JVC Camcorder Web API Reference Version 1.12

JVC KENWOOD Corporation

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THIS DOCUMENT DESCRIBES APPLICATION PROGRAMMING INTERFACE TO CONTROL JVC CAMERA RECORDERS VIA NETWORK, AND IT SHALL NOT BE USED FOR ANY OTHER PURPOSE.

1.00	Outline
	First release
1.01	Added GY-HM660 to the command table
	Added "3.1.15 Set streaming server settings(RTP)" command only GY-HM660.
	Added PcrJitter parameter in "3.1.18 Get streaming server settings" and "3.1.19 Set streaming server settings(UDP)" commands.
.02	Added "3.1.14 Set streaming server settings(RTP)" command for all cameras. Type "TCP" is effective in "GY-HM650" and "GY-HM660" in command with a streaming type parameter.
	Added "Variable Gain" parameter to "3.3.1 Get Camera Status" and "3.3.6 Set Web Event" for "GY-LS300".
03	Type "TCP" is effective in "GY-HM650" in command with a streaming type parameter.
03	Type "UDPN" and "UDPL" are effective in "GY-HM660" in command with a streaming type parameter.
04	Supported KY-PZ100 newly.
04	Added "3.1.3 Set streaming framerate" command for "KY-PZ100".
	Added 5.1.6 Available streaming framerate settings" command for "KY-PZ100".
	Added 5.1.4 PTZ Camera Support Command* for "KY-PZ100".
	Added 3.5. How to acquire JPEG data" for "KY-PZ100".
05	Added "3.1.3 Set streaming framerate" command for "GY-HM200", "GY-LS300", "GY-HM8x0", and "GY-HM660".
	Added "3.1.6 Available streaming framerate settings" command for "GY-HM200", "GY-LS300", "GY-HM8x0", and "GY-HM660".
	Added "3.5. How to acquire JPEG data" for "GY-HM200", "GY-LS300", "GY-HM8x0", and "GY-HM660".
	Added "3.6. How to use interruptible feedback function" for "GY-HM660".
06	Error correction. 2.1.1.
	Another client is able to connect while first client is using API interface.
	3.2.2 SessionRenewal command has become obsolete.
	Added "3.6. How to use interruptible feedback function" for "GY-HM8x0".
	Type "UDPN" and "UDPL" are effective in "GY-HM8x0" in command with a streaming type parameter
	of "3.1.7 Available streaming bitrate settings" command.
)7	Error correction. "3.1.10 Get streaming server settings".
	Revised wrong parameters. They are effective to all models.
	Error correction. "3.3.6. Set Web Button Event".
	Some parameters are not supported on "KY-PZ100".
	Added "MasterBlack" parameters to "3.3.1 Get Camera Status" and "3.3.6 Set Web Event"
	for "GY-HM8x0", "GY-HM660", and "GY-HM200".
	Added "Detail" parameters to "3.3.1 Get Camera Status" and "3.3.6 Set Web Event" for "GY-HM8x0", "GY-HM660", and "GY-HM200".
	Added "3.4.3 Zoom switch operation" command for "GY-HM8x0", "GY-HM660", and "GY-HM200".
	Added "3.3.10 Seesaw switch operation" command for "GY-HM8x0", "GY-HM660", and "GY-HM200".
	Added Gain event "Up1"/"Down1" parameters to "3.3.6 Set Web Event" for "GY-HM8x0", "GY-HM660", and "GY-HM200".
	Added target models "GY-HM8x0", "GY-HM660", and "GY-HM200" to MenuStatus of "3.3.1 Get Camera Status"
	Added "3.7. How to control tally system" description for "GY-HM8x0", "GY-HM660", "GY-HM200", and "KY-PZ100".
20	Changed ""3.3.5. Tally lamp control" description correspond to it. Added "Serial" parameter to "3.2.1. Get System Information" for "GY-HM660", "GY-HM8x0", "GY-HM200", and "KY-PZ100".
80	
	Added "3.2.6 Get NTP Status", "3.2.7 Set NTP Server", and "3.2,8 Set NTP settings" Commands
	for "GY-HM660", "GY-HM8x0", "GY-HM200", and "KY-PZ100". Supported GY-HM25x newly.
	Error correction.
	Added "Whb" "Status" parameter to "3.3.1. Get camera status".
	Changed "3.3.1. Get camera status". Parameter ("Enable" "Streaming" "On/Off") is not effective in "GY-HM200" and "GY-HM25x".
09	Added "Serial" parameter to "3.2.1. Get System Information" for "GY-HM650".
00	Added "3.5. How to acquire JPEG data" for "GY-HM650".
	Supported GY-HC900 newly.
10	for "GY-HC900" updates as below.
	Added some resolution and bitrate parameters to "3.1. Streaming Setting Command".
	Added "Smpte2022Fec" to "3.1.10. Get streaming server settings" and "3.1.16. Set streaming server settings(RTP)".
	Added "AdaptiveBitrate" to "3.1.10. Get streaming server settings" and "3.1.14. Set streaming server settings(ZIXI)".
	Added "3.8. Return over IP Command" for "GY-HC900".
	Added "Resolution" and "FrameRate" to "3.8.3. GetReturnOverlpServerSettings" and "3.8.4. SetReturnOverlpServerSettings(RTSP/Zixi)".
	Added "3.8.3.1. AvailableTypeOfReturnOverIP" and "3.8.3.2. AvailableFrameRateOfReturnOverIP" commands.
	Added "IrisBar" parameter to "3.3.7. Set Web Slider Event".
	Added "Position(Iris)" parameter "3.3.1. Get camera status".
	Added 1 distributions) parameter 3.3.1. Get camera status :
	Added "PCR Mode" to "3.1.10. Get streaming server settings" and "3.1.16. Set streaming server settings(UDP/Zixi/RTP)".
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- 3.8.7. SetReturnOverIpCtrl

1.1. Specification

This API specification describes commands to control JVC cameras via network.

Following commands are available.

Setting command - Configure camera settings

System command - Perform the information of the camera, the update of the session

, the memory of the value

Camera control command - Control camera
PTZ camera control command - Control PTZ camera
JPEG data acquisition command - Acquate HPEG data.
Interruptible feedback settings - Configue IFB settings.
Studio tally control command - Control studio tally display.

Return over IP command - Return over IP Settings and Control.

- * Some API commands may be restricted by camera model and software version.
- * Supported API functions are depends on the API version of the camera.

 Version information can be obtained with the command 'Get System Information'.

Supported camera model and firmware version.

	Firmware Ve	ersion							
API Version	GY-HM650	GY-HM660	GY-HM8x0	GY-HM200	GY-HM25x	GY-LS300	KY-PZ100	GY-HC900	GY-HC5x0
1.00	V0404	-	V0203-0060	V0203-0136	-	V0203-0132	-	-	-
1.01	_	V0100-0049	-	-	-	-	-	-	-
1.02		-	V0300-0067	V0300-0150	-	V0300-0143	-	-	-
1.03	-	V0102-0067	-	-	-	-	-	-	-
1.04	_	-	-	-	-	-	V0100-0076	-	-
1.05		V0105-0086	V0301-0076	V0305-0182	-	V0302-0151	V0101-0093	-	-
1.06	_	-	V0303-0084	-	-	-	-	-	-
1.07		V0110-0111	V0305-0090	V0309-0213	-	-	V0102-0103	-	-
1.08	-	V0112-0136	V0307-0098	V0313-0230	V0100-0007	-	V0104-0118	-	-
1.09	V0412	-	-	-	-	-	-	V0101-0121	-
1.10		-	-	-	-	-	-	V0230-0217	V0102-0145
1.11	-	-	-	-	-	_	-	-	V0110-0148
1.12	-	-	-	-	-	-	-	0300-0250	V0120-0166

^{*} This list shows a API version number which is returned by each firmware. Newest API document supports most recent firmwares on all models.

2. Interface

Support HTTP protocol

API commad request/response uses HTTP protocol.

A request uses a port number 80 with default setting. It may change if the web port setting on the camera menu is modified.

Requests and response data are described with JSON format in HTTP message body.

2.1. Authentication

Digest authentication

Usename/password authorization is needed on first access to the camera.

It returns 'Session ID' to the client after authorization.

The client can access without authorization by using this 'Session ID'.

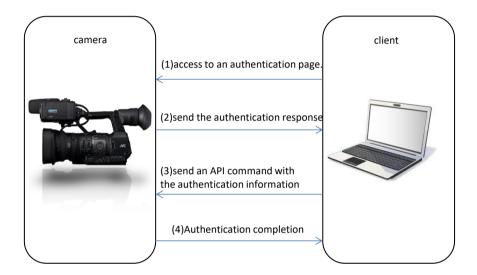
'Session ID' will expire within 30 seconds.

It has to be extended using 'SessionRenewal' command.

Authentication process has to be performed to obtain another 'Session ID' after expiration.

Please refer to RFC2617 for more information.

Procedure



(1) Access to an authentication page of a server from the client.

Example

GET /api.php HTTP/1.1\r\n

Host: 192.168.0.134\r\n

User-Agent: Mozilla/5.0 (Windows NT 5.1; rv:27.0) Gecko/20100101 Firefox/27.0\r\n

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\n

Accept-Language: ja,en-us;q=0.7,en;q=0.3\r\n

Accept-Encoding: gzip, deflate\r\n Connection: keep-alive\r\n

(2) The response for authentication is returned to a client.

Example

HTTP/1.1 401 Unauthorized\r\n

WWW-Authenticate: Digest realm="GY-HM650",

nonce="7a63056b0a608017c405707e682b9adb", qop="auth"\r\n

Content-Type: text/html\r\n Content-Length: 1458\r\n

Date: Tue, 03 Mar 2015 11:35:13 GMT\r\n

Server: Camera\r\n

(3)The client re-access with the authentication information(user name and password) to the authentication page

Example

GET /api.php HTTP/1.1\r\n Host: 192.168.0.134\r\n

User-Agent: Mozilla/5.0 (Windows NT 5.1; rv:27.0) Gecko/20100101 Firefox/27.0\r\n

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\n

Accept-Language: ja,en-us;q=0.7,en;q=0.3\r\n

Accept-Encoding: gzip, deflate\r\n Connection: keep-alive\r\n

Authorization: Digest username="prohd", realm="GY-HM650",

nonce="7a63056b0a608017c405707e682b9adb", uri="/api.php",

response="0f4d23f739a0e9fa3b78b826b33edaf8", qop=auth, nc=00000001,

cnonce="ee16206547e4dd0e"\r\n

\r\n

(4) Session ID is returned form the camera.

Example

HTTP/1.1 302 Found\r\n

Status: 302 Moved Temporarily\r\n

Expires: Thu, 19 Nov 1981 08:52:00 GMT\r\n

Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0\r\n

Pragma: no-cache\r\n

Set-Cookie: SessionID=10ffa8dcd1bb1cf5f9c252b7b8a20738\r\n

Content-type: text/html; charset=UTF-8\r\n Transfer-Encoding: chunked\r\n

Date: Tue, 03 Mar 2015 11:35:23 GMT\r\n

Server: Camerar\n

\r\n

return to (2) in authentication failure.

* Another client cannot connect while first client is using API interface.

2.2. Request form

Hypertext Transfer Protocol

Example

POST /cgi-bin/api.cgi HTTP/1.1\r\n

Host: 192.168.0.134\r\n

 $\textit{User-Agent: Mozilla/5.0 (Windows NT 5.1; rv:27.0) Gecko/20100101 Firefox/27.0 \columnwidth{\text{line}}{\text{loss}$

Accept: application/json, text/javascript, */*; q=0.01\r\n

Accept-Language: ja,en-us;q=0.7,en;q=0.3\r\n

Accept-Encoding: gzip, deflate\r\n

Content-Type: application/x-www-form-urlencoded; charset=UTF-8\r\n

X-Requested-With: XMLHttpRequest\r\n Referer: http://192.168.0.134/api.php\r\n

Content-Length: 86\r\n

Authorization: Digest username="prohd", realm="GY-HM650",

nonce="7a63056b0a608017c405707e682b9adb", uri="/cgi-bin/api.cgi", response="c412878c40aa4d4943af678c2ba070b1", qop=auth, nc=0000001a,

Connection: keep-alive\r\n Pragma: no-cache\r\n Cache-Control: no-cache\r\n

\r\n

HTML Form URL Encoded: application/x-www-form-urlencoded

Camera cannot accept any space character or newline within command string.

Ke	y	quest Command String (Command name) SessionID String (Session ID in cookie.)		Value	
Re	Request Command String (Command name) SessionID String (Session ID in cookie.) Params (You can omit this field if there is no parame				
	Со	mmand	String	(Command name)	
	Se	ssionID	String	(Session ID in cookie.)	
	Pa	rams		(You can omit this field if there is no parameter.)	
		***	***		

```
Example

{
    "Request": {
        "Command":"GetSystemInfo",
        "SessionID":"10ffa8dcd1bb1cf5f9c252b7b8a20738"
     }
}
```

2.3. Response form

Hypertext Transfer Protocol

```
Example

HTTP/1.1 200 OK\r\n

Content-type: application/json\r\n

Pragma: no-cache\r\n

Cache-Control: no-cache\r\n

Expires: Thu, 01 Dec 1994 16:00:00 GMT\r\n

Content-Length: 105\r\n

Date: Tue, 03 Mar 2015 11:35:30 GMT\r\n

Server: Camerar\n

\r\n
```

JavaScript Object Notation: application/json

Acutual response from camera does not include any space character or newline.

Key	Style	Value
Response		
Requested	String	(Command name)
Result	String	Result of command processing Success / DisableError(Timeout) / RequestedError(Illegal parameter error) / FormatError(Illegal request error) / CommandError(Illegal command error) / SessionError(Authentication error) /
Data		DualExeError(Duplicate command) (You can omit this field if there is no parameter.)
***	***	

```
Example

{
    "Response": {
        "Requested": "GetSystemInfo",
        "Result": "Success",
        "Data": {
              "Model": "HM650",
              "Destination": "EU",
              "ApiVersion": "0.13.3"
        }
    }
}
```

3.1. Streaming Setting Command

When you change a part of these parameters, you should get all parameters first, then modify and store them again. Setting commands should be used only when settings need to be changed, otherwise it causes performance degradation. Zixi and SRT streaming modes are mutually exclusive on GY-HC5x0 and GY-HC900.

Only "Zixi" or "Srt" parameter is effective according to the streaming mode.

Current mode can be checked using GetSystemInfo response.

3.1.1. Get streaming settings

Get the streaming setting

Request

K	еу	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	GetStreamingSettings	Yes								
	SessionID	String	(Session ID in cookie.)	Yes								

Example { "Request" : { "Command" : "GetStreamingSettings" , "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" } }

ey	Style	Value	HM65) HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC90	0 HC5>
esponse											
Requested	String	GetStreamingSettings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Result	String	(Result of command processing.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Data											
Resolution	String	"1920x1080"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		"1440x1080"	No	No	No	No	No	No	No	No	No
		"1280x720"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		"720x480"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
		"720x576"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
		"640x360"	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		"480x270"	Yes	No	No	No	No	No	No	No	No
Framerate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p" /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		"422_10bit_60p" / "422_10bit_50p"	No	No	No	No	No	No	No	Yes	Yes
Bitrate	String	"0.2M"	Yes	No	No	No	No	No	No	No	No
		"0.3M"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	"0.8M"	"0.8M"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		"2.5M"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No

	"3.0M"	Yes								
	"5.0M"	Yes								
	"8.0M"	Yes								
	"10M"	Yes	No	No						
	"12M"	Yes								
	"16M"	No	No	No	No	No	No	Yes	Yes	Yes
	"20M"	No	No	No	No	No	No	Yes	Yes	Yes
	"24M"	No	Yes	Yes						

^{*} Framerate "422_10bit_60p" and "422_10bit_50p" are effective only if optional adaptor "KA-EN200" is attached on 'GY-HC900' and 'GY-HC5x0'.

```
{
    "Response" : {
        "Requested" : "GetStreamingSettings" ,
        "Result" : "Success" ,
        "Data" : {
            "Resolution" : "1920x1080" ,
            "Framerate" : "60i" ,
            "Bitrate" : "3.0M"
        }
    }
}
```

3.1.2. Set streaming resolution

Set streaming resolution

Camcorder automatically reboots with this command on HM650, HM660, and HM8x0.

Current value can be obtained with the 'AvailableStreamingResolutionSettings' command.

Request

Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Request											
Command	String	SetStreamingResolution	Yes								
SessionID	String	(Session ID in cookie.)	Yes								
Params											
Resolution	String	"1920x1080"	Yes								
		"1440x1080"	No								
		"1280x720"	Yes								
		"720x480"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
		"720x576"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
		"640x360"	No	Yes							
		"480x270"	Yes	No							

^{*} Framerate is fixed by resolution.(HM650/HM660/HM8x0/HM200/HM25x/LS300)

```
Example

{
    "Request" : {
        "Command" : "SetStreamingResolution" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "Resolution" : "1920x1080"
        }
    }
}
```

ρυ.													
ŀ	Се у		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Resp	ponse											
	R	Requested	String	SetStreamingResolution	Yes								
	R	Result	String	(Result of command processing.)	Yes								

```
Example

{
    "Response" : {
        "Requested" : "SetStreamingResolution" ,
        "Result" : "Success"
     }
}
```

3.1.3. Set streaming framerate

Set streaming framerate.

Current value can be obtained with the 'AvailableStreamingFramerateSettings' command.

Request

Key	1	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Rec	quest											
(Command	String	SetStreamingFramerate	No	Yes							
	SessionID	String	(Session ID in cookie.)	No	Yes							
ļΠ	Params											
	Framerate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p" /	No	Yes							
			"422_10bit_60p" / "422_10bit_50p"	No	Yes	Yes						

^{*} Framerate "422_10bit_60p" and "422_10bit_50p" are effective only if optional adaptor "KA-EN200" is attached on 'GY-HC900' and 'GY-HC5x0'.

Example

```
| "Request" : {
    "Command" : "SetStreamingFramerate" ,
    "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
    "Params" : {
        "Framerate" : "60p"
      }
    }
}
```

Ke	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	esponse											
	Requested	String	SetStreamingFramerate	No	Yes							
	Result	String	(Result of command processing.)	No	Yes							

```
Example

{
    "Response" : {
        "Requested" : "SetStreamingFramerate" ,
        "Result" : "Success"
     }
}
```

3.1.4. Set streaming bitrate

Set streaming bitrate

Current value can be obtained with the 'AvailableStreamingBitrateSettings' command.

This command does not reboot the camcorder unlike 'Set streaming resolution' command.

Request

Э У	Style	√alue	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900) HC5>
equest											1
Command	String	SetStreamingBitrate	Yes								
SessionID	String	Session ID in cookie.)	Yes								
Params											T
Bitrate	String	'0.2M"	Yes	No							
		'0.3M"	Yes								
		'0.8M"	Yes								
		'1.5M"	Yes	Ye							
		'2.5M"	Yes	No	No						
		'3.0M"	Yes	Ye							
		'5.0M"	Yes	Ye							
		"8.0M"	Yes	Ye							
		'10M"	Yes	No	No						
		'12M"	Yes	Ye							
		'16M"	No	No	No	No	No	No	Yes	Yes	Ye
		20M"	No	No	No	No	No	No	Yes	Yes	Ye
		24M"	No	Yes	Yes						

```
### Request": {

"Command": "SetStreamingBitrate",

"SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3",

"Params": {

"Bitrate": "3.0M"

}

}
```

Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900) HC5x0
Response											
Requested	String	SetStreamingBitrate	Yes								
Result	String	(Result of command processing.)	Yes								

```
Example
{
    "Response" : {
        "Requested" : "SetStreamingBitrate" ,
        "Result" : "Success"
     }
}
```

3.1.5. Available streaming resolution settings

Get available streaming resolution settings

Settable values are depend on the recording resolution setting of the camcorder.

Request

K	ey	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	AvailableStreamingResolutionSettings	Yes								
	SessionID	String	(Session ID in cookie.)	Yes								

Example { "Request" : {

"Command": "AvailableStreamingResolutionSettings",
"SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3"

Key		Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Respon	se											
Requ	uested	String	AvailableStreamingResolutionSettings	Yes								
Resu	ult	String	(Result of command processing.)	Yes								
Data												
Α	vailableResolution			Yes								
	1920x1080	Integer	0 : unselectable , 1 : selectable	Yes								
	1440x1080	Integer	0 : unselectable , 1 : selectable	No								
	1280x720	Integer	0 : unselectable , 1 : selectable	Yes								
	720x480	Integer	0 : unselectable , 1 : selectable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	720x576	Integer	0 : unselectable , 1 : selectable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	640x360	Integer	0 : unselectable , 1 : selectable	No	Yes							
	480x270	Integer	0 : unselectable , 1 : selectable	Yes	No							

^{*} Resolution "640x360" is effective in 'GY-HM200', 'GY-HM25x', 'GY-LS300', 'GY-HM660', and 'GY-HM8x0'.

^{*} Resolution "480x270" is effective in 'GY-HM650'.

```
{
    "Response" : {
        "Requested" : "AvailableStreamingResolutionSettings" ,
        "Result" : "Success" ,
        "Data" : {
            "AvailableResolution" : {
            "1920x1080" : 1 ,
            "1440x1080" : 0 ,
            "1280x720" : 0 ,
            "720x480" : 0 ,
            "720x576" : 0 ,
            "640x360" : 0 ,
            "480x270" : 0
        }
    }
}
```

3.1.6. Available streaming framerate settings

Get available streaming framerate settings.

Settable values are depend on the recording resolution setting on the camcorder.

Request

Key	Style	Value	Н	M650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Request												
Command	String	AvailableStreamingFramerateSettings	N	0	Yes							
SessionID	String	(Session ID in cookie.)	N	0	Yes							
Params												
Resolution	String	"1920x1080"	N	0	Yes							
		"1280x720"	N	0	Yes							
		"720x480"	N	0	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
		"720x576"	N	0	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
		"640x360"	N	О	Yes							

Example

```
{
    "Request" : {
        "Command" : "AvailableStreamingFramerateSettings" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3"
        "Params" : {
            "Resolution" : "1920x1080"
        }
    }
}
```

Э У	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	O HC5
esponse											
Requested		AvailableStreamingFramerateSettings	No	Yes							
Result	String	(Result of command processing.)	No	Yes	Ye						
Data											
Resolution	String	"1920x1080"	No	Yes	Ye						
		"1280x720"	No	Yes	Υ						
		"720x480"	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
		"720x576"	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
		"640x360"	No	Yes	Υ						
AvailableFramerate											T
60p	Integer	0 : unselectable , 1 : selectable	No	Yes	١						
60i	Integer	0 : unselectable , 1 : selectable	No	Yes	١						
30p	Integer	0 : unselectable , 1 : selectable	No	Yes	1						
50p	Integer	0 : unselectable , 1 : selectable	No	Yes	1						
50i	Integer	0 : unselectable , 1 : selectable	No	Yes	1						
25p	Integer	0 : unselectable , 1 : selectable	No	Yes	Υ						
422_10bit_60p	Integer	0 : unselectable , 1 : selectable	No	Yes	Υ						
422_10bit_50p	Integer	0 : unselectable , 1 : selectable	No	Yes	Υ						

^{*} Framerate "422_10bit_60p" and "422_10bit_50p" are effective only if optional adaptor "KA-EN200" is attached on 'GY-HC900' and 'GY-HC5x0'.

```
[
"Response": {
"Requested": "AvailableStreamingFramerateSettings",
"Result": "Success",
"Data": {
"Resolution": "1920x1080",
"AvailableFramerate": {
"60p": 1,
"60i": 0,
"30p": 0,
"50p": 0,
"50i": 0,
"25p": 0
"422_10bit_60p": 0,
"422_10bit_50p": 0
}
}
}
```

3.1.7. Available streaming bitrate settings

Get available streaming bitrate settings

Request

еу	Style	Value	HM65	0 HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900) HC5
equest											
Command	String	AvailableStreamingBitrateSettings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SessionID	String	(Session ID in cookie.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Params											
Туре	String	"UDP" /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
		"UDPN" (PCR Jitter is Normal) /	No	Yes	Yes	No	No	No	No	No	No
		"UDPL"(PCR Jitter is Low) /	No	Yes	Yes	No	No	No	No	No	No
		"TCP" /	Yes	No	No	No	No	No	No	Yes	Υe
		"RTSP" /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y
		"ZIXIM"(Zixi Medium/Minimum/High Latency) /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Υe
		"ZIXIL"(Zixi Low Latency) /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Υe
		"RTMP" /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Υe
		"RTMPS" /	No	No	No	No	No	No	No	No	Y
		"Facebook" /	No	No	No	No	Yes	No	No	No	N
		"SRT"	No	No	No	No	No	No	No	Yes	Υe
Resolution	String	"1920x1080" / "1440x1080" / "1280x720" / "720x480" /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Υe
		"720x576" / "640x360" / "480x270"									
Framerate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p" /	No	No	No	No	No	No	Yes	Yes	Υe
		"422_10bit_60p" / "422_10bit_50p"	No	No	No	No	No	No	No	Yes	Υe

- * High Latency of Type is effective in 'GY-HM660', 'GY-HM200', 'GY-HM25x', 'GY-LS300', 'GY-HM8x0', and 'KY-PZ100'.
- * Resolution "640x360" is effective in 'GY-HM200', 'GY-HM25x', 'GY-LS300', 'GY-HM660', 'GY-HM8x0', and 'KY-PZ100'.
- * Resolution "480x270" is effective in 'GY-HM650'.
- * Resolution "720x480" and "720x576" are not effective in 'GY-HC5x0', 'GY-HC900'
- * Type "TCP" is effective in 'GY-HM650', 'GY-HC5x0', and 'GY-HC900'.
- * Type "UDPN" and "UDPL" are effective in 'GY-HM660', and 'GY-HM8x0'.
- * Type "Facebook" is effective in 'GY-HM250' .
- * Type "RTMPS" is effective in 'GY-HC5x0'.
- * Framerate "422_10bit_60p" and "422_10bit_50p" are effective only if optional adaptor "KA-EN200" is attached on 'GY-HC900' and 'GY-HC5x0'.

```
{
    "Request" : {
        "Command" : "AvailableStreamingBitrateSettings" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "Type" : "TCP" ,
            "Resolution" : "1920x1080" ,
            "Framerate" : "60p"
        }
    }
}
```

1	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900) НС
sponse											
Requested	String	AvailableStreamingBitrateSettings	Yes	Υe							
Result	String	(Result of command processing.)	Yes	Υe							
Da <u>ta</u>											
Type	String	"UDP" /	Yes	Υ							
		"UDPN" (PCR Jitter is Normal) /	No	Yes	Yes	No	No	No	No	No	١
		"UDPL"(PCR Jitter is Low) /	No	Yes	Yes	No	No	No	No	No	١
		"TCP" /	Yes	No	No	No	No	No	No	Yes	1
		"RTSP" /	Yes	Ì							
		"ZIXIM"(Zixi Medium/Minimum/High Latency) /	Yes	,							
		"ZIXIL"(Zixi Low Latency) /	Yes	ľ							
		"RTMP"	Yes	ľ							
		"RTMPS" /	No	ľ							
		"Facebook" /	No	No	No	No	Yes	No	No	No	
		"SRT"	No								
Resolution	String	"1920x1080" / "1440x1080" / "1280x720" / "720x480" /	Yes								
		"720x576" / "640x360" / "480x270"									
Framerate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p" /	No	No	No	No	No	No	Yes	Yes	
		"422_10bit_60p" / "422_10bit_50p"	No	Yes							
AvailableBitrate											
0.2M		0 : unselectable , 1 : selectable	Yes	No							
0.3M		0 : unselectable , 1 : selectable	Yes								
0.8M		0 : unselectable , 1 : selectable	Yes								
1.5M		0 : unselectable , 1 : selectable	Yes								
2.5M		0 : unselectable , 1 : selectable	No	_							
3.0M		0 : unselectable , 1 : selectable	Yes								
5.0M		0 : unselectable , 1 : selectable	Yes								
8.0M		0 : unselectable , 1 : selectable	Yes	ľ							
10M		0 : unselectable , 1 : selectable	No	ا							
12M		0 : unselectable , 1 : selectable	Yes	ľ							
16M		0 : unselectable , 1 : selectable	No	No	No	No	No	No	Yes	Yes	Ì
20M		0 : unselectable , 1 : selectable	No	No	No	No	No	No	Yes	Yes	,
24M	Integer	0 : unselectable , 1 : selectable	No	Yes	ď						

- * High Latency of Type is effective in 'GY-HM660', 'GY-HM200', 'GY-HM25x', 'GY-LS300', 'GY-HM8x0', and 'KY-PZ100'.
- * Resolution "640x360" is effective in 'GY-HM200', 'GY-HM25x', 'GY-LS300', 'GY-HM660', 'GY-HM8x0', and 'KY-PZ100'.
- * Resolution "480x270" is effective in 'GY-HM650'.
- * Resolution "720x480" and "720x576" are not effective in 'GY-HC5x0' , 'GY-HC900'
- * Type "TCP" is effective in 'GY-HM650', 'GY-HC5x0', and 'GY-HC900'.
- * Type "UDPN" and "UDPL" are effective in 'GY-HM660'.
- * Type "Facebook" is effective in 'GY-HM250' .
- * Type "RTMPS" is effective in 'GY-HC5x0' .
- * Framerate "422_10bit_60p" and "422_10bit_50p" are effective only if optional adaptor "KA-EN200" is attached on 'GY-HC900' and 'GY-HC5x0'.

```
"Response" : {
"Requested": "AvailableStreamingBitrateSettings",
"Result" : "Success" ,
"Data" : {
 "Type" : "TCP" ,
  "Resolution": "1920x1080",
  "Framerate" : "60p",
  "AvailableBitrate" : {
   "0.2M" : 0 ,
   "0.3M" : 0 ,
   "0.8M" : 0 ,
   "1.5M" : 0 ,
   "2.5M" : 0 ,
   "3.0M":1,
   "5.0M" : 1 ,
   "8.0M":1,
   "10M":0,
   "12M" : 1,
   "16M" : 1,
   "20M" : 1,
   "24M" : 1
```

3.1.8. Get current streaming server number

Get current streaming server ID.

There are four settings of streaming server .

Request

Κe	ә у	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	GetCurrentStreamingServerID	Yes								
	SessionID	String	(Session ID in cookie.)	Yes								

Example

```
{
    "Request" : {
        "Command" : "GetCurrentStreamingServerID" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3"
    }
}
```

Response

Ke	У	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	sponse								1			
	Requested	String	GetCurrentStreamingServerID	Yes								
	Result	String	(Result of command processing.)	Yes								
	Data							l l	1			
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	Yes								

```
.

"Response" : {

"Requested" : "GetCurrentStreamingServerID" ,

"Result" : "Success" ,

"Data" : {

"ID" : 3

}

}
```

3.1.9. Set current streaming server number

Set current streaming server ID.

Choose the server ID to use in streaming.

Request

Ke	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	equest											
	Command	String	SetCurrentStreamingServerID	Yes								
	SessionID	String	(Session ID in cookie.)	Yes								
	Params											
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	Yes								

Example { "Request" : { "Command" : "SetCurrentStreamingServerID , "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" , "Params" : { "ID" : 3 } } }

K	ә у	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetCurrentStreamingServerID	Yes								
	Result	String	(Result of command processing.)	Yes								

```
Example
{
    "Response" : {
        "Requested" : "SetCurrentStreamingServerID" ,
        "Result" : "Success"
     }
}
```

3.1.10. Get streaming server settings

Get streaming settings for each server ID.

Request

ucs													
k	Čey		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Reque	est											
	Co	mmand	String	GetStreamingServerSettings	Yes								
	Se	essionID	String	(Session ID in cookie.)	Yes								
	Pa	irams											
		ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	Yes								

Example

```
| "Request" : {
    "Command" : "GetStreamingServerSettings" ,
    "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
    "Params" : {
    "ID" : 1
    }
    }
}
```

	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900) HC
ponse											
Requested	String	GetStreamingServerSettings	Yes	Yes							
Result	String	(Result of command processing.)	Yes	Yes							
Data		·									
Alias	String	(Another name of server)	Yes	Υe							
Туре	String	"UDP" /	Yes	Υe							
		"TCP" /	Yes	No	No	No	No	No	No	Yes	Y
		"RTSP" /	Yes	Υ							
		"ZIXI" /	Yes	Y							
		"RTMP"	Yes	Υ							
		"RTMPS" /	No	Υ							
		"Facebook" /	No	No	No	No	Yes	No	No	No	Ν
		"SRT"	No	Yes	Υ						
Udp		(Selected by Type)									Ī
DstAddress	String	(IP address)	Yes	Υ							
DstPort	Integer	(Port number)	Yes	Υ							
PcrJitter	Integer	0:NORMAL, 1:LOW	No	Yes	Yes	Yes	Yes	Yes	No	No	Ν
PcrMode	Integer	0:Standard, 1:Fast	No	Yes	Υ						
Тср		(Selected by Type)									Ī
DstAddress	String	(IP address)	Yes	No	No	No	No	No	No	Yes	Υ
DstPort	Integer	(Port number)	Yes	No	No	No	No	No	No	Yes	Υ
Rtsp		(Selected by Type)									Т
DstPort	Integer	(Port number)	Yes	Υ							
StreamId	String	(Stream ID)	Yes	Υ							
Username	String	(User name)	Yes	Υ							

Password	String	(Password for RTSP/RTP)	Yes								
Zixi		(Selected by Type)									
DstAddress	String	(IP address)	Yes								
DstPort	Integer	(Port number)	Yes								
StreamId	String	(Stream ID for ZIXI)	Yes	Ye							
Password	String	(Password for ZIXI)	Yes	Ye							
Latency	Integer	0:Low, 1:Medium, 2:Minimum(Zixi OFF), 3:High	Yes	Ye							
PcrMode	Integer	0:Standard, 1:Fast	No	Yes	Ye						
AdaptiveBitrate	Integer	0:OFF, 1:ON	Yes	Ye							
Rtmp		(Selected by Type)									
DstUrl	String	(Network URL for Delivery)	Yes	Υe							
StreamKey	String	(Key for Delivery)	Yes	Υe							
Rtmps		(Selected by Type)									T
DstUrl	String	(Network URL for Delivery)	No	Y							
StreamKey	String	(Key for Delivery)	No	Y							
Rtp		(Selected by Type)									
DstAddress	String	(IP address)	No	Yes	Υe						
DstPort	Integer	(Port number)	No	Yes	Y						
PcrMode	Integer	0:Standard, 1:Fast	No	Yes	Y						
Smpte2022Fec	Integer	0:OFF, 1:ON	No	Yes	Ye						
FecMatrixL	Integer	4 - 20	No	Yes	Y						
FecMatrixD	Integer	420	No	Yes	Υe						
Srt		(Selected by Type)									
DstAddress	String	(IP address)	No	Y							
DstPort	String	(Port number)	No	Y							
ConnectionMode	Integer	0: Caller, 1: Listener, 2: Rendezvous	No	Υe							
BandwidthOverhe	aInteger	5 - 100	No	Υe							
Latency	Integer	20 - 8000	No	Ye							
Encryption	Integer	0: Off, 1: AES-128, 2: AES-196, 3: AES-256	No	Ye							
Passphrase		ASCII 10-79 character	No	Ye							

^{*} Type "TCP" is effective in 'GY-HM650', 'GY-HC5x0', and 'GY-HC900'.

```
{
    "Response" : {
        "Requested" : "GetStreamingServerSettings" ,
        "Result" : "Success" ,
        "Data" : {
            "Alias" : "Server1" ,
            "Type": "TCP",
            "Tcp" : {
             "DstAddress" : "192.168.0.1" ,
            "DstPort" : 6504
        }
        }
    }
}
```

^{*} Type "Facebook" is effective in 'GY-HM250' .

^{*} Type "RTMPS" is effective in 'GY-HC5x0' .

3.1.11. Set streaming server settings(UDP)

Set streaming settings for each server ID.

Request

Key	1	Style	Value	HM650	HM660	HM8x0	HM200	HM25×	LS300	PZ100	HC900	HC5x0
Rec	quest											
(Command	String	SetStreamingServerSettingsUDP	Yes								
	SessionID	String	(Session ID in cookie.)	Yes								
[Params											
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	Yes								
	Alias	String	(Another name of server)	Yes								
	DstAddress	String	(IP address)	Yes								
	DstPort	Integer	(Port number)	Yes								
	PcrMode	Integer	0:Standard, 1:Fast	No	Yes	Yes						
	PcrJitter	Integer	0:NORMAL, 1:LOW	No	Yes	Yes	Yes	Yes	Yes	No	No	No

Example

```
"Request" : {
"Command": "SetStreamingServerSettingsUDP",
"SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3",
 "Params" : {
 "ID":1,
  "Alias" : "Server1" ,
  "DstAddress": "192.168.0.1",
  "DstPort": 6504,
  "PcrJitter": 1
```

Response

ρυ.													
ŀ	Cey		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Resp	onse											
	R	equested	String	SetStreamingServerSettingsUDP	Yes								
	R	esult	String	(Result of command processing.)	Yes								

```
Example
 "Response" : {
  "Requested": "SetStreamingServerSettingsUDP",
  "Result" : "Success"
```

3.1.12. Set streaming server settings(TCP)

Set streaming settings for each server ID.

Type "TCP" is effective in 'GY-HM650', 'GY-HC5x0', and 'GY-HC900'.

Request

acci												
Ke	у	Style	Value	НМ	650 HM	660 HM8	0 HM20	0 HM25x	LS300	PZ100	HC900	HC5x0
Re	quest											
	Command	String	SetStreamingServerSettingsTCP	Yes	No	No	No	No	No	No	Yes	Yes
	SessionID	String	(Session ID in cookie.)	Yes	No	No	No	No	No	No	Yes	Yes
	Params											
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	Yes	No	No	No	No	No	No	Yes	Yes
	Alias	String	(Another name of server)	Yes	No	No	No	No	No	No	Yes	Yes
	DstAddress	String	(IP address)	Yes	No	No	No	No	No	No	Yes	Yes
	DstPort	Integer	(Port number)	Yes	No	No	No	No	No	No	Yes	Yes

Example

```
{
    "Request" : {
        "Command" : "SetStreamingServerSettingsTCP" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "ID" : 1 ,
        "Alias" : "Server1" ,
        "DstAddress": "192.168.0.1" ,
        "DstPort": 6504
    }
    }
}
```

K	ey	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetStreamingServerSettingsTCP	Yes	No	No	No	No	No	No	Yes	Yes
	Result	String	(Result of command processing.)	Yes	No	No	No	No	No	No	Yes	Yes

```
Example

{
    "Response" : {
        "Requested" : "SetStreamingServerSettingsTCP" ,
        "Result" : "Success"
     }
}
```

3.1.13. Set streaming server settings(RTSP/RTP)

Set streaming settings for each server ID.

Request

Key	/		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Red	que	st											
	Cor	mmand	String	SetStreamingServerSettingsRTSP	Yes								
	Ses	ssionID	String	(Session ID in cookie.)	Yes								
	Par	ams											
	- [ī	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	Yes								
	7	Alias	String	(Another name of server)	Yes								
	Ī	Password	String	(Password for RTSP/RTP)	Yes								

Example

```
{
  "Request" : {
  "Command" : "SetStreamingServerSettingsRTSP" ,
  "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
  "Params" : {
  "ID" : 1 ,
  "Alias" : "Server1" ,
  "Password": "abcde"
  }
}
```

Response

Key Style Value HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC900 HC5x0 Response String SetStreamingServerSettingsRTSP Requested Yes Yes Yes Yes Yes Yes Yes Yes Yes Result String (Result of command processing.) Yes Yes Yes Yes Yes Yes Yes Yes Yes

```
{
    "Response" : {
        "Requested" : "SetStreamingServerSettingsRTSP" ,
        "Result" : "Success"
    }
}
```

3.1.14. Set streaming server settings(ZIXI)

Set streaming settings for each server ID.

Request

O.												
Key	St	tyle	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x
Request												
Command	St	tring	SetStreamingServerSettingsZIXI	Yes	Yes							
SessionID	St	tring	(Session ID in cookie.)	Yes	Yes							
Params												
ID	Int	teger	0:server1, 1: server2, 2: server3, 3: server4	Yes	Yes							
Alias	St	tring	(Another name of server)	Yes	Yes							
DstAdd	lress St	tring	(IP address)	Yes	Yes							
DstPort	t Int	teger	(Port number)	Yes	Yes							
Stream	ld St	tring	(Stream ID for ZIXI)	Yes	Yes							
Passwo	ord St	tring	(Password for ZIXI)	Yes	Yes							
Latency	y Int	teger	0:Low, 1:Medium, 2:Minimum(Zixi OFF), 3:High	Yes	Yes							
PcrMod	de Int	teger	0:Standard, 1:Fast	No	Yes	Yes						
Adaptiv	eBitrate Int	teger	0:OFF, 1:ON	Yes	Yes							

^{*} High Latency of Type is effective in 'GY-HM660', 'GY-HM200', 'GY-HM25x', 'GY-LS300', 'GY-HM8x0', and 'KY-PZ100'.

```
Example

{
    "Request": {
        "Command": "SetStreamingServerSettingsZIXI",
        "SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3",
        "Params": {
            "ID": 1,
            "Alias": "Server1",
            "DstAddress": "192.168.0.1",
            "DstPort": 2088,
            "StreamId": "HM650-1234",
            "Password": "abcde",
            "Latency": 1,
            "AdaptiveBitrate": 0
        }
    }
}
```

Ke	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	esponse											
	Requested	String	SetStreamingServerSettingsZIXI	Yes								
	Result	String	(Result of command processing.)	Yes								

```
Example
{
    "Response" : {
        "Requested" : "SetStreamingServerSettingsZIXI" ,
        "Result" : "Success"
    }
}
```

3.1.15. Set streaming server settings(RTMP)

Set streaming settings for each server ID.

Request

Key	Style	Value	HM	550 HM6	60 HM8x0) HM200) HM25x	LS300	PZ100	HC900	HC5x0
Request											
Command	String	SetStreamingServerSettingsRTMP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SessionID	String	(Session ID in cookie.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Params											
ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Alias	String	(Another name of server)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DstUrl	String	(Network URL for Delivery)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
StreamKey	String	(Key for Delivery)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

```
"Request": {
    "Command": "SetStreamingServerSettingsRTMP",
    "SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
        "ID": 1,
        "Alias": "Server1",
        "DstUrl": "rtmp://xxxx.xxxx.xxxx.xxxx.com/play",
        "StreamKey: "livestreaming"
     }
}
```

Response

Style Value Key HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC900 HC5x0 Response String SetStreamingServerSettingsRTMP Requested Yes Yes Yes Yes Yes Yes Yes Yes Yes Result String (Result of command processing.) Yes Yes Yes Yes Yes Yes Yes Yes Yes

Example { "Response" : { "Requested" : "SetStreamingServerSettingsRTMP" , "Result" : "Success" } }

3.1.16. Set streaming server settings(RTMPS)

Set streaming settings for each server ID.

Request

Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Requ	est											
Co	ommand	String	SetStreamingServerSettingsRTMPS	No	Yes							
Se	essionID	String	(Session ID in cookie.)	No	Yes							
Pa	arams											
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes							
	Alias	String	(Another name of server)	No	Yes							
	DstUrl	String	(Network URL for Delivery)	No	Yes							
	StreamKey	String	(Key for Delivery)	No	Yes							

Example

```
"Request": {
    "Command": "SetStreamingServerSettingsRTMPS",
    "SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
        "ID": 1,
        "Alias": "Server1",
        "DstUrl": "rtmp://xxxx.xxxx.xxxx.xxxx.com/play",
        "StreamKey: "livestreaming"
     }
}
```

Response

Style Value Key HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC900 HC5x0 Response String SetStreamingServerSettingsRTMPS Requested No No No No Yes No No Result String (Result of command processing.) No No No No No No No No Yes

Example { "Response" : { "Requested" : "SetStreamingServerSettingsRTMPS" , "Result" : "Success" } }

3.1.17. Set streaming server settings(RTP)

Set streaming settings for each server ID.

Request

Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Requ	est											
Co	ommand	String	SetStreamingServerSettingsRTP	No	Yes							
Se	essionID	String	(Session ID in cookie.)	No	Yes							
Pa	arams											
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes							
	Alias	String	(Another name of server)	No	Yes							
	DstAddress	String	(IP address)	No	Yes							
	DstPort	Integer	(Port number)	No	Yes							
	PcrMode	Integer	0:Standard, 1:Fast	No	Yes	Yes						
	Smpte2022Fec	Integer	0:OFF, 1:ON	No	Yes							
	FecMatrixL	Integer	4 - 20	No	Yes							
	FecMatrixD	Integer	4 - 20	No	Yes							

^{*} FecMatorixL and FecMatrixD value are satisfy AxB=100 condition.

```
Example
```

```
{
    "Request" : {
        "Command" : "SetStreamingServerSettingsRTP" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "ID" : 1 ,
        "Alias" : "Server1" ,
        "DstAddress": "192.168.0.1" ,
        "DstPort": 2088,
        "Smpte2022Fec": 1 ,
        "FecMatrixL": 10 ,
        "FecMatrixD": 10
        }
    }
}
```

Κe	y Style Value			HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC9								HC5x0
Re	sponse											
	Requested	String	SetStreamingServerSettingsRTP	No	Yes							
	Result	String	(Result of command processing.)	No	Yes							

```
Example
```

```
{
    "Response" : {
        "Requested" : "SetStreamingServerSettingsRTP" ,
        "Result" : "Success"
    }
}
```

3.1.18. Set streaming server settings(SRT)

Set streaming settings for each server ID.

Request

CSI												
Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Req	uest											
	Command	String	SetStreamingServerSettingsSRT	No	Yes	Yes						
5	SessionID	String	(Session ID in cookie.)	No	Yes	Yes						
F	Params											
	ID	integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes	Yes						
	Alias	string	(Another name of server)	No	Yes	Yes						
	DstAddress	string	(IP Address)	No	Yes	Yes						
	DstPort	integer	1 - 65535	No	Yes	Yes						
	ConnectionMode	integer	0: Caller 1: Listener, 2: Rendezvous	No	Yes	Yes						
	BandwidthOverhead	integer	5 - 100	No	Yes	Yes						
	Latency	integer	20 - 8000	No	Yes	Yes						
	Encryption	integer	0: OFF, 1: AES-128, 2: AES-196 3: AES-256	No	Yes	Yes						
	Passphrase	string	ASCII 10-79 character	No	Yes	Yes						

```
{
  "Command" : "SetStreamingServerSettingsSRT" ,
  "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
  "Params" : {
  "ID" : 0 ,
  "Alias" : "Server1" ,
  "DstAddress": "192.168.0.1" ,
  "DstPort": 6504
  "ConnectionMode" : 0
  "BandwidthOverhead" : 10
  "Latency" : 20
  "Encryption" : 0
  "Passphrase" : "abcdefghij"
  }
}
```

Ke	ey .	Style Value		HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	esponse											
	Requested	String	SetStreamingServerSettingsSRT	No	Yes	Yes						
	Result	String	(Result of command processing.)	No	Yes	Yes						

```
Example
{
    "Response" : {
        "Requested" : "SetStreamingServerSettingsSRT" ,
        "Result" : "Success"
     }
}
```

3.2. System Command

Zixi and SRT streaming modes are mutually exclusive on GY-HC5x0 and GY-HC900. Only "Zixi" or "Srt" parameter is effective according to the streaming mode. Current mode can be checked using GetSystemInfo response.

3.2.1. Get System Information

System information acquisition

Request

K	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	Request										1	
	Command	String	GetSystemInfo	Yes								
	SessionID	String	(Session ID in cookie.)	Yes								

```
Example

{
    "Request" : {
        "Command" : "GetSystemInfo " ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3"
    }
}
```

ey .	Style	Value	HM6	50 HM66	0x8MH 0	HM200	HM25x	LS300	PZ100	HC900	HC
esponse											
Requested	String	GetSystemInfo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Result	String	(Result of command processing.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
Data											
Model	String	Model information	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Υe
Model	String	"UNKNOWN" / "HM650"(GY-HM650) /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y
		"HM850"(GY-HM850) / "HM890"(GY-HM890) /									
		"HM200"(GY-HM200) / "LS300"(GY-LS300) /									
		"HM250"(GY-HM250) / "HM258"(GY-HM258) /									
		"HM660"(GY-HM660) / "PZ100"(KY-PZ100) /									
		"HC500"(GY-HC500) / "HC550"(GY-HC550) /									
		"HC900"(GY-HC900)									
Destination	String	Place of destination	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Υ
		"JP"(Japan) / "US"(USA · Canada) / "KR"(Korea) /									
		"EU"(Southern Europe, Central Europe) / "ER"(Russia) /									
		"AC"(China) / "AA"(Australia) / "AG"(Asian) /									
		"TW"(Taiwan) / "AS"(Saudi Arabia) / "UC"(Canada) /									
		"UA"(Argentina) / "UB"(Brazil) / "EZ"(East Europe) /									
		"EY"(Northern Europe) / "EK"(China) / "EF"(France) /									
		"AH"(Hong Kong) /									
		"UN"(Format SD,NTSC/PAL both format)									
ApiVersion	String	Version "XX.YYY.ZZZ"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Υ
	1	(XX:Major ver. YYY:Minor ver. ZZZ:Development ver)									

Serial	String	Serial number	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Ye
		"xxxxxxx"									
Resolution	String	Resolution of recording format.	No	No	No	No	No	No	No	Yes	Υe
		"1920x1080" / "1440x1080" / "1280x720" / "720x480" / "720x576" / "640x360" / "480x270"									
Overlay	String	Overlay option	No	No	No	Yes	Yes	No	No	Yes	Y
		"On" / "Off"									
Tagging	String	Tagging option	Yes	Yes	No	No	No	No	No	No	Y
		"On" / "Off"									
Zixi	String	Zixi option	No	No	No	No	No	No	No	Yes	Υ
		"On" / "Off"									
Srt	String	Srt option	No	No	No	No	No	No	No	Yes	Υ
		"On" / "Off"									
KA_EN200	String	KA-EN200 option adaptor setting	No	No	No	No	No	No	No	Yes	Υ
		"On" / "Off"									

```
{
    "Response" : {
        "Requested" : "GetSystemInfo " ,
        "Result" : "Success" ,
        "Data" : {
        "Model" : "HM650" ,
        "Destination" : "JP" ,
        "ApiVersion" : "0.13.0" ,
        "Serial" : "123A1234" ,
        "Tagging" : "Off"
        }
    }
}
```

3.2.2. Session renewal

Renew a session

Updating session is needed within 25 seconds as always.

This command has become obsolete and session renewal is no longer required.

Please don't use this command because it causes malfunction on Web access.

Request

Ke	y	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	quest											
	Command	String	SessionRenewal	Yes	No							
	SessionID	String	(Session ID in cookie.)	Yes	No							
	Params											
	Update	Integer	0:False(Time-out immediately)	Yes	No							
			1:True(Time-out extension)									

Example { "Request" : { "Command" : "SessionRenewal " , "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" , "Params" : { "Update" : 1 } } }

Response

Key Style Value HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC900 HC5x0 Response Requested String SessionRenewal Yes No No No No No Result String (Result of command processing.) Yes No No No No No No No No

```
{
    "Response" : {
        "Requested" : "SessionRenewal" ,
        "Result" : "Success"
    }
}
```

3.2.3. Get preset zoom position

Acquire the preset zoom position.

Request

uco													
K	еу		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equ	uest											
	С	Command	String	GetPresetZoomPosition	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
	S	SessionID	String	(Session ID in cookie.)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes

```
Example

{
    "Request" : {
        "Command" : "GetPresetZoomPosition" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3"
    }
}
```

Response

Ke	у	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	sponse											
	Requested	String	GetPresetZoomPosition	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
	Result	String	(Result of command processing.)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
	Data											
	Α	Integer	Value of Preset "0" - "499",no-setting "-1"	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
	В	Integer	Value of Preset "0" - "499",no-setting "-1"	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
	С	Integer	Value of Preset "0" - "499",no-setting "-1"	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes

```
{
    "Response" : {
        "Requested" : "GetPresetZoomPosition" ,
        "Result" : "Success" ,
        "Data" : {
            "A" : 10 , "B" : 20 , "C" : 30
        }
    }
}
```

3.2.4. Set preset zoom position

Preset the zoom position.

Request

Ke	y		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	que	est											
	Со	mmand	String	SetPresetZoomPosition	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
	Se	essionID	String	(Session ID in cookie.)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
	Pa	irams											
		ID	String	"A"/"B"/"C" is Preset ID	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
		Position	Integer	Value of Preset "0" - "499", delete setting is "-1"	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes

```
Example

{
    "Request" : {
        "Command" : " SetPresetZoomPosition" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "ID" : "A" ,
        "Position" : 300
        }
    }
}
```

Response

K	ey	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetPresetZoomPosition	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
	Result	String	(Result of command processing.)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes

```
Example
{
    "Response" : {
        "Requested" : "SetPresetZoomPosition" ,
        "Result" : "Success"
     }
}
```

3.2.5. Set tally lamp priority

This command was moved to "3.7.3. Set tally lamp priority".

3.2.6. Get NTP Status

Acquire the status of NTP.

Request

	•											
K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	GetNTPStatus	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	SessionID	String	(Session ID in cookie.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

```
Example

{
    "Request" : {
        "Command" : "GetNTPStatus" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3"
    }
}
```

Response

Ke	/	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	sponse											
	Requested	String	GetNTPStatus	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Result	String	(Result of command processing.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Data											T
	Address	String	(IP address)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	TcSync	String	"On" / "Off"	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
	Status	String	"Syncronized" / "NotSyncronized" / "Master"	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

```
{
    "Response" : {
        "Requested" : "GetNTPStatus" ,
        "Result" : "Success" ,
        "Data" : {
              "Address" : "192.168.0.100" ,
              "TcSync" : "On",
              "Status" : "Syncronized"
        }
    }
}
```

3.2.7. Set NTP Server

Set the NTP server address.

Request

ucsi	<u> </u>											
K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	SetNTPServer	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	SessionID	String	(Session ID in cookie.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Params											
	Address	String	(IP address)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

Example

Response

ρυ.													
ŀ	<ey< td=""><td></td><td>Style</td><td>Value</td><td>HM650</td><td>HM660</td><td>HM8x0</td><td>HM200</td><td>HM25x</td><td>LS300</td><td>PZ100</td><td>HC900</td><td>HC5x0</td></ey<>		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Respo	onse											
	Re	quested	String	SetNTPServer	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Re	sult	String	(Result of command processing.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

```
{
  "Response" : {
  "Requested" : "SetNTPServer" ,
  "Result" : "Success"
  }
}
```

3.2.8. Set NTP Settings

Set the NTP settings.

Request

lucs	,,												
ŀ	ίеу		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Requ	est											
	Co	ommand	String	SetNTPSettings	No	Yes	Yes	Yes	Yes	No	Yes	No	No
	Se	essionID	String	(Session ID in cookie.)	No	Yes	Yes	Yes	Yes	No	Yes	No	No
	Pa	arams											
		TcSync	String	"On"/"Off"	No	Yes	Yes	Yes	Yes	No	Yes	No	No

Example

```
{
    "Request" : {
        "Command" : " SetNTPSettings" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "TcSync" : "On"
        }
    }
}
```

Response

K	ey	style Value						HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetNTPSettings	No	Yes	Yes	Yes	Yes	No	Yes	No	No
	Result	String	(Result of command processing.)	No	Yes	Yes	Yes	Yes	No	Yes	No	No

```
{
  "Response" : {
  "Requested" : "SetNTPSettings" ,
  "Result" : "Success"
  }
}
```

3.3.1. Get camera status

Request all status information of camera function.

It is recommended to use this command every 500 msec or above.

Unnecessary use of this command make performance degradation.

Request

K	ey	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	GetCamStatus	Yes								
	SessionID	String	(Session ID in cookie.)	Yes								

```
Example

{
    "Request" : {
        "Command" : "GetCamStatus" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3"
    }
}
```

1	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC!
sponse											
Requested	String	GetCamStatus									
Result	String	(Result of command processing.)									Ī
Data			Yes	Y							
Camera		(Camera)	Yes	Υ							
Status	String	Status "NoCard"(no card inserted) / "Stop"(recording stop) / "Standby"(record standby) / "Rec"(recording)/ "RecPause"(recording pause)	Yes	Y							
Mode	String	Mode "Camera"(record mode) / "Thmubnail"(display thmubnail) / "Play"(play clip) / "Review"(review clip) / "USB"(connect USB) / "EditMetadata"(edit metadata)	Yes	Yı							
RecMode	String	Rec mode "Normal" / "Pre" / "Clip" / "Frame" / "Interval" / "Variable"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
TC	String	recording time(sec)(32bit length)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
AspectRatio	String	Aspect ratio "16:9" / "4:3"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
WebAccess	String	Web access "Off" / "On"	Yes	١							
VideoOutputStatus	String	Video output status of camera "Off" / "On"	No	No	No	No	No	No	Yes	No	١
MenuStatus	String	Menu Open status of camera "Off" / "On"	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Υ
MenuOutput	String	"All" / "Web"	No	No	No	No	No	No	Yes	No	١
FullAuto			Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ

tring tring teger	Exposure "Auto" / "Manual" / "IrisPriority" / "ShutterPriority" Mode "Manual" / "Auto" / "AutoAELock" "Auto" / "Manual" Character string for iris value	No No Yes Yes	No No Yes Yes	No No Yes Yes	No No Yes Yes	No No Yes	No No Yes	Yes Yes Yes	No No Yes	No No
tring tring teger	"Auto" / "Manual" / "IrisPriority" / "ShutterPriority" Mode "Manual" / "Auto" / "AutoAELock" "Auto" / "Manual" Character string for iris value	Yes Yes No	Yes Yes	Yes	Yes	Yes	Yes			No
tring	Mode "Manual" / "Auto" / "AutoAELock" "Auto" / "Manual" Character string for iris value	Yes No	Yes					Yes	Yes	
tring	"Auto" / "Manual" Character string for iris value	Yes No	Yes					Yes	Yes	
tring	"Auto" / "Manual" Character string for iris value	No		Yes	Yes					Yes
nteger	Character string for iris value		No		103	Yes	Yes	No	Yes	Yes
nteger			140	No	No	No	No	Yes	No	No
		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
tring	Iris position (0-255, for Slider button position)	No	No	No	No	No	No	No	Yes	Yes
tring		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Mode "ManualL" / "ManualM" / "ManualH" / "Alc" or "AGC"(HC5x0) /	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ye
	"AlcAELock" / "Lolux" / "Variable"								ļ	
		No	No	No	No	No	No	Yes	No	No
tring	Character string for gain value						_	+	_	Ye
		Yes	Yes					Yes		Yes
		Yes	Yes					No		Yes
		Yes	Yes	Yes	Yes	Yes	_	No	Yes	Ye
tring	Character string for AE level value	Yes	Yes		Yes		_	Yes	Yes	Ye
		Yes				Yes	_	Yes	Yes	Ye
tring		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ye
									<u> </u>	
		No	No	No	No		No	Yes	No	No
tring	Character string for Shutter value	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
tring		Yes	Yes		Yes	Yes	_	No	Yes	Ye
		No							_	No
					_		_	+	+	Ye
					_	_				Ye
		Yes	Yes		Yes			Yes	Yes	Ye
		Yes	Yes		Yes	_		Yes	Yes	Ye
									_	Ye
										Ye
tring	Character string for White paint Blue value								+	Ye
										Ye
										No
		_			_	_		+	+	No
							_		+	Ye
tring	· ·	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
	(GY-HM200/HM25x/LS300 F-number "0 - 9999mm")								<u> </u>	_
								+	+	No
										No
nteger	Pan/Tilt/Preset speed (1-30)	_						+		No
		_						+		Ye
tring		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ye
		ļ	ļ.,		ļ	ļ	ļ.,		 	+-
		_			_	_	_		+	No
tring	Character string for Focus value							_	_	Ye
										Ye
tring	Character string for MasterBlack value	_			_	_		+		Ye
titi ti	ring ring ring ring ring ring ring ring	"Auto" / "Manual" fing	"Auto" / "Manual" "Auto" / "Manual" Yes Character string for gain value Yes Mode "AeOff" / "AeOn" / "AeOnFace" Yes Mode "AeOff" / "AeOn" / "Off" Yes Yes Mode "Off" / "Manual" / "Step" / "Variable" / "Eei" / "EeiAELock" "Auto" / "Manual" No Character string for Shutter value Yes Yes Mode "Preset" / "A" / "B" / "Faw / "Faw AELock" "Faw" / "Awb" / "OnePush" / "3200K" / "5600K" / "Manual" No Character string for White Balance value Yes Slide bar total length for White paint Red(0-64) Yes Slide bar current position for White paint Red(0-64) Yes Yes Character string for White paint Red (0-64) Yes Character string for White paint Red (0-64) Yes Character string for White paint Red (0-64) Yes Character string for White paint Red value Yes The popular of the	"Auto" / "Manual" No	"Auto" / "Manual" No No No No No Infing Character string for gain value Yes Yes	"Muto" / "Manual" No	Mode "Actor" / "Manual" No	"Auto" / "Manual"	Mode "Actor" / "Manual" No	Moto

Value	String	Character string for Detail value	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Streaming			Yes								
Status	String	Status	Yes	Ye							
		"Stop"(Streaming has stopped or cannot be started.) /									
		"Stopping"(About to stop.) /									
		"Start"(Streaming has started.) /									
		"Starting"(About to start.) /									
		"Waiting (Waiting for connection. (for RTSP/RTP)) /-									
		"Error"									
		(Error occurred or waiting to start RTSP/RTP streaming)									
eturnOverIP		, or	No	Yes	Υ						
Status	String	Status	No	Yes	Υ						
		"Stop"(Return over IP has stopped or cannot be started.) /									
		"Stopping"(About to stop.) /									
		"Start"(Return over IP has started.) /									
		"Starting"(About to start.) /									
		"Error"									
isptv			Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
Status	String	Status "On" / "Off"	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Y
haracterMix			No	No	Yes	No	No	No	No	Yes	Υ
Sdi	String	Mix "On" / "Off"	No	No	Yes	No	No	No	No	Yes	Υ
Hdmi	String	Mix "On" / "Off"	No	No	Yes	No	No	No	No	Yes	Υ
Video	String	Mix "On" / "Off"	No	No	Yes	No	No	No	No	Yes	Υ
allyLamp			Yes	Υ							
Priority	String	Priority "Camera" / "Web"	Yes	Υ							
Lighting	String	Lighting "On" / "Off"	Yes	Υ							
StudioTally	String	Status "Off" / "Program" / "Preview"	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Υ
lotA		(Status of SlotA)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
Status	String	Status "Select" / "NoSelect" / "NoCard" / "SelectRec" /	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
		"NoSelectRec" / "Invalid" / "Unknown"									
Protect	String	Status "Unlock" / "Lock"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
Remain	String	Remaining amount time(minutes) (0-65535)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
ClipNum	Integer	Number of clips(0-4000)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
RemainWarning	Integer	Remaining amount warning(0=No warning/1=Warning)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
lotB		(Status of SlotB)	Yes	Υ							
Status	String	Status "Select" / "NoSelect" / "NoCard" / "SelectRec" /	Yes	Υ							
		"NoSelectRec" / "Invalid" / "Unknown"									
Protect	String	Status "Unlock" / "Lock"	Yes	Υ							
Remain	String	Remaining amount time(minutes) (0-65535)	Yes	Υ							
ClipNum		Number of clips(0-4000)	Yes	Υ							
RemainWarning	Integer	Remaining amount warning(0=No warning/1=Warning)	Yes	Υ							
lotExt		(Status of SlotExt)	No	Yes	Υ						
Status	String	Status "Select" / "NoSelect" / "NoCard" / "SelectRec" /	No	Yes	Υ						
		"NoSelectRec" / "Invalid" / "Unknown"									l
Protect	String	Status "Unlock" / "Lock"	No	Yes	Υ						
Remain	String	Remaining amount time(minutes) (0-65535)	No	Yes	Υ						
ClipNum	Integer	Number of clips(0-4000)	No	Yes	Υ						
RemainWarning		Remaining amount warning(0=No warning/1=Warning)	No	Yes	Y						
attery	Ť	(Status of Battery)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Y
Info	Ctring	Battery information display classification	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Y

		"Time"(minutes) / "Capacity"(%) / "Voltage"(V)							ļ		4
_evel		Battery Level	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Y
		0:no battery / 1:plug / 2:plug[!] / 3:battery[?] /	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
		4: battery[CAL] / 5: battery[empty] / 6: battery[low] /	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
		7:battery[middle] / 8:battery[full] /	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	١
		9:battery[no segments] /	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	١
		10: charging battery [empty] /	No	Yes	No	Yes	Yes	Yes	No	Yes	`
		11: charging battery [low] /	No	Yes	No	Yes	Yes	Yes	No	Yes	,
		12: charging battery [middle] /	No	Yes	No	Yes	Yes	Yes	No	Yes	,
		13: charging battery [full] /	No	Yes	No	Yes	Yes	Yes	No	Yes	+
		14: charging battery [no segments]	No	Yes	No	Yes	Yes	Yes	No	Yes	,
/alue	String	Remaining amount time	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	1
value	og	(minutes/ % / Voltage, 65535 is impossible get)(0-1000/10)	163	103	103	103	103	103	140	163	
ıble		(Availability of function button switches)	Yes	,							
		(· · · · · · · · · · · · · · · · · · ·	Yes	Yes	Yes	Yes	Yes		No	Yes	+
Fullauto	laterer	(Fullauto function)						Yes	1		-
Enable		switch 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	,
On O#		button "ON" switch of fullauto 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	4
Off		button "OFF" switch of fullauto 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	ľ
Preset	Integer	button "PRESET" switch of fullauto 0:Disable, 1:Enable	No	No	No	No	No	Yes	No	No	1
Exposure		(Exposure function)	No	No	No	No	No	No	Yes	No	_
Enable		switch 0:Disable, 1:Enable	No	ا							
Auto		button "Atuo" switch of fullauto 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	1
Manual	Integer	button "Manual" switch of fullauto 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	ı
ShutterPriority	Integer	button ShutterPriority" switch of fullauto	No	No	No	No	No	No	Yes	No	ı
		0:Disable, 1:Enable									
IrisPriority	Integer	button "IrisPriority" switch of fullauto	No	No	No	No	No	No	Yes	No	1
		0:Disable, 1:Enable									
ris		(Iris function)	Yes	,							
Enable	Integer	switch 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	,
StatusDisp	Integer	Display Value of iris 0:Disable, 1:Enable	No	No	No	Yes	Yes	Yes	No	Yes	,
Manual		button "MANUAL" switch of iris 0:Disable, 1:Enable	Yes	,							
Auto		button "AUTO" switch of iris 0:Disable, 1:Enable	Yes	,							
Open1		button ">" switch of iris 0:Disable, 1:Enable	Yes	,							
Open2		button ">>" switch of iris 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	,
Open3		button ">>>" switch of iris 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	+
Close1		button "<" switch of iris 0:Disable, 1:Enable	Yes	,							
Close2		button "<<" switch of iris 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	,
Close3		button "<<<" switch of iris 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	+
PushAuto		button "Push Auto" switch of iris 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	No	+
	integer	(Gain function)	Yes	,							
Gain	Intogor	(_	_			+	+
Enable		switch 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	ľ
StatusDisp		Display Value of gain 0:Disable, 1:Enable	No	No	No	Yes	Yes	Yes	No	Yes	`
Manual		button "MANUAL" switch of gain 0:Disable, 1:Enable	Yes	Yes	No	No	No	No	Yes	No	1
Auto		button "AUTO" switch of gain 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	1
Lolux		button "LOLUX" switch of gain 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	ľ
Variable		button "Variable" switch of gain 0:Disable, 1:Enable	No	No	No	No	No	Yes	No	Yes	ľ
L		button "L" switch of gain 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	ŕ
M	Integer	button "M" switch of gain 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ì
Н		button "H" switch of gain 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	,
Up1		button "Up1" switch of gain 0:Disable, 1:Enable	No	Yes	+						

Up2	Integer	button "Up2" switch of gain 0:Disable, 1:Enable	No	No	No	No	No	Yes	No	Yes	Yes
Down1		button "Down1" switch of gain 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Down1 Down2		button "Down2" switch of gain 0:Disable, 1:Enable	No	No	No.	No	No	Yes	No	Yes	Yes
Level	integer	(AE Level function)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enable	Integer	switch 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes
StatusDisp		Display Value of AELevel 0:Disable. 1:Enable	No	No	No	Yes	Yes	Yes	No	Yes	Yes
Up		button "A" switch of AElevel 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Down		button "V" switch of AElevel 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
AdjustOn		button "ON" switch of AElevel 0:Disable, 1:Enable	No	No	No	Yes	Yes	Yes	No	Yes	Yes
AdjustOff	_	button "OFF" switch of AElevel 0:Disable, 1:Enable	No	No	No	Yes	Yes	Yes	No	Yes	Yes
utter	integer	(Shutter function)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
	Intogor	switch 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Enable	_	,							No	Yes	_
StatusDisp		Display Value of Shutter 0:Disable, 1:Enable)	No	No Yes	No Yes	Yes No	Yes No	Yes No	No	Yes No	Yes
Off	_	button "OFF" switch of shatter 0:Disable, 1:Enable	Yes			No			No	_	_
Manual	_	button "MANUAL" switch of shatter 0:Disable, 1:Enable	Yes	Yes	No	Yes	No	No	No	No Yes	No
Step		button "STEP" switch of shatter 0:Disable, 1:Enable	No	No	Yes		Yes	Yes			Yes
Variable		button "VRIABLE" switch of shatter 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No No	Yes	Ye
Eei		button "EEI" switch of shatter 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Ye
Slower		button "A" switch of shatter 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes Yes	Yes Yes	Ye
Faster	meger	button "▼" switch of shatter 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes			Ye
nb Images	Intoger	(White balance function)	Yes No	Yes No	Yes	Yes Yes	Yes	Yes	Yes No	Yes	Ye
Enable	_	switch 0:Disable, 1:Enable	+		Yes		Yes	Yes		Yes	+
StatusDisp		Display Value of White balance 0:Disable, 1:Enable	No	No	No	Yes	Yes	Yes	No	Yes	Ye
Manual	integer	button "MANUAL" switch of White balance	Yes	Yes	No	No	No	No	Yes	No	No
F	latanar	0:Disable, 1:Enable	.,				.		.,		
Faw	integer	button "FAW" switch of White balance	Yes	Yes	No	No	No	No	Yes	No	No
D .	latanar	0:Disable, 1:Enable	.,		.,	.,	.,	.,			
Preset	meger	button "PRESET" switch of White balance	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ye
	Interes	0:Disable, 1:Enable	.,		.,	.,	.,	.,			<u>.</u>
A		button "A" switch of White balance 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ye
В		button "B" switch of White balance 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ye
Awb	integer	button "AWB" switch of White balance	No	No	No	No	No	No	Yes	No	No
D 14 /	lata a sa	0:Disable, 1:Enable									Ļ.
PushAuto	integer	button "OnePushTrigger" switch of White balance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
1/0000	lata a sa	0:Disable, 1:Enable	.				.			 	
K3200	integer	button "3200K" switch of White balance	No	No	No	No	No	No	Yes	No	No
		0:Disable, 1:Enable	ļ.,							<u> </u>	
K5600	Integer	button "5600K" switch of White balance	No	No	No	No	No	No	Yes	No	No
		0:Disable, 1:Enable								<u> </u>	
WhPaintRP		button " ↑ " switch of White paint 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
WhPaintRM		button " \ " switch of White paint 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
WhPaintBP		button "→" switch of White paint 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
WhPaintBM	Integer	button "←" switch of White paint 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
om	1	(Zoom function)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enable		switch 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	Ye
StatusDisp		Display Value of Zoom 0:Disable, 1:Enable	No	No	No	Yes	Yes	Yes	No	Yes	Ye
Tele1		button ">" switch of zoom 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
Tele2		button ">>" switch of zoom 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
Tele3	_	button ">>>" switch of zoom 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
Wide1	Integer	button "<" switch of zoom 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye

Wide2	Integer button "<<" switch of zoom 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wide3	Integer button "<<<" switch of zoom 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tele	Integer button "Tele" switch of zoom 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Wide	Integer button "Wide" switch of zoom 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Preset	Integer button "Preset" switch of zoom 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Clear	Integer button "Clear" switch of zoom 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Preset1	Integer button "A" switch of zoom 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	No	Yes
Preset2	Integer button "B" switch of zoom 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	No	Yes
Preset3	Integer button "C" switch of zoom 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	No	Yes
ocus	(Focus function)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enable	Integer switch 0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes
StatusDisp	Integer Display Value of Focus 0:Disable, 1:Enable	No	No	No	Yes	Yes	Yes	No	Yes	Yes
Manual	Integer button "MANUAL" switch of focus 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto	Integer button "AUTO" switch of focus 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Far1	Integer button ">" switch of focus 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Far2	Integer button ">>" switch of focus 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Far3	Integer button ">>>" switch of focus 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Near1	Integer button "<" switch of focus 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Near2	Integer button "<<" switch of focus 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Near3	Integer button "<<<" switch of focus 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Infinity	Integer button "∞" switch of focus 0:Disable, 1:Enable	Yes	Yes	No	No	No	No	No	No	No
PushAuto	Integer button "PUSH AUTO" switch of focus	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0:Disable, 1:Enable									
lasterBlack	(MasterBlack function)	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Enable	Integer switch 0:Disable, 1:Enable	No	No	No	No	No	No	No	Yes	Yes
StatusDisp	Integer Display Value of MasterBlack 0:Disable, 1:Enable	No	No	No	No	No	No	No	Yes	Yes
Up1	Integer button ">" switch of MasterBlack 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Up2	Integer button ">>" switch of MasterBlack 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Up3	Integer button ">>>" switch of MasterBlack 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Down1	Integer button "<" switch of MasterBlack 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Down2	Integer button "<<" switch of MasterBlack 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Down3	Integer button "<<<" switch of MasterBlack 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
etail	(Detail function)	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Enable	Integer switch 0:Disable, 1:Enable	No	No	No	No	No	No	No	No	No
StatusDisp	Integer Display Value of Detail 0:Disable, 1:Enable	No	No	No	No	No	No	No	No	No
Up	Integer button ">" switch of Detail 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Down	Integer button "<" switch of Detail 0:Disable, 1:Enable	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
ser	(switch of user assignment)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sw0	Integer button "SW0" switch of User Switch	No	No	No	No	No	No	No	Yes	No
	0:Disable, 1:Enable									
Sw1	Integer button "SW1" switch of User Switch	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	0:Disable, 1:Enable									
Sw2	Integer button "SW2" switch of User Switch	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	0:Disable, 1:Enable									
	Integer button "SW3" switch of User Switch	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Sw3		1	1	I	1		1		1	
Sw3	0:Disable, 1:Enable									
Sw3 Sw4	0:Disable, 1:Enable Integer button "SW4" switch of User Switch	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	'	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	Integer button "SW4" switch of User Switch	Yes	Yes	Yes Yes	Yes Yes	Yes	Yes	No No	Yes Yes	Yes

	Integer In the PONON and the At Hear Order	V	V	V	V	\/	V	INI-	V	lv
Sw6	Integer button "SW6" switch of User Switch	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
07	0:Disable, 1:Enable Integer button "SW7" switch of User Switch	.,		.,	.,				.,	
Sw7		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
C0	0:Disable, 1:Enable Integer button "SW8 switch of User Switch	NI-	NI-	V	V	V	V	No	V	
Sw8		No	No	Yes	Yes	Yes	Yes	NO	Yes	Ye
00	0:Disable, 1:Enable	No	No	Yes	Yes	Yes	Yes	No	V	V-
Sw9	Integer button "SW9" switch of User Switch	No	No	Yes	Yes	Yes	Yes	No	Yes	Ye
010	0:Disable, 1:Enable Integer button "SW10" switch of User Switch	No	No	V	No	No	Yes	No	No	Ye
Sw10	0:Disable. 1:Enable	INO	INO	Yes	NO	NO	res	NO	NO	Ye
Sw11	Integer button "SW11" switch of User Switch	No	No	Yes	No	No	No	No	No	Ye
SWII		INO	INO	res	INO	INO	INO	NO	INO	re
Sw12	0:Disable, 1:Enable Integer button "SW12" switch of User Switch	No	No	No	No	No	No	No	No	Va
SWIZ		INO	INO	NO	No	NO	INO	NO	NO	Ye
C42	0:Disable, 1:Enable Integer button "SW13" switch of User Switch	No	No	No	No	No	No	No	No	Ye
Sw13		INO	INO	NO	NO	NO	INO	NO	NO	Ye
LensRet	0:Disable, 1:Enable Integer button "LensRet" switch of User Switch	Na	No	Vaa	No	No	No	No	Vaa	No
Lensket		No	No	Yes	No	INO	INO	No	Yes	INC
Cub 1	0:Disable, 1:Enable Integer button "Sub1" switch of User Switch	No	No	No	No	No	No	Yes	No	No
Sub1		NO	INO	NO	NO	NO	INO	res	NO	INC
Sub2	0:Disable, 1:Enable Integer button "Sub2" switch of User Switch	NI-	No	No	No	No	No	Yes	No	No
Sub2		No	INO	NO	NO	NO	INO	res	NO	INC
0.1.0	0:Disable, 1:Enable	NI-	NI-	No	No	No	No	Yes	No	No
Sub3	Integer button "Sub3" switch of User Switch	No	No	NO	NO	NO	INO	res	NO	INC
\/(C)4	0:Disable, 1:Enable Integer button "VfSW1" switch of User Switch	NI-	NI-	NI-	NI.	NI-	NI-	NI-	V	NI.
VfSw1		No	No	No	No	No	No	No	Yes	No
VfSw2	0:Disable, 1:Enable Integer button "VfSW2" switch of User Switch	No	No	No	No	No	No	No	V	No
VISWZ	5 Batton View 2 Switch of Good Switch	INO	INO	NO	INO	INO	INO	NO	Yes	INC
	0:Disable, 1:Enable (Streaming function)	V	Yes	Yes	Yes	Yes	V	Yes	V	Ye
eaming	Integer switch 0:Disable, 1:Enable	Yes	res	res	res		Yes	res	Yes	
Enable StatusDisp		Nia	NIa	Nia	NIa		NIa	NIa	V	_
	'	No	No	No	No	No	No	No	Yes	Ye
	Integer Display Value of Streaming 0:Disable, 1:Enable	No	No	No	No	No	No	No	Yes	Ye
On	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable	No Yes	No Yes	No Yes	No No	No No	No No	No Yes	Yes Yes	Ye Ye
On Off	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable	No Yes Yes	No Yes Yes	No Yes Yes	No No No	No No No	No No No	No Yes Yes	Yes Yes Yes	Ye Ye Ye
On Off sptv	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function)	No Yes Yes Yes	No Yes Yes Yes	No Yes Yes Yes	No No No Yes	No No No Yes	No No No Yes	No Yes Yes No	Yes Yes Yes No	Ye Ye Ye Ye
On Off ptv On	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable	No Yes Yes Yes Yes	No Yes Yes Yes Yes	No Yes Yes Yes No	No No No Yes Yes	No No No Yes Yes	No No No Yes Yes	No Yes Yes No No	Yes Yes Yes No	Ye Ye Ye Ye Ye
On Off ptv On Off	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable	No Yes Yes Yes Yes Yes Yes	No Yes Yes Yes Yes Yes	No Yes Yes Yes No No	No No No Yes Yes Yes	No No No Yes Yes Yes	No No No Yes Yes Yes	No Yes Yes No No	Yes Yes Yes No No No	Ye Ye Ye Ye Ye
On Off Off On On Off aracterMix	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function)	No Yes Yes Yes Yes Yes Yes No	No Yes Yes Yes Yes Yes No	No Yes Yes Yes No No Yes	No No No Yes Yes Yes	No No No Yes Yes Yes	No No No Yes Yes Yes	No Yes Yes No No No No	Yes Yes Yes No No No Yes	Ye Ye Ye Ye Ye Ye Ye
On Off ptv On Off	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer button "SDI" switch of CharacterMix	No Yes Yes Yes Yes Yes Yes	No Yes Yes Yes Yes Yes	No Yes Yes Yes No No	No No No Yes Yes Yes	No No No Yes Yes Yes	No No No Yes Yes Yes	No Yes Yes No No	Yes Yes Yes No No No	Ye Ye Ye Ye Ye
On Off Off On On Off aracterMix Sdi	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable	No Yes Yes Yes Yes Yes No No	No Yes Yes Yes Yes Yes No No	No Yes Yes Yes No No Yes Yes Yes Yes Yes	No No No Yes Yes Yes No No	No No No Yes Yes Yes No No	No No No Yes Yes Yes No No	No Yes Yes No No No No No No	Yes Yes Yes No No No Yes Yes Yes	Y 6 Y 6 Y 6 Y 6 Y 6 Y 6 Y 6 Y 6 Y 6 Y 6
On Off Off On On Off aracterMix	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix	No Yes Yes Yes Yes Yes Yes No	No Yes Yes Yes Yes Yes No	No Yes Yes Yes No No Yes	No No No Yes Yes Yes	No No No Yes Yes Yes	No No No Yes Yes Yes	No Yes Yes No No No No	Yes Yes Yes No No No Yes	Y6
On Off Off On Off On Off aracterMix Sdi Hdmi	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix 0:Disable, 1:Enable	No Yes Yes Yes Yes Yes No No	No Yes Yes Yes Yes Yes No No	No Yes Yes Yes No No Yes Yes Yes Yes Yes	No No No Yes Yes No No No	No No No Yes Yes No No No	No No No Yes Yes No No No No	No Yes Yes No No No No No No No	Yes Yes Yes No No No Yes Yes Yes	\(\frac{\gamma\epsilon}{\gamma\epsilon}\) \(\frac{\gamma\epsilon}{\gamma\epsilon}\g\) \(\frac{\gamma\epsilon}{
On Off Off On On Off aracterMix Sdi	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix	No Yes Yes Yes Yes Yes No No	No Yes Yes Yes Yes Yes No No	No Yes Yes Yes No No Yes Yes Yes Yes Yes	No No No Yes Yes Yes No No	No No No Yes Yes Yes No No	No No No Yes Yes Yes No No	No Yes Yes No No No No No No	Yes Yes Yes No No No Yes Yes Yes	\(\epsilon\) \(\frac{\partial}{\partial}\) \(\frac{\partial}{\part
On Off Off On Off On Off aracterMix Sdi Hdmi Video	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable	No Yes Yes Yes Yes No No No	No Yes Yes Yes Yes Yes No No No	No Yes Yes Yes No No Yes Yes Yes Yes Yes Yes	No No Yes Yes No No No No No No No No	No No No Yes Yes Yes No No No No	No No No Yes Yes Yes No No No No	No Yes Yes No	Yes Yes Yes No No No Yes Yes Yes Yes	\(\text{Ye} \)
On Off Off On Off On Off aracterMix Sdi Hdmi Video	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable (Menu function)	No Yes Yes Yes Yes No No No Yes	No Yes Yes Yes Yes Yes No No No Yes	No Yes Yes Yes No No Yes Yes Yes Yes Yes Yes Yes	No No No Yes Yes No No No No Yes Yes Yes No No No No No Yes	No No No Yes Yes No No No No Yes Yes Yes No No No No No No No Yes	No No No Yes Yes No No No No Yes Yes Yes No No No No No No No Yes	No Yes Yes No No No No No No No Yes No Yes	Yes Yes Yes No No No Yes Yes Yes Yes Yes	\(\frac{\gamma_{\epsilon}}{\gamma_{\epsilon}} \) \(\frac{\gamma_{\epsilon}} \) \(\gamma
On Off Off On Off On Off aracterMix Sdi Hdmi Video unu Display	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable Unteger button "Video" switch of CharacterMix 0:Disable, 1:Enable Unteger button "Video" switch of CharacterMix 0:Disable, 1:Enable Unteger button "DYSPLAY" switch of Menu 0:Disable, 1:Enable	No Yes Yes Yes Yes No No No Yes Yes Yes Yes Yes Yes	No Yes Yes Yes Yes No No No Yes Yes Yes	No Yes Yes Yes No No Yes Yes Yes Yes Yes Yes Yes Yes	No No No Yes Yes No No No Yes Yes Yes Yes	No No No Yes Yes No No No Vo No	No No No Yes Yes No No No Vo No	No Yes Yes No No No No No No Ves Yes Yes Yes	Yes Yes Yes No No No Yes Yes Yes Yes Yes Yes	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
On Off Off On Off On Off aracterMix Sdi Hdmi Video nu Display Status	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable Integer button "DYSPLAY" switch of Menu 0:Disable, 1:Enable Integer button "STATUS" switch of Menu 0:Disable, 1:Enable Integer button "STATUS" switch of Menu 0:Disable, 1:Enable	No Yes Yes Yes Yes No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes	No Yes Yes Yes Yes No No No Yes Yes Yes Yes	No Yes Yes No No Yes	No No No Yes Yes No No No Ves Yes Yes Yes No No No No No Yes Yes Yes	No No No Yes Yes No No No Yes Yes Yes Yes No No No No No Yes Yes Yes	No No No Yes Yes No No No Vo No No No No No No Yes Yes Yes	No Yes Yes No No No No No No Yes Yes Yes Yes Yes Yes	Yes Yes Yes No No No Yes	Y (Y (Y (Y (Y (Y (Y (Y (Y (Y (
On Off Off On On Off On	Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable Integer button "DYSPLAY" switch of Menu 0:Disable, 1:Enable Integer button "STATUS" switch of Menu 0:Disable, 1:Enable Integer button "MENU" switch of Menu 0:Disable, 1:Enable	No Yes Yes Yes Yes No No No Yes	No Yes Yes Yes Yes No No No Yes	No Yes Yes No No Yes	No No No Yes Yes No No No Yes	No No No Yes Yes No No No Yes	No No No Yes Yes No No No No Yes	No Yes Yes No No No No No Yes Yes Yes Yes Yes Yes Yes	Yes Yes No No No Yes	\(\frac{\gamma_{\epsilon}}{\gamma_{\epsilon}}\) \(\frac{\gamma_{\epsilon}}{\gamma_{\epsilon}}\gamma_{\epsilon}}\) \(\frac{\gamma_{\epsilon}}{\gamma_{\epsilon}}\gamma_{\epsilon}}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsilon}\gamma_{\epsilon}\gamma_{\epsilon}}\gamma_{\epsil
On Off Off On Off On Off aracterMix Sdi Hdmi Video nu Display Status	Integer Display Value of Streaming 0:Disable, 1:Enable Integer button "ON" switch of Streaming 0:Disable, 1:Enable Integer button "OFF" switch of Streaming 0:Disable, 1:Enable (Display function) Integer button "ON" switch of Display 0:Disable, 1:Enable Integer button "OFF" switch of Display 0:Disable, 1:Enable (Character mix function) Integer button "SDI" switch of CharacterMix 0:Disable, 1:Enable Integer button "HDMI" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable Integer button "Video" switch of CharacterMix 0:Disable, 1:Enable Integer button "DYSPLAY" switch of Menu 0:Disable, 1:Enable Integer button "STATUS" switch of Menu 0:Disable, 1:Enable Integer button "STATUS" switch of Menu 0:Disable, 1:Enable	No Yes Yes Yes Yes No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes	No Yes Yes Yes Yes No No No Yes Yes Yes Yes	No Yes Yes No No Yes	No No No Yes Yes No No No Ves Yes Yes Yes No No No No No Yes Yes Yes	No No No Yes Yes No No No Yes Yes Yes Yes No No No No No Yes Yes Yes	No No No Yes Yes No No No Vo No No No No No No Yes Yes Yes	No Yes Yes No No No No No No Yes Yes Yes Yes Yes Yes	Yes Yes Yes No No No Yes	Y (Y (Y (Y (Y (Y (Y (Y (Y (Y (

	Down	Integer	button " J " switch of Menu 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
	Left		button 1 ← switch of Menu 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
	Right		button "→" switch of Menu 0:Disable, 1:Enable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
utto	nString		(String of button name)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ye
	ain		(Suring or button name) (Button of gain)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-
G	alli				Yes					No		Ye
	L		String of Low gain button	Yes		Yes	Yes	Yes	Yes		Yes	Y
	M		String of Middle gain button	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
<u>.</u>	Н		String of High gain button	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Y
Us	ser		(Button of user switch alocation)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Υ
	Sw0		String of User switch 0	No	No	No	No	No	No	No	Yes	١
			"Load Picture File" / "Clip Cutter Trig" / "Backup Trig" /									
			"Clip Review" / "Zebra" / "Marker" / "Lolux" / "Bars" /									
			"Focus Assist" / "OIS" / "AE Lock" / "OK Mark" /									
			"Spot Meter" / "Face Detect" / "White Balance" /									
			"Preset Zoom 1" / "Preset Zoom 2" / "Preset Zoom 3" /									
			"LCD Backlight" / "Flash Band" / "One Push Focus" /									
			"One Push Iris" / "Expanded Focus" /									
			"Live Streaming" / "Auto Focus" / "Histogram" /									
			"AWB" / "Rec" / "Return Video"									
	Sw1	String	String of User switch 2. Same as above.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	1
	Sw2	String	String of User switch 2. Same as above.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	1
	Sw3	String	String of User switch 3. Same as above.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	1
	Sw4	String	String of User switch 4. Same as above.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	1
	Sw5	String	String of User switch 5. Same as above.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Ţ
	Sw6		String of User switch 6. Same as above.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	
	Sw7		String of User switch 7. Same as above.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	
	Sw8		String of User switch 8. Same as above.	No	No	Yes	Yes	Yes	Yes	No	Yes	1
	Sw9		String of User switch 9. Same as above.	No	No	Yes	Yes	Yes	Yes	No	Yes	
	Sw10		String of User switch 10. Same as above.	No	No	Yes	No	No	Yes	No	Yes	1
	Sw11		String of User switch 11. Same as above.	No	No	Yes	No	No	No	No	No	7
	Sw12		String of User switch 12. Same as above.	No	No	No	No	No	No	No	No	1
	Sw13		String of User switch 13. Same as above.	No	No	No	No	No	No	No	No	7
	LensRet		String of User switch Lens Ret. Same as above.	No	No	Yes	No	No	No	No	No	1
	VfSw1		String of User Viewfinder switch1 Same as above.	No	No	No	No	No	No	No	Yes	7
	VfSw2		String of User Viewfinder switch2 Same as above.	No	No	No	No	No	No	No	Yes	T
\٨/	hb		(Button of White balance)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	1
"	Preset		String of Preset button	No	No	Yes	Yes	Yes	Yes	No	Yes	,
	0001		"PRESET"/ "A" / "B" / "FAW"			. 55	. 00	. 00	1 00		"	
	A		String of A button	No	No	Yes	Yes	Yes	Yes	No	Yes	+
				140	140	169	163	163	169	NO	169	
	В		"PRESET"/ "A" / "B" / "FAW" String of B button	No	No	Yes	Yes	Yes	Yes	No	Yes	4
	ID.	Jung	String of b britten	INO	INO	res	res	res	res	INO	res	١,

```
{
    "Response" : {
        "Requested" : "GetCamStatus" ,
        "Result" : "Success" ,
        "Data" : {
        "Camera" : {
```

```
"Status": "Standby", "Mode": "Camera", "RecMode": "Normal",
  "TC": "#########", "AspectRetio": "16:9", "WebAccess": "On"
},
"Fullauto" : {
 "Status" : "Auto"
"Iris" : {
 "Status" : "Auto" , "Value" : "0"
"Gain" : {
 "Status" : "Alc" , "Value" : "0"
"AeLevel" : {
 "Status": "AeOn", "Adjust": "On", "Value": "0"
},
"Shutter" : {
 "Status" : "Eei" , "Value" : "0"
},
"Whb" : {
  "Status": "Faw", "Value": "0",
 "WhPRScale": "Off", "WhPBScale": "0",
 "WhPRPosition": "100", "WhPBPosition": "Z100",
 "WhPRValue": "100", "WhPBValue": "Z100"
},
"Zoom" : {
 "Dynamic": "Off", "DynamicPos": "0",
 "Position": "100", "DisplayValue": "Z100"
},
"Focus" : {
 "Status" : "AF" , "Value" : "0"
},
"Streaming" : {
 "Status" : "Stop"
"Disptv" : {
 "Status" : "Off"
"CharacterMix" : {
  "Sdi": "Off", "Hdmi": "Off", "Video": "Off"
},
"TallyLamp" : {
 "Priority" : "Camera" , "Sw" : "Off"
},
 "Status": "Select", "Protect": "Unlock", "Remain": "120", "ClipNum": "50",
 "RemainWarning" : "0"
  "Status": "Select", "Protect": "Unlock", "Remain": "140", "ClipNum": "25",
  "RemainWarning": "0"
```

```
"Battery" : {
 "Info": "Time", "Level": "8", "Value": "80"
"Enable" : {
 "Fullauto" : {
  "Status": 1, "On": 1, "Off": 1, "Preset": 1
 "Iris" : {
 "Status": 1, "StatusDisp": 1,
  "Manual": 1, "Auto": 1, "Open1": 1, "Open2": 1, "Open3": 1,
  "Close1": 1, "Close 2": 1, "Close 3": 1 "PushAuto": 1
 "Gain" : {
  "Status": 1, "StatusDisp": 1,
  "Manual": 1, "Agc": 1, "Lolux": 1, "Variable": 1, "L": 1, "M": 1, "H": 1,
  "Up1": 1, "Up2": 1, "Down1": 1, "Down2": 1,
 },
 "AeLevel" : {
  "Status": 1, "StatusDisp": 1,
  "AeLevelUp": 1, "AeLevelDown": 1, "AdjustOn": 1, "AdjustOff": 1
},
 "Shutter" : {
  "Status": 1, "StatusDisp": 1,
  "Off": 1, "Manual": 1, "Step": 1, "Variable": 1, "Eei": 1,
  "Slower" : 1 , "Faster" : 1
},
 "Whb" : {
  "Status": 1, "StatusDisp": 1,
  "Manual": 1, "Faw": 1, "Preset": 1, "A": 1, "B": 1, "Adjust": 1,
  "WhPaintRP": 1, "WhPaintRM": 1, "WhPaintBP": 1, "WhPaintBM": 1
 "Zoom" : {
 "Status": 1, "StatusDisp": 1,
 "Tele1": 1, "Tele2": 1, "Tele3": 1, "Wide1": 1, "Wide2": 1, "Wide3": 1,
 "Tele": 1. "Wide": 1.
 "Preset": 1, "Clear": 1, "Preset1": 1, "Preset2": 1, "Preset3": 1
 },
 "Focus" : {
  "Status": 1, "StatusDisp": 1,
```

```
"Manual": 1, "Auto": 1,
  "Far1": 1, "Far2": 1, "Far3": 1, "Near1": 1, "Near2": 1, "Near3": 1,
  "Infinity" : 1 , "PushAuto" : 1
 },
 "User" : {
  "Sw1": 1, "Sw2": 1, "Sw3": 1, "Sw4": 1, "Sw5": 1, "SDw6": 1,
  "Sw7": 1, "Sw8": 1, "Sw9": 1, "Sw10": 1, "Sw11": 1, "LensRet": 1
 "Streaming" : {
  "On": 1, "Off": 1
 },
 "Disptv" : {
  "On":1, "Off":1
 "CharacterMix" : {
   "Sdi": 1, "Hdmi": 1, "Video": 1
 },
 "Menu" : {
  "Display": 1, "Status": 1,
  "Menu": 1, "Set": 1, "Cancel": 1,
  "Up": 1, "Down": 1, "Left": 1, "Right": 1
}
},
"ButtonString" : {
 "Gain" : {
  "L": "0dB", "M": "6dB", "H": "12dB"
 "User" : {
  "Sw1": "Focus Assist", "Sw2": "OIS", "Sw3": "Lolux", "Sw4": "AE Lock",
  "Sw5" : "Zebra" , "Sw6" : "Marker" , "Sw7" : "Clip Review" , "Sw8" : "Rec"
  "Sw9": "AWB", "Sw10": "TC Preset", "Sw11": "OK Mark",
  "LensRet" : "Live Streaming"
 },
 "Whb" : {
  "Preset" : "PRESET" , "A" : "A" , "B" : "B"
```

3.3.2. Recording

Control the recording function

Request

Ke	y		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	que	est											
	Co	mmand	String	SetCamCtrl	Yes								
	Se	essionID	String	(Session ID in cookie.)	Yes								
	Pa	irams											
		CamCtrl	String	Camera Control	Yes								
				Rec":recording start / "Stop":recording stop									

```
Example

{
    "Request" : {
        "Command" : "SetCamCtrl " ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "CamCtrl" : "Rec"
        }
    }
}
```

K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse								'			
	Requested	String	SetCamCtrl	Yes								
	Result	String	(Result of command processing.)	Yes								

```
Example

{
    "Response" : {
        "Requested" : "SetCamCtrl " ,
        "Result" : "Success"
      }
}
```

3.3.3. Set zoom position (obey preset zoom settings of camera)

Control zoom position

In operation, obay preset zoom speed settings of camera,

If you use zooming with slide bar, you should use "SetWebSliderEvent" command.

Request

2001												
Ke	еу	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	SetZoomCtrl	Yes	No	Yes						
	SessionID	String	(Session ID in cookie.)	Yes	No	Yes						
	Params											
	Position	Integer	Zoom position "0"~"499"	Yes	No	Yes						

Example

```
{
    "Request" : {
        "Command" : "SetZoomCtrl " ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "Position" : 400
        }
    }
}
```

Response

- P												
K	Čey	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	lesponse											
	Requested	String	SetZoomCtrl	Yes	No	Yes						
	Result	String	(Result of command processing.)	Yes	No	Yes						

```
{
    "Response" : {
        "Requested" : "SetZoomCtrl " ,
        "Result" : "Success"
    }
}
```

3.3.4. Live streaming

Control the streaming function

After changing settings with API command, you should check the result of the command before start live streaming.

While menu or status screen is displayed on the camcorder, start/stop streaming command does not work.

Request

uou													
k	Сеу		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Requ	est											
	Co	ommand	String	SetStreamingCtrl	Yes								
	Se	essionID	String	(Session ID in cookie.)	Yes								
	Pa	arams											
		Streaming	String	Streaming Control	Yes								
				"On":streaming start / "Off":streaming stop									

Example

```
{
    "Request" : {
        "Command" : "SetStreamingCtrl" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "Streaming" : "On"
        }
    }
}
```

K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetStreamingCtrl	Yes								
	Result	String	(Result of command processing.)	Yes								

```
Example

{
    "Response" : {
        "Requested" : "SetStreamingCtrl" ,
        "Result" : "Success"
    }
}
```

3.3.5. Tally lamp control

This command controls tally lamp.

Turning on/off the tally lamp depends on camera settings. "3.7.2. Set tally lamp priority"has the details.

"SetTallyLampCtrl" should be used only when changing the tally lamp state, otherwise it causes performance degradation.

Please do not use "SetTallyLampCtrl" in the studio tally system described in '3.7. How to control studio tally system".

From Web API version 1.07, alarm indication on the camera itself has highest priority compared with all other tally control via web interface.

Request

Ke	У	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	quest											
	Command	String	SetTallyLampCtrl	Yes								
	SessionID	String	(Session ID in cookie.)	Yes								
	Params											
	Sw		Tarry lamp Control "On"(The order turns on LED) / "Off"(The order turns off LED) /	Yes								

Example

```
{
    "Request" : {
        "Command" : "SetTallyLampCtrl",
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "Sw" : "On"
        }
    }
}
```

Response

po.	1100										
- 1	Key	Style Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Ī	Response										
	Requested	String SetTallyLampCtrl	Yes								
	Result	String (Result of command processing.)	Yes								

Example { "Response" : { "Requested" : "SetTallyLampCtrl" , "Result" : "Success" } }

Issue a button event

Request

•	Style	Value	HM65	HM660) HM8x0	HM200	HM25x	LS300	PZ100	HC900	0 H
uest											T
Command	String	SetWebButtonEvent	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	,
SessionID	String	(Session ID in cookie.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Params		(Button parameter is selected by Kind parameter)									٦
Kind	String	Kind of button event									
		"Fullauto"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	
		"Iris"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		"Gain"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		"AeLevel"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		"Shutter"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	_
		"Whb"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		"Zoom"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		"Focus"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Π
		"User"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Π
		"Disptv"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	_
		"Menu"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	_
		"Rec"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Π
		"MasterBlack"	No	Yes	Yes	Yes	Yes	No	No	Yes	-
		"Detail"	No	Yes	Yes	Yes	Yes	No	Yes	Yes	-
		"Exposure"	No	No	No	No	No	No	Yes	No	T
		"SpeedWithZoom"	No	No	No	No	No	No	Yes	No	-
Button	String	Fullauto event									Π
		"On" / "Off"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
		"Preset"	No	No	No	No	No	Yes	No	No	٦
		Exposure event									Π
		"Auto"/ "Manual" / "IrisPriority" / "ShutterPriority"	No	No	No	No	No	No	Yes	No	
		Iris event		1							_
		"Manual" / "Auto"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	7
		"Open1"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	_
		"Open2"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	T
		"Open3"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	7
		"Close1"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	٦
		"Close2"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	T
		"Close3"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-
		"PushAuto"	Yes	Yes	Yes	Yes	Yes	Yes	No	No	T
		Gain event									_
		"Alc"	Yes	Yes	No	No	No	No	No	No	
		"Lolux"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	1
		"L"/"M"/"H"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	
		"Variable"	No	No	No	No	No	Yes	No	No	1
		"Up1"	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	٦
		"Up2"	No	No	No	No	No	Yes	No	No	٦
		"Down1"	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	٦
I	1	DOMIT	1,10				1	,		1.00	

"Manual" / "Auto"	No	o	No	No	No	No	No	No	No	No
AeLevel event										
"AeLevelUp" / "AeLevelDown"	Ye	es '	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
"AdjustOn" / "AdjustOff"	No	o 1	No	No	Yes	Yes	Yes	No	Yes	Yes
"Up" / "Down"	No	o 1	No	No	No	No	No	Yes	No	No
Shutter event										
"Off"	Ye	es '	Yes	Yes	No	No	No	No	No	No
"Step"	No	0 1	No	Yes	Yes	Yes	Yes	No	Yes	Yes
"Variable"	No	0 1	No	Yes	Yes	Yes	Yes	No	Yes	Yes
"Manual"	Ye	es '	Yes	No	No	No	No	No	No	No
"Eei"	Ye	es '	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
"Slower"	Ye	es '	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
"Faster"	Ye	es '	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Whb event										
"Faw"	Ye	es '	Yes	No	No	No	No	Yes	No	No
"Preset" / "A" / "B"	Υe	es '	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
"Adjust" (Awb trigger when PZ100)	Υe	es '	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
"WhPaintRP"/"WhPaintRM"	Υe	es '	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
"WhPaintBP"/"WhPaintBM"	Υe	es '	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
"Awb"	No	0 1	No	No	No	No	No	Yes	No	No
"3200K"	No	0 1	No	No	No	No	No	Yes	No	No
"5600K"	No	0 1	No	No	No	No	No	Yes	No	No
"Manual"	No	0 1	No	No	No	No	No	Yes	No	No
Zoom event										1
"Tele1" / "Tele2" / "Tele3"	Ye	es '	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
"Wide1" / "Wide2" / "Wide3"	Ye	es '	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
"Stop"	No	0 1	No	No	No	No	No	Yes	No	No
*"Tele" or "Wide" events need "Stop" in KY-PZ100.										
Focus event									1	
"Manual" / "Auto"	Υe	es '	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
"Far1" / "Far2" / "Far3" / "Near1" / "Near2"/ "Near3"	Υe	es '	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
"Infinity"	Υe	es '	Yes	No	No	No	No	No	No	No
"PushAuto"	Υe	es '	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
"Stop"	No	0 1	No	No	No	No	No	Yes	No	No
**"Far" or "Near" events need "Stop" in KY-PZ100.										
MasterBlack event									1	
"Up1" / "Up2" / "Up3" / "Down1" / "Down2"/ "Down3"	No	0	Yes	Yes	Yes	Yes	No	No	Yes	Yes
User event									1	
"Sw0"	No	0 1	No	Yes	No	No	No	No	Yes	No
"Sw1" / "Sw2" / "Sw3" / "Sw4" / "Sw5" / "Sw6" / "Sw7"	Υe	es '	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
"Sw8"	No	0 1	No	Yes	Yes	Yes	Yes	No	Yes	Yes
"Sw9"	No	0 1	No	Yes	Yes	Yes	Yes	No	No	Yes
"Sw10"	No			Yes	No	No	Yes	No	No	Yes
"Sw11"	No		No	Yes	No	No	No	No	No	Yes
"Sw12" / "Sw13"	No			No	No	No	No	No	No	Yes
"LensRet"	No		No	Yes	No	No	No	No	Yes	No
"Sub1" / "Sub2" / "Sub3"	No			No	No	No	No	Yes	No	No
"VfSw1" / "VfSw2"	No	-		No	No	No	No	No	Yes	No
Disptv event		1		_		-	-		<u> </u>	
"On":(Display on TV) / "Off":(Display on TV)	Ye	es ,	Yes	No	Yes	Yes	Yes	No	No	No
Cit (Dioplay Oil 1 v)/ Cit (Dioplay Oil 1 v)			. 00	. 10	100	100	, 00	. 10	<u> </u>	1.10

"Sdi":(Character Mix)	No	No	Yes	No	No	No	No	Yes	Yes
"Hdmi":(Character Mix)	No	No	Yes	No	No	No	No	Yes	Yes
"Video":(Character Mix)	No	No	Yes	No	No	No	No	Yes	Yes
Menu event									
"Display":(Menu) / "Status":(Menu) / "Menu":(Menu)	Yes								
"Cancel":(Menu) / "Set":(Menu) / "Up":(Menu) /	Yes								
"Down":(Menu) / "Left":(Menu) / "Right":(Menu)	Yes								
— "Up", "Down", "Left", and "Right" events call assigned function when menu is closed.	No	Yes	Yes						
Rec event									
"Start":Recording start / "Stop":Recording stop	Yes								
Detail event "Up" / "Down"	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
SpeedWithZoom event "Off / "On"	No	No	No	No	No	No	Yes	No	No

Example

Response

K		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetWebButtonEvent	Yes								
	Result	String	(Result of command processing.)	Yes								

```
{
    "Response" : {
        "Requested" : "SetWebButtonEvent " ,
        "Result" : "Success"
     }
}
```

3.3.7. Set Web Slider Event

Issue a slider event

You should use 'SetWebSliderEvent' command instead of 'SetZoomCtrl' for zooming with slide bar. You get maxmum speed of zoom.

Request

ıcsı												
Ke	у	Style	Value	HM65	0 HM660) HM8x0	HM200) HM25x	LS300	PZ100	HC900	HC5x0
Re	quest											
	Command	String	SetWebSliderEvent	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	SessionID	String	(Session ID in cookie.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Params											
	Kind	String	Kind of Slider event									
			" ZoomBar "	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
			" IrisBar "	No	No	No	No	No	No	No	Yes	Yes
	Position	Integer	Slider event									
			ZoomBar 0~499:Zoom position	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
			IrisBar 0~255:Iris position	No	No	No	No	No	No	No	Yes	Yes

Example

```
{
    "Request" : {
        "Command" : "SetWebSliderEvent " ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "Kind" : "ZoomBar" ,
            "Position" : 73
        }
    }
}
```

K	еу	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetWebSliderEvent	Yes								
	Result	String	(Result of command processing.)	Yes								

```
Example

{
    "Response" : {
        "Requested" : "SetWebSliderEvent " ,
        "Result" : "Success"
     }
}
```

3.3.8. Set Web XYField Event

Issue a two-dimensional slider event

Request

οι												
Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x
Request												
Comma	and	String	SetWebXYFieldEvent	Yes	Yes							
Session	nID	String	(Session ID in cookie.)	Yes	Yes							
Params	3											
Kind	t	String	Kind of XYField event "WhPaintRB ":White paint R and B	Yes	Yes							
XPo	sition	_	XYField event WhPaintRB "0"~"64" (White paint B position)	Yes	Yes							
YPo	sition	-	XYField event WhPaintRB "0"~"64" (White paint R position)	Yes	Yes							

Example

```
{
    "Request" : {
        "Command" : "SetWebXYFieldEvent" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
              "Kind" : "WhPaintRB" ,
              "XPosition" : 32,
              "YPosition" : 32
        }
    }
}
```

Respopnse

Style Value Key HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC900 HC5x0 Response Requested String SetWebXYFieldEvent Yes Yes Yes Yes Yes Yes Yes Yes Yes Result String (Result of command processing.) Yes Yes Yes Yes Yes Yes Yes Yes Yes

```
Example

{
    "Response" : {
        "Requested" : "SetWebXYFieldEvent" ,
        "Result" : "Success"
      }
}
```

3.3.9. Get GPS Information

Request location information of camera GPS function.

Request

K	э у	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	GetGPSInfo	Yes	Yes	Yes	No	No	No	No	Yes	Yes
	SessionID	String	(Session ID in cookie.)	Yes	Yes	Yes	No	No	No	No	Yes	Yes

Example { "Request" : { "Command" : "GetGPSInfo" , "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" } }

Response

Key		Style	Value	HM650	HM660	HM8x0	HM200) HM25x	LS300	PZ100	HC900	HC5x0
Resp	oonse											
R	Requested	String	GetGPSInfo	Yes	Yes	Yes	No	No	No	No	Yes	Yes
R	Result	String	(Result of command processing.)	Yes	Yes	Yes	No	No	No	No	Yes	Yes
D)ata											
	AntennaLevel	String	"None" / "Lost" / "Searching" /	Yes	Yes	Yes	No	No	No	No	Yes	Yes
			"Level1" / "Level2" / "Level3"					1				
	Location	String	"+/-" <latitude>"+/-"<longitude>"+/-"<altitude>"/"</altitude></longitude></latitude>	Yes	Yes	Yes	No	No	No	No	Yes	Yes
			Latitude +: North, -: South,					1				
			00.00000(min) - 90.000000(max)					1				
			Longitude +: East, -: West,									
			000.00000(min) - 179.999999(max)					1				
			Altitude +, -,									
			0.000000(min) - 99999999(max)					'				

^{*}Location data is valid only if AnttennaLevel is "Level1", "Level2", or "Level3".

```
{
    "Response" : {
        "Requested" : "GetGPSInfo" ,
        "Result" : "Success" ,
        "Data" : {
            "AntennaLevel" : "Level3" ,
            "Location" : "+35.360452+138.727820+3775.630/"
        } ,
        }
    }
}
```

3.3.10. Seesaw switch operation

Seesaw switch operation command is changing parameter by a seesaw-swith.

Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x(
Request											
Command	String	SeesawSwitchOperation	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
SessionID	String	(Session ID in cookie.)	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Params											
Kind	String	Kind of Seesaw event	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
		"ZoomSeesaw" / "IrisSeesaw" / "MasterBlackSeesaw" /									
		"FocusSeesaw"									
Direction	String	Zoom operation	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
		"Stop" / "Wide" / "Tele"									
		Iris operation									
		"Open" / "Close" / "Stop"									
		MasterBlack operation									
		"Up" / "Down" / "Stop"									
		Focus operation									
		"Far" / "Near" / "Stop"									
Speed	Integer	0 - 8	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes

^{*&}quot;Speed = 0" has the same meaning as "Direction = Stop".

Response

Ke	У	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	sponse											
	Requested	String	SeesawSwitchOperation	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
	Result	String	(Result of command processing.)	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes

Example { "Response" : { "Requested" : "SeesawSwitchOperation" , "Result" : "Success" } }

3.4.1. Set Pan Tilt Control

Pan / Tilt control command with direct position parameters.

еу .	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900) HC5>
equest											
Command	String	SetPTCtrl	No	No	No	No	No	No	Yes	No	No
SessionID	String	(Session ID in cookie.)	No	No	No	No	No	No	Yes	No	No
Params											T
PanDirection	String	"Stop" / "Left" / "Right" / "Home" / "Position"	No	No	No	No	No	No	Yes	No	No
PanPosition		0(Back left limmit) - 17540(front) - 35080(Back right limmit) PanPosition is valid when "PanDirection" is "Position".	No	No	No	No	No	No	Yes	No	No
PanSpeed	Integer	0 - 30	No	No	No	No	No	No	Yes	No	No
TiltDirection	String	"Stop" / "Up" / "Down" / "Home" / "Position"	No	No	No	No	No	No	Yes	No	No
TiltPosition	Integer	0(Just above) - 9040(just beside) - 12080(diagonally downward) "TiltPosition" is valid when "TiltDirection" is "Position".	No	No	No	No	No	No	Yes	No	No
TiltSpeed	Integer	0 - 30	No	No	No	No	No	No	Yes	No	No

^{*&}quot;Speed = 0" has the same meaning as "Direction = Stop".

```
{
    "Request" : {
        "Command" : "SetPTCtrl" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "PanDirection" : "Left" ,
        "PanPosition" : 32768
        "PanSpeed" : 10
        "TiltDirection" : "Up" ,
        "TiltPositon : 32768
        "TiltSpeed" : 10
    }
}
```

pon	30											
K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetPTCtrl	No	No	No	No	No	No	Yes	No	No
	Result	String	(Result of command processing.)	No	No	No	No	No	No	Yes	No	No

```
Example
{
   "Response" : {
    "Requested" : "SetPTCtrl" ,
    "Result" : "Success"
   }
}
```

3.4.2. Joystick Operation

Joystick operation command with direction and speed parameters.

Ke	y		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	que	est											
	Со	mmand	String	JoyStickOperation	No	No	No	No	No	No	Yes	No	No
	Se	ssionID	String	(Session ID in cookie.)	No	No	No	No	No	No	Yes	No	No
	Par	rams											
		PanDirection	String	"Stop" / "Left" / "Right"	No	No	No	No	No	No	Yes	No	No
		PanSpeed	Integer	0 - 30	No	No	No	No	No	No	Yes	No	No
		TiltDirection	String	"Stop" / "Up" / "Down"	No	No	No	No	No	No	Yes	No	No
		TiltSpeed	Integer	0 - 30	No	No	No	No	No	No	Yes	No	No

^{*&}quot;Speed = 0" has the same meaning as "Direction = Stop".

Example

```
"Request" : {
    "Command" : "JoyStickOperation" ,
    "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
    "Params" : {
        "PanDirection" : "Left" ,
        "PanSpeed" : 10
        "TiltDirection" : "Up" ,
        "TiltSpeed" : 10
    }
}
```

Response

Style Value Key HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC900 HC5x0 Response String JoyStickOperation Requested No No No No No No Yes String (Result of command processing.) Result No No No No No No Yes No No

```
Example

{
    "Response": {
        "Requested": "JoyStickOperation",
        "Result": "Success"
      }
}
```

3.4.3. Zoom switch operation

Zoom switch operation command is changing zoom by a seesaw-swith.

Ke	У		Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	que	est											
	Со	mmand	String	ZoomSwitchOperation	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Se	ssionID	String	(Session ID in cookie.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Pai	rams											
		Direction	String	"Stop" / "Wide" / "Tele"	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
		Speed	Integer	0 - 8	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

^{*&}quot;Speed = 0" has the same meaning as "Direction = Stop".

Example

```
## Request": {

"Command": "ZoomSwitchOperation",

"SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3",

"Params": {

"Direction": "Wide",

"Speed": 5

}

}
```

Response

	••											
K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	ZoomSwitchOperation	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Result	String	(Result of command processing.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

```
{
    "Response" : {
        "Requested" : "ZoomSwitchOperation" ,
        "Result" : "Success"
    }
}
```

3.4.4. Set Pan / Tilt / Zoom preset

Control pan / tilt / zoom preset position.

Ke	y		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	que	est											
	Со	mmand	String	SetPTZPreset	No	No	No	No	No	No	Yes	No	No
	Se	ssionID	String	(Session ID in cookie.)	No	No	No	No	No	No	Yes	No	No
	Par	rams											
		No	Integer	1 - 100(Number of preset position)	No	No	No	No	No	No	Yes	No	No
		Operation	String	"Move"(Move to preset position)	No	No	No	No	No	No	Yes	No	No
				"Set" (Current position is stored)									
				"Delete"(Delete the preset position)									

Example

```
{
    "Request" : {
        "Command" : "SetPTZPreset" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "No" : 90 ,
        "Operation" : "Move"
        }
    }
}
```

Ke	ey	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	esponse											
	Requested	String	SetPTZPreset	No	No	No	No	No	No	Yes	No	No
	Result	String	(Result of command processing.)	No	No	No	No	No	No	Yes	No	No

```
Example

{
    "Response" : {
        "Requested" : "SetPTZPreset" ,
        "Result" : "Success"
    }
}
```

3.4.5. Get camera status (for remote controller)

Request minimum status information of camera function for RM-LP100 and other remote controllers.

It is recommended to use this command every 500 msec or above.

Unnecessary use of this command make performance degradation.

Request

Κe	ә у	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	equest											
	Command	String	GetCamStatusMinimum	No	No	No	No	No	No	Yes	No	No
	SessionID	String	(Session ID in cookie.)	No	No	No	No	No	No	Yes	No	No

Example

```
{
    "Request" : {
        "Command" : "GetCamStatusMinimum" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3"
     }
}
```

/	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900) HC5
sponse											
Requested	String	GetCamStatusMinimum	No	No	No	No	No	No	Yes	No	No
Result	String	(Result of command processing.)	No	No	No	No	No	No	Yes	No	No
Data											
Camera		(Camera)									
Status	String	Status	No	No	No	No	No	No	Yes	No	Ν
		"NoCard"(no card inserted) / "Stop"(recording stop) /									
		"Standby"(record standby) / "Rec"(recording)/									
		"RecPause"(recording pause)									
VideoOutputStatus	S String	"On" / "Off"	No	No	No	No	No	No	Yes	No	١
MenuStatus	String	"On" / "Off"	No	No	No	No	No	No	Yes	No	1
Exposure											T
Status	String	"Auto" / "Manual" / "IrisPriority" / "ShutterPriority"	No	No	No	No	No	No	Yes	No	Ī
Iris											T
Status	String	"Auto" / "Manual"	No	No	No	No	No	No	Yes	No	
Value	String	Character string for iris value	No	No	No	No	No	No	Yes	No	Ī
Shutter											T
Status	String	"Auto" / "Manual"	No	No	No	No	No	No	Yes	No	
Value	String	Character string for Shutter value	No	No	No	No	No	No	Yes	No	Ī
Gain											T
Status	String	"Auto" / "Manual"	No	No	No	No	No	No	Yes	No	
Value	String	Character string for gain value	No	No	No	No	No	No	Yes	No	Ī
AeLevel											T
Status	String	"AeOff" / "AeOn"	No	No	No	No	No	No	Yes	No	ı
Value	String	Character string for AE level value	No	No	No	No	No	No	Yes	No	T
Whb											I
Status	String	"Faw" / OnePush" / "3200K" / "5600K" / "Manual"	No	No	No	No	No	No	Yes	No	1
Value	String	Character string for White Balance value	No	No	No	No	No	No	Yes	No	١

WhPRScale	Integer	Slide bar total length for White paint Red(0-255)	No	No	No	No	No	No	Yes	No	No
WhPBScale		Slide bar total length for White paint Blue(0-255)	No	No	No	No	No	No	Yes	No	No
WhPRPosition		Slide bar current position for White paint Red(0-255)	No	No	No	No	No	No	Yes	No	No
		Slide bar current position for White paint Blue(0-255)	No	No	No	No	No	No	Yes	No	No
		Character string for White paint Red value	No	No	No	No	No	No	Yes	No	N
WhPBValue		Character string for White paint Blue value	No	No	No	No	No	No	Yes	No	N
cus	-	Original Processing for the point Processing for the Processing for the point Processing for the									T
Status	String	"Auto" / "Manual"	No	No	No	No	No	No	Yes	No	N
Value		Character string for Focus value	No	No	No	No	No	No	Yes	No	N
om											Ť
Position	Integer	Zoom position (0-499)	No	No	No	No	No	No	Yes	No	١
etail		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									T
	String	Character string for detail value	No	No	No	No	No	No	Yes	No	Ν
reaming	-										t
Status	String	Status "Stop"(Streaming has stopped or cannot be started.) /	No	No	No	No	No	No	Yes	No	Ν
		"Stopping"(About to stop.) / "Start"(Streaming has started.) / "Starting"(About to start.) /									
		"Waiting"(Waiting for connection. (for RTSP/RTP)) /- "Error"									
		(Error occurred or waiting to start RTSP/RTP streaming)									
llyLamp											
Priority		Priority "Camera" / "Web"	No	No	No	No	No	No	Yes	No	١
99		Lighting "On" / "Off"	No	No	No	No	No	No	Yes	No	1
- · · · · · · · · · · · · · · · · · · ·	String	Status "Off" / "Program" / "Preview"	No	No	No	No	No	No	Yes	No	1
able		(Availability of function button switches)									1
Exposure		(Exposure function)									
		button "Atuo" switch of exposure 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	1
		button "Manual" switch of exposure 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	١
		button ShutterPriority" switch of exposure 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	١
·		button "IrisPriority" switch of exposure 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	1
Iris		(Iris function)				ļ					4
				No	No	No	No	No	Yes	No	1
Open1		button ">" switch of iris 0:Disable, 1:Enable	No							No	
Close1		button "<" switch of iris 0:Disable, 1:Enable	No No	No	No	No	No	No	Yes	140	<u> </u>
Close1 Gain	Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function)	No								İ
Close1 Gain Auto	Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable	No No	No	No	No	No	No	Yes	No	1
Close1 Gain Auto Manual	Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable	No No No	No No	No No	No No	No No	No No	Yes Yes	No No	1
Close1 Gain Auto Manual Up1	Integer Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable button "Up1" switch of gain 0:Disable, 1:Enable	No No No No	No No No	No No No	No No No	No No No	No No No	Yes Yes Yes	No No No	1
Close1 Gain Auto Manual Up1 Down1	Integer Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable button "Up1" switch of gain 0:Disable, 1:Enable button "Down1" switch of gain 0:Disable, 1:Enable	No No No	No No	No No	No No	No No	No No	Yes Yes	No No	1
Close1 Gain Auto Manual Up1 Down1 AeLevel	Integer Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable button "Up1" switch of gain 0:Disable, 1:Enable button "Down1" switch of gain 0:Disable, 1:Enable (AE Level function)	No No No No	No No No No	No No No No	No No No No	No No No	No No No	Yes Yes Yes Yes	No No No No	1
Close1 Gain Auto Manual Up1 Down1 AeLevel Up	Integer Integer Integer Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable button "Up1" switch of gain 0:Disable, 1:Enable button "Down1" switch of gain 0:Disable, 1:Enable (AE Level function) button "A" switch of AElevel 0:Disable, 1:Enable	No No No No No	No No No No	No No No No	No No No No	No No No No	No No No No	Yes Yes Yes Yes	No No No No	1
Close1 Gain Auto Manual Up1 Down1 AeLevel Up Down	Integer Integer Integer Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable button "Up1" switch of gain 0:Disable, 1:Enable button "Down1" switch of gain 0:Disable, 1:Enable (AE Level function) button "A" switch of AElevel 0:Disable, 1:Enable button "V" switch of AElevel 0:Disable, 1:Enable	No No No No	No No No No	No No No No	No No No No	No No No	No No No	Yes Yes Yes Yes	No No No No	1
Close1 Gain Auto Manual Up1 Down1 AeLevel Up Down Shutter	Integer Integer Integer Integer Integer Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable button "Up1" switch of gain 0:Disable, 1:Enable button "Down1" switch of gain 0:Disable, 1:Enable (AE Level function) button "▲" switch of AElevel 0:Disable, 1:Enable button "▼" switch of AElevel 0:Disable, 1:Enable (Shutter function)	No No No No No No	No No No No No No	No No No No No No	No No No No No No	No No No No No No	No No No No No	Yes Yes Yes Yes Yes Yes Yes	No No No No No No	1 1 1
Close1 Gain Auto Manual Up1 Down1 AeLevel Up Down Shutter Slower	Integer Integer Integer Integer Integer Integer Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable button "Up1" switch of gain 0:Disable, 1:Enable button "Down1" switch of gain 0:Disable, 1:Enable button "Down1" switch of gain 0:Disable, 1:Enable (AE Level function) button "A" switch of AElevel 0:Disable, 1:Enable button "V" switch of AElevel 0:Disable, 1:Enable (Shutter function) button "A" switch of shatter 0:Disable, 1:Enable	No N	No No No No No No	No No No No No No	No No No No No No	No No No No No No No	No No No No No No No	Yes Yes Yes Yes Yes Yes Yes Yes	No No No No No No	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Close1 Gain Auto Manual Up1 Down1 AeLevel Up Down Shutter	Integer Integer Integer Integer Integer Integer Integer Integer Integer	button "<" switch of iris 0:Disable, 1:Enable (Gain function) Display Value of gain 0:Disable, 1:Enable button "MANUAL" switch of gain 0:Disable, 1:Enable button "Up1" switch of gain 0:Disable, 1:Enable button "Down1" switch of gain 0:Disable, 1:Enable (AE Level function) button "▲" switch of AElevel 0:Disable, 1:Enable button "▼" switch of AElevel 0:Disable, 1:Enable (Shutter function)	No No No No No No	No No No No No No	No No No No No No	No No No No No No	No No No No No No	No No No No No	Yes Yes Yes Yes Yes Yes Yes	No No No No No No	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7

		0:Disable, 1:Enable									ĺ
Manual	Integer	button "MANUAL" switch of White balance	No	No	No	No	No	No	Yes	No	ı
		0:Disable, 1:Enable									
OnePush	Integer	button "AWB" switch of White balance	No	No	No	No	No	No	Yes	No	
		0:Disable, 1:Enable									
K3200	Integer	button "3200K" switch of White balance	No	No	No	No	No	No	Yes	No	
		0:Disable, 1:Enable									
K5600	Integer	button "5600K" switch of White balance	No	No	No	No	No	No	Yes	No	
		0:Disable, 1:Enable									
OnePushTrig	ge Integer	button "AWB trigger" switch of White balance	No	No	No	No	No	No	Yes	No	
		0:Disable, 1:Enable									
Focus		(Focus function)									
Manual	Integer	button "MANUAL" switch of focus 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	
Auto	Integer	button "AUTO" switch of focus 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	
Detail		(Detail function)									
Up	Integer	button "ON" switch of Streaming 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	
Down	Integer	button "OFF" switch of Streaming 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	
Preset		(Availability of preset number)									
1	Integer	PTZ preset number is operatable. 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	
2	Integer	PTZ preset number is operatable. 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	
• • • • •	• • • •										Ī
#	Integer	PTZ preset number is operatable. 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	
100	Integer	PTZ preset number is operatable. 0:Disable, 1:Enable	No	No	No	No	No	No	Yes	No	

```
"Response" : {
"Requested": "GetCamStatusMinimum",
"Result" : "Success" ,
"Data" : {
 "Camera" : {
   "PowerStatus" : "On" , "MenuStatus" : "On"
 "Exposure : {
   "Status" : "Auto"
 },
 "Iris" : {
  "Status" : "Auto" , "Value" : "0"
 "Shutter" : {
  "Status" : "Auto" , "Value" : "0"
 "Gain" : {
   "Status" : "Auto" , "Value" : "0"
 "AeLevel" : {
 "Status" : "AeOn" , "Value" : "0"
  },
 "Whb" : {
   "Status" : "Faw" , "Value" : "0" ,
```

```
"WhPRScale": 0, "WhPBScale": 0,
 "WhPRPosition": 64, "WhPBPosition": "64,
 "WhPRValue": "64", "WhPBValue": "64"
"Focus" : {
 "Status": "Auto", "Value": "0"
"Zoom" : {
"Position": 100
"Detail" : {
"Value" : "100"
"Streaming" : {
"Status" : "Stop"
"TallyLamp" : {
"Priority": "Camera", "Lighting": "Off"
"Enable" : {
"Exposure" : {
 "Auto": 1, "Manual": 1, "ShutterPriority": 1, "IrisPriority": 1
},
"Iris" : {
 "Open1": 1,"Close1": 1
},
 "Gain" : {
 "Auto": 1, "Manual": 1, "Up1": 1, "Down1": 1
 "AeLevel" : {
 "Up": 1,"Down": 1
 "Shutter" : {
 "Slower" : 1 ,"Faster" : 1
},
 "Faw": 1, "Manual": 1, "OnePush": 1, "K3200": 1, "K5600": 1, "OnePushTrigger": 1
},
 "Focus" : {
 "Auto" : 1 , "Manual" : 1
 "Detail" : {
 "Up": 1,"Down": 1
},
"Preset" : {
"1":1, "2":1, "3":1, "4":1, "5":1, "6":1, "7":1, "8":1, "9":1, "10":1,
"11": 1, "12": 1, "13": 1, "14": 1, "15": 1, "16": 1, "17": 1, "18": 1, "19": 1, "20": 1,
"21": 1, "22": 1, "23": 1, "24": 1, "25": 1, "26": 1, "27": 1, "28": 1, "29": 1, "30": 1,
"31": 1, "32": 1, "33": 1, "34": 1, "35": 1, "36": 1, "37": 1, "38": 1, "39": 1, "40": 1,
"41": 1, "42": 1, "43": 1, "44": 1, "45": 1, "46": 1, "47": 1, "48": 1, "49": 1, "50": 1,
```

```
"51":1, "52":1, "53":1, "54":1, "55":1, "56":1, "57":1, "58":1, "69":1, "60":1,

"61":1, "62":1, "63":1, "64":1, "65":1, "66":1, "66":1, "70":1,

"71":1, "72":1, "73":1, "74":1, "75":1, "76":1, "77":1, "88":1, "80":1,

"81":1, "82":1, "83":1, "84":1, "85":1, "86":1, "87":1, "88":1, "89":1, "90":1,

"91":1, "92":1, "93":1, "94":1, "95":1, "96":1, "97":1, "98":1, "99":1, "100":1,

},

}

}
```

3.5. How to acquire JPEG data

These commands enables to start JPEG encoding and aquire JPEG image data.

'3.5.1 JpegEncode' command with parameter 'Start' can be used to start encoding.

JPEG data is acquired followed by a header in a response for 'get_jpg_cgi' described in '3.5.2 Acquire JPEG data'.

3.5.1. JPEG encode control

Start / stops the encoding function of the camera.

It is necessary to start encoding to acquire JPEG data.

When other users have already used it, it returns disable error. Even in this case, you can acquire JPEG data.

Please be carefully to stop JPEG encoding, because other users may acquire JPEG data.

There is a possibility stop encoding command returns error if another client has already stopped encoding.

In the following cases, you cannot send the command to the camera.

The camera is in Live Streaming mode.

The camera is in IFB Streaming mode.

K	еу		Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	eque	est											
	Со	mmand	String	JpegEncode	Yes								
	Se	ssionID	String	(Session ID in cookie.)	Yes								
	Pai	rams											
		Operate	String	"Start" / "Stop"	Yes								

Example

```
{
    "Request" : {
        "Command" : "JpegEncode" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "Operate" : "Start"
        }
    }
}
```

Response

Ke	у	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	sponse											
	Requested	String	JpegEncode	Yes								
	Result	String	(Result of command processing.)	Yes								

```
{
    "Response" : {
        "Requested" : "JpegEncode" ,
        "Result" : "Success"
    }
}
```

3.5.2. Set JPEG encode size

Setting image resolution of acquring JPEG data.

Ke	ЭУ		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	equ	est											
	Co	ommand	String	SetJpegEncodeSize	No	No	No	No	No	No	Yes	No	No
	Se	essionID	String	(Session ID in cookie.)	No	No	No	No	No	No	Yes	No	No
	Pa	rams											
		Size	String	"640x360" / "320x181"	No	No	No	No	No	No	Yes	No	No

Example

```
{
    "Request" : {
        "Command" : "SetJpegEncodeSize" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "Size" : "320x180"
        }
    }
}
```

Response

K	ә у	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetJpegEncodeSize	No	No	No	No	No	No	Yes	No	No
	Result	String	(Result of command processing.)	No	No	No	No	No	No	Yes	No	No

```
{
    "Response" : {
        "Requested" : "SetJpegEncodeSize" ,
        "Result" : "Success"
    }
}
```

3.5.3. Acquire JPEG data

You can acquire JPEG image followed by a header when accessing to the URL below. Content type of the response is image/jpeg.

Access format	H	<i>1</i> 650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
http:// <ip address="">/cgi-bin/get_jpg.cgi?SessionID=<session cookie.="" id="" in=""></session></ip>	Ye	s	Yes							
Request	Н	<i>1</i> 650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x(
GET /cgi-bin/get_jpg.cgi?SessionID= <session cookie.="" id="" in=""> HTTP/1.1\r\n</session>	Υe	s	Yes							
Decrees								D7400		
Response							LS300			_
HTTP 1.1 200 OK\r\n	Ye	s	Yes							
Content-type: image/jpeg\r\n										
Pragma: no-cache\r\n										
Cache-Control: no-cache\r\n										
Expires: Thu, 01 Jan 1970 00:00:00 GMT\r\n										
Content-Length: 32906V/n										
Date: Wef, 07 Jan 2015 23:28:58 GMTv/n										
Server: Cameralrin										
VID.										
Data of Jpeg file follows after this.										

3.6. How to use Interruptible Feedback Function

These commands enables to use interruptible feedback(IFB) function. IFB is used for returning audio to the camera from the controller.

3.6.1. Get interruptible feedback settings

Get IFB function parameters.

Ke	ey	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	equest											
	Command	String	GetIFBSettings	No	Yes	Yes	No	No	No	No	No	No
	SessionID	String	(Session ID in cookie.)	No	Yes	Yes	No	No	No	No	No	No

```
Example

{
    "Request" : {
        "Command" : "GetIFBSettings" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        }
}
```

Key	у	Style	Value	HM65) HM66	0x8MH 0	HM200) HM25	LS300	PZ100	HC90	00 HC5x0
Re	sponse											
	Requested	String	GetIFBSettings	No	Yes	Yes	No	No	No	No	No	No
	Result	String	(Result of command processing.)	No	Yes	Yes	No	No	No	No	No	No
	Data											
	Function	String	Switch to enable IFB function. "Enable" / "Disable"	No	Yes	Yes	No	No	No	No	No	No
	Address	String	Address of IFB server. "xxx.xxx.xxx"	No	Yes	Yes	No	No	No	No	No	No
	Port	Integer	Port of IFB server. 1 - 65535	No	Yes	Yes	No	No	No	No	No	No
	Mountpoint	String	Mountpoint on IFB server. Max 62 characters.	No	Yes	Yes	No	No	No	No	No	No

3.6.2. Set interruptible feedback settings

Set IFB function parameters. It is necessary to use return audio at camera.

This command enables / disables the IFB function of the camera.

Ke	у	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	quest											
	Command	String	SetIFBSettings	No	Yes	Yes	No	No	No	No	No	No
	SessionID	String	(Session ID in cookie.)	No	Yes	Yes	No	No	No	No	No	No
	Params											
	Function	String	Switch to enable IFB function. "Enable" / "Disable"	No	Yes	Yes	No	No	No	No	No	No
	Address	String	Address of IFB server. "xxx.xxx.xxx.xxx"	No	Yes	Yes	No	No	No	No	No	No
	Port	Integer	Port of IFB server. 1 - 65535	No	Yes	Yes	No	No	No	No	No	No
	Mountpoint	String	Mountpoint on IFB server. Max 62 characters.	No	Yes	Yes	No	No	No	No	No	No

Example

```
"Request": {
    "Command": "SetIFBSettings ,
    "SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
    "Params": {
        "Function": "Enable",
        "Address": "192.168.0.11" ,
        "Port": 5000 ,
        "Mountpoint": "DB90TX"
    }
}
```

K	Čey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Response											
	Requested	String	SetIFBSettings	No	Yes	Yes	No	No	No	No	No	No
	Result	String	(Result of command processing.)	No	Yes	Yes	No	No	No	No	No	No

```
Example

{
    "Response" : {
        "Requested" : "SetIFBSettings" ,
        "Result" : "Success"
    }
}
```

3.6.3. Set interruptible feedback streaming control

This command is used to start/stop IFB streaming

Request

Ke	y		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	que	est											
	Со	mmand	String	SetIFBCtrl	No	Yes	Yes	No	No	No	No	No	No
	Se	essionID	String	(Session ID in cookie.)	No	Yes	Yes	No	No	No	No	No	No
	Pa	irams											
		Streaming	String	Streaming Control	No	Yes	Yes	No	No	No	No	No	No
				"Start": start streaming / "Stop": stop streaming									

```
Example

{
    "Request" : {
        "Command" : "SetIFBCtrl" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "Streaming" : "Start"
        }
    }
}
```

Response

K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetIFBCtrl	No	Yes	Yes	No	No	No	No	No	No
	Result	String	(Result of command processing.)	No	Yes	Yes	No	No	No	No	No	No

```
{
    "Response" : {
        "Requested" : "SetIFBCtrl" ,
        "Result" : "Success"
     }
}
```

3.7. How to control Studio Tally System

 $"SetStudioTally" command indicates tally condition to the camera and it displays \ "PGM" or "PVW" on the LCD$

Menu settings on the camera which affects tally lamp control are as follows.

On the studio tally system described in this chapter, "SetTally LampCtrl" command should not be used.

"SetStudioTally" and "SetTallyLampPriority" commands can control studio tally system.

From Web API version 1.07, alarm indication on the camera itself has highest priority compared with all other tally control via web interface.

Menu settings on HM660/HM200/HM25x/PZ100

```
System...
Tally Lamp
Off, Rec, Live Streaming, Rec/Live Streaming, External*
```

Menu settings on HM8x0

```
System...
Tally System
Studio*, Internal
```

If the Tally System setting is "Studio".

```
System...
Front Tally
Off, On*
Back Tally
Off, On*
```

^{*} Tally lamp is controlled by Web API when selected.

3.7.1. Studio tally control

This command controls studio tally indication.

Turning on/off the tally lamp depends on camera settings.

Refer to "3.7.4. Relation of commands on Studio tally system" about Tally lamp control.

"'SetStudioTally" should be used only when changing the tally state, otherwise it causes performance degradation.

Κe	y		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	eque	est											
	Co	ommand	String	SetStudioTally	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Se	essionID	String	(Session ID in cookie.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Par	rams											
		Indication		"Off"(not Indicate status on LCD) / "Program"(Indicate PGM on LCD) / "Preview"(Indicate PVW on LCD)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

```
Example

{
    "Request" : {
        "Command" : "SetStudioTally" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "Indication" : "Program"
        }
    }
}
```

K	ey	Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetStudioTally	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	Result	String	(Result of command processing.)	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

```
Example

{
    "Response" : {
        "Requested" : "SetStudioTally" ,
        "Result" : "Success"
    }
}
```

3.7.2. Set tally lamp priority

Set indication priority setting of the tally lamp.

You should set tally lamp priority to "Web" before using the tally lamp via API.

Menu setting on the camera is fixed to "External/Studio" when setting changed priority to "Web" and cannot change it.

It becomes changeable when priority setting is "Camera".

This command should be used only when the tally lamp status need to be changed, otherwise it causes performance degradation.

'SetTallyLampPriority' changes camera setting as follows.

Camera stores prior state before switching to the "Web" priority and it resumes former state when you return the priority to "Camera".

HM660/HM200/HM25x/PZ100/HC5x0

```
This setting becomes "External" when the priority is set to "Web".

System...

Tally Lamp

Off, Rec, Live Streaming, Rec/Live Streaming, External
```

HM8x0/HC900

```
This setting becomes "Studio" when the priority is set to "Web".

System...

Tally System

Studio.Internal
```

This setting becomes "On" when the priority is set to "Web".

```
System...
Front Tally
Off, Rec, Live Streaming, Rec/Live Streamin(*
Off, On
Back Tally
Off, Rec, Live Streaming, Rec/Live Streamin(*
Off, On
**
```

- * If the Tally System setting is "Internal".
- ** If the Tally System setting is "Studio".

Request

Key		Style	Value	НМ	50 HM66	0x8MH 0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Req	uest											
C	Command	String	SetTallyLampPriority	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S	SessionID	String	(Session ID in cookie.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F	Params											
	Priority	Integer	"Camera"(Camera is given priority of control.) /	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
			"Web"(Web is given priority of control.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

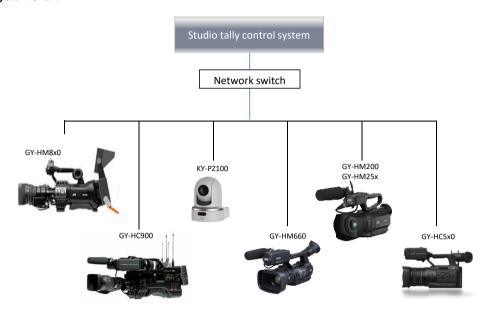
```
{
    "Request" : {
        "Command" : "SetTallyLampPriority" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "Priority" : "Camera"
        }
    }
}
```

Response

Key Style Value HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC900 HC5x0 Response Requested String SetTallyLampPriority Yes Yes Yes Yes Yes Yes Yes Yes Yes Result String (Result of command processing.) Yes Yes Yes Yes Yes Yes Yes Yes Yes

Example { "Response" : { "Requested" : "SetTallyLampPriority" , "Result" : "Success" } }

System Chart



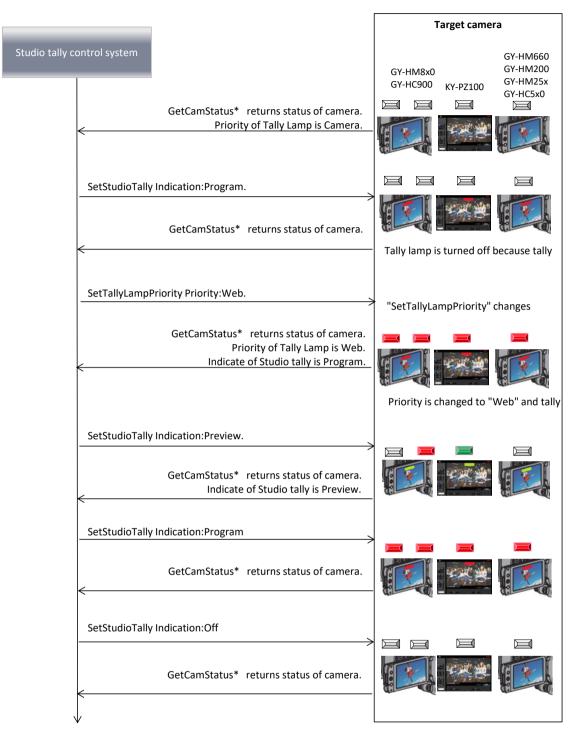
LED lighting of eacl	n model			HM8x0 HC900	KY-PZ100	GY-HM660 GY-HM200 GY-HM25x	
TallyLampPriority	StudioTally	Settings	front	back		GY-HC5x0	
	Program	External or Studio					
Web	Preview	External or Studio	\square	\bowtie			
	Off	External or Studio	\blacksquare	\mathbb{I}		\square	
	Program	External or Studio	\models)	\models		
	_	other	\sqsubseteq	\bowtie			
Camera	Preview	External or Studio	\square	\models	M		
		other	\square				
	Off	External or Studio other					

LODINE					
LCD indication of	each model			GY-HM660	
				GY-HM200	
		GY-HM8x0	KY-PZ100	GY-HM25x	
TallyLampPriority	StudioTally	GY-HC900		GY-HC5x0	
	Program	PGM	PGM	PGM	
Any time	Preview	PVW	PVW	PVW	
	Off				

LCD indication image







^{* &}quot;GetCamStatusMinimum" command can be used to acquire the status as well on KY-PZ100.

3.8. Return over IP Command

These commands enables to use Return over IP function.

Zixi and SRT streaming modes are mutually exclusive on GY-HC5x0 and GY-HC900.

Only "Zixi" or "Srt" parameter is effective according to the streaming mode.

Current mode can be checked using GetSystemInfo response.

3.8.1. GetCurrentReturnOverlpServerID

Get current server ID for Return over IP function. There are four server settings for Return over IP.

K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	GetCurrentReturnOverlpServerID	No	Yes	Yes						
	SessionID	String	(Session ID in cookie.)	No	Yes	Yes						

```
Example

{
    "Request" : {
        "Command" : "GetCurrentReturnOverlpServerID" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        }
    }
```

Κe	ә у	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	esponse											
	Requested	String	GetCurrentReturnOverlpServerID	No	Yes	Yes						
	Result	String	(Result of command processing.)	No	Yes	Yes						
	Data											
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes	Yes						

```
Example
{
    "Response" : {
        "Requested" : "GetCurrentReturnOverlpServerID" ,
        "Result" : "Success" ,
        "Data" : {
            "ID" : 0
        }
    }
}
```

3.8.2. SetCurrentReturnOverlpServerID

Set current server ID for Return over IP function.

Choose the server ID to use in Return over IP function.

K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest											
	Command	String	SetCurrentReturnOverIpServerID	No	Yes	Yes						
	SessionID	String	(Session ID in cookie.)	No	Yes	Yes						
	Params											
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes	Yes						

Example

Response

K	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	esponse											
	Requested	String	SetCurrentReturnOverIpServerID	No	Yes	Yes						
	Result	String	(Result of command processing.)	No	Yes	Yes						

```
{
    "Response" : {
        "Requested" : "SetCurrentReturnOverlpServerID" ,
        "Result" : "Success"
    }
}
```

3.8.3. GetReturnOverlpServerSettings

Get Return over IP settings for each server ID.

Request

Key		Style	Value	HM650	HM660	0x8MH	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Req	uest							l l	ı			
C	Command	String	GetReturnOverIpServerSettings	No	Yes	Yes						
S	SessionID	String	(Session ID in cookie.)	No	Yes	Yes						
F	Params							į l	ı			
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes	Yes						

Example

```
{
    "Request" : {
        "Command" : "GetReturnOverIpServerSettings" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
        "ID" : 1
        }
    }
}
```

y	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5
esponse											
Requested	String	GetReturnOverIpServerSettings	No	Yes	Yes						
Result	String	(Result of command processing.)	No	Yes	Yes						
Data											T
Alias	String	(Another name of server)	No	Yes	Yes						
Туре	String	"RTSP/RTP"/ "Icecast"	No	Yes	Yes						
RTSP/RTP		(Selected by Type)									
Protocol		"UDP"/"TCP"	No	Yes	Ye						
SrcAddress	String	(IP address)	No	Yes	Υe						
SrcPort	Integer	(Port number)	No	Yes	Υe						
StreamId		(Stream ID)	No	Yes	Υe						
Username	String	(User name)	No	Yes	Υe						
Password	String	(Password for RTSP/RTP)	No	Yes	Υe						
Resolution	integer	0:1280x720	No	Yes	Υe						
FrameRate	integer	1:60p, 2:30p, 4:50p, 5:25p	No	Yes	Y						
Zixi		(Selected by Type)									Ī
SrcAddress	string	(IP address)	No	Yes	Υe						
SrcPort	integer	(Port number)	No	Yes	Υe						
StreamId	string	(Stream ID for ZIXI)	No	Yes	Y						
Password	string	(Password for ZIXI)	No	Yes	Υe						
Name	string	(Name for ZIXI)	No	Yes	Υe						
Latency	integer	0:Off, 1:Low, 2: Medium	No	Yes	Υe						
Resolution		0:1280x720	No	Yes	Υe						
FrameRate	integer	1:60p, 2:30p, 4:50p, 5:25p	No	Yes	Υe						
Icecast		(Selected by Type)									T

| 1 | SrcAddress | String | (IP address) | No | Yes | Yes |
|---|------------|---------|---------------|----|----|----|----|----|----|----|-----|-----|
| | SrcPort | Integer | (Port number) | No | Yes | Yes |
| | Mountpoint | String | (Mountpoint) | No | Yes | Yes |

```
{
    "Response" : {
        "Requested" : "GetReturnOverlpServerSettings"" ,
        "Result" : "Success" ,
        "Data" : {
        "Alias" : "Server1" ,
        "Type": "RTSP" ,
        "Rrsp" : {
        "Protocol" : "UDP" ,
        "SrcAddress" : "192.168.0.1" ,
        "SrcPort" : 6504
        "StreamId" : "HC900-1234" ,
        "Username" : "Jvckenwood" ,
        "Password" : "abcdefghij"
        }
    }
}
```

3.8.3.1. AvailableTypeOfReturnOverIP

Get Available type.

K	еу	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
R	equest									1		
	Command	String	AvailableTypeOfReturnOverIP	No	Yes	Yes						
	SessionID	String	(Session ID in cookie.)	No	Yes	Yes						

```
Example

{
    "Request" : {
        "Command" : "AvailableTypeOfReturnOverIP" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        }
    }
```

Response

Ke	/		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	sponse	9											
	Reque	ested	String	AvailableTypeOfReturnOverIP	No	Yes	Yes						
	Result		String	(Result of command processing.)	No	Yes	Yes						
	Data												
	Ava	ailableType			No	Yes	Yes						
		RTSP/RTP	Integer	0 : unselectable , 1 : selectable	No	Yes	Yes						
		Icecast	Integer	0 : unselectable , 1 : selectable	No	Yes	Yes						
		Zixi"	Integer	0 : unselectable , 1 : selectable	No	Yes	Yes						

```
"Response": {
    "Requested": "AvailableTypeOfReturnOverIP",
    "Result": "Success",
    "Data": {
        "AvailableType": {
            "RTSP/RTP": 1,
            "lcecast": 1,
            "Zixi": 0
        }
    }
}
```

3.8.3.2. AvailableFrameRateOfReturnOverIP

Get available frame rate.

Ke	У	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	quest							1				
	Command	String	AvailableFrameRateOfReturnOverIP	No	Yes	Yes						
	SessionID	String	(Session ID in cookie.)	No	Yes	Yes						
	Params							1	'			
	RecordingFrameRate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p"	No	Yes	Yes						

Example

```
{
    "Request" : {
        "Command" : "AvailableFrameRateOfReturnOverIP" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "RecordingFrameRate" : "60p"
        }
}
```

Response

Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Res	ponse											
F	Requested	String	AvailableFrameRateOfReturnOverIP	No	Yes	Yes						
F	Result	String	(Result of command processing.)	No	Yes	Yes						
	Data											
	RecordingFrameRate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p"	No	Yes	Yes						
	AvailableFrameRate			No	Yes	Yes						
	"60p"	Integer	0 : unselectable , 1 : selectable	No	Yes	Yes						
	"30p"	Integer	0 : unselectable , 1 : selectable	No	Yes	Yes						
	"50p"	Integer	0 : unselectable , 1 : selectable	No	Yes	Yes						
	"25p"	Integer	0 : unselectable , 1 : selectable	No	Yes	Yes						

```
"Response": {
    "Requested": "AvailableFrameRateOfReturnOverIP",
    "Result": "Success",
    "Data": {
        "RecordingFrameRate": "60p"
        "AvailableFrameRate": {
        "60p": 1,
        "30p: 1,
        "50p: 0,
        "25p": 0
    }
}
```

3.8.4. SetReturnOverlpServerSettingsRTSP

Set Return over IP settings for each server ID. This command is used for RTSP/RTP protocol.

Request

Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Requ	est											
Co	ommand	String	SetReturnOverlpServerSettingsRTSP	No	Yes	Yes						
Se	essionID	String	(Session ID in cookie.)	No	Yes	Yes						
Pa	arams											
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes	Yes						
	Alias	String	(Another name of server)	No	Yes	Yes						
	Protocol	String	"UDP"/"TCP"	No	Yes	Yes						
	SrcAddress	String	(IP address)	No	Yes	Yes						
	SrcPort	Integer	(Port number)	No	Yes	Yes						
	StreamId	String	(Stream ID)	No	Yes	Yes						
	Username	String	(User name)	No	Yes	Yes						
	Password	String	(Password for RTSP/RTP)	No	Yes	Yes						
	FrameRate	Integer	1:60p, 2:30p, 4:50p, 5:25p	No	Yes	Yes						

Ke	ey	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	esponse											
	Requested	String	SetReturnOverlpServerSettingsRTSP	No	Yes	Yes						
	Result	String	(Result of command processing.)	No	Yes	Yes						

```
Example
{
    "Response" : {
        "Requested" : "SetReturnOverlpServerSettingsRTSP" ,
        "Result" : "Success"
    }
}
```

3.8.5. SetReturnOverIpServerSettingsZIXI

Set Return over IP settings for each server ID. This command is used for Zixi protocol.

Request

551												
Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5
Request												
Comm	nand	String	SetReturnOverIpServerSettingsZIXI	No	Yes	Yes						
Sessio	onID	String	(Session ID in cookie.)	No	Yes	Yes						
Param	ns											
ID		Integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes	Yes						
Alia	as	String	(Another name of server)	No	Yes	Yes						
Src	cAddress	String	(IP address)	No	Yes	Yes						
Src	Port	Integer	(Port number)	No	Yes	Yes						
Stre	eamld	String	(Stream ID for ZIXI)	No	Yes	Yes						
Pas	ssword	String	(Password for ZIXI)	No	Yes	Yes						
Nar	me	String	(Name for ZIXI)	No	Yes	Yes						
Late	tency	Integer	0:Low, 1:Medium, 2:Minimum(Zixi OFF), 3:High	No	Yes	Yes						
Fra	ameRate	Integer	1:60p, 2:30p, 4:50p, 5:25p	No	Yes	Yes						

```
Example

{
    "Request" : {
        "Command" : "SetReturnOverIpServerSettiingsZIXI" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "ID" : 1 ,
            "Alias" : "Server1" ,
            "SrcAddress": "192.168.0.1" ,
            "SrcPort": 2088,
            "StreamId": "HM650-1234" ,
            "Password": "abcde" ,
            "Name: "JvcKenwood",
            "Latency": 0
            }
        }
    }
}
```

Ke	ey .	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Re	esponse											
	Requested	String	SetReturnOverlpServerSettingsZIXI	No	Yes	Yes						
	Result	String	(Result of command processing.)	No	Yes	Yes						

```
Example
{
    "Response" : {
        "Requested" : "SetReturnOverlpServerSettingsZIXI" ,
        "Result" : "Success"
    }
}
```

3.8.6. SetReturnOverlpServerSettingsIcecast

Set Return over IP settings for each server ID. This command is used for Icecast protocol.

Request

Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
Request												
Comr	mand	String	SetReturnOverIpServerSettingsIcecast	No	Yes	Yes						
Sessi	ionID	String	(Session ID in cookie.)	No	Yes	Yes						
Parar	ms											
ID)	Integer	0:server1, 1: server2, 2: server3, 3: server4	No	Yes	Yes						
Ali	ias	String	(Another name of server)	No	Yes	Yes						
Sr	rcAddress	String	(IP address)	No	Yes	Yes						
Sr	rcPort	Integer	(Port number)	No	Yes	Yes						
Mo	ountpoint	String	(Mountpoint)	No	Yes	Yes						

Example

```
"Request": {
    "Command": "SetReturnOverlpServerSettingsIcecast",
    "SessionID": "7425fbcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
    "ID": 1,
    "Alias": "Server1",
    "SrcAddress": "192.168.0.1",
    "SrcPort": 6504,
    "Mountpoint": "abcdefg"
    }
}
```

ρυ.													
ŀ	С еу		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Resp	oonse											
	R	equested	String	SetReturnOverlpServerSettingsIcecast	No	Yes	Yes						
	R	esult	String	(Result of command processing.)	No	Yes	Yes						

```
Example

{
    "Response" : {
        "Requested" : "SetReturnOverlpServerSettingsIcecast" ,
        "Result" : "Success"
    }
}
```

3.8.7. SetReturnOverlpCtrl

This command is used to start/stop Return over IP.

Request

uc	οι.												
ŀ	Key		Style	Value	HM650	HM660	HM8x0	HM200	HM25x	LS300	PZ100	HC900	HC5x0
F	Requ	est											
	C	ommand	String	SetReturnOverlpCtrl	No	Yes	Yes						
	Se	essionID	String	(Session ID in cookie.)	No	Yes	Yes						
	Pa	arams											
		Operate	String	Streaming Control	No	Yes	Yes						
				"Start":start Return over IP / "Stop":stop Return over IP									

```
Example

{
    "Request" : {
        "Command" : "SetReturnOverIpCtrl" ,
        "SessionID" : "7425fbcb58ee4d15dd4c1f5ace4299a3" ,
        "Params" : {
            "Operate" : "Start"
        }
    }
}
```

Response

Key		Style	Style Value				HM650 HM660 HM8x0 HM200 HM25x LS300 PZ100 HC900 HC5x0								
R	esponse														
	Requested	String	SetReturnOverlpCtrl	No	No	No	No	No	No	No	Yes	Yes			
	Result	String	(Result of command processing.)	No	No	No	No	No	No	No	Yes	Yes			

```
{
    "Response" : {
        "Requested" : "SetReturnOverlpCtrl" ,
        "Result" : "Success"
    }
}
```