BLACK BOX®
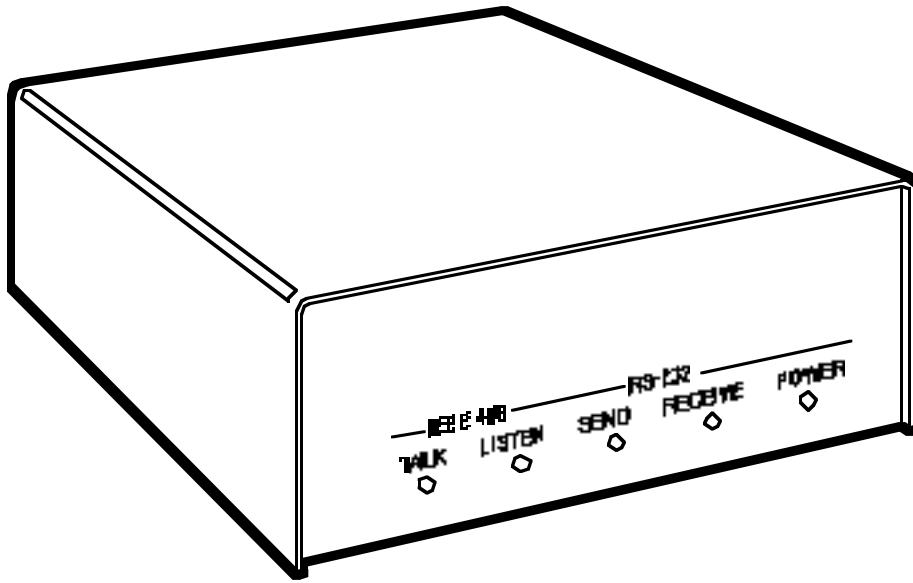## NETWORK SERVICES

232´488 Interface Converter

Integrate serial devices onto a 488 bus or communicate with serial equipment from an IEEE 488 device.

Key Features

▶ *32K dynamically allocated buffer automatically stores data.*

▶ *Runs at speeds up to 57.6 Kbps.*

▶ *RS-232 or RS-422.*

▶ *IEEE 488, HP®-IB, or GPIB compatible.*

▶ *Requires no special programming.*

▶ *Built-in ROM and RAM self-test.*

▶ *Easy-to-configure DIP switches.*

Interconnecting IEEE-488 and serial devices is a cinch with the 232´488 Interface Converter. The device can operate in either of two modes. In controller mode, it enables an RS-232 device to control an IEEE-488 device, such as a printer or plotter. In peripheral mode, it can transfer data from an IEEE-488 controller to a serial device.

And the Converter's flexible, since it runs at a wide range of speeds—from 110 bps to 57.6 Kbps.

The Converter's dynamically allocated 32K buffer is there when and where you need it. It will store data from whichever port is active. Since no specific buffer is allocated to each port, no buffer space is wasted and incoming data has access to storage when it needs it.

The Converter's transparent to data format, so it will work with spreadsheets such as Lotus® or CAD programs such as AutoCAD®.

A self-testing feature checks the microprocessor and program each time you power on. All you have to do is plug the unit in and turn the power on. The lights on the front panel will blink once to indicate proper operation. A steady light will indicate a problem area, except for the power light, which is always steady.

You can run RS-232 *or* RS-422, so you won't need another converter to work with your RS-422 equipment.

And even if you have an older HP® 74xx or 75xx plotter, the unit will adapt your old plotter to the serial communications port of your PC.

The Converter comes with an external wallmount power supply (9 VDC) that plugs into the back of the unit.
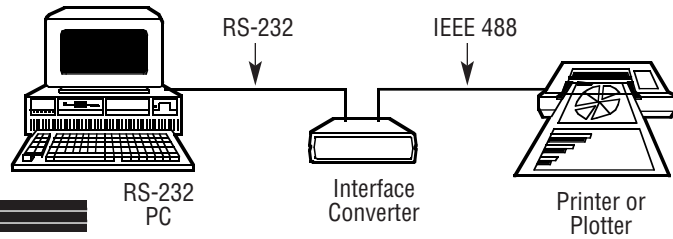
NOTE: This unit is compatible with any IEEE-488 device except tape drives, hard drives, or HP 2500, HP 2600, or HP 2900 printers.

▼

Typical Applications

Connect your PC to an IEEE-488 printer or plotter.

Attach your IEEE-488 controller to a serial device.

10470

1

With this Converter, you can control an IEEE-488 printer or plotter from your RS-232 PC.

RS-232   IEEE 488

RS-232 PC   Interface Converter   Printer or Plotter

Technically Speaking

The Converter comes configured as an IEEE controller. In this mode, the Converter allows an RS-232 computer to communicate with an IEEE peripheral such as a printer or plotter. You can also configure the Converter as an IEEE peripheral, so it can allow an IEEE controller to communicate with an RS-232 device.

Before using the Converter, you must configure a variety of parameters.

• DIP switches SW1-1 through SW1-5 configure the serial port settings, including baud rate, word length, number of stop bits, parity selection, and type of RS-232 handshake.

• SW-3 and SW2-4 set terminator substitution.

• SW3-6 through SW3-8 and SW2-1 set the operating mode.

• SW3-1 through SW3-5 set the IEEE address.

• SW1-7 and SW2-2 set controller and peripheral features.

Additional equipment you may need:

• IEEE-488 Cable
• RS-232 Cable
• IEEE-compatible Switches

For these and other components...
Call our expert Technical Support Staff for all your interface-converter needs. They'll help you find the best equipment for your application.

Specifications

General:

Control Switches—Power; internal DIP switches for RS-232 and IEEE parameters

Data Buffer—32 KB, dynamically allocated

Data Format—7 or 8 data bits, 1 or 2 stop bits; parity odd, even, mark, space, or disabled

Indicators—(5) LEDs

Controls—Power switch (external), IEEE and Serial parameter switches (internal). Jumper selection of RS-232 or RS-422 operation (internal).

Certification—FCC, CE

Environment—0 to 50 °C; 0 to 70% to 35 °C relative humidity. Linearly derate 3% relative humidity/degrees C from 35 to 50 °C

Interface—IEEE-488; RS-232/RS-422

Size—6.9H x 13.7W x 19.1D cm

Weight—1.1 kg; Power supply: 0.4 kg

IEEE-488 Interface:

Implementation—C1, C2, C3, C4, and C28 controller subsets. Serial to IEEE: SH1, AH1, T6, TE0, L4, LE0, SR1, RL0, PP0, DC1, DT0, E1.

Terminators—Selectable CR, LF, LF-CR, and CR-LF with EO1

Connector—Standard IEEE 488 connector with metric studs

Serial Interface:

EIA RS-232C—AB, BA, BB, CA, CB

EIA RS-422A—Balanced voltage on TxD and RxD

Character set—Asynchronous bit serial

Output voltage—±5 volts min. (RS-232C); 5 volts typical (RS-422A)

Input Voltage—±3 volts min.; 15v max.

Speed—Selectable 110, 300, 600, 1200, 1800, 2400, 3600, 4800, 7200, 9600, 19,200, and 57,600 bps

Data Format—Selectable 7 or 8 data bits; 1 or 2 stop bits; odd, even, mark, space, and no parity on transmit

Duplex—Full with Echo/No Echo

Serial Control—Selectable CTS/RTS or XON/XOFF

Terminators—Selectable CR, LF, LF-CR, and CR-LF

Connector—DB25 male, DCE configured

Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
232´488 Interface Converter..IC026AE-R2	
To connect your 232´488 Interface Converter, order our...	
IEEE-488 Cable (with molded hoods)	
9643M 6.6-ft. (2-m) EXN02M	
9644 13.1-ft. (4-m)..EXN04M	
You may also need IEEE-compatible switches...	
2-1 ABC SWL300A	
4-1 ABCDE..SW310A	
2-2 X..SW320A	