

## Features

- Connect custom keyboards / keypads / volt-free contacts to PC's
- Designed for MS DOS and Windows 95/98/NT/ME/2000/XP
- USB or PS2 operation (No USB on MS DOS, Win 95 and Win 98)
- Auto detects USB or PS2 interface at power up
- USB 1.1 low speed function
- Phantom key detection
- Low voltage reset function
- Supports multimedia and ACPI keys
- Built-in Watchdog Timer
- HALT function and wake-up feature for USB mode to reduce power consumption
- Small, compact size with mounting holes
- DIN rail mounting option
- Screw terminals for easy and quick field connections
- Num Lock, Caps Lock and Scroll Lock LED outputs



## General

The KBE-629 Keyboard Encoder allows a switch, pushbutton or any volt free contact to generate a PC compatible keyboard code. Any Windows 95/98/NT/ME/2000/XP key code including Multimedia and ACPI keys can be generated. As many external switches can be connected to the KBE-629 as desired.

The character that is sent to the PC depends upon which pair of screw terminals the switch is connected between. All the key code connector pairs are shown in the connection table 1. For example, to have your contact generate the “a” character, you would connect between screw terminals “D” and “L”. To have another contact generate the “b” character, you would connect between “Y” and “O”.

There is no limit to the number of switches that can be connected. The Caps Lock, Shift Lock and Num Lock LEDs may be connected between the CL, SL and NL terminals respectively.

The KBE-629 can function both in USB and PS2 interface environment. For PS2 interface, it supports IBM PC/AT, IBM PS/2 and all compatible machines and provides a 16-character first-in-first-out buffer in which data is stored. For USB interface, it can support the USB standard request as well as HID class request version 1.1.

## Dimensions

Size: 121 mm x 72mm  
Fixing Centres: 114 mm x 63 mm  
Fixing holes 3.2mm

## Ratings

Supply Voltage: 4.75V to 5.25V  
Operating Temperature: 0 to 70°C  
Storage Temperature: -55°C to 125°C

| Char   | Con1 | Con2 | Char        | Con1 | Con2 | Char                         | Con1 | Con2 |
|--------|------|------|-------------|------|------|------------------------------|------|------|
|        |      |      |             |      |      | <b>Special Function Keys</b> |      |      |
| F1     | X    | M    | ENTER       | Z    | T    |                              |      |      |
| F2     | X    | N    | CTRL-R      | Z    | K    |                              |      |      |
| F3     | E    | N    | CTRL-L      | X    | K    | Media                        | F    | I    |
| F4     | C    | N    | ESC         | C    | L    | e-mail                       | E    | I    |
| F5     | W    | K    | TAB         | E    | L    | www Home                     | D    | I    |
| F6     | C    | Q    | CAPS        | E    | M    | www Back                     | C    | I    |
| F7     | E    | R    | SPACE       | C    | S    | www Fwd                      | Z    | I    |
| F8     | X    | R    | POWER       | W    | S    | www Stop                     | Y    | I    |
| F9     | X    | T    | SLEEP       | W    | 1    | www Refresh                  | X    | I    |
| F10    | W    | T    | WAKE        | F    | B    | www Bkmk                     | W    | I    |
| F11    | C    | T    | PRINT SCRNR | W    | U    | www Search                   | C    | B    |
| F12    | Y    | T    | SCROLL      | W    | G    |                              |      |      |
| 1 (!)  | W    | L    | PAUSE       | F    | K    | Explorer                     | X    | J    |
| 2 (")  | W    | M    | INSERT      | X    | 1    | My Computer                  | F    | J    |
| 3 (£)  | W    | N    | HOME        | X    | A    | Calculator                   | E    | J    |
| 4 (\$) | W    | O    | DEL         | X    | S    |                              |      |      |
| 5 (%)  | X    | 0    | END         | W    | A    | Pre Track                    | E    | K    |
| 6 (^)  | X    | P    | PgUp        | X    | 2    | Stop                         | D    | K    |
| 7 (&)  | W    | P    | PgDn        | W    | 2    | Play/Pause                   | C    | K    |
| 8 (*)  | W    | Q    | N-CHG       | Y    | L    | Next Track                   | Y    | K    |
| 9 (/)  | W    | R    | CHG         | Y    | M    | REC                          | C    | G    |
| 0 ())  | W    | V    | BACK        | E    | T    | REW                          | Z    | G    |
| A      | D    | L    | CUR UP      | C    | A    | MIN                          | Y    | G    |
| B      | Y    | O    | CUR DOWN    | Y    | S    | EJECT                        | X    | G    |
| C      | Z    | N    | CUR LEFT    | Y    | A    | VOL-                         | D    | U    |
| D      | D    | N    | CUR RIGHT   | Y    | 1    | VOL+                         | Z    | U    |
| E      | F    | N    | [({)        | E    | V    | MUTE                         | X    | U    |
| F      | D    | O    | ] (})       | E    | Q    | APP                          | Y    | R    |
| G      | C    | O    | ; (:)       | D    | V    |                              |      |      |
| H      | C    | P    | ' (@)       | C    | V    | <b>Numeric Keypad</b>        |      |      |
| I      | F    | Q    | # (~)       | Z    | V    |                              |      |      |
| J      | D    | P    | , (<)       | Z    | Q    | NUM LOCK                     | Z    | S    |
| K      | D    | Q    | . (>)       | Z    | R    | /                            | Z    | 1    |
| L      | D    | R    | / (?)       | Y    | V    | *                            | Z    | 2    |
| M      | Z    | P    | \ ( )       | C    | M    | -                            | Y    | 2    |
| N      | Y    | P    | - (_)       | X    | V    | 7 (Home)                     | F    | S    |
| O      | F    | R    | = (+)       | X    | Q    | 8 (Up)                       | F    | 1    |
| P      | F    | V    | ` (~)       |      |      | 9 (PgDn)                     | F    | 2    |
| Q      | F    | L    | SHIFT-L     | E    | B    | 4 (left)                     | E    | S    |
| R      | F    | O    | SHIFT-R     | D    | B    | 5                            | E    | 1    |
| S      | D    | M    | ALT-L       | C    | U    | 6 (Right)                    | E    | 2    |
| T      | E    | O    | ALT-R       | Y    | U    | 1 (End)                      | D    | S    |
| U      | F    | P    | WIN-L       | E    | G    | 2 (Down)                     | D    | 1    |
| V      | Z    | O    | WIN-R       | D    | H    | 3 (PgDn)                     | D    | 2    |
| W      | F    | M    |             |      |      | +                            | F    | A    |
| X      | Z    | M    |             |      |      | Enter                        | D    | A    |
| Y      | E    | P    |             |      |      | 0 (Ins)                      | C    | 1    |
| Z      | Z    | L    |             |      |      | . (Del)                      | E    | A    |