

VIDEO & AUDIO



- AVC& HEVC Streaming; Standard H.264 and H.265 supported for different scenarios
- Mixing 2* HDMI and 4* IP streams and creating ultimate possibilities in a Box (H2)
- Sufficient IP protocols; RTSP Over TCP & UDP/ RTMP(s)/ HTTP/ UDP Unicast/ Multicast/ ONVIF/ SRT
- 4K UHD. High quality 4K video delivers immersive watching experience



Streaming

Transcoding

Encoding

Production

Mixing

H2 Video Encoder Decoder



Specifications



Encoding

HEVC/ H.265, H.264 MPEG-4

Profile

H.265 main profile, H.264 high/ main/ baseline profile



Input

HDMI- H2- Up to 4K@30;

3.5MM line-in Jack for audio

IP- H2- Up to 4 IP in



Output

HDMI- Loop through

Decoding- RTSP/ RTMP/ UDP/ HTTP/ SDK/ HLS/ P-P

IP-

HTTP/ HLS/ RTSP over UDP TCP/ RTMP/
UDP Unicast Multicast/ ONVIF/ RTP/ P-P/ SRT

Encoded Resolution:

- 1- Up to **4K@30**
- 2- Manually set up
- 3- Under Transcoding and Mixing mode support up to 1080P@60



Transcoding

4* IP to IP (HTTP/ RTSP/ RTMP/ HLS/ UDP)

H.264/ H.265 to H.265/ H.264



Bitrates

Video: 16KB/S to 12000KB/S, CBR/ VBR

Audio: 48K, 64K, 96K, 128K, 160K, 192K, 256K., 320K

Audio sample rate: 24000- 256000

Audio format: MP3/ G.711/ AAC HE/ LC



Accessibilities

Video package: VLC/ FFMPEG

Stream information rename (PMT/ transport ID/
Stream ID)

Image adaptation (Noise/ sharpe/ filter/ contrast/ Bri/Hue)

RS485 (A/B), GND, 12V (serial)

PI-P

P-P

SRT



H.265

H.264



Accessories

1* H2/HSC-S1, 1/ 2* HDMI cable, 1* warranty card.

1* power adapter, 1* audio cable



Management

HTTP WEB GUI (80/ 90) ;

Haiwei video management platform;

LiveX for Phone; Telnet, API, SDK

Customized tools.



Others

Dimension: **H2- 21.5* 14* 2.5**

Working temperature: -20°C to 60 °C

Working humidity: <90%

Net weight: **H2- 0.3kg**

Power: 12V 2A

Consumption: 5W

HSC-S1/ H2 Video Encoders

The H2 encoder is the embedded hardware for point to point interactive transmission solution, emergency communication, video mixing, streaming and recording solutions for education, defense, military, marine, city hall etc.

The encoders enabled receiving 8 streams (RTSP, HTTP, HLS, RTMP. RTP, UDP, RTP) and mixing 4ch along with 2 channels 4K HDMI sources, then alternatively output via HDMI/ 3.5mm composite Jack, meanwhile, restreaming via a series of IP protocol like RTSP over UDP & TCP/ RTMP/ HTTP/ UDP/Unicast/ Multicast/ ONVIF/ P-P (Haiwei proprietary protocol).

By virtue of HaiweiTech powered proprietary protocol, the H2 supports directly receive the stream from another HaiweiTech P-P devices in another network, even another country on the planet without any third-party server.

WEB GUI

Operation Mode	Stream : Main-1
Encoder	Standard : H.264
Encoder	H.264 Profile : Baseline
Decoder	Channel Name : chan
Transcoder	Aspect Ratio : Auto
Video Mixer	Key Interval : 30
Display	FPS : 30
Extensions	Bitrate (K) : 3200
System	Smart Encoding : Disable
	Bitrate Control : CBR
	Resolution : Standard
	Encoded Resolution : 1920x1080
	TS_PID : Hide
	HTTP : Enable
	HTTP : /stream01
	RTSP : Enable
	RTSP : /stream01
	RTSP Over : UDP
	A/V : A+V
	RTSP G.711 : Off
	RTSP Encryption : Off
	Multicast : Disable
	Unicast : Disable
	RTP : Disable
	RTMP : Disable
	SRT : Disable
	TXT OSD : Hide

Use cases

Like the most of encoder for two way communication, HSC-S1/ H2 are designed for simplifying the complex streaming system, here are some use cases for reference



E-learning



Interactive communication



Multi camera production



Video conference



Remote Production



Lecture capturing

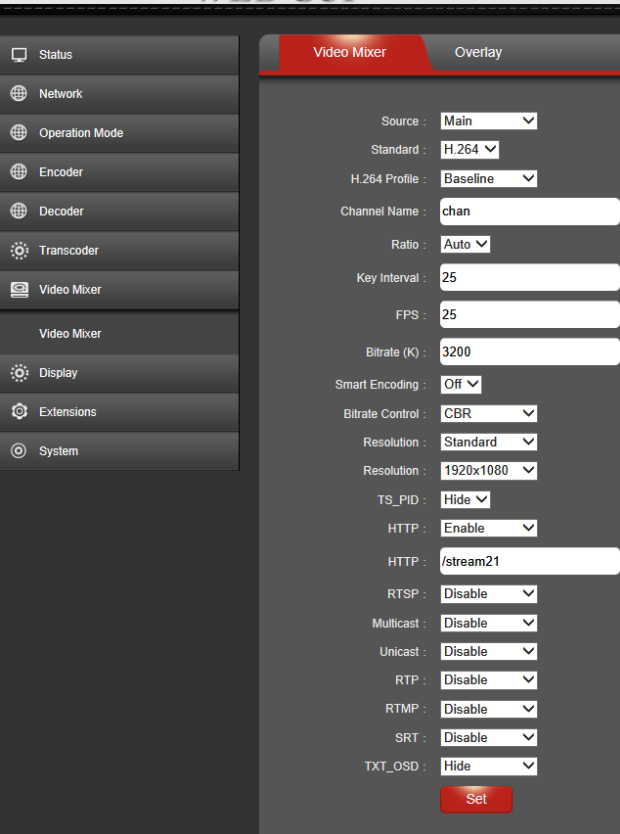
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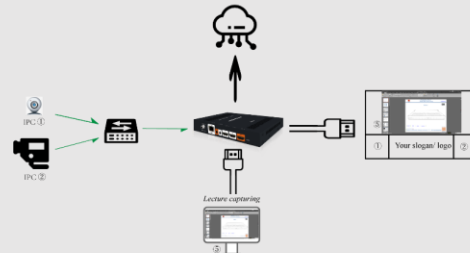
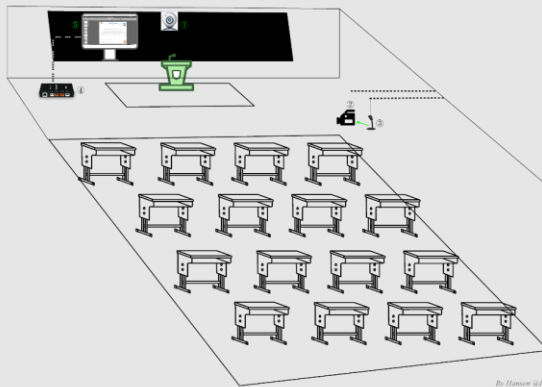


Use cases

Video mixing and streaming

We know the special requirements and the challenge of the education industry, the C2/ H2 are designed for simplifying the complex production system for **Education, Broadcasting, Video communication** and **Remote production**

Live Streaming And Recording Solution For Education

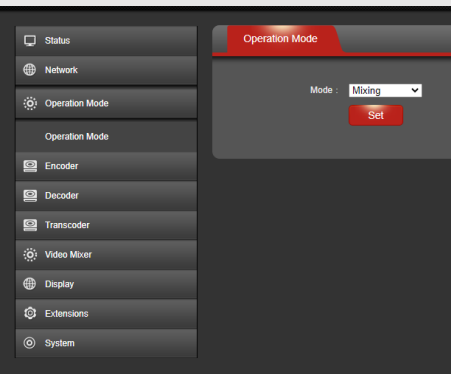


- ① IPC1- Capturing the Students
- ② IPC2- Capturing the teacher/ blackboard
- ③ Microphone for teacher (Bluetooth or omni-directional microphone)
- ④ The encoder (H2- Up to 8 IP+ 2 HDMI in, HSC-S1- Up to 1* HDMI+ 2* IP in)
- ⑤ Video input from HDMI device



Tips for Video mixing

We had used another logic for the C2/ H2, specific functions may be disabled under different operation mode, here are some examples



F 1.1



F 1.2



F 1.3

F 1.4



F1.1- Operation mode

F1.2- Set up IP feeds

F1.3- Set up layer and positions

F1.4- Live preview

F1.5- How to calculate the position

