

# ANT-2551 / ANT-2554 help guide

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## Document info

For further help and advice please contact Antrica on:  
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Version	date	author	Comments
0.1	12-Oct-22	David M	Initial release – input / output checks
0.2	8-Mar-23	David M	VLC decode settings
0.3	13-Jul-23	David M	Minor corrections

# 1. Information and setup

The guide is based on the firmware

version: v2.2.16\_20211110\_F60\_1\_release  
onvif version: version 2.6.24

To setup your ANT-2551 or ANT-2554 please refer to the HUDL website guides

<https://www.hudl.com/support/hudl-sportscodes/capture-1/set-up-a-live-capture/set-up-a-single-angle-capture-antrica>

<https://www.hudl.com/support/hudl-sportscodes/capture-1/set-up-multi-angle-capture/>

## 2. Input detected?

The ANT-2551 and ANT-2554 will auto detect the incoming video. The video must be 3G-SDI / HD-SDI Level A.

There are other types of 3G-SDI / HD-SDI which include level B which are not compatible with the ANT-2551 and ANT-2554 encoders.

For further information please see the following link as a starting point

[https://www.aja.com/pdf/qa/Dual\\_Link\\_and\\_3G\\_Overview.pdf](https://www.aja.com/pdf/qa/Dual_Link_and_3G_Overview.pdf)

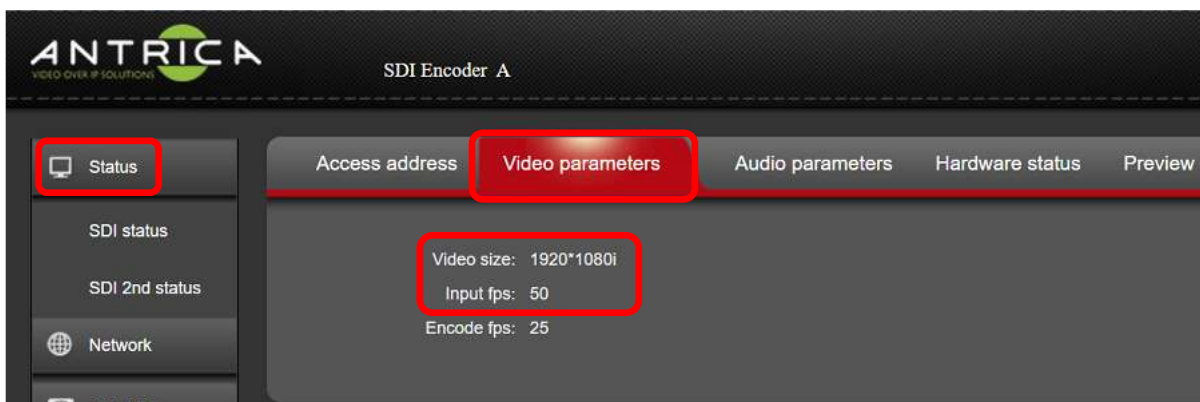
### 2.1. Webpage to check for input

To view the detect input information on the web page, click "Status" and then the "Video parameter" tab. From the example shown in Figure 1, the input is

Resolution **1920x1080**  
Display mode **i** – for Interlaced  
Frame rate **50**

If no input is detected then "Video parameters" will report 1920x1080p60. This is unhelpful if your input signal is 1920x1080p60.

Figure 1 : Web page input video details



### 2.2. HTTP API to check for input

Using the HTTP API commands the view the status of the input HD-SDI.

The two commands will determine if the video is present and what is its format. These examples are using CURL (this has to be downloaded, one location is <https://curl.se/download.html> ) as the tool to send the HTTP API commands.

The "Video Present?" command, as shown in section "2.2.1 Video present?" will show a **1** for no video and a **0** for video detected.

The resolution, display mode and frame rate can be found from the command shown in "2.2.2 Video format". **NOTE:** if no video is present the reported details will be 1920x1080p60

### 2.2.1. Video present?

```
curl http://192.168.1.168/get_ctl?type=video
```

If no video is detected the encoder will report **1** in the "no\_video" field, as shown below

```
C:\Users\work pc>curl http://192.168.1.168/get_ctl?type=video
<?xml version="1.0" encoding="UTF-8"?>
<video_ver>
<no_video>1</no_video>
</video_ver>
```

If video is detected the encoder will report **0** in the "no\_video" field, as shown below

```
C:\Users\work pc>curl http://192.168.1.168/get_ctl?type=video
<?xml version="1.0" encoding="UTF-8"?>
<video_ver>
<no_video>0</no_video>
</video_ver>
```

### 2.2.2. Video format

```
curl http://192.168.1.168/get_ctl
```

If no video is detected the encoder is very likely to show 1920x1080p60 as shown below

```
C:\Users\work pc>curl http://192.168.0.164/get_ctl
<?xml version="1.0" encoding="UTF-8"?>
<status>
<url>rtsp://192.168.0.164:554/sdi</url>
<ext_url>rtsp://192.168.0.164:554/sdi_ext</ext_url>
<onvif_enable>1</onvif_enable>
<lang>1</lang>
<video_info>
<size>1920*1080p</size>
<fps_in>60</fps_in>
<fps_cap>25</fps_cap>
</video_info>
<audio>
<channel>2</channel>
<sample>48000</sample>
<aenc_size>929452032</aenc_size>
</audio>
<chn_stat>
<total>1137651</total>
<lost>12</lost>
</chn_stat>
</status>

C:\Users\work pc>
```

If video is detected the encoder will show the video's details, in the example below it is 1920x1080 i 50.

```
C:\Users\work pc>curl http://192.168.1.168/get_ctl
<?xml version="1.0" encoding="UTF-8"?>
<status>
<url>rtsp://192.168.1.168:554/sdi</url>
<ext_url>http://192.168.1.168:80/sdi_ext</ext_url>
<onvif_enable>1</onvif_enable>
<lang>1</lang>
<video_info>
<size>1920*1080i</size>
<fps_in>50</fps_in>
<fps_cap>25</fps_cap>
</video_info>
<audio>
<channel>2</channel>
<sample>48000</sample>
<aenc_size>70770688</aenc_size>
</audio>
<chn_stat>
<total>26908</total>
<lost>2</lost>
</chn_stat>
</status>
```

### 3. Output video

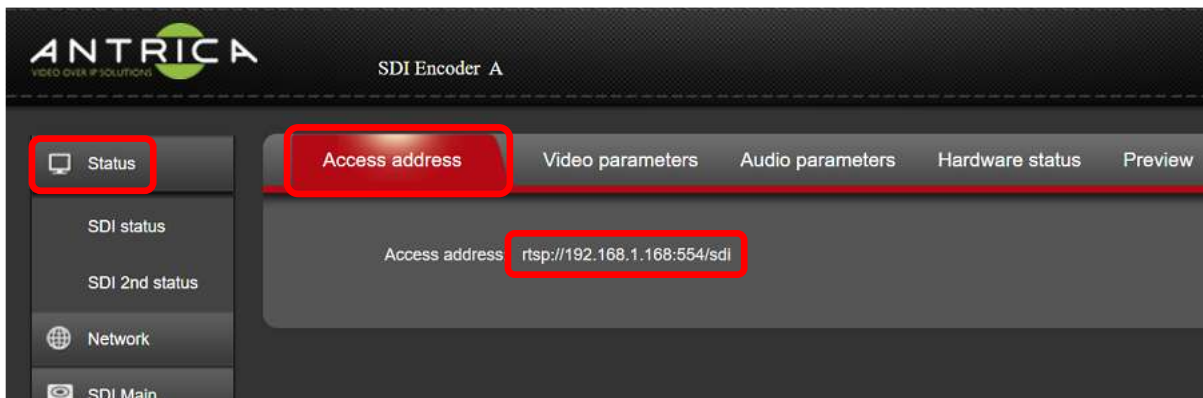
#### 3.1. Streaming protocol

The required output protocol is likely to be RTSP, but this is configurable in the encoder.

To determine the current setting of the encoder, go to the web page click "Status" and then the "Access Address" tab. In the example shown in Figure 2 the Access Address, or URL, is

```
rtsp://192.168.1.168:554/sdi
```

Figure 2 : SDI main Access Address



To alter / set the Streaming protocol go to the webpage click "SDI Main", and scroll down the page to find the "Disable" / "enable" setting, as shown in Figure 3.

When any protocol is enabled all the others will be disabled. Select the required option, RTSP has been indicated, then scroll down to click "Apply"

You can now check the streaming protocol by looking at the webpage "Access Address" as shown in Figure 2.

Figure 3 : Streaming protocol choices

The image shows a configuration interface with various settings. A red rectangular box highlights the 'Enable' dropdown menu for the RTSP protocol. A red arrow points from the right side of the image towards this dropdown menu. The settings listed are:

- HTTP: /sdi [Disable] Start with "/"
- HTTP Port: 80 [1-65535]
- RTSP: /sdi [Enable] Start with "/"
- RTSP Port: 554 [1-65535]
- RTSP Authentication: Disable
- RTSP mode: video+audio
- RTSP TCP: UDP
- TTL: 16 [0-255]
- unicast IP: 192.168.1.200 [Disable] Support domain or ip format
- unicast port: 1234 [1-65535]
- Multicast IP: 238.0.0.1 [Disable]
- Multicast port: 1234 [1-65535]
- RTP Server Ip: 192.168.1.123 [Disable]
- RTP Port: 6666 [1-65535]

### 3.2. Is video seen by decoder?

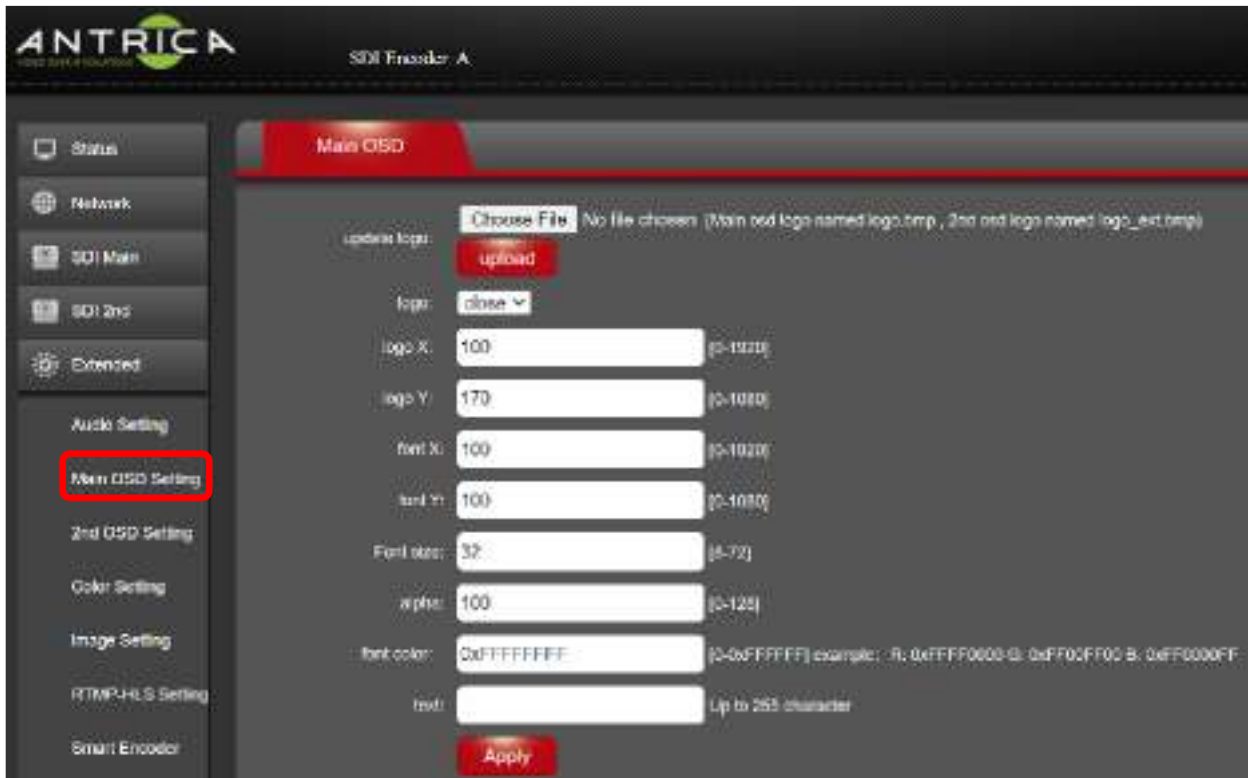
If there is no valid HD-SDI input, or the SDI cable is not connected, then the encoder will send a black screen with white text, as shown in Figure 4. This is static image. Note your installed firmware version, as other versions do not show the "NO VIDEO" message, see comments in "1 Information and setup"

Figure 4 : video out when no input present or not detected



To confirm that you have "live" video and not cached / frozen image you can add **On Screen Text**. In the webpage select "Extended" then "Main OSD Setting", as shown in Figure 5. This OSD will appear and change as you change the text, this will prove you have a live decoded live

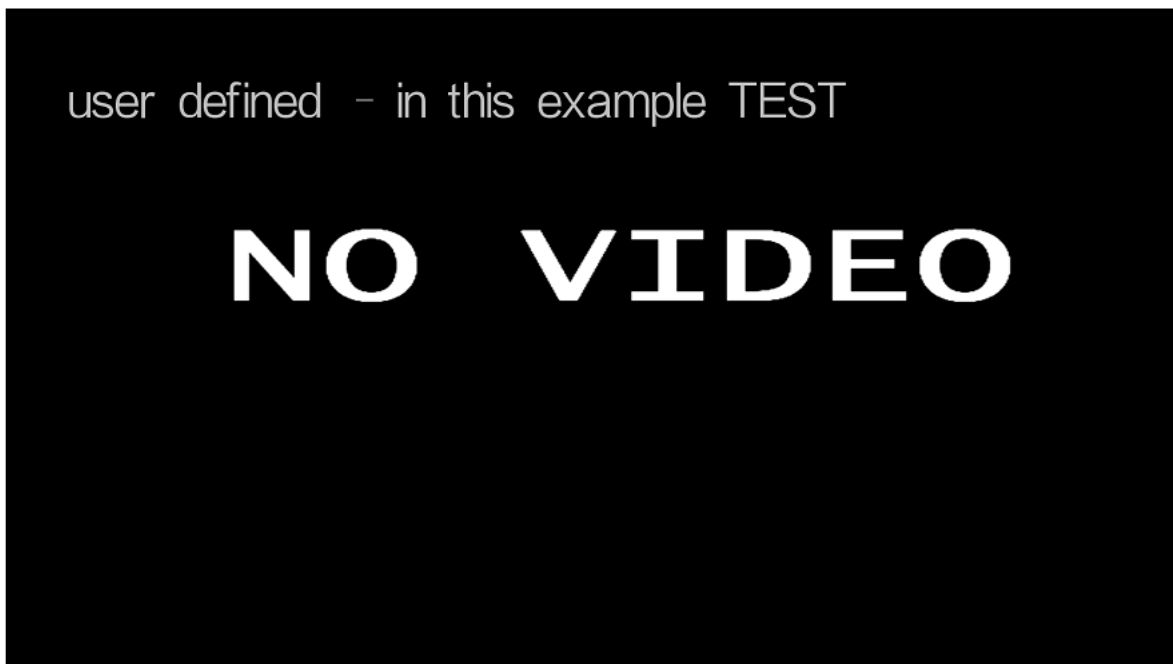
Figure 5 : Main OSD settings



Alter the settings:  
 Font size        72  
 text              user defined – in this example TEST

The output video will now be, as shown in Figure 6

Figure 6 : Output video with OSD



If the "font color:" is set to 0xFFFF00FF, the output video will have colour, as shown in Figure 7

*Figure 7 : Output video with pink OSD*



## 4. Appendix A : using software decoder VLC to decode video

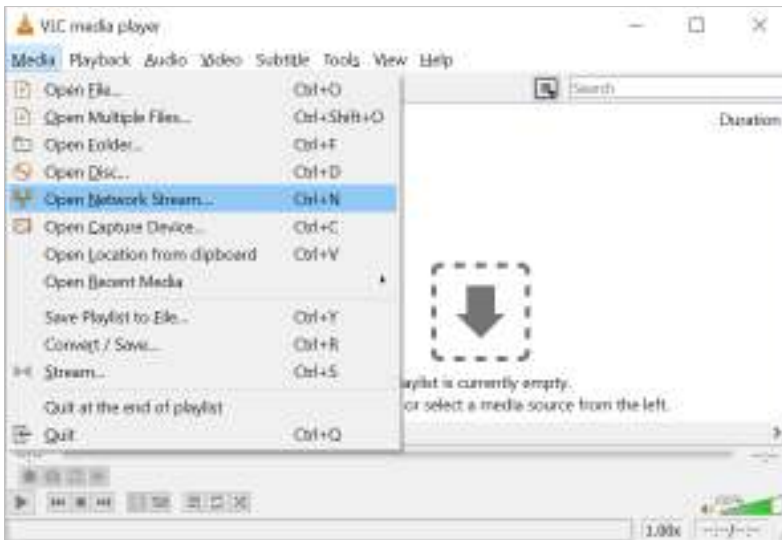
VLC is a free to use media decoder. It can be downloaded from <https://www.videolan.org/>

To view the RTSP video, a software decoder like VLC can be used. Ensure the PC is on the same network as the ANT-255x and can access the ANT-255x's web interface.

### 4.1. Windows based usage

Open VLC -> Media -> "Open Network Stream" – see Figure 8

Figure 8 : VLC - Open Network Stream

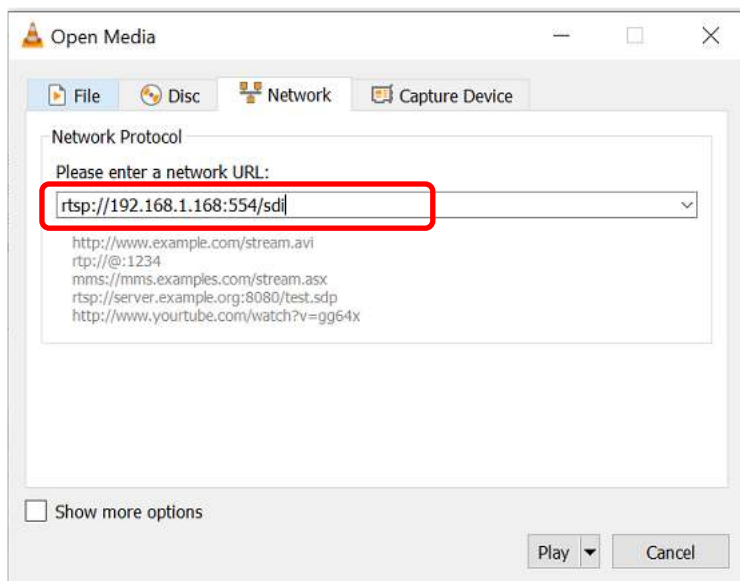


In the pop up box, in the "Please enter a network URL:" box add the URL:

rtsp://192.168.1.168:554/sdi as shown in Figure 2

as show in Figure 9, below. The same URL can be added to most decoders to enable the stream to be viewed.

Figure 9 : VLC - RTSP URL



#### 4.1.1. VLC - information about video

When the video is playing, to see information about the stream, from VLC top menu -> Tools -> "Codec Information" and popup windows will appear, as show in Figure 10, below.



The window contains the encoding algorithm (in the case h.265), resolution, frame rate and access URL. From the "Statistics" tab, the bitrate of the current video can be seen, as indicated in Figure 11, below

Figure 10 : VLC - Current Media Information - Codec Information

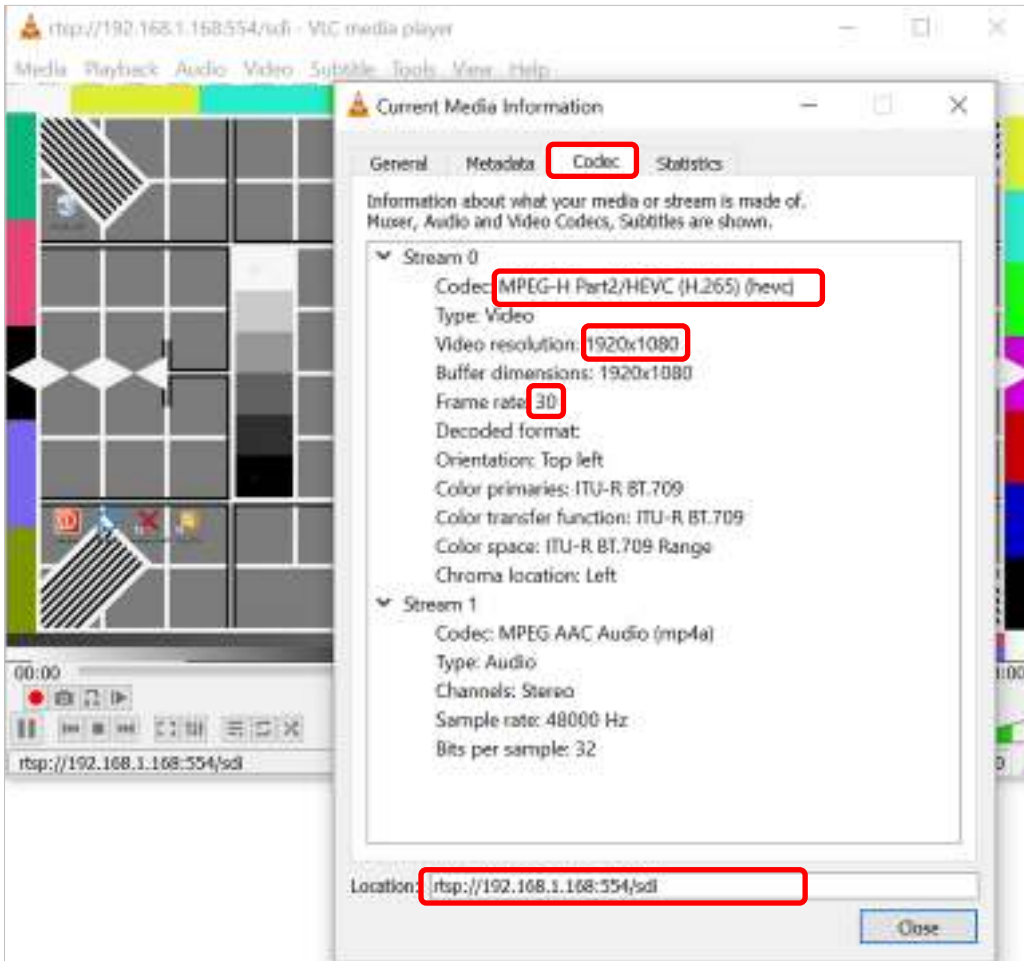
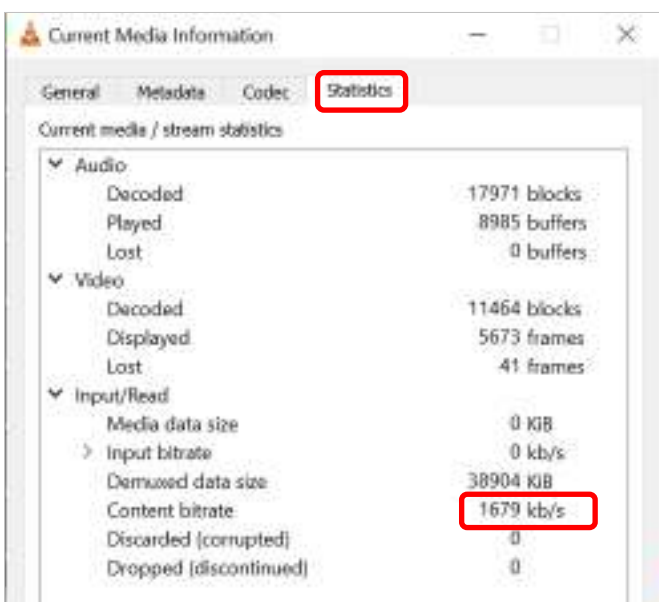


Figure 11 : VLC - Current Media Information - Statistics



## 4.2. MacOS based usage

Open video and from the top menu select File -> Open Network, as shown in Figure 12. A pop up windows appear, as show in Figure 13. Then click "Open" and VLC will open and display the video.

Figure 12 : VLC MacOS "Open Network"

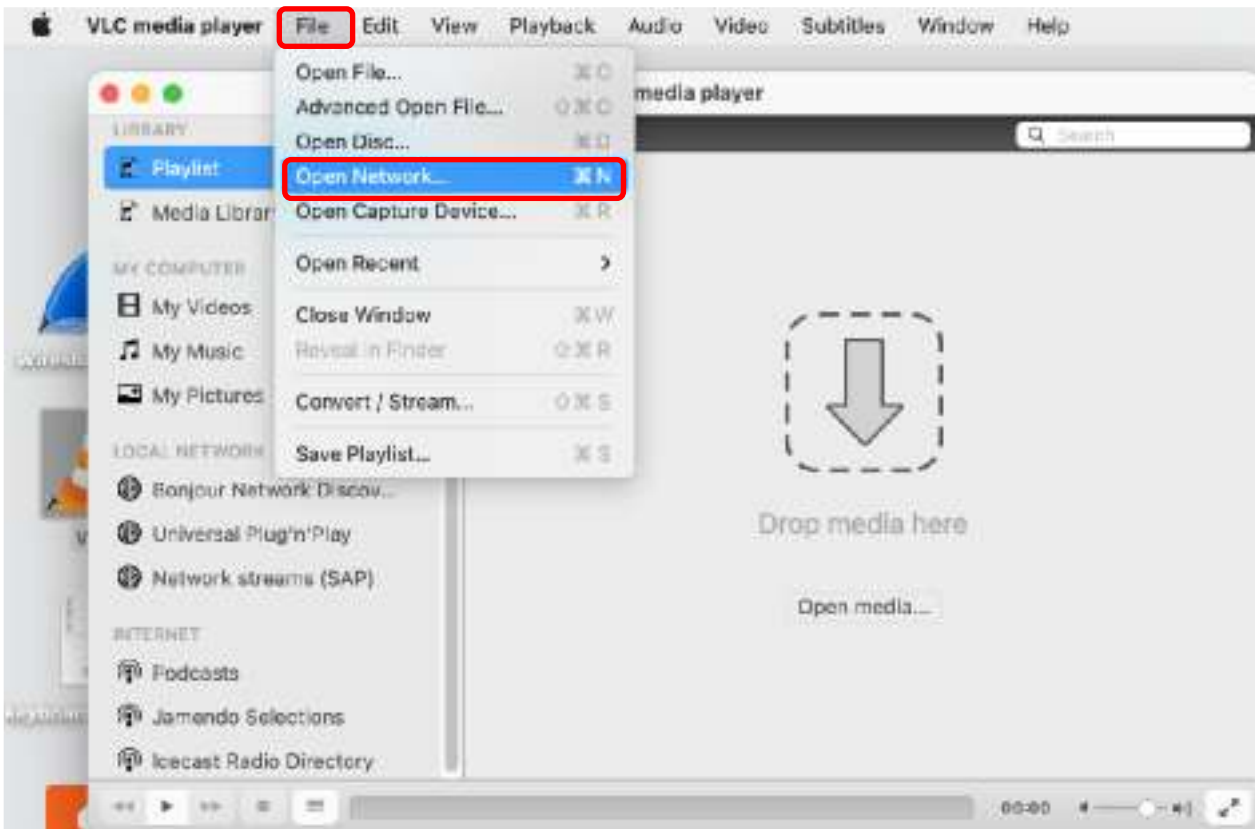
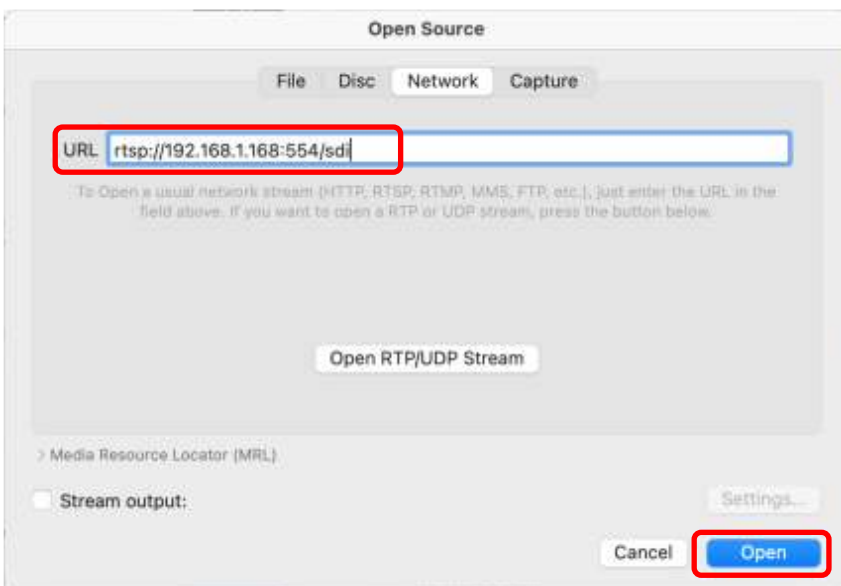


Figure 13 : MacOS - input URL



### 4.2.1.VLC - information about video

When the video is playing, to see information about the stream, from VLC top menu -> Window -> "Media Information", see Figure 14 and popup windows will appear, as show in Figure 15, below. The window contains the encoding algorithm (in the case h.265), resolution and frame

rate. From the "Statistics" tab, the bitrate of the current video can be seen, as indicated in Figure 16, below.

Figure 14 : MacOS - Media Information

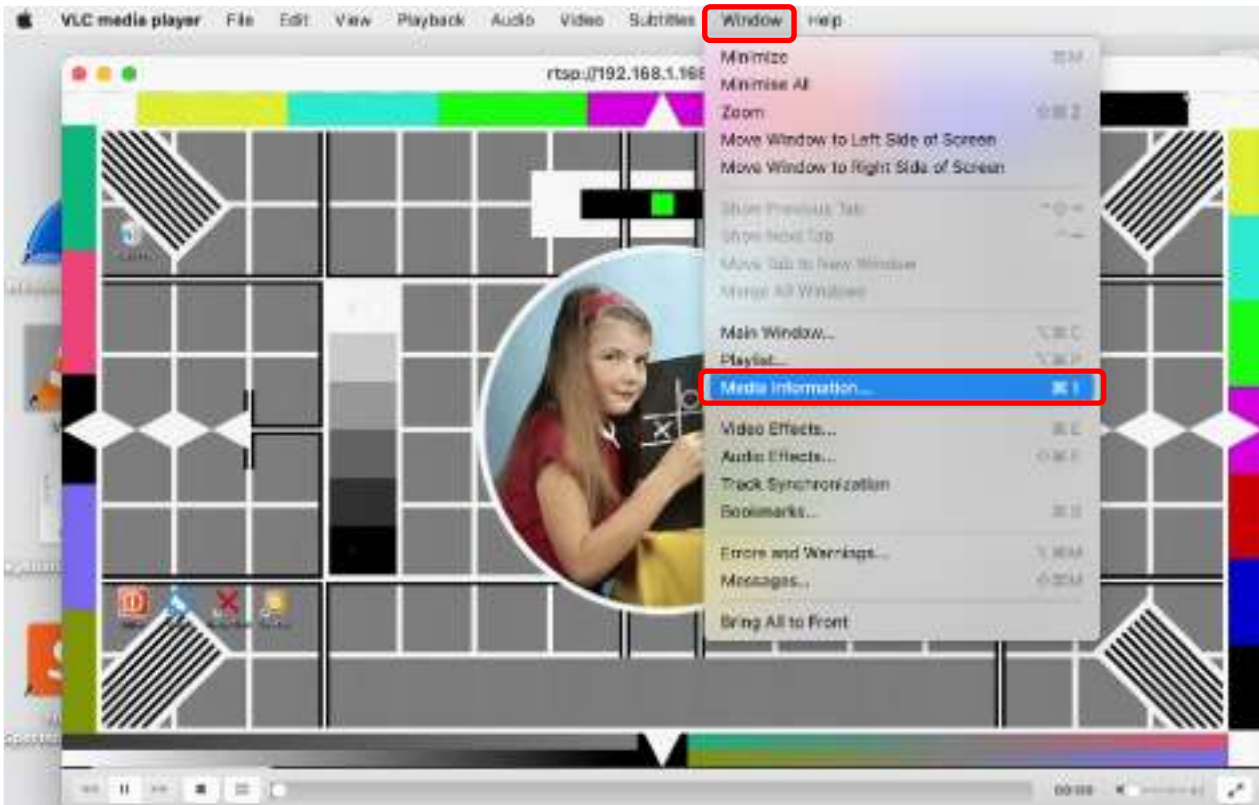


Figure 15 : MacOS - Codec Details

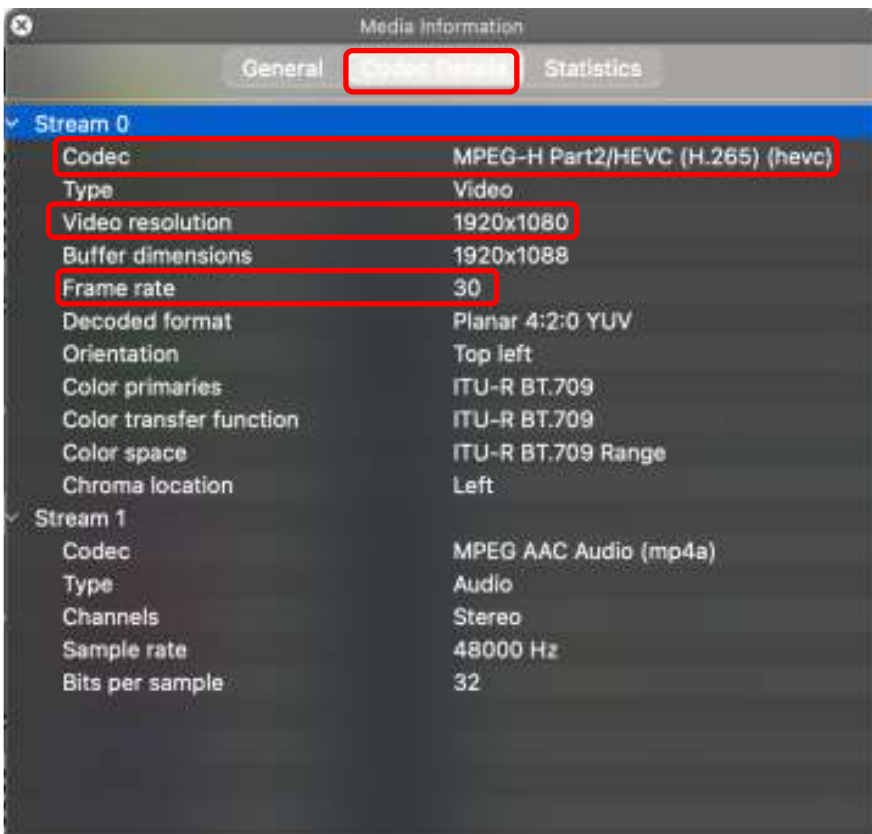


Figure 16: MacOS - statistics

