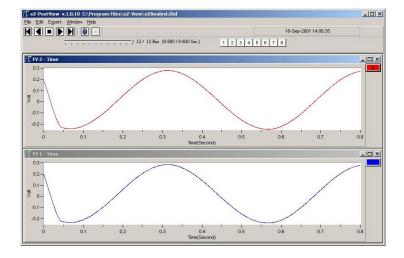
Time-Domain Post-Data Acquisition View Application



eZ-PostView User's Guide p/n 1086-0926 Rev. 2.0

Manual Layout

This document is a reference manual for *eZ-PostView's* Menu options, associated Toolbar buttons, and resulting GUI screen images.

The document is arranged as follows:

Introduction

- Ch 1 *Getting Started with eZ-PostView* lists system requirements and provides instructions for installing *eZ-PostView* onto a PC.
- Ch 2 *eZ-PostView Menus and Windows* explains the Menus, software buttons, and windows that are part of *eZ-PostView's* Graphical User Interface (GUI).
- Ch 3 *Interactive Features of eZ-PostView's Plot Display Window* explains how to change plot display characteristics, including display functions, by using the interactive features of the display window.
- Appendix A Keyboard Controls identifies keys for controlling plot display, menus, windows, and record/playback functions for the eZ-Analyst program from which eZ-PostView was derived. Many of the key controls can be used with eZ-PostView.



Check the **README.TXT** file for information that may not have been available at the time this manual went to press.

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Introduction

Ch 1 – Getting Started with eZ-PostView

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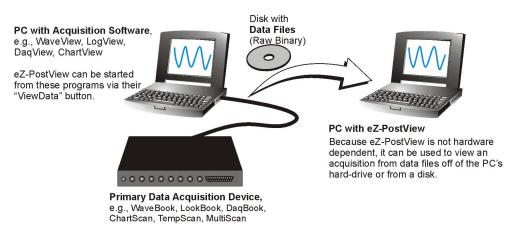
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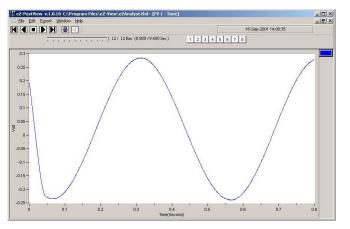


eZ-PostView Can Be Used without the Presence of Acquisition Hardware

eZ-PostView is a time-domain post-acquisition data viewing application that has been integrated with primary data acquisition software, including *DaqView*, *Personal DaqView*, *ChartView*, *LogView*, and *WaveView*.

The *eZ-PostView* application provides easy-to-use post-acquisition analysis capability, and is included free of charge as a part of product support. From this application you can display up to 8 time-domain function windows and display up to 16 channel traces per window. Data is automatically scaled to optimize its fit in the window.

From *eZ-PostView* you can customize window, channel trace, and cursor colors.



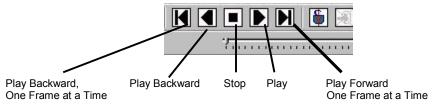
A Screen Capture from eZ-PostView

Once installed, *eZ-PostView* can be launched from the data-acquisition program by a simple click of the <View Data> button. As an alternative, the application can be launched independent of the acquisition program and supported data files can be loaded for viewing.

eZ-PostView includes the following features:

- File Input Format Support for: *DaqView, WaveView, Personal DaqView, ChartView*, Universal File Format UFF-58B.
- Can show 8 Display Windows simultaneously
- Can show 16 Channel Traces per Display Window
- Includes Automatic Data Scaling
- User-Configurable Data Display is provided for channels and trace colors
- Allows for multiple Tiling, or Cascading, of display windows

eZ-PostView makes use of buttons similar to those found on VCRs. As indicated by the following figure, you can select to play the data display forward, backward, or frame by frame in either direction. The playback task bar is located just below the menu bar, which is detailed in chapter 2.



Playback Task Bar

System Requirements 1-1 Software Installation 1-2

System Requirements

Your computer should meet the following **minimum** requirements.

- Intel[™], Pentium 90 MHz or equivalent
- 64 MB Memory
- 100 MB Hard Disk space
- Monitor: SVGA, 800 x 600 resolution
- One of the following Microsoft[®] Windows Operating Systems:
 - Windows 98 Windows Me Windows NT Windows 2000
 - Windows XP



If you purchased software, associated authorization codes will accompany your installation CD. If this is the case, keep your codes in a safe place. You will need to enter them once, during an actual run of the purchased software.

Note that no authorization code or password is needed to run eZ-PostView.

Software Installation



Before installing a version of our data-acquisition software, remove all previous versions of that software.

Reference Notes:

- Adobe Acrobat PDF versions of documents pertaining to your system hardware and software are automatically installed onto your PC's hard-drive as a part of product support at the time of software installation. The default location is the **Programs** group, which can be accessed via the *Windows Desktop Start Menu*.
- \succ PDF versions of documents can be read directly from the data acquisition CD.
- After your software is installed you can setup your data acquisition device, e.g., WaveBook, DaqBook, LogBook, and connect it to the host computer. Instructions for hardware setup are included in your device user's manual, which is included on the CD.

When you first install software for your acquisition device, *eZ-PostView* will automatically be selected for installation along with the primary acquisition software application. For example, when a WaveBook is selected, both *WaveView* and *eZ-PostView* will show as pre-selected software options.

To install eZ-PostView ...

- 1. Start Windows.
- 2. Close all running applications.
- 3. Insert the Data Acquisition CD into your CD-ROM drive and wait for the CD to auto-run.

If the CD does not start on its own:

- (a) click the desktop's <Start> button
- (b) choose the Run command
- (c) select the CD-ROM drive, then select the **setup.exe** file
- (d) click <OK>

An Opening Screen will appear.

- 4. Click the **<ENTER SETUP>** button.
- 5. On the hardware selection screen [which follows a licensing agreement], select your hardware from the drop-down list.
- 6. On the resulting software options screen, select the software that is applicable to your system. Note that *eZ-PostView* is already selected by default.
- 7. Click the <Install> button; then follow the screen prompts to complete the installation.



You will be prompted to enter an Authorization Code.

- ➢ If you purchased *eZ-TimeView* or *eZ-FrequencyView* enter the code for the associated application; then click the <Apply Code> button.
- If you are installing eZ-PostView [which requires no code], simply click the <OK> button or, if you prefer, click the <Start 30 Day Trial> button to try out the more powerful eZ-FrequencyView Application.

| 🖺 A | uthorization | | х |
|-----|---------------------------|---------------|---|
| | Enter Authorization Code: | | |
| | Feature | Authorization | |
| | | | |
| | | | |
| | Apply Code Start 30 Da | y Trial OK | |

Authorization Dialog Box

Note: Entry of your Authorization Code is only required once. However, you can enter a new code at a future date, for example, if you wanted to upgrade from *eZ-PostView* to *eZ-FrequencyView*.

To open the Authorization Dialog Box:

- 1. Open *eZ-PostView*. You can open *eZ-PostView* by clicking the *<***ViewData***>* button in your primary data acquisition program, e.g. *WaveView, DaqView, LogView,* etc.
- 2. From *eZ-PostView's* File Pull-Down menu, select *Authorization* (following figure). The *Authorization* dialog box appears.

| File | Edit | Export | Window | н | | |
|-------|------------------------------|----------|--------|---|--|--|
| 0 | pen D | ata File | | | | |
| S | Save Data File | | | | | |
| S | Save Plot Setup(PSET) | | | | | |
| R | Recall Plot Setup(PSET) | | | | | |
| Print | | | | | | |
| C | C:\Program Files\eZ-View\eZA | | | | | |
| A | Authorization | | | | | |
| E | xit | | | | | |

File Menu

To enter a code:

- 1. Type-in the code, as it appears on your Authorization Sheet.
- 2. Click the **<Apply Code>** button.



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Features of eZ-PostView

The free eZ-PostView application includes the following features.

- File Input Format Support for: DaqView, WaveView, Personal DaqView, ChartView, UFF-58B.
- 8 Display Windows
- 16 Channel Traces per Display Window
- Automatic Data Scaling
- Configurable Data Display for channels and trace colors
- Multiple Tiling of display windows

Note that *eZ-PostView* was derived from a much more versatile *eZ-Analyst* program. A comparison of *eZ-PostView* features to those of eZ-Analyst and 2 other derived applications appears on page 2-2.

As indicated by the following table, many features do not apply to *eZ-PostView*. In the screen images, both those of the actual application and those presented as figures in this manual, information that does not apply to *eZ-PostView* is either "grayed-out" or "hidden." The same applies to functions of the pull-down menus.



Reference Note:

The document, *eZ-Analyst Series Software Reference*, p/n 1086-0922 contains information that is applicable to the higher-level "view" programs *eZ-TimeView and eZ-FrequencyView*, and to *eZ-Analyst*. The *eZ-Analyst Series* document includes information regarding the Miscellaneous and the Octave Tabs, which do not apply to *eZ-PostView*.

| eZ-Analyst Series Comparison Matrix | | | | | | |
|--|---|----------------------------|---|---|--|--|
| Feature | Feature Post-Acquisition Viewing Package eZ-Analyst | | | | | |
| | eZ-PostView | eZ-TimeView | eZ-FrequencyView | | | |
| File Input Format Support for: DaqView, WaveView, Personal DaqView, ChartView, UFF-58B. | Yes | Yes | Yes | Yes | | |
| File Export to: ME'Scope and SMS Modal, Microsoft Excel, Binary Universal File, and ASCII text files. | | Yes | Yes | Yes | | |
| Display Windows, number of | 8 | 8 | 8 | 8 | | |
| Channel Traces per Display Window | 16 | 16 | 16 | 16 | | |
| Automatic Data Scaling | Yes | Yes | Yes | Yes | | |
| Simulated Data Playback | | Yes | Yes | Yes | | |
| Configurable Data Display for channels and trace colors | Yes | Yes | Yes | Yes | | |
| Multiple Tiling of display windows | Yes | Yes | Yes | Yes | | |
| Cursor Support - for both Single Cursor and Band Cursor | | Yes | Yes | Yes | | |
| Data Strip Chart Display | | Yes | Yes | Yes | | |
| Peak-to-Peak Calculations | | Yes | Yes | Yes | | |
| Peak Searching, minimum and maximum | | Yes | Yes | Yes | | |
| Mean Calculations | | Yes | Yes | Yes | | |
| RMS Calculations | | Yes | Yes | Yes | | |
| Zooming [of the data display] | | Yes | Yes | Yes | | |
| Windowed Time Display Function | | Yes | Yes | Yes | | |
| Cross Channel Support | | | FFT, FRF, Cross, Coherence, Transfer Function | FFT, FRF, Cross, Coherence, Transfer Function | | |
| Transfer Function Display Types | | | Note 1 | Note 1 | | |
| Complex Function Display Types | | | Note 2 | Note 2 | | |
| Scale Types | | RMS, Peak, Peak-to-Peak | RMS, Peak, Peak-to-Peak | RMS, Peak, Peak-to-Peak | | |
| Function Display Types | | Time, Strip Chart | Note 3 | Note 3 | | |
| Octave Types | | | 1/3, Full | 1/3, Full | | |
| Octave Weighting | | | Linear, A, B, C | Linear, A, B, C | | |
| Waterfall Plots | | | Yes | Yes | | |
| Integration/Differentiation (Single/Double) | | | Yes | Yes | | |
| Response Channel FFT Windows | | | Note 4 | Note 4 | | |
| Reference Channel FFT Windows | | | Rectangular, Cosine Taper | Rectangular, Cosine Taper | | |
| Low-Pass DC Noise Filtering | | | Yes | Yes | | |
| Spectral Strip Chart Display Synchronization | | | Yes | Yes | | |
| Octave Strip Chart Display Synchronization | | | Yes | Yes | | |
| Record and Save Data to Disk | | | | Yes | | |
| "Real Time" Data Display | | | | Yes | | |

Comparing eZ-PostView to other eZ-Analyst Series Applications

Notes: 1) *eZ-Analyst* and *eZ-FrequencyView* - each offers the following Transfer Function Display Types: Inertance, Mobility, Compliance, Apparent Mass, Impedance, and Dynamic Stiffness.

2) eZ-Analyst and eZ-FrequencyView - each offers the following Complex Function Display Types: Magnitude, Phase, Real, Imaginary, Nyquist, Magnitude and Phase, and Real and Imaginary.

3) **eZ-Analyst** and **eZ-FrequencyView** - each offers the following **Function Display Types:** Spectrum, Auto-Spectrum, PSD (Power Spectral Function), Strip Chart.

4) eZ-Analyst and eZ-FrequencyView – each offers the following Response Channel FFT Windows: Hanning, Flat Top, Exponential, and Blackman-Harris.

File Menu

The File Menu provides a means to print plotted data, as well as open and save data files.

Open Data File ... (.thd or .dsc)

Used to locate and open saved files. ZonicBook uses files with **.thd** extensions. View applications, i.e., WaveView, DaqView, Personal DaqView, LogView, and ChartView use files with **.dsc** extensions.

Save Plot Setup (PSET) ...

These two menu items provide a means of saving [or opening] function files. Time and auto-spectrum data is saved. If there is any reference channel cross-spectrum is saved for all channel pairs. The file extension is **.mds**.

Recall Plot Setup (PSET) ...

These two menu items provide a means of saving [or recalling] the current plot condition, such as window locations and window content, including: channel numbers, function type, axis-type, and range. These files can be recalled at a later date to process customized plot conditions.

Without user intervention, the plot setup file is automatically saved with .mds, .dsc, and .thd files.



You can have plot setups automatically recalled whenever you recall data files. To select this option, open the Preferences window [accessed through the Edit pull-down menu] and check the box labeled "Recall Plot Setup When Recall Data Files."

Print

The standard print window associated with your specific computer will open. Select a printer and the number of copies needed before clicking <OK>.

Note: In regard to printing, black plot backgrounds changed to white.

Authorization

Provides a means of enabling additional view features that are available with purchased software, i.e., *eZ-TimeView* and *eZ-FrequencyView*. Aside from a trial period, an authorization code is required to enable the applications available features. *eZ-TimeView*, *eZ-FrequencyView*, and the *eZ-Analyst* program from which they were derived are discussed in the document, *eZ-Analyst Series Software Reference*, p/n 1086-0922.

Exit

This menu item closes the *eZ-PostView* application.

Edit Menu

The Edit Menu provides a means of configuring *eZ-PostView* in regard to both functionality and appearance. The menu contains the following selections, each of which is detailed in the subsequent sections:

Configuration Window..... 2-4 Playback Setup Window..... 2-7 Window Colors Window..... 2-8 Preferences Window..... 2-9

Edit Menu > Configuration Window

The **Configuration** item provides a means of changing the majority of *eZ-PostView* settings in regard to determining how the data is manipulated. The Configuration selection displays the **Configuration Window** with one of several tab dialogs displayed. Selectable tabs are:

Acquisition Tab..... 2-5 Input Channels Tab 2-6 Octaves Tab (the tab is present, but does not apply to *eZ-PostView*) Miscellaneous Tab (the tab is present, but does not apply to *eZ-PostView*)

| Acquisition | Input Channels | Octaves | Miscellaneous |
|---|----------------|--------------|---------------|
| Acquisition Sample Rate: 2560. samples / s Time Blockvize: 2048 Time Delta X: 0.00039 seconds Time Block: 0.8000 seconds File Size: 10.00 seconds 13 blocks 0.3945 MB | | 7 | |
| | | [Junumumumum | |

eZ-PostView's Acquisition Setup Tab

Edit Menu > Configuration > Acquisition Tab: Acquisition Panel

With respect to eZ-PostView, the Acquisition Panel provides "read-only" text pertaining to the following:

Sample Rate (samples per second)

Time Blocksize (Acceptable blocksizes range from 128 to 16384 data points).

Time Delta X

Time Block

File Size in: seconds blocks disk space in MB

Edit Menu > Configuration >

The Input Channels tab displays the setup conditions of the input channels as they were when the acquisition was saved-to-disk. Actual hardware setup can not be changed from *eZ-PostView*. The grayed-out columns, in the following figure, can not be changed from *eZ-PostView*.

| | Acq | uisition | Inpu | t Channels | Ľ | 0 | ctaves | Ť | Miscell | aneous |
|-----|--------|-----------|----------|------------|------------|-------|-----------|-----------------|---------|----------|
| No. | Active | Label | R Type | FSV | EU Mode | mV/EU | EU Offset | dB Ref(EU V) | Units | Location |
| 1 | ON | Channel 1 | Response | 20.00 | Volt | 200.0 | 120.0 | 1.000(V) | mils | 1 |
| 2 | ON | Channel 2 | Response | 20.00 | Volt | 200.0 | 0.00302 | 1.000(V) | mils | 2 |
| 3 | ON | Channel 3 | Response | 20.00 | Volt | 100.0 | 0.00622 | 1.000(V) | g's | 3 |
| 4 | ON | Channel 4 | Response | 20.00 | Volt | 100.0 | 0.00619 | 1.000(V) | g's | 4 |
| 5 | ON | Channel 5 | Response | 20.00 | Volt | 100.0 | 0.00621 | 1.000(V) | g's | 5 |
| 6 | ON | Channel 6 | Response | 20.00 | Volt | 1000. | 0.00062 | 1.000(V) | Volts | 6 |
| 7 | ON | Channel 7 | Response | 20.00 | Volt | 1000. | 0.00060 | 1.000(V) | Volts | 7 |
| 8 | ON | Channel 8 | Response | 20.00 | Volt | 1000. | 0.00060 | 1.000(V) | Volts | 8 |
| • | | | | | | | | | | <u>ı</u> |
| | | | | | | | ок | 1 | ancel | Apply |

Input Channels Tab Selected

| No.: | This column lists all available channels. It can not be edited. |
|-----------------------|--|
| Active: | Shows "ON" for input channels that were active during the acquisition. The column can not be edited in <i>eZ-PostView</i> . |
| Label: | This should be a meaningful channel name. Highlight a cell before typing a label. When you press the Enter key, the label is accepted. |
| Response Reference | There are two types of channels, Response and Reference . All channels are initialized as Response channels. The column can not be edited in <i>eZ-PostView</i> . |
| FSV: | Full-Scale Voltage. The cells in this column are used to set the FSV value in Volts. This column can not be edited in <i>eZ-PostView</i> . |
| EU Mode: | E (ngineering) U(nits): Select EU or Volt. This column can not be edited in <i>eZ-PostView</i> . |
| Units: | Enter the measurement units you will be using. |
| Location: | This is a simple numbering system. The channel number is the default value for location. However, you can highlight a cell and type a different location number. When you press the Enter key, the value is accepted. |
| Coord: | This is the axial direction of the transducer that was connected to the channel. This column can not be edited in <i>eZ-PostView</i> . |
| Input Type: | This is the type of instrument that was attached to the channel. Menu selections include: Acceleration, Velocity, Displacement, Force, Pressure, Stress, Strain, General, and Tach (Tachometer). This column can not be edited in <i>eZ-PostView</i> . |

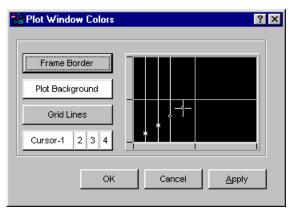
Edit Menu > Playback Setup Window: Source Information Panel

There are no playback functions that can be setup from within the *eZ-PostView* application. However, the window's *Source Information* panel does provide general file related information such as filename, file location, the number of active channels, sample rate, block size, the number of blocks recorded, and recorded time.

The panel includes a Comments box for user remarks.

| ource Information | | | | |
|---|----------------|------|---------|---|
| | | | | |
| Filename: | C:\Program | ۵. | | |
| Files\eZ-View\eZAnaly | st.thd 8 | | | |
| Active Channels: | | | | |
| Sample Rate (Hz): Blocksize: | 2560 | | | |
| | 2048 | | | |
| Recorded Time (Sec): | | | | |
| | | | | |
| | | | | |
| | | | | |
| Comments: Example file for e | Z-PostView Pro | ram | | _ |
| Comments: Example file for ea | Z-PostView Pro | gram | | |
| Comments: Example file for ea | Z-PostView Pro | gram | | |
| Comments: Example file for ea | Z-PostView Pro | gram | | |
| | Z-PostView Pro | gram | | |
| Playback Mode | Z-PostView Pro | gram | | |
| Playback Mode Sample Rate 2560 | Z-PostView Pro | gram | | |
| Playback Mode | Z-PostView Pro | gram | | |
| Playback Mode Sample Rate (samples/sec): | Z-PostView Pro | gram | | |
| Playback Mode Sample Rate 2560 | Z-PostView Pro | gram | | |
| Playback Mode Sample Rate (samples/sec): | Z-PostView Pro | gram | | |
| layback Mode Sample Rate (samples/sec): Blocksize: 2048 | Y | | | |
| Playback Mode Sample Rate (samples/sec): | Y | | iec) 0 | |
| Playback Mode Sample Rate (samples/sec): Blocksize: 2048 | Y | | iec) [0 | |

Playback Setup Window



Plot Window Colors

| Plot window defaults are: | The four possible types of cursor are: |
|---------------------------|--|
| Frame Border = Grey | Single cursor |
| Plot Background = Black | Second cursor of band cursors |
| Grid Lines = Grey | Peak Search cursor |
| Cursor = White | Data List |
| | |

- 1. To change a Plot Window display color, click on the button that applies to the display characteristic, for example, <Plot Background>.
- 2. Click <OK>. The Color Palette will open.

| Color ? 🗙 |
|-------------------------|
| Basic colors: |
| |
| |
| |
| |
| |
| |
| <u>C</u> ustom colors: |
| |
| |
| Define Custom Colors >> |
| OK Cancel |
| |

Color Palette

- 3. Select a color by clicking on a color square, or by defining a Custom Color.
- 4. Click <OK>.
- 5. Repeat steps 1 through 4 for each Plot Window color that you want to change.
- 6. When finished, click <OK> in Colors [Color Palette] window.

Edit Menu >

Preferences Window

| .abel Colors Background | | |
|--|---|--|
| Foreground | | |
| Sursor Movement Control Pick/Drag Pick Only C Drag Only | Lower Frequency Cutoff Freq. (Hz) 0 6 Skip Data C Zero Data | |
| Dursor Peak Search Width of Search (+/- Bins) 0 Auto Tracking Cursor-1 Cursor-2 | Peak Picking Minimum Amplitude Width of Peaks (+/- Bins) Sort By: Frequency/Time Data Value | |

The Preferences window provides a mean of setting several acquisition-related processing options.

Preferences

| Trace Colors: | Defines colors for traces. Click on a channel's color chip to open a color palette. Pick a new color, then click <ok>.</ok> |
|-----------------------------|---|
| Labels Colors: | Defines colors for <i>on-plot</i> text labels. Click on a color chip to open a color palette. Pick a new color, then click <ok>.</ok> |
| Cursor Movement Control: | Sets the cursor's action. Options are: <i>Pick/Drag</i>, <i>Pick Only</i>, and <i>Drag Only</i>. Pick/Drag: Makes use of both the Pick Mode and the Drag Mode. Pick Only: Clicking the left mouse button allows the cursor to move instantaneously with the band cursor. The chosen cursor moves to the location when the mouse is clicked. Drag Only: Move the mouse pointer to the cursor location. The pointer will change to a "Left and Right Arrow." Click and drag the cursor to the designated location. |
| Cursor Peak Search: | n/a |
| Peak Picking: | n/a |

Recall Plot Setup... If the box is checked, the custom plot setup will be saved (recalled) and will be applied when the next time the associated data file is opened.



Window Menu

```
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```

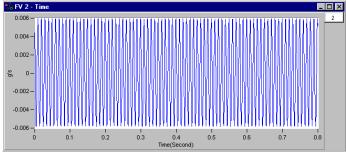


Reference Note:

For information regarding the interactive features of Plot Display Windows, refer to chapter 3. The interactive features are not selected from the Window Menu, but are accessed via mouse buttons and/or hotkeys.

Window Menu > Add Function View (FV)

This menu selection opens an additional plot window.



Example of an Added Function View

Window Menu > Delete Window

Deletes the window that is currently in focus. When multiple plot windows are open, one is always the "focus window. When a window does not have focus, its title bar is dimmed. To change the "focus window," simply click on top or side border of the window of interest.

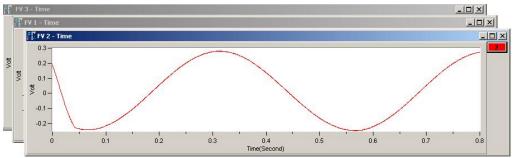
Window Menu > Channel Buttons

Brings up a display showing squares for all channel buttons. The buttons are used in the exact same manner as the 16 channel buttons that are located on *eZ-PostView*'s main window, just below the Date/Time region.

- **To add a channel**: use the mouse to click and drag a channel box from the complete channel button display into the plot area.
- **To remove a channel**: use the mouse to click and drag a channel box (from the right-side of the plot) into the plot area.

Window Menu > Cascade

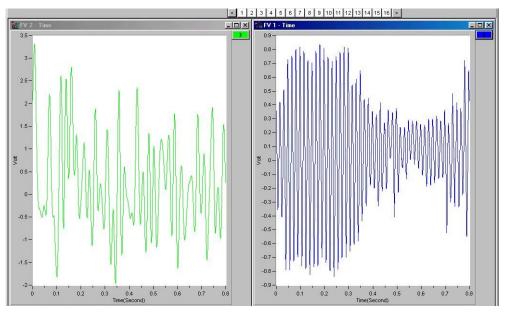
When you have multiple plot windows open, this menu selection arranges them on you screen as shown.



Example of using Cascade with three Plot Windows

Window Menu > Tile Vertically

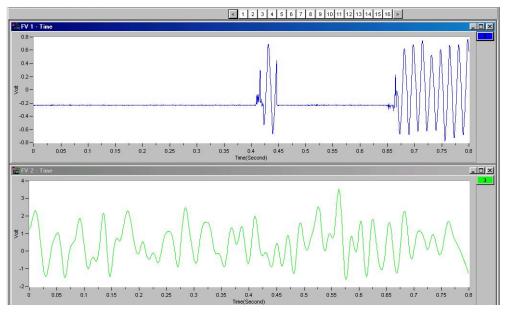
When you have multiple plot windows open, this menu selection arranges them on your screen as shown.



Example of using Vertical Tile with two Plots Each plot is longer in the "vertical" direction.

Window Menu > Tile Horizontally

When you have multiple plot windows open; this menu selection arranges them on your screen as shown.



Example of using Horizontal Tile with two Plots Each plot is longer in the "horizontal" direction.

Window Menu > Refresh Windows

Used to refresh a window; for example, to refresh a Strip Chart. In this case, the refresh function blanks out the present Strip Chart, essentially providing you with a new, clean window.



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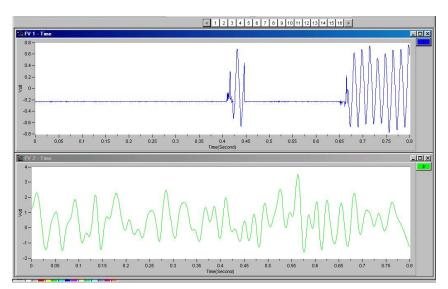
How to Change Plot Display Characteristics

To change a plot's display characteristics; it must be the "focus plot." Then, you can either use the mouse or key commands to make changes. "Focus" is explained in the following section.



Open Plot Display Characteristics Menu: Press "**D**" or right click with the cursor hovering over the plotted data.

Use the down arrow key to highlight a menu option, then press "**Enter**". Note that in some cases you can press the first letter of an option to open its sub menu, for example, pressing the "**S**" key opens the Scale Type sub menu.



Two Plot Windows In this figure, the upper plot has the "focus."

How to Change "Focus"

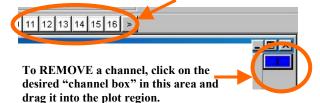
Focus can refer to the window that is in focus, as well as to a plot that is in focus. When multiple plot windows are open, one is always the "**focus window**." In the following figure, the window with the dark title bar (top window) is the window that currently has "focus." When a window does not have focus, its title bar is dimmed. **To change the "focus window," simply click on top or side border of the window of interest.**

When multiple plot windows are open, a plot *other than the one* in the "focus" window can be the "**focus plot**." You would typically do this when you want to change a plot's characteristics. To change the "focus plot," **click in the plotted area of the window of interest**. Note that the window must be in focus at the time.

How to Add and Remove Channels

To add a channel to a plot ... With your mouse, click and drag a **channel box** from *above the plot* to the plot area.

To remove a channel from a plot . . . With your mouse, click and drag a **channel box** from the *right of the plot* into the plot area. To ADD a channel, click-on the desired "channel box" in this area and drag it into the plot region.



Other Features

Сору



To Open the **Copy** Menu: Press "**D**" + "**C**," then release the keys. The **Copy** selection will be highlighted. Press "**Enter**." Next, use the down arrow key to select the item you desire to copy: **Data**, **Plot Window**, or **Screen**, then press "**Enter**."

You can paste the copied item into other applications. For example, plotted data can be copied into Notepad, Word, or Excel for use in reports or in the case of Excel further calculations.

The plot window and full screen can be copied and then pasted into any application that accepts graphics, such as MSPaint or Word.

| on Type:Octave 1/3:None (LIN) |
|-------------------------------|
| g's <lin> [RMS]</lin> |
| 10.00603 |
| CH:2 |
| 0.00097 |
| 0.00171 |
| 0.00132 |
| 0.00114 |
| 0.00117 |
| 0.00160 |
| 0.00135 |
| 0.00182 |
| 0.00191 |
| 0.00197 |
| 0.00177 |
| 0.00196 |
| 0.00241 |
| |

Plot Window Data Copied and Pasted into Word

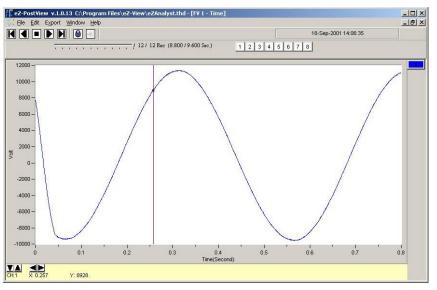
Cursor

| Cursor | • | ✓ Cursor Off |
|------------|---|---------------|
| Label/List | • | Single Cursor |
| | - | Band Cursor |

To Open the **Cursor** Menu: Press "**D**" + "**C**," then release the keys. Then use the down-arrow key to highlight **Cursor** and press "**Enter**."

Next use the down arrow key to select, **Cursor Off** or **Single Cursor**, then press "**Enter**."

When **Single Cursor** is selected, a cursor appears at the far left of the plot and cursor controls and cursor information are added below the plot. Click on the plot where you want the cursor. To fine-tune the cursor location, use the right and left arrows at the bottom. Use the X and Y information for additional help. If you have multiple channels in the graph, use the up and down arrows to move the cursor from plot to plot. Press "**C**" to toggle the cursor on and off.



Plot Window with Single Cursor

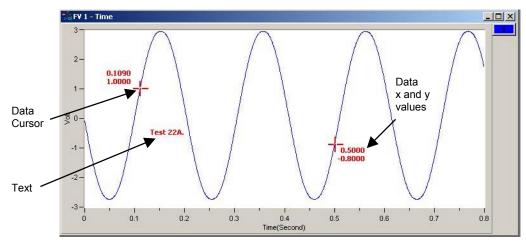
Label / List



To Open the **Label/List** Menu press "**D**" + "**L**," then release the keys. **Label/List** will be highlighted. Press "**Enter**."

Using the down arrow key, select Data or Text. Then press "Enter."

Data places up to 10 cursor values on your plot. After you select data, a temporary cursor is placed on the plot and the x, y data values are shown for that location. As you move your mouse, the temporary cursor will move across the plot with data values continuously updated. When you have the cursor where you want it, click on the mouse to place the label. Another temporary cursor immediately appears. When you are finished labeling values, right-click and select Pointer to return to a normal state.



Adding Data Point Cursors and Text

Text places a comments text box on the plot. After you select text, click on the plot and start typing. You are limited to 26 character places. Click on the right corner of the text box to move it anywhere on the plot window.

Changing the Display Range

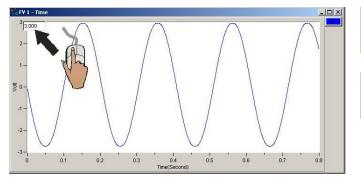
To change the maximum or minimum range value: Left-click on upper or lower scale value that is to be changed, then enter the new value. An example follows.

3

3

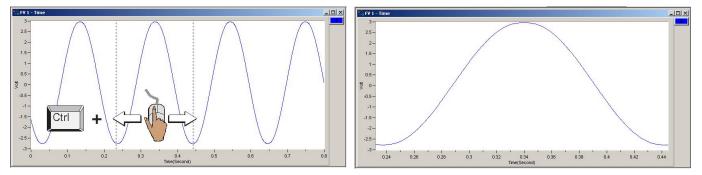
3,000

3.800

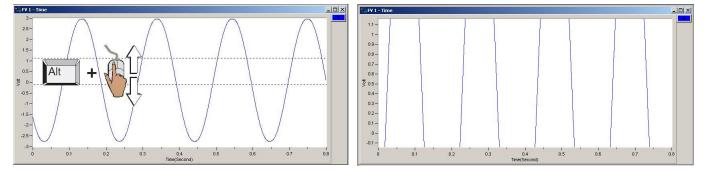


In this example, the cursor and PC keyboard were used to change the maximum scale value from 3.000 volts to 3.800 volts.

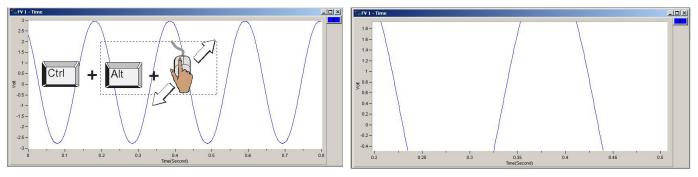
To change the X-Axis: Hold down the **<Ctrl>** key, at the same time, left-click and drag the mouse cursor horizontally on the plot. Two vertical cursor lines will define the new x-axis end points.



To change the Y-Axis: Hold down the **<Alt>** key, at the same time, left-click and drag the mouse cursor vertically on the plot. Two horizontal cursor lines will define the new Y-axis end-points.



To simultaneously change the X & Y Axes: Hold down the <Ctrl> and <Alt> keys, at the same time, left-click and drag the mouse cursor diagonally on the plot. A rectangle will define the new area of the plot.

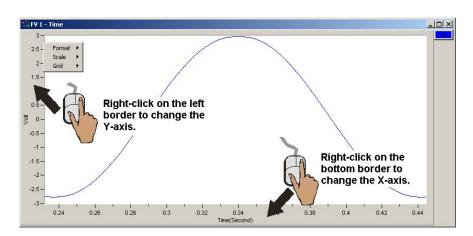


Changing the Plot's Format / Scale / Grid

Right-Click on the plot's border to open a popup menu (see figure). If you want to change the y-axis, right-click on the plots left border. If you want to change the x-axis, right-click on the plot's bottom border.



Changing the plot Format, Scale, or Grid affects the display only. It does not change the real data.



Format

The Format menu allows you to change the axis format of the plotted data.

Scale

The Scale menu allows you to change the plot scale to AutoScale, FixedScale, or Manual. Autoscale ensures that all the captured data is visible on the plot.

Grid

The Grid menu allows you to place and remove grid lines from the graph of plotted data. You can also turn the grid on and off by pressing the "G" hot key.

Note:

Appendix A, taken from the *eZ-Analyst Series Software Reference Manual*, p/n 1086-0922, consists of several hot key tables for the benefit of those who prefer to use keys in place of mouse/cursor interaction with a GUI.

Although *eZ-PostView* was derived from *eZ-Analyst*, certain key functions will not apply, for example, the keys pertaining to Measurement, Scope, and Generator Control.

This appendix consists of several hot key tables for the benefit of those who prefer to use keys in place of mouse/cursor interaction with a GUI. However, for certain functions, such as changing axis scales, a mouse will be needed. Mouse use is pointed out in the tables, when applicable.

| Record / Playback Control | | |
|---------------------------|--------------------------|----------|
| Keys | Function | Comments |
| р | Play Forward | |
| <shift> + p</shift> | Play Backward | |
| 0 | Step Forward and Record | |
| <shift> + o</shift> | Step Backward and Record | |
| Н | Halt Playback | |

| Measurement, Scope, and Generator Control | | |
|---|--------------------------------|----------|
| Keys | Function | Comments |
| н | Halt the measurement | |
| R | Start recording | |
| S | Start Scope Mode (Measurement) | |
| W | Turn the signal generator On | |

| Menu and Wi | ndow Control | |
|-------------|---|---|
| Keys | Function | Comments |
| Alt + E | Presents the Edit Menu. | |
| C | Presents the Plot Window <u>Colors</u> window. | After pressing Alt + E to access the Edit Menu, press C to get the Colors Window. Use the Tab key to select a characteristic, then hit <enter>.</enter> |
| М | Presents the Configuration window. | After pressing Alt + E to access the Edit Menu, press M to get the Configuration Window. You will need a mouse to access all panels. Also, see $Ctrl + M$. |
| P | Presents the Playback Setup window. | After pressing Alt + E to access the Edit Menu, press P to get the Playback Setup Window. Use the Tab and arrow keys to make selections within this window. Then hit <enter>.</enter> |
| Alt + F | Presents the File Menu. | |
| Alt + W | Presents the Window Menu. | You will need a mouse to make selections. |
| Ctrl + M | Presents the Configuration window. | You will need a mouse to access all panels. An alternative to Ctrl + M is to press M when the Edit Menu is open. |
| Ctrl + O | Presents the Open File Dialog window. | From within the window, use the Tab and arrow keys. An alternative to Ctrl + O is to press O when the File Menu is open. |
| Ctrl + P | Presents the Print Dialog window. | An alternative to Ctrl + P is to press P when the File Menu is open. |
| D | Presents the Display Menu , also referred to as the Plot Display Characteristics Menu. | Refer to the following table for control options related to the Display Menu. |

Α

| Display Menu Control | | |
|-------------------------------|--|---|
| Keys | Function | Comments |
| D | Opens the <i>Plot Display Characteristics Menu</i> | Option: "Right-clicking" the mouse, while the cursor is over the plot will also open this menu. |
| D + C (3 functions) | Used to open the Complex Type Display Menu. This option is only available when a function with complex data is displayed. Menu choices are: Magnitude, Phase, Real, Imaginary, Magnitude + Phase, Real + Imaginary, and Nyquist | Press D + C; release, then press <enter>. The Complex Type Display Menu will open. Use the arrow keys to highlight the type of display, then press <enter>.</enter></enter> |
| | Used to open the <i>Copy Menu</i> . Menu choices are: Data, Plot Window, Screen. | Press D + C; release, then use the arrow key to select Copy. After selecting Copy, press <enter>.</enter> |
| | Used to open the <i>Cursor Menu</i> . Menu choices are: Single Cursor, Band Cursor, or Cursor Off. | Press D + C; release, then use the arrow key to select Cursor. After selecting Cursor press <enter>.</enter> |
| D + F | Opens the <i>Display Functions Menu</i> . Note that right-clicking on the plot will also open this menu. | Use arrow keys to highlight your selection, then press <enter>. In some cases you can select the first letter of an option to select it.</enter> |
| D+I | Opens the Integration/Differentiation Menu. | Use arrow keys to highlight your selection, then press <enter>.</enter> |
| D+L | Opens the Label / List Menu. | Use arrow keys to highlight your selection, then press <enter>.</enter> |
| D + O | Opens the Octave Menu. | Use arrow keys to highlight your selection, then press <enter>.</enter> |
| D + S | Opens the Scale Type Menu. Menu choices are RMS, Peak, Pk-Pk. | Use arrow keys to highlight your selection, then press <enter>.</enter> |
| D + T | Opens the Transfer Type Menu. | Use arrow keys to highlight your selection, then press <enter>.</enter> |

| Plot Display Controls (Note) | | |
|---------------------------------|--|--|
| Keys | Function | Comments |
| Mouse-Click Bottom Border | Change the X-axis in regard to format, scale, and grid. | Right-click on the plot's bottom border to access a menu for changing the X-axis in regard to Format, Scale, and Grid. |
| Mouse-Click Left Border | Change the Y-axis in regard to format, scale, and grid. | Right-click on the plot's left border to access a menu for changing the Y-axis in regard to Format, Scale, and Grid. |
| , | Moves the primary cursor left along the trace. | When in Band Cursor mode, the comma moves the primary cursor to the left. |
| • | Moves the primary cursor right along the trace. | When in Band Cursor mode, the period moves the primary cursor to the right. |
| < | Moves the secondary cursor left along the trace. | When in Band Cursor mode, the "<" moves the secondary cursor to the left. |
| > | Moves the secondary cursor right along the trace. | When in Band Cursor mode, the ">" moves the secondary cursor to the right. |
| <shift></shift> | Peak search. | Press the <shift> key while depressing the left mouse button to search for peaks along the trace.</shift> |

Note: Also see the Display Menu Control Table.

Continued



Reference Note: For more detailed information, which includes graphics, refer to chapter 3, *Interactive Features of the Plot Display Window*.

| Plot Display | Plot Display Control (Note) | |
|--------------------------|---|--|
| Keys | Function | Comments |
| Α | Turns Auto-scale On. | |
| Alt | Expands or contracts the Y-Axis . | (a) While holding down the <alt> key, place the cursor at the desired start point of the Y-axis, (b) click the left mouse button, (c) drag the mouse vertically until the cursor is at the new end point of the scale.</alt> |
| b | Bank up. | |
| <shift> + b</shift> | Bank down. | |
| С | Toggles the cursor On or Off; or cycles the cursor options as follows (if Band Cursor is selected): Adds a Cursor, Adds a second Cursor, turns both cursors Off. | When Band Cursor is selected, the "C" key cycles through On (add a cursor), add a second cursor, and Off. |
| Ctrl | Expands or contracts the X-Axis . | (a) While holding down the <ctrl> key, place the cursor at the desired start point of the X-axis, (b) click the left mouse button, (c) drag the mouse horizontally until the cursor is at the new end point of the scale.</ctrl> |
| Ctrl + Alt | Simultaneously expands [or contracts] both the X and Y axes . | (a) While holding down both the <ctrl> and <alt> keys, place the cursor at the desired start point on the plot, (b) click the left mouse button, (c) drag the mouse diagonally until the cursor is at the new end point of the scale.</alt></ctrl> |
| F2 or Z (2 functions) | Zooms in or out. | When you depress one of these keys, while dragging with the right mouse button depressed, you will zoom in or out, according to the cursor-defined region. |
| | Pan along the X-axis, Y-axis, or both. | By depressing one of these keys, while dragging with the left mouse button depressed, you can pan in the direction of the drag. |
| F3 | Zoom in or out. | Use F3 with the left mouse button to zoom in our out. |
| G | Turns Plot Grid On or Off. | Toggles the grid to On or Off. |
| L | Changes the Scale to Linear or to Log. | Toggles the scale to Linear or to Log. |
| R | Start Recording | |
| S | Start Scope Mode (Measurement) | |
| X | Presents the X-Axis Menu | |
| Y | Presents the Y-Axis Menu | |
| Z or F2 | Zooming or Panning. | See " F2 ." |

Note: Also see the Display Menu Control Table.



Reference Note: For more detailed information, which includes graphics, refer to chapter 3, *Interactive Features of the Plot Display Window*.

