

# Product Information Sheet

## Virtual Instrumentation Unit



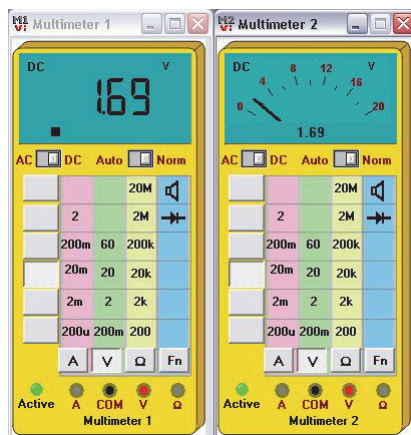
This resource packages a range of test equipment neatly into one small unit that interfaces with a PC, and allows for the test equipment to be used on-screen. Putting an oscilloscope, two multimeters, a signal generator, a spectrum analyzer, a frequency counter and a data logger into one unit greatly reduces the space required for the equivalent traditional test equipment.

The on-screen applications mimic the traditional equipment and allow the user to copy the screens showing measured values and waveforms. This is great for evidence gathering, as scope patterns and scope setups can be pasted directly into documents.

### Two built-in multimeters, each providing:

- Fully-separate meters with floating inputs.
- 2mm socket connections.
- Digital or Analog meter display.
- Auto or Manual range selection.
- Voltage ranges 60V, 20V, 2V, 200mV.
- Current ranges 2A, 200mA, 20mA, 2mA, 200µA.
- Resistance ranges 20MΩ, 2MΩ, 200kΩ, 20kΩ, 2kΩ, 200Ω.
- Continuity range audible buzzer.
- Diode test range.
- Overvoltage and over current protection.

- Copy and paste of meter display.
- Realistic on-screen virtual instrument.

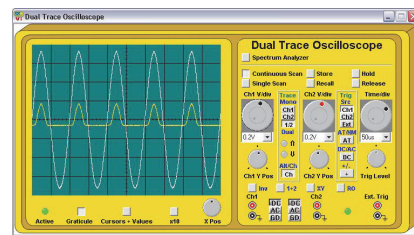


Meters in Digital and Analog Mode

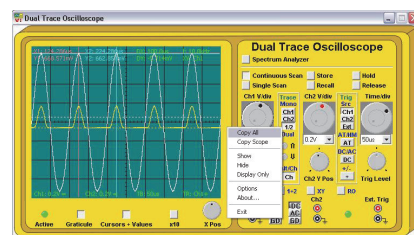
### One built-in virtual oscilloscope with spectrum analyzer mode, providing:

- Two channels at up to 20MHz sampling rate.
- >1MHz -3db input bandwidth.
- Analog and Logic noise filters.
- 1MΩ // 30pF input impedance.
- BNC sockets for standard x1/x10 probes.
- 2mm sockets for direct connection to D3000 boards.
- DC, AC, or GND input coupling.
- Voltage ranges 5mV/div to 20V/div.

- Rollover mode on slow sweep ranges
- Timebase Off and X-Y display modes.
- Trigger on Auto, Channel 1, Channel 2, or External Trigger.
- Cursors for voltage, time, and frequency measurement.
- Spectrum Analyzer mode on both channels, with linear or dB scale
- Storage and recall of waveforms on the PC
- Copy and paste of scope display.
- Realistic on-screen virtual instrument.



Dual Trace Showing Half Wave Rectification



Options for copying scope setup and wave patterns

For more information visit [www.ljcreate.com](http://www.ljcreate.com)

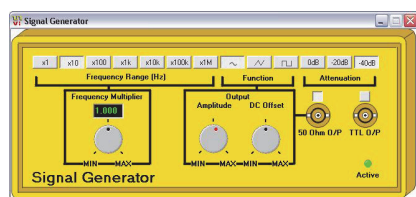
## Product Information Sheet (Continued)

### Virtual Instrumentation Unit



#### One built-in virtual function generator, providing:

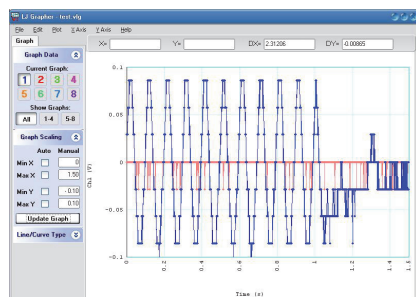
- Frequency range 0.2Hz to 2MHz.
- Sine, square, and triangle outputs.
- Output impedance 50Ω
- -20dB and -40dB attenuators.
- BNC and 2mm socket connections.
- DC offset control.
- Realistic on-screen virtual instrument.



Signal Generator – Produces square, sine and triangle waveforms

#### One built-in virtual data logger, providing:

- Capture from oscilloscope and/or multimeters.
- Start/stop using timing or a trigger condition
- Grapher application to view and print results.



Data logging and Graphing Tools from Multimeter and Oscilloscope Probes

#### The platform also includes the following features:

- Board type detection by barcode strip.
- Switched fault selection by password-protected virtual control panel.
- 0-12.7V variable DC supply, setup by virtual control panel.
- Module supply on/off switching by virtual control panel.
- 4 x digital inputs.
- 2 x digital outputs

- 100 kHz I2C Interface.
- 2 x Programmable DC voltage sources, -9V to +9V at 100mA max.
- Built-in power supply unit.
- All power supplies and additional signals available on expansion connector.

#### Items Included:

- Virtual Instrumentation Unit
- Oscilloscope Probes
- Instrumentation Software
- Installation and User Guide
- USB Lead
- Power Supply
- 2 x Red 2mm to 2mm Leads
- 2 x Black 2mm to 2mm Leads

#### Other Items Required:

- Windows-based Computer

#### General Information:

Dimensions: 112 x 325 x 100 mm (W, H, D)

Supply Voltage: 50-60Hz 110-120V AC or 220-240V AC

Packed Volume: Approx 0.006 m<sup>3</sup>

Packed Weight: Approx 2 kg

**Order Code: 300-03**

P8597-B

For more information visit [www.ljcreate.com](http://www.ljcreate.com)