



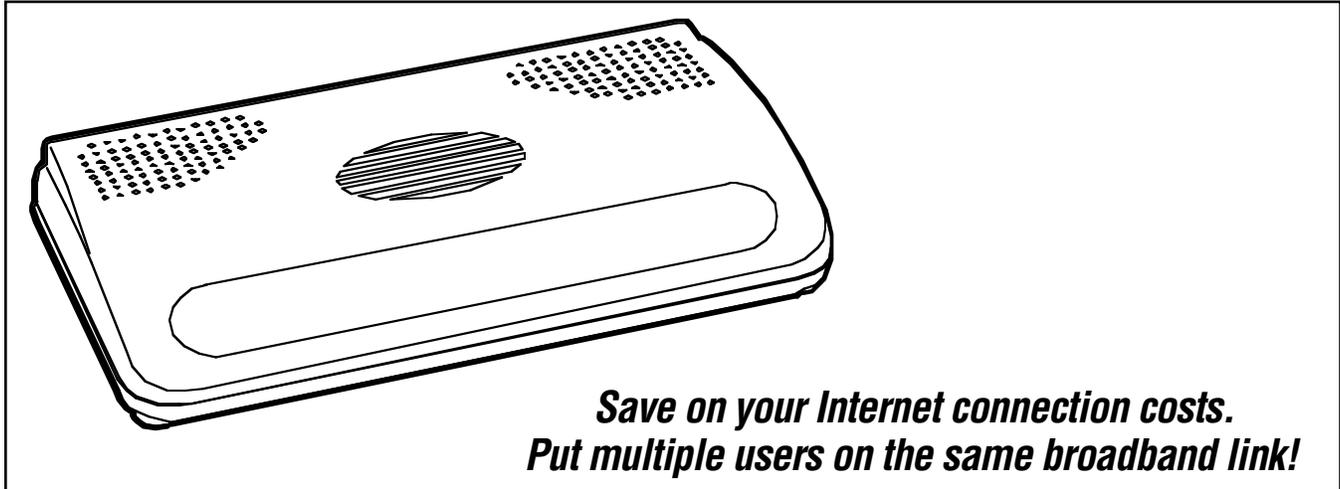
© 2004. All rights reserved.  
Black Box Corporation.

# BLACK BOX®

## NETWORK SERVICES

Black Box Network Services • 464 Basingstoke Road • Reading, Berkshire, RG2 0BG • Tech Support: 0118 965 6000 • www.blackbox.co.uk • e-mail: techhelp@blackbox.co.uk

## PURE NETWORKING BROADBAND ROUTER



***Save on your Internet connection costs.  
Put multiple users on the same broadband link!***

### Key Features

- ▶ ***For economical ADSL and cable modem links to the Web.***
- ▶ ***Supports IP routing and NAT/PAT.***
- ▶ ***Provides firewall protection and guards against hacker attacks.***
- ▶ ***Built-in print server for network print sharing.***
- ▶ ***40-Mbps LAN-to-WAN throughput.***
- ▶ ***Web-based GUI.***
- ▶ ***Remote configuration and management capabilities.***
- ▶ ***Autosensing 10-/100-Mbps ports.***
- ▶ ***Bridging function.***

For economical IP routing in which multiple users can share the Internet via a single ADSL or cable modem connection, order the Pure Networking Broadband Router.

This incredibly fast router has a high-performance CPU that delivers LAN-to-WAN throughput at 40 Mbps. The back panel has four 10-/100-Mbps LAN ports for connecting your PCs as well as printer servers, hubs, switches, and other networking devices. For Internet access, connect your ADSL modem or cable modem to the router's WAN port.

As your network grows, you can connect another hub or switch to one of the router's four 10-/100-Mbps LAN ports. Then, through the hub or switch, additional users—up to 253 in all—can share files and cost-effectively use the same ADSL or cable modem line for their Internet access.

The Pure Networking Broadband Router offers potential cost savings to home- and small-office applications as well. Use the router, for instance, to access the Internet from any computer within a home or office network while paying an ISP for only one IP address.

The device seamlessly integrates into any existing network for connections to your "always-on" Web link. Plus, it's simple to set up and use. Just configure Internet connection settings and plug your PCs into the LAN ports. The router's Dynamic Host Configuration Protocol (DHCP) server automatically assigns your networked PCs an IP address.

The router is also equipped with a print server that enables your intranet PC users to share a printer. Just connect one or two shared printers to the router through the rear USB ports. The

built-in server supports LPD printing protocol, which can be used in Windows®, Linux®, and other operating systems that provide LPD printing.

To manage and configure the Pure Networking Broadband Router, use a Web browser-based graphical user interface (GUI). Through this, you can monitor the router's status. Observe the DHCP client log, security log, as well as the connection status of devices on the LAN and WAN interfaces. You can also use the GUI to gather information relating to the port's IP address, subnet mask, ISP gateway, and Primary Domain Name System (DNS) and Secondary DNS currently in use.

And because the interface is Web-browser based, management functions can be performed from anywhere that an Internet connection can be established. The router's remote

management function allows you to designate an Internet host for configuring the device from a remote site. This is done by entering a designated host IP address in the Host IP Address field of the GUI's setup screen. If, for example, you designate your home IP address as the router's remote management host IP address, router configuration can be performed remotely through that address only.

You can instruct the router to perform bridging functions on its WAN port, so it uses Data Link Layer (MAC) address information to forward and filter packets between different networks. Used this way, the router effectively becomes a switch, transferring packets from the WAN port to the LAN port and vice versa without any Network Address Translation (NAT) involvement. When configured to operate as a bridge, the router ignores the original WAN MAC information and,

instead, uses the original LAN MAC address as the MAC address.

Through the WAN port, you can also program the router to operate as a Dynamic IP device that has its IP address assigned automatically by the ISP. The Pure Networking Broadband Router also supports PPPoE and PPTP protocols for wide equipment compatibility as well as virtual private networking (VPN).

#### ***On guard against attacks.***

To access the Internet, all PC users on the router's LAN side use Network Address Translation, which provides firewall protection for the local network.

And, to further reduce the hacker activity risk, the router defends against a wide number of common Internet attacks, including Denial of Service, Ping of Death, and RIP defect. The router can also alert you by e-mail if Internet attacks occur.

This is done by restricting its connections parameters, in which you define which type of traffic you want on your LAN. For instance, you can control which PC client uses what services and also the time period in which they can have access to those services.

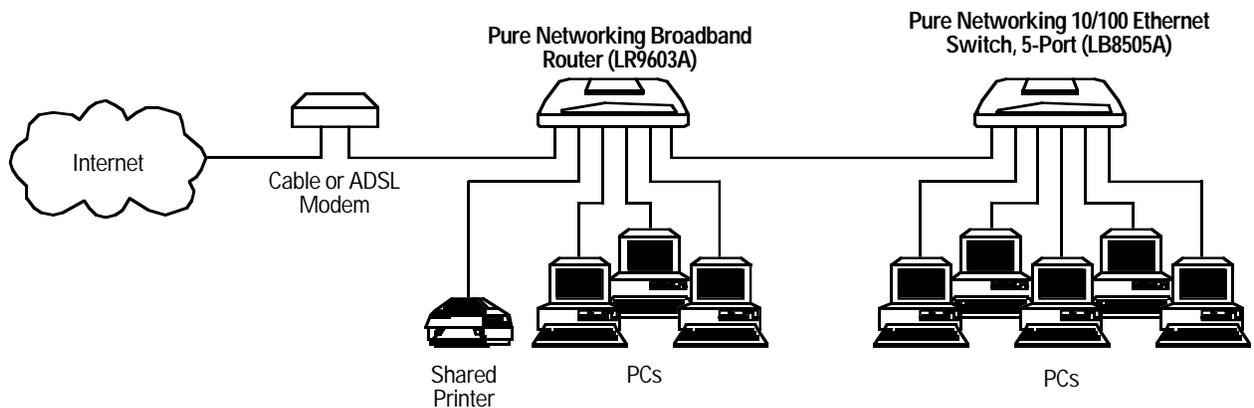
If you have a local client PC that cannot run an Internet application properly from behind the NAT firewall, then you can open the client up to unrestricted two-way Internet access by defining a DMZ host. The DMZ function allows you to redirect all packets going to your WAN port IP address to a particular IP address in your LAN.

You can also set up a "virtual" server with the Pure Networking Broadband Router. Through this, different clients on your LAN can handle different services or applications that are accessible by Internet users. For example, one can handle e-mail traffic while another hosts FTP activity.

The router also allows one or more public IP address(es) to be mapped to a pool of local private IP address(es), a feature that's particularly useful when you have multiple global IPs and want to divide local users into different groups.

Front-panel indicators keep you informed of all of the router's activity. If, for instance, the WAN LED illuminates green, you know the WAN port is connected and ready to send data at 100 Mbps. If it's yellow, the port supports 10-Mbps data transfers. If the WAN LED flashes, activity is being sent. Per-port LEDs alert you to 10- and 100-Mbps readiness and activity on each of the LAN segments, too.

## Using a Broadband Router and an Ethernet Switch



# Specifications

**Memory: Flash:** 2-MB NOR; RAM: 16-MB SDRAM

**Protocols Supported:** TCP/IP, UDP, ICMP, PPPoE, PPTP, NAT/PAT, DHCP, PAP/CHAP/MS-CHAP, L2TP, PPTP, IPSec passthrough

**Throughput:** 40 Mbps

**Standards:** IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX

**User Controls:** (1) Reset button

**Connectors:** LAN: (4) RJ-45;  
WAN: (1) RJ-45;  
Printer: (2) USB Type A

**Indicators:** (11) LEDs: (1) PWR, (1) WAN 10/100M, (1) WAN LNK/ACT, (4) LAN 10/100M, (4) LAN LNK/ACT

**Power:** 120 VAC, 60 Hz, external

**Size:** 1.2"H x 7.4"W x 3.9"D (3 x 18.8 x 9.9 cm)

**Weight:** 0.6 lb. (0.3 kg)

# Package Includes

- The router
- (1) power adapter
- (1) straight-through UTP cable
- A users' manual

# You'll Need

- External ADSL or cable modem with an RJ-45 Ethernet port.
- A network interface card (NIC) for each PC. For optimum performance, order the Pure Networking PCI Bus Network Adapter (see **right**).
- Internet Explorer 4.0 or higher, or Netscape Navigator® 4.7 or higher Web browser installed on each PC.

# Ordering Information

ITEM	CODE
Pure Networking Broadband Router .....	LR9603A
<i>For each PC on your network, you may need...</i>	
Pure Networking PCI Bus Network Adapter .....	LE1600C
For more information, request or download <b>FaxBack® 10346</b> or contact Technical Support.	
<i>To add more PCs to your network, order...</i>	
Pure Networking 10/100 Ethernet Switch	
5-Port .....	LB8505A
8-Port .....	LB8508A
16-Port .....	LB8516A
For more information, request or download <b>FaxBack 10360</b> or contact Technical Support.	
<i>You may want to order cable...</i>	
GigaBase® 350 CAT5e Patch Cable with Snagless Boots, 350-MHz, 24 AWG, RJ-45, 4-Pair, T568B, PVC, Blue	
1-ft. (0.3-m) .....	EVNSL81-0001
3-ft. (0.9-m) .....	EVNSL81-0003
5-ft. (1.5-m) .....	EVNSL81-0005
6-ft. (1.8-m) .....	EVNSL81-0006
7-ft. (2.1-m) .....	EVNSL81-0007
10-ft. (3-m) .....	EVNSL81-0010
20-ft. (6.1-m) .....	EVNSL81-0020