API, HTTP - Interface Specification

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BEWARD

1. RTSP

The RTSP URL is rtsp://<the IP address of the server>/av0_0.

first num-channel#(0~3),second num-main(0)/sub(1) stream.

The OPTIONS, DESCRIBE, SETUP, PLAY, TEARDOWN methods are supported. The RTSP protocol is described in RFC2326.

1.2. RTSP OPTIONS

The OPTIONS command returns a list of supported RTSP commands.

Example:

OPTIONS rtsp://<192.168.88.187>/av0_0 RTSP/1.0

CSeq:2

Response example:

RTSP/1.0 200 OK

CSeq:2

Date:Sun, 13 May 2012 16:39:25 GMT

Public: OPTIONS, DESCRIBE, SET_PARAMETER, GET_PARAMETER,

SETUP, TEARDOWN, PLAY, PAUSE\r\n

Notice: The SET_PARAMETER function and PAUSE function, our RTSP library temporarily not support.

1.3. RTSP DESCRIBE

Example:

DESCRIBE rtsp://<192.168.88.187>/av0_0 RTSP/1.0

CSeq:3

Accept: application/sdp

Response example:

RTSP/1.0 200 OK

CSeq:3

Server: Encoder/1.0.0

Date: Sun, 13 May 2012 16:39:25 GMT

Context-type: application/sdp

Context-Base: rtsp://<192.168.88.187>/av0_0

Context-length: 291

1.4. RTSP SETUP

Example:

SETUP rtsp://<192.168.88.187>/av0_0 RTSP/1.0

CSeq:4

Transport: RTP/AVP;unicast;client_port=2568-2569

Response example:

RTSP/1.0 200 OK

CSeq:4

Server: Encoder/1.0.0

Date: Sun, 13 May 2012 16:39:25 GMT

Session: 8962035351000806693

Transport: RTP/AVP;unicast;client_port=2568-2569;source=192.168.88.187;

server_port=8018-8019;ssrc=4f08d90f

1.5. RTSP PLAY

Example:

PLAY rtsp://<192.168.88.187>/av0_0 RTSP/1.0

CSeq:5

Session: 8962035351000806693

Range: npt=0.000-\r\n

Response example:

RTSP/1.0 200 OK

CSeq:5

Server: Encoder/1.0.0

Date: Sun, 13 May 2012 16:39:25 GMT

Session: 8962035351000806693

RTP-Info: url=rtsp://192.168.88.187/av0_1/trackID=1

1.6. RTSP TEARDOWN

Example:

TEARDOWN rtsp://<192.168.88.187>/av0_0 RTSP/1.0

CSeq:8

Session: 8962035351000806693

Response example:

RTSP/1.0 200 OK

CSeq:8

Date: Sun, 13 May 2012 16:39:25 GMT

2. JPEG images(snapshot) request

Syntax:

http://<server ipaddr>/cgi-bin/images_cgi?channel=<vaule>&user=<value>

&pwd=<value>

When a JPEG image is requested, the server returns either the specified JPEG image file or "Request failed:Param error".

Note: This requires administrator access(administrator authorization). Channel valid values are 0 to 3.

Example:

http://192.168.88.187/cgi-bin/images_cgi?channel=0&user=admin&pwd=admin

Response example:

HTTP/1.0 200 OK\r\n

Context-length:23311\r\n

Context-type: image/jpeg\r\n

\r\n

<JPEG image date>\r\n

3. Network Parameter

Get or set system network parameter.

Syntax:

http://<server ipaddr>/cgi-bin/network_cgi?[&<parameter>=<value>]

Note: This requires administrator access(administrator authorization).

with the following parameters and values

<parameter>=<value >	Values	Description
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
action=<string>	get/set	Specifies what to do.

BootProto=<string>	dhcp,none	Enable/disable dynamic IP address assignment to the device.
IPAddress=<string>	An ip address	IP Address. The physical address of the device on the network.
SubnetMask=<string>	An ip address	Subnet mask. Divides the network.
DefaultRouter=<string>	An ip address	Default router/gateway used for connecting devices attached to different networks.
MACAddress=<string>	An MAC address like：00-fc-14-0e-ff-05	MAC address. The unique identify of the device.
HostName=<string>	An host name	The name of the device on the network.
DNSServer1=<string>	An ip address	Primary Domain Name System server.
DNSServer2=<string>	An ip address	Secondary Domain Name System server.
Port=<string>	1~65535	The port of the server (web port). Default value 80.
DataPort=<string>	18~65535, Except special port like 80, 544	The port of the data. Default value 5000.
OnvifPort=<string>	18~65535, Except special port like 80, 544	The port of the Onvif. Default value 2000.

3.1. Get system network parameter

Syntax:

http://<server ipaddr>/cgi-bin/network_cgi?action=get&user=<value>

&pwd=<value>

Example:

>*http://192.168.88.187/cgi-bin/network_cgi?action=get&user=admin&pwd=admin*

Response example:

>*HTTP/1.0 200 OK\r\n*

Content-Type:text/plain\r\n

\r\n

BootProto=none

IPAddress=192.168.88.187

SubnetMask=255.255.255.0

DefaultRouter=192.168.88.2

MACAddress=00-5d-20-a0-35-12

HostName=DVS131

DNSServer1=192.168.88.2

DNSServer2=221.5.88.88

Web Port=80

Data Port=5000

ONVIF Port=2000

3.2. Set system network parameter

Syntax:

http://<server ipaddr>/cgi-bin/date_cgi?action=set[&<parameter>=<value >...]

You can set the value of a parameter or all the parameters value.

Example: set all the parameters value

http://192.168.88.187/cgi-

bin/network_cgi?action=set&user=admin&pwd=admin&BootProto=none&IPAddress=192.1

68.88.187&SubnetMask=255.255.255.0&DefaultRouter=192.168.88.2&HostName=DVS13

4&MACAddress=00-fc-14-0e-ff-

05&DNSServer1=192.168.88.2&DNSServer2=221.5.88.88&Port=80

Response example:

    Case 1: system network parameter are changed.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK, Device is rebooting\r\n

Case 2: only HostName is changed.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK\r\n

    Case 3: no system network parameter are changed.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    Param not change\r\n

Case 4: system network parameter is error.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Request failed:Param error\r\n

4. System date and *time*

Get or set the system date and time.

Note: This requires administrator or normal user access.

Syntax: http://<server ipaddr>/cgi-bin/date_cgi?<parameter>=<value >

<parameter>=<value>	Values	Description
action=<string>	get or set	Specifies what to do. get = get the current date and time. set = set the current date and time.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.

4.1. Get system date and time

Syntax:

http://<server ipaddr>/cgi-bin/date_cgi?action=get&user=<value>

&pwd=<value>

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

　　　<month> <day>, <year> <hour>:<minute>:<second> <time zone> <NTP Host>\r\n

Example：

　　　http://192.168.88.187/cgi-bin/date_cgi?action=get&user=admin&pwd=admin

Response example:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

5 22, 2012 15:4:57 29 clock.isc.org \r\n

4.2. Set system date and time

Syntax:

http://<server ipaddr>/cgi-bin/date_cgi?action=set[&<parameter>=<value >...]

with the following parameters and values

<parameter>=<value>	Values	Description
year = <int>	2012-2099	Current year.
month = <int>	1-12	Current month.
day = <int>	1-31	Current day.
hour = <int>	0-23	Current hour.
minute = <int>	0-59	Current minute.
second = <int>	0-59	Current second.
timezone = <int>	0-34 0:(GMT-12:00) , 1:(GMT-11:00) 2:(GMT-10:00), 3:(GMT-9:00) 4:(GMT-8:00) , 5:(GMT-7:00) 6:(GMT-6:00) , 7:(GMT-5:00) 8:(GMT-5:00) , 9:(GMT-4:30) 10:(GMT-4:00), 11:(GMT-3:00) 12:(GMT-2:00), 13:(GMT-1:00) 14:(GMT), 15:(GMT+1:00) 16:(GMT+1:00),17:(GMT+1:00)	Time zone. 18:(GMT+1:00) , 19:(GMT+2:00) 20: (GMT+2:00) , 21: (GMT+3:00) 22: (GMT+3:30), 23: (GMT+4:00) 24: (GMT+4:30), 25: (GMT+5:00) 26: (GMT+5:30), 27: (GMT+6:00) 28: (GMT+7:00), 29: (GMT+8:00) 30: (GMT+9:00), 31: (GMT+9:30) 32:(GMT+10:00), 33:(GMT+11:00) 34: (GMT+12:00)
ntpHost=<string>	A IP address or NTP server name	Such as: clock%2Eisc%2Eorg(clock.isc.org)

		192%2E168%2E88%2E185(Make sure that the NPT server is open).

Example：

http://192.168.88.187/cgi-bin/date_cgi?action=set&user=admin&pwd=admin
&year=2012&month=5&day=18&hour=11&minute=54&second=12

Response:
Case 1: a successful set.
HTTP/1.0 200 OK\r\n
Content-Type:text/plain\r\n
\r\n
      OK\r\n
Case 2: a failed set,Setting or syntax are probably incorrect.
HTTP/1.0 200 OK\r\n
Content-Type:text/plain\r\n
\r\n
      Request failed: Param error\r\n\r\n

4.3. Change the time zone and the NTP host

Note: When DHCP function opens, NTP server address the default for DCHP server address.
Syntax:
http://<server ipaddr>/cgi-bin/date_cgi?action=set&user=<avlue>
&pwd=<value>&timezone=<value>&ntpHost=<value>
Example：

http://192.168.88.187/cgi-bin/date_cgi?action=set&user=admin&pwd=admin&timezone=29&ntpHost=time%2Ewindows%2Ecom
Response:
HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

5. Add, modify and delete users

Note: This requires administrator access (administrator authorization), and System has an administrator user, four normal users.

Syntax:

http://<server ipaddr>/cgi-bin/pwdgrp_cgi?<parameter>=<value>

[&<parameter>=<value>…]

with the following parameters and values

<parameter>=<value>	Values	Description
action=<string>	add, update, remove, get	add = create a new user account. update = change account information of specified parameters if the account exists. remove = remove an existing account. get = get a list of the user accounts.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
username=<string>	<string>	The user account name, a non-existing user name. Valid characters are a thru z, A thru Z and 0 thru 9.
password=<string>	<string>	The user account password. Valid characters are a thru z, A thru Z and 0 thru 9.
level=<int>	1,2	One representatives of an administrator, Two representatives of an normal user.

5.1. Create a new user account.

Example： *http://192.168.88.187/cgi-*

bin/pwdgrp_cgi?action=add&user=admin&pwd=admin&username=User11234&password=

123456&level=2

Response:

Case 1: a successful add.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

>	*OK\r\n*

Case 2: Administrator user can't increase.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

>	*Administrator user can't increase\r\n*

Case 3: No user surplus or users already exist.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

>	*No user surplus or users already exist\r\n*

5.2. Change the password of a existing account.

Example:

http://192.168.88.187/cgi-

bin/pwdgrp_cgi?action=update&user=admin&pwd=admin&username=user&password=13

4

Response:

Case 1: a successful upadte.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

>	*OK\r\n*

Case 2: The user doesn't find.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

     The user doesn't find\r\n

5.3. Remove an account.

Example:

http://192.168.88.187/cgi-

bin/pwdgrp_cgi?action=remove&user=admin&pwd=admin&username=user

Response:

Case 1: a successful remove.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

     OK\r\n

Case 2: The user doesn't find.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

     The user doesn't find \r\n

Case 3: Administrators can't be deleted.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Administrators can't be deleted\r\n

5.4. List users accounts.

Example:

http://192.168.88.187/cgi-bin/pwdgrp_cgi?action=get&user=admin&pwd=admin

Response: A successful Get.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Username:password:level\n

<the users information>

6. Restart server

Note: This requires administrator access(administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/restart_cgi?user=admin&pwd=admin

Example:

http://192.168.88.187/cgi-bin/restart_cgi?user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

> *OK,Device is rebooting\r\n*

7. Factory default

*Set factory default. All parameters reset **except** Network parameters.*

Note: This requires administrator access(administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/factorydefault_cgi? user=admin&pwd=admin

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

> *OK, Device is rebooting \r\n*

8. Hard factory default

Reload factory default. All parameters are set to their factory default value.

Note: This requires administrator access(administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/hardfactorydefault_cgi?user=admin&pwd=admin

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK, Device is rebooting \r\n

9. Video coding

Set and get the encoding parameters.

Note: This requires administrator or normal user access.

Syntax:

http://<server ipaddr>/cgi-bin/videocoding_cgi?<parameter>=<value>

[&<parameter>=<value>…]

with the following parameters and values

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the encoding parameters. set = set the encoding parameters.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
channel=<int>	0~3	The channel number of the video.
EncTypes=<string>	H.264, MJPEG	The list of supported encoding types. Only for getting.
EncType1=<string>	H.264, MJPEG	Encoding format of the main stream.
Resolution1=<string>	704*576, 704*288 352*288, 176*144	The resolution of the main stream.
KeyInterval1=<int>	1~200	The main stream I-frame interval.
FrameRate1=<int>	1~25(PAL), 1~30(NTSC)	The frame rate of the main stream.

BitflowType1=<string>	CBR, VBR	The type of bit rate of the main stream.
NormalBitrate1=<int>	30~16384	The bit rate of the main stream.
ImageQuality1=<string>	1, 2, 3, 4, 5, 6	The image quality of the main stream. 1 – Best, 2 – Better, 3 – Good, 4 – Bad, 5 – Worse, 6 - Worst
AlarmBitrate1=<int>	30~16384	If streaming type of CBR, when moving alarm occurs, use this code flow size.
ResolutionList1=<string>	704*576,704*288,352*288, 176*144	The list of supported resolutions for Main stream. Only for getting.
EncType2=<string>	H.264, MJPEG	Encoding format of the Sub-stream.
Resolution2=<string>	704*576, 704*288 352*288, 176*144	The resolution of the Sub-stream.
KeyInterval2=<int>	1~200	The Sub-stream I-frame interval.
FrameRate2=<int>	1~25(PAL), 1~30(NTSC)	The frame rate of the Sub-stream.
BitflowType2=<string>	CBR, VBR	The type of bit rate of the Sub-stream.
NormalBitrate2=<int>	30~16384	The bit rate of the Sub-stream.
ImageQuality1=<string>	1, 2, 3, 4, 5, 6	The image quality of the main stream. 1 – Best, 2 – Better, 3 – Good, 4 – Bad, 5 – Worse, 6 - Worst
ResolutionList2=<string>	352*288,176*144	The list of supported resolutions for Sub-stream. Only for getting.
AlarmBitrate2=<int>	30~16384	If streaming type of CBR, when moving alarm occurs, use this code flow size.

9.1. Get the encoding parameters

Syntax:

http://<server ipaddr>/cgi-bin/videocoding_cgi?action=get&user=<value>

pwd=<value>&channel=<value>

Example:

http://192.168.88.187/cgi-

bin/videocoding_cgi?action=get&channel=0&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

EncTypes= H.264,MJPEG

Main stream options:

EncType1=H.264

*Resolution1=704*576*

KeyInterval1=200

FrameRate1=25

BitflowType1=CBR

NormalBitrate1=512

AlarmBitrate1=2800

*ResolutionList1=704*576,704*288,352*288,176*144*

Sub stream options:

EncType2=H.264

*Resolution2=352*288*

KeyInterval2=50

FrameRate2=25

BitflowType2=VBR

NormalBitrate2=512

*ResolutionList2=352*288,176*144*

9.2.Set the encoding parameters

Syntax:

http://<server ipaddr>/cgi-bin/videocoding_cgi?action=set&channel=<value>

[&<parameter>=<value>…]

Example: *Set the encoding parameters of the main stream.*

http://192.168.88.187/cgi-

bin/videocoding_cgi?action=set&channel=0&user=admin&pwd=admin&EncType1=H.264&

Resolution1=704*576&BitflowType1=CBR&KeyInterval1=20&NormalBitrate1=2035&

FrameRate1=25

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

If you change the resolution of the main stream, the device will restart and it will return "OK,Device is rebooting".

10. Video Mask

Get and set the video mask options.

Note: This requires administrator access(administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/videomask_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the video mask options. set = set the video mask options.
channel=<int>	0~3	The channel number of the video.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
MaskSwitch=<string>	open, close	Whether to enable the video mask.
MaskArea0_x=<int>	0~704	The x coordinate values of the mask area 0.

MaskArea0_y=<int>	0~576	The y coordinate values of the mask area 0.
MaskArea0_w=<int>	0~704	The width of the mask area 0.
MaskArea0_h=<int>	0~576	The height of the mask area 0.
MaskArea1_x=<int>	0~704	The x coordinate values of the mask area 1.
MaskArea1_y=<int>	0~576	The y coordinate values of the mask area 1.
MaskArea1_w=<int>	0~704	The width of the mask area 1.
MaskArea1_h=<int>	0~576	The height of the mask area 1.
MaskArea2_x=<int>	0~704	The x coordinate values of the mask area 2.
MaskArea2_y=<int>	0~576	The y coordinate values of the mask area 2.
MaskArea2_w=<int>	0~704	The width of the mask area 2.
MaskArea2_h=<int>	0~576	The height of the mask area 2.
MaskArea3_x=<int>	0~704	The x coordinate values of the mask area 3.
MaskArea3_y=<int>	0~576	The y coordinate values of the mask area 3.
MaskArea3_w=<int>	0~704	The width of the mask area 3.
MaskArea3_h=<int>	0~576	The height of the mask area 3.

10.1. Get the video mask options

Syntax:

http://<server ipaddr>/cgi-bin/videomask_cgi?action=get&channel=<value>

&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/videomask_cgi?action=get&channel=0&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

MaskSwitch=close

MaskArea0_x=0 MaskArea0_y=0 MaskArea0_w=704 MaskArea0_h=576

MaskArea1_x=0 MaskArea1_y=0 MaskArea1_w=0 MaskArea1_h=0

MaskArea2_x=0 MaskArea2_y=0 MaskArea2_w=0 MaskArea2_h=0

MaskArea3_x=0 MaskArea3_y=0 MaskArea3_w=0 MaskArea3_h=100

10.2. Set the video mask options

Syntax:

http://<server ipaddr>/cgi-bin/videomask_cgi?action=set[&parameter =<value>…]

Example: *Set the video mask parameters of the first channel.*

http://192.168.88.187/cgi-

bin/videomask_cgi?action=set&channel=0&user=admin&pwd=admin&MaskSwitch=open&

MaskArea0_x=10&MaskArea0_y=20&MaskArea0_w=100&MaskArea0_h=200&MaskArea

1_x=210&MaskArea1_y=300&MaskArea1_w=30&MaskArea1_h=40

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK\r\n

11. Video parameters

Get and set the Video parameters.

Note: This requires administrator access or normal user, and only the equipment to support this parameter, you can get or set its value.

Syntax:

http://<server ipaddr>/cgi-bin/videoparameter_cgi?<parameter>=<value>

[&<parameter>=<value>…]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the video parameters. set = set the video parameters.

channel=<int>	0~3	The channel number of the video.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
Brightness=<int>	1~255	The brightness of the video.
Contrast=<int>	1~255	The contrast of the video.
Chroma=<int>	1~255	The chroma of the video.
Saturation=<int>	1~255	The saturation of the video.
Acutance=<int>	1~255	The acutance of the video.
Red=<int>	1~255	Red of the video.
Green=<int>	1~255	Green of the video.
Blue=<int>	1~255	Blue of the video.
Gamma=<int>	1~255	The Gamma of the video.

11.1. Get the video parameters

Syntax:

http://<serveripaddr>/cgi-bin/videoparameter_cgi?action=get&channel=<value>
&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-
bin/videoparameter_cgi?action=get&channel=0&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n
Content-Type:text/plain\r\n
\r\n
Brightness=112
Contrast=132
Chroma=114
Saturation=128

11.2. Set the video parameters

Syntax:

http://<server ipaddr>/cgi-bin/videoparameter_cgi?action=set&channel=

<value>[&<parameter>=<value>…]

Example: *Set the video parameters of the channel 0.*

http://192.168.88.187/cgi-bin/videoparameter_cgi?action=set&channel=0&user=admin

&pwd=admin&Brightness=20&Contrast=100&Chroma=200&Saturation=123

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

12. Video format

Get and set the video format.

Note: This requires administrator access(administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/videoformat_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the video format. set = set the video format.
user=<string>	user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	user password	Valid characters are a thru z, A thru Z and 0 thru 9.
Videoformat=<string>	PAL, NTSC	The channel number of the video.

12.1. Get the video format

Syntax:

http://<server ipaddr>/cgi-bin/videoformat_cgi?action=get&user=<value>

&pwd=<value>

return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

  Videoformat=<value>\r\n

12.2. Set the video format

Syntax:

http://<server ipaddr>/cgi-bin/videoformat_cgi?action=set&user=<value>

&pwd=<value>&Videoformat=<value>

Example:

http://192.168.88.187/cgi-bin/videoformat_cgi?action=set&user=admin&pwd=admin&

Videoformat=PAL

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

  OK,Device is rebooting\r\n

If the video format has not changed, return "Param not change".

13. Audio parameter

Get and set the audio parameter options.

Note:This requires administrator access.

Syntax:

http://<server ipaddr>/cgi-bin/audio_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the audio parameter options. set = set the audio parameter options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.

pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
AudioSwitch=<string>	open, close	Enable audio. When video need to voice, need to open this switch.
AudioType=<string>	G.726,G.711A, G.711U, AAC	The type of the audio encoding. DVS does not have AAC encoding.
AudioInput=<string>	Mic, Line	The type of the audio Input . DVS only have 'Line' input.
AudioBitrate=<int>	16000	The value of the bitrate.
AudioSamplingRate =<string>	8k,16k,32k	The value of the audio sampling rate. DVS only have 8K sampling rate.
AudioInVol=<int>	1~15	The size of the input volume.
AudioOutVol=<int>	1~15	The size of the output volume.

13.1. Get the audio parameter options

Syntax:

http://<server ipaddr>/cgi-bin/audio_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/audio_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

AudioSwitch=close

AudioType=G.711A

AudioBitrate=16000

AudioSamplingRate=8k

AudioInput=Line

AudioInVol=2

AudioOutVol=5

DuplexMode=post

13.2. Set the audio parameter options

Syntax:

http://<server ipaddr>/cgi-bin/audio_cgi?action=set[&<parameter>=<value>]

Example:

Set parameters

http://192.168.88.187/cgi-bin/audio_cgi?action=set&channel=0&user=admin&pwd=admin

&AudioSwitch=close&AudioType=G.711U&AudioInVol=1&AudioOutVol=15

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

13.3. Switch Audio Out

Note: for B1018 only

Syntax:

http://<server ipaddr>/cgi-bin//cgi-bin/audiooutswitch_cgi?channel =<value>

&user=<value>&pwd=<value>

Example:

Set parameters

http://192.168.88.187/cgi-bin/audiooutswitch_cgi?channel=1&user=admin&pwd=admin

<parameter>=<value>	Values	Description
channel=<string>	1, 2, 4, 8, 16, 32, 64, 128	Audio Out #1 = 1, Audio Out #2 = 2, Audio Out #3= 4, Audio Out #4= 8, Audio Out #5= 16, Audio Out #6= 32, Audio Out #7= 64, Audio Out #8= 128
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.

14. Text overlay

Get and set the text overlay options.

Note: This requires administrator or normal user access.

Syntax:

http://<server ipaddr>/cgi-bin/textoverlay_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the text overlay options. set = set the text overlay options.
channel=<int>	0~3	The channel number of the video.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
Title=<string>	<string>	Valid characters are a thru z, A thru Z and 0 thru 9.
WeekValue=<int>	0,1	Whether to display the week, 0 - Do not show, 1 – Show.
TimeValue=<int>	0,1	Whether to display the time, 0 - Do not show, 1 – Show.
DateValue=<int>	0,1	Whether to display the date, 0 - Do not show, 1 – Show.
BitrateValue=<int>	0,1	Whether to display the bitrate, 0 - Do not show, 1 – Show.
TitleValue=<int>	0,1	Whether to display the title, 0 - Do not show, 1 – Show.
Color=<int>	0~4	The color of the font, 0-white, 1-black, 2-yellow, 3-red, 4-blue.

14.1. Get the text overlay options

Syntax:

http://<server ipaddr>/cgi-bin/textoverlay_cgi?action=get&channel=<value>

&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-

bin/textoverlay_cgi?action=get&channel=0&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Title=345

TitleValue=1

DateValue=1

TimeValue=1

WeekValue=0

BitrateValue=1

Color=2

14.2. Set the text overlay options

Syntax:

http://<server ipaddr>/cgi-bin/textoverlay_cgi?action=set&channel=<value>

[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-

bin/textoverlay_cgi?action=set&channel=0&user=admin&pwd=admin&Title=Channel1&We

ekValue=0& TimeValue=1&DateValue=0&TitleValue=0&BitrateValue=0

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

15. Motion alarm

Get and set the motion alarm options.

Note: This requires administrator access(administrator authorization).When device has storage (hard disk, SD card, USB disk), linkage Snap, linkage Record document will be saved to storage first and do related process based on file storage. Or it will be saved to memory for the moment and do related process based on file storage.

Syntax:

http://<server ipaddr>/cgi-bin/motion_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the motion alarm options. set = set the motion alarm options.
channel=<int>	0~3	The channel number of the video.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
Sensitivity=<int>	5~100	The sensitivity of motion alarm.
Threshold=<int>	1~100	When the level of detection is higher than threshold, motion alarm trigger.
MotionSwitch=<string>	close, open	Whether to open the motion alarm.
EMailSwitch=<string>	close, open	Whether the alarm is sent to the email.
Time1Switch=<string>	close, open	Time 1 selector switch.
Time1_BgnHour=<int>	0~23	The beginning of the hour value.
Time1_BgnMinute=<int>	0~59	The beginning of the minute value.
Time1_EndHour=<int>	0~23	The end of the hour value.
Time1_EndMinute=<int>	0~59	The end the minute value.
Time2Switch=<string>	close, open	Time 2 selector switch.
Time2_BgnHour=<int>	0~23	The beginning of the hour value.
Time2_BgnMinute=<int>	0~59	The beginning of the minute value.
Time2_EndHour=<int>	0~23	The end of the hour value.
Time2_EndMinute=<int>	0~59	The end the minute value.
Day_of_Week=<string>	Monday, Tuesday,	Day of week on that set Time 1 and Time 2.

	Wednesday, Thursday, Friday, Saturday, Sunday	
DetectArea0_x=<int>	0~704	The x coordinate values of the detection area 0.
DetectArea0_y=<int>	0~576	The y coordinate values of the detection area 0.
DetectArea0_w=<int>	0~704	The width of the detection area 0.
DetectArea0_h=<int>	0~576	The height of the detection area 0.
DetectArea1_x=<int>	0~704	The x coordinate values of the detection area 1.
DetectArea1_y=<int>	0~576	The y coordinate values of the detection area 1.
DetectArea1_w=<int>	0~704	The width of the detection area 1.
DetectArea1_h=<int>	0~576	The height of the detection area 1.
DetectArea2_x=<int>	0~704	The x coordinate values of the detection area 2.
DetectArea2_y=<int>	0~576	The y coordinate values of the detection area 2.
DetectArea2_w=<int>	0~704	The width of the detection area 2.
DetectArea2_h=<int>	0~576	The height of the detection area 2.
DetectArea3_x=<int>	0~704	The x coordinate values of the detection area 3.
DetectArea3_y=<int>	0~576	The y coordinate values of the detection area 3.
DetectArea3_w=<int>	0~704	The width of the detection area 3.
DetectArea3_h=<int>	0~576	The height of the detection area 3.
OutputSwitch=<string>	close, open	Whether the alarm is sent to the warning lights.
OutputDuration=<int>	0~2*60*60	Alarm output duration.

SnapSwitch=<string>	close, open	When the motion alarm occurs, whether to snap.
SnapNum=<int>	0~3600	The number of captured images.
SnapInterval=<float>	0~3600,0.5,1.5	The interval of captured images.
SnapSaveMode=<string>	Local,Ftp,Email FtpEmail	The way to save the pictures. FtpEmail means Ftp and Email .
RecordSwitch=<string>	close, open	When the motion alarm occurs, whether to record.
RecordTime=<int>	0~2*60*60	Recording continuous time.
RecordSaveMode=<string>	Local,Ftp	The way to save the Video resource.

15.1. Get the motion alarm options

Syntax:

http://<server ipaddr>/cgi-bin/motion_cgi?action=get&channel=<value>

&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/motion_cgi?action=get&channel=0&user=admin&pwd=admin

Response:

DetectArea0_x=0 DetectArea0_y=0 DetectArea0_w=704 DetectArea0_h=576

DetectArea1_x=0 DetectArea1_y=0 DetectArea1_w=0 DetectArea1_h=0

DetectArea2_x=0 DetectArea2_y=0 DetectArea2_w=0 DetectArea2_h=0

DetectArea3_x=0 DetectArea3_y=0 DetectArea3_w=0 DetectArea3_h=0

MotionSwitch=open

Sensitivity=90

Threshold=50

Day_of_Week=Monday

Time1Switch=close

Time1_BgnHour=0 Time1_BgnMinute=0 Time1_EndHour=23 Time1_EndMinute=30

Time2Switch=close

Time2_BgnHour=6 Time2_BgnMinute=10 Time2_EndHour=10 Time2_EndMinute=20

Day_of_Week=Tuesday

Time1Switch=close

Time1_BgnHour=0 Time1_BgnMinute=0 Time1_EndHour=23 Time1_EndMinute=30

Time2Switch=close

Time2_BgnHour=6 Time2_BgnMinute=10 Time2_EndHour=10 Time2_EndMinute=20

Day_of_Week=Wednesday

Time1Switch=open

Time1_BgnHour=0 Time1_BgnMinute=0 Time1_EndHour=23 Time1_EndMinute=30

Time2Switch=open

Time2_BgnHour=6 Time2_BgnMinute=10 Time2_EndHour=10 Time2_EndMinute=20

Day_of_Week=Thursday

Time1Switch=close

Time1_BgnHour=0 Time1_BgnMinute=0 Time1_EndHour=23 Time1_EndMinute=30

Time2Switch=close

Time2_BgnHour=6 Time2_BgnMinute=10 Time2_EndHour=10 Time2_EndMinute=20

Day_of_Week=Friday

Time1Switch=close

Time1_BgnHour=0 Time1_BgnMinute=0 Time1_EndHour=23 Time1_EndMinute=30

Time2Switch=close

Time2_BgnHour=6 Time2_BgnMinute=10 Time2_EndHour=10 Time2_EndMinute=20

Day_of_Week=Saturday

Time1Switch=close

Time1_BgnHour=0 Time1_BgnMinute=0 Time1_EndHour=23 Time1_EndMinute=30

Time2Switch=close

Time2_BgnHour=6 Time2_BgnMinute=10 Time2_EndHour=10 Time2_EndMinute=20

Day_of_Week=Sunday

Time1Switch=close

Time1_BgnHour=0 Time1_BgnMinute=0 Time1_EndHour=23 Time1_EndMinute=30

Time2Switch=close

Time2_BgnHour=6 Time2_BgnMinute=10 Time2_EndHour=10 Time2_EndMinute=20

EMailSwitch=open

OutputSwitch=open

OutputDuration=20

SnapSwitch=close

SnapNum=100

SnapInterval=1.5

SnapSaveMode=Ftp

RecordSwitch=open

RecordTime=10

RecordSaveMode=Ftp

15.2. Set the motion alarm options

Syntax:

http://<server ipaddr>/cgi-bin/motion_cgi?action=set[&parameter =<value>…]

You can set the value of a parameter or all the parameters value.

Example: *Set the motion alarm parameters of the first channel.*

http://192.168.88.187/cgi-bin/motion_cgi?action=set&channel=0&user=admin&pwd=admin&MotionSwitch=open&EMailSwitch=open&Time1Switch=open&Time1_BgnHour=0&Time1_BgnMinute=0&Time1_EndHour=20&Time1_EndMinute=30&Sensitivity=1&DetectArea0_x=0&DetectArea0_y=0&DetectArea0_w=704&RecordSwitch=open&RecordTime=61&RecordSaveMode=Ftp

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

16. Shelter alarm

Open or close the shelter alarm .

Note: This requires administrator access(administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/shelter_cgi?channel=<value>&

ShelterSwitch=<value>&user=<value>&pwd=<value>

with the following parameters and values.

<parameter>=<value>	Values	Description
channel=<int>	0~3	The channel number of the video.
ShelterSwitch =<string>	close, open	Whether to open the shelter alarm.
user=<string>	A user name	Valid characters are a thru z, A

		thru Z and 0 thru 9.
pwd=<string>	*A user password*	*Valid characters are a thru z, A thru Z and 0 thru 9.*

Example: *Open the channel 0 shelter alarm.*

http://192.168.88.187/cgi-

bin/shelter_cgi?action=set&channel=0&user=admin&pwd=admin&ShelterSwitch=open

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

> *OK\r\n*

17. Sensor alarm

Get and set the sensor alarm options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/sensor_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	*Values*	*Description*
action=<string>	*get, set*	*get = get the senor alarm options.* *set = set the senor alarm options.*
channel=<int>	*0~3*	*The channel number of the video.*
user=<string>	*A user name*	*Valid characters are a thru z, A thru Z and 0 thru 9.*
pwd=<string>	*A user password*	*Valid characters are a thru z, A thru Z and 0 thru 9.*
DetectSwitch=<string>	*close, open*	*Whether to open the sensor alarm.*
SensorType=<string>	*NormalOpen, NormalClose*	*The type of the sensor.*
EMailSwitch=<string>	*close, open*	*Whether the alarm is sent to the email.*
Time1Switch=<string>	*close, open*	*Time 1 selector switch.*
Time1_BgnHour=<int>	*0~23*	*The beginning of the hour value.*

Time1_BgnMinute=<int>	0~59	The beginning of the minute value.
Time1_EndHour=<int>	0~23	The end of the hour value.
Time1_EndMinute=<int>	0~59	The end the minute value.
Time2Switch=<string>	close, open	Time 2 selector switch.
Time2_BgnHour=<int>	0~23	The beginning of the hour value.
Time2_BgnMinute=<int>	0~59	The beginning of the minute value.
Time2_EndHour=<int>	0~23	The end of the hour value.
Time2_EndMinute=<int>	0~59	The end the minute value.
OutputSwitch=<string>	close, open	Whether the alarm is sent to the warning lights.
OutputDuration=<int>	0~2*60*60	Alarm output duration.
SnapSwitch=<string>	close, open	When the motion alarm occurs, whether to snap.
SnapNum=<int>	0~3600	The number of captured images.
SnapInterval=<float>	0~3600,0.5,1.5	The *interval* of captured images.
SnapSaveMode=<string>	Local,Ftp,Email FtpEmail	The way to save the pictures. FtpEmail means Ftp and Email .
RecordSwitch=<string>	close, open	When the motion alarm occurs, whether to record.
RecordTime=<int>	0~2*60*60	Recording continuous time.
RecordSaveMode=<string>	Local,Ftp	The way to save the Video resource.

17.1. Get the sensor alarm options

Syntax:

http://<server ipaddr>/cgi-bin/sensor_cgi?action=get&channel=<value>

&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/sensor_cgi?action=get&channel=0&user=admin&

pwd=admin

Response:

DetectSwitch=close

SensorType=NormalOpen

Time1Switch=open

Time1_BgnHour=8 Time1_BgnMinute=0 Time1_EndHour=23 Time1_EndMinute=59

Time2Switch=close

Time2_BgnHour=0 Time2_BgnMinute=0 Time2_EndHour=23 Time2_EndMinute=22

EMailSwitch=close

OutputSwitch=close

OutputDuration=10

SnapSwitch=close

SnapNum=10

SnapInterval=1.5

SnapSaveMode=Email

RecordSwitch=close

RecordTime=64

RecordSaveMode=Ftp

17.2. Set the sensor alarm options

Syntax:

http://<server ipaddr>/cgi-bin/sensor_cgi?action=set[&parameter =<value>…]

You can set the value of a parameter or all the parameters value.

Example:

Set the sensor alarm parameters of the first channel.

http://192.168.88.187/cgi-bin/sensor_cgi?action=set&channel=0&user=admin&pwd=admin

&DetectSwitch=open&SensorType=NormalClose&EMailSwitch=open&Time1Switch=open

&Time1_BgnHour=0&Time1_BgnMinute=0&Time1_EndHour=20&Time1_EndMinute=30&

SnapSwitch=open&SnapNum=6&SnapInterval=2.5&SnapSaveMode=FtpEmail&RecordS

witch=open&RecordTime=88&RecordSaveMode=Ftp

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

18. Video lose alarm

Get and set the video lose alarm options.

Note: This requires administrator access (administrator authorization).

When device has storage (hard disk, SD card, USB disk), linkage Snap, linkage Record document will be saved to storage first and do related process based on file storage. Or it will be saved to memory for the moment and do related process based on file storage.

Syntax:

http://<server ipaddr>/cgi-bin/videolose_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the video lose alarm options. set = set the video lose alarm options.
channel=<int>	0~3	The channel number of the video.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
LoseSwitch=<string>	close, open	Whether to open the video lose alarm.
EMailSwitch=<string>	close, open	Whether the alarm is sent to the email.
OutputSwitch=<string>	close, open	Whether the alarm is sent to the warning lights.
OutputDuration=<int>	0~2*60*60	Alarm output duration.
SnapSwitch=<string>	close, open	When the motion alarm occurs, whether to snap.
SnapNum=<int>	0~3600	The number of captured images.
SnapInterval=<float>	0~3600,0.5,1.5	The *interval* of captured images.
SnapSaveMode=<string>	Local,Ftp,Email FtpEmail	The way to save the pictures. FtpEmail means Ftp and Email .
RecordSwitch=<string>	close, open	When the motion alarm occurs, whether to record.
RecordTime=<int>	0~2*60*60	Recording continuous time.
RecordSaveMode=<string>	Local,Ftp	The way to save the Video resource.

18.1. Get the video lose alarm options

Syntax:

http://<server ipaddr>/cgi-bin/videolose_cgi?action=get&channel=<value>

&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/videolose_cgi?action=get&channel=0&user=admin

&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

LoseSwitch=open

EMailSwitch=open

OutputSwitch=open

OutputDuration=20

SnapSwitch=close

SnapNum=100

SnapInterval=1.5

SnapSaveMode=Ftp

RecordSwitch=open

RecordTime=10

RecordSaveMode=Ftp

18.2. Set the video loss alarm options

Syntax:

http://<server ipaddr>/cgi-bin/videolose_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/videolose_cgi?action=set&channel=0&user=admin

&pwd=admin&LoseSwitch=open&EMailSwitch=open&outputSwitch=open&OutputDuration

=21&SnapSwitch=open&SnapNum=20&SnapInterval=2&SnapSaveMode=FtpEmail&Reco

rdSwitch=open&RecordTime=61&RecordSaveMode=Ftp

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK\r\n

19. Network interruption alarm

Get and set the network interruption alarm options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/ networkinterruption_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the network interruption alarm options. set = set the network interruption alarm options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
DetectSwitch=<string>	close, open	Whether to open the video lose alarm.
OutputSwitch=<string>	close, open	Whether the alarm is sent to the warning lights.
OutputDuration=<int>	0~2*60*60	Alarm output duration.
SnapSwitch=<string>	close, open	When the motion alarm occurs, whether to snap.
SnapNum=<int>	0~3600	The number of captured images.
SnapInterval=<float>	0~3600,0.5,1.5	The interval of captured images.
RecordSwitch=<string>	close, open	When the motion alarm occurs, whether to record.
RecordTime=<int>	0~2*60*60	Recording continuous time.

BEWARD

19.1. Get the network interruption alarm options

Syntax:

http://<server ipaddr>/cgi-bin/networkinterruption_cgi?action=get

&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/networkinterruption_cgi?action=get&user=admin

&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

DetectSwitch=close

OutputSwitch=close

OutputDuration=9

SnapSwitch=close

SnapNum=10

SnapInterval=1.5

RecordSwitch=close

RecordTime=62

19.2. Set the network interruption alarm options

Syntax:

http://<server ipaddr>/cgi-bin/networkinterruption_cgi?action=set

[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/networkinterruption_cgi?action=set&user=admin&

pwd=admin&DetectSwitch=open&outputSwitch=open&OutputDuration=21&SnapSwitch=o

pen&SnapNum=20&SnapInterval=2&RecordSwitch=open&RecordTime=61

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

20. Alarm status

20.1. Method 1 (prefer)

20.1.1. Мониторинг уровней детекции движения устройства

Предлагается использовать GET-запрос для запроса текущих значений уровней детекции движения. В ответ на запрос устройство должно открыть поток, в который с максимально возможной частотой должно помещать информацию об уровнях всех заданных зон детекции движения.

Синтаксис запроса:

http://<server ipaddr>/cgi-bin/motiondetectionstate_cgi?channel=<value>
&user=<value>&pwd=<value>

Ответ на запрос:

<detectAreaNumber>=<level>{,<detectAreaNumber>=<level>}\n

Параметры запроса и ответа представлены ниже:

Параметры	Значения	Описание
Параметры GET-запроса		
channel=<string>	0-...	Номер канала.
user=<string>	Имя пользователя	Допустимые символы: a-z, A-Z, 0-9.
pwd=<string>	Пароль пользователя	Допустимые символы: a-z, A-Z, 0-9.
Параметры ответа сервера на GET-запрос		
<detectAreaNumber>	0-...	Номер зоны детекции.
<level>	0-100	Уровень обнаружения движения в зоне детекции.

Пример:

Запрос:

http://192.168.88.187/cgi-bin/motiondetectionstate_cgi?channel=0&user=admin&pwd=admin

Ответ:

0=1,1=0\n

0=15,1=0\n

0=100,1=25\n

0=80,1=60\n

0=0,1=100\n

0=0,1=10\n

0=0,1=0\n

...

20.1.2. Мониторинг изменений статусов тревоги устройства

Предлагается использовать GET-запрос для запроса оповещений об изменении состояния тревоги устройства. В ответ на запрос устройство должно открыть постоянное соединение, через которое оно будет передавать информацию об изменении состояния соответствующей тревоги сразу же после указанного изменения.

Синтаксис запроса:

http://<server ipaddr>/cgi-bin/alarmchangestate_cgi?channel=<value> [&parameter=<value>{;<value>}]&user=<value>&pwd=<value>

Ответ на запрос:

<date>;<time>;<alarmType>;<alarmStatus>[;<detectAreaNumber>{,<detectAreaNumber>}][;<SensorNumber>]\n

Если в течение 5 секунд нет события тревоги, то отправляется символ новой строки '\n' для проверки доступности клиента.

Параметры запроса и ответа представлены ниже:

Параметры	Значения	Описание
Параметры GET-запроса		
channel=<string>	0-...	Номер канала.
parameter=<string>	MotionDetection, VideoLose, SensorAlarm,	Тип тревоги, который необходимо получать. Параметр может быть не задан или принимать сразу несколько аргументов. Если параметр не задан, то необходимо получать изменения статусов по всем типам тревоги.
user=<string>	Имя пользователя	Допустимые символы: a-z, A-Z, 0-9.
pwd=<string>	Пароль пользователя	Допустимые символы: a-z, A-Z, 0-9.
Параметры ответа сервера на GET-запрос		

<date>	ГГГГ-ММ-ДД	Дата.
<time>	ЧЧ:ММ:СС	Время.
<alarmType>	MotionDetection, VideoLose, SensorAlarm,	Тип тревоги.
<alarmStatus>	1,0	Статус срабатывания тревоги: 1 – тревога включилась, 0 – тревога выключилась.
<detectAreaNumber>	0-...	Номер зоны детекции. Параметр актуален только для статуса тревоги «MotionDetection» и может принимать сразу несколько аргументов.

Пример:

Запрос:

http://192.168.88.187/cgi-bin/alarmchangestate_cgi?channel=0&parameter=MotionDetection;SensorAlarm&user=admin&pwd=admin

Ответ:

2012-06-04;20:00:36;MotionDetection;1;0,1\n

2012-06-04;20:00:36;SensorInAlarm;1;0\n

2012-06-04;20:00:40;SensorInAlarm;0;0\n

2012-06-04;20:00:47;MotionDetection;0;0\n

2012-06-04;20:01:23;MotionDetection;0;1\n

20.2. Method 2 (less preferred)

Obtain alarm status.

Note: This requires administrator access (administrator authorization). Information about alarm status add to response body every two seconds.

Syntax:

http://<server ipaddr>/cgi-bin/alarmstate_cgi?action=<value>&parameter=<value>

&user=<value>&pwd=<value>

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, clear	get = get the alarm statues.

		clear = Remove all the current state of alarm.
parameter=<string>	*MotionDetection, VideoLoss, SensorAlarm, NetworkInterruption, ShelterAlarm.*	*This parameter can used to query the interest alarm type.*
user=<string>	*A user name*	*Valid characters are a thru z, A thru Z and 0 thru 9.*
pwd=<string>	*A user password*	*Valid characters are a thru z, A thru Z and 0 thru 9.*
Alarm Type=<string>	*MotionDetection, VideoLoss , SensorAlarm, NetworkInterruption, Shelter Alarm.*	*The type of the alarm.*
Alarm Level=<int>	*0~100*	*Level of motion detection from all areas. Is actual when Alarm Type is MotionDetection*
Alarm Type Switch= <string>	*open, close*	*Open when interest alarm type turned on.*
Alarm Status = <string>	*1,0*	*When alarm triggered alarm status is 1, when not triggered alarm status 0.*

20.2.1. Get the alarm status

Syntax:

http://<server ipaddr>/cgi-bin/alarmstate_cgi?action=get&user=<value>

&pwd=<value>

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Channel=<value> date=year-month-day time=hour:minute:second

Alarm Type=<value> Alarm Level =<value> Alarm Type Switch=<value> Alarm Status=<value>

Example:

http://192.168.88.187/cgi-

bin/alarmstate_cgi?action=get&parameter=MotionDetection&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type: multipart/x-mixed-replace;boundary=detection /plain

Body:

…

--detection

Content-Type:text/plain\r\n

Channel=0 date=2012-06-04 time=20:00:36

Alarm Type= Motion Alarm

*Alarm Level =**0***

Alarm Type Switch=open

*Alarm Status=**0***

\r\n

--detection

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

Channel=0 date=2012-06-04 time=20:08:25

Alarm Type= Motion Alarm

*Alarm Level =**40***

Alarm Type Switch=open

*Alarm Status=**1***

\r\n

--detection

…

20.2.2. Clear the alarm statues

Syntax:

http://<server ipaddr>/cgi-bin/alarmstate_cgi?action=clear&user=<value>

&pwd=<value>

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

21. ALARM OUT

Obtain alarm output status.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/ alarmout _cgi?action=set&parameter=<value>&

user=<value>&pwd=<value>

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	set	set = set the alarm out parameter
Output=<int>	0~7	The channel number
Status=<string>	0,1	When status=1 output close, when status=0 output open
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.

Example:

http://192.168.88.187/cgi-bin/alarmout_cgi?action=set&user=admin&

pwd=admin&Output=0&Status=1

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

22. CONTROLLER

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/controller_cgi?action=<value>&parameter=<value>

&user=<value>&pwd=<value>

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the controller type. set = set controller type.
Type=<string>	1, 3	1 – 1 channel relay switch box 3 – 3 channel relay switch box
Output1<int> Output2=<int> Output3=<int>	Open, close	Output number
Delay1=<int> Delay2=<int> Delay3=<int>	1,2,3,4,5,6,7,8,9,10 s	Time triggered alarm out
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.

22.1. Get type

Syntax:

http://<server ipaddr>/cgi-bin/ controller_cgi?action=get&user=<value>

&pwd=<value>

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Type=1

Output1=close

Output2=open

Output3=open

Delay1=1

Delay2=1

Delay3=1

22.2. Set type

Syntax:

http://<server ipaddr>/cgi-bin/ controller_cgi?action=set&parameter=<value>&
user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/controller_cgi?action=set&user=admin&pwd=admin&Type=3

Response:

HTTP/1.0 200 OK\r\n

Content-Type: text/plain\r\n

\r\n

    OK\r\n

23. IR light mode

Parameter*: IRLampSpecMode,*

Value*: open, close*

cgi-request of current setting get*:*

/cgi-bin/videoother_cgi?action=get

cgi-request of set velue*:*

/cgi-bin/videoother_cgi?action=set&IRLampSpecMode=open

/cgi-bin/videoother_cgi?action=set&IRLampSpecMode=close

Example:

http://192.168.88.187/cgi-bin/videoother_cgi?action=get

http://192.168.88.187/cgi-bin/videoother_cgi?action=set&IRLampSpecMode=open

24. Выдержка

24.1. Get the Exposure options

http://<server ipaddr>/cgi-bin/videoother_cgi?action=get

24.2. Set the Exposure options

Parameter*: Exposure,*

Value*: 2, 3, 5, 10, 15, 25, 50, 100, 150, 200, 250, 300, 400, 500, 1000, 2000, 4000, 6000, 8000.*

cgi-request of set velue*:*

http://<server ipaddr>/cgi-bin/videoother_cgi?action=set&ExpTimeMax=value

25. PPPOE

Get and set the PPPOE options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/pppoe_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	*get, set*	*get = get the PPPOE options.* *set = set the PPPOE options.*
user=<string>	*A user name*	*Valid characters are a thru z, A thru Z and 0 thru 9.*
pwd=<string>	*A user password*	*Valid characters are a thru z, A thru Z and 0 thru 9.*
PppoeSwitch=<string>	*open,* *close*	*Whether use PPPOE to dial out.*
PppoeIpaddr=<string>	*An IP address*	*The IP address returned in the dial-up after the success of. Cannot be set.*
PppoeUser=<string>	*<string>*	*Valid characters are a thru z, A thru Z and 0 thru 9.* *The length is more than 32.*

| PppoePwd=<string> | <string> | Valid characters are a thru z, A thru Z and 0 thru 9. The length is more than 32. |
| OnlieTime=<int> | <string> | The amount of time online. Cannot be set. |

25.1. Get the PPPOE options

Syntax:

http://<server ipaddr>/cgi-bin/pppoe_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/pppoe_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

PppoeSwitch=close

PppoeIpaddr=0.0.0.0

PppoeUser=User1

PppoePwd=456123

OnlieTime=0minutes

25.2. Set the PPPOE options

Syntax:

http://<server ipaddr>/cgi-bin/pppoe_cgi?action=set[&<parameter>=

<value>]

Example:

http://192.168.88.187/cgi-bin/pppoe_cgi?action=set&user=admin&pwd=admin&PppoeSwitch=open&PppoeUser=test&PppoePwd=123456

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

26. UPNP

Get and set the UPNP options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/upnp_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the UPNP options. set = set the UPNP options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
UpnpSwitch =<string>	open,close	Whether to enable the UPNP .
UpnpEthNo=<string>	Lineate, WiFi	NIC type.
UpnpMode=<string>	Designate, Auto	The mode of the UPNP server.
UpnpHost=<string>	<A server URL>	The host address of the UPNP.
UpnpWebPort=<int>	Valid port number.	The web port of the UPNP.
UpnpDataPort=<int>	Valid port number.	The data port of the UPNP.

26.1. Get the UPNP options

Syntax:

http://<server ipaddr>/cgi-bin/upnp_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/upnp_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

UpnpSwitch=close

UpnpEthNo=WiFi

UpnpMode=Designate

UpnpHost=192.168.88.18

UpnpWebPort=80

UpnpDataPort=5000

26.2. Set the UPNP options

Syntax:

http://<server ipaddr>/cgi-bin/upnp_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/upnp_cgi?action=set&user=admin&pwd=admin&

UpnpSwitch=open&UpnpEthNo=WiFi&UpnpMode=Designate&UpnpWebPort=55&

UpnpDataPort=88&UpnpHost=192%2E168%2E88%2E188

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK\r\n

27. Email

Get and set the Email options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/email_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	*get, set*	*get = get the Email options.*
		set = set the Email options.
user=<string>	*A user name*	*Valid characters are a thru z, A*

		thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
SmtpServer=<string>	<string>	Such as: smtp%2Ebeward%2Eru (smtp.beward.ru).
MailFrom=<string>	<string>	Such as: test%40beward%2Eru(test@beward.ru).
MailTo=<string>	<string>	Such as: test1%40beward%2Eru (test1@beward.ru).
SmtpUser=<string>	<string>	Valid characters are a thru z, A thru Z and 0 thru 9.
SmtpPwd=<string>	<string>	Valid characters are a thru z, A thru Z and 0 thru 9.
MailTile=<string>	<string>	Such as: Alarm%20Message(Alarm Message)
SmtpPort=<int>	25,1~65535	Smtp port.

27.1. Get the email options

Syntax:

http://<server ipaddr>/cgi-bin/email_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/email_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

SmtpServer=smtp.beward.ru

MailFrom=test@beward.ru

MailTo=test1@beward.ru

SmtpUser=user

SmtpPwd=123456

MailTile=Alarm Message

SmtpPort=25

27.2. Set the email options

Syntax:

http://<server ipaddr>/cgi-bin/email_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/email_cgi?action=set&user=admin&pwd=admin&

SmtpServer=smtp%2Ebeward%2Eru&MailFrom=test%40beward%2Eru&MailTo=test1%40

beward%2Eru&SmtpUser=user&SmtpPwd=123456&MailTile=Alarm%20Message&SmtpP

ort=25

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK\r\n

28. FTP

Get and set the FTP options.

Note: This requires administrator access, when the preferred server connection fails, the device enabled the alternate server connection. FtpURL2, FtpPath2, FtpUser2, FtpPwd2, FtpPort2 are the parameter of the alternate server.

Syntax:

http://<server ipaddr>/cgi-bin/ftp_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the FTP options. set = set the FTP options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.

pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
FtpURL=<string>	A IP address	Such as: 192%2E168%2E88%2E187
FtpPath=<string>	<string>	Such as:%2Fcapture%2F(/capture/)
FtpUser=<string>	<string>	Valid characters are a thru z, A thru Z and 0 thru 9.
FtpPwd=<string>	<string>	Valid characters are a thru z, A thru Z and 0 thru 9.
FtpPort=<int>	21,1~65535	FTP server port.
FtpURL2=<string>	A IP address	Such as: 192%2E168%2E88%2E186
FtpPath2=<string>	<string>	Such as:%2Fcapture%2F(/capture/)
FtpUser2=<string>	<string>	Valid characters are a thru z, A thru Z and 0 thru 9.
FtpPwd2=<string>	<string>	Valid characters are a thru z, A thru Z and 0 thru 9.
FtpPort2=<int>	21,1~65535	FTP server port.

28.1. Get the FTP options

Syntax:

http://<server ipaddr>/cgi-bin/ftp_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/ftp_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Preferred Server:

FtpURL=192.168.88.185

FtpPath=/catalog/

FtpPort=21

FtpUser=ftp1

FtpPwd=123456

Alternate Server:

FtpURL2=192.168.88.186

FtpPath2=/capture/

FtpPort2=21

FtpUser2=ftp2

FtpPwd2=123456

28.2. Set the FTP options

Syntax:

http://<server ipaddr>/cgi-bin/ftp_cgi?action=set[&<parameter>=<value>]

Example: *set the alternate server parameter*

http://192.168.88.187/cgi-bin/ftp_cgi?action=set&user=admin&pwd=admin&

FtpURL2=192%2E168%2E88%2E187&FtpPath2=%2Fphotos%2F&FtpPort2=22&FtpUser

2=ftptest&FtpPwd2=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

29. DDNS

Get and set the DDNS options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/ddns_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the DDNS options. set = set the DDNS options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A

		thru Z and 0 thru 9.
Provider=<string>	*NULL,mvddns.net,3 322.org, dyndns.org*	*Service providers.* *NULL: Do not enable DDNS service.*
DdnsName=<string>	*<string>*	*DDNS registered name.*
DdnsPass=<string>	*<string>*	*DDNS registered password.*
Domain=<string>	*<string>*	*If DDNS is set successfully, you can access the device through the domain name.*
ServerUrl=<string>	*<A server URL>*	*The address of the DDNS server.* *Such as:* *members%2Edyndns%2Eorg* *(members.dyndns.org)*
ServerPort=<int>	*Valid port number.*	*The port of the DDNS server.*
DdnsMapDataPort=<int>	*Valid port number.*	*Data mapping port.*
DdnsMapWebPort=<int>	*Valid port number.*	*Web service mapping port.*
UpdateInterval=<int>	*0:2 minutes,* *1:5 minutes,* *2:30 minutes,* *3:1 hours,* *4: 2 hours,* *5: 1 days,* *6:IP update.*	*DDNS update time interval.*

29.1. Get the DDNS options

Syntax:

http://<server ipaddr>/cgi-bin/ddns_cgi?action=get&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/ddns_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Provider=dyndns.org

DdnsName= test

DdnsPass= 123456

Domain= mk56.dyndns.org

ServerUrl=members.dyndns.org

ServerPort=30000

DdnsMapDataPort=5000

DdnsMapWebPort=80

UpdateInterval=5 minutes

29.2. Set the DDNS options

Syntax:

http://<server ipaddr>/cgi-bin/ddns_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/ddns_cgi?action=set&user=admin&pwd=admin&

Provider=dyndns%2Eorg&DdnsName=test&DdnsPass=123456&Domain=mk56%2Edyndn

s%2Eorg&ServerUrl=members%2Edyndns%2Eorg&ServerPort=20000&DdnsMapDataPor

t=500&DdnsMapWebPort=8080&UpdateInterval=1

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

 OK\r\n

30. PPTP

Get and set the VPN options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/vpn_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description

action=<string>	get, set	get = get the VPN options. set = set the VPN options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
VpnSwitch=<string>	open,close	Whether to enable the VPN.
VpnServer=<string>	<string>	The address of the VPN server.
VpnName=<string>	<string>	The user name.
VpnPwd=<string>	<string>	The user password.
VpnIP=<string>	Valid port number.	The IP address of the equipment when VPN enable successful. Can't be set.
VpnStatus=<string>	Valid port number.	The status of the VPN. Can't be set.

30.1. Get the PPTP options

Syntax:

http://<server ipaddr>/cgi-bin/vpn_cgi?action=get&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/vpn_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

VpnSwitch=open

VpnServer=192.168.88.188

VpnName=test

VpnPwd=123456

VpnIP=0.0.0.0

VpnStatus=dial-up failed 2 times, device will try again!

30.2. Set the PPTP options

Syntax:

http://<server ipaddr>/cgi-bin/vpn_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/vpn_cgi?action=set&user=admin&pwd=admin&

VpnSwitch=open& VpnServer=192.168.88.188&VpnName=test&VpnPwd=123456

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK\r\n

31. RTSP Parameter

Get and set the RTSP options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/rtsp_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the RTSP options. set = set the RTSP options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
RtspSwitch=<string>	open, close	Whether to enable the RTSP.
RtspMode=<string>	Initiative, Passivity	RTSP service mode.
RtspAuth=<string>	open, close	Whether to enable the RTSP auth.
RtspPacketSize=<int>	1~1460	RTSP data package time.
RtspServer=<string>	<RTSP server address >	When the mode selection to take the initiative to connect, you need to set this parameter. The address of the RTSP server.
RtspPort=<int>	1~65535	The port of the RTSP server.

MultServer=<int>	<RTSP MultServer address >	The address of the RTSP multicast server.
MultPreVPort=<int>	Valid port number.	The main-stream multicast video port.
MultPreAPort=<int>	Valid port number.	The main-stream multicast audio port.
MultAltVPort=<int>	Valid port number.	Sub-stream multicast video port.
MultAltAPort=<int>	Valid port number.	Sub-stream multicast audio port.

31.1. Get the RTSP options

Syntax:

http://<server ipaddr>/cgi-bin/rtsp_cgi?action=get&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/rtsp_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

RtspSwitch=open

RtspMode=Passivity

RtspAuth=close

RtspPacketSize=1460

RtspPort=554

Multicast Options:

MultServer=231.0.0.222

MultPreVPort=5010

MultPreAPort=5012

MultAltVPort=5020

MultAltAPort=5022

31.2. Set the RTSP options

Syntax:

http://<server ipaddr>/cgi-bin/rtsp_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/rtsp_cgi?action=set&user=admin&pwd=admin&

RtspSwitch=close&RtspMode=Initiative&RtspAuth=open&RtspPacketSize=1400&RtspPort

=553&MultServer=231.0.0.221&MultPreVPort=5001&MultPreAPort=5002&MultAltVPort=5

003&MultAltAPort=5004

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

  OK\r\n

32. IP Email

Get and set the IP Email options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/ipemail_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the IP Email options. set = set the IP Email options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
IpEmailSwitch =<string>	open, close	Whether to enable the IP Email.
UpdateInterval =<int>	0: Default 1: 1 hour, 2: 2 hour, 3: 1 day, 4: 2 day, 5: 7 day.	IP Email update time interval.

32.1. Get the IP Email options

Syntax:

http://<server ipaddr>/cgi-bin/ipemail_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/ipemail_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

IpEmailSwitch=close

UpdateInterval=Default

32.2. Set the IP Email options

Syntax:

http://<server ipaddr>/cgi-bin/ipemail_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/ipemail_cgi?action=set&user=admin&pwd=admin&

IpEmailSwitch=open&UpdateInterval=3

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK\r\n

33. Center connection

Get and set the center connection options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/connecting_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description

action=<string>	get, set	get=get the center connection options. set = set the center connection options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
ConnectCenterSwitch =<string>	open, close	Whether to enable the center connection.
ConnectCenterPort =<int>	Valid port number.	The port of the connection service.
ConnectCenterIP=<string>	An IP address.	Such as: 192%2E167%2E88%2E185(192.168.88.185).

33.1. Get the center connection options

Syntax:

http://<server ipaddr>/cgi-bin/connecting_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/connecting_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

ConnectCenterSwitch=close

ConnectCenterPort=6500

ConnectCenterIP=192.168.88.187

33.2. Set the center connection options

Syntax:

http://<server ipaddr>/cgi-bin/connecting_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/connecting_cgi?action=set&user=admin&pwd=admin
&ConnectCenterSwitch=open&ConnectCenterPort=5500&ConnectCenterIP=192%2E168
%2E88%2E185

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

   OK\r\n

34. Mobile monitor

Get and set the mobile monitor options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/mobile_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the mobile monitor options. set = set the mobile monitor options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
MobileMode=<string>	CS, P2P	The mobile monitor service mode.
ServerUrl=<string>	<string>	The address of the mobile monitor server. Only the CS mode with this option.
ServerPort=<int>	0~65535	The port of the mobile monitor service.
DeviceId=<int>	0~2147483647	The ID of the device access. Only the CS mode with this option.
RealTime=<string>	Fine, Normal, Basic	Real-time selection of services.

ChannelSwitch0=<string>	open, close	Whether the access channel 0. Only the CS mode with this option.
ChannelSwitch1=<string>	open, close	Whether the access channel 1. Only the CS mode with this option.
ChannelSwitch2=<string>	open, close	Whether the access channel 2. Only the CS mode with this option.
ChannelSwitch3=<string>	open, close	Whether the access channel 3. Only the CS mode with this option.

34.1. Get the mobile monitor options

Syntax:

http://<server ipaddr>/cgi-bin/mobile_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/mobile_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Mode=CS

ServerUrl=116.113.109.179

ServerPort=15960

DeviceId=2020

RealTime=Basic

ChannelSwitch0=open

ChannelSwitch1=open

ChannelSwitch2=close

ChannelSwitch3=open

34.2. Set the mobile monitor options

Syntax:

http://<server ipaddr>/cgi-bin/mobile_cgi?action=set[&<parameter>=<value>]

Example: *Set up mobile phone monitoring mode for P2P mode*

http://192.168.88.187/cgi-bin/mobile_cgi?action=set&user=admin&pwd=admin&

Mode=P2P&ServerPort=1606&RealTime=Fine

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK,Device is rebooting\r\n

When the parameter is not changed, return "Param not change\r\n".

35. SIP

Get and set SIP option parameter.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/sip_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get sip settings. set = set sip settings.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
AccountEnable1=<string>	off, on	Enable SIP. AccName1, AccNumber1 must be exist.
AccName1=<string>	Account name	Valid characters are a thru z, A thru Z and 0 thru 9.
AccNumber1=<string>	Account number	Valid characters are a thru z, A thru Z and 0 thru 9.
AccUser1=<string>	A SIP user name	Valid characters are a thru z, A thru Z and 0 thru 9.
AccPassword1=<string>	A SIP user password	Valid characters are a thru z, A thru Z and 0 thru 9.

AccPort1=<int>	0~65535	SIP port account 1.
ServerEnable1=<string>	off, on	REGISTRAR server enable
RegServerDhcp1=<string>	off, on	Get Registrar server address by DHCP 120 option. SIP server IP address must be adding before.
RegServerUrl1=<string>	IP address	Registrar IP address
RegServerPort1=<string>	0~65535	Registrar port.
SipServerUrl1=<string>	IP address	SIP server IP address
SipServerPort1=<int>	0~65535	SIP server port.
NatEnable1=<string>	off, on	NAT support enable
StunUrl1=<string>	IP address/ domen name	Valid characters are a thru z, A thru Z and 0 thru 9.
StunPort1=<int>	0~65535	STUN server port.
ProxyDhcp1=<string>	off, on	Get Proxy server address by DHCP 120 option. SIP server IP address must be adding before.
ProxyServerUrl1=<string>	IP address	Proxy server IP address
ProxyServerPort1=<int>	0~65535	Proxy server port.
DtmfMode1=<string>	rfc2833, info, inband	DTMF mode
AccountEnable2=<string>	off, on	Enable SIP. AccName2, AccNumber2 must be exist.
AccName2=<string>	Account name	Valid characters are a thru z, A thru Z and 0 thru 9.
AccNumber2=<string>	Account number	Valid characters are a thru z, A thru Z and 0 thru 9.
AccUser2=<string>	A SIP user name	Valid characters are a thru z, A thru Z and 0 thru 9.
AccPassword2=<string>	A SIP user password	Valid characters are a thru z, A thru Z and 0 thru 9.
AccPort2=<int>	0~65535	SIP port account 2.

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ServerEnable2=<string>	off, on	REGISTRAR server enable
RegServerDhcp2=<string>	off, on	Get Registrar server address by DHCP 120 option. SIP server IP address must be adding before.
RegServerUrl2=<string>	IP address	Registrar IP address
RegServerPort2=<int>	0~65535	Registrar port.
SipServerUrl2=<string>	IP address	SIP server IP address
SipServerPort2=<int>	0~65535	SIP server port.
NatEnable2=<string>	off, on	NAT support enable
StunUrl2=<string>	IP address/ domen name	Valid characters are a thru z, A thru Z and 0 thru 9.
StunPort2=<int>	0~65535	STUN server port.
ProxyServerUrl2=<string>	IP address	Proxy server IP address
ProxyServerPort2=<int>	0~65535	Proxy server port.
DtmfMode2=<string>	rfc2833, info, inband	DTMF mode
ContactEnable1=<string>	off, on	Enable Contact #1. Contact number must be adding before.
ContactNumber1=<string>	Contact number	Valid characters are a thru z, A thru Z and 0 thru 9.
ContactEnable2=<string>	off, on	Enable Contact #2. Contact number must be adding before.
ContactNumber2=<string>	Contact number	Valid characters are a thru z, A thru Z and 0 thru 9.
ContactEnable3=<string>	off, on	Enable Contact #3. Contact number must be adding before.
ContactNumber3=<string>	Contact number	Valid characters are a thru z, A thru Z and 0 thru 9.
ContactEnable4=<string>	off, on	Enable Contact #4. Contact number must be adding before.
ContactNumber4=<string>	Contact number	Valid characters are a thru z, A thru Z and 0 thru 9.

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ContactEnable5=<string>	off, on	Enable Contact #5. Contact number must be adding before.
ContactNumber5=<string>	Contact number	Valid characters are a thru z, A thru Z and 0 thru 9.
DtmfSignal1=<string>	Dtmf number (3 digital value)	Relay out #1. Valid characters are 0 to 9.
DtmfBreakCall1=<string>	off, on	Stopped SIP connection after open door.
DtmfSignal2=<string>	Dtmf number (3 digital value)	Relay out #2. Valid characters are 0 to 9.
DtmfBreakCall2=<string>	off, on	Stopped SIP connection after open door.
DtmfSignal3=<string>	Dtmf number (3 digital value)	Relay out #3. Valid characters are 0 to 9.
DtmfBreakCall3=<string>	off, on	Stopped SIP connection after open door.
CallTimeout=<int>	5 ~ 300	Call timeout, by default 35.
StreamType=<string>	main, sub, audio	Stream type
AllowIncoming=<string>	off, on	Allow incoming call.
ButtonBreakCall=<string>	off, on	Break call when press button.
ButtonBreakTalk=<string>	off, on	Break talk when press button.
CallMelodyEnable=<string>	off, on	Enable call melody
CallMelodyRepeatCount=<int>	0 ~ 9	Repeated call melody. 0 – infinity (repeated by cycle)
CallerAccount=0	0, 1	SIP account which use for call 0 – SIP #1 1 – SIP #2
NoAudioAnswerEnable=off	off, on	Disable mic when answer (no door station audio)
DtmfEnableAudio=<int>	0 ~ 9	Dtmf number for mic enable

35.1. Get SIP parameter

Syntax:

http://<server ipaddr>/cgi-bin/sip_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/sip_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

AccountEnable1=on

AccName1=user1

AccNumber1=100

AccUser1=admin

AccPassword1=admin

AccPort1=5060

….

35.2. Set SIP parameter

Syntax:

http://<server ipaddr>/cgi-bin/sip_cgi?action=set[&<parameter>=<value>]

Example: *Set call timeout limitation*

http://192.168.88.187/cgi-bin/sip_cgi?action=set&CallTimeout=5

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK \r\n

When the parameter is not changed, return "Request failed:Param error\r\n".

36. Record

Get and set the record options.

Note: This requires administrator access, when device has storage (hard disk, SD card, USB disk), schedule Record will be saved to the storage first and do related

process based on file storage. Or it will be saved to memory for the moment and do related process based on file storage.

Syntax:

http://<server ipaddr>/cgi-bin/record_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the Record options. set = set the Record options.
channel=<int>	0~3	The channel number of the video.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
SaveMode=<string>	Ftp, Local	The way to save the video resources.
Time1Switch=<string>	close, open	Time 1 selector switch.
Time1_BgnHour=<int>	0~23	The beginning of the hour value.
Time1_BgnMinute=<int>	0~59	The beginning of the minute value.
Time1_EndHour=<int>	0~23	The end of the hour value.
Time1_EndMinute=<int>	0~59	The end the minute value.
Time2Switch=<string>	close, open	Time 2 selector switch.
Time2_BgnHour=<int>	0~23	The beginning of the hour value.
Time2_BgnMinute=<int>	0~59	The beginning of the minute value.
Time2_EndHour=<int>	0~23	The end of the hour value.
Time2_EndMinute=<int>	0~59	The beginning of the minute value.

36.1. Get the record options

Syntax:

http://<server ipaddr>/cgi-bin/record_cgi?action=get&channel=<value>

&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/record_cgi?action=get&channel=0&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

StreamType=AlternateStream

PackageTime=1

SaveDay=0

OverWrite=1

SaveMode=Ftp

Time1Switch=close

Time1_BngHour=0 Time1_BngMinute=0 Time1_EndHour=20 Time1_EndMinute=59

Time2Switch=close

Time2_BngHour=0 Time2_BngMinute=0 Time2_EndHour=23 Time2_EndMinute=59

36.2. Set the record options of the different channels

Syntax:

http://<server ipaddr>/cgi-bin/record_cgi?action=set&channel=<value>

[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/record_cgi?action=set&channel=0&user=admin&pwd=admin

&SaveMode=Local&Time1Switch=open&Time1_BngHour=10&Time1_BngMinute=20&Time1_EndHour=23&Time1_EndMinute=50

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

36.3. Set the record options (shared by all channels)

Syntax:

http://<server ipaddr>/cgi-bin/record_cgi?action=set[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
StreamType=<string>	PreferredStream, AlternateStream	The stream type of record.
PackageTime=<int>	1,5,10,15,20…60(Minute)	The package time of record.
SaveDay=<int>	0~180(day)	Video resource reservation time. 0: if sufficient storage space, the resources will be permanently saved.
OverWrite=<int>	0,1	When not enough storage space whether to automatically delete old resource. 0:No 1:Yes

Example:

http://192.168.88.187/cgi-bin/record_cgi?action=set&user=admin&pwd=admin

&StreamType=AlternateStream&PackageTime=5&SaveDay=0&OverWrite=1

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

37. Snap

Get and set the snap options.

Note: This requires administrator access, if you use Ftp(Email) to save the image, you need to set the Ftp(Email) parameters first.

Syntax:

http://<server ipaddr>/cgi-bin/snap_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the Record options. set = set the Record options.

channel=<int>	0~3	The channel number of the video.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
SaveMode=<string>	Ftp,Local,Email, FtpEmail	The way to save the video resources. FtpEmail means Ftp and Email .
ShootInterval=<float>	0.5~1000	The time interval of the captured images.
Time1Switch=<string>	close, open	Time 1 selector switch.
Time1_BgnHour=<int>	0~23	The beginning of the hour value.
Time1_BgnMinute=<int>	0~59	The beginning of the minute value.
Time1_EndHour=<int>	0~23	The end of the hour value.
Time1_EndMinute=<int>	0~59	The end the minute value.
Time2Switch=<string>	close, open	Time 2 selector switch.
Time2_BgnHour=<int>	0~23	The beginning of the hour value.
Time2_BgnMinute=<int>	0~59	The beginning of the minute value.
Time2_EndHour=<int>	0~23	The end of the hour value.
Time2_EndMinute=<int>	0~59	The beginning of the minute value.

37.1. Get the snap options

Syntax:

http://<server ipaddr>/cgi-bin/snap_cgi?action=get&channel=<value>

&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/snap_cgi?action=get&channel=0&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

The BeWARD logo

\r\n

SaveMode=Local

ShootInterval=10.0

Time1Switch=close

Time1_BngHour=10 Time1_BngMinute=25 Time1_EndHour=23 Time1_EndMinute=59

Time2Switch=close

Time2_BngHour=0 Time2_BngMinute=0 Time2_EndHour=23 Time2_EndMinute=59

37.2. Set the snap options

Syntax:

http://<server ipaddr>/cgi-bin/snap_cgi?action=set&channel=<value>

[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/snap_cgi?action=set&channel=0&user=admin&

pwd=admin&SaveMode=Email&ShootInterval=2.5&Time1Switch=close&Time1_BngHour=

10&Time1_BngMinute=20&Time1_EndHour=23&Time1_EndMinute=50

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

38. COM Setting

Get and set the COM setting options.

Note: This requires administrator access (administrator authorization).

Syntax: http://<server ipaddr>/cgi-bin/com_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the DDNS options. set = set the DDNS options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.

pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
Baudrate1=<int>	300,600,1200,2400,4800,9600,14400,19200,38400,56000,57600,115200,128000,256000.	RS485 serial communication baud rate.
DataBits1=<int>	5, 6, 7, 8	RS485 serial communication data bits.
StopBits1=<int>	1, 2	RS485 serial communication stop bits.
CheckType1=<string>	0: None, 1: Odd 2: Even, 3: Mark 4: Space	Checksum types of RS485 serial communication.
FlowCtrl1=<string>	None, Hardware, Software	Type of flow control for RS485 serial communication.
Baudrate2=<int>	300,600,1200,2400,4800,9600,14400,19200,38400,56000,57600,115200,128000,256000.	RS232 serial communication baud rate.
DataBits2=<int>	5, 6, 7, 8	RS232 serial communication data bits.
StopBits2=<int>	1, 2	RS232 serial communication stop bits.
CheckType2=<string>	0: None, 1: Odd 2: Even, 3: Mark 4: Space	Checksum types of RS232 serial communication.
FlowCtrl2=<string>	None, Hardware, Software	Type of flow control for RS232 serial communication.

38.1. Get the COM options

Syntax:

http://<server ipaddr>/cgi-bin/com_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/com_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

COM RS485:

Baudrate1=9600

DataBits1=8

StopBits1=2

CheckType1=Space

FlowCtrl1=Software

COM RS232:

Baudrate2=9600

DataBits2=5

StopBits2=1

CheckType2=Even

FlowCtrl2=Hardware

38.2. Set the COM options

Syntax:

http://<server ipaddr>/cgi-bin/com_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/com_cgi?action=set&user=admin&pwd=admin
&Baudrate1=115200&DataBits1=7&StopBits1=1&CheckType1=1&FlowCtrl1=None&Baudr
ate2=115200&DataBits2=7&StopBits2=1&CheckType2=1&FlowCtrl2=None

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

    OK\r\n

39. System Info

Get the system information.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/systeminfo_cgi?user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/systeminfo_cgi?user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

HostName=IPC12544

ChannelNum=1

Standard=PAL

DeviceID=12544

SoftwareVersion=2.0.0.2.52.18

HardwareVersion=Hi3518 IP Camera

DeviceModel=B1710

1、 fix the rtsp sometimes disconnect ,then connect

2、 fix the segment fault when you use the videocoding_cgi command sometimes

3、 modify the ntp function,make it more stable

40. Upgrade

Device software upgrade. DS03M(P) bells update (for DS03M(P) only).

Note: This requires administrator access (administrator authorization).

Method: POST

Syntax:

http://<server ipaddr>/cgi-bin/upgrade_cgi?user=<value>&pwd=<value>

Example (Firmware upgrade):

http://192.168.88.187/cgi-bin/upgrade_cgi?user=admin&pwd=<admin>

Response:

Case1: *Upgrade was successful.*

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK,Device is rebooting\n

Filename = hh5898_v2.3.1.2.0.159.uot\n

Size = 1702576 bytes\r\n

***Case2:** Upgrade failure.*

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Request failed: The upgrade file is not correct!\r\n

Example 2 (DS03M bells update):

http://192.168.88.187/cgi-bin/upgrade_cgi?user=admin&pwd=<admin>

Response:

***Case1:** Upgrade was successful.*

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Upload was successful\n

Filename = bells1.wav\n

Size = 63886 bytes \r\n

***Case2:** Upgrade failure. Wrong name.*

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Upgrade failure

Request failed: The upgrade file have wrong name! \r\n

41. Obtaining device firmware version

Note: Login using the user must be "root".

Obtaining Hi3512 device firmware version with three steps.

First:

Login equipment remotely via Telnet, Enter your user name and password.

Command: telnet <service ipaddr>, then entry "user",

then entry "password".

Example: telnet 192.168.88.187 , user, 1234

Second:

   Switch to the user directory.

   Command: cd /usr

Third:

   Obtaining device firmware version.

   Command: cat FirmwareVersion

42. DHCP

Note: If a DHCP server is unavailable, the DVS IP address will be 192.168.0.99. And Equipment will be every ten minutes request a DHCP service.

Syntax:

http://<server ipaddr>/cgi-bin/date_cgi?action=set&user=<value>

&pwd=<value>&BootProto=dhcp

Open DHCP service:"set BootProto=dhcp",

Close DHCP service:"set BootProto=none".

Example:

http://192.168.88.187/cgi-bin/network_cgi?action=set&user=admin&pwd=admin

&BootProto=dhcp

Response:

   Case 1: system network parameter are changed.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

   OK, Device is rebooting\r\n

   Case 2: system network parameter are not changed.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Param not change\r\n

Case 3: system network parameter are error.

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Request failed:Param error\r\n

43. SYSLOG

Note: Log retained for up to 512 records, and Log format according to RFC3164.

Syntax:

http://<server ipaddr>/cgi-bin/sysLog_cgi?user=<value>&pwd=<value>

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

<PRI><month> <day> <time> <IP>: <action>\n

Example:

http://192.168.88.187/cgi-bin/sysLog_cgi?user=admin&pwd=admin

Response:

Case1: *get log successful.*

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

<116>Jul 13 15:56:23 192.168.88.187: Power off

<116>Jul 13 16:03:37 192.168.88.187: Power On

<116>Jul 13 16:04:39 192.168.88.187: Power off

<116>Jul 13 16:09:18 192.168.88.187: Power On

<116>Jul 13 16:10:12 192.168.88.187: Power off

………

Case2: *get log failed.*

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Request failed:Allocate memory failure\r\n

Analytical log command: <116>Jul 13 15:56:23 192.168.88.187: Power off.

<PRI>=116:

*PRI = Facility * 8 + Severity.*

Facility = log alert (14), Severity = Warning: warning conditions(4).

*14 * 8 + 4 = 116.*

<month> <day> <time><IP>= Jul 13 15:56:23 192.168.88.187.

<action>= Power off.

The kinds of action:

"Power On", "Power off",

"No.<channel+1> Sensor Alarm" ,

"No.<channel+1> Sensor Alarm Finish",

"No.<channel+1>Motion Alarm " ,

"No.<channel+1>Motion Alarm Finish",

"No.<channel+1> Shelter Alarm " ,

"No.<channel+1>Shelter Alarm Finish",

"No.<channel+1> Video Lose Alarm " ,

"No.<channel+1> Video Lose Alarm Finish",

    ………

44. PTZ

Send commands to the PTZ.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/ptz_cgi?action=<value>&user=<value>

&pwd=<value>

with the following values.

<parameter>=<value>	Values	Description
action=<string>	Up, Down, Left, Right, AutoOn, AutoOff,	Up：PTZ move up. AutoOn: Enable PTZ move automatic.

	FocusAdd,	AutoOff:
	FocusSub,	Enable PTZ move automatic.
	ZoomAdd,	ZoomAdd：Zoom Up.
	ZoomSub,	
	LampOn,	ZoomSub：Zoom Down.
	LampOff,	FocusAdd, FocusSub:
	BrushOn,	The equipment to support the automatic
	BrushOff.	focus on function, the interface doesn't
		work.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Example:

http://192.168.88.187/cgi-bin/ptz_cgi?action=Up&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

45. PTZ Setting

Get or Set the PTZ setting options.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/ptz_setting?action=<value>

[&<parameter>=<value>]

with the following values.

BEWARD

<parameter>=<value>	Values	Description
action=<string>	get, set	get = get the PTZ options. set = set the PTZ options.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
AutoFlip=<string>	ON, OFF	Whether or not to open the auto flip function.
ProportionalPan=<string>	ON, OFF	Whether or not to open the proportional pan function.
VirtualZero=<string>	Set,OK,Cancel	Set of Clear the "virtual zero position".
ManualLimit=<string>	ON, OFF	Whether or not to open the manual limit function.
ScanLimit=<string>	ON, OFF	Whether or not to open the scan limit function.
DomeCameraReset=<string>	ON	Reset dome camera setting.
HSpeed=<int>	1-40(degrees)	Level scanning speed.
VSpeed=<int>	1-20(degrees)	Vertical scanning speed.
ParkMode=<int>	0-14	0:"NO" 1: "Preset 1" 2: "Preset 2" 3:"Preset 3" 4: "Preset 4" 5:"Preset 5" 6: "Preset 6" 7:"Preset 7" 8:"Preset 8" 9:"Auto Scan" 10:"P&T Scan" 11:" Preset Tour 1" 12:" Preset Tour 2" 13:"Figure Scan 1" 14:"Figure Scan 2"

ParkTime=<int>	*2-60(Minutes)*	*The automatic guard start time.*
Preset1Num[1-8] =<int>	*0-255*	*The number of Preset position.*
Preset1KeepTime[1-8] =<int>	*0-3600(second)*	*Preset dwell time.*
Preset2Num[1-8] =<int>	*0-255*	*The number of Preset position.*
Preset2KeepTime[1-8] =<int>	*0-3600(second)*	*Preset dwell time.*
Time[1-5]Switch=<string>	*open, close*	*Enable Timing tasks.*
Time [1-5]Task=<int>	*0-14*	*Like ParkMode.*
Time[1-5]BgnHour=<int>	*0-23*	*The time to start the task.*
Time[1-5]BgnMinute=<int>	*0-59*	*The time to start the task.*
Time[1-5]EndHour=<int>	*0-23*	*The time to start the task.*
Time[1-5]EndMinute=<int>	*0-59*	*The time to start the task.*

Note: The time can't overlap between the five tasks.

45.1. Get the PTZ options

Example:

http://192.168.88.187/cgi-bin/ptzsetting_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

PTZ Setting:

AutoFlip=ON

ProportionalPan=OFF

VirtualZero=Not Set

ManualLimit=OFF

ScanLimit=OFF

Scan Speed:

HSpeed=2 VSpeed=1

Park Set:

ParkMode=0 ParkTime=2

Preset Tour:

Preset1Num1=0 Preset1KeepTime1=1

Preset1Num2=0 Preset1KeepTime2=2

Preset1Num3=0 Preset1KeepTime3=3

Preset1Num4=0 Preset1KeepTime4=4

Preset1Num5=0 Preset1KeepTime5=5

Preset1Num6=0 Preset1KeepTime6=6

Preset1Num7=0 Preset1KeepTime7=7

Preset1Num8=0 Preset1KeepTime8=8

Preset2Num1=0 Preset2KeepTime1=10

Preset2Num2=0 Preset2KeepTime2=11

Preset2Num3=0 Preset2KeepTime3=12

Preset2Num4=0 Preset2KeepTime4=13

Preset2Num5=0 Preset2KeepTime5=14

Preset2Num6=0 Preset2KeepTime6=16

Preset2Num7=0 Preset2KeepTime7=15

Preset2Num8=0 Preset2KeepTime8=17

Time Set:

Time1Switch=close Time1Task=0

Time1BgnHour=1 Time1BgnMinute=2 Time1EndHour=3 Time1EndMinute=4

Time2Switch=close Time2Task=0

Time2BgnHour=5 Time2BgnMinute=6 Time2EndHour=7 Time2EndMinute=8

Time3Switch=close Time3Task=0

Time3BgnHour=9 Time3BgnMinute=0 Time3EndHour=0 Time3EndMinute=0

Time4Switch=close Time4Task=0

Time4BgnHour=2 Time4BgnMinute=3 Time4EndHour=2 Time4EndMinute=4

Time5Switch=close Time5Task=0

Time5BgnHour=3 Time5BgnMinute=4 Time5EndHour=3 Time5EndMinute=5

45.2. Set the PTZ options

Example:

http://192.168.88.187/cgi-bin/ptzsetting_cgi?action=set&user=admin&pwd=admin &HSpeed=1&VSpeed=2&ParkMode=3&ParkTime=4&Preset1Num1=5&Preset1KeepTime 1=6&Time1Switch=open&Time1Task=7&Time1BgnHour=8&Time1BgnMinute=9&Time1E ndHour=10&Time1EndMinute=11

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

46. Dome Control

Using the dome control command.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/democontrol_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>= <value>	Values	Description
action=<string >	PresetSet, PresetCall, PresetClear, PresetGet, FigureScanSet, FigureScanSave, FigureScanRun, FigureScanStop, LevelFlip, ZeroDetection, UpLimit, DownLimit LeftLimit, RightLimit PresetScan1, PresetScan2,	The command to control the dome.

	PresetScanStop. AppleScan, AppleScanStop	
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.
Title=<string>	<string>,[PresetNum]	The title of the Preset position. When using the command of "PresetSet", Need to set up this parameters.
PresetNum=<int>	1-255	The number of the Preset position. When using the command of "PresetSet" , "PresetCall"," PresetGet", Need to set up this parameters.
FigureScanNum=<int>	1-2	The number of the Figure Scan. When using the command of "FigureScanSet", Need to set up this parameters.

Example: Set the preset position.

http://192.168.88.187/cgi-bin/domecontrol_cgi?action=PresetSet&user=admin &pwd=admin&Title=test1& PresetNum=15.

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

46.1. Set PTZ position

Set PTZ position dome camera.

Note: This requires administrator access (administrator authorization). Support Extended Pelco D/P protocol only.

Syntax:

http://<server ipaddr>/cgi-bin/ptpositionset_cgi?action=set&?<parameter>=<value>

[&<parameter>=<value>]&user=<value>&pwd=<value>

with the following parameters and values.

<parameter>=<value>	Values	Description
PanPosition=<string>	00000 - 35900	Degrees its first 3 numeral, next minutes
TiltPosition=<string>	0000 - 9000	Degrees its first 2 numeral, next minutes

Example: *Set the PTZ position.*

http://192.168.88.187/cgi-

bin/ptpositionset_cgi?action=set&PanPosition=15000&TiltPosition=3000&user=admin&pw

d=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

46.2. Get PTZ position

Get PTZ position dome camera.

Note: This requires administrator access (administrator authorization). Support Extended Pelco D/P protocol only.

Syntax:

http://<server ipaddr>/cgi-bin/ptpositionset_cgi?action=get&user=<value>&pwd=<value>

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

  Pan Position= <value> \r\n

  Tilt Position= <value> \r\n

Example:

http://192.168.88.187/cgi-bin/ptpositionset_cgi?action=get&user=admin&pwd=admin

Response:

      Case1: *get position successful.*

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

Pan Position= 15000 \r\n

Tilt Position = 4500 \r\n

      Case2: *Timeout or data is corrupted.*

receive from 485 timeout (>3s) \r\n

47. Get System Parameters

Get the system parameter in XML format.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/sysparam_cgi?&user=<value>&pwd=<value>

Return:

HTTP/1.0 200 OK\r\n

Content-Type:text/xml\r\n

\r\n

      < system parameter data>

Parameters as the chart:

```
<?xml version="1.0" encoding="UTF-8" ?>
- <DOCUMENT>
  - <SysParam>
    + <SysInfo>
    + <SysVideo>
    + <SysAudio>
    + <SysNetwork>
      <SysNetService>
    + <SysFunction>
    + <SysCOM>
    + <UserManage>
    </SysParam>
</DOCUMENT>
```

48. OSD Position

Change the position of text overlay.

Note: This requires administrator access (administrator authorization).

BEWARD

Syntax:

http://<server ipaddr>/cgi-bin/osdposition_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>= <value>	Values	Description
action=<string >	Up, Down, Right, Left.	The command to control the position of the OSD. Move 8 pixels once.
channel=<int>	0~3	The channel number of the video.
value=<int>	1,2	1: mean change the date, time, bitrate, week position. 2: mean change the title position.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.

Example: Move right the title position of the channel 1.

http://192.168.88.187/cgi-bin/osdposition_cgi?channel=1&action=Right&value=2

&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

49. SNMP

Get or set SNMP setting.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/snmp_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action =<string>	get, set	get=get the parameter of SNMP setting. set= set the parameter of SNMP setting.
SnmpV1V2Switch =<string>	open, close	open =enabled the SNMP v1/v2 service. close =disabled the SNMP v1/v2 service.
CommunityRO =<string>	<a string>	The value of the community read-only.
CommunityRW =<string>	<a string>	The value of the community read-write.
SnmpTrapsSwitch =<string>	open, close	open =enabled the SNMP trap service. close =disabled the SNMP trap service.
TrapIpAddr=<string>	<a IP address>	The address of the trap service.
TrapCommunity =<string>	<a string>	The value of trap community.
SnmpV3Switch =<string>	open, close	open =enabled the SNMP v3 service. close =disabled the SNMP v3 service.
Username=<string>	<a string>	The user name of the MD5.
Password=<string>	<a string>	The user password of the MD5.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.

49.1. Get the SNMP options

Syntax:

http://<server ipaddr>/cgi-bin/snmp_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/snmp_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

SnmpV1V2Switch=open

CommunityRO=

CommunityRW= public

SnmpTrapsSwitch=close

TrapIpAddr=192.168.88.187

TrapCommunity=public

SnmpV3Switch=open

Username= testuser

Password= testpassword

49.2. Set the SNMP options

Syntax:

http://<server ipaddr>/cgi-bin/snmp_cgi?action=set[&<parameter>=<value>]

Example:

http://192.168.88.187/cgi-bin/snmp_cgi?action=set&user=admin&pwd=admin&

SnmpV3Switch=open&Username=testuser&Password=testpassword

Response:

HTTP/1.0 200 OK\r\n

Content-Type:text/plain\r\n

\r\n

OK\r\n

50. CDP Auto-discovery Protocols

Note: Our device will send a CDP packet every 60s.

The following picture is the CDP packet detail content:

```
21249 1111.811788 00:4c:e8:04:00:ec CDP/VTP/DTP/PAgP/UDLD CDP 113 Device ID: DVS10001  Port ID: web data port:80
 Frame 21249: 113 bytes on wire (904 bits), 113 bytes captured (904 bits)
 IEEE 802.3 Ethernet
 Logical-Link Control
 Cisco Discovery Protocol
    version: 2
    TTL: 180 seconds
  Checksum: 0x3985 [correct]
  Device ID: DVS10001
    Type: Device ID (0x0001)
    Length: 12
    Device ID: DVS10001
  Addresses
    Type: Addresses (0x0002)
    Length: 17
    Number of addresses: 1
    IP address: 192.168.30.100
      Protocol type: NLPID
      Protocol length: 1
      Protocol: IP
      Address length: 4
      IP address: 192.168.30.100
  Port ID: web data port:80
    Type: Port ID (0x0003)
    Length: 20
    Sent through Interface: web data port:80
  Capabilities
    Type: Capabilities (0x0004)
    Length: 8
   Capabilities: 0x00000010
  Software Version
    Type: Software version (0x0005)
    Length: 17
    Software Version: 2.3.1.2.0.178
  Platform: Hi2312DVS
    Type: Platform (0x0006)
    Length: 13
    Platform: Hi2312DVS
```

CDP header:

CDP protocol version: CDP 2.0

TTL: 180s

Checksum: true

Device ID:

Type:0x0001

Length: size of(type) + size of(length) + strlen(device name)

Device ID: (device name).

Address: device IP address.

Port ID: web data port.

Capabilities: Host.

Soft version: device firmware version.

Platform: Hardware version.

51. Storage Devices

Get Storage Devices information, or formatted the Storage Devices.

Note: This requires administrator access (administrator authorization).

Syntax:

http://<server ipaddr>/cgi-bin/storagedevices_cgi?<parameter>=<value>

[&<parameter>=<value>]

with the following parameters and values.

<parameter>=<value>	Values	Description
action =<string>	get, Format	get=get the detail of Storage Devices. Format = Formatted the Storage Devices.
StorageNum =<int>	1~4	Select which Storage Devices you want to Format.
user=<string>	A user name	Valid characters are a thru z, A thru Z and 0 thru 9.
pwd=<string>	A user password	Valid characters are a thru z, A thru Z and 0 thru 9.

51.1. Get Storage Devices information.

Syntax:

http://<server ipaddr>/cgi-bin/storagedevices_cgi?action=get&user=<value>

&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/storagedevices_cgi?action=get&user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type: text/plain\r\n

\r\n

Case 1: Storage Devices are formatted

> *Storage Device Info:*

> *Title: TotalSize: FreeSize: State:*

1 SD   7064   6574   formatted

Case 2: Storage Devices are in formatting

> *Storage Device Info:*

> *Title: TotalSize: FreeSize: State:*

1 SD   0   0

formatting(25%)

Case 2: Didn't have Storage Devices

> *Storage Device Info:*

> *Title: TotalSize: FreeSize: State:*

52.2. Formatted the Storage Devices

Syntax:

http://<server ipaddr>/cgi-bin/ storagedevices _cgi?action=Format&

StorageNum=<value>&user=<value>&pwd=<value>

Example:

http://192.168.88.187/cgi-bin/storagedevices_cgi?action=Format&StorageNum=1&

user=admin&pwd=admin

Response:

HTTP/1.0 200 OK\r\n

Content-Type: text/plain\r\n

\r\n

Case 1: Formatted success

OK\r\n

Case 2: Storage Number Error.

Request failed:Storage Number Error\r\n