

Dxx Decoder Api Documentation (v2.2)

Dxx Series Decoder Interface

Welcome to the Device HTTP API!

Device HTTP API is a programming interface for network decoding and software development for this model. Device HTTP API is designed to control various functions of the device through a simple HTTP request/response mechanism. Software developers can use Device HTTP API to achieve the purpose of remote management and control of devices.

Each function of the API corresponds to an HTTP request path. In the current version of the API, the format of this path is: `http://[:]/api/[module name]/[method]` (**http** ://ip:port/api/xxx)

This document will list the file name and function description of each API function. At the same time, in each API document, there will be a test interface. You can fill in the request parameters you need to test in the test interface according to the description of the request parameters, execute the test, and verify the API function online, which is very convenient.

API requests follow the standard HTTP protocol. Developers can use any tools or software development libraries that comply with the HTTP standard to complete API calls (such as web browsers, JavaScript libraries, C/C++ HTTP protocol libraries, JAVA, .NET, etc.). Parameter submission may be POST or GET, or both, depending on the interface requirements of different APIs. For details, please refer to the API description. The API response is in JSON format. For the meaning of each parameter in the JSON object, please refer to the documentation of each API.

We try to keep the product API interfaces wherever feasible., but we cannot rule out that the API interfaces of different products may have some differences due to differences in product features. Therefore, developers are requested to follow official guidance to distinguish and handle these detailed differences.

Contents

1. [API Call Instructions](#)
2. [Authentication](#)
3. [Example](#)
4. [Error Code](#)

- 5. [INFO Module](#)
 - 6. [USER Module](#)
 - 7. [OVERLAY Module](#)
 - 8. [SOURCE Module](#)
 - 9. [LAYOUT Module](#)
 - 10. [OUTPUT Module](#)
 - 11. [NETWORK Module](#)
 - 12. [SYSTIME Module](#)
 - 13. [SYSTEM Module](#)
 - 14. [FIRMWARE MODULES](#)
 - 15. [PREVIEW Module](#)
 - 16. [NDI-Discovery](#)
-

1. Calling interface description

Unified interface prefix:

Base URLs : `http://ip:port/api/xxx`

The return format of all interfaces is unified as follows:

- Normal return ``{"result": "ok","data": a certain Type of data, such as string, number, array, object, etc., may not have this field}`` Example of returning without data field: ``{"result": "ok"}``
- Error returns ``{"result": "error","msg": "errCode"}``

2. Authentication

- header
 - Parameter name: `**app**`, in: header.

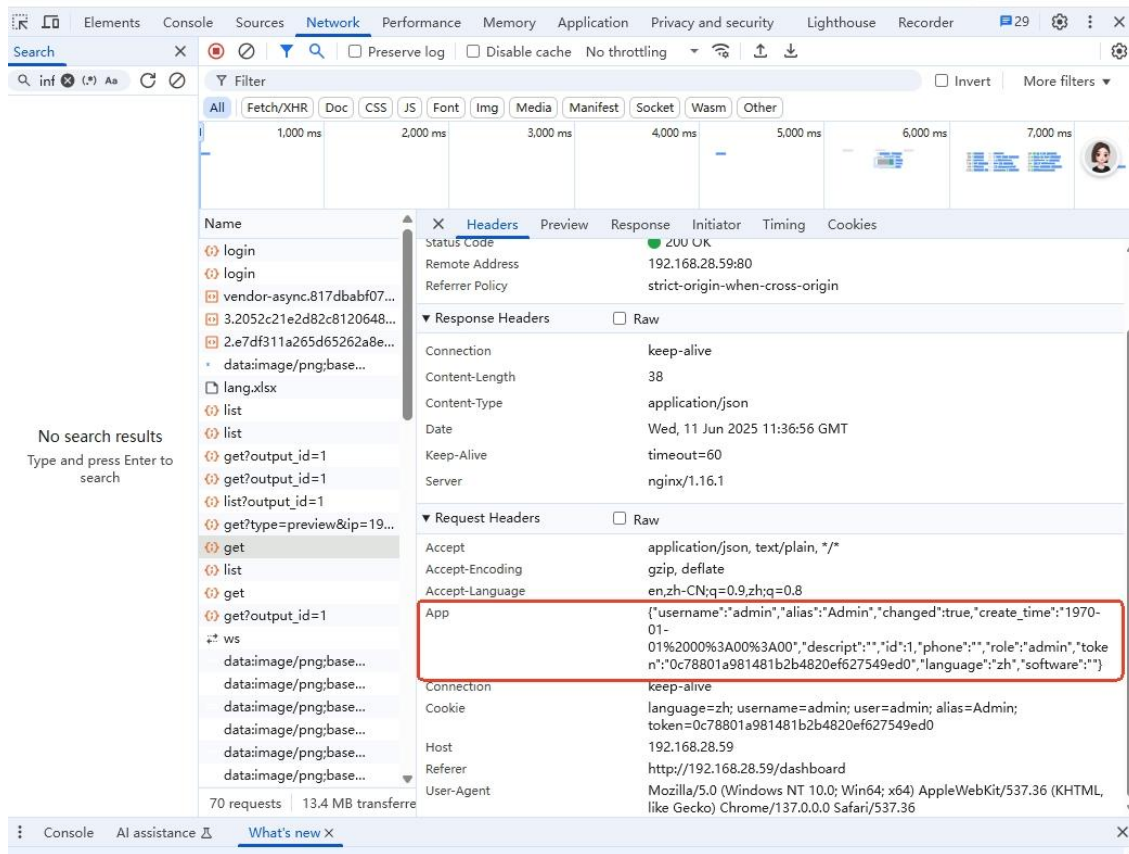
3. Example

- (1) API Authentication Principles
- (2) Log in to get a token

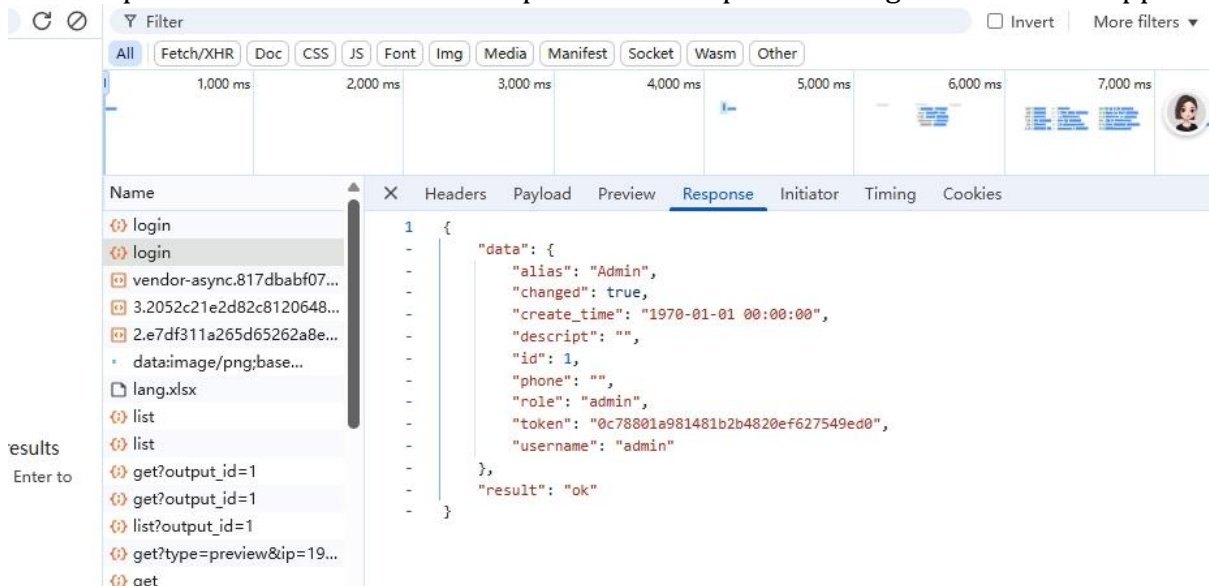
When calling the login API (via GET/POST), the response will contain a token. This token will be used as the authentication credential for subsequent API requests.

- (3) Using the token in your request

For any other API endpoint, the token must be added in the request header in the following format (example):
`{"username":"admin","alias":"admin","changed":true,"role":"admin","token":"3515d2e8d3615fc68c84f00b361c5d8c","language":"en","software":"true"}`.



You can press F12 in the browser to open the developer tools to get the relevant application.



The role of the token is to prove to the server that the authentication has been passed. The principle is similar to that of a Web graphical interface maintaining session status through cookies.

(4) Local demonstration steps (including Postman operations)

(5) Step 1 : Log in to get a token

- a. Open Postman and create a new POST request.
- b. Request address : <https://192.168.28.30/api/users/login>
- c. Request body (JSON format): { "username": "admin", "password": "your-device-password" }

(Note: If the password of the device has not been changed, the default password is admin .)

- d. Send a request : Click Send and extract the token field from the response (such as 3515d2e8d3615fc68c84f00b361c5d8c).

(6) Step 2: Add an authentication header to the request

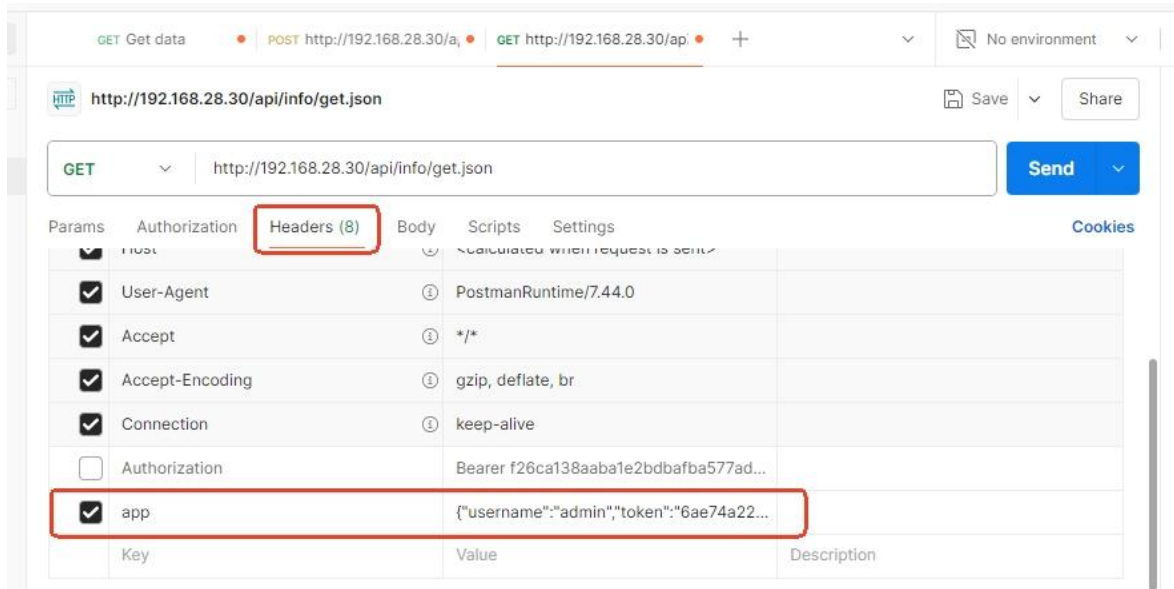
- a. Create a new target API request (such as info/get.json to get information).
- b. Set the request header :
- e. Switch to the Headers tab and add the following key-value pairs:
- f. Key: app
- g. Value : {"username":"admin","token":"your-obtained-token"}

(Note: Replace your-obtained-token with the token you actually obtained in step 1.)

- c. Send request : Click Send, and the server will return data after verifying the identity through the token.

(7) Obtaining a token using the browser developer tools (alternative method)

- a. F12 in the browser to open the developer tools and switch to the Network tab.
- b. Perform the login operation, find the login request (such as login.json), and check the token field in the response body or header .



(8) Troubleshooting Tips

- Password verification**: Make sure the device password is correct (the default password is admin if it has not been modified).
- Token validity**: Check whether the token is copied correctly and has not expired (if it expires, you need to log in again to obtain it).
- Request header format**: Confirm that the JSON format of the app header is correct and there are no spelling errors in the token field (for example, the token must be consistent with the server requirements).

4. Error Code

Error Code	Error description
0	Request Success
1	Parameter error
2	Authentication error
100	Output not found
101	Video source not found
102	Audio source not found
103	Output interface not found
104	Layout template not found
105	Preset not found
106	Output interface not found
107	Layout out of range
200	Group Not Found
201	Stream not found

202	Stream does not exist
203	NDI Server Duplicate
204	Stream Repeat
205	Unsupported protocol
206	Group already exists
207	Cache exceeds maximum limit
300	User not found
301	Passwords do not match
302	Wrong username or password
400	Ping failed
401	ERR <i>MODIFY</i> NET
402	Network configuration error
403	Duplicate routes
404	Route not found
405	The port is already occupied
500	Duplicate name
501	In use
502	Failed to save configuration
503	Time setting failed
504	Invalid VO output
505	The mixer only supports four channels of audio
506	Target already exists
507	File does not exist
508	PTZ setup failed
509	Insufficient equipment performance
1000	Common error codes

5.INFO Module

GET /info/get

(1) Request Parameters

Name	Location	Type	Required	Illustrate
app	header	string	yes	none

[Return to example](#)

```
{
  "data": {
    "device_name": "xxx",
    "firmware_version": "xxx",
    "hardware_version": "xxx",
    "serial_number": "xxx",
    "software_version": "2.0.0"
  },
  "result": "ok"
}
```

(2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» device_name	string	true	none		Device name
»»	string	true	none		Firmware

firmware_version					version
»» hardware_version	string	true	none		Hardware version
»» serial_number	string	true	none		Device serial number
»» software_version	string	true	none		Software Version
» result	string	true	none		none

6.USER Module

(1) POST /users/login

POST /users/login

User login

Body request parameters

```
{
  "username": "test",
  "password": "Admin123"
}
```

1)Request Parameters

Name	Location	Type	Required	Illustrate
username	query	string	no	username
password	query	string	no	password
app	header	string	yes	none
body	body	object	no	none

Return to example

```
{
  "data": {
    "alias": "ad nostrud fugiat veniam",
    "changed": true,
    "create_time": "2006-02-28 20:50:14",
    "descript": "reprehenderit culpa dolore voluptate est",
    "id": 4,
    "phone": "18176237335",
    "role": "admin",
    "token": "token",
    "username": "admin"
  },
  "result": "velit elit id"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» alias	string	true	none		Aliases
»» changed	boolean	true	none		Have you changed your password?
»» create_time	string	true	none		Creation time
»» descript	string	true	none		describe
»» id	integer	true	none		id, unique value

»» phone	string	true	none		Contact Number
»» role	string	true	none		Permissions
»» Token	string	true	none		Verify the token
»» username	string	true	none		Account name
» result	string	true	none		none

(2) POST /users/logout

POST /users/logout

Log out

Body request parameters

```
{
  "token": "string"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» token	body	string	yes	Authentication token	none

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code 200

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(3) GET /users/list

GET /users/list

Get User List

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

Return to example

```
{
  "count": 1,
  "list": [
    {
      "alias": "admin",
      "create_time": "1715070431000",
      "descript": "Initial password is admin, password must be changed when logging in",
      "id": 1,
      "phone": "",
      "role": "admin",
      "token": "caf27900204ebde13710feef58a2208c",
      "username": "admin"
    }
  ]
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» count	integer	true	none		none
» list	[object]	true	none		none
»» alias	string	false	none		Aliases
»» create_time	string	false	none		Creation timestamp (ms)
»» descript	string	false	none		Detailed Description
»» id	integer	false	none		User ID
»» phone	string	false	none		telephone number
»» role	string	false	none		Role
»» Token	string	false	none		token value
»» username	string	false	none		username

(4) POST /users/add

POST /users/add

Adding Users

Body request parameters

```
{
  "username": "admin",
  "password": "admin",
  "alias": "test1",
  "role": "user",
  "phone": "",
  "descript": ""
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» id	body	string	no		none
» username	body	string	yes		Username
» password	body	string	yes		password
» alias	body	string	yes		Aliases
» role	body	string	yes		Role
» phone	body	string	yes		Contact Number
» descript	body	string	yes		describe

Return to example

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(5)POST /users/remove

POST /users/remove

Deleting a User

Body request parameters

```
{
  "id": 2
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» id	body	integer	yes		User ID

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(6) POST /users/modifyPwd

POST /users/modify

Change Password

Body request parameters

```
{
  "username": "admin",
  "password": "Admin123",
  "passwordAgain": "Admin123"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» username	body	string	yes		Username
» password	body	string	yes		password
» passwordAgain	body	string	yes		password

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

7. OVERLAY Module

(1) GET /overlay/list

GET /overlay/list

Get the list of overlay templates

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
output_id	query	string	no		none
app	header	string	yes		none

[Return to example](#)

```
{
  "data": [
    {
      "background": "transparent",
      "editing": true,
      "id": 1,
      "img_path": "./data/decoder_config/overlay/preview/overlay_1.png",
      "modified": false,
      "name": "template_1",
      "selected": false,
      "status": 0
    }
  ],
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	[object]	true	none		none
»» background	string	false	none		Background Color
»» editing	boolean	false	none		Edit
»» id	integer	false	none		id
»» img_path	string	false	none		Image URL
»» modified	boolean	false	none		Modify
»» name	string	false	none		name
»» selected	boolean	false	none		Is it selected?
»» status	integer	false	none		state
» result	string	true	none		none

(2)POST /overlay/select

POST /overlay/select

Select (check) a template

[Body request parameters](#)

```
{
  "overlay_id": 1,
  "output_id": 0
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
------	----------	------	----------	--------------	------------

app	header	string	yes		none
body	body	object	no		none
» overlay_id	body	integer	yes		Overlay template id
» output_id	body	integer	yes		Output id

[Return to example](#)

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

8.SOURCE module

(1)POST /source/groups/list

POST /source/groups/list

Get all video source groups

[Request body parameters](#)

```
{
  "is_need_stream": true
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» is_need_stream to match the parameter name as shown in the code block above.	body	boolean	no	Whether to return flow information	User controls whether to return stream information when returning group list

[Return to example](#)

```
{
  "data": [
    {
      "id": "2ed1f7150cf235e8662d73ac58b925b1",
      "name": "NDI",
      "streams": [
        {
          "address": "192.168.36.238",
          "application": "",
          "audio_sync_compst": 0,
          "bandwidth": -1,
          "buffer": "live:0:0:0:0:0",
          "connect_speed": 0,
          "connection_mode": "",
          "enable": 0,
          "encryption": "",
          "id": "0f79952dbc00505b2331b0bdb0c8ca0a",

```

```

        "latency": -1,
        "listener_port": -1,
        "name": "N60_238 (HX)",
        "ndi_name": "N60_238 (HX)",
        "passphrase": "",
        "password": "",
        "payload_size": -1,
        "preview_mode": "Auto",
        "rtmp_server_port": -1,
        "sdp_content": "",
        "security": "",
        "session": "public",
        "show_advanced": "",
        "srt_id": "",
        "status": 2,
        "token": "",
        "trans_mode": "tcp",
        "Type": "ndi",
        "url": "192.168.36.238:5964",
        "user": ""
    },
    {
        "address": "192.168.36.238",
        "application": "",
        "audio_sync_compst": 0,
        "bandwidth": -1,
        "buffer": "live:0:0:0:0",
        "connect_speed": 0,
        "connection_mode": "",
        "enable": 0,
        "encryption": "",
        "id": "e893d03a94326b981fd3aa276f90183a",
        "latency": -1,
        "listener_port": -1,
        "name": "N60_238 (HB)",
        "ndi_name": "N60_238 (HB)",
        "passphrase": "",
        "password": "",
        "payload_size": -1,
        "preview_mode": "Auto",
        "rtmp_server_port": -1,
        "sdp_content": "",
        "security": "",
        "session": "public",
        "show_advanced": "",
        "srt_id": "",
        "status": 2,
        "token": "",
        "trans_mode": "tcp",
        "Type": "ndi",
        "url": "192.168.36.238:5965",
        "user": ""
    }
]
},
{

```

```

"id": "0093969758ac42c99245e89f9108ad08",
"name": "Other",
"streams": [
  {
    "address": "",
    "application": "",
    "audio_sync_compst": 0,
    "bandwidth": 0,
    "buffer": "live:200:200:500:0:0",
    "connect_speed": 0,
    "connection_mode": "",
    "enable": 0,
    "encryption": "",
    "id": "03db9d3284fd709f6bdd099c9a5f8778",
    "latency": 0,
    "listener_port": 0,
    "name": "RTMP",
    "ndi_name": "",
    "passphrase": "",
    "password": "",
    "payload_size": 0,
    "preview_mode": "Auto",
    "rtmp_server_port": 0,
    "sdp_content": "",
    "security": "",
    "session": "",
    "show_advanced": "",
    "srt_id": "",
    "status": 0,
    "token": "",
    "trans_mode": "",
    "Type": "rtmp",
    "url": "rtmp://192.168.0.73:1935/live/vvv",
    "user": ""
  },
  {
    "address": "192.168.36.236",
    "application": "",
    "audio_sync_compst": 0,
    "bandwidth": 25,
    "buffer": "live:200:200:500:0:0",
    "connect_speed": 0,
    "connection_mode": "Caller",
    "enable": 0,
    "encryption": "none",
    "id": "834fd00666b91015b23ee336bc2d605a",
    "latency": 125,
    "listener_port": 1025,
    "name": "SRT_Caller",
    "ndi_name": "",
    "passphrase": "",
    "password": "",
    "payload_size": 1316,
    "preview_mode": "Auto",
    "rtmp_server_port": 0,
    "sdp_content": "",

```

```

    "security": "",
    "session": "",
    "show_advanced": "0",
    "srt_id": "",
    "status": 0,
    "token": "",
    "trans_mode": "",
    "Type": "srt",
    "url": "srt://192.168.36.236:1025",
    "user": ""
  },
  {
    "address": "",
    "application": "",
    "audio_sync_compst": 0,
    "bandwidth": 0,
    "buffer": "live:200:200:500:0:0",
    "connect_speed": 0,
    "connection_mode": "",
    "enable": 0,
    "encryption": "",
    "id": "f63dda56f9891ed3b4a5677cf040a4f8",
    "latency": 0,
    "listener_port": 0,
    "name": "RTMP",
    "ndi_name": "",
    "passphrase": "",
    "password": "",
    "payload_size": 0,
    "preview_mode": "Auto",
    "rtmp_server_port": 0,
    "sdp_content": "",
    "security": "",
    "session": "",
    "show_advanced": "",
    "srt_id": "",
    "status": 0,
    "token": "",
    "trans_mode": "",
    "Type": "rtmp",
    "url": "rtmp://192.168.0.73:1935/live/vvv",
    "user": ""
  }
]
},
"result": "ok"
}

```

2)Return data structure

Status code 0

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none
»» id	string	true	none		Group id
»» name	string	true	none		Group name
»» streams	\[object]	true	none		none

»»» address	string	true	none		Public IP
»»» application	string	true	none		rtmp_server application name
»»» audio_sync_compst	integer	true	none		Reserved Fields
»»» bandwidth	integer	true	none		SRT recovery bandwidth overhead
»»» buffer	string	true	none		Cache time
»»» connect_speed	integer	true	none		Reserved Fields
»»» connection_mode	string	true	none		srt connection mode Rendezvous or Listener or Caller
»»» enable	integer	true	none		Reserved Fields
»»» encryption	string	true	none		srt encryption method
»»» id	string	true	none		Stream id, unique value
»»» latency	integer	true	none		<i>SRT packet delay</i>
»»» listener_port	integer	true	none		port
»»» name	string	true	none		Stream name
»»» ndi_name	string	true	none		NDI name
»»» passphrase	string	true	none		<i>SRT encryption passphrase</i>
»»» password	string	true	none		Connection authentication password
»»» payload_size	integer	true	none		<i>SRT payload size</i>
»»» preview_mode	string	true	none		“Loading mode: Auto: Automatically select stream based on resolution Full: Main stream Preview: Sub stream
»»» rtmp_server_port	integer	true	none		rtmp_server port
»»» sdp_content	string	true	none		rtp protocol sdp content
»»» security	string	true	none		rtmp_server authentication method none

					or token
»»» session	string	true	none		rtmp_server session
»»» show_advanced	string	true	none		Enable display of advanced settings (true/false)
»»» srt_id	string	true	none		srt protocol stream id
»»» status	integer	true	none		Streaming status 0 Not connected 1 Connecting 2 Successfully connected 3 Failed to connect 4 Performance limited, stop streaming
»»» token	string	true	none		rtmp_server authentication token
»»» trans_mode	string	true	none		rtsp connection mode udp/tcp
»»» Type	string	true	none		Stream Type
»»» url	string	true	none		Stream URL
»»» user	string	true	none		Connection authentication account
»»» connect_speed	integer	true	none		Connection timeout
»»» Audio sync compensation (ms)	integer	true	none		Audio sync compensation (ms)
» result	string	true	none		none

(2)POST /source/groups/add

POST /source/groups/add

Add a group

Body request parameters

```
{
  "name": "group1"
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» name	body	string	yes		Add the name of the group

[Return to example](#)

```
{
"result": "ok"
}
```

2)Return data structure

Status code 200

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(3)POST /source/groups/streams/add

POST /source/groups/streams/add

Add a flow

Body request parameters

```
//rtsp add
{
"group_id": "05b8ba7a42f01af957d2e8483857962f", //Group
"name": "rtsp1", //name--non-empty
"Type": "rtsp", //Type
"url": "rtsp://192.168.36.222:554/ch01", //Streaming address
"buffer": "live:0:0:0:0:0", //Cache
"trans_mode": "tcp", //rtsp transmission mode tcp or udp
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"user": "", //Authentication account--can be empty
"password": "" //Authentication password--can be empty
}

//rtmp add
{
"group_id": "d054f1d80ed71583392fada325a02823", //Group
"name": "rtmp1", //name--non-empty
"Type": "rtmp", //Type
"url": "rtmp://192.168.0.73:1935/live/vv", //Streaming address
"buffer": "live:0:0:0:0:0", //Cache
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"user": "", //Authentication account
"password": "" //Authentication password
}

//rtmps add
{
"group_id": "d054f1d80ed71583392fada325a02823", //Group
"name": "rtmps", //name--non-empty
"Type": "rtmps", //Type
"url": "rtmps://192.168.0.73:1935/live/vv", //Streaming address
"buffer": "live:0:0:0:0:0", //cache
"connect_speed": 5000, //connection speed
"audio_sync_compst": 0, //audio synchronization compensation
"user": "", //authentication account
"password": "" //authentication password
}

//srt_listener
{
"group_id": "8eca38e84020aba241ead45094c7dd24", //group
```

```

"name": "srt_listener", //name
"Type": "srt", //Type
"url": "srt://:1025", //srt listener mode has no streaming url. Fixed transmission: srt://:port
"buffer": "live:0:0:0:0:0", //cache
"connection_mode": "Listener", //srt connection mode Rendezvous or Listener or Caller
"listener_port": 1025, //srt connection port
"latency": 125, //IP lifetime
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"show_advanced": "1", //Whether to display advanced settings
"srt_id": "111", //srt id
"encryption": "none", //Encryption password. Used to generate encryption key noneNo
encryptionAES-128/AES-192/AES-256
"passphrase": "", //Encryption password
"bandwidth": 25, //Bandwidth overhead
"payload_size": 1316 //Payload size
}

//srt_rendezvous
{
"group_id": "52005872cd91b13767660d196c463879", //Group
"name": "srt3", //name
"Type": "srt", //Type
"url": "srt://192.168.36.51:1025", //Streaming address
"buffer": "live:0:0:0:0:0", //Cache
"connection_mode": "Rendezvous", //SRT connection mode Rendezvous or Listener or Caller
"address": "192.168.36.51", //Public IP
"listener_port": 1025, ///srt connection port
"latency": 125, //IP lifetime
"connect_speed": 5000, //connection speed
"audio_sync_compst": 0, //audio synchronization compensation
"show_advanced": "1", //whether to display advanced settings
"srt_id": "111", //srt id
"encryption": "none", //encryption password. Used to generate encryption key noneNo
encryptionAES-128/AES-192/AES-256
"passphrase": "", //Encryption password
"bandwidth": 25, //Bandwidth overhead
"payload_size": 1316 //Payload size
}

//srt_caller
{
"group_id": "8eca38e84020aba241ead45094c7dd24", //Group
"name": "srt_caller", //name
"Type": "srt", //Type
"url": "srt://192.168.36.59:1025", //Streaming address
"buffer": "live:0:0:0:0:0", //Cache
"connection_mode": "Caller", //SRT connection mode Rendezvous or Listener or Caller
"address": "192.168.36.51", //Public network IP, needs to be consistent with the url
"listener_port": 1025, //srt connection port
"latency": 125, //IP lifetime
"connect_speed": 5000, //connection speed
"audio_sync_compst": 0, //audio synchronization compensation
"show_advanced": "1", //whether to show advanced
"srt_id": "111", //srt id
"encryption": "none", //encryption password. Used to generate encryption key noneNo

```

```

encryptionAES-128/AES-192/AES-256
"passphrase": "", //Encryption password
"bandwidth": 25, //Bandwidth overhead
"payload_size": 1316 //Payload size
}

//rtmp_server
{
"group_id": "8eca38e84020aba241ead45094c7dd24", //Group
"name": "rtmp server1", //name
"Type": "rtmp_server", //Type
"url": "rtmp://192.168.36.59:1935/live/xxx/11111", //Streaming address
"buffer": "live:0:0:0:0", //Cache
"application": "live", //RTMP application name
"session": "11111", //Session name
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"security": "token", //Verification method "" or "token"
"token": "xxx", //token content
"enable": 1, //Default 1
"rtmp_server_port": 1935 //rtmp port is greater than 1025 and less than 65535
}

//rtp
{
"group_id": "e64fbc915a0c34c85cb83bac1e1650fe", //Group
"name": "rtp_no_audio", //name
"Type": "rtp", //Type
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"buffer": "live:200:200:500:0:0", //Cache
"sdp_content": "SDP:\nv=0\no=- 0 0 IN IP4 127.0.0.1\ns=No name\nc=IN IP4 192.168.36.197\nt=0 0\na=tool:libavformat
61.1.100\nm=video 1234 RTP/AVP 96\na=rtpmap:96 H264/90000\na=fmtp:96 packetization-mode=1" //sdp content
}

//udp
{
"group_id": "05b8ba7a42f01af957d2e8483857962f", //Group
"name": "udp", //name--non-empty
"Type": "udp", //Type--non-empty
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"url": "rtsp://192.168.36.222:554/ch01", //Streaming address
"buffer": "live:0:0:0:0" //cache
}

//http
{
"group_id": "05b8ba7a42f01af957d2e8483857962f", //Group
"name": "http", //name--non-empty
"Type": "http", //Type--non-empty
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"url": "http://192.168.36.222:554/ch01", //Streaming address
"buffer": "live:0:0:0:0" //cache
}

```

```
//https
{
"group_id": "05b8ba7a42f01af957d2e8483857962f", //Group
"name": "https", //name--non-empty
"Type": "https", //Type--non-empty
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"url": "https://192.168.36.222:554/ch01", //Streaming address
"buffer": "live:0:0:0:0" //Cache
}

//ndi
{
"group_id": "c719a3c5803d9434050f6ede09d29215", //Group
"Type": "ndi", //Stream Type
"data": [
{
"channel": "HB", //HB or HX
"group_name": "public", //group
"ip": "192.168.36.238", //ip
"name": "N60_238 ", //name
"ndi_name": "N60_238 (HB)", //ndi name
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"port": 5965, //port
"url": "192.168.36.238:5965" //url
}
]
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» group_id	body	string	yes		Group ID
» name	body	string	yes		name
» Type	body	string	yes		Stream Type supports rtmp/rtmps/rtsp/udp/http/https/srt/rtp/ndi
» url	body	string	yes		none
» buffer	body	string	yes		none
» address	body	string	yes		Public IP
» application	body	string	yes		rtmp_server application name
» compst	body	integer	no		Reserved Fields
» bandwidth	body	integer	no		SRT recovery bandwidth overhead
» connect_speed	body	integer	no		Reserved Fields
» connection_mode	body	string	no		<i>srt connection mode Rendezvous or Listener or Caller</i>
» enable	body	integer	no		Reserved Fields
» encryption	body	string	no		srt encryption method
» id	body	string	no		Stream id, unique value
» latency	body	integer	no		Srt packet delay
» listener_port	body	integer	no		port
» ndi_name	body	string	no		NDI name
» passphrase	body	string	no		srt character key

» password	body	string	no		Connection authentication password
» payload_size	body	integer	no		srt loading size
» preview_mode	body	string	no		Loading mode: Auto (selects main or sub stream based on resolution), Full (main stream), Preview (sub stream)
» rtmp_server_port	body	integer	no		rtmp server port
» sdp_content	body	string	no		rtp protocol sdp content
» security	body	string	no		rtmp_server authentication method none or token
» session	body	string	no		rtmp_server session
» show_advanced	body	string	no		Whether to display advanced settings
» srt_id	body	string	no		srt protocol stream id
» status	body	integer	no		Streaming status 0 Not connected 1 Connecting 2 Successfully connected 3 Failed to connect 4 Performance limited, stop streaming
» token	body	string	no		rtmp_server authentication token
» trans_mode	body	string	no		TSP transport protocol: UDP or TCP

| » user | body | string | No | | Connection authentication account | \

» connect_speed	integer	true	none		Connection timeout (ms)
-----------------	---------	------	------	--	-------------------------

[Return to example](#)

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(3)POST source/groups/rename

POST /source/groups/rename

Modify the specified group name

[Body request parameters](#)

```
{
  "group_id": 1,
  "name": "new_group1"
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» group_id	body	string	yes		Group id
» name	body	string	yes		Modified group name

[Return to example](#)

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(4)POST source/groups/remove

POST /source/groups/remove

Delete a group

Body request parameters

```
{
  "group_id": "string"
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» group_id	body	string	yes		Group id

[Return to example](#)

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(5)POST /source/groups/streams/modify

POST /source/groups/streams/modify

To modify a video stream parameter, you can pass the corresponding parameter according to the protocol Type.

Body request parameters

//Modify rtmp

```
{
  "stream_id": "d054f1d80ed71583392fada325a02823", //stream_id
  "name": "rtmp1", //name--non-empty
  "Type": "rtmp", //Type
  "connect_speed":5000, //Connection speed
  "audio_sync_compst":0, //Audio synchronization compensation
  "url": "rtmp://192.168.0.73:1935/live/vv", //Pull stream address
  "buffer": "live:0:0:0:0", //Cache
  "user": "", //Authentication account
  "password": "" //Authentication password
}
```

//Modify rtmps

```
{
  "stream_id": "d054f1d80ed71583392fada325a02823", //stream_id
  "name": "rtmps", //name--non-empty
  "Type": "rtmps", //Type
  "url": "rtmps://192.168.0.73:1935/live/vv", //stream pull address
  "connect_speed":5000, //connection speed
  "audio_sync_compst":0, //audio synchronization compensation
  "buffer": "live:0:0:0:0", //cache
  "user": "", //authentication account
  "password": "" //authentication password
}
```

//Modify udp

```
{
```

```

"stream_id": "05b8ba7a42f01af957d2e8483857962f", //stream_id
"name": "udp", //name--non-empty
"Type": "udp", //Type--non-empty
"connect_speed": 5000, //connection speed
"audio_sync_compst": 0, //audio synchronization compensation
"url": "udp://192.168.36.222:554/ch01", //stream pull address
"buffer": "live:0:0:0:0" //cache
}

//Modify http
{
"stream_id": "05b8ba7a42f01af957d2e8483857962f", //stream_id
"name": "http", //name--non-empty
"Type": "http", //Type--non-empty
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"url": "http://192.168.36.222:554/ch01", //Stream pull address
"buffer": "live:0:0:0:0" //cache
}

//Modify https
{
"stream_id": "05b8ba7a42f01af957d2e8483857962f", //stream_id
"name": "https", //name--non-empty
"Type": "https", //Type--non-empty
"url": "https://192.168.36.222:554/ch01", //streaming address
"buffer": "live:0:0:0:0", //cache
"connect_speed": 5000, //connection speed
"audio_sync_compst": 0, //audio synchronization compensation
"user": "", //authentication account--can be empty
"password": "" //authentication password--can be empty
}

//Modify rtsp
{
"stream_id": "05b8ba7a42f01af957d2e8483857962f", //stream_id
"name": "rtsp1", //name--non-empty
"Type": "rtsp", //Type
"url": "rtsp://192.168.36.222:554/ch01", //streaming address
"buffer": "live:0:0:0:0", //cache
"trans_mode": "tcp", //rtsp transmission mode tcp or udp
"connect_speed": 5000, //connection speed
"audio_sync_compst": 0, //audio synchronization compensation
"user": "", //authentication account--can be empty
"password": "" //authentication password--can be empty
}

//Modify rtp
{
"stream_id": "8ef8bd5971763f671d81efa994549764", //stream_id
"name": "rtp1", //name
"Type": "rtp", //Type
"connect_speed": 5000, //connection speed
"audio_sync_compst": 0, //audio synchronization compensation
"buffer": "live:0:0:0:0", //cache
"sdp_content": "SDP:\nv=0\nv=0 0 0 IN IP4 127.0.0.1\nns=No name\nc=IN IP4 192.168.36.197\nt=0 0\na=tool:libavformat

```

```
61.1.100\nm=audio 1236 RTP/AVP 97\nb=AS:768\na=rtpmap:97 PCMU/48000/2" //sdp content
}
```

```
//Modify SRT(Listener)
```

```
{
"stream_id": "8eca38e84020aba241ead45094c7dd24", //stream_id
"name": "srt_listener", //name
"Type": "srt", //Type
"url": "srt://:1025", //srt listener mode has no stream url. Fixed transmission: srt://:port
"buffer": "live:0:0:0:0:0", //cache
"connection_mode": "Listener", //srt connection mode Rendezvous or Listener or Caller
"listener_port": 1025, //srt connection port
"latency": 125, //IP lifetime
"show_advanced": "1", //Whether to display advanced settings
"srt_id": "111", //srt id
"encryption": "none", //Encryption password. Used to generate encryption keynoneNo
encryptionAES-128/AES-192/AES-256
"passphrase": "", //Encryption password
"bandwidth": 25, //Bandwidth overhead
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"payload_size": 1316 //Payload size
}
```

```
//Modify SRT(Caller)
```

```
{
"stream_id": "8eca38e84020aba241ead45094c7dd24", //stream_id
"name": "srt_caller", //name
"Type": "srt", //Type
"url": "srt://192.168.36.59:1025", //Pull stream address
"buffer": "live:0:0:0:0:0", //Cache
"connection_mode": "Caller", //SRT connection modeRendezvous or Listener or Caller
"address": "192.168.36.51", //Public IP, needs to be consistent with the URL
"listener_port": 1025, //SRT connection port
"latency": 125, //IP lifetime
"show_advanced": "1", //Whether to display advanced
"srt_id": "111", //SRT id
"encryption": "none", //Encryption password. Used to generate encryption keynoneNo
encryptionAES-128/AES-192/AES-256
"passphrase": "", //Encryption password
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"bandwidth": 25, //Bandwidth overhead
"payload_size": 1316 //Payload size
}
```

```
//Modify SRT(Rendezvous)
```

```
{
"stream_id": "52005872cd91b13767660d196c463879", //stream_id
"name": "srt3", //name
"Type": "srt", //Type
"url": "srt://192.168.36.51:1025", //Pull stream address
"buffer": "live:0:0:0:0:0", //Cache
"connect_speed": 2, //Connection response speed--Confirm cancellation, temporarily reserved in the interface, can be fixed to
0
"audio_sync_compst": 0, //Audio synchronization compensation--confirm cancellation, temporarily reserved in the interface,
```

```

can be fixed to 0
"connection_mode": "Rendezvous", //srt connection mode Rendezvous or Listener or Caller
"address": "192.168.36.51", //Public network IP
"listener_port": 1025, ///srt connection port
"latency": 125, //IP lifetime
"show_advanced": "1", //Whether to display advanced settings
"connect_speed":5000, //Connection speed
"audio_sync_compst":0, //Audio synchronization compensation
"srt_id": "111", //srt id
"encryption": "none", //Encryption password. Used to generate encryption keynoneNo
encryptionAES-128/AES-192/AES-256
"passphrase": "", //Encryption password
"bandwidth": 25, //Bandwidth overhead
"payload_size": 1316 //Payload size
}

//Modify rtmp_server
{
"stream_id": "8eca38e84020aba241ead45094c7dd24", //stream_id
"name": "rtmp server1", //name
"Type": "rtmp_server", //Type
"url": "rtmp://192.168.36.59:1935/live/xxx/11111", //Pull stream address
"buffer": "live:0:0:0:0", //Cache
"application": "live", //RTMP application name
"session": "11111", //Session name
"security": "token", //Authentication method"" or "token"
"token": "xxx", //token content
"connect_speed":5000, //connection speed
"audio_sync_compst":0, //audio synchronization compensation
"enable": 1, //default 1
"rtmp_server_port":1935 //rtmp port is greater than 1025 and less than 65535
}

//Modify NDI
{
"stream_id": "c0343e3a2fed40071b1b51a4af53f3c3", //stream id
"Type": "ndi", //Type
"url": "192.168.36.155:5963", //url
"buffer": "live:1000:1000:1500:0:0", //cache
"trans_mode": "multicast", //NDI connection mode tcp/multicast/unicast/rudp
"ndi_name": "N6-21-1080P60 (Channel-NDI)", //NDI name
"connect_speed": 5000, //Connection speed
"audio_sync_compst": 0, //Audio synchronization compensation
"name": "N6-21-1080P60", //name
"preview_mode": "Full" //NDI streaming mode Full or Preview or Auto default Auto
}

```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» group_id	body	string	yes		Group ID
» stream_id	body	string	yes		Stream ID
» name	body	string	yes		name
» Type	body	string	yes		Supported stream types:

					rtmp, rtmps, rtsp, udp, http, https, srt, rtp, ndi
» url	body	string	yes		Stream URL
» buffer	body	string	yes		Cache time
» address	body	string	yes		Public IP
» application	body	string	yes		rtmp_server application name
» audio_sync_compst	body	integer	yes		Reserved Fields
» bandwidth	body	integer	yes		SRT recovery bandwidth overhead
» connect_speed	body	integer	yes		Reserved Fields
» connection_mode	body	string	yes		<i>Rendezvous or Listener or Caller</i>
» enable	body	integer	yes		Reserved Fields
» encryption	body	string	yes		srt encryption method
» id	body	string	yes		Stream id, unique value
» latency	body	integer	yes		SRT packet delay
» listener_port	body	integer	yes		port
» ndi_name	body	string	yes		NDI name
» passphrase	body	string	yes		SRT character key
» password	body	string	yes		Connection authentication password
» payload_size	body	integer	yes		srt loading size
» preview_mode	body	string	yes		select stream based on resolution. Full: main stream. Preview: sub stream.
» rtmp_server_port	body	integer	yes		rtmp_server port
» sdp_content	body	string	yes		RTP protocol SDP content
» security	body	string	yes		RTMP server authentication method (none or token)
» session	body	string	yes		rtmp_server session

» show_advanced	body	string	yes		Whether to display advanced settings
» srt_id	body	string	yes		srt protocol stream id
» status	body	integer	yes		Streaming status 0 Not connected 1 Connecting 2 Successfully connected 3 Failed to connect 4 Performance limited, stop streaming
» token	body	string	yes		rtmp_server authentication token
» trans_mode	body	string	yes		rtsp connection mode udp/tcp
» user	body	string	yes		Connection authentication account
» connect_speed	integer	true	none		Connection timeout
» audio_sync_compst	integer	true	none		Audio sync compensation (ms)

[Return to example](#)

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(6) POST /source/groups/streams/remove

POST /source/groups/streams/remove

Delete a video stream

Body request parameters

```
{
  "group_id": 1,
  "stream_id": 1
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none

» group_id	body	string	yes		Group ID
» stream_id	body	string	yes		Stream ID

[Return to example](#)

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(7) POST /source/groups/streams/copy

POST /source/groups/streams/copy

Source duplication

Body request parameters

```
{
  "from_group_id": "83b50ca8e8af2ec13f35b251b50076dd",
  "from_stream_id": "17dd78a37db89a20eb4a11a7705dafb2",
  "to_group_id": "354ee7bf5984462d483151fcc98f74fb"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» from_group_id	body	string	yes		Source group from which the stream is moved
» from_stream_id	body	string	yes		Stream identifier being moved
» to_group_id	body	string	yes		Target group that will receive the stream

[Return to example](#)

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(8) POST /source/groups/streams/move

POST /source/groups/streams/move

Body request parameters

```
{
  "from_group_id": "83b50ca8e8af2ec13f35b251b50076dd",
  "from_stream_id": "17dd78a37db89a20eb4a11a7705dafb2",
  "to_group_id": "354ee7bf5984462d483151fcc98f74fb"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» from_group_id	body	string	yes		none
» from_stream_id	body	string	yes		none
» to_group_id	body	string	yes		none

[Return to example](#)

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

9.LAYOUT Module

(1) GET /layout/template/list

GET /layout/template/list
Get a list of layout templates

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

[Return to example](#)

```
{
  "count": 1000,
  "data": [
    {
      "name": "Single",
      "position": [
        {
          "height": 100,
          "id": 1,
          "number": 1,
          "stream_id": "",
          "width": 100,
          "x": 0,
          "y": 0,
          "z_index": 0
        }
      ]
    }
  ],
}
```

```

"template_count": 1,
"template_id": 1
},
{
"name": "PIP",
"position": [
{
"height": 100,
"id": 1,
"number": 1,
"stream_id": "",
"width": 100,
"x": 0,
"y": 0,
"z_index": 0
},
{
"height": 30,
"id": 2,
"number": 2,
"stream_id": "",
"width": 30,
"x": 69,
"y": 69,
"z_index": 1
}
],
"template_count": 2,
"template_id": 2
},
{
"name": "2x2",
"position": [
{
"height": 50,
"id": 1,
"number": 1,
"stream_id": "",
"width": 50,
"x": 0,
"y": 0,
"z_index": 0
},
{
"height": 50,
"id": 2,
"number": 2,
"stream_id": "",
"width": 50,
"x": 50,
"y": 0,
"z_index": 1
},
{
"height": 50,
"id": 3,

```

```

"number": 3,
"stream_id": "",
"width": 50,
"x": 0,
"y": 50,
"z_index": 2
},
{
"height": 50,
"id": 4,
"number": 4,
"stream_id": "",
"width": 50,
"x": 50,
"y": 50,
"z_index": 3
}
],
"template_count": 4,
"template_id": 3
},
{
"height": 33.33,
"id": 1,
"number": 1,
"stream_id": "",
"width": 33.33,
"x": 0,
"y": 0,
"z_index": 0
},
{
"height": 33.33,
"id": 2,
"number": 2,
"stream_id": "",
"width": 33.33,
"x": 33.33,
"y": 0,
"z_index": 1
},
{
"height": 33.33,
"id": 3,
"number": 3,
"stream_id": "",
"width": 33.33,
"x": 66.67,
"y": 0,
"z_index": 2
},
{
"height": 33.33,

```

```
"id": 4,  
"number": 4,  
"stream_id": "",  
"width": 33.33,  
"x": 0,  
"y": 33.33,  
"z_index": 3  
},  
{  
"height": 33.33,  
"id": 5,  
"number": 5,  
"stream_id": "",  
"width": 33.33,  
"x": 33.33,  
"y": 33.33,  
"z_index": 4  
},  
{  
"height": 33.33,  
"id": 6,  
"number": 6,  
"stream_id": "",  
"width": 33.33,  
"x": 66.67,  
"y": 33.33,  
"z_index": 5  
},  
{  
"height": 33.33,  
"id": 7,  
"number": 7,  
"stream_id": "",  
"width": 33.33,  
"x": 0,  
"y": 66.67,  
"z_index": 6  
},  
{  
"height": 33.33,  
"id": 8,  
"number": 8,  
"stream_id": "",  
"width": 33.33,  
"x": 33.33,  
"y": 66.67,  
"z_index": 7  
},  
{  
"height": 33.33,  
"id": 9,  
"number": 9,  
"stream_id": "",  
"width": 33.33,  
"x": 66.67,  
"y": 66.67,
```

```

"z_index": 8
},
],
"template_count": 9,
"template_id": 4
},
{
"name": "4x4",
"position": [
{
"height": 25,
"id": 1,
"number": 1,
"stream_id": "",
"width": 25,
"x": 0,
"y": 0,
"z_index": 0
},
{
"height": 25,
"id": 2,
"number": 2,
"stream_id": "",
"width": 25,
"x": 25,
"y": 0,
"z_index": 1
},
{
"height": 25,
"id": 3,
"number": 3,
"stream_id": "",
"width": 25,
"x": 50,
"y": 0,
"z_index": 2
},
{
"height": 25,
"id": 4,
"number": 4,
"stream_id": "",
"width": 25,
"x": 75,
"y": 0,
"z_index": 3
},
{
"height": 25,
"id": 5,
"number": 5,
"stream_id": "",
"width": 25,
"x": 0,

```

```
"y": 25,  
"z_index": 4  
},  
{  
"height": 25,  
"id": 6,  
"number": 6,  
"stream_id": "",  
"width": 25,  
"x": 25,  
"y": 25,  
"z_index": 5  
},  
{  
"height": 25,  
"id": 7,  
"number": 7,  
"stream_id": "",  
"width": 25,  
"x": 50,  
"y": 25,  
"z_index": 6  
},  
{  
"height": 25,  
"id": 8,  
"number": 8,  
"stream_id": "",  
"width": 25,  
"x": 75,  
"y": 25,  
"z_index": 7  
},  
{  
"height": 25,  
"id": 9,  
"number": 9,  
"stream_id": "",  
"width": 25,  
"x": 0,  
"y": 50,  
"z_index": 8  
},  
{  
"height": 25,  
"id": 10,  
"number": 10,  
"stream_id": "",  
"width": 25,  
"x": 25,  
"y": 50,  
"z_index": 9  
},  
{  
"height": 25,  
"id": 11,
```

```
"number": 11,  
"stream_id": "",  
"width": 25,  
"x": 50,  
"y": 50,  
"z_index": 10  
},  
{  
"height": 25,  
"id": 12,  
"number": 12,  
"stream_id": "",  
"width": 25,  
"x": 75,  
"y": 50,  
"z_index": 11  
},  
{  
"height": 25,  
"id": 13,  
"number": 13,  
"stream_id": "",  
"width": 25,  
"x": 0,  
"y": 75,  
"z_index": 12  
},  
{  
"height": 25,  
"id": 14,  
"number": 14,  
"stream_id": "",  
"width": 25,  
"x": 25,  
"y": 75,  
"z_index": 13  
},  
{  
"height": 25,  
"id": 15,  
"number": 15,  
"stream_id": "",  
"width": 25,  
"x": 50,  
"y": 75,  
"z_index": 14  
},  
{  
"height": 25,  
"id": 16,  
"number": 16,  
"stream_id": "",  
"width": 25,  
"x": 75,  
"y": 75,  
"z_index": 15
```

```

}
],
"template_count": 16,
"template_id": 5
}
],
"result": "ok"
}

```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» count	integer	true	none		none
» data	\[object]	true	none		none
»» name	string	true	none		name
»» position	\[object]	true	none		Location
»»» height	integer	true	none		Height value expressed as percentage (0-100)
»»» id	integer	true	none		id
»»» number	integer	true	none		Located in a
»»» stream_id	string	true	none		The signal source bound to the current position
»»» width	integer	true	none		Width unit: percentage
»»» x	integer	true	none		Horizontal position (0-100)
»»» y	integer	true	none		Vertical position (0-100)
»»» z_index	integer	true	none		z-axis
»» template_count	integer	true	none		Number of templates
»» template_id	integer	true	none		Template ID
» result	string	true	none		none

(3) GET /layout/list

GET /layout/list

Get the current layout list

1) Request Parameters

name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

[Return to example](#)

```

{
"data": [
{
"layout_count": 1, //Number of layout panes
"layout_id": 1, //Layout id

```

```

"name": "Single", //Layout name
"position": [ //Pane position
{
"height": 100, //Pane height unit: percentage
"id": 1, //Pane id
"number": 1, //Pane subscript
"stream_id": "", //Pane current stream id
"width": 100, //Pane width unit: percentage
"x": 0, //Pane x-axis unit: percentage
"y": 0, //Pane y-axis unit: percentage
"z_index": 0 //Pane z-axis
}
],
"used": false
},
{
"layout_count": 2,
"layout_id": 2,
"name": "PIP",
"position": [
{
"height": 100,
"id": 1,
"number": 1,
"stream_id": "", "
width": 100,
"x": 0,
"y": 0,
"z_index": 0
},
{
"height": 30,
"id": 2,
"number": 2,
"stream_id": "",
"width": 30,
"x": 69,
"y": 69,
"z_index": 1
}
],
"used": false
},
{
"layout_count": 4,
"layout_id": 3,
"name": "2x2",
"position": [
{
"height": 50,
"id": 1,
"number": 1,
"stream_id": "",
"width": 50,
"x": 0,
"y": 0,

```

```

    "z_index": 0
  },
  {
    "height": 50,
    "id": 2,
    "number": 2,
    "stream_id": "",
    "width": 50,
    "x": 50,
    "y": 0,
    "z_index": 1
  },
  {
    "height": 50,
    "id": 3,
    "number": 3,
    "stream_id": "",
    "width": 50,
    "x": 0,
    "y": 50,
    "z_index": 2
  },
  {
    "height": 50,
    "id": 4,
    "number": 4,
    "stream_id": "",
    "width": 50,
    "x": 50,
    "y": 50,
    "z_index": 3
  }
],
"used": false
},
{
  "layout_count": 9,
  "layout_id": 4,
  "name": "3x3",
  "position": [
    {
      "height": 33.33,
      "id": 1,
      "number": 1,
      "stream_id": "",
      "width": 33.33,
      "x": 0,
      "y": 0,
      "z_index": 0
    },
    {
      "height": 33.33,
      "id": 2,
      "number": 2,
      "stream_id": "",
      "width": 33.33,

```

```
"x": 33.33,  
"y": 0,  
"z_index": 1  
},  
{  
"height": 33.33,  
"id": 3,  
"number": 3,  
"stream_id": "",  
"width": 33.33,  
"x": 66.67,  
"y": 0,  
"z_index": 2  
},  
{  
"height": 33.33,  
"id": 4,  
"number": 4,  
"stream_id": "",  
"width": 33.33,  
"x": 0,  
"y": 33.33,  
"z_index": 3  
},  
{  
"height": 33.33,  
"id": 5,  
"number": 5,  
"stream_id": "",  
"width": 33.33,  
"x": 33.33,  
"y": 33.33,  
"z_index": 4  
},  
{  
"height": 33.33,  
"id": 6,  
"number": 6,  
"stream_id": "",  
"width": 33.33,  
"x": 66.67,  
"y": 33.33,  
"z_index": 5  
},  
{  
"height": 33.33,  
"id": 7,  
"number": 7,  
"stream_id": "",  
"width": 33.33,  
"x": 0,  
"y": 66.67,  
"z_index": 6  
},  
{  
"height": 33.33,
```

```

    "id": 8,
    "number": 8,
    "stream_id": "",
    "width": 33.33,
    "x": 33.33,
    "y": 66.67,
    "z_index": 7
  },
  {
    "height": 33.33,
    "id": 9,
    "number": 9,
    "stream_id": "",
    "width": 33.33,
    "x": 66.67,
    "y": 66.67,
    "z_index": 8
  }
],
"used": false
},
{
  "layout_count": 16,
  "layout_id": 5,
  "name": "4x4",
  "position": [
    {
      "height": 25,
      "id": 1,
      "number": 1,
      "stream_id": "",
      "width": 25,
      "x": 0,
      "y": 0,
      "z_index": 0
    },
    {
      "height": 25,
      "id": 2,
      "number": 2,
      "stream_id": "",
      "width": 25,
      "x": 25,
      "y": 0,
      "z_index": 1
    },
    {
      "height": 25,
      "id": 3,
      "number": 3,
      "stream_id": "",
      "width": 25,
      "x": 50,
      "y": 0,
      "z_index": 2
    },

```

```
{
  "height": 25,
  "id": 4,
  "number": 4,
  "stream_id": "",
  "width": 25,
  "x": 75,
  "y": 0,
  "z_index": 3
},
{
  "height": 25,
  "id": 5,
  "number": 5,
  "stream_id": "",
  "width": 25,
  "x": 0,
  "y": 25,
  "z_index": 4
},
{
  "height": 25,
  "id": 6,
  "number": 6,
  "stream_id": "",
  "width": 25,
  "x": 25,
  "y": 25,
  "z_index": 5
},
{
  "height": 25,
  "id": 7,
  "number": 7,
  "stream_id": "",
  "width": 25,
  "x": 50,
  "y": 25,
  "z_index": 6
},
{
  "height": 25,
  "id": 8,
  "number": 8,
  "stream_id": "",
  "width": 25,
  "x": 75,
  "y": 25,
  "z_index": 7
},
{
  "height": 25,
  "id": 9,
  "number": 9,
  "stream_id": "",
  "width": 25,
```

```
"x": 0,  
"y": 50,  
"z_index": 8  
},  
{  
  "height": 25,  
  "id": 10,  
  "number": 10,  
  "stream_id": "",  
  "width": 25,  
  "x": 25,  
  "y": 50,  
  "z_index": 9  
},  
{  
  "height": 25,  
  "id": 11,  
  "number": 11,  
  "stream_id": "",  
  "width": 25,  
  "x": 50,  
  "y": 50,  
  "z_index": 10  
},  
{  
  "height": 25,  
  "id": 12,  
  "number": 12,  
  "stream_id": "",  
  "width": 25,  
  "x": 75,  
  "y": 50,  
  "z_index": 11  
},  
{  
  "height": 25,  
  "id": 13,  
  "number": 13,  
  "stream_id": "",  
  "width": 25,  
  "x": 0,  
  "y": 75,  
  "z_index": 12  
},  
{  
  "height": 25,  
  "id": 14,  
  "number": 14,  
  "stream_id": "",  
  "width": 25,  
  "x": 25,  
  "y": 75,  
  "z_index": 13  
},  
{  
  "height": 25,
```

```

"id": 15,
"number": 15,
"stream_id": "",
"width": 25,
"x": 50,
"y": 75,
"z_index": 14
},
{
"height": 25,
"id": 16,
"number": 16,
"stream_id": "",
"width": 25,
"x": 75,
"y": 75,
"z_index": 15
}
],
"used": false
}
],
"result": "ok"
}

```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none
»» layout_count	integer	true	none		PANES
»» layout_id	integer	true	none		Layout id
»» name	string	true	none		Layout name
»» position	\[object]	true	none		Pane Position
»»» height	integer	true	none		Pane height unit: percentage
»»» id	integer	true	none		Pane id
»»» number	integer	true	none		Pane subscript
»»» stream_id	string	true	none		The current stream id of the pane
»»» width	integer	true	none		Pane width unit: percentage
»»» x	integer	true	none		Pane x-axis unit: percentage
»»» y	integer	true	none		Pane y-axis unit: percentage
»»» z_index	integer	true	none		Pane z-axis
»» used	boolean	true	none		none
» result	string	true	none		none

(4) POST /layout/add

POST /layout/add

Adding a layout template

Body request parameters

```
{
  "template_id": 1, //Template id
  "name": "AddSingle2" //Layout name
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» template_id	body	integer	yes		Template id
» name	body	string	yes		Layout name

[Return to example](#)

2) Return data structure

Status code 200

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(5) POST /layout/remove

POST /layout/remove

Deleting a preset

Body request parameters

```
{
  "layout_id": 7 //Layout id
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» layout_id	body	integer	yes		Layout ID

[Return to example](#)

2) Return data structure

Status code 200

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(6) POST /layout/select

POST /layout/select

Select a layout for an output

Body request parameters

```
{
  "output_id": "1", //Output ID
}
```

```
"layout_id": 2 //Layout ID
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Output ID
» layout_id	body	integer	yes		Layout ID

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(7) POST /layout/modify

POST /layout/modify

Modify a preset

Body request parameters

```
{
  "layout_id": 6, //Layout id
  "position": [
    {
      "width": 30, //Width unit: percentage
      "height": 30, //Height unit: percentage
      "number": 2, //Subscript
      "z_index": 1, //z axis
      "id": 2, //Position ID
      "x": 0, //x axis position unit: percentage
      "y": 0 //y axis position unit: percentage
    }
  ],
  "output_id": "1" //Output id
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» layout_id	body	integer	yes		Layout ID
» position	body	\[object]	yes		none
»» width	body	integer	no		Width unit: Percentage
»» height	body	integer	no		Height unit: Percent
»» number	body	integer	no		Subscript
»» z_index	body	integer	no		z-axis
»» id	body	integer	no		Location ID

»» x	body	integer	no		x-axis position unit: percentage
»» y	body	integer	no		Y-axis position unit: percentage
» output_id	body	string	yes		Output ID

[Return to example](#)

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(8) POST /layout/save

POST /layout/save

Save the changes in output to a certain layout

Body request parameters

```
{
  "output_id": "1", //output ID, supports two layouts 1 and 2
  "layout_id": 6 //layout id
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Output ID, supports 1 and 2 layouts
» layout_id	body	integer	yes		Layout ID

[Return to example](#)

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(9) POST /layout/resave

POST /layout/resave

Save Preset As

Body request parameters

```
{
  "output_id": "1", //Output ID
  "layout_id": 6, //Layout ID
  "layout_name": "Test" //Layout name
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

body	body	object	no		none
» output_id	body	string	yes		Output ID
» layout_id	body	integer	yes		Layout ID
» layout_name	body	string	yes		Layout name

[Return to example](#)

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(10) POST /layout/reload

POST /layout/reload

Reload the layout in output

Body request parameters

```
{
  "output_id": 1,
  "layout_name": "5",
  "layout_id": 6
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	integer	yes		none
» layout_id	body	integer	yes		none

[Return to example](#)

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(11) POST /layout/rename

POST /layout/rename

Modify a layout name

Body request parameters

```
{
  "layout_id": 1,
  "name": ""
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none

» layout_id	body	integer	yes		Layout ID
» name	body	string	yes		name

[Return to example](#)

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

10.OUTPUT module

(1) POST /output/interfaces/get

POST /output/interfaces/get

Get the output interface Type list

Body request parameters

```
{
  "output_id": 1,
  "Type": "audio"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
output_id	query	string	no		none
Type	query	string	no		Output Type: video, audio
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes	Layout id	none
» Type	body	string	yes	Get the interface Type	Support video/audio to obtain video output interface information and audio output interface information respectively

[Return to example](#)

```
{
  "data": [
    {
      "colorspace": "RGB444",
      "enable": false,
      "id": 1,
      "label": "HDMI1",
      "mode": "HDMI",
      "support": false,
      "visible": true
    },
    {
```

```

    "colorspace": "RGB444",
    "enable": false,
    "id": 2,
    "label": "HDMI2",
    "mode": "HDMI",
    "support": true,
    "visible": true
  },
  {
    "colorspace": "RGB444",
    "enable": false,
    "id": 3,
    "label": "SDI",
    "mode": "HDMI",
    "support": true,
    "visible": true
  }
],
"result": "ok"
}
{
  "data": [
    {
      "id": 1,
      "label": "HDMI",
      "enable": false,
      "samplerate": 44.1,
      "channels": 2,
      "volume": 0,
      "mute": false,
      "visible": true
    },
    {
      "id": 2,
      "label": "HDMI1",
      "enable": false,
      "samplerate": 44.1,
      "channels": 2,
      "volume": 0,
      "mute": false,
      "visible": true
    },
    {
      "id": 3,
      "label": "SDI",
      "enable": false,
      "samplerate": 44.1,
      "channels": 2,
      "volume": 0,
      "mute": false,
      "visible": true
    },
    {
      "id": 4,
      "label": "LineOut",
      "enable": false,

```

```

    "samplerate": 44.1,
    "channels": 2,
    "volume": 0,
    "mute": false,
    "visible": true
  }
],
"result": "ok"
}

```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none
»» colorspace	string	true	none		Current output interface color mode
»» enable	boolean	true	none		enabled
»» id	integer	true	none		Output interface ID
»» label	string	true	none		Output interface display name
»» mode	string	true	none		Output interface Type
»» support	boolean	true	none		Whether the current device supports the current interface
»» visible	boolean	true	none		Is the output interface enabled?
» result	string	true	none		none

(2) POST /output/interfaces/set(audio)

POST /output/interfaces/set

Body request parameters

```

{
  "channels": 2, //Number of channels
  "enable": true, //Is it enabled
  "id": 1, //id
  "label": "HDMI1", //Display name
  "mute": true, //Is it mute
  "samplerate": 48000, //Number of samples
  "visible": true, //Is it supported
  "volume": 14, //Sound increase dB
  "output_id": "1", //Output id
  "Type": "audio", //Type video or audio
  "intf_id": 1 //id
}

```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» channels	body	integer	yes		Number of channels
» enable	body	boolean	yes		Is it enabled?
» id	body	integer	yes		id
» label	body	string	yes		display name
» mute	body	boolean	yes		Is it muted?
» samplerate	body	integer	yes		Number of samples
» visible	body	boolean	yes		Support
» volume	body	integer	yes		Sound increase in dB
» output_id	body	string	yes		Output ID
» Type	body	string	yes		Type video or audio
» intf_id	body	integer	yes		ID

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(3) GET /output/list

GET /output/list

Get the window list

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

Return to example

```
{
  "data": [
    {
      "background": "#000000",
      "bg_enable": false,
      "border": {
        "bottom_width": 2,
        "color": "#FF0000",
        "enable": false,
        "hex_color": 16711680,
        "left_width": 2,
        "right_width": 2,
        "top_width": 2
      },
      "id": "1",
      "layout_id": 2,
      "modified": false,

```

```

    "name": "output1",
    "res_id": "5",
    "res_name": "1920x1080P60",
    "vumeter": true
  },
  {
    "background": "#000000",
    "bg_enable": false,
    "border": {
      "bottom_width": 2,
      "color": "#FF0000",
      "enable": false,
      "hex_color": 16711680,
      "left_width": 2,
      "right_width": 2,
      "top_width": 2
    },
    "id": "2",
    "layout_id": 1,
    "modified": false,
    "name": "output2",
    "res_id": "5",
    "res_name": "1920x1080P60",
    "vumeter": true
  }
],
"result": "ok"
}

```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none
»» background	string	true	none		Background Color
»» bg_enable	boolean	true	none		Whether to enable background
»» border	object	true	none		Border parameters
»»» bottom_width	integer	true	none		Border Width
»»» color	string	true	none		Border Color
»»» enable	boolean	true	none		Whether to open the border
»»» hex_color	integer	true	none		none
»»» left_width	integer	true	none		Border Width
»»» right_width	integer	true	none		Border Width
»»» top_width	integer	true	none		Border Width
»» id	string	true	none		Layout id
»» layout_id	integer	true	none		Layout id
»» modified	boolean	true	none		Whether the current layout

					has been modified
»» name	string	true	none		Layout name
»» res_id	string	true	none		Output resolution ID
»» res_name	string	true	none		Output Resolution name
»» vumeter	boolean	true	none		none
» result	string	true	none		none

(3) GET /output/get

GET /output/get
Get a window information

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
output_id	query	string	no		Layout ID
app	header	string	yes		none

[Return to example](#)

```
{
  "data": {
    "layout_id": 2,
    "name": "output1",
    "position": [
      {
        "enable": true,
        "height": 30,
        "id": 1,
        "mute": false,
        "number": 1,
        "resolution": "1920x1080p60",
        "status": 2,
        "stream_id": "e893d03a94326b981fd3aa276f90183a",
        "stream_ip": "192.168.36.238:5965",
        "stream_name": "N60_238 (HB)",
        "Type": "ndi",
        "video_bitrate": "55479.4",
        "video_format": "NDI | HB",
        "volume": 0,
        "vu_meter": true,
        "width": 30,
        "x": 0,
        "y": 0,
        "z_index": 0
      },
      {
        "enable": false,
        "height": 30,
        "id": 2,
        "mute": false,
        "number": 2,
        "resolution": "0x0p0",
        "status": 2,
```

```

    "stream_id": "",
    "stream_ip": "",
    "stream_name": "",
    "Type": "",
    "video_bitrate": "0",
    "video_format": "",
    "volume": 0,
    "vu_meter": true,
    "width": 30,
    "x": 69,
    "y": 69,
    "z_index": 1
  }
],
"vumeter": true
},
"result": "ok"
}

```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» layout_id	integer	true	none		Layout ID
»» name	string	true	none		Output name
»» position	\[object]	true	none		none
»»» enable	boolean	true	none		Whether to enable streaming
»»» height	integer	true	none		Height unit: percentage
»»» id	integer	true	none		Location ID
»»» mute	boolean	true	none		Is it muted?
»»» number	integer	true	none		Position subscript
»»» resolution	string	true	none		Output resolution
»»» status	integer	true	none		Flow state, refer to the definition of flow acquisition
»»» stream_id	string	true	none		The ID of the stream currently being loaded
»»» stream_ip	string	true	none		The stream IP currently being loaded
»»» stream_name	string	true	none		The name of the stream currently being loaded
»»» Type	string	true	none		The Type of stream

					currently being loaded
»»» video_bitrate	string	true	none		The stream code stream currently being loaded
»»» video_format	string	true	none		The stream encoding Type being loaded at the current position
»»» volume	integer	true	none		none
»»» vu_meter	boolean	true	none		none
»»» width	integer	true	none		Width unit: Percent
»»» x	integer	true	none		x-axis position unit: percentage
»»» y	integer	true	none		Y-axis position unit: percentage
»»» z_index	integer	true	none		none
»» vumeter	boolean	true	none		none
» result	string	true	none		none

(4) POST /output/source/set

POST /output/source/set

Set the video source to a certain position in a window

Body request parameters

```
{
  "from": {
    "output_id": "1",
    "pos_id": 1
  },
  "to": {
    "output_id": "2",
    "pos_id": 2,
    "stream_id": ""
  }
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» from	body	object	yes		Move a stream from a location
»» Type	body	string	yes		Type
»» stream_id	body	string	yes		Stream ID
»» stream_name	body	string	yes		Stream name
»» stream_url	body	string	yes		Stream URL
»» pos_id	body	string	yes		Location ID

»» output_id	body	string	yes		Output ID
»» layout_id	body	string	yes		Layout ID
» to	body	object	yes		Fill in location information
»» Type	body	string	yes		Type
»» stream_id	body	string	yes		Stream ID
»» stream_name	body	string	yes		Stream name
»» stream_url	body	string	yes		Stream URL
»» pos_id	body	integer	yes		Location ID
»» output_id	body	string	yes		Output ID
»» layout_id	body	integer	yes		Layout ID

[Return to example](#)

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(5) POST /output/source/remove

POST /output/source/remove

Delete the source information bound to a certain position on the window

Body request parameters

```
{
  "output_id": "1",
  "pos_id": 1
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes	Layout ID	(1, 2)
» pos_id	body	integer	yes	Location ID	none

[Return to example](#)

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(6) GET /output/resolution/list

GET /output/resolution/list

Get the resolution (timing) list

Body request parameters

```
{}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

body	body	object	no		none
------	------	--------	----	--	------

[Return to example](#)

```
{
  "data": [
    {
      "id": "1",
      "name": "3840x2160P60(HDMI only)",
      "value": "3840x2160P60(HDMI only)"
    },
    {
      "id": "2",
      "name": "3840x2160P50(HDMI only)",
      "value": "3840x2160P50(HDMI only)"
    },
    {
      "id": "3",
      "name": "3840x2160P30(HDMI only)",
      "value": "3840x2160P30(HDMI only)"
    },
    {
      "id": "4",
      "name": "3840x2160P25(HDMI only)",
      "value": "3840x2160P25(HDMI only)"
    },
    {
      "id": "5",
      "name": "1920x1080P60",
      "value": "1920x1080P60"
    },
    {
      "id": "6",
      "name": "1920x1080P59.94(SDI only)",
      "value": "1920x1080P59.94(SDI only)"
    },
    {
      "id": "7",
      "name": "1920x1080P50",
      "value": "1920x1080P50"
    },
    {
      "id": "8",
      "name": "1920x1080P30",
      "value": "1920x1080P30"
    },
    {
      "id": "9",
      "name": "1920x1080P29.97(SDI only)",
      "value": "1920x1080P29.97(SDI only)"
    },
    {
      "id": "10",
      "name": "1920x1080P25",
      "value": "1920x1080P25"
    },
    {
      "id": "11",
```

```

    "name": "1920x1080P24",
    "value": "1920x1080P24"
  },
  {
    "id": "12",
    "name": "1920x1080P23.98(SDI only)",
    "value": "1920x1080P23.98(SDI only)"
  },
  {
    "id": "13",
    "name": "1920x1080i60",
    "value": "1920x1080i60"
  },
  {
    "id": "14",
    "name": "1920x1080i50",
    "value": "1920x1080i50"
  },
  {
    "id": "15",
    "name": "1920x1080i59.94(SDI only)",
    "value": "1920x1080i59.94(SDI only)"
  },
  {
    "id": "16",
    "name": "1280x720P60",
    "value": "1280x720P60"
  },
  {
    "id": "17",
    "name": "1280x720P59.94(SDI only)",
    "value": "1280x720P59.94(SDI only)"
  },
  {
    "id": "18",
    "name": "1280x720P50",
    "value": "1280x720P50"
  },
  {
    "id": "19",
    "name": "576i/625i 50Hz(SDI only)",
    "value": "576i/625i 50Hz(SDI only)"
  },
  {
    "id": "20",
    "name": "480i/525i 60Hz(SDI only)",
    "value": "480i/525i 60Hz(SDI only)"
  }
],
"result": "ok"
}

```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none

»» id	string	true	none		Output resolution id
»» name	string	true	none		Output Resolution name
»» value	string	true	none		Output resolution value
» result	string	true	none		none

(7) POST /output/resolution/set

POST /output/resolution/set

Set Resolution (Timing) List

Body request parameters

```
{
  "output_id": "1",
  "res_index": 14
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes	Output id	none
» res_id	body	integer	yes	Output Resolution ID	none

[Return to example](#)

2) Return data structure

Status code 200

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none
» data	\[object]	true	none		none
»» name	string	true	none		none
»» value	string	true	none		none

(8) GET output/audiomix/get

GET /output/audiomix/get

Get the mixed audio status list of a window

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
output_id	query	string	no		Layout id
app	header	string	yes		none

[Return to example](#)

```
{
  "data": {
    "output": [
      {
        "stream_id": "1",
        "name": "n60...",

```

```

        "enable": false,
        "volume": 0,
        "mute": false,
        "Type": "output"
    },
    {
        "stream_id": "2",
        "name": "n50...",
        "enable": false,
        "volume": 0,
        "mute": false,
        "Type": "output"
    }
],
"preview": [
    {
        "stream_id": "1",
        "name": "n50...",
        "enable": false,
        "volume": 0,
        "mute": false,
        "Type": "preview"
    }
]
}

```

2) Return results

Status Code	Status code meaning	Illustrate	Data Model
200	OK	none	Inline

3) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» output	\[object]	true	none	output Type	There are two Types of output audio source information: output Type changes according to layout switching, and preview is shared by a single output
»»» enable	boolean	false	none		Is it enabled?
»»» mute	boolean	false	none		Is it muted?
»»» name	string	false	none		name
»»» pos_id	integer	false	none		Location ID
»»» stream_id	string	false	none		Stream ID
»»» Type	string	false	none		Type
»»» volume	integer	false	none		Gain value in

					dB
»» preview	\[object]	true	none	Preview Type	Current priview audio source information
»»» enable	boolean	false	none		Is it enabled?
»»» mute	boolean	false	none		Is it muted?
»»» name	string	false	none		name
»»» stream_id	string	false	none		Stream ID
»»» Type	string	false	none		Type
»»» volume	integer	false	none		Gain value in dB
» result	string	true	none		none

(9) POST /output/audiomix/set

POST /output/audiomix/set

Set the audio mixing status in a window

Body request parameters

```
{
  "output_id": "1",
  "stream_id": "895a2714dc8e5197fb0491066be73f22", //Change from audio_id to stream_id
  "enable": true,
  "volume": 0,
  "mute": false,
  "Type": "output"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Layout id
» stream_id	body	string	yes		Stream ID
» enable	body	boolean	yes		Is it enabled?
» Type	body	string	yes		Type supports output/preview

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(10) POST /output/audiomix/remove

POST /output/audiomix/remove

Delete the audio files in the manually added audio list

Body request parameters

```
{
"output_id": "1", //Layout id
"stream_id": "e893d03a94326b981fd3aa276f90183a", //Stream id
"Type": "preview" //Type supports output/preview
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Layout ID
» stream_id	body	string	yes		Stream ID
» Type	body	string	yes		Type supports output/preview

Return to example

```
{
"result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(11) POST /output/audiomix/add

POST /output/audiomix/add

Add the previewed audio to the audio list

Body request parameters

```
{
"output_id": "1",
"stream_id": "895a2714dc8e5197fb0491066be73f22"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Output ID
» stream_id	body	string	yes		Stream ID

Return to example

```
{
"result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(12) POST /ptz/set

POST /ptz/set

Set the PTZ of the stream (currently only supports NDI)

Body request parameters

```
{
  "output_id": "1",
  "pos_id": 1,
  "Type": ["ptz_zoom", "ptz_zoom_speed", "ptz_pan_tilt", "ptz_pan_tilt_speed", "ptz_store_preset", "ptz_recall_preset",
"ptz_auto_focus", "ptz_focus", "ptz_focus_speed", "ptz_white_balance_auto", "ptz_white_balance_indoor",
"ptz_white_balance_outdoor", "ptz_white_balance_oneshot", "ptz_white_balance_manual", "ptz_exposure_auto",
"ptz_exposure_manual", "ptz_is_supported"],
  "data": {
    "zoom_value": 0.5,
    "zoom_speed": -1.0,
    "pan_value": -1.0,
    "tilt_value": -1.0,
    "pan_speed": -1.0,
    "tilt_speed": -1.0,
    "preset_no": 0,
    "speed": 0.0,
    "focus_value": 0.0,
    "focus_speed": -1.0,
    "red": 0.0,
    "blue": 0.0,
    "exposure_level": 0.0
  }
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Output ID
» pos_id	body	integer	yes		Location ID
» Type	body	string	yes		Type
» data	body	object	yes		Specific value
»» zoom_value	body	number	yes		0.0 (zoomed in) ... 1.0 (zoomed out)
»» zoom_speed	body	integer	yes		-1.0 (zoom outwards) ... +1.0 (zoom inwards)
»» pan_value	body	integer	yes		-1.0 (left) ... 0.0 (centered) ... +1.0 (right)
»» tilt_value	body	integer	yes		-1.0 (bottom) ... 0.0 (centered) ... +1.0 (top)
»» pan_speed	body	integer	yes		-1.0 (moving right) ... 0.0 (stopped) ... +1.0 (moving left)
»» tilt_speed	body	integer	yes		-1.0 (down) ... 0.0 (stopped) ... +1.0 (moving up)

					up)
»» preset_no	body	integer	yes		0 ... 99
»» speed	body	integer	yes		0.0(as slow as possible) ... 1.0(as fast as possible)
»» focus_value	body	integer	yes		0.0 (focused to infinity) ... 1.0 (focused as close as possible)
»» focus_speed	body	integer	yes		-1.0 (focus outwards) ... +1.0 (focus inwards)
»» red	body	integer	yes		0.0(not red) ... 1.0(very red)
»» blue	body	integer	yes		0.0(not blue) ... 1.0(very blue)
»» exposure_level	body	integer	yes		0.0(dark) ... 1.0(light)

● The Type field supports the following parameters

Type name	Functional Description
ptz_zoom	To control the zoom operation of PTZ, the data object needs to contain the zoom_value field to set the zoom value.
ptz zoom speed	Control the zoom speed of PTZ. The data object needs to contain the zoom_speed field to set the zoom speed value.
ptz pan tilt	Control the horizontal (' pan) and vertical (' tilt) rotation of the PTZ. The data object needs to contain the pan_value and tilt_value fields to set the horizontal and vertical rotation values respectively.
ptz pan tilt_speed	To control the horizontal and vertical rotation speed of PTZ, the data object needs to contain the pan_speed and tilt_speed fields to set the horizontal and vertical rotation speed values respectively.
ptz store preset	To store PTZ preset positions, the data object must contain the preset_no. field to set the preset position number.
ptz recall preset	To call a PTZ preset position, the data object needs to contain the preset_no. and speed fields to set the preset position number and calling speed respectively.
ptz auto focus	Enable auto focus function, no parameters required
ptz_focus	To control the focus operation of PTZ, the data object needs to contain the focus_value field to set the focus value.
ptz focus speed	Control the focus speed of PTZ. The data object needs to contain the focus_speed field to set the focus speed value.
ptz white balance_auto	Enable automatic white balance, no parameters required
ptz white balance_indoor	Set the indoor white balance mode, no parameters required

ptz <i>white</i> balance_outdoor	Set the outdoor white balance mode, no parameters required
ptz <i>white</i> balance_oneshot	Performs a one-time white balance adjustment, without parameters
ptz <i>white</i> balance_manual	To manually set the white balance, the data object needs to contain RGB
ptz <i>exposure</i> auto	Enable auto exposure, no parameters required
ptz <i>exposure</i> manual	Manually set the exposure level. The data object must contain exposure_level.

| ptz is supported | Query whether the device supports PTZ function (returns Boolean value), no parameters are required

- Speed control class Must reset> Example `//` Must reset PTZ settings need to be divided into two steps: 1. Set the target Type and target parametersstep1:{"Type": "ptz *focus* speed","data": {"focus_speed": 0.5},"pos_id": 1,"output_id": "1","layout_id": 1}2. Set the target Type and return the parameters to the originalstep2:{"Type": "ptz *focus* speed","data": {"focus_speed": 0},"pos_id": 1,"output_id": "1","layout_id": 1}`
- Absolute position interface No need to reset> Example `//` Just set it directly1. Set the target Type and target parametersstep1:{"Type": "ptz *recall* preset","data": {"preset_no": 1,"speed": 0.5},"pos_id": 1,"output_id": "1","layout_id": 1}

Return to example

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(13)POST /output/audio/sound

POST /output/audio/sound

Get audio notes

Body request parameters

```
{
  "output_id": "1"
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Output ID

Return to example

```
{
  "data": [
    {
      "dB": [
        0,
        0,
        0,
        0
      ],
      "stream_id": "e893d03a94326b981fd3aa276f90183a"
    },
    {
      "dB": [
        0,
        0,
        0,
        0
      ]
    }
  ]
}
```

```

0,
0
],
"stream_id": "e893d03a94326b981fd3aa276f90183a"
}
],
"result": "ok"
}

```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none
»» dB	\[integer]	true	none		Audio in dB value
»» stream_id	string	true	none		Stream ID
» result	string	true	none		none

(14)POST /output/border/set

POST /output/border/set

Set layout border

Body request parameters

```

{
"output_id": "1", //output id
"enable": true, //whether to enable
"color": "#FF0000" //border color
}

```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Output ID
» enable	body	boolean	yes		Is it enabled?
» color	body	string	yes		Border Color

Return to example

```

{
"result": "ok"
}

```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(15)POST /output/border/get

POST /output/border/get

Body request parameters

```

{
"output_id": 1 // Output ID
}

```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	integer	yes		Output ID

Return to example

```
{
  "data": {
    "bottom_width": 2,
    "color": "#FF0000",
    "enable": true,
    "hex_color": 16711680,
    "left_width": 2,
    "right_width": 2,
    "top_width": 2
  },
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» bottom_width	integer	true	none		Border Width
»» color	string	true	none		Border Color
»» enable	boolean	true	none		Is it Khaki
»» hex_color	integer	true	none		none
»» left_width	integer	true	none		Border Width
»» right_width	integer	true	none		Border Width
»» top_width	integer	true	none		Border Width
» result	string	true	none		none

(16)POST /output/background/set

POST /output/background/set

Body request parameters

```
{
  "output_id": "1", //output id
  "enable": true, //whether to enable
  "background": "#000000" //background color
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» output_id	body	string	yes		Output id
» enable	body	boolean	yes		Is it enabled?
» background	body	string	yes		Background Color

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

(17) GET /output/background/get

GET /output/background/get

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
output_id	query	string	no		none
app	header	string	yes		none

[Return to example](#)

```
{
  "data": {
    "background": "",
    "enable": true
  },
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» background	string	true	none		Background Color
»» enable	boolean	true	none		Is it enabled?
» result	string	true	none		none

(18) POST /output/audio/check

POST /output/audio/check

Gets whether the audio is selectable

[Body request parameters](#)

```
{
  "id": ""
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» id	body	string	yes		Audio Device ID

[Return to example](#)

```
{
  "data": true,
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	boolean	true	none		Is it allowed to

					open
» result	string	true	none		none

11.NETWORK module

(1) GET /network/get

GET /network/get

Get the network card list

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

[Return to example](#)

```
{
  "data": [
    {
      "device": "eth0", //Network port name
      "dns": "", //DNS
      "dynamic": "n", //Whether DHCP is dynamically allocated
      "enable": 1, //Whether to enable
      "enable2": true, //Whether the maintenance address is enabled
      "gw": "192.168.36.254", //Gateway
      "gw2": "", //Maintenance address gateway
      "ip": "192.168.36.6", //IP
      "ip2": "192.168.1.163", //Maintenance address IP
      "mac": "18:C3:F4:25:66:66", //MAC address
      "mask": "255.255.255.0", //Subnet
      "mask2": "255.255.255.0", //Maintenance address subnet mask
      "state": "up" //Whether the connection status
    },
    {
      "device": "eth1",
      "dns": "",
      "dynamic": "n",
      "enable": 1,
      "enable2": true,
      "gw": "192.168.36.254",
      "gw2": "",
      "ip": "192.168.36.16",
      "ip2": "192.168.2.161",
      "mac": "18:C3:F4:25:66:67",
      "mask": "255.255.255.0",
      "mask2": "255.255.255.0",
      "state": "down"
    }
  ],
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none

»» device	string	true	none		Network port name
»» DNS	string	true	none		DNS
»» dynamic	string	true	none		Whether DHCP is dynamically allocated
»» enable	integer	true	none		Is it enabled?
»» enable2	boolean	true	none		local link IP address
»» gw	string	true	none		Gateway
»» gw2	string	true	none		Maintenance Address Gateway
»» ip	string	true	none		IP
»» ip2	string	true	none		Maintenance IP Address
»» mac	string	true	none		mac address
»» mask	string	true	none		Subnet Mask
»» mask2	string	true	none		Maintenance subnet mask address
»» state	string	true	none		Connection status
» result	string	true	none		none

(2)POST /network/routing/add

POST /network/routing/add

Adding Routes

Body request parameters

```
{
  "device": "eth1", //Network port name
  "ip": "192.168.1.1", //Route IP
  "netmask": "255.255.255.255", //Subnet mask
  "gw": "192.168.36.6", //Gateway
  "mtu": 1500, //MTU
  "metric": 0 //Metric
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» device	body	string	yes		Network port name
» ip	body	string	yes		Routing IP
» netmask	body	string	yes		Subnet Mask
» gw	body	string	yes		Gateway
» mtu	body	integer	yes		MTU
» metric	body	integer	yes		Metric

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(3)POST /network/http/set

POST /network/http/set

Set http,https ports

Body request parameters

```
{
  "http": true, //Whether to enable http
  "httpPort": 80, //http port
  "https": true, //Whether to enable https
  "httpsPort": 443 //https port
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» http	body	boolean	yes		Whether to enable http
» httpPort	body	integer	yes		http port
» https	body	boolean	yes		Whether to enable https
» httpsPort	body	integer	yes		https port

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(4)GET /network/http/get

GET /network/http/get

Get http and https ports

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

Return to example

```
{
  "data": {
    "http": true,
    "httpPort": 80,
    "https": true,
    "httpsPort": 443
  },
}
```

```
"result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» http	boolean	true	none		Whether to enable http
»» httpPort	integer	true	none		http port
»» https	boolean	true	none		Whether to enable https
»» httpsPort	integer	true	none		https port
» result	string	true	none		none

(5) POST /network/ping

POST /network/ping

Check whether the specified address can be pinged

Body request parameters

```
{
  "ip": "192.168.36.124"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» ip	body	string	yes		Target Address

Return to example

```
{
  "data": {
    "lossRate": 0,
    "reachable": true
  },
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» lossRate	integer	true	none		Packet loss rate
»» reachable	boolean	true	none		Is it reachable?
» result	string	true	none		none

(6) POST /network/routing/set

POST /network/routing/set

Set the routing status (whether enabled)

Body request parameters

```
{
  "id": "c26163a66109b6c1a717e7be658ab071", //unique value
}
```

```
"status": 0 //Whether it is enabled or not, 1 means enabled and 0 means disabled
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» id	body	string	yes		Unique Values
» status	body	integer	yes		Is it enabled? 1 means enabled, 0 means disabled

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(7) POST /network/routing/del

POST /network/routing/del

Deleting a route

Body request parameters

```
{
  "ids": "e762817bb4e7d6889bc4cd09477672a2" //id unique value
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» ids	body	string	yes		id unique value

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(8) POST /network/routing/modify

POST /network/routing/modify

Modify the route

Body request parameters

```
{
  "id": "e762817bb4e7d6889bc4cd09477672a2", //id unique value
  "device": "eth1", //network port name
  "ip": "192.168.1.2", //ip
  "netmask": "255.255.255.255", //subnet mask
  "gw": "192.168.36.6", //gateway
  "mtu": 1500, //mtu
  "metric": 0 // metric
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» id	body	string	yes		id unique value
» device	body	string	yes		Network port name
» ip	body	string	yes		IP
» netmask	body	string	yes		Subnet Mask
» gw	body	string	yes		Gateway
» mtu	body	integer	yes		MTU
» metric	body	integer	yes		none

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(9) GET network/routing/get

GET /network/routing/get

Get the route list

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

Return to example

```
{
  "result": "ok",
  "data": [
    {
      "id": 1,
      "device": "eth0",
      "ip": "192.168.38.12",
      "netmask": "255.255.255.0",
      "gw": "192.168.38.254",
      "mtu": 1500,
      "metric": 0,
      "status": 0 //Is it enabled
    }
  ]
}
```

```
]
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none
»» device	string	false	none		Network port name
»» gw	string	false	none		Gateway
»» id	string	false	none		ID
»» ip	string	false	none		IP
»» metric	integer	false	none		metric
»» mtu	integer	false	none		MTU
»» netmask	string	false	none		Subnet Mask
»» status	integer	false	none		state
» result	string	true	none		none

(10) POST /network/set

POST /network/set

Modify network settings

Body request parameters

```
{
  "device": "eth0", //Network port name
  "dynamic": "n", //Is it DHCP
  "ip": "192.168.36.6", //IP
  "mask": "255.255.255.0", //Subnet mask
  "gw": "192.168.36.254", //Gateway
  "dns": "", //dns
  "mac": "18:C3:F4:25:66:66" //Mac address
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» device	body	string	yes		Network port name
» dynamic	body	string	yes		DHCP
» ip	body	string	yes		IP
» mask	body	string	yes		Subnet Mask
» gw	body	string	yes		Gateway
» dns	body	string	yes		DNS
» mac	body	string	yes		MAC address

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
------	------	----------	------------	--------------	------------

» result	string	true	none		none
----------	--------	------	------	--	------

(11) POST /network/modify

POST /network/modify

Modify maintenance address

Body request parameters

```
{
  "device": "eth0", //Network port name
  "enable2": true, //Whether to enable
  "ip2": "192.168.1.168", //Maintenance address IP
  "mask2": "255.255.255.0", //Maintenance address subnet mask
  "gw2": "" //Maintenance address subnet gateway
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» device	body	string	yes		Network port name
» enable2	body	boolean	yes		Is it enabled?
» ip2	body	string	yes		Maintenance address IP
» mask2	body	string	yes		Maintenance address subnet mask
» gw2	body	string	yes		Maintenance Address Subnet Gateway

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code 200

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

12.SYSTIME module

(1) GET /timeregion/settings

GET /timeregion/settings

Get time zone setting information

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

Return to example

```
{
  "data": {
```

```
"ntp_servers": "ntp1.aliyun.com ntp2.aliyun.com ntp3.aliyun.com",
"offset": 8,
"time": "2024-09-09 10:40:46",
"timeType": "pc",
"timezone": "Asia/Shanghai"
},
"result": "ok"
}
```

2)Return data structure

Status code 200

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» ntp_servers	string	true	none		NTP server address
»» offset	integer	true	none		Time zone offset
»» time	string	true	none		Time string
»» timeType	string	true	none		3 mode: NTP, PC, Manual
»» timezone	string	true	none		Time zone name
» result	string	true	none		none

(2)POST /timeregion/time/set

POST /timeregion/time/set

Time settings

Body request parameters

```
{
"time": "2024-09-09 09:20:46",
"timeType": "pc",
"offset": 8,
"ntp_servers": "ntp1.aliyun.com ntp2.aliyun.com ntp3.aliyun.com"
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» time	body	string	yes		Time string format: "2024-09-09 09:20:46"
» timeType	body	string	yes		3 mode: NTP, PC, Manual
» offset	body	integer	yes		Time zone offset, such as 8
» ntp_servers	body	string	yes		NTP server URL address, if not NTP, pass empty or no

Return to example

```
{
"result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(3) POST /timeregion/timezone/set

POST /timeregion/timezone/set

Time zone settings

Body request parameters

```
{
"timezone": "Asia/Shanghai",
"offset": 8
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» timezone	body	string	yes		Time zone name
» offset	body	integer	yes		Time zone offset

Return to example

```
{
"result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

13.SYSTEM module

(1)GET /sys/reboot

GET /sys/reboot

System Restart

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

Return to example

```
{
"result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(2)GET /sys/reset

GET /sys/reset
System Reset

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

[Return to example](#)

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(3)GET /sys/restore

GET /sys/restore
Restore the system to factory settings

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

[Return to example](#)

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(4)GET /sys/device/get

GET /sys/device/get
Get the device name

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

[Return to example](#)

```
{
  "data": {
    "device_name": "DECODER-D350159856666\n"
  },
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» device_name	string	true	none		Device name

» result	string	true	none		none
----------	--------	------	------	--	------

(5)POST /sys/device/set

POST /sys/device/set

Set the device name

Body request parameters

```
{
  "device_name": "D350-211111" //Device name
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» device_name	body	string	yes		Device name

Return to example

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(6)POST /sys/ip/get

POST /sys/ip/get

Get the corresponding IP port according to the URL

Body request parameters

```
{
  "url": "ndi://10.20.30.21:5961" //url
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» url	body	string	yes		URL

Return to example

```
{
  "data": {
    "ip": "10.20.30.21",
    "path": "",
    "port": 5961
  },
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» ip	string	true	none		IP
»» path	string	true	none		path
»» port	integer	true	none		port

» result	string	true	none		none
----------	--------	------	------	--	------

(7)POST /sys/ip/replace

POST /sys/ip/replace

Body request parameters

```
{
"url": "srt://192.168.1.1:13?dddddd", //url
"target_ip": "192.168.1.124", //target url
"target_port": "1234" //target port
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» url	body	string	yes		URL
» target_ip	body	string	yes		Target URL
» target_port	body	string	yes		Destination Port

Return to example

```
{
"data": {
"url": "srt://192.168.1.124:1234?dddddd"
},
"result": "ok"
}
```

2)Return data structure

Status code 200

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» url	string	true	none		Replaced URL
» result	string	true	none		none

14.FIRMWARE Module

(1)POST /firmware/upgrade

POST /firmware/upgrade

Body request parameters

upload: string
path: D:\firmware-D350-kiloview-0.00.0000-20241010.bin
size: file length

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
Content-Type	header	string	yes		none
app	header	string	yes		none
body	body	object	no		none
» upload	body	string(binary)	yes		Firmware file data
» path	body	string	no		none
» size	body	integer	no		none

Return to example

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

15.PREVIEW Module

(1)GET /preview/get

GET /preview/get
Get the list of video sources in preview

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

[Return to example](#)

```
{
  "data": {
    "position": [
      {
        "height": 144,
        "id": 1,
        "resolution": "1920x1080p60",
        "status": 2,
        "stream_id": "e893d03a94326b981fd3aa276f90183a",
        "stream_name": "N60_238 (HB)",
        "stream_url": "192.168.36.238:5965",
        "Type": "ndi",
        "width": 320,
        "x": 0,
        "y": 0
      },
      {
        "height": 144,
        "id": 2,
        "resolution": "640x360p30",
        "status": 2,
        "stream_id": "0f79952dbc00505b2331b0bdb0c8ca0a",
        "stream_name": "N60_238 (HX)",
        "stream_url": "192.168.36.238:5964",
        "Type": "ndi",
        "width": 320,
        "x": 320,
        "y": 0
      }
    ]
  },
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
------	------	----------	------------	--------------	------------

» data	object	true	none		none
»» position	\[object]	true	none		Location Information
»»» height	integer	true	none		high
»»» id	integer	true	none		id
»»» resolution	string	true	none		Resolution Information
»»» status	integer	true	none		Pull flow status
»»» stream_id	string	true	none		Stream ID
»»» stream_name	string	true	none		Stream name
»»» stream_url	string	true	none		Stream URL
»»» Type	string	true	none		Stream Type
»»» width	integer	true	none		Display Width
»»» x	integer	true	none		Image location
»»» y	integer	true	none		Image location
» result	string	true	none		none

(2)POST /preview/source/modify

POST /preview/source/modify

Add video source to preview

Body request parameters

```
{
  "from": {
    "Type": "source", //Source information
    "stream_id": "0f79952dbc00505b2331b0bdb0c8ca0a", //Stream id
    "stream_name": "N60_238 (HX)", // //Stream name
    "stream_url": "192.168.36.238:5964", //Stream url
    "pos_id": "", //Come from a certain position
    "output_id": "1", //Output id
    "layout_id": "" //Layout id
  },
  "to": {
    "Type": "preview", //Add Type
    "stream_id": "0f79952dbc00505b2331b0bdb0c8ca0a", //Stream id
    "stream_name": "N60_238 (HX)", //Stream name
    "stream_url": "192.168.36.238:5964", //Stream url
    "output_id": "1", //output id
    "layout_id": "" //layout id
  }
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» from	body	object	yes		none
»» Type	body	string	yes		Source Information
»» stream_id	body	string	yes		Stream ID
»» stream_name	body	string	yes		stream name
»» stream_url	body	string	yes		Stream URL
»» pos_id	body	string	yes		Come from a

					certain location
»» output_id	body	string	yes		Output ID
»» layout_id	body	string	yes		Layout ID
» to	body	object	yes		none
»» Type	body	string	yes		Join Type
»» stream_id	body	string	yes		Stream ID
»» stream_name	body	string	yes		Stream name
»» stream_url	body	string	yes		Stream URL
»» output_id	body	string	yes		Output ID
»» layout_id	body	string	yes		Layout ID

[Return to example](#)

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(2)POST /preview/source/remove

POST /preview/source/remove

Delete the video source in the preview

Body request parameters

```
{
  "id": 1
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» pos_id	body	integer	yes		Location ID

[Return to example](#)

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

16.NDI-Discovery Module

(1)GET /ndi/discovery/all

GET /ndi/discovery/all

Get all discovery Types and configurations

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none

[Return to example](#)

```
{
  "data": {
    "auto": [
      {
        "dis_d_ip": "",
        "dis_g_name": "123",
        "dis_method": 3,
        "dis_s_ip": ""
      }
    ],
    "discovery_server": [
      {
        "dis_d_ip": "",
        "dis_g_name": "public",
        "dis_method": 4,
        "dis_s_ip": "192.168.43.141"
      },
      {
        "dis_d_ip": "",
        "dis_g_name": "puc",
        "dis_method": 4,
        "dis_s_ip": "192.168.43.141"
      }
    ],
    "manual": [
      {
        "dis_d_ip": "192.168.43.141",
        "dis_g_name": "public",
        "dis_method": 2,
        "dis_s_ip": ""
      },
      {
        "dis_d_ip": "192.168.35.178",
        "dis_g_name": "mhb",
        "dis_method": 2,
        "dis_s_ip": ""
      },
      {
        "dis_d_ip": "192.168.35.178",
        "dis_g_name": "public",
        "dis_method": 2,
        "dis_s_ip": ""
      }
    ],
    "public": [
      {
        "dis_d_ip": "",
        "dis_g_name": "public",
        "dis_method": 1,
        "dis_s_ip": ""
      }
    ]
  },
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	object	true	none		none
»» auto_server	\[object]	true	none		Automatically discover server Type
»»» dis_d_ip	string	true	none		Manually discover IP
»»» dis_g_name	string	true	none		Group name
»»» dis_method	integer	true	none		Discovery method 1: Automatic discovery 2: Manual discovery 3: Automatic discovery by group 4: Server discovery
»»» dis_s_ip	string	true	none		Automatically discover server ip
»»» id	string	true	none		ID unique value
»» manual	\[object]	true	none		Manual List
»»» dis_d_ip	string	true	none		none
»»» dis_g_name	string	true	none		none
»»» dis_method	integer	true	none		none
»»» dis_s_ip	string	true	none		none
»»» id	string	true	none		none
» result	string	true	none		none

(2)POST /ndi/discovery/auto/del

POST /ndi/discovery/auto/del
Deleting Auto-Discovery Items

Body request parameters

```
{
  "dis_d_ip": "192.168.35.93",
  "dis_g_name": "123"
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» id	body	integer	yes		unique ID

Return to example

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(3)GET /ndi/discovery/sources

GET /ndi/discovery/sources

Get the corresponding discovery method to find the source

Body request parameters

```
{
  "dis_method": 1, //1: public automatic discovery, 2: manual configuration, 3: automatic discovery, 4: discovery server
  discovery
  "dis_g_name": "", //Group name, this parameter is required when dis_method=3, 4
  "dis_s_ip": "", //Discovery server IP, this parameter is required when dis_method=4
  "group_id": ""
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
dis_method	query	integer	no		1\: public automatic discovery, 2: manual configuration, 3: automatic discovery, 4: discovery server discovery
dis_g_name	query	string	no		Group name. This parameter is required when dis_method=3 or 4.
dis_s_ip	query	string	no		Discover the server IP. This parameter is required when dis_method=4
group_id	query	string	no		1
app	header	string	yes		none
body	body	object	no		none

Return to example

```
{
  "data": [
    {
      "channel": "FULL",
      "group_name": "public",
      "ip": "192.168.35.178",
      "name": "N60-N6020240531 ",
      "ndi_name": "N60-N6020240531 (FULL)",
      "port": 5961,
      "url": "192.168.35.178:5961"
    }
  ],
}
```

```
"result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» data	\[object]	true	none		none
»» channel	string	false	none		Channel name
»» group_name	string	false	none		Group name
»» ip	string	false	none		IP
»» name	string	false	none		Device name
»» ndi_name	string	false	none		Full name of NDI discovery
»» port	integer	false	none		port
»» url	string	false	none		Source URL
» result	string	true	none		none

(3)POST /ndi/discovery/manual/add

POST /ndi/discovery/manual/add

This interface is also used as a configuration item deletion interface. After the user deletes the corresponding IP and group on the page, the remaining items can be passed to the backend, just like the matrix operation.

Body request parameters

```
{
  "manuals": [
    {
      "dis_d_ip": "192.168.43.141",
      "dis_g_name": "public"
    }
  ]
}
```

1)Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» manuals	body	\[object]	yes		none
»» dis_d_ip	body	string	yes		Discovery IP
»» dis_g_name	body	string	yes		Discovery Group name

Return to example

```
{
  "result": "ok"
}
```

2)Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(4) POST /ndi/discovery/auto/add

POST /ndi/discovery/auto/add

Adding Auto-Discovery Items

Body request parameters

```
{
  "dis_g_name": "123"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» dis_g_name	body	string	yes		Group name

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(5) POST /ndi/discovery/server/del

POST /ndi/discovery/server/del
Deleting a server discovery entry

Body request parameters

```
{
  "dis_s_ip": "192.168.43.146",
  "dis_g_name": "public"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» id	body	integer	yes		ID

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

(6) POST /ndi/discovery/server/add

POST /ndi/discovery/server/add
Add server discovery item

Body request parameters

```
{
  "dis_g_name": "public",
  "dis_s_ip": "192.168.43.141"
}
```

1) Request Parameters

Name	Location	Type	Required	Chinese name	Illustrate
app	header	string	yes		none
body	body	object	no		none
» dis_g_name	body	string	yes		Group name
» dis_s_ip	body	string	yes		IP discovery

Return to example

```
{
  "result": "ok"
}
```

2) Return data structure

Status code **200**

Name	Type	Required	Constraint	Chinese name	Illustrate
» result	string	true	none		none

Return to example

```
{
  "result": "ok"
}
```