

Exporting Chart Data

This Application Note describes how to export Chart data into other file formats, and export Chart graphics into other application software.



Written by staff of ADInstruments.

Introduction

Chart is a powerful analysis tool, but there may be times when it is desirable to access Chart data from other software applications. Here we describe several methods for placing Chart data and graphics into other programs.

Required Equipment

Chart 5.0.2 or later
Any Chart data file

Selecting and viewing data in Chart

When exporting data from Chart, you have the option of exporting a subset of your data or the entire data file. Which option you choose depends on the type and amount of data you wish to export. For viewing subsets of data, the ability to select a subset of your data channels is critical. Chart allows you to make a direct selection of all or part of your recording simply by using your computer's mouse. Select data by clicking and dragging the mouse over the data of interest in the Chart view window. If you wish to select data in multiple channels, you can do so in one of two ways. Select a range of data in one channel, and then while holding down the Shift key on your keyboard, select data in another channel. The first selection will be preserved, and the selection in the second channel will be constrained to the same time interval as the initial selection.

Alternatively, you can select data in all of the active Chart channels by clicking the mouse in the time axis area of the Chart view window, and dragging a selection (Figure 1).

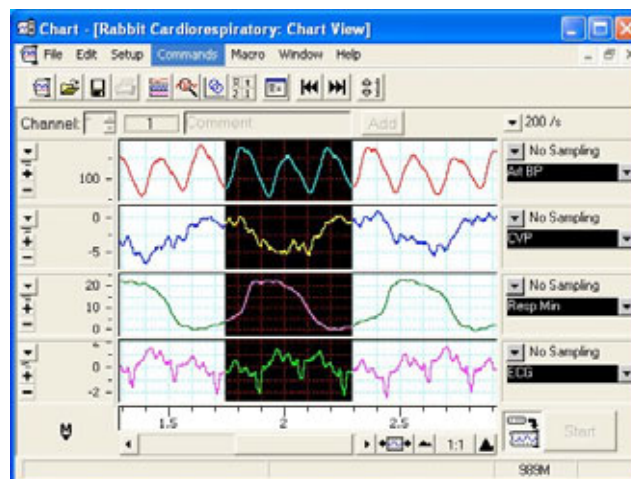


Figure 1. A selection of Chart data.

After you select a range of data, it is customary to use the Zoom view to expand the view of the selection. Click the Zoom view toolbar icon, and a new window will open showing only the data that you have selected. You can rescale the Y-axis in the Zoom view in exactly the same manner as you would in the Chart view. If you make a selection in the Zoom view, the window will be re-drawn to expand the view to that new selection. You can use the marker and waveform cursor in the Zoom view the same way you use them in the Chart view window.

Exporting graphics

Many times, you will want to place a graphic of your data selection into another program. You can easily export Chart graphics into other applications that support picture files by selecting data and opening the Zoom window.

1. Make a selection in one or more channels and open the Zoom window by clicking the Zoom view icon in the Chart toolbar.
2. With the Zoom view open, choose Edit→ Copy Zoom View (Figure 2).

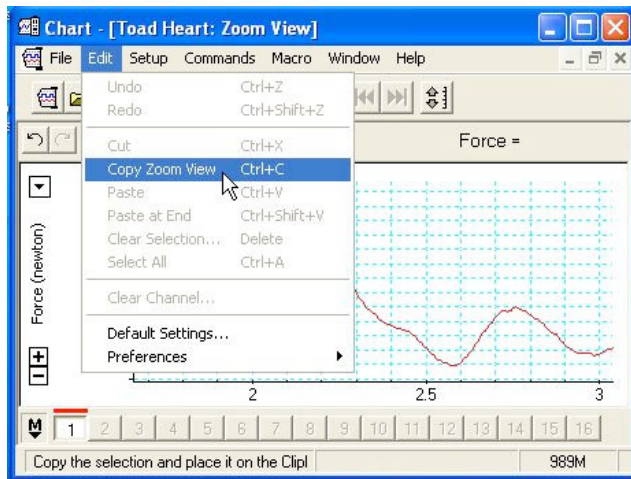


Figure 2. Copying the Zoom view as a graphic.

After the "Copy Zoom" command has executed, the Zoom window will be copied to your computer's clipboard as a graphic file. The graphic can then be accessed from another application by using the "Paste" command in that application. Applications that can accept Chart Zoom graphics include Microsoft® Word™, Excel™, and PowerPoint™, and Adobe® Photoshop™.

Exporting numerical data

Sometimes, you may want to use another application to analyze or plot data recorded in Chart. In these situations, you need to extract numerical values from your Chart data file. Export numerical data from Chart when you want to:

- Use a statistical analysis program
- Use a specialized graphing program
- Use a spreadsheet with Chart data
- Save Data Pad data for analysis

Copy/Paste

There are several methods available to export numerical data from Chart into other applications. The first, and simplest method, is to use the "Copy" command from the Edit menu after selecting a range of data, and then "Paste" the clipboard data into another application. When you choose the "Copy" command, the numerical values from the selected channel(s) are placed into the clipboard. Use this command if you want to paste Chart data into a spreadsheet such as Excel™.

1. Make a selection of data in the Chart view window.
2. Choose "Edit→ Copy Chart Data".
3. Choose the "Edit→ Paste" command from you application of choice, i.e. Excel™.
4. The numerical values are pasted into your application.

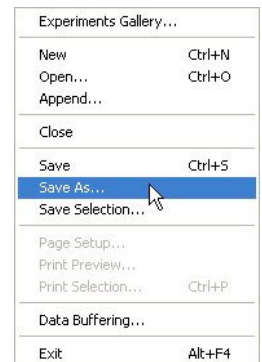
Saving Chart data into other formats: Save As... and Save Selection

Another method of exporting Chart numerical data is to use the "Save As..." or "Save Selection" commands from Chart's File menu. The "Save As..." command allows you to save the *entire* Chart data file into a different format, such as text. The "Save Selection" command allows you to save only the active selection in the Chart view in an alternate format.

Save As...

The "Save As..." command allows you to save the entire Chart data file in a different format. In addition, you can use the "Save As..." command to save the contents of the Data Pad.

1. From the Chart view, choose File→ Save As...
2. A dialog box will open.
3. Choose the type of file you would like to save, e.g., text (.txt), or Data Pad data as Excel (.xls) from the pull-down menu (Figure 3).



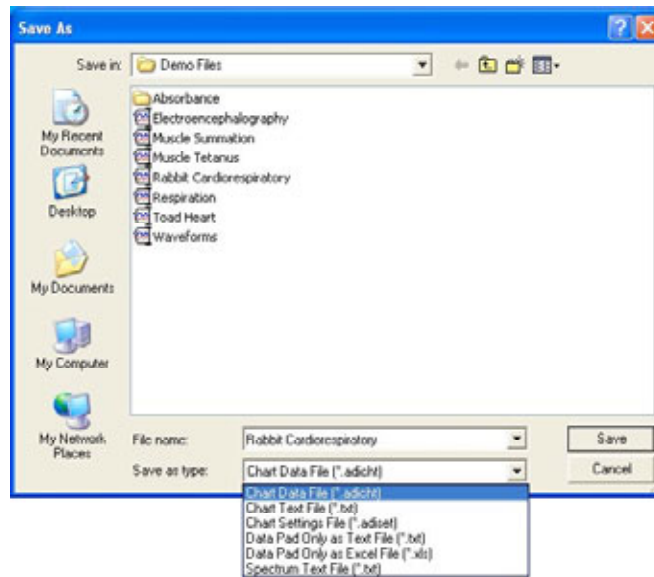


Figure 3. The "Save As..." dialog box.

4. Enter a filename for the exported data file.
5. Click the "Save" button.

Save Selection

The Save Selection command works similarly to the "Save As..." command, but it will only export data in the active selection. Some special formats, such as QuickTime movies, are only available via the "Save Selection" command.

1. Select the data of interest from the Chart view window.
2. Choose File → Save Selection
3. In the dialog box that appears, choose a file format from the pull-down menu.
4. Enter a filename for the exported data file and click the "Save" button.

Special file formats

Chart is capable of exporting data into formats other than text. These formats include AXON, MATLAB, QuickTime, and WAV audio formats. In order to export Chart data into these formats, you will need to install the appropriate Chart extension in your Chart Extensions folder. Chart extensions are free software add-ons that can be downloaded from the ADInstruments software update website (Figure 4):

<http://www.adinstruments.com/updates/>

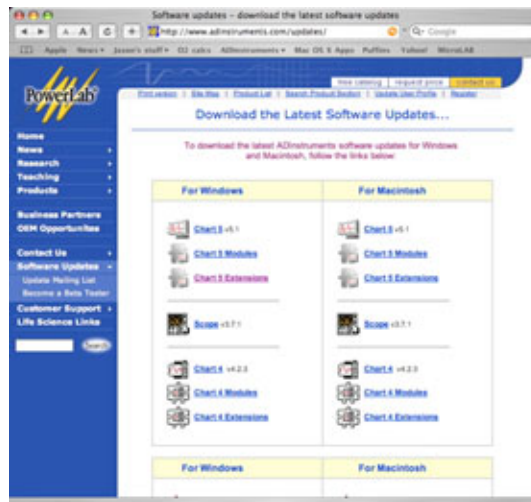


Figure 4. The ADInstruments website has many free software updates.

1. Download the extension to your computer and run the installer.
2. Make sure the files are installed in your Chart Extensions folder on your computer.
3. You will need to quit and restart Chart in order for the changes to take effect.

Example: Saving Chart data as a QuickTime™ movie

Chart data can be exported to an animated QuickTime™ movie when the "Export QuickTime" extension is installed.

1. Select a range of data in the Chart view window.
2. Choose File→ Save Selection
3. In the dialog box that appears, select "QuickTime movie" from the pull-down menu.
4. Click the "Options" button to choose output parameters for the QuickTime movie.
5. Type a filename and click the "Save" button.
6. Your selection will be saved as a viewable movie file that can be used in presentations (Figure 5).

Note: QuickTime movies require the free QuickTime viewer that can be downloaded from:

<http://www.apple.com/quicktime>

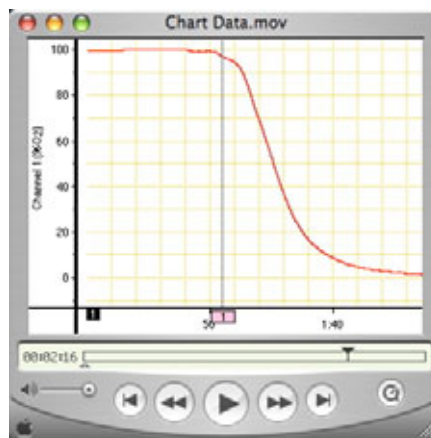


Figure 5. Chart data saved as a QuickTime™ movie using the "Save Selection" command.

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