

JVC Camcorder Web API Reference

Version 1.20

JVC KENWOOD Corporation

Conditions for the use of this document

Use of this document is permitted only if you agree to the following terms.

JVCKENWOOD CORPORATION SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. JVCKENWOOD CORPORATION HAS NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

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

Version	Outline
1.00	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.
1.02	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".
1.03	Type "TCP" is effective in "GY-HM650" in command with a streaming type parameter. Type "UDPN" and "UDPL" are effective in "GY-HM660" in command with a streaming type parameter.
1.04	Supported KY-PZ100 newly. Added "3.1.3 Set streaming framerate" command for "KY-PZ100". Added "3.1.6 Available streaming framerate settings" command for "KY-PZ100". Added "3.4. PTZ Camera Support Command" for "KY-PZ100". Added "3.5. How to acquire JPEG data" for "KY-PZ100".
1.05	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".
1.06	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.
1.07	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". Changed "'3.3.5. Tally lamp control" description correspond to it.
1.08	Added "Serial" parameter to "3.2.1. Get System Information" for "GY-HM660", "GY-HM8x0", "GY-HM200", and "KY-PZ100". 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".
1.09	Added "Serial" parameter to "3.2.1. Get System Information" for "GY-HM650". Added "3.5. How to acquire JPEG data" for "GY-HM650". Supported GY-HC900 newly.
1.10	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. GetReturnOverIpServerSettings" and "3.8.4. SetReturnOverIpServerSettings(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 "PCR Mode" to "3.1.10. Get streaming server settings" and "3.1.16. Set streaming server settings(UDP/Zixi/RTP)". Added "Overlay" and "Tagging" parameter to 3.2.1. Get System Information. Error correction. GY-HC900 does not support "Iris PushAuto" of "3.3.6 Set Web Event".
1.11	Supported GY-HC5x0 newly. Added "3.2.6. Get NTP Status" and "3.2.7. Set NTP Server" for "GY-HC5x0". Added SRT parameter for "GY-HC5x0". "3.2.1. Get System Information", "3.1.7. Available streaming bitrate settings", "3.1.10. Get streaming server settings", and "3.1.18. Set streaming server settings(SRT)". Added "PCR Mode" parameter to "3.1.10. Get streaming server settings" and "3.1.16. Set streaming server settings(UDP/Zixi/RTP)" for GY-HC5x0. Added "RTMPS" protocol for "GY-HC5x0". "3.1.7. Available streaming bitrate settings" and "3.1.10. Get streaming server settings" and "3.1.16. Set streaming server settings(RTMPS)".
1.12	Added "3.2.6. Get NTP Status" and "3.2.7. Set NTP Server" for "GY-HC900". Added SRT parameter for "GY-HC900". "3.2.1. Get System Information", "3.1.7. Available streaming bitrate settings", "3.1.10. Get streaming server settings", and "3.1.18. Set streaming server settings(SRT)". Added "3.8. Return over IP Command" 30p/25p parameter for "GY-HC5x0". Added "IrisBar" parameter to "3.3.7. Set Web Slider Event" for "GY-HC5x0". Added "Position(Iris)" parameter "3.3.1. Get camera status" for "GY-HC5x0". Added "KA_EN200" parameter to 3.2.1. Get System Information for "GY-HC5x0" and "GY-HC900". Added "422_60p" and "422_50p" parameters to each available streaming settings for "GY-HC5x0" and "GY-HC900" when "KA-EN200" is enabled. "3.1.1. Get streaming settings" and other available settings. Added "EXT slot information" to "3.3.1. Get camera status" for "GY-HC900".

1.13	<p>Added "RTMPS" protocol for "GY-HM250" and "KY-PZ100". "3.1.7. Available streaming bitrate settings", "3.1.10. Get streaming server settings" and "3.1.16. Set streaming server settings(RTMPS)".</p> <p>Added "3.4.6. Get Pan & Tilt Positions" command for "KY-PZ100".</p> <p>Added "Username" parameter to "3.1.13. Set streaming server settings(RTSP/RTP)" for "GY-HC5x0" and "GY-HC900".</p> <p>Error correction. GY-HC900 has supported "SRT" protocol of "3.1.10. Get streaming server settings"</p>
1.14	<p>Added "RTMPS" protocol for "GY-HC900". "3.1.7. Available streaming bitrate settings", "3.1.10. Get streaming server settings" and "3.1.16. Set streaming server settings(RTMPS)".</p> <p>"GY-HC5x0" is support "One touch Live" on Facebook and YouTube.</p> <p>"3.1.7. Available streaming bitrate settings", "3.1.10. Get streaming server settings".</p> <p>"GY-HC900" and "GY-HC5x0" are support "ZIXI" parameter on streaming type of ZIXI. "3.1.7. Available streaming bitrate settings", "3.1.10. Get streaming server settings".</p> <p>Portrait Resolution supported in "GY-HC5x0". "3.1.1. Get streaming settings", "3.1.2. Set streaming resolution", "3.1.5. Available streaming resolution settings" and "3.1.6. Available streaming framerate settings".</p> <p>Error correction. Corrected Parameter member AES-196 to AES-192 in "SRT" protocol. "3.1.10. Get streaming server settings", "3.1.18. Set streaming server settings(SRT)" Added "and SRT Listener mode" cause of streaming error status. "3.3.1 Get camera status", "3.4.5 Get camera status (for remote controller)" Added "RTP" protocol was Missing description. "3.1.7. Available streaming bitrate settings", "3.1.10. Get streaming server settings" Added Explanation of White balance scale and position for "KY-PZ100". "3.3.1. Get camera status" Corrected Parameter key "OnePush" to "Awb", "OnePushTrigger" to "AwbTrigger" for "KY-PZ100". 3.4.5 Get camera status (for remote controller)</p>
1.15	<p>Added "StreamId", "FEC", "PCRMode", and "AdaptiveBitrate" parameters to "3.1.10. Get streaming server settings(SRT)" for "GY-HC5x0" and "GY-HC900".</p> <p>Support Return over IP streaming type SRT. "3.8.3. GetReturnOverIpServerSettings" / "3.8.8. SetReturnOverIpServerSettingsSRT" / "3.8.3.1. AvailableTypeOfReturnOverIp" for "GY-HC5x0" and "GY-HC900".</p> <p>Error correction. Corrected encode size parameter "320x181" to "320x180". "3.5.2. Set JPEG encode size" Corrected parameter style "String" to "Integer" in SRT DstPort. "3.1.10. Get streaming server settings" Parameter Button Fullauto event is no support in "KY-PZ100". "3.3.6. Set Web Button Event" Corrected to no space in "2.3 Response form" return value.</p>
1.16	Supported GY-HM280 newly.
1.17	Supported KY-PZ400 newly.
1.18	Supported KY-PZ200 newly.
1.19	<p>Supported KY-PZ510 newly.</p> <p>The following Request Params support String in addition to Integer (for PZ100/400/200). 3.4.1 SetPTCtrl : PanPosition, TiltPosition, PanSpeed, TiltSpeed 3.4.3 ZoomSwitchOperation : Speed 3.4.4 SetPTZPreset : No</p> <p>Error correction. 3.1.10. Get streaming server settings : PZ400/200 does not support Username and Password in Type of RTSP. 3.1.21. GetVideoSettings : Change param name from EncodeLevel to VideoEncodeLevel. 3.2.1 GetSystemInfo : Model in Response was duplicated. 3.3.1 GetCamStatus : PZ100 does not support "Auto" / "Indoor" / "Outdoor" in Whb Status and does not support Bright . 3.4.5 GetCamStatusMinimum : Corrected wrong description word from "Streaming" to "Detail".</p>
1.19.1	<p>Error correction. 3.1.1. GetStreamingSettings : Add PZ510 to 3840x2160 resolution of Response. Add notes of some resolution for PZ510. 3.1.2. SetStreamingResolution : Add PZ510 to 3840x2160 resolution of Request. Add notes of some resolution for PZ510. 3.1.4 SetStreamingBitrate : Correct typo in command description. 3.1.6 AvailableStreamingFramerateSettings : Correct typo in Example. 3.1.10 GetStreamingServerSettings : Correct typo in Example. 3.1.16 SetStreamingServerSettingsRTMPS : Correct typo in Example. 3.1.19 , 3.1.20 , 3.1.22 , 3.1.23 , 3.1.24 , 3.1.26 : Correct typo in command description. 3.2.6 GetNTPStatus : Correct typo in Status of Response from "-tSynchronized" to "Not Synchronized". 3.2.8 SetNTPSettings : Add range of value. 3.3.9 GetGPSInfo : Correct typo in Example. 3.4.1 SetPTCtrl : Correct typo in Example. 3.4.5 GetCamStatusMinimum : Correct typo in Example. 3.4.6 GetPTPosition : Correct typo in Example. 3.7.3. Relation of commands on Studio tally system : Add notes for PZ510. 3.8.4 SetReturnOverIpServerSettingsRTSP : Correct typo in Example. 3.8.5 SetReturnOverIpServerSettingsZIXI : Correct typo in Example.</p>
1.20	<p>Added params. 3.2.10. SystemRequest : Added Restore params.</p>

Contents

[1.Outline](#)

[1.1. Specification](#)

[2. Interface](#)

[2.1. Authentication](#)

[2.2. Request form](#)

[2.3. Response form](#)

[3. Command](#)

[3.1. Streaming Setting Command](#)

[3.1.1. Get streaming settings](#)

[3.1.2. Set streaming resolution](#)

[3.1.3. Set streaming framerate](#)

[3.1.4. Set streaming bitrate](#)

[3.1.5. Available streaming resolution settings](#)

[3.1.6. Available streaming framerate settings](#)

[3.1.7. Available streaming bitrate settings](#)

[3.1.8. Get current streaming server number](#)

[3.1.9. Set current streaming server number](#)

[3.1.10. Get streaming server settings](#)

[3.1.11. Set streaming server settings\(UDP\)](#)

[3.1.12. Set streaming server settings\(TCP\)](#)

[3.1.13. Set streaming server settings\(RTSP/RTP\)](#)

[3.1.14. Set streaming server settings\(ZIXI\)](#)

[3.1.15. Set streaming server settings\(RTMP\)](#)

[3.1.16. Set streaming server settings\(RTMPFS\)](#)

[3.1.17. Set streaming server settings\(RTP\)](#)

[3.1.18. Set streaming server settings\(SRT\)](#)

[3.1.19. Set Streaming Encode Protocol](#)

[3.1.20. Set Streaming I Key Frame Interval](#)

[3.1.21. Get Video Settings](#)

[3.1.22. Set Video HDMI/SDI Output](#)

[3.1.23. Set Video Format](#)

[3.1.24. Set Video Encode Level](#)

[3.1.26. Set Network Multicast Settings](#)

[3.1.27. Set NDI Settings](#)

[3.1.28. Set MPEG2-TS Settings](#)

[3.2. System Command](#)

[3.2.1. Get System Information](#)

[3.2.2. Session renewal](#)

[3.2.3. Get preset zoom position](#)

[3.2.4. Set preset zoom position](#)

[3.2.5. Set tally lamp priority](#)

[3.2.6. Get NTP Status](#)

[3.2.7. Set NTP Server](#)

[3.2.8. Set NTP Settings](#)

[3.2.9. Get NTP Settings](#)

[3.2.10. SystemRequest](#)

[3.3. Camera Control Command](#)

[3.3.1. Get camera status](#)

[3.3.2. Recording](#)

[3.3.3. Set zoom position \(obey preset zoom settings of camera \)](#)

[3.3.4. Live streaming](#)

[3.3.5. Tally lamp control](#)

[3.3.6. Set Web Button Event](#)

[3.3.7. Set Web Slider Event](#)

[3.3.8. Set Web XYField Event](#)

[3.3.9. Get GPS Information](#)

[3.3.10. Seesaw switch operation](#)

[3.4. PTZ Camera Support Command](#)

[3.4.1. Set Pan Tilt Control](#)

[3.4.2. Joystick Operation](#)

[3.4.3. Zoom switch operation](#)

[3.4.4. Set Pan / Tilt / Zoom preset](#)

[3.4.5. Get camera status \(for remote controller\)](#)

[3.4.6. Get Pan & Tilt Positions](#)

[3.5. How to acquire JPEG data](#)

[3.5.1. JPEG encode control](#)

[3.5.2. Set JPEG encode size](#)

[3.5.3. Acquire JPEG data](#)

[3.6. How to use Interruptible Feedback Function](#)

[3.6.1. Get interruptible feedback settings](#)

[3.6.2. Set interruptible feedback settings](#)

[3.6.3. Set interruptible feedback streaming control](#)

[3.7. How to control Studio Tally System](#)

[3.7.1. Studio tally control](#)

[3.7.2. Set tally lamp priority](#)

[3.7.3. Relation of commands on Studio tally system](#)

[3.7.4. Sequence of studio tally system](#)

[3.8. Return over IP Command](#)

[3.8.1. GetCurrentReturnOverIpServerID](#)

[3.8.2. SetCurrentReturnOverIpServerID](#)

[3.8.3. GetReturnOverIpServerSettings](#)

[3.8.3.1. AvailableTypeOfReturnOverIP](#)

[3.8.3.2. AvailableFrameRateOfReturnOverIP](#)

[3.8.4. SetReturnOverIpServerSettingsRTSP](#)

[3.8.5. SetReturnOverIpServerSettingsZIXI](#)

[3.8.6. SetReturnOverIpServerSettingsIcecast](#)

[3.8.7. SetReturnOverIpCtrl](#)

[3.8.8. SetReturnOverIpServerSettingsSRT](#)

1.Outline

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 - Acquire JPEG data.
- Interruptible feedback settings - Configure 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.

API Version	Firmware Version												
	GY-HM650	GY-HM660	GY-HM6x0	GY-HM200	GY-HM25x	GY-HM280	GY-LS300	KY-PZ100	GY-HC900	GY-HC5x0	KY-PZ400	KY-PZ200	KY-PZ510
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	-	-	-	-	-	-	-	-	V0300-0250	V0120-0166	-	-	-
1.13	-	-	-	-	V0106-0022	-	-	V0200-0128	-	-	-	-	-
1.14	-	-	-	-	-	-	-	-	V0400-0268	V0200-0201	-	-	-
1.15	-	-	-	-	-	-	-	-	V0410-0277	V0220-0232	-	-	-
1.16	-	-	-	-	-	V0202-0034	-	-	-	-	-	-	-
1.17	-	-	-	-	-	-	-	-	-	-	v1.1.98	-	-
1.18	-	-	-	-	-	-	-	-	-	-	-	v1.1.20	-
1.19	-	-	-	-	-	-	-	-	-	-	-	-	v2.0.67
1.20	-	-	-	-	-	-	-	-	-	-	v1.2.46	v1.1.53	-

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

NOTE: Examples for each Request/Response are just for your reference.
Please replace it with the correct API call according to the model you are using.

2. Interface

Support HTTP protocol

API command 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

Username/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'.

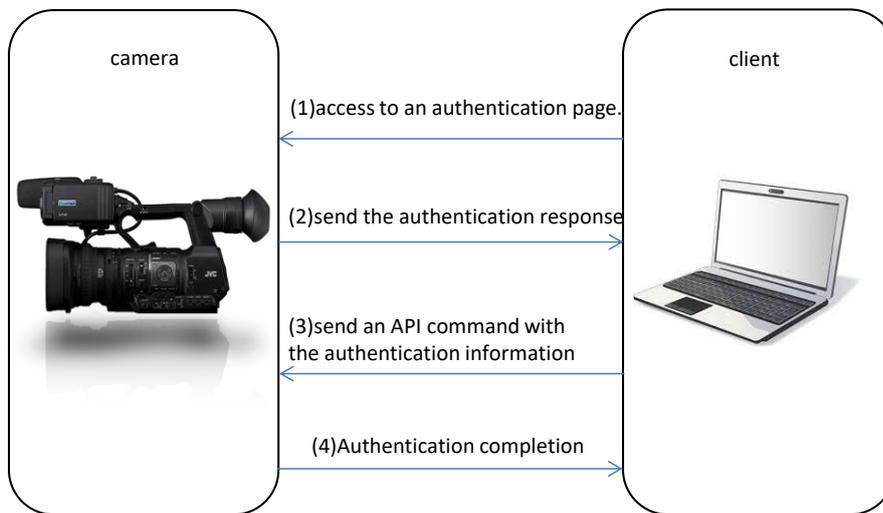
~~'Session ID' will expire within 30 seconds.~~

~~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\nHost: 192.168.0.134\r\nUser-Agent: Mozilla/5.0 (Windows NT 5.1; rv:27.0) Gecko/20100101 Firefox/27.0\r\nAccept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\nAccept-Language: ja,en-us;q=0.7,en;q=0.3\r\nAccept-Encoding: gzip, deflate\r\nConnection: keep-alive\r\n\r\n
```

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

Example

```
HTTP/1.1 401 Unauthorized\r\nWWW-Authenticate: Digest realm="GY-HM650",\n    nonce="7a63056b0a608017c405707e682b9adb", qop="auth"\r\nContent-Type: text/html\r\nContent-Length: 1458\r\nDate: Tue, 03 Mar 2015 11:35:13 GMT\r\nServer: Camera\r\n\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\r\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
User-Agent: Mozilla/5.0 (Windows NT 5.1; rv:27.0) Gecko/20100101 Firefox/27.0\r\n
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,
    cnonce="3c706c583d858603"\r\n
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.

Key	Style	Value
Request		
Command	String	(Command name)
SessionID	String	(Session ID in cookie.)
Params		(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: Camera\r\n
\r\n
```

JavaScript Object Notation: application/json

Actual 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) / DualExeError(Duplicate command) / Failed(Other error)
Data		(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. Command

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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetStreamingSettings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "GetStreamingSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "GetStreamingSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  },
  "Params": {
    "Stream": 0
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM6X0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510		
	Requested	String	GetStreamingSettings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Data																	
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	Resolution	String	"3840x2160" (PZ400/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
			"1920x1080" (PZ400/200/510: First stream only)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
			"1440x1080"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			"1280x720" (PZ400/200/510: First stream only)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1024x576" (PZ400/200/510: First stream only)	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"720x480"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"720x576"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"720x408"	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x480"	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x360"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"480x320"	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"480x270"	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			"320x240"	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"1080x1080"	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"606x1080"	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"720x720"	-	-	-	-	✓	✓	-	-	-	-	-	✓	-	-	-
			"404x720"	-	-	-	-	✓	✓	-	-	-	-	-	✓	-	-	-
	Framerate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-		
			"422_10bit_60p" / "422_10bit_50p"	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	
			Character string for Framerate value "1" – "60"	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
	Bitrate	String	"0.2M"	✓	-	-	-	-	-	-	-	-	-	-	-	-		
			"0.3M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"0.8M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"1.5M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"2.5M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"3.0M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"5.0M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"8.0M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"10M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"12M"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
			"16M"	-	-	-	-	-	-	-	-	✓	✓	✓	-	-	-	
			"20M"	-	-	-	-	-	-	-	-	✓	✓	✓	-	-	-	
			"24M"	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	
			Character string for Bitrate bps value "32K" – "61440K" (This parameter is valid only H.264/H.265 mode.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	Qfactor	String	Character string for quality factor value "1" – "99" (This parameter is valid only MJPEG mode.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	EncodeProtocol	String	"H264" / "H265" / "MJPEG"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	IKeyFrameInterval	Integer	Value of I Key Frame Interval 2 – 60	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	BitRateControl	String	"CBR" / "VBR"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		

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

* Character string for Framerate value for PZ400/200/510 : If the Video setting is 59.94/29.27, then 60=59.94 and 30=29.97.

Example

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

Example (In case of H.264/H.265 for PZ400/200/510)

```
{
  "Response": {
    "Requested": "GetStreamingSettings",
    "Result": "Success",
    "Data": {
      "Stream": 0,
      "Resolution": "1920x1080",
      "Framerate": "60",
      "Bitrate": "4096K",
      "EncodeProtocol": "H264",
      "IKeyFrameInterval": 30,
      "BitRateControl": "CBR"
    }
  }
}
```

Example (In case of MJPEG for PZ400/200/510)

```
{
  "Response": {
    "Requested": "GetStreamingSettings",
    "Result": "Success",
    "Data": {
      "Stream": 0,
      "Resolution": "1920x1080",
      "Framerate": "60",
      "Qfactor": "80",
      "EncodeProtocol": "MJPEG",
      "IKeyFrameInterval": 30,
      "BitRateControl": "CBR"
    }
  }
}
```

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	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingResolution	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Resolution	String	"3840x2160" (PZ400/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	-	✓
			"1920x1080" (PZ400/200/510: First stream only)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1440x1080"	-	-	-	-	-	-	-	-	-	-	-	-	-
			"1280x720" (PZ400/200/510: First stream only)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1024x576" (PZ400/200/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"720x480"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"720x576"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"720x408"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x480"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x360"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"480x320"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"480x270"	✓	-	-	-	-	-	-	-	-	-	-	-	-
			"320x240"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"1080x1080"	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"606x1080"	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"720x720"	-	-	-	-	✓	✓	✓	✓	✓	✓	-	-	-
			"404x720"	-	-	-	-	✓	✓	✓	✓	✓	✓	-	-	-

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

Example

```
{
  "Request": {
    "Command": "SetStreamingResolution",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Resolution": "1920x1080"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "SetStreamingResolution",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Stream": 0,
      "Resolution": "1920x1080"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingResolution	√	√	√	√	√	√	√	√	√	√	√	√	√
	Result	String	(Result of command processing.)	√	√	√	√	√	√	√	√	√	√	√	√	√

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	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingFramerate	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Framerate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p" / "422_10bit_60p" / "422_10bit_50p"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			Character string for Framerate value "1" – "60"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

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

* Character string for Framerate value for PZ400/200/510 : If the Video setting is 59.94/29.27, then 60=59.94 and 30=29.97.

Example

```
{
  "Request": {
    "Command": "SetStreamingFramerate",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Framerate": "30p"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "SetStreamingFramerate",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Stream": 0,
      "Framerate": "30"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingFramerate	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510	
	Request																
	Command	String	SetStreamingBitrate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Params																
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
	Bitrate	String	"0.2M"	✓	-	-	-	-	-	-	-	-	-	-	-	-	
"0.3M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
"0.8M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
"1.5M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
"2.5M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	
"3.0M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
"5.0M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
"8.0M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
"10M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-
"12M"			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
"16M"			-	-	-	-	-	-	-	-	-	✓	✓	✓	-	-	-
"20M"			-	-	-	-	-	-	-	-	-	✓	✓	✓	-	-	-
			"24M"	-	-	-	-	-	-	-	✓	✓	-	-	-		
			Character string for Bitrate bps value "32K" – "61440K" (This parameter is valid only H.264/H.265 mode.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
	Qfactor	String	Character string for quality factor value "1" – "99" (This parameter is valid only MJPEG mode.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
	BitRateControl	String	"CBR" / "VBR"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	

*In case of PZ400/200/510, BitRateControl are always needed. The corresponding Value of Bitrate and Qfactor is used depending on the mode.

*In case of PZ400/200/510, This settings specified in each Params item must be set in the camera after a reboot.

Example

```
{
  "Request": {
    "Command": "SetStreamingBitrate",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Bitrate": "3.0M"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "SetStreamingBitrate",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Stream": 0,
      "Bitrate": "4096K",
      "Qfactor": "80",
      "BitRateControl": "CBR"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingBitrate	√	√	√	√	√	√	√	√	√	√	√	√	√
	Result	String	(Result of command processing.)	√	√	√	√	√	√	√	√	√	√	√	√	√

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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	AvailableStreamingResolutionSettings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request" : {
    "Command" : "AvailableStreamingResolutionSettings",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request" : {
    "Command" : "AvailableStreamingResolutionSettings",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3"
  },
  "Params" : {
    "Stream" : 0
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	AvailableStreamingResolutionSettings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Data															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	AvailableResolution			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	3840x2160	Integer	0 : unselectable , 1 : selectable (PZ400/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	1920x1080	Integer	0 : unselectable , 1 : selectable (PZ400/200/510: First stream only)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1440x1080	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	-	-	-
	1280x720	Integer	0 : unselectable , 1 : selectable (PZ400/200/510: First stream only)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1024x576	Integer	0 : unselectable , 1 : selectable (PZ400/200/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	720x480	Integer	0 : unselectable , 1 : selectable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	720x576	Integer	0 : unselectable , 1 : selectable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	720x408	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	640x480	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	640x360	Integer	0 : unselectable , 1 : selectable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	480x320	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	480x270	Integer	0 : unselectable , 1 : selectable	✓	-	-	-	-	-	-	-	-	-	-	-	-
	320x240	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	1080x1080	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	✓	-	-	-
	606x1080	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	✓	-	-	-
	720x720	Integer	0 : unselectable , 1 : selectable	-	-	-	-	✓	✓	-	-	-	✓	-	-	-
	404x720	Integer	0 : unselectable , 1 : selectable	-	-	-	-	✓	✓	-	-	-	✓	-	-	-

Example

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

Example(In case of PZ400/200/510)

```
{
  "Response": {
    "Requested": "AvailableStreamingResolutionSettings",
    "Result": "Success",
    "Data": {
      "Stream": 0,
      "AvailableResolution": {
        "3840x2160": 1,
        "1920x1080": 1,
        "1280x720": 1,
        "1024x576": 1,
        "720x480": 1,
        "720x408": 1,
        "640x480": 1,
        "640x360": 1,
        "480x320": 0,
        "320x240": 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	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510	
	Request																
	Command	String	AvailableStreamingFramerateSettings	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SessionID	String	(Session ID in cookie.)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Params																
	Stream	Integer	0: First, 1: Second											✓	✓	✓	
	Resolution	String	"3840x2160" (PZ400/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
			"1920x1080" (PZ400/200/510: First stream only)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1280x720" (PZ400/200/510: First stream only)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1024x576" (PZ400/200/510: First stream only)	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"720x480"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓
			"720x576"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"720x408"	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x480"	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x360"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"480x320"	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"320x240"	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"1080x1080"	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"606x1080"	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"720x720"	-	-	-	-	✓	✓	✓	✓	-	-	✓	-	-	-
			"404x720"	-	-	-	-	✓	✓	✓	✓	-	-	✓	-	-	-

Example

```
{
  "Request": {
    "Command": "AvailableStreamingFramerateSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
  "Params": {
    "Resolution": "1920x1080"
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "AvailableStreamingFramerateSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
  "Params": {
    "Stream": 0,
    "Resolution": "1920x1080"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM680	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510		
	Response																	
	Requested	String	AvailableStreamingFramerateSettings	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Result	String	(Result of command processing.)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Data																	
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	Resolution	String	"3840x2160" (PZ400/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
			"1920x1080" (PZ400/200/510: First stream only)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
			"1280x720" (PZ400/200/510: First stream only)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
			"1024x576" (PZ400/200/510: First stream only)	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"720x480"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"720x576"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"720x408"	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x480"	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x360"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"480x320"	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"320x240"	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"1080x1080"	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"606x1080"	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"720x720"	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-
	"404x720"	-	-	-	-	✓	✓	-	-	-	-	-	✓	-	-	-		
	AvailableFramerate																	
	60p	Integer	0 : unselectable , 1 : selectable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-		
	60i	Integer	0 : unselectable , 1 : selectable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-		
	30p	Integer	0 : unselectable , 1 : selectable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-		
	50p	Integer	0 : unselectable , 1 : selectable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-		
	50i	Integer	0 : unselectable , 1 : selectable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-		
	25p	Integer	0 : unselectable , 1 : selectable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-		
	422_10bit_60p	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-		
	422_10bit_50p	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-		
	max_25	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	max_30	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	max_50	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
	max_60	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		

* 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

```
{
  "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
      }
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Response": {
    "Requested": "AvailableStreamingFramerateSettings",
    "Result": "Success",
    "Data": {
      "Stream": 0,
      "Resolution": "1920x1080",
      "AvailableFramerate": {
        "max_25": 0,
        "max_30": 0,
        "max_50": 0,
        "max_60": 1
      }
    }
  }
}
```

3.1.7. Available streaming bitrate settings

Get available streaming bitrate settings

Request	Key	Style	Value	HMB50	HMB60	HMBx0	HMB200	HMB25x	HMB280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	AvailableStreamingBitrateSettings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Type	String	"UDP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"UDPN" (PCR Jitter is -rml) /	-	✓	✓	-	-	-	-	-	-	-	-	-	-
			"UDPL"(PCR Jitter is Low) /	-	✓	✓	-	-	-	-	-	-	-	-	-	-
			"TCP" /	✓	-	-	-	-	-	-	-	✓	✓	-	-	-
			"RTSP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"ZIXIM"(Zixi Medium/Minimum/High Latency) /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"ZIXIL"(Zixi Low Latency) /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"ZIXI" /	-	-	-	-	-	-	-	-	✓	✓	-	-	-
			"RTMP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"RTMPS" /	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
			"RTP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓
			"Facebook" /	-	-	-	-	✓	✓	-	-	-	✓	-	-	-
			"YouTube" /	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"SRT"	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	Resolution	String	"3840x2160" (PZ400/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	-	✓
			"1920x1080" (PZ400/200/510: First stream only)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1280x720" (PZ400/200/510: First stream only)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1024x576" (PZ400/200/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"720x480"	-	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
			"720x576"	-	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
			"720x408"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x480"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x360"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"480x320"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"320x240"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"1080x1080"	-	-	-	-	-	-	-	-	-	-	✓	-	-
			"606x1080"	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"720x720"	-	-	-	-	✓	✓	-	-	-	✓	-	-	-
			"404x720"	-	-	-	-	✓	✓	-	-	-	✓	-	-	-
	Framerate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p" /	-	-	-	-	-	-	-	✓	✓	✓	-	-	-
			"422_10bit_60p" / "422_10bit_50p"	-	-	-	-	-	-	-	-	-	✓	✓	-	-
			Character string for Framerate value "1" – "60"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

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

* Character string for Framerate value for PZ400/200/510 : If the Video setting is 59.94/29.27, then 60=59.94 and 30=29.97.

Example

```
{
  "Request" : {
    "Command" : "AvailableStreamingBitrateSettings",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params" : {
      "Type" : "TCP",
      "Resolution" : "1920x1080",
      "Framerate" : "60p"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request" : {
    "Command" : "AvailableStreamingBitrateSettings",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params" : {
      "Stream" : 0,
      "Type" : "RTSP",
      "Resolution" : "1920x1080",
      "Framerate" : "30"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	AvailableStreamingBitrateSettings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Data															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Type	String	"UDP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓
			"UDPN" (PCR Jitter is -rml) /	-	✓	✓	-	-	-	-	-	-	-	-	-	-
			"UDPL"(PCR Jitter is Low) /	-	✓	✓	-	-	-	-	-	-	-	-	-	-
			"TCP" /	✓	-	-	-	-	-	-	-	✓	✓	-	-	-
			"RTSP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"ZIXIM"(Zixi Medium/Minimum/High Latency) /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"ZIXIL"(Zixi Low Latency) /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"ZIXI" /	-	-	-	-	-	-	-	-	✓	✓	-	-	-
			"RTMP"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"RTMPS" /	-	-	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓
			"RTP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"Facebook" /	-	-	-	-	✓	✓	-	-	-	✓	-	-	-
			"YouTube" /	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"SRT"	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	Resolution	String	"3840x2160" (PZ400/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	-	✓
			"1920x1080" (PZ400/200/510: First stream only)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1280x720" (PZ400/200/510: First stream only)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"1024x576" (PZ400/200/510: First stream only)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"720x480"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"720x576"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
			"720x408"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x480"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"640x360"	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"480x320"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"320x240"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
			"1080x1080"	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"606x1080"	-	-	-	-	-	-	-	-	-	✓	-	-	-
			"720x720"	-	-	-	-	✓	✓	-	-	-	✓	-	-	-
			"404x720"	-	-	-	-	✓	✓	-	-	-	✓	-	-	-
	Framerate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p" /	-	-	-	-	-	-	-	✓	✓	✓	-	-	-
			"422_10bit_60p" / "422_10bit_50p"	-	-	-	-	-	-	-	-	✓	✓	-	-	-
			Character string for Framerate value "1" – "60"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

AvailableBitrate																				
0.2M	Integer	0 : unselectable , 1 : selectable																		
0.3M	Integer	0 : unselectable , 1 : selectable																		
0.8M	Integer	0 : unselectable , 1 : selectable																		
1.5M	Integer	0 : unselectable , 1 : selectable																		
2.5M	Integer	0 : unselectable , 1 : selectable																		
3.0M	Integer	0 : unselectable , 1 : selectable																		
5.0M	Integer	0 : unselectable , 1 : selectable																		
8.0M	Integer	0 : unselectable , 1 : selectable																		
10M	Integer	0 : unselectable , 1 : selectable																		
12M	Integer	0 : unselectable , 1 : selectable																		
16M	Integer	0 : unselectable , 1 : selectable																		
20M	Integer	0 : unselectable , 1 : selectable																		
24M	Integer	0 : unselectable , 1 : selectable																		
32K-61440K	Integer	0 : unselectable , 1 : selectable * For the second stream, read as 32K-20480K.																		

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

* Character string for Framerate value for PZ400/200/510 : If the Video setting is 59.94/29.27, then 60=59.94 and 30=29.97.

Example

```
{
  "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
      }
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Response" : {
    "Requested" : "AvailableStreamingBitrateSettings",
    "Result" : "Success",
    "Data" : {
      "Stream" : 0,
      "Type" : "RTSP",
      "Resolution" : "1920x1080",
      "Framerate" : "30",
      "AvailableBitrate" : {
        "32K-61440K" : 1
      }
    }
  }
}
```

3.1.8. Get current streaming server number

Get current streaming server ID.
There are four settings of streaming server .

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetCurrentStreamingServerID	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Example

```
{
  "Request": {
    "Command": "GetCurrentStreamingServerID",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetCurrentStreamingServerID	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Data															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Example

```
{
  "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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetCurrentStreamingServerID	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Example

```
{
  "Request": {
    "Command": "SetCurrentStreamingServerID",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 3
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetCurrentStreamingServerID	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Example

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

3.1.10. Get streaming server settings

Get streaming settings for each server ID.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetStreamingServerSettings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Type	String	"RTSP" / "RTSP2" / "RTMP" / "RTMP2" / "RTMPS" / "RTMPS2" / "SRT" / "Multicast" / "NDI"	—	—	—	—	—	—	—	—	—	—	✓	✓	—
			"RTSP" / "RTSP2" / "RTMP" / "RTMP2" / "RTMPS" / "RTMPS2" / "SRT" / "NDI" / "MPEG2-TS" / "MPEG2-TS2"	—	—	—	—	—	—	—	—	—	—	—	—	✓

Example

```
{
  "Request": {
    "Command": "GetStreamingServerSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "GetStreamingServerSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Type": "RTSP"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetStreamingServerSettings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Data															
	Alias	String	(Another name of server)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Type	String	"UDP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
			"TCP" /	✓	—	—	—	—	—	—	—	—	—	—	—	—
			"RTSP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"RTSP2" /	—	—	—	—	—	—	—	—	—	—	✓	✓	✓
			"ZIXI" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
			"RTMP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			"RTMP2" /	—	—	—	—	—	—	—	—	—	—	✓	✓	✓
			"RTMPS" /	—	—	—	—	✓	✓	—	✓	✓	✓	✓	✓	✓
			"RTMPS2" /	—	—	—	—	—	—	—	—	—	—	✓	✓	✓
			"RTP" /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
			"Facebook" /	—	—	—	—	✓	✓	—	—	—	—	—	—	—
			"YouTube" /	—	—	—	—	—	—	—	—	—	—	✓	—	—
			"SRT" /	—	—	—	—	—	—	—	—	—	—	✓	✓	✓
			"Multicast" /	—	—	—	—	—	—	—	—	—	—	✓	✓	—
			"NDI" /	—	—	—	—	—	—	—	—	—	—	✓	✓	—
			"MPEG2-TS" /	—	—	—	—	—	—	—	—	—	—	—	—	✓
			"MPEG2-TS2" /	—	—	—	—	—	—	—	—	—	—	—	—	✓

3.1.11. Set streaming server settings(UDP)

Set streaming settings for each server ID.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsUDP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Alias	String	(Another name of server)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	DstAddress	String	(IP address)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	DstPort	Integer	(Port number)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	PcrMode	Integer	0:Standard, 1:Fast	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	PcrJitter	Integer	0:—RMAL, 1:LOW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsUDP",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1,
      "Alias": "Server1",
      "DstAddress": "192.168.0.1",
      "DstPort": 6504,
      "PcrJitter": 1
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsUDP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsTCP	√	-	-	-	-	-	-	-	√	√	-	-	-
	SessionID	String	(Session ID in cookie.)	√	-	-	-	-	-	-	-	√	√	-	-	-
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	√	-	-	-	-	-	-	-	√	√	-	-	-
	Alias	String	(Another name of server)	√	-	-	-	-	-	-	-	√	√	-	-	-
	DstAddress	String	(IP address)	√	-	-	-	-	-	-	-	√	√	-	-	-
	DstPort	Integer	(Port number)	√	-	-	-	-	-	-	-	√	√	-	-	-

Example

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsTCP",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1,
      "Alias": "Server1",
      "DstAddress": "192.168.0.1",
      "DstPort": 6504
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsTCP	√	-	-	-	-	-	-	-	√	√	-	-	-
	Result	String	(Result of command processing.)	√	-	-	-	-	-	-	-	√	√	-	-	-

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	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsRTSP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Alias	String	(Another name of server)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Username	String	(Username for RTSP/RTP)	—	—	—	—	—	—	—	—	—	—	—	—	—
	Password	String	(Password for RTSP/RTP)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	DstPort	Integer	(Port number)	—	—	—	—	—	—	—	—	—	—	✓	✓	✓
	Auth	Integer	0:OFF, 1:ON	—	—	—	—	—	—	—	—	—	—	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsRTSP",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1,
      "Alias": "Server1",
      "Username": "user",
      "Password": "abcde"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsRTSP",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "DstPort": 554,
      "Auth": 1
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsRTSP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Example

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

3.1.14. Set streaming server settings(ZIXI)

Set streaming settings for each server ID.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsZIXI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Alias	String	(Another name of server)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	DstAddress	String	(IP address)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	DstPort	Integer	(Port number)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	StreamId	String	(Stream ID for ZIXI)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Password	String	(Password for ZIXI)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Latency	Integer	0:Low, 1:Medium, 2:Minimum(Zixi OFF), 3:High	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	PcrMode	Integer	0:Standard, 1:Fast	—	—	—	—	—	—	—	—	✓	✓	—	—	—
	AdaptiveBitrate	Integer	0:OFF, 1:ON	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

* High Latency of Type is effective in 'GY-HM660', 'GY-HM200', 'GY-HM25x', 'GY-HM280', 'GY-LS300', 'GY-HM8x0', and 'KY-PZ100'.

Example

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsZIXI",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1,
      "Alias": "Server1",
      "DstAddress": "192.168.0.1",
      "DstPort": 2088,
      "StreamId": "HM650-1234",
      "Password": "abcde",
      "Latency": 1,
      "AdaptiveBitrate": 0
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsZIXI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

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	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsRTMP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Alias	String	(Another name of server)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Stream	Integer	0: First, 1: Second	—	—	—	—	—	—	—	—	—	—	✓	✓	✓
	DstUrl	String	(Network URL for Delivery)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	StreamKey	String	(Key for Delivery)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Status	Integer	0:OFF, 1:ON (Other settings are valid when this is ON.)	—	—	—	—	—	—	—	—	—	—	—	—	—
	Video	Integer	0:Disable, 1:Enable	—	—	—	—	—	—	—	—	—	—	✓	✓	✓
	Audio	Integer	0:Disable, 1:Enable	—	—	—	—	—	—	—	—	—	—	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsRTMP",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1,
      "Alias": "Server1",
      "DstUrl": "rtmp://xxx.xxx.xxx.com/play",
      "StreamKey": "livestreaming"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsRTMP",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Stream": 0,
      "DstUrl": "rtmp://xxx.xxx.xxx.com/live",
      "StreamKey": "stream0",
      "Status": 1,
      "Video": 0,
      "Audio": 0
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsRTMP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsRTMPS	-	-	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	✓	✓	-	✓	✓	✓	-	-	-
	Alias	String	(Another name of server)	-	-	-	-	✓	✓	-	✓	✓	✓	-	-	-
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	DstUrl	String	(Network URL for Delivery)	-	-	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓
	StreamKey	String	(Key for Delivery)	-	-	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓
	Status	Integer	0:OFF, 1:ON (Other settings are valid when this is ON.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Video	Integer	0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Audio	Integer	0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request" : {
    "Command" : "SetStreamingServerSettingsRTMPS",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params" : {
      "ID" : 1,
      "Alias" : "Server1",
      "DstUrl" : "rtmps://xxxx.xxxx.xxxx-xxx.com/play",
      "StreamKey" : "livestreaming"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request" : {
    "Command" : "SetStreamingServerSettingsRTMPS",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params" : {
      "Stream" : 0,
      "DstUrl" : "rtmps://xxxx.xxxx.xxxx-xxx.com/live",
      "StreamKey" : "stream0",
      "Status" : 1,
      "Video" : 0,
      "Audio" : 0
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsRTMPS	-	-	-	-	✓	✓	-	✓	-	✓	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	✓	✓	-	✓	-	✓	✓	✓	✓

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	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsRTP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Alias	String	(Another name of server)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	DstAddress	String	(IP address)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	DstPort	Integer	(Port number)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	PcrMode	Integer	0:Standard, 1:Fast	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Smppte2022Fec	Integer	0:OFF, 1:ON	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	FecMatrixL	Integer	4 - 20	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	FecMatrixD	Integer	4 - 20	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-

* FecMatorixL and FecMatrixD value are satisfy $A \times B = 100$ condition.

Example

```
{
  "Request" : {
    "Command" : "SetStreamingServerSettingsRTP",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params" : {
      "ID" : 1,
      "Alias" : "Server1",
      "DstAddress" : "192.168.0.1",
      "DstPort" : 2088,
      "Smppte2022Fec" : 1,
      "FecMatrixL" : 10,
      "FecMatrixD" : 10
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsRTP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-

Example

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

3.1.18. Set streaming server settings(SRT)

Set streaming settings for each server ID.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsSRT	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	Params															
	ID	integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Alias	string	(Another name of server)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	DstAddress	string	(IP Address)	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	DstPort	integer	1 - 65535	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	StreamId	string	(Stream ID for SRT)	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	ConnectionMode	integer	0: Caller 1: Listener, 2: Rendezvous	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	BandwidthOverhead	integer	5 - 100	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	Latency	integer	20 - 8000	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	Encryption	integer	0: OFF, 1: AES-128, 2: AES-192 3: AES-256	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	FEC	integer	0: OFF, 1: 10x10, 2: 8x8 3: 6x6	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	AdaptiveBitrate	Integer	0:OFF, 1:ON	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	PcrMode	integer	0:Standard, 1:Fast	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Passphrase	string	ASCII 10-79 character	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	Status	integer	0:OFF, 1:ON (Other settings are valid when this is ON. The second stream is not supported, it works as OFF regardless of the setting.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsSRT",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 0,
      "Alias": "Server1",
      "DstAddress": "192.168.0.1",
      "DstPort": 6504
      "ConnectionMode": 0
      "BandwidthOverhead": 10
      "Latency": 20
      "Encryption": 0
      "Passphrase": "abcdefghij"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": "SetStreamingServerSettingsSRT",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params":{
      "DstAddress":"192.0.2.1",
      "DstPort":4578 ,
      "StreamId":"PZ510-AABCCDD",
      "ConnectionMode":1 ,
      "BandwidthOverhead":25 ,
      "Latency":500 ,
      "Encryption":0 ,
      "FEC":0 ,
      "Passphrase":"1234567890",
      "Status":1
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsSRT	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓

Example

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

3.1.19. Set Streaming Encode Protocol

Set Streaming Encode Protocol

This setting will not take effect until reboot.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingEncodeProtocol	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Params															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	EncodeProtocol	String	"H264" / "H265" / "MJPEG"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetStreamingEncodeProtocol",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Stream": 0,
      "EncodeProtocol": "H264"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingEncodeProtocol	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

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

3.1.20. Set Streaming I Key Frame Interval

Set Streaming I Key Frame Interval
This setting will not take effect until reboot.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingIKeyFrameInterval	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Params															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Interval	Integer	Value of I Key Frame Interval 2 - 60	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetStreamingIKeyFrameInterval",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Stream": 0,
      "Interval": 30
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingIKeyFrameInterval	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

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

3.1.21. Get Video Settings

Get the Video settings

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetVideoSettings	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "GetVideoSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetVideoSettings	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Data															
	Output	String	"SDI" / "HDMI"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	VideoFormat	String	"50Hz" / "60Hz" / "DialPriority" "3840x2160/60p" / "3840x2160/59.94p" / "3840x2160/50p" / "3840x2160/30p" / "3840x2160/29.97p" / "3840x2160/25p" / "1920x1080/60p" / "1920x1080/59.94p" / "1920x1080/50p" / "1920x1080/60i" / "1920x1080/59.94i" / "1920x1080/50i" / "1920x1080/30p" / "1920x1080/29.97p" / "1920x1080/25p" / "1280x720/60p" / "1280x720/59.94p" / "1280x720/50p" *3840x2160 is available only for HDMI	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	VideoEncodeLevel	String	"mainprofile" / "highprofile"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Response": {
    "Requested": "GetVideoSettings",
    "Result": "Success",
    "Data": {
      "Output": "HDMI",
      "VideoFormat": "DialPriority",
      "EncodeLevel": "mainprofile"
    }
  }
}
```

3.1.22. Set Video HDMI/SDI Output

Set Video HDMI/SDI Output.
This setting will not take effect until reboot.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetVideoHdmiSdiOutput	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Params															
	Output	String	"SDI" / "HDMI"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetVideoHdmiSdiOutput",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Output": "HDMI"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetVideoHdmiSdiOutput	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

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

3.1.23. Set Video Format

Set Video Format.

This setting will not take effect until reboot.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetVideoFormat	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Params															
	VideoFormat	String	"50Hz" / "60Hz" / "DialPriority" "3840x2160/60p" / "3840x2160/59.94p" / "3840x2160/50p" / "3840x2160/30p" / "3840x2160/29.97p" / "3840x2160/25p" / "1920x1080/60p" / "1920x1080/59.94p" / "1920x1080/50p" / "1920x1080/60i" / "1920x1080/59.94i" / "1920x1080/50i" / "1920x1080/30p" / "1920x1080/29.97p" / "1920x1080/25p" / "1280x720/60p" / "1280x720/59.94p" / "1280x720/50p" *3840x2160 is available only for HDMI	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetVideoFormat",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "VideoFormat": "DialPriority"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetVideoFormat	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

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

3.1.24. Set Video Encode Level

Set Video Encode Level.

This setting will not take effect until reboot.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetVideoEncodeLevel	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Params															
	EncodeLevel	String	"mainprofile" / "highprofile"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetVideoEncodeLevel",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "EncodeLevel": "mainprofile"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetVideoEncodeLevel	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

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

3.1.26. Set Network Multicast Settings

Set the Network Multicast Settings.
This setting will not take effect until reboot.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetNetworkMulticastSettings	-	-	-	-	-	-	-	-	-	-	✓	✓	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	-
	Params															
	Status	Integer	0:OFF, 1:ON (Other settings are valid when this is ON.)	-	-	-	-	-	-	-	-	-	-	✓	✓	-
	DstAddress	String	(IP address)	-	-	-	-	-	-	-	-	-	-	✓	✓	-
	DstPort	Integer	(Port number)	-	-	-	-	-	-	-	-	-	-	✓	✓	-

Example

```
{
  "Request": {
    "Command": "SetNetworkMulticastSettings",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Status": 1,
      "DstAddress": "224.1.2.3",
      "DstPort": 6688
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetNetworkMulticastSettings	-	-	-	-	-	-	-	-	-	-	✓	✓	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	-

Example

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

3.1.27. Set NDI Settings

Set the NDI Settings.

This setting will not take effect until reboot.

KY-PZ200 does not support NDI streaming and this command is supported only by KY-PZ200N.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetNDISettings	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Params															
	DeviceName	String	(text)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	GroupName	String	(text)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetNDISettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "DeviceName": "HD Camera",
      "GroupName": "public"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetNDISettings	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

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

3.1.28. Set MPEG2-TS Settings

Set the MPEG2-TS Settings.
This setting will not take effect until reboot.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingServerSettingsMPEG2TS	-	-	-	-	-	-	-	-	-	-	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Params															
	Stream	Integer	0: First, 1: Second	-	-	-	-	-	-	-	-	-	-	-	-	-
	Type	Integer	0: UDP, 1: RTP (A setting for either MPEG-TS or MPEG-TS2 is valid for both.)	-	-	-	-	-	-	-	-	-	-	-	-	-
	DstAddress	string	(IP Address / Server name)	-	-	-	-	-	-	-	-	-	-	-	-	-
	DstPort	Integer	(Port number)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Status	Integer	0:OFF, 1:ON (Other settings are valid when this is ON.)	-	-	-	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "Request":{
    "Command":"SetStreamingServerSettingsMPEG2TS",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params":{
      "Stream":0,
      "Type":0,
      "DstAddress":"192.168.0.1",
      "DstPort":6688,
      "Status":1
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingServerSettingsMPEG2TS	-	-	-	-	-	-	-	-	-	-	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "Response": {
    "Requested": "SetStreamingServerSettingsMPEG2TS",
    "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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetSystemInfo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Example

```
{
  "Request" : {
    "Command" : "GetSystemInfo ",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetSystemInfo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Data															
	Model	String	Model information "UNKNOWN" / "HM650"(GY-HM650) / "HM850"(GY-HM850) / "HM890"(GY-HM890) / "HM200"(GY-HM200) / "LS300"(GY-LS300) / "HM250"(GY-HM250) / "HM258"(GY-HM258) / "HM280"(GY-HM280) / "HM660"(GY-HM660) / "PZ100"(KY-PZ100) / "PZ400"(KY-PZ400) / "PZ200"(KY-PZ200) / "PZ510"(KY-PZ510) / "HC500"(GY-HC500) / "HC550"(GY-HC550) / "HC900"(GY-HC900)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Destination	String	Place of destination "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	WebAPI Version "XX.YYY.ZZZ" (XX:Major ver. YYY:Minor ver. ZZZ:Development ver)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Serial	String	Serial number	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-

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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SessionRenewal	√	-	-	-	-	-	-	-	-	-	-	-	-
	SessionID	String	(Session ID in cookie.)	√	-	-	-	-	-	-	-	-	-	-	-	-
	Params															
	Update	Integer	0:False(Time-out immediately) 1:True(Time-out extension)	√	-	-	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "Request": {
    "Command": "SessionRenewal",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Update": 1
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SessionRenewal	√	-	-	-	-	-	-	-	-	-	-	-	-
	Result	String	(Result of command processing.)	√	-	-	-	-	-	-	-	-	-	-	-	-

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

3.2.3. Get preset zoom position

Acquire the preset zoom position.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetPresetZoomPosition	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—

Example

```
{
  "Request": {
    "Command": "GetPresetZoomPosition",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetPresetZoomPosition	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	Data															
	A	Integer	Value of Preset "0" - "499",no-setting "-1"	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	B	Integer	Value of Preset "0" - "499",no-setting "-1"	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	C	Integer	Value of Preset "0" - "499",no-setting "-1"	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—

Example

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

3.2.4. Set preset zoom position

Presets the zoom position.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetPresetZoomPosition	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	Params															
	ID	String	"A"/"B"/"C" is Preset ID	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	Position	Integer	Value of Preset "0" - "499", delete setting is "-1"	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—

Example

```
{
  "Request": {
    "Command": "SetPresetZoomPosition",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": "A",
      "Position": 300
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetPresetZoomPosition	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	—	—	✓	—	—	—

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	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	GetNTPStatus	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-

Example

```
{
  "Request": {
    "Command": "GetNTPStatus",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	GetNTPStatus	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-
	Data			-	-	-	-	-	-	-	-	-	-	-	-	-
	Address	String	(IP address)	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-
	TcSync	String	"On" / "Off"	-	✓	✓	✓	✓	✓	-	✓	✓	-	-	-	-
	Status	String	"Synchronized" / "Not Synchronized" / "Master"	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-

Example

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

3.2.7. Set NTP Server

Set the NTP server address.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			—	—	—	—	—	—	—	—	—	—	—	—	—
	Command	String	SetNTPServer	—	✓	✓	✓	✓	✓	—	✓	✓	✓	—	—	—
	SessionID	String	(Session ID in cookie.)	—	✓	✓	✓	✓	✓	—	✓	✓	✓	—	—	—
	Params			—	—	—	—	—	—	—	—	—	—	—	—	—
	Address	String	(IP address)	—	✓	✓	✓	✓	✓	—	✓	✓	✓	—	—	—

Example

```
{
  "Request": {
    "Command": "SetNTPServer",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Address": "192.168.0.100"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			—	—	—	—	—	—	—	—	—	—	—	—	—
	Requested	String	SetNTPServer	—	✓	✓	✓	✓	✓	—	✓	✓	✓	—	—	—
	Result	String	(Result of command processing.)	—	✓	✓	✓	✓	✓	—	✓	✓	✓	—	—	—

Example

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

3.2.8. Set NTP Settings

Set the NTP settings.

Request	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetNTPSettings	-	✓	✓	✓	✓	✓	-	✓	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	✓	✓	✓	✓	✓	-	✓	-	-	✓	✓	✓
	Params															
	TcSync	String	"On"/"Off"	-	✓	✓	✓	✓	✓	-	✓	-	-	-	-	-
	TimeSync	Integer	0:OFF, 1:ON (For PZ400/200, other Params is valid when this parameter is ON.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	TimeZone	String	(Time Zone) "GMT-1100" - "GMT+1300"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	ServerAddress	String	(IP address)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	TimeInterval	Integer	Value of Time interval(min)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	MainTimeShow															
	Status	Integer	0:OFF, 1:ON	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	XPosition	Integer	Value of X Position. (0 - 100)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	YPosition	Integer	Value of Y Position. (0 - 100)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SubTimeShow															
	Status	Integer	0:OFF, 1:ON	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	XPosition	Integer	Value of X Position. (0 - 100)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	YPosition	Integer	Value of Y Position. (0 - 100)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": " SetNTPSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "TcSync": "On"
    }
  }
}
```

Example(In case of PZ400/200/510)

```
{
  "Request": {
    "Command": " SetNTPSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "TimeSync": 1,
      "TimeZone": "GMT+0900",
      "ServerAddress": "192.168.123.123",
      "TimeInterval": 1440,
      "MainTimeShow": {
        "Status": 1,
        "XPosition": 0,
        "YPosition": 0
      }
      "SubTimeShow": {
        "Status": 0,
        "XPosition": 0,
        "YPosition": 0
      }
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetNTPSettings	-	✓	✓	✓	✓	✓	-	✓	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	✓	✓	✓	✓	✓	-	✓	-	-	✓	✓	✓

Example

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

3.2.9. Get NTP Settings

Get NTP Settings.

Request	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	GetNTPSettings	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "GetNTPSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	GetNTPSettings	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Data			-	-	-	-	-	-	-	-	-	-	-	-	-
	TimeSync	Integer	0:OFF, 1:ON	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	TimeZone	String	(Time Zone) "GMT-1100" - "GMT+1300"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	ServerAddress	String	(IP address)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	TimeInterval	Integer	Value of Time interval(min)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	MainTimeShow			-	-	-	-	-	-	-	-	-	-	-	-	-
	Status	Integer	0:OFF, 1:ON	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	XPosition	Integer	Value of X Position.	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	YPosition	Integer	Value of Y Position.	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	SubTimeShow			-	-	-	-	-	-	-	-	-	-	-	-	-
	Status	Integer	0:OFF, 1:ON	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	XPosition	Integer	Value of X Position.	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	YPosition	Integer	Value of Y Position.	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Response": {
    "Requested": "GetNTPSettings",
    "Result": "Success",
    "Data": {
      "TimeSync": 1,
      "TimeZone": "GMT+0900",
      "ServerAddress": "192.168.0.100",
      "TimeInterval": 1440,
      "MainTimeShow": {
        "Status": 1,
        "XPosition": 0,
        "YPosition": 0
      },
      "SubTimeShow": {
        "Status": "Off",
        "XPosition": 0,
        "YPosition": 0
      }
    }
  }
}
```

3.2.10. SystemRequest

Send the Request to the System.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	SystemRequest	-	-	-	-	-	-	-	-	-	-	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Params			-	-	-	-	-	-	-	-	-	-	-	-	-
	Request	String	"Reboot" / "Restore"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SystemRequest",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Request": "Reboot"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	SystemRequest	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	-	-	✓	✓	✓

Example

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

3.3. Camera Control Command

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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetCamStatus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "GetCamStatus",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetCamStatus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Data			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Camera		(Camera)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Status	String	Status "NoCard"(no card inserted) / "Stop"(recording stop) / "Standby"(record standby) / "Rec"(recording) / "RecPause"(recording pause) PZ400/200 always return "NoCard".	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Mode	String	Mode "Camera"(record mode) / "Thumbnail"(display thumbnail) / "Play"(play clip) / "Review"(review clip) / "USB"(connect USB) / "EditMetadata"(edit metadata)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	RecMode	String	Rec mode "Normal" / "Pre" / "Clip" / "Frame" / "Interval" / "Variable"	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
	TC	String	recording time(sec)(32bit length)	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
	AspectRatio	String	Aspect ratio "16:9" / "4:3"	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
	WebAccess	String	Web access "Off" / "On"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VideoOutputStatus	String	Video output status of camera "Off" / "On"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	MenuStatus	String	Menu Open status of camera "Off" / "On"	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
	MenuOutput	String	"All" / "Web"	-	-	-	-	-	-	✓	-	-	-	-	-	-
	FullAuto			✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
	Status	String	Status "Off" / "On" / "Preset"	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
	Exposure			-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

	Status	String	Exposure "Auto" / "Manual" / "IrisPriority" / "ShutterPriority" / "Bright"	-	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
Iris	Status	String	Mode "Manual" / "Auto" / "AutoAELock" / "Auto" / "Manual"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Value	String	Character string for iris value	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Position	Integer	Iris position (0-255, for Slider button position)	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-
Gain	Status	String	Mode "ManualL" / "ManualM" / "ManualH" / "Aic" or "AGC"(HC5x0) / "AicAELock" / "Lolux" / "Variable" / "Auto" / "Manual"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Value	String	Character string for gain value	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AeLevel	Status	String	Mode "AeOff" / "AeOn" / "AeOnFace"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Adjust	String	AE Level adjustment "On" / "Off"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Value	String	Character string for AE level value	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shutter	Status	String	Mode "Off" / "Manual" / "Step" / "Variable" / "Eei" / "EeiAELock" / "Auto" / "Manual"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Value	String	Character string for Shutter value	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Whb	Status	String	Mode "Preset"/"A"/"B"/"Faw"/"FawAELock" / "Faw" / "Awb" / "OnePush" / "3200K" / "5600K" / "Manual" / "Auto" / "Indoor" / "Outdoor" / "OnePush" / "Manual"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Value	String	Character string for White Balance value	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	WhPRScale	Integer	Slide bar total length for White paint Red(0-64). (*)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			Slide bar total length for White paint Red(0-255). (*)	-	-	-	-	-	-	-	-	✓	✓	-	-	✓	✓
	WhPBScale	Integer	Slide bar total length for White paint Blue(0-64). (*)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			Slide bar total length for White paint Blue(0-255). (*)	-	-	-	-	-	-	-	-	✓	✓	-	-	✓	✓
	WhPRPosition	Integer	Slide bar current position for White paint Red(0-64). (*)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			Slide bar current position for White paint Red(0-255). (*)	-	-	-	-	-	-	-	-	✓	✓	-	-	✓	✓
	WhPBPosition	Integer	Slide bar current position for White paint Blue(0-64). (*)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			Slide bar current position for White paint Blue(0-255). (*)	-	-	-	-	-	-	-	-	✓	✓	-	-	✓	✓
	WhPRValue	String	Character string for White paint Red value	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	WhPBValue	String	Character string for White paint Blue value	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bright	Value	String	Character string for Bright value	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
Zoom	Dynamic	String	Dynamic Zoom Status "On" / "Off"	-	-	-	✓	✓	✓	-	-	-	-	-	-	-	-
	DynamicPos	Integer	Dynamic Zoom Position(0-499)	-	-	-	✓	✓	✓	-	-	-	-	-	-	-	-
	Position	Integer	Zoom position (0-499, for Slider button position)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	DisplayValue	String	Character string for Zoom value "Z0 - Z149" (GY-HM200/HM25x/HM280/LS300 F-number "0 - 9999mm")	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PanTilt	SpeedWithZoom	String	Speed With Zoom Status "On" / "Off"	-	-	-	-	-	-	-	✓	-	-	-	✓	✓	✓
	PresetSpeed	Integer	Pan/Tilt/Preset speed (1-30)	-	-	-	-	-	-	-	-	✓	✓	-	-	✓	✓
Focus	Status	String	Mode "AFFace" / "AF" / "MFOnePush" / "MF" / "MFFace" / "Auto" / "Manual"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Value	String	Character string for Focus value	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MasterBlack	Value	String	Character string for MasterBlack value	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-	-

StatusDisp	Integer	Display Value of gain 0:Disable, 1:Enable	-	-	-	✓	✓	✓	✓	-	✓	✓	-	-	-
Manual	Integer	button "MANUAL" switch of gain 0:Disable, 1:Enable PZ400/200 always return 0.	✓	✓	-	-	-	-	-	✓	-	-	✓	✓	✓
Auto	Integer	button "AUTO" switch of gain 0:Disable, 1:Enable PZ400/200 always return 0.	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
Lolux	Integer	button "LOLUX" switch of gain 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Variable	Integer	button "Variable" switch of gain 0:Disable, 1:Enable	-	-	-	-	-	-	-	✓	✓	✓	-	-	-
L	Integer	button "L" switch of gain 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
M	Integer	button "M" switch of gain 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
H	Integer	button "H" switch of gain 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Up1	Integer	button "Up1" switch of gain 0:Disable, 1:Enable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Up2	Integer	button "Up2" switch of gain 0:Disable, 1:Enable	-	-	-	-	-	-	-	✓	-	✓	-	-	-
Down1	Integer	button "Down1" switch of gain 0:Disable, 1:Enable	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Down2	Integer	button "Down2" switch of gain 0:Disable, 1:Enable	-	-	-	-	-	-	-	✓	-	✓	-	-	-
AeLevel		(AE Level function)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Enable	Integer	switch 0:Disable, 1:Enable	-	-	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
StatusDisp	Integer	Display Value of AELevel 0:Disable, 1:Enable	-	-	-	✓	✓	✓	✓	-	✓	✓	-	-	-
Up	Integer	button "▲" switch of AElevel 0:Disable, 1:Enable PZ400/200 always return 0.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Down	Integer	button "▼" switch of AElevel 0:Disable, 1:Enable PZ400/200 always return 0.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AdjustOn	Integer	button "ON" switch of AElevel 0:Disable, 1:Enable	-	-	-	✓	✓	✓	✓	-	✓	✓	-	-	-
AdjustOff	Integer	button "OFF" switch of AElevel 0:Disable, 1:Enable	-	-	-	✓	✓	✓	✓	-	✓	✓	-	-	-
Shutter		(Shutter function)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Enable	Integer	switch 0:Disable, 1:Enable	-	-	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
StatusDisp	Integer	Display Value of Shutter 0:Disable, 1:Enable)	-	-	-	✓	✓	✓	✓	-	✓	✓	-	-	-
Off	Integer	button "OFF" switch of shatter 0:Disable, 1:Enable	✓	✓	✓	-	-	-	-	-	-	-	-	-	-
Manual	Integer	button "MANUAL" switch of shatter 0:Disable, 1:Enable	✓	✓	-	-	-	-	-	-	-	-	-	-	-
Step	Integer	button "STEP" switch of shatter 0:Disable, 1:Enable	-	-	-	✓	✓	✓	✓	-	✓	✓	-	-	-
Variable	Integer	button "VARIABLE" switch of shatter 0:Disable, 1:Enable	-	-	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Eei	Integer	button "EEI" switch of shatter 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Slower	Integer	button "▲" switch of shatter 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Faster	Integer	button "▼" switch of shatter 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Whb		(White balance function)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Enable	Integer	switch 0:Disable, 1:Enable	-	-	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
StatusDisp	Integer	Display Value of White balance 0:Disable, 1:Enable	-	-	-	✓	✓	✓	✓	-	✓	✓	-	-	-
Auto	Integer	button "Auto" switch of White balance 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
Indoor	Integer	button "Indoor" switch of White balance 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
Outdoor	Integer	button "Outdoor" switch of White balance 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
OnePush	Integer	button "OnePush" switch of White balance 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	-	✓	✓	✓
Manual	Integer	button "MANUAL" switch of White balance 0:Disable, 1:Enable	✓	✓	-	-	-	-	-	✓	-	-	✓	✓	✓
Faw	Integer	button "FAW" switch of White balance 0:Disable, 1:Enable	✓	✓	-	-	-	-	-	✓	-	-	-	-	-
Preset	Integer	button "PRESET" switch of White balance 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
A	Integer	button "A" switch of White balance 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
B	Integer	button "B" switch of White balance 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Awb	Integer	button "AWB" switch of White balance 0:Disable, 1:Enable	-	-	-	-	-	-	-	✓	-	-	-	-	-
PushAuto	Integer	button "OnePushTrigger" switch of White balance 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
K3200	Integer	button "3200K" switch of White balance 0:Disable, 1:Enable	-	-	-	-	-	-	-	✓	-	-	-	-	-

Down	Integer	button "<" switch of Detail 0:Disable, 1:Enable	-	✓	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-
User		(switch of user assignment)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Sw0	Integer	button "SW0" switch of User Switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	✓	-	-	-	-
Sw1	Integer	button "SW1" switch of User Switch 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw2	Integer	button "SW2" switch of User Switch 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw3	Integer	button "SW3" switch of User Switch 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw4	Integer	button "SW4" switch of User Switch 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw5	Integer	button "SW5" switch of User Switch 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw6	Integer	button "SW6" switch of User Switch 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw7	Integer	button "SW7" switch of User Switch 0:Disable, 1:Enable	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw8	Integer	button "SW8" switch of User Switch 0:Disable, 1:Enable	-	-	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw9	Integer	button "SW9" switch of User Switch 0:Disable, 1:Enable	-	-	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-
Sw10	Integer	button "SW10" switch of User Switch 0:Disable, 1:Enable	-	-	✓	-	-	-	-	✓	-	-	✓	-	-	-
Sw11	Integer	button "SW11" switch of User Switch 0:Disable, 1:Enable	-	-	✓	-	-	-	-	-	-	-	✓	-	-	-
Sw12	Integer	button "SW12" switch of User Switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
Sw13	Integer	button "SW13" switch of User Switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
LensRet	Integer	button "LensRet" switch of User Switch 0:Disable, 1:Enable	-	-	✓	-	-	-	-	-	-	✓	-	-	-	-
Sub1	Integer	button "Sub1" switch of User Switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
Sub2	Integer	button "Sub2" switch of User Switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
Sub3	Integer	button "Sub3" switch of User Switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
VfSw1	Integer	button "VfSW1" switch of User Switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	✓	-	-	-	-
VfSw2	Integer	button "VfSW2" switch of User Switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	✓	-	-	-	-
Streaming		(Streaming function)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Enable	Integer	switch 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-
StatusDisp	Integer	Display Value of Streaming 0:Disable, 1:Enable	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-
On	Integer	button "ON" switch of Streaming 0:Disable, 1:Enable	✓	✓	✓	-	-	-	-	✓	✓	✓	✓	✓	✓	✓
Off	Integer	button "OFF" switch of Streaming 0:Disable, 1:Enable	✓	✓	✓	-	-	-	-	✓	✓	✓	✓	✓	✓	✓
Disptv		(Display function)	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	-	-	-
On	Integer	button "ON" switch of Display 0:Disable, 1:Enable	✓	✓	-	✓	✓	✓	✓	✓	-	-	✓	-	-	-
Off	Integer	button "OFF" switch of Display 0:Disable, 1:Enable	✓	✓	-	✓	✓	✓	✓	✓	-	-	✓	-	-	-
CharacterMix		(Character mix function)	-	-	✓	-	-	-	-	-	-	✓	✓	-	-	-
Sdi	Integer	button "SDI" switch of CharacterMix 0:Disable, 1:Enable	-	-	✓	-	-	-	-	-	-	✓	✓	-	-	-
Hdmi	Integer	button "HDMI" switch of CharacterMix	-	-	✓	-	-	-	-	-	-	✓	✓	-	-	-

Sw0	String	String of User switch 0 "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.	√	√	√	√	√	√	√	√	-	√	√	-
Sw2	String	String of User switch 2. Same as above.	√	√	√	√	√	√	√	√	-	√	√	-
Sw3	String	String of User switch 3. Same as above.	√	√	√	√	√	√	√	√	-	√	√	-
Sw4	String	String of User switch 4. Same as above.	√	√	√	√	√	√	√	√	-	√	√	-
Sw5	String	String of User switch 5. Same as above.	√	√	√	√	√	√	√	√	-	√	√	-
Sw6	String	String of User switch 6. Same as above.	√	√	√	√	√	√	√	√	-	√	√	-
Sw7	String	String of User switch 7. Same as above.	√	√	√	√	√	√	√	√	-	√	√	-
Sw8	String	String of User switch 8. Same as above.	-	-	√	√	√	√	√	√	-	√	√	-
Sw9	String	String of User switch 9. Same as above.	-	-	√	√	√	√	√	√	-	√	√	-
Sw10	String	String of User switch 10. Same as above.	-	-	√	-	-	-	√	-	√	√	-	-
Sw11	String	String of User switch 11. Same as above.	-	-	√	-	-	-	-	-	√	-	-	-
Sw12	String	String of User switch 12. Same as above.	-	-	-	-	-	-	-	-	-	√	-	-
Sw13	String	String of User switch 13. Same as above.	-	-	-	-	-	-	-	-	-	-	√	-
LensRet	String	String of User switch Lens Ret. Same as above.	-	-	√	-	-	-	-	-	-	-	-	-
VfSw1	String	String of User Viewfinder switch1 Same as above.	-	-	-	-	-	-	-	-	-	√	-	-
VfSw2	String	String of User Viewfinder switch2 Same as above.	-	-	-	-	-	-	-	-	-	-	√	-
Whb		(Button of White balance)	√	√	√	√	√	√	√	√	-	√	√	-
Preset	String	String of Preset button "PRESET" / "A" / "B" / "FAW"	-	-	√	√	√	√	√	√	-	√	√	-
A	String	String of A button "PRESET" / "A" / "B" / "FAW"	-	-	√	√	√	√	√	√	-	√	√	-
B	String	String of B button "PRESET" / "A" / "B" / "FAW"	-	-	√	√	√	√	√	√	-	√	√	-

* 0-64 can be used for AWB mode and 0-255 for manual white balance mode on KY-PZ100.

Example

```
{
  "Response": {
    "Requested": "GetCamStatus",
    "Result": "Success",
    "Data": {
      "Camera": {
        "Status": "Standby", "Mode": "Camera", "RecMode": "Normal",
        "TC": "#####", "AspectRatio": "16:9", "WebAccess": "On"
      },
      "Fullauto": {
        "Status": "Auto"
      },
      "Iris": {
        "Status": "Auto", "Value": "0"
      },
      "Gain": {
        "Status": "Aic", "Value": "0"
      },
      "AeLevel": {
        "Status": "AeOn", "Adjust": "On", "Value": "0"
      },
      "Shutter": {
        "Status": "Eei", "Value": "0"
      },
      "Whb": {
        "Status": "Faw", "Value": "0",
        "WhPRScale": 0, "WhPBScale": 0,
        "WhPRPosition": 100, "WhPBPosition": 100,
        "WhPRValue": 100, "WhPBValue": 100
      },
      "Zoom": {
        "Dynamic": "Off", "DynamicPos": 0,
        "Position": 100, "DisplayValue": "Z100"
      },
      "Focus": {
        "Status": "AF", "Value": "0"
      },
      "Streaming": {
        "Status": "Stop"
      },
      "Disptv": {
        "Status": "Off"
      },
      "CharacterMix": {
        "Sdl": "Off", "Hdm": "Off", "Video": "Off"
      },
      "TallyLamp": {
        "Priority": "Camera", "Sw": "Off"
      },
      "SlotA": {
        "Status": "Select", "Protect": "Unlock", "Remain": "120", "ClipNum": 50,
        "RemainWarning": 0
      },
    },
  },
}
```

```

"SlotB": {
  "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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetCamCtrl	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Params															
	CamCtrl	String	Camera Control "Rec": recording start / "Stop": recording stop	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Example

```
{
  "Request": {
    "Command": "SetCamCtrl ",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "CamCtrl": "Rec"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetCamCtrl	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Example

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

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

Control zoom position

In operation,obey preset zoom speed settings of camera,

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetZoomCtrl	√	√	√	√	√	√	√	√	—	√	√	√	√
	SessionID	String	(Session ID in cookie.)	√	√	√	√	√	√	√	√	—	√	√	√	√
	Params															
	Position	Integer	Zoom position "0"~"499"	√	√	√	√	√	√	√	√	—	√	√	√	√

Example

```
{
  "Request": {
    "Command": "SetZoomCtrl ",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Position": 400
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetZoomCtrl	√	√	√	√	√	√	√	√	—	√	√	√	√
	Result	String	(Result of command processing.)	√	√	√	√	√	√	√	√	—	√	√	√	√

Example

```
{
  "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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStreamingCtrl	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Params															
	Streaming	String	Streaming Control "On" : streaming start / "Off" : streaming stop	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Example

```
{
  "Request" : {
    "Command" : "SetStreamingCtrl",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params" : {
      "Streaming" : "On"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStreamingCtrl	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetTallyLampCtrl	√	√	√	√	√	√	√	√	√	√	√	-	√
	SessionID	String	(Session ID in cookie.)	√	√	√	√	√	√	√	√	√	√	√	-	√
	Params															
	Sw	String	Tally lamp Control "On"(The order turns on LED) / "Off"(The order turns off LED) /	√	√	√	√	√	√	√	√	√	√	√	-	√

Example

```
{
  "Request": {
    "Command": "SetTallyLampCtrl",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Sw": "On"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetTallyLampCtrl	√	√	√	√	√	√	√	√	√	√	√	-	√
	Result	String	(Result of command processing.)	√	√	√	√	√	√	√	√	√	√	√	-	√

Example

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

3.3.6. Set Web Button Event

Issue a button event

Request	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetWebButtonEvent	√	√	√	√	√	√	√	√	√	√	√	√	√
	SessionID	String	(Session ID in cookie.)	√	√	√	√	√	√	√	√	√	√	√	√	√
	Params		(Button parameter is selected by Kind parameter)													
	Kind	String	Kind of button event													
			"Fullauto"	√	√	√	√	√	√	√	-	√	√	-	-	-
			"Iris"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"Gain"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"AeLevel"	√	√	√	√	√	√	√	√	√	√	-	-	-
			"Shutter"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"Whb"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"Zoom"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"Focus"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"User"	√	√	√	√	√	√	√	√	√	√	-	-	-
			"Disptv"	√	√	√	√	√	√	√	√	√	√	-	-	-
			"Menu"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"Rec"	√	√	√	√	√	√	√	√	√	√	-	-	-
			"MasterBlack"	-	√	√	√	√	√	-	-	√	√	-	-	-
			"Detail"	-	√	√	√	√	√	-	-	√	√	-	-	-
			"Exposure"	-	-	-	-	-	-	-	√	-	-	√	√	√
			"SpeedWithZoom"	-	-	-	-	-	-	-	√	-	-	√	√	√
			"Bright"	-	-	-	-	-	-	-	-	-	-	√	√	√
			"Luminance"	-	-	-	-	-	-	-	-	-	-	√	√	√
			"Saturation"	-	-	-	-	-	-	-	-	-	-	√	√	√
			"Contrast"	-	-	-	-	-	-	-	-	-	-	√	√	√
			"Sharpness"	-	-	-	-	-	-	-	-	-	-	√	√	√
			"Hue"	-	-	-	-	-	-	-	-	-	-	√	√	√
			"Flip"	-	-	-	-	-	-	-	-	-	-	√	√	√
			"Mirror"	-	-	-	-	-	-	-	-	-	-	√	√	√
	Button	String	Fullauto event													
			"On" / "Off"	√	√	√	√	√	√	√	-	√	√	-	-	-
			"Preset"	-	-	-	-	-	-	√	-	-	-	-	-	-
			Exposure event													
			"Auto" / "Manual" / "IrisPriority" (AAE on PZ400/200/510) / "ShutterPriority" (SAE on PZ400/200/510) / "Bright" (only PZ400/200/510)	-	-	-	-	-	-	-	√	-	-	√	√	√
			Iris event													
			"Manual" / "Auto"	√	√	√	√	√	√	√	-	√	√	-	-	-
			"Open1"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"Open2"	√	√	√	√	√	√	√	-	√	√	-	-	-
			"Open3"	√	√	√	√	√	√	√	-	√	√	-	-	-
			"Close1"	√	√	√	√	√	√	√	√	√	√	√	√	√
			"Close2"	√	√	√	√	√	√	√	-	√	√	-	-	-
			"Close3"	√	√	√	√	√	√	√	-	√	√	-	-	-
			"PushAuto"	√	√	√	√	√	√	√	-	√	√	-	-	-
			Gain event													
			"Alc"	√	√	-	-	-	-	-	-	-	-	-	-	-
			"Lolux"	√	√	√	√	√	√	√	-	√	√	-	-	-

"Sw12" / "Sw13"	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
"LensRet"	-	-	✓	-	-	-	-	-	✓	-	-	-	-	-
"Sub1" / "Sub2" / "Sub3"	-	-	-	-	-	-	-	✓	-	-	-	-	-	-
"VfSw1" / "VfSw2"	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
Disptv event														
"On":(Display on TV) / "Off":(Display on TV)	✓	✓	-	✓	✓	✓	✓	-	-	-	-	-	-	-
"Sdi":(Character Mix)	-	-	✓	-	-	-	-	-	✓	✓	-	-	-	-
"Hdmi":(Character Mix)	-	-	✓	-	-	-	-	-	✓	✓	-	-	-	-
"Video":(Character Mix)	-	-	✓	-	-	-	-	-	✓	✓	-	-	-	-
Menu event														
"Display":(Menu) / "Status":(Menu) /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
"Menu":(Menu) / "Cancel":(Menu) / "Set":(Menu) /	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
"Up":(Menu) / "Down":(Menu) / "Left":(Menu) / "Right":(Menu)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
※ "Up", "Down", "Left", and "Right" events call assigned function when menu is closed.	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
Rec event														
"Start":Recording start / "Stop":Recording stop	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
Detail event "Up" / "Down"	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	-	-	-
SpeedWithZoom event "Off" / "On"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓	✓
Bright event														
"Up" / "Down"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓
Luminance event														
"Up" / "Down"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓
Saturation event														
"Up" / "Down"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓
Contrast event														
"Up" / "Down"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓
Sharpness event														
"Up" / "Down"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓
Hue event														
"Up" / "Down"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓
Flip event														
"On" / "Off"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓
Mirror event														
"On" / "Off"	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓

Example

```

{
  "Request": {
    "Command": "SetWebButtonEvent ",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Kind": "Fullauto",
      "Button": "On"
    }
  }
}

```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetWebButtonEvent	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Example

```
{
  "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 maximum speed of zoom.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetWebSliderEvent	√	√	√	√	√	√	√	√	√	√	√	√	√
	SessionID	String	(Session ID in cookie.)	√	√	√	√	√	√	√	√	√	√	√	√	√
	Params															
	Kind	String	Kind of Slider event													
" ZoomBar "			√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Position	Integer	Slider event	—	—	—	—	—	—	—	—	—	—	—	—	—
ZoomBar 0~499:Zoom position			√	√	√	√	√	√	√	√	√	√	√	√	√	√
			IrisBar 0~255:Iris position	—	—	—	—	—	—	—	—	—	—	—	—	—

Example

```
{
  "Request" : {
    "Command" : "SetWebSliderEvent ",
    "SessionID" : "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params" : {
      "Kind" : "ZoomBar",
      "Position" : 73
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetWebSliderEvent	√	√	√	√	√	√	√	√	√	√	√	√	√
	Result	String	(Result of command processing.)	√	√	√	√	√	√	√	√	√	√	√	√	√

Example

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

3.3.8. Set Web XYField Event

Issue a two-dimensional slider event

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetWebXYFieldEvent	√	√	√	√	√	√	√	√	√	√	√	√	√
	SessionID	String	(Session ID in cookie.)	√	√	√	√	√	√	√	√	√	√	√	√	√
	Params															
	Kind	String	Kind of XYField event "WhPaintRB ":White paint R and B	√	√	√	√	√	√	√	√	√	√	√	√	√
	XPosition	Integer	XYField event WhPaintRB "0"~"64" (White paint B position) (PZ400/200/510: Max value of Whb Auto is 20, Whb manual is 255)	√	√	√	√	√	√	√	√	√	√	√	√	√
	YPosition	Integer	XYField event WhPaintRB "0"~"64" (White paint R position) (PZ400/200/510: Max value of Whb Auto is 20, Whb manual is 255)	√	√	√	√	√	√	√	√	√	√	√	√	√

Example

```
{
  "Request": {
    "Command": "SetWebXYFieldEvent",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Kind": "WhPaintRB",
      "XPosition": 32,
      "YPosition": 32
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetWebXYFieldEvent	√	√	√	√	√	√	√	√	√	√	√	√	√
	Result	String	(Result of command processing.)	√	√	√	√	√	√	√	√	√	√	√	√	√

Example

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

3.3.9. Get GPS Information

Request location information of camera GPS function.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetGPSInfo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "GetGPSInfo",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetGPSInfo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Data															
	AntennaLevel	String	"None" / "Lost" / "Searching" / "Level1" / "Level2" / "Level3"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Location	String	"<+/-><Latitude>"<+/-><Longitude>"<+/-><Altitude>" Latitude +:North, -:South, 00.00000(min) - 90.00000(max) Longitude +:East, -:West, 000.000000(min) - 179.999999(max) Altitude +, -, 0.000000(min) - 99999999(max)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*Location data is valid only if AntennaLevel is "Level1", "Level2", or "Level3".

Example

```
{
  "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-switch.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SeesawSwitchOperation	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-
	Params															
	Kind	String	Kind of Seesaw event "ZoomSeesaw" / "IrisSeesaw" / "MasterBlackSeesaw" / "FocusSeesaw"	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-
	Direction	String	Zoom operation "Stop" / "Wide" / "Tele" Iris operation "Open" / "Close" / "Stop" MasterBlack operation "Up" / "Down" / "Stop" Focus operation "Far" / "Near" / "Stop"	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-
	Speed	Integer	0 - 8	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-

**Speed = 0" has the same meaning as "Direction = Stop".

Example

```
{
  "Request": {
    "Command": "SeesawSwitchOperation",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Kind": "MasterBlack",
      "Direction": "Up",
      "Speed": 5
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SeesawSwitchOperation	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	-	-

Example

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

3.4. PTZ Camera Support Command

3.4.1. Set Pan Tilt Control

Pan / Tilt control command with direct position parameters.

Request	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetPTCtrl	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Params															
	PanDirection	String	"Stop" / "Left" / "Right" / "Home" / "Position"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	PanPosition	Integer / String	0/"0"(Back left limit) - 17540/"17540"(Front) - 35080/"35080"(Back right limit) PanPosition is valid when "PanDirection" is "Position".	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	PanSpeed	Integer / String	0 - 30/"0"~"30"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	TiltDirection	String	"Stop" / "Up" / "Down" / "Home" / "Position"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	TiltPosition	Integer / String	0/"0"(Just above) - 9040/"9040"(Just beside) - 12080/"12080"(Diagonally downward) "TiltPosition" is valid when "TiltDirection" is "Position".	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	TiltSpeed	Integer / String	0 - 30/"0"~"30"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

**Speed = 0" has the same meaning as "Direction = Stop".

Example

```
{
  "Request": {
    "Command": "SetPTCtrl",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "PanDirection": "Left",
      "PanPosition": 32768,
      "PanSpeed": 10,
      "TiltDirection": "Up",
      "TiltPosition": 32768,
      "TiltSpeed": 10
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	SetPTCtrl	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

Example

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

3.4.2. Joystick Operation

Joystick operation command with direction and speed parameters.
For PTZ cameras, it should function as a cursor movement while the MENU is displayed.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	JoyStickOperation	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Params															
	PanDirection	String	"Stop" / "Left" / "Right"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	PanSpeed	Integer	0 - 30	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	TiltDirection	String	"Stop" / "Up" / "Down"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	TiltSpeed	Integer	0 - 30	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

**Speed = 0" has the same meaning as "Direction = Stop".

Example

```
{
  "Request": {
    "Command": "JoyStickOperation",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "PanDirection": "Left",
      "PanSpeed": 10,
      "TiltDirection": "Up",
      "TiltSpeed": 10
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	JoyStickOperation	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

Example

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

3.4.3. Zoom switch operation

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	ZoomSwitchOperation	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
	Params			-	-	-	-	-	-	-	-	-	-	-	-	-
	Direction	String	"Stop" / "Wide" / "Tele"	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
	Speed	Integer	0 - 8	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
		Integer / String	0 - 8/"0"~"8"	-	-	-	-	-	-	-	✓	-	-	✓	-	-

**Speed = 0" has the same meaning as "Direction = Stop".

Example

```
{
  "Request": {
    "Command": "ZoomSwitchOperation",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Direction": "Wide",
      "Speed": 5
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	ZoomSwitchOperation	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
	Result	String	(Result of command processing.)	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓

Example

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

3.4.4. Set Pan / Tilt / Zoom preset

Control pan / tilt / zoom preset position.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetPTZPreset	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Params															
	No	Integer / String	1 - 100/"1"~"100"(Number of preset position) 1 - 255/"1"~"255"(Number of preset position in case of PZ400/200/510)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Operation	String	"Move"(Move to preset position) "Set" (Current position is stored) "Delete"(Delete the preset position)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "SetPTZPreset",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "No": 90,
      "Operation": "Move"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetPTZPreset	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

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	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetCamStatusMinimum	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

Example

```
{
  "Request" : {
    "Command" : "GetCamStatusMinimum",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3"
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetCamStatusMinimum	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Data															
	Camera		(Camera)													
	Status	String	Status "NoCard"(no card inserted) / "Stop"(recording stop) / PZ400/200 always return "NoCard". "Standby"(record standby) / "Rec"(recording)/ "RecPause"(recording pause)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	VideoOutputStatus	String	"On" / "Off"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	MenuStatus	String	"On" / "Off"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Exposure															
	Status	String	"Auto" / "Manual" / "IrisPriority" / "ShutterPriority" "Bright"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Iris															
	Status	String	"Auto" / "Manual"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Value	String	Character string for iris value	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Shutter															
	Status	String	"Auto" / "Manual"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Value	String	Character string for Shutter value	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Gain															
	Status	String	"Auto" / "Manual"	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Value	String	Character string for gain value	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	AeLevel															
	Status	String	"AeOff" / "AeOn"	-	-	-	-	-	-	-	✓	-	-	-	-	-
	Value	String	Character string for AE level value	-	-	-	-	-	-	-	✓	-	-	-	-	-

Example

```
{
  "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
        }
      }
    }
  }
}
```


3.4.6. Get Pan & Tilt Positions

Get Pan & Tilt positions

Request	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	GetPTPosition	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

Example

```
{
  "Request": {
    "Command": "GetPTPosition",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	GetPTPosition	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Data			-	-	-	-	-	-	-	-	-	-	-	-	-
	Pan	Integer	0(Back left limit) - 17540(Front) - 35080(Back right limit)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓
	Tilt	Integer	0(Just above) - 9040(Just beside) - 12080(Diagonally downward)	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓

Example

```
{
  "Response": {
    "Requested": "GetPTPosition",
    "Result": "Success",
    "Data": {
      "Pan": 17540,
      "Tilt": 9040
    }
  }
}
```

3.5. How to acquire JPEG data

These commands enables to start JPEG encoding and acquire 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'.

3.5.1.1. 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.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	JpegEncode	√	√	√	√	√	√	√	√	√	√	-	-	-
	SessionID	String	(Session ID in cookie.)	√	√	√	√	√	√	√	√	√	√	-	-	-
	Params															
	Operate	String	"Start" / "Stop"	√	√	√	√	√	√	√	√	√	√	-	-	-

Example

```
{
  "Request": {
    "Command": "JpegEncode",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Operate": "Start"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	JpegEncode	√	√	√	√	√	√	√	√	√	√	-	-	-
	Result	String	(Result of command processing.)	√	√	√	√	√	√	√	√	√	√	-	-	-

Example

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

3.5.2. Set JPEG encode size

Setting image resolution of acquiring JPEG data.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	SetJpegEncodeSize	-	-	-	-	-	-	-	✓	-	-	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	✓	-	-	-	-	-
	Params			-	-	-	-	-	-	-	-	-	-	-	-	-
	Size	String	"640x360" / "320x180"	-	-	-	-	-	-	-	✓	-	-	-	-	-

Example

```
{
  "Request": {
    "Command": "SetJpegEncodeSize",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Size": "320x180"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	SetJpegEncodeSize	-	-	-	-	-	-	-	✓	-	-	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	✓	-	-	-	-	-

Example

```
{
  "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	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
<a href="http://<ip address>/cgi-bin/get_jpg.cgi?SessionID=<Session ID in cookie.>">http://<ip address>/cgi-bin/get_jpg.cgi?SessionID=<Session ID in cookie.>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Request	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
GET /cgi-bin/get_jpg.cgi?SessionID=<Session ID in cookie.> HTTP/1.1\r\n	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Response	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
HTTP 1.1 200 OK\r\n 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: 32906\r\n Date: Wed, 07 Jan 2015 23:28:58 GMT\r\n Server: Camera\r\n \r\nData 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.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetIFBSettings	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	SessionID	String	(Session ID in cookie.)	-	✓	✓	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "Request": {
    "Command": "GetIFBSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetIFBSettings	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Result	String	(Result of command processing.)	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Data															
	Function	String	Switch to enable IFB function. "Enable" / "Disable"	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Address	String	Address of IFB server. "xxx.xxx.xxx.xxx"	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Port	Integer	Port of IFB server. 1 - 65535	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Mountpoint	String	Mountpoint on IFB server. Max 62 characters.	-	✓	✓	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "Response": {
    "Requested": "GetIFBSettings",
    "Result": "Success",
    "Data": {
      "Function": "Enable",
      "Address": "192.168.0.11",
      "Port": 5000,
      "Mountpoint": "DB90TX"
    }
  }
}
```

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.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetIFBSettings	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	SessionID	String	(Session ID in cookie.)	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Params															
	Function	String	Switch to enable IFB function. "Enable" / "Disable"	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Address	String	Address of IFB server. "xxx.xxx.xxx.xxx"	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Port	Integer	Port of IFB server. 1 - 65535	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Mountpoint	String	Mountpoint on IFB server. Max 62 characters.	-	✓	✓	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "Request": {
    "Command": "SetIFBSettings",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Function": "Enable",
      "Address": "192.168.0.11",
      "Port": 5000,
      "Mountpoint": "DB90TX"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetIFBSettings	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Result	String	(Result of command processing.)	-	✓	✓	-	-	-	-	-	-	-	-	-	-

Example

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

3.6.3. Set interruptible feedback streaming control

This command is used to start/stop IFB streaming

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	SetIFBCtrl	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	SessionID	String	(Session ID in cookie.)	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Params			-	-	-	-	-	-	-	-	-	-	-	-	-
	Streaming	String	Streaming Control "Start": start streaming / "Stop": stop streaming	-	✓	✓	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "Request": {
    "Command": "SetIFBCtrl",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Streaming": "Start"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	SetIFBCtrl	-	✓	✓	-	-	-	-	-	-	-	-	-	-
	Result	String	(Result of command processing.)	-	✓	✓	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "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.

This description is not for PZ400/200/510.

Menu settings on HM660/HM200/HM25x/HM280/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.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetStudioTally	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓
	SessionID	String	(Session ID in cookie.)	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓
	Params															
	Indication	String	"Off"(not Indicate status on LCD) / "Program"(Indicate PGM on LCD) / "Preview"(Indicate PVW on LCD)	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓

Example

```
{
  "Request": {
    "Command": "SetStudioTally",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Indication": "Program"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetStudioTally	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓
	Result	String	(Result of command processing.)	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓

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/HM280/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 Streaming *
Off, On **
Back Tally
Off, Rec, Live Streaming, Rec/Live Streaming *
Off, On **

* If the Tally System setting is "Internal".

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
Request																
	Command	String	SetTallyLampPriority	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	SessionID	String	(Session ID in cookie.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—
	Params															
	Priority	Integer	"Camera"(Camera is given priority of control.) / "Web"(Web is given priority of control.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	—

Example

```
{
  "Request" : {
    "Command" : "SetTallyLampPriority",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params" : {
      "Priority" : "Camera"
    }
  }
}
```

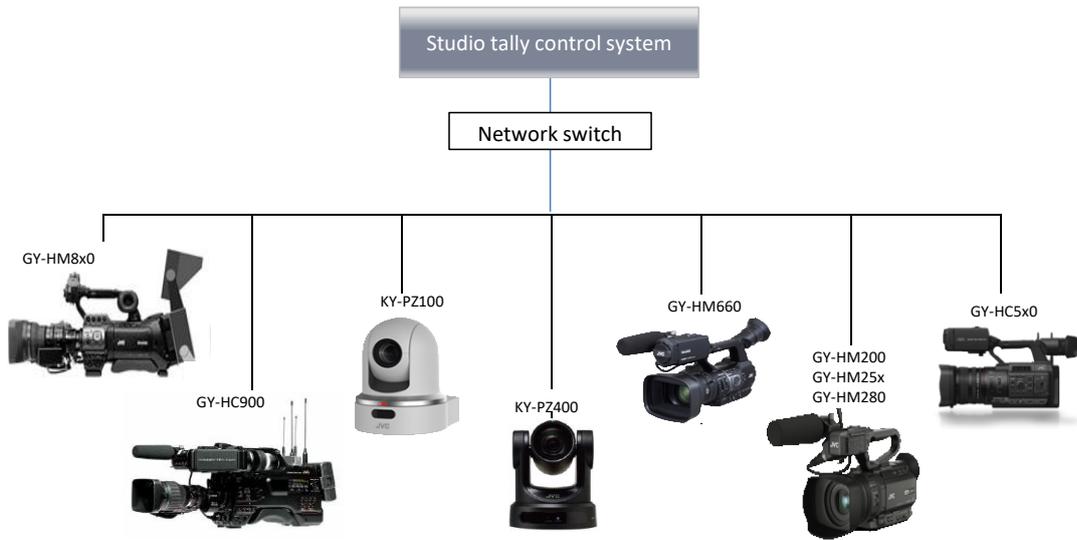
Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetTallyLampPriority	√	√	√	√	√	√	√	√	√	√	-	-	-
	Result	String	(Result of command processing.)	√	√	√	√	√	√	√	√	√	√	-	-	-

Example

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

3.7.3. Relation of commands on Studio tally system

System Chart



LED lighting of each model

TallyLampPriority	StudioTally	Settings	front		back							
			GY-HM8x0	GY-HC900	KY-PZ100	KY-PZ400	KY-PZ510	GY-HM660	GY-HM200	GY-HM25x	GY-HM280	GY-HC5x0
Web	Program	External or Studio	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
	Preview	External or Studio	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Off	External or Studio	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Camera	Program	External or Studio	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
	Preview	External or Studio	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
		other	External or Studio	Red								
	Off	External or Studio	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey

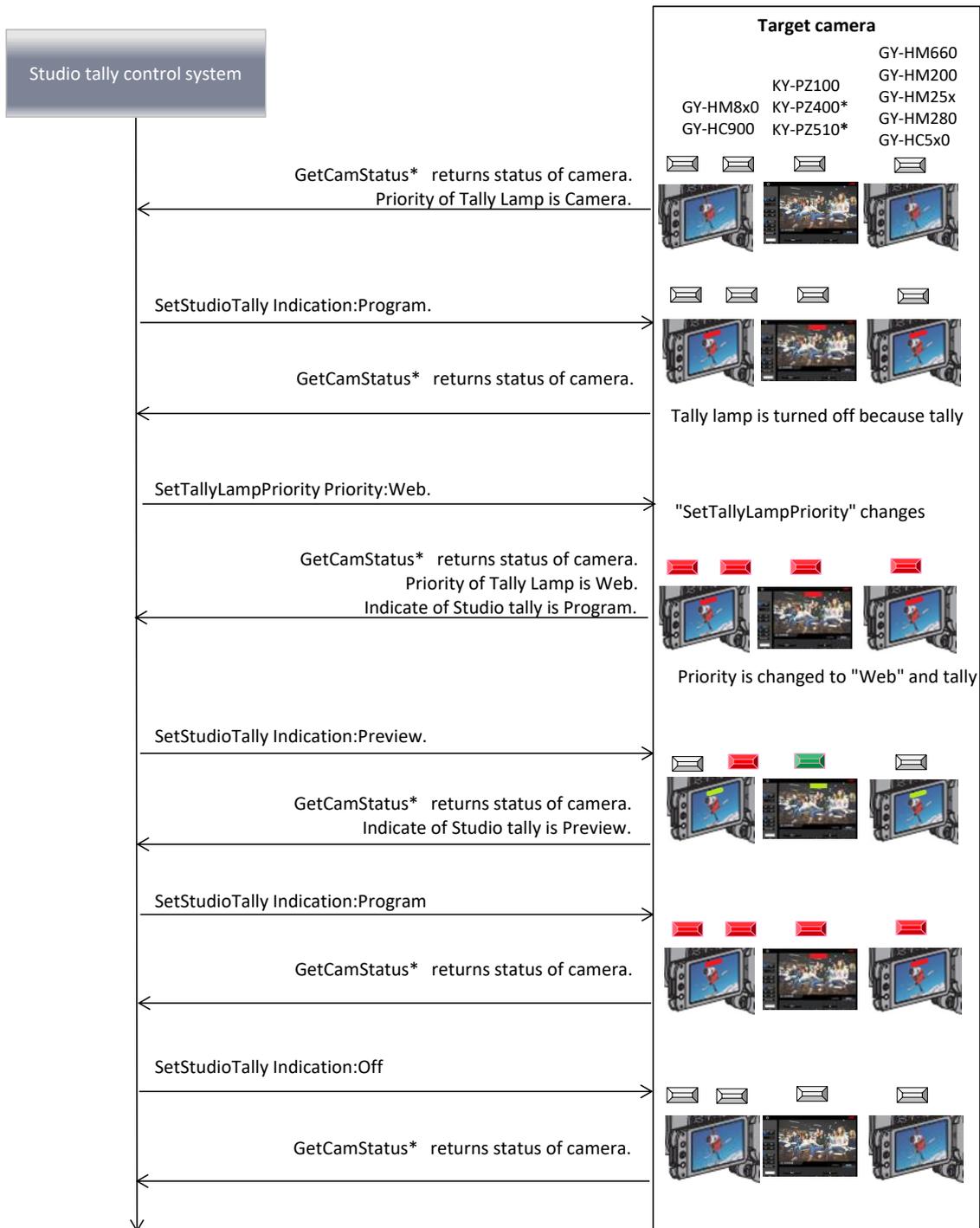
LCD indication of each model

TallyLampPriority	StudioTally	front		back					
		GY-HM8x0	GY-HC900	KY-PZ100	GY-HM660	GY-HM200	GY-HM25x	GY-HM280	GY-HC5x0
Any time	Program	Red							
	Preview	Green							
	Off	Grey							

LCD indication image



3.7.4 Sequence of studio tally system



* "GetCamStatusMinimum" command can be used to acquire the status as well on KY-PZ100/400/510.
 * KY-PZ400/510 is not indication of studio tally status on LCD.

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. GetCurrentReturnOverIpServerID

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	GetCurrentReturnOverIpServerID	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

```
{
  "Request" : {
    "Command" : "GetCurrentReturnOverIpServerID",
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3",
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	GetCurrentReturnOverIpServerID	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Data															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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

3.8.2. SetCurrentReturnOverIpServerID

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetCurrentReturnOverIpServerID	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

```
{
  "Request": {
    "Command": "SetCurrentReturnOverIpServerID",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 0
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetCurrentReturnOverIpServerID	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	✓	✓	-	-	-	-

Example

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

3.8.3. GetReturnOverIpServerSettings

Get Return over IP settings for each server ID.

Request	Key	Style	Value	HM650	HM660	HM6x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	GetReturnOverIpServerSettings	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Params			-	-	-	-	-	-	-	-	-	-	-	-	-
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

```
{
  "Request": {
    "Command": "GetReturnOverIpServerSettings",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Requested	String	GetReturnOverIpServerSettings	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Data															
	Alias	String	(Another name of server)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Type	String	"RTSP/RTP" / "Icecast" / "SRT"	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	RTSP/RTP		(Selected by Type)													
	Protocol	String	"UDP"/"TCP"	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcAddress	String	(IP address)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcPort	Integer	(Port number)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	StreamId	String	(Stream ID)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Username	String	(User name)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Password	String	(Password for RTSP/RTP)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Resolution	integer	0:1280x720	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	FrameRate	integer	1:60p, 2:30p, 4:50p, 5:25p	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Zixi		(Selected by Type)													
	SrcAddress	string	(IP address)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcPort	integer	(Port number)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	StreamId	string	(Stream ID for ZIXI)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Password	string	(Password for ZIXI)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Name	string	(Name for ZIXI)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Latency	integer	0:Off, 1:Low, 2: Medium	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Resolution	integer	0:1280x720	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	FrameRate	integer	1:60p, 2:30p, 4:50p, 5:25p	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Icecast		(Selected by Type)													
	SrcAddress	String	(IP address)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcPort	Integer	(Port number)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Mountpoint	String	(Mountpoint)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SRT		(Selected by Type)													
	SrcAddress	string	(IP address)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Port	integer	(Port number)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	ConnectionMode	integer	0: Caller 1: Listener, 2: Rendezvous	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Latency	integer	20 - 8000	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Encryption	integer	0: OFF, 1: ON	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Passphrase	string	(Passphrase for SRT)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Resolution	integer	0:1280x720	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	FrameRate	integer	1:60p, 2:30p, 4:50p, 5:25p	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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

3.8.3.1. AvailableTypeOfReturnOverIP

Get Available type.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	AvailableTypeOfReturnOverIP	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

```
{
  "Request": {
    "Command": "AvailableTypeOfReturnOverIP",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	AvailableTypeOfReturnOverIP	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Data			-	-	-	-	-	-	-	-	-	-	-	-	-
	AvailableType			-	-	-	-	-	-	-	-	✓	✓	-	-	-
	RTSP/RTP	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Icecast	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Zixi	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SRT	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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

3.8.3.2. AvailableFrameRateOfReturnOverIP

Get available frame rate.

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	AvailableFrameRateOfReturnOverIP	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Params			-	-	-	-	-	-	-	-	-	-	-	-	-
	RecordingFrameRate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p"	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

```
{
  "Request": {
    "Command": "AvailableFrameRateOfReturnOverIP",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "RecordingFrameRate": "60p"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	AvailableFrameRateOfReturnOverIP	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Data			-	-	-	-	-	-	-	-	-	-	-	-	-
	RecordingFrameRate	String	"60p" / "50p" / "60i" / "50i" / "30p" / "25p"	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	AvailableFrameRate			-	-	-	-	-	-	-	-	✓	✓	-	-	-
	"60p"	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	"30p"	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	"50p"	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	"25p"	Integer	0 : unselectable , 1 : selectable	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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

3.8.4. SetReturnOverIpServerSettingsRTSP

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	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetReturnOverIpServerSettingsRTSP	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Alias	String	(Another name of server)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Protocol	String	"UDP"/"TCP"	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcAddress	String	(IP address)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcPort	Integer	(Port number)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	StreamId	String	(Stream ID)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Username	String	(User name)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Password	String	(Password for RTSP/RTP)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	FrameRate	Integer	1:60p, 2:30p, 4:50p, 5:25p	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

```
{
  "Request": {
    "Command": "SetReturnOverIpServerSettingsRTSP",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1,
      "Alias": "Server1",
      "Protocol": "UDP",
      "SrcAddress": "192.168.0.1",
      "SrcPort": 6504,
      "StreamId": "HC900-1234",
      "Username": "Jvckenwood",
      "Password": "abcde",
      "FrameRate": 1
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	SetReturnOverIpServerSettingsRTSP	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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

3.8.5. SetReturnOverIpServerSettingsZIXI

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetReturnOverIpServerSettingsZIXI	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Alias	String	(Another name of server)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcAddress	String	(IP address)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcPort	Integer	(Port number)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	StreamId	String	(Stream ID for ZIXI)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Password	String	(Password for ZIXI)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Name	String	(Name for ZIXI)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Latency	Integer	0:Low, 1:Medium, 2:Minimum(Zixi OFF), 3:High	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	FrameRate	Integer	1:60p, 2:30p, 4:50p, 5:25p	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

```
{
  "Request": {
    "Command": "SetReturnOverIpServerSettingsZIXI",
    "SessionID": "7425fcb58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1,
      "Alias": "Server1",
      "SrcAddress": "192.168.0.1",
      "SrcPort": 2088,
      "StreamId": "HM650-1234",
      "Password": "abcde",
      "Name": "JvcKenwood",
      "Latency": 0,
      "FrameRate": 1
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	SetReturnOverlpServerSettingsZIXI	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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

3.8.6. SetReturnOverIpServerSettingsIccast

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetReturnOverIpServerSettingsIccast	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Alias	String	(Another name of server)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcAddress	String	(IP address)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SrcPort	Integer	(Port number)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Mountpoint	String	(Mountpoint)	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

```
{
  "Request" : {
    "Command" : "SetReturnOverIpServerSettingsIccast" ,
    "SessionID" : "7425fbc58ee4d15dd4c1f5ace4299a3" ,
    "Params" : {
      "ID" : 1 ,
      "Alias" : "Server1" ,
      "SrcAddress" : "192.168.0.1" ,
      "SrcPort" : 6504 ,
      "Mountpoint" : "abcdefg"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response															
	Requested	String	SetReturnOverIpServerSettingsIccast	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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

3.8.7. SetReturnOverIpCtrl

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request			-	-	-	-	-	-	-	-	-	-	-	-	-
	Command	String	SetReturnOverIpCtrl	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Params			-	-	-	-	-	-	-	-	-	-	-	-	-
	Operate	String	Streaming Control	-	-	-	-	-	-	-	-	✓	✓	-	-	-
			"Start": start Return over IP / "Stop": stop Return over IP	-	-	-	-	-	-	-	-	-	-	-	-	-

Example

```
{
  "Request": {
    "Command": "SetReturnOverIpCtrl",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "Operate": "Start"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	SetReturnOverIpCtrl	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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

3.8.8. SetReturnOverIpServerSettingsSRT

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

Request	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS300	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Request															
	Command	String	SetReturnOverIpServerSettingsSRT	-	-	-	-	-	-	-	-	√	√	-	-	-
	SessionID	String	(Session ID in cookie.)	-	-	-	-	-	-	-	-	√	√	-	-	-
	Params															
	ID	Integer	0:server1, 1: server2, 2: server3, 3: server4	-	-	-	-	-	-	-	-	√	√	-	-	-
	Alias	String	(Another name of server)	-	-	-	-	-	-	-	-	√	√	-	-	-
	SrcAddress	String	(IP address)	-	-	-	-	-	-	-	-	√	√	-	-	-
	Port	Integer	(Port number)	-	-	-	-	-	-	-	-	√	√	-	-	-
	ConnectionMode	Integer	0: Caller 1: Listener, 2: Rendezvous	-	-	-	-	-	-	-	-	√	√	-	-	-
	Latency	Integer	20 - 8000	-	-	-	-	-	-	-	-	√	√	-	-	-
	Encryption	Integer	0: OFF, 1: ON	-	-	-	-	-	-	-	-	√	√	-	-	-
	Passphrase	String	(Passphrase for SRT)	-	-	-	-	-	-	-	-	√	√	-	-	-
	FrameRate	Integer	1:60p, 2:30p, 4:50p, 5:25p	-	-	-	-	-	-	-	-	√	√	-	-	-

Example

```
{
  "Request": {
    "Command": "SetReturnOverIpServerSettingsSRT",
    "SessionID": "7425fbc58ee4d15dd4c1f5ace4299a3",
    "Params": {
      "ID": 1,
      "Alias": "Server1",
      "SrcAddress": "192.168.0.1",
      "Port": 2088,
      "ConnectionMode": 0,
      "Latency": 20,
      "Encryption": 0,
      "Passphrase": "abcdefghijklmn"
    }
  }
}
```

Response	Key	Style	Value	HM650	HM660	HM8x0	HM200	HM25x	HM280	LS900	PZ100	HC900	HC5x0	PZ400	PZ200	PZ510
	Response			-	-	-	-	-	-	-	-	-	-	-	-	-
	Requested	String	SetReturnOverlapServerSettingsSRT	-	-	-	-	-	-	-	-	✓	✓	-	-	-
	Result	String	(Result of command processing.)	-	-	-	-	-	-	-	-	✓	✓	-	-	-

Example

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