# EMINENT

## EM4420 - Cable and DSL Router

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# ⚠ Warnings and points of attention

Opening a product and/or products may cause serious injuries! Always have products repaired by qualified Eminent personnel!

# Table of contents

# 1.0 Warranty conditions

The five-year Eminent warranty applies for all Eminent products unless mentioned otherwise before or during the moment of purchase. When having bought a second-hand Eminent product the remaining period of warranty is measured from the moment of purchase by the product's first owner. The Eminent warranty applies to all Eminent products and parts inextricably connected to and/or mounted on the main product. Power supply adapters, batteries, antennas and all other products not integrated in or directly connected to the main product and/or products of which, without reasonable doubt, can be assumed that wear and tear show a different pattern than the main product are not covered by the Eminent warranty. Products are not covered by the Eminent warranty when exposed to incorrect/improper use, external influences and/or when opened by parties other than Eminent.

# 2.0 Introduction

Congratulations on your purchase of this high-quality Eminent product! This product has undergone extensive testing by Eminent's technical experts. Should you experience any problems with this product, you are covered by a five-year Eminent warranty. Please keep this manual and the receipt in a safe place.

Register this product now on www.eminent-online.com and receive product updates!

## 2.1 Functions and features

Are you looking for a way to share your cable or DSL Internet connection with other users in an easy way? Then the Eminent Broadband Router is exactly what you need! With this device you can use and share your Internet connection and files with multiple roommates or family members.

## 2.2 Packing contents

The following parts need to be present in the packing:

- EM4420, Cable and DSL router.
- Power adapter.
- UTP network cable.
- Manual.
- Installation CD-rom.

# 3.0 Configuring using the installation wizard

The easiest way to configure the router is by using the installation wizard, as explained in this chapter. If you do not wish to use the wizard as found on the CD-rom, you can also configure the router manually.

Before configuring the router first consult your personal Internet information (such as your username and password). This information was given to you by your provider. You will need it to configure the router.

1. Turn on the computer.
2. Insert the enclosed CD-rom in the CD-rom player.
3. The wizard will automatically start.
4. Follow the instructions on your screen till the installation has been finished. You now have a working Internet connection.

Attention! The settings will now be transferred to your router. You should be able to access the Internet after about 3 minutes.

# 4.0 Manually configuring the router

## 4.1 Connecting the router using a network cable

1.  Shut down your computer.
2.  Connect the router to a power outlet using the provided power adapter.
3.  Connect your Internet modem to the 'WAN' port of your router using a network cable.
4.  You can connect your computer(s) to LAN ports 1 to 4 using network cables.

## 4.2 Manually configuring the router for the Internet

*Before configuring the router first consult your personal Internet information. This information was given to you by your provider. You will need it to configure the router.*

1.  Open your Internet browser.
2.  Enter 'http://192.168.1.1' in the address bar.
3.  Press 'Enter' on your keyboard.
4.  Leave the field 'username' blank.
5.  Leave the field 'password' blank.
6.  Click 'Ok' to open the web page of the router.
7.  Click 'Next' in the opening page.
8.  Select the correct connection method.

## 4.3 Configuration for a DHCP Internet connection

Examples of providers who use a DHCP Internet connection are @home, Chello, Casema, Zeelandnet, Quicknet and ADSL providers that use a Speedtouch 510 or 530 modem.

1.  Enable the checkbox near 'Obtain an IP automatically'.
2.  Click 'Next'.
3.  Enter a 'Hostname' if required by your provider.
4.  Enter a 'Domain name' if required by your provider.
5.  Click the 'Clone MAC' button.
6.  Click 'Save' to save the settings.

## 4.4 Configuration for a PPTP Internet connection

PPTP Internet connections are utilized by ADSL providers that connect to the Internet using a Speedtouch Home modem.

1.  Enable the checkbox near 'PPP Tunneling Protocol (PPTP)'
2.  Click 'Next'.

3. Enter your Internet username in the 'PPTP Account' field (for instance: user@ADSL-comfort).
4. Enter your Internet password in the 'PPTP Password' field.
5. Enable the checkbox near 'IP address'.
6. Enter '10.0.0.138' in the 'IP Address' field.
7. Enter '1400' in the 'MTU' field.
8. Click 'Next'.
9. Enable the checkbox near 'Ethernet Broadband, fixed IP address provided by ISP.
10. Enter '10.0.0.150' in the 'IP Address' field.
11. Enter '255.255.255.0' in the 'Subnet' field.
12. Enter '10.0.0.138' in the 'Gateway' field.
13. Click 'Next'.
14. Click 'Save' to save the settings.

## 4.5 Configuration for a PPPoE Internet connection

PPPoE Internet connections are used, amongst others, by Kabelfoon, UPC and Tele2.

1. Enable the checkbox 'ADSL Virtual Dial-up (PPPoE)'.
2. Enter your Internet username in the 'Username' field.
3. Enter your Internet password in the 'Password' field.
4. Click 'Next'.
5. Click 'Save' to save the settings.

# 5.0 Checking the status of the router

1. Open your Internet browser.
2. Enter 'http://192.168.1.1' in the address bar.
3. Press 'Enter' on your keyboard.
4. Leave the field 'username' blank.
5. Leave the field 'password' blank.
6. Click 'Ok' to open the web page of the router.
7. Click 'Running Status' in the menu.

| WAN Status | |
| --- | --- |
| WAN Link Type | Shows the WAN connection type. |
| WAN IP | Shows the IP address you received from your provider. |
| Submask | Shows the subnet mask that comes with your IP address. |
| Secondly DNS | Shows the secondary DNS address of your provider. |
| Linked Time | Shows how long the connection has been up. |
| Link status | Indicates if your router is connected to the Internet. |
| Hostname | Shows the host name as configured |
| Gateway | Shows the gateway address of your provider |

| | |
|---|---|
| Domain | Shows the domain name as configured. |
| DNS Server | Shows the primary DNS address of your provider. |

| **LAN Status** | |
|---|---|
| WAN MAC Address | Shows the MAC address of the WAN connection. |
| Submask | Shows the local subnet mask of your router. |
| Running time | Shows for how long your router has been active. |
| NAT | Indicates whether the NAT option of your router is on or off. |
| LAN MAC Address | Shows the MAC address of the LAN connection. |
| IP Address | Shows the local IP address of your router. |
| **Information** | |
| Firmware Version | Shows the firmware version of your router. |
| Firewall | Indicates whether the firewall of your router is on or off. |
| DHCP Server | Indicates whether the DHCP server of your router is on or off. |
| Client Count | Shows how many computers are connected to your router. |

# 6.0 Firewall settings

A firewall can both be a software based solution or a hardware based solution. It places a wall between your local network and the outer world, so to speak. Firewalls usually check both incoming and outgoing data traffic. Firewalls can be set to block or allow specific information from the Internet. Firewalls can also be set to block or allow requests from within your local network.

## 6.1 Opening ports in the firewall

The option 'Virtual server' allows you to make a computer in your network (for instance configured as an FTP or web server) available from the Internet. When using the 'Virtual Server' you can specify ports that need to be opened by the firewall. Opening ports in the firewall can be necessary if you use programs that both receive and transmit data (such as VPN, Kazaa, Azureus and some computer games).

*Note! Before configuring the Virtual Server you first need to know which ports need to be opened. Consult the help function or the documentation of the program for which you wish to open ports.*

1. Open your Internet browser.
2. Enter 'http://192.168.1.1' in the address bar.
3. Press 'Enter' on your keyboard.
4. Leave the field 'username' blank.
5. Leave the field 'password' blank.
6. Click 'Ok' to open the web page of the router.
7. Click 'Virtual Server' in the menu.
8. Click 'Enable'.

9.  Select the port you wish to open in the 'e.g. Port' field. If you can not select this port in the 'e.g. Port' field, you can manually enter the port in the field next to 'e.g. Port'.
10. Enter the IP address of the computers that needs to use the opened port in the field next to '192.168.1'.
11. Select the correct Internet protocol. Consult the help function or documentation of the program for more information.
12. Click 'Add' to add the port.
13. Click 'Save' to save the settings.

## 6.2 Disabling the firewall

The DMZ or DeMilitarized Zone is a zone between the Internet and your local network. Computers that are placed in the DMZ are reachable from the Internet. Therefore the DMZ is often used for servers that are hosting web sites. People that frequently play online games also often place their computer in a DMZ. It is however recommended to install a software based firewall on the computer when placing it in a DMZ, because the DMZ opens all ports to the computer. There are no restrictions on data traffic, even though in some situations this is preferable.

1.  Open your Internet browser.
2.  Enter 'http://192.168.1.1' in the address bar.
3.  Press 'Enter' on your keyboard.
4.  Leave the field 'username' blank.
5.  Leave the field 'password' blank.
6.  Click 'Ok' to open the web page of the router.
7.  Click 'Virtual Server' in the menu.
8.  Click 'DMZ'.
9.  Enter the IP address of the computer that needs to use the DMZ option in the 'DMZ Host IP address' field.
10. Click 'Save'.

## 6.3 Opening ports automatically in the firewall

The option UPnP allows programs and devices that support UPnP to automatically open ports in the firewall.

1.  Open your Internet browser.
2.  Enter 'http://192.168.1.1' in the address bar.
3.  Press 'Enter' on your keyboard.
4.  Leave the field 'username' blank.
5.  Leave the field 'password' blank.
6.  Click 'Ok' to open the web page of the router.
7.  Click 'Virtual Server' in the menu.
8.  Click 'UPnP'.

9.   Enable the checkbox near 'Enable UPnP'.
10.  Click 'Save'.

## 6.4 Parental control, blocking websites

The option 'URL Filtering' allows you to block specific websites or websites with certain content (using keywords). With 'URL Filtering' you can keep total control over your Internet connection.

1.   Open your Internet browser.
2.   Enter 'http://192.168.1.1' in the address bar.
3.   Press 'Enter' on your keyboard.
4.   Leave the field 'username' blank.
5.   Leave the field 'password' blank.
6.   Click 'Ok' to open the web page of the router.
7.   Click 'Security Settings' in the menu.
8.   Click 'URL Filter'.
9.   Enable the checkbox near 'Enable URL Filter'.
10.  Enter the IP address of the computer for which the access to certain websites needs to be blocked.
11.  Enter the address of a web page or a keyword in the 'URL String' field.
12.  Click 'Add'.
13.  Click 'Save'.

# 7.0 Frequently asked questions

Q:   The CD-rom does not start automatically?
A:   You can start the installation wizard by clicking 'Start', then 'Run'. Type 'X:\wizard\wizard.exe' in the field 'Open' (X is the drive letter of your CD-rom or DVD station) and click 'OK'.

Q:   How do I reset the router to its defaults settings?
A:   On the back of the router, near the port of the power adapter, you will find a small reset button. If you press and hold this button for about 10 seconds while the router is powered on, the router will automatically return to its default settings.

Q:   My router does not save the settings?
A:   Remove the Browser history and the temporary Internet files of your Internet browser.

1.   Open Internet Explorer.
2.   Click 'Tools'.
3.   Click 'Internet Options'.
4.   Click 'Delete history'.
5.   Click 'Delete files'.

6.   Click 'Ok'.

*Q:   My Internet connection is slow or unstable?*

A:   The router can handle speeds up to 100 Mbps. These kinds of speed are very demanding on your network cables. When using self made cables it often happens that the small colored cables are not connected in the correct order. The colors of a network cable need to be in the following order: white/orange, orange, white/green, blue, white/blue, green, white/brown, brown.

# 8.0 Service and Support

This users manual has been carefully written by Eminent's technical experts. If you have problems installing or using the product, please contact support@eminent-online.com.

# Declaration of conformity

To ensure your safety and compliance of the product with the directives and laws created by the European Commission you can obtain a copy of the Declaration of Conformity concerning your product by sending an e-mail message to: info@eminent-online.com. You can also send a letter to:

Eminent Computer Supplies
P.O. Box 276
6160 AG  Geleen
The Netherlands

Clearly state 'Declaration of Conformity' and the article code of the product of which you would like to obtain a copy of the Declaration of Conformity.