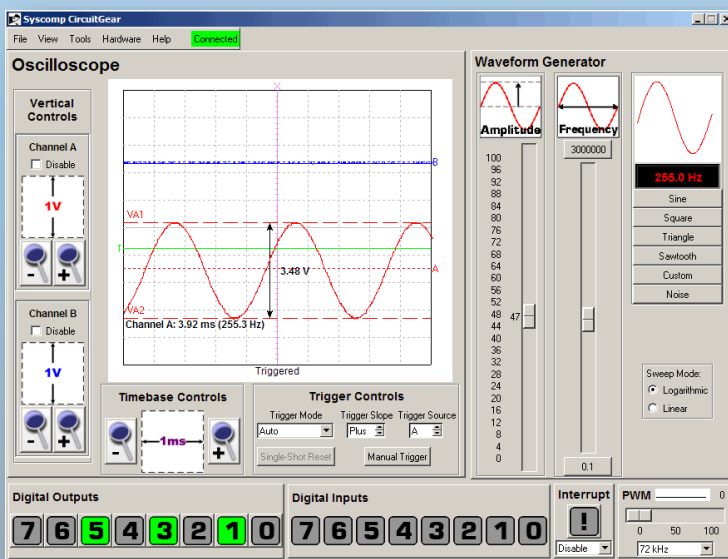


CGR-101

Multi-Function USB Lab Instrument

PC-Hosted Oscilloscope, Waveform Generator,
Vector Network Analyser & Digital I/O

Syscomp Electronic Design's CGR-101 CircuitGear is a PC-based instrument with powerful features. It combines a digital storage oscilloscope, standard function generator, arbitrary waveform generator, digital I/O, pulse generator and vector network analyser in one pocket-sized package, powered entirely from a single USB port. All functions can be controlled from a computer running the Windows, Linux, or Mac operating systems, using our open-source software. The CGR-101 oscilloscope features a sampling rate of 20MS/s. The waveform generator can generate standard and arbitrary waveforms at frequencies ranging from 0.1Hz to 2MHz in one sweep, eliminating the need for range selection or mechanical controls. The oscilloscope and waveform generator can be combined to form a vector network analyser using our open-source software. The fully documented command set is also compatible with MATLAB, LabVIEW and virtually any programming language.



Graphical User Interface

Key Features

- ✓ Portable, completely USB powered
- ✓ Powerful digital storage oscilloscope
- ✓ Standard and arbitrary waveform generator
- ✓ Vector Network Analyser
- ✓ Digital Inputs and Outputs
- ✓ Pulse Generator
- ✓ Open-Source Software

Compatibility

- ✓ Windows 2000/XP/Vista/7
- ✓ Linux
- ✓ Mac OS X

Typical Applications

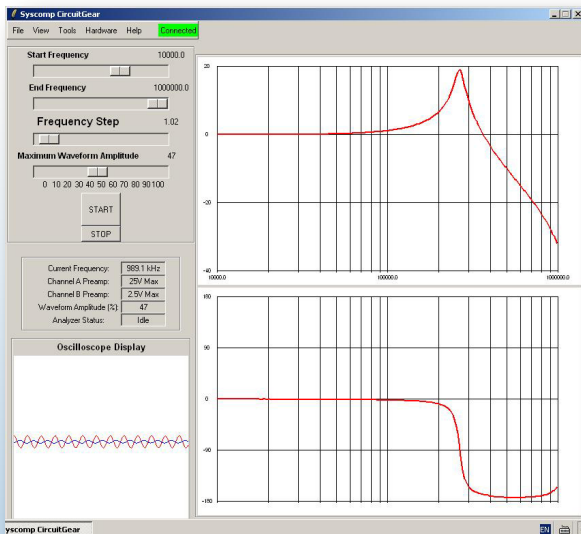
- ✓ General purpose electronics test
- ✓ Education/Electronics labs
- ✓ Field technicians/engineers

SYSCOMP
Electronic Design Ltd.

www.syscompdesign.com

CGR-101

Multi-Function USB Lab Instrument



What's Included

- CGR-101 USB Instrument
- USB Cable
- Installation CD
- Drivers
- Source Code
- Manual

General Specifications

Interface	1 USB Port
Power Supply	USB Bus Powered
Dimensions	6.25" x 3.5" x 1" (246 x 138 x 40mm)

Oscilloscope

Number of Channels	2
Maximum Sampling Rate	20MS/s
Bandwidth	2 MHz
Input Voltage Span	+/-0.25Vp-p to +/-25Vp-p
Input Ranges	7 Ranges in 1:2:5 Sequence
Vertical Calibration	Yes, Software
Input A/D	10 bit
Input Impedance	1M Ω 20pF
Timebase Span	50ns/div to 100ms/div
Timebase Ranges	21 Steps in 1:2:5 Sequence
Trigger	Normal, Auto, Single Shot, Ext.
Trigger Polarity	+/-
Trigger Level	Adjustable via on-screen cursor
Pre & Post Trigger Display	Adjustable via on-screen cursor
Readouts	Amplitude and Timebase Cursors
Sample Memory	1k samples/channel
Additional Modes	X-Y Plot
	Spectrum Analysis
	Waveform Math

System Requirements

Pentium 233MHz, 64MB RAM, 30MB HDD Space
 Minimum 1024x768 Screen Resolution
 One USB Port
 Windows 2000/XP/Vista/7
 Linux with 2.4 Kernel or Higher, X Windows
 Mac OS X 10.4 or Higher, Power PC or Intel

Arbitrary Function Generator

Output Frequency Range	0 - 2MHz
Frequency Resolution	0.1 Hz
Amplitude Control	Hardware
Vertical Resolution	8-Bits (Independent of Amplitude)
Output Range	+/-3V
Output Impedance	150 Ω
Standard Waveforms	Sine, Square Triangle, Sawtooth, Noise
Arbitrary Waveforms	8-Bit Vertical Resolution (256 Time Points)

Digital I/O

Output	8 bits, 5 volt, HCMOS
Input	8 bits, 3 or 5 volt, HCMOS
PWM	Fixed frequency Variable duty cycle
Interrupt	3 or 5 volt Edge or Level Triggered

Bode Plotter

Type	Vector Network Analyser
Frequency Range	0.1 Hz to 2 MHz
Amplitude Response	Yes
Phase Response	Yes
Oscilloscope Display	Yes

Contact Us

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