

BIPAC- 7402

ADSL Modem/Router

Features >> VPN with 3DES Accelerator, QoS (Quality of Service) & 4port Switch!!



Quick Start Guide

IMPORTANT notice from Billion...

This Quick Start Guide (QSG) is to guide user to connect to the Internet in a very short time. Having Internet access will not be far away from this point of time.

This router, Billion 7402, has been customised for New Zealand users. That is, its factory default profile is pre-configured for New Zealand. Hence, less steps in configuring your router.

There are 2 User's Manuals included in the package: (1) Quick Start Guide (this booklet your are reading) (2) Billion 7402 Series ADSL Router Universal User's Manual (File name: **Universal Manual** and it is saved on the CD included in the package). Both manuals should be read in conjunction with each other.

Why read QSG? Because it is designed for New Zealand users whereas the *Billion 7402 ADSL Router Universal Manual* guides international and/or advanced users.

Package Contents

- Billion 7402 ADSL Modem/Router
- Drivers & Utilities CD
- This Quick Start Guide
- One RJ-11 (A-Type) "ADSL Router-to-ADSL splitter" telephone cable [both ends are of square shape]
- One RJ-11 (B-Type) "ADSL splitter-to-telephone walljack" telephone cable [one end is of square shape only]

- One RJ-45 (CAT-5) straight (standard) LAN cable
- One ADSL line filter/splitter (call "splitter" for short)
- One PS2/RS-232 cable (Console Port cable).
- One DC 12V 1A Power adaptor

WARNING!

The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.



To know about your ADSL Modem/Router...

The Front Panel LEDs of Billion 7402



LED		Meaning		
1	PPP/MAIL	Lit steady when there is a PPPoA / PPPoE connection. Lit and flashed periodically when there is email in the Inbox.		
2	ADSL	Lit when successfully connected to an ADSL DSLAM ("linesync").		
3	LAN	Lit when connected to an Ethernet device. Green for 100Mbps; Orange for 10Mbps. Blinking when data is Transmitted / Received.		
4	SYS	Lit when the system is ready.		
5	PWR	Lit when power is ON.		

Please follow Billion's

READY? & GO! Program

to complete the setup of the router and enjoy the *high speed* of Internet!!

1. READY?

[Do you have the following installed on your PC?]

- ✓ An Ethernet (LAN)
- ✓ TCP/IP protocol
- \checkmark A web browser. E.g. Internet Explorer 5.0 or Netscape 6 or later.
- ✓ Your Internet account details. i.e. username and password supplied by your Internet Service Provider (ISP)

2. GO!

2.1[Hardware Chapter]

Please check out the <u>Rear Ports of 7402</u> on next page (page 5) to know what to connect using what kind of cable.

Connect your router to your PC and to other devices using the accessories provided according to the rear ports layout on next page.

The Rear Ports of 7402

LINE [RJ-11 A- Type Connector or Modem Line Port]	 (3.1) Plug in RJ-11-A cable to this LINE port and another end of cable to the MODEM port on the SPLITTER. (3.2) Splitter's tail will plug into the walljack. (3.3) Plug in RJ-11-B cable to PHONE port on the SPLITTER and another end of cable to any Telephone device. Warning: ALL telephone devices in the residence MUST be connected through splitters. 	
Console Connect a PS2/RS-232 cable to this port when connecting to a PC's RS-232 port (9-pin serial port).		
LAN No.1~4 [RJ-45 Connector or Ethernet Port]	Connect the supplied standard cable to this port while another end connects to the LAN port of the PC. <i>This LAN port can AUTO- DETECT standard and crossover</i> <i>cables</i>	
Reset Button	Press it if you intend to restore the factory default settings back.	
Power Socket	Connect the supplied power adapter to this jack.	
Power Switch	Recommend turn it on AFTER everything is connected properly.	Î Ż

2.2[Software Chapter]

2.2.1 Connection Mode

LAN (Ethernet) port users:

Please follow the "Configuring the Network Properties on a PC" section (Procedure 2.2.2) on the bottom of this page to modify the network settings.

2.2.2 Configuring the Network Properties on PC

Windows XP/2000 users

		Local Area Connection Properties
1.	Click Start and go to	General Authentication Advanced
	Sattings \Centrel	Connect using:
	Settings-Control	D-Link DFE-530TX PCI Fast Ethernet Adapter (rev.B)
	Panel→Network	Configure
	Connections.	Glient for Microsoft Networks Elle and Rister Sharing for Microsoft Networks
_		QoS Packet Scheduler Grade Control C
2.	Right-click Network	
	Connections icon. choose	Install Uninstall Properties
	Properties.	Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
2	Salast Internet Drate col	Show icon in notification area when connected
J.	(TCD/ID) and aliak	OK Cancel
	Properties.	
		Internet Protocol (TCP/IP) Properties
4.	Select the Obtain an IP	General Alternate Configuration
	address automatically and	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
	the Obtain DNS server	Obtain an IP address automaticallu
	address automatically radio	Use the following IP address:
	buttons	IP address:
	battorio	Subnet mask:
		Default gateway:
5.	Click OK to finished the	Obtain DNS server address automatically
	configuration	O Use the following DNS server addresses:
	configuration.	Preferred DNS server:
		Alternate DNS server:
		Advanced
		OK Cancel

Please go to Procedure 2.2.3 on page 8 to continue.

Windows 95/98/Me users

1. 2.	Click Start and go to Settings→Control Panel→Network. Select Internet Protocol (TCP/IP)→[Name of Your Network Card] and Click Properties.	Network Image: Configuration Configuration Identification The following getwork: components are installed: The following getwork: Description TCP/IP is the protocol you use to connect to the Internet and wide area network: OK Cancel
3.	Select the IP Address tab. In this page, click the Obtain an IP address automatically radio button.	CP/IP Properties C Bindings Advanced NetBIOS DNS Configuration Gateway VINS Configuration IP Address An IP address can be automatically assign P addresses, ask you network does not automatically assign P addresses, ask the space below. IP address automatically Image: Configuration IP address Image: Configuration IP address Image: Configuration IP address Image: Configuration IP address Image: Configuration IP address Image: Configuration IP address Image: Configuration IP address Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration Image: Configuration
4. 5.	Then select the DNS Configuration tab. Select the Disable DNS radio button and click OK to finish the configuration then prepare to Restart your computer.	CP/IP Properties Y Bindings Advanced NetBIOS DNS Configuration Gateway WINS Configuration IP Address C [Dipable DNS] Enable DNS Enable DNS Host Demain Add DNS Server Search Order Add Encove Domain Suffix Search Order Add Encove OK Cancel OK

Windows NT 4.0 users

1. 2.	Click Start and go to Settings→Control Panel→Network. Select Internet Protocol (TCP/IP)→[Name of Your Network Card] and Click Properties.	Network Potocols Adspters Bindings Identification Services Protocols Adspters Bindings Network Protocols NVLink: HPX/SPX Compatible Transport Wullink: HPX/SPX Compatible Transport Wullink: Bemove Properties Description: Transport Control Protocol/Internet Protocol. The default wide diverse entercommercied networks.
3.	Select the Obtain an IP address from a DHCP server radio button and click OK.	

2.2.3 Verifying if your PC connects to the Router successfully (This checking is OPTIONAL. Otherwise, go to 2.2.4)

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 .	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you. Open: ping 192.168.1.254
	OK Cancel Browse

9

<u>Snapshot of a Successful Connection</u> 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.	C1 WINDOWSNSystem32/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 Reply from 192.168.1.254: bytes=32 time<1ms TTL=155
<u>Snapshot of a Failed Connection</u>	CAWINNTsystem321pping.exe
Connection fails, when you see	Pinging 192.168.1.254 with 32 bytes of data:
" Request timed out" in the	Request timed out.
command prompt window. You	Request timed out.
may need to check your set up.	Request timed out.

2.2.4 Configuring the ADSL Modem/Router

1. Open the web browser and type <u>http://192.168.1.254</u> in the browser's address field and press Enter. This number is the default IP address for this router.	Connect to 192.168.1.254
Enter the default User name: admin Password: admin	User name: 2 admin Password: Remember my password
Then press OK to enter the router setup page.	OK Cancel

- 2. Click *Quick Start* on the pane at the left-hand-side.
- 3. Check the Encapsulation is PPPoA and Values of Virtual Circuit ID, VPI & VCI are 0 and 100 respectively. Please refer to the figure on the right-hand-side. (Note: Some ISPs use PPPoE as their encapsulation, if unsure please click Auto Scan or check it with your ISP)
- 4. Enter your Internet Account Details, then click Next.

Other settings (e.g. Optional Settings & DNS) are for advanced users, please do NOT change them.

User Name→ MUST fill in

Password→ MUST fill in

- **MPORTANT:** When entering the User Name, please ensure user ID followed by a @ symbol followed by the domain name e.g. user@isp.co.nz
- Note that for the **Xtra Velocity Service** the customer user ID has ".xadsl" appended to it i.e. <u>user.xadsl@xtra.co.nz</u> Other ISPs may or may not have similar requirements, the user will need to check this with their ISP. Also, the User Name and Password are CASE SENSITIVE!

5. Click Apply.



AD AD	SL VPN Fire	ewall Router
	lick Start	
Cor	inection	
0 E	rcapsulation	PPPoA v Asta Scan
3) FLASH M	PI	0
VI	CI	100
N	аŢ	⊙Enable ○Disable
Opt	tional Settings	
P	Address	(0.0.0.0 (0.0.0.0 means 'Obtain an IP address automatically)
51	ubNetmask	0000
De	etsult Gateway	
DN	s	
P	imary DNS	
S	econdary DNAS	
PPI	р	
U	54533739	uter xadsi@stra.co.nz

 A "Successful" message should appear. 	Microsoft Internet Explorer 🔀 Successful OK
 Click SAVE CONFIG and then Apply to save settings you have made permanently. 	SAVE CONFIG RESTART LOGOUT Save Config to FLASH Desees confirm that you wish to save the configuration. There will be a delay while saving as configuration information is written to FLASH chips. There will be a delay while saving as configuration information is written to FLASH chips. There will be a delay while saving as configuration information is written to FLASH chips.
 A "Save Config to FLASH Successful" message should appear. Note: You could still connect to the Internet without saving config to FLASH, but when the router is being switched off and back on again, you will have to re-enter your Internet account details. 	Microsoft Internet Explorer 🔀 Save Config to FLASH Successful OK
8. Click F5 key to return to the Home Page of Router. And then check the table of WAN and see if the Internet Access is established (i.e. PPP Connection).	WAN QS_PPP0A O VPI / VCI 0 / 100 PPP Connection Connection established Connected time so far 00:00:57s IP Address 210:86:97.77 SubNetmask 225:255:00
CONGRATULATIONS! YOU ARE DONE!!	Go and surf the Internet now!



3. **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.

For further assistances with the product, please feel free to contact and visit us at:	http://www.billion.com
New Zealand Customer Technical Support:	Mail to: <u>helpdesk@morningstar.co.nz</u> FREE Phone: 0800 008 765