HTTP API

Version 1.0

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1. Get IPCam System Parameter

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax: http://<servername>/cgi-bin/sysparam.cgi?<parameter>=<value>
Parameter explain:
all: Get all parameter(Null<value>)
group: Get category of group parameter (Category of group<value>)
element: Get a element parameter(Element <value>)

Example:
i. Get all parameter
http://192.168.0.100/cgi-bin/sysparam.cgi?all
ii.Get Video Stream Parameter Group
http://192.168.0.100/cgi-bin/sysparam.cgi?group=video
iii.Get first video stream Bitrate
http://192.168.0.100/cgi-bin/sysparam.cgi?element=BITRATE

1.1 System Parameter Return Format

Return Format:
HTTP/1.0 200 OK\r\n
Content-Type: text/plain\n
\n
<parameter all>
where <parameter all> is
[<parameter group>]
where <parameter group> is
--groupname--\n
<parameter pair>\n
where <parameter pair> is
Parameter=value\n
[<parameter pair>]

Example:
Get netParameter Group:
HTTP/1.0 200 OK\r\n
Content-Type: text/plain\n
\n
--net--

WDHCP=0
WIPADDR=NULL
WNETMASK=NULL
WGATEWAY=NULL
PPPOE_ENABLE=0
EDHCP=0
EIPADDR=192.168.0.100
ENETMASK=255.255.255.0
EGATEWAY=192.168.0.1
DNS1=168.95.1.1
DNS2=168.95.192.1
NET_HOSTNAME=Digital_Security_Camera
P.S. If parameter error , Return as follow format.
HTTP/1.0 200 OK\r\n
Content-Type: text/plain\n
\n
Error: no data match

2. Setup IPCam System Parameter

2.1 Setup Image Parameter Group(image) #reference1

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/activex.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
OSD: Setup OSD whether enable or not (<value>=0,Disable;<value>=1,Enable)
TRANSPARENCY: Setup OSD transparency whether enable or not.
(<value>=0,Disable;<value>=1,Enable)
FONT_COLOR: Setup OSD font color (<value>=0~2)
0=>Orange
1=>Green
2=>Blue
[model:ccd] #reference2
SA7113_BRIGHTNESS: Adjust brightness(<value>=0~255)
SA7113_SATURATION: Adjust saturation(<value>=0~255)
SA7113_CONTRAST: Adjust contrast(<value>=0~255)
SA7113_HUE: Adjust hue(<value>=0~255)
[**model:** cmos]
OV7720_BRIGHTNESS: Adjust brightness (<value>=0~255)
OV7720_SATURATION: Adjust saturation (<value>=0~255)

OV7720_CONTRAST: Adjust contrast (<value>=0~255)
OV7720_HUE: Adjust hue (<value>=0~12)
OV7720_SHARPNESS: Adjust sharpness (<value>=0~15)
OV7720_AEREFERENCE: Adjust auto exposure reference (<value>=0~4)
OV7720_LIGHT: Setup light mode (<value>=0,In door;<value>=1,Out door)
OV7720_NIGHTMODE: Setup night mode whether enable or not (<value>=0,Disable;<value>=1,Enable)
OV7720_FLIP: Setup vertical flip whether enable or not (<value>=0,Disable;<value>=1,Enable)
OV7720_FREQUENCY: Setup voltage frequency (<value>=50,50Hz;<value>=60,60Hz)

Example:
i.Enable OSD function
http://192.168.0.100/cgi-bin/activex.cgi?OSD=1
ii.Adjust ccd brightness #reference3
http://192.168.0.100/cgi-bin/activex.cgi?SA7113_BRIGHTNESS=64
iii.Adjust cmos sharpness
http://192.168.0.100/cgi-bin/activex.cgi?OV7720_SHARPNESS=6

2.2 Setup Motion Parameter Group(motion)

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/motionset.cgi?<parameter>=<value>[&<parameter>=<value>...]

Parameter explain:
ALARM_PIC_ENABLE: Enable alarm capture image (<value>=0,Disable;<value>=1,Enable)
MAILALARM: Enable alarm send to email(<value>=0,Disable;<value>=1,Enable)
P.S. This option demand first Enable ALARM_PIC_ENABLE
FTPALARM: Enable alarm Send image to FTP (<value>=0,Disable;<value>=1,Enable)
P.S. This option demand first EnableALARM_PIC_ENABLE
DETECTION1: Setup first motion mask rectangle area whether enable or not. (<value>=0,Disable;<value>=1,Enable)
SENSITIVITY1: Setup first motion mask rectangle area sensitive(<value>=0~9)
STARTX1: Setup first motion mask rectangle area X position start(<value>=X Position)
STARTY1: Setup first motion mask rectangle area Y position start(<value>=Y Position)
STOP1: Setup first motion mask rectangle area X position end(<value>=X Position)
STOPY1: Setup first motion mask rectangle area Y position end(<value>=Y Position)
P.S. Setup first motion mask rectangle area, Demand first Enable DETECTION1,And starting point value needs to be smaller than terminal point value
DETECTION2: Setup second motion mask rectangle area whether enable or not. (<value>=0,Disable;<value>=1,Enable)
SENSITIVITY2: Setup second motion mask rectangle area sensitive(<value>=0~9)
STARTX2: Setup second motion mask rectangle area X position start(<value>=X Position)
STARTY2: Setup second motion mask rectangle area Y position start(<value>=Y Position)
STOP2: Setup second motion mask rectangle area X position end(<value>=X Position)
STOPY2: Setup second motion mask rectangle area Y position end(<value>=Y Position)
P.S. Setup second motion mask rectangle area, Demand first Enable DETECTION2,And starting point value needs to be smaller than terminal point value
DETECTION3: Setup third motion mask rectangle area whether enable or not. (<value>=0,Disable;<value>=1,Enable)
SENSITIVITY3: Setup third motion mask rectangle area sensitive(<value>=0~9)
STARTX3: Setup third motion mask rectangle area X position start(<value>=X Position)
STARTY3: Setup third motion mask rectangle area Y position start(<value>=Y Position)
STOP3: Setup third motion mask rectangle area X position end(<value>=X Position)
STOPY3: Setup third motion mask rectangle area Y position end(<value>=Y Position)
P.S. Setup third motion mask rectangle area, Demand first Enable DETECTION3,And starting point value needs to be smaller than terminal point value

Example:
i.Enable motion alarm and trigger capture image send to email
http://192.168.0.100/cgi-bin/motionset.cgi?ALARM_PIC_ENABLE=1&
MAILALARM=1
ii.Enable second motion mask rectangle area and set rectangle area position.

http://192.168.0.100/cgi-bin/motionset.cgi?DETECTION2=1&STARTX2
=50&STARTY2=50&STOPX2=250&STOPY2=250

2.3 Setup Digital I/O Parameter Group(io) #reference4

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/IoAlarm.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
DIN_MODE: Setup Digital Input trigger mode(<value>=0,Low;<value>=1,High)
IOALARM_PIC_ENABLE: Setup alarm event whether capture image or not (<value>=0,Disable; <value>=1,Enable)
IOMAILALARM: Setup alarm event whether send email or not (<value>=0,Disable;<value>=1,Enable)
P.S. This option demand first EnableIOALARM_PIC_ENABLE
IOFTPALARM: Setup alarm event whether capture image send to FTP or not (<value>=0,Disable; <value>=1,Enable)
P.S. This option demand first EnableIOALARM_PIC_ENABLE
VLMAILALARM: Setup Video Loss event whether send email or not (<value>=0,Disable;<value>=1,Enable)
DOUT_TYPE: Setup trigger Digital Output while related alarm event come up(<value>=0~3)
0=>OFF
1=>Motion Detect
2=>Digital Input
3=>Video Loss
IODOUTTIME: Trigger Digital Output time(<value>=1~19)
Example:
i.Digital Input trigger mode is High
http://192.168.0.100/cgi-bin/IoAlarm.cgi?DIN_MODE=1
ii.Enable send image to FTP while digital input alarm event come up
http://192.168.0.100/cgi-bin/IoAlarm.cgi?IOALARM_PIC_ENABLE
=1&IOFTPALARM=1

2.4 Setup Audio Stream Parameter Group(audio)

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/audioset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
MP2RATE: Setup MP2 Bitrate (<value>=1~3)
1=>32kbps

2=>48kbps
3=>64kbps
Example:
i. MP2 Bitrate is 48kbps
http://192.168.0.100/cgi-bin/audioset.cgi?MP2RATE=2

2.5 Setup Video Stream Parameter Group (video)

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/videoset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
QUALITYMETHOD: SetupVideo Stream1 encode method (<value>=1,CBR;<value>=2,VBR)
BITRATE: Setup Video Stream1 Bitrate (<value>=3~19)
3=>48kbps
4=>64kbps
5=>96kbps
6=>128kbps
7=>192kbps
8=>256kbps
9=>320kbps
10=>384kbps
11=>448kbps
12=>512kbps
13=>576kbps
14=>640kbps
15=>704kbps
16=>768kbps
17=>1Mbps
18=>1.5Mbps
19=>2Mbps
P.S. This option demand QUALITYMETHOD = 1
QUALITY: Setup Video Stream1 quality (<value>=5~9)
5=>Standard
6=>Good
7=>Pretty Good
8=>Great
9=>Excellent
P.S. This option demand QUALITYMETHOD = 2
RESOLUTION: Setup Video Stream2 resolution (<value>=1~9)
1=>NTSC(QCIF)
2=>NTSC(CIF)
3=>NTSC(D1)

4=>PAL(QCIF)
5=>PAL(CIF)
6=>PAL(D1)
7=>QQVGA(160x120)
8=>QVGA(320x240)
9=>VGA(640x480)
FRAMERATE: Setup Video Stream1 framerate (<value>=1~6)
1=>5fps
2=>10fps
3=>15fps
4=>20fps
5=>25fps
6=>30fps
DUALBITSTREAM: Setup Video Stream2 encode mode (<value>=0~2)
0=Disable
1=MPEG4
2=MJPEG
QUALITYMETHOD2: Setup Video Stream2 encode method
(<value>=1,CBR;<value>=2,VBR)
P.S. This setting demand DUALBITSTREAM = 1.
BITRATE2: Setup Video Stream bitrate (<value>=3~19)
3=>48kbps
4=>64kbps
5=>96kbps
6=>128kbps
7=>192kbps
8=>256kbps
9=>320kbps
10=>384kbps
11=>448kbps
12=>512kbps
13=>576kbps
14=>640kbps
15=>704kbps
16=>768kbps
17=>1Mbps
18=>1.5Mbps
19=>2Mbps
P.S. This option demand DUALBITSTREAM=1 and QUALITYMETHOD2=1
QUALITY2: Setup Video Stream2 quality (<value>=5~9)
5=>Standard
6=>Good
7=>Pretty Good
8=>Great
9=>Excellent
P.S. This option demand DUALBITSTREAM=1 and QUALITYMETHOD2=2

RESOLUTION2: Setup Video Stream2 resolution (<value>=1~9)
1=>NTSC(QCIF)
2=>NTSC(CIF)
3=>NTSC(D1)
4=>PAL(QCIF)
5=>PAL(CIF)
6=>PAL(D1)
7=>QQVGA(160x120)
8=>QVGA(320x240)
9=>VGA(640x480)
P.S. This setting demand DUALBITSTREAM=1.
FRAMERATE2: Setup Video Stream framerate(<value>=1~6)
1=>5fps
2=>10fps
3=>15fps
4=>20fps
5=>25fps
6=>30fps
P.S. This setting demand DUALBITSTREAM=1.
JQUALITY: Setup MotionJPEG encode quality (<value>=1~90)
P.S. This setting demand DUALBITSTREAM=2.
JRESOLUTION: Setup MotionJPEG resolution. (<value>=1~9)
1=>NTSC(QCIF)
2=>NTSC(CIF)
3=>NTSC(D1)
4=>PAL(QCIF)
5=>PAL(CIF)
6=>PAL(D1)
7=>QQVGA(160x120)
8=>QVGA(320x240)
9=>VGA(640x480)
P.S. This setting demand DUALBITSTREAM=2
JFRAMERATE: Setup MotionJPEG framerate(<value>=1~6)
1=>1fps
2=>5fps
3=>10fps
4=>15fps
5=>20fps
6=>25fps
P.S. This setting demand DUALBITSTREAM=2
Example:
i.Set Video Stream1 CBR Bitrate is 512kbps
http://192.168.0.100/cgi-bin/videoset.cgi?QUALITYMETHOD=1&
BITRATE=12
ii. Set Video Stream1resolution is NTSC(D1)
http://192.168.0.100/cgi-bin/videoset.cgi?RESOLUTION=3

iii.Set Video Stream2 is MJPEG
http://192.168.0.100/cgi-bin/videoset.cgi?DUALBITSTREAM=2

2.6 Setup PPPoEParameter Group(pppoe)

Attention: This CGI command that authority level must be administrator(administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/pppoe.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
PPPOE_USER: Account user name of PPPoE (<value>=character*30)
PPPOE_PASSWD: Account password of PPPoE (<value>=character*20)
Example:
i.Set PPPoE login User Name and Password.
http://192.168.0.100/cgi-bin/pppoe.cgi?PPPOE_USER=aaa&
PPPOE_PASSWD =bbb

2.7 Setup DDNSParameter Group(ddns)

Attention: This CGI command that authority level must be administrator(administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/ddns.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
DDNS_ENABLE: Enable DDNS (<value>=0,Disable;<value>=1,Enable)
DDNS_DOMAIN: DDNS Server address (<value>=1,DynDNS.org;<value>=2,3322.org)
DDNS_HOSTNAME: Host Name of DDNS (<value>=character*50)
DDNS_USER: User name of DDNS (<value>=character*30)
DDNS_PASSWD: Password of DDNS (<value>=character*20)
Example:
i.Set enable DDNS
http://192.168.0.100/cgi-bin/ddns.cgi?DDNS_ENABLE=1
ii.Set host name of DDNS
http://192.168.0.100/cgi-bin/ddns.cgi?DDNS_HOSTNAME
=clairvoyant.dyndns.org

2.8 Setup Wireless Parameter Group(wlan)

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST

Syntax:
http://<servername>/cgi-bin/wlanset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
WLANMODE: The wireless of IP camera can be set to Infrastructure or Ad-Hoc mode of the basic transmission. (<value>=1, Infrastructure;<value>=2, Ad-Hoc)
WLANOPMODE: Select wireless transmission specification (<value>=1~3)
1=>Auto(IEEE 802.11b/g)
2=>IEEE 802.11g
3=>IEEE 802.11b
CHANNEL: Wireless channel (<value>=0~11, 0=Auto)
SSID: Wireless Access Point Name (<value>=character*32)
PREAMBLE: Wireless Preamble Type (<value>=1, Long; <value>=2, Short)
AUTHEN: IP camera supported WEP or WPA encryption. Please select the authentication mode and input the key in below items. We DO NOT recommend to setup the wireless as Open System for security reasons. (<value>=1~3)
1=>Open System
2=>Shared key
3=>WPA-PSK
ENCRYPT: Select WEP key length (<value>=0, 64, 128)
0=>OFF
64=>64-bit
128=>128-bit
P.S. This setting is valid when AUTHEN is two (WEP).
WEPKEYCH: Select use WEP_Key index (<value>=1~4)
P.S. This setting is valid when AUTHEN is two (WEP).
WEPKEY641: WEP1 encryption 64bit 1(<value>=hex*10 or character*5)
P.S. This setting demand AUTHEN=2 and ENCRYPT=64
WEPKEY642: WEP2 encryption 64bit (<value>=hex*10 or character*5)
P.S. This setting demand AUTHEN=2 and ENCRYPT=64
WEPKEY643: WEP3 encryption 64bit (<value>=hex*10 or character*5)
P.S. This setting demand AUTHEN=2 and ENCRYPT=64
WEPKEY644: WEP4 encryption 64bit (<value>= hex*10 or character*5)
P.S. This setting demand AUTHEN=2 and ENCRYPT=64
WEPKEY1281: WEP1 encryption 128bit (<value>= hex*26 or character*13)
P.S. This setting demand AUTHEN=2 and ENCRYPT=128
WEPKEY1282: WEP2 encryption 128bit (<value>= hex*26 or character*13)
P.S. This setting demand AUTHEN=2 and ENCRYPT=128
WEPKEY1283: WEP3 encryption 128bit (<value>= hex*26 or character*13)
P.S. This setting demand AUTHEN=2 and ENCRYPT=128
WEPKEY1284: WEP4 encryption 128bit (<value>= hex*26 or character*13)
P.S. This setting demand AUTHEN=2 and ENCRYPT=128
WPAENC: WPAencryption mode(<value>=1, TKIP;<value>=2, AES)
P.S. This setting demand AUTHEN=3
WPAPSK: WPA encryption Key (<value>=character*20)
P.S. This setting demand AUTHEN=3
Example:

i.Set Wireless channel=6
http://192.168.0.100/cgi-bin/wlanset.cgi?CHANNEL=6
ii.Set Wireless use WPA encryption ,And Encryption mode is AES
http://192.168.0.100/cgi-bin/wlanset.cgi?AUTHEN=3&WPAENC=2&
WPAPSK=Clairvoyant
iii.Set Wireless use WEPencryption and key length is 64bit and WEP_Key select third.
http://192.168.0.100/cgi-bin/wlanset.cgi?AUTHEN=2&ENCRYPT=64&
WEPKEYCH=3&WEPKEY643=12345abcde
iv.Set Wireless not use encryption.
http://192.168.0.100/cgi-bin/wlanset.cgi?AUTHEN=1

2.9 Setup NetworkParameter Group(net)

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/netset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
WDHCP: Enable the DHCP function of wireless. (<value>=0,Disable; <value>=1,Enable)
WIPADDR: Setup IP address of wireless. (<value>=character*15)
WNETMASK: Setup Subnet Mask of wireless. (<value>=character*15)
WGATEWAY: Setup Gateway address of wireless. (<value>=character*15)
PPPOE_ENABLE: Enable or Disable the PPPoE. (<value>=0,Disable; <value>=1,Enable)
EDHCP: Enable the DHCP function of Ethernet . (<value>=0,Disable; <value>=1,Enable)
EIPADDR: Setup IP address of Ethernet. (<value>=character*15)
ENETMASK: Setup Subnet Mask of Ethernet (<value>=character*15)
EGATEWAY: Setup Gateway address of Ethernet (<value>=character*15)
DNS1: Setup DNS1 address of Ethernet (<value>=character*15)
DNS2: Setup DNS2 address of Ethernet (<value>=character*15)
NET_HOSTNAME: Setup IP Camera Host Name (<value>=character*30)
P.S. This Setting will affect the UpnP show host name
Example:
i.Set enableWireless DHCP
http://192.168.0.100/cgi-bin/netset.cgi?WDHCP=1
ii.Set enable PPPoE
http://192.168.0.100/cgi-bin/netset.cgi?PPPOE_ENABLE=1
iii.Set IP address , Subnet Mask and Gateway address of Ethernet
http://192.168.0.100/cgi-bin/netset.cgi?EIPADDR=192.168.128.100&
ENETMASK=255.255.255.0&EGATEWAY=192.168.128.1

2.10 Setup Multicast Parameter Group (multicast)

Attention: This CGI command that authority level must be administrator(administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/multicastset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
MULTICAST: Enable or disable multicast function .(<value>=0,Disable;<value>=1,Enable)
MULTICASTIP: Setup IP address of multicast. (<value>=character*15)
MULTICASTPORT: Use port of multicast .(<value>=character*5)
Example:
i.Set enable Multicast.
http://192.168.0.100/cgi-bin/multicastset.cgi?MULTICAST=1
ii.Set Multicast IP and Port
http://192.168.0.100/cgi-bin/multicastset.cgi?MULTICASTIP
=234.5.6.11&MULTICASTPORT=6000

2.11 Setup Connect Port Parameter Group(port)

Attention: This CGI command that authority level must be administrator(administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/portset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
RTSPPORT: RTSP Service use port .(<value>=character*5)
CTRLPORT: Control Service use port .(<value>=character*5)
ALARMPORT: Alarm Service use port .(<value>=character*5)
HTTPPORT: HTTP Service use port .(<value>=character*5)
Example:
i.Set RTSP Service use port
http://192.168.0.100/cgi-bin/portset.cgi?RTSPPORT=554

2.12Setup E-mailParamter Group(smtp)

Attention: This CGI command that authority level must be administrator(administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/smtpset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
SMTPSERVER1: SMTP Server address. (<value>=character*30)
SMTPREC1: Recipient the Email address .(<value>=character*30)
SMTPNAME1: Login account of SMTP Server (<value>=character*30)

SMTPPASSWD1: Login password of SMTP Server. (<value>=character*20)
AUTHMETHOD1: Setup SMTP Server authentication method. (<value>=1, PLAIN;<value>=2, LOGIN)
Example:
i.Set E-mail SMTP address.
http://192.168.0.100/cgi-bin/smtpset.cgi?SMTPSERVER1
=sohonas.com.tw
ii. Set E-mail Recipient the Email address
http://192.168.0.100/cgi-bin/smtpset.cgi?SMTPREC1
=william@ sohonas.com.tw
iii. Set E-mail SMTP Server authentication method is LOGIN
http://192.168.0.100/cgi-bin/smtpset.cgi?AUTHMETHOD1=2

2.13 Setup FTPParameter Group (ftp)

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/ftpset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
FTPSERVER1: FTP server address. (<value>=character*20)
FTPPORT1: Service port of FTP. (<value>=character*5)
FTPNAME1: Account of FTP .(<value>=character*30)
FTPPASSWD1: Password of FTP (<value>=character*20)
FTPFOLDER1: FTP upload folder name. (<value>=character*20)
FTPPASV1: Enable passive mode .(<value>=0,Disable;<value>=1,Enable)
Example:
i.Set FTP server address.
http://192.168.0.100/cgi-bin/ftpset.cgi?FTPSERVER1
= sohonas.com.tw
ii.Set FTP upload folder name.
http://192.168.0.100/cgi-bin/ftpset.cgi?FTPFOLDER1=alarm_pic

2.14 Setup UPnPParameter Group(upnp)

Attention: This CGI command that authority level must be administrator(administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/upnp.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
UPNP: Enable UPnP function. (<value>=0,Disable;<value>=1,Enable)

Example:
i.Set enable UPnP function.
http://192.168.0.100/cgi-bin/upnp.cgi?UPNP=1

2.15 Setup Storage Paramter Group(storage)

Attention: This CGI command that authority level must be administrator(administrator authorization).
Method: GET/POST
Syntax:
http://<servername>/cgi-bin/storageset.cgi?<parameter>=<value>[&<parameter>=<value>...]
Parameter explain:
SSJPGSTORAGEDEV: Set snapshot storage path .(<value>=1~3)
1=>SD
2=>USB
3=>OFF
RECVDOSTORAGEDEV: Set record storage path .(<value>=1~3)
1=>SD
2=>USB
3=>OFF
RECTIME: The Record Time length (for record video) can be set to 1 ~ 5 seconds.
(<value>=1~5)
ENABLESNAP: Users also can setup the Schedule Snapshot in this setting.
(<value>=0,Disable;<value>=1,Enable)
SNAPTIME: If bScheduleSnapShotEnable is enable , The IP camera will save the snapshot picture every a period of time as user setup to SD or USB storage devices.
(<value>=10, 20, 30, 40, 50, 60)
10=>10min
20=>20min
30=>30min
40=>40min
50=>50min
60=>60min
P.S. This option demand ENABLESNAP=1
Example:
i. Set snapshot to SD storage
http://192.168.0.100/cgi-bin/storageset.cgi?SSJPGSTORAGEDEV=1
ii. Set record to USB storage
http://192.168.0.100/cgi-bin/storageset.cgi?RECVDOSTORAGEDEV=2
iii. Enable schedule snapshot and every snapshot are interval 10 minute
http://192.168.0.100/cgi-bin/storageset.cgi?ENABLESNAP=1&
SNAPTIME=10

3. Get Snapshot JPEG Image File

Attention: This CGI command that authority level must be administrator (administrator authorization).
Method: GET/POST
Syntax: http://<servername>/cgi-bin/image.cgi
Example: http://192.168.0.100/cgi-bin/image.cgi

3.1 Return Image File Format

HTTP/1.0 200 OK\r\n
Content-Type: image/jpeg\r\n
[Content-Length: <image size>\r\n]
\r\n
<JPEG image data>\r\n
P.S. If this function execute fail, Return as follow format.
HTTP/1.0 200 OK\r\n
Content-Type: text/html\n
\n
Error: cannot get image

4. reference:

(1) Default video source is ccd = composite video
(2) Red color font is video source.
(3) Some products hardware have not been offered Digital I/O