

BiPAC 8501/8521

SHDSL.bis (VPN) Firewall Bridge/Router

Quick Start Guide

Declaration of Conformity Konformitätserklärung

in accordance with the Radio and Telecommunications Terminal Equipment Act (FTEG) and Directive 1999/5/EC (R&TTE Directive)

gemäß dem Gesetz über Funkanlagen und Telekommunikationsendeinrichtungen (FTEG) und der Richtlinie 1999/5/EG (R&TTE)

The Manufacturer: Hersteller:	Billion Electric Co., Ltd.
norsener	8F, No. 192, Sec. 2, Chung Hsing Rd.,
	Hsin Tien City, Taipei Hsien
	Taiwan
declares that the product: erklärt, dass das Produkt:	BiPAC 8501/8500/8520/8521
	Telecommunications terminal equipment
	Telekommunikations(Tk-)endeinrichtung
Intended purpose:	SHDSL (VPN) Firewall Bridge/Router

Verwendungszweck:

SHDSL (VPN) Firewall Bridge/Router

complies with the essential requirements of §3 and the other relevant provisions of the FTEG (Article 3 of the R&TTE Directive), when used for its intended purpose. bei bestimmungsgemäßer Verwendung den grundlegenden Anforderungen des § 3 und den übrigen einschlägigen Bestimmungen des FTEG (Artikel 3 der R&TTE) entspricht.

Harmonised standards: Health and Safety requirements contained in §3 (1) 1. (Article 3 (1) a)) Harmonisierte Normen: Gesundheit und Sicherheit gemäß §3 (1) 1. (Artikel 3 (1) a))

EN 60950: 2000

Harmonised standards: Protection requirements with respect to EMC §3 (1) 2, (Article 3 (1) b)) Harmonisierte Normen: Schutzanforderungen in Bezug auf die EMV §3 (1) 2, Artikel 3 (1) b))

EN 55022 : 2006, EN 61000-3-2: 2006, EN 61000-3-3: 1995 +A1: 2001 +A2: 2005, EN 55024: 1998 +A1: 2001 +A2: 2003, IEC 61000-4-3:2006, IEC 61000-4-4:2004, IEC 61000-4-5:2005, IEC 61000-4-6:2007, IEC 61000-4-8:1993+A1:2000, IEC 61000-4-11:2004

This declaration is issued by: Diese Erklärung wird verantwortlich abgegeben durch:

(Place)

2 June 2009 (Date)

Edward Kung Managing Director Etec Components Ltd.



For more detailed instructions on configuring and using the Billion SHDSL.bis (VPN) Firewall Bridge/Router, please refer to the on-line manual.

Package Contents

- BiPAC 8501/8521 SHDSL.bis (VPN) Firewall Bridge/ Router
- CD-ROM containing the online manual
- RJ-11 SHDSL/telephone Cable (Note: BiPAC 8521 contains two RJ-11 cables)
- Ethernet (CAT-5 LAN) Cable
- Console (PS2-RS232) Cable
- AC-DC power adapter (12VDC, 1A)
- This Quick Start Guide



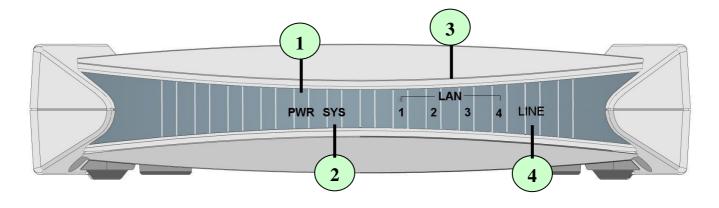
- ✓ Do not use the BiPAC 8501/8521 in high humidity or high temperatures.
- Do not use the same power source for this router as other equipment.
- Do not open or repair the case yourself. If this router is too hot, turn off the power immediately and have it repaired at a qualified service center.
- ✓ Avoid using this product and all accessories outdoors.



- **´** Place this router on a stable surface.
- Only use the power adapter that comes with the package. Using a different voltage rating power adaptor may damage this router.

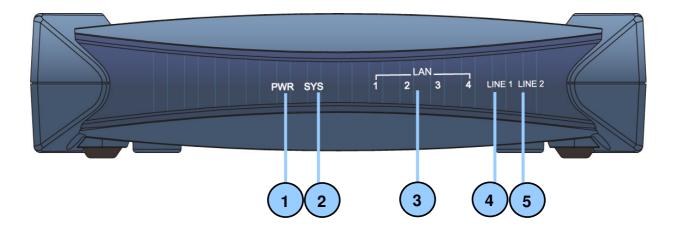
1

The Front LEDs of BiPAC 8501



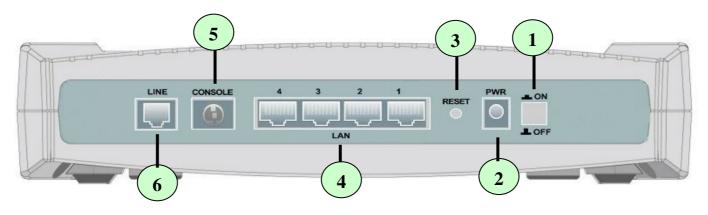
	LED	Meaning
1	PWR	Lit when power is ON.
2	SYS	Lit when the system is ready.
3	LAN Port 1X — 4X (RJ-45 connector)	Lit when connected to an Ethernet device. Green for 100Mbps; Orange for 10Mbps. Blinking when data is Transmitted / Received.
4	LINE	Lit when successfully connected to SHDSL line and when it is synchronized.

The Front LEDs of BiPAC 8521



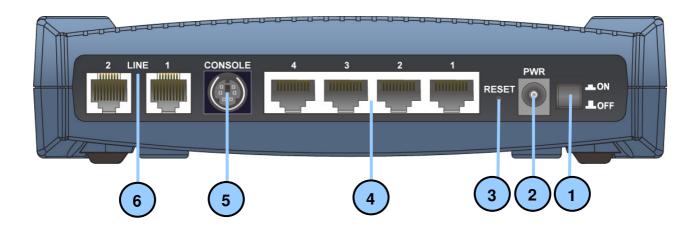
	LED	Meaning
1	PWR	Lit green when power is ON.
2	SYS	Flashes when the system is being started. Then lit green when the system is ready.
3	LAN Port 1X — 4X (RJ-45 connector)	Lit when connected to an Ethernet device. Green for 100Mbps; Orange for 10Mbps. Blinking when data is Transmitted / Received.
4 5	LINE 1 & 2	The green LED will flash steadily when successfully connected to SHDSL line and when it is synchronized.

The Rear Ports of BiPAC 8501



	Port	Meaning
1	Power Switch	Power ON/OFF switch
2	PWR	Connect the supplied power adapter to this jack.
3	RESET	To be sure the device is being turned on->press RESET button for: 1-3 seconds : quick reset the device. 6 seconds above, and power off, power on the device : restore to factory default settings. (Cannot login to the router or forgot your Username/Password. Press the button for more than 6 seconds). Caution : After pressing the RESET button for more than 6 seconds, to be sure you power cycle the device again.
4	LAN 1X — 4X (RJ-45 connector)	Connect a UTP Ethernet cable (Cat-5 or Cat-5e) to one of the four LAN ports when connecting to a PC or an office/home network of 10Mbps or 100Mbps.
5	CONSOLE	Connect a PS2/RS-232 cable to this port when connecting to a PC's RS-232 port (9-pin serial port).
6	LINE	Connect the supplied RJ-11 ("telephone") cable to this port when connecting to SHDSL line.

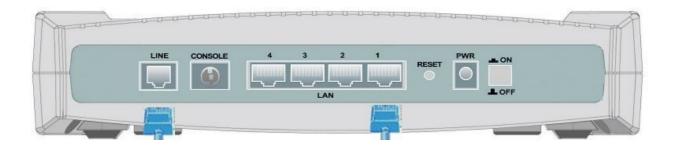
The Rear Ports of BiPAC 8521



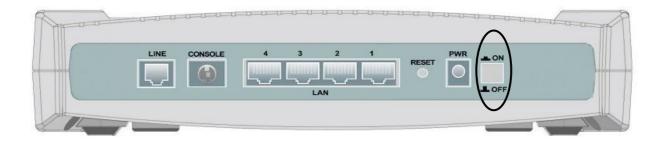
	Port	Meaning
1	Power Switch	Power ON/OFF switch
2	PWR	Connect the supplied power adapter to this jack.
3	RESET	To be sure the device is being turned on->press RESET button for: 1-3 seconds : quick reset the device. Press 6 seconds above to power off the device, then power on the device to restore the factory default settings. (Used when cannot login to the router or forgot your Username/Password. Press the button for more than 6 seconds). Caution : After pressing the RESET button for more than 6 seconds, to be sure you power cycle the device again.
4	LAN 1X — 4X (RJ-45 connector)	Connect a UTP Ethernet cable (Cat-5 or Cat-5e) to one of the four LAN ports when connecting to a PC or an office/home network of 10Mbps or 100Mbps.
5	CONSOLE	Connect a PS2/RS-232 cable to this port when connecting to a PC's RS-232 port (9-pin serial port).
6	LINE 1X — 2X (RJ-11 connector)	Connect the supplied RJ-11 ("telephone") cable to this port when connecting to SHDSL line.

Connecting Your SHDSL.bis Bridge/Router

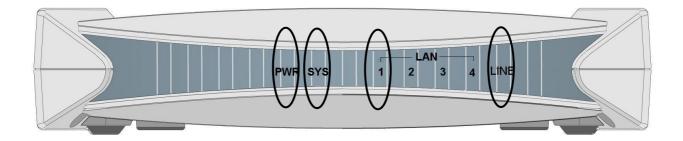
1. Connect the Router to a LAN (Local Area Network) and the SHDSL LINE.



2. Power on the device.

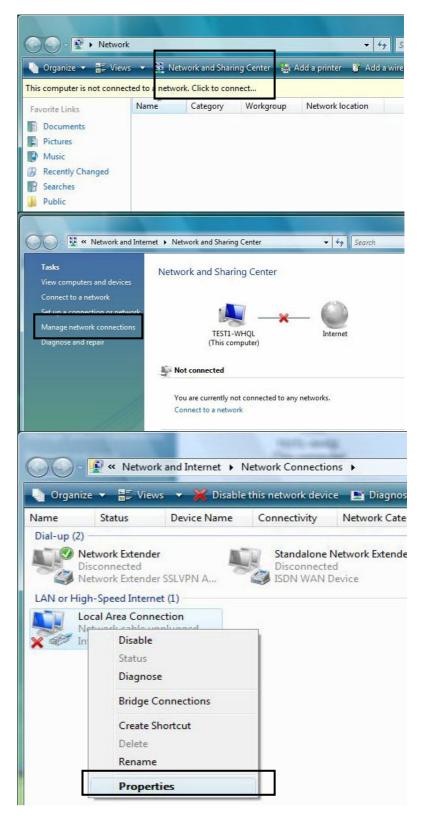


3. Make sure the **PWR** and **SYS** LEDs are lit steadily and that the **relevant LAN and LINE** LED are lit.



Configuring PC in Windows Vista

- 1. Go to Start. Click on Network.
- 2. Then click on Network and Sharing Center at the top bar.
- 3. When the Network and Sharing Center window pops up, select and click on Manage network connections on the left window pane.
- 4. Select the Local Area Connection, and right click the icon to select Properties.



5. Select Internet Protocol Version 4 (TCP/IPv4) then click Properties.

- 6. In the TCP/IPv4 properties window, select the Obtain an IP address automatically and Obtain DNS Server address automatically radio buttons. Then click OK to exit the setting.
- 7. Click OK again in the Local Area Connection Properties window to apply the new configuration.

tworking		
onnect using:		
Intel(R) 82566DM Gigab	it Network Connection	
1	Configure	
his connection uses the follov		-
QoS Packet Schedule		
File and Printer Sharing	ig for Microsoft Networks	
A Internet Protocol Vers A Internet Protocol Vers		
🗹 🔺 Link-Layer Topology [Discovery Mapper I/O Driver	
Link-Layer Topology [Discovery Responder	
		-
	Ininstall Properties	
Description	-14-to-et Destand The default	
	ol/Internet Protocol. The default that provides communication	
across diverse interconnecte		
	OK Cano	el
	OK	el
net Protocol Version 4 (TCP/		
net Protocol Version 4 (TCP/	IPv4) Properties	
neral Alternate Configuration	IPv4) Properties)
neral Alternate Configuration ou can get IP settings assigned nis capability. Otherwise, you no or the appropriate IP settings.	IPv4) Properties	orts
 Alternate Configuration ou can get IP settings assigned nis capability. Otherwise, you not on the appropriate IP settings. Obtain an IP address autom 	IPv4) Properties	orts
 Alternate Configuration ou can get IP settings assigned nis capability. Otherwise, you not or the appropriate IP settings. Obtain an IP address autom Use the following IP address 	IPv4) Properties	orts
Alternate Configuration ou can get IP settings assigned is capability. Otherwise, you no or the appropriate IP settings. Obtain an IP address autom Use the following IP address IP address:	IPv4) Properties	orts
Alternate Configuration ou can get IP settings assigned his capability. Otherwise, you no or the appropriate IP settings. Obtain an IP address autom Use the following IP address IP address: Subnet mask:	IPv4) Properties	orts
Alternate Configuration ou can get IP settings assigned is capability. Otherwise, you no or the appropriate IP settings. Obtain an IP address autom Use the following IP address IP address:	IPv4) Properties	orts
Alternate Configuration ou can get IP settings assigned his capability. Otherwise, you no or the appropriate IP settings. Obtain an IP address autom Use the following IP address IP address: Subnet mask:	IPv4) Properties	orts
Alternate Configuration ou can get IP settings assigned his capability. Otherwise, you no or the appropriate IP settings. Obtain an IP address autom Use the following IP address IP address: Subnet mask: Default gateway:	IPv4) Properties automatically if your network suppresed to ask your network administration natically s: automatically	orts
 Alternate Configuration ou can get IP settings assigned nis capability. Otherwise, you no or the appropriate IP settings. Obtain an IP address autom Use the following IP address IP address: Subnet mask: Default gateway: Obtain DNS server address 	IPv4) Properties automatically if your network suppresed to ask your network administration natically s: automatically	orts
 Alternate Configuration ou can get IP settings assigned his capability. Otherwise, you no or the appropriate IP settings. Obtain an IP address autom Use the following IP address IP address: Subnet mask: Default gateway: Obtain DNS server address Use the following DNS server 	IPv4) Properties automatically if your network suppresed to ask your network administration natically s: automatically	orts
 Alternate Configuration ou can get IP settings assigned his capability. Otherwise, you no or the appropriate IP settings. Obtain an IP address autom Use the following IP address IP address: Subnet mask: Default gateway: Obtain DNS server address Ose the following DNS server Preferred DNS server: 	IPv4) Properties automatically if your network suppresed to ask your network administration natically s: automatically	orts

Configuring PC in Windows XP

- 1. Go to Start / Control Panel (in Classic View). In the Control Panel, double-click on Network Connections
- 2. Double-click Local Area Connection.

3. In the Local Area Connection Status window, click Properties.

👺 Control Panel	
File Edit View Favorites Tools	Help
🕞 Back 🔹 🌍 🔹 🏂 🔎 S	iearch 😥 Folders 🛄 🗸
Address 🔂 Control Panel	*
Control Panel	S 🖒 🍕
🥵 Switch to Category View	Network Phone and Power Op Connections Modem
See Also	N 🔮 🚭
🍇 Windows Update	Printers and Regional and Scanners Faxes Language Camer
Help and Support	🤒 🔍 💰
	Scheduled Sounds and Speed Tasks Audio Devices
Local Area Connection S	itatus 🛛 🛛 🔀
General Support	
- appoint	
Connection	
Status:	Connected 00:19:32
Duration:	
Speed:	100.0 Mbps
A = 15, 26.	
Activity Sent –	- 🧞 - Received
Packets:	27 0
Properties Disable	
	Close

4. Select Internet Protocol (TCP/IP) and click Properties.

- 5. Select the Obtain an IP address automatically and the Obtain DNS server address automatically radio buttons.
- 6. Click **OK** to finish the configuration.

Local Area Connection Pr	opernes [👔 🛛
General Authentication Advan	ced
Connect using:	
B ASUSTeK/Broadcom 440	x 10/100 Integrated Controller
	Configure
This connection uses the following	ng items:
 Client for Microsoft Netw Reference 	
Ros Packet Scheduler	_
Internet Protocol (TCP/	P)
Install Un	install Properties
Description	
Transmission Control Protocol. wide area network protocol th across diverse interconnected	
Show icon in notification area	when connected
Show icon in noulication area	I when connected
	OK Cancel
nternet Protocol (TCP/IP) Prop	erties ? >
ternet Protocol (TCP/IP) Prop General Alternate Configuration	erties ?>
	omatically if your network supports
General Alternate Configuration You can get IP settings assigned aut this capability. Otherwise, you need t	omatically if your network supports o ask your network administrator for
General Alternate Configuration You can get IP settings assigned aut this capability. Otherwise, you need to the appropriate IP settings.	omatically if your network supports o ask your network administrator for
General Alternate Configuration You can get IP settings assigned aut this capability. Otherwise, you need to the appropriate IP settings. Obtain an IP address automatic Use the following IP address: – IP address:	omatically if your network supports o ask your network administrator for
You can get IP settings assigned aut this capability. Otherwise, you need to the appropriate IP settings. Obtain an IP address automatic Use the following IP address: IP address: Subnet mask:	omatically if your network supports o ask your network administrator for
General Alternate Configuration You can get IP settings assigned aut this capability. Otherwise, you need to the appropriate IP settings. Obtain an IP address automatic Use the following IP address: – IP address:	omatically if your network supports o ask your network administrator for
General Alternate Configuration You can get IP settings assigned aut this capability. Otherwise, you need to the appropriate IP settings. Obtain an IP address automatic Use the following IP address: IP address: Subnet mask: Default gateway: Obtain DNS server address automatic	omatically if your network supports o ask your network administrator for ally
General Alternate Configuration You can get IP settings assigned aut this capability. Otherwise, you need to the appropriate IP settings. Obtain an IP address automatic Use the following IP address: IP address: Subnet mask: Default gateway: Obtain DNS server address automatic Use the following DNS server a	omatically if your network supports o ask your network administrator for ally
General Alternate Configuration You can get IP settings assigned aut this capability. Otherwise, you need to the appropriate IP settings. Obtain an IP address automatic Use the following IP address: IP address: Subnet mask: Default gateway: Obtain DNS server address automatic	omatically if your network supports o ask your network administrator for ally
General Alternate Configuration You can get IP settings assigned aut this capability. Otherwise, you need to the appropriate IP settings. Obtain an IP address automatic O Use the following IP address: - IP address: Subnet mask: Default gateway: Obtain DNS server address automatic O Use the following DNS server a Preferred DNS server:	omatically if your network supports o ask your network administrator for ally

Configuring PC in Windows 2000

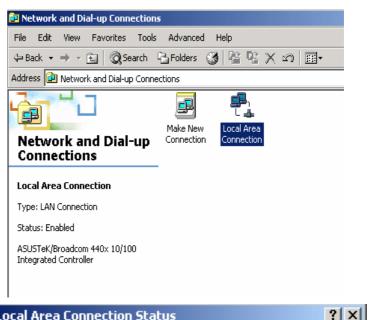
 Go to Start / Settings / Control Panel. In the Control Panel, double-click on Network and Dial-up Connections.

3. In the Local Area Connection

Status window click

Properties.

2. Double-click Local Area Connection.



General	
Connection	
Status:	Connected
Duration:	06:16:26
Speed:	100.0 Mbps
Activity Packets:	Sent — 🖳 — Received 12,215 109,427
Properties	Disable
	Close

4. Select Internet Protocol Local Area Connection Properties ? × (TCP/IP) and click Properties. General Connect using: ASUSTeK/Broadcom 440x 10/100 Integrated Controller Configure Components checked are used by this connection: 🗹 🔜 Client for Microsoft Networks 畏 File and Printer Sharing for Microsoft Networks **1** 🗹 🏹 Internet Protocol (TCP/IP) Install... Uninstall Properties Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. Show icon in taskbar when connected 0K Cancel 5. Select the Obtain an IP Internet Protocol (TCP/IP) Properties ? × address automatically and General the Obtain DNS server address automatically radio You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for buttons. the appropriate IP settings. 6. Click OK to finish the Obtain an IP address automatically configuration. Use the following IP address Subnet mask: Default gateway: Obtain DNS server address automatically O Use the following DNS server addresses: Preferred DNS server: Alternate DNS server: Advanced... 0K Cancel

Configuring PC in Windows 98/Me

- Go to Start / Settings / Control Panel. In the Control Panel, double-click on Network and choose the Configuration tab.
- 2. Select TCP/IP ->NE2000 Compatible, or the name of your Network Interface Card (NIC) in your PC. Then click Properties.
- 3. Select the Obtain an IP address automatically radio button.

Network
Configuration Identification Access Control
The following <u>n</u> etwork components are installed:
BP ASUSTeK/Broadcom 440x 10/100 Integrated Controller
TCP/IP -> ASUST eK/Broadcom 440x 10/100 Integrated
Add Remove Properties
Primary Network Logon: Microsoft Family Logon
TCP/IP Properties
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 assign IP addresses, ask
your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically Specify an IP address:
[P Address:
Sybnet Mask:
OK Cancel

Quick Start Guide

- 4. Then select the DNS Configuration tab.
- 5. Select the **Disable DNS** radio button and click **OK** to finish the configuration.

TCP/IP Properties				? ×
Bindings DNS Configuration		anced WINS Cor		etBIOS IP Address
Disable DNS Enable DNS]			
<u>H</u> ost:		D <u>o</u> main:		
DNS Server Sea			Add	
	•		<u>A</u> emove]
Domain Suffix Se	arch Order:		Add	
			Re <u>m</u> ove	
			ок 1	Cancel
		()K	Cancel

Configuring PC in Windows NT4.0

- 1. Go to Start / Settings / Control Panel. In the Control Panel, double-click on Network and choose the Protocols tab.
- 2. Select TCP/IP Protocol and click Properties.

3. Select the Obtain an IP address from a DHCP server radio button and click OK.

dentification 1 Servio	
and the second se	ices Protocols Adapters Bindings
Network Protocols:	
等 NetBEUI Proto 等 NWLink IPX/S 等 NWLink NetBI ず ITCP/IP Protoc	SPX Compatible Transport IOS
Add	Remove Properties
	I Protocol/Internet Protocol. The default wide tocol that provides communication across acted networks.
	OK Cancel
rosoft TCP/IP Pr	roperties 🛛
Address DNS	WINS Address Routing
	be automatically assigned to this network card If your network does not have a DHCP server, administrator for an address, and then type it in
ask your network a the space below.	
ask your network a	spter)
ask your network a the space below. Adapter:	
ask your network a the space below. Adapter: I (your network ada Dbtain an IP	address from a DHCP server
ask your network a the space below. Adapter: (your network ada Dbtain an IP C Specify an IF	address from a DHCP server
ask your network a the space below. Adapter: I (your network ada Dbtain an IP	address from a DHCP server
ask your network a the space below. Adapter: (your network ada Dbtain an IP C Specify an IF	address from a DHCP server
ask your network a the space below. Adapter: (vour network ada <u>0</u> btain an IP <u>0</u> <u>S</u> pecify an IF [P Address:	address from a DHCP server P address
ask your network a the space below. Adagter: (vour network ada © Obtain an IP © Specify an IF IP Address: Subnet Mask:	address from a DHCP server P address

Configuring Your SHDSL.bis (VPN) Firewall Bridge/ Router



To configure this device, you must have IE 5.0 / Netscape 4.5 or above installed

Verifying Your Local Network Connection with the Device

To see if this ADSL Router is visible on the local network, go to **Start / Run**. In the Run dialog box, type "**ping 192.168.1.254**" then press **OK**.

A command prompt window will pop out. If your ping is successful which means your local network is able to reach to the device, then the command prompt window will close up automatically.

Connection fails, when you see "**Request timed out**" in the command prompt window. You may need to check your set up.

Run					<u>? ×</u>
<u> </u>	Type the resource,	name of a prog and Windows	gram, fol will ope	lder, docur n it for you	ment, or Internet ı.
<u>O</u> pen:	ping 192.168.1.254				
		OK	C	ancel	Browse

C:\WINDOWS\System32\ping.exe

```
Pinging 192.168.1.254 with 32 bytes of data:
Reply from 192.168.1.254: bytes=32 time<1ms TTL=155
Reply from 192.168.1.254: bytes=32 time<1ms TTL=155
Reply from 192.168.1.254: bytes=32 time<1ms TTL=155
```

🚾 C:\WINN T\system32\ping.exe

Pinging 192.168.1.254 with 32 bytes of data:

Request timed out. Request timed out. Request timed out.

Connecting to the Router

Open the web browser and type <u>http://192.168.1.254</u> in the browser's address box. This number is the default IP address for this router. Press **Enter**.

A user name and password window will appear. The default User Name and Password are "admin" and" admin". Press OK to proceed.

nter Ne	twork Passwo	ord			
- ?	Please type your user name and password.				
9	Site:	192.168.1.254			
	Realm				
	<u>U</u> ser Name	admin			
	Password	admin			
	Save this password in your password list				
		OK Cancel			

Please see the relevant sections of on-line manual for detailed instructions on how to configure your router.

Product Support and Contact Information

Most problems can be solved by referring to the **Troubleshooting** section in the User's Manual. If you cannot resolve the problem with the **Troubleshooting** chapter, please contact the dealer where you purchased this product.

Contact Billion

WORLDWIDE http://www.billion.com

Billion Product Registration

Billion is committed to before and after sales customer services. You will get the most out of your Billion's products after registration. Please register online at <u>www.billion.com/register</u> to receive valuable services and support from us.