



### EXTENDED USB INTERFACE BOARD

### VM140

Advanced and safe interfacing possibility using this card.

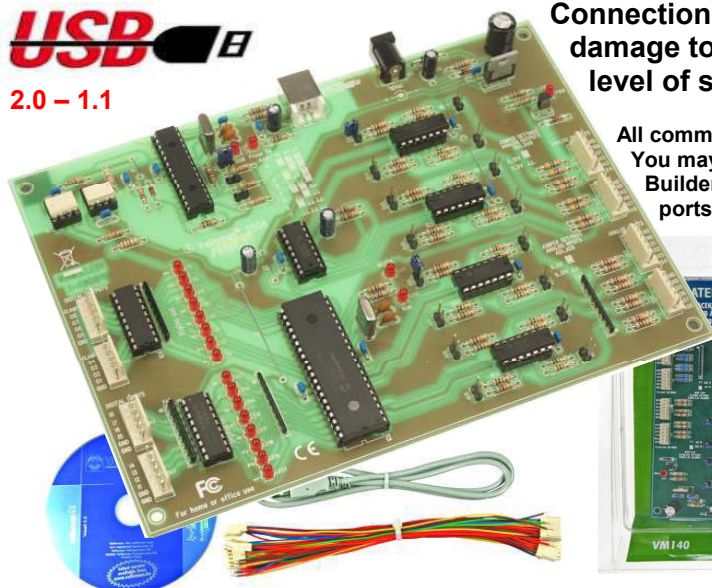
Connection to the computer is galvanically isolated, so that damage to the computer is not possible thus providing a high level of secure implementation.

All communication routines are contained in a Dynamic Link Library (DLL). You may write custom Windows\*. Applications in Delphi, Visual Basic, C++ Builder or most other 32-bit Windows application development tool that supports calls to a DLL.

(\* For first time interfacing and tutoring, check also our VM110 USB experimentation interface board



2.0 - 1.1

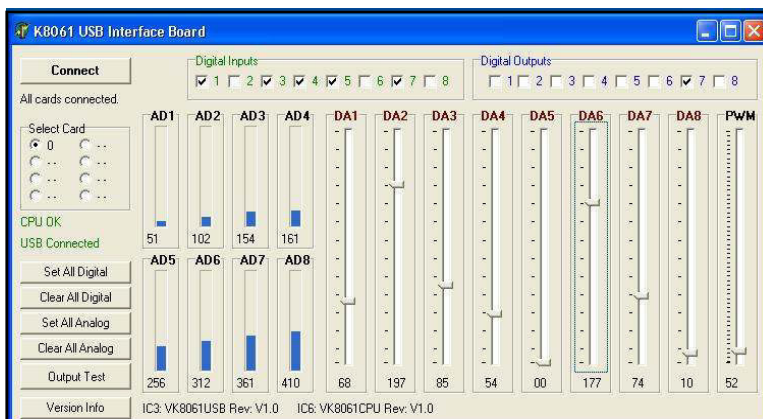


#### Specifications

- 8 analogue 10 bit resolution inputs: 0...5 or 10VDC / 20kohm
- 8 analogue 8 bit resolution outputs: 0...5V or 10VDC / 47ohm
- 8 digital inputs: Open collector compatible (connection to GND=0) with on board LED indication.
- 8 digital open collector outputs (max. 50V/100mA) with on board LED indication.
- One 10 bit PWM output: 0 to 100% open collector output (max 100mA / 40V) with on board LED indication.
- General response time: 4ms per command.
- USB Port: 2.0 and 1.1 compatible. USB cable included
- Board to wire connectors (20cm wire)
- Power consumption through USB port: approx. 60mA
- Power supply through adaptor: 12Vdc / 300 mA (PS1205).
- PCB Dimensions: 195 x 142 x 20mm (2.7 " x 5.6" x 0.8")

#### Minimum system:

Pentium class CPU with free USB port (1.1 or higher)  
 Windows 98SE, ME, 2K, XP (Win NT excluded) \*  
 CD ROM player and Mouse  
 \*Windows XP recommended!



#### DIAGNOSTIC / TEST SOFTWARE

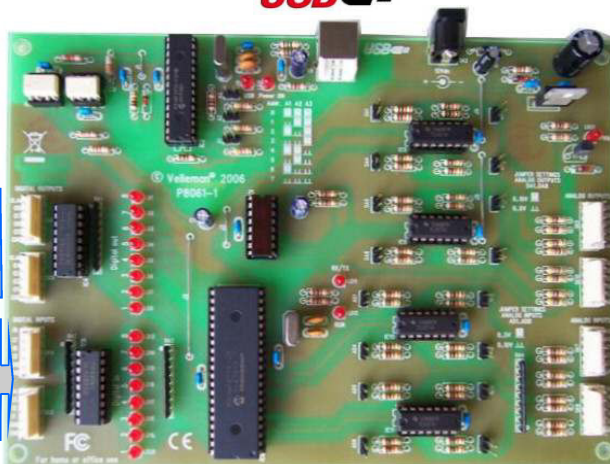
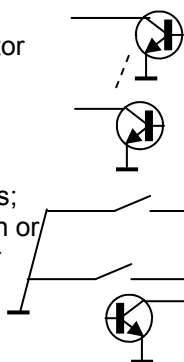
##### Features:

- Separate output / input test
- Clear all / set all function
- Analog and PWM output set sliders
- Analog input bar-graph indication
- Card selection address



8 open collector outputs

8 Digital inputs; Use dry switch or open collector



I/O check LEDs

PWM output

8 Analog outputs

0 to 5V or 0 to 10V

8 Analog inputs

0 to 5V or 0 to 10V

0 to 10V or 0 to 5V selection per analog input / output !