

HDMI Video H.264 H.265 IPTV Encoder with loopout User Manual







Features

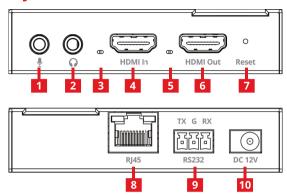
- Output supports RTSP / HLS / RTMP (S) / RTP / UDP
- Support a variety of video decoding: H.265 main stream, H.264 basic, mainstream and advanced quality, MJPEG/JPEG basic quality
- Audio coding format supports AAC, AAC+, AAC++
- Maximum support 2 channel video stream decoding support 1 channel only audio stream decoding
- Support HDCP1.4
- HDMI IN resolution supports the maximum 1080P@60Hz 4:4:4 8 bit with one loop out
- Support CBR/VBR two coding modes, maximum code rate up to 40Mbps (Main code stream is 40M, Sub-code stream is 8M)
- · Support analog audio extraction and embedded

Package Contents

- IPTV Encoder
- Power adapter DC 12V/1A
- · Mounting kits
- Phoenix plugs for RS232 cable termination
- · User Manual



Layout



- 1. 3.5mm Audio Embedded port
- 2. 3.5mm Audio Extraction port
- 3. HDMI Input Indicator
- 4. **HDMI Input:** connect to video source
- 5. HDMI Output Indicator
- **6. HDMI Output:** connect to display
- **7. Reset BUTTON:** (Long press 3s to reset default)
- **8. RJ-45:** Connect to the Ethernet
- **9. RS232 port:** for RS-232 signal pass-through
- **10. POWER JACK:** DC 12V/1A



Device Setting Description

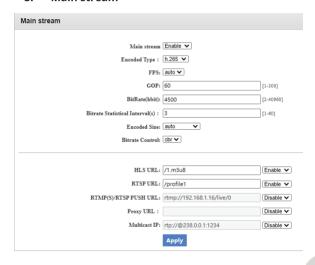
1. Device default IP

192.168.1.168

2. Browser login password

default user name & password: admin/admin

3. Main stream





- 1. Channel address can support RTSP / HLS / RTMP (S) / UDP / RTP protocol
- 2. The maximum support 1920*1080@60fps resolution decoding. Main stream default auto decoding
- 3. Bit rate (kbps) maximum support 2-40960, FPS maximum support 1-90, key frame interval maximum support 1-300, bit rate statistical interval (seconds)1-60, bitstream control: support CBR and VBR
- 4. Enable RTSP by default
- %No need to restart the device after successful setting
- ※If all four frames are decoded at the same time, the source supports only 1080P encoded frame rate/key frame interval 25FPS video stream
- *RTMP needs to set the video encoding to H.264,and Youtube needs to set the audio format to AAC



4. Sub stream

- 1. The sub stream setting is the same as the main stream
- 2. The maximum bit rate of sub stream (KBPS) is 2-8192, and the maximum FPS is 1-30
- **3.** After setting the sub stream, you can choose to set the Stream level, including baseline Profile, Main Profile and High Profile

5. Video setting

Video Input	
Video Rotate :	0 🗸
Mirror	Disable 🕶
Flip	Disable 🕶
Video Clipping:	Disable V
Video Clipping(Left):	0 [0~1280 Even]
Video Clipping(Top):	[0~720 Even]
Video Clipping(Width):	[640~1920 Even]
Video Clipping(Height):	[360~1080 Even]
	Apply

- Video input setting included: Rotation, Mirroring, Flipping, etc.
- 2. Rotation include 90°, 180°, 270°
- 3. Video source signal clipping can be used to clip images within the resolution range. Note that it will not take effect until it is started, and it is disabled by default;



Note: The parameters for starting point-cut and cutting width in the upper left corner cannot exceed 1920. The parameters for starting point-cut and Height in the upper left corner cannot exceed 1080, and parameters can only be set to an even number.

6. Audio setting

Audio		
Audio Input		
	HDMI Audio Input :	Enable 🗸
	HDMI Audio Input Volume:	256 [0~256]
	Analog Audio Input:	Enable 🗸
	Analog Audio Input Volume :	256 [0~256]
Audio Coding		
,		[44010]
	Encoder:	AACLC V
	Bitrate:	128
	RTSP Audio Stream:	Enable V
	RTSP Audio Stream Url:	/audio1
Audio Output		
	HDMI Audio Loop Out :	Enable V
	HDMI Audio Loop Out Volume :	[-121~6]
	Analog Audio Loop Out :	Enable 🗸
	Analog Audio Loop Out Volume :	0 [-121~6]
		Apply



Audio input

Audio input is using for HDMI audio input and Analog audio embedded settings, When the HDMI audio input and Analog audio input enabled at the same time, then the stream, such as the RTSP audio will be played HDMI audio and the analog audio embedded simultaneously, Volume range 0 \sim 256;

**Audio input is available for all streams

Audio Coding

Audio support AAC/AAC+ +/AC3/MP2/MP3, sampling rate 44.1/48khz, bit rate: 128 default Support Enable RTSP Audio stream transfer or modify audio stream transfer address

** Support to set sampling rate when HDMI audio input is enabled

Audio Output

Audio output support to set HDMI loop audio output and analog audio output



7. OSD Setting

Zone 1	
Zone :	Enable 🗸
	Time And Date ▼
X :	[0-1919]
Y:	[0-1079]
Style :	Bold 🗹 Italics 🗆 Underline 🗀 Strikethrough 🗀
Font Size :	[1-4096]
Background Color:	Color Select
Foreground Color :	Color Select
Foreground Alpha:	0 [0-255]
	Apply

Support setting 4 OSDs, supporting setting Format text, date, style, font size, color, etc. After setting, can be viewed in the main code stream and sub-code stream

Note: Make sure the Foreground Alpha more than "1" when doing the OSD Setting. Setting the Foreground Alpha to "0" will make it impossible to see the font.



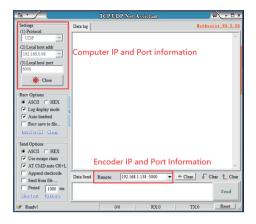
8. Serial port setting description

RS232 Pass through support Encoder to Computer; Or Encoder to Encoder

Encoder to Computer:

- **1.** Using USB to RS232 cable access to the serial port of the Encoder
- **2.** Open the serial port tool, connect to the correct port.
- **3.** Enter the Encoder web page to set the port number, the web page can set the source port number and IP information; Target port number, target IP.
- **4.** Checking the IP address of the computer, need to use a Network tool to type computer side information and device side information according to the following figure, and select the corresponding baud rate to perform RS232 Pass through between the computer and Encoder.





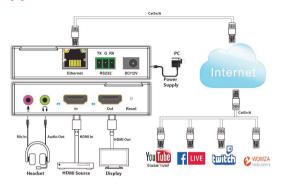
Encoder to Encoder:

Distinguishing between source and target information, type in correct Source IP, Port to the Source Encoder. Type in correct Target IP and Port to the target Encoder





Application



Audio Format Supported

• Input: LPCM2.0 Sample rate 44.1KHz and 48KHz

• Audio Encode: AACLC, AAC+, AAC++

· Audio bit rate:

AACLC: 48~320

AAC+: 32~128

AAC++: 16~64



Input Supported Resolution List

Fresh Rate	Resolution
50hz (8bit)	576i
	576p
	720p
	1080p
	1080i
60Hz /59.94Hz (8bit)	480i
	480p
	720p
	1080p
30/29.97Hz (8bit)	720p
	1080p
24Hz (8bit)	720p
	1080p
25Hz (8bit)	720p
	1080p



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Dear Valued Customer WE REALLY APPRECIATE YOUR PURCHASE

~thank you~

Support

For more info or tech support

http://www.siig.com/support

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