LeCroy

WaveAce™ Series Oscilloscopes
60 MHz–300 MHz

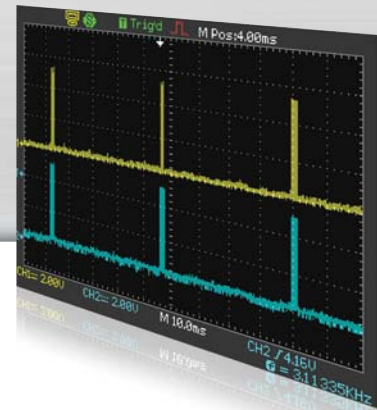**Debug With Confidence**

Key Features

- **60 MHz, 100 MHz, 200 MHz and 300 MHz bandwidths**

- **Sample rates up to 2 GS/s**

- **Long Waveform Memory — 4 kpts/Ch or 9 kpts/Ch (18 kpts interleaved)**

- **Advanced Triggering— Edge, Pulse Width, Video, Slope (Rise Time)**

- **5.7" color display on all models**

- **32 automatic measurements**

- **Multi-language User Interface and Context Sensitive Help**

- **Large internal waveform and setup storage**

- **4 math functions plus FFT**

- **USB host and device connections for printers, memory sticks and PC remote control**

A good oscilloscope should simplify how you work and shorten the time it takes to find and debug problems. The WaveAce™ combines long memory, a color display, extensive measurement capabilities, advanced triggering and excellent connectivity to improve troubleshooting and shorten debug time. With bandwidths from 60 MHz to 300 MHz, sample rates up to 2 GS/s and waveform memory up to 9 kpts/Ch (18 kpts interleaved) the WaveAce exceeds all expectations of a small affordable oscilloscope.
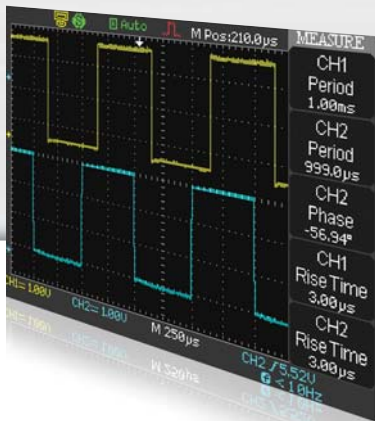
Long Capture and Zoom

Small, portable oscilloscopes often suffer from short capture time due to the small waveform memory. The WaveAce is available in 4 kpts/Ch and 9 kpts/Ch configurations which is up 2 to 3 times more than competitive products. More memory results in longer capture times showing more waveform detail with each trigger. Activate the built-in zoom function to take a closer look at the details.

Digital Filter

Digital filtering is available on each channel of the WaveAce. The Low-Pass, High-Pass, Band-Pass and Band-Stop filters allow you to isolate only the frequencies you want to see.
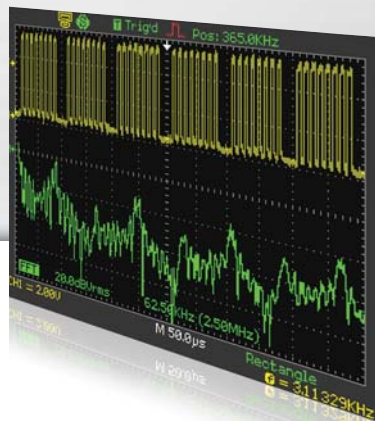
Trigger

Edge triggering is not always the best choice for every signal. Beyond the basic edge trigger is a set of trigger capabilities which include Pulse Width, Video and Slope (Rise Time) triggers.
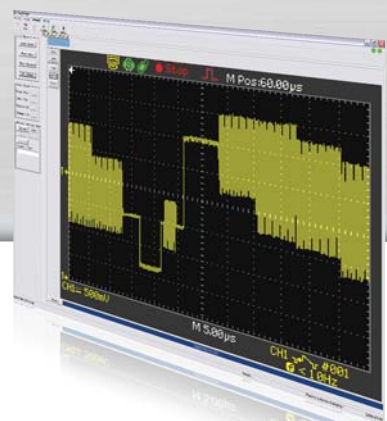
Automatic Measurements

With 32 standard automatic measurements the WaveAce simplifies how you work. Display up to 4 measurements without crowding the waveform display or show all 32 at once with the measurement dashboard. A wide range of advanced timing parameters provide insight to the relationship between 2 different signals.
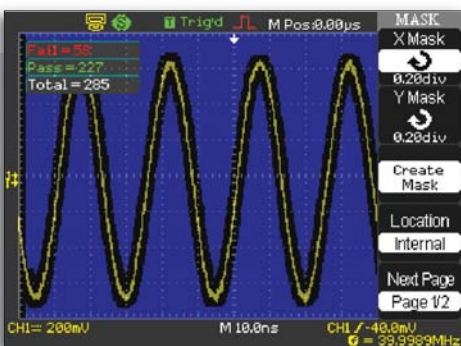
Waveform Math

The WaveAce provides five math functions including Add, Subtract, Multiply, Divide and FFT. The FFT capability includes the choices of four windows and two different vertical scales.
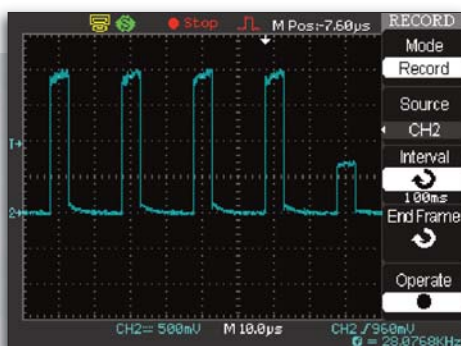
Connectivity

The WaveAce provides a USB host port on the front panel for saving screen images, waveforms and setups to a memory stick. A rear panel USB device port allows for connection to a PC or PictBridge printer. Connecting and communicating with a PC is simplified with EasyScope software providing full access to the oscilloscope's display, measurements, waveform data and front panel controls through USB or RS-232.

Large Internal Storage

Saving and recalling waveforms and setups from internal memory can save a lot of time during test and debug. The WaveAce can save up to 20 waveforms, 20 setups and 2 reference waveforms to the internal memory.

Pass/Fail Test

With built-in Pass/Fail Mask testing the WaveAce can quickly identify problems and let you know when they occur. A history of the P/F results can be displayed on the screen.

Waveform Sequence Recorder

Capture and replay a sequence of up to 2500 waveforms to isolate that runt or glitch which is causing problems in your system.

Acquisition Modes

Different applications call for different acquisitions mode. The WaveAce offers Real Time, Equivalent Time, Peak Detect and Averaging modes to ensure that any waveform can be captured and displayed.

SMART, SIMPLE, EFFICIENT

1. Fast Power Up

The WaveAce turns on and is ready for use in under 10 seconds.

2. Display

All WaveAce models have a 5.7" color display.

3. Connectivity

Saving waveforms, screenshots and setups is easy with the front panel USB port for use with a memory stick.

4. Portability

The small compact form factor weighs only 5 pounds and is only 5" deep.

5. Communication

Rear panel USB and RS-232 ports enable direct remote control from a PC. The USB port also allows for connecting to a printer.
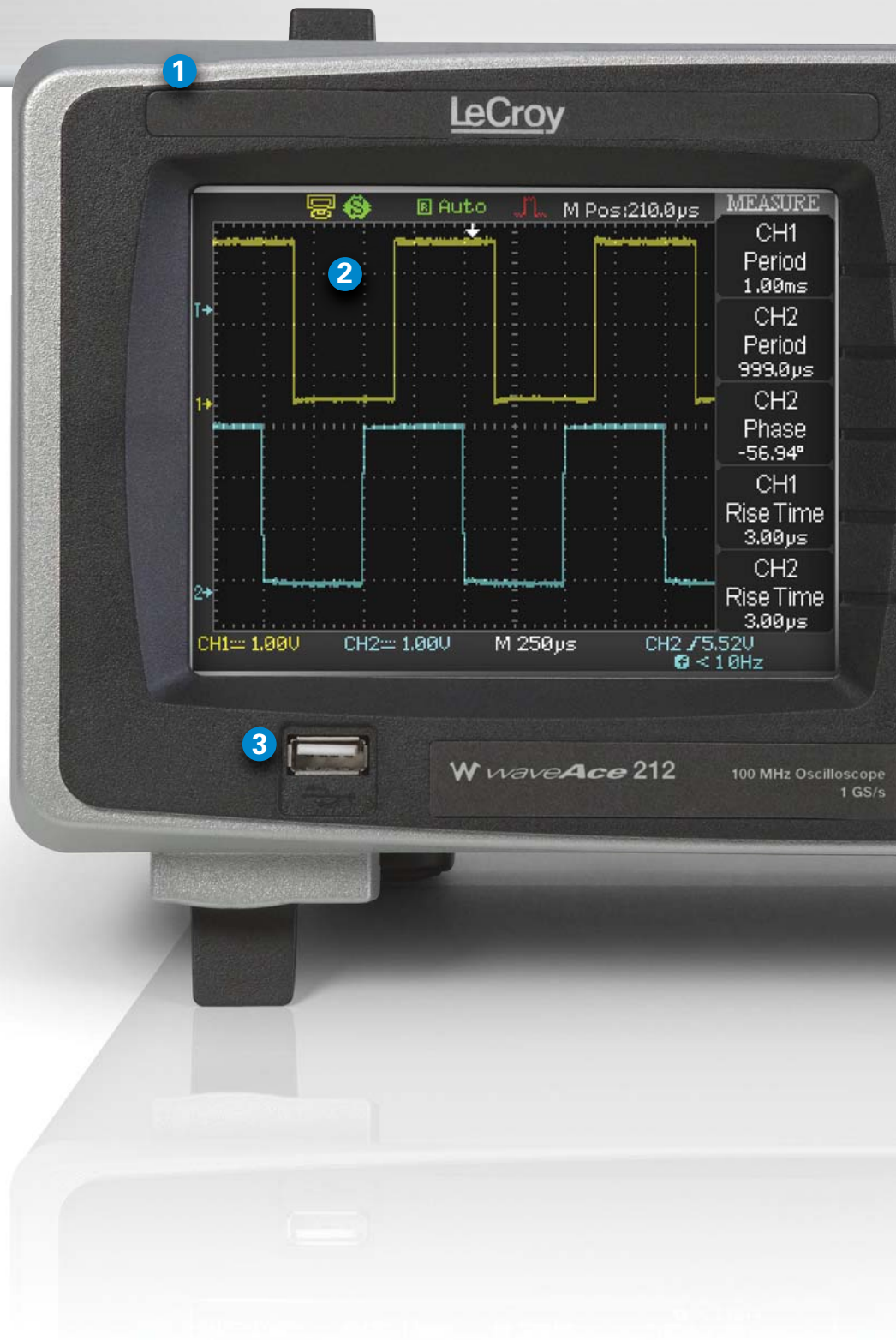
6. Intensity

Waveform intensity can be quickly adjusted by rotating this knob, a meter on the display will appear and show the current setting.

7. Individual Vertical Controls

Quickly change the vertical scale of either channel.

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8. Push Knobs

All WaveAce knobs can be pushed for additional capabilities. Push the V/div knobs to toggle between fixed and variable gain. Push the T/div knob to enter zoom mode and push the position knobs to center the waveform on screen.

9. Local Language User Interface

The intuitive user interface is available in several different languages.

10. Front Panel Print Button

Saving or Printing screenshots requires only a single button press.

11. Backlit Menu Buttons

When using certain features like Cursors or Measurements the button remains lit for easy menu navigation.

12. Context Sensitive Help

Press any button or turn any knob while in help mode and a pop-up window displays the functionality of that control.

13. Auto Setup

Quickly configures the vertical, horizontal and trigger settings for the WaveAce. Choose to view the waveform as multi-cycle, single-cycle, rising or falling edge.

SPECIFICATIONS AND ORDERING INFORMATION

	WaveAce 102	WaveAce 112	WaveAce 202	WaveAce 212	WaveAce 222	WaveAce 232
Bandwidth	60 MHz	100 MHz	60 MHz	100 MHz	200 MHz	300 MHz
Rise Time	5.8 ns	3.5 ns	5.8 ns	3.5 ns	1.75 ns	1.2 ns
Input Channels	2	2	2	2	2	2
Display	5.7" Color, 320 x 240 Resolution					
Sampling Rate (Single Shot)	500 MS/s (interleaved), 250 MS/s (all channels)		1 GS/s (all channels)		2 GS/s (interleaved), 1 GS/s (all channels)	
Sampling Rate (Equivalent Time)	50 GS/s					
Peak Detect Period	10 ns					
Memory Length	4 kpts/Ch		9 kpts/Ch, (18 kpts interleaved)			
Vertical Resolution	8-bits					
Vertical Sensitivity	2 mV/div–5 V/div					
Bandwidth Limiting Filter	20 MHz					
Maximum Input Voltage	400 V Pk				400 V Pk, 5 V_{rms} (50 Ω)	
Input Coupling	1 MΩ ‖ 13 pF				1 MΩ ‖ 13 pF, 50 Ω	
Input Impedance	GND, DC 1 MΩ, AC 1 MΩ					
Probes	10:1, 1:1 Switchable Passive Probe (one per channel)					
Timebase Range	5 ns/div–50 s/div		2.5 ns/div–50 s/div			

Triggering

Triggers	Edge, Pulse Width, Video, Slope (Rise Time), Alternate

Measure, Math, and Wave Recorder

Measure	Amplitude, Average, Base, Burst Width, Cyclic RMS, + Duty Cycle, - Duty Cycle, Fall Time, Frequency, Max, Mean, Min, Peak-Peak, Period, Phase, Rise Time, RMS, Top, + Width, - Width. Plus 8 advanced parameters for edge to edge timing measurements
Math	Add, Subtract, Multiply, Divide, FFT (up to 1 kpts with Rectangular, Von Hann, Hamming or Blackman windows)
Waveform Sequence Recorder	Record and playback a sequence of up to 2500 waveforms

Physical

Dimensions (HWD)	154 mm x 305 mm x 133 mm; 6" x 12" x 5.2" (height excludes feet)
Shipping Weight	2.3 kg; 5 lbs.

Ordering Information

Product Description	Product Code
60 MHz, 2 Ch, 500 MS/s (Max.), 4 kpts/Ch with 5.7" Color Display	WaveAce 102
100 MHz, 2 Ch, 500 MS/s (Max.), 4 kpts/Ch with 5.7" Color Display	WaveAce 112
60 MHz, 2 Ch, 1 GS/s (Max.), 9 kpts/Ch (18 kpts interleaved) with 5.7" Color Display	WaveAce 202
100 MHz, 2 Ch, 1 GS/s (Max.), 9 kpts/Ch (18 kpts interleaved) with 5.7" Color Display	WaveAce 212
200 MHz, 2 Ch, 2 GS/s (Max.), 9 kpts/Ch (18 kpts interleaved) with 5.7" Color Display	WaveAce 222
300 MHz, 2 Ch, 2 GS/s (Max.), 9 kpts/Ch (18 kpts interleaved) with 5.7" Color Display	WaveAce 232

Included with Standard Configuration

One Passive Probe per Channel

Multi-language User-interface and Help (English, French, German, Japanese, Korean, Portuguese, Russian, Simplified Chinese, Spanish, Traditional Chinese)

EasyScope PC Software with USB Cable

User Manual and Quick Reference Guide

Calibration and Performance Certificate

3-year Warranty

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.