



# 1-PORT H.264 VIDEO SERVER



**USER MANUAL**  
**DN-16100**

# IMPORTANT SAFEGUARD



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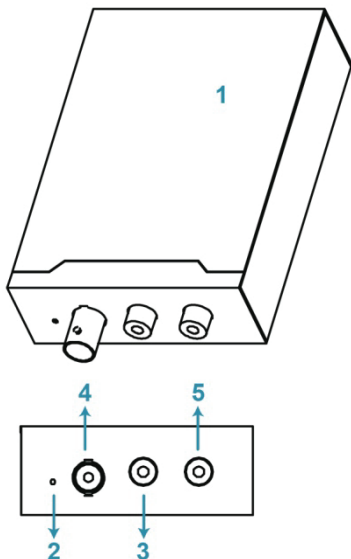
We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:

# TABLE OF CONTENTS

1. PRODUCT OVERVIEW.....	1
1.1 FRONT SIDE.....	1
1.2 REAR SIDE .....	2
2. CONNECTION.....	3
3. ETHERNET CONNECTION .....	4
3.1 NETWORK CONNECTION VIA LAN.....	4
3.2 NETWORK CONFIGURATIONS VIA WEB BROWSER .....	9
3.2.1 <i>DDNS setting</i> .....	10
APPENDIX 1 CREATING AN ACCOUNT FOR DDNS SERVICE .....	11

# 1. PRODUCT OVERVIEW

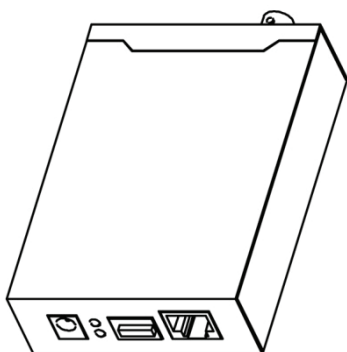
## 1.1 Front Side



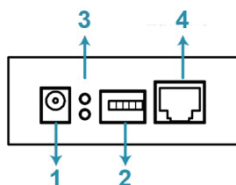
- 1 Video Web Server
- 2 Reset
- 3 Video In
- 4 Audio In
- 5 Audio Out

CONNECTOR / BUTTON	DESCRIPTION
Reset	This button is hidden in the pinhole. Press and hold the reset button until this device is rebooted. This will reset all parameters, including the IP address to factory default settings.
Video In	Connect to the video output connector of your camera with a video cable (i.e. a RCA cable with the BNC connector, or a coaxial cable) for video output. * The video cable is optional.
Audio In	Connect to the audio connector of your camera with an audio cable if your camera support audio recording. * The audio cable is optional.
Audio Out	Connect to an audio device, such as speaker.

## 1.2 Rear Side



- 1 DC 12V
- 2 Alarm I/O
- 3 Status
- 4 Ethernet



CONNECTOR	DESCRIPTION
DC 12V	Connect the DC 12V adapter for power supply.
Alarm I/O	Connect to an external device. There are five connectors, and they're RS485-B, RS485-A, alarm-out, alarm-in, and GND respectively from left to right.
Ethernet	Connect the device to the network with the supplied RJ45 cable.

## 2. CONNECTION

Step1: Finish camera installation as described in its respective user manual.

Step2: Connect the video output of the camera to the video input of this device with a video cable.

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**Note: *The video cable is not supplied within the sales package. Please purchase separately.***

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Step3: (Optional) Connect the audio output of the camera to the audio input of this device with an audio cable if your camera support audio recording.

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**Note: *The audio cable is not supplied within the sales package. Please purchase separately.***

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Step4: Connect the camera to power.

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**Note: *The camera adapter might be supplied with the camera. Please check your camera's sales package. If not, please use the regulated adapter with correct output voltage.***

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Step5: Connect this device to power with the supplied adapter.

Step6: Connect this device to Internet. For details, please refer to the next chapter, "3. ETHERNET CONNECTION".

# 3. ETHERNET CONNECTION

Before using this device, please follow the instructions below to finish the network connection settings based on your installation environment:

- To configure the network settings, you must connect the device to your PC by LAN. For details, please refer to “3.1 Network Connection via LAN” at page Fehler! Textmarke nicht definiert..
- To configure the network settings via a web browser, please refer to “3.2 Network configurations via web browser” at page 9.

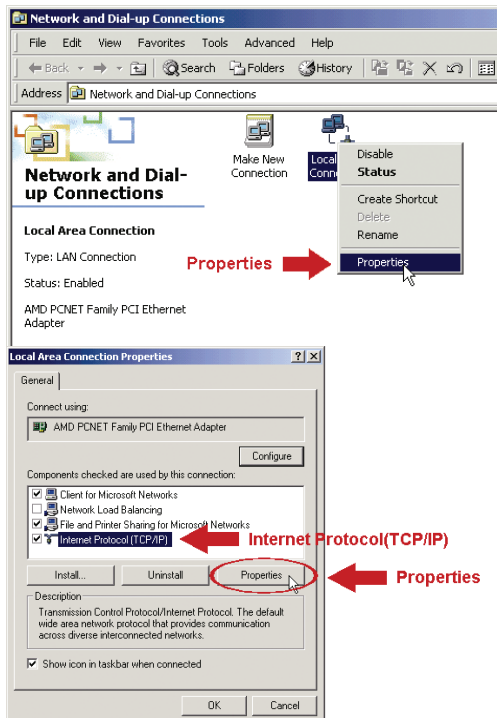
## 3.1 Network connection via LAN

Step1: Connect this device and your PC via a RJ45 network cable, and make sure the device is powered on.

Step2: Set the PC’s IP address as “192.168.1.XXX” (1~255, except 10).

*For Windows 2000 users:*

- Select “Start” → “Settings” → “Network and Dial-up Connections”.
- Right-click on “Local Area Connection”, and select “Properties”.
- In the “General” tab, select “Internet Protocol (TCP/IP)”, and select “Properties”.



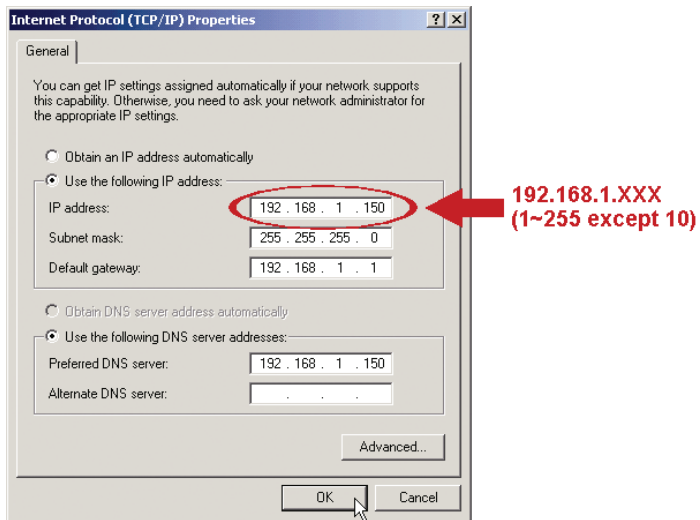


- d. In the “General” tab, select “Use the following IP address”, and set the IP address as described below.

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**Note:** *It’s recommended to note down the current settings first and then change as instructed. It’s helpful when you need to restore the PC network settings for connecting to Internet later.*

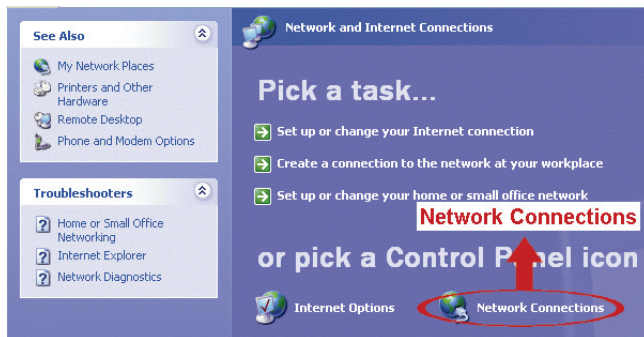
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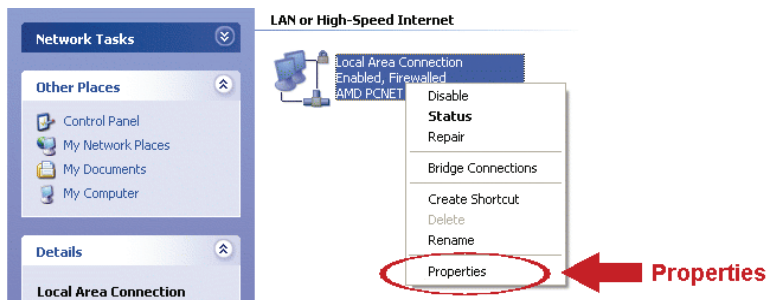
- e. Click “OK” to close the “Internet Protocol (TCP/IP) Properties” dialog box. Then, click “Close” to close the “Local Area Connection Properties” dialog box.

For Windows XP users:

- a) Select “start” → “Control Panel” → “Network and Internet Connections” → “Network Connections” (If you’re in “Category View”).



- b) In “LAN or High-Speed Internet”, right-click on “Local Area Connection”, and select “Properties”.



- c) In the “General” tab, select “Internet Protocol (TCP/IP)”, and select “Properties”.

- d) In the “General” tab, select “Use the following IP address”, and set the IP address to “192.168.1.XXX” (XXX can be any value from 1~255 except 10).


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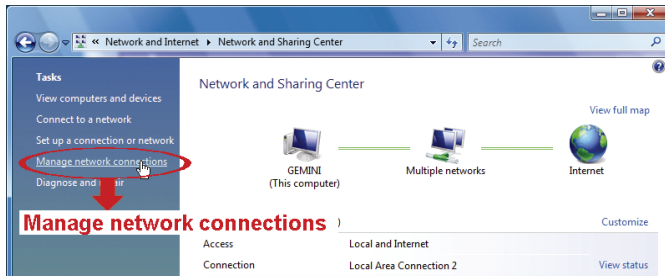
**Note: It's recommended to note down the current settings first and then change as instructed. It's helpful when you need to restore the PC network settings for connecting to Internet later.**

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- e) Click “OK” to close the “Internet Protocol (TCP/IP) Properties” dialog box. Then, click “Close” to close the “Local Area Connection Properties” dialog box.

For Windows Vista users:

- a) Select “” (start) → “Control Panel” → “Network and Internet” to enter the “Network and Sharing Center”. Then, click “Manage network connections” (If you're in “Category View”).



- b) Right-click on “Local Area Connection”, and select “Properties”.



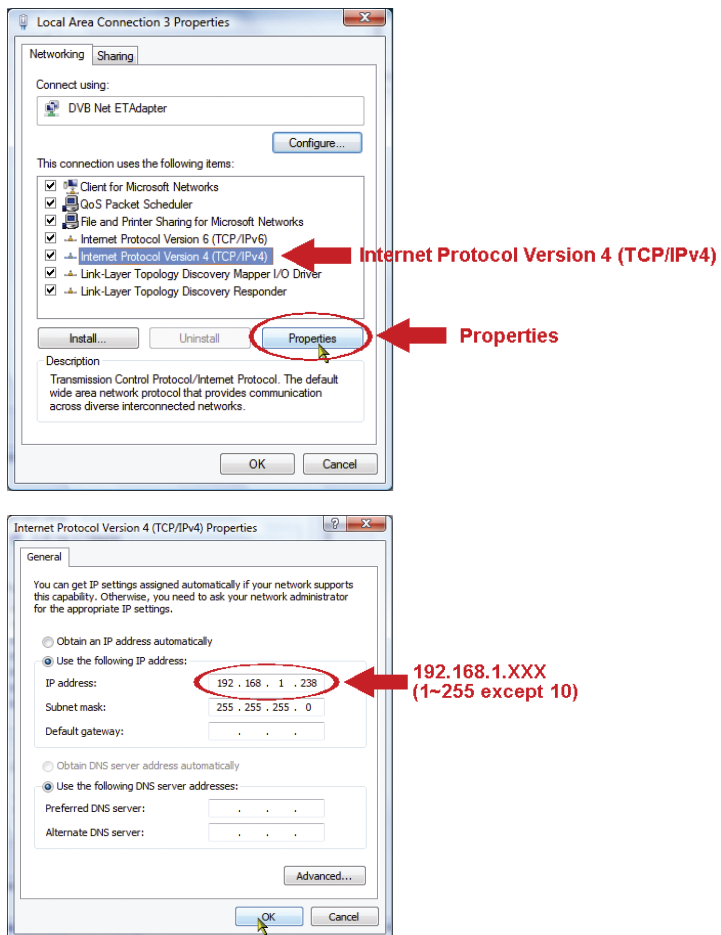
- c) In the “Networking” tab, select “Internet Protocol Version 4 (TCP/IPv4)”, and select “Properties”.

- d) In the “General” tab, select “Use the following IP address”, and set the IP address as described below.

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**Note: It’s recommended to note down the current settings first and then change as instructed. It’s helpful when you need to restore the PC network settings for connecting to Internet later.**

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- e) Click “OK” to close the “Internet Protocol Version 4 (TCP/IPv4) Properties” dialog box. Then, click “Close” to close the “Local Area Connection Properties” dialog box.

## 3.2 Network configurations via web browser

Step1: Open your web browser, for example, Microsoft Internet Explorer, and enter “http://192.168.1.10” in the URL address box.

Step2: In the login page, key in the default user name (*admin*) and password (*admin*), and enter the security code from the image below. Then, click “LOGIN”.

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**Note:** *Skip the wizard if any.*

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Step3: In the live page, click “Config.” on the top right side to open the configuration page.

Step4: Click “Network” → “Network” to select the connection type: Static IP / PPPoE / DHCP.

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**Note:** *This device doesn't support POE router or hub.*

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Network Configuration

IP Type:  Static IP  PPPoE  DHCP

Server IP: 192.168.1.10

Gateway: 60.250.165.97

Net Mask: 255.255.255.0

Port: 80

DNS1: 168.95.1.1

DNS2: 0.0.0.0

MAC Address: 00:0e:53:16:8c:cd

Save Reload

### For Static IP:

- a) Enter the information of “Server IP”, “Gateway” and “Net Mask” obtained from your ISP (Internet Service Provider).
- b) Enter the port number. The valid number ranges from 1 to 9999. The default value is 80. Typically, the TCP port used by HTTP is 80. However in some cases, it is better to change this port number for added flexibility or security.
- c) Click “Save” to save your network configurations, and log out.
- d) Disconnect your device and your PC, and connect them to Internet separately. Then, enter the IP address or host name you just note down in the URL address box of the web browser, and see if you can access the device successfully.

### For PPPOE:

- a. Enter the user name and password obtained from your ISP, and click “Save”.
- b. Continue the DDNS setting as instructed in “3.2.1 DDNS Setting”.

### For DHCP:

- a. Before selecting this option, you need to finish the DHCP router settings first.  
Get a router and connect it to the Internet via your PC (with Static IP or PPPoE setting). There are different setting methods for different routers. Please refer to their respective user manuals.
- b. Continue the DDNS setting as instructed in “3.2.1 DDNS Setting”.

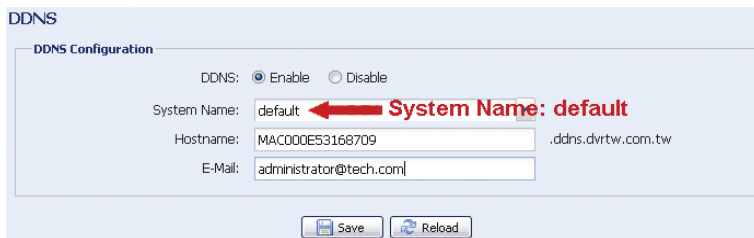
## 3.2.1 DDNS setting

Step1: Click “Network” → “DDNS”, and check “DDNS Enable”.

Step2: Select “default” in “System Name”.

In “Hostname”, keep the default value, i.e. the MAC address of this camera, or change the name to a meaningful one. It’s easier to memorize.

Then, note down the whole address of the camera, for example, MAC000E530D93E3.ddns.dvrtw.com.tw.



DDNS

DDNS Configuration

DDNS:  Enable  Disable

System Name: default **← System Name: default**

Hostname: MAC000E53168709 .ddns.dvrtw.com.tw

E-Mail: administrator@tech.com

Save Reload

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**Note:** *You can also create a DDNS account from a website which provides free DDNS service. For details, please refer to “Fehler! Verweisquelle konnte nicht gefunden werden.” at page Fehler! Textmarke nicht definiert..*

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Step3: Click “Save” and log out. Then, disconnect your device and your PC, and connect them to Internet separately.

Step4: Enter the host name you just note down in the URL address box of the web browser, and see if you can access the device successfully.

## APPENDIX 1 CREATING AN ACCOUNT FOR DDNS SERVICE

For PPPOE or DHCP, you should enter the host name which points to the IP address of your device for login first.

There are many websites for free DDNS service application, and below shows an example of DDNS account application from the website <http://www.dyndns.com>.

Step1: Go to <http://www.dyndns.com>, and click “Create Account” to sign up a DDNS account.

The screenshot shows the DynDNS website interface. At the top right, there is a login form with fields for 'User:' and 'Pass:' and a 'Login' button. Below the login form, there are links for 'Lost Password?' and 'Create Account'. A red arrow points to the 'Create Account' link with the text 'Create Account' next to it. The main navigation menu includes 'About', 'Services', 'Account', 'Support', and 'News'. The central banner features the text 'SPRING INTO ACTION!' and 'DynDNS now offering Virtual Private Servers' with a list of specifications: '512MB RAM • 2GHz 64-bit Quad Core' and '\$60/Month • No Setup/Overage Fees'. Below the banner, there is a 'Now Available!' button. To the right of the banner, there are sections for 'New to DynDNS?', 'DNS Services', and 'Mail-Top Services'. At the bottom of the page, there are four columns of links: 'Resources' (What is DNS?, DNS Tools, Home Solutions, Business Solutions), 'Services' (DNS Hosting, Free Dynamic DNS, Email Relay, Domain Names), 'Support' (24/7 Premier Support, DNS Update API, Update Clients, Updater for Windows), and 'About DynDNS' (Company Facts, Technologies, DNS Inc. Jobs, Contacts).

Step2: Enter all the information necessary for signing up an account according to the website instructions.

- Key in a user name for login, for example, *headoffice523*.
- Set the password and input it again to confirm.
- Key in your E-mail address and input it again to confirm.

Then, click “Create Account”.

**Create an account or log in to continue**

Username:

Password:

Confirm password:

Email:

Confirm email:

Subscribe to:

- DynDNS.com newsletter (1 or 2 per month)
- Dyn Inc. press releases
- Remove HTML, for matting from email

Security Image:

Enter the numbers from the above image:

I agree with the [acceptable use policy \(AUP\)](#) and [privacy policy](#).

← Create Account

Step3: The system will automatically send a confirmation email to your email account. Please read this email within 48 hours and complete the procedure to activate your account according to the instructions in the email.

When the account is confirmed, you will see “Account Confirmed”. Your account is created successfully now.

**Account Confirmed**

The account headoffice523 has been confirmed. You can now [login](#) and start using your account.

Getting Started

- [Create a dynamic DNS host with your own domain name](#)
- [Create a dynamic DNS host within our Free domain](#)
- [Setup email services](#)
- [Register a domain name](#)



Step4: Click “login”, and enter the user name and password you preset before to log in.

Step5: Click “Add Host Services”.

The screenshot shows the DynDNS.com user interface for user 'headoffice523'. The main navigation bar includes 'About', 'Services', 'Account', 'Support', and 'News'. The left sidebar contains 'My Account', 'My Services', 'Account Settings', 'Billing', and 'My Cart'. The main content area is titled 'DynDNS Account headoffice523' and is divided into three columns: 'My Services', 'Billing', and 'Account Settings'. In the 'My Services' column, the 'Add Host Services' link is highlighted with a red arrow and a red text box that says 'Add Host Services'. Other links in this column include 'My Zones/Domains', 'My Hosts', 'Dynamic DNS Pro', 'Spring Server VPS', 'Network Monitoring', 'SSL Certificates', 'Recursive DNS', and 'Support'. The 'Billing' column contains links for 'View Shopping Cart', 'Active Services', 'Order History', 'Billing Profile and Vouchers', 'Renew Services', 'Auto Renew Settings', and 'Sync Expirations'. The 'Account Settings' column contains links for 'Change Email Address', 'Change Password', 'Change Username', 'Contact Manager', 'Mailing Lists', 'Move Services', 'Preferences', and 'Close Account'.

- Input a meaningful host name.
- Choose a host system name.
- Enter the IP address you want to redirect.

Note down the whole host name, for example, headoffice523.dyn dns.org. Then, click “Add To Cart” for billing.

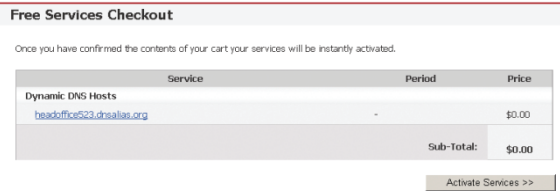
The screenshot shows the 'Add New Hostname' form in the DynDNS.com user interface. The form is titled 'Add New Hostname' and includes a note: 'Note: You currently don't have any active Dynamic DNS Pro upgrades in your account. You cannot use some of our Host Service features. Paying for an Dynamic DNS Pro upgrade will make this form fully functional and will add several other features.' The form fields are: 'Hostname' (set to 'headoffice523' and '.dyn dns.org'), 'Wildcard Status' (Disabled), 'Service Type' (radio buttons for 'Host with IP address', 'WebHop Redirect', and 'Offline Hostname'), 'IP Address' (set to '211.75.84.96' with links for 'Use auto detected IP address' and 'TTL value is 60 seconds'), and 'Mail Routing' (checkbox for 'Yes, let me configure Email routing'). A red arrow points to the 'Add To Cart' button at the bottom right of the form.

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**Note: This service is free. Just finish the billing process, and NO paying information is required.**

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Step6: Click “Activate Services” after checkout, and you’re ready to use DDNS services now.



← Activate Services

Step7: Return to your web browser, and go to “Network” → “DDNS”.

Select “Enable” for DDNS.

Select the system name you set when subscribing the DDNS service from the drop-down list, for example, *dyndns*.

Enter the user name & password you used to log into the DDNS service.

Enter the host name you set when subscribing the DDNS service, for example, *headoffice523*.

DDNS Configuration

DDNS:  Enable  Disable

System Name:

Username:  ← User name to log in DDNS service

Password:  ← Password to log in DDNS service

Hostname: