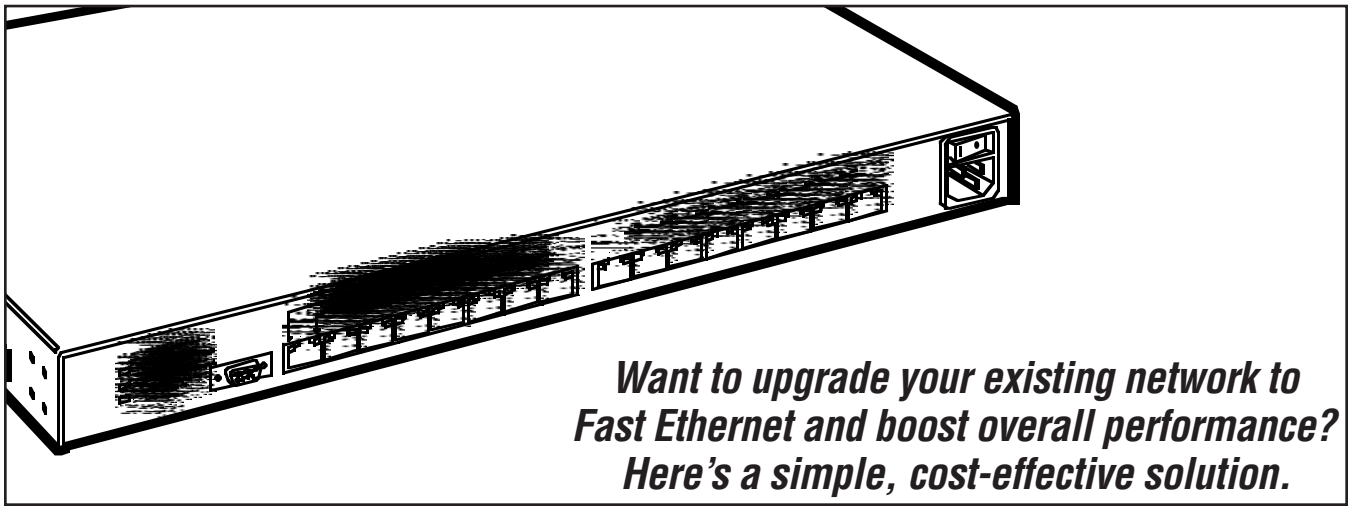
BLACK BOX®

NETWORK SERVICES

8- AND 16-PORT ROUTER ACCELERATORS



Want to upgrade your existing network to Fast Ethernet and boost overall performance? Here's a simple, cost-effective solution.

Key Features

- ***Gives your router up to 10 times the performance—at a great price.***
- ***Diverts IP traffic from your software-based backbone routers to ease network congestion.***
- ***Complies with all relevant networking standards.***
- ***Fully interoperable with conventional routers using standard IP protocols.***
- ***Network management features powerful yet easy-to-use graphical interface.***

These affordable new Router Accelerators from Black Box offer you a much simpler way to boost your network performance.

They take the hard work off your router's hands and accelerate it to Fast Ethernet speed. And they do it with no help from you at all.

Unlike multilayer switches or conventional routers, these Router Accelerators require no manual configuration. You can deploy the device in your existing network easily and immediately.

The secret is the new Autoroute technology. These Router Accelerators don't have to use routing protocols to understand the routing topology. Instead, AutoRoute snoops out the appropriate IP routing configuration, identifying the location of attached LANs and their workstations while imitating the operation of the existing backbone router.

Once the network is learned, the Router Accelerators automatically perform all the standard Layer-3 routing operations for local data, such as header modification, TTL update, and checksum recalculation.

WAN data is simply passed on the conventional router without modification or delay. For routing non-IP protocols, the conventional router also handles DECnet, AppleTalk, and so on.

With the old router relieved of most local traffic, you immediately multiply local network performance by 10—without any manual router configuration or user intervention.

The Router Accelerators come with 8 or 16 Fast Ethernet ports (full- or half-duplex operation), supporting concurrent wire-speed routing and switching on every port.

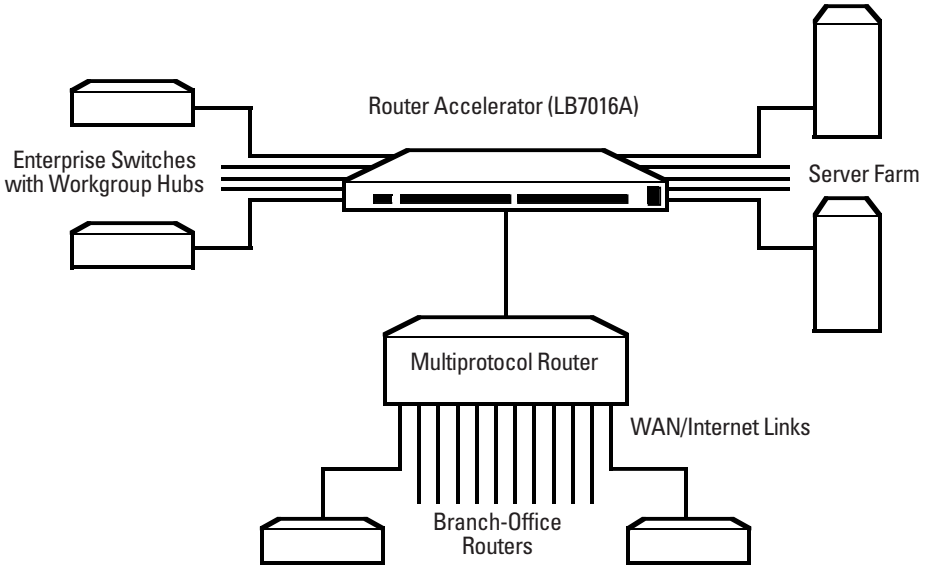
And don't worry about having to configure complex software to get the device on-line. The Router Accelerator comes with pre-loaded software. Moreover, because AutoRoute is protocol-independent, it works equally well in networks that use RIP, OSPF, Cisco Interior Gateway Routing Protocol, and EIGRP.

The Router Accelerators are not only transparent to any routing protocol, but are also transparent in their operation.

Installation, configuration, and management of the Router Accelerators are made easy by the intuitive, browser-based TrueView™ network management software. You can also manage them through standard SNMP, Telnet, and a serial command-line interface.

The Router Accelerators store their software in flash memory, which can be upgraded locally or through the network. Two copies of the operating software can be stored in the memory, so that a fallback version is always available.

Using the 16-Port Router Accelerator shown here, the heaviest load can be shifted away from the conventional router. The device routes the campus backbone IP data between the workgroups and high-speed servers, while the conventional router continues to handle the WAN traffic.



Technically Speaking

More network managers on central server farms are consolidating their workgroup file servers and intranet Web servers.

To do this, high-performance superservers are used to replace many smaller workgroup servers, boosting the overall data-handling capacity while cutting the acquisition and support costs.

But most of the data still travels across the network backbone to get to these servers. As a result, this new configuration places a hefty load on the existing routers, and conventional software-based routers have become a network-bandwidth bottleneck.

How do you deal with this congestion? Upgrading your router with expensive Fast Ethernet cards does little to boost performance. They lack the capacity needed to handle the millions of packets per second that flow through higher-speed interfaces. Your router may not even have empty slots available for the Fast Ethernet cards.

The Router Accelerator is your remedy, delivering 10 times the performance of conventional software-based routers at a fraction of the price.

The secret behind the unsurpassed performance achieved by the Router Accelerator is its hardware switching architecture.

At the heart of the switch is a 4-Gbps hardware routing engine, which uses the advanced TrueSwitch™ multilayer switch ASIC. It also features two high-performance RISC processors—one for routing processing and one for network management. They work with the custom ASIC to route and switch millions of packets per second.

Fragment-free cut-through and store-and-forward Layer 2 switching are supported. True Layer 3 IP routing is provided on any or all ports. All Layer 3 packet handling functions are supported, including TTL counter and header updates, address resolutions, and checksum recalculations. The Router Accelerator also supports all standard Layer 3 best-path routing protocols, such as RIP. Concurrent Layer 2 switching and Layer 3 routing can also be configured for each port.

Typical Application

Your Virtual LAN can be configured to create closed user groups and isolate broadcast traffic. This is especially useful for non-routing protocols but also can be used in conjunction with routing to provide switching within your subnetwork and routing between subnetworks.

The complete package:

- The Router Accelerator rackmount kit for 19-inch rack.
- 115 VAC power cord and RS-232 console cable.
- Pre-loaded True Multilayer Switching software, including SNMP management agent, Telnet, and all operating software.
- CD-ROM with backup copy of pre-loaded software and on-line user guide.
- User's manual.

Specifications

Standards — IEEE 802.1D self-learning bridging; IEEE 802.3 10BASE-T (half- and full-duplex); IEEE 802.3u 100BASE-TX (half- and full-duplex); RFC 1058 RIP; RFC 1723 RIPv2; RFC 1583 OSPF Version 2; RFC 1812 router requirements; RFC 1350 TFTP; RFC 792 ICMP; RFC 951 BOOTP; RFC 854 Telnet; RFC 1157 SNMPv2; RFC 1213 SNMP MIB-11; RFC 1493 Bridge MIB; RFC 2096 IP Forwarding MIB; RFC 1850 OSPFv2 MIB; RFC 1724 RIPv2 MIB

Compatibility — EN 50082-1, CE Mark

Interface — RS-232 console

Internal Memory — 4 MB flash

Protocols — Dynamic IP routing; RIP, RIPv2, and OSPF; AutoRoute automatic IP routing configuration; Spanning Tree Protocol, including multiple spanning trees; Per-port configuration and routing Virtual LANs (VLANs)

User Control — Software, command-line interface via Telnet or RS-232 console port; SNMP

Power —
8-Port Model: 70W (239 BTU/ hour), 90 to 250 VAC, 47 to 63 Hz;
16-Port Model: 100W (341 BTU/hour) 90 to 250 VAC; 47 to 63 Hz

Temperature —
Operating: 0 to 40°C;
Storage: -20 to +80°C

Humidity — 10 to 95% (noncondensing)

Size —
4.3 x 44.5 x 31.4 cm

Weight —
8-Port Model: 4.3 kg;
16-Port Model: 4.9 kg

Ordering Information

ITEM	CODE
Router Accelerators	
16-Port	LB7016A
You may also need:	
CAT5 Color Patch Cable, Custom Lengths	EVMSL05
Ethernet Transceiver Cable, Custom Lengths	LCN210
ThinNet Cable, PVC, Custom Lengths	LCN300