MSP 325H



Quick Start

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USER YOUR PRODUCT

1. Environment Configuration

1.1 Log in Web UI

Type in 192.168.1.168 to the search bar of your internet browser and open up the online admin interface. There will pop up and a window asking for user name (admin) and password (admin).

Attp://192.168.1.168/ - Windows Internet Explorer	
	3 47 🗙 📓 百度搜索 🛛 🖓 🔻
收藏夹 ① 正在连接 ① ① □	🔊 ▼ 🖃 🖶 ▼ 页面(P)▼ 安全(S)▼ 工具(O)▼ 🕢 ▼ ^{>>}
Windows 安全 位于 pbox 的服务器 192.168.1.168 要求用产(警告:此服务器要求以不安全的方式发送您的用的基本认证)。 admin ●●●●●● 记住我的凭握	X 各和密码。 户名和密码(没有安全连接) 确定
等待 http://192.168.1.168/.	Internet 保护模式: 启用 🋛 🖓 🔻 💐 100% 👻 📄

1.2 Check Status

Change the language of WEB UI to English if needed. Check the main stream address as in the red frame.

H.265/H.264 Encoder	Status	Language: English 🗸
	Status	
Status	Running Time: 0000-00-00 00:13:10	
	Device Time: 1970-01-01 09:06:49 (Sync Time To Device)	
Encoder	CPU Usage: 0%	
CONTRACTOR DE LA CONTRACT	CPU Junction Temperature: 48°C	
OSD	Memory Usage: 90.4M/1490.2M	
	Input Size: 1920x1080p@29	
System	Collected Video Frames: 0	
	Lost Video Frames: 0	
	Audio Samplerate: 48000	
	Collected Audio Frames: 0	
	Net Packet Sent: 46	
	Net Packet Dropped: 0	
	Main Stream	
	Encoding Type: H.265	
	Encoded Size: 1920x1080@29	
	Bitrate(kbit): 8000	
	TS URL: http://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 URL: Disable	
	RTMP PUSH URL: Disable	
	Multicast URL: Disable	
	SRT URL: Disable	

1.3 Preview Video

Input signal can be previewed either on WEB UI or on VLC Player

	Territor Territor
H.265/H.264 Encoder	Langanger [Eliginsii •
Status	
Status Running Time: 0000-00-00 00:13:10	
Device Time: 1970-01-01 09:06:49 (Sync Time To Dev	28)
Encoder CPU Usage: 0%	
CPU Junction Temperature: 48°C	
OSD Memory Usage: 90.4M/1490.2M	
System Input Size: 1920x1080p@29	
Collected Video Frames: 0	
Lost Video Frames: 0	
Audio Samplerate: 48000	
Collected Audio Frames: 0	
Net Packet Sent: 46	
Net Packet Dropped: 0	
Main Stream	
Encoding Type: H.265	
Encoded Size: 1920x1080@29	
Bitrate(kbit): 8000	
TS URL: http://192.168.1.168/0.ts	
HLS URL: Disable	
FLV URL: http://192.168.1.168/0.ffv	
RTSP URL: rtsp://192.168.1.168.0	
RTMP URL: Disable	
RTMP PUSH URL: Disable	
Multicast URL: Disable	
SRT URL: Disable	
SRT PUSH URL : Disable	

Or play video on VLC Media Player. When there are valid input signal captured, open up VLC Player(download: http://www.videolan.org/),choose 【media】 →Open Network Stream.

4	VLC media player				
Me	dia Playback Audio Video	Subtitle	Tools	View	Help
	Open File	Ctrl+O			
	Open Multiple Files	Ctrl+Sł	hift+O		
	Open Folder	Ctrl+F			
•	Open Disc	Ctrl+D			
+	Open Network Stream	Ctrl+N			
1	Open Capture Device	Ctrl+C			
	Open Location from clipboard	Ctrl+V			
	Open Recent Media		+		
	Save Playlist to File	Ctrl+Y			
	Convert / Save	Ctrl+R			
((+1))	Stream	Ctrl+S			
	Ouit at the end of plavlist				
G-	Quit	Ctrl+Q			
		-			

Type in the TS URLfrom Main Stream



🕒 <u>F</u> ile 💛 <u>D</u> isc 👕 <u>M</u> etwork	🗔 Capture <u>D</u> evice	
Network Protocol		
Please enter a network URL:		
192.168.1.168./0.ts		•
http://www.example.com/stream.	.avi	
mms.//ms.examples.com/stream	. asx	
http://www.yourtube.com/watch	o/test.sdp ?v=gg64x	

2. Encoder Setting

2.1 Main Stream

Click **[**Encoder **]** \rightarrow **[**Main Stream **]** \rightarrow Type in each parameter's value \rightarrow click Apply

H.265/H.264 Encoder	Main stream		
Status	Encoding Type: FPS:	H.265 V	[5-150]
Encoder	GOP	30	[5-300]
Main stream	Bitrate(kbit):	8000	[32-100000]
Substream1	Encoded Size:	same as the input V	
Substream2	H.265 Profile:	main 10 profile 🗸	
Substream3	Bitrate Control:	avbr 🗸	
Audio			
Advanced	TSURL	/0 ts	Enable V
OSD	HLS URL:	/0.m3u8	Disable V
System	FLV URL:	/0.fl∨	Enable V
	RTSP URL:	/0	Enable V
	RTMP URL:	/0	Disable V
	RTMP(S)/RTSP PUSH URL:	rtmp://192.168.1.169/live/0	Disable V
	Multicast IP:	238.0.0.1	Disable 🗸
	Multicast Port:	1234	[1-65535]
		Apply	

Explanation of Some Parameters:

FPS:Frame Per Second, numbers of picture output each second GOP:gap of key frame, how many pictures between each two key frame Bitrate:numbers of bits processed in each second. Here is an usual bitrate setting table.

Item	Calculation Formula	192×144	320×240	480×360	640×480	1280×720	1920×1080
EX Low	W×H×3/4	30kb/s	60kb/s	120kb/s	250kb/s	500kb/s	1mbps
Low	W×H×3/2	60kb/s	120kb/s	250kb/s	500kb/s	1mbps	2mbps
Medium	W×H×3	120kb/s	250kb/s	500kb/s	1mbps	2mbps	4mbps
High	W×H×3×2	250kb/s	500kb/s	1mbps	2mbps	4mbps	8mbps
EX High	W×H×3×4	500kb/s	1mbps	2mbps	4mbps	8mbps	16mbps

Bitrate Control

CBR stands for constant **bitrate**. During **CBR** encoding, the **bitrate** or the number of **bits per** second is kept the same throu ghout the encoding process.

VBR stands for variable bit rate VBR changes the bitrate according to the image content

2.2 Audio Setting

Click **[**Encoder **]** \rightarrow **[**Audio **]** \rightarrow Type in each parameter's value \rightarrow click Apply

H.265/H.264 Encoder	Audio
Status Encoder Main stream Substream1 Substream2 Substream3	Audio Input: HDMI V Sampling Rate: 44100 V Encoder: AAC V Audio Channel: L+R V Bitrate: 128000 [48000-320000] Digital Volume Gain: 0 [-50-50] G711A Over PTE: Enable V
Advanced	ONVIF Audio
OSD System	G711A Over RISP: Disable G711: G711A Apply

2.3 Advanced

Click **[**Encoder **]** \rightarrow **[**Advanced **]** \rightarrow Type in each parameter's value \rightarrow click Apply





3. OSD

3.1 OSD Streaming Setting

Click **(**OSD **)** \rightarrow **(**Main Stream **)** \rightarrow Type in each parameter's value \rightarrow click Apply



H.265/H.264	Main atream	
Encoder	main stream	
Status	Alpha: [100 [0-128]	
Encoder	Zone 1	
USD		
Substreem1	lype: bt	
Substream?	X: 10 [6-1920]	
Substream3	Y: 10 [0-1080]	
LOGO Upload		
	Font Size: 30	
System	Background Color: white	
	Color: select color	
	Zone 2	
	Zone: Disable 🗸	
	Zone 3	
	Zone: Disable 🗸	
	Zone 4	
	Zone: Disable 🗸	
	Apply	

3.2 LOGO Upload

Click **[**LOGO Upload **]** \rightarrow select desired LOGO pic from local \rightarrow click Upload

H.265/H.264 Encoder	LOGO Upload
Status Encoder OSD Main stream Substream1	LOGO:
Substream2 Substream3 LOGO Upload < System	

4. System

4.1 Network

Click **(**System **)** \rightarrow **(**Network **)** \rightarrow Type in parameters \rightarrow click Apply



	LAN
Status	DHCP: Disable 🗸
Encoder	IP: 192.168.1.168
OSD	Netmask: 255.255.255.0
Construction of the second second second second	Gateway: 192.168.1.1
System	MAC: 00:13:14:01:A5:71
Paraword	
Serial to TCP	DNS
Upprade	DNS1: 8.8.8
Reset	DNS2: 192.168.1.1
Reboot	
Schedule Restart	NTP
	NTP Enable: Disable 🗸
	NTP Server: time.windows.com
	Time Zone: UTC+8 🗸
	Port
	HTTP Port: 8086 [1-65500]
	RTSP Port: 8554 [1-65500]
	Арріу

4.2 Password

Click **[**System **]** \rightarrow **[**Password **]** \rightarrow type in password \rightarrow click Apply

H.265/H.264 Encoder	Password
Status Encoder OSD	Old password: New password: Confirm new password: Apply
System	
Inetwork	
Password	
Upgrade	
Reset	
Reboot	
Schedule Restart	

4.3 Serial to TCP

Click **[**System **]** \rightarrow **[**Serial to TCP **]** \rightarrow choose Baud Rate and TCP Port \rightarrow click Apply



H.265/H.264 Encoder	Serial to TCP
Status Encoder	Baud Rate: 9600 V TCP Port: 5150 [1-65535]
System Network Password	
Serial to TCP < Upgrade	
Reboot Schedule Restart	

4.4 Upgrade

Click	System	\rightarrow	Upgrade 】	→choose upgrade file.up.rar→click Upload
-------	--------	---------------	-----------	--

H.265/H.264 Encoder	Laspage English V
Status	Upgrade: Upgrade file name in up at Please don't upload by different people at the name time, don't power off or referah the page during upload.)
Encoder	Upload
System	
Network	
Password	
Serial to TCP	
Upgrade 🗸	
Reset	
Reboot	
Schedule Restart	

4.5 Reset

Click $[System] \rightarrow [Reset] \rightarrow click Reset$



4.6 Reboot

H 265/H 264	
Encoder	Reboot
Status	Click the button to restart the encoder.
Encoder	
OSD	
System	
Network	
Password	
Serial to TCP	
Upgrade	
Reset	
Reboot •	
Schedule Restart	

When reboot is required, Click Reboot. (Refresh the webpage 1 minute after reboot)

5. Application

5.1 Multicast

Multicast is designed for multiple local users to watch the video source from one Endcoder.

Enable Multicast in Encoder \rightarrow Main Stream \rightarrow Enable Multicast

After Enable Multicast, a warning window pop up. Reboot the Encoder is required.

Substream2	Encoded Size: same as the input V
Substream3	H.265 Profile: main 10 profile V
Video	Bitrate Control: avbr 🗸
Audio	
Advanced	TS URL: /0.ts Enable V
deo	HLS URL: /0.m3 来自网页的消息
030	FLV URL: 10.ftv
System	RTSP URL: 10 A Set successfully, please restart your device!
	RTMP URL: 10
	RTMP(S)/RTSP PUSH URL: rtmp:/
	Multicast IP: 238.0
	Multicast Port: 1234 [1-65535]
	Арріу
	Арріу

After rebooting the device, a multicast URL is shown in the Status. Copy the multicast URL and paste on VLC Player of each each user.





5.2 Play Source on NVR

1. Make sure your NVR can support H.264 decoding. Due to ONVIF communication, RTSP shall be enabled.

H.265/H.264 Encoder	Main stream	
Status	Encoding Type: H.264 V	
Encoder	GOP: 30	[5-130]
Main stream ◀ Substream1 Substream2 Substream3	Bitrate(kbit): 8000 Encoded Size: same as the input H.265 Profile: main 10 profile V	[32-100000]
Video Audio		
Advanced	TS URL: /0.ts HLS URL: /0.m3u8	Enable Disable
System	FLV URL: //0.flv RTSP URL: //0	Enable V
	RTMP URL: /0	Disable V
	Multicast IP: 238.0.0.1	Enable V
	Multicast Port: 1234	[1-65535]

2. If the audio from the Encoder need to be recognizable on NVR, the AUDIO setting shall be done. After AUDIO Setting, reboot the Encoder is required.



H.265/H.264 Encoder	Audio
Status Encoder Main stream Substream1 Substream2 Substream3	Audio Input: HDMI Sampling Rate: 44100 V Encoder: AAC Audio Channel: [+F.V Bitrate: [28000] Digital Volume Gain: [0] [-50-50] G711A Over PTE: Enable V
Video Audio < Advanced OSD System	ONVIF Audio G711A Over RTSP G711: G711A V Apply

Note: If NVR cannot play the video after the above setting, download a ONVIF testing tool from http://url.cn/2ESQRcn to the test the ONVIF feature on Encoder. If the ONVIF feature is normal, please check the NVR settings.

5.3 Remote RMTP Connection

If a large number of users from all over the country need to watch the video source of the same encoder at the same time, we suggest the RTMP transfer mode. At present, we perfectly support RTMP server platforms including free platforms: NGINX, RED5 MEDIA SERVER, paid platform: ADOBE MEDIA SERVER5 and some platforms such as http://mudu.tv/. Other methods of setting the RTMP publication are as follows:

Since the current RTMP protocol only supports H.264 function, you need to set the encoder type to H.264, set the RTMP publishing address in the live broadcast platform and enable it as shown in the picture below. After setting, please restart the encoder.

Note: Some live streaming platforms provides a live code and the RTMP address. Then we need to combine the two pages of text and fill in to the encoder: RTMP address plus slashes, and live code Such as RTMP address is: RTMP: // video mudu. TV/live broadcast code for: abcdef combination: rtmp://video.mudu.tv/live/abcdef

H.265/H.264 Encoder	Main stream		
Status Encoder Main stream Substream1 Substream2 Substream3 Video	Encoding Type: FPS: GOP: Bitrate(kbit): Encoded Size: H.265 Profile: Bitrate Control:	H 264 V 30 30 8000 same as the input V main 10 profile V Vbr V] [5-150]] [5-300]] [32-100000]
Audio Advanced OSD System	TS URL: HLS URL: FLV URL: RTSP URL: RTMP URL:	/0.ts /0.m3u8 /0.fiv /0 /0	Enable V Disable V Enable V Enable V
	RTMP(S)/RTSP PUSH URL: Multicast IP: Multicast Port:	rtmp://video.mudu.tv/watch/dbm3pd 238.0.0.1 1234	Enable V [I-65535]



6. Trouble Shooting

6.1 Cannot login in the WEB UI

If you cannot on open up the WEB UI, check the LAN port and see if it is lit up, if the LAN connection is fine, but you still cannot open up the page, check your IP address and see if your computer is in the network of 192.168.1.XX, if not here is the method for you to manually check and change your IP address.

Check y	our IP address		
Step 1. Press	Windows + X	keys together ar	nd open Windows
PowerShell	cmd	×	or Command Prompt).

Step 2. Type ipconfig and hit Enter, then the information will be displayed in the window.

2 Administrator: Windows PowerShell	-	×
PS C:\WINDOWS\system32> ipconfig		í
Windows IP Configuration		
Ethernet adapter SSTAP 1:		
Media State Media disconnected Connection-specific DNS Suffix . :		
Nireless LAN adapter 本地连接* 1:		
Media State Media disconnected Connection-specific DNS Suffix . :		
Wireless LAN adapter 本地连接* 12:		
Media State Media disconnected Connection-specific DNS Suffix . :		
PPP adapter VPN Connection:		
Connection-specific DNS Suffix . : IPv4 Address 10. Subnet Mask		
Wireless LAN adapter WLAN:		
Connection-specific DNS Suffix . : Link-local IPv6 Address : fe8C IPv4 Address : 192. Subnet Mask : 255. Default Gateway : 192.		

Manually Change IP Address

- Step 1. Click Start menu, then type **Control Panel** and click the option on the result.
- Step 2. Open Network and Internet > Network and Sharing Center.
- Step 3. On the left pane of the new window, click **Change adapter settings**.
- Step 4. You will be displayed with Network Connections of the PC.
 Important note: Right click on "Ethernet" or "Local Area Connection" if you want to change IP of any physical connection. And right click on "WLAN" in case you wish to change IP of any wireless connections.
- Step 5. Choose **Properties** after right clicking on the network name.
- Step 6. Select the Internet Protocol Version 4 (TCP/IPv4), then click Properties.



- Step 7. Obtain an IP Address automatically should be selected by default, but please choose the Use the Following IP Address.
- Step 8. Now put your desired IP Address according to your wish its correct format. Change **Subnet mask and default gateway** if you want to.

You can get IP settings assigned aut this capability. Otherwise, you need for the appropriate IP settings.	tomatically if yo to ask your ne	our net etwork	work sup administ	pports rator
Obtain an IP address automatic	cally			
• Use the following IP address:				
IP address:		×.		
Subnet mask:		а. С		
Default gateway:		•		
Obtain DNS server address aut	omatically			
• Use the following DNS server a	ddresses:			
Preferred DNS server:	208 . 67	. 222	. 222	
Alternate DNS server:	208 . 67	. 220	. 220	
Validate settings upon exit			Advan	ced
Validate settings upon exit			Advan	ced

6.2 Cannot Play Video on VLC

If VLC Player does not play video after TS URL is typed in, check the Status of Encoder and see if there are video frames collected.





If the signal collected is 0, please check the connection between input device and Encoder and check the HDMI indicator is lit up make sure they are correctly connected, and make sure the input source is supported on Encoder.



Contact Information

Warranty:

All video products are designed and tested to the highest quality standard and backed by full 1 years parts and labor warranty. Warranties are effective upon delivery date to customer and are non-transferable. RGBlink warranties are only valid to the original purchase/owner. Warranty related repairs include parts and labor, but do not include faults resulting from user negligence, special modification, lighting strikes, abuse(drop/crush), and/or other unusual damages.

The customer shall pay shipping charges when unit is returned for repair.

Headquarter: S601Weiye Building Torch Hi-Tech Industrial Development Zone Xiamen, Fujian Province, P.R.C

- Tel: +86-592-5771197
- Fax: +86-592-5788216
- Customer Hotline: 4008-592-315
- Web: http://www.rgblink.com
- E-mail: support@rgblink.com