

KB-1 Keypad Decoder Board

KB-1



KB-1 Special Processor Board

The Westar KB-1 is a highly configurable keypad interface card. The KB-1 can scan both a switch matrix and discrete switches, including discrete and rotary switched grounds.

Switch Reporting

Switch reporting is enabled via a customer-selectable interface: either RS-232 or USB. Several switch reporting modes are available, including a skeletal, “no-frills” approach referred to as **Basic** mode, and a more encoded mode referred to as **Switch ID** mode.

Switch Reporting – Basic (Level 1 and Level 2)

In Basic Mode, switch status reporting is selected to occur either periodically (Level 1) or when a change occurs (Level 2).

Periodic switch reporting occurs at a programmable rate. Change reporting occurs whenever a change occurs, with a guaranteed minimum latency.

The data includes the switch status for all monitored switches. Switch monitoring is defined via our supplied KB-1 Configuration Software.

The customer develops software to decode the switch status into operationally meaningful switch presses.

Switch Reporting – Switch ID (Level 3)

In Switch ID Mode, switch status is reported as a traditional computer keyboard would.

A Switch ID is reported for each switch currently pressed. Switch ID's may be reported once, or repeated at a configurable rate while a switch is held.

- **Configurable switch matrix scanning**
- **Up to 24 total rows and columns in matrix**
- **Also scans a rotary switch (up to 4 position)**
- **Also scans up to (12) additional switch closures**
- **Switch reporting via USB or RS-232**
- **Optional switch reporting via Ethernet**
- **12VDC input power**
- **PWB size is 4” x 3”**

Switch ID's are defined using the KB-1 Configuration Software.

This mode is appropriate for applications requiring less decoding burden. These applications implement logic based on which switches are currently closed.

Configuration and Integration:

We sell our KB products directly to you, the customer. You can set up the board for your requirements using the supplied Keypad Manager configuration software.

You can integrate the KB-1 into your system with the help of the Keypad Decoder Command Line Description document. This document describes how to use the RS-232 interface or the USB interface for the KB-1. The USB interface is delivered as a part of the Software Integration Package including a C library and example files.

Our application engineers can assist you with configuration and integration via phone or e-mail. If you send us your switch scanning details, we may be able to “pre-set” the KB-1 configuration so that it works right out of the box!

How to get started

Please contact us at (636) 300-5164 for your KB-1 quotation. The following documents and software products are available to KB-1 customers:

- Keypad Decoder Installation Manual
- Keypad Manager Software
- Keypad Manager User's Manual
- Keypad Decoder Command Line Description
- USB C Library with “Keypad Listen” example