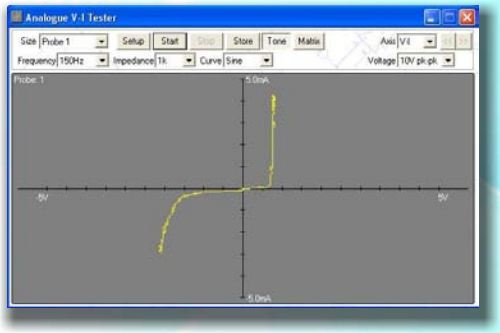
The technique of V-I testing is a well established and reliable method of fault-finding on analogue and digital boards. A voltage waveform is applied via a limiting resistor to the node under test, and the resultant current is measured.

The current is then plotted against the applied voltage to display the signature of the component under test. Analysis of this curve, usually by comparison with a known good board, leads to rapid fault diagnosis. A major advantage of the technique is that the board under test requires no power, so that even a completely "dead" board can be diagnosed.

Analogue & Digital

In and out of circuit

PC required



- Suitable for Analogue and Digital Devices
- In and Out Of Circuit Tests
- 24 Analogue Channels
- Powerful Matrix V-I Mode
- Auto comparison with stored results
- Safe Power Off Test

SYSTEM 8 Analogue Test Station

Powerful V-I Solution

The ABI SYSTEM 8 Analogue Test Station is a PC-based analogue V-I tester for testing discrete components and ICs.

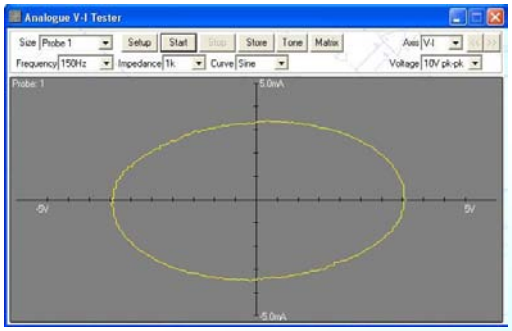
The same size as a CD-ROM drive, the system can be installed in your PC or in an optional external case.

Comprehensive fault-finding functions including live comparison of good and bad boards are provided.

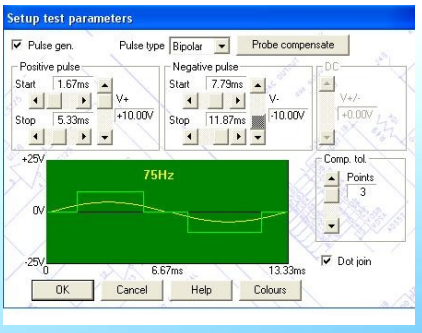
abi

www.abielectronics.co.uk

The SYSTEM 8 Analogue Test Station functions are fully configurable by the user. Test signals can be set up for every possible kind of component, from resistors to comlex microprocessors. Even the trace & screen colours are user selectable. Use it on any kind of PCB or module, from PC monitors to interfaces.

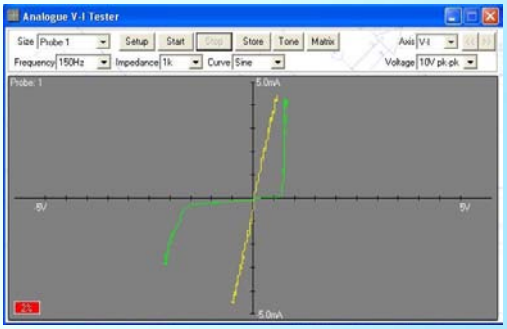


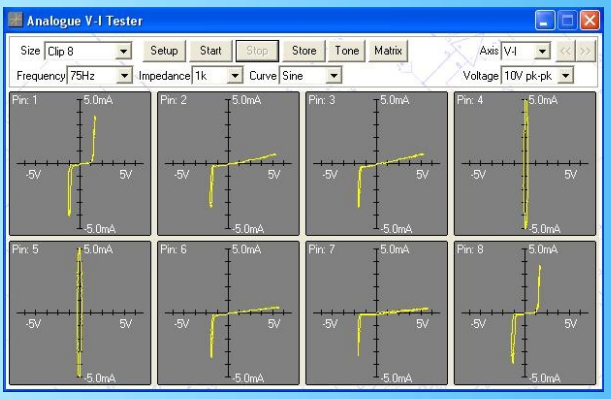
This elliptical curve is typical of the V-I trace for a good capacitor. Any deviation from this shape quickly leads to a fault identification, particularly when used in dual probe mode to compare two boards!



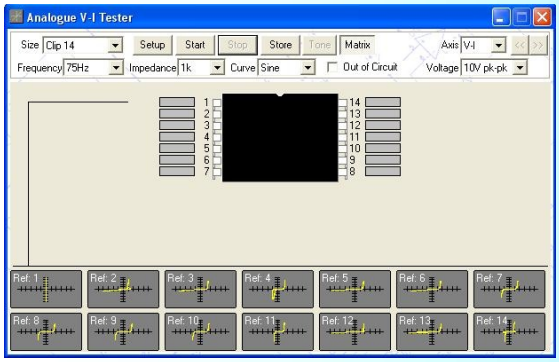
The ATS module provides a pulse generator to turn on gate-activated devices (eg. thyristors, triacs and transistors) during the test. The pulse width, polarity and position are all programmable.

Using the dual probe mode enables two devices to be tested together. This means that a suspect device on a bad PCB may be instantly compared with a good device on a known good PCB. This greatly speeds up fault finding and greatly reduces the skill level required!





Up to eight separate V-I traces may be displayed on the screen at once. Individual traces may be selected and expanded for closer analysis. No need to probe each pin of an IC individually, check them all together for fast fault diagnosis!



Powerful Matrix VI uses each pin of the device as a reference to generate a more in depth analysis. Even the most elusive faults can be detected with this technique. Matrix VI is also available out-of-circuit with optional adapter.

Out-of-circuit adapter (optional)

V-I test capability

Number of test channels:	24 + 2 probes + 2 pulse outputs and references
Test voltage:	2 V to 50 V peak to peak
Voltage resolution:	8 to 12 bits
Test frequency:	37.5 Hz to 12 kHz
Test current:	1 µA to 150 mA
Source impedance:	100 Ohm to 1 M
Test waveforms:	Sine, square, triangle, ramp, pulse
Waveform modes:	V-I, V-T, I-T
Waveform display:	Multi-plot with single waveform zoom
Waveform comparison:	Automatic comparison algorithm for good and bad boards using live probes or saved data
V-I comparison tolerance:	50 mV to 500 mV with 50 mV resolution
Package support:	DIL, SOIC, PLCC, QFP and variants with MultiProbes
Pulse output:	Positive, negative or bipolar for gate activated devices
Pulse amplitude:	Adjustable to +/-10 V
Calibration:	Automatic

Accessories

Standard	1 x 24 way test clip
	1 x 24 way test cable
	2 x Ground leads
	2 x Pulse leads
	1 x Blue V-I probe and adapter
	1 x Yellow V-I probe and adapter
	1 x SMD test tweezer set

Options

Internal fitting	PCI interface
External fitting	MultiLink case (cost option) with USB interface.
	External case (cost option) which can hold up to 5 SYSTEM 8 modules.

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