LeCroy

WaveSurfer® Xs-A and MXs-A Oscilloscopes

200 MHz–1 GHz

Engineered for Efficient Design and Debug

ESSENTIAL TOOLS FOR VALIDATION AND DEBUG

WaveSurfer Xs-A

- 200 MHz, 400 MHz, 600 MHz and 1 GHz bandwidths
- 2.5 GS/s Sample Rates per Channel, up to 5 GS/s with WS 104Xs-A
- 5 Mpts/Ch Memory
- Fast Processing of Long Memory and Math
- Responsive User Interface
- WaveStream™ Fast Viewing Mode
- WaveScan™ – Advanced Search and Find
- 10.4" Touch Screen Display
- LXI Compliant

WaveSurfer MXs-A

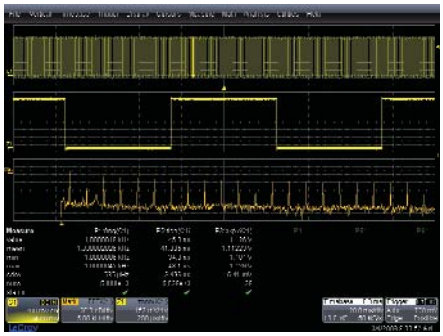
All the great features of the WaveSurfer Xs-A plus:

- 10 Mpts/Ch Memory
- Up to 5 GS/s per Channel
- LabNotebook™ Documentation and Report Generation
- Advanced Math with 15 Different Functions and Enhanced FFT
- Additional SMART Trigger™ Capabilities

Many oscilloscopes promise high-performance, great banner specs, ease-of-use and a rich feature set to shorten debug and validation time but the WaveSurfer Xs-A and MXs-A oscilloscopes truly deliver on these promises.

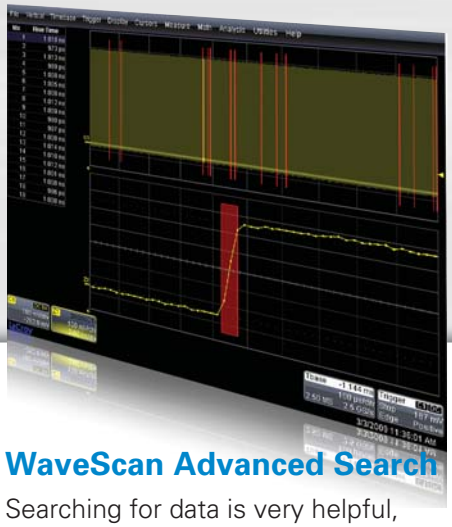
Its small form factor packs a powerful processor that can handle long memory captures faster than any of the competition. The touch screen interface is the ultimate in ease-of use. With features like WaveStream fast viewing mode and WaveScan Search and Find, you can be confident that every problem can quickly be detected and analyzed.

Beyond these great features, the WaveSurfer offers a wide range of serial data trigger and decode tools for SPI, I^2C UART, RS-232, LIN, or CAN as well as industry leading mixed signal capabilities to quickly troubleshoot embedded system designs. With bandwidths from 200 MHz to 1 GHz the WaveSurfer is the ideal oscilloscope for everyday design and debug.



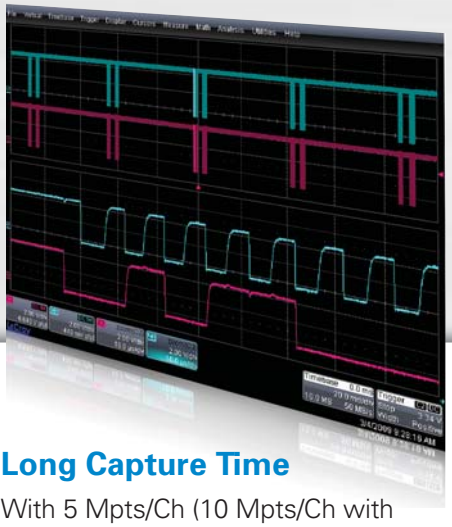
Speed and Responsiveness

The WaveSurfer was designed to shorten debug time through faster hardware and more sophisticated software. The hardware allows for fast processing of long memory even when using math and measurement functions. The software is designed to respond immediately to the user's input even while processing data, eliminating any lag or delay.



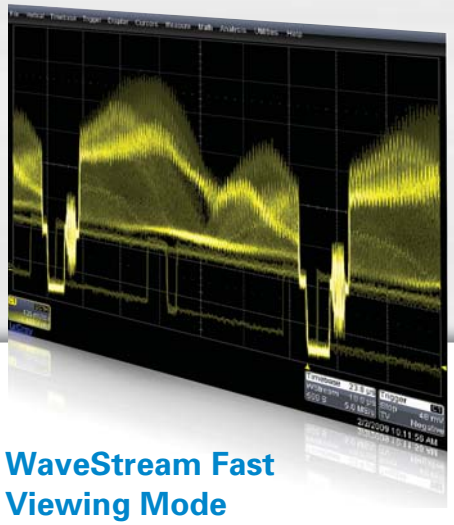
WaveScan Advanced Search

Searching for data is very helpful, but wouldn't it be better to Search for something you can't trigger on? WaveScan allows searching in a single acquisition using more than 20 different modes. Or, set up a Scan condition and scan for an event over hours or days, and perform some action when it is found.



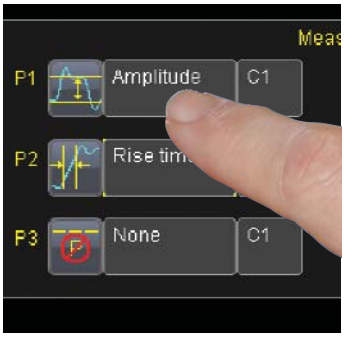
Long Capture Time

With 5 Mpts/Ch (10 Mpts/Ch with MXs-A) of fast acquisition memory standard the WaveSurfer provides long capture time at full sample rate, and longer times at lower sample rates. WaveSurfer long memory is also thoughtfully designed to respond quickly, even when measurements, math, or serial decoders are being used.



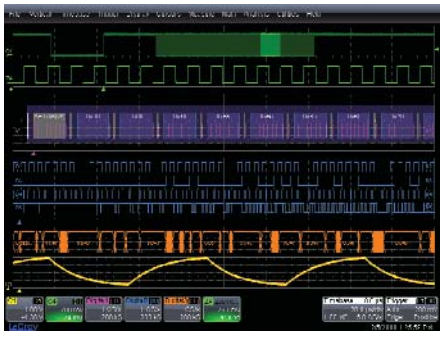
WaveStream Fast Viewing Mode

WaveStream provides a vibrant, intensity graded (256 levels) display with a fast update to closely simulate the look and feel of an analog oscilloscope. Turn WaveStream ON or OFF, and adjust intensity, using the front panel knob. Use it only when you want to.



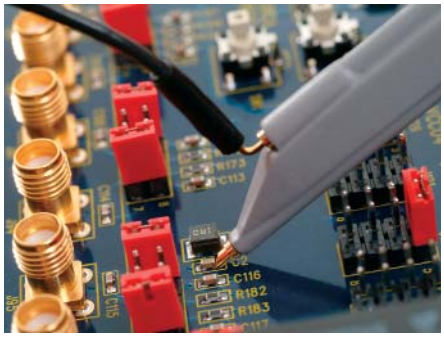
Touch Screen Simplicity

Keep your testing efficient with a thoughtfully designed user interface that provides the busy engineer with a GUI that is smooth, transparent, and easy to use. Use the touch screen to quickly access all triggers, math functions and measurement parameters or to "draw a box" around the area of interest and zoom all channels to the desired area.



Embedded Controller Design and Debug

Save time when working with embedded controllers by adding high-performance mixed signal capability to the WaveSurfer. Capture digital signals up to 500 MHz with up to 50 Mpts/Ch memory, 2 GS/s and 18 or 36 channels. Quickly and easily isolate specific serial data events with optional I^2C, SPI, UART, CAN and LIN trigger and decode capabilities.



ZS Series High Impedance Active Probes

The ZS Series of high impedance active probes provide full bandwidth at the probe tip, and the high impedance (1 MΩ || 0.9 pF) you want. A variety of standard and available probe tip and grounding accessories are offered to meet any requirement. What's more, ZS Series probes are available for a very affordable price. Use the ZS1000 with 200 to 600 MHz WaveSurfers and the ZS1500 with 1 GHz WaveSurfers to give full system bandwidth at the probe tip.

INTUITIVE USER INTERFACE TO FIND PROBLEMS FASTER

The new WaveSurfer Xs-A oscilloscope makes everyday testing simpler and easier. The intuitive user interface and streamlined front panel make it easy to turn on the oscilloscope and start making measurements. The interface is designed so that all the common measurements and functions are just one touch away.

1. Only 15 cm (6") Deep

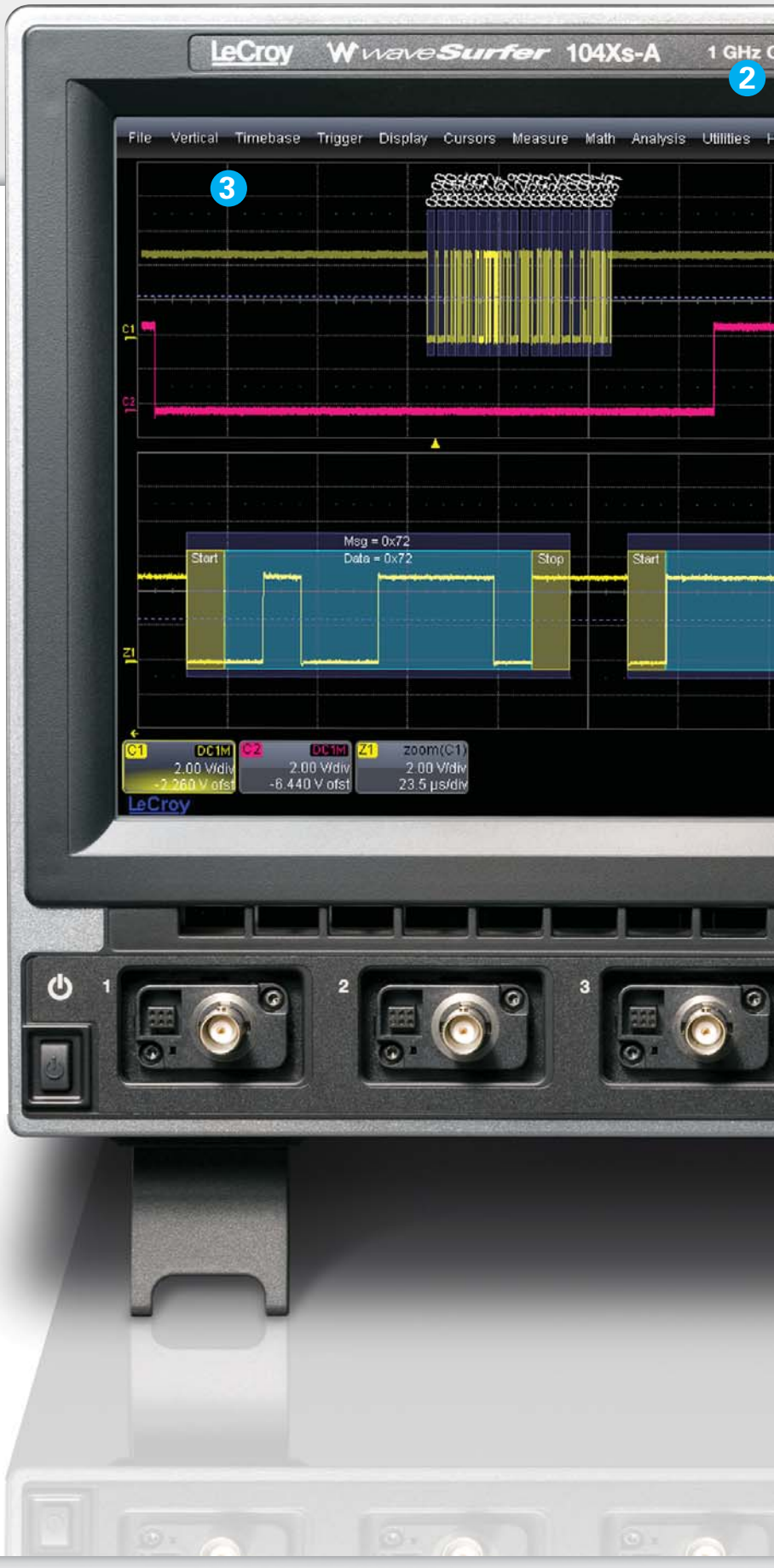
The most space-efficient oscilloscope for your bench from 200 MHz to 1 GHz.

2. Local Language User Interface

Select from 10 language preferences. Add a front panel overlay with your local language.

3. Bright 10.4" Display

You'll never use a small display oscilloscope again. A fantastic viewing angle makes it easy to view.



4. "Push" Knobs

Trigger level, delay, and offset knobs all provide shortcuts to common actions when pushed.

5. Zoom Control Knobs

Navigate zoom or math traces with the multiplexed horizontal knobs.

6. LeCroy WaveStream Fast Viewing Mode

Provides a lively, analog-like feel similar to a phosphor trace. Adjust "trace" intensity with the front panel control, or toggle between LeCroy WaveStream and real-time modes.

7. Dedicated Cursor Knobs

Select type of cursor, position them on your signal, and read values without ever opening a menu.

8. Touch Screen with Built-in Stylus

The most time-efficient user interface is even easier to use with a built-in stylus.

Document and Share:

- Save to on-board hard drive
- Save to network drive
- E-mail to team members
- Send to a printer
- Utilize front mounted USB port
- Main port is standard 10/100Base-T Ethernet

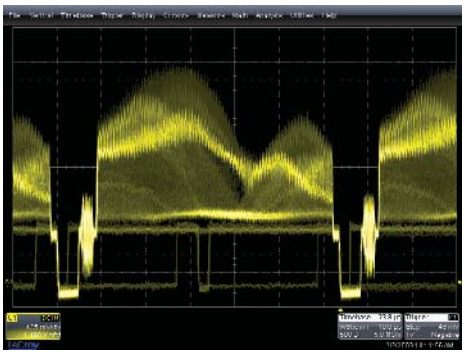
LECROY WAVESCAN ADVANCED SEARCH

WaveScan provides powerful isolation capabilities that hardware triggers can't provide. WaveScan provides the ability to locate unusual events in a single capture (i.e., capture and search), or "scan" for an event in many acquisitions over a long period of time. Select from more than 20 search modes (frequency, rise time, runt, duty cycle, etc.), apply a search condition, and begin scanning.

Since the scanning "modes" are not simply copies of the hardware triggers, the utility and capability is much higher. For instance, there is no "frequency" trigger in any oscilloscope, yet WaveScan allows for "frequency" to be quickly "scanned." This allows the user to accumulate a data set of unusual events that are separated by hours or days, enabling faster debugging. When used in multiple acquisitions, WaveScan builds on the traditional LeCroy strength of fast processing of data. A LeCroy X-Stream oscilloscope will quickly scan millions of events looking for unusual occurrences, and do it much faster and more efficiently than other oscilloscopes can.

WaveStream Fast Viewing Mode

WaveStream provides a vibrant, intensity graded (256 levels) display with a fast update rate to closely simulate the look and feel of an analog oscilloscope. WaveStream is most helpful in viewing signals that have signal jitter or signal anomalies, or for applying a visual check before creating an advanced trigger or WaveScan setup to locate an unusual event.



Since the sampling rate in WaveStream mode can be as high as 5 GS/s (up to 2.5x that of other oscilloscopes), it is an excellent runt or glitch finder. Timing jitter is often visually assessed to understand approximate behavior. WaveStream makes it easy to understand jitter on edges or in eye diagrams. WaveStream also excels in allowing you to relate composite (WaveStream) to single-event (real-time sampled) behaviors. Just capture in WaveStream mode, toggle to view or zoom a single trace, then toggle back to WaveStream mode.

EMBEDDED SYSTEM DESIGN AND DEBUG

Successful design and debug of an embedded system requires monitoring a wide range of signals at any given time. The WaveSurfer Xs-A and MXs-A oscilloscopes can be made in to an all-in-one tool for capturing analog, digital and serial signals simultaneously.

High-performance MSO

Capture digital signals up to 500 MHz with up to 50 Mpts/Ch memory, 2 GS/s, and 18 or 36 channels by adding the MS-500 or MS-250 to any model WaveSurfer. Create analog and digital cross-pattern triggers of up to 4 analog and 36 digital channels and view the data as individual lines or in a bus view.

I²C, SPI, UART,RS-232, CAN, and LIN Serial Trigger and Decode

Quickly and easily isolate specific serial data events on your embedded controller for better understanding and faster debug with trigger conditions in binary or hexadecimal formats. The conditional data trigger allows for triggering on a range of values.

Intuitive, Color-coded Decode Overlay

Advanced software algorithms deconstruct the waveform into binary, hex, or ASCII protocol information, then overlay the decoded data on the waveform. Various sections of the protocol are color-coded to make it easy to understand. The decode operation is fast—even with long acquisitions.

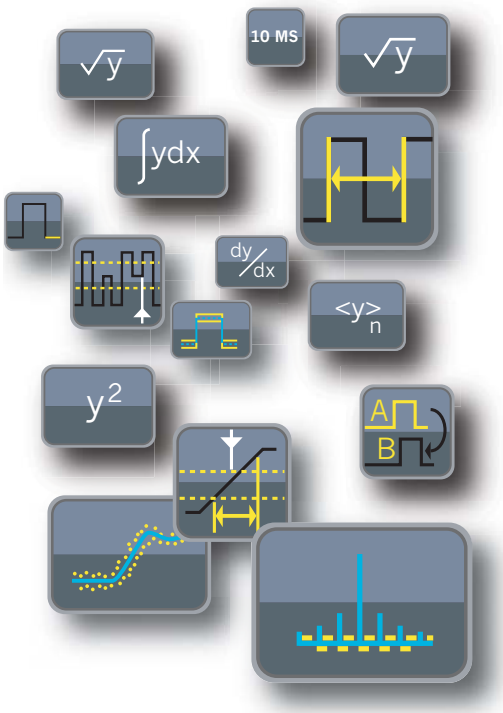
Table Summary and Search/Zoom

Turn your oscilloscope into a protocol analyzer with the Table display of protocol information. Customize the table, or export Table data to an Excel file. Touch a message in the table and automatically zoom for detail. Search for specific address or data values in the acquisition.

Idx	Time	Addr Length	Address	R/W	Length	Data
8	240.494 ms	7	0x21	1	2	0xff 00 00
9	360.555 ms	7	0x21	0	1	0x08
10	360.698 ms	7	0x21	1	2	0x49 00 00
11	481.865 ms	7	0x21	0	1	0x0a
12	482.007 ms	7	0x21	1	2	0x00 00 00
13	606.294 ms	7	0x20	0	3	0x01 36 00
14	721.235 ms	7	0x20	0	1	0x00
15	721.377 ms	7	0x20	1	2	0x12 36 00
16	841.266 ms	7	0x20	0	1	0x02

THE WAVESURFER M-TYPE OSCILLOSCOPE

Higher sample rates, 10 Mpts/Ch memory, advanced math and triggering, enhanced FFT capabilities and LabNotebook make the WaveSurfer M-Type a truly unique oscilloscope.



No other product in this class offers such a powerful combination of features and banner specs making the WaveSurfer M-Type the ideal oscilloscope for fast and efficient debug from 200 MHz to 1 GHz.

High Sample Rate

5 GS/s max sample rate at 600 MHz and 5 GS/s per channel at 1 GHz to capture the fastest signals.

Long Capture

Maintain the high sample rate with 10 Mpts/Ch on all models.

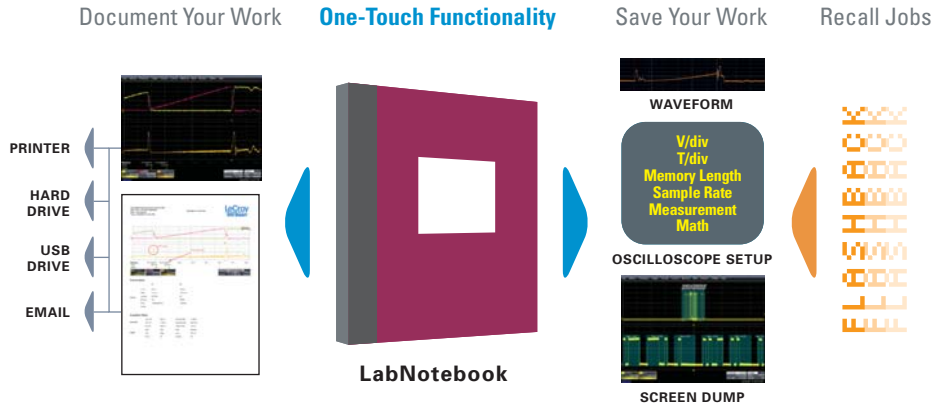
Advanced Math and Triggering

Many oscilloscopes offer a small set of basic trigger modes, math functions and limited FFT. The M-Type offers 10 trigger modes, 1 Mpts FFT and 17 math functions.

LabNotebook™

A Unique Tool for Documentation and Report Generation

Use LabNotebook to quickly save and document all your work. With a single button press all displayed waveforms, relevant settings, and screen images can be stored. Easy report generation allows you to annotate screen images, share your findings and communicate important results; reports can even be emailed directly from the oscilloscope. The Flashback function lets you recall your settings from any report and use them to reproduce previous measurements.



Easy report generation helps you share your findings and communicate important results.

LabNotebook adds a simple way to report your work and save all essential waveforms, settings, and screen images.

Quickly save all the necessary files with LabNotebook in a single button press.

Recall your settings from any report by using the Flashback capability.

PROBES, ACCESSORIES, AND OPTIONS

LeCroy offers an extensive range of probes, accessories, and options for WaveSurfer Xs-A. Leverage your investment with these items.

ZS Series High Impedance Active Probes

Leading Features:

- 1 GHz (ZS1000) and 1.5 GHz (ZS1500) bandwidths
- High Impedance (0.9 pF, 1 MΩ)
- Extensive standard and available probe tip and ground connection accessories
- ±12 Vdc offset (ZS1500)
- LeCroy ProBus system

ADP305, ADP300

Leading Features:

- 20 MHz and 100 MHz bandwidth
- 1,000 V_{rms} common mode voltage
- 1,400 V_{peak} differential voltage
- EN 61010 CAT III
- 80 dB CMRR at 50/60 Hz
- LeCroy ProBus system

PPE1.2KV, PPE2KV, PPE4KV, PPE5KV, PPE6KV, PPE20KV

Leading Features:

- Suitable for safe, accurate high-voltage measurements
- 1.2 kV to 20 kV
- Works with any 1 MΩ input oscilloscope

CP030, CP031

Leading Features:

- 30 A_{rms} continuous current (50 A_{peak})
- 50 or 100 MHz bandwidth
- Small form factor accommodates large conductors with small jaw size
- LeCroy ProBus system

AP031

Leading Features:

- Lowest priced differential probe
- 15 MHz bandwidth
- 700 V maximum input voltage
- Works with any 1 MΩ input oscilloscope

AP033, AP034

Leading Features:

- 500 MHz and 1 GHz bandwidth
- 10,000:1 CMRR
- Wide dynamic range, low noise
- LeCroy ProBus system

Advanced Trigger Option

Adds Runt, Slew Rate, Interval, Dropout, and Qualified/State triggers to the standard triggers.

Extended Math Option

Adds 12 additional math functions, chaining of two math functions, rescaling with unit selection, and 1 Mpts FFTs.

I²C, SPI, UART, RS-232, LIN, and CAN Trigger & Decode Options

Powerful serial triggering, including conditional data triggering, intuitive, color-coded decode overlay, search, and table display.

MS Series Mixed Signal Oscilloscope Options

Add high-performance mixed signal capability to a WaveSurfer Xs-A. Capture digital signals up to 500 MHz with up to 50 Mpts/Ch memory, 2 GS/s and 18 or 36 channels.

WAVESURFER Xs-A SPECIFICATIONS

	WaveSurfer 24Xs-A	WaveSurfer 44Xs-A	WaveSurfer 42Xs-A	WaveSurfer 64Xs-A	WaveSurfer 62Xs-A	WaveSurfer 104Xs-A
Bandwidth (@ 50 Ω)	200 MHz	400 MHz		600 MHz		1 GHz
Rise Time	1.75 ns	875 ps		500 ps		300 ps
Input Channels	4	4	2	4	2	4
Display	10.4" Color flat-panel TFT-LCD, 800 x 600 SVGA, touch screen					
Sample Rate (single-shot)	2.5 GS/s					2.5 GS/s (5 GS/s Interleaved)
Sample Rate (RIS mode)	50 GS/s					
Standard Record Length	5 Mpts/Ch (all channels)					
Standard Capture Time	Up to 2 ms at full sample rate on all four channels					
Vertical Resolution	8-bits					
Vertical Sensitivity (V/div)	2 mV/div–10 V/div (1 MΩ); 2 mV/div–1 V/div (50 Ω)					
Vertical (DC Gain) Accuracy	±1.0% of full scale (typical); ±1.5% of full scale ≥ 10 mV/div (warranted)					
BW Limit	20 MHz	20 MHz, 200 MHz				
Maximum Input Voltage	50 Ω: 5 V_{rms}, 1 MΩ: 400 V max. (DC + Peak AC ≤ 5 kHz)					50 Ω: 5 V_{rms} 1 MΩ: 250 V max. (DC + Peak AC ≤ 10 kHz)
Input Coupling	AC, DC, GND (DC and GND for 50 Ω)					
Input Impedance	1 MΩ || 16 pF, or 50 Ω					1 MΩ || 20 pF, or 50 Ω
Probing System	BNC or ProBus					
Probes	One PP009 (5 mm) per channel (standard)					One PP011 (5 mm) per channel (standard)
Timebase Range	200 ps/div–1000 s/div (roll mode from 500 ms/div–1000 s/div)					
Timebase Accuracy	≤ 5 ppm @ 25 °C (typical) (≤ 10 ppm @ 5–40 °C)					
Trigger Modes	Normal, Auto, Single, and Stop					
Trigger Sources	Any input channel, External, Ext/10, or line; slope and level unique to each source (except for line trigger)					
Trigger Coupling	DC, AC, HFRej, LFRej					
Pre-trigger Delay	0–100% of full scale					
Post-trigger Delay	0–10,000 divisions					
Trigger Hold-off	1 ns to 20 s or 1 to 1,000,000,000 events					
Internal Trigger Level Range	±4.1 div from center					
External Trigger Range	EXT/10 ±4V; EXT ±400 mV					

Triggering

Standard	Edge, Glitch, Width, Logic (Pattern), TV (NTSC, PAL, SECAM, HDTV – 720p, 1080i, 1080p)

Measure, Zoom, and Math Tools

Standard Parameter Measurements	Up to 6 of the following parameters can be calculated at one time on any waveform: Amplitude, Area, Base (Low), Delay, Duty, Fall Time (90%-10%), Fall Time (80%-20%), Frequency, Maximum, Mean, Minimum, Overshoot+, Overshoot-, Period, Peak-Peak, Phase, Rise Time (10%-90%), Rise Time (20%-80%), RMS, Skew, Standard Deviation, Top (High), Width+, Width-. Measurements can be gated.
Zooming	Use front panel QuickZoom button, or use touch screen or mouse to draw a box around the zoom area.
Standard Math	Operators include Sum, Difference, Product, Ratio, and FFT (up to 25 kpts with power spectrum output and rectangular, VonHann, and FlatTop windows). 1 math function may be defined at a time.

Physical

Dimensions (HWD)	260 mm x 340 mm x 152 mm Excluding accessories and projections (10.25" x 13.4" x 6")
Net Weight	7.26 kg. (16.0 lbs.)

Options

Advanced (WS Xs-ADVTRIG)	Runt, Slew Rate, Interval (Signal or Pattern), Dropout, Qualified (State or Edge)
Extended Math (WSXs-MATHSURF Option)	Adds the following additional math functions: Absolute Value, Averaging (summed and continuous), Derivative, Envelope, Enhanced Resolution (to 11- bits), Floor, Integral, Invert, Reciprocal, Roof, Square, and Square Root. Also adds chaining of two math functions and rescaling to different units, and 1 Mpts FFTs.

WAVESURFER MXs-A SPECIFICATIONS

	WaveSurfer 24MXs-A	WaveSurfer 44MXs-A		WaveSurfer 64MXs-A		WaveSurfer 104Xs-A
Bandwidth (@ 50 Ω)	200 MHz	400 MHz		600 MHz		1 GHz
Rise Time	1.75 ns	875 ps		500 ps		300 ps
Input Channels	4	4	2	4	2	4
Display	10.4" Color flat-panel TFT-LCD, 800 x 600 SVGA, touch screen					
Sample Rate (single-shot)	2.5 GS/s			2.5 GS/s (5 GS/s Interleaved)		5 GS/s
Sample Rate (RIS mode)	50 GS/s					
Standard Record Length	10 Mpts/Ch (all channels)					
Standard Capture Time	Up to 4 ms at 2.5 GS/s (2 ms at 5 GS/s)					
Vertical Resolution	8-bits					
Vertical Sensitivity (V/div)	2 mV/div–10 V/div (1 MΩ); 2 mV/div–1 V/div (50 Ω)					
Vertical (DC Gain) Accuracy	±1.0% of full scale (typical); ±1.5% of full scale ≥ 10 mV/div (warranted)					
BW Limit	20 MHz	20 MHz, 200 MHz				
Maximum Input Voltage	50 Ω: 5 V_{rms}, 1 MΩ: 400 V max. (DC + Peak AC ≤ 5 kHz)					50 Ω: 5 V_{rms} 1 MΩ: 250 V max. (DC + Peak AC ≤ 10 kHz)
Input Coupling	AC, DC, GND (DC and GND for 50 Ω)					
Input Impedance	1 MΩ || 16 pF, or 50 Ω					1 MΩ || 20 pF, or 50 Ω
Probing System	BNC or ProBus					
Probes	One PP009 (5 mm) per channel (standard)					One PP011 (5 mm) per channel (standard)
Timebase Range	200 ps/div–1000 s/div (roll mode from 500 ms/div–1000 s/div)					
Timebase Accuracy	≤ 5 ppm @ 25 °C (typical) (≤ 10 ppm @ 5–40 °C)					
Trigger Modes	Normal, Auto, Single, and Stop					
Trigger Sources	Any input channel, External, Ext/10, or line; slope and level unique to each source (except for line trigger)					
Trigger Coupling	DC, AC, HFRej, LFRej					
Pre-trigger Delay	0–100% of full scale					
Post-trigger Delay	0–10,000 divisions					
Trigger Hold-off	1 ns to 20 s or 1 to 1,000,000,000 events					
Internal Trigger Level Range	±4.1 div from center					
External Trigger Range	EXT/10 ±4V; EXT ±400 mV					

Triggering

Standard	Edge, Glitch, Width, Logic (Pattern), TV (NTSC, PAL, SECAM, HDTV – 720p, 1080i, 1080p), Runt, Slew Rate, Interval (Signal or Pattern), Dropout, Qualified (State or Edge)

Measure, Zoom, and Math Tools

Standard Parameter Measurements	Up to 6 of the following parameters can be calculated at one time on any waveform: Amplitude, Area, Base (Low), Delay, Duty, Fall Time (90%-10%), Fall Time (80%-20%), Frequency, Maximum, Mean, Minimum, Overshoot+, Overshoot-, Period, Peak-Peak, Phase, Rise Time (10%-90%), Rise Time (20%-80%), RMS, Skew, Standard Deviation, Top (High), Width+, Width-. Measurements can be gated.
Zooming	Use front panel QuickZoom button, or use touch screen or mouse to draw a box around the zoom area.
Standard Math	Operators include Sum, Difference, Product, Ratio, Absolute Value, Averaging (summed and continuous), Derivative, Envelope, Enhanced Resolution (to 11-bits), Floor, Integral, Invert, Reciprocal, Roof, Square, Square Root and FFT (up to 1 Mpts with power spectrum output and rectangular, VonHann, and FlatTop windows). 1 math function may be defined at a time, 2 functions may be chained together.

Physical

Dimensions (HWD)	260 mm x 340 mm x 152 mm Excluding accessories and projections (10.25" x 13.4" x 6")
Net Weight	7.26 kg. (16.0 lbs.)

ORDERING INFORMATION

Product Description	Product Code
WaveSurfer Xs-A Digital Oscilloscopes	
1 GHz, 2.5 GS/s, 4 Ch, 5 Mpts/Ch (5 GS/s interleaved) with 10.4" Color Touch Screen Display	WaveSurfer 104Xs-A
600 MHz, 2.5 GS/s, 4 Ch, 5 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 64Xs-A
600 MHz, 2.5 GS/s, 2 Ch, 5 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 62Xs-A
400 MHz, 2.5 GS/s, 4 Ch, 5 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 44Xs-A
400 MHz, 2.5 GS/s, 2 Ch, 5 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 42Xs-A
200 MHz, 2.5 GS/s, 4 Ch, 5 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 24Xs-A
WaveSurfer MXs-A Series Oscilloscopes	
1 GHz, 5 GS/s, 4 Ch, 10 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 104MXs-A
600 MHz, 2.5 GS/s (5 GS/s interleaved) 4 Ch, 10 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 64MXs-A
400 MHz, 2.5 GS/s, 4 Ch, 10 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 44MXs-A
200 MHz, 2.5 GS/s, 4 Ch, 10 Mpts/Ch with 10.4" Color Touch Screen Display	WaveSurfer 24MXs-A
Included with Standard Configuration (WaveSurfer Xs-A and MXs-A)	
÷10, 500 MHz, 10MΩ Passive Probe (Total of 1 Per Channel)	
Getting Started Manual and Quick Reference Guide	
Standard Ports: 10/100Base-T Ethernet, USB 2.0 (5), SVGA Video out, Audio in/out, RS-232	
Protective Front Cover	
Anti-virus Software (Trial Version)	
Standard Commercial Calibration and Performance Certificate	
3-year Warranty	
Included with WaveSurfer MXs-A	
10 Mpts/Ch Standard Memory	
Advanced Triggering with LeCroy SMART Triggers	
Extended Math with 15 Math Functions and Improved FFT Capabilities	
LabNotebook Documentation and Report Generation	
Memory Option	
10 Mpts/Ch Memory Option (for 4 Ch WaveSurfer Xs-A)	WSXs-VL
10 Mpts/Ch Memory Option (for 2 Ch WaveSurfer Xs-A)	WSXs-VL2
General Accessories	
Keyboard Accessory	WSXs-KYBD
Optical Mouse Accessory	WSXs-MOUSE
External GPIB Accessory	WS-GPIB
Hard Carrying Case	WSXs-HARDCASE
Soft Carrying Case	WSXs-SOFTCASE
Rack Mount Accessory	WSXs-RACK
Accessory Pouch	WSXs-POUCH
Mounting Accessory	
Clamp Mounting Stand	WSXs-MS-CLAMP

Product Description	Product Code
Local Language Overlays	
German Front Panel Overlay	WSXs-A-FP-GERMAN
French Front Panel Overlay	WSXs-A-FP-FRENCH
Italian Front Panel Overlay	WSXs-A-FP-ITALIAN
Spanish Front Panel Overlay	WSXs-A-FP-SPANISH
Japanese Front Panel Overlay	WSXs-A-FP-JAPANESE
Korean Front Panel Overlay	WSXs-A-FP-KOREAN
Chinese (Tr) Front Panel Overlay	WSXs-A-FP-CHNES-TR
Chinese (Simp) Front Panel Overlay	WSXs-A-FP-CHNES-SI
Russian Front Panel Overlay	WSXs-A-FP-RUSSIAN
Software Options	
Advanced Trigger Software Package	WSXs-ADVTRIG
Extended Math Software Package	WSXs-MATHSURF
Electrical Telecom Mask Test Software Package	WSXs-ET-PMT
Windows Lockout Software Option	WSXs-LOCKOUT
Serial Data Options	
I^2C Trigger and Decode Option	WSXs-I2Cbus TD
UART and RS-232 Trigger and Decode Option	WSXs-UART-RS232bus TD
SPI Trigger and Decode Option	WSXs-SPIbus TD
LIN Trigger and Decode Option	WSXs-LINbus TD
CAN Trigger and Decode Option	WSXs-CANbus TD
Mixed Signal Oscilloscope Options	
500 MHz, 18 Ch, 2 GS/s, 50 Mpts/Ch Mixed Signal Oscilloscope Option	MS-500
250 MHz, 36 Ch, 1 GS/s, 25 Mpts/Ch (500 MHz, 18 Ch, 2 GS/s, 50 Mpts/Ch Interleaved) Mixed Signal Oscilloscope Option	MS-500-36
250 MHz, 18 Ch, 1 GS/s, 10 Mpts/Ch Mixed Signal Oscilloscope Option	MS-250
Probes and Amplifiers*	
Set of 4 ZS1500, 1.5 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe	ZS1500-QUADPAK
Set of 4 ZS1000, 1 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe	ZS1000-QUADPAK
1 GHz Active Differential Probe (÷1, ÷10, ÷20)	AP034
500 MHz Active Differential Probe (x10, ÷1, ÷10, ÷100)	AP033
30 A; 100 MHz Current Probe – AC/DC; 30 A_{rms}; 50 A_{peak} Pulse	CP031
30 A; 50 MHz Current Probe – AC/DC; 30 A_{rms}; 50 A_{peak} Pulse	CP030
30 A; 50 MHz Current Probe – AC/DC; 30 A_{rms}; 50 A_{peak} Pulse	AP015
150 A; 10 MHz Current Probe – AC/DC; 150 A_{rms}; 500 A_{peak} Pulse	CP150
500 A; 2 MHz Current Probe – AC/DC; 500 A_{rms}; 700 A_{peak} Pulse	CP500
1,400 V, 100 MHz High-Voltage Differential Probe	ADP305
1,400 V, 20 MHz High-Voltage Differential Probe	ADP300
1 Ch, 100 MHz Differential Amplifier	DA1855A

*A wide variety of other passive, active, and differential probes are also available. Consult LeCroy for more information.

Customer Service

LeCroy oscilloscopes and probes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years, and our probes are warranted for one year.

This warranty includes: No charge for return shipping • Long-term 7-year support • Upgrade to latest software at no charge

LeCroy 1-800-5-LeCroy www.lecroy.com

Local sales offices are located throughout the world. Visit our website to find the most convenient location.

WSXs-ADS-09Mar09
10K LG