



Smartec – 1-Channel Video Decoder

STS-IPD160



Firmware User manual

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1 INTRODUCTION

1.1 Minimum system requirements

CPU	Pentium 4 2.4GHz and above
Hard Disk	40 GB or above
Memory	256 MB or above
Operating System	Windows XP / Windows 2000 with SP4 or above
Required Utilities	FFDShow, DirectX 9.0b or later hardware acceleration
Video Resolution	SVGA or XGA with 1024x768 resolution, 32-bit color

1.2 Preparation before setup

To configure the video Decoder, you have to use the Internet Explorer to login the video Decoder. Before that, your PC's networks settings and the video Decoder's IP address must be setup. Make sure all the connections are connected correctly, and then follow the procedures below to setup.

1. Setup your PC network

You have to match your PC's TCP/IP setting with the video Decoder's default settings before you can use IE browser to login it. This section tells you how to setup your PC's TCP/IP settings.

2. Setup video Decoder's IP address

This video Decoder's IP address can be setup manually or automatically by network service (DHCP).

1.2.1 Setup your PC network

To set up the network of video Decoder via a PC, you have to change the TCP/IP settings of the PC.

The following are the default network settings of video Decoder.

IP Address: 192.168.0.200

Subnet Mask: 255.255.255.0

To access the video Decoder, the IP address of the PC should match the address below.

IP Address: 192.168.0.xxx

Subnet Mask: 255.255.255.0



NOTE: xxx should be a number from 1 to 254, but 200 is excepted.

The procedures below is the setup procedure of a PC using Windows XP as its OS. When running an OS other than Windows XP, please refer to the manual included with the OS.

● STEP1

Start up your PC.

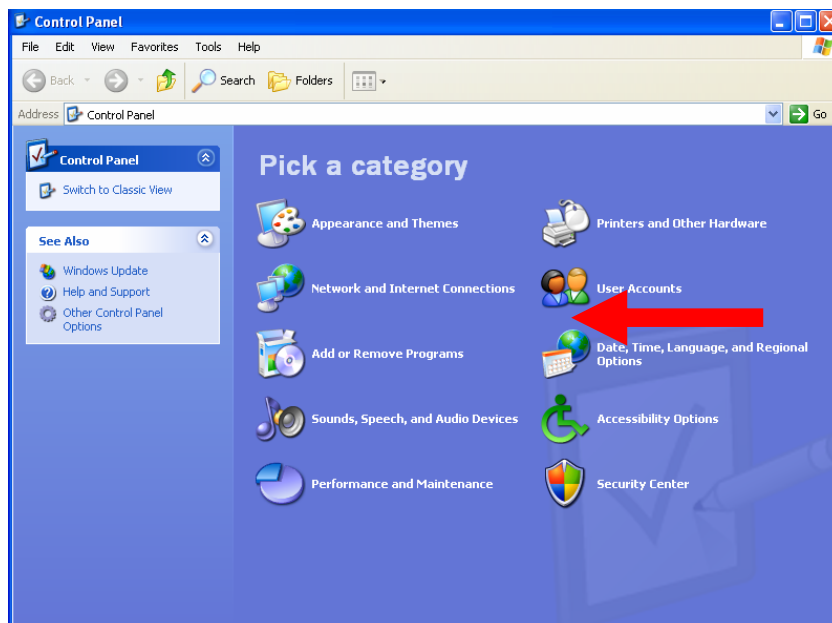
- **STEP2**

Click the [Start] and select the "Control Panel"



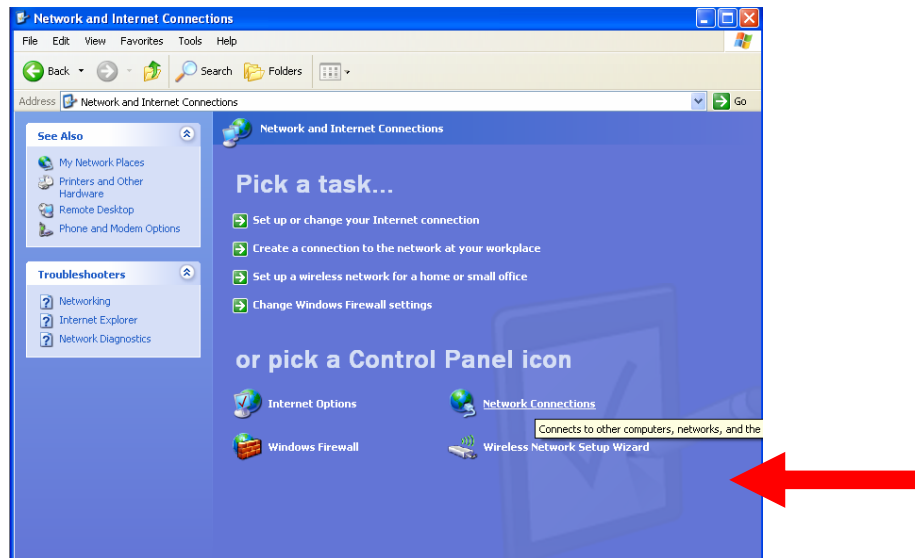
- **STEP3**

Double-click the "Network and Internet connections" icon.



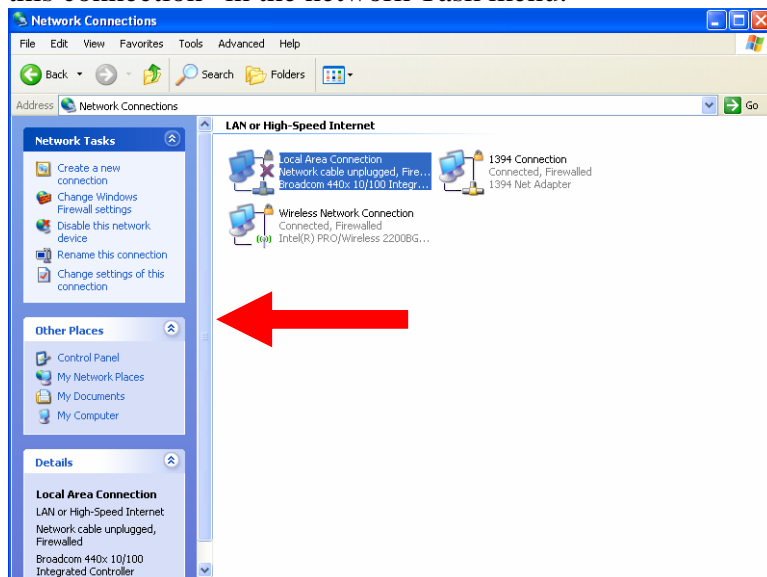
- **STEP4**

Double-click the "Network connections" icon



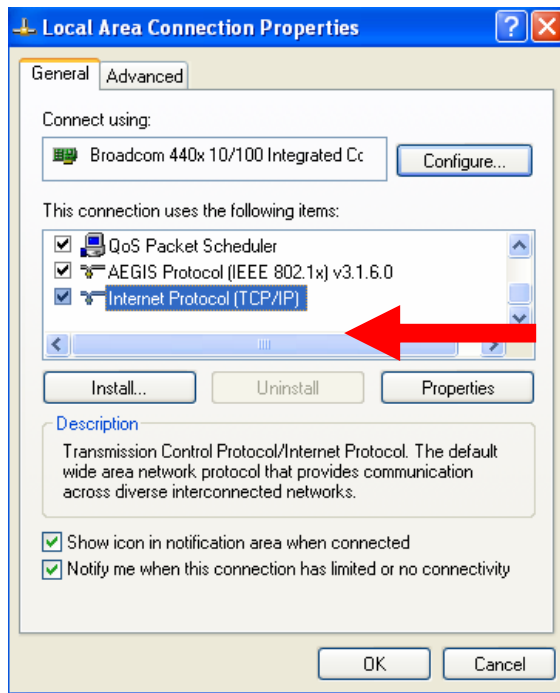
- **STEP5**

Click "Local Area Connections", and then click "Change settings of this connection" in the network Task menu.



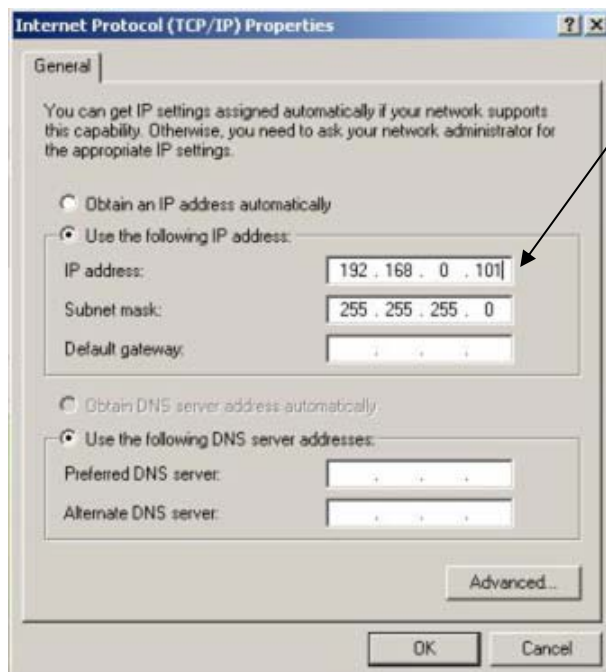
- **STEP6**

Click "Internet Protocol (TCP/IP)", and then click the [Properties] button.



- **STEP7**

Click the “Use the following IP address” radio button and enter the IP address and the subnet mask.



Please set the settings as below.

IP address: 192.168.0.xxx
Subnet mask: 255.255.255.0

(NOTE: xxx should be a number from 1 to 254, but 200 is excepted.)

- **STEP8**

Click the [OK] button and the window dialog box closes.

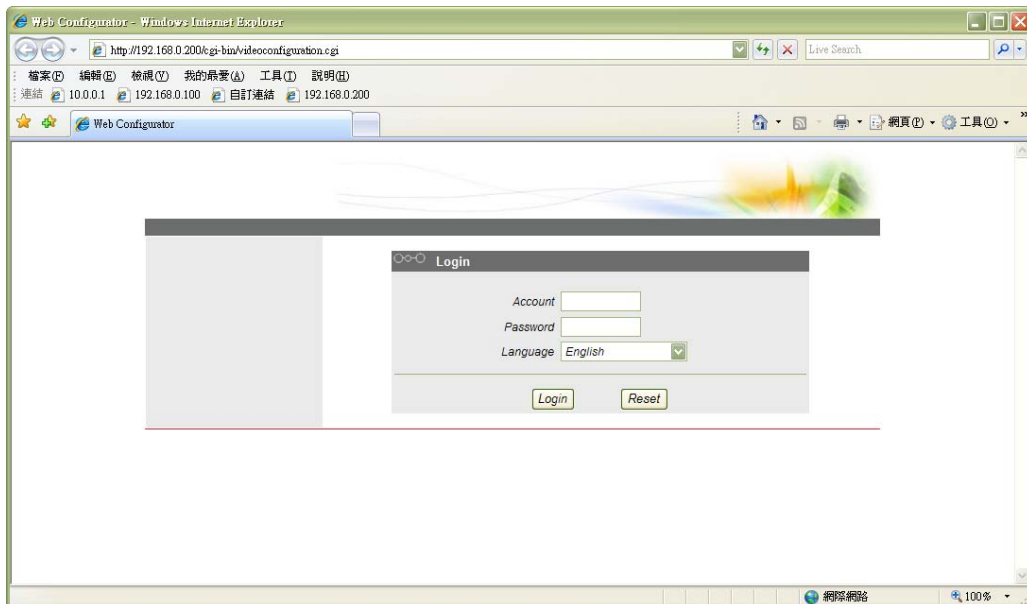
1.3 Configuring the video Decoder

This section describes how to configure the video Decoder. The product administrator has unlimited access to all setup windows and normal users can only watch the live image. The video Decoder is configured under a standard browser (Microsoft Internet Explorer 6.0 or above). Follow the procedures below to configure the video Decoder.

- **STEP1:** Open a browser
- **STEP2:** Enter the IP address of the video transcoder.

The default IP address is “192.168.0.200”



The “Login Page” is now displayed as below.



NOTE: Internet Explorer of 6.0 or above is highly recommended. If you don't have the it, please download it from <http://www.microsoft.com/windows/ie/downloads/default.msp>

- **STEP3:** Enter the Account name (factory default: Admin) and the Password (factory default: 123456).
- **STEP4:** Select the language of the video Decoder user interface. You can select from English, Traditional Chinese, Simplified Chinese, Japanese and Spanish, Italian, German, Portuguese and French. This user interface setting will disappear once you log out, if you want to

change the default user interface language.

- **STEP5:** Click the  button to login or click the  button to re-enter again.

1.3.1 Host Setting

This section tells you how to setup video Decoder's host settings and LAN settings.

- **STEP1:** Click the [Host Setting] on the “Main Setup page”.

The “Host setting page” is displayed as below.

>> Host Setting
>> WAN Setting
>> Connection Setting
>> User Account
>> Port Setting
>> System Info
>> Firmware
>> Factory Default
>> Save Reboot
>> Logout

Host Setting
Host Name ¹
Language ²
 ³ ⁴

Network Link Speed & Duplex
WAN Port ⁵
 ³ ⁴

Serial Port Setting
Baud Rate ⁶
Bits Setting ⁷
 ³ ⁴

OSD Position Setting
X: ⁸
Y: ⁹
 ³ ⁴

Connection Setting
Default TV Type ¹⁰
 Date Time
 Server IP
 Camera Name
 Local IP
 Motion Detect
 DIO Status
¹¹ OSD Item
Date Format ¹²
 ³ ⁴

Audio Volume Setting
Audio In Gain: ¹³
Audio Out Vol: ¹⁴
 ³ ⁴

- **STEP2:** Configure these settings with reference to the table below. If you are still unsure what to set, contact your system administrator.

■Host Setting

Parameters	Description
① Host name	Enter a host name, and this host name will be shown when you use the IP utility or the SDK to search for the video Decoder.
② Language	Select the language of default user-interface. Each user login will see the default user-interface first.

■Network Link Speed & Duplex

Parameters	Description
⑤ WAN port	This item lets you select the network transmission speed of WAN port. You can select from 1. Auto detect (default setting) 2. 100Mbps / Full duplex 3. 100Mbps / Half duplex 4. 10Mbps / Full duplex 5. 10Mbps / Half duplex

■Baud Rate

Parameters	Description
⑥ Serial port baud rate	Select the Baud Rate setting of serial port.
⑦ Serial port setting	Select settings of serial port.



■OSD Position Setting



Parameters	Description
⑧ X	X-coordinate of OSD initial position
⑨ Y	Y-coordinate of OSD initial position

■Connection Setting

Parameters	Description
⑩ Default TV Type	Select your TV system. Default setting is PAL.
⑪ OSD	On Screen Display will show information/icon when event is triggered.
⑫ Date Formate	Select which date formate you prefer.

■ Audio Volumn Setting

Parameters	Description
 Audio In Gain	Set “On” to increase audio signal, or “Off” to do nothing of increasing audio
 Audio Out Vol	Audio out volumn setting

- **STEP3:** Click the  [Apply] button of each setting to confirm the settings or click  [Reset] button to re-enter the parameters.



NOTE: Once finished all settings, be sure to click the [Save Reboot] button, otherwise, some settings won't take effect.



NOTE: Check with your system administrator, if Client PC and video Decoder are setting in different VLANs, please connect to WAN port.

1.3.2 WAN Setting

This section tells you how to setup video Decoder's WAN, DNS server and DDNS server settings.

- **STEP1:** Click the [WAN Setting] on the “Main Setup page”.

The “WAN setting page” is displayed as below

The screenshot shows the WAN Setting page with the following configuration details:

- Dynamic IP Address** (Selected)
- Static IP Address** (Unselected):
 - IP Address: 192.168.0.200
 - Subnet Mask: 255.255.255.0
 - ISP Gateway: 192.168.0.254
- PPPoE** (Unselected):
 - User Name: [Empty]
 - Password: [Empty]

DNS Server Setting:

- Primary DNS Server: [Empty]
- Secondary DNS Server: [Empty]

DDNS Server Setting:

- DDNS Type: Desable
- Service ISP: members.dyndns.org
- Host Name: [Empty]
- User Name: [Empty]
- Password: [Empty]

- **STEP2:** Configure these settings with reference to the table below. If you are still unsure what to set, contact your system administrator.

■ WAN Setting


Parameters	Description
1 Dynamic IP address	Click this to enable video Decoder's DHCP function. It will acquire its WAN port IP address from a DHCP server within the same network. (You must have a DHCP server in order to enable this function.)
2 Static IP address	Click this to manually enter the video Decoder WAN port IP address. 3 IP address: Enter the IP address of WAN port. 4 Subnet mask: Enter the subnet mask of WAN port, if IP address is changed, adjust the subnet mask accordingly. 5 ISP gateway: Enter the IP address of the gateway (the router).
6 PPPoE	Click this when you connect video Decoder directly to the xDSL modem. 7 User name: Enter the user name of your xDSL account. 8 Password: Enter the password of your xDSL account. Note: You have to click the [Save Reboot] after you click the [Apply button] to let this video Decoder start xDSL connections.



■ DNS server Setting

Parameters	Description
1 Primary DNS server	Defines the IP address of the primary DNS server. This is used for identifying this computer by name instead of IP address.
2 Secondary DNS server	The IP address of the secondary DNS server. It will be used once the primary DNS server fails.

■ DDNS server Setting

Parameters	Description
13 DDNS type	Click this to enable video Decoder's DDNS function. DDNS function enables user to connect to this video Decoder by domain name even if its IP address is not static.
14 Service ISP	Click one of the DDNS service providers. You can visit their website to get a DDNS service account for this video Decoder.
15 Host name	Enter the host name of your DDNS service account. (ex: xxxx.dyndns.org)
16 User name	Enter the user name to login your DDNS service account.

 Password	Enter the password to login your DDNS service account.
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- **STEP3:** Click the  [Apply] button of each setting to confirm the settings or click the  [Reset] button to re-enter the parameters.



NOTE: Check with your system administrator, if Client PC and video Decoder are setting in different VLANs, please connect to WAN port.



NOTE: Once finished all settings, be sure to click the [Save Reboot] button, otherwise, some settings won't take effect.

1.3.3 Connection Setting

This section tells you how to setup video server or IP camera's video and streaming settings.

- **STEP1:** Click the [Video Setting] on the “Main Setup page”.

The “Video setting page” is displayed as below

- **STEP2:** Configure these settings with reference to the table below. If you are still unsure what to set, contact your system administrator.

■Connection Setting

Parameters	Description
1 Source Type	Select your video source 1. Video Server 2. Quad Server 3. Muti-CH Server
2 Connect Type	Select Multicast, TCP or RTP mode for connecting to a video server/IP camera.
3 Variable FPS	Select variable FPS 1. Use Server's Setting 2. 30(NTSC) or 25(PAL)

	<p>3. 6(NTSC) or 5(PAL)</p> <p>4. 3(NTSC) or 3(PAL)</p> <p>5. 1(NTSC) or 1(PAL)</p>
4 TCTCP Connect IP	Set IP address or domain name of a video server / IP camera while Connect Type is TCP Streaming.
5 Multicast Connect IP	Set IP address of video server / IP camera while Connect Type is Multicast streaming.
6 Connect User Name	Set Login Name of video server / IP camera.
7 Connect Password	Set Password of video server / IP camera.
8 Enable Audio In	Enable / disable audio input
9 Enable Control Data	Set "On" to get the token of Control Data, or "Off" to release the token of Control Data
10 Stream Port	Select the port for video streaming w/ video server / IP camera
11 Control Port	Select the port for video controlling w/ video server / IP camera
12 Multicast Port	Select the port for video multicast w/ video server / IP camera
13 RTP Port	Select the port for RTP
14 HTTP Port	Select the port for HTTP

- **STEP3:** Click the **15** [Apply] button of each setting to confirm the settings or click the **16** [Reset] button to re-enter the parameters.



NOTE: **Save Reboot** is necessary to execute for keeping this configuration after reboot next time

1.3.4 User Account Management

This section tells you how to setup the accounts.

- **STEP1:** Click the [User account] on the “Main Setup page”.

The “Account management page” is displayed as below

User	Account	Password
1 Root	Admin	123456
USER1		
USER2		
USER3		
USER4		
2 USER5		
USER6		
USER7		
USER8		
USER9		
USER10		

Apply ³ Reset ⁴

- **STEP2:** Setup the account names and their respective passwords. There are ¹ 1 root (administrator) account and ² 10 common user accounts. Administrator account allows the user to watch the live view and setup everything; but common user account allows user only to watch the live image.
- **STEP3:** Click the ³ [Apply] button of each setting to confirm the settings or click the ⁴ [Reset] button to re-enter the parameters.



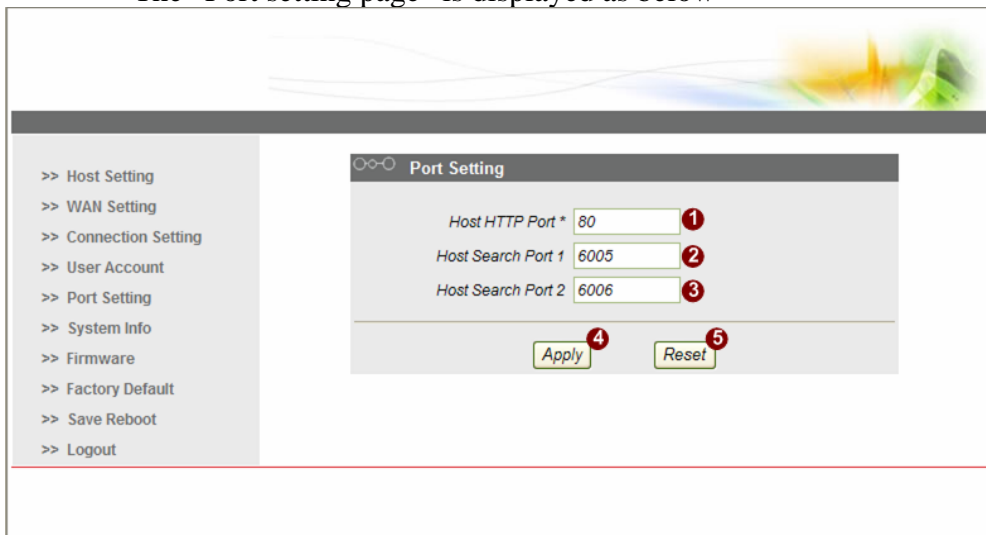
NOTE: Save Reboot is necessary to execute for keeping this configuration after reboot next time.

1.3.5 Port Setting

This section tells you how to setup the ports.

- **STEP1:** Click the [Port Setting] on the “Main Setup page”.

The “Port setting page” is displayed as below



- **STEP2:** Configure these settings with reference to the table below. If you are still unsure what to set, contact your system administrator.

■Port Setting

Parameters	Description
1 Host HTTP Port	Select a port for HTTP protocol of video server / IP camera
2 Host Search Port1	Select a port of “Send” protocol for searching server function .
3 Host search Port2	Select a port of “Receive” protocol for searching server function .

- **STEP3:** Click the **4** [Apply] button of each setting to confirm the settings or click the **5** [Reset] button to re-enter the parameters.



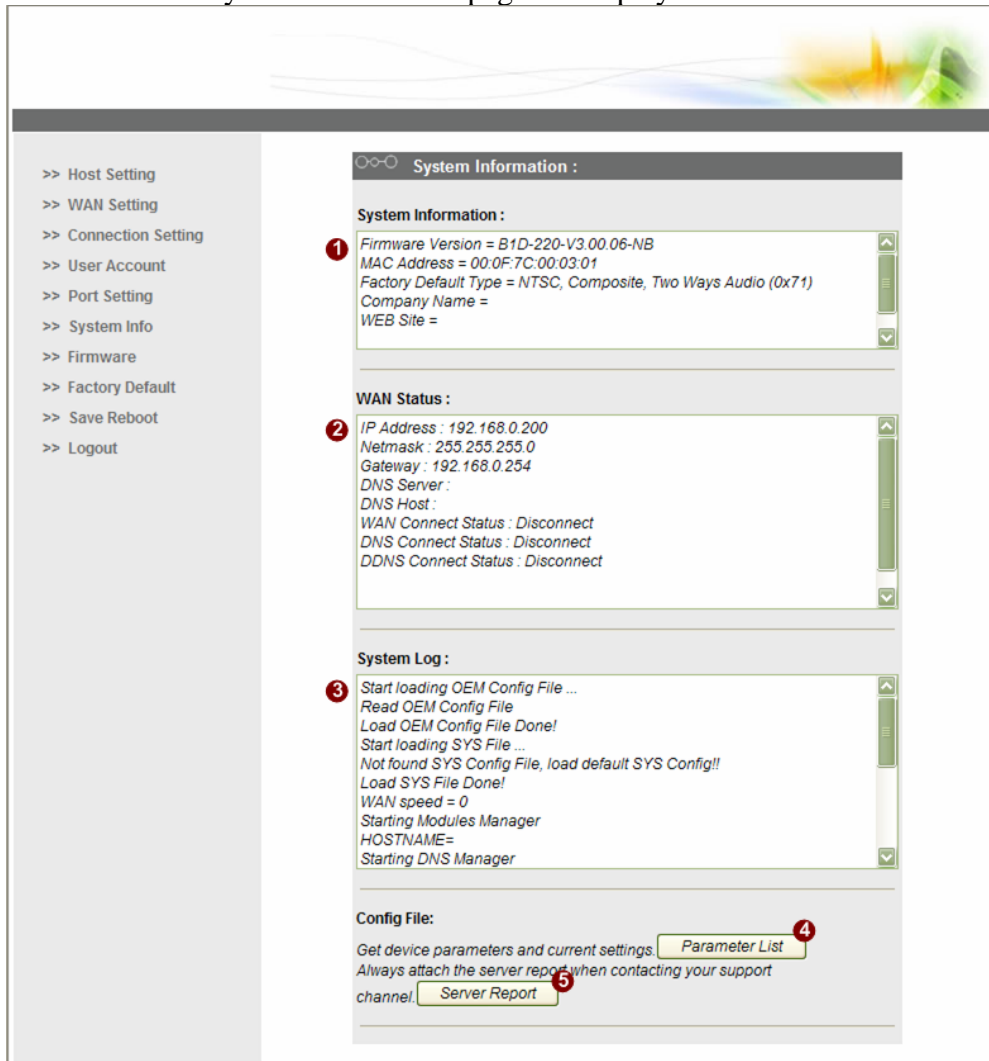
NOTE: Save Reboot is necessary to execute for keeping this configuration after reboot next time.

1.3.6 System Info

This section tells you how to see the system information of this video Decoder including firmware version, MAC address, WAN status and system log.

- **STEP1:** Click the [System info] on the “Main Setup page”.

The “System information page” is displayed as below



- **STEP2:** View the information at the 3 columns. This information is very useful to understand the video Decoder status and to resolve any problem that might occur.

■ System info

Column	Description
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1 System info	It shows the firmware version, MAC address, and video Decoder's production ID.
2 WAN status	It shows the WAN port's IP address, netmask, gateway, DNS server, DDNS host and connection status.
3 System log	It shows the system event. This column is very useful to as a diagnostic tool.

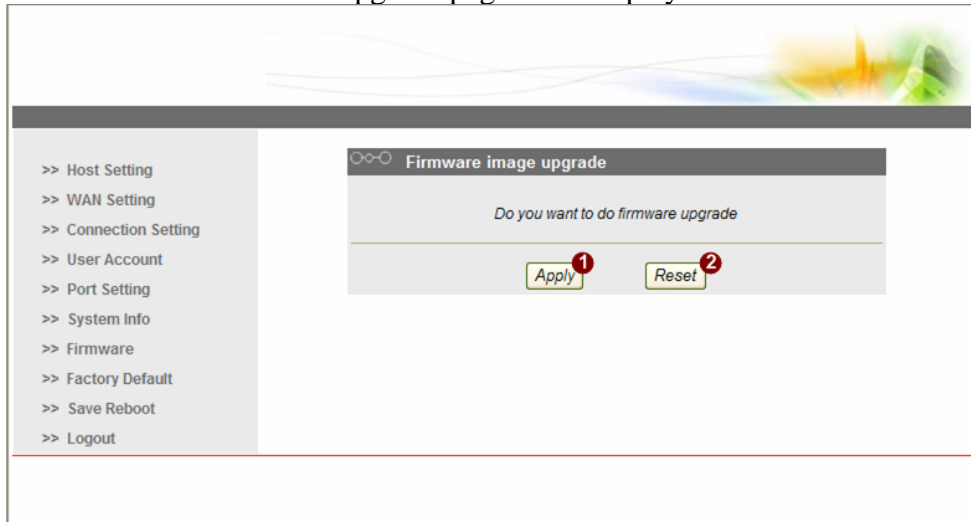
- **STEP3:** Click **4** [Parameter List] where you may see all configurations of the IP device.
- **STEP4:** Click **5** [Server Report] to export related information of the IP device while reporting a support to your support channel.

1.3.7 Firmware Upgrade

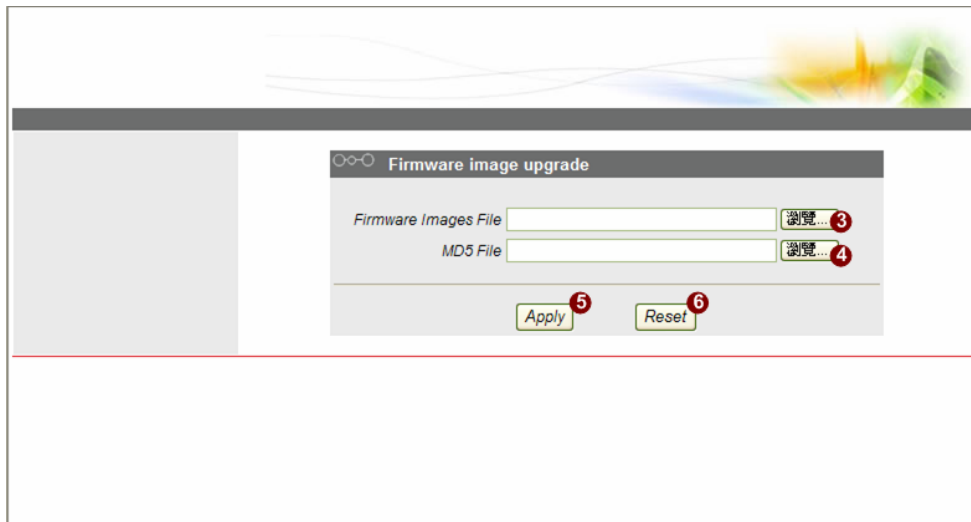
This section tells you how to see update video Decoder’s firmware. You can always visit our web site for the latest firmware.

- **STEP1:** Click the [Firmware] on the “Main Setup page”.

The “Firmware upgrade page-1” is displayed as below



- **STEP2:** Click **1** [Apply] button. The “firmware upgrade page-2” will be displayed as below.



■ Date Setting

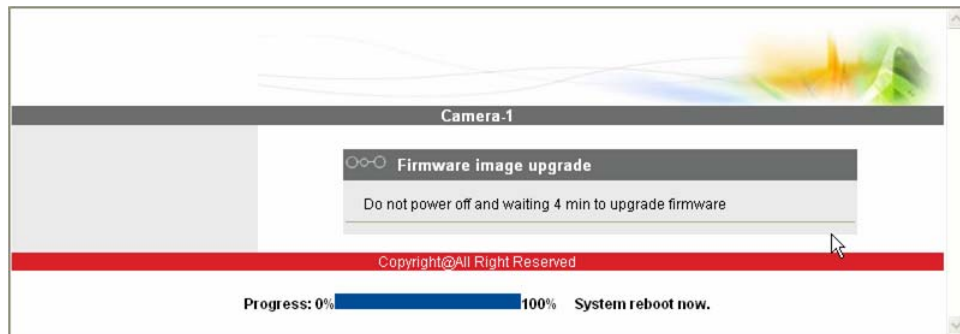
Parameters	Description
------------	-------------

<p>3 Firmware images file</p>	<p>You can upload the firmware images here. Click the [browse] to select the an image file and click the [enter]. You can always get the latest version at our website.</p>
<p>4 MD5 file</p>	<p>You can upload the MD5 file here. Click the [browse] to select an MD5 file and click the [enter]. You can always get the latest version at our website.</p>



NOTE: The version of the firmware image and the MD5 file to be uploaded must be the same, otherwise, the firmware upgrading will fail and the video Decoder will continue using previous firmware version.

- **STEP3:** Click the **5** [Upload] button to start upgrading or click the [Reset] to re-select the files.
- **STEP4:** The upgrade process window shows a progress bar indicating upgrade status. When the upgrading is completed, the system will reboot.

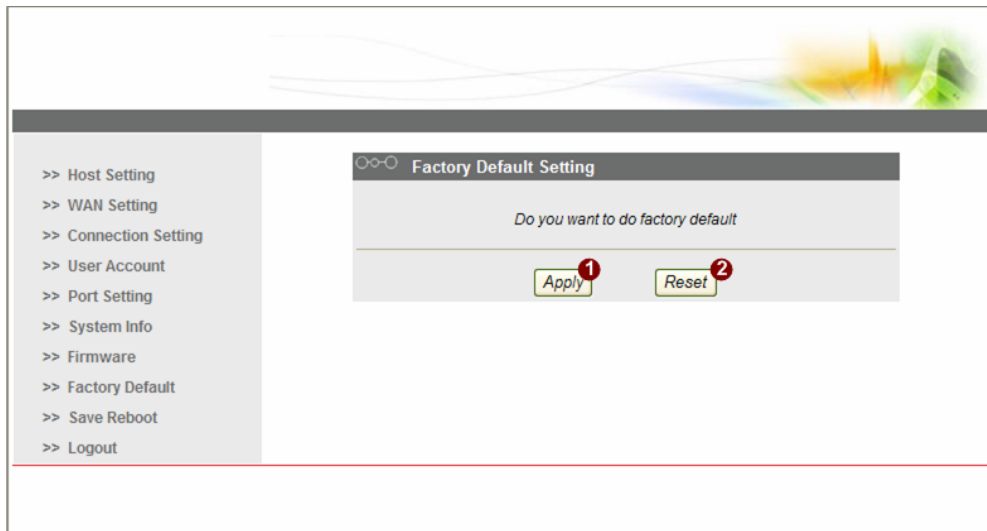


1.3.8 Factory Default

This section tells you how to load the factory default setting of video Decoder

- **STEP1:** Click the [Factory Default] on the “Main Setup page”.

The “Factory default setting page” is displayed as below



- **STEP2:** Click the **1** [Apply] button to go to the loading confirmation page or click the **2** [Reset] button to exit to previous page.
- **STEP3:** A loading confirmation page will be displayed. Click the [OK] button to start loading factory default or click the [Cancel] button to exit to previous page.



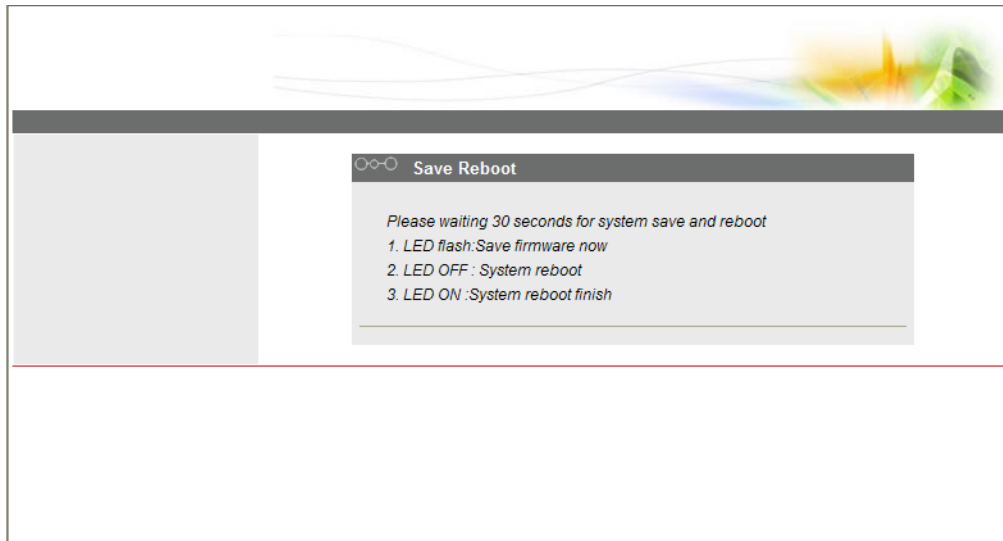
NOTE: **Save Reboot** is necessary to execute for keeping this configuration after reboot next time.

1.3.9 Save Reboot

This section tells you how to save all the settings and reboot this video Decoder. This is critical because some settings might not take effect before save and reboot.

- **STEP1:** Click the [Save and reboot] on the “Main Setup page”.

The “Save and reboot page” is displayed as below.



- **STEP2:** The Power LED indicator (red) will light down to indicate that the video Decoder is rebooting, and after around 30 seconds, the factory default loading is completed.

1.3.10 Logout

This section tells you how to logout the video Decoder. Be sure to logout this video Decoder once your setting is completed.

- **STEP1:** Click the [Logout] on the “Main Setup page”.

You will logout and return to the “Login Page” displayed as below.

