BLANKOM HDMI SDI Encoder and Decoder Instructions

Contents

BLANKOM HDMI SDI Encoder and Decoder

Product Information

HDMI/SDI Encoder -> HDD-275 Decoder

The HDMI/SDI Encoder -> HDD-275 Decoder is a system that allows for the conversion and transmission of video and audio signals. The system includes an Encoder Input SDE-265, which supports Unicast HTTP streams, and a HDD-275 Decoder, which adapts to new settings and has pre-configured Multicast as UDP and SRT Unicast (Pull mode from Decoder /IP-Receivers).

The system can be configured with different settings for video and audio, and it is recommended to refer to the Encoder Manual from our Web for additional configuration options.

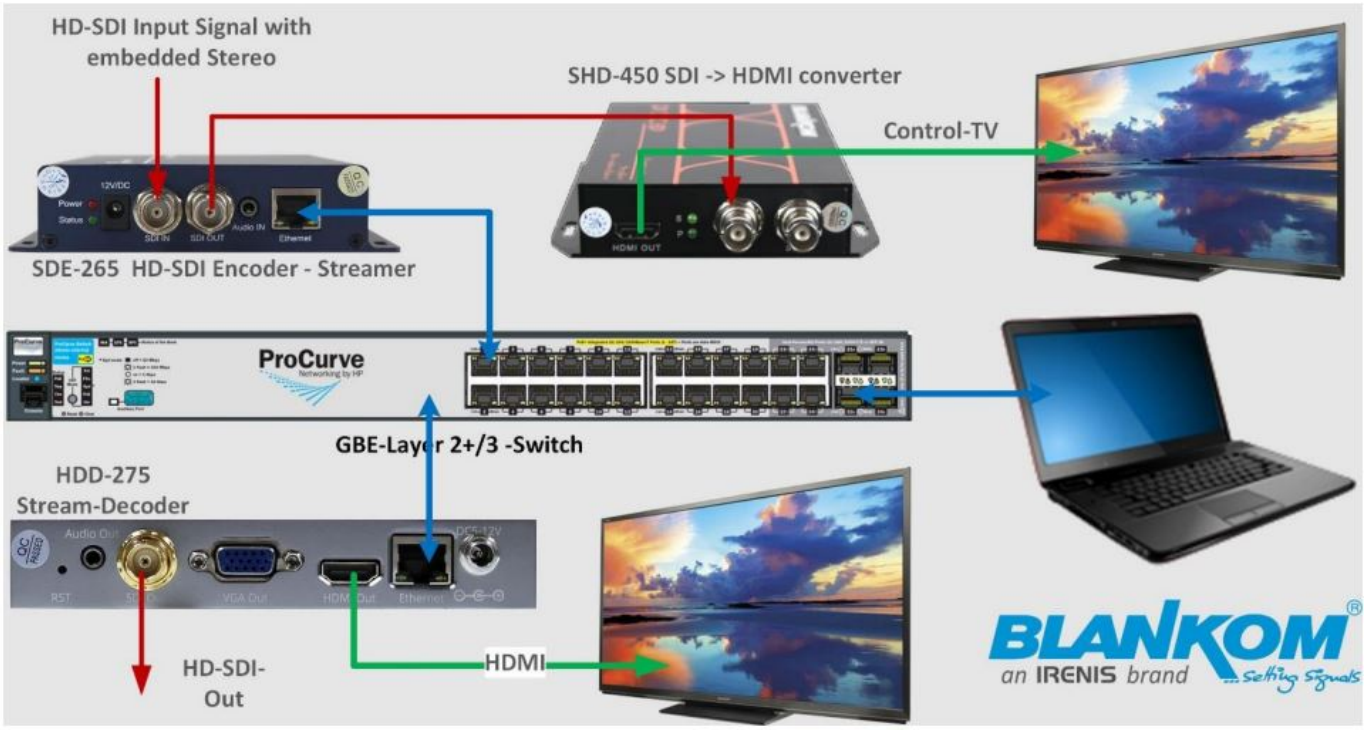
The system can be used to stream video and audio signals to a TV output or VLC on a laptop. It is recommended to use a layer 3 switch with IGMP enabled for optimal performance.

Product Usage Instructions

1. Connect the HDMI/SDI Encoder to the HDD-275 Decoder.
2. Configure the Encoder settings for video, referring to the Encoder Manual from our Web for additional configuration options.
3. Configure the Encoder settings for audio.
4. Configure the Decoder settings, allowing time for the system to adapt to new settings. If necessary, reboot the unit.
5. Use the pre-configured Multicast as UDP and SRT Unicast (Pull mode from Decoder /IP-Receivers) for audio streaming.
6. To stream video and audio signals to a TV output or VLC on a laptop, check the SRT streaming as Unicast and copy and paste the Encoder code.
7. Check the TV output or VLC on a laptop for any differences.
8. If necessary, install FFMPEG binaries (Linux— sudo apt install ffmpeg).
9. Add a . before the ffplay executable and enter into the folder.
10. Use the player with admin access and a layer 3 switch with IGMP enabled.
11. Check the system for optimal performance.
12. For RTMP-mode, enable the RTMP mode in the Encoder menu and add the Decoder IP address. If necessary, add admin:admin for user/password.

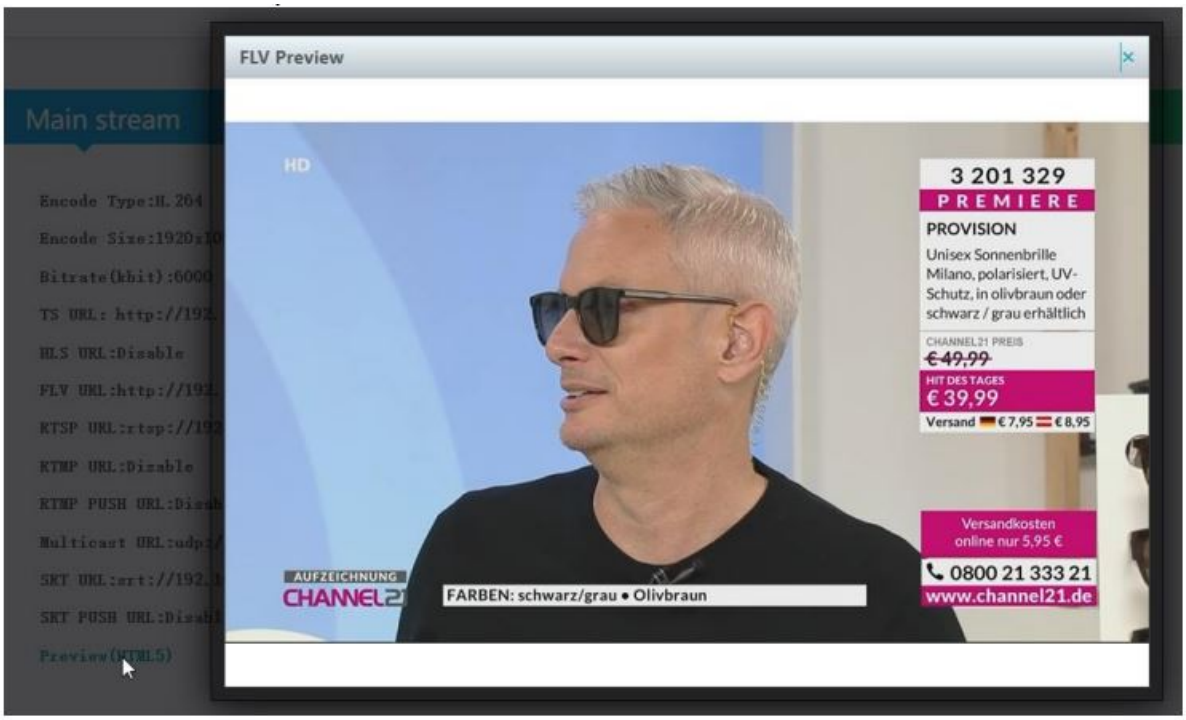
Instruction

How to configure the Couple: HDMI/SDI Encoder -> HDD-275 Decoder
We like to give you a short quick-start setup to configure and setup your Encoder – Streamer with its Decoder stream receiver.
If you do not configure anything except the encoding and output resolutions and use the default settings you will have a system like:



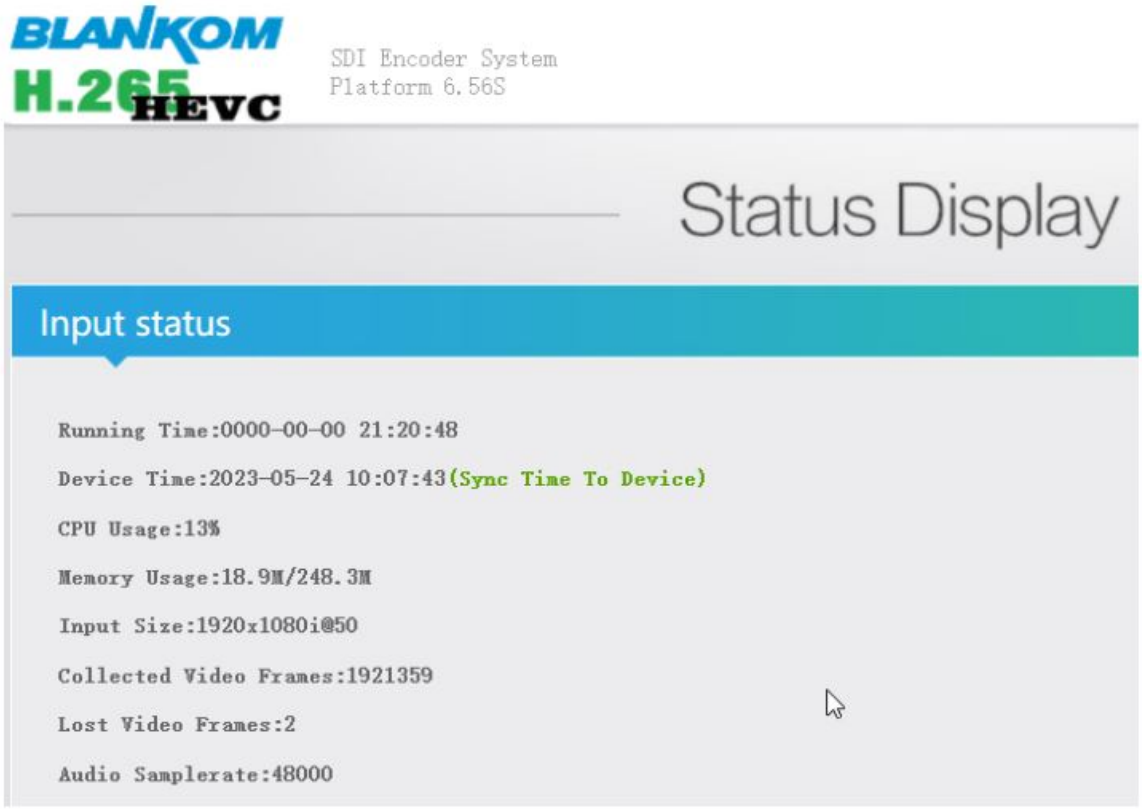
Simple as it is, the SDI-ENCODER SDE-265 default IP-Address is static: 192.168.1.168
while the DECODER HDD-275 has 192.168.1.169.
The Laptop for configuration and wired Ethernet should has an address in the same subnet. WIFI should be OFF because of Metric settings are almost set to automatic in Windows.
After switching on with default settings in both devices you have a plug and play: The Video Signal will automatically appear on the HDD-275 output interfaces.
We are using h.264 encoding with AAC Audio.

So a preview in the SDE-Web-interface is almost easier:

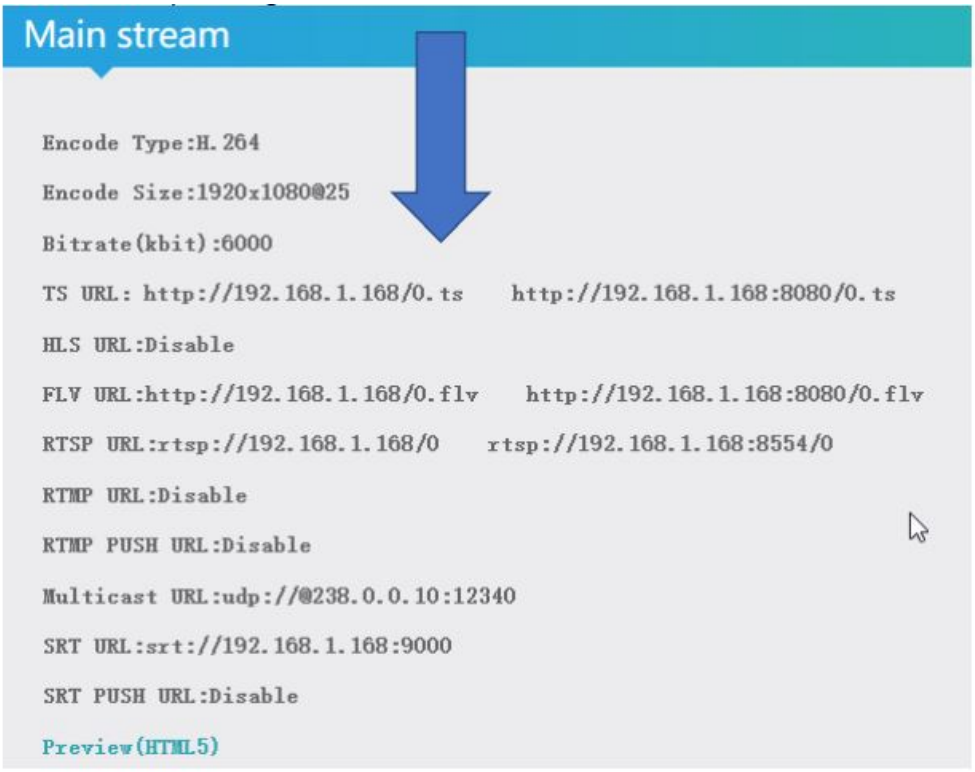


How-to-configure-the-Encoder-Decoder-Couple.docx

Encoder Input SDE-265 (older model but still OK):

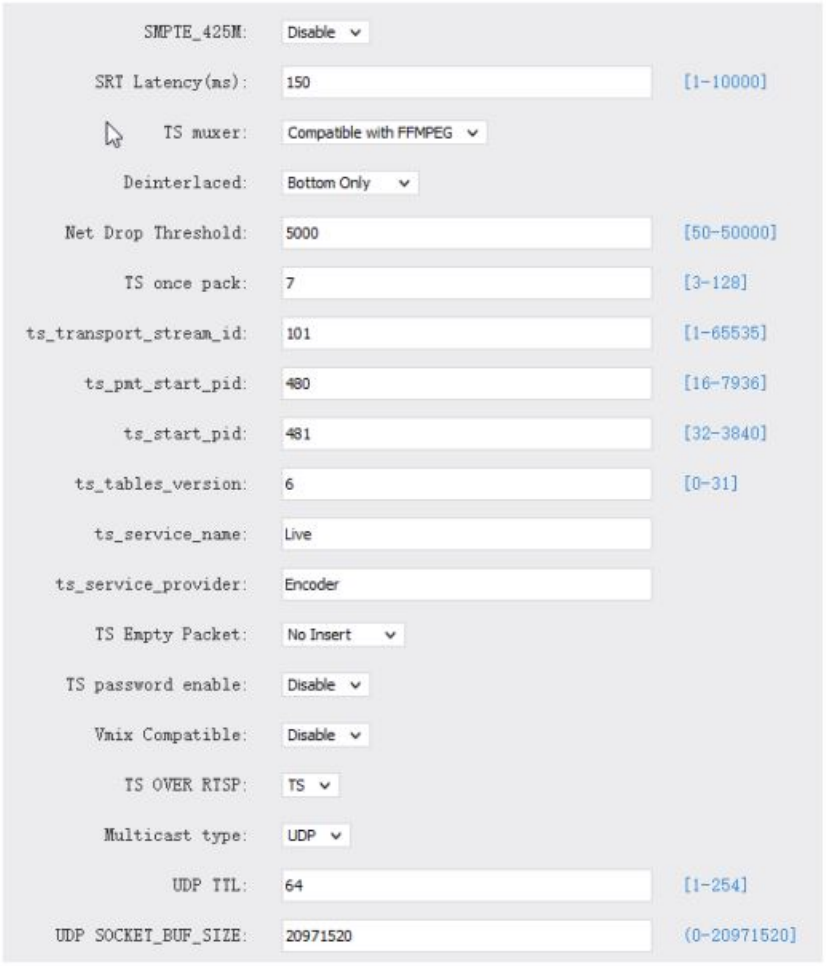


Stream in Unicast HTTP is pre-configured in both:

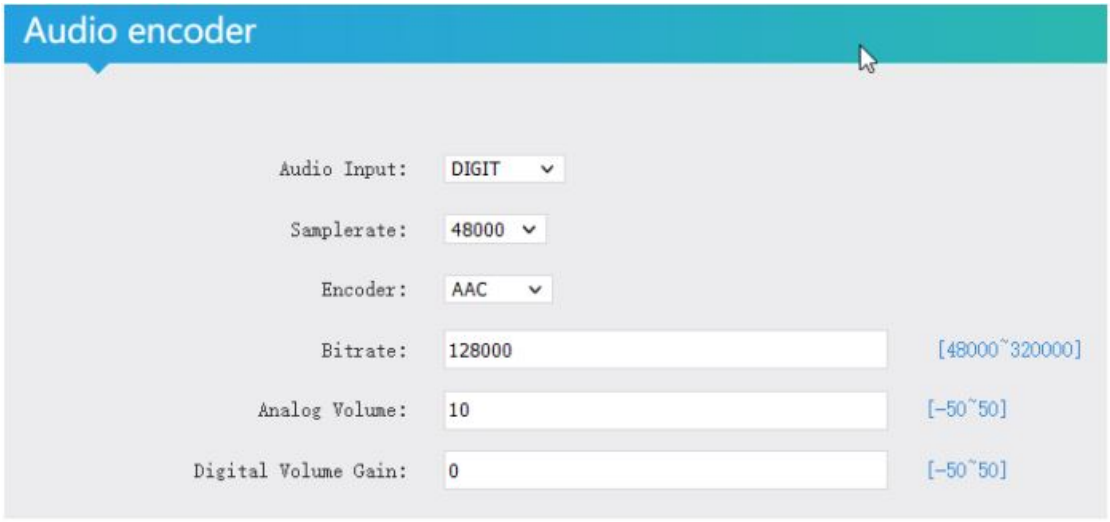


Encoder settings: Video:

In System you have got some more to configure (refer to the Encoder Manual from our Web):

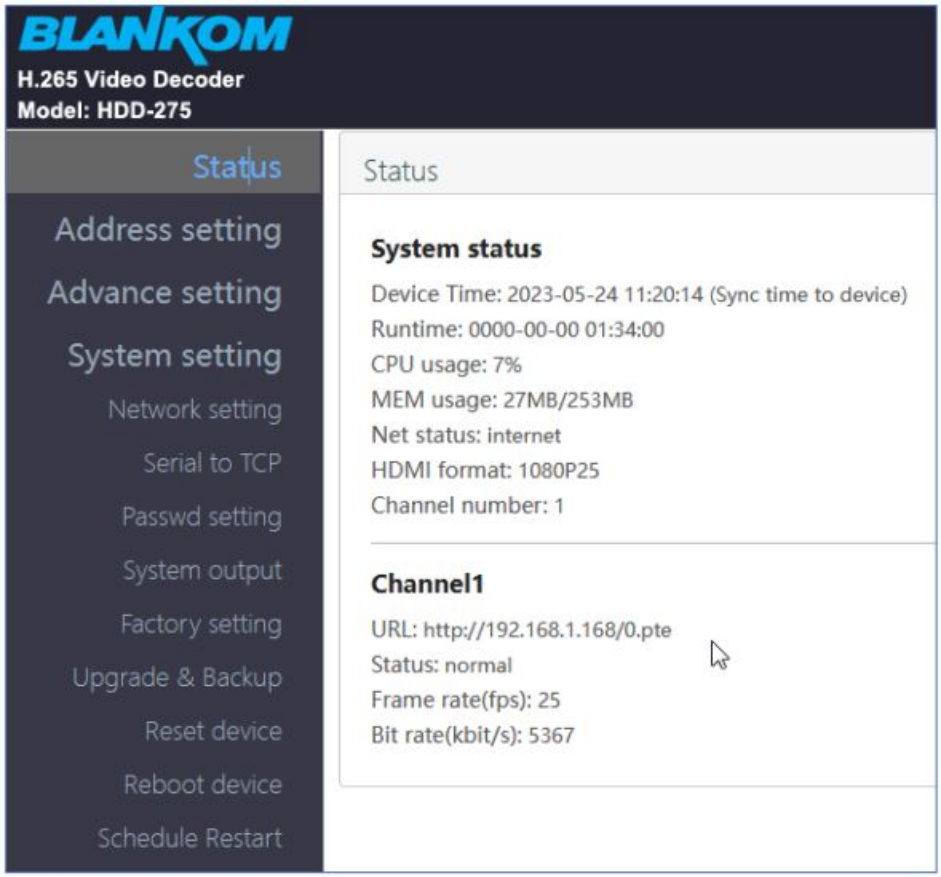


Audio:



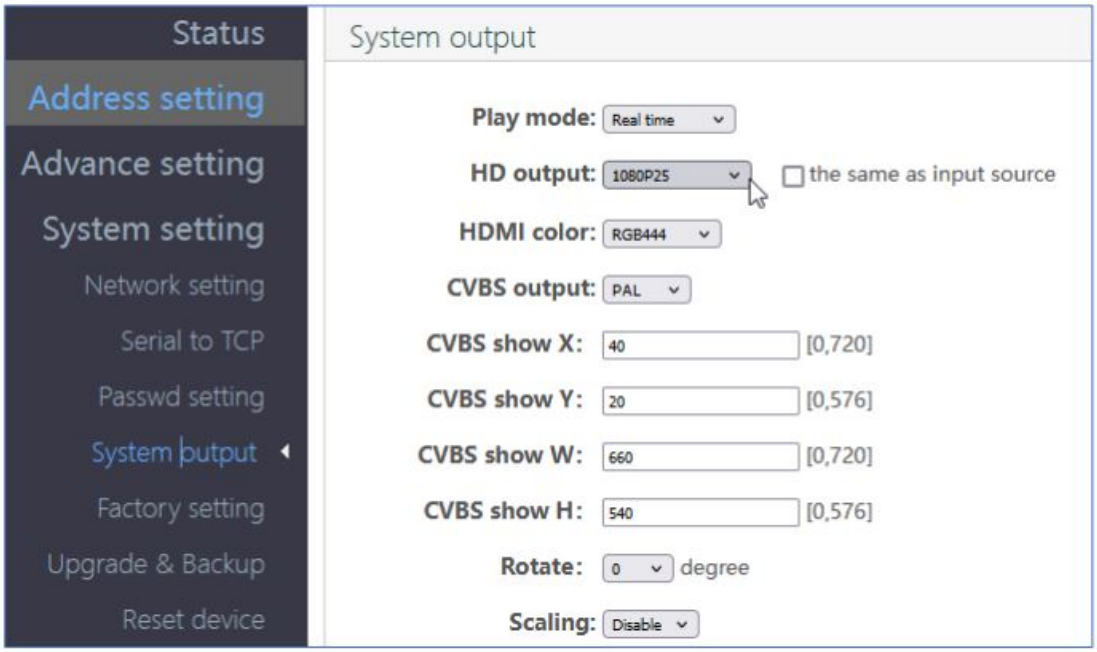
We have also configured Multicast as UDP and SRT Unicast (Pull mode from Decoder /IP-Receivers).

Decoder

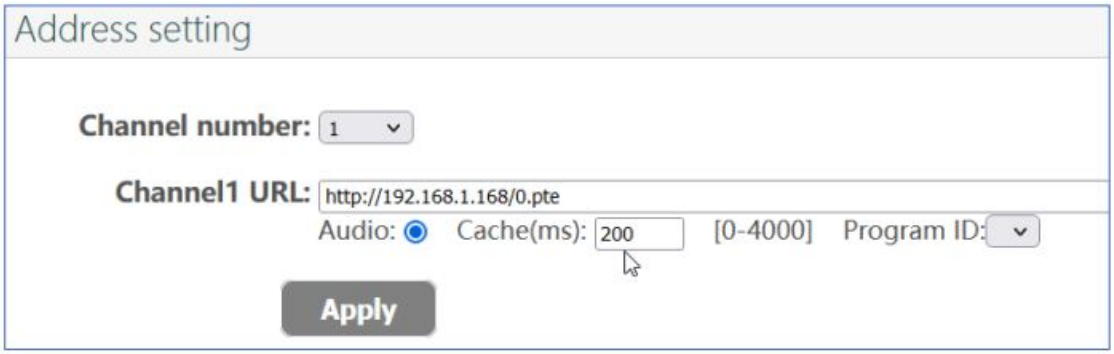


The DECODER needs time to adapt its system to new settings, so please be patient. Sometimes you need to reboot the unit i.e. when you change the IP addresses (same for the encoder as well) or change essential decoding configurations… Trial and Error … if it stuck, maybe a reboot might be necessary.

We already configured the Output to match the input stream values:

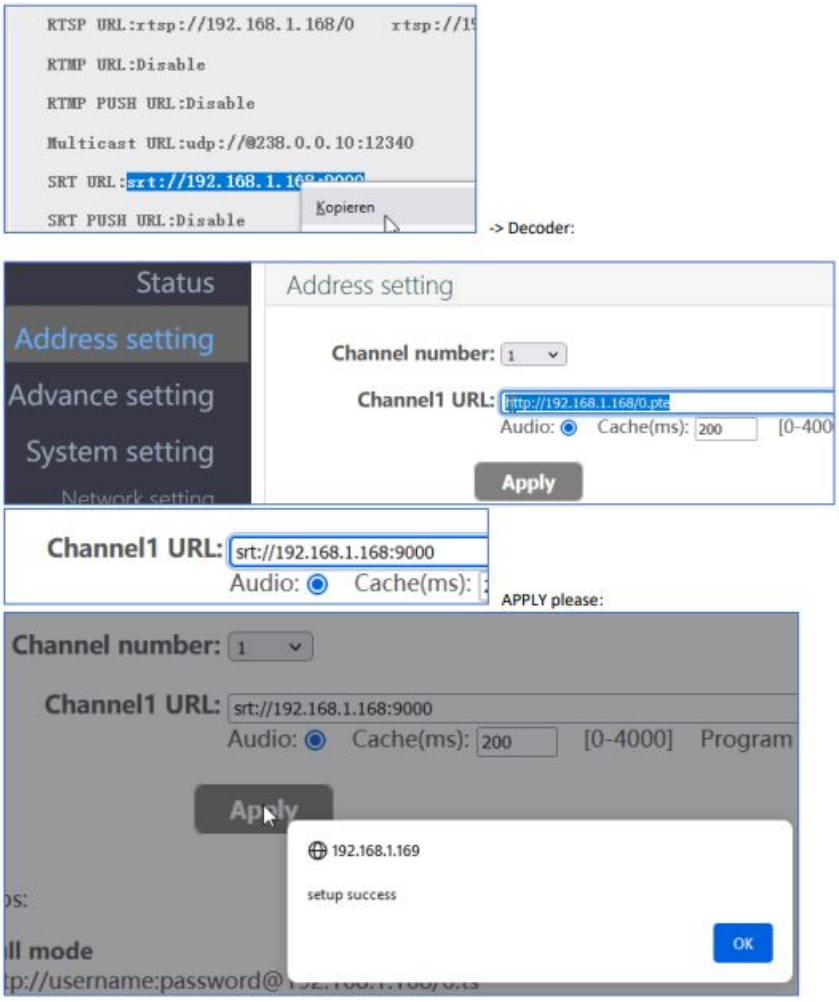


If the TV-Output will be disturbed somehow stucking /running … please just increase the Cache setting in the DECODER:

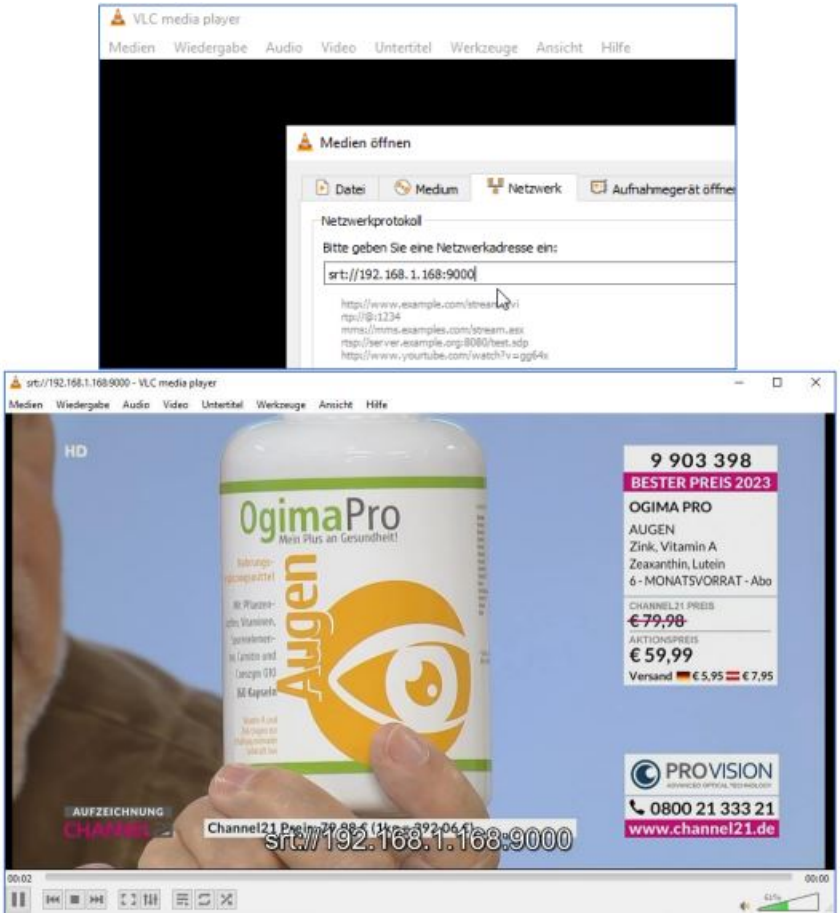


The 0.pte is an internal setting between our encoders and decoders and might be not function with other stream sources.

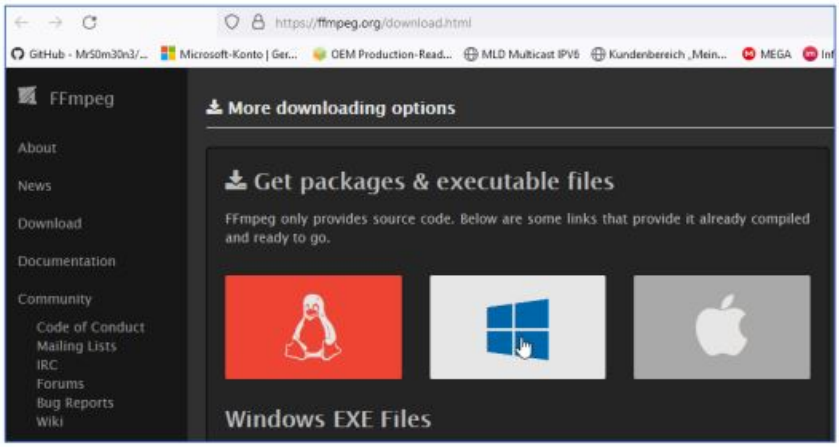
Let’s check the SRT streaming as Unicast:
Encoder copy and paste:

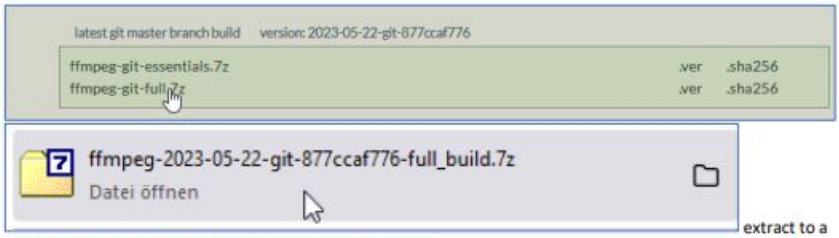


Check your TV output … it should be their w/o any differences (no Reboot necessary). We can cross-check with VLC in the Laptop:

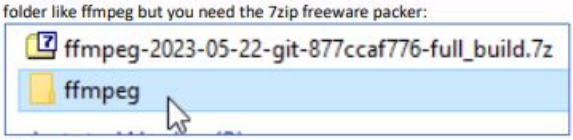


Or -if you do not have VLC, you can install the FFMPEG binaries (Linux— sudo apt install ffmpeg):

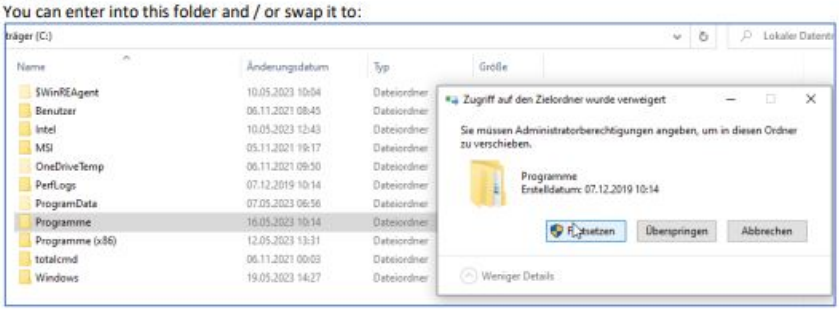




extract to a folder like ffmpeg but you need the 7zip freeware packer:

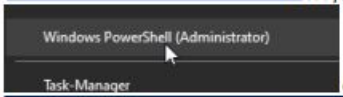


renamed the folder to simple ffmpeg...
You can enter into this folder and / or swap it to:

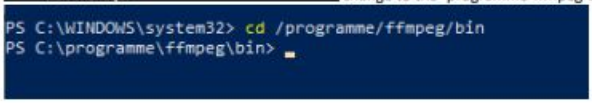


We want to use the player with this:

but you need to be admin to start it so we open:

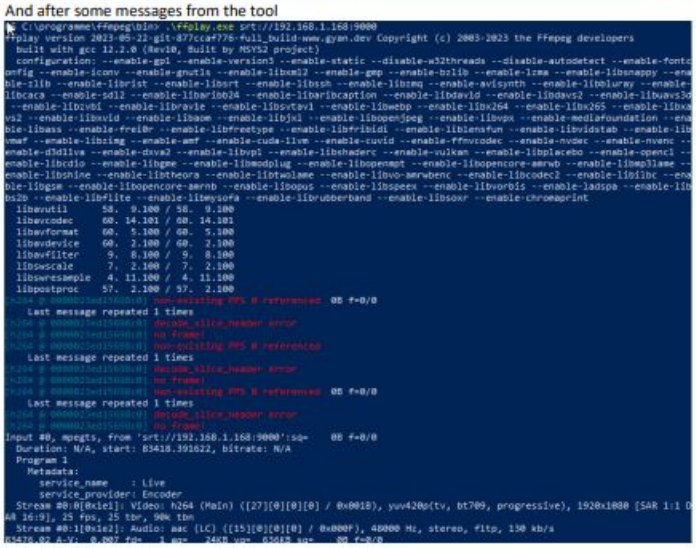


change to the -programme-ffmpeg-bin folder



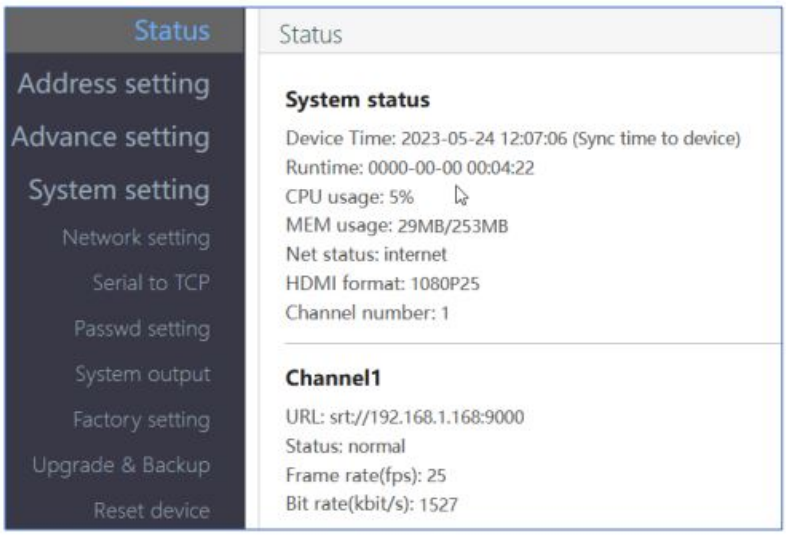
You need to add a .\ before the ffplay executable because the powershell demands it from you (security issue):

And after some messages from the tool



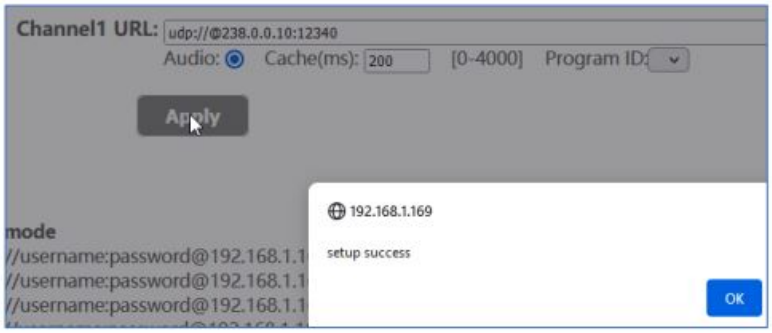
you'll get a fullscreen on your laptop:

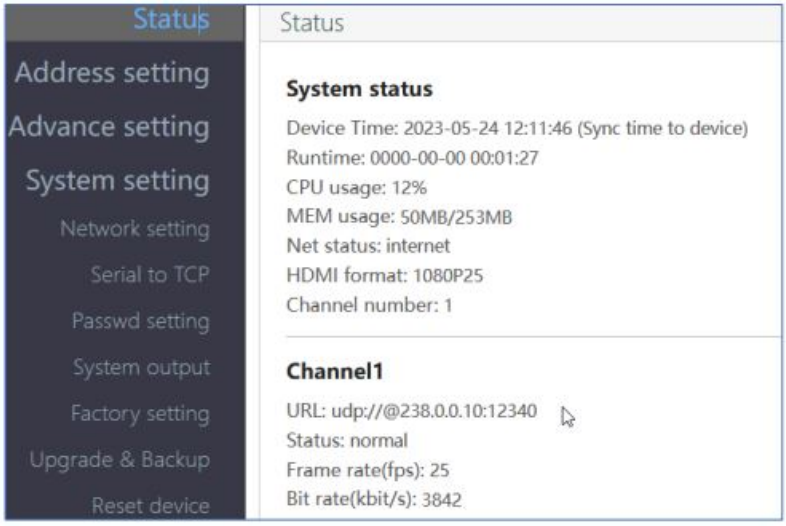
Just stop the reception by ESC. – but back to the decoder:



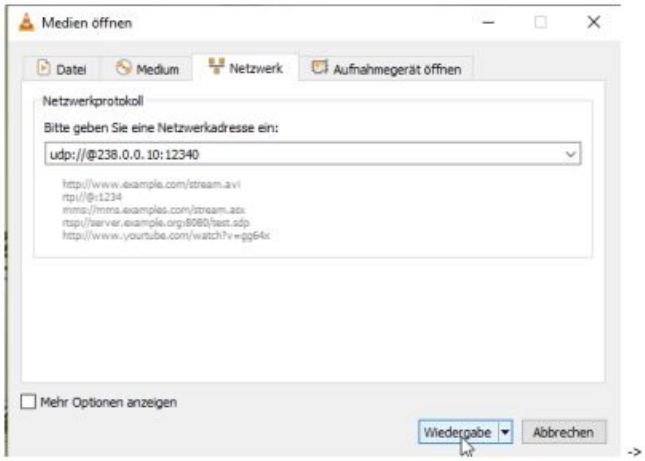
We like to check the MULTICAST now: Encoder-Stream is

You should use a layer 3 switch with IGMP enabled.



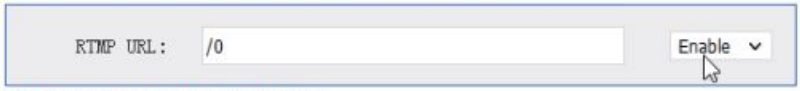


We use VLC for that…Enter the udp address in VLC with the @ :

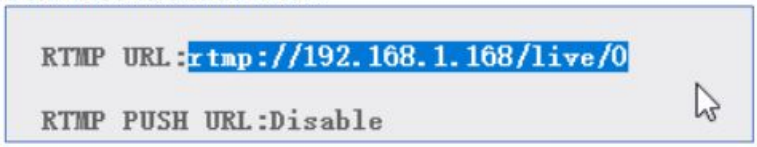


Now we try RTMP-mode:

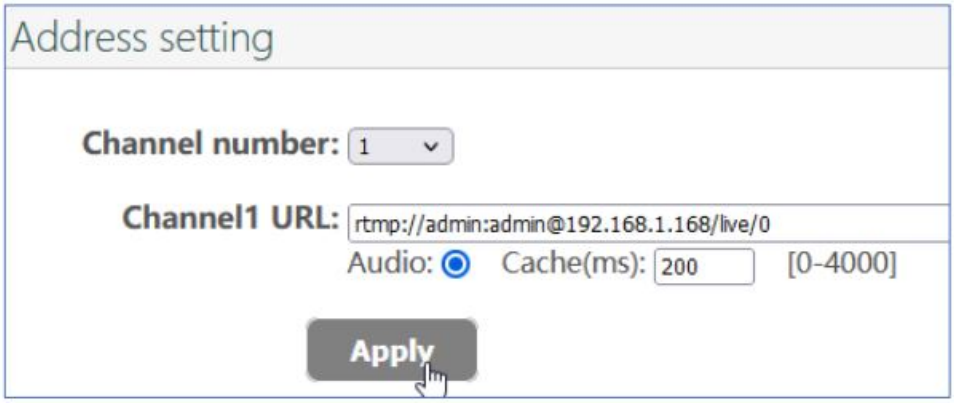
Encoder first: In main Encoder menu enable the RTMP mode:



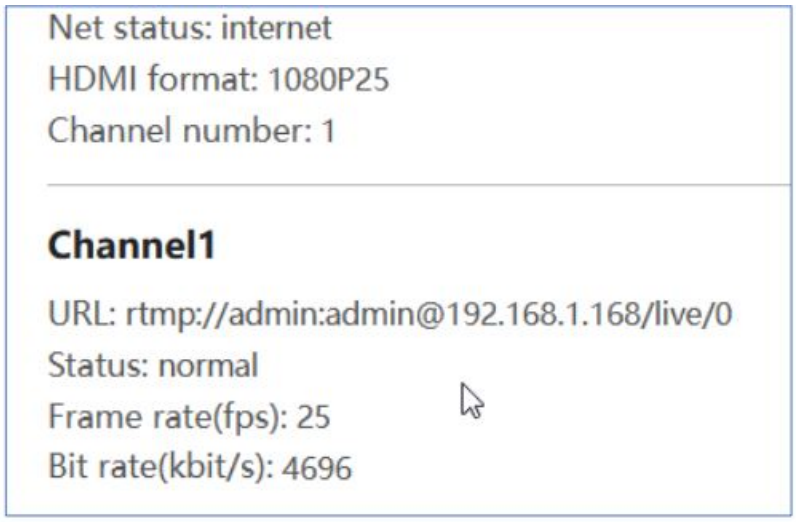
Check in the encoder status window:



The encoder need to know the Decoder IP address for that !!!
If you operate with user/password you need to add admin:admin …:

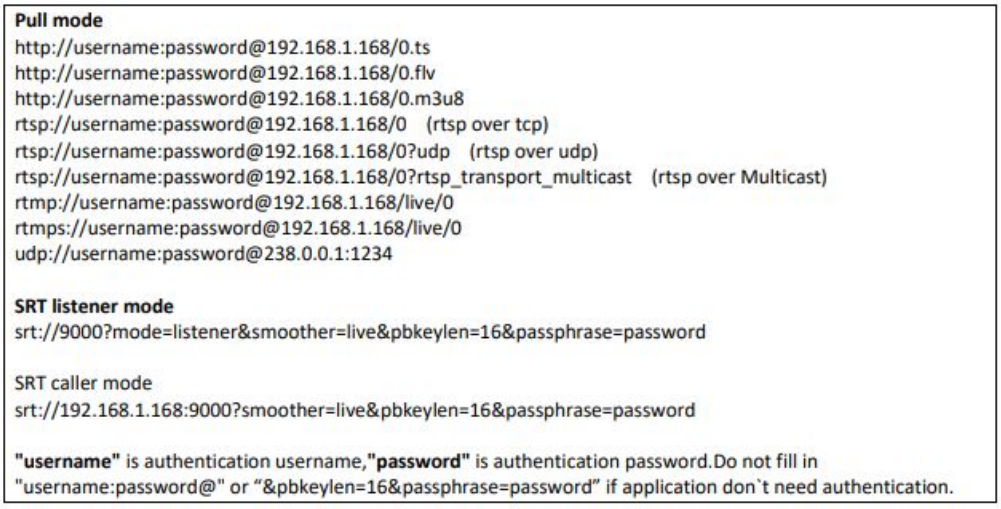


Check decoder status:

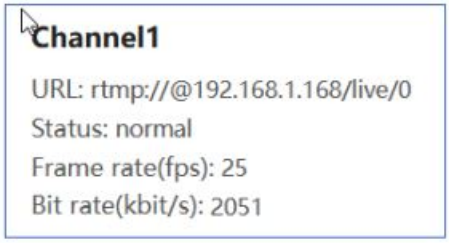


That works!!!

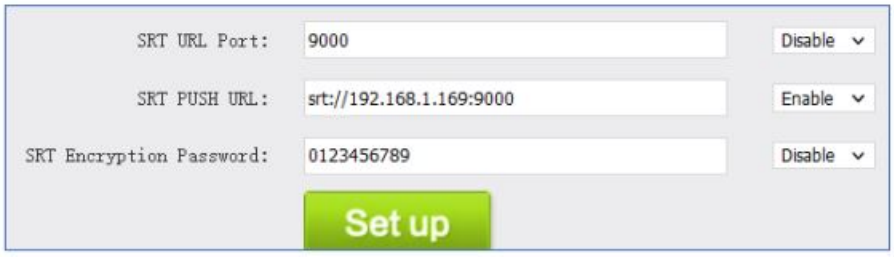
The decoder gives some hints how to use the different protocols:



username:password is only necessary if you already configured that in the encoder as well.

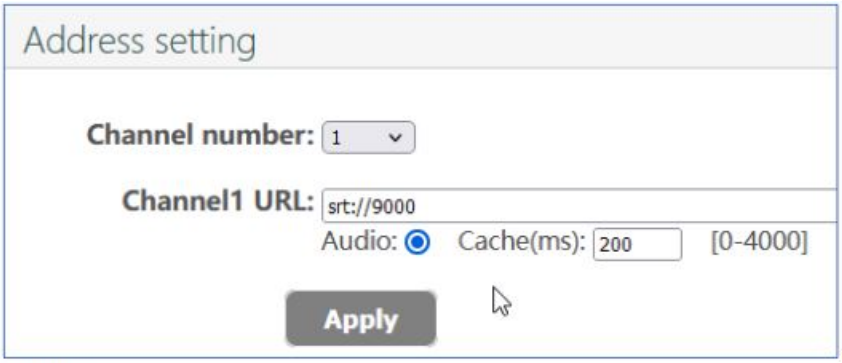


SRT-Listener mode in encoder:

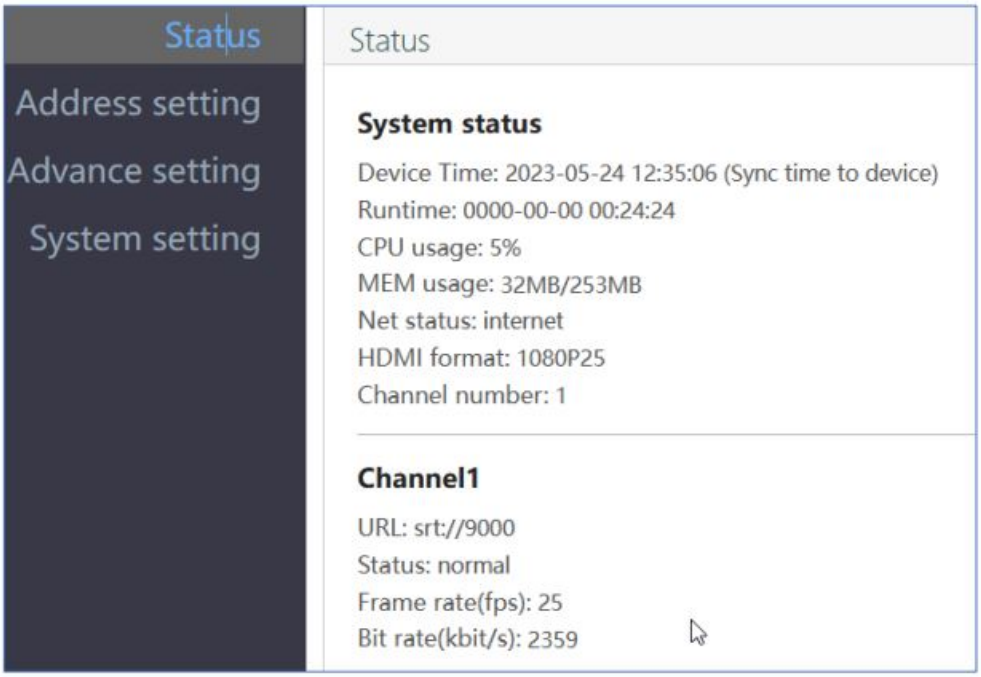


Decoder:
Just add into the address field:

srt://9000
How-to-configure-the-Encoder-Decoder-Couple.docx and here we go:

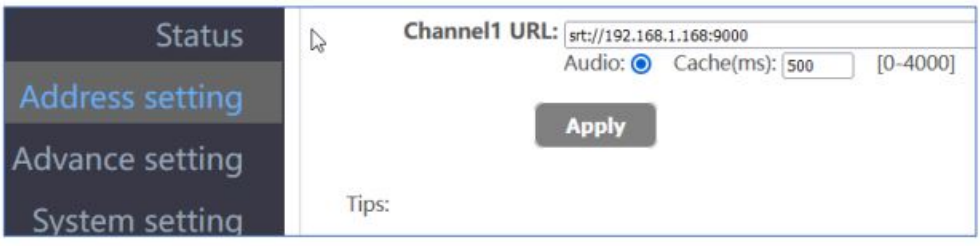


check status and TV set:

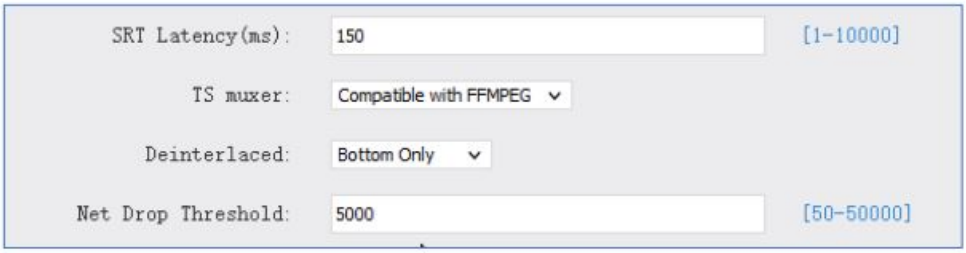


And here we are…. All is OK.

Some tips:
If you face heavy traffic on the network and the video is stucking a little: Increase decoder cache:



And maybe the **Encoders Net drop threshold** in the SYSTEM settings needs to be increased:



The SRT Latency is also a Network issue which you can change up to your sufficient results. We cannot give values here because these highly depends on your network, switches, routers and also if you transport the stream over Internet or CDN: Every time these values are different from case to case.

How-to-configure-the-Encoder-Decoder-Couple.docx

Documents / Resources

	BLANKOM HDMI SDI Encoder and Decoder [pdf] Instructions SDE-265, HDD-275, HDMI SDI Encoder and Decoder, SDI Encoder and Decoder, Encoder and Decoder

References

- **User Manual**