

OPR-DT9 4K H.265 IP Transcoder and Transmitter Guide


V1.0 2024/4/26



- 1. Management Settings..... 2
- 2. Transcoder 2
 - 2.1 Transcode list..... 2
 - 2.2 Transcode settings 3
 - 2.3 Transcode output settings..... 4
 - 2.4 Transcode encode settings 5
 - 2.5 Transcode audio settings..... 5
 - 2.6 Transcode OSD settings..... 6
 - 2.7 Transcode Advance parameters settings..... 6
- 3 Transmit 7
 - 3.1 Transmit list..... 7
 - 3.2 Transmit input settings 7
 - 3.3 Transmit output settings 8
 - 3.4 Transmit audio settings..... 8
 - 3.5 Transmit Advance parameters settings..... 9
- 4. System setting..... 10
 - 4.1 Network Setting10
 - 4.2 Advance setting11
 - 4.3 System output12
 - 4.4 Upgrade and Backup firmware13

1. Management Settings

By <http://192.168.1.169> (default IP) to login the device, default user name and password are **admin**.



IP Transcoder

IP Transmitter - Decoder

Status

Transcode list

Transmit list

Device manage

System setting

Status

System status

Device time: 2024-04-27 00:54:27 ([Sync time to device](#))

Runtime: 0000-00-00 00:01:01

CPU usage: 0

Memory usage: 123MB/1018MB

Net status: Internet

Eth0 speed: Input0Kbps/Output517Kbps

Eth1 speed: Input0Kbps/Output0Kbps

2. Transcoder

2.1 Transcode list

It supports 1,2, 4, 9 channels decoding and transcoding,

Status

Transcode list

Transmit list

Device manage

System setting

Transcode list

Transcod chns: The maximum input stream resolution should be at or below 1920*1200@25

Audio action:

Channel	Input address	Cache time(s)	Transcoding index(TS available)	Transcode setting
1	http://192.168.1.171/0.ts	200	0	Setup
2		200	0	Setup
3		200	0	Setup
4		200	0	Setup
5		200	0	Setup
6		200	0	Setup
7		200	0	Setup
8		200	0	Setup
9		200	0	Setup

2.2 Transcode settings

Click the Setup to set the transcoding address and cache, etc.

Status	Input setting	Output setting	Encoded setting	Audio setting
Transcode list	Transcoding address: <input type="text" value="http://192.168.1.150/0.ts"/> The so			
Transmit list	Cache(ms): <input type="text" value="200"/> [0-60000]			
Device manage	Note: 0 means played directly, the cache time is at least 2 times of the splitter time when the source is HLS stream			
System setting	Transcoding index(TS available): <input type="text" value="0"/>			
	<input type="button" value="Apply"/> <input type="button" value="Return"/>			

The source address can be obtained from the device management also,

Status	Encoder device
Transcode list	Encoder list: <input type="text" value="192.168.1.150"/> ▼
Transmit list	Encoder ip: <input type="text" value="192.168.1.150"/>
Device manage	Username: <input type="text"/>
System setting	Password: <input type="text"/>
	<input type="button" value="Get URL"/>
	ONVIF device
	ONVIF list: <input type="text" value="http://192.168.1.150/onvif/device_service"/> ▼
	ONVIF URL: <input type="text" value="http://192.168.1.150/onvif/device_service"/>
	Username: <input type="text"/>
	Password: <input type="text"/>
	<input type="button" value="Get RTSP URL"/>
	SAP device
	SAP list: <input type="text" value="SAP offline"/> ▼

2.3 Transcode output settings

Input setting	Output setting	Encoded setting
	TS URL: <input type="text" value="/0.ts"/>	Enable <input type="button" value="v"/>
	HLS TS URL: <input type="text" value="/0.m3u8"/>	Disable <input type="button" value="v"/>
	HLS MP4 URL: <input type="text" value="/0_mp4.m3u8"/>	Disable <input type="button" value="v"/>
	MP4 URL: <input type="text" value="/0.mp4"/>	Disable <input type="button" value="v"/>
	FLV URL: <input type="text" value="/0.flv"/>	Disable <input type="button" value="v"/>
	RTSP URL: <input type="text" value="/0"/>	Disable <input type="button" value="v"/>
	RTMP URL: <input type="text" value="/0"/>	Disable <input type="button" value="v"/>
	RTMP(S)/RTSP PUSH URL: <input type="text" value="rtmp://192.168.1.169/live/0"/>	Disable <input type="button" value="v"/>
	Multicast IP: <input type="text" value="238.0.0.1"/>	Disable <input type="button" value="v"/>
	Multicast Port: <input type="text" value="1234"/>	
	Multicast SAP Name: <input type="text" value="sap"/>	
	SRT URL Port: <input type="text" value="9000"/>	Disable <input type="button" value="v"/>
	SRT PUSH URL: <input type="text" value="srt://192.168.1.169:9000"/>	Disable <input type="button" value="v"/>
	SRT Encryption Password: <input type="text" value="0123456789"/>	Disable <input type="button" value="v"/>
	HLS PUSH URL: <input type="text" value="https://a.upload.youtube.com/http_upload_hls?c"/>	Disable <input type="button" value="v"/>

2.4 Transcode encode settings


Input setting	Output setting	Encoded setting
Encoding Type:	<input type="text" value="H.264"/>	<input type="text" value="H.264"/>
FPS:	<input type="text" value="Same as input"/>	<input type="text" value="Same as input"/>
GOP:	<input type="text" value="25"/>	<input type="text" value="25"/> [5-300]
Bitrate(kbit):	<input type="text" value="4000"/>	<input type="text" value="4000"/> [32-32000]
Encoded Size:	<input type="text" value="1920x1080"/>	<input type="text" value="1920x1080"/>
H.264 Level:	<input type="text" value="baseline profile"/>	<input type="text" value="baseline profile"/>
Bitrate Control:	<input type="text" value="vbr"/>	<input type="text" value="vbr"/>
Image Split:	<input type="text" value="Disable"/>	<input type="text" value="Disable"/>

2.5 Transcode audio settings

Input setting	Output setting	Encoded setting	Audio setting
Audio Input:	<input type="text" value="Raw audio"/>	<input type="text" value="Raw audio"/>	<input type="text" value="Raw audio"/>
Encoder:	<input type="text" value="AAC"/>	<input type="text" value="AAC"/>	<input type="text" value="AAC"/>
Bitrate:	<input type="text" value="128000"/>	<input type="text" value="128000"/> [48000~320000]	<input type="text" value="128000"/>
G711 Over PTE:	<input type="text" value="Disable"/>	<input type="text" value="Disable"/>	<input type="text" value="Disable"/>
G711:	<input type="text" value="Disable"/>	<input type="text" value="Disable"/>	<input type="text" value="Disable"/>
G711 Over RTSP:	<input type="text" value="Disable"/>	<input type="text" value="Disable"/>	<input type="text" value="Disable"/>

2.6 Transcode OSD settings

Four OSD zones can be enabled with text, image, scrolling text, and time.

Input setting	Output setting	Encoded setting	Audio setting	OSD setting
Zone1				
Zone: <input type="text" value="Enable"/>				
Type: <input type="text" value="bmp"/>				
Alpha: <input type="text" value="200"/> [0-255]				
X: <input type="text" value="10"/> [0-1920]				
Y: <input type="text" value="10"/> [0-1080]				
LOGO preview : 				
Zone2				
Zone: <input type="text" value="Disable"/>				
Zone3				
Zone: <input type="text" value="Disable"/>				
Zone4				
Zone: <input type="text" value="Disable"/>				
<input type="button" value="Apply"/> <input type="button" value="Return"/>				

2.7 Transcode Advance parameters settings

You can set some advanced parameters for the transcoding stream.

Input setting	Output setting	Encoded setting	Audio setting	OSD setting	Advance parameters
TS Video PID: <input type="text" value="100"/> [16-8190]					
TS Audio PID: <input type="text" value="200"/> [16-8190]					
TS Transport Stream ID: <input type="text" value="101"/> [1-65535]					
TS Original Network ID: <input type="text" value="65281"/> [1-65535]					
TS PMT Start PID: <input type="text" value="480"/> [16-7936]					
TS Start PID: <input type="text" value="481"/> [32-3840]					
TS Tables Version: <input type="text" value="6"/> [0-31]					
TS Service ID: <input type="text" value="1"/> [1-65535]					
TS Service Name: <input type="text" value="Live"/>					
TS Provider Name: <input type="text" value="TCoder"/>					
Conform to System B (DVB): <input type="text" value="Disable"/>					
TS Null Packet: <input type="text" value="No Insert"/>					
TS TDT: <input type="text" value="Disable"/>					
SRT Latency(ms): <input type="text" value="150"/> [1-10000]					
SRT Bandwidth(KByte): <input type="text" value="0"/> [0-102400][0=unlimit]					
<input type="button" value="Apply"/> <input type="button" value="Return"/>					

3 Transmit

3.1 Transmit list

Max supports 36 channels forwarding, Click the Setup to set url,

Status	Transmit list			
Transcode list				
Transmit list				
Device manage				
System setting				
Channel	Input address	Cache time(s)	Transcoding index(TS available)	Transmit setting
1		200	0	Setup
2		200	0	Setup
3		200	0	Setup
4		200	0	Setup
5		200	0	Setup
6		200	0	Setup
7		200	0	Setup

3.2 Transmit input settings

Status	Input setting	Output setting	Audi
Transcode list	Transmission address: <input type="text"/> IT		
Transmit list	Cache(ms): <input type="text" value="200"/> [0-60000]		
Device manage	Note: 0 means played directly, the cache time is at least 2 times of the splitter time when the source is HLS stream		
System setting	Transcoding index(TS available): <input type="text" value="0"/>		
	<input type="button" value="Apply"/>	<input type="button" value="Return"/>	

The Transmission address can be obtained from the device management also.

3.3 Transmit output settings

Status	Input setting	Output setting	Audio setting
Transcode list		TS URL: /9.ts	Enable
Transmit list		HLS TS URL: /9.m3u8	Disable
Device manage		HLS MP4 URL: /9_mp4.m3u8	Disable
System setting		MP4 URL: /9.mp4	Disable
		FLV URL: /9.flv	Disable
		RTSP URL: /9	Disable
		RTMP URL: /9	Disable
		RTMP(S)/RTSP PUSH URL: rtmp://192.168.1.169/live/9	Disable
		Multicast IP: 238.0.0.1	Disable
		Multicast Port: 1243	
		Multicast SAP Name: sap	
		SRT URL Port: 9009	Disable
		SRT PUSH URL: srt://192.168.1.169:9000	Disable
		SRT Encryption Password: 0123456789	Disable
		HLS PUSH URL: https://a.upload.youtube.com/http_upload_hls?c	Disable

3.4 Transmit audio settings

Input setting	Output setting	Audio setting
	Audio Input: Raw audio	
	Encoder: AAC	
	Bitrate: 128000 [48000~320000]	
	G711 Over PTE: Disable	
	G711: Disable	
	G711 Over RTSP: Disable	

3.5 Transmit Advance parameters settings

Input setting	Output setting	Audio setting	Advance parameters
	TS Video PID:	<input type="text" value="100"/>	[16-8190]
	TS Audio PID:	<input type="text" value="200"/>	[16-8190]
	TS Transport Stream ID:	<input type="text" value="101"/>	[1-65535]
	TS Original Network ID:	<input type="text" value="65281"/>	[1-65535]
	TS PMT Start PID:	<input type="text" value="480"/>	[16-7936]
	TS Start PID:	<input type="text" value="481"/>	[32-3840]
	TS Tables Version:	<input type="text" value="6"/>	[0-31]
	TS Service ID:	<input type="text" value="1"/>	[1-65535]
	TS Service Name:	<input type="text" value="Live"/>	
	TS Provider Name:	<input type="text" value="TCoder"/>	
	Conform to System B (DVB):	<input type="text" value="Disable"/>	
	TS Null Packet:	<input type="text" value="No Insert"/>	
	TS TDT:	<input type="text" value="Disable"/>	
	SRT Latency(ms):	<input type="text" value="150"/>	[1-10000]
	SRT Bandwidth(KByte):	<input type="text" value="0"/>	[0-102400](0=nolimit)

4. System setting

4.1 Network Setting

- Status
- Transcode list
- Transmit list
- Device manage
- System setting
 - Network setting
 - Advance setting
 - System output
 - Serial to TCP
 - Password setting
- Update and Backup
 - Reset device
 - Reboot device
 - Schedule Restart

Network setting

Internet access 1

DHCP:

IP:

Mask:

Gateway:

MAC:

Internet access 2

DHCP:

IP:

Mask:

Gateway:

MAC:

DNS

DNS 1:

DNS 2:

NTP

NTP Enable:

NTP Server:

Time Zone:

Port

HTTP Port:

RTSP Port:

4.2 Advance setting

Status	Advance setting
Transcode list	
Transmit list	
Device manage	
System setting	
Network setting	
Advance setting	
System output	
Serial to TCP	
Password setting	
Update and Backup	
Reset device	
Reboot device	
Schedule Restart	

Video Only:

Audio Only:

Lost Time(s): [3-30]

Hls Splitter Time(s): [3-20]

Hls Number: [3-20]

Net Drop Threshold: [50-50000]

TS once pack: [3-128]

TS password enable:

Vmix Compatible:

RTP OVER RTSP:

TS OVER RTSP:

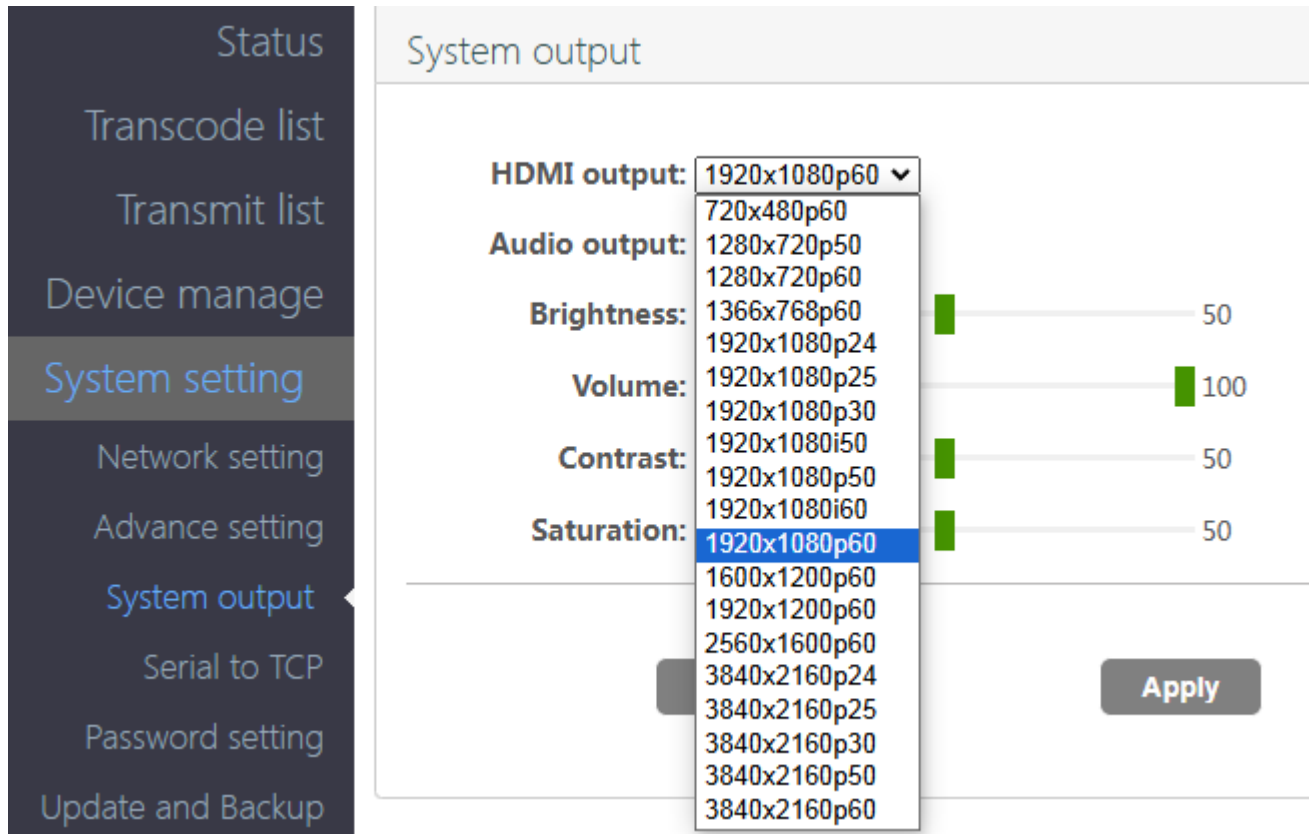
Multicast type:

Multicast port:

UDP TTL: [1-254]

UDP SOCKET BUF SIZE: [0-20971520]

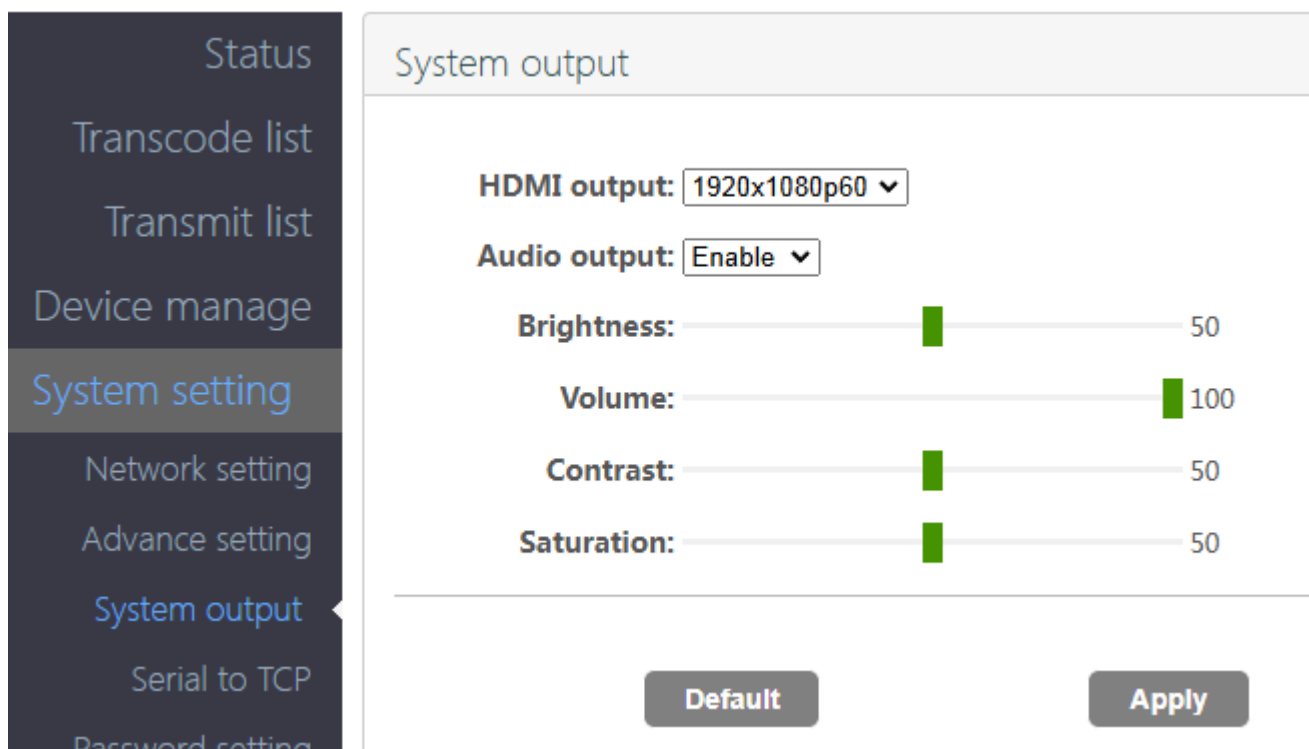
4.3 System output



The screenshot shows the 'System output' settings page. On the left is a dark sidebar menu with the following items: Status, Transcode list, Transmit list, Device manage, System setting (highlighted in light blue), Network setting, Advance setting, System output (with a white arrow pointing right), Serial to TCP, Password setting, and Update and Backup. The main content area is titled 'System output' and contains the following settings:

- HDMI output:** 1920x1080p60 (dropdown menu is open)
- Audio output:** 1280x720p50
- Brightness:** 1366x768p60 (slider at 50)
- Volume:** 1920x1080p25 (slider at 100)
- Contrast:** 1920x1080i50 (slider at 50)
- Saturation:** 1920x1080i60 (slider at 50)

The dropdown menu for HDMI output is open, showing the following options: 720x480p60, 1280x720p50, 1280x720p60, 1366x768p60, 1920x1080p24, 1920x1080p25, 1920x1080p30, 1920x1080i50, 1920x1080p50, 1920x1080i60, 1920x1080p60 (highlighted in blue), 1600x1200p60, 1920x1200p60, 2560x1600p60, 3840x2160p24, 3840x2160p25, 3840x2160p30, 3840x2160p50, and 3840x2160p60. An 'Apply' button is located at the bottom right of the settings area.



The screenshot shows the 'System output' settings page. On the left is a dark sidebar menu with the following items: Status, Transcode list, Transmit list, Device manage, System setting (highlighted in light blue), Network setting, Advance setting, System output (with a white arrow pointing right), Serial to TCP, and Password setting. The main content area is titled 'System output' and contains the following settings:

- HDMI output:** 1920x1080p60 (dropdown menu is closed)
- Audio output:** Enable (dropdown menu is open)
- Brightness:** 50 (slider at 50)
- Volume:** 100 (slider at 100)
- Contrast:** 50 (slider at 50)
- Saturation:** 50 (slider at 50)

The dropdown menu for Audio output is open, showing the following options: Enable (highlighted in light blue) and Disable. At the bottom of the settings area, there are two buttons: 'Default' and 'Apply'.

4.4 Upgrade and Backup firmware

- Status
- Transcode list
- Transmit list
- Device manage
- System setting**
- Network setting
- Advance setting
- System output
- Serial to TCP
- Password setting
- Update and Backup**
- Reset device
- Reboot device
- Schedule Restart

Upload firmware and configuration

Version: 1.1.0.9

Select file: **Scan...** **Upload**

Warning: File name is up.rar or box.ini. Please dont upload by different people at the same time, dont power off during upload.

Backup firmware and configuration

Firmware **Configuration**