

H.265 HEVC/H.264 AVC/MPGE4

HD Video Live Encoder

Manual

1.Interface



Power: DC 12V 1A
HDMI IN: HDMI Video Input Port
Reset: Recovery to Default setting
LAN: 100M or 1000M Ethernet Port



ANT: HG Wifi Antenna
Power: Power Light (Red)
LAN: Lan Status Light (Green)
HDMI: Video Signal Light (Blue)

Instructions:

- A. Power ---- 12 V/DC 1A or 5V 2A;
- B. Reset ---- it is used to reset the equipment; after the equipment is started, press the button for 10 seconds, the equipment IP is restored to the factory IP, 192.168.1.168.
- C. Video input --- it is used to input high-definition HDMI
- D. network interface ---- 100M or 1000M Ethernet connection.

2.Specification

Input

Video	1.4 HDMI HDCP
HDMI resolution ratio	1920×1080_50/60P, 1920×1080_50/60i, 1280×720_50/60p 720x576i/p 720x480i/p.
Encoding	H.265 HEVC/H.264 AVC Profile 4.2
Code rate	16kbit/s~32Mbit/s
Code rate control	CBR/VBR
GOP type	Adjustable

Audio:

Coded format	AAC AAC+ AAC++ MP3 G.711
Sampling rate	44100/48000
Bit rate	48K, 64K, 96K, 128K, 160K, 192K, 256K
Sampling precision	24 bit
Code rate	64Kb/s~384Kb/s

System:

RJ45	100M or 1000M Ethernet connection
Stream	HTTP, UDP, FLV, HLS, RTSP, RTMP and ONVIF protocols
Configuration interface	WEB operation interface
Updating	Software update

General

Size	89*103*29mm
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Net Weight	0.3KG
Temperature range	-15~55℃(workable)
Power supply	12V/1A or 5V/2A
Power consumption	5W

3. System Setting :

3.1 Reset

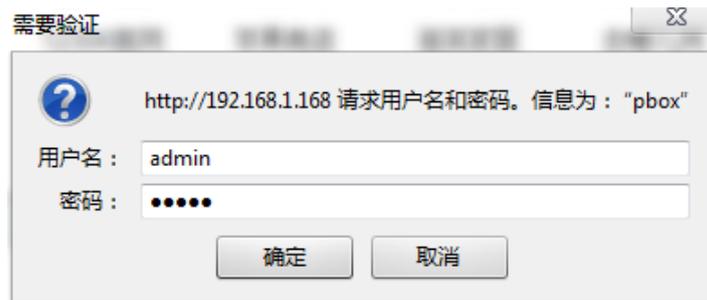
there is a RST in the panel which is used to conduct initialization reset for the high-definition encoder. When the equipment is powered on, press the button and hold for 12 Seconds, when the power light is off, release the button, and all the parameters will be initialized. The initialized IP is 192.168.1.168.

3.2 Computer IP Address Setting

Computer IP can be set as 192.168.1.*. Note: anyone from 1—254, except for 168

3.3 Open IE Explorer

Fill <http://192.168.1.168> to address bar, Default user name: admin Pass: admin



3.4 Status Display

3.4.1 status: when there is video input, it will display resolution of the input, and if there is not status info, input is not correct, please check your video source or video cable..



3.4.2 main stream : it shows main Stream Encode Type,Resolution,Bitrate and access address

Main stream	
Encode Type:	H.264
Encode Size:	1920x1080@30
Bitrate(kbit):	2800
TS URL:	http://192.168.1.168/0.ts
HLS URL:	http://192.168.1.168/0.m3u8
FLV URL:	http://192.168.1.168/0.flv
RTSP URL:	rtsp://192.168.1.168/0
RTMP PUBLISH URL:	Disable
Multicast URL:	Disable
Preview(Delay 1000ms)	

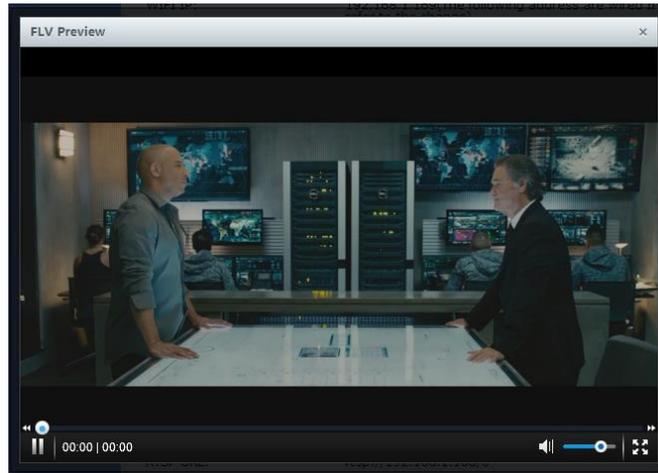
3.4.3 Sub stream: it shows Sub-Stream Encode Type,Resolution,Bitrate and access address

Substream1
Encoder size:1280x720@30
Bitrate(kbit):1800
TS URL:Disable
HLS URL:Disable
FLV URL:Disable
RTSP URL:Disable
RTMP PUBLISH URL:Disable
Multicast URL:Disable
Preview(Delay 1000ms)

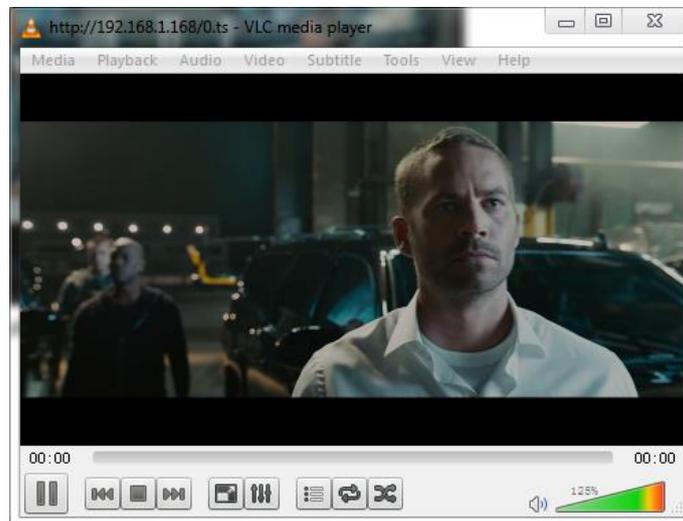
3.3.4 Preview:

a.Click Preview ,it will play stream in browser

Main stream
Encoding Type:1920x1080@30
Bitrate(kbit):1800
TS URLhttp://192.168.1.168/0.ts
HLS URL:Disable
FLV URL:http://192.168.1.168/0.flv
RTSP URL:rtsp://192.168.1.168/0
RTMP PUBLISH URL:Disable
Multicast URL:Disable
Preview(Delay 1000ms)



b.open VLC software to play stream



4. Network Setting

Network	
DHCP:	<input type="button" value="Disable"/>
IP:	<input type="text" value="192.168.1.168"/>
Netmask:	<input type="text" value="255.255.255.0"/>
Gateway:	<input type="text" value="192.168.1.1"/>
MAC:	<input type="text" value="00:13:14:15:3A:21"/>
DNS	
DNS1:	<input type="text" value="114.114.114.114"/>
DNS2:	<input type="text" value="8.8.8.8"/>
Port	
HTTP Port:	<input type="text" value="8080"/> [1-65535]
RTSP Port:	<input type="text" value="8554"/> [1-65535]
<input type="button" value="Apply"/>	

Instructions: in terms of IP address of the equipment, the factory default is 192.168.1.168. If you forget the IP address after modification, you can reset the equipment by pressing the rest button for 12 seconds when the equipment is powered on, and restore the factory default ip.

5. Main Stream Encoding Setting

5.1 Encoding Setting of Main Stream

Main stream	
Encoding type:	H.264 ▾
FPS:	30 [5-60]
GOP:	30 [5-300]
Bitrate(kbit):	2800 [32-32000]
Encoded size:	same as the input ▾
H.264 Level:	high profile ▾
Bitrate control:	vbr ▾
TS URL:	/0.ts Enable ▾
HLS URL:	/0.m3u8 Enable ▾
FLV URL:	/0.flv Enable ▾
RTSP URL:	/0 Enable ▾
RTMP PUBLISH URL:	rtmp://192.168.1.50/live/0 Disable ▾
Multicast IP:	238.0.0.1 Disable ▾
Multicast port:	1234 [1-65535]
Apply	

5.1.1 Encoding Type: H.264 or H.265

5.1.2 Encode level: baseline profile / main profile / high profile

5.1.3 Encoding frame rate: 5-60 frames (it can output 60p When Input is 60p)

5.1.4 Bitrate control: VBR(quality priority) and CBR(bandwidth Priority)

5.1.5 GOP: 30

5.1.6 Encoding size: 1920x1080, 1680x1050, 1280x720, 1024x576, 850x480, 720x576, 720x540, 720x480, 720x404, 704x576, 640x480, 640x360, 608x488, 544x480, 480x480, 480x384, 480x360, 480x320, 480x272, 480x720, 400x320, 400x224, 352x480, 352x228, 320x256, 320x240, 320x180, 240x180, 176x144

5.1.7 Video bit rate: 16-32000K

5.2 Main Stream Protocol Setting

5.2.1 HTTP protocols : /0.ts Enable /Disable

5.2.2 HTTP port: 1-65535

5.2.3 RTSP protocol: /0 Enable /Disable

5.2.4 RTSP port: 1-65535

5.2.5 multicast IP: 238.0.0.1 Enable /Disable

5.2.6 multicast port: 1-65535

5.2.7 RTMP push stream address:

rtmp://ip:port/xxx/xxx or rtmp://user:pass@ip:port/xxx/xxx

5.3 OSD Setting

主码流

Alpha: 100 [0-128]

Zone 1

Zone: Enable ▾

Type: txt ▾

X: 10 [0-1920]

Y: 10 [0-1080]

Text: [0-1080]

Font size: 36 [8-72]

Background color: white ▾

Color: select color

Zone 2

Zone: Disable ▾

Zone 3

Zone: Disable ▾

Zone 4

Zone: Disable ▾

Apply

5.3.1 Zone 1-4,you can enable max to 4 image or txt

Text, support English,Character and Image can be used Enable/Disable

Image, support 24bit BMP file ,less than 500KB,transparency color is R:241 G:241 B:241

5.3.2 X coordinate: the left and right positions displayed by 0-1920 text.

Y coordinate: the up and down positions displayed by 0-1080 text.

5.3.3 font: the size of 8-72 text display in the display screen.

5.3.4 Alpha: 0-128 , transparency

5.3.5 Logo: select logo files

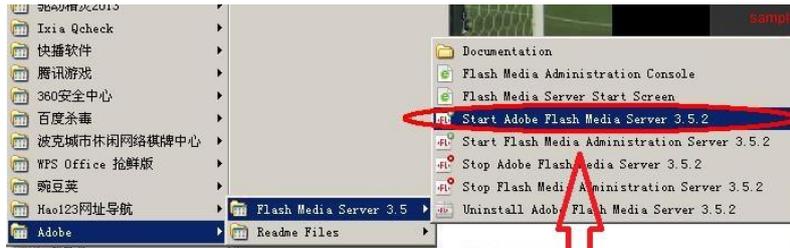
5.4 Sub Stream Encoding Setting

Note: the setting method is as same as that of main stream

6. Installing FMS Server

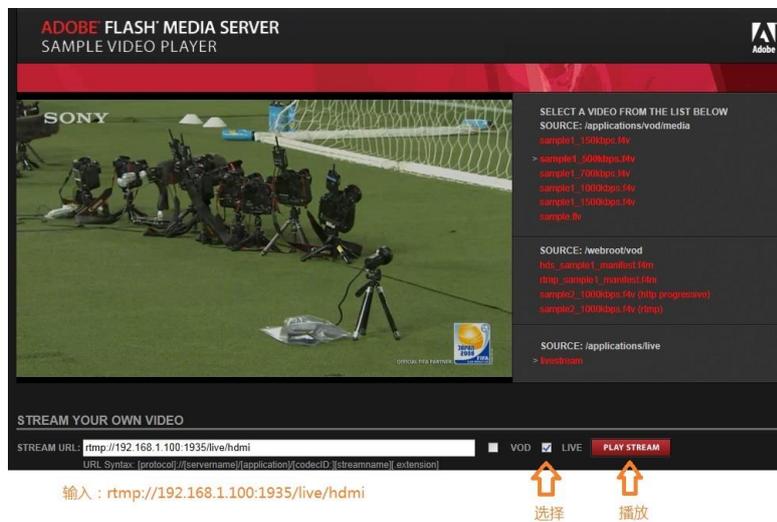
6.1 installation software: Flash+Media+Server3.5, the input of serial number is not required during the installation, and input both user's name and pin: 1

6.2 launch the background software



此软件后台运行

- 6.3 open : VideoPlayer.html in the file of FlashPlayer
- 6.4 input :rtmp://ipaddress /rtmp/hdmi and select live, you can see the image or input:
rtmp://192.168.1.100:1935/live/hdmi select: LIVE click: Play stream



7. Instructions for Wowza Server Test

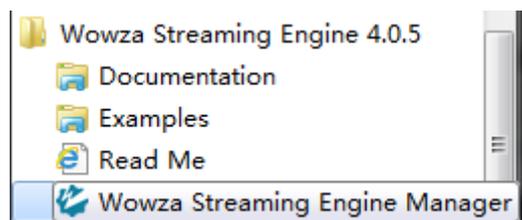
7.1 Wowza Installation

Run wowzaStreamingEngine-4.0.5

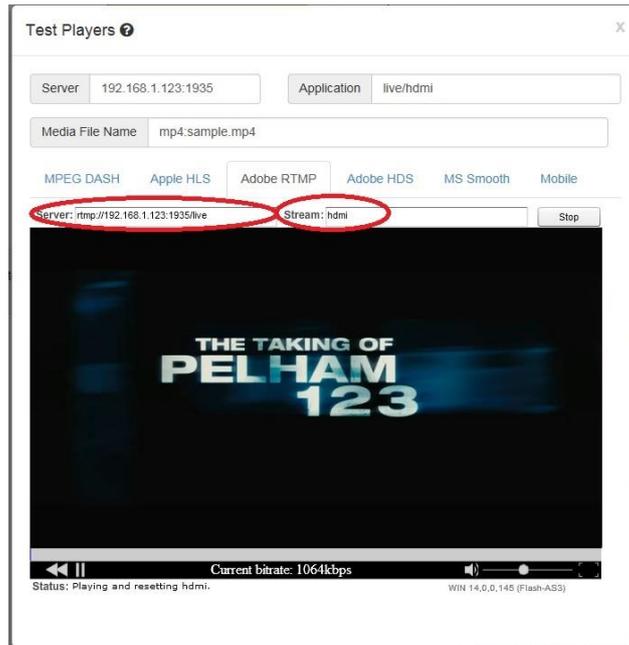
Registration code: ET1A4-KxrGd-Eaj9T-dTbcf-rZNza-9xaJd-7nQQnuhkxkpm

During the installation, the software provides guide for the installation of jdk-8u5-windows-64. Complete the software installation.

7.2 run: Wowza Streaming Engine Manager



7.3 Enter the test interface



Server input: rtmp://192.168.1.123:1935/live
Stream input: hdmi

8. Audio Encoding Settings

Audio	
Audio Input:	SDI ▼
Samplerate:	48000 ▼
Encoder:	AAC ▼
Bitrate:	128000 [48000~128000]
Analog Vol:	10 [-50~50]
ONVIF Audio	
G711A Over RTSP:	Disable ▼
<input type="button" value="Apply"/>	

Audio Bit rate: 48K, 64K, 96K, 128K, 160K, 192K and 256K
Audio type: AAC,AAC+,MP3, G711
Audio resample: 44.1K,48K

9. System Settings

9.1 User name and password change

Change password

Old password:

New password:

Confirm new password:

9.2 Software upgrade

Version: 2.16

Upgrade: 未选择任何文件

Upgrade file name is up.bin.Please don't upload by different people at the same time,don't power off or refresh the page during upload.

9.3 System settings: Device reset and initialization settings

Reset

Restore the device to factory settings.