

Overview 1**Hardware Setup 2**

DBK1 Configuration 2

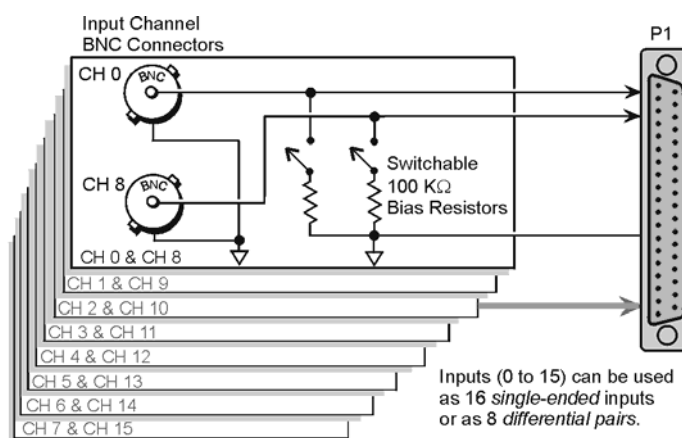
JP4 Configuration in DaqBook 2

Software Configuration 2**DBK1 – Specifications 2****Reference Notes:**

- o Chapter 2 includes pinouts for P1, P2, P3, and P4. Refer to pinouts applicable to your system, as needed.
- o In regard to calculating system power requirements, refer to *DBK Basics* located near the front of this manual.

Overview

The DBK1 provides a convenient means of attaching analog input signals from BNC cables to a LogBook or Daq Device via the P1 interface. Each of the 16 inputs has a switchable 100 K Ω bias resistor to accommodate floating signal sources. The 16 inputs can be used as 16 single-ended inputs (channel 0 to 15) or as 8 differential pairs (channel 0 to 7). The BNC inputs are grouped to reflect use in the differential mode (ch 0, ch 8, ch 1, ch 9, ch 2, ch 10 ...) where channel 8 serves as the low-signal line of channel 0 and so forth.



Connections are shown for channels 0 and 8. As differential pairs, channel 0 serves as the high signal line; and channel 8, the low signal line. Connections for remaining channels are similar.

DBK1 Block Diagram

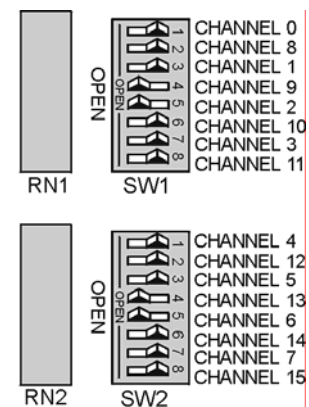
Hardware Setup

DBK1 Configuration

Factory Default: 100K Ω Bias resistors are Enabled

The only configuration option is to enable or disable the 100 K Ω bias resistors, 1 per channel. Two resistor networks (RN1 and RN2) contain the resistor elements that are switched by SW1 and SW2 DIP switches. The rocker-arm switches must be depressed in the desired orientation: OPEN for disabled (shunted). Default is enabled. Enable bias resistors to make differential measurements of signal sources with floating voltages. As shown in the figure and silk-screened on the board,

- SW1 controls channels 0, 8, 1, 9, 2, 10, 3, 11
- SW2 controls channels 4, 12, 5, 13, 6, 14, 7, 15



DBK1 Resistor Configuration

JP4 Configuration in DaqBook/100 Series

For DaqBook/100, DaqBook/112, and DaqBook/120 devices you must set the DaqBook's JP4 jumper for single-ended, or for differential input as needed. Refer to your DaqBook *User's Manual* (p/n 457-0906) for additional information.

Software Configuration

None Required. Treat as a direct signal connection in both DaqView and LogView.

DBK1 - Specifications

Name/Function: 16-Connector BNC Adapter Module

Connectors:

DB37 male, mates with P1

BNC connectors for signal input

Analog Input Connection: 1 BNC connector for each of 16 analog input channels

Dimensions: 221 mm wide $\times$ 285 mm long $\times$ 25 mm high (8.5" $\times$ 11" $\times$ 1.375")

Weight: 1.3 kg (3 lb)