

## **HX IP Camera CGI Instruction**

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# Version update description

| Version | editor      | Modification time | Modification content   |
|---------|-------------|-------------------|--|
| 1.0     | Himmy Ho    | 2011-07-30        | First release  |
| 1.1     | Franck Zhao | 2011-09-08        | Revise   |
| 1.2     | Franck Zhao | 2012-02-22        | 1. param.cgi?cmd=getimageattr<br>param.cgi?cmd=setimageattr<br>Add description of 53xmk model<br>2. Added request I frame<br>3. param.cgi?cmd=requestifrm  |
| 1.3     | Franck Zhao | 2012-08-01        | 1. param.cgi?cmd=chkwirelessattr<br>Added configuration detection wireless parameters<br>2. param.cgi?cmd=getchkwireless<br>Added acquisition of detection WiFi results  |
| 1.4     | Franck Zhao | 2018-02-08        | Revise   |
|         |             |                   | 1、 param.cgi?cmd=getaudioalarmattr<br>2、 param.cgi?cmd=getdevices<br>3、 param.cgi?cmd=gettimmerreboot<br>4、 param.cgi?cmd=getlanguage<br>5、 param.cgi?cmd=getmotorange<br>6、 param.cgi?cmd=getlampctrl<br>7、 param.cgi?cmd=setlampctrl |
| 1.5     | Franck Zhao | 2019-11-12        | Revise   |

|  |  |  |   |
|--|--|--|---|
|  |  |  | 1、 /param.cgi?cmd=getsmdattr<br>2、 /param.cgi?cmd=setsmdattr<br>3、 /param.cgi?cmd=getsmdex<br>4、 /param.cgi?cmd=setsmdex<br>5、 /param.cgi?cmd=getmdalarm<br>5、 /param.cgi?cmd=setmdalarm<br><br>Remarks: add 5m resolution primary、secondary<br>code streams and intelligent human shape<br>recognition |
|--|--|--|---|

## HX IP Camera CGI Brief Introduction

The CGI listed in this paper is a set of interfaces based on HTTP protocol provided by IP camera. The client program (which can be a web page running on a web browser or other applications) can operate the device through CGI.

- Security authentication of CGI: the CGI listed below requires security authentication when accessing it. Moreover, different CGI interfaces require different permissions, which are divided into three levels: visitor, operator and manager. The permission is determined by the user set on the device. The specific security authentication mechanism supports two ways: the basic security authentication mechanism specified in HTTP protocol and directly attaching user name and password to CGI parameters.
- Methods to access CGI: among all HTTP methods, CGI listed in this article only supports “get” and “post”, and “upgrade.cgi” and “restore.cgi” only support “post” way.

Get Sample

```
<form name="form2" method="get" action="cgi-bin/hi3510/cleanlog.cgi">
  <input name="cururl" type="hidden" >
  <input name="name" type="hidden" value="access">
```

</form>

Post Sample:

```
<form name="form5" method="post" target="retframe" enctype="multipart/form-data"
```

```

        action="cgi-bin/hi3510/upgrade.cgi" onSubmit="return upgrade()">
<td colspan="3"><input type="file" name="setting_file" >
<input type="submit" value=" submit" >
</form>

```

- Cgi return: According to the different returned information, the CGI listed in this paper can be divided into two types:

- ✓ Obtain CGI of equipment status and parameters.

If it is successful, the text including the device status or parameters will be returned. The specific format is similar to the variable definition in java script. Each status or parameter will be defined as a variable and returned, such as:

```

var bps_1="2048";
var fps_1="25";
var gop_1="50";
var brmode_1="1";
var imagegrade_1="1";
var width_1="704";
var height_1="576";

```

If the acquisition fails, an error message is returned, such as: “[Error]Get video attribution error! Error code is 0xa10e6008”。

- ✓ CGI for setting device parameters or operation.

This type of CGI will return text information containing the operation results. If it is successful, it will return “HTTP/1.0 200 OK”；If it fails, specific error information will be returned, such as: “[Error][Data-Length:91] unrecognized or incomplete command line.” Means that the parameters attached to CGI are incorrect.

- ✓ CGI can be entered to test directly in the browser, as follows:

http://192.168.1.6/cgi-bin/hi3510/param.cgi?cmd=getwirelessattr

You can also attach the user name and password directly:

http://192.168.1.88/cgi-bin/hi3510/param.cgi?cmd=getvencattr&-chn=11&-usr=admin&-pwd=admin

http://192.168.1.6/cgi-bin/hi3510/param.cgi?cmd=getwirelessattr&-usr=admin&-pwd=admin

## 1. Video& Audio

### Param.cgi?cmd=getaudioalarmattr

|                     |  |
|---------------------|--|
| Function            | Voice alarm                                      |
| Limits of authority | admin  |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=getaudioalarmattr |





|         |   |                            |
|---------|---|----------------------------|
|         | wdr=0   | 0 linear<br>1 wide dynamic |
| remarks | <p>Note:</p> <p>Resolution of 720P: 1280x720</p> <p>Resolution of Q720P: 640x352</p> <p>Resolution of QQ720P: 320x176</p> <p>Resolution of 960P: 1280x960</p> <p>Resolution of VGA: 640x480</p> <p>Resolution of QVGA: 320x240</p> <p>Resolution of 1080P: 1920x1080</p> <p>Resolution of D1: 704x576</p> <p>Resolution of CIF: 352x288</p> <p>Resolution of 5M: 2560x1920</p> <p>Resolution of 600P: 800x600</p> <p>Note:</p> <p>720P_Q720P_QQ720P: First code stream:720P, Second code stream:Q720P, Third code stream:QQ720P</p> |                            |
| Sample  | /cgi-bin/hi3510/param.cgi?cmd=getvideoattr  |                            |

## param.cgi?cmd=setvideoattr

|                     |   |  |
|---------------------|---|--|
| Function            | Set video properties for device   |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setvideoattr&-vinorm=&-profile=&-videomode=] |  |
| Parameters          | vinorm  | P: 50Hz(PAL)<br>N: 60Hz(NTSC)  |
|                     | profile   | 0: baseline<br>1: mainprofile  |
|                     | videomode   | 31: 720P_Q720P_QQ720P<br>32: 720P_QQ720P_QQ720P<br>33: Q720P_Q720P_QQ720P<br>34: Q720P_QQ720P_QQ720P<br>35: 720P_D1_CIF<br>36: 720P_CIF_CIF<br>41: 1080P_Q720P_QQ720P<br>42: 1080P_QQ720P_QQ720P<br>45: 1080P_D1_CIF |

|         |   |   |
|---------|---|---|
|         |   | 46: 1080P_CIF_CIF<br>51: 960P_VGA_QVGA<br>52: 960P_QVGA_QVGA<br>53:VGA_VGA_QVGA<br>54: VGA_QVGA_QVGA<br>55: 960P_D1_CIF<br>56: 960P_CIF_CIF<br>17: D1_CIF_CIF<br>20: CIF_CIF_CIF<br>101:5M_600P |
| Return  | wdr=0   | 0 linear<br>1 wide dynamic  |
|         | <p>Success: include Success</p> <p>Failed: include Error</p> <p>Note:</p> <p>Resolution of 720P: 1280x720</p> <p>Resolution of Q720P: 640x352</p> <p>Resolution of QQ720P: 320x176</p> <p>Resolution of 960P: 1280x960</p> <p>Resolution of VGA: 640x480</p> <p>Resolution of QVGA: 320x240</p> <p>Resolution of 1080P: 1920x1080</p> <p>Resolution of D1: 704x576</p> <p>Resolution of CIF: 352x288</p> <p>Resolution of 5M: 2560x1920</p> <p>Resolution of 600P: 800x600</p> <p>Note:</p> <p>720P_Q720P_QQ720P: First code stream:720P, Second code stream:Q720P, Third code stream:QQ720P</p> <p>Note:</p> <p>Long return time</p> |   |
| Remarks | Null  |   |
| Sample  | /cgi-bin/hi3510/param.cgi?cmd=setvideoattr&-vinorm=N&-profile=1&-videomode=32&-wdr=1  |   |

## param.cgi?cmd=getfisheyeattr

|                     |  |   |
|---------------------|--|---|
| Function            | Get fisheye parameters                         |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getfisheyeattr] |   |
| Parameters          | null   |   |
| Return              | fisheye_flag                                   | 0-turn off, 1-turn on   |
|                     | fisheye_mode                                   | 0-ceillingmount, 1-wall mount                                       |
|                     | fisheye_lens                                   | 0、 gc2033+K119<br>1、 h65+H106A<br>2、 imx323+K104<br>3、 sc4236+H103A |
|                     | fisheye_xcircle                                | Center X coordinate   |
|                     | fisheye_ycircle                                | Center Y coordinate   |
|                     | fisheye_rcircle                                | Radius of circle  |
|                     |  |   |
| Remarks             | null   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getfisheyeattr   |   |

## param.cgi?cmd=setfisheyeattr

|                     |  |   |
|---------------------|--|---|
| Function            | Get fisheye parameters   |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setfisheyeattr]   |   |
| Parameters          | null   |   |
| Return              | fisheye_flag   | 0-turn off, 1-turn on   |
|                     | fisheye_mode   | 0-ceillingmount, 1-wall mount                                       |
|                     | fisheye_lens   | 4、 gc2033+K119<br>5、 h65+H106A<br>6、 imx323+K104<br>7、 sc4236+H103A |
|                     | fisheye_xcircle  | Center X coordinate   |
|                     | fisheye_ycircle  | Center Y coordinate   |
|                     | fisheye_rcircle  | Radius of circle  |
|                     |  |   |
| Remarks             | Null   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setfisheyeattr&-fisheye_flag=1&-fisheye_mode=0&-fisheye_lens=0 |   |

## param.cgi?cmd=getvencattr

|                     |  |   |
|---------------------|--|---|
| Function            | Get device video coding parameters   |   |
| Limits of authority | admin、userandguest   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getvencattr &-chn=]   |   |
| Parameters          | chn  | Code stream number:<br>11: First steam<br>12: Second code stream<br>13: Third code stream |
| Return              | bps_1、bps_2 OR bps_3   | Bit rate  |
|                     | fps_1、fps_2 OR fps_3   | Frame rate  |
|                     | gop_1、gop_2 OR gop_3   | Main frame interval   |
|                     | brmode_1、brmode_2 OR<br>brmode_3   | Video coding control:<br>0: fixed bit rate<br>1: Variable bit rate                        |
|                     | imagegrade_1、<br>imagegrade_2 OR<br>imagegrade_3   | Video coding quality  |
|                     | width_1、width_2 OR<br>width_3  | Video width   |
|                     | height_1、height_2 OR<br>height_3   | Video height  |
| Remarks             | Note: the suffix "_1" is the first code stream parameter, the suffix "_2" is the second code stream parameter, and the suffix "_3" is the third code stream parameter. |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getvencattr&-chn=11  |   |

## param.cgi?cmd=setvencattr

|                     |   |   |
|---------------------|---|---|
| Function            | Configure device video coding parameters  |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setvencattr&-chn=&-bps=&-fps=&-brmode=&-imagegrade=&-gop=] |   |
| Parameters          | chn   | Channel number:<br>11: First code stream<br>12: Second code stream<br>13: Third code stream |

|         |   |   |
|---------|---|---|
|         | bps   | Bit rate:<br>720p: range [32 ~ 6144 Kbps]<br>1080p: range [32 ~ 8192 Kbps]<br>D1: range [32 ~ 2048 Kbps]<br>CIF: range [32 ~ 512 Kbps]<br>QCIF: range [32 ~ 256 Kbps]<br>VGA: range [32 ~ 2048 Kbps]<br>QVGA: range [32 ~ 512 Kbps]<br>Qqvga: range [32 ~ 256 Kbps]<br>5m (2560 * 1920): range [32-6144 Kbps]<br>600P (800 * 600): range [32-2048 Kbps] |
|         | fps   | Frame rate:<br>PAL system: range [1 ~ 25]<br>NTSC system: range [1 ~ 30]  |
|         | brmode  | Video coding control:<br>0: fixed bit rate<br>1: Variable bit rate  |
|         | imagegrade  | Video coding quality: range [1 ~ 6]<br>Note: the smaller the value, the better the image quality and the larger the bitstream control amplitude   |
|         | gop   | Main frame interval: range [2 ~ 150]  |
| Return  | Success: include success<br>Failed: contains error  |   |
| Remarks | Null  |   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=setvencattr&-chn=11&-bps=1536&-fps=25<br>&-brmode=1&-imagegrade=1&-gop=50 |   |
|         | /cgi-bin/hi3510/param.cgi?cmd=setvencattr&-chn=12&-bps=1536&-fps=25<br>&-brmode=1&-imagegrade=1&-gop=50 |   |
|         | /cgi-bin/hi3510/param.cgi?cmd=setvencattr&-chn=11&-bps=1536&-fps=25                                     |   |

## param.cgi?cmd=getimageattr

|                     |  |            |
|---------------------|--|------------|
| Function            | Get image parameters                         |            |
| Limits of authority | admin  |            |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getimageattr] |            |
| Parameters          | null   |            |
| Return              | brightness                                   | Brightness |

|         |  |  |
|---------|--|--|
|         | saturation   | Saturation   |
|         | contrast   | Contrast ratio   |
|         | sharpness  | Sharpness  |
|         | hue  | Chroma   |
|         | targety  | Exposure   |
|         | gamma  | Gamma  |
|         | flip   | Image flip:<br>On: on<br>Off: off  |
|         | mirror   | Mirror image:<br>On: on<br>Off: off  |
|         | night  | Night mode:<br>On: on<br>Off: off  |
|         | shutter  | 快门   |
|         | wdr  | Wide dynamic:<br>On: on<br>Off: off  |
|         | noise  | Denoising intensity (0-100, working under low illumination)                        |
|         | gc   | Gain, value range [0-4294967295]   |
|         | aemode   | Exposure mode, value range [0-22]<br>0 for automatic, 1 for indoor, 2 for outdoor. |
|         | imgmode  | Image priority mode<br>0: Frame rate priority<br>1: Illumination priority          |
|         | display_mode   | Current mode<br>0: black and white mode<br>1: Color mode                           |
| Remarks | Different devices have different image parameters. Please refer to <a href="#">Appendix I, Equipment Type Definition</a> |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getimageattr   |  |

## param.cgi?cmd=setimageattr

|          |                      |
|----------|----------------------|
| Function | Set image parameters |
|----------|----------------------|

|                     |   |  |
|---------------------|---|--|
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setimageattr&-image_type=&-brightness=&-saturation=&-contrast=&-hue=&-targety=&-gamma=&-flip=&-mirror=&-noise=&-aemode=&-imgmode=] |  |
| Parameters          | brightness  | Brightness   |
|                     | saturation  | Saturation   |
|                     | contrast  | Contrast   |
|                     | sharpness   | Sharpness  |
|                     | hue   | Chroma   |
|                     | targety   | Exposure   |
|                     | gamma   | Gamma  |
|                     | flip  | Flip image up and down:<br>On: on<br>Off: off  |
|                     | mirror  | Mirror flip (left &Right &up &down):<br>On: on<br>Off: off   |
|                     | night   | Night mode:<br>On: on<br>Off: off  |
|                     | shutter   | shutter  |
|                     | wdr   | Wide dynamic:<br>On: on<br>Off: off  |
|                     | noise   | Denoising intensity (0-100, working under low illumination)  |
|                     | gc  | Gain, value range [0-4294967295]   |
|                     | aemode  | Exposure mode, value range [0-22]<br>0 for automatic, 1 for indoor, 2 for outdoor.   |
|                     | imgmode   | Image priority mode<br>0: Frame rate priority<br>1: Illumination priority  |
|                     | display_mode  | Current mode<br>0 means Night vision , 1 means day vision.(the setting parameters are effective only in the corresponding current mode.) |
| Return              | Success: include success<br>Error: contains error   |  |



|         |  |
|---------|--|
| Remarks | <p>Different equipment parameters are not exactly the same, please refer to <a href="#">Appendix I, Equipment Type Definition</a></p> <p>The image parameter setting must take effect in the current mode, otherwise the setting is invalid.</p> |
| Example | <pre>/cgi-bin/hi3510/param.cgi?cmd=setimageattr&amp;-image_type=1&amp;-brightness=1 &amp;-saturation=1&amp;-contrast=1&amp;-hue=1&amp;-gamma=1&amp;-flip=on&amp;-mirror=on&amp;-noise=5&amp;-aemode=0&amp;-imgmode=1</pre>                       |

## param.cgi?cmd=getldcattr

|                     |  |                         |
|---------------------|--|-------------------------|
| Function            | Get lens distortion value                  |                         |
| Limits of authority | admin                                      |                         |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getldcattr] |                         |
| Parameters          | null                                       |                         |
| Return              | ldc_ratio                                  | Distortion value[0-511] |
| Remarks             |  |                         |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getldcattr   |                         |

## param.cgi?cmd=setldcattr

|                     |  |                         |
|---------------------|--|-------------------------|
| Function            | Set lens distortion value                                    |                         |
| Limits of authority | admin  |                         |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setldcattr&- ldc_ratio =]     |                         |
| Parameters          | ldc_ratio  | Distortion value[0-511] |
| Return              | <p>Success: include success</p> <p>Error: contains error</p> |                         |
| Remarks             |  |                         |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setldcattr&- ldc_ratio=1       |                         |

## param.cgi?cmd=getircutattr

|                     |  |                                   |
|---------------------|--|-----------------------------------|
| Function            | Get IRCut switching threshold                |                                   |
| Limits of authority | admin  |                                   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getircutattr] |                                   |
| Parameters          | null   |                                   |
| Return              | saradc_switch_value                          | IRCut switching threshold[1-1024] |
| Remarks             | null   |                                   |

|         |  |
|---------|--|
| Example | /cgi-bin/hi3510/param.cgi?cmd=getircutattr |
|---------|--|

## param.cgi?cmd=setircutattr

|                     |   |                                   |
|---------------------|---|-----------------------------------|
| Function            | Set IRCut switching threshold                                       |                                   |
| Limits of authority | admin   |                                   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setircutattr&-saradc_switch_value=]  |                                   |
| Parameters          | saradc_switch_value   | IRCut switching threshold[1-1024] |
| Return              | Success: include success<br>Error: contains error                   |                                   |
| Remarks             |   |                                   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setircutattr&-saradc_switch_value=700 |                                   |

## param.cgi?cmd=getoverlayattr

|                     |   |  |
|---------------------|---|--|
| Function            | Get OSD Parameters                                      |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getoverlayattr&-region=] |  |
| Parameters          | region  | Area<br>0: OSD Time area<br>1: OSD Name area |
| Return              | x_[region]  | OSD area x coordinate                        |
|                     | y_[region]  | OSD area y coordinate                        |
|                     | w_[region]  | OSD area width                               |
|                     | h_[region]  | OSD area high                                |
|                     | show_[region]   | Is OSD displayed<br>0: Hidden<br>1: Show     |
|                     | place_[region]  | 0: Top<br>1: Bottom                          |
|                     | name_[region]   | OSD name                                     |
| Remarks             |   |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getoverlayattr&-region=0  |  |

## param.cgi?cmd=setoverlayattr

|          |                   |
|----------|-------------------|
| Function | Set OSDParameters |
|----------|-------------------|

|                     |   |   |
|---------------------|---|---|
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setoverlayattr&-region=&-show=&-name=&-place=]       |   |
| Parameters          | region  | Area<br>0: OSD Time area<br>1: OSD Name area                  |
|                     | show  | Is OSD displayed<br>0: Hidden<br>1: Show                      |
|                     | place   | 0: Top<br>1: Bottom   |
|                     | name  | OSD name, English only. The character length cannot exceed 16 |
| Return              | Success: include Success<br>Error: contains Error                                   |   |
| Remarks             | Note: region_0 OSD area does not support nameParameters                             |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setoverlayattr&-region=0&-show=0                      |   |
|                     | /cgi-bin/hi3510/param.cgi?cmd=setoverlayattr&-region=1&-show=1&-name=IPCam&-place=0 |   |

## param.cgi?cmd=getmobilesnapattr

|                     |   |  |
|---------------------|---|--|
| Function            | Get phone image Parameters  |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getmobilesnapattr]   |  |
| Parameters          |   |  |
| Return              | msize   | 1: Maximum resolution of the second code stream<br>2: Minimum resolution of the second code stream |
| Remarks             | Some models do not support this attribute. For details, please refer to <a href="#">Appendix I, Equipment Type Definition</a> for details |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getmobilesnapattr   |  |

## param.cgi?cmd=setmobilesnapattr

|                     |   |  |
|---------------------|---|--|
| Function            | Set phone image Parameters                                |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setmobilesnapattr&-msize=] |  |

|            |   |  |
|------------|---|--|
| Parameters | msize   | 1: Maximum resolution of the second code stream<br>2: Minimum resolution of the second code stream |
| Return     | Success: include Success<br>Error: contains Error   |  |
| Remarks    | Some models do not support this attribute. For details, please refer to <a href="#">Appendix I, Equipment Type Definition</a> |  |
| Example    | /cgi-bin/hi3510/param.cgi?cmd=setmobilesnapattr&-msize=1  |  |

## param.cgi?cmd=getaencattr

|                     |  |   |
|---------------------|--|---|
| Function            | Get audio encoding Parameters  |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getaencattr&-chn=]  |   |
| Parameters          | chn  | Channel number:<br>11: First code stream<br>12: Second code stream<br>13: Third code stream |
| Return              | aeswitch_1 、 aeswitch_2 Or<br>aeswitch_3   | Turn on/off audio coding<br>0: Off<br>1: Open   |
|                     | aeformat_1 、 aeformat_2 Or<br>aeformat_3   | Audio coding format<br>g711a: G711A 64Kbps<br>g726: G726 16Kbps                             |
| Remarks             | _ 1 is the first code stream _ 2 is the second code stream _ 3 is the third code stream. The audio sampling rate is 8K, mono, 16 bit wide. |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getaencattr&-chn=11  |   |

## param.cgi?cmd=setaencattr

|                     |   |   |
|---------------------|---|---|
| Function            | Set audio encoding Parameters                     |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setaencattr&-chn=] |   |
| Parameters          | chn   | Channel number:<br>11: First code stream<br>12: Second code stream<br>13: Third code stream |
|                     | aeswitch  | Turn on/off audio coding<br>0: Off  |

|         |  |  |
|---------|--|--|
|         |  | l: Open  |
|         | aeformat   | Audio coding format<br>g711a: G711 64Kbps<br>g726: G726 16Kbps |
| Return  | Success: include Success<br>Error: contains Error                            |  |
| Remarks | The audio sampling rate is 8K, mono, 16 bit wide.                            |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=setaencattr&-chn=11&-aeswitch=0                |  |
|         | /cgi-bin/hi3510/param.cgi?cmd=setaencattr&-chn=12&-aeswitch=1&-aeformat=g726 |  |

## param.cgi?cmd=getaudioinvolume

|                     |  |                                |
|---------------------|--|--------------------------------|
| Function            | Get input audio volume                           |                                |
| Limits of authority | admin  |                                |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getaudioinvolume] |                                |
| Parameters          |  |                                |
| Return              | Volume   | Volume size [1-100]            |
|                     | aec  | Echo cancellation 0: off 1: on |
|                     | denoise  | noise reduction                |
| Remarks             |  |                                |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getaudioinvolume   |                                |

## param.cgi?cmd=setaudioinvolume

|                     |   |                     |
|---------------------|---|---------------------|
| Function            | Set input audio volume                                    |                     |
| Limits of authority | admin   |                     |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setaudioinvolume&-volume=] |                     |
| Parameters          | volume  | Volume size [1-100] |
| Return              | Success: include Success                                  |                     |
|                     | Error: contains Error                                     |                     |
| Remarks             |   |                     |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setaudioinvolume&-volume=80 |                     |

## param.cgi?cmd=getaudiooutvolume

|          |                         |
|----------|-------------------------|
| Function | Get output audio volume |
|----------|-------------------------|

|                     |   |                     |
|---------------------|---|---------------------|
| Limits of authority | admin   |                     |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getaudiooutvolume] |                     |
| Parameters          |   |                     |
| Return              | ao_volume   | Volume size [1-100] |
| Remarks             |   |                     |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getaudiooutvolume   |                     |

## param.cgi?cmd=setaudiooutvolume

|                     |  |                     |
|---------------------|--|---------------------|
| Function            | Set output audio volume                                    |                     |
| Limits of authority | admin  |                     |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setaudiooutvolume&-volume=] |                     |
| Parameters          | volume   | Volume size [1-100] |
| Return              | Success: include Success<br>Error: contains Error          |                     |
| Remarks             |  |                     |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setaudiooutvolume&-volume=80 |                     |

## param.cgi?cmd=getaudioinvolume

|                     |  |                                 |
|---------------------|--|---------------------------------|
| Function            | Get input type                                   |                                 |
| Limits of authority | admin  |                                 |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getaudioinvolume] |                                 |
| Parameters          |  |                                 |
| Return              | volin_type                                       | 0: Linear input<br>1: MIC input |
| Remarks             |  |                                 |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getaudioinvolume   |                                 |

## param.cgi?cmd=setaudioinvolume

|                     |  |                                 |
|---------------------|--|---------------------------------|
| Function            | Set input type   |                                 |
| Limits of authority | admin  |                                 |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setaudioinvolume &-volin_type=] |                                 |
| Parameters          | volin_type   | 0: Linear input<br>1: MIC input |
| Return              | Success: include Success                                       |                                 |

|         |   |
|---------|---|
|         | Error: contains Error   |
| Remarks |   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=setaudioinvolume &-volin_type=0 |

## param.cgi?cmd=requestifrm

|                     |   |        |
|---------------------|---|--------|
| Function            | Request the next frame as a keyframe              |        |
| Limits of authority | admin   |        |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=requestifrm&-chn=] |        |
| Parameters          | chn   | 11, 12 |
| Return              | Success: include Success<br>Error: contains Error |        |
| Remarks             |   |        |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=requestifrm&-chn=11 |        |

## param.cgi?cmd=requestifrm

|                     |   |           |
|---------------------|---|-----------|
| Function            | Request the next frame as a keyframe              |           |
| Limits of authority | admin   |           |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=requestifrm&-chn=] |           |
| Parameters          | chn   | 11, 12,13 |
| Return              | Success: include Success<br>Error: contains Error |           |
| Remarks             |   |           |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=requestifrm&-chn=11 |           |

## param.cgi?cmd=getcover

|                     |  |  |
|---------------------|--|--|
| Function            | Get video occlusion Parameters           |  |
| Limits of authority | admin                                    |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getcover] |  |
| Parameters          |  |  |
| Return              | show_1                                   | Whether to enable the video occlusion function in area 1:<br>0: off<br>1: enable |
|                     | color_1                                  | Color of video occlusion area 1  |

|         |  |  |
|---------|--|--|
|         | x_1                                    | Abscissa of video occlusion area 1   |
|         | y_1                                    | Ordinate of video occlusion area 1   |
|         | w_1                                    | Width of video occlusion area 1  |
|         | h_1                                    | Height of video occlusion area 1   |
|         | show_2                                 | Whether to enable the video occlusion function in area 2:<br>0: off<br>1: enable |
|         | color_2                                | Color of video occlusion area 2  |
|         | x_2                                    | Abscissa of video occlusion area 2   |
|         | y_2                                    | Ordinate of video occlusion area 2   |
|         | w_2                                    | Width of video occlusion area 2  |
|         | h_2                                    | Height of video occlusion area 2   |
|         | show_3                                 | Whether to enable the video occlusion function in area 3:<br>0: off<br>1: enable |
|         | color_3                                | Color of video occlusion area 3  |
|         | x_3                                    | Abscissa of video occlusion area 3   |
|         | y_3                                    | Ordinate of video occlusion area 3   |
|         | w_3                                    | Width of video occlusion area 3  |
|         | h_3                                    | Height of video occlusion area 3   |
|         | show_4                                 | Whether to enable the video occlusion function in area 4:<br>0: off<br>1: enable |
|         | color_4                                | Color of video occlusion area 4  |
|         | x_4                                    | Abscissa of video occlusion area 4   |
|         | y_4                                    | Ordinate of video occlusion area 4   |
|         | w_4                                    | Width of video occlusion area 4  |
|         | h_4                                    | Height of video occlusion area 4   |
| Remarks | null                                   |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getcover |  |

## param.cgi?cmd=setcover

|          |                                     |
|----------|-------------------------------------|
| Function | Set video occlusion area Parameters |
|----------|-------------------------------------|



|                     |  |   |
|---------------------|--|---|
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setcover&-show=&-region=&-color=&-x=&-y=&-w=&-h=]                 |   |
| Parameters          | region   | video occlusion area: [1 ~ 4]   |
|                     | show   | Whether to enable the area video occlusion function:<br>0: off<br>1: enable |
|                     | color  | Color of video occlusion area   |
|                     | x  | Abcissa of video occlusion area   |
|                     | y  | Ordinate of video occlusion area  |
|                     | w  | Width of video occlusion area   |
|                     | h  | Height of video occlusion area  |
| Return              | Success: include Success<br>Error: contains Error  |   |
| Remarks             | null   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setcover&-show=1&-region=1&-color=FFFF<br>FF&-x=0&-y=0&-w=60&-h=60 |   |

## CERT File Upload

### cert.cgi?-filename

|                     |   |  |
|---------------------|---|--|
| Function            | File Upload                                       |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/cert.cgi?-filename=cert.pem       |  |
| Parameters          |   |  |
| Return              | Success: include Success<br>Error: contains Error |  |
| Remarks             |   |  |
| Example             | /cgi-bin/hi3510/cert.cgi?-filename=cert.pem       |  |

## 2. Infrared and white light control

### Param.cgi?cmd=getlampctrl

|                     |   |  |
|---------------------|---|--|
| Function            | Get white light Parameters  |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getlampctrl]   |  |
| Parameters          |   |  |
| Return              | var lampstat  | Infrared light status<br>auto: automatic<br>open: forced open<br>close: forced close |
| Remarks             | Some models do not support this attribute. For details, please refer to <a href="#">Appendix I, Equipment Type Definition</a> |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getlampctrl   |  |

### Param.cgi?cmd=setlampctrl

|                     |   |  |
|---------------------|---|--|
| Function            | Set white light Parameters  |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setlampctrl]   |  |
| Parameters          |   |  |
| Return              | var lampstat  | Infrared light status<br>auto: automatic<br>open: forced open<br>close: forced close |
| Remarks             | Some models do not support this attribute. For details, please refer to <a href="#">Appendix I, Equipment Type Definition</a> |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setlampctrl&-lampstat=open  |  |

## param.cgi?cmd=getinfrared

|                     |   |  |
|---------------------|---|--|
| Function            | Get infrared light Parameters   |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getinfrared]   |  |
| Parameters          |   |  |
| Return              | infraredstat  | Infrared light status<br>auto: automatic<br>open: forced open<br>close: forced close |
| Remarks             | Some models do not support this attribute. For details, please refer to <a href="#">Appendix I, Equipment Type Definition</a> |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getinfrared   |  |

## param.cgi?cmd=setinfrared

|                     |   |  |
|---------------------|---|--|
| Function            | Set infrared light Parameters   |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setinfrared]   |  |
| Parameters          |   |  |
| Return              | infraredstat  | Infrared light status<br>auto: automatic<br>open: forced open<br>close: forced close |
| Remarks             | Some models do not support this attribute. For details, please refer to <a href="#">Appendix I, Equipment Type Definition</a> |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setinfrared&-infraredstat=auto  |  |

## 3. Network

### param.cgi?cmd=getnetattr

|                     |  |                         |
|---------------------|--|-------------------------|
| Function            | Get device network Parameters              |                         |
| Limits of authority | admin                                      |                         |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getnetattr] |                         |
| Parameters          |  |                         |
| Return              | dhcpflag                                   | Whether to enable DHCP: |

|         |  |  |
|---------|--|--|
|         |  | on: enable<br>off: turn off                              |
|         | ip                                       | IP address   |
|         | netmask                                  | Subnet mask  |
|         | gateway                                  | Gateway  |
|         | dnsstat                                  | DNS status:<br>0: manual setting<br>1: Automatically set |
|         | fdnsip                                   | Preferred DNS  |
|         | sdnsip                                   | Spare DNS  |
|         | macaddress                               | MAC address  |
|         | networktype                              | Network type:<br>LAN: wired<br>WiFi: wireless            |
| Remarks |  |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getnetattr |  |

## param.cgi?cmd=setnetattr

|                     |  |  |
|---------------------|--|--|
| Function            | Configure device LAN network Parameters  |  |
| Limits of authority | admin  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setnetattr&-dhcp=&-ipaddr=&-netmask=&-gateway=&-dnsstat=&-fdnsip=&-sdnsip=] |  |
| Parameters          | dhcp   | Enable DHCP or not:<br>On: enabled<br>Off: off           |
|                     | ipaddr   | IP address   |
|                     | netmask  | Subnet mask  |
|                     | gateway  | gateway  |
|                     | dnsstat  | DNS status:<br>0: manual setting<br>1: Automatic setting |
|                     | fdnsip   | Preferred DNS  |
|                     | sdnsip   | Spare DNS  |
| Return              | Success: include Success<br>Error: contains Error  |  |
| Remarks             |  |  |

|         |   |
|---------|---|
| Example | /cgi-bin/hi3510/param.cgi?cmd=setnetattr&-dhcp=off&-ipaddr=192.168.1.88<br>&-netmask=255.255.255.0&-gateway=192.168.1.1&-dnsstat=0&-fdnsip=192.168.1.1&-sdnsip= |
|---------|---|

## param.cgi?cmd=gethttpport

|                     |   |           |
|---------------------|---|-----------|
| Function            | Get HTTP port                               |           |
| Limits of authority | admin                                       |           |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=gethttpport] |           |
| Parameters          |   |           |
| Return              | httpport                                    | HTTP Port |
| Remarks             |   |           |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=gethttpport   |           |

## param.cgi?cmd=sethttpport

|                     |   |                      |
|---------------------|---|----------------------|
| Function            | Configure HTTP port   |                      |
| Limits of authority | admin   |                      |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=sethttpport&-httpport=]                      |                      |
| Parameters          | httpport  | HTTP 端口：范围[80~65535] |
| Return              | Success: include Success<br>Error: contains Error                           |                      |
| Remarks             | After the modification is successful, the device will restart automatically |                      |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=sethttpport&-httpport=80                      |                      |

## param.cgi?cmd=getrtspport

|                     |   |           |
|---------------------|---|-----------|
| Function            | Get RTSP and RTP ports                      |           |
| Limits of authority | admin                                       |           |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getrtspport] |           |
| Parameters          |   |           |
| Return              | rtspport                                    | RTSP port |
|                     | rtpport                                     | RTP port  |
| Remarks             |   |           |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getrtspport   |           |

## param.cgi?cmd=setrtspport

|                     |  |                      |
|---------------------|--|----------------------|
| Function            | Set RTSP and RTP ports   |                      |
| Limits of authority | admin  |                      |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setrtspport&-rtspport=&-rtpport=]             |                      |
| Parameters          | rtspport   | RTSP 端口：范围[80~65535] |
|                     | rtpport  | RTP 端口：范围[5000~8000] |
| Return              | Success: include Success   |                      |
|                     | Error: contains Error  |                      |
| Remarks             | After the modification is successful, the device will restart automatically. |                      |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setrtspport&-rtspport=554&-rtpport=6600        |                      |

## param.cgi?cmd=getrtmpattr

|                     |   |           |
|---------------------|---|-----------|
| Function            | Get RTMP port                               |           |
| Limits of authority | admin                                       |           |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getrtmpattr] |           |
| Parameters          |   |           |
| Return              | rtmpport                                    | RTMP port |
| Remarks             |   |           |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getrtmpattr   |           |

## param.cgi?cmd=setrtmpport

|                     |  |           |
|---------------------|--|-----------|
| Function            | Set RTMP port  |           |
| Limits of authority | admin  |           |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setrtmpattr&-rtmpport=]                       |           |
| Parameters          | rtmpport   | RTMP port |
| Return              | Success: include Success   |           |
|                     | Error: contains Error  |           |
| Remarks             | After the modification is successful, the device will restart automatically. |           |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setrtmpatt&-rtmpport=1935                      |           |

## param.cgi?cmd=getrtspauth

|                     |                                  |
|---------------------|----------------------------------|
| Function            | Get RTSP permission verification |
| Limits of authority | admin                            |

|            |   |  |
|------------|---|--|
| Grammar    | /cgi-bin/hi3510/param.cgi[?cmd=getrtspauth] |  |
| Parameters |   |  |
| Return     | rtsp_aenable                                | Enable RTSP permission verification or not:<br>0: Off<br>1: Open |
| Remarks    |   |  |
| Example    | /cgi-bin/hi3510/param.cgi?cmd=getrtspauth   |  |

## param.cgi?cmd=setrtspauth

|                     |  |  |
|---------------------|--|--|
| Function            | Configure RTSP permission verification                                       |  |
| Limits of authority | admin  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setrtspauth&- rtsp_aenable=]                  |  |
| Parameters          | rtsp_aenable   | Enable RTSP permission verification or not:<br>0: Off<br>1: Open |
| Return              | Success: include Success<br>Error: contains Error                            |  |
| Remarks             | After the modification is successful, the device will restart automatically. |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setrtspauth&-rtsp_aenable=1                    |  |

## param.cgi?cmd=getinterip

|                     |   |  |
|---------------------|---|--|
| Function            | Query the Internet IP address of this machine |  |
| Limits of authority | admin   |  |
| Grammar             | / cgi-bin/param.cgi?cmd=getinterip            |  |
| Parameters          |   |  |
| Return              | interip                                       | Internet IP address, such as: interip = "220.112.14.173" |
| Remarks             |   |  |
| Example             | /cgi-bin/param.cgi?cmd=getinterip             |  |

## param.cgi?cmd=getupnpattr

|                     |   |  |
|---------------------|---|--|
| Function            | Get UPNP Parameters                         |  |
| Limits of authority | admin                                       |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getupnpattr] |  |

|            |   |  |
|------------|---|--|
| Parameters |   |  |
| Return     | upm_enable                                | Enable UPNP port mapping:<br>0: Off<br>1: Enable |
| Remarks    |   |  |
| Example    | /cgi-bin/hi3510/param.cgi?cmd=getupnpattr |  |

## param.cgi?cmd=setupnpattr

|                     |  |  |
|---------------------|--|--|
| Function            | Set UPNP Parameters                                      |  |
| Limits of authority | admin  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setupnpattr&-upm_enable=] |  |
| Parameters          | upm_enable   | Enable UPNP port mapping:<br>0: Off<br>1: Enable |
| Return              | Success: include Success<br>Error: contains Error        |  |
| Remarks             |  |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setupnpattr&-upm_enable=1  |  |

## param.cgi?cmd=getplatformtype

|                     |   |   |
|---------------------|---|---|
| Function            | Get platform serial number                      |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getplatformtype] |   |
| Parameters          |   |   |
| Return              | pftype  | Platform Serial No:<br>0: hichip<br>1: Langtao<br>3: TUTK<br>5: Dana<br>6: Ojet<br>8: Haixi |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getplatformtype   |   |



## param.cgi?cmd=setplatformtype

|                     |  |   |
|---------------------|--|---|
| Function            | Set platform serial number                               |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setplatformtype&-pftype=] |   |
| Parameters          | pftype   | platform serial number:<br>0: hichip<br>1: Langtao<br>3: TUTK<br>5: Dana<br>6: Ojet<br>8: Haixi |
| Return              | Success: include Success<br>Error: contains Error        |   |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setplatformtype&-pftype=0  |   |

## param.cgi?cmd=getopplatformattr

|                     |   |   |
|---------------------|---|---|
| Function            | Get hichip platform Parameters                    |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getopplatformattr] |   |
| Parameters          |   |   |
| Return              | op_state  | Connection status<br>1: Go online<br>0: Offline         |
|                     | op_enable   | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | op_server   | Server ip Address                                       |
|                     | op_port   | Port  |
|                     | op_uname  | Login ID  |
|                     | op_passwd   | Password  |
|                     | op_timeout  | Timeout   |
| Remarks             |   |   |

|         |   |
|---------|---|
| Example | /cgi-bin/hi3510/param.cgi?cmd=getopplatformattr |
|---------|---|

## param.cgi?cmd=setplatformtype

|                     |  |   |
|---------------------|--|---|
| Function            | Set hichip platform Parameters   |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?setopplatformattr&-op_enable=&-op_uname=&-op_passwd=&-op_server=&-op_port=&-op_timeout=]                        |   |
| Parameters          | op_enable  | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | op_server  | server address  |
|                     | op_port  | port  |
|                     | op_uname   | Login ID  |
|                     | op_passwd  | password  |
|                     | op_timeout   | Timeout   |
| Return              | Success: include Success<br>Error: contains Error  |   |
| Remarks             | After the modification is successful, the device will restart automatically.   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setopplatformattr&-op_enable=1&-op_uname=a&-op_passwd=b&-op_server=192.168.1.26&-op_port=12105&-op_timeout=5 |   |

## param.cgi?cmd=getgoolinkattr

|                     |  |   |
|---------------------|--|---|
| Function            | Access Langtao Parameters                      |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getgoolinkattr] |   |
| Parameters          |  |   |
| Return              | goolink_enable                                 | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | goolink_uid                                    | UID   |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getgoolinkattr   |   |

## param.cgi?cmd=setgoolinkattr

|                     |  |   |
|---------------------|--|---|
| Function            | Set Langtao Platform Parameters  |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?setgoolinkattr&-goolink_enable=&-goolink_uid=]                |   |
| Parameters          | goolink_enable   | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | goolink_uid  | UID   |
| Return              | Success: include Success<br>Error: contains Error  |   |
| Remarks             | After the modification is successful, the device will restart automatically.             |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setgoolinkattr&-goolink_enable=1&-goolink_uid=zz08580aa545 |   |

## param.cgi?cmd=getp2pattr

|                     |  |   |
|---------------------|--|---|
| Function            | Access TUTK Platform Parameters            |   |
| Limits of authority | admin                                      |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getp2pattr] |   |
| Parameters          |  |   |
| Return              | p2p_enable                                 | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | p2p_mode                                   |   |
|                     | p2p_pushaddr                               |   |
|                     | p2p_uid                                    | UID   |
|                     | p2p_server1                                | Server address 1  |
|                     | p2p_server2                                | Server address 2  |
|                     | p2p_server3                                | Server address 3  |
|                     | p2p_server4                                | Server address 4  |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getp2pattr   |   |

## param.cgi?cmd=setp2patr

|                     |  |   |
|---------------------|--|---|
| Function            | Set TUTK Platform Parameters   |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setp2patr&-p2p_enable=&-p2p_uid=&-p2p_server1=&-p2p_server2=&-p2p_server3=&-p2p_server4=]   |   |
| Parameters          | p2p_enable   | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | p2p_uid  | UID   |
|                     | p2p_server1  | Server address 1  |
|                     | p2p_server2  | Server address 2  |
|                     | p2p_server3  | Server address 3  |
|                     | p2p_server4  | Server address 4  |
| Return              | Success: include Success<br>Error: contains Error  |   |
| Remarks             | After the modification is successful, the device will restart automatically.   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setp2patr&-p2p_enable=1&-p2p_uid=FLCTB5ME9WAF8MPPSFFS&-p2p_server1=50.19.254.134&-p2p_server2=122.248.234.207&-p2p_server3=m2.iotcplatform.com&-p2p_server4=m5.iotcplatform.com& |   |

## param.cgi?cmd=getdanaattr

|                     |   |   |
|---------------------|---|---|
| Function            | Access danale Platform Parameters           |   |
| Limits of authority | admin                                       |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getdanaattr] |   |
| Parameters          |   |   |
| Return              | dana_enable                                 | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | dana_server                                 | Server ip Address                                       |
|                     | dana_port                                   | Port  |
|                     | dana_sn                                     | Serial Number   |
| Remarks             |   |   |

|         |   |
|---------|---|
| Example | /cgi-bin/hi3510/param.cgi?cmd=getdanaattr |
|---------|---|

## param.cgi?cmd=setdanaattr

|                     |  |   |
|---------------------|--|---|
| Function            | Set danale Platform Parameters   |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setdanaattr&-dana_enable=&-dana_server=&-dana_port=&-dana_sn=]  |   |
| Parameters          | dana_enable  | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | dana_server  | Server ip Address                                       |
|                     | dana_port  | Port  |
|                     | Serial Number  | Serial Number   |
| Return              | Success: include Success<br>Error: contains Error  |   |
| Remarks             | After the modification is successful, the device will restart automatically.   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setdanaattr&-dana_enable=1&-dana_server=<br>=<br>svrshp.thingsnic.com&-dana_port=80&-dana_sn=MMDQ7H87CL9DKZWF<br>T |   |

## param.cgi?cmd=getobjattr

|                     |  |   |
|---------------------|--|---|
| Function            | Access Ojet Parameters                     |   |
| Limits of authority | admin                                      |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getobjattr] |   |
| Parameters          |  |   |
| Return              | obj_enable                                 | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | obj_uid                                    | Serial Number   |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getobjattr   |   |

## param.cgi?cmd=setobjattr

|                     |  |   |
|---------------------|--|---|
| Function            | Set Ojet Parameters  |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setobjattr&-obj_enable=&-obj_uid=]                |   |
| Parameters          | obj_enable   | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | obj_uid  | Serial Number   |
| Return              | Success: include Success<br>Error: contains Error                                |   |
| Remarks             | After the modification is successful, the device will restart automatically.     |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setobjattr&-obj_enable=1&-obj_uid=ERTD<br>GG3R4FGH |   |

## param.cgi?cmd=gethip2pattr

|                     |  |   |
|---------------------|--|---|
| Function            | Access Haixi Parameters                      |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=gethip2pattr] |   |
| Parameters          |  |   |
| Return              | hip2p_enable                                 | Is the platform connection enabled<br>1: Open<br>0: Off |
|                     | hip2p_uid                                    | Serial Number   |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=gethip2pattr   |   |

## param.cgi?cmd=sethip2pattr

|                     |   |   |
|---------------------|---|---|
| Function            | Set Haixi Parameters  |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setobjattr&-hip2p_enable =&-hip2p _uid=] |   |
| Parameters          | hip2p_enable  | Is the platform connection enabled<br>1: Open<br>0: Off |

|         |  |               |
|---------|--|---------------|
|         | hip2p_uid  | Serial Number |
| Return  | Success: include Success<br>Error: contains Error                              |               |
| Remarks | After the modification is successful, the device will restart automatically.   |               |
| Example | /cgi-bin/hi3510/param.cgi?cmd=sethip2pattr&-hip2p_enable=1&-hip2p_uid=ERDBFHSA |               |

## param.cgi?cmd=getonvifattr

|                     |  |   |
|---------------------|--|---|
| Function            | Access onvif Parameters  |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getonvifattr]                           |   |
| Parameters          |  |   |
| Return              | ov_enable  | Open or Off<br>1: Open<br>0: Off  |
|                     | ov_port  | Port  |
|                     | ov_authflag  | Check permissions or not:<br>1: Calibration<br>0: No Calibration  |
|                     | ov_forbitset<br><br>var ov_snapchn<br>var ov_snapchn<br>var ov_nvctype | 0: Time zone setting allows , Image Parameters setting allowed<br>1: Time Zone Setting Disable , Image Parameters setting allowed<br>2: Time zone setting allows , Image Parameters setting disabled<br>3: Time zone setting disabled , Image Parameters setting disabled |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getonvifattr                             |   |

## param.cgi?cmd=setonvifattr

|                     |   |
|---------------------|---|
| Function            | Set onvif Parameters  |
| Limits of authority | admin   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setonvifattr&-ov_enable=&-ov_port=&-ov |

|            |  |  |
|------------|--|--|
|            | _authflag=&-ov_forbitset=]   |  |
| Parameters | ov_enable  | Open or Off<br>1: Open<br>0: Off   |
|            | ov_port  | Port   |
|            | ov_authflag  | 【】 Permissions are verified or not<br>1: Calibration<br>0: No Calibration  |
|            | ov_forbitset   | 0: Time zone setting allows , Image Parameters setting allows<br>1: Time zone setting disabled , Image Parameters setting allows<br>2: Time zone setting allows , Image Parameters setting disabled<br>3: Time zone setting disabled , Image Parameters setting disabled |
| Return     | Success: include Success<br>Error: contains Error  |  |
| Remarks    | After the modification is successful, the device will restart automatically.                             |  |
| Example    | /cgi-bin/hi3510/param.cgi?cmd=setonvifattr&-ov_enable=1&-ov_port=8080<br>&-ov_authflag=0&-ov_forbitset=0 |  |

## 4. Wifi

### param.cgi?cmd=getwirelessattr

|                     |   |   |
|---------------------|---|---|
| Function            | Access Wifi Parameters                          |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getwirelessattr] |   |
| Parameters          |   |   |
| Return              | wf_enable                                       | Whether to enable wireless<br>0: Off<br>1: Open |
|                     | wf_ssid   | SSID<br>Maximum 32 characters                   |
|                     | wf_auth   | Encryption method<br>0: No                      |



|         |   |   |
|---------|---|---|
|         |   | 1: WEP<br>2: WPA-PSK<br>3: WPA2-PSK                               |
|         | wf_key  | Key   |
|         | wf_enc  | Password Type<br>0: TKIP<br>1: AES                                |
|         | wf_mode                                       | Connection method<br>0: Router method<br>1: Peer-to-peer approach |
| Remarks |   |   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getwirelessattr |   |

## param.cgi?cmd=setwirelessattr

|                     |   |   |
|---------------------|---|---|
| Function            | Set Wifi Parameters   |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setwirelessattr&-wf_enable=&-wf_ssid=&-wf_auth=&-wf_key=&-wf_enc=&-wf_mode=] |   |
| Parameters          | wf_enable   | Whether to enable wireless<br>0: Off<br>1: Open                   |
|                     | wf_ssid   | SSID<br>Maximum 32 characters                                     |
|                     | wf_auth   | Encryption method<br>0: No<br>1: WEP<br>2: WPA-PSK<br>3: WPA2-PSK |
|                     | wf_key  | Key   |
|                     | wf_enc  | Password Type<br>0: TKIP<br>1: AES                                |
|                     | wf_mode   | Connection method<br>0: Router method<br>1: Peer-to-peer approach |
| Return              | Success: include Success<br>Error: contains Error   |   |

|         |  |
|---------|--|
| Remarks |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=setwirelessattr&-wf_ssid=linksys&-wf_enable=1&-wf_auth=2&-wf_key=1234567890&-wf_enc=0&-wf_mode=0 |

## param.cgi?cmd=searchwireless

|  |  |   |
|--|--|---|
| Function   | Search for wireless networks                   |   |
| Limits of authority  | admin  |   |
| Grammar  | /cgi-bin/hi3510/param.cgi[?cmd=searchwireless] |   |
| Parameters   |  |   |
| Return   | waccess_points                                 | Number of wireless networks searched              |
|  | wchannel                                       | Channel   |
|  | wrssi  | Signal strength                                   |
|  | wssid  | SSID  |
|  | wenc   | Encryption method                                 |
|  | wauth  | Authentication method                             |
|  | wnet   | Connection Mode(Router mode, point-to-point mode) |
| <p>Note: If there are multiple wifi networks, waccess_points &gt;1, then it will Return Multiple groups access_points, wchannel--wnet the value of the field,<br/>For example:</p> <pre>var waccess_points="2" ; var wchannel=new Array(); var wrssi=new Array(); var wssid=new Array(); var wenc=new Array(); var wauth=new Array(); var wnet=new Array(); wchannel[0]="6" ; wrssi[0]="-82" ; wssid[0]="Fumax wireless" ; wenc[0]="AES" ; wauth[0]="WPA(2)-PSK" ; wnet[0]="Infra" ; wchannel[1]="11" ; wrssi[1]="-62" ; wssid[1]="linksys" ; wenc[1]="TKIP" ;</pre> |  |   |

|         |  |
|---------|--|
|         | wauth[1]="WPA(2)-PSK" ;<br>wnet[1]="Infra" ; |
| Remarks |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=searchwireless |

## param.cgi?cmd=chkwirelessattr

|                     |   |   |
|---------------------|---|---|
| Function            | Set Detecting wireless Parameters   |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=chkwirelessattr&-wf_ssid=&-wf_auth=&-wf_key=&-wf_enc=&-wf_mode=]                   |   |
|                     | wf_ssid   | SSID<br>Maximum 32 characters                                     |
|                     | wf_auth   | Encryption method<br>0: No<br>1: WEP<br>2: WPA-PSK<br>3: WPA2-PSK |
|                     | wf_key  | Key   |
|                     | wf_enc  | Password Type<br>0: TKIP<br>1: AES                                |
|                     | wf_mode   | Connection method<br>0: Router method<br>1: Peer-to-peer approach |
| Return              | Success: include Success<br>Error: contains Error   |   |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=chkwirelessattr&-wf_ssid=linksys&-wf_auth=3&-wf_key=1234567890&-wf_enc=0&-wf_mode=0 |   |

## param.cgi?cmd=getchkwireless

|                     |  |
|---------------------|--|
| Function            | Access Detection of WIFI results               |
| Limits of authority | admin  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getchkwireless] |

|            |   |  |
|------------|---|--|
| Parameters |   |  |
| Return     | chkres  | Test results<br>0: Failure<br>1: Success |
| Remarks    | To execute first: param.cgi?cmd=chkwirelessattr |  |
| Example    | /cgi-bin/hi3510/param.cgi?cmd=getchkwireless    |  |

## 5. DDNS

### param.cgi?cmd=getourddnsattr

|                     |  |   |
|---------------------|--|---|
| Function            | Get Manufacturers DDNSParameters               |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getourddnsattr] |   |
| Parameters          |  |   |
| Return              | our_enable                                     | Whether to enable the vendor DDNS:<br>0: Off<br>1: Open |
|                     | our_server                                     | server address  |
|                     | our_port                                       | port  |
|                     | our_username                                   | user name   |
|                     | our_passwd                                     | password  |
|                     | our_domain                                     | host name   |
|                     | var out_interval                               | time interval   |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getourddnsattr   |   |

### param.cgi?cmd=setourddnsattr

|                     |   |   |
|---------------------|---|---|
| Function            | Setting Manufacturer DDNSParameters   |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setourddnsattr&-our_enable=&-our_server=&-our_port=&-our_username=&-our_passwd=] |   |
| Parameters          | our_enable  | Whether to enable the vendor DDNS:<br>0: Off<br>1: Open |

|         |   |                   |
|---------|---|-------------------|
|         | our_server  | Server ip Address |
|         | our_port  | Port              |
|         | our_uname   | User Name         |
|         | our_passwd  | Password          |
| Return  | Success: include Success<br>Error: contains Error   |                   |
| Remarks |   |                   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=setourddnsattr&-our_enable=1&-our_server=hipcam.org&-our_port=80&-our_uname=user&-our_passwd=user |                   |

## param.cgi?cmd=get3thddnsattr

|                     |  |   |
|---------------------|--|---|
| Function            | Get Third Party DDNSParameters                 |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=get3thddnsattr] |   |
| Parameters          |  |   |
| Return              | d3th_enable                                    | Whether to enable third party DDNS:<br>0: Off<br>1: Open                                    |
|                     | d3th_service                                   | DDNS Service Provider Type:<br>0: dyndns.org<br>1: 322.org<br>2: dynddns.us<br>3: No-ip.com |
|                     | d3th_uname                                     | User Name   |
|                     | d3th_passwd                                    | Password  |
|                     | d3th_domain                                    | Host Name   |
|                     |  |   |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=get3thddnsattr   |   |

## param.cgi?cmd=set3thddnsattr

|                     |   |                                     |
|---------------------|---|-------------------------------------|
| Function            | Set up third party DDNSParameters   |                                     |
| Limits of authority | admin   |                                     |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=set3thddnsattr.&-d3th_enable=&-d3th_service=&-d3th_uname=&-d3th_passwd=&-d3th_domain=] |                                     |
| Parameters          | d3th_enable   | Whether to enable third party DDNS: |

|         |   |  |
|---------|---|--|
|         |   | 0: Off<br>1: Open  |
|         | d3th_service  | DDNS Service Provider Type:<br>0: dyndns.org<br>1: 3322.org<br>2: dynddns.us<br>3: No-ip.com |
|         | d3th_uname  | User Name  |
|         | d3th_passwd   | Password   |
|         | d3th_domain   | Host Name  |
|         |   |  |
| Return  | Success: include Success<br>Error: contains Error   |  |
| Remarks |   |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=set3thddnsattr&-d3th_enable=1&-d3th_service=1&-d3th_uname=sample&-d3th_passwd=1234&-d3th_domain=sample.dyndns.org |  |

## 6. PTZ Control

### param.cgi?cmd=getmotorrange

|                     |   |                        |
|---------------------|---|------------------------|
| Function            | Get step  |                        |
| Limits of authority | admin   |                        |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=getmotorrange          |                        |
| Parameters          | var panrange  | Horizontal             |
|                     | var tiltrange   | Vertical               |
|                     | var panhome   | Centering Horizontally |
|                     | var tilthome  | Vertically centered    |
| Return              | Success: include Success<br><br>Error: contains Error |                        |
| Remarks             |   |                        |
| Example             | /cgi-bin/hi3510/param.cgi? cmd=getmotorrange          |                        |

## param.cgi?cmd=setmotorrange

|                     |  |                        |
|---------------------|--|------------------------|
| Function            | Get step   |                        |
| Limits of authority | admin  |                        |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=setmotorrange               |                        |
| Parameters          | var panrange   | Horizontal             |
|                     | var tiltrange  | Vertical               |
|                     | var panhome  | Centering Horizontally |
|                     | var tilthome   | Vertically centered    |
| Return              | Success: include Success<br><br>Error: contains Error      |                        |
| Remarks             |  |                        |
| Example             | /cgi-bin/hi3510/param.cgi? cmd=setmotorrange&-panrange=500 |                        |

## param.cgi?cmd=ptzctrl

|                     |  |   |
|---------------------|--|---|
| Function            | PTZ Control  |   |
| Limits of authority | Admin and user   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi?cmd=ptzctrl.cgi[&-step=&-act=&-speed=] |   |
| Parameters          | step   | Stepping method:<br><br>0: After single-step execution, the stop command must be sent again to stop<br><br>1: Automatic stop after single step execution  |
|                     | act  | Control command string, For example:<br><br>left: To the left<br><br>right: To the right<br><br>up: Upward<br><br>down: Downward<br><br>home: Back to the center<br><br>zoomin: Enlarge<br><br>zoomout: Narrow<br><br>focusout: Spotlight+<br><br>focusin: Spotlight-<br><br>hscan: Horizontal Cruise |

|         |  |  |
|---------|--|--|
|         |  | vscan: Vertical Cruise<br>stop: Stop               |
|         | speed  | Cloud platform speed, the range of values is 1~63。 |
| Return  | Success: Contains Success<br>Error: Contains Error   |  |
| Remarks | Different models support different Cloud Station parameters , Specific reference <a href="#">Appendix I, Equipment Type Definition</a> |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=ptzctrl&-step=0&-act=left&-speed=45  |  |

## param.cgi?cmd=preset

|                     |   |  |
|---------------------|---|--|
| Function            | Cloud station preset position operation   |  |
| Limits of authority | Admin and user  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi?cmd=preset[&-act=&-status=&-number=]  |  |
| Parameters          | act   | Operation commands:<br>goto: Adjust the preset position<br>set: Set preset bit |
|                     | status  | Preset bit operation command:<br>0: Clear<br>1: Save                           |
|                     | number  | Preset bit serial number   |
| Return              | Success: include Success<br>Error: contains Error   |  |
| Remarks             | The number of preset positions varies from model to model   |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=preset&-act=goto&-number=1<br>/cgi-bin/hi3510/param.cgi?cmd=preset&-act=set&-status=1&-number=1 |  |

## param.cgi?cmd=getmotorattr

|                     |  |   |
|---------------------|--|---|
| Function            | Access Cloud Terrace Parameters              |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getmotorattr] |   |
| Parameters          |  |   |
| Return              | panspeed                                     | Horizontal speed<br>0: Fast<br>1: Medium<br>2: slowly |



|         |  |  |
|---------|--|--|
|         | tiltspeed                                  | Vertical speed<br>0: Fast<br>1: Medium<br>2: slowly                            |
|         | panscan                                    | Horizontal cruising laps   |
|         | tiltsan                                    | Vertical Cruising Laps   |
|         | movehome                                   | Self-check centering<br>on: Open<br>off: Off                                   |
|         | ptzalarmmask                               | Turn off the alarm when the Cloud Station is in motion<br>on: Open<br>off: Off |
|         | light_enable                               |  |
|         | alarmpresetindex                           | Alarm linkage preset position, (1-8)   |
| Remarks |  |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getmotorattr |  |

## param.cgi?cmd=setmotorattr

|                     |  |   |
|---------------------|--|---|
| Function            | Setting cloud Station Parameters   |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setmotorattr&-panspeed=&-tiltspeed=&-panscan=&-tiltsan=&-movehome=&-ptzalarmmask=&-alarmpresetindex=] |   |
| Parameters          | panspeed   | Horizontal speed<br>0: Fast<br>1: Medium<br>2: slowly |
|                     | tiltspeed  | Vertical speed<br>0: Fast<br>1: Medium<br>2: slowly   |
|                     | panscan  | Horizontal cruising laps                              |
|                     | tiltsan  | Vertical Cruising Laps                                |
|                     | movehome   | Self-check centering<br>on: Open<br>off: Off          |
|                     | ptzalarmmask   | Turn off the alarm when the Cloud Station is in       |
|                     |  |   |

|         |   |                                      |
|---------|---|--------------------------------------|
|         |   | motion<br>on: Open<br>off: Off       |
|         | alarmpresetindex  | Alarm linkage preset position, (1-8) |
| Return  | Success: include Success<br>Error: contains Error   |                                      |
| Remarks | Horizontal speed and vertical speed values are the same, and the number of horizontal cruise laps is the same as the value of vertical cruise laps. |                                      |
| Example | /cgi-bin/hi3510/param.cgi?cmd=setmotorattr&-panspeed=1&-tiltspeed=1&-panscan=1&-tiltscan=1&-movehome=on&-ptzalarmmask=on&-alarmpresetindex=1        |                                      |

## param.cgi?cmd=getptzcomattr

|                     |   |  |
|---------------------|---|--|
| Function            | Access PTZ Parameters   |  |
| Limits of authority | Admin and user  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getptzcomattr]   |  |
| Parameters          |   |  |
| Return              | protocal  | Protocol Type:<br>0: PELCO-D<br>1: PELCO-P   |
|                     | address   | Address Code (0~255)   |
|                     | baud  | Baud rate  |
|                     | databit   | Data bits  |
|                     | stopbit   | Stop bit   |
|                     | check   | Calibration:<br>0: No<br>1: Odd Number Checking<br>2: Even number check<br>3: Marker<br>4: Space |
|                     | speed   | Speed  |
| Remarks             | Some models have no secondary attributes , For details, please refer to <a href="#">Appendix I, Equipment Type Definition</a> |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getptzcomattr   |  |

## param.cgi?cmd=setptzcomattr

|                     |   |   |
|---------------------|---|---|
| Function            | Set PTZParameters   |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setptzcomattr&-protocal=&-address=&-baud=&-databit=&-stopbit=&-check=&-speed=]                 |   |
| Parameters          | protocal  | Protocol Type:<br>0: PELCO-D<br>1: PELCO-P                              |
|                     | address   | Address Code: 0~255   |
|                     | baud  | Baud rate:<br>1200、2400、4800、9600、19200、38400、57600 (One of them)       |
|                     | databit   | Data bits: 7、8 (One of them)  |
|                     | stopbit   | Stop bit: 1、2 (One of them)   |
|                     | check   | Calibration:<br>0: No<br>1: Odd Number Checking<br>2: Even number check |
|                     | Speed   | Speed (1-63)  |
| Return              | Success: include Success<br>Error: contains Error   |   |
| Remarks             | Some models have no secondary attributes , For details, please refer to <a href="#">Appendix I, Equipment Type Definition</a> |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setptzcomattr&-protocal=0&-address=1&-baud=9600&-databit=8&-stopbit=1&-check=0&-speed=31        |   |

## ptzup.cgi

|                     |   |
|---------------------|---|
| Function            | Control the Cloud Terrace to turn upwards (for PTZ control when browsing on cell phones)) |
| Limits of authority | Admin and user  |
| Grammar             | /cgi-bin/hi3510/ptzup.cgi   |
| Parameters          |   |
| Return              | Success: include Success<br>Error: contains Error   |
| Remarks             |   |

|         |                           |
|---------|---------------------------|
| Example | /cgi-bin/hi3510/ptzup.cgi |
|---------|---------------------------|

## ptzdown.cgi

|                     |   |
|---------------------|---|
| Function            | Control the Cloud Terrace to turn downward (for PTZ control when browsing on cell phones) |
| Limits of authority | Admin and user  |
| Grammar             | /cgi-bin/hi3510/ptzdown.cgi   |
| Parameters          |   |
| Return              | Success: include Success<br>Error: contains Error   |
| Remarks             |   |
| Example             | /cgi-bin/hi3510/ptzdown.cgi   |

## ptzleft.cgi

|                     |  |
|---------------------|--|
| Function            | Control the Cloud Terrace to turn to the left (for PTZ control when browsing on cell phones) |
| Limits of authority | Admin and user   |
| Grammar             | /cgi-bin/hi3510/ptzleft.cgi  |
| Parameters          |  |
| Return              | Success: include Success<br>Error: contains Error  |
| Remarks             |  |
| Example             | /cgi-bin/hi3510/ptzleft.cgi  |

## ptzright.cgi

|                     |   |
|---------------------|---|
| Function            | Control the Cloud Terrace to turn to the right (for PTZ control when browsing on cell phones) |
| Limits of authority | Admin and user  |
| Grammar             | /cgi-bin/hi3510/ptzright.cgi  |
| Parameters          |   |
| Return              | Success: include Success<br>Error: contains Error   |
| Remarks             |   |
| Example             | /cgi-bin/hi3510/ptzright.cgi  |

## ptzzoomin.cgi

|                     |  |  |
|---------------------|--|--|
| Function            | Control the PTZ lens to pull closer (for PTZ control when browsing on cell phones) |  |
| Limits of authority | Admin and user   |  |
| Grammar             | /cgi-bin/hi3510/ptzzoomin.cgi  |  |
| Parameters          |  |  |
| Return              | Success: include Success<br>Error: contains Error                                  |  |
| Remarks             |  |  |
| Example             | /cgi-bin/hi3510/ptzzoomin.cgi  |  |

## ptzzoomout.cgi

|                     |  |  |
|---------------------|--|--|
| Function            | Control the PTZ lens to pull away (for PTZ control when browsing on cell phones) |  |
| Limits of authority | Admin and user   |  |
| Grammar             | /cgi-bin/hi3510/ptzzoomout.cgi   |  |
| Parameters          |  |  |
| Return              | Success: include Success<br>Error: contains Error                                |  |
| Remarks             |  |  |
| Example             | /cgi-bin/hi3510/ptzzoomout.cgi   |  |

## 7. Motion detection, I/O Alarm

### param.cgi?cmd=getmdattr

|                     |  |  |
|---------------------|--|--|
| Function            | Access Motion detection configuration Parameters |  |
| Limits of authority | admin  |  |
| Grammar             | cgi-bin/hi3510/param.cgi[?cmd=getmdattr]         |  |
| Parameters          |  |  |
| Return              | m1_enable  | Motion detection configuration:<br>0: Off<br>1: Open |

|         |   |  |
|---------|---|--|
|         | m1_x  | Area 1 horizontal coordinate   |
|         | m1_y  | Area 1 vertical coordinate   |
|         | m1_w  | Area 1 width   |
|         | m1_h  | Area 1 height  |
|         | m1_sensitivity  | Region 1 Sensitivity   |
|         | m1_threshold  | Reserved field, not used   |
|         | m2_enable   | Whether to enable the region two motion detection function:<br>0: Off<br>1: Open     |
|         | m2_x  | Region 2 horizontal coordinates  |
|         | m2_y  | Region 2 vertical coordinates  |
|         | m2_w  | Region 2 width   |
|         | m2_h  | Region 2 Height  |
|         | m2_sensitivity  | Region 2 sensitivity   |
|         | m2_threshold  | Reserved field, not used   |
|         | m3_enable   | Whether to enable the regional three motion detection function:<br>0: Off<br>1: Open |
|         | m3_x  | Area 3 horizontal coordinates  |
|         | m3_y  | Area 3 vertical coordinates  |
|         | m3_w  | Region 3 width   |
|         | m3_h  | Region 3 Height  |
|         | m3_sensitivity  | Region 3 Sensitivity   |
|         | m3_threshold  | Reserved field, not used   |
|         | m4_enable   | Whether to enable the region four motion detection function:<br>0: Off<br>1: Open    |
|         | m4_x  | Region 4 horizontal coordinates  |
|         | m4_y  | Region 4 vertical coordinates  |
|         | m4_w  | Region 4 Width   |
|         | m4_h  | Region 4 Height  |
|         | m4_sensitivity  | Region 4 Sensitivity   |
|         | m4_threshold  | Reserved field, not used   |
| Remarks | The area coordinates and width and height are based on the device's |  |

|         |   |
|---------|---|
|         | maximum:base.                           |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getmdattr |

## param.cgi?cmd=setmdattr

|                     |   |   |
|---------------------|---|---|
| Function            | Configuring motion detection Parameters   |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setmdattr&-enable=&-s=&-name=&-x=&-y=&-w=&-h=]         |   |
| Parameters          | enable  | Whether to enable the motion detection function:<br>0: Off<br>1: Open |
|                     | s   | Sensitivity: Range[1 ~ 100]   |
|                     | name  | Alarm area: Range[1 ~ 4]  |
|                     | x   | Horizontal coordinates of the motion detection area                   |
|                     | y   | Motion detection area vertical coordinate                             |
|                     | w   | Width of motion detection area  |
|                     | h   | Height of motion detection area                                       |
| Return              | Success: include Success<br>Error: contains Error                                     |   |
| Remarks             | The area coordinatesand width and height are based on the device's maximum:base.      |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setmdattr&-enable=1&-s=50&-name=1&-x=0&-y=0&-w=60&-h=60 |   |

## param.cgi?cmd=getioattr

|                     |   |  |
|---------------------|---|--|
| Function            | Get external alarm input Parameters       |  |
| Limits of authority | admin                                     |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getioattr] |  |
| Parameters          |   |  |
| Return              | io_enable                                 | Whether to enable external alarm input:<br>0: Off<br>1: Open |
|                     | io_flag                                   | External alarm mode:<br>0: Off<br>1: Open                    |

|         |   |
|---------|---|
| Remarks |   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getioattr |

## param.cgi?cmd=setioattr

|                     |  |  |
|---------------------|--|--|
| Function            | Set external alarm input Parameters                              |  |
| Limits of authority | admin  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setioattr &-io_enable=&-io_flag=] |  |
| Parameters          | io_enable  | Whether to enable external alarm input:<br>0: Off<br>1: Open |
|                     | io_flag  | External alarm mode:<br>0: Off<br>1: Open                    |
| Return              | Success: include Success<br>Error: contains Error                |  |
| Remarks             |  |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setioattr&-io_enable=1&-io_flag=0  |  |

## param.cgi?cmd=getmdalarm

|                     |  |   |
|---------------------|--|---|
| Function            | Get alarm linkage status information               |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getmdalarm&-aname=] |   |
| Parameters          | aname  | Option Name:<br>email: E-mail Alarm<br>emailsnap: E-mail Report an alarm and send a picture<br>snap: Save pictures to SD card<br>ftpsnap: Save images to FTP server<br>record: Save video to SD card<br>ftpsec: Save video to FTP server<br>relay: Relay Output |
|                     | md_email_switch                                    | Whether to enable E-mail alarm function:<br>on: Open<br>off: Off  |
|                     | md_emailsnap_switch                                | Whether to enable E-mail alarm and send picture   |



|         |   |  |
|---------|---|--|
|         |   | function:<br>on: Open<br>off: Off                                      |
|         | md_snap_switch  | Whether to enable saving pictures to SD card:<br>on: Open<br>off: Off  |
|         | md_ftpsnap_switch   | Whether to enable saving images to FTP server:<br>on: Open<br>off: Off |
|         | md_record_switch  | Whether to enable saving video to SD card:<br>on: Open<br>off: Off     |
|         | md_ftprec_switch  | Whether to enable saving video to FTP server:<br>on: Open<br>off: Off  |
|         | md_relay_switch   | Whether to enable relay output:<br>on: Open<br>off: Off                |
| Remarks |   |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getmdalarm&-aname=email&cmd=getmdalarm&-aname=emailsnap&cmd=getmdalarm&-aname=ftpsnap&cmd=getmdalarm&-aname=snap&cmd=getmdalarm&-aname=emailrec&cmd=getmdalarm&-aname=record&cmd=getmdalarm&-aname=ftprec&cmd=getmdalarm&-aname=relay |  |

## param.cgi?cmd=setmdalarm

|                     |  |   |
|---------------------|--|---|
| Function            | Configure alarm linkage Parameters                           |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setmdalarm &-aname=&-switch=] |   |
| Parameters          | aname  | Alarm linkage option name:<br>email: E-mail Alarm<br>emailsnap : E-mail Report an alarm and send a picture<br>snap: Save pictures to SD card<br>ftpsnap: Save images to FTP server<br>record: Save video to SD card<br>ftprec: Save video to FTP server |

|         |  |   |
|---------|--|---|
|         |  | relay: Relay Output                                 |
|         | switch   | Alarm linkage option value:<br>on: Open<br>off: Off |
| Return  | Success: include Success<br>Error: contains Error  |   |
| Remarks |  |   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=setmdalarm&-aname=email&-switch=off&cmd=setmdalarm&-aname=emailsnap&-switch=off&cmd=setmdalarm&-aname=ftprec&-switch=off&cmd=setmdalarm&-aname=snap&-switch=off&cmd=setmdalarm&-aname=ftpsnap&-switch=off&cmd=setmdalarm&-aname=record&-switch=off&cmd=setmdalarm&-aname=relay&-switch=off |   |

## param.cgi?cmd=getrelayattr

|                     |  |   |
|---------------------|--|---|
| Function            | Get the relay output time when the alarm is linked |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getrelayattr]       |   |
| Parameters          |  |   |
| Return              | time   | Output time (in seconds), As var time="10"; |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getrelayattr         |   |

## param.cgi?cmd=setrelayattr

|                     |   |   |
|---------------------|---|---|
| Function            | Set relay output time for alarm linkage             |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setrelayattr&-time=] |   |
| Parameters          | time  | Output time (in seconds), Range of values[5、10、20、30] |
| Return              | Success: include Success<br>Error: contains Error   |   |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setrelayattr&-time=10 |   |

## param.cgi?cmd=getalarmsnapattr

|                     |  |                          |
|---------------------|--|--------------------------|
| Function            | Get the number of pictures captured              |                          |
| Limits of authority | admin  |                          |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getalarmsnapattr] |                          |
| Parameters          |  |                          |
| Return              | snap_count                                       | Number of pictures taken |
| Remarks             |  |                          |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getalarmsnapattr   |                          |

## param.cgi?cmd=setalarmsnapattr

|                     |   |  |
|---------------------|---|--|
| Function            | Set the number of pictures to be captured                     |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setalarmsnapattr&-snap_count=] |  |
| Parameters          | snap_count  | Number of pictures taken, Range of values[1、2、3] |
| Return              | Success: include Success<br>Error: contains Error             |  |
| Remarks             |   |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setalarmsnapattr&-snap_count=2  |  |

## param.cgi?cmd=getscheduleex

|                     |  |   |
|---------------------|--|---|
| Function            | Obtain the alarm deployment time and timing video recording time   |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getscheduleex&-ename=]  |   |
| Parameters          | ename  | Option name<br>md: alarm deployment<br>plan: timed recording  |
| Return              | week0=PPPPPPPPPP<br>PPPPPPPPPPPPPPPP<br>PPPPPPPPPPPPPPPP<br>PPPPPP<br>week1=PPPPPPPPPP<br>PPPPPPPPPPPPPPPP<br>PPPPPPPPPPPPPPPP | Week0: Sunday<br>Week1: Monday<br>Week2: Tuesday<br>Week3: Wednesday<br>Week4: Thursday<br>Week5: Friday<br>Week6: Saturday |

|         |   |                   |
|---------|---|-------------------|
|         | P P P P P P<br>week3=P P P P P P P P P P<br>P P P P P P P P P P P P P P P P<br>P P P P P P P P P P P P P P P P<br>P P P P P P<br>week4=P P P P P P P P P P<br>P P P P P P P P P P P P P P P P<br>P P P P P P P P P P P P P P P P<br>P P P P P P<br>week5=P P P P P P P P P P<br>P P P P P P P P P P P P P P P P<br>P P P P P P P P P P P P P P P P<br>P P P P P P<br>week6=P P P P P P P P P P<br>P P P P P P P P P P P P P P P P<br>P P P P P P P P P P P P P P P P<br>P P P P P P | P : On<br>N : Off |
| Remarks | In parameters - week0 ~ - week6, each parameter has 48 characters, that is, the recording configuration string for 24 hours a day (24 hours a day will be subdivided into half an hour as a time period, and the characters P or n indicate whether to start recording, P indicates on, n indicates off). The time is calculated from zero to zero  |                   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getscheduleex&-ename=md   |                   |

## param.cgi?cmd=setscheduleex

|                     |   |   |
|---------------------|---|---|
| Function            | Set the alarm deployment time and timing video recording time   |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setscheduleex&-ename=&-week0=&-week1=&-week2=&-week3=&-week4=&-week5=&-week6=] |   |
| Parameters          | ename   | Option name<br>md: alarm deployment<br>plan: timed recording  |
|                     | week0   | Sunday: 24 hours will be subdivided into half an hour into a time period. The status of each time period is p or N, with a total of 48 bytes (P means on and N means off) |



|            |   |   |
|------------|---|---|
| Parameters | planrec_enable  | Turn on/off recording<br>0: Off<br>1: On      |
|            | planrec_time  | Video file length (of time): (15-900 seconds) |
|            | planrec_chn   | Video bit rate 11、12、13                       |
| Return     | Success: include Success<br>Error: contains Error   |   |
| Remarks    | After the code rate is modified successfully, the device will restart automatically             |   |
| Example    | /cgi-bin/hi3510/param.cgi?cmd=setplanrecattr&-planrec_enable=1&-planrec_time=30&-planrec_chn=12 |   |

## param.cgi?cmd=relayctrl

|                     |   |  |
|---------------------|---|--|
| Function            | Manually open or close the relay                  |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=relayctrl&-act=]   |  |
|                     | act   | Enable relay function or Not:<br>On: enabled<br>Off: off |
| Return              | Success: include Success<br>Error: contains Error |  |
| Remarks             |   |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=relayctrl&-act=on   |  |

## 8、User Management

### param.cgi?cmd=getuserattr

|          |                          |
|----------|--------------------------|
| Function | Get all user information |
|----------|--------------------------|

|                     |   |               |
|---------------------|---|---------------|
| Limits of authority | admin   |               |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getuserattr]   |               |
| Parameters          |   |               |
| Return              | at_name   | user name     |
|                     | at_password   | User password |
| Remarks             | <p>This command will return all user information, such as:</p> <pre>var at_name0="admin"; var at_password0="admin"; var at_name1="user"; var at_password1="user"; var at_name2="guest"; var at_password2="guest";</pre> |               |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getuserattr   |               |

## param.cgi?cmd=setuserattr

|                     |   |   |
|---------------------|---|---|
| Function            | Configure user management Parameters  |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setuserattr&-at_username=&-at_newname=&-at_password=]                |   |
| Parameters          | at_username   | Original user name, maximum number of characters is 16  |
|                     | at_newname  | New user name with a maximum of 16 characters           |
|                     | at_password   | Password Parameters, maximum number of characters is 16 |
| Return              | <p>Success: include Success</p> <p>Error: contains Error</p>  |   |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setuserattr&-at_username=admin&-at_newname=newname&-at_password=admin |   |

## param.cgi?cmd=getsetupflag

|                     |  |  |
|---------------------|--|--|
| Function            | Access admin User Parameters               |  |
| Limits of authority | admin                                      |  |
| Grammar             | /cgi-bin/hi3510/param.cgi?cmd=getsetupflag |  |
| Parameters          |  |  |

|         |  |                 |
|---------|--|-----------------|
| Return  | name0                                      | User Name       |
|         | password0                                  | Password        |
|         | authLevel0                                 | Reserved Fields |
| Remarks |  |                 |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getsetupflag |                 |

## param.cgi?cmd=getstreamflag

|                     |  |                 |
|---------------------|--|-----------------|
| Function            | Access guest User Parameters                 |                 |
| Limits of authority | guest  |                 |
| Grammar             | /cgi-bin/hi3510/ param.cgi?cmd=getstreamflag |                 |
| Parameters          |  |                 |
| Return              | name2  | User Name       |
|                     | password2                                    | Password        |
|                     | authLevel2                                   | Reserved Fields |
| Remarks             |  |                 |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getstreamflag  |                 |

## param.cgi?cmd=getptzflag

|                     |  |                 |
|---------------------|--|-----------------|
| Function            | Access user Parameters                   |                 |
| Limits of authority | user                                     |                 |
| Grammar             | /cgi-bin/hi3510/param.cgi?cmd=getptzflag |                 |
| Parameters          |  |                 |
| Return              | name1                                    | User Name       |
|                     | password1                                | Password        |
|                     | authLevel1                               | Reserved Fields |
| Remarks             |  |                 |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getptzflag |                 |

## param.cgi?cmd=getuserinfo

|                     |   |  |
|---------------------|---|--|
| Function            | Get login user information                |  |
| Limits of authority | admin、 user or guest                      |  |
| Grammar             | /cgi-bin/hi3510/param.cgi?cmd=getuserinfo |  |
| Parameters          |   |  |



|         |   |   |
|---------|---|---|
| Return  | name                                      | User name   |
|         | password                                  | Password  |
|         | authLevel                                 | Limits of authority<br>15: admin<br>3: user<br>1: guest |
| Remarks |   |   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getuserinfo |   |

## 9、Timed capture snapshot

### param.cgi?cmd=getsnaptimerattrex

|                     |  |  |
|---------------------|--|--|
| Function            | Get Timed Capture Parameters                       |  |
| Limits of authority | admin  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getsnaptimerattrex] |  |
| Parameters          |  |  |
| Return              | as_snap_enable                                     | Whether to enable timed capture to save pictures to SD card:<br>0: Off<br>1: Open                              |
|                     | as_snap_interval                                   | Time interval, in seconds (range: 5~86400)   |
|                     | as_email_enable                                    | Whether to enable regular capture to send pictures to Email:<br>0: Off<br>1: Open                              |
|                     | as_email_interval                                  | Time interval, in seconds (range: 5~86400)   |
|                     | as_ftp_enable                                      | Whether to enable regular capture to send pictures to FTP server:<br>0: Off<br>1: Open                         |
|                     | as_ftp_interval                                    | Time interval, in seconds (range: 5~86400)   |
|                     | as_cloud_enable                                    | Whether to enable regular capture to send pictures to the cloud: Reserved field, not used<br>0: Off<br>1: Open |
|                     |  |  |

|         |  |  |
|---------|--|--|
|         | var_cloud_interval                               | Time interval, in seconds (range: 5~86400) |
| Remarks |  |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getsnaptimerattrex |  |

## param.cgi?cmd=setsnaptimerattrex

|                     |   |   |
|---------------------|---|---|
| Function            | Set timed capture Parameters  |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setsnaptimerattrex&-as_enable=&-as_interval=&-as_type=]      |   |
| Parameters          | as_enable   | Whether to open the timing capture:<br>0: Off<br>1: Open  |
|                     | as_interval   | Time interval, in seconds (range: 5~86400)  |
|                     | as_type   | Linkage Type<br>snap: Save the image to the SD card.<br>email: Send image to Email<br>ftp: Send images to FTP server. |
| Return              | Success: include Success<br>Error: contains Error   |   |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setsnaptimerattrex&-as_enable=1&-as_interval=60&-as_type=snap |   |

## 10、FTP

### param.cgi?cmd=getftpattr

|                     |  |                    |
|---------------------|--|--------------------|
| Function            | Access FTP Parameters                      |                    |
| Limits of authority | admin                                      |                    |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getftpattr] |                    |
| Parameters          |  |                    |
| Return              | ft_server                                  | FTP server address |
|                     | ft_port                                    | Server port        |
|                     | ft_username                                | Username           |
|                     | ft_password                                | Password           |

|         |  |  |
|---------|--|--|
|         | ft_dirname                               | Paths  |
|         | ft_mode                                  | Passive mode.<br>0: Off<br>1: Open                 |
|         | ft_autocreatedir                         | Automatic directory creation:<br>0: Off<br>1: Open |
| Remarks |  |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getftpattr |  |

## param.cgi?cmd=setftpattr

|                     |  |  |
|---------------------|--|--|
| Function            | Set FTP Parameters   |  |
| Limits of authority | admin  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getftpattr&-ft_server=&-ft_port=&-ft_username=&-ft_password=&-ft_dirname =&-ft_mode=]   |  |
| Parameters          | ft_server  | FTP server address                                 |
|                     | ft_port  | Server port  |
|                     | ft_username  | User name  |
|                     | ft_password  | Password   |
|                     | ft_dirname   | Path   |
|                     | ft_mode  | Passive mode:<br>0: Off<br>1: Open                 |
|                     | ft_autocreatedir   | Automatic directory creation:<br>0: Off<br>1: Open |
| Return              | Success: include Success<br>Error: contains Error  |  |
| Remarks             |  |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setftpattr&-ft_server=220.112.14.173&-ft_port=21&-ft_username=FTPUsername&-ft_password=FTPPassword&-ft_dirname =Program Files&-ft_mode=1 |  |

## param.cgi?cmd=testftp

|          |          |
|----------|----------|
| Function | Test FTP |
|----------|----------|

|                     |   |   |
|---------------------|---|---|
| Limits of authority | admin                                   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=testftp] |   |
| Parameters          |   |   |
| Return              | result                                  | Type<br>0: Success<br>-1: Unknown error<br>-2: Unable to connect to server<br>-3: User name or password error<br>-4: Wrong path |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=testftp   |   |

## 11、SMTP

### param.cgi?cmd=getsmtppatr

|                     |   |   |
|---------------------|---|---|
| Function            | Get SMTP configuration Parameters           |   |
| Limits of authority | admin                                       |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getsmtppatr] |   |
| Parameters          |   |   |
| Return              | ma_server                                   | SMTP server address   |
|                     | ma_port                                     | Server port   |
|                     | ma_ssl                                      | Secure connection type:<br>0: Off<br>1: SSL<br>2: TLS<br>3: STARTTLS                      |
|                     | ma_logintype                                | Authentication required or not:<br>1: Enable Authentication<br>3: Turn off authentication |
|                     | ma_username                                 | User name   |
|                     | ma_password                                 | Password  |
|                     | ma_from                                     | Sending Address   |
|                     | ma_to                                       | Receiving Address   |
|                     | ma_subject                                  | Email subject   |
|                     | ma_text                                     | Message text  |

|         |   |
|---------|---|
| Remarks |   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=setsmtppatr |

## param.cgi?cmd=setsmtppatr

|                     |  |   |
|---------------------|--|---|
| Function            | Set SMTP Parameters  |   |
| Limits of authority | admin  |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setsmtppatr&-ma_server=&-ma_port=&-ma_ssl=&-ma_logintype=&-ma_username=&-ma_password=&-ma_from=&-ma_to=&-ma_subject=&-ma_text=]   |   |
| Parameters          | ma_server  | SMTP server address   |
|                     | ma_port  | Server port   |
|                     | ma_ssl   | Secure connection type:<br>0: Off<br>1: SSL<br>2: TLS<br>3: STARTTLS                      |
|                     | ma_logintype   | Authentication required or not:<br>1: Enable Authentication<br>3: Turn off authentication |
|                     | ma_username  | User name   |
|                     | ma_password  | Password  |
|                     | ma_from  | Sending Address   |
|                     | ma_to  | Receiving Address   |
|                     | ma_subject   | Email subject   |
|                     | ma_text  | Message text  |
|                     |  |   |
| Return              | Success: include Success<br>Error: contains Error  |   |
| Remarks             |  |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setsmtppatr&-ma_server=smtp.sdf.com&-ma_from=sd1@sdf.com&-ma_to=a1@sdf.com&-ma_subject=demosubject&-ma_text=demotext&-ma_logintype=1&-ma_username=demo&-ma_password=123456&-ma_port=25&-ma_ssl=0 |   |

## param.cgi?cmd=testsmtp

|                     |  |  |
|---------------------|--|--|
| Function            | Test smtp                              |  |
| Limits of authority | admin                                  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=smtp]   |  |
| Parameters          |  |  |
| Return              | result                                 | Type<br>0: Success<br>-1: Unknown error<br>-2: ssl error<br>-3: Unable to connect to server<br>-4: User name or password error |
| Remarks             |  |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=testsmtp |  |

## 12. SD Card

### param.cgi?cmd=sdfmt

|                     |                                     |
|---------------------|-------------------------------------|
| Function            | Format SD card to FAT32 file system |
| Limits of authority | admin                               |
| Grammar             | /cgi-bin/hi3510/param.cgi?cmd=sdfmt |
| Parameters          |                                     |
| Return              | Format SD Card Success              |
| Remarks             | Long waiting time                   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=sdfmt |

### param.cgi?cmd=sdstop

|                     |                                       |
|---------------------|---------------------------------------|
| Function            | Stop using the SD card                |
| Limits of authority | admin                                 |
| Grammar             | /cgi-bin/hi3510/param.cgi?cmd= sdstop |
| Parameters          |                                       |
| Return              | Stop SD Card Success                  |
| Remarks             | Long waiting time                     |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=sdstop  |

## 13. Timed reboot

### Param.cgi?cmd=gettimerreboot

|                     |   |   |
|---------------------|---|---|
| Function            | Timed reboot                                  |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=gettimerreboot |   |
| Parameters          | sr_enable                                     | Whether to turn on the timer reboot<br><br>0: Off、1: Open |
|                     | sr_day  | Week: 0-6 (Sunday-Saturday), 7 every day                  |
|                     | sr_hour                                       | Time: 0~23 hours  |
| Return              | Success: include Success                      |   |
|                     | Error: contains Error                         |   |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi? cmd=gettimerreboot |   |

### Param.cgi?cmd=settimerreboot

|                     |   |   |
|---------------------|---|---|
| Function            | Timed reboot                                  |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=settimerreboot |   |
| Parameters          | sr_enable                                     | Whether to turn on the timer reboot<br><br>0: Off、1: Open |
|                     | sr_day  | Week: 0-6 (Sunday-Saturday), 7 every day                  |

|         |  |                  |
|---------|--|------------------|
|         | sr_hour  | Time: 0~23 hours |
| Return  | Success: include Success<br>Error: contains Error          |                  |
| Remarks |  |                  |
| Example | /cgi-bin/hi3510/param.cgi? cmd=settimerreboot&-sr_enable=0 |                  |

## 14. Language setting

### param.cgi?cmd=getlanguage

|                     |   |                       |
|---------------------|---|-----------------------|
| Function            | Get language                                      |                       |
| Limits of authority | admin   |                       |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=getlanguage        |                       |
| Parameters          | lancode   | 0: Chinese、1: English |
| Return              | Success: include Success<br>Error: contains Error |                       |
| Remarks             |   |                       |
| Example             | /cgi-bin/hi3510/param.cgi? cmd=getlanguage        |                       |

### Param.cgi?cmd=setlanguage

|                     |  |                       |
|---------------------|--|-----------------------|
| Function            | Set language                               |                       |
| Limits of authority | admin                                      |                       |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=getlanguage |                       |
| Parameters          | lancode                                    | 0: Chinese、1: English |



|         |  |
|---------|--|
| Return  | Success: include Success                               |
|         | Error: contains Error                                  |
| Remarks |  |
| Example | /cgi-bin/hi3510/param.cgi? cmd=setlanguage&-language=0 |

## 15. Multi-way setting

### param.cgi?cmd=getdevices

|                     |   |                 |
|---------------------|---|-----------------|
| Function            | Multi-way setting                         |                 |
| Limits of authority | Admin                                     |                 |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=getdevices |                 |
| Parameters          |   |                 |
| Return              | d_host                                    | Device address  |
|                     | d_ailas                                   | Device alias    |
|                     | d_port                                    | Device port     |
|                     | d_username                                | Device name     |
|                     | d_password                                | Device password |
| Remarks             |   |                 |
| Example             | /cgi-bin/hi3510/param.cgi? cmd=getdevices |                 |

### Param.cgi?cmd=setdevices

|                     |   |                 |
|---------------------|---|-----------------|
| Function            | Multi-way setting                         |                 |
| Limits of authority | Admin                                     |                 |
| Grammar             | /cgi-bin/hi3510/param.cgi? cmd=setdevices |                 |
| Parameters          |   |                 |
| Return              | d_host                                    | Device address  |
|                     | d_ailas                                   | Device alias    |
|                     | d_port                                    | Device port     |
|                     | d_username                                | Device name     |
|                     | d_password                                | Device password |

|         |   |
|---------|---|
| Remarks |   |
| Example | <pre>cgi-bin/hi3510/param.cgi? cmd=setdevices&amp;-d_number=2&amp;-d_host=192.168.1.100</pre> |

## 16. System Settings

### param.cgi?cmd=getserverinfo

|                     |   |  |
|---------------------|---|--|
| Function            | Get device information                        |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getserverinfo] |  |
| Parameters          |   |  |
| Return              | model   | Device Serial  |
|                     | hardVersion                                   | Hardware Version   |
|                     | softVersion                                   | Software Version   |
|                     | webVersion                                    | Web Version  |
|                     | name  | Device Name  |
|                     | startdate                                     | System start time  |
|                     | upnpstatus                                    | Upnp Status<br>ok: Success<br>off: Not enabled<br>failed: Failed                             |
|                     | facddnsstatus                                 | Manufacturer dynamic domain name status<br>ok: Success<br>off: Not enabled<br>failed: Failed |
|                     | th3ddnsstatus                                 | Third party dynamic domain name status<br>ok: Success<br>off: Not enabled<br>failed: Failed  |
|                     | platformstatus                                | Platform Status  |
|                     | runtimes                                      | Reserved Fields  |
|                     | sdstatus                                      | SD Card Status<br>out: No SD card<br>Ready: With SD card<br>Readonly: SD card read-only      |
|                     | sd freespace                                  | SD card remaining free space size in KB  |

|         |   |                              |
|---------|---|------------------------------|
|         | sdtotalspace                                | Total SD card capacity in KB |
| Remarks |   |                              |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getserverinfo |                              |

## param.cgi?cmd=getdevtype

|                     |   |             |
|---------------------|---|-------------|
| Function            | Get device type information   |             |
| Limits of authority | admin   |             |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getdevtype]                                  |             |
| Parameters          |   |             |
| Return              | devtype   | Device type |
| Remarks             | Specific reference to <a href="#">Appendix I, Equipment Type Definition</a> |             |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getdevtype                                    |             |

## param.cgi?cmd=getstreamnum

|                     |   |   |
|---------------------|---|---|
| Function            | Get the number of users for live video monitoring |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getstreamnum]      |   |
| Parameters          |   |   |
| Return              | stream_num  | Number of online users, e.g. var stream_num = "1" ; |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getstreamnum        |   |

## param.cgi?cmd=getservertime

|                     |   |  |
|---------------------|---|--|
| Function            | Get system time information                   |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getservertime] |  |
| Parameters          |   |  |
| Return              | time  | Current date and time,<br>[yyyy][mm][dd][hh][mm][ss]<br>As: time="20110802182638"; |
|                     | timeZone                                      | Time Zone, As: timeZone="Asia/Hong_Kong";  |
|                     | dstmode                                       | Whether to enable daylight saving time automatic time adjustment:                  |

|         |   |                      |
|---------|---|----------------------|
|         |   | on: Open<br>off: Off |
| Remarks |   |                      |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getservertime |                      |

## param.cgi?cmd=setservertime

|                     |   |  |
|---------------------|---|--|
| Function            | Setting the system time   |  |
| Limits of authority | admin   |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setservertime&-time=&-timezone=&-dstmode=]                                     |  |
| Parameters          | stime   | Current date and time<br>[yyyy].[mm].[dd].[hh].[mm].[ss]<br>For example: 2011.08.23.10.35.08   |
|                     | timezone  | Time Zone: As:timeZone="Asia/Hong_Kong";<br>Note: For specific field values for time zones, please refer to <a href="#">Appendix II, Time Zone Table</a> . |
|                     | dstmode   | Whether to enable daylight saving time automatic time adjustment:<br>on: Open<br>off: Off  |
| Return              | Success: include Success<br>Error: contains Error   |  |
| Remarks             | Daylight Saving Time automatic time adjustment is not available in all time zones.                            |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setservertime&-time=2011.08.23.10.35.08&-timezone=Asia%2FHong_Kong&-dstmode=off |  |

## param.cgi?cmd=getntpattr

|                     |  |   |
|---------------------|--|---|
| Function            | Access NTP Parameters                      |   |
| Limits of authority | admin                                      |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getntpattr] |   |
| Parameters          |  |   |
| Return              | ntpenable                                  | Whether to enable NTP:<br>1: Open<br>0: Off |

|         |  |  |
|---------|--|--|
|         | ntpserver                                | NTP server: (one of the following)<br><br>time.nist.gov<br>time.kriss.re.kr<br>time.windows.com<br>time.nuri.net |
|         | ntpinterval                              | Synchronization interval   |
| Remarks |  |  |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getntpattr |  |

## param.cgi?cmd=setntpattr

|                     |   |   |
|---------------------|---|---|
| Function            | Setting NTP Parameters  |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setntpattr&-ntpenable=&-ntpserver=&-ntpinterval=]              |   |
| Parameters          | ntpenable   | Whether to enable NTP:<br><br>1: Open<br>0: Off   |
|                     | ntpserver   | NTP sever:(one of the following is recommended)<br><br>time.nist.gov<br>time.kriss.re.kr<br>time.windows.com<br>time.nuri.net |
|                     | ntpinterval   | Sync interval: Range [1 ~ 24 hours]   |
| Return              | Success: include Success<br>Error: contains Error   |   |
| Remarks             |   |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setntpattr&-ntpenable=1&-ntpinterval=2&-ntpserver=time.nuri.net |   |

## param.cgi?cmd=getcapability

|                     |   |                          |
|---------------------|---|--------------------------|
| Function            | Access to equipment capabilities Parameters   |                          |
| Limits of authority | admin   |                          |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=getcapability] |                          |
| Parameters          |   |                          |
| Return              | cap_cvbs                                      | Whether CVBS is enabled. |

|         |   |   |
|---------|---|---|
|         |   | on: Open<br>off: Off                            |
|         | cap_sd                                      | SD card enabled or not.<br>on: Open<br>off: Off |
|         | cap_usb                                     | Whether to enable USB:<br>on: Open<br>off: Off  |
| Remarks |   |   |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getcapability |   |

## param.cgi?cmd=setcapability

|                     |  |  |
|---------------------|--|--|
| Function            | Configure device capabilities Parameters   |  |
| Limits of authority | admin  |  |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=setcapability&-cap_cvbs=&-cap_sd=&-cap_usb=]      |  |
| Parameters          | cap_cvbs   | Whether CVBS is enabled.<br>on: Open<br>off: Off |
|                     | cap_sd   | SD card enabled or not.<br>on: Open<br>off: Off  |
|                     | cap_usb  | Whether to enable USB:<br>on: Open<br>off: Off   |
| Return              | Success: include Success<br>Error: contains Error                                |  |
| Remarks             |  |  |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setcapability&-cap_cvbs=off&-cap_sd=on&-cap_usb=on |  |

## web/tmpfs/snap.jpg

|                     |                        |
|---------------------|------------------------|
| Function            | IE Lower capture image |
| Limits of authority | admin、userandguest     |
| Grammar             | /web/tmpfs/snap.jpg    |

|            |                     |
|------------|---------------------|
| Parameters |                     |
| Return     | snap.jpg            |
| Remarks    |                     |
| Example    | /web/tmpfs/snap.jpg |

## Sysreset.cgi

|                     |   |
|---------------------|---|
| Function            | Restore system to factory settings                |
| Limits of authority | admin   |
| Grammar             | /cgi-bin/hi3510/sysreset.cgi                      |
| Parameters          |   |
| Return              | Success: include Success<br>Error: contains Error |
| Remarks             |   |
| Example             | /cgi-bin/hi3510/sysreset.cgi                      |

## Sysreboot.cgi

|                     |   |
|---------------------|---|
| Function            | Rebooting the system                              |
| Limits of authority | admin   |
| Grammar             | /cgi-bin/hi3510/sysreboot.cgi                     |
| Parameters          |   |
| Return              | Success: include Success<br>Error: contains Error |
| Remarks             |   |
| Example             | /cgi-bin/hi3510/sysreboot.cgi                     |

## backup.cgi

|                     |                               |
|---------------------|-------------------------------|
| Function            | Backing up configuration data |
| Limits of authority | admin                         |
| Grammar             | /cgi-bin/hi3510/backup.cgi    |
| Parameters          |                               |
| Return              | config_backup.bin             |
| Remarks             |                               |
| Example             | /cgi-bin/hi3510/backup.cgi    |

## restore.cgi

|                     |  |                                |
|---------------------|--|--------------------------------|
| Function            | Restore system settings  |                                |
| Limits of authority | admin  |                                |
| Grammar             | /cgi-bin/hi3510/restore.cgi[?-setting_file=]   |                                |
| Parameters          | setting_file   | System configuration file path |
| Return              |  |                                |
| Remarks             | This cgi must use the post method to package the previously backed up Parameters configuration file to the ip camera.  |                                |
| Example             | <pre>&lt;form   name="form6"   method="post"   enctype="multipart/form-data" action="/cgi-bin/hi3510/restore.cgi" &gt;   &lt;input type="file" name="setting_file" &gt;   &lt;input type="submit" value="restore" &gt; &lt;/form&gt;</pre> |                                |

## upgrade.cgi

|                     |   |                   |
|---------------------|---|-------------------|
| Function            | System upgrade ( <b>dangerous, use with caution</b> )   |                   |
| Limits of authority | admin   |                   |
| Grammar             | /cgi-bin/hi3510/upgrade.cgi[?-filename=]  |                   |
| Parameters          | filename  | Upgrade file name |
| Return              |   |                   |
| Remarks             | This cgi must use the post method to package the upgrade file and send it to ip camera.   |                   |
| Example             | <pre>&lt;form      name="form5"      method="post"      target="retframe" enctype="multipart/form-data" action="/cgi-bin/hi3510/upgrade.cgi" &gt;   &lt;input type="file" name="setting_file" &gt;   &lt;input type="submit" value="upgrade" &gt; &lt;/form&gt;</pre> |                   |

## 17. Logs

### param.cgi?cmd=logsync

|                     |                     |
|---------------------|---------------------|
| Function            | Get log information |
| Limits of authority | admin               |



|            |   |
|------------|---|
| Grammar    | /cgi-bin/hi3510/param.cgi[?cmd=logsync]   |
| Parameters |   |
| Return     |   |
| Remarks    | This CGI is refreshing the log information. After execution, get the log content by accessing /log/syslog.txt<br>Note: The log is automatically cleared when the device is rebooted |
| Example    | /cgi-bin/hi3510/param.cgi?cmd=logsync<br>/log/syslog.txt  |

## param.cgi?cmd=cleanlog

|                     |   |   |
|---------------------|---|---|
| Function            | Clear log information   |   |
| Limits of authority | admin   |   |
| Grammar             | /cgi-bin/hi3510/param.cgi[?cmd=cleanlog&-name=]                               |   |
| Parameters          | name  | Clear log command name.<br>access: Log name |
| Return              | Success: include Success<br>Error: contains Error                             |   |
| Remarks             | When there are too many logs, you can use this CGI to clear the log messages. |   |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=cleanlog&-name=sys                              |   |

## 18. Appendix

### Appendix I, Equipment Type Definition

#### 1. Equipment type

Used to identify the type of device, with different functions for different devices.

ASCII code, 32 bytes in length.

Each field is 2 bytes long. The first byte represents the total field type and the second field represents the field subtype.

|         |                           |
|---------|---------------------------|
| Field 3 | Field 4                   |
| Footage | Cloud<br>Platform<br>Type |
| ‘S’     | ‘Z’                       |

#### 3). Lens field ‘S’

As follows:

|     |                         |   |
|-----|-------------------------|---|
| 'e' | CMOS 720P               | Brightness (0-100), full and degree (0-255), contrast (0-100), chroma (0-100), sharpness (0-100), shutter (0-65535), flip up and down, mirror left and right, wide dynamic, night vision mode. First code stream: 720P, Q720P Second code stream: Q720P, QQ720P Third code stream: QQ720P<br>Cell phone picture size: Q720P, QQ720P.  |
| 'f' | CMOS 720P<br>CMOS 960P  | Brightness (0-100), satiation (0-255), contrast (0-100), chroma (0-100), sharpness (0-100), shutter (0-65535), up and down flip, left and right mirror, wide dynamic, night vision mode.<br>720P (First code stream: 720P Second code stream: Q720P, QQ720P Third code stream: QQ720P Phone picture size: Q720P, QQ720P.)<br>960P (First code stream: 960P Second code stream: VGA, QVGA Third code stream: QVGA Phone picture size: VGA, QVGA.)              |
| 'g' | CMOS 1080P<br>CMOS 720P | Brightness (0-100), satiation (0-255), contrast (0-100), chroma (0-100), sharpness (0-100), shutter (0-65535), up and down flip, left and right mirror, wide dynamic, night vision mode.<br>1080P (first code stream: 1080P second code stream: Q720P, QQ720P third code stream: QQ720P phone picture size: Q720P, QQ720P.)<br>720P (first code stream: 720P second code stream: Q720P, QQ720P third code stream: QQ720P phone picture size: Q720P, QQ720P.)  |
| 'h' | CMOS 720P WDR           | Brightness(0-6), Fullness(0-6), Contrast(0-8), Chroma(0-255), Sharpness(0-4), Shutter(0-3), Wide Dynamic, Night Vision Mode. First code stream: 720P, Q720P Second code stream: Q720P, QQ720P Third code stream: QQ720P<br>Cell phone picture size: Q720P, QQ720P.  |
| i   | CMOS 1080P<br>CMOS 720P | Brightness (0-100), Saturation (0-255), Contrast (0-100), Chroma (0-100), Sharpness (0-100), Shutter (0-65535), Flip up and down, Mirror left and right, Wide Dynamic, Night vision mode.<br>1080P (first code stream: 1080P second code stream: Q720P, QQ720P third code stream: QQ720P phone picture size: Q720P, QQ720P.)<br>720P (first code stream: 720P second code stream: Q720P, QQ720P third code stream: QQ720P phone picture size: Q720P, QQ720P.) |
| j   | CMOS 1080P              | Brightness (0-100), satiation (0-255), contrast (0-100),  |

|    |           |   |
|----|-----------|---|
|    | CMOS 720P | chroma (0-100), sharpness (0-100), shutter (0-65535), up and down flip, left and right mirror, wide dynamic, night vision mode.<br>1080P (first code stream: 1080P second code stream: Q720P, QQ720P third code stream: QQ720P phone picture size: Q720P, QQ720P.)<br>720P (first code stream: 720P second code stream: Q720P, QQ720P third code stream: QQ720P phone picture size: Q720P, QQ720P.) |
| k  | D1        | Brightness (0-100), satiation (0-255), contrast (0-100), chroma (0-100), sharpness (0-100), shutter (0-65535), up and down flip, left and right mirror, night vision mode.<br>First code stream: D1, CIF Second code stream: CIF Third code stream: CIF<br>Cell phone picture size: D1.   |
| SO | CMOS 5M   | Brightness(0-100), Saturation(0-255), Contrast(0-100), Chroma(0-100), Sharpness(0-100), Shutter(0-65535), Flip up and down, Mirror left and right, Night vision mode.<br>The first code stream: 2560*1920, the second code stream: 800*600.   |

#### 4). Cloud Station Fields ‘Z’

As follows:

|     |                          |  |
|-----|--------------------------|--|
| ‘0’ | Customized Cloud Station | Up, down, left, right, up and down cruise, left and right cruise, back to the center position, preset call (up to 8) No support for serial port setting, no support for head speed |
| ‘3’ | 485 Cloud Station        | Up, down, left, right, draw close, draw far, preset call settings. You can set 485 port properties.  |

## Appendix II, Time Zone Table

| Time Zone Field     | Description                                     |
|---------------------|---|
| Etc/GMT-12          | (GMT-12:00) Dateline West                       |
| Pacific/Apia        | (GMT-11:00) Midway Atoll, Samoa Islands         |
| Pacific/Honolulu    | (GMT-10:00) Hawaii                              |
| America/Anchorage   | (GMT-09:00) Alaska                              |
| America/Los_Angeles | (GMT-08:00) Pacific Time (America/Canada)       |
| America/Denver      | (GMT-07:00) Mountain Time (America/Canada)      |
| America/Tegucigalpa | (GMT-07:00) Chihuahua, La Paz, Mazatlan         |
| America/Phoenix     | (GMT-07:00) Arizona                             |
| America/Winnipeg    | (GMT-06:00) Saskatchewan                        |
| America/Mexico_City | (GMT-06:00) Guadalajara, Mexico City, Monterrey |

|                        |   |
|------------------------|---|
| America/Chicago        | (GMT-06:00) Central time (America/Canada)                                   |
| America/Costa_Rica     | (GMT-06:00) Central America   |
| America/Indianapolis   | (GMT-05:00) Indiana (Eastern)   |
| America/New_York       | (GMT-05:00) Eastern Time (America/Canada)                                   |
| America/Bogota         | (GMT-05:00) Bogota, Lima, Rio Branco  |
| America/Santiago       | (GMT-04:00) Santiago de Chile   |
| America/Caracas        | (GMT-04:00) La Paz  |
| America/Montreal       | (GMT-04:00) Atlantic Time (Canada)  |
| America/St_Johns       | (GMT-03:30) Newfoundland and Labrador                                       |
| America/Thule          | (GMT-03:00) Greenland   |
| America/Buenos_Aires   | (GMT-03:00) Buenos Aires, Georgetown  |
| America/Sao_Paulo      | (GMT-03:00) :Brasilia   |
| Atlantic/South_Georgia | (GMT-02:00) Mid-Atlantic  |
| Atlantic/Cape_Verde    | (GMT-01:00) Cape Verde Islands  |
| Atlantic/Azores        | (GMT-01:00) Azores  |
| Europe/Dublin          | (GMT) Greenwich Mean Time : Dublin , The Towns of Edinburgh, London, Lisbon |
| Africa/Casablanca      | (GMT) Casablanca, Monrovia, Reykjavík                                       |
| Europe/Amsterdam       | (GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Wien                  |
| Europe/Belgrade        | (GMT+01:00) Београд, Bratislava, Budapest, Ljubljana, Prague                |
| Europe/Brussels        | (GMT+01:00) Brussels, Copenhagen, Madrid, Paris                             |
| Europe/Warsaw          | (GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb                                |
| Africa/Lagos           | (GMT+01:00) Central West Africa   |
| Europe/Athens          | (GMT+02:00) Athens, Istanbul, Minsk   |
| Europe/Bucharest       | (GMT+02:00) Bucharest   |
| Africa/Cairo           | (GMT+02:00) Cairo   |
| Africa/Harare          | (GMT+02:00) Harare, Pretoria  |
| Europe/Helsinki        | (GMT+02:00) Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilna                     |
| Asia/Jerusalem         | (GMT+02:00) Jerusalem   |
| Asia/Baghdad           | (GMT+03:00) Baghdad   |
| Asia/Kuwait            | (GMT+03:00) The State of Kuwait, Riyadh                                     |
| Europe/Moscow          | (GMT+03:00) Moscow, Saint Petersburg, Volgograd                             |
| Africa/Nairobi         | (GMT+03:00) NAIROBI   |
| Asia/Tehran            | (GMT+03:30) Teheran   |
| Asia/Dubai             | (GMT+04:00) Abu Dhabi, Muscat   |
| Asia/Baku              | (GMT+04:00) Baku, T'bilisi, Yerevan   |
| Asia/Kabul             | (GMT+04:30) Kabul   |
| Asia/Yekaterinburg     | (GMT+05:00) Yekaterinburg   |
| Asia/Karachi           | (GMT+05:00) ISLAMABAD, Karachi, Toshkent viloyati                           |
| Asia/Calcutta          | (GMT+05:30) Madras, Kolkata, Mumbai, NEW DELHI                              |
| Asia/Katmandu          | (GMT+05:45) Kathmandu   |

|                    |   |
|--------------------|---|
| Asia/Almaty        | (GMT+06:00) Алматы, Новосибирск                         |
| Asia/Dhaka         | (GMT+06:00) Nur Sultan, Dhaka                           |
| Asia/Colombo       | (GMT+06:00) Colombo                                     |
| Asia/Rangoon       | (GMT+06:30) Yangon                                      |
| Asia/Bangkok       | (GMT+07:00) Bangkok, Thành phố Hà Nội, Jakarta          |
| Asia/Krasnoyarsk   | (GMT+07:00) Красноярск                                  |
| Asia/Hong_Kong     | (GMT+08:00) Beijing, Chongqing, Hongkong, Urumqi County |
| Asia/Irkutsk       | (GMT+08:00) Иркутск, Ulaanbaatar                        |
| Asia/Kuala_Lumpur  | (GMT+08:00) Kuala Lumpur, Singapore                     |
| Australia/Perth    | (GMT+08:00) Perth                                       |
| Asia/Taipei        | (GMT+08:00) Taipei                                      |
| Asia/Tokyo         | (GMT+09:00) Osaka, Sapporo, Tokyo                       |
| Asia/Seoul         | (GMT+09:00) Seoul                                       |
| Asia/Yakutsk       | (GMT+09:00) Yakutsk                                     |
| Australia/Adelaide | (GMT+09:30) Adelaide                                    |
| Australia/Brisbane | (GMT+10:00) Brisbane                                    |
| Australia/Sydney   | (GMT+10:00) Canberra, Melbourne, Sydney                 |
| Pacific/Guam       | (GMT+10:00) Guam, Port Moresby                          |
| Australia/Hobart   | (GMT+10:00) Hobart                                      |
| Asia/Vladivostok   | (GMT+10:00) Vladivostok                                 |
| Asia/Magadan       | (GMT+11:00) Magadis, SolomonIslands, New Caledonia      |
| Pacific/Auckland   | (GMT+12:00) Auckland, Wellington                        |
| Pacific/Fiji       | (GMT+12:00) Fiji, Kamchatka Peninsula, Marshall Islands |
| Pacific/Tongatapu  | (GMT+13:00) Nukualofa                                   |

## 19. Intelligent Humanoid Detection

**param.cgi?cmd=getsmdattr**

|                     |   |
|---------------------|---|
| Function            | Get intelligent human shape recognition |
| Limits of authority | admin                                   |
| Grammar             |   |

|         |  |               |
|---------|--|---------------|
| Return  | smd_enable                               | 0-Off, 1-Open |
| Example | /cgi-bin/hi3510/param.cgi?cmd=getsmdattr |               |

## param.cgi?cmd=setsmdattr

|                     |  |               |
|---------------------|--|---------------|
| Function            | Set up smart humanoid recognition                      |               |
| Limits of authority | admin  |               |
| Grammar             |  |               |
| Return              | smd_enable   | 0-Off, 1-Open |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setsmdattr&-smd_enable=1 |               |

## param.cgi?cmd= getsmdex

|                     |  |               |
|---------------------|--|---------------|
| Function            | Get framed humanoid                    |               |
| Limits of authority | admin                                  |               |
| Grammar             |  |               |
| Return              | smd_rect                               | 0-Off, 1-Open |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getsmdex |               |

## param.cgi?cmd= setsmdex

|                     |  |               |
|---------------------|--|---------------|
| Function            | Set framed humanoid                                |               |
| Limits of authority | admin  |               |
| Grammar             |  |               |
| Return              | smd_rect   | 0-Off, 1-Open |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setsmdex&-smd_rect=1 |               |

## param.cgi?cmd= getmdalarm

|                     |  |  |
|---------------------|--|--|
| Function            | Get alarm trigger                                    |  |
| Limits of authority | admin  |  |
| Grammar             |  |  |
| Return              | md_alarm_type  | Off - separate trigger, on - linkage trigger |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=getmdalarm&-aname=type |  |

## param.cgi?cmd= setmdalarm

|                     |   |  |
|---------------------|---|--|
| Function            | Set alarm trigger   |  |
| Limits of authority | admin   |  |
| Grammar             |   |  |
| Return              | md_alarm_type   | Off - separate trigger, on - linkage trigger |
| Example             | /cgi-bin/hi3510/param.cgi?cmd=setmdalarm&-aname=type&-switch=on/off |  |