Prestige 660H Series

ADSL 2/2+ Gateway



Version 3.40 (QT) April 2004



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1 Introducing the Prestige

The Prestige 660H ADSL 2/2+ Gateway is the ideal all-in-one device for small networks connecting to the Internet via ADSL. Key features of the Prestige include NAT, content filter and firewall. See your *User's Guide* for more details on all Prestige features.

You should have an Internet account already set up and have been given most of the following information.

INTERNET ACCOUNT INFORMATION				
Your device's WAN IP Address (if given):				
DNS Server IP Address (if given): Primary,				
Secondary				
Virtual Path Identifier (VPI):				
Virtual Channel Identifier (VCI):				
Multiplexing (VC-based or LLC-based):				
Encapsulation: (choos	se one below)			
O RFC 1483				
O ENET ENCAP	Ethernet Encapsula	ation Gateway	IP Address:	
O PPPoA	User Name:		Password:	
O PPPoE	Service Name:	· · · · · · · · · · · · · · · · · · ·		
	User Name:		Password:	

Certifications

- 1. Go to <u>www.zyxel.com</u>
- 2. Select your product from the drop-down list box on the ZyXEL home page to go to that product's page.
- 3. Select the certification you wish to view from this page.

2 Hardware

2.1 Rear Panel Connections



Figure 1 Prestige Rear Panel Connections

Table 1 Prestige Rear Panel Description

	LABEL	DESCRII TION
1.	DSL	Connect to a telephone jack using the included phone wire.
2.	LAN 14	Connect to a computer/external hub using an Ethernet cable.
3.	POWER	Connect to a power source using the power adaptor for your region.
		Use only the included power adaptor.
Afte	er you've ma	ade the connections, connect the power adaptor to a power supply and

push in the power button to turn on the Prestige. The **PWR/SYS** LED blinks while performing system testing and then turns steady on if

the testing is successful. A LAN LED turns on if a LAN port is properly connected.

Table 1 Prestige Rear Panel Description

LABEL	DESCRII FION
RESET	You only need to use this button if you've forgotten the Prestige's password. It returns the Prestige to the factory defaults (password is 1234, LAN IP address 192.168.1.1 etc.; see your <i>User's Guide</i> for details).

2.2 The Front Panel LEDs



Figure 2 Front Panel

Refer to the following table for more detailed LED descriptions.

LED	COLOR	STATUS	DESCRIPTION
PWR/SYS	Green	On	The Prestige is receiving power and functioning properly.
		Blinking	The Prestige is rebooting.
	Red	On	Power to the Prestige is too low.
		Off	The system is not ready or has malfunctioned.
LAN 1-4	Green	On	The Prestige has a successful 10Mb Ethernet connection.
		Blinking	The Prestige is sending/receiving data.
	Amber	On	The Prestige has a successful 100Mb Ethernet connection.
		Blinking	The Prestige is sending/receiving data.

LED	COLOR	STATUS	DESCRIPTION
		Off	The LAN is not connected.
DSL/ACT	Green	Fast Blinking	The Prestige is sending/receiving non-PPP data.
		Slow Blinking	The Prestige is initializing the DSL line.
		On	The system is ready, but is not sending/receiving non-PPP data.
	Amber	On	The connection to the PPPoE server is up.
		Blinking	The Prestige is sending/receiving PPP data.
		Off	The DSL link is down.

Table 2 Front Panel LED Description

3 Setting Up Your Computer's IP Address

Skip this section if your computer is already set up to accept a dynamic IP address. This is the default for most new computers.

The Prestige is already set up to assign your computer an IP address. Use this section to set up your computer to receive an IP address or assign it a static IP address in the 192.168.1.2 to 192.168.1.254 range with a subnet mask of 255.255.255.0. This is necessary to ensure that your computer can communicate with your Prestige.

Your computer must have an Ethernet card and TCP/IP installed. TCP/IP should already be installed on computers using Windows NT/2000/XP, Macintosh OS 7 and later operating systems.

3.1 Windows 95/98/Me

1. Click Start, Settings, Control Panel and double-click the Network icon to open the Network window.

- 2. The **Network** window **Configuration** tab displays a list of installed components. You need a network adapter, the TCP/IP protocol and Client for Microsoft Networks.
- In the Network window Configuration tab, select your network adapter's TCP/IP entry and click Properties.

4. Click the **IP Address** tab.

-If your IP address is dynamic, select **Obtain an IP address automatically**.

-If you have a static IP address, select Specify an IP address and type your information into the IP Address and Subnet Mask fields.

Configuration Identification Access Control
The following network components are installed:
ZyAIR 100 Wireless PCMCIA
TCP/IP -> Accton EN1207D-TX PCI Fast Ethernet Adapte
TCP/IP -> Dial-Up Adapter
CP/IP -> ZyAIR TOU Wireless PL/MLIA
Add Remove Properties
Primary Network Logon:
Client for Microsoft Networks
<u>File</u> and Print Sharing
Description TCP/IP is the protocol you use to connect to the Internet and wide-area networks.
OK Cancel
TCP/IP Properties
Bindings Advanced NetBIDS DNS Configuration Gateway WINS Configuration IP Address
TCP/IP Properties Image: Comparison Bindings Advanced NetBIDS DNS Configuration Gateway WINS Configuration IP Address An IP address can be automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer.
TCP/IP Properties Image: Comparison Bindings Advanced NetBIOS DNS Configuration Gateway WINS Configuration IP Address An IP address can be automatically assigned to this computer IP address, ask your network does not automatically assigned to this computer If your network does not automatically assigned to this computer If your network does not automatically assigned to this computer If addresse, ask your network administrator for an address, and then type it in the space below. If (Data an IP address automatically is) Image: Computer address automatically is)
CP/IP Properties Cl x Bindings Advanced NetBIOS DNS Configuration Gateway WINS Configuration IP Address An IP address can be automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network administrator for an address, and then type it in the space below. If the address automatically assigned to the space below. If the address automatically assigned to the space below.
CP/IP Properties Image: Comparison Bindings Advanced NetBIOS DNS Configuration Gateway WINS Configuration IP Address An IP address can be automatically assigned to this computer. If your network does not automatically assigned to this computer, ask you network administrator for an address, and then type it in the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image: Comparison of the space below. Image
CP/IP Properties C × Bindings Advanced NetBIDS DNS Configuration Gateway WINS Configuration IP Address An IP address can be automatically assigned to this computer. If your network does not automatically assigned to this computer. IP address can be automatically assigned to this computer. If address can be automatically assigned to this computer. IP address can be automatically assigned to this computer. If address can be address automatically IP address:
TCP/IP Properties I × Bindings Advanced NetBIDS DNS Configuration Gateway WINS Configuration IP Address An IP address can be automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If your network does not automatically assigned to this computer. If the space below. If begins an IP address automatically Specify an IP address. If PAddress: I If put network media If address. If put network media If address. If put network media If address.

5. Click the **DNS Configuration** tab.

-If you do not know your DNS information, select **Disable DNS**.

-If you know your DNS information, select **Enable DNS** and type the information in the fields below (you may not need to fill them all in).

6.	Click the	Gateway tab.	
----	-----------	--------------	--

-If you do not know your gateway's IP address, remove previously installed gateways.

-If you have a gateway IP address, type it in the **New gateway field** and click **Add**.

Bindings	Adv	anced	Net	BIOS
VS Configuration	Gateway	WINS Config	guration	IP Addres
Disable DN:	5			
C Enable DNS	;			
Host		Domain: F		
Tiper				
DNS Server Se	arch Order —			_
			Add	
			moya	
		<u></u>	anovo	
1				
Domain Suffix S	earch Order			_
			Add	
		Be	move	
		OK		Cancel

CP/IP Properties				? ×
Bindings DNS Configuration	Adv Gateway	anced WINS Conf	NetBI	OS Address
The first gateway i The address order machines are user	in the Installe r in the list wi d.	ed Gateway li III be the orde	st will be the o rin which the	default. se
New gateway:	•] <u>A</u> do	1	
- Installed gatewa	ıys:	Bemo	ve	
		0		Cancel

- 7. Click OK to save and close the TCP/IP Properties window.
- 8. Click OK to close the Network window. Insert the Windows CD if prompted.
- 9. Turn on your Prestige and restart your computer when prompted.

Verifying Your Computer's IP Address

1. Click Start and then Run.

- 2. In the **Run** window, type "winipcfg" and then click **OK** to open the **IP Configuration** window.
- Select your network adapter. You should see your computer's IP address, subnet mask and default gateway.

3.2 Windows 2000/NT/XP

- 1. In Windows XP, click start, Control Panel. In Windows 2000/NT, click Start, Settings, Control Panel.
- 2. In Windows XP, click Network Connections.

In Windows 2000/NT, click Network and Dial-up Connections.

- 3. Right-click Local Area Connection and then click Properties.
- 4. Select Internet Protocol (TCP/IP) (under the General tab in Win XP) and click Properties.
- The Internet Protocol TCP/IP Properties screen opens (the General tab in Windows XP).

- To have your computer assigned a dynamic IP address, click **Obtain an IP address automatically**.

If you know your DNS sever IP address(es), type them in the **Preferred DNS server** and/or **Alternate DNS server** fields.

-To configure a static IP address, click Use the following IP Address and fill in the IP address (choose one from192.168.1.2 to 192.168.1.254), Subnet mask (255.255.255.0), and Default gateway (192.168.1.1) fields.

ieneral	Alternate Configuration	
You ca this cap the app	n get IP settings assigne ability. Otherwise, you n ropriate IP settings.	d automatically if your network supports eed to ask your network administrator for
<u>ا</u> (otain an IP address auto	matically
OU	e the following IP addre	\$\$.
IP ad	idress:	
Subr	iet mask:	
Defa	ult gateway:	
0	otain DNS server addres	s automatically
OU	se the following DNS ser	ver addresses:
Prefe	erred DNS server:	
Alter	nate DNS server:	
		Advanced
		OK Can

Then enter your DNS server IP address(es) in the **Preferred DNS server** and/or **Alternate DNS server** fields.

If you have more than two DNS servers, click **Advanced**, the **DNS** tab and then configure them using **Add**.

- Click Advanced. Remove any previously installed gateways in the IP Settings tab and click OK to go back to the Internet Protocol TCP/IP Properties screen.
- 7. Click OK to close the Internet Protocol (TCP/IP) Properties window.
- 8. Click **OK** to close the **Local Area Connection Properties** window.

IP address DHCP Enabled	Subnet mask
	Add Edit Remove
efault gateways: Gateway	Metric
	Add Edit Remove
Automatic metric	

3.3 Checking/Updating Your Computer's IP Address

- 1. In the computer, click **Start**, **(All) Programs**, **Accessories** and then **Command Prompt**.
- 2. In the **Command Prompt** window, type "ipconfig" and then press **ENTER** to verify that your computer's IP address is in the correct range (192.168.1.2 to 192.168.1.254) with subnet mask 255.255.255.0. This is necessary in order to communicate with the Prestige.

Refer to your *User's Guide* for detailed IP address configuration for other Windows and Macintosh computer operating systems.

3.4 Testing the Connection to the Prestige

- 1. Click Start, (All) Programs, Accessories and then Command Prompt.
- 2. In the **Command Prompt** window, type "ping" followed by a space and the IP address of the Prestige (192.168.1.1 is the default).
- 3. Press **ENTER** and the following screen displays.

```
C:\>ping 192.168.1.1
Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time=10ms TTL=254
Reply from 192.168.1.1: bytes=32 time<10ms TTL=254
Reply from 192.168.1.1: bytes=32 time<10ms TTL=254
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 2ms</pre>
```

Your computer can now communicate with the Prestige using the LAN port.

4 Configuring Your Prestige

This *Compact Guide shows* you how to use the web configurator only. See your *User's Guide* for background information on all Prestige features and SMT (System Management Terminal) configuration.

4.1 Accessing Your Prestige Via Web Configurator

Step 1. Launch your web browser. Enter "192.168.1.1" as the web site address.

]	File	<u>E</u> dit	⊻iew	F <u>a</u> vorite	es	<u>T</u> ools	Help		Web site address.
	🗲 Ba	ack 🔻	⇒ ~	🔊 🖗		Q	Search	Favorites GHistory	å- ∌
].	Addres	ss	192.168	B.1.1			-		

Figure 3 Entering Prestige LAN IP Address in Internet Explorer

Step 2. An Enter Network Password window displays. Enter the user name ("admin" is the default), password ("1234" is the default) and click **OK**.

Prestige 660H Series Compact Guide

Enter Net	work Passwo	rd	<u>?</u> ×	
?	Please type y	our user name and password.		
IJ	Site:	192.168.1.1		
	Realm	Prestige 660H-61	Default user n	ame.
	<u>U</u> ser Name	admin		
	<u>P</u> assword	****		
	🔲 <u>S</u> ave this	password in your password list		
		OK	Cancel	

Figure 4 Web Configurator: Password Screen

- Step 3. You should now see the web configurator Site Map screen.
 - Click Wizard Setup to begin a series of screens to configure your Prestige for the first time.
 - Click a link under Advanced Setup to configure advanced Prestige features.
 - Click a link under Maintenance to see Prestige performance statistics, upload firmware and back up, restore or upload a configuration file.
 - Click Logout in the navigation panel when you have finished a Prestige management session.

ZvXEL			SITE MAP	HELP
TOTAL INTERNET ACCESS SOLUTION	Site Map	WIZARD		
Wizard Setup	Wizard Setup	Advanced Setup	Maintenance System Status	174
Advanced Setup	Trai o Scup	LAN WAN NAT	DHCP Table Diagnostic Firmware	
	Navigation panel	Dynamic DNS Time And Date Firewall		
	LOGOUT	<u>Content Filter</u> <u>Remote Management</u> <u>UPnP</u> Logs <u>BW Manager</u>		

Figure 5 Web Configurator: Site Map Screen

The Prestige automatically times out after five minutes of inactivity. Simply log back into the Prestige if this happens to you.

4.2 Common Screen Command Buttons

The following table shows common command buttons found on many web configurator screens.

Back	Click Back to return to the previous screen.
Apply	Click Apply to save your changes back to the Prestige.
Reset/Cancel	Click Reset or Cancel to begin configuring this screen afresh.

4.3 Internet Access Using the Wizard

Use the Wizard Setup screens to configure your system for Internet access settings and fill in the fields with the information in the *Internet Account Information* table. Your ISP may have already configured some of the fields in the wizard screens for you.

Step 1. In the **Site Map** screen click **Wizard Setup** to display the first wizard screen.

Wizard Setup - ISP	Parameters for Internet Access
Mode	Routing 💌
Encapsulation	PPPoA 💌
Multiplex	LLC
Virtual Circuit ID	
VPI	8
VCI	35
	Next

Figure 6 Wizard Screen 1

From the **Mode** drop-down list box, select **Routing** (default) if your ISP allows multiple computers to share an Internet account. Otherwise select **Bridge**.

Select the encapsulation type your ISP uses from the **Encapsulation** drop-down list box. Choices vary depending on what you select in the **Mode** field.

Select the multiplexing method used by your ISP from the **Multiplex** drop-down list box.

Enter the correct Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) numbers supplied by your ISP in the **VPI** and **VCI** fields. These fields may already be configured.

Click Next.

Step 2. The second wizard screen varies depending on what mode and encapsulation type you use. All screens shown are with routing mode. Configure the fields and click **Next** to continue.

Wizard Setup - I	SP Parameters for Internet Access
Service Name	
User Name	
Password	
IP Address	
	Obtain an IP Address Automtically
	C Static IP Address
	0.0.0.0
Connection	
	Connect on Demand: Max Idle Timeout O Secs
	C Nailed-Up Connection
Network Address	s Translation
	SUA Only 💌
2	Back Next

If your ISP provides the name of your PPPoE service provider, enter it in the **Service Name** field.

Enter the user name and password *exactly* as your ISP assigned them.

Select **Obtain an IP Address Automatically** if you have a dynamic IP address; otherwise select **Static IP Address** and type your ISP assigned IP address in the text box below.

Select **Connect on Demand** when you don't want the connection up all the time and specify an idle time-out period (in seconds) in the **Max Idle Timeout** field.

Figure 7 Internet Connection with PPPoE

Select **Nailed-Up Connection** when you want your connection up all the time. The Prestige will try to bring up the connection automatically if it is disconnected

From the **Network Address Translation** drop-down list box, select **SUA Only, Full Feature** or **None**. Refer to the *Network Address Translation* section for more information.

Wizard Setup	ISP Parameters for Internet Access
IP Address	0.0.0.0
Network Addre	ss Translation SUA Only
	Back Next

Enter the IP address given by your ISP in the **IP Address** field.

The IP Address field is not available for bridge mode.

Refer to *Figure* 7 for description of the **Network Address Translation** field.

Figure 8 Internet Connection with RFC 1483

IP Address			
	C	Obtain an IP Address Automtic	ally
	O	Static IP Address	
		IP Address	0.0.0
		Subnet Mask	0.0.0
		ENET ENCAP Gateway	0.0.0.0
Network A	ddress	s Translation	
		SUA Only 💌	

Figure 9 Internet Connection with ENET

ENCAP

Wizard Setup - IS	SP Parameters for Internet Access
User Name	
Password	
IP Address	
	Obtain an IP Address Automtically
	C Static IP Address
	0.0.0.0
Connection	
	Connect on Demand: Max Idle Timeout 0 Secs
	C Nailed-Up Connection
Network Address	s Translation
	SUA Only 💌
	Back Next

In the ENET ENCAP Gateway field, enter the gateway IP

address given by your ISP.

Refer to *Figure* 7 for other field descriptions.

The IP Address

descriptions.

Refer to Figure 7 for field

and Network Address Translation fields are not available for bridge mode.

Figure 10 Internet Connection with PPPoA

Step 3. Verify the settings in the screen shown next. To change the LAN information on the Prestige, click **Change LAN Configurations**. Otherwise click **Save Settings** to save the configuration and skip to step 5.

Wizard Setup - ISP Parameters for Internet Access
WAN Information:
Mode: Routing
Encapsulation: PPPoE
Mutiplexing: LLC
VPI/VCI: 8/35
Service Name:
User Name: user@isp.ch
Password: ******
NATI SUA Ontain an IP Address Addomatically NATI SUA Ontai
Connect on Demand: Max Idle Timeout 1500 Secs.
LAN Information:
IP Address: 192.168.1.1
IP Mask: 255.255.255.0
DHCP: ON
Client IP Pool Stating Address: 192.168.1.33
Size of Client IP Pool: 32
Change LAN Configuration
Save Settings

Figure 11 Wizard Screen 3

Step 4. If you want to change your Prestige LAN settings, click **Change LAN Configuration** to display the screen as shown next.

	LAN IP Address	172.21.4.114	
	LAN Subnet Mask	255.255.0.0	
HCF	0		
	DHCP Server	ON 💌	
	Client IP Pool Stating Address	192.168.1.33	
	Size of Client IP Pool	32	
	Primary DNS Server	0.0.0.0	
	Secondary DNS Server	0.0.0.0	

Enter the IP address of your Prestige in dotted decimal notation in the LAN IP Address field. For example, 192.168.1.1 (factory default).

If you change the Prestige's LAN IP address, you must use the *new* IP address if you want to access the web configurator again.

Enter a subnet mask in dotted decimal notation in the LAN Subnet Mask field.

Figure 12 Wizard: LAN Configuration

From the **DHCP Server** drop-down list box, select **ON** to allow your Prestige to assign IP addresses, an IP default gateway and DNS servers to computer systems that support the DHCP client. Select **OFF** to disable DHCP server.

When DHCP server is used, set the following items:

Specify the first of the contiguous addresses in the IP address pool in the **Client IP Pool Starting Address** field.

Specify the size or count of the IP address pool in the Size of Client IP Pool field.

Enter the IP address(es) of the DNS server(s) in the **Primary DNS Server** and/or **Secondary DNS Server** fields.

Step 5. The Prestige automatically tests the connection to the computer(s) connected to the LAN ports. To test the connection from the Prestige to the ISP, click Start Diagnose. Otherwise click Return to Main Menu to go back to the Site Map screen.



Figure 13 Wizard Screen 4

4.4 Test Your Internet Connection

Launch your web browser and navigate to <u>www.zyxel.com</u>. Internet access is just the beginning. Refer to the *User's Guide* for more detailed information on the complete range of Prestige features. If you cannot access the Internet, open the web configurator again to confirm that the Internet settings you configured in the Wizard Setup are correct.

5 Advanced Configuration

This section shows how to configure some of the advanced features of the Prestige.

5.1 Network Address Translation Overview

NAT (Network Address Translation - NAT, RFC 1631) is the translation of the IP address of a host in a packet. For example, the source address of an outgoing packet, used within one network is changed to a different IP address known within another network.

If you have a single public IP address then select **SUA Only** in the **NAT-Mode** screen (see *Figure 14*). If you have multiple public IP addresses then you may use full feature mapping types (see the *User's Guide* for more details).

NAT supports five types of IP/port mapping. They are:

- 1. **One-to-One**: One-to-one mode maps one local IP address to one global IP address. Note that port numbers do not change for One-to-one NAT mapping type.
- 2. **Many-to-One**: Many-to-One mode maps multiple local IP addresses to one global IP address.
- 3. **Many-to-Many Overload**: Many-to-Many Overload mode maps multiple local IP addresses to shared global IP addresses.
- 4. **Many-to-Many No Overload**: Many-to-Many No Overload mode maps each local IP address to unique global IP addresses.
- 5. **Server**: This type allows you to specify inside servers of different services behind the NAT to be accessible to the outside world.

5.2 Configuring SUA Server

An SUA server set is a list of inside (behind NAT on the LAN) servers, for example, web or FTP, that you can make visible to the outside world even though SUA makes your whole inside network appear as a single computer to the outside world.

Step 1. From the main screen click **Advanced Setup** and then **NAT** to open the **NAT-Mode** screen. Select **SUA Only**.

Network Address T	ranslation	
O None		
SUA Only	Edit Details	
C Full Feature	Edit Details	

Figure 14 NAT: Mode

Step 2. Click Edit Details.

	Start Port No.	End Port No.	IP Address
1	All ports	All ports	0.0.0.0
2	0	0	0.0.0.0
3	0	0	0.0.0.0
4	0	0	0.0.0.0
5	0	0	0.0.0.0
6	0	0	0.0.0.0
7	0	0	0.0.0.0
8	0	0	0.0.0.0
9	0	0	0.0.0.0
10	0	0	0.0.0.0
11	0	0	0.0.0.0
12	0	0	0.0.0.0
-			*

Figure 15 SUA/NAT Server

The following table describes the labels in this screen.

Table 3 SUA/NAT Server

LABEL	DESCRIPTION
Start Port No.	Type a port number in this field. To forward only one port, type the port number again in the End Port field. To forward a series of ports, type the start port number here and the end port number in the End Port field.
End Port No.	Type a port number in this field. To forward only one port, type the port number in the Start Port field above and then type it again in this field. To forward a series of ports, type the last port number in a series that begins with the port number in the Start Port field above.
IP Address	Enter the inside IP address of the server here.

5.3 Firewall Overview

The Prestige firewall is a stateful inspection firewall and is designed to protect against Denial of Service attacks when activated. The Prestige's purpose is to allow a private Local Area Network (LAN) to be securely connected to the Internet. The Prestige can be used to prevent theft, destruction and modification of data, as well as log events, which may be important to the security of your network. The Prestige also has packet-filtering capabilities.

When activated, the firewall allows all traffic to the Internet that originates from the LAN, and blocks all traffic to the LAN that originates from the Internet. In other words the Prestige will:

Allow all sessions originating from the LAN to the WAN Deny all sessions originating from the WAN to the LAN

LAN-to-WAN rules are local network to Internet firewall rules. The default is to forward all traffic from your local network to the Internet.

The following figure illustrates a Prestige firewall application.



Figure 16 Prestige Firewall Application

5.4 Enabling the Firewall

From the main screen, click **Advanced Setup**, **Firewall** and then **Config** to open the screen as shown. Enable (or activate) the firewall by selecting the **Enable Firewall** check box as seen in the following screen.

🗹 Fi	rewall Enabled
The fir	ewall protects against Denial of Service (DOS) attacks when it is active. The default Policy sets
1.	allow all sessions originating from theLocal Network to the Internet and
2.	deny all sessions originating from the Internet to the Local Network
doing 1. 2	so Local Network to Internet Set Internet to Local Network Set
CAUTI	ON: If Firewall Enabled is not checked, all the existing firewall security policies and firewall no will be disabled.

Figure 17 Enabling the Firewall

5.5 Procedure for Configuring Firewall Rules

From the main screen, click **Advanced Setup**, **Firewall** and then **Rule Summary** (for either local network to Internet rules or Internet to local network rules) to open the **Summary** screen.

0.	Source IP	Destination IP	Service	Action	Log
1	•	•	-		
2	-	-	-		
3	-				
4	•	-	-		
5	•	-	•		
<u>6</u>	•	-	•		
Z	•	-	•		
B	•	-	-		
9	•		•		
0	-		-		

Figure 18 Rule Summary

The following table describes the labels in this screen.

Table 4 Rule Summary

LABEL	DESCF PTION
The default action for packets not matching following rules	Should packets that do not match the following rules be blocked or forwarded? Make your choice from the drop down list box. Note that "block" means the firewall silently discards the packet.
Default Permit Log	Click this check box to log all matched rules in the Access Control List (ACL) default set.

Table 4 Rule Summary

LABEL	DESCF PTION	
The following read-only fields summarize the rules you have created that apply to traffic traveling in the selected packet direction. The firewall rules that you configure (summarized below) take priority over the general firewall action settings above.		
No.	This is your firewall rule number. The ordering of your rules is important as rules are applied in turn. The Move field below allows you to reorder your rules.	
Source IP	This drop-down list box displays the source addresses or ranges of addresses to which this firewall rule applies. Please note that a blank source or destination address is equivalent to Any .	
Destination IP	This drop-down list box displays the destination addresses or ranges of addresses to which this firewall rule applies. Please note that a blank source or destination address is equivalent to Any .	
Service	This drop-down list box displays the services to which this firewall rule applies. Please note that a blank service type is equivalent to Any .	
Action	This is the specified action for that rule, either Block or Forward . Note that Block means the firewall silently discards the packet.	
Log	This field shows you if a log is created for packets that match the rule (Match), don't match the rule (Not Match), both (Both) or no log is created (None).	
Rules Reorder	You may reorder your rules using this function. Select the rule you want to move. The ordering of your rules is important as rules are applied in turn.	
To Rule Number	Select the number you want to move the rule to.	
Move	Click Move to move the rule.	

Follow these directions to create a new rule.

- **Step 1.** In the **Summary** screen, click a rule's index number. The **Edit Rule** screen opens.
- **Step 2.** In the Available Services text box, select the services you want. Customize ports for services not predefined by the Prestige by clicking the Edit

Available Service buttons. For a comprehensive list of port numbers and services, visit the IANA (Internet Assigned Number Authority) web site.

Step 3. Configure the Source Address and Destination Address for the rule.

urce Address:		
####### Source IP Address ###### Any		
SrcAdd SrcEdit SrcDelete		
itination Address:		
####### Destination IP Address ####### Any DestAdd DestEdit		
· · · ·	_	
wice: Available Services:	Se	elected Services:
AIM/NEW-ICQ(TCP:5190) AUTH(TCP:113) BGP(TCP:179) BOOTP_CLIENT(UDP:68) BOOTP_SERVER(UDP:67) Edit Available Service	A 	vny(UDP) vny(TCP)
ion for Matched Packets:	Forward 💌	
g:	None 💌	
Alert		

Figure 19 Creating/Editing A Firewall Rule

The following table describes the labels in this screen.

Table 5 Creating/Editing A F rewall Rule

LABEL	DESCF PTION
Source Address	Click SrcAdd to add a new address, SrcEdit to edit an existing one or SrcDelete to delete one. Please see the next section for more information on adding and editing source addresses.
Destination Address	Click DestAdd to add a new address, DestEdit to edit an existing one or DestDelete to delete one. Please see the following section on adding and editing destination addresses.
Services	
Available/ Selected Services	Highlight a service from the Available Services box on the left, then click >> to add it to the Selected Services box on the right. To remove a service, highlight it in the Selected Services box on the right, then click <<.
Edit Available Service	Click this button to go to the list of available services.
Action for Matched Packets	Should packets that match this rule be blocked or forwarded? Make your choice from the drop down list box. Note that Block means the firewall silently discards the packet.
Log	This field determines if a log is created for packets that match the rule, don't match the rule, both or no log is created.
Alert	Check the Alert check box to determine that this rule generates an alert when the rule is matched.
Delete	Click Delete to remove this rule.

5.6 Configuring Source and Destination Addresses

To add a new source or destination address, click **SrcAdd** or **DestAdd** from the previous screen. To edit an existing source or destination address, select it from the box and click **SrcEdit** or **DestEdit** from the previous screen. Either action displays the following screen.

Address Type:	Subnet Address 💌	
Start IP Address:	0.0.0.0	
End IP Address:	0.0.0.0	
Subnet Mask:	0.0.0.0	

Figure 20 Adding/Editing Source and Destination Addresses

The following table describes the labels in this screen.

Table 6 Adding/Editing Source and Destination Addresses

LABEL	DESCF PTION
Address Type	Do you want your rule to apply to packets with a particular (single) IP address, a range of IP addresses (e.g., 192.168.1.10 to 192.169.1.50), a subnet or any IP address? Select an option from the drop down list box
Start IP Address	Enter the single IP address or the starting IP address in a range here.
End IP Address	Enter the ending IP address in a range here.
Subnet Mask	Enter the subnet mask here, if applicable.

6 Troubleshooting

Table 7 Troubleshoc ing

PROBLEM	CORRECTIVE ACTION
None of the LEDs turn on when you turn on the Prestige.	Make sure that you have the correct power adaptor connected to the Prestige and plugged in to an appropriate power source. Check all cable connections.
	If the LEDs still do not turn on, you may have a hardware problem. In this case, you should contact your local vendor.
Cannot access the Prestige from the LAN.	Check the cable connection between the Prestige and your computer or hub. Refer to the <i>Rear Panel Connections</i> section for details.
	Ping the Prestige from a computer on the LAN. Make sure your computer Ethernet adapter is installed and functioning properly.
Cannot ping any computer on the LAN.	If the LAN LEDs are all off, check the cable connections between the Prestige and your computers on the LAN.
	Verify that the IP address, subnet mask of the Prestige and the LAN computers are in the same IP address range.
Cannot get a WAN IP address from	The WAN IP is provided after the ISP verifies the MAC address, host name or user ID. Find out the verification method used by your ISP and configure the corresponding fields.
the ISP.	If the ISP checks the user ID, check your service type, user name, and password in the WAN Setup screen.
Cannot access	Verify the Internet connection settings in the WAN Setup screen.
the Internet.	Make sure you entered the correct user name and password.