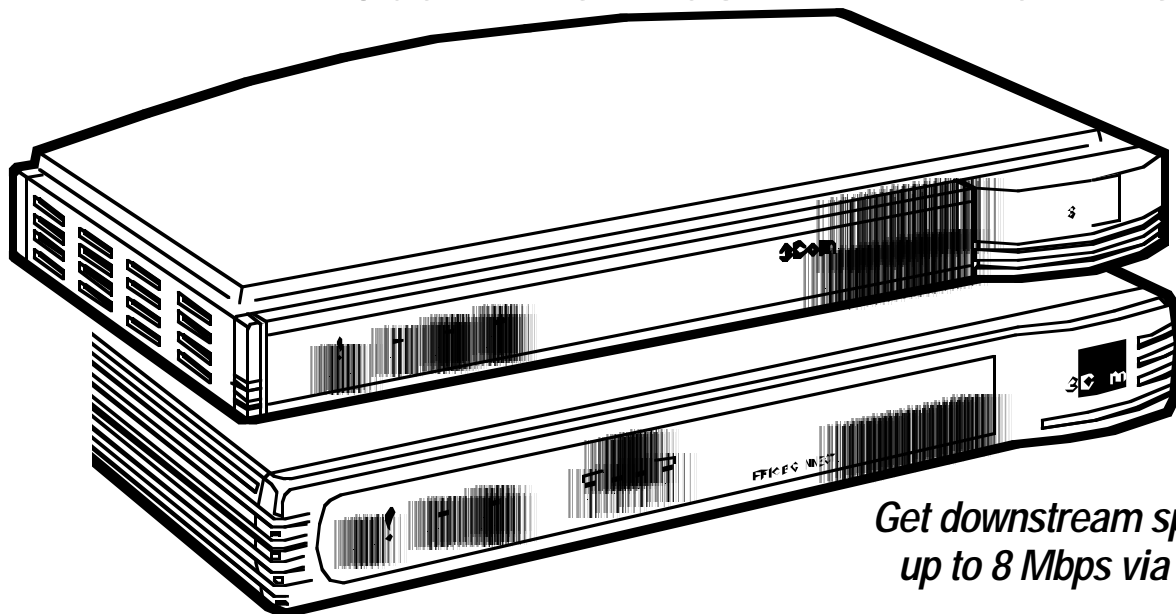# BLACK BOX ®
NETWORK SERVICES

3COM ADSL ROUTER AND MODEMS

Get downstream speeds of up to 8 Mbps via ADSL!

Key Features

▶ *Always-on, high-bandwidth connection capable of down-stream speeds up to 8 Mbps and upstream speeds up to 1 Mbps.*

▶ *Router includes an integrated 4-port Ethernet hub for LAN connectivity, bridging, and routing.*

▶ *Dual-link modem has both USB and Ethernet ports.*

▶ *Ethernet modem connects to a PC, Macintosh, or UNIX workstation with an Ethernet NIC.*

With the 3Com 812 ADSL Router, you can use your ordinary analog phone line for both regular voice calls and high-speed Internet or corporate LAN access at the same time. Download large databases or image files in a fraction of the time it takes using an analog or ISDN modem. And you can send and receive e-mail in a flash.

Asymmetric Digital Subscriber Line (ADSL) can bring data, voice, and video into your computer up to 150 times faster than a 56-kbps modem. You get speeds up to 8 Mbps downstream and 1 Mbps upstream. Since the connection is always on, you don't have to dial in to a server, wait to establish your connection, or encounter busy signals.

The Router has an integrated 4-port 10BASE-T hub. As your needs grow, you can stack additional hubs, so multiple users

or devices can share the same ADSL circuit. The Router supports up to 16 virtual concurrent connections to multiple destinations.

It also includes full routing and bridging capabilities to segment and route IP and IPX protocols, as well as NAT and PAT for extra security.

You can connect directly to an Ethernet interface on your PC or connect multiple workstations with the integrated hub. The Router provides a routed WAN interface for workgroups, and is software upgradeable for new services and features. HTML management software provides easy installation and configuration.

ADSL Dual-Link Modem
The ADSL Dual-Link Modem provides both USB and Ethernet ports. Computers can share local resources (such as printers and

files) and access the Internet at the same time. The Dual-Link Modem can grow along with your home networking needs. Initially, attach a computer to either port. Attach a second desktop or notebook computer to the other port. Add a stackable Ethernet hub to connect even more computers.

ADSL Ethernet Modem
The ADSL Ethernet Modem connects to a PC, Macintosh, or UNIX workstation with an Ethernet network interface card (NIC) for an individual user. Or connect it to a hub or switch to provide multiple users with the benefits of high-speed access. Each modem has an Ethernet 10BASE-T port and includes the appropriate cable for connecting directly to your workstation, hub, or switch.

The ADSL Ethernet Modem supports either full-rate G.992.1 (G.dmt) or splitterless G.992.2 (G.lite).

Specifications

Router:

Bridging: 802.1d

DIP Switches: 4

Protocols: IP, IPX

Security: DHCP, NAT, PAT

Standards: ITU G.992.1 full-rate ADSL, G.992.2 G.lite

System Requirements: Up to (4) workstations with an Ethernet 10BASE-T interface; (1) external voice/data splitter for simultaneous telephone and data access while operating in full-rate or G.lite mode, ADSL service from telco or broadband service provider

Operating system: DOS, Windows® 3.x, Windows 95, Windows 98, Windows NT® 4.0, Windows 2000, Macintosh, UNIX®, Linux, or any operating system that supports an Ethernet connection with an IP stack (installation CD requires Windows 95, Windows 98, Windows NT 4.0, or Windows 2000);

Altatel compatible ADSL service from a local telephone company or broadband service provider; External voice/data splitter or line filter may be required for simultaneous use of telephone and data access when operating in full-rate or G. lite mode

Approvals: FCC Part 15, Class B; IC CS-03 and ICES-003; UL listed; CUL listed; EN55022 CISPR22 Class B; EN50082-1; EN60950

Virtual Circuits (VCs): (16) VCs concurrently

Connectors: (1) DB9 female (console), (1) RJ-45 (LAN), (1) RJ-11 (ADSL)

Power: 100 to 240 VAC, external

ADSL Modem Ethernet:

DIP Switches: 4

System Requirements: (1) Workstation with Ethernet 10BASE-T interface, ADSL service from your telephone company, (1) External voice/data splitter for simultaneous telephone and data access when operating in full-rate mode

Standards Compliance: Local interface: IEEE 802.3 10BASE-T RJ-45; Bridging: 802.1d spanning tree

WAN Support: Full-rate ADSL T1.413, Issue 2, ITU G.992.1 (G.dmt) and ITU G.992.2 (G.lite); ATM signaling: UNI 3.1, UNI 4.0; RFC 1483: Bridged Ethernet/ATM; VCs: Up to 8

ATM Attributes: AAL Type: AAL5; ATM Service Class: USB

Speed: Downstream: up to 8 Mbps; Up stream: up to 1 Mbps

Indicators: Alert, Power, LAN Status, ADSL Status

Management: SNMP, Console/CRAFT/CLI: RS-232, Telnet, ADSL Forum TR-006-ADSL Line MIB

Operating Temperature: 0 to 40°C (32 to 120°F)

Power: External power supply: Input: 100 to 240 VAC; Output: +15 VDC

Size: 4.1 x 22.1 x 13.7 cm (1.6"H x 8.7"W x 5.4"D)

ADSL Modem Dual Link:

DIP Switches: 4

System Requirements: 10 MB available hard drive space on (1) Computer with Ethernet 10BASE-T interface and/or USB port; ADSL service from your telephone company; External voice/data splitter for simultaneous telephone and data access when operating in full-rate mode. (Splitter or line filters may be required and installed by your service provider.)

Operating Systems: Ethernet port: Windows 95, Windows 98, Windows 2000, Windows NT 4.0 (call Black Box Technical Support at 724-746-5500 for help with configuration under Windows 3.x, DOS, Macintosh, UNIX, or Linux operating systems; USB port: Windows 98, Windows 2000

Standards and Protocols Supported:

Local Interface: IEEE 802.3 10BASE-T (RJ-45); USB 1.0, 1.1 (Type B); Bridging: 802.1d Spanning Tree;

WAN Interface:
Full-rate ADSL: ANSI T1.413, Issue 2; ITU G.992 (G.lite);
WAN service support:
 RFC 1483: Bridged Ethernet over ATM;
 RFC-2516: PPP over Ethernet;
 RFC-2364: PPP over ATM

ATM Attributes: ATM Service Class: UBR; AAL Type: AAL5; Virtual Circuits (VCs): Up to 8

Speed: Downstream: Up to 8 Mbps; Upstream: Up to 1 Mbps

LEDs/Indicators: Alert, Power, LAN, USB, ADSL

Management: Web browser, Telnet, Console, CLI, RS-232, ADSL Forum TR-006 (ADSL Line MIB)

Operating Temperature: 0 to 40°C (32 to 120°F)

Power: 100 to 240 VACm external

Size: 4.1 x 22.1 x 13.7 cm (1.6"H x 8.7"W x 5.4"D)

▼ What the Package Includes

3CP4130:
- 3Com ADSL Dual-Link Modem
- (1) software CD
- (1) USB driver diskette
- (1) 5-ft. USB cable
- (1) 7-ft. RJ-11 to RJ-11 phone cable
- (1) 8-ft. RJ-45 to RJ-45 10BASE-T cable
- Users' manual

3CP3647:
- 3Com ADSL Ethernet Modem
- (1) software CD
- (1) 7-ft. RJ-11 to RJ-11 phone cable
- (1) 8-ft. RJ-45 to RJ-45 10BASE-T cable
- (1) DB9 to DB9 console cable
- Users' manual

3CP4144
- 3Com Remote 812 ADSL Router
- (1) power cord and adapter
- (1) software CD
- (1) 7-ft. RJ-11 to RJ-11 phone cable
- (1) 8-ft. RJ-45 to RJ-45 10BASE-T cable
- (1) DB9 to DB9 console cable
- Users' manual

▼ *Ordering Information*

ITEM	CODE
3Com ADSL Modems	
Dual Link	3CP4130
Ethernet	3CP3647
3Com Remote 812 ADSL Router	3CP4144