



INTELLINET ACTIVE NETWORKING 550710 – CGI Command Reference

February 17 2004

CGI Command Reference V 1.3a for Network IP Camera

This documentation explains the usage of CGI commands which are supported by Network IP Camera 550710.

There are five different categories of CGI commands:

- 1) Still image request command
- 2) Motion image request command
- 3) GP_OUT Setting commands
- 4) Setting Commands / Remote Programming
- 5) Inquiry commands / Display of current settings & Alert State of Digital IO Connector

This reference is based on Firmware Version 4.11 (Released: February 17 2004).

You can get the latest firmware version here:

<http://www.intellinet-network.com/ipcamera>



1. Still image request command

Use this command when you need 1 data segment of JPEG file as a still image. The command returns a small HTML page which links to the JPG.

Syntax 1.

```
http://camera_ip/image.cgi?id=<value>&passwd=<value>&img_size=<value>
```

* It's necessary to place "&" between each <parameter>=<name>

- **id=<value>**

Valid username (account must have viewing rights)

- **passwd=<value>**

Valid password (account must have viewing rights)

- **img_size=<value>**

It is possible to set the image size by setting "img_size" parameter.

If not specified the image size currently programmed in the camera will be returned.

Value	Image Size
VGA	640 * 480
QVGA	320 * 240
QCIF	160 * 120

Attention:

This command does not return a JPG image, but a HTML page linking to the image. To get the JPG image only you can use the following SYNTAX:

Syntax:

```
http://camera_ip/jpg/image.jpg
```

The "direct image access function" can be activated and configured in the camera's system configuration.



2. Motion image request command

Use this command to retrieve a motion image. This command offers two kinds of mode. One is Applet (JAVA), the other is ActiveX (Windows MSIE). It is possible to control "frame rate" and "image size", and to activate the "firewall option" and "timestamp option".

Syntax 1.

```
http://camera_ip/image.cgi?id=<value>&passwd=<value>&mode=<value>&fr=<value>&img_size=<value>&bf=<value>&timestamp=<value>
```

- **id=<value>**
Valid username (account must have viewing rights)
- **passwd=<value>**
Valid password (account must have viewing rights)

- **mode=<value>**

Value	Details
activex	ActiveX motion image
applet	Applet motion image

- **fr=<value>**
Controls the frame rate (frames/second).
Possible values are:
1, 2, 5, 10, 15 and **30**.
- **img_size=<value>**
If not specified the image size currently programmed in the camera will be returned.

Value	Image Size
VGA	640 * 480
QVGA	320 * 240
QCIF	160 * 120

- **bf=<value>**
Controls the "behind firewall" parameter. Possible values are:
0 = behindfirewall = false (default value)
1 = behindfirewall = true
If not specified the default value will be returned.
- **timestamp=<value>**
Controls the "timestamp" parameter to display the date/time information in the live image.
Possible values are:
off = no timestamp
on = timestamp = on (default value)
If not specified the default value will be returned.



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3. GP_OUT Setting commands

These commands are to be used to control the GPIO (General Purpose I/O) output port of the camera.

Syntax:

```
http://camera_ip/gp_out.cgi?id=<value>&passwd=<value>&out=<value>&interval=<value>
```

- **id=<value>**
Valid username (account must have administrator rights)
- **passwd=<value>**
Valid password (account must have administrator rights)
- **out=<value>**
Activates the Output port by using the value "on".
- **interval=<value>**
Specifies the time in seconds the output port should be activated.
Possible values are: 0 – 255

Example:

```
http://camera_ip/gp_out.cgi?id=guest&passwd=guest&out=on&interval=20
```

Camera activates the GPIO output for a period of 20 seconds.



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4. Setting Commands / Remote Programming

These commands are to be used to set various settings for the WEBVIEW. It is possible to transmit several parameters at one time only when they belong to the same CGI name (*_set.cgi).

Syntax:

```
http://camera_ip/*_set.cgi?id=<value>&passwd=<value>&parameter=<value>
```

There are six different CGI Commands controlling different aspects:

- 1) Image setting command ([image_set.cgi](#))
Control Brightness, Contrast, Saturation and other image parameters.
 - 2) Network setting command ([network_set.cgi](#))
Change the IP Address, Ports, SMTP Server,
 - 3) Event setting command ([event_set.cgi](#))
Setup the Event Trigger Configuration remotely.
 - 4) Time setting command ([time_set.cgi](#))
Define the time server, time zone, daylight saving time, ...
 - 5) System setting command ([system_set.cgi](#))
Configuration of Camera Name, Location, Direct Image Access and more
 - 6) PTZ Control command ([ptz_webctl.cgi](#))
Command set for the PTZ Version of Network IP Camera.
- Always enter User ID and Password of an Administrator Account.
 - [parameter=<value>](#)
Refer to “CGI command list” below.



5. Inquiry commands / Display of current settings & Alert State of Digital IO Connector

The INQUIRY.CGI command displays a HTML page with the current settings in Network IP Camera. There are different commands displaying different parameters.

Syntax:

```
http://camera_ip/inquiry.cgi?id=<value>&passwd=<value>&inq=<value>
```

- **id=<value>**
Valid username (account must have administrator rights)
- **passwd=<value>**
Valid password (account must have administrator rights)

inq=<value>

Use one of the following values:

image = displays the current image settings

network = displays the parameters of the Network Configuration

user = displays the list users

event = displays the parameters of the Event Trigger Configuration

time = displays all time relevant settings

system = displays parameters of System Configuration

gpio = displays the alert state of Network IP Camera (see below)

Query of Digital IO Alert State:

You can query the alert state of the camera using the command below:

Syntax:

```
http://camera_ip/inquiry.cgi?id=<value>&passwd=<value>&inq= gpio
```

This command returns:

GPIO_IN : 1(open)

GPIO_IN : 0(closed)



CGI Command List

1. Image setting command ([image_set.cgi](#))

Parameter	Value	Inquiry Parameter	Setting page	Note
Comp_Rate	1 ~ 10	image	Image Configuration	
Img_Size	vga/qvga/qcif	image	Image Configuration	640*480 / 320*240 / 160*120
Vertical_Flip	on/off	image	Image Configuration	
Horizontal_Flip	on/off	image	Image Configuration	
Time_Stamp	on/off	inq/set	Image Configuration	
Bright_Value	0 ~ 25	image	Image Configuration	
Contrast	0 ~ 10	image	Image Configuration	
Hue	0 ~ 15	image	Image Configuration	
Saturation	0 ~ 255	image	Image Configuration	
Sharpness	0 ~ 7	image	Image Configuration	
Exposure	auto/manual	image	Image Configuration	
Exposure_Value	0 ~ 255	image	Image Configuration	
Back_Light	on /off	image	Image Configuration	
Exposure_Time	yes/no	image	Image Configuration	
In_Out	indoor/outdoor	image	Image Configuration	
Light_Fre	50hz/60hz	image	Image Configuration	

Example: Changing the Brightness of the live image

Syntax:

```
http://camera_ip/*image_set.cgi?id=<value>&passwd=<value>&Bright_Value=128
```

Sets the Brightness Value to 128 (Brightness Mode needs to be set to "manual" first).

Example 2: Changing the Image Resolution of the live image

Syntax:

```
http://camera_ip/*image_set.cgi?id=<value>&passwd=<value>&Img_Size=vga
```

Sets the image size to VGA (= 640 x 480 pixel).



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2. Network Setting command ([network_set.cgi](#))

IP Addresses, Ports and DNS

Parameter	Value	Inquiry Parameter	Setting CGI	Setting page
Ip_Assign_Method	using_dhcp/manually	network	network_set.cgi	Network Configuration
Ip	<IP address>	network	network_set.cgi	Network Configuration
Subnet	<subnet address>	network	network_set.cgi	Network Configuration
Gateway	<gateway address>	network	network_set.cgi	Network Configuration
Send_Email	on/off	network	network_set.cgi	Network Configuration
Email_Addr	<email address>	network	network_set.cgi	Network Configuration
Web_Port	80 ~ 1023	network	network_set.cgi	Network Configuration
Img_Port	8000 ~ 65535	network	network_set.cgi	Network Configuration
Upgrade_Port	8000 ~ 65535	network	network_set.cgi	Network Configuration
Ptz_Port	8000 ~ 65535	network	network_set.cgi	Network Configuration
Etsp_Port	8000 ~ 65535	network	network_set.cgi	Network Configuration
Dns1_Server	<IP Address>	network	network_set.cgi	Network Configuration
Dns2_Server	<IP Address>	network	network_set.cgi	Network Configuration

SMTP / Email Settings

Parameter	Value	Inquiry Parameter	Setting CGI	Setting page
Use_Smtp_Auth	on/off	network	network_set.cgi	Network Configuration
Smtp_Server	<smtp server address>	network	network_set.cgi	Network Configuration
Sender_Email_Addr	<email address>	network	network_set.cgi	Network Configuration
Smtp_Auth_Method	digest_md5/login/plain	network	network_set.cgi	Network Configuration
Smtp_Auth_Id	<text>	network	network_set.cgi	Network Configuration
Smtp_Auth_Passwd	<text>	network	network_set.cgi	Network Configuration
Smtp_Auth_Realm	<text>	network	network_set.cgi	Network Configuration

DDNS Settings

Parameter	Value	Inquire Parameter	Setting CGI	Setting page
Regist	enable/disable	network	network_set.cgi	Network Configuration
Ddns_Serv	<server address>	network	network_set.cgi	Network Configuration
Regist_Id	<text>	network	network_set.cgi	Network Configuration
Regist_Pd	<text>	network	network_set.cgi	Network Configuration
Host_Name	<text>	network	network_set.cgi	Network Configuration
Manual_update	On/off	network	network_set.cgi	Network Configuration
Ddns_status	<text>	network	network_set.cgi	Network Configuration



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3. Event Trigger Configuration Setting command ([event_set.cgi](#))

Trigger Condition

Parameter	Value	Inquiry Parameter	Setting CGI	Setting page
Digital_Option	on/off	event	event_set.cgi	Event Configuration
Di_From	0 ~ 24	event	event_set.cgi	Event Configuration
Di_To	0 ~ 24	event	event_set.cgi	Event Configuration
Motion_Option	on/off	event	event_set.cgi	Event Configuration
Md_From	0 ~ 24	event	event_set.cgi	Event Configuration
Md_To	0 ~ 24	event	event_set.cgi	Event Configuration
Motion_Sensitivity	0 ~ 9	event	event_set.cgi	Event Configuration
Period_Option	on/off	event	event_set.cgi	Event Configuration
Pe_Sec	1 ~ 3600	event	event_set.cgi	Event Configuration
Pe_From	0 ~ 24	event	event_set.cgi	Event Configuration
Pe_To	0 ~ 24	event	event_set.cgi	Event Configuration

Image Capture Settings

Parameter	Value	Inquire Parameter	Setting CGI	Setting page
Before_Event	0 ~ 21	event	event_set.cgi	Event Configuration
After_Event	0 ~ 21	event	event_set.cgi	Event Configuration
Cap_Rate	1 / 2 / 3 / 5 / 7 / 10 / 15	event	event_set.cgi	Event Configuration
Img_Name	<text>	event	event_set.cgi	Event Configuration
Append_Ip	on / off	event	event_set.cgi	Event Configuration
Append_Date	on/off	event	event_set.cgi	Event Configuration
Append_Trigger	on/off	event	event_set.cgi	Event Configuration
Append_Sequence	on/off	event	event_set.cgi	Event Configuration

Trigger Output Settings

Parameter	Value	Inquire Parameter	Setting CGI	Setting page
Trg_Out	on/off	event	event_set.cgi	Event Configuration
Sup_Volt	0 ~ 255	event	event_set.cgi	Event Configuration
Send_Alm	on/off	event	event_set.cgi	Event Configuration
Trg_Send_Img	on/off	event	event_set.cgi	Event Configuration
Email_Addr	<email address>	event	event_set.cgi	Event Configuration
Email_Title	<text>	event	event_set.cgi	Event Configuration
Trg_Send_Ftp	on/off	event	event_set.cgi	Event Configuration
Ftp_Serv	<ftp server>	event	event_set.cgi	Event Configuration
Ftp_User	<ftp user>	event	event_set.cgi	Event Configuration
Ftp_Passwd	<ftp password>	event	event_set.cgi	Event Configuration
Ftp_Dir	<ftp directory>	event	event_set.cgi	Event Configuration



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4. Time Configuration Setting command ([time_set.cgi](#))

Time Server & Update Settings

Parameter	Value	Inquiry Parameter	Setting CGI	Setting page	Note
Time_Ntp	sync_ntp/manually	time	time_set.cgi	Time Configuration	
Time_Zone	1 ~ 68	time	time_set.cgi	Time Configuration	See Time Zone Reference
Update_Interval	0 ~ 65536	time	time_set.cgi	Time Configuration	
Ntp_Addr	<ntp server address>	time	time_set.cgi	Time Configuration	
Td_Year	1000 ~ 9999	time	time_set.cgi	Time Configuration	
Td_Month	1 ~ 12	time	time_set.cgi	Time Configuration	
Td_Date	1 ~ 31	time	time_set.cgi	Time Configuration	
Tc_Hour	0 ~ 23	time	time_set.cgi	Time Configuration	
Tc_Min	0 ~ 59	time	time_set.cgi	Time Configuration	
Tc_Sec	0 ~ 59	time	time_set.cgi	Time Configuration	

Daylight Saving Settings

Parameter	Value	Inquire Parameter	Setting CGI	Setting page
Enable_Day	on/off	time	time_set.cgi	Time Configuration
Start_Month	1 ~ 12	time	time_set.cgi	Time Configuration
Start_Day	1 ~ 31	time	time_set.cgi	Time Configuration
End_Month	1 ~ 12	time	time_set.cgi	Time Configuration
End_Day	1 ~ 31	time	time_set.cgi	Time Configuration

See Time Zone Reference at the end of this document.



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5. System Setting command ([system_set.cgi](#))

General Settings

Parameter	Value	Inquiry Parameter	Setting CGI	Setting page
Cam_Name	<text>	system	system_set.cgi	System Configuration
Cam_Locate	<text>	system	system_set.cgi	System Configuration
Supply_Op	supply/no	system	system_set.cgi	System Configuration
Access_Image_Option	enable/disable	system	system_set.cgi	System Configuration
Image_Name	<text>	system	system_set.cgi	System Configuration

PTZ Control Settings (for PTZ Version)

Parameter	Value	Inquiry Parameter	Setting CGI	Setting page
Ptz_Con	enable/disable	system	system_set.cgi	System Configuration
Ptz_Model	sj/lg	system	system_set.cgi	System Configuration



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Time Zone Reference

1	Midway Island, Samoa	35	Riga, Tallinn, Jerusalem
2	Hawaii	36	Baghdad, Kuwait, Riyadh
3	Alaska	37	Moscow, St. Petersburg
4	Pacific Time (US&Canada)	38	Volgograd, Nairobi
5	Tijuana	39	Tehran
6	Arizona	40	Abu Dhabi, Muscat
7	Mountain Time (US&Canada)	41	Baku, Tbilisi, Verevan
8	Central America	42	Kabul
9	Central Time (US&Canada)	43	Ekaterinburg
10	Mexico City, Saskatchewan	44	Islamabad, Karachi, Tashkent
11	Bogota, Lima, Quito	45	Calcutta, Chennai
12	Indiana (East)	46	Mumbai, New Delhi
13	Eastern Time (US&Canada)	47	Kathmandu
14	Atlantic Time (Canada)	48	Almaty, Novosibirsk, Astana
15	Caracas, La Paz, Santiago	49	Dhaka, Sri Jayawardenepura
16	Newfoundland	50	Rangoon
17	Brasilia, Buenos Aires	51	Bankok, Hanoi
18	Georgetown, Greenland	52	Jakarta, Krasnoyarsk
19	Mid-Atlantic	53	Beijing, Chongqing, Hong Kong
20	Azores, Cape verde Is	54	Urumqi, Irkutsk, Ulaan Baraar
21	Casablanca, Monrovia, Dublin	55	Kuala Lumpur, Singapore
22	Greenwich Mean Time	56	Perth, Taipei
23	Edinburgh, Lisbon, London	57	Osaka, Sapporo, Tokyo
24	Amsterdam, Berlin, Bern, Rome	58	Seoul
25	Stockholm, Vienna, Belgrade	59	Yakutsk
26	Bratislava, Budapest	60	Adelaide, Darwin
27	Ljubljana, Prague, Brussels	61	Brisbane, Canberra, Melbourne
28	Copenhagen, Madrid, Paris	62	Sydney, Guam, Port Moresby
29	Sarajevo, Skopje, Sofija	63	Hobart, Vladivostok
30	Vilnius, Warsaw, Zagreb	64	Magadan, Solomon Is.
31	West Central Africa	65	New Caledonia
32	Athens, Istanbul, Minsk	66	Auckland, Wellington
33	Bucharest, Cairo, Harare	67	Fiji, Kamchatka, Marshall Is.
34	Pretoria, Helsinki	68	Nuku'alofa



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PTZ Camera 550734

6. PTZ Control command ([ptz_webctl.cgi](#))

```
http://camera_ip/ptz\_webctl.cgi?id=<value>&passwd=<value>&cmd=<value>
```

cmd=<value>

Use one of the following values:

up
down
left
right
zoom_in
zoom_out
focus_near
focus_far
stop

In order to move the camera via te CGI commands, you need to send two commands to the camera:

Example: Move the camera up.

```
http://camera_ip/ptz_webctl.cgi?id=<value>&passwd=<value>&cmd=up  
http://camera_ip/ptz_webctl.cgi?id=<value>&passwd=<value>&cmd=stop
```

Example: Move the camera left.

```
http://camera_ip/ptz_webctl.cgi?id=<value>&passwd=<value>&cmd=left  
http://camera_ip/ptz_webctl.cgi?id=<value>&passwd=<value>&cmd=stop
```

Example: ZOOM the camera in

```
http://camera_ip/ptz_webctl.cgi?id=<value>&passwd=<value>&cmd=zoom_in  
http://camera_ip/ptz_webctl.cgi?id=<value>&passwd=<value>&cmd=stop
```

Each DIRECTION command needs to be followed by a STOP command. If you do not send the STOP commend, the camera keeps on moving until it reaches the physical limit of the PTZ unit (like all the way up, all the way down).