

©Copyright 1998. Black Box Corporation. All rights reserved.



MARCH 1998 ME001A ME001A-E

RS-232 Line Booster



CUSTOMER SUPPORT INFORMATION

Order toll-free in the U.S. 24 hours, 7 A.M. Monday to midnight Friday: 877-877-BBOX FREE technical support, 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746 Mail order: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018 Web site: www.blackbox.com • E-mail: info@blackbox.com

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment generates, uses, and can radiate radio frequency energy and if not installed an used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for Radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par Industrie Canada.

Contents

1.	Specifications	4
2.	Introduction	5
3.	Installation	8

RS-232 LINE BOOSTER

1. Specifications

Protocol — Asynchronous/synchronous

Speed — Transparent

Operation — Transparent

Interface — RS-232/CCITT V.24

Connectors — (1) male DB25P connects to DCE;

(1) female DB25S connects to DTE

Power — ME001A: $120 \text{ VAC} \pm 10\%$, 60 Hz,

18 watts;

ME001A-E: 100-240 VAC,

50-60 Hz, 0.2A

Size — 1.1"H x 3.5"W x 4.5"D

 $(2.8 \times 8.9 \times 11.4 \text{ cm})$

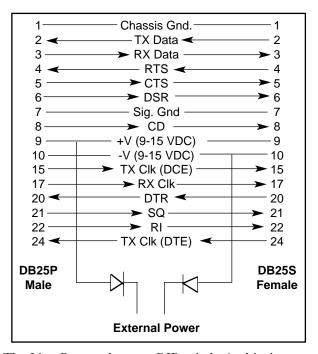
Weight — 0.4 lb. (0.2 kg)

2. Introduction

The RS-232 Line Booster doubles the length of an RS-232 cable by actively receiving and re-transmitting twelve of the most common signal lines of the RS232-C interface. The RS232-C specifications state that the maximum cable length is limited to 50 feet. In actual operation (depending on environmental conditions), you may be able to operate with as much as 100-150 feet of cable. The Line Booster doubles the maximum cable length if the environmental conditions are similar over the entire cable and the Booster is in the center of the cable length.

Under these same conditions, the signal to noise ratio is halved when using the Line Booster. The unit is data and data format transparent. It can be powered from the interface (Pins 9 and 10) or from its detachable power supply. The lines supported and the direction of the signal flow are summarized in **Figure 2-1**.

RS-232 LINE BOOSTER



The Line Booster has one DIP switch. At this time, the DIP switch has no function—it is for future enhancements.

The Line booster has a male (to DCE) and female (from DTE) connector with bulkhead (female screwlock) hardware. If either of the devices being interconnected has 100 mA of test power on Pins 9 and 10, the unit can be powered from the interface. If not, a detachable wallmount power supply is provided and the installation must provide for AC power to the power supply. The female connector must be connected to the cable attached to the equipment sending data to the DCE on Pin 2.

3. Installation

Connect the cable from your modem (or other DCE device) to the DCE side of the Line Booster. Connect the cable from your computer, terminal or printer (or other DTE device) to the DTE side of the Line Booster.