

Floppy-Free Documentation

Saving Data, Panels Setups & Images via Remote Control

For many years, the floppy diskette has been indispensable for saving waveform files, panel setup (or "state of the machine") files, and screenshots of the front-panel display. For users who make extensive use of these documentation features, a significant amount of time is spent pushing menu buttons, checking file directories, and transferring the floppy back and forth to a computer.

LeCroy provides several tools that enable oscilloscope users to eliminate these wasteful steps in documenting their work. The software utilities *ActiveDSO* and *ScopeExplorer* streamline the documentation process. All that is needed is an RS232 connection to your oscilloscope, although a GPIB connection provides a faster transfer rate. This Application Brief describes how to use these tools to increase documentation efficiency. Both utilities are

available for download from the LeCroy website, <http://www.lecroy.com> at no charge

ScopeExplorer is a standalone application used to operate LeCroy oscilloscopes and signal analyzers from PCs running Windows 95/98/NT. It includes utilities for saving panel setups, waveform data, and the display. Figure 1 shows the Scope Explorer application window with the Panel, Trace and Display windows opened.

The **Panel Window** maintains a list of stored panel setups, allowing users to see when a panel was saved and to upload the panel back to the scope when necessary. To save a panel, choose "Get Panel from Scope" from the Panel Menu.

To save data to your PC from any input channel or Math trace, select the trace in the **Trace Window** and choose either "Get in binary format"

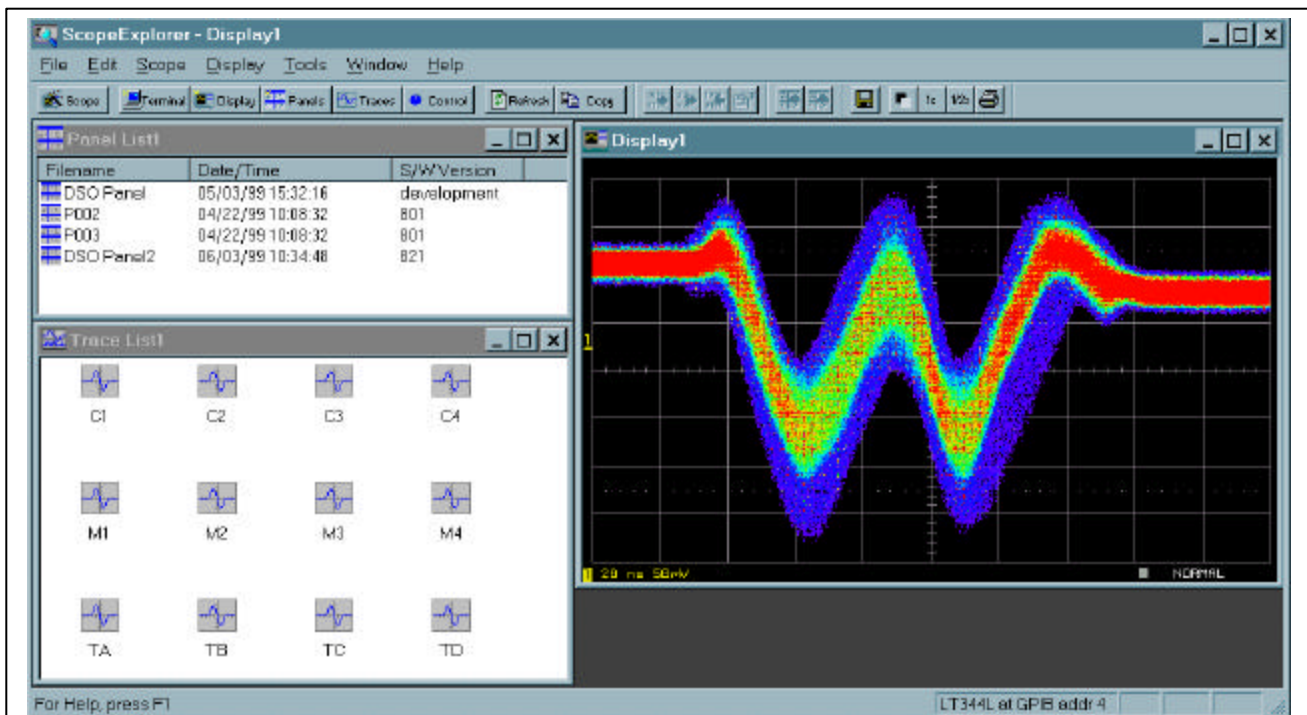


Figure 1 – The ScopeExplorer Application Window, with Panel, Trace and Display windows open.

or "Get in ASCII format" from the Trace menu. Waveforms stored in binary are smaller in size, and can be converted to ASCII at any time via the "Convert Waveform to ASCII" tool. Waveforms stored in ASCII format can include a column with time values as well as voltage values. The option to store data in raw format (ADC codes) is available as well. *Note* - When saving Math traces (trace A, B, C or D) use Word Mode, which uses a 16-bit data format.

Lastly, to save the display image, click the **Display** button from the toolbar. Once the image has been transferred, it will be displayed in its own window. Choose "Save As" from the File menu to save the display image as bitmap file. The display image can also be copied and pasted into your electronic logbook.

For more details on using ScopeExplorer, see the help file included with the installation.

For users who want the versatility of customizing documentation features within their own

application, **ActiveDSO**, a LeCroy-designed ActiveX control, can be used to control LeCroy oscilloscopes and signal analyzers, as well as to store waveforms, display imagefiles and panel setups.

Figure 2 shows an ActiveDSO example implemented in Microsoft Excel. The spreadsheet includes buttons that are linked to Visual Basic for Applications (VBA) subroutines that perform the documentation functions, using calls to the appropriate ActiveDSO methods. The spreadsheet and the VBA code are completely customizable, allowing the user to modify it to suit his or her individual needs..

In addition to Excel, similar applications can be written for use in a Microsoft Access database, Visual Basic or Visual C++ program, or any other application that is ActiveX compatible. See the ActiveDSO section of the LeCroy website for additional Application Briefs on ActiveDSO, and to download the Excel example.

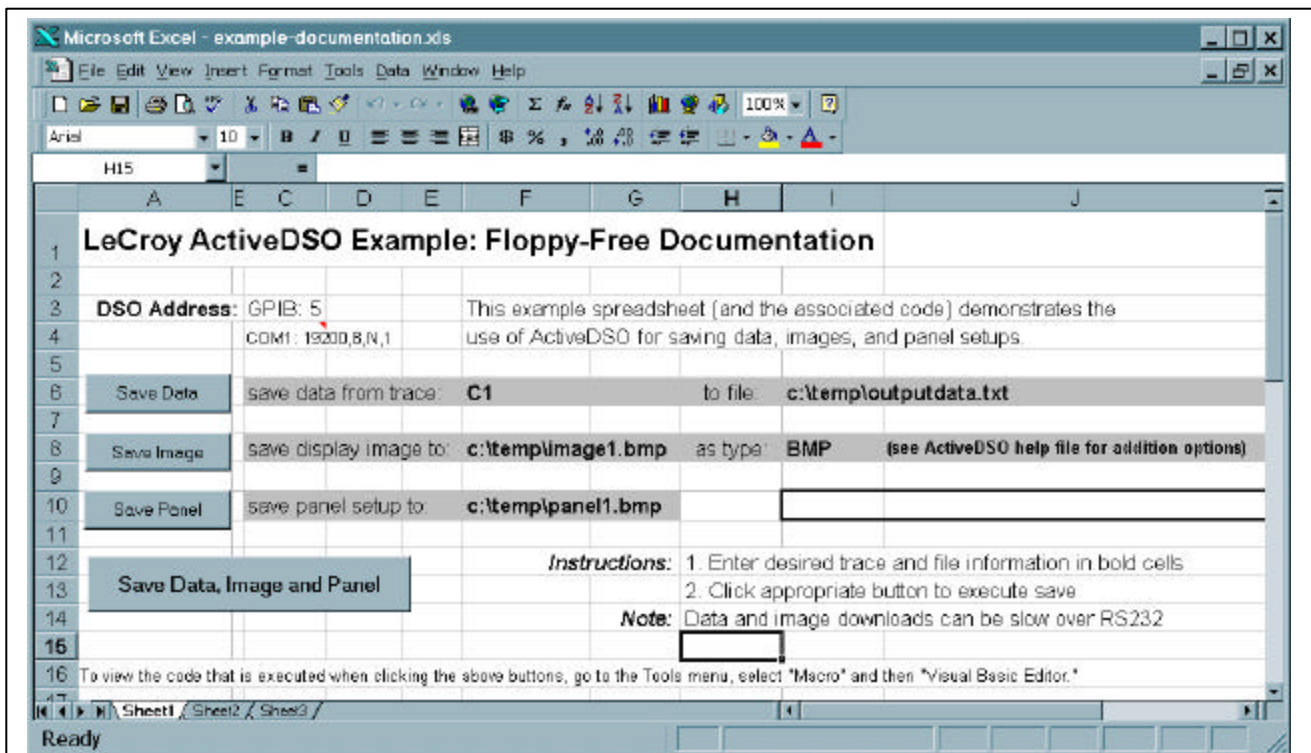


Figure 2 – Microsoft Excel spreadsheet for Floppy-Free documentation. The 4 buttons are linked to subroutines that utilize ActiveDSO methods for communications with LeCroy oscilloscopes.

Filename: Lab810-floppyfree.doc
Directory: \\Apini\work\LAB810
Template: C:\Documents and Settings\kpazmino\Application
Data\Microsoft\Templates\Normal.dot
Title: Making the Most of ActiveDSO
Subject:
Author: LeCroy Corporation
Keywords:
Comments:
Creation Date: 6/17/1999 11:05 AM
Change Number: 2
Last Saved On: 6/17/1999 11:05 AM
Last Saved By: LeCroy Corporation
Total Editing Time: 0 Minutes
Last Printed On: 8/22/2001 3:00 PM
As of Last Complete Printing
Number of Pages: 2
Number of Words: 521 (approx.)
Number of Characters: 2,971 (approx.)