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Find the *Measurement Computing / IOtech DBK11A* at our website: *Click HERE*

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Reference Notes:

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

Overview

DBK11A is a passive card that provides screw-terminal connections and optional BNC connections in place of a 37-pin (DB37) connector; i.e., P1, P2, or P3. In addition to providing access to all 37 pins on a DB37 connector, the card includes sockets for optional passive-filtering components.

In regard to the optional filtering aspect, the card provides connectivity between DB37 pins and screw terminals while passing through the card's prototyping area, as can be seen in the following figure. This region of the DBK11A can accommodate resistors, capacitors, and custom wiring. The user can choose component values to meet application requirements.

Note: DBK11A is compatible with DB37 connectors, for example the P1, P2, and P3 connectors on LogBook, DaqBook, and DaqBoard devices. The DBK11A card has footprints for 4 BNC connectors that can be soldered onto the card.

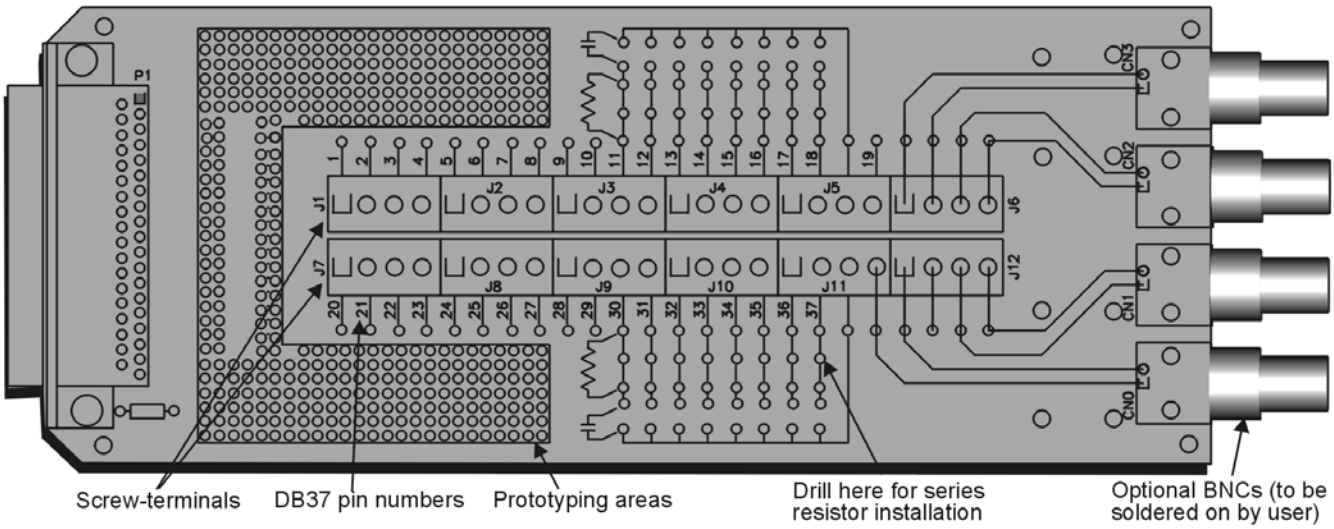
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DBK11A Connections

The DBK11A connects to a P1, P2, or P3 DB37 connector via a CA-37-x cable. The card has screw-terminal blocks for easy access to analog inputs and outputs. Each screw-terminal has a number that corresponds to a pin number on the DB37 connector.

The DBK11A prototyping area, see figure, contains standard 0.1" hole spacing for the optional installation of *user-customized* circuitry.

BNC connectors can be soldered to the board at footprints labeled: CN0, CN1, CN2, and CN3. These will have connectivity to J6 and J12, as indicated in the figure. The J6 and J12 terminals can be wired to the other screw terminals to provide BNC connection for designated P1 pins.



DBK11A Board Layout

Reference Notes:
Refer to chapter 2, *System Connections and Pinouts*, to verify the pin designations for P1, P2, or P3, as applicable. The DBK11A screw-terminals are labeled 1 through 37. These numbers correspond one-to-one with specific DB37 pins for P1, P2, and P3.

To make wire connections to the card's terminal blocks:

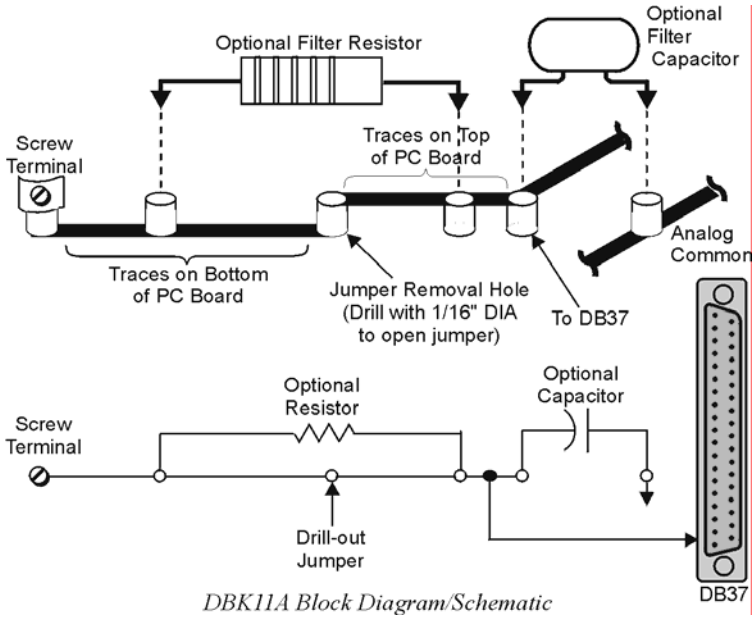
1. Refer to the applicable pinout (P1, P2, or P3) in chapter 2, *System Connections and Pinouts*.
2. Using 14 to 26 gage signal wire, make the appropriate connections to the DBK11A terminal blocks. The screw-terminal numbers 1 through 37 correspond directly with the P1, P2, or P3 pins, depending on which DB37 connector applies.
3. Once all connections have been made, secure all wires at the end of the DBK11A board. Nylon tie wraps (not included) work well for this purpose.

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If you want to add your own custom circuit to the DBK11A:

The DBK11A includes spare terminals for optional circuitry, such as RC networks. The card includes several hundred *unconnected* solder pads and signal paths to the analog input terminals [pins 11-18 and 30-37]. Note that the default circuit path is just a straight connection, with no options.

Optional RC filters can be located on the card to correspond with the DB37 pins for the 16 analog input channels. Before adding components, drill out the 1/16" diameter *jumper-removal holes*.



DBK11A Block Diagram/Schematic

DaqBook and DaqBoard Configuration

Due to the DBK11A's simplicity and flexibility, no configurations are required other than those that may depend on the nature of the signal source.

CE Compliance

Reference Note:
Should your data acquisition system need to comply with CE standards, refer to the *CE Compliance* section of chapter 1, *Signal Management*.

Software Setup

Reference Notes:

- **DaqView users** - Refer to chapter 3, *DBK Setup in DaqView*.
- **LogView users** - No Setup in LogView.

Note: DaqView Users – The DBK11A is not listed in *DaqView's Hardware Configuration window*; however, to use the card you must configure the applicable DBK11A channel(s) for **Direct Signal Connect**. When you select **Direct Signal Connect,** the applicable channels are made available on the DBK11A, from within *DaqView*. Note that aside from the ability to read Analog accessed through **P1**, the digital I/O window of *DaqView* can access a DBK11A connected to **P2**; and the counter/timer window can access a DBK11A connected to **P3**.

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DBK11A - Specifications

Name/Function: Screw-Terminal Card

Connector: DB37 male, attaches to P1, P2 or P3 connector

Wire Size Range: 14 to 26 gage

BNC Option: DBK11A includes 4 BNCs for optional user-soldered connections

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