



**ACTi SDK-10000**  
**URL Command Edition**  
**V1.4**

# **Programming Guide**



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## **ACTi SDK-10000**

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# 1

## URL Command Index

### MPEG4 Category

This category lists the commands that is related to MPEG-4 settings.

The syntax of the command is listed as follow:

`http://<IP Address>/cgi-bin/mpeg4?USER=<Account Name>&PWD=<Password>&<Parameters>`  
or

`http://<Account Name>:<Password>@<IP Address>/cgi-bin/cmd/mpeg4?<Parameters>`

The notation of the value inside is listed as follow:

**R:** Read

**W:** Write

**\***: On the fly change. Does not need to execute save and reboot to the firmware; all other parameters without \* mark need to run save and reboot to the firmware to take effect.

**G:** Global setting, meaning that when user sets the value for Global setting, then all channels in the sub-unit are applied automatically

--: Not supported

**C:** Individual channels under a multi-channel device

**<RED color>**: Indicates that the setting of 2-channel device is different from that of 8-channel devices

| MPEG4             |   |            |      |            |            |
|-------------------|---|------------|------|------------|------------|
| Parameter         | Value   | Format     | 1-CH | 2-CH       | 8-CH       |
| VIDEO_BRIGHTNESS  | 0~100   | <value>    | RW*  | G:--,C:RW* | G:--,C:RW* |
| VIDEO_CONTRAST    | 0~100   | <value>    | RW*  | G:--,C:RW* | G:--,C:RW* |
| VIDEO_SATURATION  | 0~100   | <value>    | RW*  | G:--,C:RW* | G:--,C:RW* |
| VIDEO_HUE         | 0~100   | <value>    | RW*  | G:--,C:RW* | G:--,C:RW* |
| VIDEO_RESOLUTION  | NTSC:<br>N720x480/N352x240/N160x112<br><br>PAL : P720x576/P352x288/P176x144   | <string>   | RW*  | G:--,C:RW* | G:--,C:RW* |
| VIDEO_BITRATE     | 28K/56K/128K/256K/384K/500K/750K<br>/<br>1M/1.2M/1.5M/2M/2.5M/3M  | <string>   | RW*  | G:--,C:RW* | G:--,C:RW* |
| VIDEO_FPS_NUM     | 1/2/3/4/5/6/7/10/15/30 for NTSC<br>1/2/3/4/5/6/8/12/25 for PAL  | <value>    | RW*  | G:--,C:RW* | G:--,C:RW* |
| VIDEO_CAMERA_NAME | Max sizes: 20 bytes   | <string>   | RW   | G:--,C:RW  | G:--,C:RW  |
| VIDEO_STATUS      | VIDEO_BRIGHTNESS='43'<br>VIDEO_CONTRAST='50'<br>VIDEO_SATURATION='58'<br>VIDEO_HUE='50'<br>VIDEO_RESOLUTION='N720x480'<br>VIDEO_BITRATE='1.2M'<br>VIDEO_FPS='MODE1'<br>VIDEO_FPS_NUM='30'<br>VIDEO_CAMERA_NAME='Camera-1' | text/plain | RO*  | G:--,C:RO* | G:--,C:RO* |
| DIO_OUTPUT        | 0x00: DO1 LOW, DO2 LOW<br>0x01: DO1 HI, DO2 LOW<br>0x02: DO1 LOW, DO2 HI<br>0x03: DO1 HI, DO2 HI  | <hex>      | WO*  | G:WO*,C:-- | G:--,C:RW* |
| DIO_STATUS        | BIT0: DI1 status<br>BIT1: DI2 status<br>BIT2: Reserved<br>BIT3: Reserved<br>BIT4: DO1 status<br>BIT5: DO2 status<br>BIT6: Reserved<br>BIT7: Reserved  | text/plain | RO*  | G:RO*,C:-- | G:--,C:RW* |
| MOTION_ENABLED    | 0x00: Disabled  | <hex>      | RW*  | G:--,C:RW* | G:--,C:RW* |

|                         |   |  |     |            |            |
|-------------------------|---|--|-----|------------|------------|
|                         | 0x01: Enabled   |  |     |            |            |
| MOTION_SETTING          | window: 1~3<br>x_upper: NTSC:0~720/PAL:0~720<br>y_upper: NTSC:0~720/PAL:0~720<br>x_bottom: NTSC:0~480/PAL:0~576<br>y_bottom: NTSC:0~480/PAL:0~576<br>sensitive: 0~100 | <window><x_upper>,<y_upper>,<x_bottom>,<y_bottom><sensitive> | WO* | G:--,C:WO* | G:--,C:WO* |
| MOTION_SENSITIVE        | window: 1~3<br>sensitive: 0~100   | <window>,<sensitive>   | WO* | G:--,C:WO* | G:--,C:WO* |
| MOTION_STATUS           | MOTION_STATUS=1,0,0,0,0<br>MOTION_STATUS=2,0,0,0,0<br>MOTION_STATUS=3,0,0,0,0   | text/plain   | RO* | G:--,C:RO* | G:--,C:RO* |
| SERIAL_SETTING          | line: 8N1/8O1/8E1<br>baudrate: 2400/4800/9600/19200<br>38400/57600/115200   | <line>,<baudrate>  | RW* | G:RW*,C:-- | G:--,C:RW* |
| SERIAL_ASCII            | ascii string  | <ascii string>   | WO* | G:WO*,C:-- | G:--,C:WO* |
| SERIAL_HEX              | hex string  | <hex string>   | WO* | G:WO*,C:-- | G:--,C:WO* |
| VIDEO_VARIABLE_FPS      | id: get session id form sdk<br>fps: NTSC: 1/3/6/30<br>PAL : 1/3/5/25  | <id>,<fps>   | WO* | G:--,C:WO* | G:--,C:WO* |
| RTP_MULTICAST_STREAMING | PLAY/PAUSE  | <string>   | RW* | G:--,C:RW* | G:--,C:RW* |

# SYSTEM Category

This category lists the commands that is related to system settings.

The syntax of the command is listed as follow:

`http://<IP Address>/cgi-bin/system?USER=<Account Name>&PWD=<Password>&<Parameters>`

or

`http://<Account Name>:<Password>@<IP Address>/cgi-bin/cmd/system?<Parameters>`

The notation of the value inside is listed as follow:

**R:** Read

**W:** Write

**\***: On the fly change. Does not need to execute save and reboot to the firmware; all other parameters without \* mark need to run save and reboot to the firmware to take effect.

**G:** Global setting, meaning that when user sets the value for Global setting, then all channels in the sub-unit are applied automatically

**--**: Not supported

**C:** Individual channels under a multi-channel device

**<RED color>**: Indicates that the setting of 2-channel device is different from that of 8-channel devices

| SYSTEM             |  |              |      |           |             |
|--------------------|--|--------------|------|-----------|-------------|
| Parameter          | Value  | Format       | 1-CH | 2-CH      | 8-CH        |
| SAVE_REBOOT        | SAVE_REBOOT OK   | text/plain   | WO*  | G:WO*,C-- | G:WO*,C:WO* |
| SAVE               | Save Finish  | Test/plain   | WO   | G:WO,C--  | G:WO,C:WO   |
| REBOOT             | REBOOT OK  | text/plain   | WO*  | G:WO*,C-- | G:WO*,C:WO* |
| FACTORY_DEFAULT    | Factory Default Finish   | text/plain   | WO   | G:WO,C--  | G:WO,C:WO   |
| SYSTEM_INFO        | Firmware Version =<br>A1D-P2N-V2.00.07-AC<br><br>MAC Address = 00:0F:7C:00:00:67<br><br>Production ID =<br>SED2400-04I-8-00027<br><br>Factory Default Type = NTSC,<br>Composite, Two Ways Audio (0x71) | text/plain   | RO*  | G:RO*,C-- | G:RO*,C:RO* |
| SYSTEM_PROPERTY    | SYSTEM='E'<br><br>TYPE='A'<br><br>NO_OF_CHANNEL='01'<br><br>MULTIPLEXING='X'<br><br>NO_OF_AUDIO_WAYS='2'<br><br>AUDIO_TYPE='PCM'<br><br>MOTION_TYPE='0'<br><br>PROTOCOL_TYPE='2'                       | text/plain   | RO*  | G:RO*,C-- | G:RO*,C:RO* |
| LAN_HOSTNAME       | Max size: 30bytes  | <string>     | RW   | G:RW,C--  | G:RW,C:--   |
| WAN                | WAN_TYPE='1'<br><br>WAN_IP='10.0.0.1'<br><br>WAN_NETMASK='255.255.255.0'<br><br>WAN_GATEWAY='10.0.0.254'<br><br>WAN_PPPOE_USERNAME=""<br><br>WAN_PPPOE_PASSWORD=                                       | text/plain   | RO*  | G:RO*,C-- | G:RO*,C:--  |
| WAN_TYPE           | 1: Dynamic IP<br>2: Static IP<br>3: PPPoE  | <value>      | RW   | G:RW,C--  | G:RW,C:--   |
| WAN_IP             | Static ip address  | <ip address> | RW   | G:RW,C--  | G:RW,C:--   |
| WAN_NETMASK        | Static netmask ip  | <ip address> | RW   | G:RW,C--  | G:RW,C:--   |
| WAN_GATEWAY        | Static gateway ip  | <ip address> | RW   | G:RW,C--  | G:RW,C:--   |
| WAN_PPPOE_USERNAME | Max sizes: 60bytes   | <string>     | RW   | G:RW,C--  | G:RW,C:--   |
| WAN_PPPOE_PASSWORD | Max sizes: 60bytes   | <string>     | RW   | G:RW,C--  | G:RW,C:--   |
| WAN_STATUS         | IP Address : 172.16.3.15<br><br>Netmask : 255.255.255.0  | text/plain   | RO*  | G:RO*,C-- | G:RO*,C:--  |

|               |  |              |     |            |            |
|---------------|--|--------------|-----|------------|------------|
|               | Gateway : 172.16.3.253<br>DNS Server : 172.16.5.19 172.16.5.22<br>DNS Host :<br>WAN Connect Status : Connect<br>DNS Connect Status : Connect<br>DDNS Connect Status : Disconnect   |              |     |            |            |
| V2_WAN_STATUS | WAN_TYPE='1'<br>WAN_IP='172.16.3.27'<br>WAN_NETMASK='255.255.255.0'<br>WAN_GATEWAY='172.16.3.253'  | text/plain   | RO* | G:RO*,C:-- | G:RO*,C:-- |
| DNS_PRIMARY   | Primary domain name server   | <ip address> | RW  | G:RW,C:--  | G:RW,C:--  |
| DNS_SECONDARY | Secondary domain name server   | <ip address> | RW  | G:RW,C:--  | G:RW,C:--  |
| DNS           | DNS_PRIMARY=""<br>DNS_SECONDARY=""   | text/plain   | RO* | G:RO*,C:-- | G:RO*,C:-- |
| DDNS_TYPE     | 1: Disabled<br>2: Enabled  | <value>      | RW  | G:RW,C:--  | G:RW,C:--  |
| DDNS_HOSTNAME |  | <string>     | RW  | G:RW,C:--  | G:RW,C:--  |
| DDNS_SERVICE  | dyndns: members.dyndns.org<br>qdns: members.3322.org<br>ezip: www.EZ-IP.Net<br>pgpow: www.penguinpowered.com<br>dhs: members.fhs.org<br>ods: update.ods.com<br>tzo: cgi.tzo.com<br>easydns: members.easydns.com<br>justlinux: www.justlinux.com<br>dyns: www.dyns.cx<br>hn: www.hn.org<br>zoneedit: www.zoneedit.com | <string>     | RW  | G:RW,C:--  | G:RW,C:--  |
| DDNS_USERNAME | Max sizes: 30bytes   | <string>     | RW  | G:RW,C:--  | G:RW,C:--  |
| DDNS_PASSWORD | Max sizes: 30bytes   | <string>     | RW  | G:RW,C:--  | G:RW,C:--  |
| DDNS          | DDNS_TYPE='1'<br>DDNS_HOSTNAME=""<br>DDNS_SERVICE='dyndns'<br>DDNS_USERNAME=""<br>DDNS_PASSWORD=""   | text/plain   | RO* | G:RO*,C:-- | G:RO*,C:-- |
| DATE_TYPE     | 1: Manual setting<br>2: NTP/SNTP   | <value>      | RW  | G:RW,C:--  | G:RW,C:--  |
| DATE_SNTP_IP  |  | <ip address> | RW  | G:RW,C:--  | G:RW,C:--  |

|                             |   |                    |     |           |                       |
|-----------------------------|---|--------------------|-----|-----------|-----------------------|
| DATE_Sntp_UPDATE            | 30: 5 min<br>3600: 1 hour<br>21600: 6 hour<br>43200: 12 hour<br>86400: 1 day  | <value>            | RW  | G:RW,C--  | G:RW,C:--             |
| DATE_Manual_DATE            | MM: Month<br>DD: Day<br>hh: Hour<br>mm: Minute<br>YYYY: Year  | <MMDDhhmm<br>YYYY> | RW  | G:RW,C--  | G:RW,C:--             |
| DATE_Manual_TIME            | hh: Hour<br>mm: Minute<br>ss: Second  | < hh:mm:ss>        | RW  | G:RW,C--  | G:RW,C:--             |
| DATE_Manual_ZONE            | -12 ~ +00 ~ +13   | <string>           | RW  | G:RW,C--  | G:RW,C:--             |
| DATE                        | DATE_TYPE='2'<br>DATE_Sntp_IP='192.168.0.2'<br>DATE_Sntp_UPDATE='86400'<br>DATE_Manual_DATE='0101000020<br>04'<br>DATE_Manual_TIME='00:00:00'<br>DATE_Manual_ZONE='+00' | text/plain         | RO* | G:RO*,C-- | G:RO*,C:--            |
| VIDEO_TOS_TYPE              | 1: Disabled<br>2: Enabled   | <value>            | RW  | G:RW,C--  | G:RO*,C:RW<br>G=CH 1  |
| VIDEO_TOS_PRIORITY          | Minimize-Delay<br>Maximize-Throughput<br>Maximize-Reliability<br>Minimize-Cost<br>Normal-Service  | <string>           | RW  | G:RW,C--  | G:RO*,C:RW<br>G=CH 1  |
| TOS                         | VIDEO_TOS_TYPE='1'<br>VIDEO_TOS_PRIORITY='Normal-Ser<br>vice'   | text/plain         | RO* | G:RO*,C-- | G:RO*,C:RO*<br>G=CH 1 |
| ACCOUNT_ROOT_NAME           | Max sizes: 30bytes  | <string>           | RW  | G:RW,C--  | G:RW,C:RO*            |
| ACCOUNT_ROOT_PASS<br>WORD   | Max sizes: 30bytes  | <string>           | RW  | G:RW,C--  | G:RW,C:RO*            |
| ACCOUNT_USER_NAME<br>_1     | Max sizes: 30bytes  | <string>           | RW  | G:RW,C--  | G:RW,C:RO*            |
| ACCOUNT_USER_PASS<br>WORD_1 | Max sizes: 30bytes  | <string>           | RW  | G:RW,C--  | G:RW,C:RO*            |
| ACCOUNT_USER_NAME<br>_2     | Max sizes: 30bytes  | <string>           | RW  | G:RW,C--  | G:RW,C:RO*            |
| ACCOUNT_USER_PASS<br>WORD_2 | Max sizes: 30bytes  | <string>           | RW  | G:RW,C--  | G:RW,C:RO*            |

|                           |   |            |     |           |            |
|---------------------------|---|------------|-----|-----------|------------|
| ACCOUNT_USER_NAME_3       | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_PASS_WORD_3  | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_NAME_4       | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_PASS_WORD_4  | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_NAME_5       | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_PASS_WORD_5  | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_NAME_6       | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_PASS_WORD_6  | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_NAME_7       | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_PASS_WORD_7  | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_NAME_8       | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_PASS_WORD_8  | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_NAME_9       | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_PASS_WORD_9  | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_NAME_10      | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT_USER_PASS_WORD_10 | Max sizes: 30bytes  | <string>   | RW  | G:RW,C--  | G:RW,C:RO* |
| ACCOUNT                   | ACCOUNT_ROOT_NAME='Admin'<br>ACCOUNT_ROOT_PASSWORD='123456'<br>ACCOUNT_USER_NAME_1="<br>ACCOUNT_USER_PASSWORD_1="<br>ACCOUNT_USER_NAME_2="<br>ACCOUNT_USER_PASSWORD_2="<br>ACCOUNT_USER_NAME_3="<br>ACCOUNT_USER_PASSWORD_3="<br>ACCOUNT_USER_NAME_4="<br>ACCOUNT_USER_PASSWORD_4="<br>ACCOUNT_USER_NAME_5="<br>ACCOUNT_USER_PASSWORD_5=" | text/plain | RO* | G:RO*,C-- | G:RW,C:RO* |



|                |   |            |     |            |             |
|----------------|---|------------|-----|------------|-------------|
|                | ACCOUNT_USER_NAME_6=" ACCOUNT_USER_PASSWORD_6=" ACCOUNT_USER_NAME_7=" ACCOUNT_USER_PASSWORD_7=" ACCOUNT_USER_NAME_8=" ACCOUNT_USER_PASSWORD_8=" ACCOUNT_USER_NAME_9=" ACCOUNT_USER_PASSWORD_9=" ACCOUNT_USER_NAME_10=" ACCOUNT_USER_PASSWORD_10=" |            |     |            |             |
| PORT_HTTP      | Http port number  | <value>    | RW  | G:RW,C:--  | G:RW,C:RO*  |
| PORT_SEARCH_1  | Client send search command to this port   | <value>    | RW  | G:RW,C:--  | G:RW,C:RO*  |
| PORT_SEARCH_2  | Server return search result to this port  | <value>    | RW  | G:RW,C:--  | G:RW,C:RO*  |
| PORT_REGISTER  | Register port for TCP1.0 streaming  | <value>    | RW  | G:--,C:--  | G:--,C:--   |
| PORT_CONTROL   | IO Control port for TCP1.0/2.0 streaming  | <value>    | RW  | G:--,C:RW  | G:RW,C:RO*  |
| PORT_VIDEO     | Video/Audio streaming port for TCP1.0/2.0   | <value>    | RW  | G:--,C:RW  | G:RW,C:RO*  |
| PORT_MULTICAST | Multicast streaming port for TCP1.0/2.0   | <value>    | RW  | G:RW,C:--  | G:RW,C:RO*  |
| V2_PORT_RTSP   | RTSP port number  | <value>    | RW  | G:--,C:RW  | G:RW,C:RO*  |
| PORT           | PORT_HTTP='80' PORT_SEARCH_1='6005' PORT_SEARCH_2='6006' PORT_REGISTER='6000' PORT_CONTROL='6001' PORT_VIDEO='6002' PORT_MULTICAST='5000' V2_PORT_RTSP='7070'   | text/plain | RO* | G:--,C:RO* | G:RO*,C:RO* |
| LANGUAGE       | 0: English 1: Traditional Chinese 2: Simplified Chinese 3: Japanese 4: Spanish 5: Italian 6: German 7: Portuguese   | <value>    | RW  | G:RW,C:--  | G:RW,C:RO*  |

|                             |   |              |    |           |             |
|-----------------------------|---|--------------|----|-----------|-------------|
|                             | 8: Czech<br>9: French   |              |    |           |             |
| V2_STREAMING_TYPE           | 1: TCP Version 1.0<br>2: TCP Version 2.0  | <value>      | RW | G:RW,C:-- | G:RO,C:RO*  |
| V2_STREMAING_METHO<br>D     | 0: TCP Only for TCP2.0<br>1: Multicast Only for TCP2.0<br>2: TCP & Multicast for TCP2.0<br>3: RTP over UDP for TCP2.0<br>4: RTP over Multicast for TCP2.0<br>5: RTP over UDP & Multicast for TCP2.0 | <value>      | RW | G:RW,C:-- | G:--,C:RW   |
| V2_MULTICAST_IF             | 0: LAN Port<br>1: WAN Port  | <value>      | RW | G:RW,C:-- | G:RO, C:--  |
| V2_MULTICAST_IP             | 224.3.1.0 ~ 239.255.255.255 for TCP2.0  | <ip address> | RW | G:--,C:RW | G:RW,C:RO*  |
| V2_PORT_RTP_MULTI_V<br>IDEO | Video port for rtp over multicast   | <value>      | RW | G:--,C:RW | G:RW,C:RO*  |
| V2_PORT_RTP_MULTI_A<br>UDIO | Audio port for rtp over multicast   | <value>      | RW | G:--,C:RW | G:RW,C:RO*  |
| V2_FAILOVER                 | 0: Disabled<br>1: Enabled   | <value>      | RW | G:RW,C:-- | G:--, C:--  |
| IGMP_ENABLED                | 0: Disabled<br>1: Enabled   | <value>      | RW | G:RW,C:-- | G:RW,C:RO*  |
| SPEED_LAN                   | 0: Auto detect speed<br>1: 100Mbps/Full Duplex<br>2: 100Mbps/Half Duplex<br>3: 10Mbps/Full Duplex<br>4: 10Mbps/Half Duplex  | <value>      | RW | G:RW,C:-- | G:--, C:--  |
| SPEED_WAN                   | 0: Auto detect speed<br>1: 100Mbps/Full Duplex<br>2: 100Mbps/Half Duplex<br>3: 10Mbps/Full Duplex<br>4: 10Mbps/Half Duplex  | <value>      | RW | G:RW,C:-- | G:RW,C:--   |
| VIDEO_MULTICAST_TTL         | 1~255   | <value>      | RW | G:--,C:RW | G:RO*, C:RW |
| VIDEO_MULTICAST_IP          | 1~255 multicast ip for TCP1.0   | <value>      | RW | G:--,C:-- | G:--,C:--   |
| VIDEO_LAN                   | DISABLE/TCP MULTICAST<br>Streaming method for TCP1.0  | <value>      | RW | G:--,C:-- | G:--,C:--   |
| VIDEO_WAN                   | DISABLE/TCP MULTICAST<br>Streaming method for TCP1.0  | <value>      | RW | G:--,C:-- | G:--,C:--   |



# HTTP Code Status

| HTTP Code | HTTP Text           | Description   |
|-----------|---------------------|---|
| 200       | OK                  | The request has succeeded, but an application error can still occur, which will be returned as an application error code. |
| 204       | No Content          | The server has fulfilled the request, but there is no new information to send back.                                       |
| 400       | Bad Request         | The request had bad syntax or was inherently impossible to be satisfied.  |
| 401       | Unauthorized        | The request requires user authentication or the authorization has been refused.   |
| 404       | Not Found           | The server has not found anything matching the request.   |
| 409       | Conflict            | The request could not be completed due to a conflict with the current state of the resource.                              |
| 500       | Internal Error      | The server encountered an unexpected condition which prevented it from fulfilling the request.                            |
| 503       | Service Unavailable | The server is unable to handle the request due to temporary overload.   |

Example :

## Return success http context

```
HTTP/1.0 200 OK\r\n
Content-Type: text/plain\r\n
\r\n
```

## Return failed http context

```
HTTP/1.0 200 OK\r\n
Content-Type: text/plain\r\n
\r\n
ERROR: error description
```

# 2

## URL Sample Code

### URL Command for Mpeg4

**CHANNEL=n** might be added in the URL command where **n** is in the range of 1 to maximum channels. For example, the **n** is in the range of 1 and 8 for the 8-channel video server device. The **CHANNEL=n** should be followed by **PWD** parameter in an URL command. If the **CHANNEL=n** is missed in this method (mpeg4), the **CHANNEL=1** is used when read.

#### How to get video status

**Syntax** `http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_STATUS`

#### How to get brightness

**Syntax** `http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_BRIGHTNESS`

#### How to set brightness

**Syntax** `http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_BRIGHTNESS=a`

| <parameter>      | <values>   | Description   |
|------------------|------------|---|
| VIDEO_BRIGHTNESS | a: 0 ~ 100 | 0: -25IRE<br>.<br>..<br>50: 0IRE<br>.<br>..<br>100: 25IRE |

#### How to get contrast

**Syntax** `http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_CONTRAST`

#### How to set contrast

**Syntax** `http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_CONTRAST=a`

| <parameter>    | <values>   | Description      |
|----------------|------------|------------------|
| VIDEO_CONTRAST | a: 0 ~ 100 | 0: 0%<br>.<br>.. |

|  |  |           |
|--|--|-----------|
|  |  | 50: 100%  |
|  |  | . ..      |
|  |  | 100: 200% |

## How to get saturation

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;VIDEO_SATURATION</code> |
|---------------|--|

## How to set saturation

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;VIDEO_SATURATION=a</code> |
|---------------|--|

| <parameter>      | <values>   | Description                              |
|------------------|------------|--|
| VIDEO_SATURATION | A: 0 ~ 100 | 0: 0%<br>.<br>50: 100%<br>.<br>100: 200% |

## How to get hue

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;VIDEO_HUE</code> |
|---------------|---|

## How to set hue

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;VIDEO_HUE=a</code> |
|---------------|---|

| <parameter>      | <values>   | Description   |
|------------------|------------|---|
| VIDEO_BRIGHTNESS | a: 0 ~ 100 | 0: -180 degree<br>.<br>50: 0 degree<br>.<br>100: 180 degree |

## How to get resolution

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;VIDEO_RESOLUTION</code> |
|---------------|--|

## How to set resolution

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;VIDEO_RESOLUTION=xxxx</code> |
|---------------|---|

| <parameter>      | <values>     | Description   |
|------------------|--------------|---|
| VIDEO_RESOLUTION | Xxxx: string | N720x480: NTSC 720x480<br>N320x240: NTSC 320x240<br>N160x112: NTSC 160x112<br>P720x576: PAL 720x576<br>P352x288: PAL 352x288<br>P176x144: PAL 176x144 |

## How to get bitrate

|               |  |
|---------------|--|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_BITRATE |
|---------------|--|

## How to set bitrate

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_BITRATE=xxxx |
|---------------|---|

| <parameter>   | <values>     | Description  |
|---------------|--------------|--|
| VIDEO_BITRATE | xxxx: string | 28K: 28K bps<br>56K: 56K bps<br>128K: 128K bps<br>256K: 256K bps<br>384K: 384K bps<br>500K: 500K bps<br>750K: 750K bps<br>1M: 1M bps<br>1.5M: 1.5M bps<br>2M: 2M bps<br>2.5M: 2.5M bps<br>3M: 3M bps |

## How to get fps

|               |  |
|---------------|--|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_FPS_NUM |
|---------------|--|

## How to set fps

|               |  |
|---------------|--|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_FPS_NUM=a |
|---------------|--|

| <parameter>   | <values>  | Description |
|---------------|---|-------------|
| VIDEO_FPS_NUM | a: NTSC - 1,2,3,4,5,6,7,10,15,30<br>PAL - 1,2,3,4,5,6,8,12,25 |             |

## How to get camera name

|               |  |
|---------------|--|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_CAMERA_NAME |
|---------------|--|

## How to set camera name

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_CAMERA_NAME=xxxx |
|---------------|---|

| <parameter>       | <values>     | Description                  |
|-------------------|--------------|------------------------------|
| VIDEO_CAMERA_NAME | Xxxx: string | String max length : 15 bytes |

## How to get DIO status

| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&DIO_STATUS |  |
|---------------|---|--|
| <parameter>   | <values>  | Description  |
| CHANNEL       |   | Rackmount : Support<br>Multi-Channel : Not Support   |
| DIO_STATUS    | 0xnn: hexadecimal   | BIT0: DI1 status<br>BIT1: DI2 status<br>BIT2: Reserved<br>BIT3: Reserved<br>BIT4: DO1 status<br>BIT5: DO2 status<br>BIT6: Reserved<br>BIT7: Reserved |

## How to set DO

|               |  |
|---------------|--|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&DIO_OUTPUT=0xnn |
|---------------|--|

| <parameter> | <values>          | Description  |
|-------------|-------------------|--|
| CHANNEL     |                   | Rackmount: Support<br>Multi-Channel: Not Support   |
| DIO_OUTPUT  | 0xnn: hexadecimal | 0x00 : DO1 LOW, DO2 LOW<br>0x01 : DO1 HI, DO2 LOW<br>0x02 : DO1 LOW, DO2 HI<br>0x03 : DO1 HI, DO2 HI |



## How to get motion enabled

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;MOTION_ENABLED</code> |
|---------------|--|

## How to set motion enabled

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;MOTION_ENABLED=0xnn</code> |
|---------------|---|

| <parameter>    | <values>        | Description                                     |
|----------------|-----------------|---|
| MOTION_ENABLED | 0xnn: 0x00,0x01 | 0x00 : Motion disabled<br>0x01 : Motion enabled |

## How to get motion config

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;MOTION_STATUS</code> |
|---------------|---|

## How to set motion config

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;MOTION_SETTING=a,b,c,d,e</code> |
|---------------|--|

| <parameter>    | <values>   | Description  |
|----------------|--|--|
| MOTION_SETTING | a: 1 ~ 3<br>b: 0 ~ 720<br>c: 0 ~ 480/576<br>d: 0 ~ 720<br>f: 0 ~ 480/576<br>g: 0 ~ 100 | a: region number<br>b: x upper<br>c: y upper<br>d: x lower<br>f: y lower<br>g: sensitive |

## How to set motion sensitive

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;MOTION_SENSITIVE=a,b</code> |
|---------------|--|

| <parameter>    | <values>               | Description  |
|----------------|------------------------|--|
| MOTION_SETTING | a: 1 ~ 3<br>b: 0 ~ 100 | a: region number<br>b:<br>0: less sensitive<br>. . .<br>50: middle sensitive<br>. . .<br>100: more sensitive |

## How to get serial config

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&SERIAL_SETTING |
|---------------|---|

## How to set serial config

|               |  |
|---------------|--|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&SERIAL_SETTING=xxxx,a |
|---------------|--|

| <parameter>    | <values>   | Description                                      |
|----------------|--|--|
| CHANNEL        |  | Rackmount: Support<br>Multi-Channel: Not Support |
| SERIAL_SETTING | xxxx: 8N1,801,8E1<br>a: 2400,4800,9600,19200<br>38400,57600,115200 | xxxx: Line Control<br>a: Bitrate                 |

## How to send ASCII to serial

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&SERIAL_ASCII=xxxxxxxxx |
|---------------|---|

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |

## How to send HEX to serial

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&SERIAL_HEX=xxxxxxxxx |
|---------------|---|

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |

## How to on-fly-change variable fps

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/mpeg4?USER=Admin&PWD=123456&CHANNEL=n&VIDEO_VARIABLE_FPS=a,b |
|---------------|---|

| <parameter>        | <values>                                       | Description   |
|--------------------|--|---|
| VIDEO_VARIABLE_FPS | a: client session id<br>b: variable frame rate | A: get client session id from SDK<br>b: NTSC: 1,3,6,30<br>PAL: 1,3,5,25 |

# URL Command for System

**CHANNEL=n** might be added in the URL command where **n** is in the range of 1 to maximum channels. For example, the **n** is in the range of 1 and 8 for the 8-channel video server device. The **CHANNEL=n** should be followed by **PWD** parameter in an URL command.

## How to save parameter to flash

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/update?USER=Admin&amp;PWD=123456&amp;SAVE</code> |
|---------------|---|

Save the configuration file of system to the flash

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/update?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;SAVE</code> |
|---------------|---|

Save the configuration file of the nth video server to the flash

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |

Http return context

HTTP/1.0 200 OK\r\n

Content-Type: text/plain\n

\n

Save Finish

## How to reboot system

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;REBOOT</code> |
|---------------|---|

Reboot the whole system included all of video servers

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;REBOOT</code> |
|---------------|---|

Reboot the nth video server only

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |

## How to save parameter to flash and reboot system

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;SAVE_REBOOT</code> |
|---------------|--|

Save the configuration file of system and reboot included all of video servers

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;SAVE_REBOOT</code> |
|---------------|--|

Save the configuration file of the nth video server and reboot the nth video server

| <parameter> | <values> | Description        |
|-------------|----------|--------------------|
| CHANNEL     |          | Rackmount: Support |

|  |  |                            |
|--|--|----------------------------|
|  |  | Multi-Channel: Not Support |
|--|--|----------------------------|

## How to set factory default

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&FACTORY_DEFAULT |
|---------------|---|

Restore the factory default setting in the system

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&FACTORY_DEFAULT |
|---------------|---|

Restore the factory default setting in the nth video server.

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |

**Http return context**

```
HTTP/1.0 200 OK\r\n
Content-Type: text/plain\r\n
\r\n
Factory Default Finish
```

## How to get system information

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&SYSTEM_INFO |
|---------------|---|

Read the SYSTEM\_INFO of the system.

**Http return context**

```
Firmware Version = A8D-R2N-V2.00.01-AC
MAC Address = 00:0F:7C:00:00:80
Production ID = SED2610
Factory Default Type = NTSC, Composite, Two Ways Audio (0x71).
NOTE: The return value of Factory Default Type is the CHANNEL=1 video server's value.
```

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&SYSTEM_INFO |
|---------------|---|

Read the SYSTEM\_INFO of the nth video server.

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |

**Http return context**

```
Firmware Version = A1D-P2N-V2.00.07-AC
MAC Address = 00:0F:7C:00:00:67
Production ID = SED2400-04I-8-00027
Factory Default Type = NTSC, Composite, Two Ways Audio (0x71)
```

## How to get system property

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&SYSTEM_PROPERTY |
|---------------|---|

Read the SYSTEM\_PROPERTY of the system. All of the return values are the same as the values of the CHANNEL=1 video server.

**Http return context**

```
SYSTEM='E'
```

```
TYPE='A'  
NO_OF_CHANNEL='01'  
MULTIPLEXING='X'  
NO_OF_AUDIO_WAYS='2'  
AUDIO_TYPE='PCM'  
MOTION_TYPE='0'  
PROTOCOL_TYPE='2'
```

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&SYSTEM_PROPERTY |
|---------------|---|

Read the SYSTEM\_PROPERTY of the nth video server.

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |

#### Http return context

```
SYSTEM='E'  
TYPE='A'  
NO_OF_CHANNEL='01'  
MULTIPLEXING='X'  
NO_OF_AUDIO_WAYS='2'  
AUDIO_TYPE='PCM'  
MOTION_TYPE='0'  
PROTOCOL_TYPE='2'
```

## How to get protocol type

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&PROTOCOL_TYPE |
|---------------|---|

Read the PROTOCOL\_TYPE of the system. The 2 is always returned.

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&PROTOCOL_TYPE |
|---------------|---|

Read the PROTOCOL\_TYPE of the nth video server which is the same as the setting in the system

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |

| <parameter>   | <values> | Description  |
|---------------|----------|--|
| PROTOCOL_TYPE | a: 1 ~ 2 | 1: Run version 1 protocol<br>2: Run Version 2 protocol |

## How to get LAN

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&LAN |
|---------------|---|

Read the LAN HOSTNAME settings in the system

## How to get LAN hostname

|               |  |
|---------------|--|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&LAN_HOSTNAME |
|---------------|--|

Get the LAN HOSTNAME setting in the system

## How to set LAN hostname

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;LAN_HOSTNAME=xxxxxxxx</code> |
|---------------|--|

Set the LAN HOSTNAME to the system and all of video servers.

## How to get WAN

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;WAN</code> |
|---------------|--|

Read the WAN port settings in the system

## How to set dynamic ip for WAN

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;WAN_TYPE=1</code> |
|---------------|---|

Set the dynamic type of WAN in the system.

## How to set static ip for WAN

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;WAN_TYPE=2&amp;<br/>WAN_IP=x.x.x.x&amp;WAN_NETMASK=x.x.x.x&amp;WAN_GATEWAY=x.x.x.x</code> |
|---------------|---|

Set the static wan ip in the system.

| <parameter> | <values>             | Description                   |
|-------------|----------------------|-------------------------------|
| WAN_TYPE    | n : 1 ~ 2            | 1: Dynamic IP<br>2: Static IP |
| WAN_IP      | x.x.x.x : IP address | Static IP address             |
| WAN_NETMASK | x.x.x.x : NetMask    | Netmask, ex: 255.255.255.0    |
| WAN_GATEWAY | x.x.x.x : gateway IP | Default gateway ip            |

## How to get DNS

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;DNS</code> |
|---------------|--|

Get the DNS settings in the system

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;DNS</code> |
|---------------|--|

Get the DNS settings in the nth video server which should be the same as the settings in the system

## How to set DNS

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;<br/>DNS_PRIMARY=x.x.x.x&amp;DNS_SECONDARY=x.x.x.x</code> |
|---------------|---|

Set the DNS in the system and all of video servers.

| <parameter>   | <values>             | Description                     |
|---------------|----------------------|---------------------------------|
|               |                      |                                 |
| DNS_PRIMARY   | x.x.x.x : IP address | Primary DNS server ip address   |
| DNS_SECONDARY | x.x.x.x : IP address | Secondary DNS server ip address |

## How to get DDNS

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;DDNS</code> |
|---------------|---|

Get the DDNS in the system

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;DDNS</code> |
|---------------|---|

Get the DDNS in the nth video server which is the same as the setting in the system

## How to disable DDNS

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;DDNS_TYPE=1</code> |
|---------------|--|

Disable the DDNS in the system and all of video servers.

## How to enable DDNS

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;DDNS_TYPE=2&amp;<br/>DDNS_SERVICE=xxxx&amp;DDNS_HOSTNAME=x.x.x.x&amp;DDNS_USERNAME=xxxx&amp;DDNS_PASSWORD=xxxx</code> |
|---------------|---|

Enable the DDNS in the system and all of video servers.

| <parameter>   | <values>        | Description  |
|---------------|-----------------|--|
| DDNS_TYPE     | n: 1 ~2         | 1: Disabled<br>2: Enabled  |
| DDNS_SERVICE  | xxxx: string    | dyndns: members.dyndns.org<br>qdns: members.3322.org<br>ezip: www.EZ-IP.Net<br>pgpow: www.penguinpowered.com<br>dhs: members.fhs.org<br>ods: update.ods.com<br>tzo: cgi.tzo.com<br>easydns: members.easydns.com<br>justlinux: www.justlinux.com<br>dyns: www.dyns.cx<br>hn: www.hn.org<br>zoneedit: www.zoneedit.com |
| DDNS_HOSTNAME | x.x.x.x: string | Host domain name   |
| DDNS_USERNAME | xxxx: string    | User name  |
| DDNS_PASSWORD | Xxxx: string    | Password   |

## How to get date

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;DATE</code> |
|---------------|---|

Get the DATE settings in the system

## How to set manual config

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;DATE_TYPE=1</code><br><code>DATE_MANUAL_DATE=MMDDhhmmYYYY&amp;DATE_MANUAL_TIME=hh:mm:ss&amp;DATE_MANUAL_ZONE=nn</code> |
|---------------|--|

Set the MANUAL DATE settings in the system and all video servers.

## How to set NTP/SNTP

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;DATE_TYPE=2</code><br><code>DATE_SNTP_IP=x.x.x.x&amp;DATE_SNTP_UPDATE=m&amp;DATE_MANUAL_ZONE=nn</code> |
|---------------|--|

Set the NTP/SNTP in the system and all of video servers.

| <parameter>      | <values>                         | Description  |
|------------------|----------------------------------|--|
| DATE_TYPE        | n: 1 ~2                          | 1: Manual setting<br>2: NTP/SNTP   |
| DATE_MANUAL_DATE | MMDDhhmmYYYY: number             | MM: Month<br>DD: Day<br>hh: Hour<br>mm: Minute<br>YYYY: Year                 |
| DATE_MANUAL_TIME | hh:mm:ss : number                | Hh: Hour<br>mm: Minute<br>ss: Second   |
| DATE_MANUAL_ZONE | nn: -12 ~ +00 ~ +13              | Time zone  |
| DATE_SNTP_IP     | x.x.x.x: IP address              | NTP/SNTP Server  |
| DATE_SNTP_UPDATE | n: 30,3600,21600,<br>43200,86400 | 30: 5 min<br>3600: 1 hour<br>21600: 6 hour<br>43200: 12 hour<br>86400: 1 day |

## How to get TOS

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;TOS</code> |
|---------------|--|

Read the TOS in the system which is the same as the value in the CHANNEL=1 video server

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;TOS</code> |
|---------------|--|

Read the TOS in the nth video server

| <parameter> | <values> | Description                                      |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Not Support |



## How to disabled TOS

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;VIDEO_TOS_TYPE=1</code> |
|---------------|---|

Set the TOS of the nth video server.

| <parameter> | <values> | Description  |
|-------------|----------|--|
| CHANNEL     |          | <p>Rackmount: Support</p> <p>If the CHANNEL=n is missed, error message is returned.</p> <pre>HTTP/1.0 200 OK\r\n Content-Type: text/plain\n \n ERROR!! The CHANNEL is not assigned!!</pre> <p>Multi-Channel: Not Support</p> |

## How to enabled TOS

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;VIDEO_TOS_TYPE=2&amp;VIDEO_TOS_PRIORITY=xxxx</code> |
|---------------|---|

Enable TOS of the nth video server.

| <parameter> | <values> | Description  |
|-------------|----------|--|
| CHANNEL     |          | <p>Rackmount: Support</p> <p>If the CHANNEL=n is missed, error message is returned.</p> <pre>HTTP/1.0 200 OK\r\n Content-Type: text/plain\n \n ERROR!! The CHANNEL is not assigned!!</pre> <p>Multi-Channel: Not Support</p> |

| <parameter>      | <values>     | Description  |
|------------------|--------------|--|
| VIDEO_TOS_TYPE   | n: 1 ~2      | 1: Disabled<br>2: Enabled  |
| DATE_MANUAL_DATE | xxxx: string | Minimize-Delay<br>Maximize-Throughput<br>Maximize-Reliability<br>Minimize-Cost<br>Normal-Service |

## How to get account

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;ACCOUNT</code> |
|---------------|--|

Get the account information in the system

## How to set root account

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;ACCOUNT_ROOT_PASSWORD=xxxx&amp;ACCOUNT_ROOT_PASSWORD=xxxx</code> |
|---------------|--|

Set the root account and password in the system and all of video servers.

## How to set user account

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;ACCOUNT_USER_NAME_1=xxxx&amp;ACCOUNT_USER_PASSWORD_1=xxxx</code> |
|---------------|--|

Set the root account and password in the system and all of video servers.

| <parameter>             | <values>                   | Description        |
|-------------------------|----------------------------|--------------------|
| ACCOUNT_ROOT_NAME       | xxxx: string               | User name for root |
| ACCOUNT_ROOT_PASSWORD   | xxxx: string               | Password for root  |
| ACCOUNT_USER_NAME_?     | ? : 1 ~ 10<br>xxxx: string | User name          |
| ACCOUNT_USER_PASSWORD_? | ? : 1 ~ 10<br>xxxx: string | Password           |

## How to get port number

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;PORT</code> |
|---------------|---|

Get all port information of system. The value in the PORT\_CONTROL, PORT\_VIDEO and V2\_PORT\_RTSP ports is the same as the value in the CHANNEL=0 video server.

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;PORT</code> |
|---------------|---|

Get all port information of the nth video server. The value in the PORT\_REGISTER, PORT\_HTTP, PORT\_MULTICAST, PORT\_SEARCH\_1 and PORT\_SEARCH\_2 are the same as the value in the system.

| <parameter> | <values> | Description                                  |
|-------------|----------|--|
| CHANNEL     |          | Rackmount: Support<br>Multi-Channel: Support |

## How to set http port

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;PORT_HTTP=n</code> |
|---------------|--|

Set HTTP PORT of the system.

## How to set search port

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;PORT_SEARCH_1=n&amp;PORT_SEARCH_2=m</code> |
|---------------|--|

Set SEARCH PORTS of the system.

## How to set streaming port

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;PORT_CONTROL=m&amp;PORT_VIDEO=p</code> |
|---------------|--|

Set streaming ports for the nth video server.

| <parameter> | <values> | Description   |
|-------------|----------|---|
| CHANNEL     |          | <b>Rackmount: Support</b><br>If the CHANNEL=n is not assigned in the URL command, the error message is returned.<br>HTTP/1.0 200 OK\r\n<br>Content-Type: text/plain\n<br>\n<br>ERROR!! The CHANNEL is not assigned! |
|             |          | <b>Multi-Channel: Support</b>   |

## How to set multicast port

**Syntax** http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&PORT\_MULTICAST=q

Set multicast port in the system and all of video servers. This setting will be same as the URL command with V2\_PORT\_RTP\_MULTI\_VIDEO.

| <parameter> | <values> | Description   |
|-------------|----------|---|
| CHANNEL     |          | <b>Rackmount: Not Support</b><br>If the CHANNEL=n is assigned in the URL command, the error message is returned.<br>HTTP/1.0 200 OK\r\n<br>Content-Type: text/plain\n<br>\n<br>ERROR!! CHANNEL=n should not be set. |
|             |          | <b>Multi-Channel: Not Support</b>   |

## How to set RTSP port

**Syntax** http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&V2\_PORT\_RTSP=p

Set the RTSP port in the nth video server.

| <parameter> | <values> | Description   |
|-------------|----------|---|
| CHANNEL     |          | <b>Rackmount: Support</b><br>If the CHANNEL=n is not assigned in the URL command, the error message is returned.<br>HTTP/1.0 200 OK\r\n<br>Content-Type: text/plain\n<br>\n<br>ERROR!! The CHANNEL is not assigned! |
|             |          | <b>Multi-Channel: Support</b>   |

| <parameter> | <values>  | Description            |
|-------------|-----------|------------------------|
| PORT_HTTP   | n: number | Web server port number |

|                |           |                                   |
|----------------|-----------|-----------------------------------|
| PORT_SEARCH_1  | n: number | For ip search tool used           |
| PORT_SEARCH_2  | m: number | For ip search tool used           |
| PORT_REGISTER  | n: number | Version 1 protocol used           |
| PORT_CONTROL   | m: number | Version 1/Version 2 protocol used |
| PORT_VIDEO     | p: number | Version 1/Version 2 protocol used |
| PORT_MULTICAST | q: number | Version 1/Version 2 protocol used |
| V2_PORT_RTSP   | n: number | Version 2 protocol used           |

## How to get language

**Syntax** `http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&LANGUAGE`

Get the language setting in the system

**Syntax** `http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&LANGUAGE`

Get the language setting in the nth video server which is the same as the value in the system

## How to set language

**Syntax** `http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&LANGUAGE=n`

Set the language in the system and all of video servers.

| <parameter> | <values>  | Description  |
|-------------|-----------|--|
| LANGUAGE    | n: number | 0: English<br>1: Traditional Chinese<br>2: Simplified<br>3: Japanese<br>4: Spanish |

## How to get streaming type

**Syntax** `http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&V2_STREAMING_TYPE`

Get the streaming type of the system. The 2 is always returned.

| <parameter>       | <values>  | Description                              |
|-------------------|-----------|--|
| V2_STREAMING_TYPE | n: number | 1: TCP Version 1.0<br>2: TCP Version 2.0 |

## How to set version 2.0 streaming method

**Syntax** `http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&V2_STREAMING_METHOD=n`

Set the streaming method in the nth video server.

| <parameter> | <values> | Description |
|-------------|----------|-------------|
|-------------|----------|-------------|

|                     |           |  |
|---------------------|-----------|--|
| CHANNEL             |           | <b>Rackmount: Support</b><br>If the CHANNEL=n is not assigned in the URL command, the error message is returned.<br>HTTP/1.0 200 OK\r\n<br>Content-Type: text/plain\n<br>\n<br>ERROR!! The CHANNEL is not assigned!<br><b>Multi-Channel: Not Support</b> |
| V2_STREAMING_METHOD | n: number | 0: TCP Only<br>1: Multicast Only<br>2: TCP & Multicast<br>3: RTP over UDP<br>4: RTP over Multicast   |

## How to get multicast interface

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&V2_MULTICAST_IF |
|---------------|---|

Get the multicast interface setting of the system

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&V2_MULTICAST_IF |
|---------------|---|

Get the multicast interface setting of the nth video server which is the same as the setting of the system

| <parameter> | <values> | Description  |
|-------------|----------|--|
| CHANNEL     |          | <b>Rackmount: Support</b><br><b>Multi-Channel: Not Support</b> |

| <parameter>     | <values>  | Description                |
|-----------------|-----------|----------------------------|
| V2_MULTICAST_IF | n: number | 0: LAN Port<br>1: WAN Port |

## How to set version 2.0 multicast ip

|               |   |
|---------------|---|
| <b>Syntax</b> | http://192.168.1.1/cgi-bin/system?USER=Admin&PWD=123456&CHANNEL=n&V2_MULTICAST_IP=x.x.x.x |
|---------------|---|

Set the Multicast IP address of the nth video server.

| <parameter> | <values> | Description  |
|-------------|----------|--|
| CHANNEL     |          | <b>Rackmount: Support</b><br>If the CHANNEL=n is not assigned in the URL command, the error message is returned.<br>HTTP/1.0 200 OK\r\n<br>Content-Type: text/plain\n<br>\n<br>ERROR!! The CHANNEL is not assigned!! |

|  |  |                        |
|--|--|------------------------|
|  |  | Multi-Channel: Support |
|--|--|------------------------|

| <parameter>     | <values>            | Description                                      |
|-----------------|---------------------|--|
| V2_MULTICAST_IP | x.x.x.x: IP address | Multicast ip address 224.3.1.0 ~ 239.255.255.255 |

## How to set version 2.0 RTP over Multicast port number

|               |  |
|---------------|--|
| <b>Syntax</b> | <pre>http://192.168.1.1/cgi-bin/system?USER=Admin&amp;PWD=123456&amp;CHANNEL=n&amp;V2_PORT_RTP_MULTI_VIDEO=n&amp;V2_PORT_RTP_MULTI_AUDIO=m</pre> |
|---------------|--|

Set the multicast video and audio port in the system and all of the video servers.

| <parameter>     | <values>               | Description   |
|-----------------|------------------------|---|
| CHANNEL         |                        | <p>Rackmount: Not Support</p> <p>If the CHANNEL=n is assigned in the URL command, the error message is returned.</p> <pre>HTTP/1.0 200 OK\r\nContent-Type: text/plain\n\nERROR!! CHANNEL=n should not be set.</pre> <p>Multi-Channel: Not Support</p> |
| V2_MULTICAST_IP | n: number<br>m: number | n: Video port number for RTP over Multicast<br>m: Audio port number for RTP over Multicast  |

# 3

## URL Command for IP Quad

### URL Command for IP Quad

#### How to set display mode

**Syntax** `http://192.168.1.1/cgi-bin/quad?DISPLAY=n`

#### How to get display mode

**Syntax** `http://192.168.1.1/cgi-bin/quad?DISPLAY`

| <parameter> | <values> | Description   |
|-------------|----------|---|
| DISPAY      | n: 0~4   | 0: quad display<br>1: display channel 1<br>2: display channel 2<br>3: display channel 3<br>4: display channel 4 |

#### How to set osd enabled

**Syntax** `http://192.168.1.1/cgi-bin/quad?OSD_ENABLED=0xnn`

#### How to get osd enabled status

**Syntax** `http://192.168.1.1/cgi-bin/quad?OSD_ENABLED`

| <parameter> | <values>           | Description  |
|-------------|--------------------|--|
| OSD_ENABLED | 0xnn : hexadecimal | BIT0: 1:title name enabled<br>BIT1: 1:video loss enabled<br>BIT2: 1:motion detect enabled<br>BIT3: 1:date time enabled<br>BIT4: 1:DIO status enabled<br>BIT5: Reserved<br>BIT6: Reserved<br>BIT7: Reserved |

## How to set motion detect enabled

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?MOTION_ENABLED=0xnn</code> |
|---------------|--|

## How to get motion enabled status

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?MOTION_ENABLED</code> |
|---------------|---|

| <parameter>    | <values>           | Description  |
|----------------|--------------------|--|
| MOTION_ENABLED | 0xnn : hexadecimal | BIT0: 1:channel 1 motion detect enabled<br>BIT1: 1:channel 2 motion detect enabled<br>BIT2: 1:channel 3 motion detect enabled<br>BIT3: 1:channel 4 motion detect enabled<br>BIT4: Reserved<br>BIT5: Reserved<br>BIT6: Reserved<br>BIT7: Reserved |

## How to set sensitive for motion detect

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;SENSITIVE=m</code> |
|---------------|--|

## How to get sensitive setting

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;SENSITIVE</code> |
|---------------|--|

| <parameter> | <values> | Description  |
|-------------|----------|--|
| CHANNEL     | n: 1~4   | channel number   |
| SENSITIVE   | m: 0~15  | 0: more sensitive<br>. ..<br>8: middle sensitive<br>. ..<br>15: less sensitive |



## How to set title name

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;TITLE_NAME=xxxxxxx</code> |
|---------------|---|

## How to get title name setting

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;TITLE_NAME</code> |
|---------------|---|

| <parameter> | <values>            | Description                                    |
|-------------|---------------------|--|
| CHANNEL     | n: 1~4              | channel number                                 |
| TITLE_NAME  | xxxxxxx: title name | max length: 8bytes<br>ASCII: A~Z & 0~9 & space |

## How to set brightness

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;BRIGHTNESS=m</code> |
|---------------|---|

## How to get brightness setting

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;BRIGHTNESS</code> |
|---------------|---|

| <parameter> | <values> | Description  |
|-------------|----------|--|
| CHANNEL     | n: 1~4   | channel number   |
| BRIGHTNESS  | m: 0~255 | 0: -25IRE<br>. . .<br>128: 0IRE<br>. . .<br>255: 25IRE |

## How to set contrast

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;CONTRAST=m</code> |
|---------------|---|

## How to get contrast setting

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;CONTRAST</code> |
|---------------|---|

| <parameter> | <values> | Description    |
|-------------|----------|----------------|
| CHANNEL     | n: 1~4   | channel number |

|          |          |   |
|----------|----------|---|
| CONTRAST | m: 0~255 | 0: 0%<br>.<br>128: 100%<br>.<br>255: 200% |
|----------|----------|---|

## How to set saturation

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;SATURATION=m</code> |
|---------------|---|

## How to get saturation setting

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;SATURATION</code> |
|---------------|---|

| <parameter> | <values> | Description                               |
|-------------|----------|---|
| CHANNEL     | n: 1~4   | channel number                            |
| SATURATION  | m: 0~255 | 0: 0%<br>.<br>128: 100%<br>.<br>255: 200% |

## How to set hue

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;HUE=m</code> |
|---------------|--|

## How to get contrast setting

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/quad?CHANNEL=n&amp;HUE</code> |
|---------------|--|

| <parameter> | <values> | Description   |
|-------------|----------|---|
| CHANNEL     | n: 1~4   | channel number  |
| HUE         | m: 0~255 | 0: -180degree<br>.<br>128: 0degree<br>.<br>255: 180degree |

## How to get system information

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?INFO</code> |
|---------------|---|

### Http return context

Firmware Version = SED2300Q-20050404.02-AC-D1

MAC Address = 00:0F:7C:00:00:67

Factory Default Type = NTSC (0x51)

Serial ID = SED2300-04I-8-00027

Model Number = SED-2300Q (11)

## How to set factory default

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?FACTORY_DEFAULT</code> |
|---------------|--|

## How to save all setting to flash and reboot system

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.1.1/cgi-bin/system?SAVE_REBOOT</code> |
|---------------|--|



# 4

## URL Command for Transcoder

### URL Command for Transcoder

This category lists the commands that is related to MPEG-4 settings.

The syntax of the command is listed as follow:

`http://<IP Address>/cgi-bin/url.cgi?USER=<Account Name>&PWD=<Password>&<Parameters>`

## Host Setting

| Parameter    | Value                     | Description  |
|--------------|---------------------------|--|
| LAN_HOSTNAME |                           | String<br>(32 Bytes with terminal 0 )  |
| LAN_IP       | x.x.x.x : IP address      | LAN IP Address   |
| LAN_NETMASK  | x.x.x.x : IP address Mask | Netmask Address Format   |
| LANGUAGE     | 0 ~ MAX LANGUAGE SUPPORT  |  |
| BAUDRATE     | 1 ~ 7                     | 2400,<br>4800,<br>9600,<br>19200,<br>38400,<br>57600,<br>115200<br>BPS                                 |
| UARTSETTING  | 0~2                       | 0x00, 0x08, 0x18   |
| OSD_X        | 8 ~ 96                    | OSD Upper Left X   |
| OSD_Y        | 8 ~ 96                    | OSD Upper Left Y   |
| VIDEO_TV     | 0, 1                      | 0 : PAL, 1 : NTSC  |
| VIDEO_OSD    | 1, 2, 4, 8, 16, 32        | 0x01:Time Code<br>0x02:Server IP<br>0x04:Camera Name<br>0x08:Local IP<br>0x10:Motion Detect<br>0x20:DI |
| VOL_AUDIOOUT | 0, 1, 2, 3                | 0: mute<br>1: small<br>2: middle<br>3: large   |
| VOL_AUDIOIN  | 0, 1, 2, 3                | 0: mute<br>1: small<br>2: middle<br>3: large   |

## WAN Setting

| Parameter          | Value                     | Description  |
|--------------------|---------------------------|--|
| WAN_TYPE           | 1 ~ 3                     | 1 : Dynamic IP<br>2 : Static IP<br>3 : PPPoE   |
| WAN_IP             | x.x.x.x : IP address      | WAN IP Addrss  |
| WAN_NETMASK        | x.x.x.x : IP address Mask | Netmask Address Format   |
| WAN_GATEWAY        | x.x.x.x : IP address      | Gateway Address  |
| WAN_PPPOE_USERNAME |                           | String<br>(32 Bytes with terminal 0 )  |
| WAN_PPPOE_PASSWORD |                           | String<br>(32 Bytes with terminal 0 )  |
| DNS_PRIMARY        |                           | IP Address Format  |
| DNS_SECONDARY      |                           | IP Address Format  |
| DDNS_TYPE          | 1, 2                      | 1 : Disabled<br>2 : Enabled  |
| DDNS_HOSTNAME      |                           | String<br>(32 Bytes with terminal 0 )  |
| DDNS_SERVICE       | As right →                | members.dyndns.org<br>=> dyndns<br>members.3322.org<br>=> qdns<br>www,EZ-IP.Net<br>=> ezip<br>www.penguinpowered.com<br>=> pgpow<br>members.dhs.org<br>=> dhs<br>update.ods.org<br>=> ods<br>cgi.tzo.com<br>=> tzo<br>members.easydns.com<br>=> easydns<br>www.justlinux.com<br>=> justlinux |

|                      |  |   |
|----------------------|--|---|
|                      |  | <b>www.dyns.cx</b><br>=> dyns<br><b>www.hn.org</b><br>=> hn<br><b>www.zoneedit.com</b><br>=> zoneedit |
| <b>DDNS_USERNAME</b> |  | <b>String</b>   |
| <b>DDNS_PASSWORD</b> |  | <b>String</b>   |



## Video Server Connection Setting

| URL Command Name        | Value                | Mark  |
|-------------------------|----------------------|---|
| PROTOCOLVERSION         | 1, 2                 | Version 1 or Version 2  |
| CHANNEL                 | 1 ~ 16               | Channel Number  |
| CHxx_VIDEO_CONNECT      | 0, 1, 2              | 0: MultiCast<br>1: UniCast<br>2: RTP  |
| CHxx_VIDEO_VARFPS       | 0, 1, 2, 3, 4        | 0: Using Server's Setting<br>1: 30 (NTSC) or 25 (PAL)<br>2: 6 (NTSC) or 5 (PAL)<br>3: 3 (NTSC) or 3 (PAL)<br>4: 1 (NTSC) or 1 (PAL) |
| CHxx_VIDEO_STREAM       | 0, 1                 | 0 : Disable, 1 : Enable   |
| CHxx_VIDEO_AUDIO        | 0, 1                 | 0 : Disable, 1 : Enable   |
| CHxx_VIDEO_CONTROL      | 0, 1                 | 0 : Disable, 1 : Enable   |
| CHxx_VIDEO_TCP_IP       | x.x.x.x : IP address | Server IP Address   |
| CHxx_VIDEO_MULTICAST_IP | x.x.x.x : IP address | Server Multicast Address  |
| CHxx_VIDEO_USERNAME     |                      | String<br>(32 Bytes with terminal 0 )   |
| CHxx_VIDEO_PASSWORD     |                      | String<br>(32 Bytes with terminal 0 )   |
| CHxx_PORT_STREAMIN      |                      | Stream Port Number  |
| CHxx_PORT_CONTROL       |                      | Control & AudioOut<br>Port Number   |
| CHxx_PORT_MULTICAST     |                      | Server's Multicast Port Number  |
| CHxx_PORT_RTP           |                      | Server's RTP Port Number  |
| CHxx_PORT_HTTP          |                      | Server's Http Port Number   |
| CHxx_TIME               |                      | Server's Dwell Time (seconds)<br>0 means infinite   |

## User Account Setting

| URL Command Name        | Value | Mark                                  |
|-------------------------|-------|---------------------------------------|
| ACCOUNT_ROOT_NAME       |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_ROOT_PASSWORD   |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_1     |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_1 |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_2     |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_2 |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_3     |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_3 |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_4     |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_4 |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_5     |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_5 |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_6     |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_6 |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_7     |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_7 |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_8     |       | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_8 |       | String                                |

|                          |  |                                       |
|--------------------------|--|---------------------------------------|
|                          |  | (32 Bytes with terminal 0 )           |
| ACCOUNT_USER_NAME_9      |  | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_9  |  | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_NAME_10     |  | String<br>(32 Bytes with terminal 0 ) |
| ACCOUNT_USER_PASSWORD_10 |  | String<br>(32 Bytes with terminal 0 ) |

## Port Setting

| URL Command Name   | Value | Mark                                   |
|--------------------|-------|--|
| PORT_HTTP'         |       | Host HTTP PORT                         |
| PORT_HOST_SEARCH_1 |       | HOST SEARCH PORT<br>(Client to Server) |
| PORT_HOST_SEARCH_2 |       | HOST SEARCH PORT<br>(Server to Client) |

## URL Command for Transcoder Return Value

This category lists the commands that is related to Transcoder return value.

The syntax of the command is listed as follow:

`http://<IP Address>/cgi-bin/url.cgi?USER=<Account Name>&PWD=<Password>&<Parameters>`

| Parameter   | Description                                |
|-------------|--|
| HOST        | Return all the items of host setting page  |
| WAN         | Return all the items of wan setting page   |
| VIDEOSERVER | Return all the items of video setting page |
| ACCOUNT     | Return all the items of user account page  |
| PORT        | Return all the items of port setting page  |
| SYSTEM_LOG  | Return all the items of system info page   |

# URL Command for Transcoder System Setting

This category lists the commands that is related to Transcoder system settings.

The syntax of the command is listed as follow:

`http://<IP Address>/cgi-bin/url.cgi?USER=<Account Name>&PWD=<Password>&<Parameters>`

| Parameter       | Description                                 |
|-----------------|---|
| FACTORY_DEFAULT | Load factory default                        |
| SAVE_REBOOT     | Save and Reboot                             |
| SWITCH          | Switch to another video server or IP camera |

# URL Command for Transcoder Variable Frame Rate Setting

This category lists the commands that is related to Transcoder variable frame rate settings.

The syntax of the command is listed as follow:

`http://<IP Address>/cgi-bin/url.cgi?USER=<Account Name>&PWD=<Password>&<Parameters>`

| Parameter    | Description  |
|--------------|--|
| VIDEO_VARFPS | Change the Variable Frame Rate on the fly in the current channel |

Note that the defition is the same as CHxx\_VIDEO\_VARFPS

# URL Command for Transcoder Connecting NVR

This category lists the commands that is related to Transcoder connecting to NVR setting

The syntax of the command is listed as follow:

http://<IP Address>/cgi-bin/url.cgi?netSendVideoCmd&

| Parameter       | Description   |
|-----------------|---|
| netSendVideoCmd | The URL Command for supporting NVR<br>Ex:<br>0006ANET      http://192.168.0.200/A2100?USER=Admin&PWD=123456&Cid=6 |



# URL Command for Transcoder Samples

This category lists the sample URL Commands for Transcoder

## How to get Transcoder host setting

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.0.200/cgi-bin/url.cgi?USER=Admin&amp;PWD=123456&amp;HOST</code> |
|---------------|--|

## How to set Transcoder host setting

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.0.200/cgi-bin/url.cgi?USER=Admin&amp;PWD=123456&amp;LAN_HOSTNAME=ACTi&amp;LAN_IP=192.168.1.20&amp;LAN_NETMASK=255.255.255.0&amp;LANGUAGE=1&amp;BAUDRATE=4</code> |
|---------------|---|

## How to save and reboot Transcoder

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.0.200/cgi-bin/url.cgi?USER=Admin&amp;PWD=123456&amp;SAVE_REBOOT</code> |
|---------------|---|

## How to get Transcoder system log

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.0.200/cgi-bin/url.cgi?USER=Admin&amp;PWD=123456&amp;SYSTEM_LOG</code> |
|---------------|--|

## How to set Transcoder to factory default

|               |   |
|---------------|---|
| <b>Syntax</b> | <code>http://192.168.0.200/cgi-bin/url.cgi?USER=Admin&amp;PWD=123456&amp;FACTORY_DEFAULT</code> |
|---------------|---|

## How to request Transcoder to switch to another video server

|               |  |
|---------------|--|
| <b>Syntax</b> | <code>http://192.168.0.200/cgi-bin/url.cgi?USER=Admin&amp;PWD=123456&amp;VIDEO_TCP_IP=192.168.0.100&amp;VIDEO_USERNAME=Admin&amp;VIDEO_PASSWORD=123456&amp;SWITCH</code> |
|---------------|--|