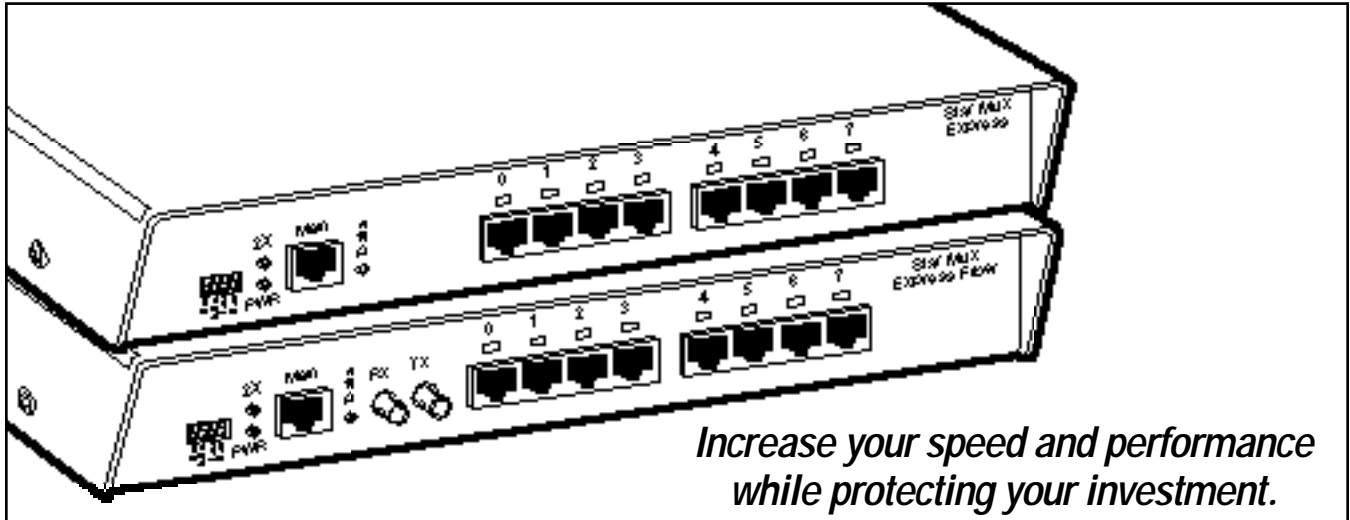




BLACK BOX[®]

NETWORK SERVICES

STAR MUX EXPRESS AND STAR MUX EXPRESS FIBRE



Key Features

- ▶ **Operate your AS/400 twinax equipment over Category 5 cabling.**
- ▶ **Autosenses 1- or 2-Mbps operation.**
- ▶ **Up to four times the throughput on your twinax lines.**
- ▶ **Multiplex up to 56 devices over a single fibre or copper link.**
- ▶ **Fibre optic multiplexing option for extending distance up to 6600 feet.**

The upgrade. Instead of being excited about any promised performance boost, you worry that what you've invested in so far will go to waste. Will the equipment you buy today work with equipment you buy tomorrow?

The Star Mux Express was developed, in part, to ease those fears. Available in copper and fibre configurations, the converter gives you compatibility now and in the future. Your wiring investment is protected as you upgrade your AS/400 system to take advantage of faster twinax technology.

You can operate your AS/400 twinax devices over Category 5 or fibre optic cables *and* when you upgrade to a 2-Mbps system. The Star Mux Express automatically senses 1- or 2-Mbps operation and switches to the appropriate mode transparently. If you have all 1-Mbps devices now, but you plan to add faster devices later, the Star Mux Express will adapt.

What's more, as an advanced

active star/mux repeater, the Star Mux Express converts a twinax daisychain cable configuration into an economical and flexible star-wire configuration, replacing twinax cabling between host or controller devices with easy-to-handle, inexpensive Category 5 cable.

Star-wired UTP networks are easier to maintain, and you don't have to deal with proprietary twinax cable. If you want to move from building to building, you simply move the Category 5 patch cable from one jack to another.

For added flexibility, the Star Mux Express also allows you to switch it from a star configuration to a twinax multiplexor configuration using UTP cabling. The star/mux repeater, available in copper and fibre configurations, supports fibre and backup twisted-pair or twinax cables between units.

You can attach up seven twinax devices to the Star Mux Express. It receives the twinax

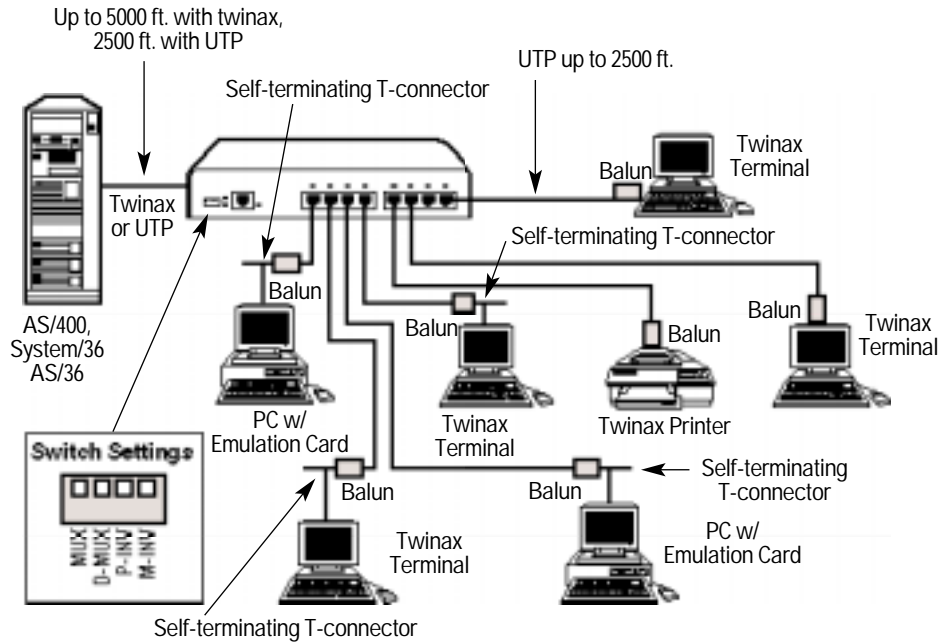
signal from the host or controller, then regenerates, amplifies, retimes, reshapes, and divides it into seven device channels. Each device port has its own transmit and receive drivers, so all connected devices can independently operate at the same time. To configure device and host port polarity, just flip the front-panel DIP switches.

The same DIP switches are used to change modes, too. These are the available modes:

- In Star Mode, you can extend twinax devices up to 762 m (2500 feet) over Category 5.
- In Mux/Demux Mode, you can connect up to 56 twinax devices to a single twinax AS/400 brick.
- In Remote Star Mode over fibre, you can connect two Star Mux Express units and place a group of twinax devices up to 2011.6 m (6600 feet) away!

(Continued on page 2)

Typical Application



The Star Mux Express in a star-wired configuration.

(Continued from page 1)

Please note that maximum distances between the host and the Star Mux Express depend on the gauge or level of the UTP cables you use, along with the quality of your baluns or Ts,

twinax and UTP, or your application environment. Each mechanical connection (break) usually reduces your overall distance by 15 metres (50 feet).

Each twinax terminal device must have a balun attached to its twinax ports. The controller

doesn't need a balun if it attaches to the Star Mux Express with twinax cable. We recommend

BLACK BOX Mini Twinax↔Twisted Pair Baluns for proper impedance matching.

Specifications

Cable Requirements —

UTP: Category 3, 4, or 5;
Fibre: Duplex fibre 50/125, 62.6/125, 85/125, 100/140 µ;
Twinax: Dependent upon host configuration

Maximum Distance —

Star Mode: To host: 1524 m (5000 ft.) twinax, 762 m (2500 ft.) UTP; To device: 914.4 m (3000 ft.) UTP;
Fibre Mux/Demux: To host: 1219.2 m (4000 ft.) twinax, 609.6 m (2000 ft.) UTP, 2011.7 m (6600 ft.) fibre; To device: 609.6 m (2000 ft.) UTP

Devices Supported — IBM

Processors: AS/400 (all models), 534X (all models), 536X, 538X; Remote Controllers: IBM 5294 and compatibles, IBM 5394 and compatibles, IBM 5494 and compatibles

Polarity — Switch-selectable on device and host ports

Speed — 1 to 2 Mbps, autosensing

Connectors — All models: (1) Twinax host port, (1) RJ-45 host port, (8) RJ-45 device ports; IC206A: (1) Pair of ST*

Indicators — LEDs: (1) 2-Mbps operation, (1) host/controller port status, (8) device port status

Fuse — 0.5 amp, 250V Slo-Blo®

Power — Autosensing 115 to 230 VAC, 50/60 Hz, 6 watts power consumption

Heat Dissipation — 21 BTUs per hour

Temperature — Operating: 0 to 55°C (32 to 131°F)

Humidity — Up to 95%, noncondensing

Size — 4.3H x 28.7W x 22.9D cm (1.7"H x 11.3"W x 9"D)

Weight — 2.7 kg (6 lb.)

Package Includes

- Star Mux Express or Star Mux Express Fibre
- Power cord
- Rubber feet for shelf mounting
- 19" rackmounting kit
- Users' guide

Ordering Information

ITEM	CODE
<i>Choose the Star Mux for your application...</i>	
Star Mux Express.....	IC205A
Star Mux Express Fibre	IC206A
<i>For optimum performance, order...</i>	
Category 5 Solid-Conductor Cable, 4-Pair, Straight-Pinned, PVC, 10-ft. (3-m)	EYN737MS-0010
Duplex Fibre Optic Cable, PVC, ST-ST, Custom Lengths.....	EFN062-CC