Data sheet

Digital Storage Oscilloscopes

Models 2530 & 2532

Essential features for the cost conscious user

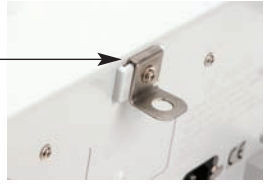
The Digital Storage Oscilloscope models 2530 & 2532 deliver essential features and reliable performance at a price you can afford. Analog style controls combined with Auto functions make these oscilloscopes easy to use. Advanced triggering, automatic measurements and FFT functions provide you with many options to debug your circuits. Additionally, the instruments come with PC Software that lets you easily capture, save and analyze waveforms and measurement results.

The 2530 & 2532 are ideal oscilloscopes for education and training and are well suited for applications in service and repair.

Model	Bandwidth	Sample rate	Display
2530	25MHz	250MSa/s	Monochrome
2532	40MHz	500MSa/s	Color

- 25 MHz and 40 MHz bandwidth and sample rate up to 500MSa/s Real Time
- Monochrome (2530) or Color (2532) LCD
- One touch automatic setup for ease of use (Auto)
- 4000 point record length for each channel
- Capture, save and analyze waveform data with the included EasyScope Application Software
- Eleven automatic measurements
- FFT standard plus 4 additional math functions
- Extensive Trigger capabilities including Pulse Width and line-selectable Video trigger
- Save/Recall setup and waveform data
- Multiple language interface
- Security loop

Use the built-in cable channel to secure your oscilloscope to your location



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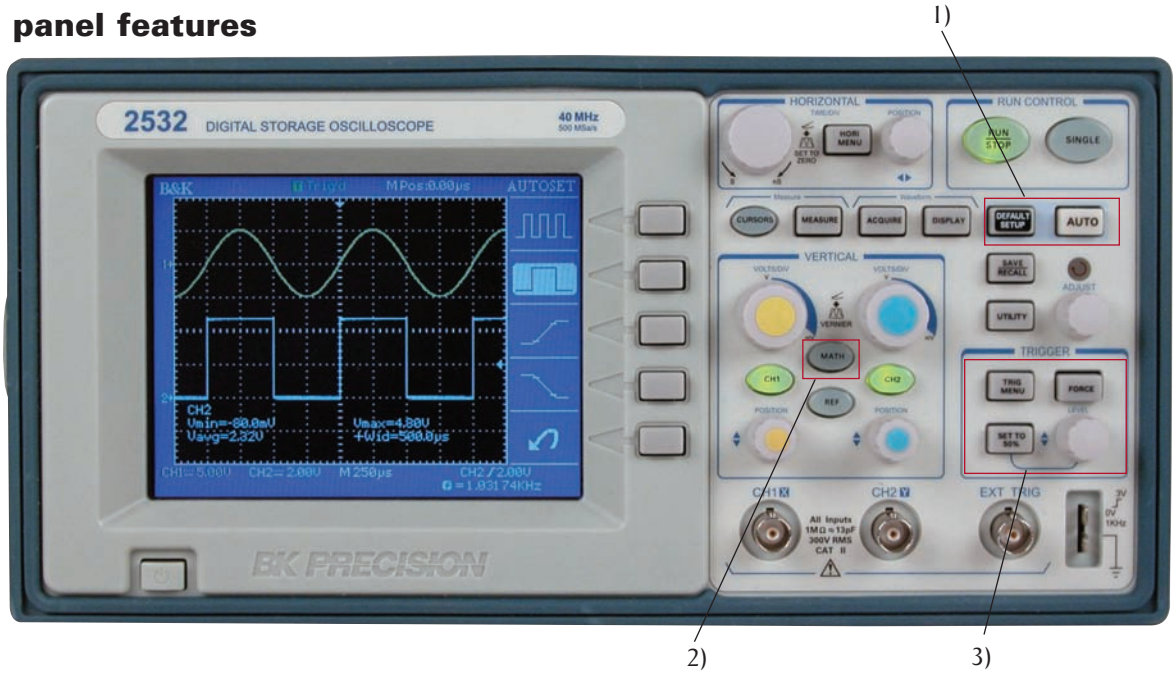
▲ Front panel features



1) Easy setup and use

The Auto button identifies the input signal and automatically sets up the vertical, horizontal and trigger controls to produce a useable display. You can choose how the waveform will be displayed by selecting option single cycle, multiple cycle, rising or falling edge. Press the Default button to instantly restore the default setting. Users familiar with analog oscilloscopes will appreciate the analog style controls and features.

2) Waveform analysis with math and FFT

Analyze your signal with add, subtract multiply and divide functions. View the signal's frequency domain spectrum and perform harmonic distortion analysis.

3) Advanced triggering

Isolate the signal with advanced triggering including pulse width and selectable video trigger.

Auto calibration

Automatically calibrate the instrument's vertical and horizontal system.

Stored setups and waveforms

Store up to 10 waveforms and 2 setups for future reference and use.

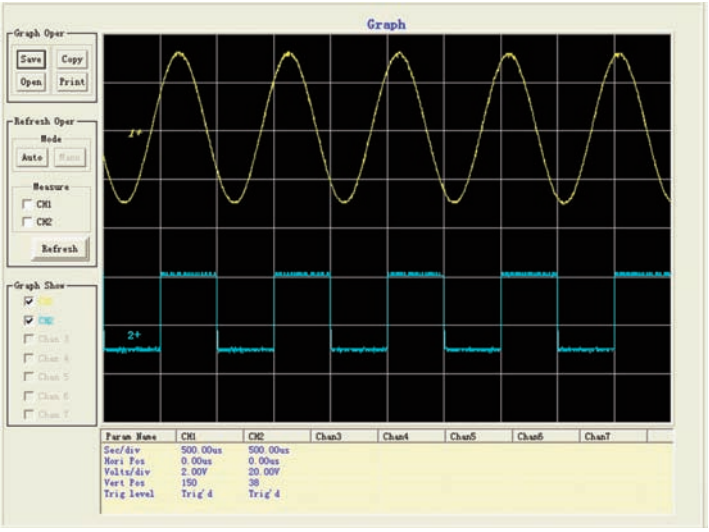
11 automatic measurements

Increase your efficiency. Execute and display 11 common measurements simultaneously.

XY Mode

Unlike comparable models in the market, the 2530/ 2532 supports settable sample rates of 5kSa/s – 200kSa/s when operating in XY mode.

Simple Documentation and Analysis



The included Easyscope software provides seamless integration between the oscilloscope and PC. Capture and transfer waveforms, screen images, setups and measurement results to a Windows PC via the USB device port on the back of the instrument.

- Save waveform data in csv (Microsoft Excel) format for post acquisition analysis
- Document your results: Print, save or copy/paste waveform data and measurement results. Save and print bitmap images and setups
- Capture waveforms and measurement results manually or automatically at user defined intervals. In automatic mode, the smallest refresh rate is 0.5 seconds, allowing for virtually real time waveform capture
- Generate real-time Pass/Fail verdicts for captured measurement results

Specifications

	models 2530	2532
Performance Characteristics		
Bandwidth	25 MHz	40 MHz
Real time sample rate	250 MSa/s	500 MSa/s (two channels interleaved)
Channels	2	
Display	1/4 VGA Monochrome LCD	1/4 VGA Color LCD
Rise Time	<14 ns	<8.8 ns
Record Length*	4000 points	
Vertical Resolution	8 bits	
Vertical Sensitivity	2 mV - 5 V/div	
DC gain accuracy	±3.0 %	
Maximum Input Voltage	300 Vrms, CAT II (between signal and reference BNC connector)	
Position Range	2 mV – 100 mV range ±2 V 200 mV - 5 V range: ±40 V	
Bandwidth Limit	-	20 MHz
Time Base range	2.5 ns/div – 50 s/div	10 ns/div – 50 s/div
Timebase accuracy	100 ppm	
Input Coupling	AC, DC,GND	
Input Impedance	1 MΩ in parallel with13 pf	
Vertical and Horizontal Zoom	Vertically or horizontally expand or compress a live or stopped waveform	
I/O interface	USB device port for connection to PC. (Requires included EasyScope Software for use)	

* The instrument displays 2500 points. 4000 points can be retrieved from internal memory with the included EasyScope application. This feature is supported for a time base settings range of 2.5µs/Div-50ms/Div (scan mode is not active)

Acquisition Modes	
Sample	Display sample data only
Peak Detect	
Average	Waveform averaged, selectable from 4,16,32,64,128,256
Scan Mode	For time base settings 0.1 s/div-50 s/div
Trigger System	
Trigger Types	Edge, Pulse Width, Video*
Trigger Modes	Auto, Normal, Single
Trigger Coupling	AC, DC, LF reject, HF reject
Trigger Source	CH1, CH2, AC line, Ext, Ext/5

*Support formats PAL/SECAM, NTSC. Triggers on odd or even field, all lines or line number

Cursors	
Types	Amplitude, Time
Measurements	ΔV, ΔT, 1/ΔT

Automatic Waveform Measurement	
Time	Rise time, Fall Time, Cycle Frequency, Period, Positive Pulse Width, Negative Pulse width
Voltage	MAX, MIN, Peak-Peak, Average, Vrms
Frequency	Hardware counter provides frequency readout of trigger source with 6 digit resolution
Waveform Math	
Math function	FFT, add, subtract, multiply, divide
FFT	Windows: Hanning, Hamming, Blackman, Rectangular 1024 sample points
Autoset	Single button automatic setup of both channels for vertical, horizontal and trigger systems
Display	
Display Mode	1/4 VGA (5.7") monochrome LCD (320x240) with adjustable contrast and inverse video
Display Types	Point, Vector
Persistence	Off, 1 s, 2 s, 5 s, infinite
Waveform Interpolation	Sin(x)/x, Linear
Format	YT and XY
Power Requirements	100-240 VAC, 50 VAmax, 45 Hz to 440 Hz
Environmental	
Temperature	Operating: 0° C to +55° C Nonoperating: -40° C to +70° C
Humidity	Operating: 95 %RH, 40° C Nonoperating: 90 %RH, 65° C
Altitude	Operating to 4000 m
Pollution Degree	Pollution degree 2 for indoor use only.
Electromagnetic compatibility and Safety	
EMC	This oscilloscope is in compliance with council EMC directive 2004/108/EC
Safety	EN61010-1:2001
General	
Dimensions Width x Height x Depth	290 mm x 150 mm x 300 mm 11.4 in x 5.9 in x 11.8 in
Weight	4.6 kg (10 Lbs)

One Year Warranty

Accessories
Supplied: User Manual, 10:1 Probe set (2 pieces), Power cord , USB interface cable, EasyScope Software Installation disk
Optional: PR 37A 10:1 Probe, PR 32A Demodulator Probe, PR 55 High Voltage Probe