

IP Camera CGI Application Guide

Version	Author	Date	Modify
1.0	Maverick Gao	2007-11-21	Apply to system software x.x.1.2
1.01	Maverick Gao	2008-07-25	Apply to system software x.x.1.17 <ul style="list-style-type: none"> ● Increase the parameter in get_params.cgi : wifi_channel 、 wifi_authtype 、 wifi_keyformat 、 wifi_key1_bits 、 wifi_key2_bits 、 wifi_key3_bits 、 wifi_key4_bits. ● Increase the parameter in set_wifi.cgi: channel 、 authtype 、 keyformat 、 key1_bits 、 key2_bits 、 key3_bits 、 key4_bits. ● Modify snapshot.cgi , Increase a authentication : add the cgi parameter to the user name and password directly. ● Increase videotostream.cgi
1.02	Maverick Gao	2008-08-06	Apply to system software x.x.1.18 <ul style="list-style-type: none"> ● Modify camera_control.cgi , Increase the rotation control
1.03	Maverick Gao	2009-01-07	Apply to system software x.x.1.32
1.04	Maverick Gao	2009-02-07	Apply to system software x.x.1.33 Change the motion detection sensitivity Increase parameters of alarm deployment plan
1.05	Maverick Gao	2009-04-29	Apply to system software x.x.1.39 Increase videotostream.asf Increase parameters resolution in videotostream.cgi
1.06	Maverick Gao	2009-06-13	Apply to system software x.x.1.41 Increase onestep parameters in decoder_control.cgi Increase comm_write.cgi Increase set_forbidden.cgi Increase get_forbidden.cgi Increase set_misc.cgi Increase get_misc.cgi Increase set_decoder.cgi Increase parameters decoder_baud in get_params.cgi
1.07	Maverick	2009-06-19	Apply to system software x.x.1.42

	Gao		Increase parameters in set_misc.cgi get_misc.cgi ptz_patrol_rate, ptz_patrol_up_rate, ptz_patrol_down_rate, ptz_patrol_left_rate, ptz_patrol_right_rate
1.08	Maverick Gao	2009-08-03	Apply to system software x.x.1.43 Increase wifi_scan.cgi Increase get_wifi_scan_result.cgi Increase get_log.cgi
1.09	Maverick Gao	2009-08-22	Apply to system software x.x.1.44 Modify return value get_wifi_scan_result.cgi
1.10	Maverick Gao	2009-09-25	Apply to system software x.x.2.2 Increase parameters in get_params.cgi alarm_ioin_level, alarm_ioout_level Modify user and password, in set_pppoe.cgi,don't more than 64 words. Modify user, password and host in inset_ddns.cgi , proxy_svr , don't more than 64 words. Modify user,password, sender , receiver1 , receiver2 , receiver3 , receiver4 in set_mail.cgi , don't more than 64 words. Increase the parameter in set_alarm.cgi ioin_level, ioout_level Increase check_user.cgi Increase backup_params.cgi Increase restore_params.cgi
1.11	Maverick Gao	2009-10-07	Apply to system software x.x.2.2 Increase set_mac.cgi
1.12	Maverick Gao	2010-04-26	Modify get_misc.cgi and set_misc.cgi parameters get_params.cgi and set_alarm.cgi add alarm_http related parameters(for system programx.x.2.12) videostream.cgi and videostream.asf increase parameter rate get_params.cgi and set_ftp.cgi increase ftp_filename and ftp_numberoffiles parmeters Apply to system software x.x.2.17

1.13	Maverick Gao	2010-05-26	Modify get_params.cgi and set_ddns.cgi parameters Modify get_status.cgi parameter Increase set_factory_ddns.cgi Increase get_factory_ddns.cgi Increase restore_factory_ddns.cgi Apply to system software x.x.2.20
1.14	Maverick Gao	2010-06-03	Modify decoder_control.cgi parameter Modify get_params.cgi parameter Modify set_alarm.cgi parameter Above for system program x.x.2.21
1.15	Maverick Gao	2010-08-17	Modify set_misc.cgi parameter Modify get_misc.cgi parameter Modify get_params.cgi and set_mail.cgi parameter, increase tls parameter Modify test_mail.cgi 's return value Above for system program x.x.2.27
1.16	Maverick Gao	2010-09-03	Modify decoder_control.cgi parameter degree Above for system program x.x.2.28
1.17	Maverick Gao	2010-09-27	Modify get_params.cgi parameter , increase alarm_motion_compensation 、 daylight_saving_time 、 ftp_schedule_enable 、 ftp_schedule parameter Modify set_ftp.cgi parameter, increase schedule_enable、schedule parameter Modify set_datetime.cgi parameter , increase daylight_saving_time parameter Modify set_alarm.cgi parameter , increase motion_compensation parameter Modify set_misc.cgi parameter , increase ptz_preset_onstart parameter Modify get_misc.cgi parameter , increase ptz_preset_onstart parameter Above for system program x.x.2.29

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ip camera cgi

This paper listed in Cgi is to provide a set of ip camera interface based on http protocol, the client program (a web browser can run Web or other application) can be cgi various operations on the equipment.

- cgi security certificate: The following the cgi, when they was visited , they require safety certification. Different Cgi interfaces require different authority require, a total of three levels: visitors, operators and managers. Authorization is based on the user in the camera setting. Specific authentication's mechanism support two ways: http protocol basic on security authentication mechanism, add the cgi parameter to the user name and password directly.
- Check cgi method: In all of the http method, this paper only supports cgi get and post. upgrade_firmware.cgi and upgrade_htmls.cgi only support post method, others suppot get method.

Get example:

```
<form action="/set_mail.cgi">
    <input name="svr">
    <input name="user">
    <input name="pwd">
    <input name="sender">
    <input name="receiver1">
    <input name="receiver2">
        <input name="receiver3">
        <input name="receiver4">
<input type=hidden name="next_url" value="index.htm">
<input type=submit value="ok">
</form>
```

Post 例子

```
<form      action="upgrade_firmware.cgi?next_url=index.htm"      method="post"
enctype="multipart/form-data">
    <input type="file" name="file" size="20">
</form>
```

- cgi return : According to the returned information, this paper listed two method about cgi:

- ✓ Acquire equipment status and parameters of the cgi, including get_status.cgi and get_params.cgi. They returned including the status of the device or text of parameters, the specific format similar to the javascript variable, it will the every state and parameter define a variable ,then returns. For example:

```
var id='003456789A0A';
var sys_ver='0.0.1.2';
var app_ver='0.0.1.3';
var alias="";
var now=1195552193;
var tz=0;
var ntp_enable=1;
```

- ```
var ntp_svr='time.nist.gov';
```
- ✓ Set parameters of equipment or operate cgi. Such cgi will return information of text what operate results, If it is success, it will return "ok"; if it is the failure, it will return the specific error message, such as: "error: illegal param" it means parameter of cgi is wrong. As well as if you operate successful, but you don't want to simply return text of 'ok', example is a simple operation is successful do not want to return "ok" text, but a file, you can request add a parameters to cgi parameter string : next\_url. The parameters that correspond to operating successful jump to the next file, note must be a relative path.

## check\_user.cgi

Description: Check the results for the current user

Authorization: Visitors

Grammar: /check\_user.cgi[?user=&pwd=]

return:

user: current user

pwd: current password

pri: current authorization

1: User

2: Operator

3: Managers

## snapshot.cgi

Description: Acquire the current picture

Authorization: Visitors

Grammar: /snapshot.cgi[?user=&pwd=&next\_url=]

parameters:

next\_url: Image file name

specification:

If don't have append next\_url parameter, returned the image file name: device id (device alias) \_ the current time. Jpg, otherwise the file name is next\_url specified file name.

# **videostream.cgi**

Description: ip camera send the JPEG video streaming to client by server push model.

Authorization: Visitors

Grammar: /videostream.cgi[?user=&pwd=&resolution=]

parameters:

resolution: Image resolution (8: 320\*240, 32: 640\*480)

rate: Image transmission speed, range0-23

0: Full speed

1: 20 fps

3: 15 fps

6: 10 fps

11: 5 fps

12: 4 fps

13: 3 fps

14: 2 fps

15: 1 fps

17: 1 fp/2s

19: 1 fp/3s

21: 1 fp/4s

23: 1 fp/5s

# **videostream.asf**

Description: Ip camera sent asf audio data of media formats. Now only support vlc player and mplayer

Authorization: Visitors

Grammar: /videostream.asf[?user=&pwd=&resolution=]

parameters:

resolution: Image resolution (8: 320\*240, 32: 640\*480)

# **get\_status.cgi**

Description: Acquire Device Status

Authorization: Null

Grammar: /get\_status.cgi

Return:

id: Equipment id

sys\_ver: firmware version

app\_ver: Website interface version

alias: Alias

now: The current time elapsed seconds From 1970-1-1 0:0:0 to equipment

tz: Set the current time zone and Greenwich Mean Time standards time by seconds of deviation

alarm\_status: Set current alarm status, 0: no alarm; 1: Mobile monitoring and alarming;

2: Enter the alarm

ddns\_status: Set current ddns working order.

|       |                                                                    |
|-------|--------------------------------------------------------------------|
| 0     | No operation                                                       |
| 1     | Connecting                                                         |
| 2     | connect to server is failed                                        |
| 3     | Dyndns Success                                                     |
| 4     | Dyndns failed: System Error                                        |
| 5     | Dyndns failed: User name and password are error                    |
| 6     | Dyndns failed: register failed                                     |
| 7     | DynDns failed:Domain name format is not correct                    |
| 8     | DynDns failed: Domain does not exist                               |
| 9     | DynDns failed: Domain name does not belong to you                  |
| 10    | DynDns failed: The domain name request is too much or too little   |
| 11    | DynDns failed: Domain was blocked due to flooding                  |
| 12    | DynDns failed: Server is error                                     |
| 13    | DynDns failed:                                                     |
| 14    | Peanuthull failed: Haven't received the correct response of server |
| 15    | Peanuthull failed: User or password is error                       |
| 16    | Peanuthull failed: The domain name is wrong                        |
| 17    | Peanuthull successed                                               |
| 18 .. | Save                                                               |
| 28    |                                                                    |
| 29    | 3322 successed                                                     |
| 30    | 3322 failed: System Error                                          |
| 31    | 3322 failed: User or password is error                             |
| 32    | 3322 failed: register failed                                       |
| 33    | 3322 failed: Domain name format is not correct                     |
| 34    | 3322 failed: Domain does not exist                                 |

|    |                                                                |
|----|----------------------------------------------------------------|
| 35 | 3322 failed: Domain name does not belong to you                |
| 36 | 3322 failed: The domain name request is too much or too little |
| 37 | 3322 failed: Domain was blocked due to flooding                |
| 38 | 3322 failed: Server is error                                   |
| 39 | 3322 failed: Haven't received the correct response of server   |

ddns\_host: ddns Host Name

oray\_type : Peanuthull type of service , 0: Standard; 1: Professional

upnp\_status: set operational status of current upnp

|   |                                                    |
|---|----------------------------------------------------|
| 0 | No operation                                       |
| 1 | Success                                            |
| 2 | Equipment system is error                          |
| 3 | Network communication is error                     |
| 4 | Dialogue is error with the UPnP device             |
| 5 | UpnP equipment is refuse, may be port is conflicts |

## get\_camera\_params.cgi

Description: acquire camera parameter set

Authorization: Visitors

Grammar: /get\_camera\_params.cgi[?user=&pwd=]

return:

resolution 8: qvga; 32: vga

brightness: Brightness, 0~255

contrast: Contrast, 0~6

mode: Mode, 0: 50hz; 1: 60hz; 2: outdoor

flip: Rotation, 0: Original;1: Vertical Flip;2: level image; 3: Vertical Flip + horizontal mirror;

## decoder\_control.cgi

Description: decoder control

Authorization: operator

Grammar: /decoder\_control.cgi?command=[&onestep=&degree=&user=&pwd=&next\_url=]

Parameter:

onestep=1: Explain ptz is a single step operation equal to stop, only for the model with ptz functions and applies for up, down, left and right action.

command: Action command decoder

| values | 485 Serial external pelco-d decoder | Built-in motor             |
|--------|-------------------------------------|----------------------------|
| 0      | up                                  | up                         |
| 1      | Stop up                             | Stop up                    |
| 2      | down                                | down                       |
| 3      | Stop down                           | Stop down                  |
| 4      | left                                | left                       |
| 5      | Stop left                           | Stop left                  |
| 6      | right                               | right                      |
| 7      | Stop right                          | Stop right                 |
| 8      | Small aperture                      |                            |
| 9      | Stop small aperture                 |                            |
| 10     | Big aperture                        |                            |
| 11     | Stop big aperture                   |                            |
| 12     | The focal length is near            |                            |
| 13     | Stop the focal length               |                            |
| 14     | The focal length is far             |                            |
| 15     | Stop the focal length               |                            |
| 16     | Zoom is near                        |                            |
| 17     | Stop zoom nearer                    |                            |
| 18     | Zoom is far                         |                            |
| 19     | Stop zoom is farther                |                            |
| 20     | Auto Cruisie                        |                            |
| 21     | Stop automatic cruisie              |                            |
| 22     | Close switch 1                      |                            |
| 23     | Disconnect switch 1                 |                            |
| 24     | Close switch 2                      |                            |
| 25     | Disconnect switch 2                 | Center                     |
| 26     | Close switch 3                      | Cruise up and down         |
| 27     | Disconnect switch 3                 | Cruise up and down to stop |
| 28     | Close switch 4                      | Cruise left and right      |
| 29     | Disconnect switch 4                 | Stop cruise left and right |
| 30     | Set preset position 1               |                            |
| 31     | To the preset position 1            |                            |
| ...    | .                                   |                            |
| 90     | .                                   | upper-left                 |
| 91     | .                                   | upper-right                |
| 92     | Set preset position 32              | lower left                 |
| 93     | To the preset position 32           | lower right                |
| 94     | Io Output high                      | Io output high             |
| 95     | IoOutput low                        | Io output low              |
| 255    |                                     | Motor test mode            |

## **camera\_control.cgi**

Description: image sensor parameter control

Authorization: operator

Grammar: /camera\_control.cgi?param=&value=[&user=&pwd=&next\_url=]

return:

param: Parameter type

value: Parameter values

| param         | value                                |
|---------------|--------------------------------------|
| 0: Resolution | 2: qqvga                             |
|               | 8: qvga                              |
|               | 32: vga                              |
|               | 1: Brightness                        |
| 2: Contrast   | 0~6                                  |
| 3: Mode       | 0: 50hz                              |
|               | 1: 60hz                              |
|               | 2: outdoor                           |
| 5: Rotation   | 0: Original                          |
|               | 1: Flip Vertical                     |
|               | 2: Level image                       |
|               | 3: Flip + horizontal vertical mirror |

## **reboot.cgi**

Description: restart device

Authorization: manager

Grammar: /reboot.cgi[?user=&pwd=&next\_url=]

## **restore\_factory.cgi**

Description: Restore factory settings

Authorization: manager

Grammar: /restore\_factory.cgi[?user=&pwd=&next\_url=]

## **get\_params.cgi**

Description Description: get device parameters set

Authorization: manager

Grammar: /get\_params.cgi[?user=&pwd=]

return:

|               |                                                                                          |
|---------------|------------------------------------------------------------------------------------------|
| id            | Device id                                                                                |
| sys_ver       | Firmware version                                                                         |
| app_ver       | Website interface version                                                                |
| alias         | Alias                                                                                    |
| now           | The current time elapsed seconds From 1970-1-1 0:0:0 to equipment                        |
| tz            | Set the current time zone and Greenwich Mean Time standards time by seconds of deviation |
| ntp_enable    | 0: Stop ntp; 1: allow                                                                    |
| ntp_svr       | Ntp server                                                                               |
| user1_name    | The name of the user 1                                                                   |
| user1_pwd     | The password of the users 1                                                              |
| user1_pri     | 1 user authorization , 0: visitors; 1: operator; 2: Administrator                        |
| ...           |                                                                                          |
| user8_name    | The name of the user 8                                                                   |
| user8_pwd     | The password of the user 8                                                               |
| user8_pri     | The authorization of user 8                                                              |
| dev2_alias    | Second line equipment alias                                                              |
| dev2_host     | Second line equipment address                                                            |
| dev2_port     | Second line device port                                                                  |
| dev2_user     | Second line device visitor                                                               |
| dev2_pwd      | The password of second line device                                                       |
| ...           |                                                                                          |
| dev4_alias    | Fourth line equipment alias                                                              |
| dev4_host     | Fourth line equipment address                                                            |
| dev4_port     | Fourth line device port                                                                  |
| dev4_user     | Fourth line device visitor                                                               |
| dev4_pwd      | The password of second line device                                                       |
| ip            | Ip address                                                                               |
| mask          | Subnet mask                                                                              |
| gateway       | Gateway                                                                                  |
| dns           | Dns server                                                                               |
| port          | Port                                                                                     |
| wifi_enable   | 0: Forbidden wifi function; 1: allow                                                     |
| wifi_ssid     | To join ssid of wifi network                                                             |
| wifi_channel  | Save                                                                                     |
| wifi_mode     | Save                                                                                     |
| wifi_encrypt  | 0: No encryption; 1: wep encryption                                                      |
| wifi_authtype | wep Check mode, 0: open; 1: share                                                        |

|                 |                                                                            |
|-----------------|----------------------------------------------------------------------------|
| wifi_keyformat  | Wep Key format, 0: Hexadecimal; 1: ascii words                             |
| wifi_defkey     | Key selection in wep                                                       |
| wifi_key1       | Wep Key 1                                                                  |
| wifi_key2       | Wep Key2                                                                   |
| wifi_key3       | Wep Key 3                                                                  |
| wifi_key4       | Wep Key 4                                                                  |
| wifi_key1_bits  | Wep Key1 length, 0: 64 bits; 1: 128 bits                                   |
| wifi_key2_bits  | wep Key 2 length, 0: 64 bits; 1: 128 bits                                  |
| wifi_key3_bits  | wep Key 3 length, 0: 64 bits; 1: 128 bits                                  |
| wifi_key4_bits  | wep Key 4 length, 0: 64 bits; 1: 128 bits                                  |
| wifi_wpa_psk    | wpa psk Key                                                                |
| pppoe_enable    | 0: forbidden pppoe; 1: allow                                               |
| pppoe_user      | Pppoe dial-up users                                                        |
| pppoe_pwd       | Pppoe dial-up password                                                     |
| upnp_enable     | 0: Forbidden upnp mapping function; 1: allow                               |
| ddns_service    | 0: Forbidden ddns service                                                  |
|                 | 1: Peanuthull                                                              |
|                 | 2: DynDns.org(dyndns)                                                      |
|                 | 3: DynDns.org(statdns)                                                     |
|                 | 4: DynDns.org(custom)                                                      |
|                 | 5: save                                                                    |
|                 | 6: save                                                                    |
|                 | 7: save                                                                    |
|                 | 8: 3322(dyndns)                                                            |
|                 | 9: 3322(statdns)                                                           |
| ddns_user       | ddns users                                                                 |
| ddns_pwd        | ddns password                                                              |
| ddns_host       | Ddns Domain name                                                           |
| ddns_proxy_svr  | Proxy server address (only used in mainland China dyndns service)          |
| ddns_proxy_port | Proxy server port                                                          |
| mail_svr        | Mail server address                                                        |
| mail_port       | Mail service port                                                          |
| mail_user       | Mail Server Login                                                          |
| mail_pwd        | Mail server password                                                       |
| mail_sender     | Mail sender                                                                |
| mail_receiver1  | Recipient of a message                                                     |
| mail_receiver2  | Mail recipient 2                                                           |
| mail_receiver3  | Mail recipient 3                                                           |
| mail_receiver4  | Mail recipient 4                                                           |
| mail_inet_ip    | Camera inet ip change whether to send the mail notification, 0: No; 1: Yes |
| ftp_svr         | ftp server address                                                         |

|                          |                                                                                                  |
|--------------------------|--------------------------------------------------------------------------------------------------|
| ftp_port                 | ftp server port                                                                                  |
| ftp_user                 | ftp server login                                                                                 |
| ftp_pwd                  | ftp server password                                                                              |
| ftp_dir                  | ftp server, storage directory                                                                    |
| ftp_mode                 | 0: port model; 1: pasv mode                                                                      |
| ftp_upload_interval      | Instantly upload pictures of the interval (in seconds), 0: prohibit                              |
| alarm_motion_armed       | 0: Mobile detection disarm; 1: deployment                                                        |
| alarm_motion_sensitivity | 0-9: High - Low                                                                                  |
| alarm_input_armed        | 0: Input test disarm; 1: deployment                                                              |
| alarm_join_level         | Alarm trigger input level, 0: low; 1: High                                                       |
| alarm_iolinkage          | 0: alarm linkage against io; 1: allow                                                            |
| alarm_ioout_level        | io linkage output level, 0: low; 1: High                                                         |
| alarm_mail               | 0: Alarm mail notification when the ban; 1: allow                                                |
| alarm_upload_interval    | 0: Alarm mail notification when the ban; 1: allow                                                |
| alarm_schedule_enable    | Whether to adopt the deployment plan                                                             |
| alarm_schedule_sun_0     | Sunday deployment plan by 24 hours a day, hour by 15 minutes divided into 96 deployment periods. |
| alarm_schedule_sun_1     |                                                                                                  |
| alarm_schedule_sun_2     | bit0-95: 0: The time is not deployed; 1: The deployment time                                     |
| alarm_schedule_mon_0     |                                                                                                  |
| alarm_schedule_mon_1     |                                                                                                  |
| alarm_schedule_mon_2     |                                                                                                  |
| alarm_schedule_tue_0     |                                                                                                  |
| alarm_schedule_tue_1     |                                                                                                  |
| alarm_schedule_tue_2     |                                                                                                  |
| alarm_schedule_wed_0     |                                                                                                  |
| alarm_schedule_wed_1     |                                                                                                  |
| alarm_schedule_wed_2     |                                                                                                  |
| alarm_schedule_thu_0     |                                                                                                  |
| alarm_schedule_thu_1     |                                                                                                  |
| alarm_schedule_thu_2     |                                                                                                  |
| alarm_schedule_fri_0     |                                                                                                  |
| alarm_schedule_fri_1     |                                                                                                  |
| alarm_schedule_fri_2     |                                                                                                  |
| alarm_schedule_sat_0     |                                                                                                  |
| alarm_schedule_sat_1     |                                                                                                  |
| alarm_schedule_sat_2     |                                                                                                  |
| decoder_baud             | Decoder baud rate                                                                                |

## **upgrade\_firmware.cgi**

Description: The device firmware upgrade

Authorization: manager

Grammar: /upgrade\_firmware.cgi[?user=&pwd=&next\_url=]

Note: The cgi must use post method, the documents will need to upgrade package sent to

the ip camera.

## **upgrade\_htmls.cgi**

Description: Web interface upgrade equipment

Authorization: manager

Grammar \upgrade\_htmls.cgi[?user=&pwd=&next\_url=]

Note: The cgi must use post method, the documents will need to upgrade package sent to  
the ip camera.

## **set\_alias.cgi**

Description: Set the device alias parameters

Authorization: manager

Syntax: /set\_alias.cgi?alias=[&user=&pwd=&next\_url=]

Parameters:

alias: device alias, length <= 20

## **set\_datetime.cgi**

Description: Set the device date and time parameters

Authorization:manager

Syntax: /set\_datetime.cgi?tz=&ntp\_enable=&ntp\_svr=[&now=&user=&pwd=&next\_url=]

**Parameters:**

|            |                                                                                                                                                                 |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| now        | From 1970-1-1 0:0:0 to the specified number of seconds elapsed time, such as additional to the parameters of the equipment is based on the time when the school |
| tz         | Set time zone: GMT and standard deviation of the number of seconds                                                                                              |
| ntp_enable | 0: Forbidden of school when ntp; 1: allow                                                                                                                       |
| ntp_svr    | 0: Forbidden of school when ntp; 1: allow                                                                                                                       |

## **set\_users.cgi**

Description: Set the device date and time parameters

Authorization :manager

Syntax:

/set\_users.cgi?user1=&pwd1=&pri1=&user2=&pwd2=&pri2=&user3=&pwd3=&pri3=&user4=&pwd4=&pri4=&user5=&pwd5=&pri5=&user6=&pwd6=&pri6=&user7=&pwd7=&pri7=&user8=&pwd8=&pri8=[&user=&pwd=&next\_url=]

**Parameters:**

|       |                                                                |
|-------|----------------------------------------------------------------|
| user1 | The user a name, length <= 12                                  |
| pwd1  | The user a password, length <= 12                              |
| pri1  | 1 user permissions, 0: visitors; 1: operator; 2: Administrator |
| ...   |                                                                |
| user8 | The name of the user 8                                         |
| pwd8  | The name of the user 8                                         |

|      |                    |
|------|--------------------|
| pri8 | 8 user permissions |
|------|--------------------|

## set\_devices.cgi

Description: Set the device date and time parameters

Authorization : manager

Syntax:

```
/set_devices.cgi?dev2_alias=&dev2_host=&dev2_port=&dev2_user=&dev2_pwd=&
dev3_alias=&dev3_host=&dev3_port=&dev3_user=&dev3_pwd=&dev4_alias=&dev4
_host=&dev4_port=&dev4_user=&dev4_pwd=[&user=&pwd=&next_url=]
```

**Parameters:**

|            |                                                           |
|------------|-----------------------------------------------------------|
| dev2_alias | The second road equipment, alias, length <= 20            |
| dev2_host  | The second way device address, length <= 64               |
| dev2_port  | The second way device port                                |
| dev2_user  | The second way to access the user equipment, length <= 12 |
| dev2_pwd   | Second Road Device Access Password, length <= 12          |
| ...        |                                                           |
| dev4_alias | Fourth Road Equipment alias                               |
| dev4_host  | Fourth Way device address                                 |
| dev4_port  | Fourth Way device port                                    |
| dev4_user  | Fourth Road access to the user equipment                  |
| dev4_pwd   | Fourth Way Device Access Password                         |

## set\_network.cgi

Description: Set the parameters of the basic network equipment

Authorization: manager

Syntax: /set\_network.cgi?ip=&mask=&gateway=&dns=&port=[&user=&pwd=&next\_url=]

**Parameters:**

|         |                                                                                                                     |
|---------|---------------------------------------------------------------------------------------------------------------------|
| ip      | ip address, if ip is set to null, the dynamic ip and neglected to obtain the following mask, gateway, dns parameter |
| mask    | Subnet mask                                                                                                         |
| gateway | Gateway                                                                                                             |
| dns     | dns server                                                                                                          |

|      |      |
|------|------|
| port | Port |
|------|------|

## set\_wifi.cgi

Description: Setting device wifi **Parameters**

Authorization: manager

Syntax:

```
/set_wifi.cgi?enable=&ssid=&encrypt=&defkey=&key1=&key2=&key3=&key4=
&authtype=&keyformat=&key1_bits=&key2_bits=&key3_bits=&key4_bits=&channel=
&mode=&wpa_psk=[&user=&pwd=&next_url=]
```

**Parameters:**

|           |                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------|
| enable    | 0: Forbidden wifi function; 1: allow                                                          |
| ssid      | To join the wifi network ssid, length <= 40                                                   |
| channel   | Reserved = 5                                                                                  |
| mode      | Reserved = 0                                                                                  |
| encrypt   | 0: No encryption; 1: wep encryption; 2: wpa tkip; 3: wpa aes; 4: wpa2 aes; 5: wpa2 tkip + aes |
| authtype  | wep calibration mode, 0: open; 1: share                                                       |
| keyformat | wep key format, 0:16 hexadecimal numbers; 1: ascii characters                                 |
| defkey    | wep key choice in :0-3                                                                        |
| key1      | wep key 1, length <= 30                                                                       |
| key2      | wep key 2                                                                                     |
| key3      | wep key 3                                                                                     |
| key4      | wep key 4                                                                                     |
| key1_bits | wep key 1 length, 0:64 bits; 1:128 bits                                                       |
| key2_bits | wep key 2 length, 0:64 bits; 1:128 bits                                                       |
| key3_bits | wep key 3 length, 0:64 bits; 1:128 bits                                                       |
| key4_bits | wep key 4 length, 0:64 bits; 1:128 bits                                                       |
| wpa_psk   | wpa psk key, length <= 64                                                                     |

## set\_pppoe.cgi

Description: Set the device pppoe options

Authorization: manager

Syntax

```
: /set_pppoe.cgi?enable=&user=&pwd=&mail_ip=[&cam_user=&cam_pwd=&next_url=]
```

**Parameters:**

|        |                                      |
|--------|--------------------------------------|
| enable | 0: Forbidden of pppoe; 1: allow      |
| user   | pppoe dial-up users, length <= 64    |
| pwd    | pppoe dial-up password, length <= 64 |

## set\_upnp.cgi

Description: Set the device upnp options

Authorization: manager

Syntax:

/set\_upnp.cgi?enable=[&user=&pwd=&next\_url=]

**Parameters:**

|        |                                              |
|--------|----------------------------------------------|
| enable | 0: Forbidden upnp mapping function; 1: allow |
|--------|----------------------------------------------|

## set\_ddns.cgi

Description: Set the device ddns options

Authorization: manager

Syntax:

/set\_ddns.cgi?service=&user=&pwd=&host=&proxy\_svr=&proxy\_port=[&restart\_dyn  
dns=&cam\_user=&cam\_pwd=&next\_url=]

**Parameters:**

|            |                                                                                 |
|------------|---------------------------------------------------------------------------------|
| service    | 0:Forbidden of Service DDNS                                                     |
|            | 1: Peanut Shell                                                                 |
|            | 2: DynDns.org(dyndns)                                                           |
|            | 3: DynDns.org(statdns)                                                          |
|            | 4: DynDns.org(custom)                                                           |
|            | 5: Reserved                                                                     |
|            | 6: Reserved                                                                     |
|            | 7: Reserved                                                                     |
|            | 8: 3322(dyndns)                                                                 |
|            | 9: 3322(statdns)                                                                |
| user       | ddns user, length <= 64                                                         |
| pwd        | Ddns password, length <= 64                                                     |
| host       | Ddns Domain name, length <= 64                                                  |
| proxy_svr  | Proxy server address (only used dyndns service in mainland China), length <= 64 |
| proxy_port | Proxy server port                                                               |

|                |                                      |
|----------------|--------------------------------------|
| restart_dyndns | 1: Again update dyndns; 0: forbidden |
|----------------|--------------------------------------|

## set\_ftp.cgi

Description: Set the device ftp options

Authorization: manager

Syntax:

```
/set_ftp.cgi?[svr=&port=&user=&pwd=&mode=&dir=&upload_interval=&filename=&numberoffiles=&schedule_enable=&schedule_sun_0=&schedule_sun_1=&schedule_sun_2=&schedule_mon_0=&schedule_mon_1=&schedule_mon_2=&schedule_tue_0=&schedule_tue_1=&schedule_tue_2=&schedule_wed_0=&schedule_wed_1=&schedule_wed_2=&schedule_thu_0=&schedule_thu_1=&schedule_thu_2=&schedule_fri_0=&schedule_fri_1=&schedule_fri_2=&schedule_sat_0=&schedule_sat_1=&schedule_sat_2=&cam_user=&cam_pwd=&next_url=]
```

参数:

|                 |                                                                                                  |
|-----------------|--------------------------------------------------------------------------------------------------|
| svr             | ftp Server Address, length <= 64                                                                 |
| port            | ftp Server port                                                                                  |
| user            | ftp Server Login user, length <= 64                                                              |
| pwd             | ftp Server Login Password, length <= 64                                                          |
| dir             | ftp Store directory on the server, length <= 64                                                  |
| mode            | 0: port mode; 1: pasv mode                                                                       |
| upload_interval | interval (seconds) of upload pictures instantly 0: forbidden, 0-65535                            |
| filename        | Save the file name when uploading                                                                |
| numberoffiles   | Save the file number when uploading                                                              |
| schedule_enable | Whether to adopt the uploading plan                                                              |
| schedule_sun_0  | Uploading program on Sunday, eachday at 24hours, Each hour per 15mins devided by 96 armed period |
| schedule_sun_1  | bit0-95: 0: do not upload in this period; 1: upload in this period                               |
| schedule_sun_2  |                                                                                                  |
| schedule_mon_0  |                                                                                                  |
| schedule_mon_1  |                                                                                                  |
| schedule_mon_2  |                                                                                                  |
| schedule_tue_0  |                                                                                                  |
| schedule_tue_1  |                                                                                                  |
| schedule_tue_2  |                                                                                                  |
| schedule_wed_0  |                                                                                                  |
| schedule_wed_1  |                                                                                                  |
| schedule_wed_2  |                                                                                                  |
| schedule_thu_0  |                                                                                                  |
| schedule_thu_1  |                                                                                                  |

|                |  |
|----------------|--|
| schedule_thu_2 |  |
| schedule_fri_0 |  |
| schedule_fri_1 |  |
| schedule_fri_2 |  |
| schedule_sat_0 |  |
| schedule_sat_1 |  |
| schedule_sat_2 |  |

## set\_mail.cgi

Description: Set the device e-mail options

Authorization: manager

Grammar:

```
/set_mail.cgi?svr=&user=&pwd=&sender=&receiver1=&receiver2=&receiver3=&receiver4=[&cam_user=&cam_pwd=&next_url=]
```

Parameter:

|           |                                        |
|-----------|----------------------------------------|
| svr       | Mail server address, length<= 64       |
| port      | Mail service port                      |
| user      | Mail server log in user,, length <= 64 |
| pwd       | Mail server password, length <= 64     |
| sender    | Mail Receiver 1, length <= 64          |
| receiver1 | Mail Receiver 1, length <= 64          |
| receiver2 | Mail Receiver 2, length <= 64          |
| receiver3 | Mail Receiver 3, length <= 64          |
| receiver4 | Mail Receiver 4, length <= 64          |

## set\_alarm.cgi

Description: Set the device alarm option

Authorization: manager

Grammar:

```
/set_alarm.cgi?motion_armed=&motion_sensitivity=&input_armed=&iolinkage=&mail=&upload_interval=&schedule_enable=&schedule_sun_0=&schedule_sun_1=&schedule_sun_2=&schedule_mon_0=&schedule_mon_1=&schedule_mon_2=&schedule_tue_0=&schedule_tue_1=&schedule_tue_2=&schedule_wed_0=&schedule_wed_1=&schedule_wed_2=&schedule_thu_0=&schedule_thu_1=&schedule_thu_2=&schedule_fri_0=&schedule_fri_1=&schedule_fri_2=&schedule_sat_0=&schedule_sat_1=&schedule_sat_2=[&ioin_level=&ioout_level=&user=&pwd=&next_url=]
```

Parameter:

|                    |                                                                                              |
|--------------------|----------------------------------------------------------------------------------------------|
| motion_armed       | 0: Mobile detection disarm; 1: deployment                                                    |
| motion_sensitivity | 0-9: High - low                                                                              |
| input_armed        | 0: Input test disarm; 1: deployment                                                          |
| ioin_level         | io enter the alarm trigger level, 0: low, 1: High                                            |
| iolinkage          | 0: alarm linkage against io; 1: allow                                                        |
| ioout_level        | linkage output level, 0: low, 1: High                                                        |
| mail               | 0: Alarm mail notification when the ban; 1: allow                                            |
| upload_interval    | Interval (second) of upload picture when alarm, 0: forbidden, 0-65535                        |
| schedule_enable    | Whether adopt the deployment plan                                                            |
| schedule_sun_0     | Sunday deployment plan by 24 hours a day and 15 minutes, divided into 96 deployment periods. |
| schedule_sun_1     | bit0-95: 0: The time is not deployed; 1: The deployment time                                 |
| schedule_sun_2     |                                                                                              |
| schedule_mon_0     |                                                                                              |
| schedule_mon_1     |                                                                                              |
| schedule_mon_2     |                                                                                              |
| schedule_tue_0     |                                                                                              |
| schedule_tue_1     |                                                                                              |
| schedule_tue_2     |                                                                                              |
| schedule_wed_0     |                                                                                              |
| schedule_wed_1     |                                                                                              |
| schedule_wed_2     |                                                                                              |
| schedule_thu_0     |                                                                                              |
| schedule_thu_1     |                                                                                              |
| schedule_thu_2     |                                                                                              |
| schedule_fri_0     |                                                                                              |
| schedule_fri_1     |                                                                                              |
| schedule_fri_2     |                                                                                              |
| schedule_sat_0     |                                                                                              |
| schedule_sat_1     |                                                                                              |
| schedule_sat_2     |                                                                                              |

## comm\_write.cgi

Description: Though the camera's serial port send data, only some models is effective

Authorization: Operator

Grammar: /comm\_write.cgi?port=&baud=&bytes=&data=[&user=&pwd=&next\_url=]

Parameter:

port: Serial port, 0-3

baud: Serial baud rate

9: B1200  
11: B2400  
12: B4800  
13: B9600  
14: B19200  
15: B38400;  
4097: B57600  
4098: B115200

bytes: send bytes quantity of data < 256

data: send the data, application url encoding

## **set\_forbidden.cgi**

Description: Set the camera whether it prohibit audio information

Authorization: manage

Grammar:

```
/set_forbidden.cgi?schedule_enable=&schedule_sun_0=&schedule_sun_1=&sched
ule_sun_2=&schedule_mon_0=&schedule_mon_1=&schedule_mon_2=&schedule_t
ue_0=&schedule_tue_1=&schedule_tue_2=&schedule_wed_0=&schedule_wed_1=
&schedule_wed_2=&schedule_thu_0=&schedule_thu_1=&schedule_thu_2=&sched
ule_fri_0=&schedule_fri_1=&schedule_fri_2=&schedule_sat_0=&schedule_sat_1=
&schedule_sat_2=[&user=&pwd=&next_url=]
```

Parameter:

|                 |                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------|
| schedule_enable | Whether adopt the deployment plan                                                            |
| schedule_sun_0  | Sunday deployment plan by 24 hours a day and 15 minutes, divided into 96 deployment periods. |
| schedule_sun_1  | bit0-95: 0: The time is not deployed; 1: The deployment time                                 |
| schedule_sun_2  |                                                                                              |
| schedule_mon_0  |                                                                                              |
| schedule_mon_1  |                                                                                              |
| schedule_mon_2  |                                                                                              |
| schedule_tue_0  |                                                                                              |
| schedule_tue_1  |                                                                                              |
| schedule_tue_2  |                                                                                              |
| schedule_wed_0  |                                                                                              |
| schedule_wed_1  |                                                                                              |
| schedule_wed_2  |                                                                                              |
| schedule_thu_0  |                                                                                              |
| schedule_thu_1  |                                                                                              |
| schedule_thu_2  |                                                                                              |
| schedule_fri_0  |                                                                                              |

|                |  |
|----------------|--|
| schedule_fri_1 |  |
| schedule_fri_2 |  |
| schedule_sat_0 |  |
| schedule_sat_1 |  |
| schedule_sat_2 |  |

## get\_forbidden.cgi

Description: Acquire the camera video information if it is prohibited

Authorization: manage

Grammar: /get\_forbidden.cgi[?user=&pwd=]

return: see set\_forbidden.cgi

## set\_misc.cgi

Description: Set the parameters of the camera Miscellaneous

Authorization: manage

Grammar:

```
set_misc.cgi?[led_mode=&ptz_center_onstart=&ptz_auto_patrol_interval=&ptz_auto_patrol_type=&ptz_patrol_h_rounds=&ptz_patrol_v_rounds=&ptz_disable_preset=&ptz_preset_onstart=&user=&pwd=&next_url=]
```

Parameter:

led\_mode: 0: mode 1; 1: mode 2; 2: Turn off lights

ptz\_center\_onstart: =1, cencer after boot

ptz\_auto\_patrol\_interval: Auto Tour setting, =0: Not automatical visit

ptz\_auto\_patrol\_type: 0: Null; 1: Horizontal; 2: Level; 3: Horizontal + vertical

ptz\_patrol\_h\_rounds: Horizontal visits laps, 0: Infinite

ptz\_patrol\_v\_rounds: Vertical visits laps, 0: Infinite

ptz\_patrol\_rate: Cruising speed benchmark, 0-100, 0: Fastest

ptz\_patrol\_up\_rate: Cruiseing speed up: 0-100, 0: slowest

ptz\_patrol\_down\_rate: Cruising speed down: 0-100, 0: slowest

ptz\_patrol\_left\_rate: Cruising speed left: 0-100, 0: slowest

ptz\_patrol\_right\_rate: Cruising speed right: 0-100, 0: slowest

ptz\_disable\_preset: forbidden present position function: 0: no; 1: yes (After restart to teke effect)

ptz\_preset\_onstart: Camera starts automatically to specified preset position: 0: Disable

## **get\_misc.cgi**

Description: Acquire miscellaneous parameters for the camera

Authorization: manage

Grammar: /get\_misc.cgi[?user=&pwd=]

Return: see get\_misc.cgi

## **set\_decoder.cgi**

Description: Set the camera parameters of the decoder

Authorization: manage

Grammar: /set\_decoder.cgi?baud=[&user=&pwd=&next\_url=]

Parameter:

baud:

9: B1200

11: B2400

12: B4800

13: B9600

14: B19200

15: B38400;

4097: B57600

4098: B115200

## **wifi\_scan.cgi**

Description: command camera Search wireless network

Authorization: manage

Grammar: /wifi\_scan.cgi [?user=&pwd=&next\_url=]

Parameter: Null

## **get\_wifi\_scan\_result.cgi**

Description: Acquire search results about wireless camera

Authorization: manage

Grammar: /get\_wifi\_scan\_result.cgi[?user=&pwd=]

return:

```
var ap_bssid=new Array();
var ap_ssid=new Array();
var ap_mode=new Array();
var ap_security=new Array();
ap_bssid[0]='0015ebbe2153';
ap_ssid[0]='ZXDSL531BII-BE2153';
ap_mode[0]=0;
ap_security[0]=0;
ap_bssid[1]='00223f176d70';
ap_ssid[1]='nony';
ap_mode[1]=0;
ap_security[1]=2;
ap_bssid[2]='001d0f3fef40';
ap_ssid[2]='Calvin&Cici';
ap_mode[2]=0;
ap_security[2]=1;
ap_bssid[3]='0022b0f5ce72';
ap_ssid[3]='CX';
ap_mode[3]=0;
ap_security[3]=1;
ap_bssid[4]='001c1042b6b7';
ap_ssid[4]='ipcamera';
ap_mode[4]=0;
ap_security[4]=2;
var ap_number=5;
```

Among

ap\_number: search quantity of ap

ap\_bssid: searched ap bssid

ap\_ssid: searched ap ssid

ap\_mode: searched ap mode, 0: infra; 1: adhoc (Not supported)

ap\_security: searched ap safe mode,

0: Null;

1: WEP;

2: WPAPSK(TKIP);

3: WPAPSK(AES);

4: WPA2PSK(AES);

- 5: WPA2PSK(TKIP);
- 6: can't support safe mode

## **get\_log.cgi**

Description: Acquire the camera logs

Authorization: manage

Grammar: /get\_log.cgi[?user=&pwd=]

return: log information, for example

```
var log_text='Mon, 2009-08-03 19:53:04 ipcamera
192.168.0.16 access\nMon, 2009-08-03 20:13:03 admin
192.168.0.16 access\n';
Store variable log_text information, every log message separated by '\n'
test_mail.cgi
```

Description: Test mail function

Authorization: manage

Grammar: /test\_mail.cgi[?user=&pwd=]

return:

result: test result

- 0: Success
- 1: fail to connect to server
- 2: Network is error
- 3: Server is error
- 4: Wrong users
- 5: Wrong password
- 6: Sender was rejected
- 7: Recipient was rejected
- 8: The body was rejected
- 9: Authentication is not accepted

## **test\_ftp.cgi**

Description: ftp function test

Authorization: manage  
Grammar: /test\_ftp.cgi[?user=&pwd=]  
return:  
result: result of text  
    0: Success  
    -1: fail to connect to server  
    -2: Network is error  
    -3: Server is error  
    -4: Wrong users  
    -5: Wrong password  
    -6: Wrong directory  
    -7: Pasv mode is error  
    -8: Port model is error  
    -9: Stor command is error

## **backup\_params.cgi**

Description: Back up the current parameter settings

Authorization: manage  
Grammar: /backup\_params.cgi[?user=&pwd=]  
return: params.bin document

## **restore\_params.cgi**

Description: Restore parameters setting what the previous backup

Authorization: manage  
Grammar: /restore\_params.cgi[?user=&pwd=&next\_url=]

Note: The cgi must use post method, set file of the parameters of the previous backup and package , sent to the ip camera.

## **set\_mac.cgi**

Description: Set mac address of the camera

Authorization: manage

Grammar: /set\_mac.cgi?mac=[&user=&pwd=&next\_url=]

Parameter:

mac: mac address: such as mac=0012a0746f01

## **set\_factory\_ddns.cgi**

Description: Set equipment ddns option, while set it to factory defaults

Permissions: manager

Grammar:

/set\_factory\_ddns.cgi?[service=&user=&pwd=&host=&proxy\_svr=&proxy\_port=&cam\_use  
r=&cam\_pwd=&next\_url=]

Parameters:

|            |                                                                                                                                                                                                                                                              |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| service    | 0: Forbidden ddns service<br>1: Peanut Shell<br>2: DynDns.org(dyndns)<br>3: DynDns.org(statdns)<br>4: DynDns.org(custom)<br>5: Reserved<br>6: Reserved<br>7: Reserved<br>8: 3322(dyndns)<br>9: 3322(statdns)<br>10: Reserved<br>11: Reserved<br>12: Reserved |
| user       | Ddns user, Lengh <= 64                                                                                                                                                                                                                                       |
| pwd        | Ddns password, Lengh <= 64                                                                                                                                                                                                                                   |
| host       | Ddnsdomain name, Lengh <= 64                                                                                                                                                                                                                                 |
| proxy_svr  | Proxy server address (only used dyndns service in the mainland), Lengh <= 64                                                                                                                                                                                 |
| proxy_port | Proxy sever port                                                                                                                                                                                                                                             |

## **get\_factory\_ddns.cgi**

Description: get the device ddns parameter

Permission: Manager

Grammar: /get\_factory\_ddns.cgi[?user=&pwd=]

Returns:

|                         |                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| factory_ddns_service    | 0: Forbidden ddns service<br>1: Peanut shell<br>2: DynDns.org(dyndns)<br>3: DynDns.org(statdns)<br>4: DynDns.org(custom)<br>5: Reserved<br>6: Reserved<br>7: Reserved<br>8: 3322(dyndns)<br>9: 3322(statdns)<br>10: Reserved<br>11: Reserved<br>12: Reserved |
| factory_ddns_user       | Ddns users                                                                                                                                                                                                                                                   |
| factory_ddns_pwd        | Ddns password                                                                                                                                                                                                                                                |
| factory_ddns_host       | Ddns domain                                                                                                                                                                                                                                                  |
| factory_ddns_proxy_svr  | Proxy server address (only used in mainland china ddnss service )                                                                                                                                                                                            |
| factory_ddns_proxy_port | Proxy server port                                                                                                                                                                                                                                            |

## **restore\_factory\_ddns.cgi**

Description: restore the factory device ddns default

Permissions: manager

Grammar:

/restore\_factory\_ddns.cgi?[user=&pwd=&next\_url=]