

User Manual

UH-H265-1

4K60 H.265 HDMI & SDI Streaming Encoder



All Rights Reserved

Version: UH-H265-1_2023V2.0

Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till January, 2023. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

All product function is valid till 2023-01-31.

Trademarks

Product model and logo  are trademarks of U.T.E. electronic GmbH & Co. KG. Any other trademarks mentioned in this manual are acknowledged as the properties of the trademark owner. No part of this publication may be copied or reproduced without the prior written consent.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



SAFETY PRECAUTIONS

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- To prevent fire or shock hazard, do not expose this equipment to an environment of high humidity and/or dust. Do not use in an unprotected outdoor installation or any area classified as overly damp or wet.
- The temperature for installation should be kept between -10°C - 70°C. Avoid direct sunlight exposure or extreme changes of temperature over a short period of time.
- Do not disassemble the unit or put it on an unstable base.
- Do not drop it and avoid heavy impact.
- Ventilation: Any openings in the enclosure are provided for ventilation and to ensure reliable operation of the unit and to protect it from overheating. These openings, if any, must not be blocked or covered. This unit should not be placed in a built-in installation unless proper ventilation is provided.
- Cleaning: Unplug the unit from the mains outlet before cleaning. Do not use liquid cleaners or aerosol cleaners, only use a damp cloth.
- Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
- Enclosure Entry of any kind is dangerous. Never push objects of any kind, including liquids, into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
- Service: Do not attempt to open or service this unit yourself as opening or removing covers may expose you to dangerous voltage of other hazards.
- There are no user-serviceable parts inside the unit. If the unit requires service please contact your authorized dealer, or an authorized repair service company.

Table of Content

1. Product Introduction.....	1
1.1 Introduction to 4K60 H.265 HDMI & SDI Video Encoder	1
1.2 Package List	1
1.3 Features	2
1.4 Applications	3
2. Panel Description.....	4
2.1 Front Panel	4
2.2 Rear Panel.....	5
3. WEB Settings.....	6
3.1 Initialization.....	6
3.2 PC Network Settings	6
3.3 Reset to factory default.....	6
4. System Connection.....	6
4.1 Usage Precautions	6
4.2 System Diagram UH-H265-1	6
4.2.1 WAN Connection	7
4.2.2 LAN Connection	8
5. Web-based GUI Access.....	9
5.1 Log-In to the System	9
5.1.1 Default Settings	9
5.1.2 Standard Log-In.....	9
6. Web-based GUI Control.....	10
6.1 Status Display.....	10
6.1.1 Input status	11
6.1.2 Mainstream Status.....	11
6.1.3 Substream Status	12
6.2 Network Settings	13
6.2.1 Internet access	14
6.2.2 DNS.....	15
6.2.3 Port.....	15

6.3 Mainstream input and encoding settings	16
6.3.1 Main stream settings	17
6.3.2 Main steam OSD settings	21
6.3.2.1. Zone 1~4.....	22
6.3.2.1.1. Type Text	23
6.3.2.1.2. Type Graphic	24
6.3.2.1.3. Type Time	25
6.3.2.2. LOGO	26
6.3.3 Main steam Video Input settings.....	27
6.3.4 Main steam Audio settings.....	29
6.4 Substream encoding settings	31
6.4.1 Substream Settings	32
6.4.2 Substream OSD Settings	36
6.4.2.1. Zone 1~4.....	37
6.4.2.1.1. Type Text	38
6.4.2.1.2. Type Graphic	39
6.4.2.1.3. Type Time	40
6.4.2.2. LOGO	41
6.4.3 Substream Video Input settings	42
6.4.4 Substream Audio settings	44
6.5 System settings	46
6.5.1 Change password.....	47
6.5.2 Advance Settings.....	48
6.5.3 Serial to TCP settings	52
6.5.4 FRP Client settings	52
6.5.5 Schedule restart settings	53
6.5.6 NTP settings	54
6.5.7 Upload firmware and configuration	55
6.5.8 Backup firmware and configuration	56
6.5.9 System settings (Reboot and Reset)	57
7. VLC Operation	58

8. Recording the Main Stream	60
9. Specifications.....	61
10. Panel Drawing	63
11. Frequently Asked Questions	64
12. After-sales/ Customer Service	65

1. Product Introduction

1.1 Introduction to 4K60 H.265 HDMI & SDI Video Encoder

The 4K60 H.265 HDMI & SDI Streaming Encoder UH-H265-1 is a hardware device used for ultrahigh-definition video signal up to 2160P@60Hz encoding and network transmission, using the latest and high-efficient HD digital video compression technology H.265, with the characteristics of reliable, high-definition, low bitrate and low latency.

The launch of this product, using a hardware encoder, fills the gap in the industry, which is a direct replacement for the traditional capture card or software coding method. Input the 12G SDI or HDMI high-definition video signal to conduct the encoding process, after compression processing of the hardware chip, output the standard TS network stream.

The system is more stable and image quality is more perfect, which can be used in a wide variety of needs for high-definition video and high-resolution and high frame rate acquisition-based IP network transmission. Its powerful scalability makes it more easily to respond to the needs of different industries and can be used as live video encoder too.

Industrial controlled, precision design, small size, easy installation offers an easy and energy efficient installation.

1.2 Package List

- 1x UH-H265-1: 4K60 H.265 IP Encoder with HDMI and SDI input
- 1x Set of mounting brackets (pre-assembled)
- 1x Power Supply (12V DC 3A) [100 V - 240 V AC 50/60 Hz input range]
- 1x User Manual



Notes:

- Please confirm if the product and the accessories are all included, if not, please contact with the dealers.
- Please contact your dealer immediately if any damage or defect in the components is found.

1.3 Features

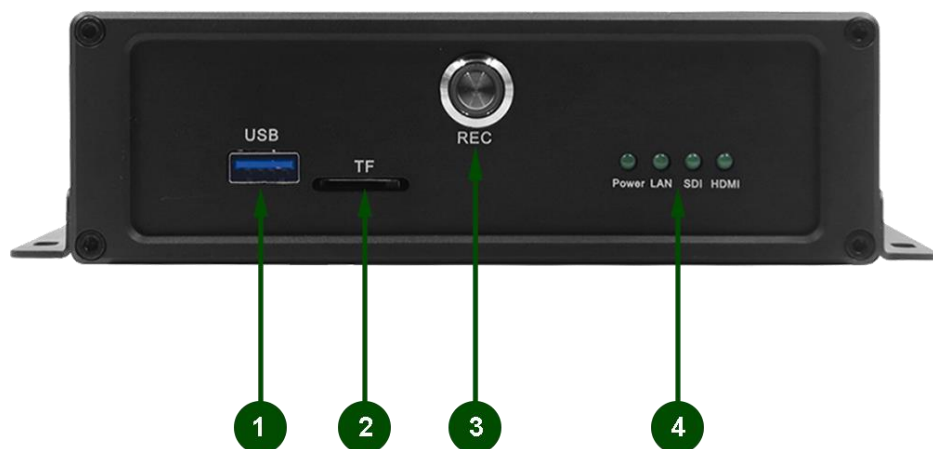
- With Xilinx, stable and effective.
- Friendly Web Control UI, default IP is 192.168.1.168.
- Support HTTP / SRT / HTTPS / HLS / FLV / RTSP / RTMP / RTMPS / UDP/RTP (Unicast/Multicast) TS Stream Protocols and ONVIF.
- Support output Multi RTMP(S) (Main stream & Sub stream.) to different Media Streaming Server.
- Support 4K SMPTE 4096x2160@60fps / 3840x2160@60 / 2560x1440@144fps HDMI input and encoding
- Support BT.2020 WCG
- Support HDR10, 10bit input and encoding. To fully support 10bit, please ensure that HDMI input is 10bit input, and select h.265 Main10 Profile encoding
- Support 100m bit rate encoding
- Support one click recording, support USB 3.0/ TF card in NTFS/ exFAT/ FAT32 format, with SAMBA server built-in, and video can be viewed through network.
- Support Text and image insert as Stream Logo for Main stream & Sub stream.
- Output Stream bitrate adjustable.
- It supports audio & video Pass-Through by the main chip
- Support External Analog audio input.
- Support Audio digital gain.
- Support remote control via router port forward.
- Support firmware upgrade.

1.4 Applications

- IPTV (Wowza, Xstream Codes Media Server, etc.)
- Online Live Broadcast (YouTube, Facebook, Ustream, Twitter, etc.)
- NVR (Network Video Recorder)
- Recording System / Software
- Digital Signage
- Teaching / Campus Broadcast
- Hotel TV system
- Video Conference

2. Panel Description

2.1 Front Panel



- ① **USB:** USB port for saving the main stream.
- ② **TF:** TF card slot port for saving the main stream.
- ③ **REC:** Button for 1-click recording
- ④ **LED:** Status LEDs

 **Note:** Pictures shown in this manual are for reference only, different model and specifications are subject to real product.

2.2 Rear Panel



- ① **Rest:** Reset button It is used to reset the device. After power on, hold it on for about 15 seconds to reset the device to default IP (192.168.1.168)
- ② **HDMI:** HDMI video input
- ③ **SDI:** SDI video input
- ④ **Audio 1:** Audio input
- ⑤ **Audio 2:** Audio input
- ⑥ **LAN:** 10/1000M Ethernet/ network port.
- ⑦ **12V/DC:** Power input.

 **Note:** The selection between the HDMI and SDI input as well as the Audio 1 and Audio 2 input for main stream and substream is accessible in the Mainstream and Substream section in the web-based GUI.

Further information can be found in chapters 6.3.3, 6.3.4, 6.4.3 and 6.4.4.

3. WEB Settings

The 4K60 H.265 HDMI / SDI Streaming Encoder UH-H265-1 can be configured and controlled by the WEB GUI interface.

It allows users to interact with the Streaming Encoder through graphical icons and visual indicators.

3.1 Initialization

Input the power supply to turn on encoder and hold a pin to press RST on the encoder for 15 seconds, it will be restarted and initialized.

The default Route IP of dash board is 192.168.1.168 after initialization.

3.2 PC Network Settings

Change the administrator's computer IP address as: 192.168.1.* to avoid IP conflicting with dashboard IP. (mark "*" numbers range will be 0-254 except 168)

3.3 Reset to factory default

Input the power supply to turn on encoder and press reset button (RST) on the encoder's front constantly for about 15 seconds.

The system will be reset and restarted.

The default IP of the encoder is 192.168.1.168 after reset.

4. System Connection

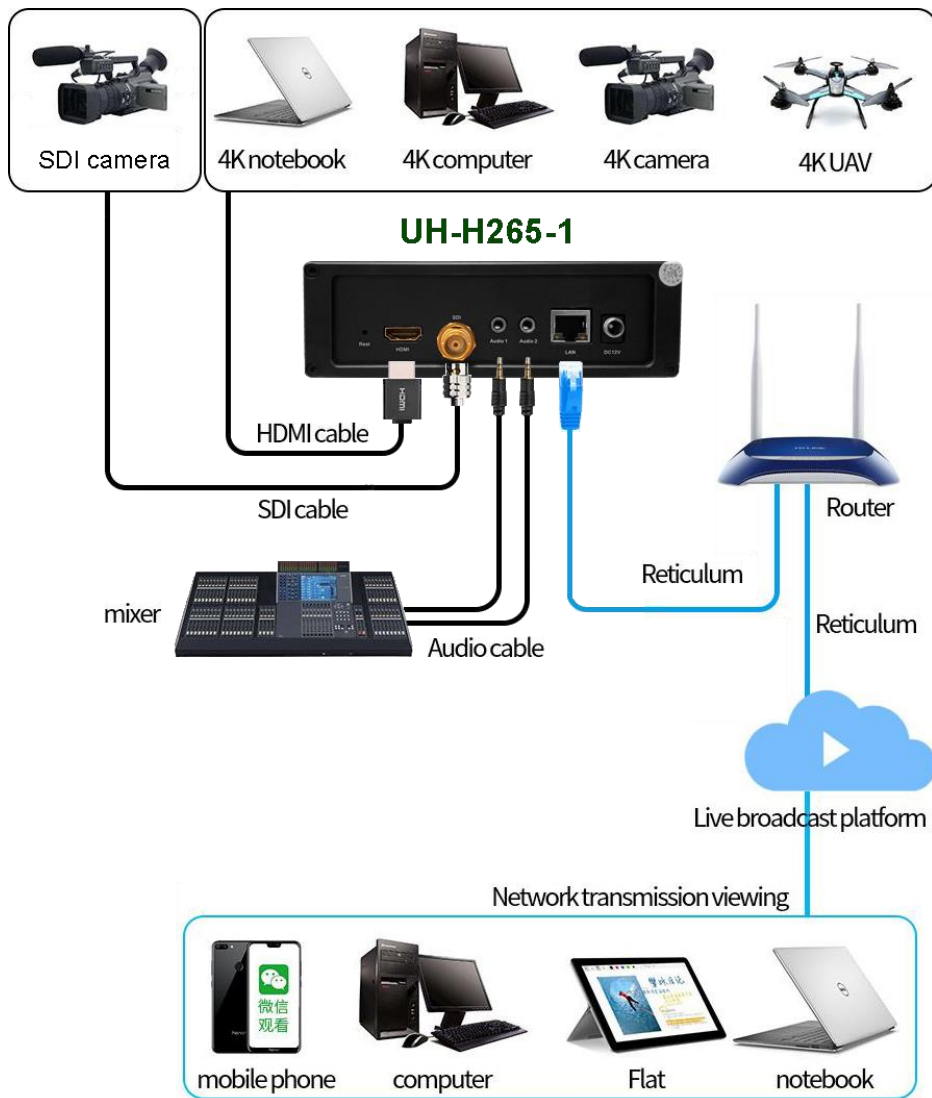
4.1 Usage Precautions

- System should be installed in a clean environment and has a prop temperature and humidity.
- All of the power switches, plugs, sockets and power cords should be insulated and safe.
- After initialization all devices should be connected before power on.

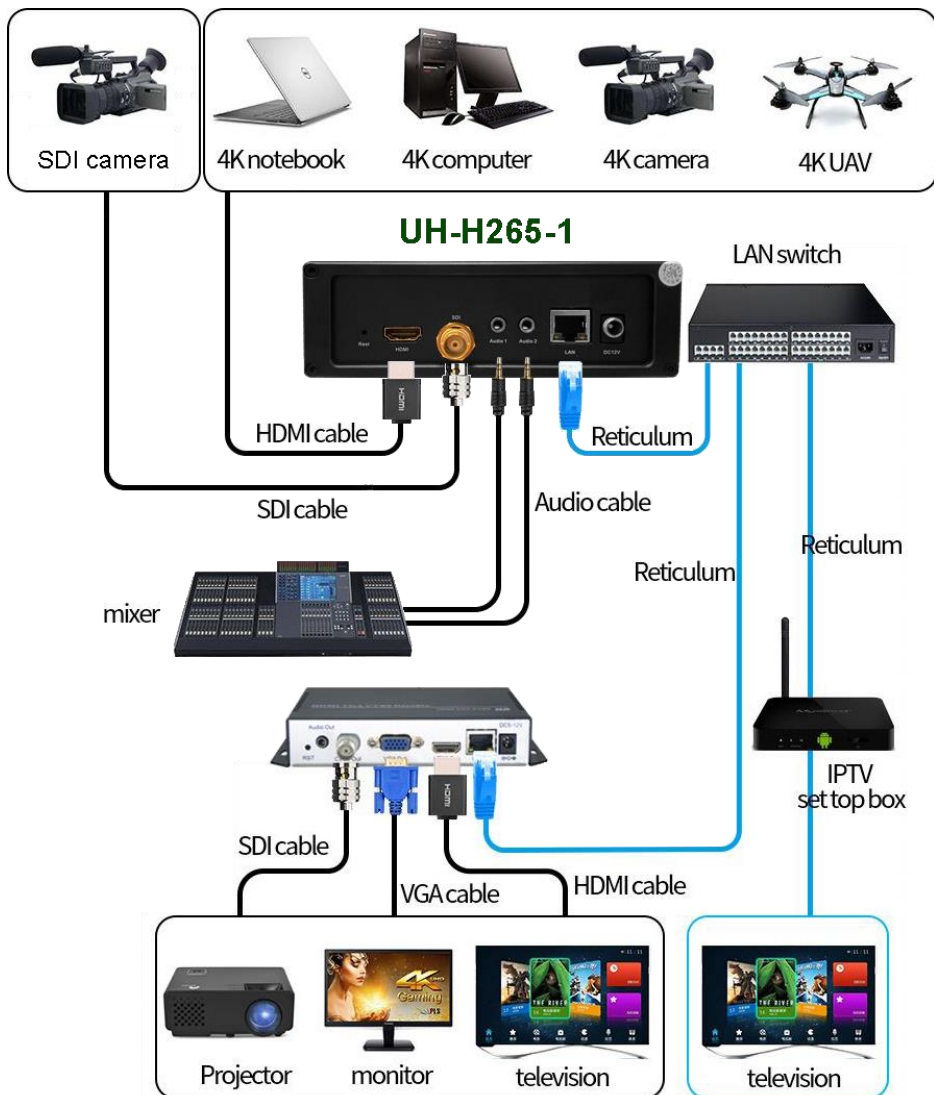
4.2 System Diagram UH-H265-1

The following figures show typical applications that can be realized with HDMI & SDI Streaming Encoder UH-H265-1.

4.2.1 WAN Connection



4.2.2 LAN Connection



5. Web-based GUI Access

The 4K60 H.265 HDMI & SDI Streaming Encoder UH-H265-1 can be configured and controlled via web-based GUI.

It allows users to interact with the Streaming Encoder through graphical icons and visual indicators.

Connect the LAN port of UH-H265-1 with a straight-through CAT cable with the PC that you prepared as described in chapter 3.2.

5.1 Log-In to the System

To access a standard WEB browser is best.

5.1.1 Default Settings

The System comes with default user and password.

- Default address after initialization: 192.168.1.168
- Default User: admin
- Default Password: admin

5.1.2 Standard Log-In

Type **192.168.1.168** in your browser, it will enter the log-in interface shown as below (in case of Windows 7):



Type the user name and password.

- Default User: admin
- Default Password: admin

 **Note:** Pictures shown in this manual are for reference only, different model and specifications are subject to real product.

6. Web-based GUI Control

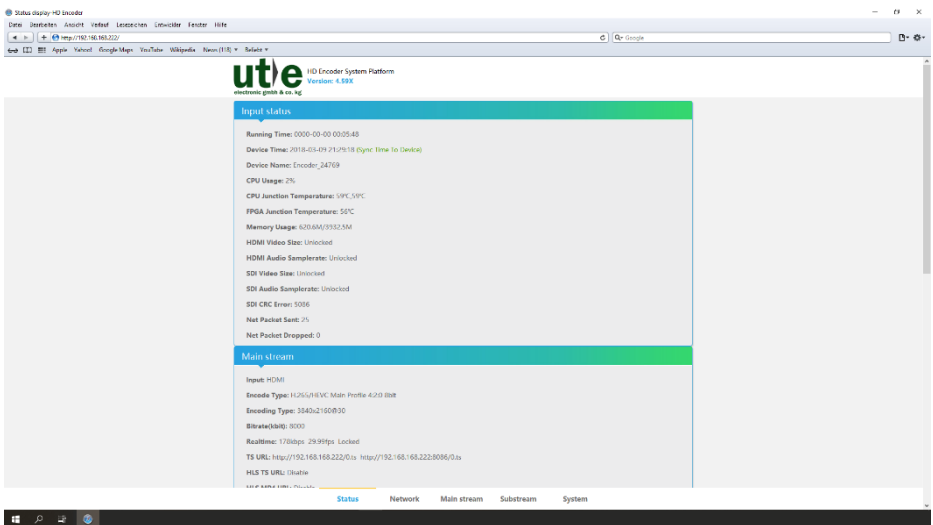
The 4K H.265 HDMI & SDI Streaming Encoder UH-H265-1 can be configured and controlled via web-based GUI.

It allows users to interact with the Streaming Encoder through graphical icons and visual indicators.

After logging in as described in chapter 5, you can control the UH-H265-1 from the web-based GUI.

6.1 Status Display

Directly after the login you will get to the status overview page.



6.1.1 Input status

When you input the (U)HD signal source, it will show resolution of video input, if it's blank here, it means there no video input.

Input status

Running Time: 0000-00-00 00:05:48

Device Time: 2018-03-09 21:29:18 (Sync Time To Device)

Device Name: Encoder_24769

CPU Usage: 2%

CPU Junction Temperature: 59°C, 59°C

FPGA Junction Temperature: 56°C

Memory Usage: 620.6M/3932.5M

HDMI Video Size: Unlocked

HDMI Audio Samplerate: Unlocked

SDI Video Size: Unlocked

SDI Audio Samplerate: Unlocked

SDI CRC Error: 5086

Net Packet Sent: 25

Net Packet Dropped: 0

6.1.2 Mainstream Status

The Main stream window shows an overview about the device Main stream settings. It will show the resolution of the mainstream you set and multicast address. You can stream the multicast address by VLC or other streaming software.

Main stream

Input: HDMI

Encode Type: H.265/HEVC Main Profile 4:2:0 8bit

Encoding Type: 3840x2160@30

Bitrate(kbit): 8000

Realtime: 178kbps 29.99fps Locked

TS URL: <http://192.168.168.222/0.ts> <http://192.168.168.222:8086/0.ts>

HLS TS URL: Disable

HLS MP4 URL: Disable

MP4 URL: <http://192.168.168.222/0.mp4>

FLV URL: <http://192.168.168.222/0.flv> <http://192.168.168.222:8086/0.flv>

RTSP URL: <rtsp://192.168.168.222/0> <rtsp://192.168.168.222:8554/0>

RTMP URL: Disable

RTMP(S) PUSH URL: Disable

Multicast URL: Disable

SRT URL: Disable

SRT PUSH URL: Disable

HLS PUSH URL: Disable

[Preview\(HTML5\)](#)

6.1.3 Substream Status

The Substream window shows an overview about the device Substream settings. It will show the resolution of the substream you set and multicast address. You can stream the multicast address by VLC or other streaming software.

Substream

Input: HDMI

Encode Type: H.265/HEVC Main Profile 4:2:0 8bit

Encoding Type: 1920x1080@30

Bitrate(kbit): 8000

Realtime: 105kbps 29.99fps Locked

TS URL: <http://192.168.168.222/1.ts> <http://192.168.168.222:8086/1.ts>

HLS TS URL: Disable

HLS MP4 URL: Disable

MP4 URL: <http://192.168.168.222/1.mp4>

FLV URL: <http://192.168.168.222/1.flv> <http://192.168.168.222:8086/1.flv>

RTSP URL: <rtsp://192.168.168.222/1> <rtsp://192.168.168.222:8554/1>

RTMP URL: Disable

RTMP(S) PUSH URL: Disable

Multicast URL: Disable

SRT URL: Disable

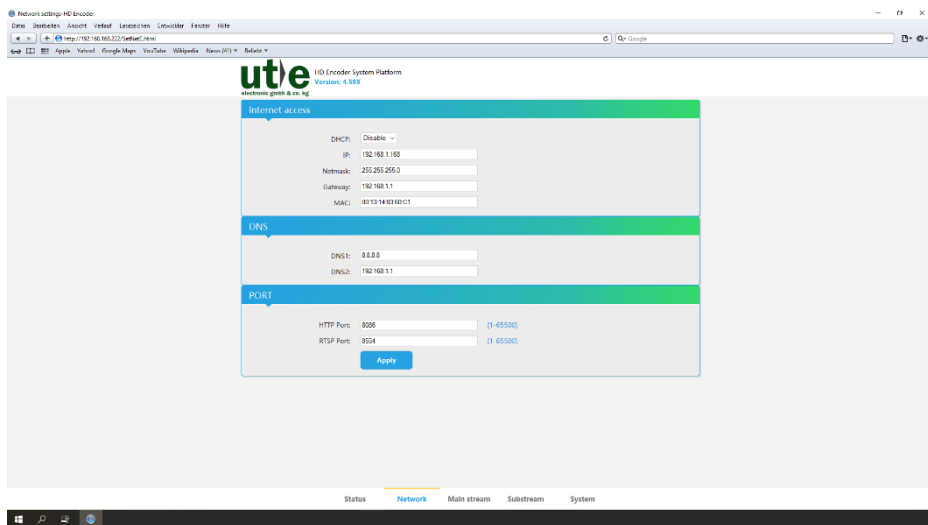
SRT PUSH URL: Disable

HLS PUSH URL: Disable

[Preview\(HTML5\)](#)

6.2 Network Settings

In this section the network settings are accessible.



The screenshot shows the 'Network settings' page of the UTE HD Encoder System Platform. The interface is displayed in a web browser window. The page title is 'ute HD Encoder System Platform' with a version number 'Version: 4.95X'. The main content area is divided into three sections: 'Internet access', 'DNS', and 'PORT'. The 'Internet access' section has a 'DHCP' dropdown set to 'Disable', and fields for 'IP' (192.168.1.100), 'Netmask' (255.255.255.0), 'Gateway' (192.168.1.1), and 'MAC' (00:13:14:03:40:C1). The 'DNS' section has fields for 'DNS1' (8.8.8.8) and 'DNS2' (192.168.1.1). The 'PORT' section has fields for 'HTTP Port' (8086) and 'RTSP Port' (8554), both with a range of (1-65535). An 'Apply' button is located at the bottom of the form. The bottom navigation bar shows 'Status', 'Network' (selected), 'Main stream', 'Substream', and 'System'.

6.2.1 Internet access

Internet access

DHCP: Disable ▾

IP: 192.168.1.168

Netmask: 255.255.255.0

Gateway: 192.168.1.1

MAC: 00:13:14:03:60:C1

Item	Function	Value
DHCP	Enables DHCP Mode	Enable Disable
IP	Enter your individual IP address	192.168.1.168 (default)
Netmask	Enter your individual netmask	255.255.255.0
Gateway	Enter your individual gateway address	192.168.1.1
MAC	The device physical address. After you reset this, it will change	00:13:14:03:60:C1

Confirm your individual settings for internet access by clicking the **Apply** button at the bottom of the page once.



Note: The Default IP of the device is 192.168.1.168.

If IP setting is forgotten after changing you can reset it to default IP follow steps in chapter 3.3.

6.2.2 DNS

DNS

DNS1:

DNS2:

Item	Function	Value
DNS1	Enter your individual DNS address	8.8.8.8
DNS2	Enter your individual DNS address	192.168.1.1 (default)

Confirm your individual settings for DNS by clicking the **Apply** button at the bottom of the page once.

6.2.3 Port

PORT

HTTP Port:

[1-65500]

RTSP Port:

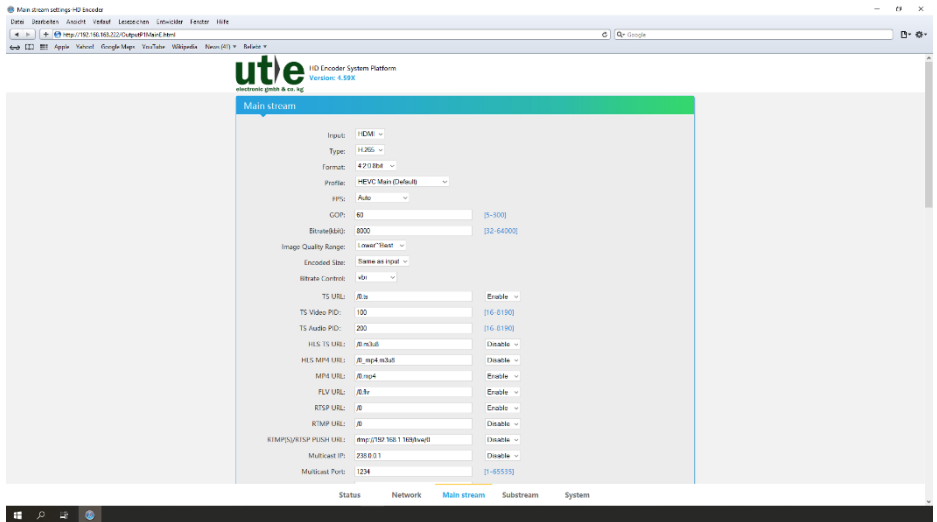
[1-65500]

Item	Function	Value
HTTP Port	Enter your individual HTTP port	1 ~ 65500
RSTP Port	Enter your individual RSTP port	1 ~ 65500

Confirm your individual settings for HTTP and RTSP ports by clicking the **Apply** button once.

6.3 Mainstream input and encoding settings

In this section the mainstream and main stream OSD settings are accessible.



6.3.1 Main stream settings

Main stream

Input:

HDMI

Type:

H.265

Format:

4:2:0 8bit

Profile:

HEVC Main (Default)

FPS:

Auto

GOP:

60

[5-300]

Bitrate(kbit):

8000

[32-64000]

Image Quality Range:

Lower~Best

Encoded Size:

Same as input

Bitrate Control:

vbr

TS URL:

/0.ts

Enable

TS Video PID:

100

[16-8190]

TS Audio PID:

200

[16-8190]

HLS TS URL:

/0.m3u8

Disable

HLS MP4 URL:

/0_mp4.m3u8

Disable

MP4 URL:

/0.mp4

Enable

FLV URL:

/0.flv

Enable

RTSP URL:

/0

Enable

RTMP URL:

/0

Disable

RTMP(S)/RTSP PUSH URL:

rtmp://192.168.1.169/live/0

Disable

Multicast IP:

238.0.0.1

Disable

Multicast Port:

1234

[1-65535]

Multicast SAP Name:

GROUP0_STREAM0

SRT URL Port:

9000

Disable

SRT PUSH URL:

srt://192.168.1.169:9000

Disable

SRT Encryption Password:

0123456789

Disable

HLS PUSH URL:

https://a.upload.youtube.com/http_upload

Disable

Apply

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

Item	Function	Value
Input	Selector for the input	HDMI SDI
Type	Selector for the type of compression/encoding type	H.265 H.264
Format	Selector for the chroma subsampling	Depends on the selected input (HDMI/ SDI) and the selected encoding type (H.265/ H.264)
Profile	Selector for the encoding profile	baseline main high profile Depends on the selected encoding type and format.
FPS	Selector for frame rate [frames per second]	Same as input Auto Custom (5 ~ 60 fps)
GOP	Selector for Group of Picture (GOP) size [frames as GOP]	5 ~ 300
Bitrate (kbit)	Selector for bit rate (Network bandwidth setting) in kbit	32 ~ 64000
Image Quality Range	Selector for image quality	Best Better~Best Mid~Best Lower~Best Lowest~Best
Encoded Size	Selector for the encoded image size	same as input 4096x2160 ... 1920x1080 ... 1280x720 ... 720x576 ... 240x180
Bitrate Control	Selector for type of bitrate mode	CBR VBR Strong CBR
TS URL	Enter your TS URL You can enable or disable TS by selecting Enable/ Disable	/0.ts
TS Video PID	Enter your TS Video PID	16 ~ 8190
TS Audio PID	Enter your TS Audio PID	16 ~ 8190

HLS TS URL	Enter your HLS TS URL You can enable or disable HLS TS by selecting Enable/ Disable	/0.m3u8
HLS MP4 URL	Enter your HLS MP4 URL You can enable or disable HLS MP4 by selecting Enable/ Disable	/0_mp4.m3u8
MP4 URL	Enter your MP4 URL You can enable or disable MP4 by selecting Enable/ Disable	/0.mp4
FLV URL	Enter your FLV URL You can enable or disable FLV by selecting Enable/ Disable	/0.flv
RTSP URL	Enter your RTSP URL You can enable or disable RTPS by selecting Enable/ Disable	/0
RTMP URL	Enter your RTMP URL You can enable or disable RTMP by selecting Enable/ Disable	/0
RTMP(S)/RTMP PUSH URL	Enter your RTMP(S) /RTSP URL You can enable or disable RTMP(S)/RTMP PUSH by selecting Enable/ Disable	rtmp://192.168.1.169/live/0
Multicast IP	Enter your IP address for MultiCast You can enable or disable MultiCast by selecting Enable/ Disable	238.0.0.1
Multicast port	Enter your port address for MultiCast	1 ~ 65535
Multicast SAP Name	Enter your Multicast SAP Name	GROUP0_STREAM0
SRT URL Port	Enter your SRT URL Port You can enable or disable SRT Port by selecting Enable/ Disable	1 ~ 65535
SRT PUSH URL	Enter your SRT URL You can enable or disable SRT PUSH by selecting Enable/ Disable	srt://192.168.1.169:9000

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

SRT Encryption Password	Enter your individual password for encryption You can enable or disable SRT Encryption by selecting Enable/ Disable	0123456789
HLS PUSH URL	Enter your HLS PUSH URL You can enable or disable HLS PUSH by selecting Enable/ Disable	https://a.upload.youtube.com/http_upload_hls?cid=1111-1111-1111-1111&copy=0&file=

Confirm your individual main stream settings by clicking the **Apply** button at the bottom of the section once.

Notes:

- FPS/ Frame rate: When the input resolution is 720i/50,1080i50, the frame rate will choose 25
- Profile: H.265 only supports main profile
- HTTP port: 1-65535 optional
- RTSP port: 1-65535 optional
- Multicast IP: 232.255.42.42 disable/RTP/UDP optional
- RTMP server IP: can set by stream media server
- RTMP server port: 1-65535 optional
- RTMP app name: can set by yourself
- RTMP stream name: can set by yourself

6.3.2 Main steam OSD settings

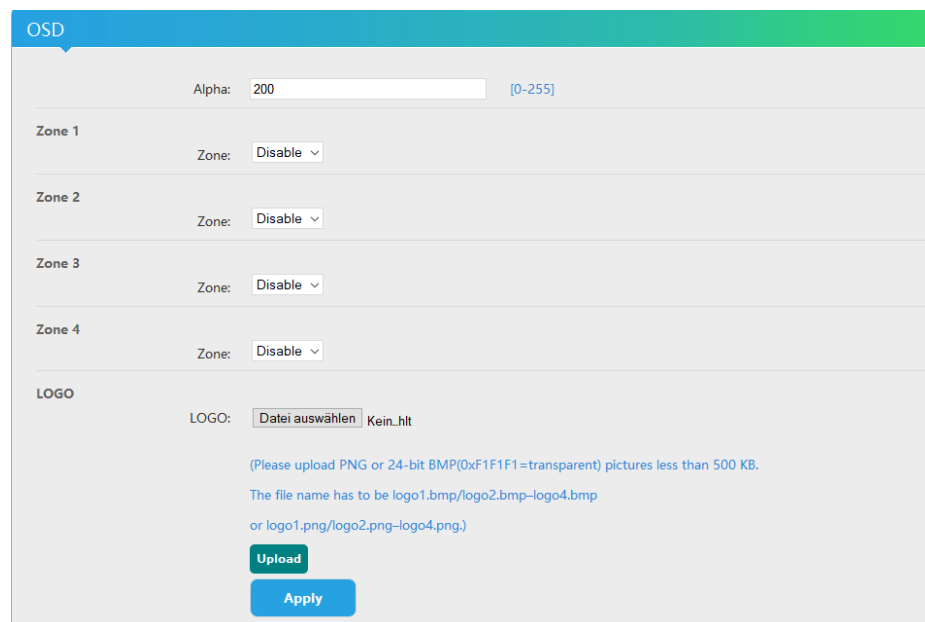
The UH-H265-1 Streaming Encoder allows to insert individual watermarks or logos.

Four different overlays, named Zone, can be made in the mainstream video signal.

There is a choice between logos, freely selectable text, ticker or time.

Use the OSD menu to arrange setting for type, content, colors and position.

Confirm your individual mainstream OSD settings by clicking the **Apply** button at the bottom of the section once.



Alpha Key Level

As a general setting, valid for all four zones, the alpha key level is adjustable.

Item	Function	Value
Alpha	Set the level of opacity	0~255

6.3.2.1. Zone 1~4

OSD

Alpha: [0-255]

Zone 1

Zone:
Type:

txt

graphic

time

X: [0-1920]
Y: [0-1080]
Text:
Font size: [8-72]
Background color:
Color: [select color](#)

Zone 2

Zone:

Zone 3

Zone:

Zone 4

Zone:

LOGO

LOGO: Kein .hlt

(Please upload PNG or 24-bit BMP(0xF1F1=transparent) pictures less than 500 KB.
The file name has to be logo1.bmp/logo2.bmp-logo4.bmp
or logo1.png/logo2.png-logo4.png.)

Upload

Apply

The OSD capability for Zone 1 is different to Zone 2-4.

Zone 1 is the most featured one. To overlay time stamps use Zone 1.

Item	Function	Value
Zone	Enable OSD for Zone 1~4	Enable disable
Type	Select the type of OSD	text (txt) graphic time

6.3.2.1.1. Type Text

Zone 1

Zone:

Type:

X: [0-1920]

Y: [0-1080]

Text:

Font size: [8-72]

Background color:

Color: [select color](#)

Item	Function	Value
X	Defines the left position of the text	0 ~ 1920
Y	Defines the up position of the text	0 ~ 1080
Text	Enter your individual text	
Font size	Select the size of text characters	8~72 (default 36)
Background color	Select the background color for text, scroll text and time on the video	transparent black white
Color	Select the font color for text, scroll text and time	Open the color map and select one of 216 colors

6.3.2.1.2. Type Graphic

In each Zone a graphic file can be placed as a logo. The logo data are upload to the device internal memory.

You can find more about how to upload your pictures in chapter 6.3.2.2.

Therefore size and data volume is limited.

Zone 1

Zone: Enable ▾

Type: graphic ▾

X: 10 [0-1920]

Y: 10 [0-1080]

Logo: logo1 ▾

Item	Function	Value
X	Defines the left position of the picture	0 ~ 1920
Y	Defines the up position of the picture	0 ~ 1080
Logo	Select one of your uploaded pictures	

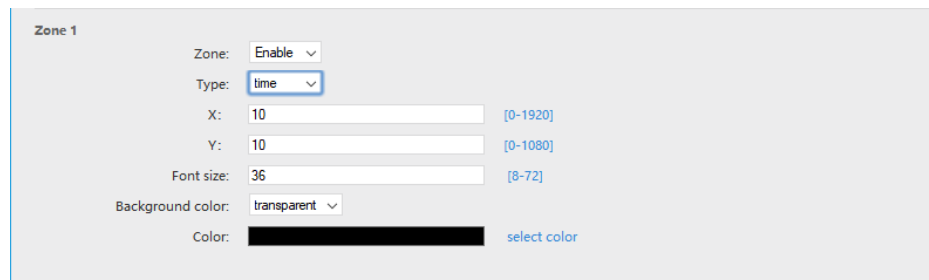
6.3.2.1.3. Type Time

The insert type TIME is only available in zone 1.

If insert type TIME is chosen, the device time will be shown as HH:MM.

Enable NTP function to get the time always synced to UTC.

For more information about NTP, see chapter 6.5.6.



The screenshot shows the 'Zone 1' configuration panel. It includes the following settings:

- Zone:** Enable (dropdown)
- Type:** time (dropdown, highlighted with a blue border)
- X:** 10 (input field, range [0-1920])
- Y:** 10 (input field, range [0-1080])
- Font size:** 36 (input field, range [8-72])
- Background color:** transparent (dropdown)
- Color:** [black color swatch] (with a 'select color' link)

Item	Function	Value
X	Defines the left position of the text	0 ~ 1920
Y	Defines the up position of the text	0 ~ 1080
Font size	Select the size of text characters	8~72 (default 36)
Background color	Select the background color for text, scroll text and time on the video	transparent black white
Color	Select the font color for text, scroll text and time	Open the color map and select one of 216 colors

6.3.2.2. LOGO

In this section you can upload your pictures

LOGO

LOGO: Kein...hlt

(Please upload PNG or 24-bit BMP(0xF1F1F1=transparent) pictures less than 500 KB.
 The file name has to be logo1.bmp/logo2.bmp–logo4.bmp
 or logo1.png/logo2.png–logo4.png.)

Item	Function	Value
LOGO/ Upload picture	Select your individual picture	Open the explorer to search for your logo file and upload



Note: Please upload PNG or 24-bit BMP(0xF1F1F1=transparent) pictures less than 500 KB.

The file name has to be logo1.bmp/logo2.bmp–logo4.bmp
or logo1.png/logo2.png–logo4.png.

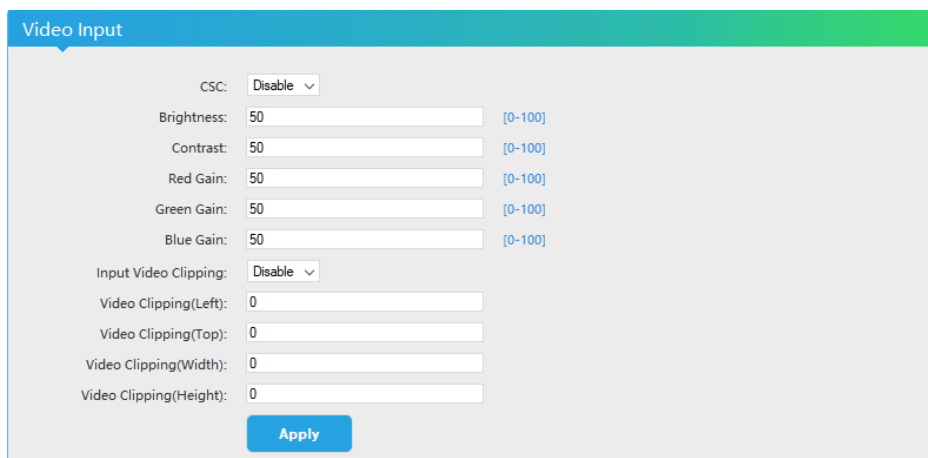
6.3.3 Main steam Video Input settings

In this section you can setup the video input settings.

You can enable/ disable CSC, adjust the brightness, contrast, and red gain, green gain and blue gain.

The enabling and disabling of Input Video Clipping as well as setting the Video Clipping position, the Video Clipping width and the Video Clipping height is without function.

Confirm your individual mainstream Video Input settings by clicking the **Apply** button at the bottom of the section once.



Item	Function	Value
CSC	You can enable or disable CSC by selecting Enable/ Disable With CSC enabled, you can configure the Brightness, Contrast, and Red, Green and Blue Gain settings.	Enable Disable
Brightness	Setup the brightness	0 ~ 100
Contrast	Setup the contrast	0 ~ 100
Red Gain	Setup red gain	0 ~ 100
Green Gain	Setup green gain	0 ~ 100
Blue Gain	Setup blue gain	0 ~ 100

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

Input Video Clipping	Without function	
Video Clipping (Left)	Without function	
Video Clipping (Top)	Without function	
Video Clipping (Width)	Without function	
Video Clipping (Height)	Without function	

6.3.4 Main steam Audio settings

In this section you can setup the video input settings.

Confirm your individual mainstream Audio Input settings by clicking the **Apply** button at the bottom of the section once.

Audio

Audio Input: Auto

Sampling Rate: 48000

Encoder: AAC

Audio Channel: L+R

Bitrate: 128000 [48000~320000]

Digital Volume Gain: 0 [-50~50]

Denoise: Enable

Denoise(dB): 15 [1~100]

G711 Over PTE: Enable

G711 Over RTSP: Enable

G711: G711A

Apply

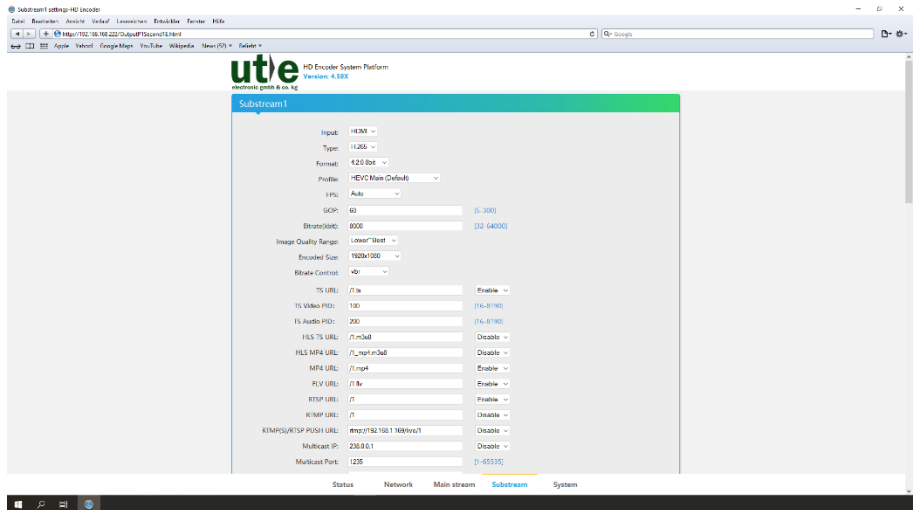
Item	Function	Value
Audio Input	Selector for the audio input	Auto HDMI SDI ANALOG 1 ANALOG 2
Sampling Rate	Selector for the sample rate to digitize in bit/s	44100 (44.1 kbit/s) 48000 (48 kbit/s) Same as input sample rate
Encoder	Selector for the type of encoding	AAC AAC+ AAC++ MP3 MP2 AC3 Opus
Audio Channel	Selector for audio channel	L+R L R
Bitrate	Selector for bit rate	48 k ~ 320 k
Digital Volume Gain	Defines the digital audio gain	-50 ~ 50
Denoise	You can enable or disable denoise by selecting Enable/ Disable	Enable Disable
Denoise (dB)	Defines the denoise in db	1 ~ 100

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

G711 over PTE	Enable or disable G711 audio over PTE	Disable Enable
G711 over RTSP	Enable or disable G711 audio over RTSP	Disable Enable Enable and resample with 8k
G711	Selector for G711 standard	G711U G711A

6.4 Substream encoding settings

In this section the substream 1, substream OSD settings, substream Video settings and substream Audio settings are accessible.



6.4.1 Substream Settings

Substream1

Input:	HDMI	
Type:	H.265	
Format:	4:2:0 8bit	
Profile:	HEVC Main (Default)	
FPS:	Auto	
GOP:	60	[5-300]
Bitrate(kbit):	8000	[32-64000]
Image Quality Range:	Lower~Best	
Encoded Size:	1920x1080	
Bitrate Control:	vbr	
TS URL:	/1.ts	Enable
TS Video PID:	100	[16-8190]
TS Audio PID:	200	[16-8190]
HLS TS URL:	/1.m3u8	Disable
HLS MP4 URL:	/1_mp4.m3u8	Disable
MP4 URL:	/1.mp4	Enable
FLV URL:	/1.flv	Enable
RTSP URL:	/1	Enable
RTMP URL:	/1	Disable
RTMP(S)/RTSP PUSH URL:	rtmp://192.168.1.169/live/1	Disable
Multicast IP:	238.0.0.1	Disable
Multicast Port:	1235	[1-65535]
Multicast SAP Name:	GROUP0_STREAM1	
SRT URL Port:	9001	Disable
SRT PUSH URL:	srt://192.168.1.169:9001	Disable
SRT Encryption Password:	0123456789	Disable
HLS PUSH URL:	https://a.upload.youtube.com/http_upload	Disable

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

Item	Function	Value
Input	Selector for the input	HDMI SDI
Type	Selector for the type of compression/encoding type	H.265 H.264
Format	Selector for the chroma subsampling	Depends on the selected input (HDMI/ SDI) and the selected encoding type (H.265/ H.264)
Profile	Selector for the encoding profile	baseline main high profile Depends on the selected encoding type and format.
FPS	Selector for frame rate [frames per second]	Same as input Auto Custom (5 ~ 60 fps)
GOP	Selector for Group of Picture (GOP) size [frames as GOP]	5 ~ 300
Bitrate (kbit)	Selector for bit rate (Network bandwidth setting) in kbit	32 ~ 64000
Image Quality Range	Selector for image quality	Best Better~Best Mid~Best Lower~Best Lowest~Best
Encoded Size	Selector for the encoded image size	same as input 3840x2160 ... 1920x1080 ... 1280x720 ... 720x576 ... 240x180
Bitrate Control	Selector for type of bitrate mode	CBR VBR Strong CBR
TS URL	Enter your TS URL You can enable or disable TS by selecting Enable/ Disable	/1.ts
TS Video PID	Enter your TS Video PID	16 ~ 8190
TS Audio PID	Enter your TS Audio PID	16 ~ 8190

HLS TS URL	Enter your HLS TS URL You can enable or disable HLS TS by selecting Enable/ Disable	/1.m3u8
HLS MP4 URL	Enter your HLS MP4 URL You can enable or disable HLS MP4 by selecting Enable/ Disable	/1_mp4.m3u8
MP4 URL	Enter your MP4 URL You can enable or disable MP4 by selecting Enable/ Disable	/1.mp4
FLV URL	Enter your FLV URL You can enable or disable FLV by selecting Enable/ Disable	/1.flv
RTSP URL	Enter your RTSP URL You can enable or disable RTPS by selecting Enable/ Disable	/1
RTMP URL	Enter your RTMP URL You can enable or disable RTMP by selecting Enable/ Disable	/1
RTMP(S)/RTMP PUSH URL	Enter your RTMP(S) /RTSP URL You can enable or disable RTMP(S)/RTMP PUSH by selecting Enable/ Disable	rtmp://192.168.1.169/live/1
Multicast IP	Enter your IP address for MultiCast You can enable or disable MultiCast by selecting Enable/ Disable	238.0.0.1
Multicast port	Enter your port address for MultiCast	1 ~ 65535
Multicast SAP Name	Enter your Multicast SAP Name	GROUP0_STREAM1
SRT URL Port	Enter your SRT URL Port You can enable or disable SRT Port by selecting Enable/ Disable	1 ~ 65535
SRT PUSH URL	Enter your SRT URL You can enable or disable SRT PUSH by selecting Enable/ Disable	srt://192.168.1.169:9001

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

SRT Encryption Password	Enter your individual password for encryption You can enable or disable SRT Encryption by selecting Enable/ Disable	0123456789
HLS PUSH URL	Enter your HLS PUSH URL You can enable or disable HLS PUSH by selecting Enable/ Disable	https://a.upload.youtube.com/http_upload_hls?cid=1111-1111-1111-1111&copy=0&file=

Confirm your individual main stream settings by clicking the **Apply** button at the bottom of the section once.

Notes:

- FPS/ Frame rate: When the input resolution is 720i/50,1080i50, the frame rate will choose 25
- Profile: H.265 only supports main profile
- HTTP port: 1-65535 optional
- RTSP port: 1-65535 optional
- Multicast IP: 232.255.42.42 disable/RTP/UDP optional
- RTMP server IP: can set by stream media server
- RTMP server port: 1-65535 optional
- RTMP app name: can set by yourself
- RTMP stream name: can set by yourself

6.4.2 Substream OSD Settings

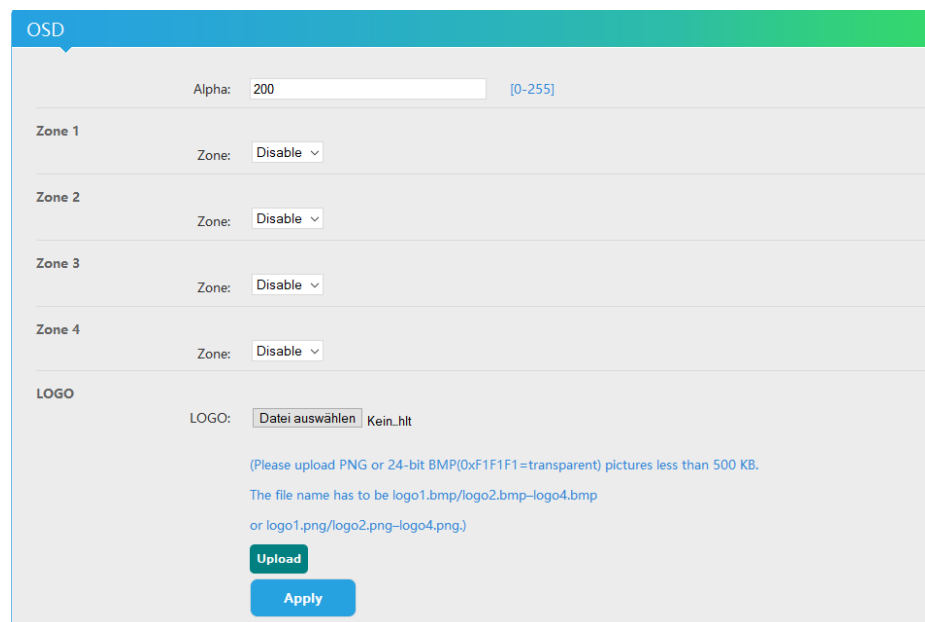
The UH-H265-1 Streaming Encoder allows to insert individual watermarks or logos.

Four different overlays, named Zone, can be made in the substream video signal.

There is a choice between logos, freely selectable text, ticker or time.

Use the OSD menu to arrange setting for type, content, colors and position.

Confirm your individual mainstream OSD settings by clicking the **Apply** button at the bottom of the section once.



Alpha Key Level

As a general setting, valid for all four zones, the alpha key level is adjustable.

Item	Function	Value
Alpha	Set the level of opacity	0~255

6.4.2.1. Zone 1~4

OSD

Alpha: [0-255]

Zone 1

Zone:

Type:

X: [0-1920]

Y: [0-1080]

Text:

Font size: [8-72]

Background color:

Color: [select color](#)

Zone 2

Zone:

Zone 3

Zone:

Zone 4

Zone:

LOGO

LOGO: Kein .hlt

(Please upload PNG or 24-bit BMP(0xF1F1=transparent) pictures less than 500 KB.

The file name has to be logo1.bmp/logo2.bmp-logo4.bmp

or logo1.png/logo2.png-logo4.png.)

The OSD capability for Zone 1 is different to Zone 2-4.

Zone 1 is the most featured one. To overlay time stamps use Zone 1.

Item	Function	Value
Zone	Enable OSD for Zone 1~4	Enable disable
Type	Select the type of OSD	text (txt) graphic time

6.4.2.1.1. Type Text

Zone 1

Zone:

Type:

X: [0-1920]

Y: [0-1080]

Text:

Font size: [8-72]

Background color:

Color: [select color](#)

Item	Function	Value
X	Defines the left position of the text	0 ~ 1920
Y	Defines the up position of the text	0 ~ 1080
Text	Enter your individual text	
Font size	Select the size of text characters	8~72 (default 36)
Background color	Select the background color for text, scroll text and time on the video	transparent black white
Color	Select the font color for text, scroll text and time	Open the color map and select one of 216 colors

6.4.2.1.2. Type Graphic

In each Zone a graphic file can be placed as a logo. The logo data are upload to the device internal memory.

You can find more about how to upload your pictures in chapter 6.3.2.2.

Therefore size and data volume is limited.

Zone 1

Zone: Enable ▾

Type: graphic ▾

X: 10 [0-1920]

Y: 10 [0-1080]

Logo: logo1 ▾

Item	Function	Value
X	Defines the left position of the picture	0 ~ 1920
Y	Defines the up position of the picture	0 ~ 1080
Logo	Select one of your uploaded pictures	

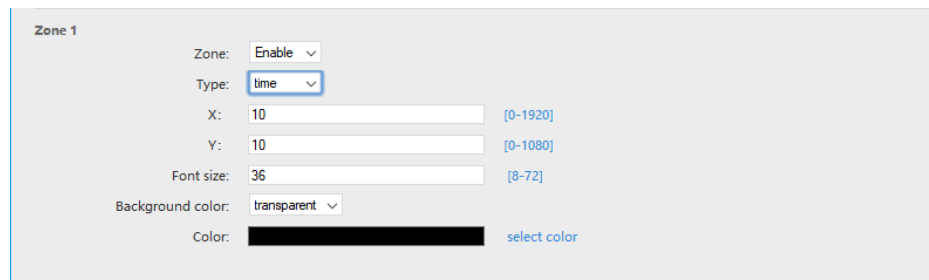
6.4.2.1.3. Type Time

The insert type TIME is only available in zone 1.

If insert type TIME is chosen, the device time will be shown as HH:MM.

Enable NTP function to get the time always synced to UTC.

For more information about NTP, see chapter 6.5.6.



The screenshot shows the 'Zone 1' configuration panel. It includes the following settings:

- Zone:** Enable (dropdown menu)
- Type:** time (dropdown menu, highlighted with a blue border)
- X:** 10 (text input field, range [0-1920])
- Y:** 10 (text input field, range [0-1080])
- Font size:** 36 (text input field, range [8-72])
- Background color:** transparent (dropdown menu)
- Color:** [black color swatch] (with a 'select color' link)

Item	Function	Value
X	Defines the left position of the text	0 ~ 1920
Y	Defines the up position of the text	0 ~ 1080
Font size	Select the size of text characters	8~72 (default 36)
Background color	Select the background color for text, scroll text and time on the video	transparent black white
Color	Select the font color for text, scroll text and time	Open the color map and select one of 216 colors

6.4.2.2. LOGO

In this section you can upload your pictures

LOGO

LOGO: Kein...hlt

(Please upload PNG or 24-bit BMP(0xF1F1F1=transparent) pictures less than 500 KB.
 The file name has to be logo1.bmp/logo2.bmp–logo4.bmp
 or logo1.png/logo2.png–logo4.png.)

Item	Function	Value
LOGO/ Upload picture	Select your individual picture	Open the explorer to search for your logo file and upload



Note: Please upload PNG or 24-bit BMP(0xF1F1F1=transparent) pictures less than 500 KB.

The file name has to be logo1.bmp/logo2.bmp–logo4.bmp
or logo1.png/logo2.png–logo4.png.

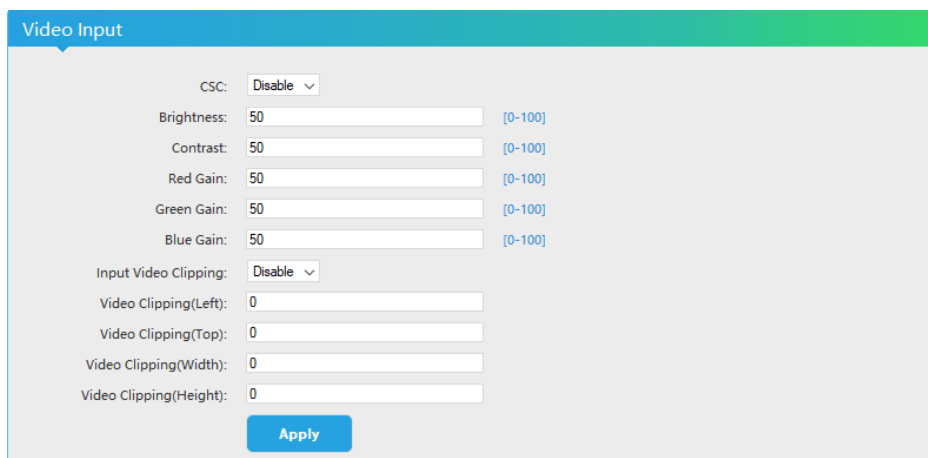
6.4.3 Substream Video Input settings

In this section you can setup the video input settings.

You can enable/ disable CSC, adjust the brightness, contrast, and red gain, green gain and blue gain.

The enabling and disabling of Input Video Clipping as well as setting the Video Clipping position, the Video Clipping width and the Video Clipping height is without function.

Confirm your individual mainstream Video Input settings by clicking the **Apply** button at the bottom of the section once.



Item	Function	Value
CSC	You can enable or disable CSC by selecting Enable/ Disable With CSC enabled, you can configure the Brightness, Contrast, and Red, Green and Blue Gain settings.	Enable Disable
Brightness	Setup the brightness	0 ~ 100
Contrast	Setup the contrast	0 ~ 100
Red Gain	Setup red gain	0 ~ 100
Green Gain	Setup green gain	0 ~ 100
Blue Gain	Setup blue gain	0 ~ 100

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

Input Video Clipping	Without function	
Video Clipping (Left)	Without function	
Video Clipping (Top)	Without function	
Video Clipping (Width)	Without function	
Video Clipping (Height)	Without function	

6.4.4 Substream Audio settings

In this section you can setup the video input settings.

Confirm your individual mainstream Audio Input settings by clicking the **Apply** button at the bottom of the section once.

Audio

Audio Input: Auto ▼

Sampling Rate: 48000 ▼

Encoder: AAC ▼

Audio Channel: L+R ▼

Bitrate: 128000 [48000~320000]

Digital Volume Gain: 0 [-50~50]

Denoise: Enable ▼

Denoise(dB): 15 [1~100]

G711 Over PTE: Enable ▼

G711 Over RTSP: Enable ▼

G711: G711A ▼

Apply

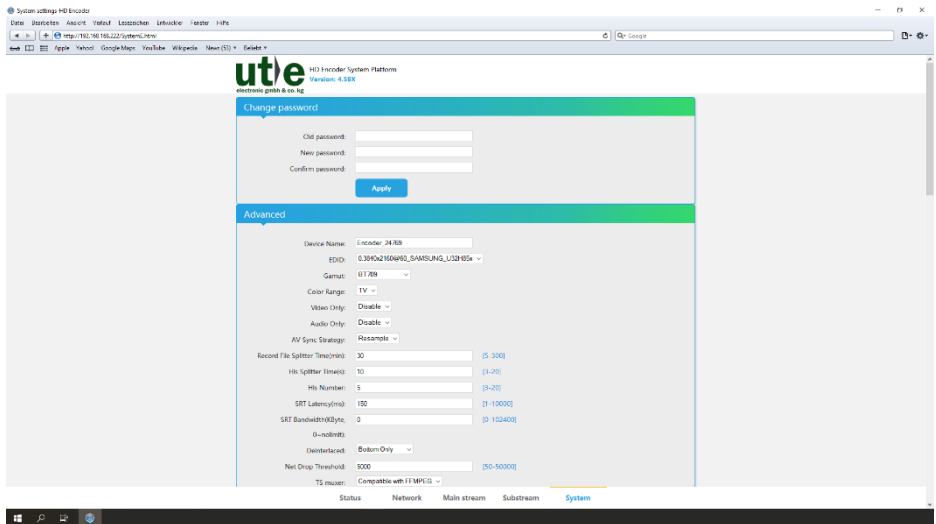
Item	Function	Value
Audio Input	Selector for the audio input	Auto HDMI SDI ANALOG 1 ANALOG 2
Sampling Rate	Selector for the sample rate to digitize in bit/s	44100 (44.1 kbit/s) 48000 (48 kbit/s) Same as input sample rate
Encoder	Selector for the type of encoding	AAC AAC+ AAC++ MP3 MP2 AC3 Opus
Audio Channel	Selector for audio channel	L+R L R
Bitrate	Selector for bit rate	48 k ~ 320 k
Digital Volume Gain	Defines the digital audio gain	-50 ~ 50
Denoise	You can enable or disable denoise by selecting Enable/ Disable	Enable Disable
Denoise (dB)	Defines the denoise in db	1 ~ 100

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

G711 over PTE	Enable or disable G711 audio over PTE	Disable Enable
G711 over RTSP	Enable or disable G711 audio over RTSP	Disable Enable Enable and resample with 8k
G711	Selector for G711 standard	G711U G711A

6.5 System settings

The System menu allows to configure the device to operate using the individual set up.



6.5.1 Change password

In this section the password settings are accessible. Here you can change the default password to an individual password.

Change password

Old password:

New password:

Confirm password:

Apply

Item	Function
Old password	min. character a~z, A~Z, 1~0
New password	min. character a~z, A~Z, 1~0
Confirm password	min. character a~z, A~Z, 1~0

Confirm your individual settings by clicking the **Apply** button once.

6.5.2 Advance Settings

In this section the advanced system settings are accessible

Advanced

Device Name: Encoder 24769

EDID: 0.3840x2160@60 SAMSUNG U52H85K

Gamut: BT709

Color Range: TV

Video Only: Disable

Audio Only: Disable

AV Sync Strategy: Resample

Record File Splitter Time(min): 30 [5-300]

Hls Splitter Time(s): 10 [3-20]

Hls Number: 5 [3-20]

SRT Latency(ms): 150 [1-10000]

SRT Bandwidth(KByte): 0 [0-102400]

0=unlimit:

Deinterlaced: Bottom Only

Net Drop Threshold: 5000 [50-50000]

TS muxer: Compatible with FFmpeg

TS once pack: 7 [3-128]

TS TDT: Disable

ts_transport_stream_id: 101 [1-65535]

ts_pmt_start_pid: 480 [16-7936]

ts_start_pid: 481 [32-3840]

ts_tables_version: 5 [0-31]

ts_service_id: 1 [1-65535]

ts_service_name: Live

ts_service_provider: Encoder

ts_system_bt: Disable

TS Empty Packet: No Insert

TS/RTSP password enable: Disable

HTTP No Password: Disable

Telnet Service: Disable

RTSP Default Stream: Main Stream

Vmix Compatible: Disable

TS OVER RTSP: ES

Multicast type: UDP

Enable SAP: Enable

MTU Size: 1500 [500-1500]

UDP TTL: 64 [1-254]

UDP SOCKET_BUF_SIZE: 20971520 [0-20971520]

SLICE Number: 1 [1-255]

MIN_QP: 5 [1-35]

MAX_QP: 42 [MIN_QP-50]

SAR(H.264 Only): Disable

Apply

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

Item	Function	Value
Device Name	Enter your individual name of the device	
EDID	Select your preferred EDID	
Gamut		
Color Range		
Video Only	You can enable or disable video only encoding by selecting Enable/ Disable	Disable Enable
Audio Only	You can enable or disable audio only encoding by selecting Enable/ Disable	Disable Enable
AV Sync Strateg		Auto Resample
Record File Flitter Time (min)		5 ~ 300
HLS Splitter Time(s)	Select the delay for HLS in seconds	3 ~ 20
HLS Number	Select the HLS number	3 ~ 20
SRT Latency (ms)		1 ~ 10000
SRT Bandwidth (KByte, 0=nolimit=		0 ~ 102400
Deinterlaced	Select type of deinterlacing	Both Bottom Only Field to Frame
Net Drop Threshold	Select the threshold for net drops	50 ~ 50000
TS muxer	Select type of TS mux compatibility	Compatible with VLC Compatible with FFMPEC

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

TS once pack	Select the number of TS packs	3 ~ 128
TS TDT		Disable Enable
ts_transport_stream_id	Select the transport stream ID	1 ~ 65535
ts_pmt_start_pid	Select the TS packet identifier	16 ~ 7936
ts_start_pid	Select the TS packet identifier	32 ~ 3840
ts_tables_version	Select the TS table	0 ~ 31
ts_service_name	Enter your TS service name	Live (default)
ts_service_provider	Enter your TS service provider	Encoder (default)
ts_system_b		Disable Enable
TS Empty Packet	Select the type of TS empty packet insertion	No Insert Insert(1.2x) ... Insert(3.5x)
TS/ RTSP password enable	Enable TS/ RTSP password	Disable Enable
HTTP No Password		Disable Enable
Telnet Service	You can enable or disable telnet service by selecting Enable/ Disable	Disable Enable
RTSP Default Stream	Select RTSP Default Stream	Disable Main Stream Substream
Vmix Compatible	Enable the stream as Vmix compatible	Disable Enable
TS OVER RTSP	Enable the TS over RTSP	ES TS
Multicast type	Select type of MultiCast	RTP UDP

UH-H265-1: 4K60 H.265 HDMI & SDI Streaming Encoder

MTU Size		500 ~ 1500
UDP TTL	Select the UDP TTL	1 ~ 254
UDP SOCKET_ BUF_SIZE	Select the UDP buffer size	0 ~ 20971520
SLICE Number	Select the slice number	1 ~ 255
MIN_QP	Select the lower level for QP	1 ~ 35
MAX_QP	Select the high level for QP	MIN_QP ~ 50
SAR (H.264 Only)	Select the aspect ratio	

Confirm your individual advance settings by clicking the **Apply** button once.

6.5.3 Serial to TCP settings

In this section you can enable and disable Serial to TCP mode.

Serial to TCP

Mode:

Disable

Apply

Item	Function	Value
Mode		Server Client Disable

Confirm your Serial to TCP settings by clicking the **Apply** button once.

6.5.4 FRP Client settings

In this section you can enable and disable FRP client mode.

FRP Client

Enable:

Disable

Apply

Item	Function	Value
Mode		Disable Enable

Confirm your FRP Client settings by clicking the **Apply** button once.

6.5.5 Schedule restart settings

In this section the restart settings are accessible, you can enable and set a scheduled restart.

Using this function, the encoder will restart at the set time automatically.

Schedule restart

Restart enable:

Disable ▾

Restart time:

03:00

Apply

Item	Function	Value
Restart enable	Enable or disable a schedule restart	Enable Disable
Restart time	Set the schedule restart time	HH:MM

Confirm your individual schedule restart settings by clicking the **Apply** button once.

6.5.6 NTP settings

In this section the NTP settings are accessible.

Using this function, the encoder is synchronized to NTP time from the selected server.

NTP

NTP Enable: Disable ▾

NTP Server:

Time Zone: UTC+8 ▾

Apply

Item	Function	Value
NTP Enable	Enable NTP sync function	Disable Enable
NTP Server	Enter address of your preferred NTP server	time.windows.com (default)
Time Zone	Select your local time zone	UTC-12 ... UTC-1 UTC UTC+1 ... UTC+12

Confirm your individual schedule restart settings by clicking the **Apply** button once.

 **Note:** Central European Time (CET) Time Zone is UTC+1, during summer time, the CET Time Zone is UTC+2

6.5.7 Upload firmware and configuration

In this section the firmware upload function is accessible.

In case a newer firmware package is available, here the user can update the device. Choose the new firmware file on the connected PC and start the upload.

Upload firmware and configuration

Select File:
Keine Dat...sgewählt

(File name has to be 'up.rar' or 'box.ini'. Please don't upload by different people at the same time and don't power off during upload.)

The update file name has to be "up.rar", and it have to be an origin "rar" compressed file. Never try to upload any different file.

The configuration file name has to be "box.ini".

When upload check that no other people upload at the same time. Don't power off or refresh the page during upload.

When the procedure is finished the device waits for a restart.

Item	Function	Value
Select File	Search the file from PC for upload file	up.rar or box.ini

Confirm the individual settings by clicking the **Upload** button once.

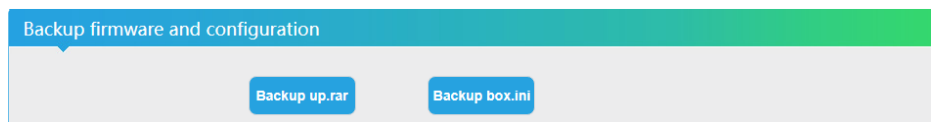


Note: Please don't upload by different people at the same time, don't power off during upload.

6.5.8 Backup firmware and configuration

In this section the firmware backup function and the backup configuration function are accessible.

Here the user can store and save the current firmware and configuration as backup to an external data carrier.



Item	Function	Value
Firmware	Backup the systems firmware	up.rar
Configuration	Backup the systems configuration	box.ini

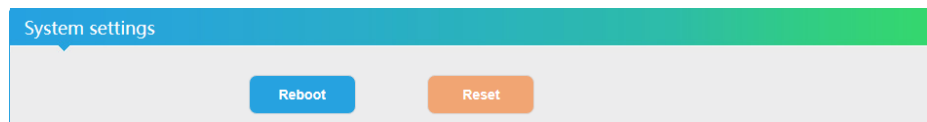
Use the **Backup up.rar** button once to open the backup procedure to save the systems firmware to an external data carrier at the connected PC.

Use the **Backup box.ini** button once to open the backup procedure to save the systems values and individual configuration to an external data carrier at the connected PC.

6.5.9 System settings (Reboot and Reset)

In this section the reboot and reset functions are accessible.

Here the user can restart the device to confirm any configuration or reset the device back to factory default values and functions.



Item	Function	Value
Reboot	Reboot the system to confirm individual settings	User settings
Reset	Reset the system to factory default	Default settings

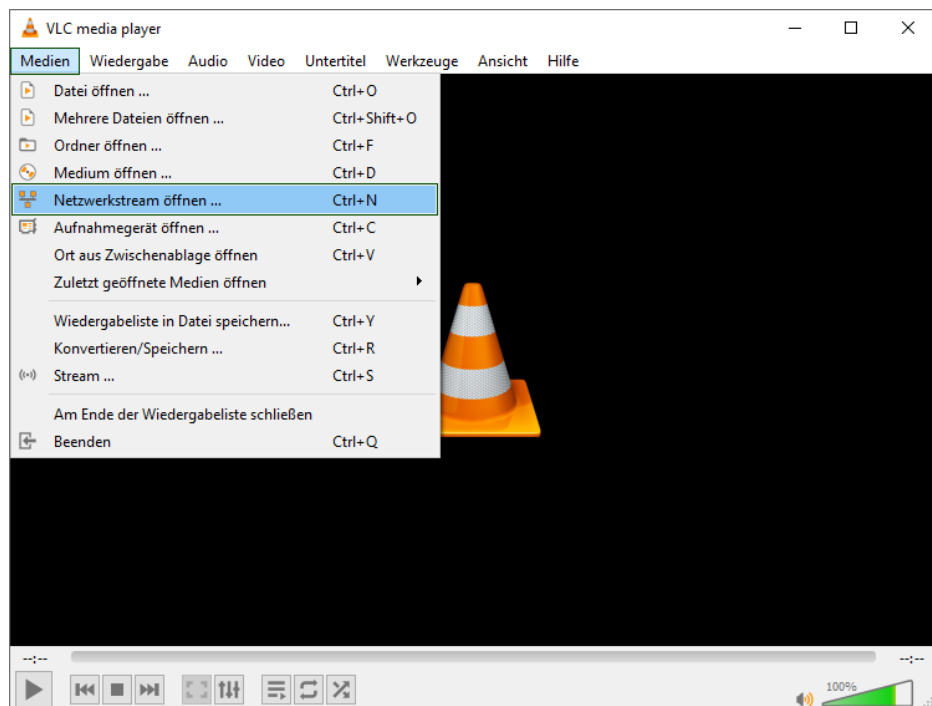
To confirm your individual settings click **Reboot**. The system will reboot after confirming a security question and start again using the latest settings.

To reload the factory settings click **Reset**. The system will reboot after confirming a security question and start again using the default settings.

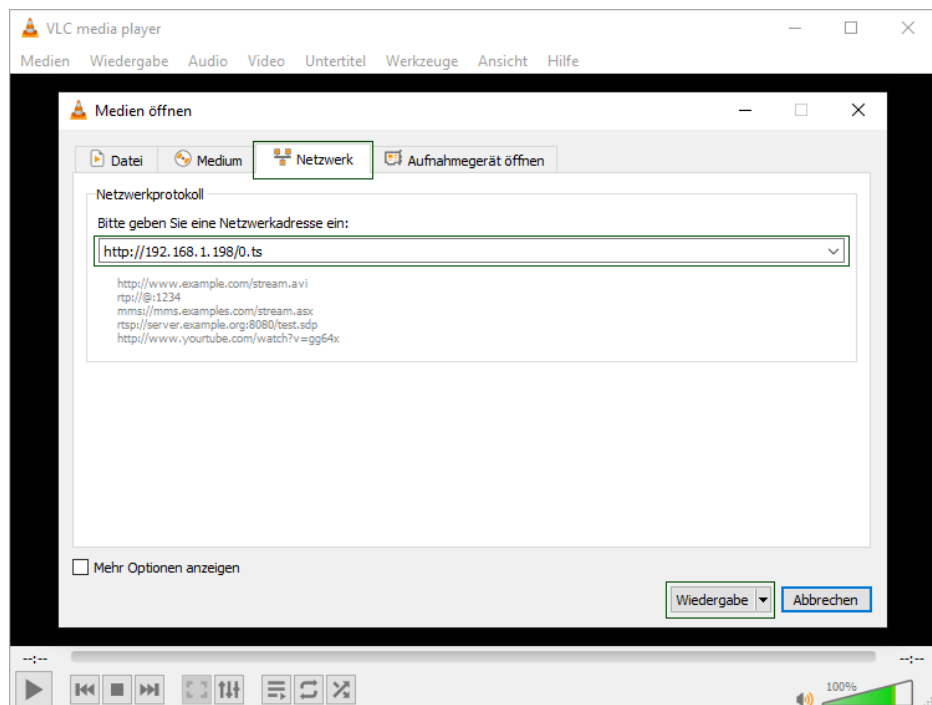
7. VLC Operation

The UH-H265-1 is compatible to be used with VLC open media player software. After all settings are ok, you can use VLC to test the stream.

Step 1. Start the VLC application at your PC and open the Network Stream.



Step 2. Enter the IP address of the encoder to play the stream video.



Step 3. Click PLAY to start the video.

8. Recording the Main Stream

The UH-H265-1 supports one-click recording to an NTFS/ exFAT/ FAT32 formatted USB 3.0 stick or TF card.

The stream is saved in mp4 format - without HDCP

To start recording, press the REC button on the front panel.

Pressing the REC button again stops recording.

The REC buttons lights up during recording.

The stream is saved in mp4 format - without HDCP

9. Specifications

Interfaces	
Video Input	(1) HDMI input, (1) SDI input max. support 4096x2160@60Hz / 3840x2160@60Hz / 2560x1440@144Hz, etc.
Audio Input	(2) External Analog audio input & HDMI & SDI embed audio
Ethernet	(1) RJ45, 1000Mbps
Video General	
HDMI Input Resolution	Up to 4096x2160@60Hz
SDI Input Resolution	Up to 4096x2160@60Hz
Video Encoding	
Video Format	H.264/AVC high/ main/ baseline Profile H.265/HEVC main profile MJPEG/JPEG baseline
Video Resolution	Up to 4096x2160@60Hz
Video Bitrate	0.1 ~ 100Mbps
Video FPS	5 ~ 144 Hz/ FPS (Frames per second)
Bitrate Control	VBR/ CBR
Streaming Protocols	HTTP / HTTPS / HLS / FLV / RTSP / RTMP / RTMPS / UDP/RTP (Unicast/Multicast) TS Stream Protocols and ONVIF.
Audio Encoding	
Audio Format	AAC/ AAC+/ AAC++/ MP3/ MP2/ AC3 G711
Sample Rates	44.1kHz/ 48kHz
Bitrate	12 ~ 640kbps
System/ Control	
Control Method	Web based management
Language	Multi lingual control interface
Firmware	Ethernet software upgrade
General	
Transmission Distance	up to 100m to the next active component (e.g. switch)
Power Supply	External Power Supply (included) Input: AC 100~240V, 50/60Hz, Output: 12V DC 2A

Environmental	
Operation Temperature	-10°C ~ +70°C
Storage Temperature	-20°C ~ +80°C
Humidity	5% ~ 90%, relative humidity, non-condensing
Physical	
Dimension (L*W*H)	150mm x 110mm x 45mm
Net Weight	500g (approx.)

10. Panel Drawing



11. Frequently Asked Questions

Q: How to access to the encoder web-interface by default IP?

A: The computer's IP network segment need be same as the encoder's default IP. ex: if the encoder's default IP is 192.168.1.168, then you need change your computer's ip to 192.168.1.* (mark "*" numbers range will be 0~254, except 168).

Q: H.265 will save bandwidth than H.264?

A: YES, H.265 will save nearly 33% bandwidth than H.264.

Q: What is the maximum resolution after encoded?

A: The encoder UH-H265-1 support a maximum resolution of 2160p, but it depends on your signal source, if your signal source is 1080p or 720p, then max encoded resolution is 1080p 720p, respectively.

Q: How to push stream to media server to do live broadcast by YouTube, Facebook, Ustream, Twitter or like that?

A: Because most server can not support H.265 for the moment, so if you want to push stream to server, you need choose encoding level to H.264, and then set RTMP protocol. Put your server's IP, server's port, app name and stream name to the web-interface after enable RTMP protocol. Please kindly note that you need set the DNS same as your router's by network setting.

Q: Does the encoder support push stream to IPTV s like WOWZA or Xstream Codes Media Server?

A: Yes, UH-H265-1 supports IPTV like Wowza, Xstream Codes Media Server, etc

12. After-sales/ Customer Service

If there appear some problems when running the HDMI & SDI Streaming encoder, please check and deal with the problems referring to this user manual.

Any transport costs are borne by the users during the warranty.

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

1) Product Limited Warranty: We warrant that its products will be free from defects in materials and workmanship for two years, which starts from the first day you buy this product (The purchase invoice shall prevail).

Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

2) Scope

These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized distributor only.

3) What the warranty does not cover (Warranty Exclusion)

- Warranty expiration.
- Factory applied serial number has been altered or removed from the product.
- Damage, deterioration or malfunction caused by:
 - Normal wear and tear.
 - Use of supplies or parts not meeting our specifications.
 - No certificate or invoice as the proof of warranty.
 - The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
 - Damage caused by force majeure.
 - Servicing not authorized by distributor.
 - Any other causes which does not relate to a product defect.
- Shipping fees, installation or labor charges for installation or setup of the product.

4) Documentation

Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defect has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of dealer.

5) Technical Support: Email to our after-sales department or make a call, please inform us the following information about your cases.

- Product version and name.
- Detailed failure situations.
- The formation of the cases.

Remarks: For any questions or problems, please try to get help from your local dealer or our customer support (info@ute.de).



U.T.E. electronic GmbH & Co. KG

Tel: +49-2302-28283-0

Fax: +49-2302-28283-10

Email: info@ute.de

Website: www.ute.de