ANT-48100 QUICK START GUIDE

1 Channel Transcoder
(4 Channel Decoder)
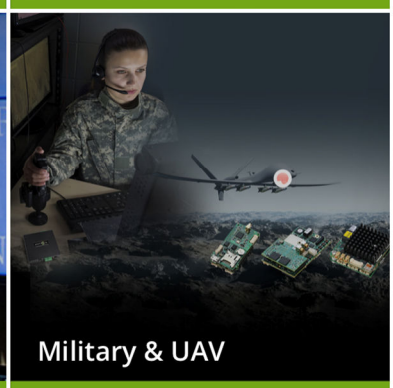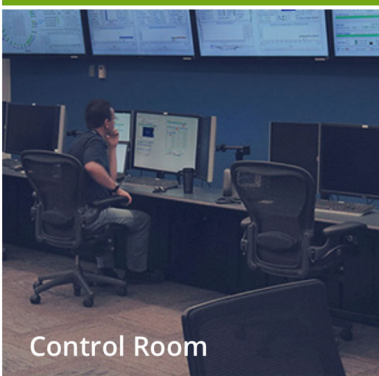
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Contents

Overview

The ANT-48100 TRANSCODER is a highly flexible IP to IP transcoder. Featuring up to 4 channels of decoding on one Ethernet port (NIC) and 1 channel of re encoding (Transcoding) on a second Ethernet Port (NIC). This transcoder is intended for IP to IP transcoding without offering any local video inputs or outputs. The Transcoder engine can take up to 4 decoded streams and re encode then as a 1x1 (full screen) or 2x2 image with a main stream and secondary stream. The decoder block can decode 1-4 streams then combine them as a quad image or in the case of one decoded stream a single image. These quad and single images can also be scaled to 1080P 720P and 576P resolutions. Additionally, the decoder engine can decode URLs or pre recorded video files. SRT decoding is supported.

Once decoded and scaled the images pass to the Encoder engine. The encoder can then re-encode (transcode) these decoded streams as HTTP, RTSP, RTP, MPEG-TS, RTMP or SRT streams on to a completely independent LAN Network Interface.

As the Transcoder features two independent Network interfaces it acts as an effective Video stream air gap between two networks.

1.What's in the Box

The ANT-48100 box contains

     - ANT-48100 Transcoder

     -12 Volt Power converter with UK/EU/USA and China adaptors

2. Setting up the ANT-48100

Connect the both of the Ethernet ports of the ANT-48100 to a laptop or PC via an Ethernet switch using standard ethernet cables.

Connect the 12 volt power input and switch on.

The ANT-48100 will take approximately 1 minute to boot up. You will see there are 1 LED on the front. On power up this LED will illuminate RED. You are now ready to setup the ANT-48100 Transcoder

3. ANT-48100 IP addresses and Log In

The ANT-48100 default IP address is **192.168.1.160 (IP-IN) and 192.168.1.168 (IP-OUT).** Please set the laptop/PC Ethernet IP address to be in the same sub-domain e.g 1**92.168.1.XXX**
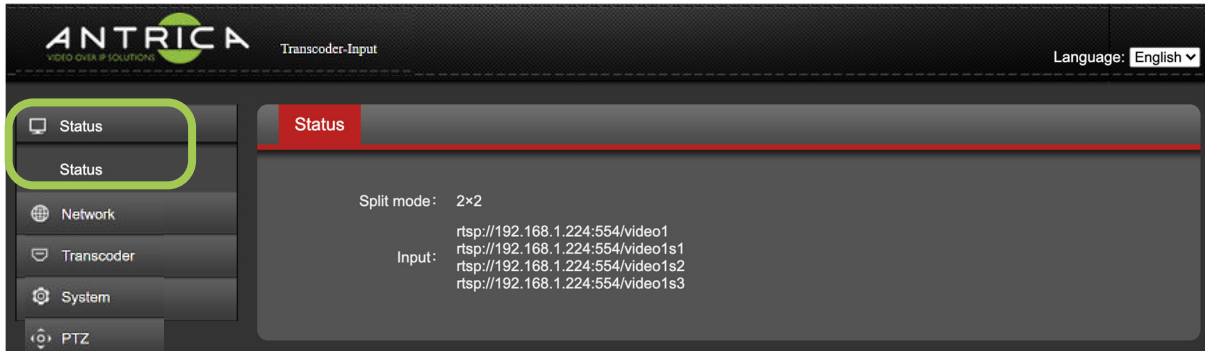
Open Chrome to view settings and Preview video (or other up to date browser to just view settings without video preview) and browse to **192.168.1.160 and / or 192.168.1.168**

You will be asked to LOGIN: **User : admin ,   password: admin**
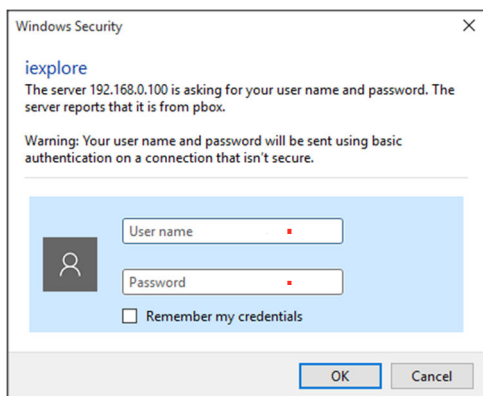
# 4.0 Setup of the ANT-48100 in IP IN (Decoder) (192.168.1.160)

4.1 Status

The status tab will show you information on the IP Input settings. This is effectively a decoder within the transcoder and can decode up to 4 streams or files. This screen will show if you are in 1x1 mode (1-1 transcode) or 2x2 mode (4 channels decoded and arranged as a quad image then transcoded). The input URLs or files are shown here

4.2 Network

This section defines the network settings of the IP Ethernet input port. NOTE! The ANT-48100 has two ethernet ports (NICs) which are independent. This setting is for the IP input (decode)
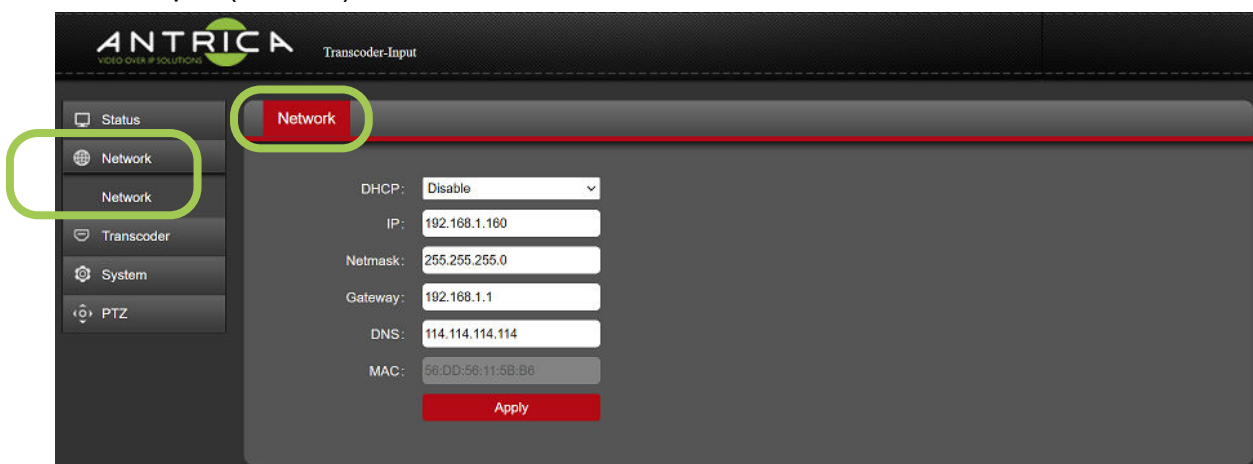
4.3 Video Source
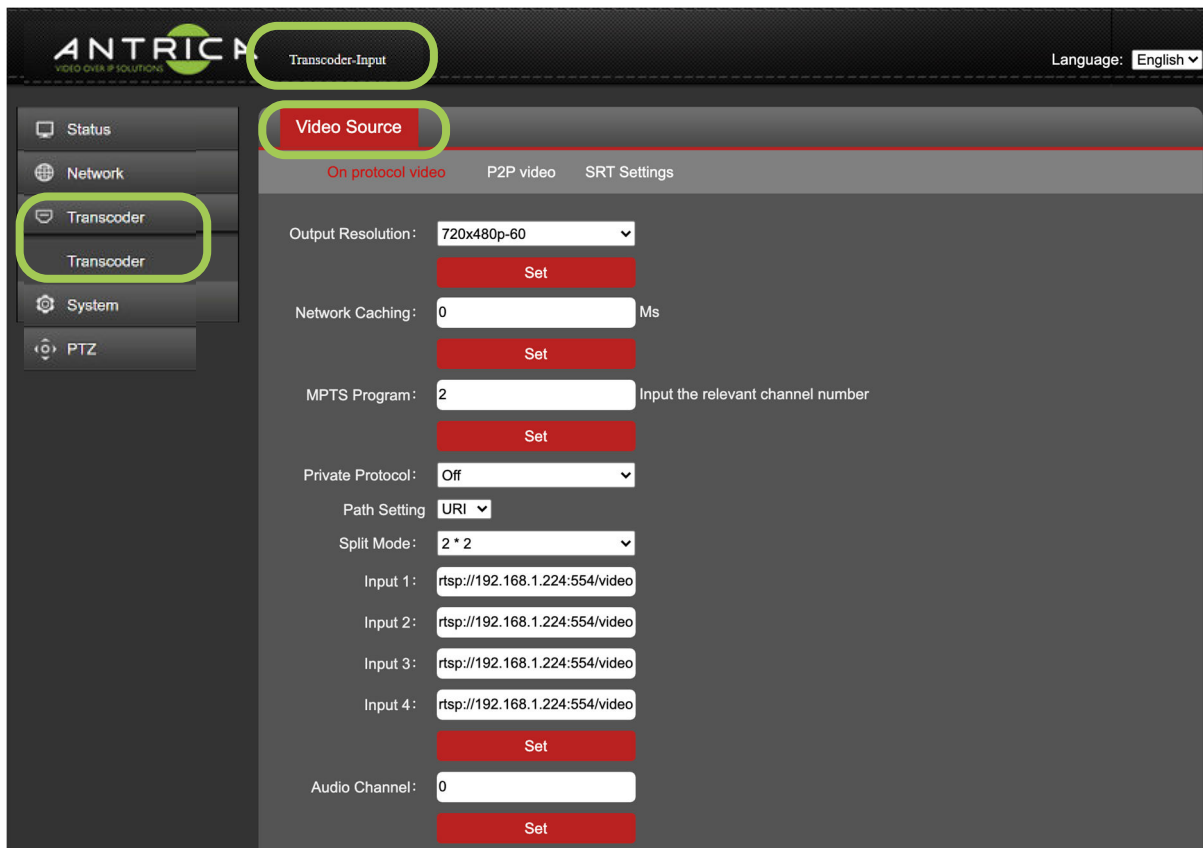
Video Source has 3 sub sections: **On protocol Video**, **P2P video** and **SRT settings**, as this a *quick start guide,* we will only be the using **On protocol Video** setting

4.3.1 On Protocol Video

Output Resolution: This allows you to set the resolution of the decoded image/images prior to re encoding

Network Caching: This is a buffer for the decoder section and helps with Network jitter but as a result introduces latency in the overall Transcode process.

MPTS Program: select the program from a MPTS stream

Private Protocol: Future use / functionality to be advised

Path Setting: This is either a URL or a .SDP file location for using as the source of the decoder section
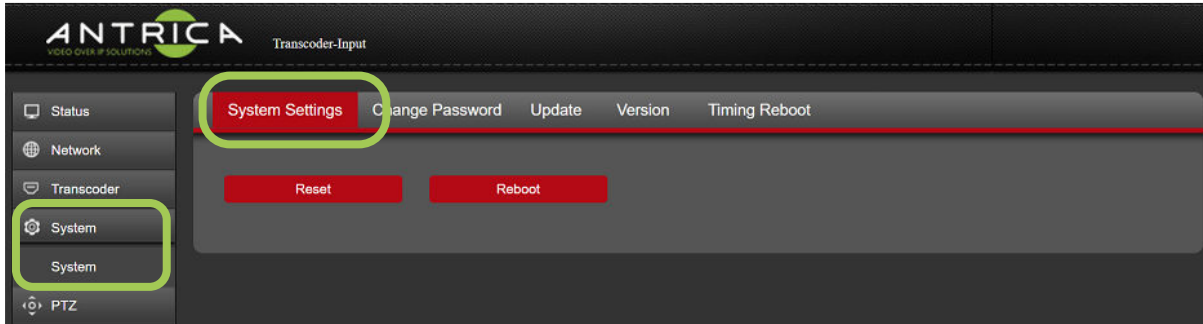
Split Mode (if using a URL): Select 1x1 or 2x2 mode (quad) for decoding

Input: 1-4: These are the URLs for the 4 decoded inputs. Generally, you would use 1 input in 1x1 mode or 2, 3 or 4 inputs for 2x2 mode.
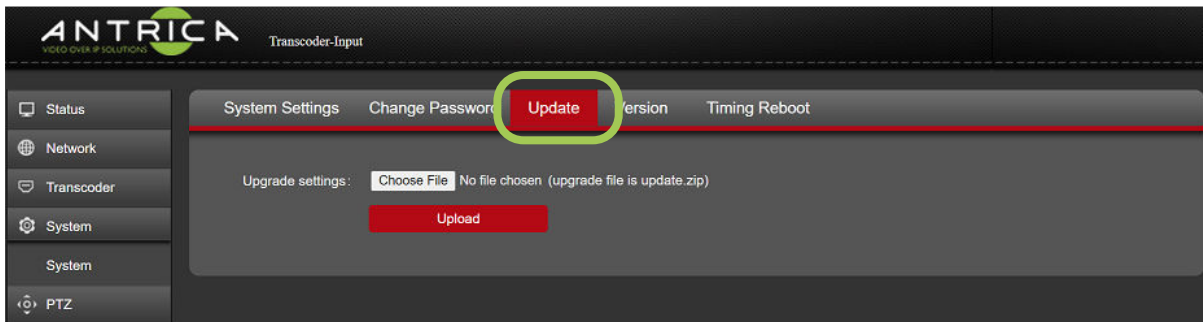
Audio Channel: Future use / functionality to be advised

4.4 System

System Settings Tab: This allows the Decoder section of the transcoder to be Factory Reset or rebooted
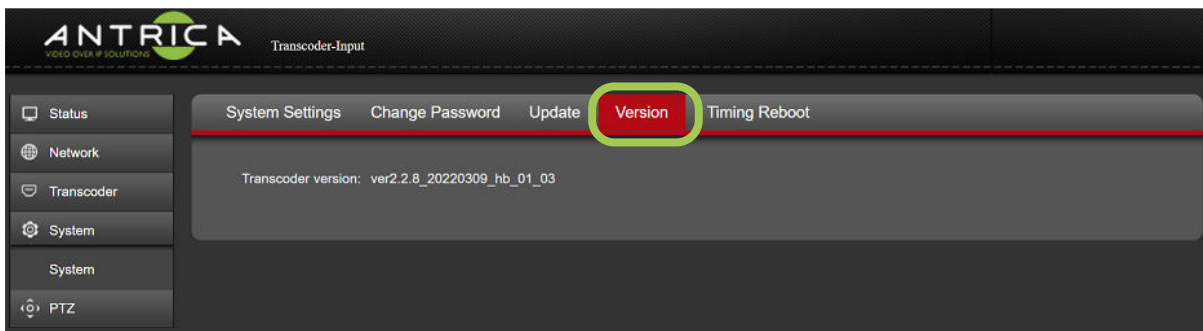

Change Password: Allows for the default admin password or previously used password to be changed.
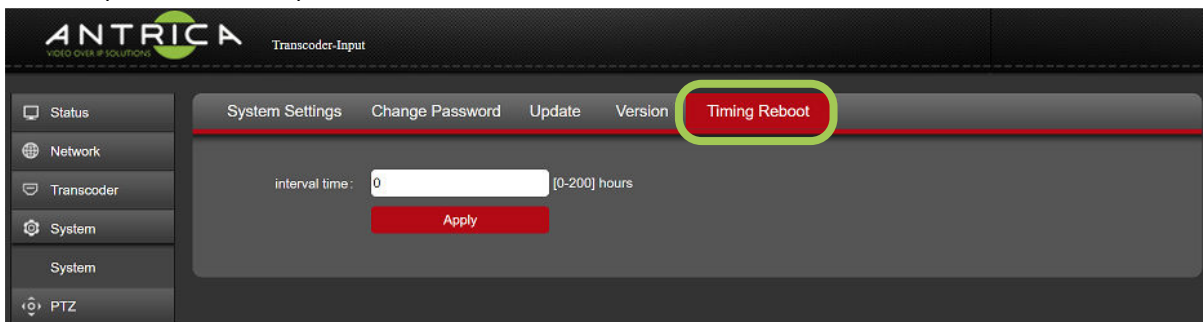
Update: This allows firmware for the decoder section to be upgraded

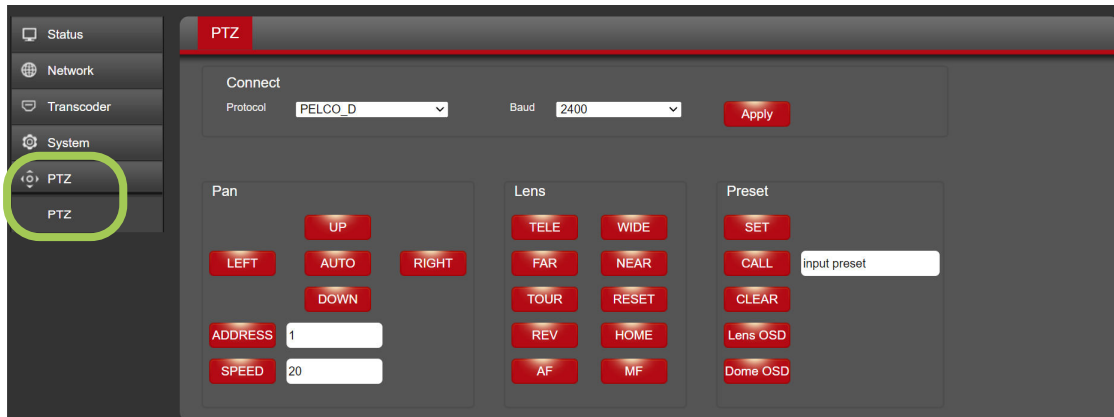**Version:** The firmware currently installed for the Decoder part of the Transcoder.

Timing Reboot: Allows the Decoder section to be rebooted automatically every N Hours (0-200 Hours)

4.5 PTZ

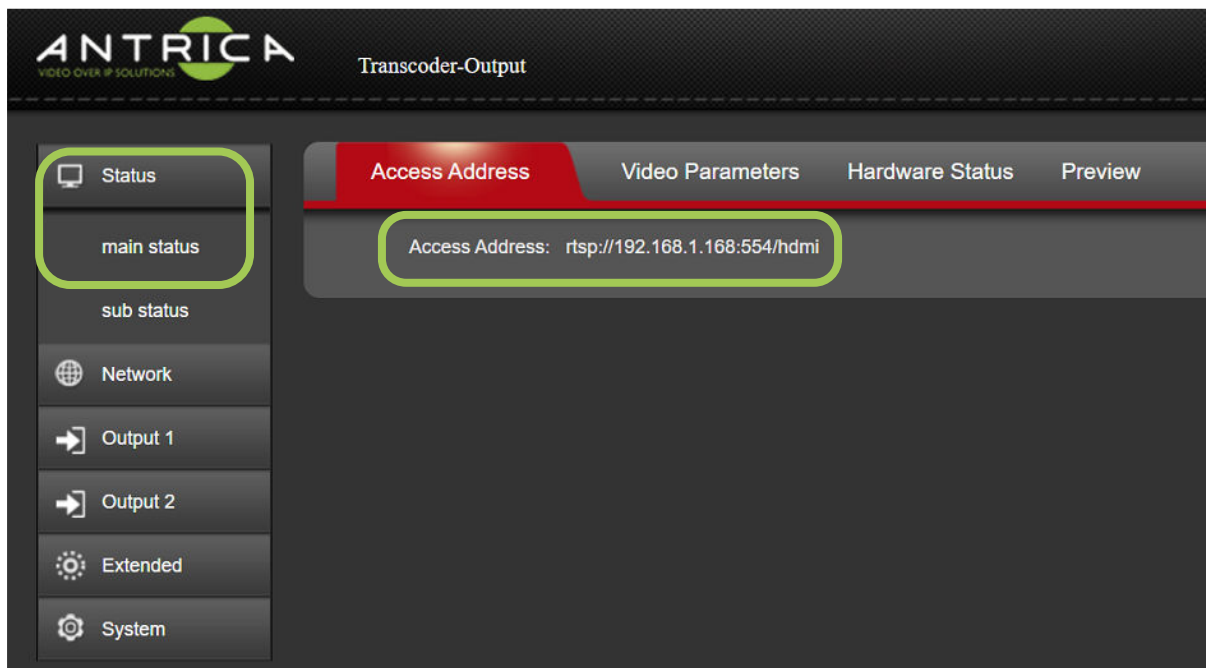This is for future use / functionality to be advised

# 5.0 Setup of the ANT-48100 in IP OUTPUT (Encoder) (192.168.1.168)

5.1 Status

Status shows information about the Encoder section of the ANT-48100 Transcoder and is broken down into 4 sections:
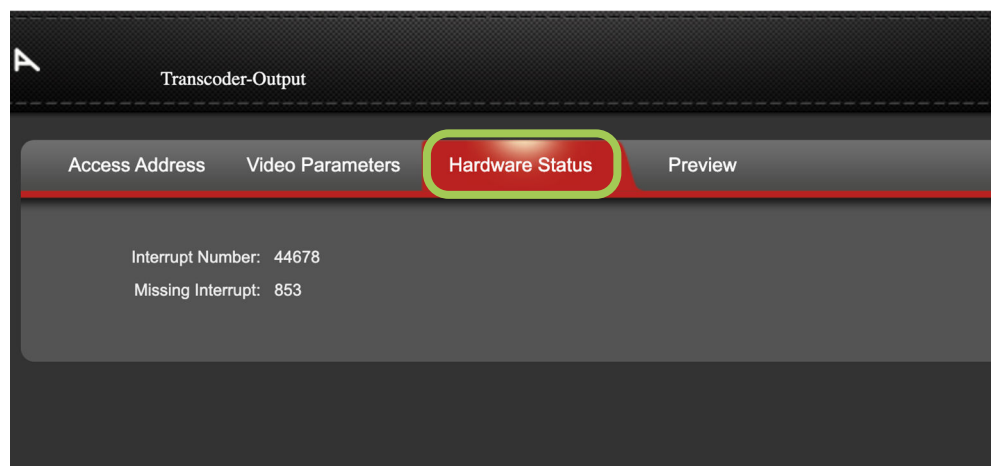
Access Address: The URL of the encoded stream depending what stream method is selected HTTP RTSP RTP etc .

Video Parameters: shows the resolution and frame rate of the signal input being supplied by the decoder section, and the encoding frame rate as set in the Output 1 section
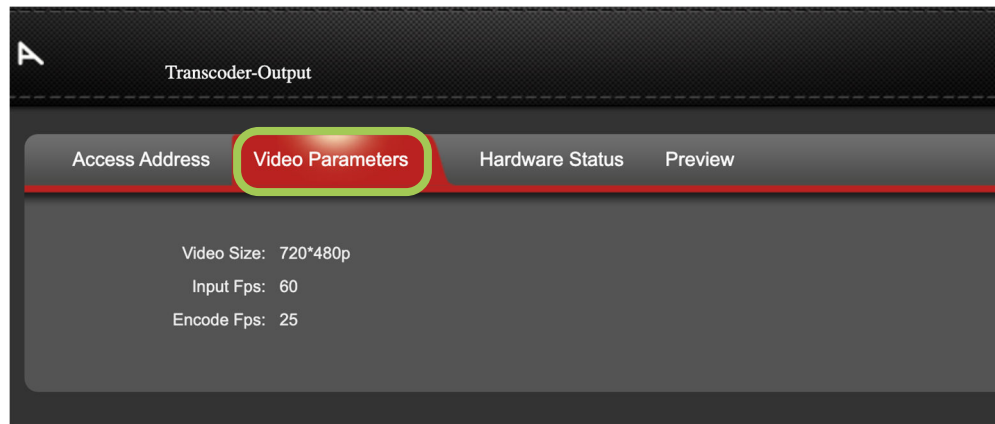
Hardware Status: Future use / functionality to be advised

Preview: Allows a delayed preview of the encoded video stream if using Chrome as a browser. RTMP-HLS has to be set to "open" – see section 5.3.5 RTMP-HLS
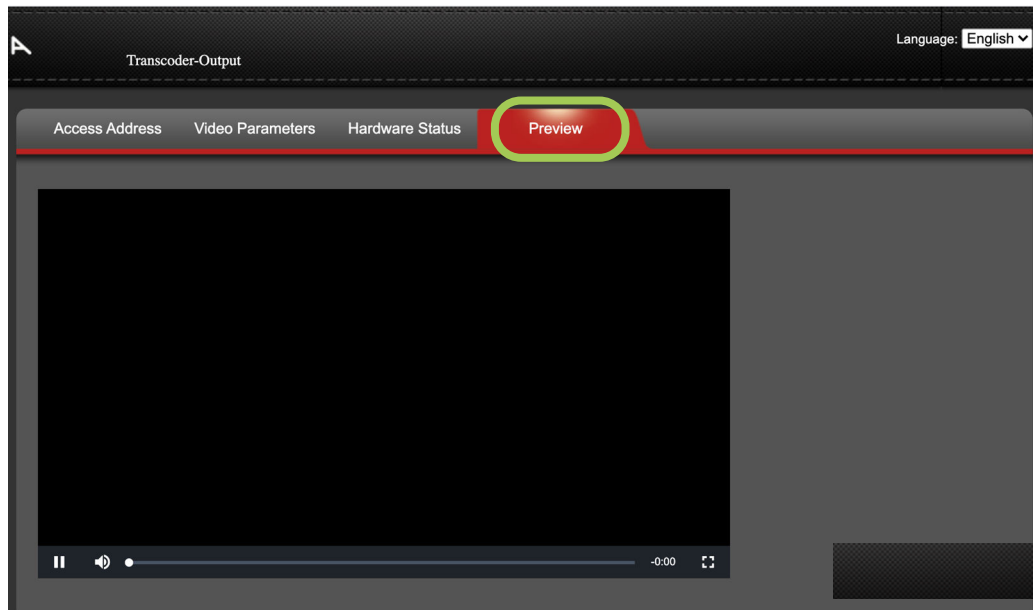

5.2 Network

This section allows you set the Transcoder (Encoder) network IP address , DHCP On/Off and other network settings such as Gateway , Netmask, DNS and information about the MAC address.

5.2 Output 1

This section defines the Encoder parameters, type off Codec and all other encoder settings. As this is a **_quick start guide_** only the basics will be mentioned.

Output 1: This is Encoders main stream. The sub stream is Output 2
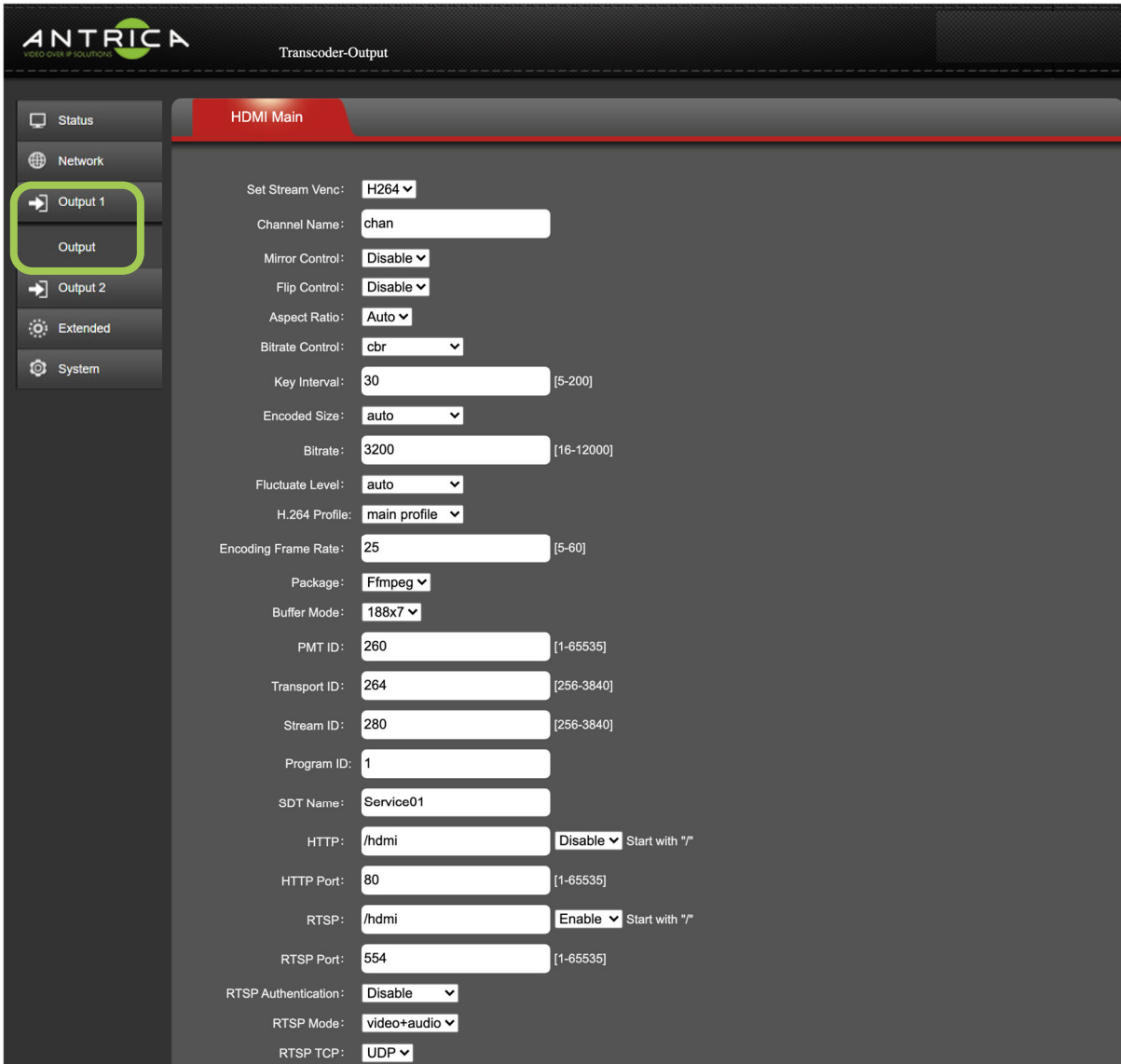
Set Stream Venc: Choose H264 or H265 Encoding codec

Aspect Ratio: Defines Auto, 16:9 or 4:3 aspect ratio for the streamed image

Bitrate Control: CBR or VBR modes

Key Interval: This is the GOP for the encoder ratio of I to P frames.

Encoded Size: Resolution settings

Bitrate: Set the encoder bit rate in kilo bits per second (1 = 1kB/s)

Encoded Frame Rate: Frames per second of encoded stream

HTTP: Select Enable if you wish to use http streaming and edit the stream identifier

RTSP: Select Enable to use RTSP mode and edit the stream

RTSP Authentication: Enable user name password RTSP authentication

RTSP Mode: Video + Audio, video or Audio only

RTSP TCP: select UDP or TCP streaming

Unicast IP: Enable MPEG-TS Unicast here and set destination IP

Multicast IP: Enable multicast MPEG-TS and set the IP

RTP Server: Enable RTP mode and set IP

RTMP: Enable RTMP mode and define either IP addressing or URL addressing here

RTMP Mode: Define video + Audio, Video or Audio only

SRT: Enable SRT here and define if listener or caller

5.3 Extended

5.3.1 Audio Setting

The audio settings for the audio with the streamed video

5.3.2 Main OSD Settings

These setting allow for text and a static image to burnt into the video.
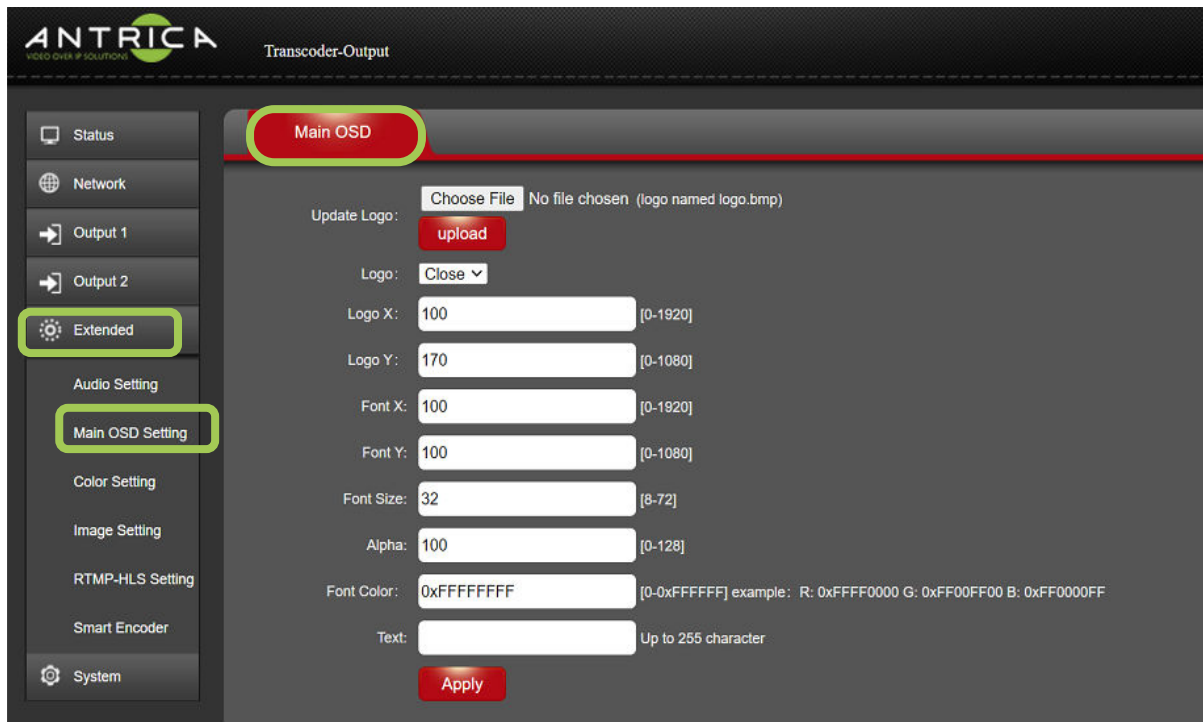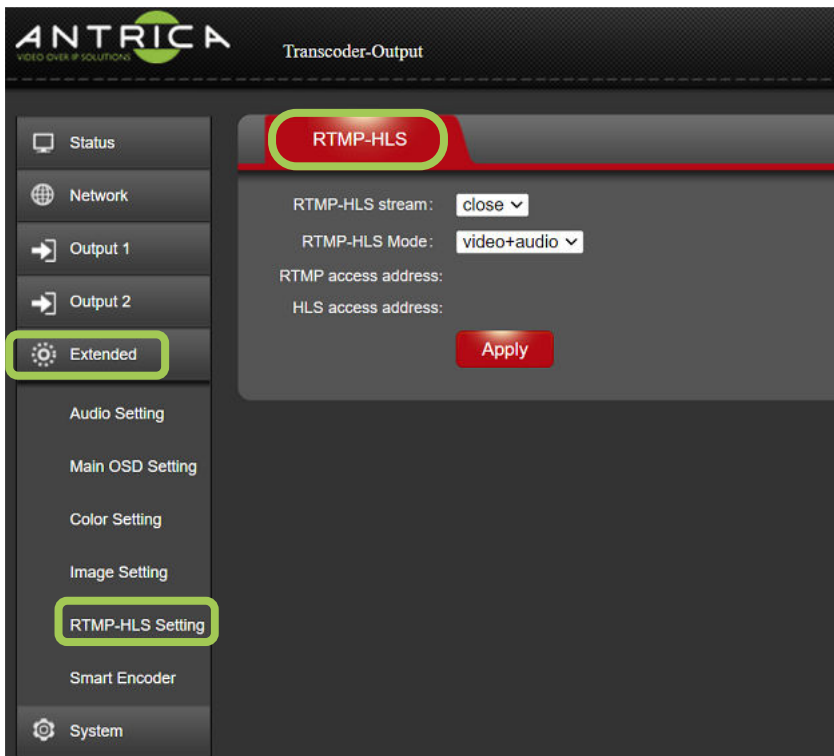

5.3.3 Color Setting

Future use / functionality to be advised

5.3.4 Image Setting

Future use / functionality to be advised

5.3.5 RTMP-HLS Setting

This is to enable RTMP and HLS streaming. The RTMP-HLS stream needs to be set to open to allow the preview video to be section, as mention in **Preview** in the Status setting (Section 5.1)
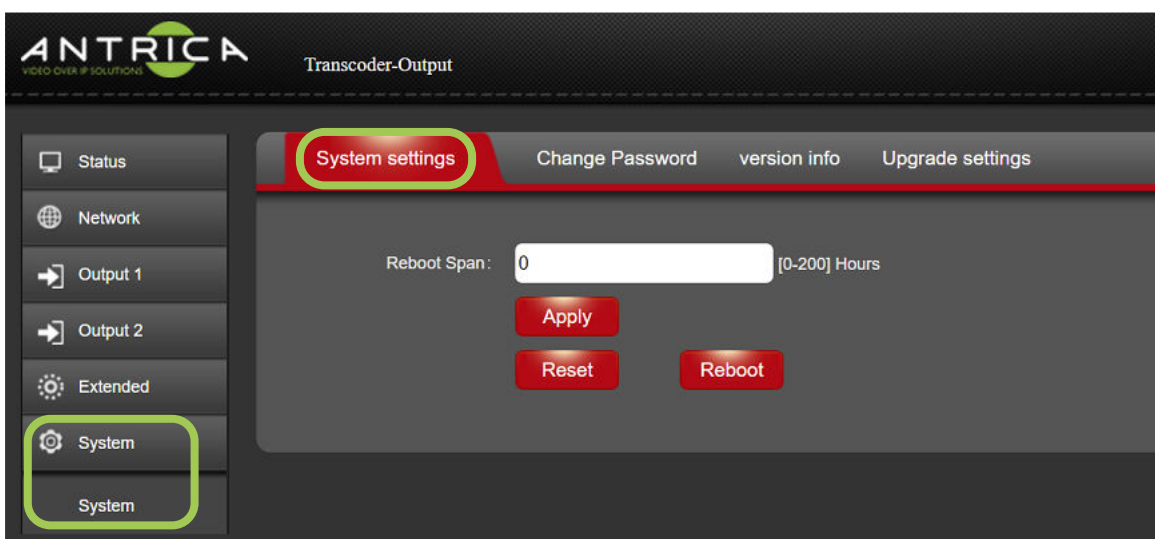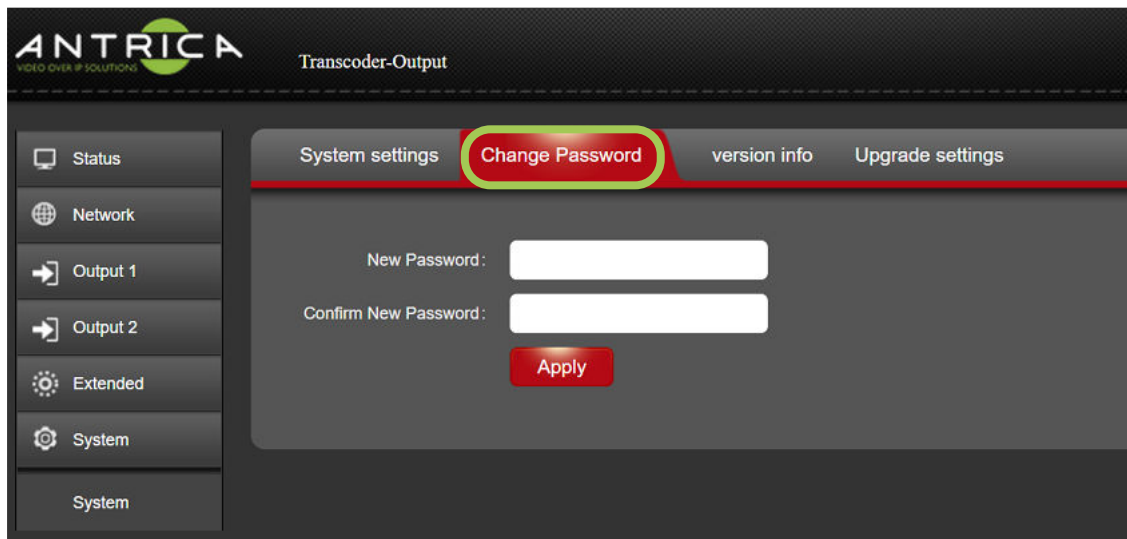
5.3.6 Smart Encoder

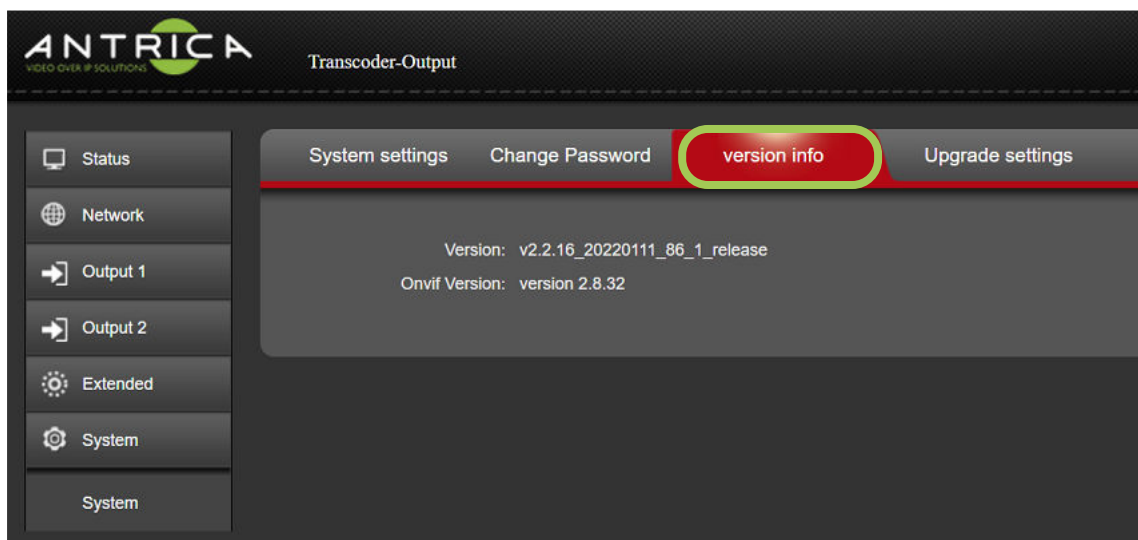Future use / functionality to be advised

5.4 System

System Settings Tab: This allows the Encoder section of the transcoder to be Factory Reset or rebooted
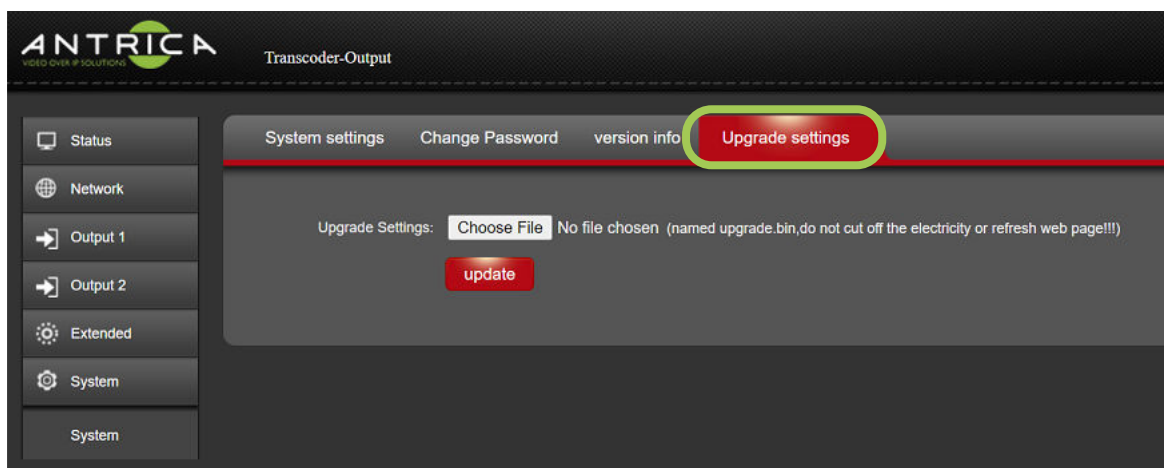
Change Password: Allows for the default admin password or previously used password to be changed.

Version: The firmware currently installed for the Encoder part of the Transcoder.

Update: This allows firmware for the decoder section to be upgraded

6.0 Other Information

Please visit our website www.antrica.com and browse to the product page (e.g ANT-48100) where you can find a DOWNLOADS SECTION :

- application notes

- Full User manuals

- FAQs

- Firmware

- Other useful information

- More help Open up a Technical Support Ticket from the support page.

Contact: support@antrica.com

Call : +44 1628 626098 x3

Document info

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2.0	26-Aug-22	David M	Corrections and new images ver2.2.8_20220309_hb_01_03 and v2.2.16_20220111_86_1_release - Onvif 2.8.32