



## e-corder/5 Series (Models ED205 & ED405)



- Embedded full function PC running Windows® XP Professional
- Chart and Scope software pre-installed
- Remote control of one or more units through a KVM, ethernet or wireless network
- Powered by 12 V DC – use with a battery source or operate from a vehicle
- Continuous recording up to 200 000 samples/s
- 16 bit A/D resolution
- Bipolar output for pulse and waveform generation

### Description

The **e-corder/5** series comprises a high performance 2 or 4 channel data recorder integrated with a full function PC in the one compact enclosure. Windows® XP Professional is pre-installed along with Chart and Scope software for real-time data recording, display and analysis. The **e-corder/5** series are 12 V DC powered devices, thus enabling use with batteries, 12 V vehicle power or mains power adaptor (supplied standard).

Operate one or more units remotely through a KVM\*, ethernet or wireless network†. Alternatively just add a VGA monitor, USB keyboard and mouse for stand-alone use. With e-corders many trigger options, the unit can also be used as a fast data logger to record transient events in the field.

The unit records analog signals from a wide variety of transducers and instruments, along with eDAQ Amps and Pods. It features software controlled single ended and differential input amplifiers, that can record 16 bit resolution data at speeds up to 200 000 samples/s. A built-in software controlled analog output also provides pulse and waveform generation functionality.

\* Keyboard, Video and Mouse switch (not supplied).

† Wireless interface can be factory fitted as an optional extra.

### Applications

The **e-corder/5** series recorders are ideal for use in physical science applications where fast recording display and analysis of analog signals is required in remote or size critical applications. Absolutely no programming is required as the numerous on-line and off-line analysis functions allow results to be quickly extracted from recorded data. The units can be used in applications such as environmental monitoring, electrochemistry, acoustics and vibration, optics, materials testing, mechanical engineering, thermal analysis, and many more.

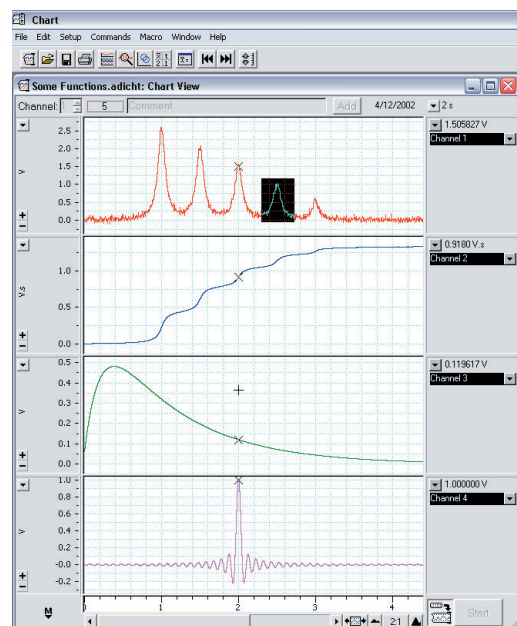
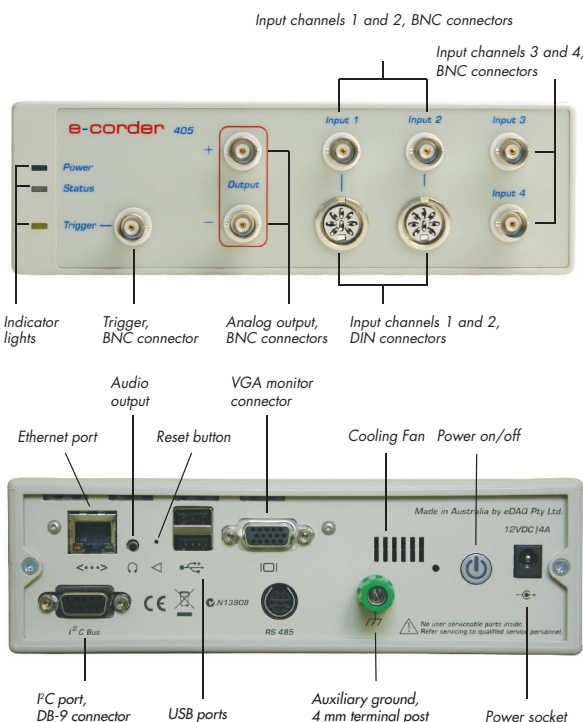
### Software

Windows® XP Professional, Chart™ and Scope™ software are pre-installed on the internal hard drive.

Chart™ – emulates the functions of a multichannel strip chart recorder, polygraph, XY/XY<sub>1</sub>Y<sub>2</sub> plotter and digital voltmeter.

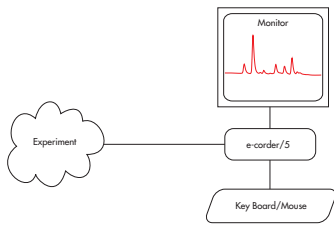
Scope™ – emulates the functions of a two-channel storage oscilloscope and XY plotter.

Specialist Chart extensions are also available for use with **e-corder** units. See [www.eDAQ.com/extensions](http://www.eDAQ.com/extensions) for more details.

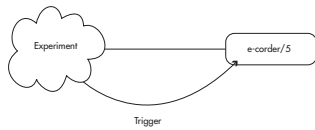


Main Chart window. All eDAQ software has a user friendly interface and does not require additional programing to develop applications.

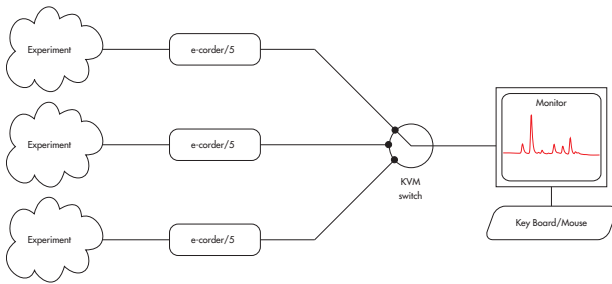
## Configurations



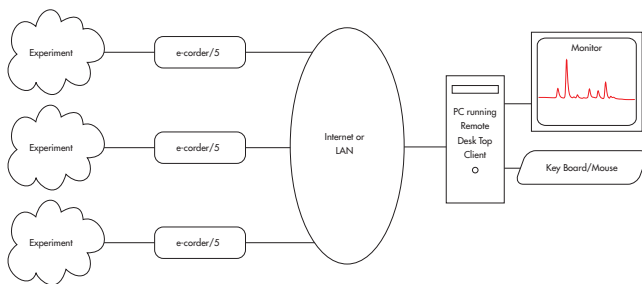
Stand Alone Use – **e-corder/5** with monitor, keyboard and mouse. Optional connection to remote file server.



Transient Event Recorder – **e-corder/5** can be set up to triggered by an event, then left in situ without peripherals. The monitor, keyboard and mouse may be added later to analyse the data.



Multiple **e-corder/5** units controlled through a KVM switch.



Multiple **e-corder/5** units operated remotely through a LAN or over the Internet. A PC running Remote Desk Top Client is required.

## Specifications

e-corder	
Number of Input channels:	2 (ED205) ; 4 (ED405)
Input configuration:	SE and Differential
Input amplifier gain:	$\pm 2$ mV to $\pm 10$ V full scale in 12 steps
Input impedance:	$\sim 1$ M $\Omega$    47 pF @ DC
Input noise:	$< 2$ $\mu$ Vrms + 300 $\mu$ Vrms/Gain RTI
Bandwidth:	20 kHz
ADC resolution:	16 bits
Linearity error:	$\pm 2$ bits
Maximum sampling rate: (continuous to disk)	200K s/s single channel 100K s/s for two channels 40K s/s for four channels
Embedded PC	
CPU:	VIA low power Eden processor
Memory:	256 MB SO-DIMM SDRAM
Hard drive:	20 GB
Monitor port:	XVGA S3 Video CRT Mode: 1280 x 1024 @ 16 bpp (60 Hz) 1024 x 768 @ 16 bpp (85 Hz) LCD Mode: 1280 x 1024 @ 16 bpp (60 Hz) 1024 x 768 @ 16 bpp (60 Hz)
Networking:	IEEE 802.3u 10/100 base-T ethernet
Comms port:	2 x USB 1.1 (used for keyboard and mouse)
e-corder port:	1 x internal USB 2 port
Audio:	Headphone/audio line out
Factory options:	802.11 WLAN
Expansion Ports	
I <sup>2</sup> C expansion port:	Power and control bus for eDAQ Amps (maximum of 500 mA). Interface communications rate of up to 10 000 bits/s.
RS485 Serial Port	Provided for internal diagnostic purposes only
Dimensions (w x h x d):	200 x 65 x 250 mm (7.9" x 2.6" x 9.8")
Weight:	2.5 kg (5.5 lb)
Operating voltage:	12 V DC @ 2.5 A RMS 90 to 250 V AC 50/60 Hz with AC adapter
Nominal power needs:	30 W
Operating conditions:	0 to 40 °C 0 to 90% humidity (non-condensing)
eDAQ Pty Ltd reserves the right to alter these specifications at any time. For detailed specifications of e-corder hardware units, please refer to ED201 and ED401 data sheets.	

**contact:**



**red box direct**  
Think inside the box

Tel. +353 1 440 3775  
Fax. +353 1 443 0784  
VIOP 3318@blueface.ie  
email info@redboxdirect.com  
Web www.redboxdirect.com

5-0406  
Q 2006