



VID-H.264



- Simple, hassle free monitoring of IP Cameras and Servers!
- Connect your Network Cable & Plug in your Composite Monitor!
- Get your video without PC anywhere on the network!

Perfect for stand-alone monitoring stations, the Veilux VID-H.264 decodes single channel of H.264 video with synchronized audio! With Full D1 Resolution your legacy devices can seamlessly blend the IP system.

FCC

- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio, or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correcting the interference by one, or more of the following methods:
- Reorient, or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to and outlet on a different circuit than that of the receiver device
- Consult a dealer, or experienced radio/TV technician for help.

FCC, CE Warning

- Any changes, or modifications to the construction of this device, which are not explicitly approved by the party responsible for compliance, may void the user's authority to operate the equipment.
- This appliance and its antenna must not be co-located, or operating in conjunction with any other antenna or transmitter. A minimum separation distance of 20 cm must be maintained between the antenna and the user in order to meet RF exposure requirements.

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1. Products Overview

1.1 Introduction to the Veilux VID-H.264

Thanks for using this product. Veilux VID-H.264 is an embedded network video decoder developed by network technology. Veilux VID-H.264 gets digital signal (sources provided by IP cam or DVS) from network, and converts it to the analog video signal. Not like PCI decode card, Veilux VID-H.264 finishes decoding independently. Especially, Veilux VID-H.264 can play an important role in the large-scale project when you need to use the TV Wall.

When a Veilux VID-H.264 connects more than one camera, it can cycle display images provided by them. This function is called "Poll function".

Video Resolution	yes or not
D1	yes
CIF	yes
HalfD1	yes
QCIF	yes
VGA	yes
QVGA	yes

Table 1-1 Video resolution support by Veilux VID-H.264

1.2 Features

- Decoding for H.264 / MJPEG
- Small cubage, low power, convenient installation
- Operation independent of PC, high stability and efficiency, robustness against virus
- High video quality and resolution, high fidelity
- Automatic reconnection in case of network failure
- Strong Poll function, 32 targets available and accessible to configure each stalling time
- OSD presents the name of the destination target while polling
- Status information, high availability of the working state from every device

1.3 Network Topology

Category	Sub-Category	Details
Video	Compression	H.264 / MJPEG
	Resolution	☐ NTSC (30 frames/sec Max.) : 704x480, 640x480, 704x240, 352x240, 176x112 ☐ PAL/SECAM (25 frames/sec Max.) : 704x576, 640x480, 704x288, 352x288, 176x144
Audio (Bi-directional)	Up	ADPCM 32 Kbps (G.726)
	Down	PCM 64 Kbps
Network	Interface	RJ-45, 10/100 Mbps, PoE (802.3af)
	Access network	Static, DHCP, PPP/PPPoE
	Application	IPv4, TCP/IP, ARP, DHCP, RTSP
I/O	RS-485	Connection of PTZ controller
	Relay Output	For alarm annunciation or remote ON/OFF control (30V, 1A)
	Mic/Line In	1 V p-p output for amplified speaker
	Line Out	For temporal use in installation
Power Supply	CVBS output	Power over Ethernet (IEEE802.3af)
	PoE	12V DC adaptor
Upgrade	Firmware upgrade over IP network	
Administration	Remote administration over IP network	
Security	ID and Password protection and IP filtering for restricting administrative	
Time management	Sync to PC	Synchronize to PC
	Manual	Manual time setting
	Internet Time Server	Synchronize to Time Server
	DLS	Day Light Saving

1.4. Applications of Veilux H.264

- IP surveillance (buildings, stores, manufacturing facilities, parking lots, banks, government facilities, military, etc..)
- Real time Internet broadcasting
- Remote monitoring (hospitals, kindergartens, traffic, public areas, etc..)
- Teleconference (Bi-directional audio conference)
- Remote Learning
- Weather and environmental observation

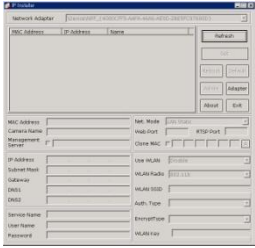
2. Operating Instructions

2.1 Package Contents

Open the package and check if you have the followings:

Contents	Description	Remarks
Veilux VID-H.264	Veilux VID-H.264 main unit	
Power Adaptor	Default built in standard PoE module (IEEE802.3af)	12VDC Adaptor (Optional item)
CD	Software & User's Guide	
Quick Reference Guide	Quick installation guide	

2.2. Product Preview

Veilux VID-H.264	IP-Installer
	
H.264 Decoder	PC software to allocate an IP address

2.3. Physical description

2.3.1. External View



Figure 2-1. External view of Veilux VID-H.264

2.3.1. Front and Rear

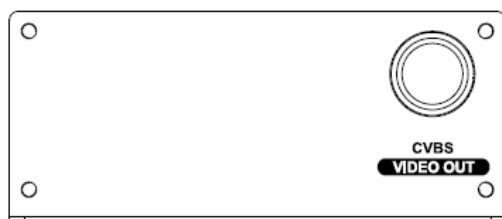


Figure 2-2. Front

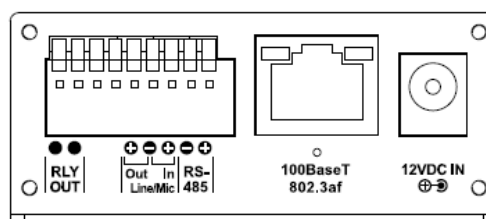


Figure 2-3. Rear

2.4. Functional Description

Category		Content	Misc.
RJ-45	PoE	Standard PoE (IEEE802.3af)	10/100Base-T
12VDC input	Adapter	Max. 5W	0.5A ~ 2.5A
Video output	CVBS	BNC	
Audio	In	Line Level (1Vpk) and micro phone	Configuration in administration tool
	Out	Line Level (1Vpk)	
RLY (Relay)	Out	Normal Open	30VDC/AC, 2A
RS-485	Master	PTZ connection	Terminated

• 100Base-T

100Mbps Ethernet connector (RJ-45) with PoE standard (802.3af). 2 LEDs on the Ethernet connector shows the status of Veilux VID-H.264 as the followings:

- **Status LED (Dual Color - Red/Green)** : It will be lit in green or red depending on the status.
 - ① Green : Green color indicates that the product is in normal operation mode. Continuous green indicates that data transmission is possible. Blinking green means that someone is connected to Veilux VID-H.264.
 - ② Red : Continuous or blinking red indicates that hardware is in abnormal condition.



Red/Green LED will be lit with red momentarily and it will be lit with green after a while when power is applied into Veilux VID-H.264.

- LINK/LAN LED (Orange)

It will be lit with orange color when network cabling is all right. Blinking orange color indicates that normal data transmission is under way. Off state indicates that there is trouble in network connection.

• DC 12V: Power input for supplying 12V DC power.



Caution: If Veilux VID-H.264 is powered by PoE, do not plug in DC Jack with active DC power into DC power connector.

• Video output (CVBS)

Video output from IP camera video.

• Audio in (MIC/LINE IN)

Connect external audio source or microphone.

• Audio out (Line Out)

Connect speakers with built in amplifier. Audio from remote site is output through Line out in bi-directional audio mode.

- **RLY Out:** Relay output is provided for connecting alarm devices or for remote on/off control of devices such as light. Relay is normal open and it will be closed upon alarm annunciation or remote on. The relay is capable of switching **30V AC/DC, 2A**. For the application which needs power switching beyond this limit, use additional relay switch as shown in the right of Figure 2-4.

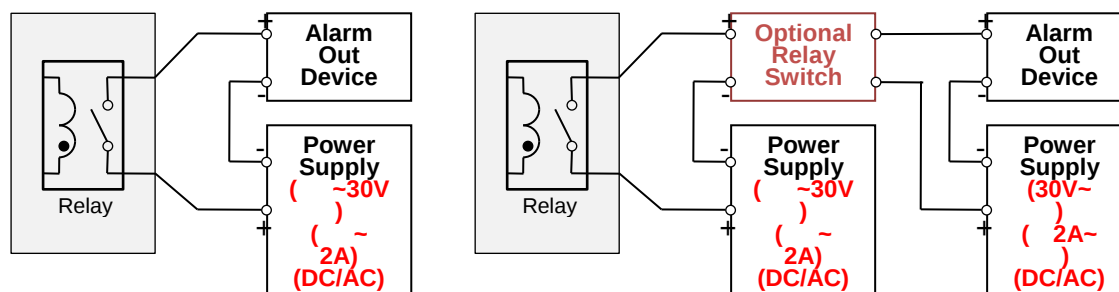


Figure 2-4. RELAY Output connection (left: switching requirement below 30V, 2A), (right : switching requirement higher than 30V, 2A. Apply this connection when either voltage or current exceed the limit.)

- **Factory Default Switch**

A switch provided for returning the product to factory default state. Press the switch for a few seconds while power is applied.

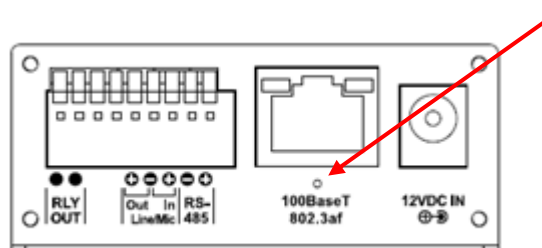


Figure 2-5. Factory Default Switch



All configurations will be deleted when you take factory default. You should assign from IP address configuration to camera registration.

3. Getting Started

3.1. PC Requirement

First of all, you should set up the Veilux VID-H.264 such as IP address using IP installer software and administration tool using Internet Explorer. Minimum requirement of the PC is described below:

	Recommended	Remark
CPU	Pentium III above	
Main Memory	512MB above	
Operating System *	Windows XP/ Vista/ 7 (32 bit)	
Web Browser	Internet Explorer 6.0 above	
Network	100 Base-T Ethernet	

* Operating Systems supported: Windows 2000 Professional, Windows XP / Vista / 7

3.2. IP address configuration

1. Connect PC and Veilux VID-H.264 to network.

- 1) Prepare a PC to run programs for the installation and video connection (PC is needed to assign IP address to Veilux VID-H.264)
- 2) In the case of using PoE, connect the PC and Veilux VID-H.264 to the network using one of the following ways.

If your LAN Switch does not support standard PoE, connect Veilux VID-H.264 as shown in dotted line in Figure 3-1. The DC power is applied through DC adaptor.

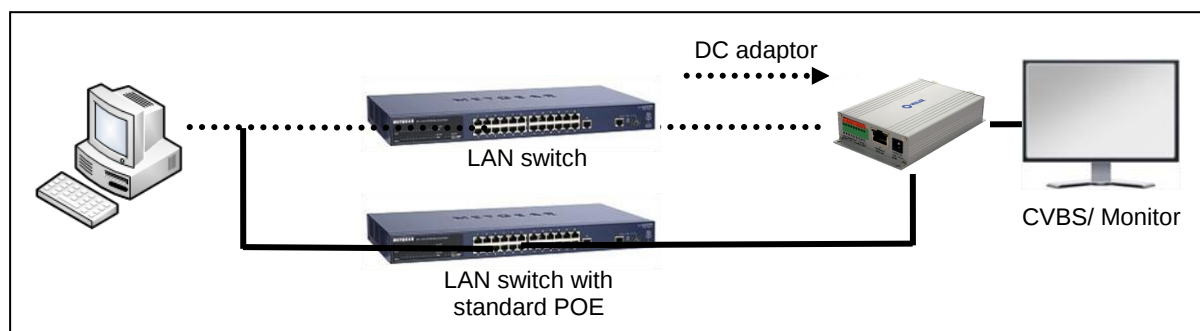
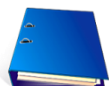


Figure 3-1. Power and network connection

2. Install "IP installer" and set IP parameters on Veilux VID-H.264

Insert the CD provided with product into the PC. Install WinPcap and IP Installer in sequence. Make sure that IP Installer can't run without WinPcap.



IP installer Ver. **3.0.1 or later** is needed in the configuration.

Follow the sequence below for setting the IP parameter

- i) Run IP installer > Select Network Adaptor > OK
- ii) Click ① in IP installer window.> Double click on ② > Fill in ④ > make a selection in ⑤ > Fill the parameters in ⑥
- iii) Click on ⑨ to apply the settings.
- iv) You can connect to admin page by clicking on ⑩.

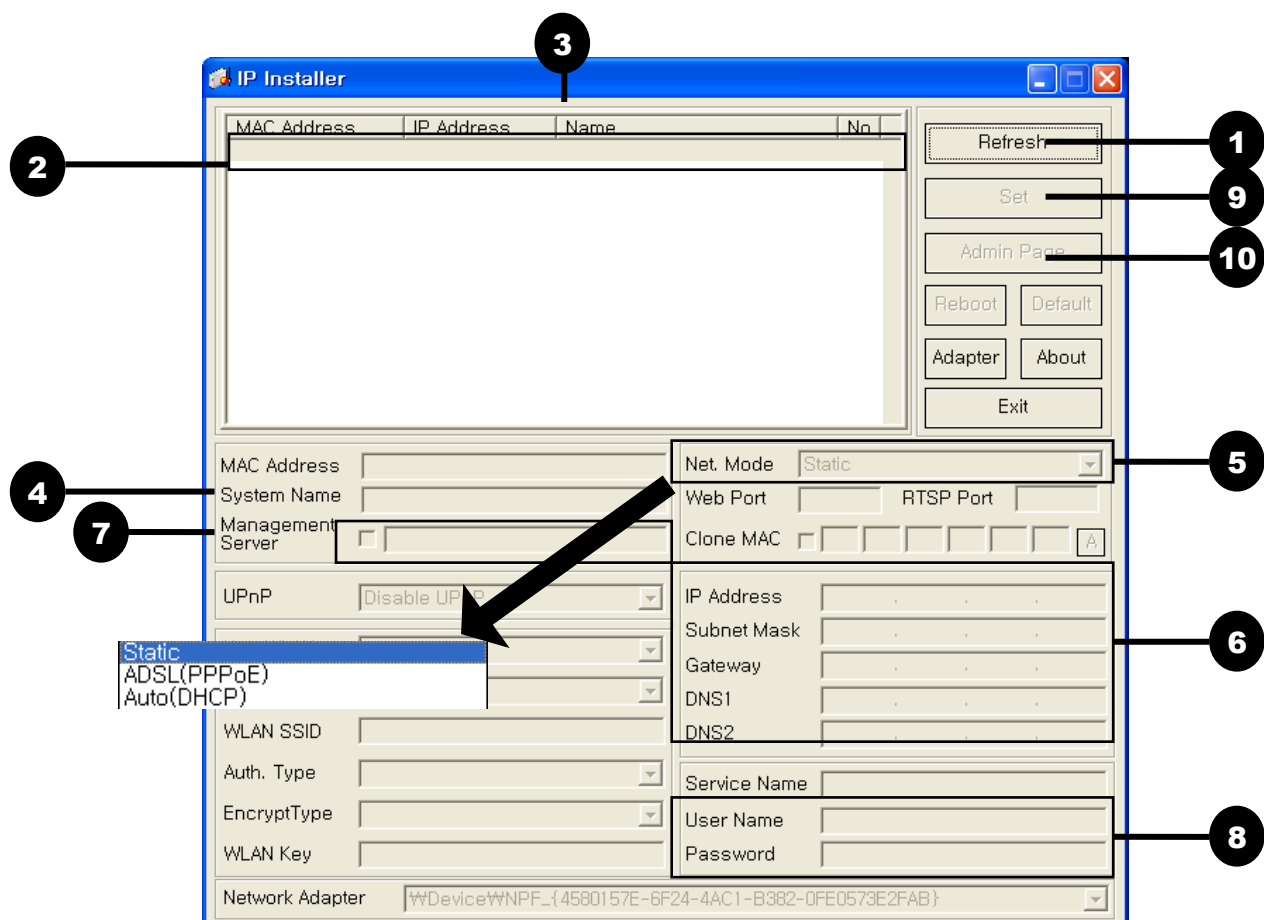


Figure 3-2. IP installer



Click on the field in ③ for sorting and rearranging the list.

Select network mode that best suits from the drop down list in ⑤. You can choose either Static or ADSL and Auto (DHCP), respectively. If ADSL and Auto are selected, the fields in ⑥ is deactivated.

In case of ADSL, fill the User Name and Password in ⑧ with the values provided by your ISP.

3.3. Administration Tool configuration

There is a way of connecting to the Veilux VID-H.264 admin mode. Type in the connection address of the product in the address field of the Internet Explorer as followings:

[http://\[IP address of the product\]](http://[IP address of the product]), **Example: <http://172.16.43.244>**

Default ID and Password are “root” and “admin”.

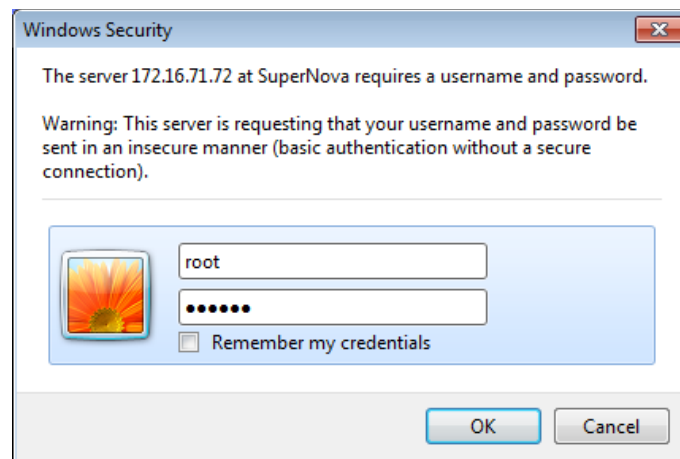


Figure 3-3. Log-in window

3.3.1. Basic Setup

The screenshot shows the 'Administration Tools' web interface for the Veilux VID-H.264. The 'Basic Setup' section is active. It includes fields for System Name (720), Audio Input Selection (Mic selected, Volume 0, Line In), Video Out Type (NTSC selected, PAL), Viewing Mode (Single selected, Sequence, Default Group 1), and OSD Setup (OSD Display, Time Display, Alarm Display, each with Enable/Disable options). A SAVE button is at the bottom.

Figure 3-4 Basic Setup

Field/Button	Sub Field /Button	Description
System name		Input, edit and save the name of Veilux VID-H.264 here (support input English, letter and character). Veilux VID-H.264 name will be shown in the [Search List] window.
Audio input selection	Mic	When you use microphone, you should check the radio button and volume.
	Line-in:	When you use external audio signal, check it.
Video format		Choose different output standard to matching different monitor. If user's monitor is NTSC monitor, he should choose the output format "NTSC". (Veilux VID-H.264 default output format is "NTSC")
Viewing mode	Sequence	When you want to see each channel sequentially.
	Single / Default group	When you want to see group such as split screens.
OSD setup	OSD	You can select Enable or Disable.
	Time	You can select Camera or Decoder.
	Alarm	You can select Enable or Disable.
Save		Save the set-up parameters when parameters settings are finished.

3.3.2. Network Configuration

Setup the network parameters appropriately in accordance with your network environment. Many of the parameters in this page are same as those set up by "**IP-Installer**".

Figure 3-5 Network Configuration

Field/Button	Sub Field /Button	Description
IP Assign Type	The network types supported by the products are LAN(fixed IP), PPPoE, and DHCP(automatic IP allocation)	
	Static IP Setup	When the network environment is fixed IP, select 'LAN' in the network type, and input the IP address, Subnet Mask, Gateway, DNS1 and DNS2. Ask your network administrator or ISP for the information. DNS2 is used when DNS1 does not work.
	PPPoE Setup	When the network environment is PPPoE and IP address is assigned automatically, select 'PPPoE' in the network type. Next, fill in the 'User Name' and 'Password' fields with the values given by your ISP.
	DHCP Setup	When the DHCP server assigns IP address automatically, select 'DHCP' in the network type. Select this mode in case of Cable Modem. Refer to [IP-installer user's guide] for "Host name and domain for Cable Modem"
	Clone MAC	Refer to [IP-installer user's guide] for "Clone MAC"
Port Change	Each port should have a number below 65535.	

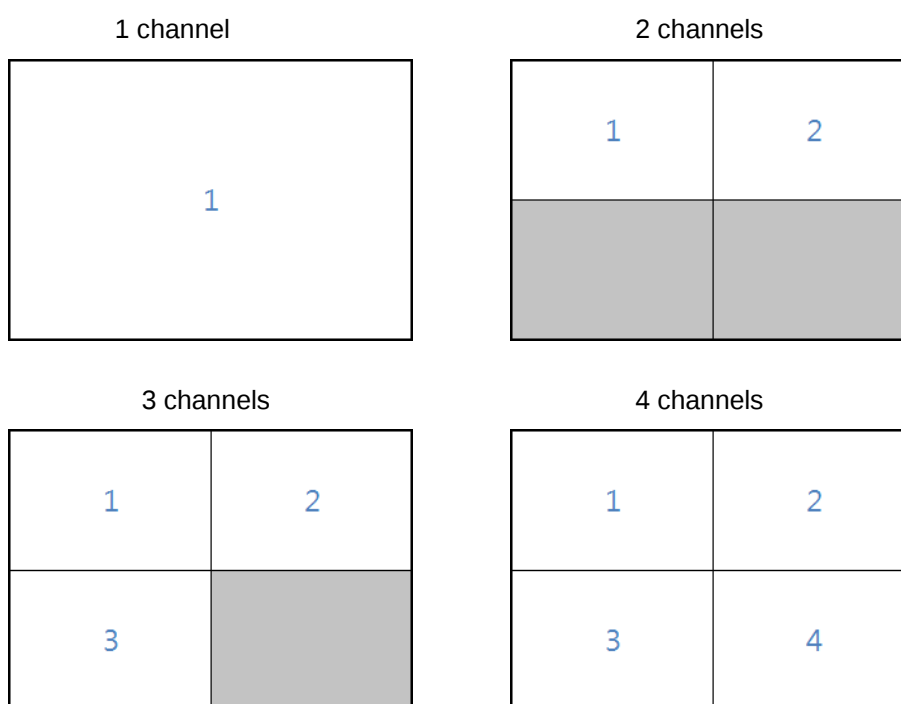
	HTTP	HTTP port is used for the connection to the admin page. Default is 80.
IP Filtering	You can restrict the access to the admin page from IP addresses beyond certain IP address range.	
	Restrict Administrator Access	Check at this box to restrict log on to the admin page.
	Base IP Address	Input IP address of the PC which is intended to be used for log on to admin mode.
	Using External SMTP Server	If you are using external mail server, fill in the fields with proper parameters.
	Use TLS	Check at this box to use SSL log on to the SMTP server.
Management Server	You can register the product to the Management Server (DDNS Server) for name service.	
	Log on to server	Check this box to enable log on to management server (DDNS Server) . By log on to the management server your product can use domain name instead of numeric IP address. This feature is particularly useful when your product is using dynamic IP address. Input the URL of valid management server (DDNS Server) for the service. You must have an account on the management server (DDNS Server) and register your product under your account to use this feature. Domain name of your product can be assigned when you register your product to the management server under your account. One of the servers available is mgmt.net-video.net . For opening an account, visit www.net-video.net .
Save		Save the set-up parameters when parameters settings are finished.

3.3.3. Group setup

Setup the display group. Group can setup up to 16 groups and a group can setup up to 4 channels.

Delete	Index	Channel 1	Channel 2	Channel 3	Channel 4	During	Enable
☐	0	1 pPtz	0 pMic	0 pMic		30	☒
☐	1	1 pPtz				10	☒
☐	2	0 pMic				10	☒
☐	3					10	☐
☐	4					10	☐
☐	5					10	☐
☐	6					10	☐
☐	7					10	☐
☐	8					10	☐
☐	9					10	☐
☐	10					10	☐
☐	11					10	☐
☐	12					10	☐
☐	13					10	☐
☐	14					10	☐
☐	15					10	☐

Figure 3-6 Group Setup



Field/Button	Sub Field /Button	Description
Group	Delete	Deletion of all channel parameters
	Index	Group number
	Channel 1~4	Assignment of each channel
	During	Waiting time from 10 sec. to 120 sec.
	Enable	You can select Enable or Disable.
Apply / Delete	Save the setup parameters or delete selected check-box on Delete	

3.3.4. Session setup

Administration Tools							
English							
SESSION SETUP							
Session List							
Delete	Index	Name	Address	Port	Channel	Id	Password
☐	0	pMic	172.16.43.32	554	1	root	
☐	1	pPtz	58.181.14.72	554	1	root	
☐	2						
☐	3						
☐	4						
☐	5						
☐	6						
☐	28						
☐	29						
☐	30						
☐	31						

Apply Delete

Figure 3-7 Session Setup

Field/Button	Sub Field /Button	Description
Session	Delete	Deletion of all channel parameters.
	Index	Number of camera and video server lists.
	Name	Input the name.
	Address	IP address and domain name of encoder. Default list table are blank, support input Internet IP, LAN IP and Internet domain name. (Suppose an encoder domain name, the address blank must input like this " Veilux.net ", do NOT input the " http:// ").
	Port	Input the Http port number.
	Channel	Select the channel. IP camera and video server is channel 1. In case of 4 channels video server, select desired channel.
	ID/Password	Input the ID and Password. Default ID/PW is root/admin .
Apply / Delete	Save the setup parameters or delete selected check-box on Delete.	

Connecting decoders target list:

3.3.5. User Admin & Time Setup

The screenshot shows the 'Administration Tools' interface with a sidebar menu on the left containing: Basic Setup, Network Setup, Group Setup, Session Setup, User Admin & Time Setup (highlighted), PTZ Setup, Upgrade & Reset, and Status Report. The main content area is titled 'USER ADMIN. & TIME SETUP' and has a language dropdown set to 'English'. It contains two sections: 'User Administration' with fields for Username, Password (4 ~ 16 char), and Confirm Password, and a 'SAVE' button; and 'Time Setup' with a 'Current Time' display, a 'Synchronize with an Internet Time Server' option (selected), a 'Specify Time Server' field (pool.ntp.org), a 'Select Time Zone' dropdown (GMT +9:00), a 'Daylight saving' checkbox, and a 'Synchronize with this Computer Time' option. There are also fields for Date and Time for both synchronization methods, and a 'SAVE' button at the bottom.

Figure 3-8 User admin. & Time setup

Field/Button	Sub Field /Button	Description
User Administration	Administrator Username	Admin ID. Default ID is "root"
	Administrator password :	Admin password. The default password is "admin".
	Administrator Confirm Password	Enter the password once more to confirm the password.
Time Setup	Current Time	It shows you the current time kept in the product.
	Synchronize with an Internet Time Server	Synchronize the time kept in the product with the time kept in time server on the internet at the right. When the time server is out of the reach from the product, you can assign time server by filling in " Specific Time Server " field.
	Synchronize With this Computer Time	Synchronize the time kept in the product with the time in the PC.
	Set Manually	Set the time manually. Fill in the fields with desired formats.
SAVE		Save the set up parameters



If you lost Administrator's ID and password, the only means of recovery is to reset the settings to factory default, but then you lose your previous settings.

3.3.6. PTZ setup

This is the setup page for PTZ controller.

The screenshot shows the 'Administration Tools' window with the 'PTZ SETUP' tab selected. On the left is a sidebar with links: Basic Setup, Network Setup, Group Setup, Session Setup, User Admin & Time Setup, PTZ Setup (highlighted), Upgrade & Reset, and Status Report. The main area contains two sections: 'PTZ Controller Selection' with a dropdown menu showing 'Veilux VIK-USB Web Keyboard' and buttons for 'DELETE' and 'SAVE'; and 'PTZ Baud Rate' with a dropdown menu showing '9600' and a 'SAVE' button. A language dropdown in the top right corner is set to 'English'.

Figure 3-9 PTZ Setup

Field/Button	Sub Field /Button	Description
PTZ controller Selection		Choose the PTZ controller. It can support Veilux Wed Base dedicated controller.
	Delete Button	Click on this button to delete. (Do not delete the default model.)
	SAVE	Save the set-up parameters when PTZ controller setting is finished.
PTZ baud Rate		Select this Baud rate to set the PTZ controller.
	SAVE	Save the set-up parameters when baud rate setting is finished.

3.3.7. Upgrade & Reset

You can upgrade the device via the IP network.

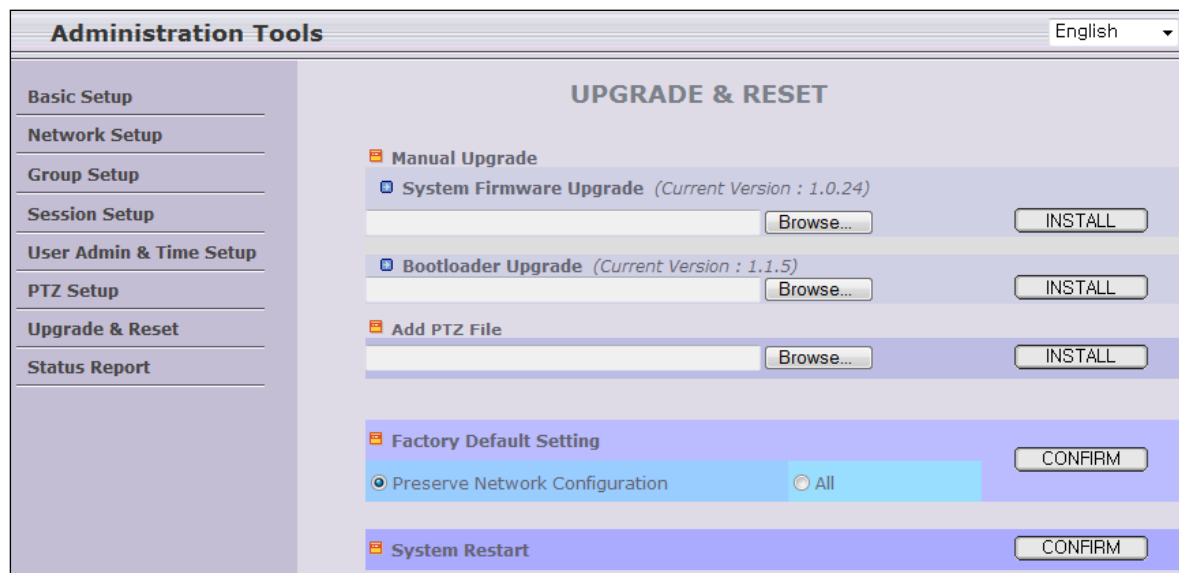


Figure 3-10 Upgrade & Reset

Contents of the upgradable system component should be downloaded from www.Veilux.net home page before the system upgrade is performed.

Field/Button	Sub Field /Button	Description
Manual Upgrade	Upgrade the system manually.	
	System S/W Upgrade	Upgrade the system software installed on the product via the network. System software needed for the upgrade can be downloaded from www.Veilux.net home page.
	Bootloader Upgrade	Upgrade the boot loader installed on the product via the network. Bootloader needed for the upgrade can be downloaded from www.Veilux.net home page.
Add PTZ File	Upgrade the PTZ script file for adding new PTZ controller.	
Factory Default Setting		Re-initialize the product to factory default state. By checking on a Radio button "Preserve Network Configuration", you can preserve the parameters for the network. Checking on "All", will return all the parameters to factory default state. Once all the values are set to factory default state, the product should be set-up again using IP-Installer.
System Restart		Perform remote reset by clicking on the "CONFIRM" button. [Important] To apply upgraded contents, you

		<i>should perform System Restart.</i> All previous connections will be disconnected upon reset. Device does not resume the connections and the users must re-connect to the product manually.
--	--	--

Upgrading the device.

Unless otherwise instructed, the owners of the device are recommended to upgrade the system when upgraded firmware is released using manual upgrade procedure.

Followings are the procedure to apply for the manual upgrade

- 1) Save the upgrade system software to your PC. Upgrade software can be downloaded from www.Veilux.net home page or provided in CD.
- 2) Connect to the product in admin mode and select "Update & Reset" menu.
- 3) Click "Browse..." to find the files you want to use for upgrade. This will open a "Choose file" dialogue window. The file extension is ".ief" for the case of system firmware.
- 4) When you've found the file, click "Open." This will select the file and close the "Choose file" dialogue window.
- 5) Click the "INSTALL" button. An alert message box will pop up. Click "OK" button then it will start uploading the file. This may take some time.
- 6) Upgrade completion message will appear after the system upgrade has been completed.
- 7) Reboot device by performing "System Restart".
- 8) After rebooting, log on to the product in admin mode again and click the "Status Report".
- 9) Check the version number and release date of the firmware.



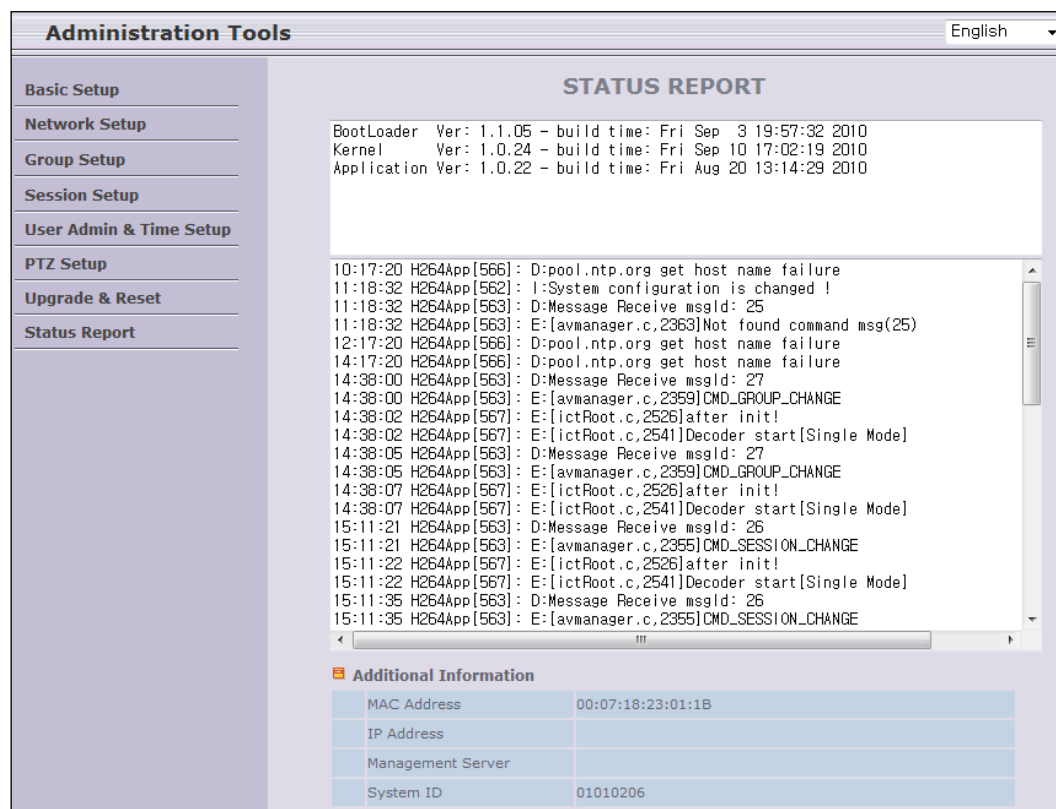
You can download system software of the device from Veilux homepage. www.Veilux.net



Once the system is reset to the factory default state by system reset of the administrator, all the connection of the users might be disconnected. Since the connection is not recovered automatically, users should set up the connection manually with new connection information.

3.3.8. Status Report

It shows you system records since the system started.



You can check the problems as well as the versions and event status of the whole system and modules.

4. Trouble Shooting

4.1. No power is applied

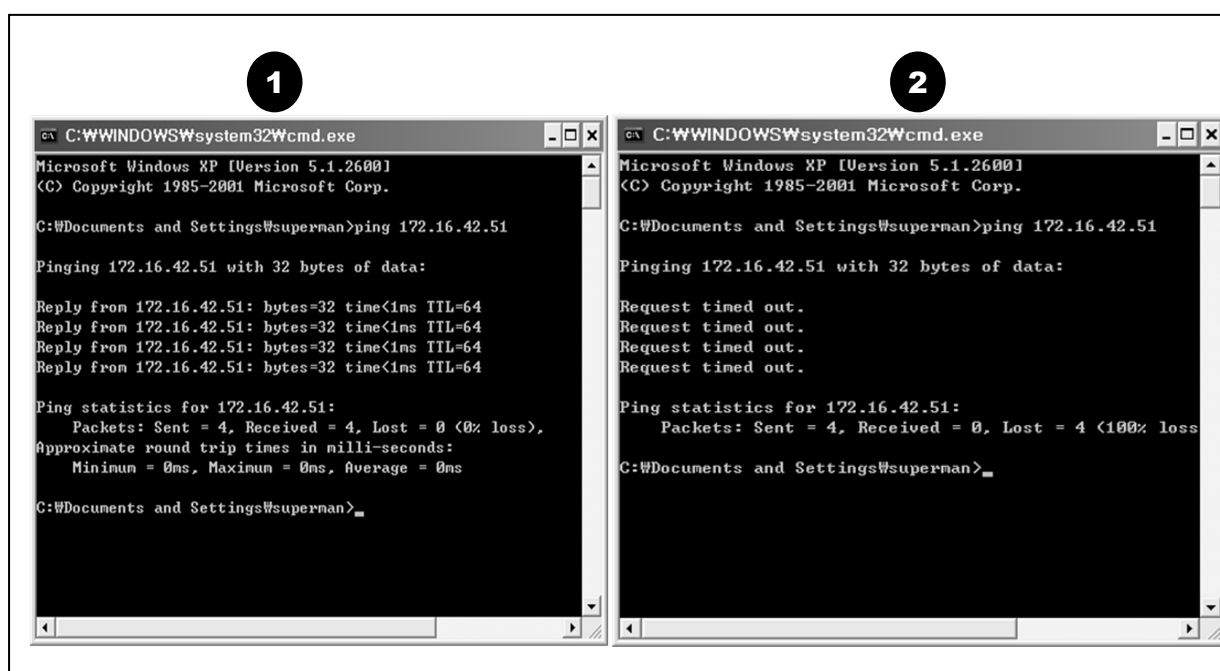
- In case of Standard PoE (Power over Ethernet)
Power supply through standard PoE is possible only when the following conditions are met.
 1. Standard PoE is supported on the product.
 2. The LAN switch supports standard PoE.Make sure that both the product and the LAN switch support standard PoE (IEEE 802.3af)
- In case of DC adaptor
If PoE is not applied, the power and network connection should be made through separate cables. It is recommended to use DC adaptor supplied by Veilux for the feeding of the power. In case of replacing the DC power supply, make sure that the power supply meets with the power requirement of the product to prevent damage or malfunction.

4.2. Cannot connect to the Video

Check the status of the network connection through PING test.

Try the following on your PC :

- Start > Run > Cmd > Ping IP address (Ex : Ping 172.16.42.51)
- If "Reply from ~" message is returned (① in the figure below), the network connection is in normal state. Try connection to the video again. If the problem persists, or refer to other trouble shooting notes.
- If "Request timed out" message is returned. (② in the figure below), the network connection or network setting is not in normal state. Check the network cable and settings.



4.3. Technical Assistance

If you need any technical assistance, please contact your dealer. For immediate service please provide the following information.



1. **Model name**
2. **MAC address and Registration number**
3. **Purchase date**
4. **Description of the problem**
5. **Error message**