HTTP API , Interface Specification

This document specifies the external HTTP based application programming interface of the video servers.

The HTTP-based video interface provides the functionality for controlling device and for getting, setting internal parameter.

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1. Overview

1.1. References

HTTP protocol Hypertext Transfer Protocol HTTP/1.0 HTTP/1.1
URL Uniform Resource Locator

1.2. Version Management

Version	Date	Comment
V2.0	2011-9-9	Compose CGI document.
V2.1	2011-10-20	Modify.
V2.2	2011-11-10	Update.
V2.3	2011-11-16	Modify.PTZ
V3.0	2018-01-16	A Full revision.
V3.1	2018-01-23	Update.

2. General URL and parameters syntax

2.1. URL syntax

http://<*servername*>

The <*servername*> can be replaced with the name of the actual server.

Example: request for a web homepage

http://192.168.1.100

Server name: 192.168.2.72

2.2. Return data

The returned data from the server lists as follows. All data is returned as HTTP format.

Syntax: HTTP/1.0 *<HTTP code> <HTTP text>*

Example: HTTP/1.0 200 OK

              HTTP/1.0 404 File Not Found

With the following HTTP code and meanings

HTTP code	HTTP text	Description
200	OK	The request has succeeded, but an application error can still occur, which will be returned as an application error code.
204	No Content	The server has fulfilled the request, but there is no new information to send back.
400	Bad Request	The request had bad syntax or was inherently impossible to be satisfied.
401	Unauthorized	401 Unauthorized The request requires user authentication or the authorization has been refused.
404	Not Found	The server has not found anything matching the request.
409	Conflict	The request could not be completed due to a conflict with the current state of the resource.
500	Internal Error	500 Internal Error The server encountered an unexpected condition that prevented it from fulfilling the request.
503	Service Unavailable	The server is unable to handle the request due to temporary overload.

2.3. Parameters syntax

Customer can get/set parameters and query device features and parameter range through url request, and server generates http response with contents in xml format.

2.3.1. Get / Set / Query parameters

2.3.1.1. Client Request

Method: GET/POST

Syntax:

http://<servername>/cgi/<cginame>?<parameter>=<setValue>[&<parameter>=<setValue>...]

setValue – the value of parameter to be set.

[…] – … is optional.

2.3.1.2.Server response

```
HTTP/1.0 200 OK\r\n
Content-Type: text/html\n
<?xml version="1.0" encoding="utf-8"?>
<Message>
<Header class="class" ></Header>
<result code="code">description</result>
<group>
    <parameter><type>value</type></parameter>
</group>
</Message>
```

Remark:

Attribute **class:** parameter class. For example, mjpeg_get, mjpeg_set, net_get, net_set…

Label **code:** response code. For example, 2xx means successfully, 4xx means client error, 5xx means

server error...

Label **group:** parameter name. For example, DeviceInfo, TimeInfo, StreamInfo...

Label **parameter:** parameter name. For example, Channel, Resolution, BitRate...

Label **type:** parameter type. For example, int, string...

For example

1) Get request response

Request:

http://<servername>/cgi/major_stream_get?Channel=setValue&Group=StreamInfo

Response:

```
HTTP/1.0 200 OK\r\n
Content-Type: text/html\n
<?xml version="1.0" encoding="utf-8"?>
<Message>
<Header class="major_stream_get"></Header>
<result code="200">Successfully</result>
<StreamInfo>
    <Resolution><string>1920x1080</string></Resolution>
    <BitRate><int>8000</int></BitRate>
    <FrameRate><int>25</int></FrameRate>
    <IPRate><int>30</int></IPRate>
```

```
</StreamInfo>
</Message>
```

Remark:

This content means current parameter values of the device.

2) Set request response

Request:

http://<servername>/cgi/major_stream_set?Channel=1&Group=StreamInfo&Resolution=720x576&IPRate=20

Response:

```
HTTP/1.0 200 OK\r\n
Content-Type: text/html\n
<?xml version="1.0" encoding="utf-8"?>
<Message>
<Header class="major_stream_set"></Header>
<result code="200">Successfully</result>
<StreamInfo>
    <Resolution><string>720x576</string></Resolution>
    <IPRate><int>20</int></IPRate>
</StreamInfo>
```

Remark:

This content means current parameter values of the device after setting.

3) Query request response

Request:

http://<servername>/cgi/major_stream_query?Group=StreamInfo

Response:

```
HTTP/1.0 200 OK\r\n
Content-Type: text/html\n
<?xml version="1.0" encoding="utf-8"?>
<Message>
<Header class="major_stream_query"></Header>
<result code="200">Successfully</result>
<StreamInfo>
    <Resolution><string>1280x720</string></Resolution>
    <BitRate><int>1000, 2000, 3000, 4000</int></BitRate>
    <FrameRate><int>1 … 30</int></FrameRate>
    <IPRate><int>1 … 30</int></IPRate>
</StreamInfo>
<StreamInfo>
    <Resolution><string>1920x1080</string></Resolution>
    <BitRate><int>1000, 2000, 3000, 4000, 6000, 8000</int></BitRate>
    <FrameRate><int>1 … 30</int></FrameRate>
```

```
    <IPRate><int>1 … 30</int></IPRate>
</StreamInfo>
</Message>
```
Remark:

1. This content means features and parameter range supported by the device

2. In this case, the device supports the following features: Resolution, BitRate, FrameRate, IPRate.

3. Format 'value1, value2' means only value1 and value 2 are supported

   Format 'value1 … value2' means every value between value1 and value2 is supported.

4. If the content of an element is empty, it means that its value can only be get. For example, <DeviceID><string></string></DeviceID> means you have the feature 'DeviceID' and you could get its value, but not set its value.

5. For elements with string type, value 'valid string' means that only reasonable strings are allowed when you set their values. For example, <IPAddress><string>valid string</string></IPAddress> means you must use legal IP address.

2.3.1.3. Return code

Code	code	Description
2xx	200	Successfully
4xx	401	Invalid Channel number.
	402	Invalid parameter value.
	402	Invalid parameter name.
5xx	501	Feature does not support by server.
	502	Feature supported by server but not available in current mode.
	503	Server failed.

3. API

3.1.System

3.1.1. Get System Information
Get Hardware Version
http://<servername>/cgi/sys_get?Group=HardwareV
Example:
http://192.168.1.100/cgi/sys_get?Group=HardwareV
Return:

 Successfully --->status

 1   --->HwdVersion, 0 old, 1 new

Get Factory Reset Status
http://<servername>/cgi/sys_get?Group=FactoryCheck
Example:
http://192.168.1.100/cgi/sys_get?Group=FactoryCheck
Return:

 Successfully --->status

 0   --->Reset 0 not success, 1 success

Get Device Information
http://<servername>/cgi/sys_get?Group=DeviceInfo
Example:
http://192.168.1.100/cgi/sys_get?Group=DeviceInfo
Return:

 Successfully --->status

 V6202IR-AR0237 --->DeviceID

 V1.04.10-161208 --->Software Version

 5509560FBF2D --->SerialNumber

 52:3e:42:02:bc:20 --->Mac

Get EAPIL Information
http://<servername>/cgi/sys_get?Group=EapilInfo
Example:
http://192.168.1.100/cgi/sys_get?Group=EapilInfo
Return:

 Successfully --->status

 0   --->centerLX

 0   --->centerLY

 0   --->centerRX

 0   --->centerRY

 by019e253e --->Goolink ID

 abcd   --->Elvision UUID

Get Time Information

http://<servername>/cgi/sys_get?Group=TimeInfo

Example:

http://192.168.1.100/cgi/sys_get?Group=TimeInfo

Return:

Successfully	--->state
0	--->NTP Switch, 0 turn off, 1 turn on.
1488005407	--->CameraTime UTC
661	--->UpTime
0	--->DaylightEnable O turn off, 1 turn on
480	--->Time Zone
192.168.1.100	--->NTP server Ip

3.1.2. Set System Information

3.1.2.1.Reset device

http://<servername>/cgi/sys_set?Group=SystemInfo&ResetFlag=setValue&IPkeep=setValue

Example:

http://192.168.1.100/cgi/sys_set?Group=SystemInfo&ResetFlag=1&IPkeep=0

3.1.2.2.Set serial number

http://<servername>/cgi/sys_set?Group=DeviceInfo&SerialNum=setValue

Example:

http://192.168.1.100/cgi/sys_set?Group=DeviceInfo&SerialNum=0123456789AB

Return:

Successfully	---> state
0123456789AB	--->serial number

3.1.2.3.Set Time Information

http://<servername>/cgi/sys_set?Group=TimeInfo&TimeMethod=setValue[&CameraTime=setValue][&TimeZone=setValue][&DaylightEnable=setValue][&NTPServerIP=setValue]

Note:the information include [],you can set it or not,others be must.

Example1: Manually set device time.

http://192.168.1.100/cgi/sys_set?Group=TimeInfo&TimeMethod=0&CameraTime=10000

Example2: Synchronize time with NTP server 192.168.1.2.

http://192.168.1.100/cgi/sys_set?Group=TimeInfo&TimeMethod=1&NTPServerIP=192.168.1.2

3.1.3. Query System Information

http://<servername>/cgi/sys_query?Group=GroupName

Example:

http://192.168.1.100/cgi/sys_query?Group=All

3.1.4. System parameters

group	parameter name	value type	setValue	description
Reboot				Reboot camera
RmTemplate				Remove elvsion info
RmSerialnum				Remove serial number
HardwareV	HwdVersion	int	0,1	0 = set to old hardware 1 = set to new hardware
SystemInfo	ResetFlag	int	0,1	0 = reboot only 1 = reset
	IPkeep	int	0,1	Use with ResetFlag 0 = reset IP too 1 = keep IP setting
	Aging	int	0,1	0 = close aging mode 1 = open aging mode
DeviceInfo	SerialNum	string	12 hexdemical numbers	Set serial number
TimeInfo	TimeMethod	int	0,1	0 = Manually set device time 1 = Synchronize time with NTP server
	CameraTime	int	1…n seconds	Remark: If you want to set time, you will count the total seconds since 1970/1/1 00:00:00.
	DaylightEnable	int	0,1	0 = disable 1 = enable
	TimeZone	int	-720=(GMT-12:00) International Date Line West -660=(GMT-11:00) Midway Island, Samoa -600=(GMT-10:00) Hawaii -540=(GMT-09:00) Alaska -480=(GMT-08:00) Pacific Time(US & Canada); Tijuana -420=(GMT-07:00) Arizona, Chihuahua, La Paz, Mazatlan, Mountain Time(US & Canada) -360=(GMT-06:00) Central America, Central Time(US; Canada), Guadalajara, Mexico City, Monterrey, Saskatchewan -300=(GMT-05:00) Bogota, Lima, Quito, Eastern Time(US; Canada), Indiana(East)	

			−240=(GMT−04:00) Atlantic Time(Canada), Caracas, La Paz, Santiago
			−210=(GMT−03:30) Newfoundland
			−180=(GMT−03:00) Brasilia, Buenos Aires, Georgetown, Greenland
			−120=(GMT−02:00) Mid-Atlantic
			−60=(GMT−01:00) Azores, Cape Verde Is.
			0=(GMT)Casablanca, Monrovia, Greenwich Mean Time; Dublin, Edinburgh, Lisbon, London
			60=(GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna, Belgrade, Bratislava, Budapest, Ljubljana, Prague, Brussels, Copenhagen, Madrid, Paris, Sarajevo, Skopje, Warsaw, Zagreb, West Central Africa
			120=(GMT+02:00) Athens, Beirut, Istanbul, Minsk, Bucharest, Cairo, Harare, Pretoria, Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius, Jerusalem
			180=(GMT+03:00) Baghdad, Kuwait, Riyadh, Moscow, St. Petersburg, Volgograd, Nairobi
			210=(GMT+03:30) Tehran
			240=(GMT+04:00) Abu Dhabi, Muscat, Baku, Tbilisi, Yerevan
			270=(GMT+04:30) Kabul
			300=(GMT+05:00) Ekaterinburg, Islamabad, Karachi, Tashkent
			330=(GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi
			345=(GMT+05:45) Kathmandu
			360=(GMT+06:00) Almaty, Novosibirsk, Astana, Dhaka, Sri Jayewardenepura
			390=(GMT+06:30) Rangoon
			420=(GMT+07:00) Bangkok, Hanoi, Jakarta, Krasnoyarsk
			480=(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi, Irkutsk, Ulaan Bataar, Kuala Lumpur, Singapore, Perth, Taipei
			540=(GMT+09:00) Osaka, Sapporo, Tokyo, Seoul, Yakutsk
			570=(GMT+09:30) Adelaide, Darwin
			600=(GMT+10:00) Brisbane, Canberra, Melbourne,

| | | | Sydney, Guam,Pot Moresby, Hobart, Vladivostok
660=(GMT+11:00) Magadan, Solomon Is.,
NewCaledonia
720=(GMT+12:00) Auckland, Wellington, Fiji,
Kamchatka, Marshall Is.
780=(GMT+13:00) Nuku'alofa | |
| | NTPServerIP | string | 0.0.0.0-255.255.255.255 | |

3.2. Video (Stream specific)

3.2.1. Major Stream

3.2.1.1. Get Major Stream Information

http://<servername>/cgi/major_stream_get?Channel=setValue&Group=StreamInfo

Example:

http://192.168.1.100/cgi/major_stream_get?Channel=1&Group=StreamInfo

Return:

```
Successfully       --->statue
1                  --->Channel
1920x1080          --->Resolution
512                --->BitRate
0                  --->BitType 0 VBR 1 CBR
20                 --->FrameRate
50                 --->IP Rate
0                  --->Payload
0                  --->StreamRateCut
2                  --->VideoQuality    0 lowest 1 low 2 Average 3 high 4 highest
```

Note: For PCD devices, there will also be following fields: Emode, HPan, VPan, Tilt, Zoom

3.2.1.2. Set Major Stream Information

http://<servername>/cgi/major_stream_set?Channel=setValue&Group=StreamInfo
[&Resolution=setValue][&BitRate=setValue][&FrameRate=setValue][&IPRate=set
Value][&VideoQuality=setValue]

Example:

http://192.168.1.100/cgi/major_stream_set?Channel=1&Group=StreamInfo&Resol
ution=1920x1080

Return:

```
Successfully       -->status
1                  -->channel
1920x1080          -->Resolution
```

Note: the set value Resolution format is as 1920x1080.not support 1080P.

Example:

http://192.168.1.100/cgi/major_stream_set?Channel=1&Group=StreamInfo&Frame Rate=10

Return:

    Successfully   --->status

    1   --->channel

    10   --->Framerate

3.2.1.3. Query Major Stream Information

http://<servername>/cgi/major_stream_query?Group=GroupName

GroupName: All and StreamInfo

Example:

http://192.168.1.100/cgi/major_stream_query?Group=All

Return:

Successfully 1 1920x1080 256 … 10000 0, 1 3, 5, 10, 15, 20, 25, 30 5, 10, 15, 20, 25, 30, 40, 50, 60, 100, 120 0, 1 0 … 4 1280x960 256 … 10000 0, 1 3, 5, 10, 15, 20, 25, 30 5, 10, 15, 20, 25, 30, 40, 50, 60, 100, 120 0, 1 0 … 4 1280x720 256 … 10000 0, 1 3, 5, 10, 15, 20, 25, 30 5, 10, 15, 20, 25, 30, 40, 50, 60, 100, 120 0, 1 0 … 4 720x576 256 … 10000 0, 1 3, 5, 10, 15, 20, 25, 30 5, 10, 15, 20, 25, 30, 40, 50, 60, 100, 120 0, 1 0 … 4 720x480 256 … 10000 0, 1 3, 5, 10, 15, 20, 25, 30 5, 10, 15, 20, 25, 30, 40, 50, 60, 100, 120 0, 1 0 … 4 640x480 256 … 10000 0, 1 3, 5, 10, 15, 20, 25, 30 5, 10, 15, 20, 25, 30, 40, 50, 60, 100, 120 0, 1 0 … 4

3.2.2. Minor Stream

3.2.2.1. Get Minor Stream Information

http://<servername>/cgi/minor_stream_get?Channel=setValue&Group=StreamInfo

Chanel = 1, Group = StreamInfo

Example:

http://192.168.1.100/cgi/minor_stream_get?Channel=1&Group=StreamInfo

Return:

    Successfully   --->status

    1   --->channel

    640x480   --->Resolution

    512   --->BitRate

    0   --->BitType 0 VBR 1 CBR

    25   --->FrameRate

    50   --->IP Rate

    0   --->Payload

    0   --->StreamRateCut

    2   --->VideoQuality   0 lowest 1 low 2 Average 3 high 4 highest

3.2.2.2. Set Minor Stream Information

http://<i><servername></i>/cgi/minor_stream_set?Channel=setValue&Group=StreamInfo[&Resolution=setValue][&BitRate=setValue][&FrameRate=setValue][&IPRate=setValue][&VideoQuality=setValue]

3.2.2.3. Query Minor Stream Information
http://<i><servername></i>/cgi/minor_stream_query?Group=GroupName

GroupName: All and StreamInfo

Example1:
http://192.168.1.100/cgi/minor_stream_query?Group=All

Example2:
http://192.168.1.100/cgi/minor_stream_query?Group=StreamInfo

3.2.3. MJPEG
3.2.3.1. Get MJPEG Information
http://<i><servername></i>/cgi/mjpeg_get?Channel=setValue&Group=StreamInfo

Example:
http://192.168.1.100/cgi/mjpeg_get?Channel=1&Group=StreamInfo

3.2.3.2. Set MJPEG Information
http://<i><servername></i>/cgi/mjpeg_set?Channel=setValue&Group=StreamInfo[&Resolution=setValue][&FrameRate=setValue][&VideoQuality=setValue]

3.2.3.3. Query MJPEG Information
http://<i><servername></i>/cgi/mjpeg_query?Group=GroupName

GroupName: All and StreamInfo

Example:
http://192.168.1.100/cgi/mjpeg_query?Group=All

Return:

Successfully	--->state
1	--->channel
1280x720, CLOSED	--->Resolution
1, 2, 3, 4, 5	--->framerate
0 … 4	--->img quality

3.2.4. Video parameters (Stream specific)

group	parameter name	value type	setValue	description
Channel	Channel	int	1 … n	1 = Channel 1 … n = Channel n
StreamInfo	Resolution	string	…	For example 720x480

				720x576 1280x720 1920x1080 720P 960P 4CIF …
	StreamRateCut	int	0,1	0 = disable 1 = enable
	BitRate	int	0, 1 …n	0 = vbr 1 = 1K …1 000 = 1000K …
	BitType	int	0,1	0 = VBR 1 = CBR
	FrameRate	int	1 … n.	
	IPRate	int	1 …n.	
	VideoQuality	int	0 … 4	0 = Lowest 1 = Low 2 = Average 3 = High 4 = Highest
	Payload	int	0,1	0 = H.264 1 = H.265
	ForceIframe			

3.3.Video (Image specific)

3.3.1. Get Video Information
3.3.1.1.Get Image Information
http://<*servername*>/cgi/image_get?Channel=setValue&Group=ImageInfo
3.3.1.2.Get OSD Information
http://<*servername*>/cgi/image_get?Channel=setValue&Group=OSDInfo
3.3.1.3.Get ROI Information
http://<*servername*>/cgi/image_get?Channel=setValue&Group=ROIInfo
3.3.1.4.Get area exposure Information
http://<*servername*>/cgi/image_get?Channel=setValue&Group=AreaExpInfo
3.3.1.5.Get privacy mask Information
http://<*servername*>/cgi/image_get?Channel=setValue&Group=PrivacyMaskInfo

3.3.2. Set Video Information
3.3.2.1.Set Image Information
http://<*servername*>/cgi/image_set?Channel=setValue&Group=ImageInfo[&Format
=setValue][&Brightness=setValue][&Sharpness=setValue][&Saturation=setValue]
[&Contrast=setValue][&Hue=setValue][&Denoise=setValue][&Gamma=setValue]
Example 1: Set all parameter.
http://192.168.1.100/cgi/image_set?Channel=1&Group=ImageInfo&Hue=128&Brigh
tness=128&Sharpness=128&Saturation=128&Contrast=128&Denoise=128&Gamma=4
Example 2: Set Contrast.
http://192.168.1.100/cgi/image_set?Channel=1&Group=ImageInfo&Contrast=128
3.3.2.2.Set OSD Information
http://<*servername*>/cgi/image_set?Channel=setValue&Group=OSDInfo[&TextOSDS
tatus=setValue&TextOSDTitle=setValue&TextOSDX=setValue&TextOSDY=setValue][
&DateOSDStatus=setValue&DateFormat=setValue&DateOSDX=setValue&DateOSDY=set
Value][&TimeOSDStatus=setValue&TimeOSDX=setValue&TimeOSDY=setValue]
Example : Set Text OSD.
http://<*servername*>/cgi/image_set?Channel=1&Group=OSDInfo&TextOSDStatus=1&
TextOSDTitle=Hello&TextOSDX=20&TextOSDY=30

3.3.3. Query Video Information
http://<*servername*>/cgi/image_query?Group=GroupName
GroupName*: All, ImageInfo and OSDInfo*

3.3.4. Video parameters (Image specific)

group	parameter name	value type	*setValue*	description
Channel	Channel	int	1 ⋯ n	1 = Channel 1 ⋯

				n = Channel n
ImageInfo 选择一项。	Format	int	0,1	0 = PAL 1 = NTSC
	Hue	int	0 … 255	0 = Lowest … 255 = Highest
	Brightness			0 = Darkest … 255 = Brightest
	Sharpness			0 = Lowest … 255 = Highest
	Saturation			0 = Lowest … 255 = Highest
	Contrast			0 = Lowest … 255 = Highest
	Denoise			0 = Lowest … 255 = Highest
	Gamma	int	0 … 5	0 = standard mode 1 = contrast mode 1 2 = contrast mode 2 3 = contrast mode 3 4 = truecolor mode 5 = wide-dynamic mode
OSDInfo	TextOSDStatus	int	0,1	0 = off 1 = on
	TextOSDTitle	string	any string	
	TextOSDX	int	0…99	X,Y coordinate
	TextOSDY			
	TextOSDSize	int	1…8	1 = smallest … 8 = largest
	TextOSDStatus**i**	int	0,1	**i** between 1 and 4 0 = off 1 = on
	TextOSDTitle**i**	string	any string	

	TextOSDX**i**	int	0···99	X,Y coordinate
	TextOSDY**i**			
	TextOSDSize**i**	int	1···8	1 = smallest ··· 8 = largest
	MultipleOSDStatus	int	0,1	0 = off 1 = on
	MultipleOSDX	int	0···99	X,Y coordinate
	MultipleOSDY			
	MultipleOSDSize	int	1···8	1 = smallest ··· 8 = largest
	DateOSDStatus	int	0,1	0 = off 1 = on
	DateOSDX	int	0···99	X,Y coordinate
	DateOSDY			
	TimeOSDStatus	int	0,1	0 = off 1 = on
	TimeOSDX	int	0···99	X,Y coordinate
	TimeOSDY			
	TimeOSDSize	int	1···8	1 = smallest ··· 8 = largest

3.4.Audio

3.4.1. Get Audio Information

http://<*servername*>/cgi/audio_get?Channel=setValue&Group=AudioInfo

Example:

http://192.168.1.100/cgi/audio_get?Channel=1&Group=AudioInfo

Return:

    Successfully   ---->state

    G711U   ---->AudioCodec

    0   ---->AudioEnable

    0   ---->Volume

    8   ---->SampleRate

3.4.2. Set Audio Information

http://<*servername*>/cgi/audio_set?Channel=setValue&Group=AudioInfo[&AudioCodec=setValue][&SampleRate=setValue][&BitRate=setValue][&Track=setValue]

Example:

http://192.168.1.100/cgi/audio_set?Channel=1&Group=AudioInfo&AudioCodec=G711U&AudioEnable=1&AudioVolume=9

Return:

    Successfully   ----->state

    G711U   ----->AudioCodec

    1   ----->AudioEnable

    9   ----->AudioVolume

3.4.3. Query Audio Information

http://<servername>/cgi/audio_query?Group=GroupName

GroupName: All and AudioInfo

3.4.4. Audio parameters

group	parameter name	value type	*setValue*	description
Channel	Channel	int	1 … n	1 = Channel 1 … n = Channel n
AudioInfo	AudioEnable	int	0,1	0 = disable 1 = enable
	AudioCodec	string	"G711U", "G711A", "PCM", "G726","AAC"	
	SampleRate	int	8,44…n	8=8K 44=44K …
	AudioVolume	int	0…9	

3.5. Record

3.5.1. Get record information

http://*<servername>*/cgi/record_get?Channel=setValue&Group=GroupName

GroupName: RecordSearch, ElSearch, RecordControl and RecordDevice

Example: Search Record

http://192.168.1.100/cgi/record_get?Channel=1&Group=RecordSearch&StartTime=0&EndTime=1516171330

Example: Get device info

http://192.168.1.100/cgi/record_get?Channel=1&Group=RecordControl

Return:

Successfully	--->state
1	--->action when sd card is full, 0 stop recording, 1override
1	--->0 no manually recording, 1 manually recording
1	--->record stream type, 0 mainstream, 1 substream, 2 error
0	--->0 no recording on offline/alarm, 1 recording on offline/alarm
600	--->record length in seconds

Example: Get device info

http://192.168.1.100/cgi/record_get?Channel=1&Group=RecordDevice

Return:

Successfully	--->state
1	--->channel
0	--->total space, in
0	--->used space
7	--->SD status flag, 0 dev off, 1 dev on, 2 sd card pulled out, 3 formating sd,

4 sd mounted, 5 sd umounted, 6 sd is write-protected, 7 device uninitialized, 8 mounting sd card, 9 umounting sd card

    0   --->SD write-protect flag, 0 off, 1 on

3.5.2. Set record information

3.5.2.1. Record control

http://*<servername>*/cgi/record_set?Channel=setValue&Group=RecordControl[&Loop=setValue][&Mode=setValue][&Lenght=setValue]

3.5.2.2. Record device operation

http://*<servername>*/cgi/record_set?Channel=setValue&Group=RecordDevice&Operate=setValue

3.5.3. Query record information

http://*<servername>*/cgi/record_query?Group=GroupName

GroupName: All and RecordControl

3.5.4. Record parameters

group	parameter name	value type	*setValue*	description
Channel	Channel	int	1 … n	1 = Channel 1

				... n = Channel n
RecordControl	Loop	int	0,1	0 = stop recording when SD storage is full 1 = override old recording when SD storage is full
	Mode	int	0,1	0 = stop manully recording 1 = start manually recording
	StreamType	int	0,1	0 = Mainstream 1 = Substream
	Event	int	0,1	0 = no recording on offline/event 1 = recording on offline/event
	Lenght	int	10 ··· 3600	Length per record in seconds
RecordDevice	Operate	int	0,1,2	0 = unmount SD card 1 = mount SD card 2 = format SD card

3.6.PTZ

3.6.1. Get PTZ Information
3.6.1.1.Get PTZ Information
http://<servername>/cgi/ptz_get?Channel=setValue&Group=GroupName

GroupName: PTZCtrlInfo, SpeedInfo, PresetNameInfo, TourInfo and ProtocolInfo

Example:

http://192.168.1.100/cgi/ptz_get?Channel=1&Group=SpeedInfo

Return:

    Successfully   --->state

    6   --->pan_speed

    6   --->tilt_speed

    2   --->zoom_speed

    2   --->focus_speed

3.6.2. Set PTZ Information
3.6.2.1.Set Stop
http://<servername>/cgi/ptz_set?Channel=setValue&Group=PTZCtrlInfo&Stop=setValue

Example:

http://192.168.1.100/cgi/ptz_set?Channel=1&Group=PTZCtrlInfo&Stop=0

Return:

    Successfully   --->state

    1   --->Channel

    0   --->Stop

3.6.2.2.Set Movement
http://<servername>/cgi/ptz_set?Channel=setValue&Group=PTZCtrlInfo[&Direction=setValue][&PanSpeed=setValue][&TiltSpeed=setValue]

Example: Set all parameter.

http://192.168.1.100/cgi/ptz_set?Channel=1&Group=PTZCtrlInfo&Direction=up&PanSpeed=6&TiltSpeed=6

Example:

http://192.168.1.100/cgi/ptz_set?Channel=1&Group=PTZCtrlInfo&Direction=1&PanSpeed=2&TiltSpeed=3

Return:

    Successfully   ---->state

    1   ---->channel

    1   ---->Direction

    2   ---->PanSpeed

    3   ---->TiltSpeed

3.6.2.3. Set Iris, Zoom, Focus

http://<servername>/cgi/ptz_set?Channel=setValue&Group=PTZCtrlInfo[&Iris=setValue][&Zoom=setValue][&Focus=setValue]

Example : Set Iris open.

http://192.168.1.100/cgi/ptz_set?Channel=1&Group=PTZCtrlInfo&Iris=1

3.6.2.4. Set Auto Scan

http://<servername>/cgi/ptz_set?Channel=setValue&Group=PTZCtrlInfo[&AutoScan=setValue]

Example:

http://192.168.1.100/cgi/ptz_set?Channel=1&Group=PTZCtrlInfo&AutoScan=1

3.6.2.5. Set Preset

http://<servername>/cgi/ptz_set?Channel=setValue&Group=PTZCtrlInfo&PresetNumber=setValue&Preset=setValue[&PresetTitle=setValue]

Example Set Preset 1.

http://192.168.1.100/cgi/ptz_set?Channel=1&Group=PTZCtrlInfo&PresetNumber=1&Preset=0

Example 2: Call Preset 1.

http://192.168.1.100/cgi/ptz_set?Channel=1&Group=PTZCtrlInfo&PresetNumber=1&Preset=1

3.6.2.6. Set Pattern

http://<servername>/cgi/ptz_set?Channel=setValue&Group=PTZCtrlInfo&PatternNumber=setValue&Pattern=setValue

3.6.2.7. Set Auto Pan

http://<servername>/cgi/ptz_set?Channel=setValue&Group=PTZCtrlInfo&AutoPanNumber=setValue&AutoPan=setValue

3.6.2.8. Set Current Position

http://<servername>/cgi/ptz_set?Channel=setValue&Group=PTZCtrlInfo&Model=setValue[&Pan=setValue][&Tilt=setValue][&ZoomPosition=setValue]

3.6.3. Query PTZ Information

http://<servername>/cgi/ptz_query?Group=GroupName

GroupName: All and PTZCtrlInfo

3.6.4. PTZ parameters

group	parameter name	value type	setValue	description

Channel	Channel	int	1…n	1 = Channel 1 … n = Channel n
PTZCtrlInfo	Stop	int	0	All PTZ operation will be stopped
	Direction	int	1…8	1= up 2= down 3= left 4= right 5= upleft 6= downleft 7= upright 8= downright
	PanSpeed	int	0…63	
	TiltSpeed	int	0…63	
	Iris	int	0,1	0= Iris Close 1= Iris Open
	Zoom	int	0,1	0= Zoom Out 1= Zoom In
	Focus	int	0,1	0= Focus Far 1= Focus Near
	AutoScan	int	1	1=start
	Preset	int	0,1	0=Set Preset 1=Call Preset
	PresetNumber	int	1...255	
	PresetTitle	string		
	Pattern	int	0,1,2	0= Pattern Start Position 1= Pattern End Position 2= Pattern Run
	PatternNumber	int	1…4	
	AutoPan	int	0,1,2	0= AutoPan Start Position 1= AutoPan End Position 2= AutoPan Run
	AutoPanNumber	int	1…4	
	Model	int		0= Absolute 1= Relative
	Pan	int	0…36000	0=0° *100 … 36000=360° *100
	Tilt	int	0…36000	0=0° *100 …

			36000=360°*100

	ZoomPosition	int	0···65535	ZoomPosition =(desired_zoom_position/zoom_limit)*65535;
				
				Remark:
				desired_zoom_position=OpticZoom;
				zoom_limit = (Optic maximum Zoom)*(Digital maximum Zoom);
				For example:
				Optic Zoom = 30
				Optic maximum Zoom = 35
				Digital maximum Zoom = 12
				ZoomPosition =(30/420) * 65535=4681

SpeedInfo	PanSpeed	int	1···8	
	TiltSpeed			
	ZoomSpeed	int	0···2	
	FocusSpeed			
PresetNameInfo	PresetNumber	int	1···255	
	PresetTitle	string	Any valid string	
TourInfo	TourNum	int	1···4	
	TourAct	int	0,1	
	PresetNumber	int	1···255	
ProtocolInfo	CamAddr	int	1···255	
	ProtocolType	int	0···2	0 = Pelco-D 1 = Pelco-P 2 = Samsung
	BaudRate	int	0···4	0 = 2400 1 = 4800 2 = 9600 3 = 19200 4 = 38400
	Protocol3D	int	0,1	0 = Pelco-3D-DH 1 = PElco-3D-HK
	UserMode	int	0···3	

3.7. Transparent UART

3.7.1. Send data to UART

http://<servername>/cgi/rs485_set?Channel=setValue&Group=RS485Data&Data=setValue

Example:

http://192.168.1.100/cgi/rs485_set?Channel=1&Group=RS485Data&Data=1234567890abcdef

Return:

    Successfully   --->state

    12 34 56 78 90 AB CD EF   --->sent data

3.7.2. Send data to UART and read from UART

http://<servername>/cgi/rs485_get?Channel=setValue&Group=RS485Data[&Data=setValue]

Example:

http://192.168.1.100/cgi/rs485_get?Channel=1&Group=RS485Data

Return:

    Successfully   --->state

    12 34 56 78 90 AB CD EF   --->received data

3.8.Camera

3.8.1. Get Camera Information

http://<servername>/cgi/camera_get?Channel=setValue&Group=GroupName

GroupName: ExposureInfo and BasicInfo

Example:

http://192.168.1.100/cgi/camera_get?Channel=1&Group=ExposureInfo

3.8.2. Set Camera Information

3.8.2.1.Set Basic Camera Infomation

http://<servername>/cgi/camera_set?Channel=setValue&Group=BasicInfo[&Mirro
rHor=setValue&MirrorVer=setValue&WDRSwitch=setValue&WDRLevel=setValue&AFCS
witch=setValue&AFGSwitch=setValue&LSCSwitch=setValue&LDCSwitch=setValue&DI
SSwitch=setValue&WBMode=setValue][&WBRGain=setValue&WBBGain=setValue]

Example 1:

http://192.168.1.18/cgi/camera_set?Channel=1&Group=BasicInfo&DISSwitch=1

Example 2:

http://192.168.1.18/cgi/camera_set?Channel=1&Group=BasicInfo&WBMode=1&WBRG
ain=255&WBBGain=255

3.8.2.2.Set Camera Exposure Information

http://<servername>/cgi/camera_set?Channel=setValue&Group=ExposureInfo[&Ex
posureMode=setValue&ScenceSelect=setValue&AGCMax=setValue&AGCManual=setVal
ue&ShutterMax=setValue&ShutterManual=setValue][&ICRSwitch=setValue&ICRTime
r=setValue][&BLCSwitch=setValue&BLCLevel=setValue][&HLCSwitch=setValue]

Example 1:

http://192.168.1.100/cgi/camera_set?Channel=1&Group=ExposureInfo&ExposureM
ode=0&ScenceSelect=0&AGCMax=16

Example 2:

http://192.168.1.100/cgi/camera_set?Channel=1&Group=ExposureInfo&ExposureM
ode=1&AGCMax=16&ShutterMax=100

Example 3:

http://192.168.1.100/cgi/camera_set?Channel=1&Group=ExposureInfo&ExposureM
ode=2&AGCManual=1&ShutterManual=100

Example 4:

http://192.168.1.100/cgi/camera_set?Channel=1&Group=ExposureInfo&ICRSwitch
=3&ICRTimer=5

Example 5:

http://192.168.1.100/cgi/camera_set?Channel=1&Group=ExposureInfo&BLCSwitch
=1&BLCLevel=0

Example 6:

http://192.168.1.100/cgi/camera_set?Channel=1&Group=ExposureInfo&HLCSwitch=0

3.8.2.3.Reset Camera Information

http://<servername>/cgi/camera_set?Channel=setValue&Group=ResetInfo

3.8.3. Query Camera Information

http://<servername>/cgi/camera_query?Group=GroupName

GroupName: All, ExposureInfo,BasicInfo, ResetInfo

Example:

http://192.168.1.100/cgi/camera_query?Group=ExposureInfo

3.8.4. Basic parameters

group	parameter name	value type	*setValue*	description
Channel	Channel	int	1 ⋯ n	1 = channel 1 ⋯⋯.. n = channel n
BasicInfo	MirrorHor	int	0,1	Horizonal mirror 0 = off 1 = on
	MirrorVer	Int	0,1	Vertical mirror 0 = off 1 = on
	WDRSwitch	Int	0,1	Digital WDR 0 = off 1 = on
	WDRLevel	Int	0,1,..255	Set WDR level
	AFCSwitch	Int	0,1	Anti-falsecolor 0 = off 1 = on
	AFGSwitch	Int	0,1	Anti-Fog 0 = off 1 = on
	LSCSwitch	Int	0,1	LensShadeCorrection 0 = off 1 = on
	LDCSwitch	Int	0,1	LensDistortCorrection 0 = off 1 = on

	DISSwitch	Int	0,1	Dig-ImgStabilize 0 = off 1 = on
	WBMode	Int	0,1	White balance mode0 = auto 1 = manual
	WBRGain	int	0,1,...255	Effective when WBMode = 1, set red gain
	WBBGain	Int	0,1,...255	Effective when WBMode = 1, set blue gain
	LDCLevel	int	0,1,...255	LDC level

3.8.5. Exposure parameters

group	parameter name	value type	*setValue*	description
Channel	Channel	int	1 ⋯ n	1 = channel 1 ⋯⋯.. n = channel n
ExposureInfo	ExposureMode	int	0,1,2	0 = auto mode 1 = shutter mode 2 = manual mode
	ScenceSelect	int	0,1	0 = outdoor 1 = indoor
	AGCMax	int	2,4,8 ⋯.64	2 = 2x 4 = 4x 8 = 8x ⋯⋯.. 64 = 64x
	AGCManual	int	1,2,4 ⋯.64	1 = 1x 2 = 2x ⋯⋯.. 64 = 64x
	ShutterMax	int	25,30 ⋯8000	25 = 1/25 30 = 1/30 ⋯⋯.. 8000 = 1/8000
	ShutterManual	int	25,30, ⋯ 8000	25 = 1/25 30 = 1/30

				…….. 8000 = 1/8000
	ICRSwitch	int	0,1,2,3	0 = out control 1 = night 2 = day 3 = auto
	ICREnable	int	0,1	= off = on
	ICRTimer	int	0,3,5,10	0 = 0s 3 = 3s 5 = 5s 10 = 10s
	ICRC2BThr	int	0,1,…255	Color to black threshold
	ICRB2CThr	int	0,1,…255	Black to color threshold
	BLCSwitch	Int	0,1	Back light 0 = off 1 = on
	ColorMode	Int	0,1,2	0 = colorful 1 = standard 2 = cold
	BLCLevel	int	0,1,2 ….240	0 = low(reuse) 1 = middle(reuse) 2 = heigh(reuse) …….. 240 = level
	HLCSwitch	int	0,1	0 = Intelligent infrared 1 = Center metering 2 = Average metering 3 = Area metering
	ELCLevel	Int	0,1,…255	Exposure level

3.9. Net

3.9.1. Get Net Information
3.9.1.1. Get Address Information
http://<*servername*>/cgi/net_get?Group=AddressInfo

Example:

http://192.168.1.100/cgi/net_get?Group=AddressInfo

Return:

Successfully	--->state
192.168.1.100	--->IP
255.255.255.0	--->netmask
192.168.1.1	--->Gateway
0	--->AddressType
1	--->Automatic setting DNS
192.168.1.1	--->DNSServer
8.8.8.8	--->DNSServer2

3.9.1.2. Get SMTP Information
http://<*servername*>/cgi/net_get?Group=SMTPInfo

Example:

http://192.168.1.100/cgi/net_get?Group=SMTPInfo

Return:

Successfully	--->state
0.0.0.0	--->SMTPServerIP
25	--->SMTPPort
0	--->SMTPUseSSL
465	--->SMTPSSLPort
ipc@domain.com	--->FromMail
test@domain.com	--->ToMail
0	--->SMTPAuth
1	--->SMTPSnapShot

3.9.1.3. Get FTP Information
http://<*servername*>/cgi/net_get?Group=FTPInfo

Example:

http://192.168.1.100/cgi/net_get?Group=FTPInfo

Return:

Successfully	---> state
0.0.0.0	--->FTP Server IP
21	--->Port
/	--->FTPFilePath
1	--->FTPSnapCount
0	--->FTPSnapInterval

3.9.2. Set Net Information

3.9.2.1. Set Address Information

http://<servername>/cgi/net_set?Group=AddressInfo[&IPAddress=setValue][&SubnetMask=setValue][&Gateway=setValue]

Example1:

http://192.168.1.100/cgi/net_set?Group=AddressInfo&IPAddress=192.168.1.67

Return:

    Successfully   -->state

    192.168.1.67   -->IP

Example2:

http://192.168.1.100/cgi/net_set?Group=AddressInfo&SubnetMask=255.255.240.0&Gateway=192.168.1.1

Return:

    Successfully   --->state

    255.255.240.0   --->subnetMask

    192.168.1.1   --->Gateway

3.9.2.2. Set SMTP Information

http://<servername>/cgi/net_set?Group=SMTPInfo[&SMTPServerIP=setValue][&SMTPUsername=setValue&SMTPPassword=setValue&SMTPAuth=setValue][&ToMail=setValue][&FromMail=setValue][&CcMail=setValue]

Example:

http://192.168.1.100/cgi/net_set?Group=SMTPInfo&SMTPServerIP=192.168.1.100&SMTPUsername=Username&SMTPPassword=1234&SMTPAuth=0&ToMail=testTo@126.com&FromMail=testFrom@126.com&CcMail=testCC@126.com

Return:

    Successfully   --->state

    192.168.1.100   --->SMTPServerIP

    testFrom@126.com   --->From Mail

    testTo@126.com   --->To Mail

    testCC@126.com   --->CC Mail

    0   --->SMTPAuth

    Username   --->Username

    1234   --->Passwd

3.9.2.3. Set FTP Information

http://<servername>/cgi/net_set?Group=FTPInfo[&FTPServerIP=setValue][&FTPUsername=setValue&FTPPassword=setValue]

Example:

http://192.168.1.100/cgi/net_set?Group=FTPInfo&FTPServerIP=192.168.1.110&FTPUsername=FTPUsername&FTPPassword=1234

Return:

```
Successfully              ---->state
192.168.1.110             --->FTPServerIP
FTPUsername               --->FTPUsername
1234                      --->Passwd
```

3.9.3. Query Net Information

http://<servername>/cgi/net_query?Group=GroupName

GroupName: All, AddressInfo, SMTPInfo, FTPInfo, DigestLoginInfo, KaiCong, DDNSInfo, UluInfo, GlinkInfo and ElInfo

3.9.4. Net parameters

Parameter	Parameter Name	Value type	*setValue*	Description
AddressInfo	IPAddress	string	0.0.0.0-255.255.255.255	
	SubnetMask			
	Gateway			
	AddressType	int	0,1	0 = Manually Configured 1 = Assigned by DHCP
	AutoDNSEnable	Int	0,1	0 = Manually set DNS server 1 = Automatically set DNS server
	DNSServer	string	0.0.0.0-255.255.255.255	Main DNS server
	DNSServer2			Backup DNS server
AlarmServer Info	AlarmServerIP	string	0.0.0.0-255.255.255.255	
	AlarmServerIP1			
	AlarmServerIP2			
SMTPInfo	SMTPServerIP	string	0.0.0.0-255.255.255.255	
	SMTPUsername		Any valid string	
	SMTPPassword			
	ToMail	string	xxx@xxx.com	
	CcMail			
	FromMail			
	SMTPAuth		0,1	0 = Authentication off 1 = Authentication on
	SMTPPort	int	1-65535	
	SMTPUseSSL	int	0,1	0 = do not use SSL 1 = use SSL
	SMTPSSLPort	int	1···65535	
	SMTPSnapShot	int	0-1	0 = do not take snapshot 1 = take snapshot

	FTPServerIP	string	0.0.0.0-255.255.255.255	
	FTPUsername		Any valid string	
	FTPPassword			
	FTPPort	int	0…65535	
FTPInfo	FTPCount	int	1…10	
	FTPInterval	int	1…15	Interval between FTP snapshot
	FTPPath	string	Any valid path	
	FTPFilename	string	Any valid file name	
DigestLogin Info	AuthenticationE nable	int	0,1	
	KcDdnsEnable	int	0,1	0 = disable 1 = enable
	KcDdnsUser	string	Any valid string	KaiCong user name
KaiCong	KcDdnsPasswd			KaiCong password
	TutkEnable	int	0,1	0 = disable 1 = enable
	TutkUid	String	Any valid string	Set TUTK UID
	DDNSEnable	int	0,1	0 = disable 1 = enable
	DDNSType	int	0,1,2,3	0 = CamAnyWhere 1 = QDNS 2 = DYNDNS 3 = NO-IP
DDNSInfo	DDNSServerAddr	string	Any valid string	
	DDNSServerPort	int	0…65535	
	DDNSUserName	string	Any valid string	
	DDNSPassword			
	DDNSDomain	string		
	ONVIF			
	HK			
NetProtocol Info	XM	int	0,1	0 = disable 1 = enable
	TOPSEE			
	ZW			
	ZENO			

3.10. Net Port

3.10.1.   Get Net Port Information

http://*<servername>*/cgi/netport_get?Channel=setValue&Group=NetPortInfo

Example:

http://192.168.1.100/cgi/netport_get?Channel=1&Group=NetPortInfo

Return:

    Successfully   ---> state

    80   ---> HTTP Port

    90   ---> Video Port

    554   ---> Rtsp Port

    8999   ---> Onvif Port

    8088   ---> Record Port

3.10.2.   Set Net Port Information

http://*<servername>*/cgi/netport_set?Channel=setValue&Group=NetPortInfo[&HttpPort=setValue][&VideoPort=setValue][&RtspPort=setValue][&OnvifPort=setValue][&RecordPort=setValue]

Example:

http://192.168.1.100/cgi/netport_set?Channel=1&Group=NetPortInfo&HttpPort=8001

3.10.3.   Query Net Port Information

http://*<servername>*/cgi/netport_query

3.10.4.   Net Port parameters

Parameter	Parameter Name	Value type	*setValue*	Description
NetPortInfo	HttpPort	int	1-65535	
	VideoPort			
	RtspPort			
	OnvifPort			
	RecordPort			

3.12. Wifi

3.12.1.　Get Wifi Info

http://<servername>/cgi/wifi_get?Group=WifiInfo

Example:

http://192.168.1.100/cgi/wifi_get?Group=WifiInfo

Return:

Successfully   ---> state
0   ---> enable status, 0 disable, 1 enable
0   ---> Wifi mode
Hkvision   ---> Wifi SSID
53T0A   ---> Wifi password
808663348   ---> Wifi signal
1   ---> Wifi bitrate control mode, 1 = automatic
26   ---> Wifi channel
n   ---> Wifi protocol

3.12.2.　Search nearby hotspots

http://<servername>/cgi/wifi_get?Group=HotspotList

Example:

http://192.168.1.100/cgi/wifi_get?Group=HotspotList

Return:

Successfully   ---> state
1   ---> number of hotspots
samplewifi   ---> Wifi SSID
3   ---> Wifi encrytion mode, 0 off, 1 wep, 2 TKIP, 3 AES-CCMP
3   ---> Wifi authentication, 0 WPA, 1 WPA2, 2 WPAPSK, 3 WPA2PSK
14   ---> Wifi channel
0   ---> 0 master, 1 managed, 2 ad-hoc, 3 monitor

3.12.3.　Set Wifi Info

http://<servername>/cgi/wifi_get?Group=WifiInfo[&enable=setValue][&SSID=setValue][&password=setValue][&AutoMode=setValue][&Protocol=setValue][&WifiChannel=setValue][&Mode=setValue]

Example:

http://192.168.1.100/cgi/wifi_set?Group=WifiInfo&enable=1&SSID=aWifi&password=password

3.12.4.　Query Wifi Info

http://<servername>/cgi/wifi_query

3.12.5.　Wifi parameters

Parameter	Parameter Name	Value type	*setValue*	Description

WifiInfo	enable	int	0,1	0 = disable 1 = enable
	SSID	string	Any valid string	
	password			
	AutoMode	int	0,1	0 = disable 1 = enable
	Protocol	string	"b", "g"	
	WifiChanel	int	1···14	
	Mode	int	0,1	0 = disable 1 = enable

3.13. Alarm

3.13.1.   Get Alarm Information
3.13.1.1.   Get I/O Trigger Information
http://<servername>/cgi/alarm_get?Group=IOTrigInfo

Example:

http://192.168.1.100/cgi/alarm_get?Group=IOTrigInfo

Return:

    Successfully   --->state
    1   --->IO number 1
    1   --->IOTrig

3.13.1.2.   Get Motion Detection Information
http://<servername>/cgi/alarm_get?Channel=setValue&Group=MDInfo

Example:

http://192.168.1.100/cgi/alarm_get?Channel=1&Group=MDInfo

Return:

    Successfully   --->state
    1   --->Channel
    0   --->MDEnable
    50   --->MDSensitivity
    ;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f   --->Motion Detect Area

3.13.1.3.   Get I/O Access Information
http://<servername>/cgi/alarm_get?Group=IOAccessInfo

Example:

http://192.168.1.100/cgi/alarm_get?Group=IOAccessInfo

Return:

    Successfully   --->state
    1   --->channel
    0   --->relay IO out1 off
    0   --->relay Mail off
    0   --->relay Sd off
    0   --->relay ftp off
    0   --->relay tcp off
    0   --->relay all off

3.13.1.4.   Get Schedule Information
http://<servername>/cgi/alarm_get?Group=ScheduleInfo

Example:

http://192.168.1.100/cgi/alarm_get?Group=ScheduleInfo

Return:

    Successfully   --->state
    0   --->enable Sunday

0:0	--->startTime0 (first schedule on Sunday)
23:59	--->endTime0
0:0	--->startTime8 (second schedule on Sunday)
23:59	--->endTime8
…	
0	--->enable everyday
0:0	--->startTime7 (first schedule)
23:59	--->endTime7
0:0	--->startTime15 (second schedule)
23:59	--->endTime15

3.13.1.5. Get Motion Detection Access Information

http://<servername>/cgi/alarm_get?Channel=setValue&Group=MDAccessInfo

Example:

http://192.168.1.100/cgi/alarm_get?Group=MDAccessInfo

Return:

Successfully	--->state
1	--->channel
0	--->relay IO out1 off
0	--->relay Mail off
0	--->relay Sd off
0	--->relay ftp off
0	--->relay tcp off
0	--->relay all off

3.13.2. Set Alarm Information

3.13.2.1. Set I/O Trigger Information

http://<servername>/cgi/alarm_set?Group=IOTrigInfo[&IOTrigNum=setValue][&IOTrig=setValue]

Example Sent IO Trigger 1 Grounded Circuit.

http://192.168.1.100/cgi/alarm_set?Group=IOTrigInfo&IOTrigNum=1&IOTrig=0

3.13.2.2. Set Motion Detection Information

http://<servername>/cgi/alarm_set?Channel=setValue&Group=MDInfo&MDArea=setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue/setValue[&MDEnable=setValue][&MDSensitivity=setValue]

Example: Set Motion Detection Area 1, enable, sensitivity is 15,fill the whole area

http://192.168.1.100/cgi/alarm_set?Channel=1&Group=MDInfo&MDEnable=1&MDSensitivity=15&MDArea=;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f

Return:

| Successfully | --->state |

1   --->Channel
        1   --->MDenable
        15   --->MDSensitivity
        ;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f/;;;f   ---> MDArea
Note: the video viewport is devided into 18x22 MD areas, which is represented as
18 numbers delimited with "/". A number is represented as 64-based digits mapping
[0-9a-zA-Z:;] to [0-63] (the enable status of 6 MD areas). For example, 1 means only the
leftmost 1 MD area is enabled, and ;f means the leftmost 10 areas are enabled.

3.13.2.3.   Set Alarm Access Scope

http://<*servername*>/cgi/alarm_set?Group=AccessScopeInfo&AlarmAccessScope=setValue

3.13.2.4.   Set I/O Access Information

http://<servername>/cgi/alarm_set?Group=IOAccessInfo&IOTrigNum=setValue[&IO1=setValue][&...][&IO**i**=setValue][&IM**i**=setValue][&IF**i**=setValue][&IA**i**=setValue][&IT**i**=setValue][&IS**i**=setValue]

Example: Set I/O Trigger 1, IO Alarm on, Mail Alarm off, FTP Alarm on, TCP Alarm on.

http://192.168.1.100/cgi/alarm_set?Group=IOAccessInfo&IOTrigNum=1&IO1=1&IM=0&IF1=1&IT1=1

Note: In hi3516a/d, there are two sets of Alarm input, otherwise there is only one input.

3.13.2.5.   Set Motion Detection Alarm Access

http://<servername>/cgi/alarm_set?Channel=setValue&Group=MDAccessInfo&MDArea=setvalue[&IO1=setValue][&...][&MO=setValue][&MM=setValue][&MF=setValue][&MA=setValue][&MT=setValue][&MS=setValue]

Example: Set Motion Detection Area 2, IO Alarm on, Mail Alarm off, FTP Alarm on, TCP Alarm on.

http://192.168.1.100/cgi/alarm_set?Channel=1&Group=MDAccessInfo&MDArea=2&MO=1&MM=0&MF=1&MT=1

3.13.2.6.   Set Alarm schedule

http://<servername>/cgi/alarm_set?Channel=setValue&Group=ScheduleInfo&enable0=setValue&start0H=setValue&start0M=setValue&end0H=setValue&end0M=setValue&start8H=setValue&start8M=setValue&end8H=setValue&end8M=setValue...

Example: Set Monday's first schedule from 0:00 to 8:00, and second schedule from 18:00
To 23:59

http://192.168.1.100/cgi/alarm_set?Channel=1&Group=ScheduleInfo&enable1=1&start1H=0&start1M=0&end1H=8&end1M=0&start9H=18&start9M=0&end9H=23&end9M=59

3.13.3.   Query Alarm Information

http://<servername>/cgi/alarm_query?Group=GroupName

GroupName: All, IOTrigInfo, MDInfo, AccessScopeInfo, IOAccessInfo, and MDAccessInfo

Examle:

http://192.168.1.100/cgi/alarm_query?Group=All

Return:

Successfully 1 0, 1 1 … 100 string 1 … 4 0, 1 0, 1

3.13.4.Alarm parameters

Parameter	Parameter Name	Value type	*setValue*	Description
Channel	Channel	int	1 ⋯ n	1 = Channel 1 … n = Channel n
IOTrigInfo	IOTrigNum	int	1⋯n	
	IOTrig	int	0,1	0 = Grounded Circuit 1 = Open Circuit
MDInfo	MDArea	string	L1/L2/L3/L4 /L5/L6/L7/L 8/L9/L10/L1 1/L12/L13/L 14/L15/L16/ L17/L18	Ln: A 64-based number from 0 to ;;;f (2ˆ22-1) representing enable status of MD areas in Line n.
	MDEnable	int	0,1	0 = disable 1 = enable
	MDSensitivity	int	1⋯100	1=the least sensitive 100=the most sensitive
	(X0, Y0), (X1, Y1),	int	0⋯99	X,Y coordinate
AccessScopeInfo	AlarmAccessScope	int	0,1	0 = Net Access 1 = Local Access
IOAccessInfo	i	int	1,2(hi3516a /d) 1(rest)	Alarm input number
	j	int	1,2(hi3516a /d) 1(rest)	Alarm output number
	IOij	int	0,1	1 = I/O Alarm on 0 = I/O Alarm off
	IMi	int	0,1	1 = Mail Alarm on 0 = Mail Alarm off
	IFi	int	0,1	1 = FTP Alarm on 0 = FTP Alarm off
	ITi	int	0,1	1 = TCP Alarm on 0 = TCP Alarm off
	ISi	int	0,1	1 = SDSave Alarm on 0 = SDSave Alarm off
	IAi	Int	0,1	1 = Open all alarm output

				2 = Close all alarm output
MDAccessInfo	i	int	1···n	i = I/O Alarm Number
	MOi	int	0,1	1 = I/O Alarm on 0 = I/O Alarm off
	MM	int	0,1	1 = Mail Alarm on 0 = Mail Alarm off
	MF	int	0,1	1 = FTP Alarm on 0 = FTP Alarm off
	MT	int	0,1	1 = TCP Alarm on 0 = TCP Alarm off
	MS	int	0,1	1 = SDSave Alarm on 0 = SDSave Alarm off
	MA	int	0,1	1 = Open all alarm output 0 = Close all alarm output

3.13.5.　User Management

3.13.5.1.　Add User

http://<*servername*>/cgi/user_set?Group=AddUser&UserName=setValue&Password=setValue&Privilege=setValue

Example:

http://192.168.1.100/cgi/user_set?Group=AddUser&UserName=admin&Password=password&Privilege=6

3.13.6.　Delete User

http://<*servername*>/cgi/user_set?Group=DeleteUser&UserName=setValue

3.13.7.　Change User password

http://<*servername*>/cgi/user_set?Group=ChangePassword&UserName=setValue&Password=setValue&NewPassword=setValue

Example:

http://192.168.1.100/cgi/user_set?Group=ChangePassword&UserName=thisisusername&Password=oldpassword&NewPassword=newpassword

3.13.8.　List Users

http://<*servername*>/cgi/user_get?Group=UserList

3.14. JPEG / MJPEG

3.15.

3.15.1. Get JPEG

http://<servername>/jpgimage/Channel/image.jpg

3.15.2. Get MJPEG

http://<servername>/mjpgstreamreq/Channel/image.jpg

Remark: If you want to stop get MJPEG; you can close the connection of request.

3.15.3. JPEG / MJPEG parameters

parameter name	value type	*setValue*	description
Channel	int	1 … n	1 = Channel 1 … n = Channel n