

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

V1.0 2024/4/26



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# 1. Management Settings

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

4K

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: 

Total 9 channels

 The maximum input stream resolution should be at or below 1920\*1200@25

Audio action: 

Number 1 channel

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

## 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	<b>Transcoding address:</b> <input type="text" value="http://192.168.1.150/0.ts"/> <a href="#">The source address</a>			
Transmit list	<b>Cache(ms):</b> <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	<b>Transcoding index(TS available):</b> <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	<b>Encoder list:</b> <input type="text" value="192.168.1.150"/> ▼
Transmit list	<b>Encoder ip:</b> <input type="text" value="192.168.1.150"/>
Device manage	<b>Username:</b> <input type="text"/>
System setting	<b>Password:</b> <input type="text"/>
	<input type="button" value="Get URL"/>
	ONVIF device
	<b>ONVIF list:</b> <input type="text" value="http://192.168.1.150/onvif/device_service"/> ▼
	<b>ONVIF URL:</b> <input type="text" value="http://192.168.1.150/onvif/device_service"/>
	<b>Username:</b> <input type="text"/>
	<b>Password:</b> <input type="text"/>
	<input type="button" value="Get RTSP URL"/>
	SAP device
	<b>SAP list:</b> <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 ▼
HLS TS URL:	<input type="text" value="/0.m3u8"/>	Disable ▼
HLS MP4 URL:	<input type="text" value="/0_mp4.m3u8"/>	Disable ▼
MP4 URL:	<input type="text" value="/0.mp4"/>	Disable ▼
FLV URL:	<input type="text" value="/0.flv"/>	Disable ▼
RTSP URL:	<input type="text" value="/0"/>	Disable ▼
RTMP URL:	<input type="text" value="/0"/>	Disable ▼
RTMP(S)/RTSP PUSH URL:	<input type="text" value="rtmp://192.168.1.169/live/0"/>	Disable ▼
Multicast IP:	<input type="text" value="238.0.0.1"/>	Disable ▼
Multicast Port:	<input type="text" value="1234"/>	
Multicast SAP Name:	<input type="text" value="sap"/>	
SRT URL Port:	<input type="text" value="9000"/>	Disable ▼
SRT PUSH URL:	<input type="text" value="srt://192.168.1.169:9000"/>	Disable ▼
SRT Encryption Password:	<input type="text" value="0123456789"/>	Disable ▼
HLS PUSH URL:	<input type="text" value="https://a.upload.youtube.com/http_upload_hls?c"/>	Disable ▼

## 2.4 Transcode encode settings


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

## 2.5 Transcode audio settings

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

## 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
<div>Zone1</div> <div>Zone: <div>Enable</div></div> <div>Type: <div>bmp</div></div> <div>Alpha: <div>200</div> [0-255]</div> <div>X: <div>10</div> [0-1920]</div> <div>Y: <div>10</div> [0-1080]</div> <div>LOGO preview : <div></div></div>				

## 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
<div>TS Video PID: <div>100</div> [16-8190]</div> <div>TS Audio PID: <div>200</div> [16-8190]</div> <div>TS Transport Stream ID: <div>101</div> [1-65535]</div> <div>TS Original Network ID: <div>65281</div> [1-65535]</div> <div>TS PMT Start PID: <div>480</div> [16-7936]</div> <div>TS Start PID: <div>481</div> [92-3840]</div> <div>TS Tables Version: <div>6</div> [0-31]</div> <div>TS Service ID: <div>1</div> [1-65535]</div> <div>TS Service Name: <div>Live</div></div> <div>TS Provider Name: <div>TCoder</div></div> <div>Conform to System B (DVB): <div>Disable</div></div> <div>TS Null Packet: <div>No Insert</div></div> <div>TS TDT: <div>Disable</div></div> <div>SRT Latency(ms): <div>150</div> [1-10000]</div> <div>SRT Bandwidth(KByte): <div>0</div> [0-102400](0=unlimit)</div>					

### 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	

### 3.2 Transmit input settings

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

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			
Transmit list			
Device manage			
System setting			

TS URL:  Enable ▼

HLS TS URL:  Disable ▼

HLS MP4 URL:  Disable ▼

MP4 URL:  Disable ▼

FLV URL:  Disable ▼

RTSP URL:  Disable ▼

RTMP URL:  Disable ▼

RTMP(S)/RTSP PUSH URL:  Disable ▼

Multicast IP:  Disable ▼

Multicast Port:

Multicast SAP Name:

SRT URL Port:  Disable ▼

SRT PUSH URL:  Disable ▼

SRT Encryption Password:  Disable ▼

HLS PUSH URL:  Disable ▼

Apply Return

### 3.4 Transmit audio settings

Input setting	Output setting	Audio setting
---------------	----------------	---------------

Audio Input:  ▼

Encoder:  ▼

Bitrate:  [48000~320000]

G711 Over PTE:  ▼

G711:  ▼

G711 Over RTSP:  ▼

Apply Return



## 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)			

Apply

Return

## 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: 

Disable ▾

IP: 

192.168.1.169

Mask: 

255.255.255.0

Gateway: 

192.168.1.1

MAC: 

00:13:14:04:7B:6E

Internet access 2

DHCP: 

Disable ▾

IP: 

192.168.0.169

Mask: 

255.255.255.0

Gateway: 

192.168.0.1

MAC: 

00:23:24:04:7B:6E

DNS

DNS 1: 

192.168.1.1

DNS 2: 

8.8.8.8

NTP

NTP Enable: 

Disable ▾

NTP Server: 

time.windows.com

Time Zone: 

UTC+8 ▾

Apply

Port

HTTP Port: 

8080

RTSP Port: 

8554

Apply

## 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

Status

Transcode list

Transmit list

Device manage

System setting

Network setting

Advance setting

System output

Serial to TCP

Password setting

Update and Backup

System output

HDMI output: 1920x1080p60

720x480p60

Audio output: 1280x720p50

1280x720p60

Brightness: 1366x768p60

1920x1080p24

Volume: 1920x1080p25

1920x1080p30

Contrast: 1920x1080i50

1920x1080p50

1920x1080i60

Saturation: 1920x1080p60

1600x1200p60

1920x1200p60

2560x1600p60

3840x2160p24

3840x2160p25

3840x2160p30

3840x2160p50

3840x2160p60

50

100

50

50

Apply

Status

Transcode list

Transmit list

Device manage

System setting

Network setting

Advance setting

System output

Serial to TCP

Password setting

System output

HDMI output: 1920x1080p60

Audio output: Enable

Brightness:

Volume:

Contrast:

Saturation:

50

100

50

50

Default

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