

## Embtest DSO2300 USB Oscilloscope

- 8-bit, 100Ms/s, 50MHz, 2-channel USB1.1/2.0 Compatible Digital Storage Oscilloscope
- Multi-functions Including Logic Analyzer, Spectrum Analyzer (FFT), Record & Playback...
- Easy-to-use with Intelligent Graphical Software Interface



Embtest DSO2300 USB Oscilloscope

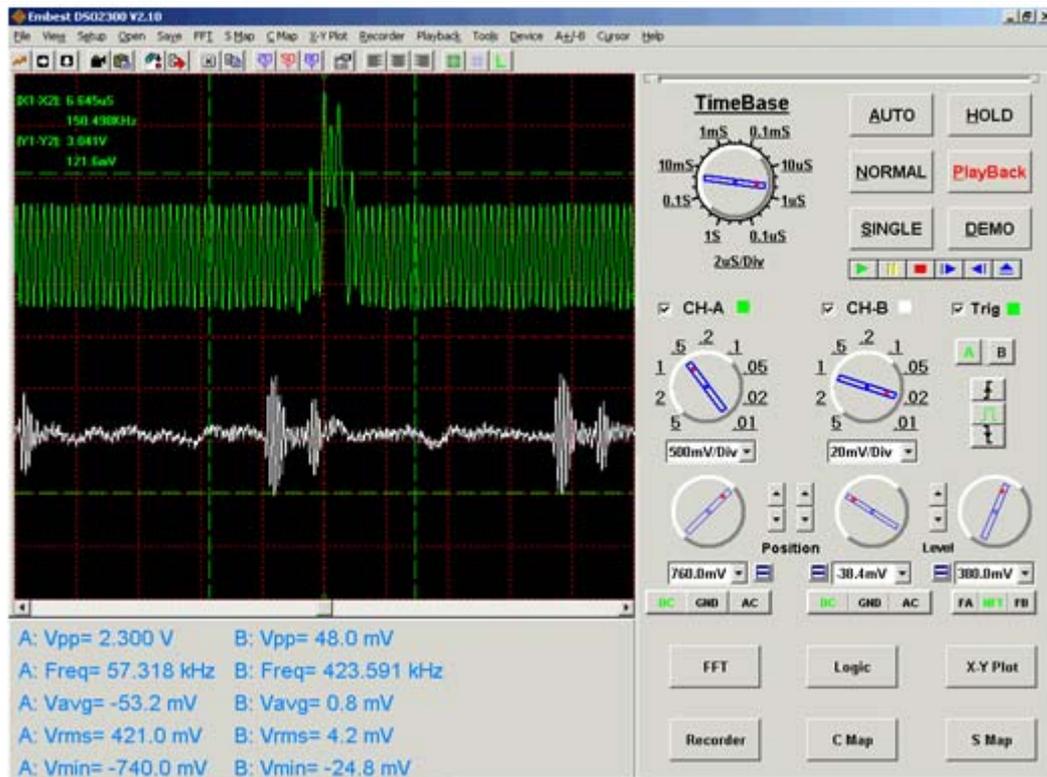
### Description

Embtest DSO2300 is an intelligent 8-bit two-channel PC based USB digital storage oscilloscope with high performance. It runs on any USB1.1 or USB2.0 equipped PC using Windows 98/2000/XP. It connects to your PC with the included USB cable for both data transfer and power, so no external power supply is needed. It has up to 100Ms/s real-time sampling rate and 50MHz bandwidth. The device combines the functions of analyzer, spectrum analyzer, waveform recorder, signal generator, cymometer, voltmeter, acoustic analysis graphic instrument, mathematical related graphic instrument voltage meter, digital storage oscilloscope and all these functions are controlled through a point-and-click PC software interface. It is a small, portable handheld device that is idea for engineers, students and anyone looking for an easy-to-use, low-cost and powerful oscilloscope.

### Features

- Size: 144x88x38(mm) (excluding cable and probes) Weight: <0.25kg (excluding accessories)
- Metal case and PnP (Plug and Play)
- USB power supply directly and no external power supply required

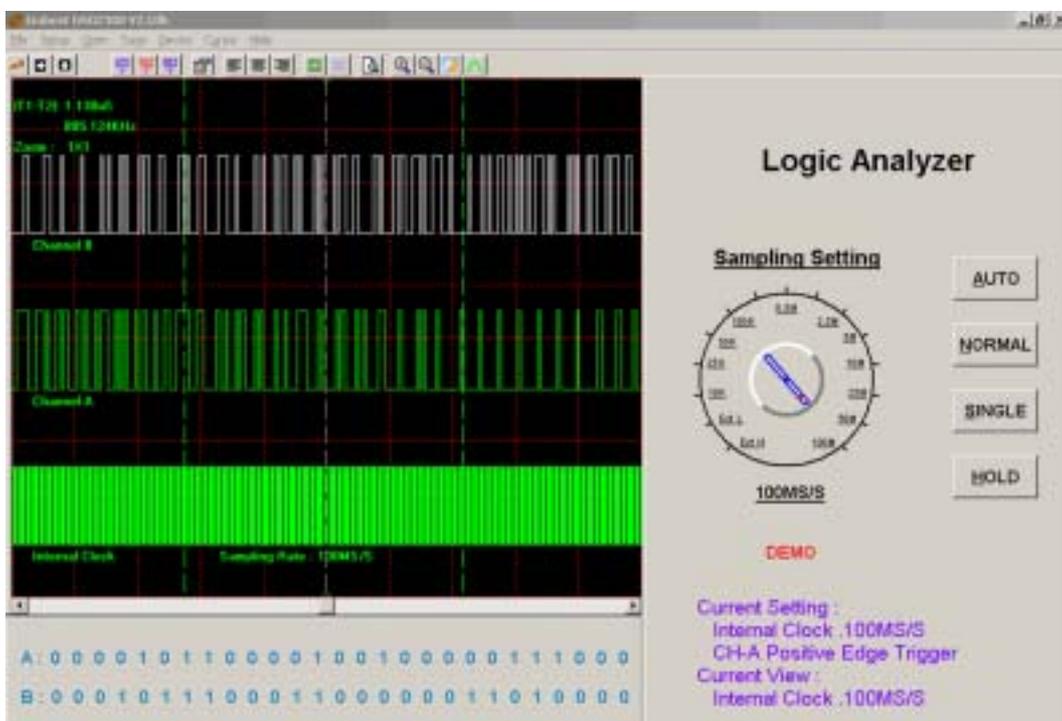
- Multi-functions: frequency spectrum analyzer, waveform recorder, signal generator, cymometer, voltmeter, acoustic analysis graphic instrument, mathematical related graphic instrument voltage meter, digital storage oscilloscope, etc.
- Record and play. The computer cannot only save current waveform on the screen, but also record continuous waveform. The operations of the record and playback are just as to operate DVD.
- The data can be led in by the formats Excel, Word or Notepad which would be convenient for report forms coming into being and taking full use of the powerful diagram functions of Excel.
- Zoom features with active cursors to drag the edges of the waveform window and waveform can be saved as a .jpg file.
- Capable of providing intuitionistic professional diagram like FFT waveform / Lissajous pattern (X-Y PLOT) waveform / S MAP / C MAP.
- The variables of input signal be calculated and displayed. User can adjust the displayed location and color. All variables can be copied to Excel, Word, etc.
- On-line auto calibration.
- Trigger settings allow horizontal trigger position settings and vertical trigger position settings.
- The two channels can be the trigger of each other.
- Simple logic analyzer enables analyzing logic relationships and serial signals between the two channels.
- Waveform is able to print on-line.
- Menu styles are able to change. Knobs can be selected with 3D solid style or plane style.
- Easy to use with various color settings and a point-and-click PC software interface.
- Intelligent waveform searching and tracing function.
- Simple Copy and Paste into other applications such as Word, Excel
- Channel interactive mathematical operations.
- User can save and restore the settings.
- One PC can work with several DSO2300 oscilloscopes so that more channels can be observed.
- Inherits the advantage of traditional instrument with friendly human-machine interface and easy to use.
- Capable of running on Windows 98/2000/XP OS.



Embest DSO2300 USB Oscilloscope Software Interface

## Logic Analyzer

The DSO2300 has simple logic analyzer function, which is capable of analyzing logic relationship and serial signal between the two channels.



## Technical Specifications

### Input

Max. Sample rate	Real-time sampling: 100MS/s for every channel using one or two channels.
Channel	2
Bandwidth	50MHz (-3dB)
Vertical resolution	8 bits/channel
Gain range	10mV --5V/ div @ x1 probe (10mV, 20mV, 50mV, 100mV, 200mV, 500mV, 1V, 2V, 5V/ div 1-2-5 sequence) 100mV~50V / div @ x10 probe 1V~500V/ div @ x100 probe 10V---5kV/div @ x1000 probe
Range	10 divisions
Offset level	+/-5 divisions
Coupling	AC, DC, GND
Offset Increments	0.04 div
Impedance	1M ohm
DC accuracy	+/-3%
Input protection	50Vpk (DC + peak AC < 10 kHz, without external attenuation)
Display Mode	Y-T, X-Y

### Timebase

Timebase range.	20ns/div ~ 1s/div (20ns, 50ns, 100ns, 200ns, 500ns, 1us, 2us, 5us, 10us, 20us, 50us, 100us, 200us, 500us, 1ms, 2ms, 5ms, 10ms, 20ms, 50ms, 100ms, 200ms, 500ms, 1s / div 1-2-5 sequence)
Acquisition Range	Realtime sampling: 20ns/div ~ 1s/div 10 divisions
Pre/Post trigger	0%-1000%
Buffer size	6Kbytes (3Kbytes for each channel)

### Trigger

Type	Rising edge, Falling edge, Voltage Level
Mode	Auto. Normal and Single
Intelligent Trace	Yes
Range	10 divisions
Trigger level	+/-5 divisions
Settability	0.04 div increments

### Math

Measurements	Vp-p, Vmax, Vmin, Vrms, Vavg, Frequency.
Cursor	Time/frequency difference, voltage difference Both Frequency and voltage in FFT mode
Math	Addition, subtraction
FFT	2048 Samples
Voltage/Current View	Yes.

### Logic Analyzer Function

Channel	2
Trigger	Rising edge, Falling edge and Byte.
Clock	Internal or External Clock.
Data display	Binary or Hexadecimal
Screen	Zoom In/Out.
Cursor	Frequency difference.

### Physical

Interface	Universal Serial Bus (USB)
Power	No external power source required. Bus-powered from USB
Dimensions	144x 88 x38mm

### Software

Interface	User-friendly Graphic User Interface (GUI) Microsoft Windows standard interface
Display Screen size	user can adjust it to large or small. Color and monochrome. User color setting: Yes.
File management	Image save: JPG file. Data save: DAT /TXT for Oscilloscope GDA for Logic Analyzer. OLE (Object Linking and Embedding) Automation: Data generation for Microsoft Excel / Word Setting save/load
Playback Function	Capacity: >50Gbytes.
Print	Yes

## **Order Information**

Order No.	ETI
Item	Embest DSO2300 USB Oscilloscope
Hardware	<ul style="list-style-type: none"> <li>● DSO2300 USB Oscilloscope</li> <li>● 1 x USB cable</li> <li>● 2 x Probe (Switchable 1:1 or 10:1)</li> <li>● 1 x CD (product reference)</li> </ul>
Software	Download form Embest website (can run directly without installation) <a href="http://www.armkits.com/Product/oscilloscope.asp">http://www.armkits.com/Product/oscilloscope.asp</a>



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