H.265/264 1080P HDMI Encoder

Operating Instruction



Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

SURGE PROTECTION DEVICE RECOMMENDED

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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1. Package Contents

- 1). 1x Encoder

- 1x Encoder
 1x 12V/1A DC power supply
 2x Fixed Hangers
 1x Phoenix plugs for RS232 cable termination
 1x CD for control software & user manual

2. Specifications

Operating Temperature	0 to +40 °C (+23 to 149°F)	
Operating Humidity	5 to 95%RH(No Condensation)	
Max resolution	1080P60HZ-YUV444-8bit	
HDCP Compliant	HDCP1.4	
	Input: LPCM2.0 Sample rate 44.1KHz and 48KHz	
	Audio Encode:AACLC,AAC+,AAC++	
	Audio bit rate:	
Audio Format Supported	AACLC: 48~320	
	AAC+: 32~128	
	AAC++: 16~64	
RS-232 serial port	3PIN terminal block connectors	
Ethernet port (IP control)	RJ45, female	
Default IP	192.168.1.168	
Dimensions(WxHxD)	124*90*21mm	
Net Weight	300g	
Power consumption	DC12V1A 4W(Max)	

3. Input Resolution List

Fresh Rate	I/P	Resolution	Support
	I	576i	\checkmark
	Р	576P	\checkmark
50Hz (8BIT)	Р	720P	\checkmark
	Р	1080P	\checkmark
	I	1080i	\checkmark
	I	480i	\checkmark
60Hz /59.94Hz (8BIT)	Р	480P	\checkmark
	Р	720P	\checkmark
	Р	1080P	\checkmark
30/29.97Hz	Р	720P	\checkmark

(8BIT)	Р	1080P	\checkmark
24Hz	Р	720P	\checkmark
(8BIT)	Р	1080P	\checkmark
25Hz	Р	720P	\checkmark
(8BIT)	Р	1080P	\checkmark

3.1. VESA Resolution List

Resolution	Support
800×600	\checkmark
1024×768	√
1280×768	\checkmark
1280×1024	\checkmark
1600×1200	\checkmark
1680×1050	\checkmark
1920×1080	\checkmark
1280×720	\checkmark
1360×768	\checkmark

Encoder Mode:

1. Features

- The output supports RTSP / HLS / RTMP (S) / RTP / UDP protocol
- Support a variety of video decoding: H.265 mainstream, 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 1080P60Hz 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 analog audio embedded
- DC 12V 1A, the maximum power consumption can't over 4W

2. Wiring Diagram



3. Connecting



- 1 Audio Embedded port
- 2 Analog Audio Extraction port
- ③ HDMI Input Indicator
- ④ HDMI Input port
- ⁽⁵⁾ HDMI Output Indicator
- 6 HDMI Output port
- \bigcirc Reset button (Long press 3s to reset the unit)
- (8) DC12/1A Power input port
- ③ RS232 Port
- 10 Ethernet port

4. Device Setting Description

4.1. Change IP address from PC

Before configuring the device through the website, it is necessary to configure the IP address from the computer configured with the device (mainly to ensure that the computer and the device were set in the same network segment).

1). Open the network control center and set the computer's IP address

2). Choose to use Static IP, with the IP address set to 196.168.1.x (x ranges from 0 to

254, but cannot be consistent with the device's IP address: 192.168.1.168),

3). Subnet mask set to 255.255.255.0

You can get IP settings assigne this capability. Otherwise, you for the appropriate IP settings	ed automatically if your need to ask your netw	networks ork admini	upports strator
💮 Obtain an IP address auto	omatically		
Use the following IF addre	ess:		
IP address:	192.168.	1 . 2	
Subnet mask:	255 . 255 .	255.0	
Default gateway:	1	100	1
Obtain DNS server addres	s automatically		
(a) Use the following DNS ser	ver acdresses:		
Preferred DNS server:			1
Alternate DNS server:	[- 19-	1
Validate settings upon ex	dt	Adva	nced

4.2. Log in by browser

Default IP address for log-in:192.168.1.168

Type in user name and password (default user name:admin; default password: admin)

Username		
Password		
	Login	

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		Instantia (Envila) w
H.265/H.264	Status	andonia (militar
Status	Status Device H1255-ENCCODE (Moulty device name) Device H1: 52248855	
Encoder	PM Version: 1.1.1 Running Time Odd-att Exektion: Time Mon Nov-23 055024 2020 (Synx: Time To Denixa) CT Linears 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
System	CPU Junction forgunations 30,819C OPU Junction forgunations 30,819C Memory Unages 64,3102/2003.03M HDML Statutus on Signal	
	Input Video Colected Video Frames Lott Video Frames Audo Samplemate	
	Net Packet Sent: 3570 Net Packet Dropped: 55206	
	Network:	
	DHCF: on IP: 192.168.118 IP: 192.168.118 Netmask: 252.552.55.0 Gutanug: 192.168.11 MAC: 455.642.64.03.50.01	
	Main Stream	
	Enaded Type: h.265 Encoded Size auto Byte Bathylaid: 9000	
	H.S. URL: Disable RTSP URL: http://192.168.1.138/profile1 RTMPSP, NGV HLIK: Disable Multicast URL: Disable	
	Sub Stream	

4.3. Status

Divided into five modes: "Status", "Network", "Main stream", "Sub stream" and "Audio stream"

4.4. Encoder

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				· · · · · · · · ·
H.265/H.264 Encoder	Main stream			Longuage (English V)
	Main stream	Frankle se		
24845	Encoded Type:	h 265 ¥		
Encoder	FPS:	auto 🗸		
Gate street	GOP:	60	[1-360]	
Sub-states	BitRate(kbit):	9000	[1-40960]	
Wava	Bitrate Statistical Interval(s):	3	[1-62]	
Auto	Encoded Size:	auto 💌		
090	Bitrate Control:	ctur 🛩		
System				
- S-	HLS URL:	/Lm3už	Disable 🛩	
	RTSP URL:	/profile1	Enable ¥	
	RTMP(S)/RTSP PUSH URL:	rtmp://192.168.1.16/live/0	Disable ¥	
	Proxy URL:		Disable ¥	
	Multicast IP:	rtp://@238.0.0.1:1234	Disable ¥	
		Apply		

4.5. 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

%HLS format video streams only support H.264 decoding

% RTMP needs to set the video encoding to H.264, and Youtube needs to set the audio format to AAC

4.6. 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

4.7. Video Settings

1. 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.

4.8. Audio setting

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H.265/H.264		Surgeoup (English V)
Encoder	Alloio	
	Audio Input	
5181.6	HDMI Audio Input: Enaite 🛩	
Encoder	HDMI Audio Input Volume: 256 (0~256)	
Mate street	Analog Audio Input: Disable V	
Salo onorm Varia	Analog Audio Input Volume: 0 0-256)	
Audio	Audio Coding	
080	Sampling Rate: 44101 v	
Seatern	Encoder: AACLC 9	
	Bitrate: 128	
	RTSP Audio Stream: Enable V	
	RTSP Audio Stream Url: //audio1	
	Audio Output	
	HDMI Audio Loop Out: Enable 🗸	
	HDMI Audio Loop Out Volume: 0 [-121~6]	
	Analog Audio Loop Out: Enable V	
	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 $0 \sim 256$; X Audio input is available for all streams Audio Coding

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

4.9. OSD Setting

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.

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			Language Frederic v
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Encoder			
1 2210	Zone:	Osable e	
2222	Туре:	Tat 👻	
Encoder	x.	0 01919	
OSD	Ŷ.	0 (0-1079)	
dana 1	Text:]]>127]	
i dene il	Style.	Bold L Italica L Underine L Strikethrough L	
100	Port Size:	p[1]=4040[
Canal a	and agriculture contra-	Cotor Select	
Dystem	Background Alpha:	0 (0-255)	
	Foreground Color:	Color Select	
	Foreground Alpha:	0 (0-255)	
		Apply	

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.

4.10. System Setting

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H.265/H.264	Network	Language (Eighth v)
encoder	LAN	
anna -	DHCP: (Enable V)	
Encodir	IP: (192.368.1.1	35
000	Netmask: 255.255.25	0
	Gateway: 192.100.1.1	
System	MAC: 48584EAC	3801 J
Parameter	DNS	
200	DN51: 192.1683.1	
Oppose and Barlog	DNS2: 00.00	
Reset	Dark Sattiana	
Reboot	Port setungs	
Schedule Restart	RTSP Anonymous Access: Enable V	11-655001
	HTTP Port: 80	(1-65500)
	Apply	

DHCP status: Enabled by default

IP: Only can be set when DHCP disabled. The factory default IP is 192.168.1.168

Net mask: The factory default net mask is 255.255.255.0

Mac address: factory fixed, support modification, restore after reset

Port Settings:

 \rightarrow RTSP anonymous Access: Enable means that no account and password need to be input when receiving video stream; otherwise, account and password needed.

The modified IP address cannot be the same as the IP address of all connected devices in the network

Password Setting:

Default account: admin Password: admin

Password	
Old password:	
New password:	
Confirm new password:	
Apply	

Serial port setting description:

RS232 Pass through support Encoder to Computer; Or Encoder to Encoder Testing method:

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.

		TCP/UDP Net Assistant	4 - O ×
Settings (1) Protocol	Data log		NetAssist V4.3.26
UDP ▼ (2) Local host addr 192.168.0.98 ▼ (3) Local host port 6000 • (6000 • •	Comp	outer IP and Port informatio	n
Recv Options ASCII C HEX Log display mode Auto Imefeed Recv save to file AutoScroll Clear			
Send Options ● ASCII ← HEX ↓ Use escape chars ↓ AT CMD auto CR+L		Encoder IP and Port Inform	ation
Append checkcode Send from file Period 1000 ms	Data Send	Remote: 192.168.1.138:5000 💌 🗲 Clear	1 F Clear Clear
Shortcut Mistory			Send
🕼 Readv!		0/0 RX:0 T	X:0 Reset

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

14 666261
 [1-65535]

Upload firmware and configuration and backup:

Upload firmware and configuration (Version:1.3.1)			
Select File	: 畫輝文件 中古译任何文件 Upload	(Please don't upload by different people at the same time.don't power off during upload.)	
Upload EDID			
Select File	: 遗得文件 未选择任何文件 Upload	(Please don't upload by different people at the same time.don't power off during upload.)	
Backup Configuration			
	Backup Config		

Time and date setting:

Time and date Settings		
NTP sync:	Disable •	
Date Setting:	2020/11/23	
Time Setting:	14:39:06	
Time Zone:	Asia/Shanghai •	
	Apply'	

Factory reset:

Reset	
	Click the button to restore all the settings to the default.

Reboot:

Reboot	
	Click the button to restart the Device. Reboot

Schedule Restart:

Schedule Restart	
Schedule Restart:	Diable •
Repeat:	Monday 💷 Tuesday 💷 Wednesday 💷 Thursday 💷 Friday 🕮 Saturday 🕮 Sunday 🕮
Schedule Time:	22:30
	Apply

Language Setting:

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H.265/H.264	Network		Language (Englan y
Encoder	LAN		
50210		DHCP: [Enable v]	
tocoort .		IP: 192.163.1.138	
050		Netmask: 2552552530	

MAINTENANCE

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner of benzine to clean this unit.

PRODUCT SERVICE

(1) Damage requiring service:

The unit should be serviced by qualified service personnel if:

- (a) The DC power supply cord or AC adaptor has been damaged;
- (b) Objects or liquids have gotten into the unit;
- (c) The unit has been exposed to rain;
- (d) The unit does not operate normally or exhibits a marked change in performance;

The unit has been dropped or the cabinet damaged.

(2) Servicing Personnel: Do not attempt to service the unit beyond that described in these operating instructions.Refer all other servicing to authorized servicing personnel.

(3) **Replacement parts:** When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the

original parts. Unauthorized substitutes may result in fire, electric shock, or other Hazards.

(4) **Safety check:** After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

WARRANTY

If your product does not work properly because of a defect in materials or workmanship, our Company (referred to as "the warrantor") will, for the length of the period indicated as below, (Parts(2)Year, Labor(90) Days) which starts with the date of original purchase ("Limited Warranty period"), at its option either(a) repair your product with new or refurbished parts, or (b) replace it with a new of a refurbished product. The decision to repair or replace will be made by the warrantor.

During the "Labor" Limited Warranty period there will be no charge for labor.

During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

MAIL-IN SERVICE

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

LIMITED WARRANTY LIMITS AND EXCLUSIONS

1) This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage.

The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributable to acts of God. 2) THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRNTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)

3) PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.