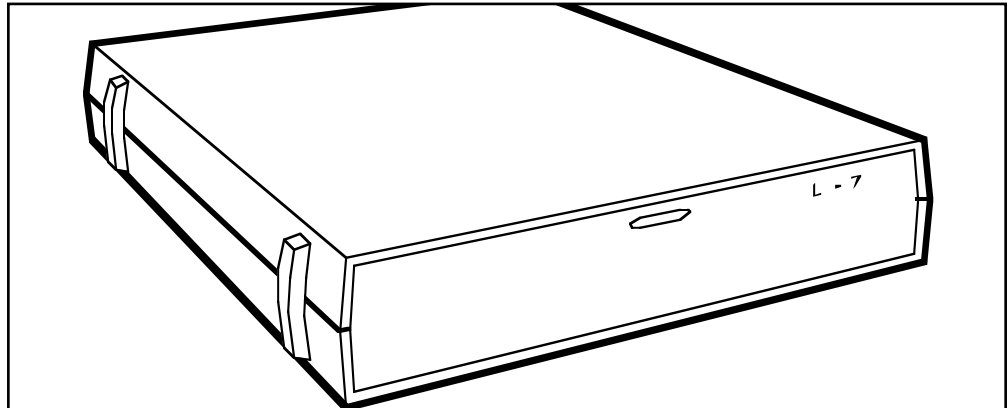




BLACK BOX[®]

NETWORK SERVICES

ASYNCHRONOUS LINE DRIVER MULTIPLEXOR



A pair of Asynchronous Line Driver Multiplexors replaces up to 16 line drivers—and gives you transmission distances up to more than four miles!

Key Features

- ▶ *Uses standard RS-232 cabling for easy connections.*
- ▶ *Supports hardware hand-shaking and bit-sampling for fast, efficient data transmission.*
- ▶ *Long-range models extend your transmission distances to more than 4 miles—22,000 feet (6705.6 m) over 19-AWG twisted pairs.*
- ▶ *One pair replaces 8 or 16 line drivers.*
- ▶ *Three built-in diagnostic tests for monitoring system performance.*
- ▶ *Front-panel indicators display channel status and overall system status.*

Our Asynchronous Line Driver Multiplexors (LD470 series) are designed to transfer data between your asynchronous host computer and your asynchronous terminals and printers over standard RS-232 cabling.

We have four models built to fit different needs. All models support hardware handshaking and bit-sampling to transmit multichannel data over a single link. Three built-in diagnostic tests are also included in all of the models—the digital loopback test, the analogue loopback test, and the channel loopback test.

The LD474 and LD478 models are basic units. Each channel operates at a maximum rate of

19.2 kbps, with a maximum transmission distance of 3675.6 m (12,000 feet). The LD474 has four channels; the LD478 has eight channels.

In the two long-range models, each channel operates at a maximum rate of 9600 bps. The maximum transmission distance for this model is 6705.6 m (22,000 feet). The LD474LR has four channels; the LD478LR has eight channels.

All models have indicators on the front panel which monitor and display both individual channel status and the composite stream of the entire system.

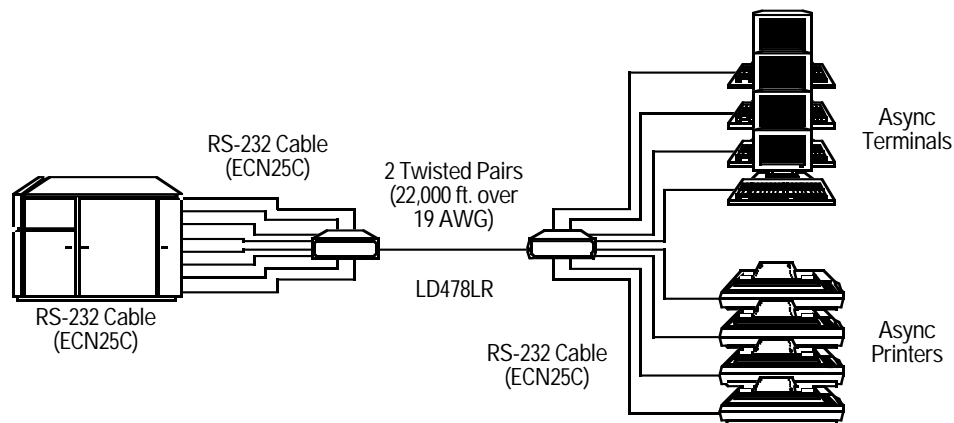
For more information on bit-sampling and the Asynchronous Line Drivers' internal diagnostics, see the Technically Speaking section on the next page.

Typical Applications

Use a pair of LD478 Multiplexors to connect your async host computer to eight remote terminals or printers.

Use a pair of LD478LR Multiplexors to transmit data across extended distances between your host computer and four terminals.

A pair of LD478LR units increases the distance between your async host and your terminals and printers to over four miles.



Specifications

Multiplexor Technique:
Time division

User Channels: 4 or 8

Speed:

Channel:

ME724A, ME728A:

Up to 19.2 kbps;

ME724A-LR, ME728A-LR:

Up to 9600 bps;

Composite:

ME724A, ME728A: 819.6 kbps;

ME724A-LR, ME728A-LR:

296.9 kbps

Protocol: Asynchronous

Interface:

Channel: RS-232;

Composite: 4-wire differential

Connectors:

Channel: (4) or (8) DB25 female;

Composite: 5-screw terminal block

Power: 115/230 VAC (switchable),
48-62 Hz, 15 watts

Size: 7.1H x 30.5W x 27.9D cm
(2.8"H x 12"W x 11"D)

Weight: 1.8 kg (4 lb.)

Technically Speaking

The Asynchronous Line Driver Multiplexor uses bit-sampled time-division multiplexing to transmit multichannel data over a single link. The unit receives data from different channels at different rates. It samples each bit at the composite rate and then places it into the composite stream. This method allows each channel to transmit data at its own rate, and reduces delay time to a maximum of one millisecond.

The Asynchronous Line Driver Multiplexor also has three diagnostic tests—the digital loopback test, the analogue loopback test, and the channel

loopback test. These tests systematically check the operational status of the equipment.

- Digital loopback test—checks the capability of the composite-line digital logic to establish synchronization.
- Analogue loopback test—tests both the digital and the analogue portions of the Multiplexor.
- Channel loopback test—tests the ability of the Multiplexor to multiplex and demultiplex individual channel data.

Additional equipment you may need:

- RS-232 cabling to connect the Asynchronous Line Driver Multiplexors to your existing equipment.
- A wide range of line drivers, multiplexors, and data broadcast units for your other local communication needs.

The Complete Package

- The Asynchronous Line Driver Multiplexor.
- Installation and Operation Manual.

Ordering Information

ITEM	CODE
LD474 (4-port)	ME724A
LD474LR (4-port long-range)	ME724A-LR
LD478 (8-port)	ME728A
LD478LR (8-port long-range)	ME728A-LR