



BLACK BOX[®]

NETWORK SERVICES

ASync MASTER



Key Features

- ▶ Standard 19-inch rack-mountable design for industrial applications
- ▶ 10/100 Mbps Ethernet interface
- ▶ Windows 95/98, NT, 2000 and Unix tty COM-Port driver
- ▶ RS-232 devices can be shared by multiple hosts
- ▶ Dial-IN, Dial-OUT Remote Access
- ▶ Console Server
- ▶ Serial tunneling
- ▶ Simple setup and configuration with a user-friendly GUI-no host reboot required

Are you looking for a multi-functional communication server for your customer's remote access needs? Are you planning to control remote asynchronous devices over a TCP/IP-based network? Or, are you looking for economical ways to connect terminals to Ethernet LANs? By connecting RS-232 devices, such as terminals, modems, ISDN TA, and printers, to TCP/IP Ethernet networks, LES25xxAE Async Server provides an intelligent and cost-effective solution to all of these problems. The transparent access to Async Server's COM Ports enables easy multi-host control over asynchronous devices under a Windows NT environment.

LES25xxAE technology also includes enhanced software features. In addition to RADIUS Server for Dial-In accounts, LES25xxAE embeds a user database, providing alternatives for user profile management. RIP I/II, another advancement for Async Server, makes LAN-to-LAN routing more convenient than ever. LES25xxAE provides exceptional stability and performance among UNIX-

based SUN, IBM, and HP workstations, as well as Windows or LINUX based PCs. Blending BLACK BOX's proven async technology into the new 100 MB LAN environment, LES25xxAE truly represents an easy, cost-effective LAN-to-Async solution.

Beyond Tomorrow's Technologies

BLACK BOX LES25xxAE Async Server, with the latest 10/100BaseT LAN interface and 4/8/16 serial interfaces, is the best multi-functional communication Server on the market. LES25XXAE incorporates all popular features and functions, such as ASPP Async Device Control, Rtelnet console management, and PPP/SLIP/terminal remote access, into its new cutting-edge hardware design. It adopts a 19" rackmount chassis to fit better with other network equipment. Each of its 4/8/16 serial ports has a dedicated LED indicator to display TX/RX status at all times, and surge protection for every signal.

Easy Configuration and Management

Using our latest Windows

configuration program, you can easily configure and manage BLACK BOX Async Server with its point-and-click menu. BLACK BOX Async Server can be managed or monitored either on a local console port or via Telnet, from anywhere on the network. SNMP and MIB II network management protocols are also supported to provide better network management capabilities.

Remote Dial-in, Dial out and RIP I, RIP II Multi-Point Routing

BLACK BOX Async Server provides remote dial-in access for mobile users, telecommuters, and small remote offices, allowing them to connect to centralized corporate networks. To ensure network connectivity, a number of auto-sensing protocols, such as PPP, SLIP, CSLIP, and Terminal, are supported, and are independently configurable on each of BLACK BOX Async Server's ports. After connecting to BLACK BOX Async Server, remote users or customers can utilize Telnet, FTP, and web browsers, to enjoy Intranet/Internet services, regardless of which network protocol is being used.

If you are considering increasing the use of dial up services for multiple remote branch office connections, or for an Internet backup link with low-density network access, you may configure Async Server as an asynchronous routing server. By connecting to multiple standalone Async Servers, or async routers, data is routed from LAN to LAN. This provides an entry-level solution for branch office communication, replacing the use of traditional routers.

Terminal Access

Main-frame-based computing, with access via traditional terminals, creates business advantages for many enterprises. From cashiers in Point-Of-Sale systems, terminals in stock exchange offices or travel agencies, to ATM machines in banking systems, BLACK BOX LES25xxAE Async Server provides a reliable solution for users to access central mainframes by using the Telnet protocol. Moreover, multi-session and host configurations make terminal access smoother than ever.

Console Server (Reverse Telnet)

Contrary to Telnet, Reverse Telnet protocol allows TCP/IP network hosts, such as terminals or workstations, to access Async Server's RS-232 devices, giving network administrators another way to manage servers or routers with console ports attached to Async Server. In addition, non-TCP/IP servers, minicomputers, or equipment with asynchronous interfaces can easily be accessed and managed through the LAN.

Async Device Control over TCP/IP- TransOS ASPP

To extend traditional serial communication, which involves attaching serial devices directly to a dedicated machine, to being able to control serial devices over a TCP/IP network, BLACK BOX Async Server provides ASPP protocol. This protocol is programmable on various network hosts. By using ASPP protocol, hosts can control devices attached to Async Server anywhere on the network. The control is transparent, meaning that the look and

feel is the same as if the devices are connected directly to the host. Since ASPP protocol works through a standard network socket Interface, it is interchangeable with most operating system platforms.

Async Device Control over TCP/IP- Windows Real COM Port and UNIX Fixed tty

BLACK BOX Async Server supports Windows NT's COM port driver, with full compatibility to Windows NT's standard COM driver, including full RS-232 signal control. You are now able to run application software such as modem pooling, fax pooling, data acquisition, thin-client, and RAS from any Windows NT on the network. The software can be installed on more than one Windows NT host for either sharing the server or for backup. BLACK BOX Async Server provides port access control, making the WAN more secure for multiple-host usage and remote control of serial port devices. To ease implementation and compatibility with existing third party

application software, UNIX fixed TTY's device driver is also supported, providing serial access for UNIX systems.

Secured Communication- RADIUS and Dial-Back

BLACK BOX Async Server provides multiple levels of security to protect your vital information. Password Authentication Protocol (PAP) and Challenge Handshake Authentication Protocol (CHAP) enable the username and password to be transmitted in an encrypted form to help protect against eavesdroppers. RADIUS (Remote Authentication Dial-In User Service) on Windows NT and UNIX systems is also supported to extend security control over large user profile databases. The dial-back feature strengthens account authentication by dialing back to authorized telephone numbers. Async Server can also be password-protected to avoid unauthorized configurations. Choose one, or combine several security measures to make your network safer.

Specifications

Hardware

Processor — Intel i960CA RISC processor
I/O controller — 16C954 or compatible (auto hardware flow control)
Memory — 1 MB (4, 8 ports), 2 MB (16 ports)
Connector type — RJ45

Interface

LAN interface — 10BaseT, 100Base-TX
Serial interface — RS-232

Printer Interface — 1 x parallel Port DB25
No. of ports — 4, 8 or 16 ports
Performance
Speed — 50 bps - 230.4 Kbps
Max. No. of ports — 256 (per Windows NT)
OS supported — Windows 2000, Windows NT, Windows 95/98/ME, UnixWare SVR4.2, Unix Ware7 SVR5, SCO Open Server, SCO UNIX, Linux 2.2.x/2.0x (Intel x86) (running TCP/IP)

Power and Environment

Power requirements — 90V-260V, 47-63Hz, 60W
Operating Temperature — 0 - 55°C

Rackmount — 19-in Standard Rack
Dimensions — 44 x 440 x 190 mm (H x B x T)

The Complete Package

- Manual
- PComm Lite (professional serial comm developing tool)
- RJ45-DB9F (DCE) console cable
- RJ45-DB25M (DTE) modem cable

Black Box Network Services - The world's largest network services company

We are, with 25 years of experience, the world leader in network infrastructure services.

On the Phone — no charge, answer calls in less than 20 seconds, find the right product with our technical experts.

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Ordering information

ITEM	CODE
Async Master, 4-Port	LES2504AE
Async Master, 8-Port	LES2508AE
Async Master, 16-Port	LES2516AE
RJ45-DB9F (DCE) console cable	LES2500AE-9F-DCE
RJ45-DB9M (DTE) modem cable	LES2500AE-9M-DTE
RJ45-DB25F (DCE) console cable	LES2500AE-25F-DCE
RJ45-DB25M (DTE) modem cable	LES2500AE-25M-DTE