



# DBK2™

## 4-Channel D/A Voltage-Output Card



Compatibility: ✓ DaqBook ✓ DaqLab ✓ DaqScan ✓ DaqBoard/2000 Series

### Features

- 14-bit, quad analog output
- Features on-board bipolar reference for accurate and stable voltage outputs
- Provides per-channel bipolar voltage ranges

The 4-channel DBK2™ D/A voltage-output card provides IOtech's data acquisition systems\* with the ability to generate precise bipolar analog voltage outputs. The DBK2's outputs can be programmed with a static value whenever the data acquisition system is not transferring A/D data. The card is particularly useful for applications that require programmable voltage sources or the control of devices such as programmable power supplies and process controllers. Up to 64 DBK2 cards can be attached to one system for a total of 256 outputs.



The 4-channel DBK2 allows systems to generate precise bipolar analog voltage outputs

**Card Architecture.** The DBK2 features a quad 14-bit D/A converter that permits it to generate up to a  $\pm 5V$  or  $\pm 10V$  voltage. Voltage ranges are jumper selectable per channel. The card is also equipped with an on-board bipolar reference to ensure accurate and stable output voltages.

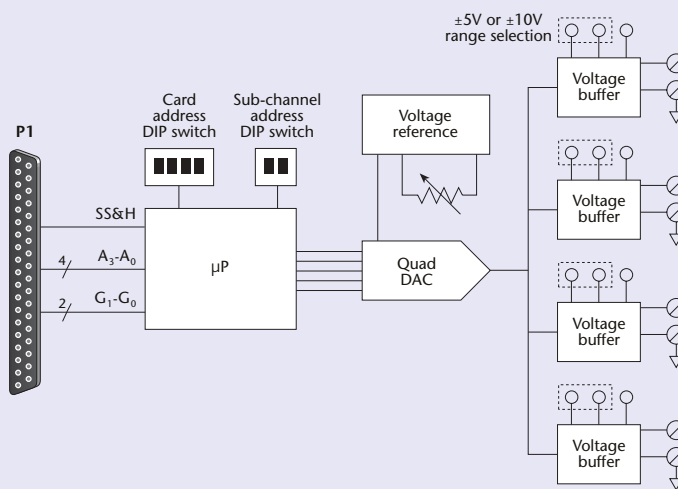
**Applications.** The DBK2's precise voltage output makes it especially useful for applications that require programmable voltage sources or test-signal generation. It is also ideal for applications that require the control of external devices such as programmable power supplies, proportional actuators, analog indicators, and process controllers.

### Specifications

- Connectors:** DB37 male, mates with P1\*; screw terminals for signal outputs  
**Resolution:** 14 bit  
**Output Ranges:**  $\pm 5V$  and  $\pm 10V$  (selectable per-channel via jumpers)  
**Accuracy:** 0.05% FS  
**Linearity:** 0.02% FS  
**Hysteresis:** 0.01% FS  
**Output Current:** 5 mA typ  
**Power Consumption:** 565 mW

\* Attachment to the DaqBoard/2000 series requires a DBK200, DBK201, DBK202, DBK203, DBK205, or DBK209 adapter

### DBK2 D/A Voltage-Output Card Block Diagram



### Ordering Information

Description	Part No.
4-channel voltage-output card	DBK2

#### Cables

For use with DBK10, use CA-37-x ribbon cable, or contact factory of additional cabling options  
 For use with DBK60 or LogBook360, no cable is required (except from DBK60 or LogBook/360 to the A/D mainframe)  
 For use with no enclosure, use CA-37-x where x is the number of DBK devices attached  
 For use with DaqLab series (internal slots), use CA-255-2T with one board, or CA-37-2 for use with two DBK cards (or contact factory for additional cabling options)

For complete information on accessories and cables, visit [www.iotech.com/acc](http://www.iotech.com/acc)

#### Related Products

DaqBook	p. 89
DaqLab	p. 103
DaqScan	p. 108
DBK Options	p. 112
DaqBoard/2000 Series	p. 192