BLACK BOX® Catalogue Ltd

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USER GUIDE

Order Code : SD2-BX

8 Bit (Narrow) SCSI FAST Single-ended to Differential Canverter in a top quality enclosure.

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SD2-BX USER GUIDE.

PREAMBLE:

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INTRODUCTION

The SD2-BX is an 8 Bit (Narrow) SCSI FAST Single-ended to Differential Converter in a top quality enclosure.

Used in pairs, or in combination with other Aeon SCSI converters, the SD2-BX is a SCSI Single-ended extender providing up to 25 metres additional cable length.

DESCRIPTION

The enclosure is based on a standard half-height desk top housing. It has a single green LED on the facia indicating mains power is present. On the rear are 2 Centronics type 50 way connectors one marked Single-ended, the other marked Differential.

There is also an IEC socket for mains power connection on the rear, together with an On/Off illuminated switch.

INSTALLATION

Power down all equipment relating to this installation before beginning this procedure.

Connect the power to a suitable source.

- ❑ 1.AS A CONVERTER

Connect the Single-ended socket to the Single-ended Device/host using a suitable Centronics type 50 way cable, and do the same with the Differential SCSI.

Power up the SD2-BX and the connected SCSI device/s host/s. The system will now "see" the new SCSI configuration once the relevant system installation procedure is followed.

- ❑ 2.AS AN EXTENSION

Connect the Single-ended side to the appropriate device/host with a suitable Centronics type cable; repeat at the other end of the extension. Connect the 2 Differential sockets with the required length (up to 25 metres) of 50 way shielded cable with suitable Centronics type connectors on each end.

Power up both SD2-BX's and the rest of the system. The system will now "see" the devices although they are located up to 25 metres away. (Once the relevant installation procedure has been followed.)

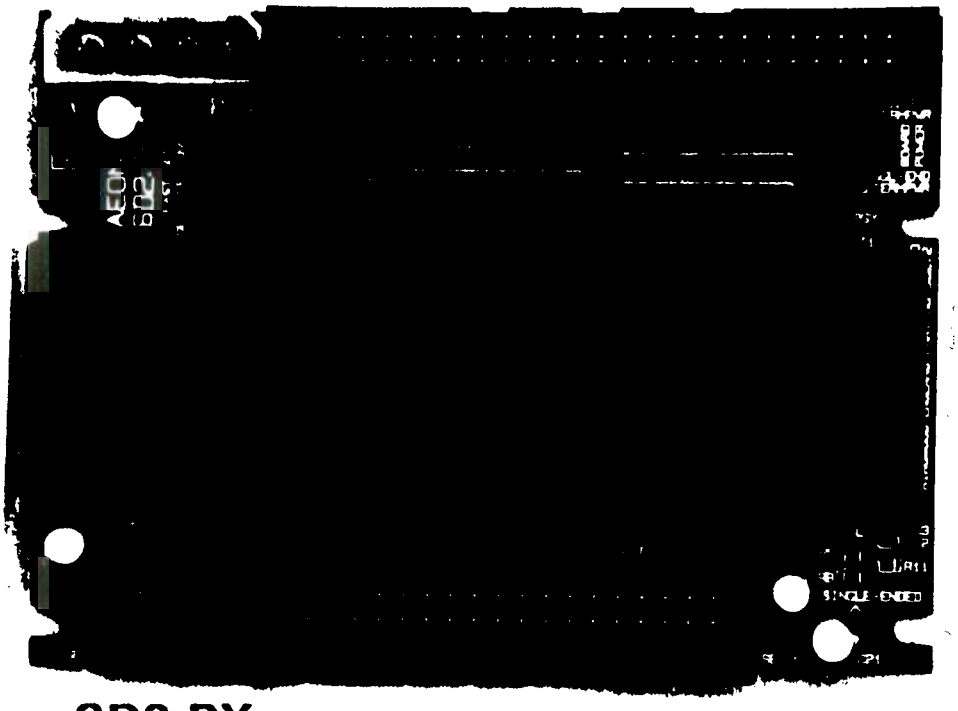
TECHNICAL FUNCTION

Details of the SD2 Board and layout are contained on seperate sheets.

Apart from the transparent nature of the SD2, it is important to realise that the SD2-BX ENDS one SCSI bus, and STARTS a new one. This means that on the Single-ended side up to 6 metres at 5 MB/second or 3 metres at 10 MB/second (FAST) cable/bus length is available; and on the Differential side up to 25 metres cable/bus length is available.

There should be NO MEASURABLE PERFORMANCE IMPACT by the use of the SD2-BX as either a Converter or Extender.

AEON SD2 & SD2-BX Single-ended To Differential SCSI Bus Converters and Extenders.



SD2

SD2 is a free-standing bus converter capable of interfacing a 6 metre single-ended bus with a 25 metre differential bus. When applied, it creates a hybrid logical bus to which any number of initiators or targets, single-ended or differential, synchronous or asynchronous, may be connected. It may also be applied in pairs, to add distance and improve noise immunity in existing single-ended applications.

SD2-BX

The SD2-BX is the boxed version of the SD2 board product. Supplied with power supply, 2 centronics 50 way sockets marked Single-ended and Differential, and a mains lead, it is a plug and play solution. In Pairs, it provides a ready to use extender for Single-ended 8 bit SCSI environments, with a range of 25 metres.

SD2 Specifications.

Dimensions: 2.7''x 3.8''x 0.5''
(69 x 97 x 13mm)

Power Requirement: 4.75 - 5.25 VDC @ 1.0A

Power Connector: Standard 5.25'' drive connector.

Average Dissipation:4.7 Watts.

SCSI Connectors: SCSI alternate 1

Termination: Active Single-ended Removable on Both.

Termpower: Link-selected, isolated and protected.

SD2-BX Specifications.

Dimensions: 67h x 230w x 265d mm
(2.63'' x 9.05'' x 10.43'')

Input Voltage: 90 - 260 VAC

Weight: 2.9 kg

Operating Temperature: 0 - 45° C

Fan Air Flow: 17CFM

Connectivity: SCSI : 2 x 50 way Centronics type sockets.

Power: 1 IED socket.

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SD2 CONFIGURATION BRIEF

The SD2 board converts 8 bit Fast Single-ended SCSI to 8 bit Fast Differential SCSI. It also ends and starts both SCSI buses when used at the final point of the buses.

On Board Features.

The board diagram shows the position of the following features:

- LEDs denoting power on board; termpower; SCSI busy.
- Link selectable options.
- 5 pin socket for external LEDs if required.
- Resetable fuse.
- Terminator packs.

Link Selections.

The board is supplied with both links in, thereby activating termpower on both Single-ended and Differential buses. Each link is marked "Diff" or "S-E" as appropriate on the PCB next to the Yellow LEDs.

If termpower is NOT required on one or other, or both, SCSI buses, remove the relevant link/s.

Termination:

Single-ended active termination comprises 2 110R SIL resistor packs.

Differential termination comprises 4 330R SIL packs and 4 150 SIL packs.

Termination Removal.

If the SD2 is daisy-chained within one or both SCSI buses the relevant Terminators need to be removed. If the SD2 is at the END of one or both SCSI buses, and an external terminator is not used, the terminators should be left on the board.

Notice:

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SD2 BOARD DIAGRAM

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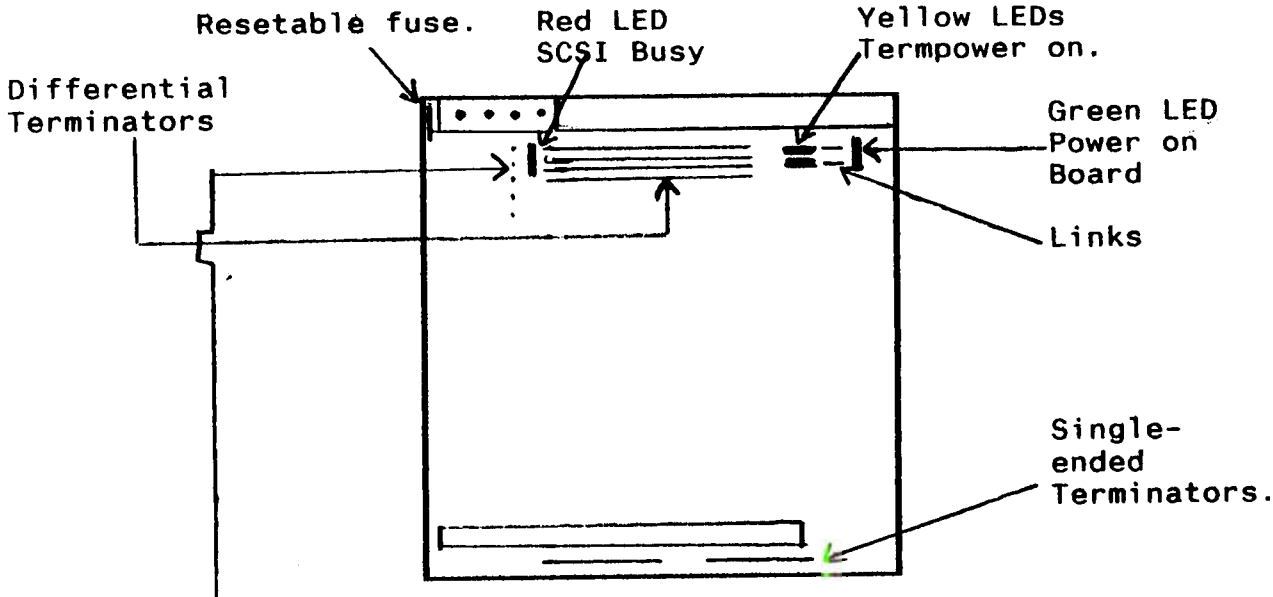

5 pin plug. This gives the possibility to connect 4 external LEDs for integration into a housing.

Power LED: K pin 5; A pin 4 - power supplied to board.

Busy LED: K pin 1; A pin 4 - BSY active for either side of board.

SE Busy LED: A pin 2; K pin 5 - BSY active for Single-ended side of board.

Diff Busy LED: A pin 3; K pin 5 - BSY active for Differential side of board.