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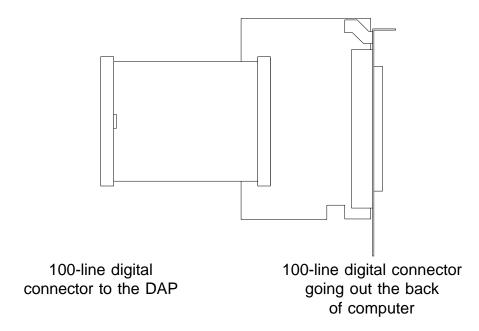




Technical Note TN-178 Version 1.1

Using the Microstar Laboratories 100-line Digital Adapter Panel

The Microstar Laboratories 100-line Digital Adapter Panel, part number MSCBL 046-01, is compatible with all a-Series Data Acquisition ProcessorTM boards. The MSCBL 046-01 brings the Data Acquisition Processor board's digital input/output port out to the back panel of the host computer. One end of the panel connects to the digital input/output port while the other end has a shielded female connector secured to a mounting bracket. The shield connector on the mounting bracket mates with the MSCBL 054-01, a 100-line round shield cable.



Before installing the Data Acquisition Processor and MSCBL 046-01, make sure you are properly grounded. Also make sure that power to the host computer is off.

To install the MSCBL 046-01:

- 1. Connect the end of the 100-line ribbon cable to the digital input/output port of the Data Acquisition Processor. The connector is keyed to make connection easy.
- 2. Insert both the Data Acquisition Processor and Digital Adapter Panel into the computer.
- 3. Fasten the back panel screws of the Data Acquisition Processor into the computer, and fasten the Digital Adapter Panel into the adjacent slot of the computer.

The digital output lines of the MSCBL 046-01 have less drive current than that of the Data Acquisition Processor it is attached to. The table below shows the typical voltage for a given drive current when attached to an a-Series Data Acquisition Processor. Ioh and Voh are the drive current and voltage for a digital output when driving high. Iol and Vol are the drive current and voltage for a digital output when driving low.

Ioh	Voh		Iol	Vol
-13.5mA	2.0V	_	5.5mA	0.5V
-8mA	2.4V		8.9mA	0.8V

Typical drive current for MSCBL 046-01 connected to an a-Series DAP

Contact Microstar Laboratories for information on how to design large systems using the MSCBL 046-01 or using a MSCBL 046-01 with a non a-Series Data Acquisition Processor.