Probing Solutions

CONVENIENT, HANDS-FREE PROBING

To access the ever-increasing variety of test points, today's probing solutions need to be versatile, small, and light-weight. The new HFP series of probes meets these needs with high bandwidth, miniature size and a variety of tip styles, making probing easier than ever.

In combination with these innovative probe tips, the unique HFP FreeHand probe holder will hold the probe on test points to maintain signal fidelity. The end result of HFP "hands-free" probing is the enhanced ability to analyze waveforms instead of having to focus energy on keeping the probe itself in place.

AUTOCOLOR ID

When the probe is connected to a Waverunner LT scope, our new patent-pending AutoColor ID feature automatically senses and illuminates the probe head in that channel's trace color. You no longer need to worry about plastic rings or colored tape to identify which channel on the scope is connected to a particular test point.
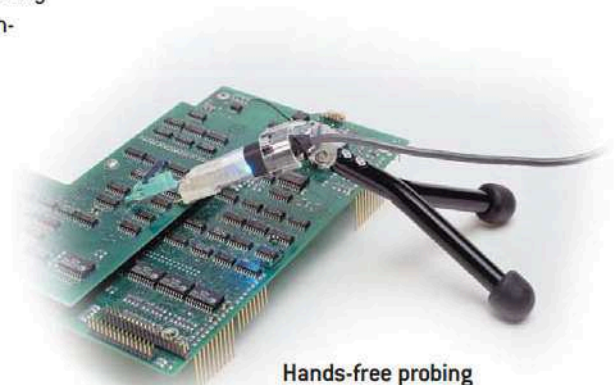
CURRENT PROBES

CP150 and CP015 are high-performance current probes capable of measuring 150 amp and 15 amp current signals. They incorporate Hall effect and transformer technology to measure both DC and AC currents. LeCroy also offers the best differential amplifiers available on the market, the DA1800 series.

Other useful accessories for the Waverunner LT series are low-cost active differential probes, high voltage probes, an internal graphics printer, and a choice of two scope carts.

HFP1500

Leading Specifications

1.5 GHz Bandwidth
0.7 pF Input Capacitance at 1 GHz
100 kΩ VDC Input Resistance
±8 V Dynamic Range
5 Interchangeable Tips available for Probing a Variety of Test Points
Replaceable Probe Tip Socket
Hands-Free Probing with "Freehand" probe holder
AutoColor ID Feature Matches the Probe Color to the Trace Color

Hands-free probing with FreeHand probe holder and HFP probe

The new current probes CP150 and CP015.

Signal Measurements and Analysis

*wave*runner™

The new Wavepilot button and the Analysis Control Area provide quick access to a comprehensive, easy-to-use set of signal analysis tools that help you solve problems fast. Optional packages expand the Waverunner LT scope to a complete signal analyzer.

STANDARD IN ALL MODELS

Press Wavepilot to select the Parameter Dashboard and view up to 26 automatic measurements that update with your waveform — in real-time, on screen. Select Graph and view an FFT of a signal—up to 50 kpoints. Process signals with Math Tools including averaging to 1,000 sweeps to reduce noise or use enhanced resolution for up to 11 bits of vertical resolution. Chain up to 4 math functions and display the final waveform or any of the intermediate steps.

EXTENDED MATH AND MEASUREMENTS (EMM)

The EMM option provides basic graphical signal analysis tools including Histograms (200 events) and Trending of parameters (expanded to over 40). Additional Math Tools include signal integration and differentiation.

WAVEANALYZER SIGNAL ANALYSIS (WAVA)

Waveform averaging capability increases to one million acquisitions. The FFT spectrum analysis expands to process all acquired data up to 8 Mpts and provides additional spectral views. Histograms (up to 2 billion events) and Trends let you view and measure statistical variations of signal parameters.

JITTER AND TIMING ANALYSIS (JTA)

JTA has broad applications in measuring and analyzing digital electronics or mechanically related signals. Measure a wide variety of timing parameters: cycle-to-cycle, period, frequency, time interval, and width. Use JitterTrack to plot the parameter variation vs. time.
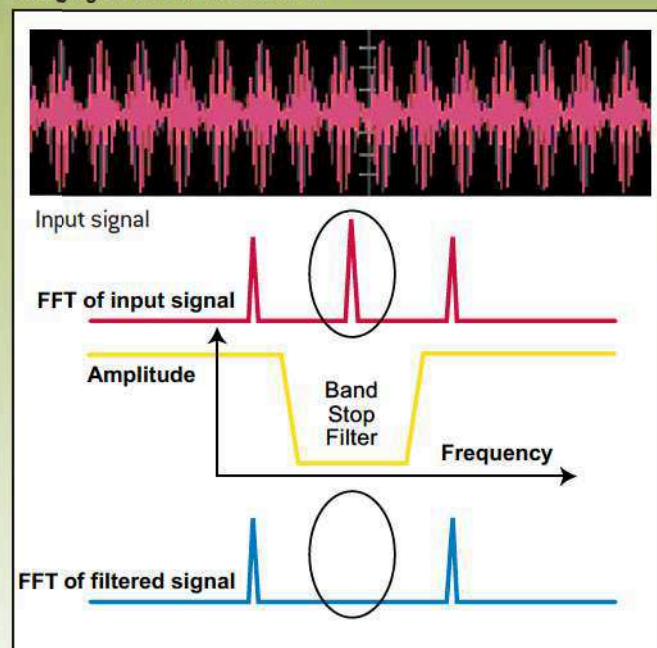
WAVEANALYZER WITH JTA (JTWA)

The WaveAnalyzer JTA option is the ultimate tool for characterization and troubleshooting in time, frequency, and statistical domains. It includes:

• WaveAnalyzer Signal Analysis (WAVA)

• Jitter and Timing Analysis (JTA)

DIGITAL FILTER PACKAGE (DFP)

The DFP option implements a set of linear-phase Finite Impulse Response (FIR) filters. The package enhances your ability to examine important signal components by filtering out undesired spectral components such as noise.

FILTERS INCLUDE:

Low Pass	Raised Cosine
High Pass	Raised Root Cosine
Band Pass	Gaussian
Band Stop	Custom
Up to 4 filters can be cascaded	

Design your own filters with DFP

Input signal

FFT of input signal

Amplitude

Band Stop Filter

Frequency

FFT of filtered signal

Powerful Applications

SOLUTION PACKAGES

Here are solution packages from LeCroy targeted to your specific test applications. You'll find that these packages will bring precise measurements and fast analysis to your workflow.

WORLD CLASS POWER MEASUREMENT SOLUTIONS

With LeCroy PowerMeasure Systems, you can analyze power devices' performance while they are operating in circuit. The PowerMeasure System combines the required current and differential voltage measuring capability with unequalled DSO triggering, long record capture, and waveform math to make these difficult measurements as simple as the push of a very few buttons.
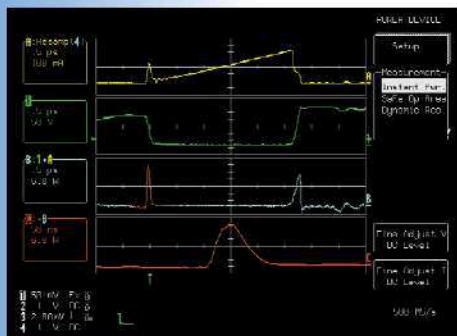

Current, voltage, instantaneous power, and energy dissipation measurements.
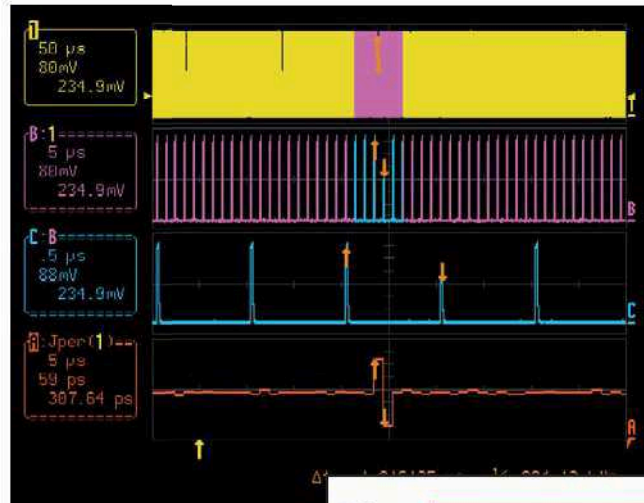
JitterTrack clearly shows timing variation as it tracks the signal cycle by cycle.

JITTER & TIMING ANALYSIS (JTA)

This analysis package provides a comprehensive set of precise timing measurements for clock, clock-to-data, and data-stream analysis. TrackView shows deviations directly synchronized to the signal — patterns you would never see without this view. Press the Wavepilot button for easy access, and zoom in on both the "where" and the "why" of the problem; you can see it and fix it! Quickly gain insight into the source of timing and signal integrity problems.
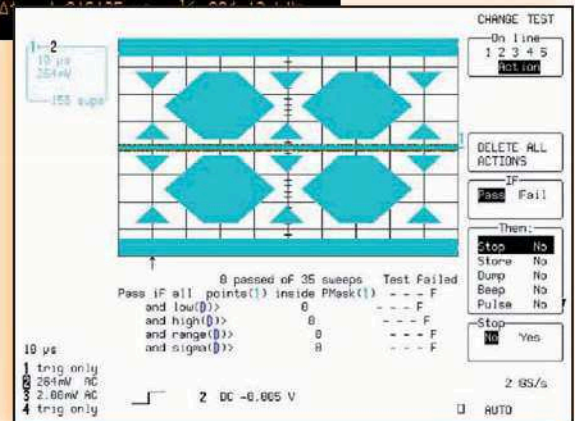
An Ethernet 100Base-T mask created with the MaskMaker utility.

POLYMASK

PolyMask is a powerful, general-purpose testing application that lets you view and test against complex masks. PolyMask locates and clearly depicts signal failures. In pass/fail testing, failures are highlighted with colored circles. Creating masks is greatly simplified with the MaskMaker utility, a simple program that runs on any PC with Windows. Masks can be used in either normal or X-Y display mode (useful for applications such as power measurement).

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waverunner™

Windows Connectivity
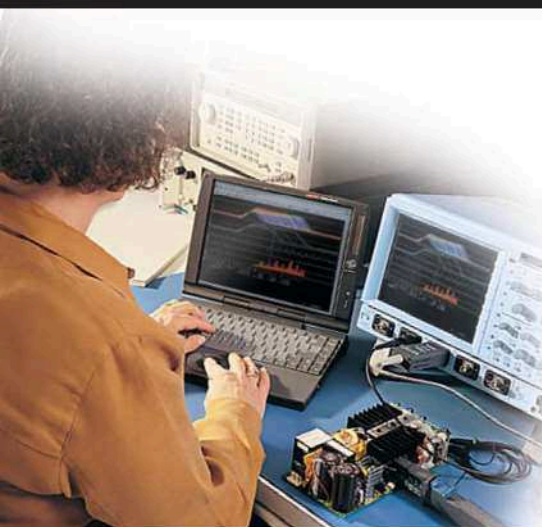
All it takes is a PC with Windows and a GPIB, RS-232-C, or the Ethernet option.

Connect your scope to Windows-based ScopeExplorer using the Ethernet (option), GPIB, or RS-232 interfaces. Click and drag files, or operate from the virtual front panel. Update your software via the web.

WINDOWS SOFTWARE TO ENHANCE YOUR PRODUCTIVITY

ScopeExplorer and ActiveDSO are Windows (95, 98, 2000, or NT) PC-based connectivity tools that make it easy to interface your Waverunner LT scope with a PC via Ethernet, RS-232-C, or GPIB. It's easy

ScopeExplorer interactive front panel with familiar Windows PC operation.

ScopeExplorer provides access to the scope's storage media to view, edit, save, load, and run scope setup and CustomDSO applications.

to integrate scope data with Windows applications, as well as to control the Waverunner LT scope from your PC

SCOPEEXPLORER

Annotate and print screen shots, drag and drop files, save and load scope setup panels, and run CustomDSO applications. Click on the print icon to send the file to the printer of your choice. Access files on storage media, including PC-Cards, hard drives, and floppy diskettes.

ACTIVEDSO

ActiveDSO is a LeCroy software utility for ActiveX control of LeCroy digital scopes.

Exchange Waverunner LT scope data with applications that support the ActiveX standard. Many applications (such as Excel, PowerPoint, Internet Explorer, Visual Basic, Visual C++ and Labview) allow users to incorporate ActiveX controls.

MASKMAKER AND DSO FILTER

These easy-to-use Windows-based graphic utilities let you create and edit test masks and digital filters for use on Waverunner LT scopes. Use MaskMaker with the PolyMask tolerance mask testing option. You can even create X-Y masks.

With the DSO Filter PC utility and DFP (Digital Filter Package), you can specify a set of filter coefficients in an Excel spreadsheet and load them directly into the oscilloscope.