

## USB 2.0 Keypad Encoder

This self-contained device is ready to use.

It can be easily attached to the rear surface of most Storm keypads to provide connectivity and communication with USB compatible host systems. Factory configured for standard numeric data entry, this versatile device can also be user programmed to output alternative key codes; making the 450 Series Encoder the ideal keypad interface for most applications.



- Generic keyboard (HID) device – no additional drivers needed
  - Factory configured to encode telephone or calculator format numeric keypads
  - Output code table can be customised using the USB Configuration Utility (available for free download from [www.storm-interface.com](http://www.storm-interface.com))
  - 450i version includes an integrated power supply and provides colour and brightness control for keypad illumination (where fitted)
  - 450i version features a piezo sounder for optional key press confirmation or status signal
  - Simple connection via a USB Mini-B socket
  - Compact, self contained form factor
- Compatible with most Storm 4, 12 and 16 key format keypads (including Storm 700, 720, 1000, 2000, 3000, GFX and PLX product series)

### Features

- Direct connection to keypad via integral 0.1" pitch, square pin, female connector (included)
- Connection to host system via cable fitted with USB Mini-B male connector (supplied separately)
- Integral cable tie anchor points to secure USB cable

### Compliance (designed to meet)

- EU RoHS
- EU Low Voltage Directive
- EMC: Emissions and Immunity: FCC part 15 class A
- EN55022, EN55024
- ESD: Up to +/- 15kV air discharge, +/- 7.5kV contact discharge
- WEEE Directive compliant

### Performance

Operational temperature	-20°C to +60°C
Storage temperature	-20°C to +70°C
Humidity	10% to 90% non-condensing
Vibration and shock	ETSI 300 019 5M3
Insulation resistance	50Mohms (min)
Breakdown voltage	500V a.c. (60 secs)
Operating voltage	5V +/- 5% (USB)
Operating current	20mA (excluding keypad illumination current)



### Encoder Part No.s

450i 4500-10  
450 4500-00

### Accessories Part No.s

- USB cable fitted with 90° angled Mini-B male connector (to encoder) and USB-A male connector (to host system). 4500-01
- Optional encoder configuration software (free download) 4500-SW01



Whilst every effort is made to ensure details are correct at time of print, specifications are subject to change without notice.

Designed & produced by NIK Design [nik@nikdesign.co.uk](mailto:nik@nikdesign.co.uk)

For more information & to order:  
**[www.storm-interface.com](http://www.storm-interface.com)**

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