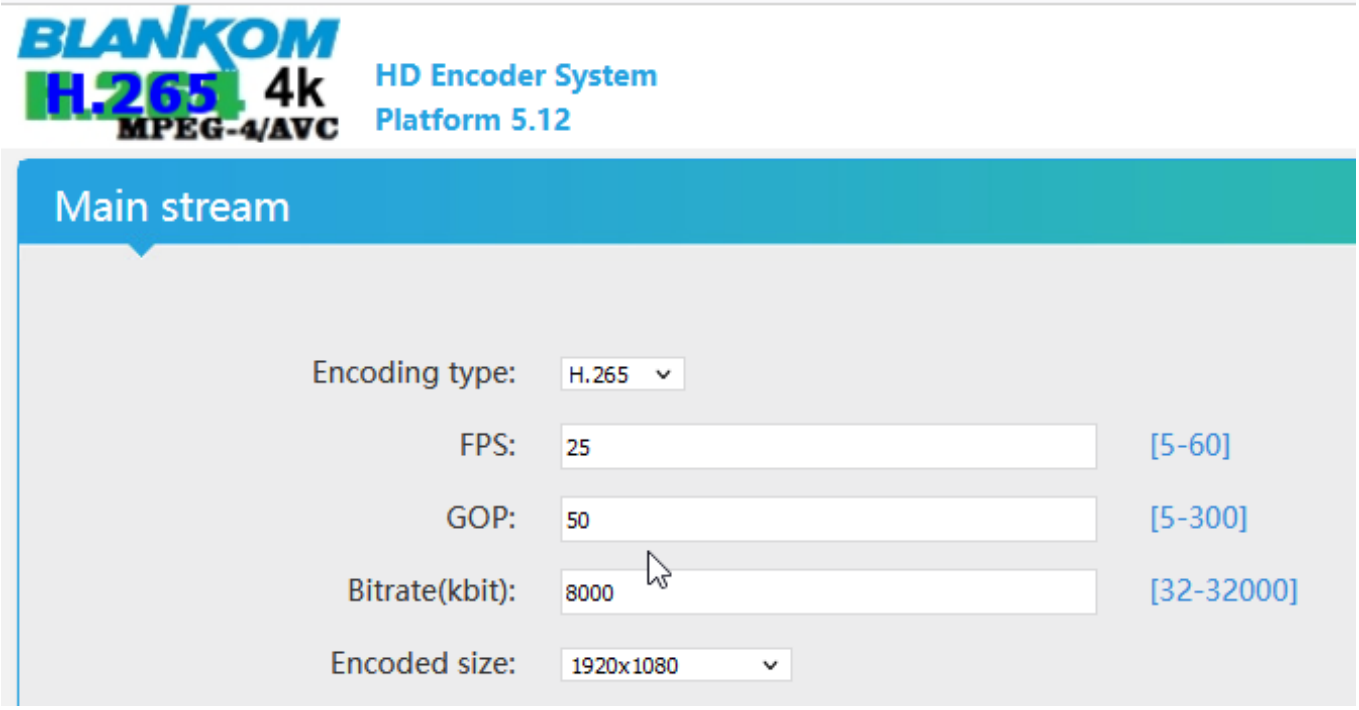
What's a Keyframe?
The keyframe (I-frame) is the **full** frame of the image in a video.
Subsequent frames, the delta frames, only contain the information that has been changed from picture to picture. Keyframes will appear multiple times within a coded stream, depending on how it was created or how it's being streamed.

How to set Keyframe frequency/I-Frame(keyframe) Interval (S) for YouTube & Facebook Live by the BLANKOM IP Video Encoder?

Facebook:
An I-frame (keyframe) must be sent at least every 2 seconds within the Video-stream.

YouTube:
Keyframe frequency: Recommended 2 seconds. Should not exceed 4 seconds

Keyframe frequency / I-Frame(keyframe) Interval (S) = GOP/FPS. The below stream I-Frame Interval (S) is 2s, resulting from GOP/FPS=50/25:



BLANKOM ONVIF Video Encoders is working together with Milestone VMS Software

How to Integrate Non-IP Video Sources into Milestone VMS Software with BLANKOM SDI, HDMI and VGA or CVBS Analog encoders?
If you are using Milestone VMS Software to manage your video surveillance system, you may encounter some situations where you need to integrate non-IP video sources into your network. For example, you may want to monitor a PC screen that a security guard is watching or a non-network enabled camera that is already installed.

In these cases, you may think that you have to re-wire and retrofit your existing equipment, which can be costly and time-consuming. However, there is a simpler and easier solution: Using BLANKOM Encoders.

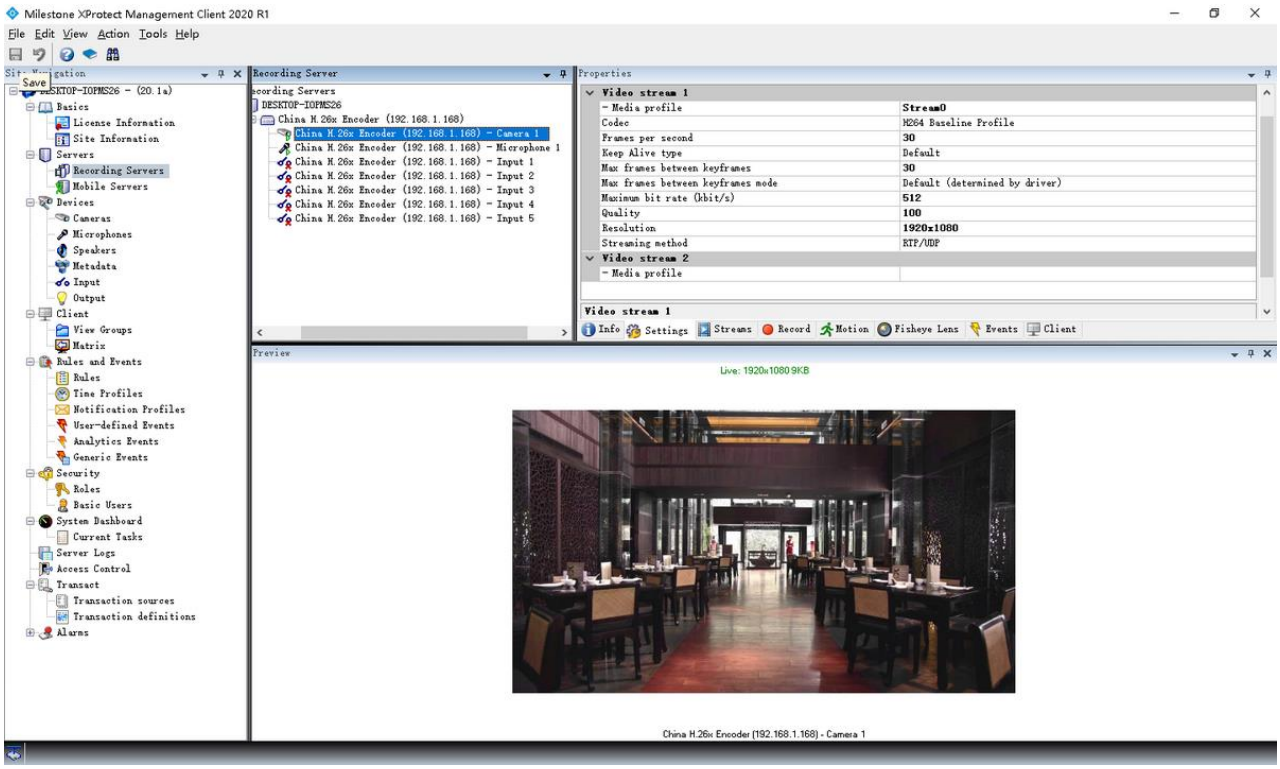
BLANKOM Encoders are devices that can convert any SDI, HDMI, VGA, or CVBS analog video signal into an IP stream that can be integrated into Milestone VMS Software via a network. This way, you can view and record your non-IP video sources on your VMS software without changing your hardware.

BLANKOM Encoders support various video formats and resolutions, including 4K HDR, and can encode in H.264 or H.265 for optimal bandwidth and storage efficiency. They also support ONVIF protocol, which means they are compatible with most IP cameras and NVRs on the market.

BLANKOM Encoders are easy to install and configure, and they come with a web-based interface that allows you to adjust the settings and preview the video output. You can also use BLANKOM's free tool to search and manage multiple encoders on your network.

With BLANKOM Encoders, you can expand your video surveillance system with non-IP video sources without compromising the quality and performance of your network. You can also enjoy the flexibility and convenience of accessing your video feeds from anywhere on your network.

If you want to learn more about BLANKOM Encoders and how they work with Milestone VMS Software, you can contact us for more information.



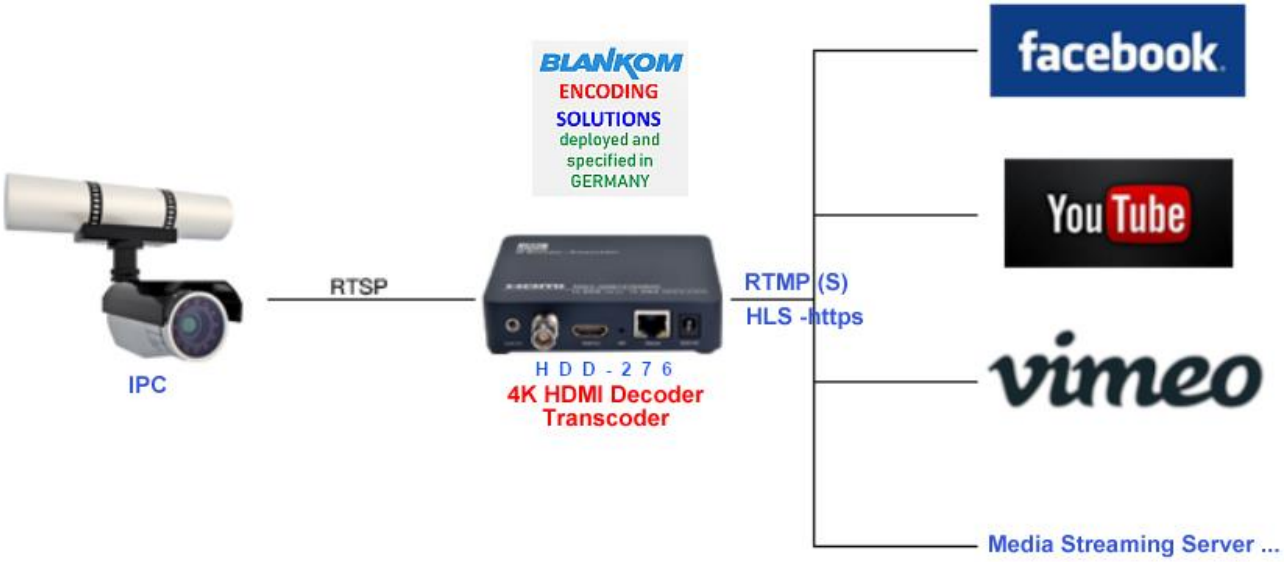
Decoder as Transcoder: HDD-276 4Kp60:

How to convert an IPC (Camera) RTSP to a RTMP Stream?

With the rapid development of the security monitoring industry, more and more surveillance cameras are widely used, but mostly of the IP cameras are support RTSP ONVIF protocols, it's not easy to view the video over internet or from other location.

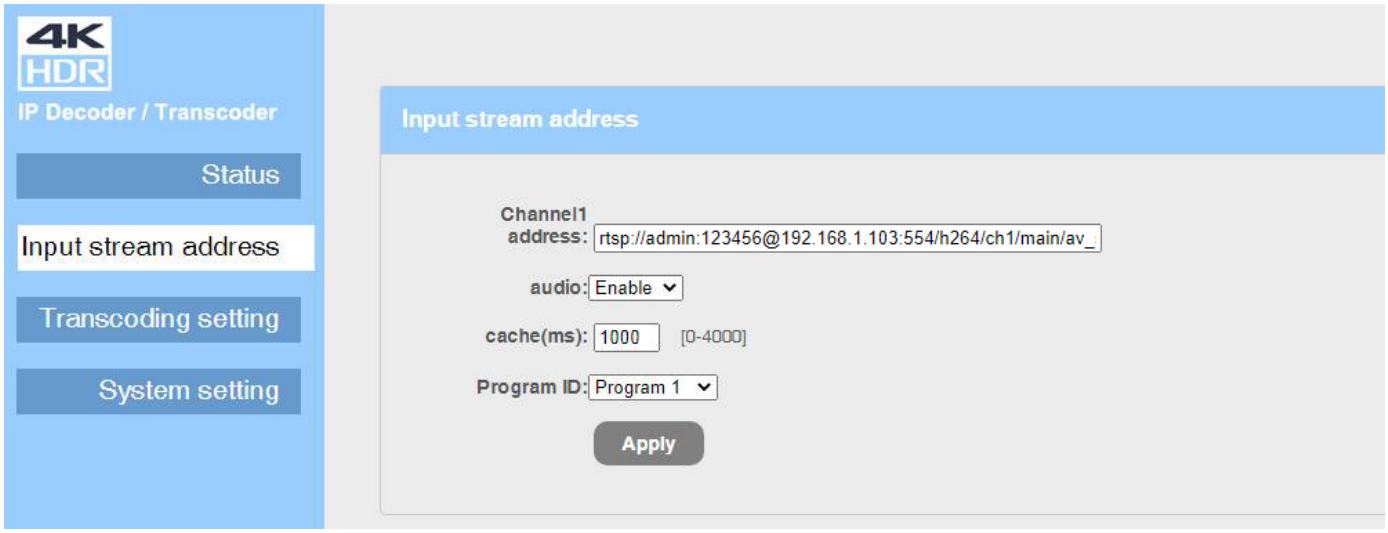
By the BLANKOM **HDD-276 4K 60FPS HDMI CVBS Decoder & Transcoder**, you can decode the IP camera RTSP stream (also, supports SRT / HTTP(S) / HLS / FLV / RTMP(S) / UDP/RTP (Unicast/Multicast), ONVIF stream), and output HDMI, CVBS and L/R stereo audio, at the same time, our HDD-276 can do a re-streaming, converting the IPC –RTSP stream to RTMP and push this to a 3rd party live stream platform or a media streaming server.

With the **BLANKOM HDD-276 Decoder & Transcoder**, you don't need to do any changes for the original surveillance camera, the HDD-276 converts the RTSP video stream from the surveillance camera into an RTMP live stream.

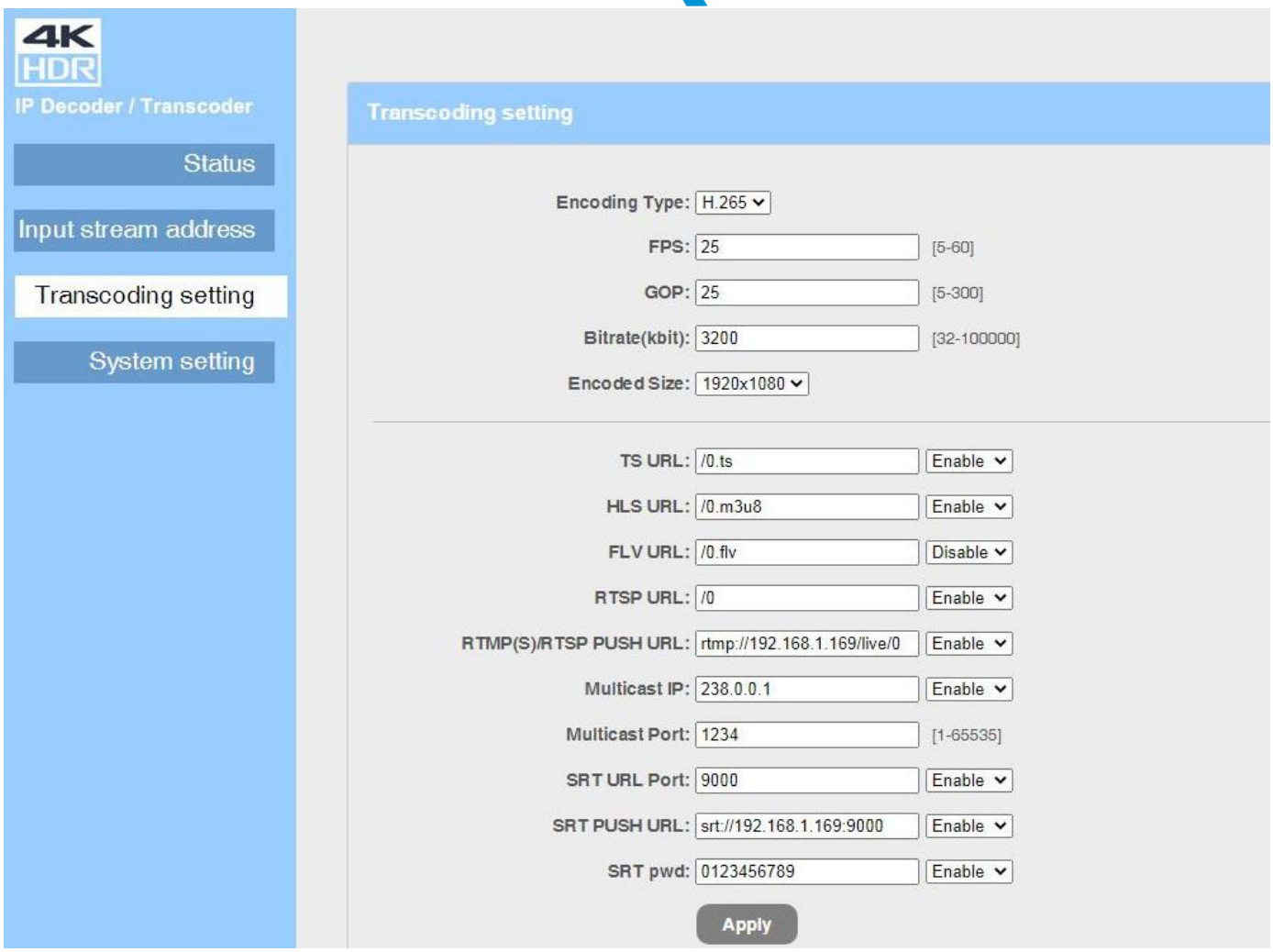


Steps:

1. Copy the RTSP URL from the IP camera
2. Login the WEB control panel of HDD-276, click the 'Input Stream Address ', and paste the RTSP URL to it:



3. Chose the 'Transcoding setting' menu and configure the RTMP URL of the platform we want to push to, then enable (APPLY) it:



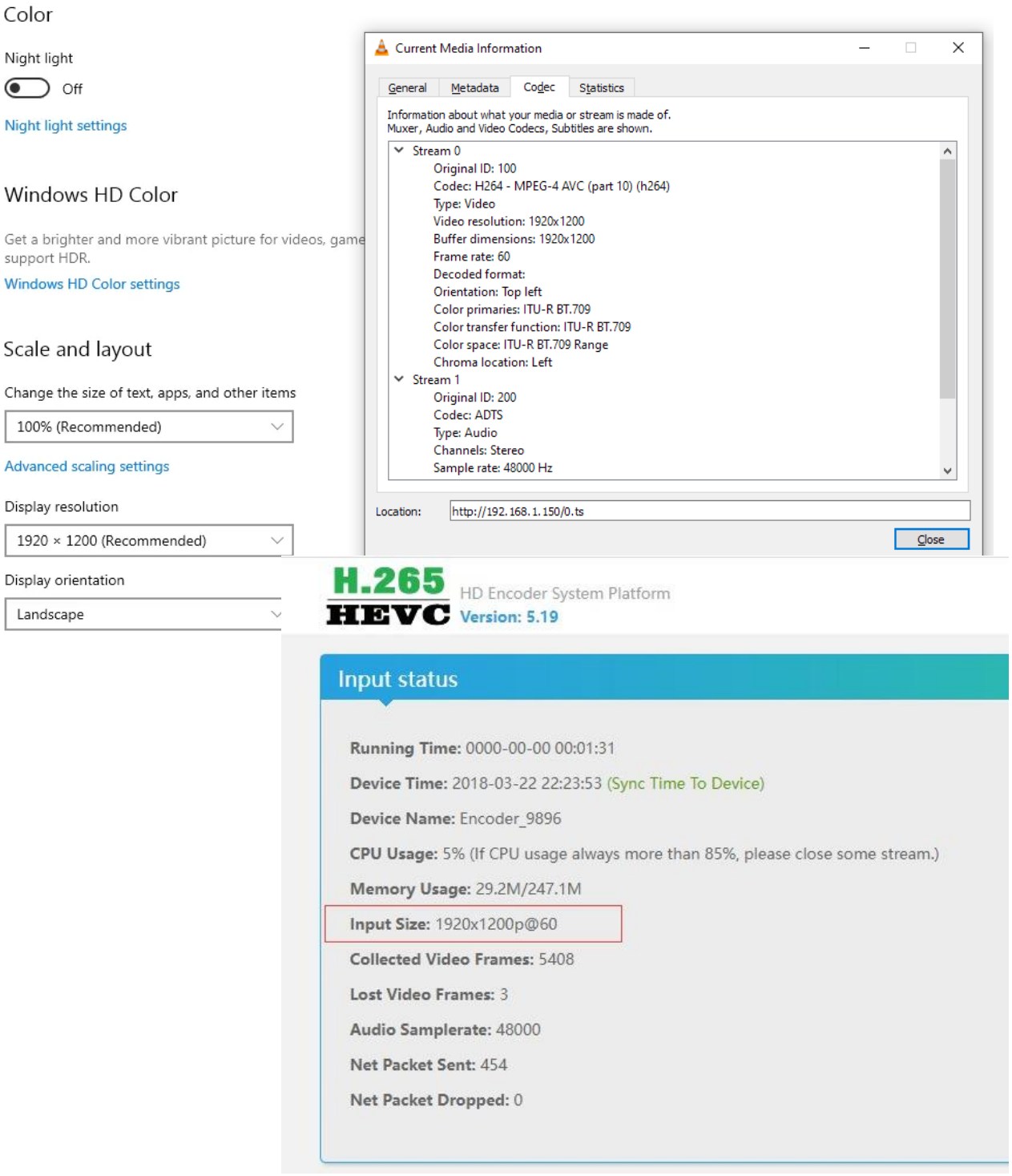
4. Set the **BLANKOM HDD-276 Decoder & Transcoder** Decoder output resolution for HDMI & CVBS:

WUXGA 1920x1200@60fps and UXGA 1600x1200@60fps Input with our HDMI Video Encoder:

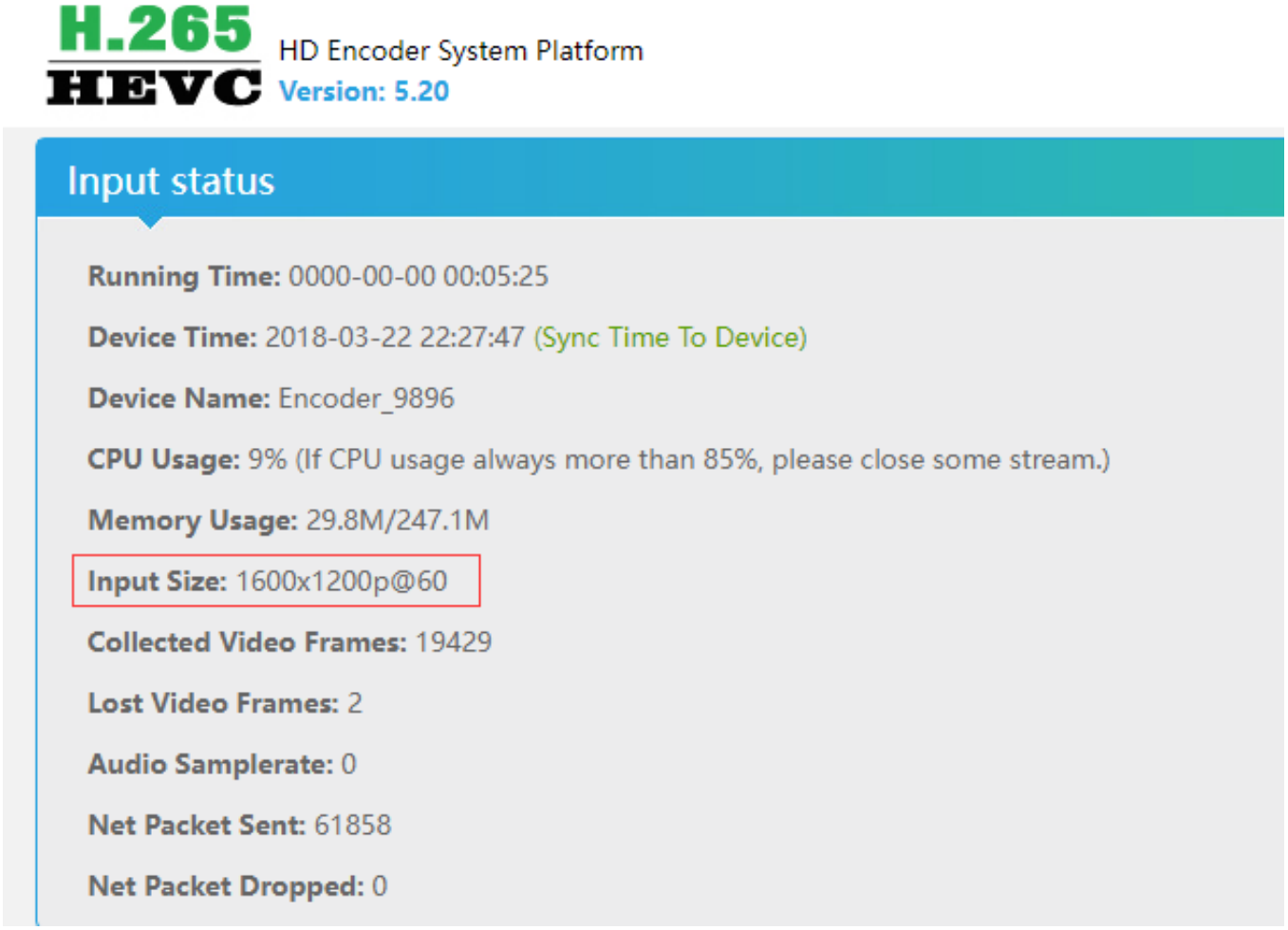
BLANKOM Video Encoders support as input also the special PC-formats:

WUXGA 1920x1200@60fps and UXGA 1600x1200@60fps but you need a special firmware from us. You can click here to contact us if needed.

Example: WUXGA 1920x1200@60fps input to BLANKOM H265 HDMI Video Encoder can be caused sometimes used by MS-Windows PC's:



UXGA 1600x1200@60fps input & output for H265 Video Encoder:



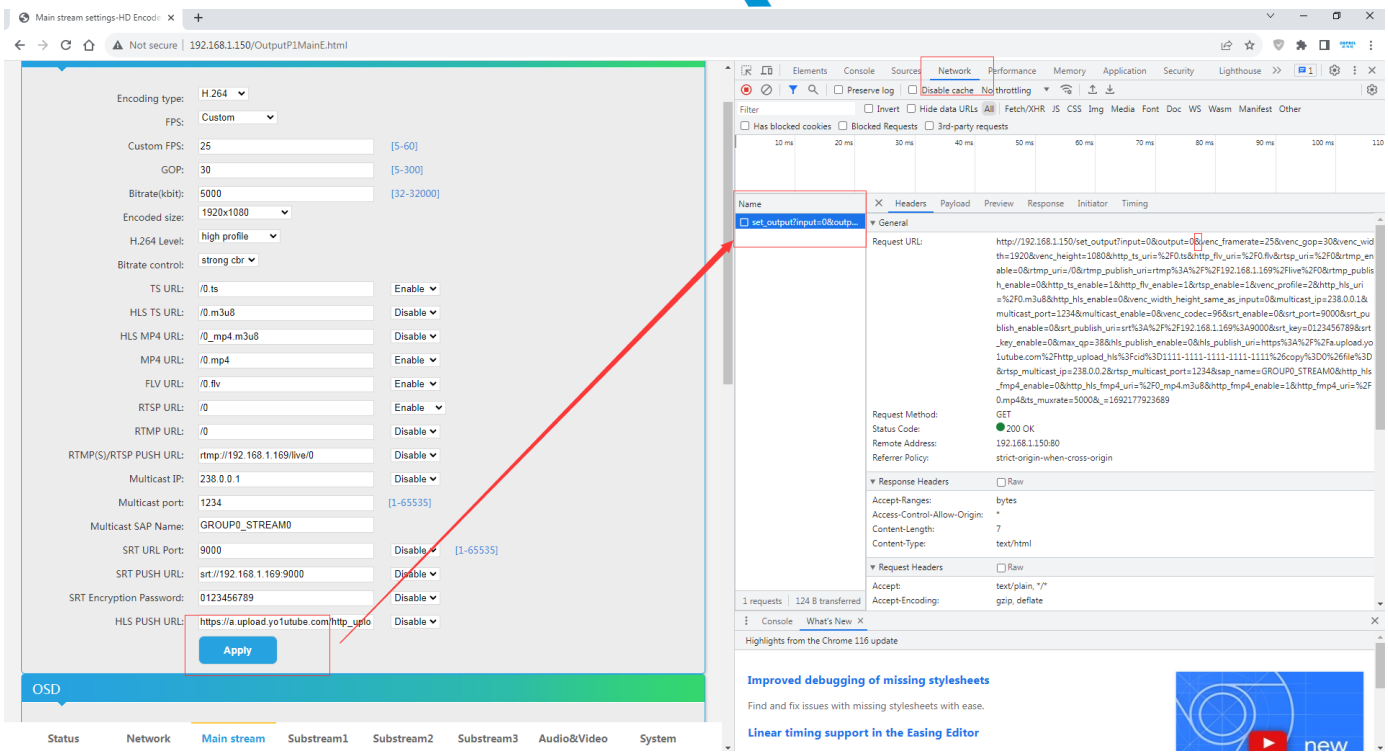
Special HTTP- commands to disable and enable the stream outputs

for the MAIN-Encoder Menu: like RTMP/RTSP.....
Example: IP address of the SoC encoder device is 192.168.1.150 then

http://192.168.1.150/set_output?&rtmp_enable=0&rtmp_publish_enable=0&http_ts_enable=0&http_flv_enable=0&rtsp_enable=0&http_hls_enable=0&multicast_enable=0&srt_enable=0&srt_publish_enable=0&srt_key_enable=0&hls_publish_enable=0&http_hls_fmp4_enable=0&http_fmp4_enable=0
enable 0=means disable
enable 1=means enable

or parts of it like: http://192.168.1.150/set_output&multicast_enable=0
would disable the udp (or rtp) stream output.
http://192.168.1.150/set_output&multicast_enable=1
would re-enable it as a remote command to the encoder's web server.

Attention: The target Webserver in the encoder needs the login data "user:password" - to let you in: So http://**admin:admin@**IP-Address/... as prefix needed.



To maintain the other encoding parts like Secondary 1,2 and 3 (if the encoder supports multiple secondary streams) is:

http://192.168.1.150/set_output?output=1&rtmp_enable=1&rtmp_publish_enable=0&http_ts_enable=0&http_flv_enable=0&rtsp_enable=0&http_hls_enable=0&multicast_enable=0&srt_enable=0&srt_publish_enable=0&srt_key_enable=0&hls_publish_enable=0&http_hls_fmp4_enable=0&http_fmp4_enable=0

output=1 value 0…3 , 0=mainstream; 1…3=substream 1~3

To **kill all stream outputs** in once when the input signal is lost (avoiding the default NO-Signal-Picture to be send in the enabled streams):

this http://ip/set_sys?kick_all=1 (such as http://192.168.1.170/set_sys?kick_all=1), which mean it will disconnect all clients when removed the HDMI or SDI Input (or signal Input was switched off).

Also, http://ip/set_sys?kick_all=0 means this disables the above function and goes back to normal default = Transmitting a Test-Picture instead of the Video – Stream.

These above commands are working in the Windows-CMD-(DOS) environment:

```
C:\>curl  "http://admin:admin@192.168.0.168/set_output?output=0&multicast_enable=0"
succeed
```

To simply use it in Windows 10 with the Powershell (PS) – because CURL is not working here as in the CMD, you can install following tool:

https://www.coretechnologies.com/products/http-ping/http-ping.exe

copy it to the C:\Windows\system32 folder as administrator so it will be accessible from any windows location or folder = its in the Path.

Then open the PS: enter:

PS C:\> http-ping http://admin:admin@192.168.0.168/set_output?output=0"&"multicast_enable=1

Or disable a stream-output:

http-ping http://admin:admin@192.168.0.168/set_output?output=0"&"multicast_enable=0

BUT: you need to put the **&** in brackets: "**&**" to pass this as part of the command because otherwise it assumes the & is part of the command syntax.

results in:

```
---------------------------------------------------------------------------
Pinging "http://admin:admin@192.168.0.168/set_output?output=0&multicast_enable=0":
1> Reply: [200/OK] bytes=7 time=181ms
2> Reply: [200/OK] bytes=7 time=184ms
3> Reply: [200/OK] bytes=7 time=129ms
4> Reply: [200/OK] bytes=7 time=63ms
Ping statistics for "http://admin:admin@192.168.0.168/set_output?output=0&multicast_enable=0":
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milli-seconds:
Minimum = 63ms, Maximum = 184ms, Average = 139ms, Deviation = 49ms
---------------------------------------------------------------------------
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Find out about this and our other products at our web site:
http://www.CoreTechnologies.com/
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