Astro-Med, Inc.

AstroVIEW C is a Windows-based program that allows you to quickly and easily review data that has been captured on your Astro-Med recorder and transferred to your computer. AstroVIEW C ships free of charge with all of the recorders that it supports. The latest version of AstroVIEW C is available free of charge from our web site: http://www.astro-med.com/software/software.html

With AstroVIEW C, you can view an entire capture or look at just a small section selected in terms of samples, time or percentage. Quickly locate points of interest using waveform scrolling with "VCR-like" controls. On screen markers make it easy to measure amplitude and timing of your signals, and a "zoom" feature allows you to take a closer look at your data. With AstroVIEW C, you can save data in formats that can be imported into software such as Excel, Lotus 123, or DADiSP.

AstroVIEW C runs on Windows 95, 98 and NT operating systems.

AstroVIEW C supports the following Astro-Med products:
Everest, MT95K2,
Dash 18, Dash 16u, Dash 10, Dash 8n, Dash 8u,
Dash 4u, AstroDAQ, AstroDAQ 2.

This guide reviews the basic and popular functions of AstroVIEW C. Contact us with any questions you may have. See the last page for contact information.
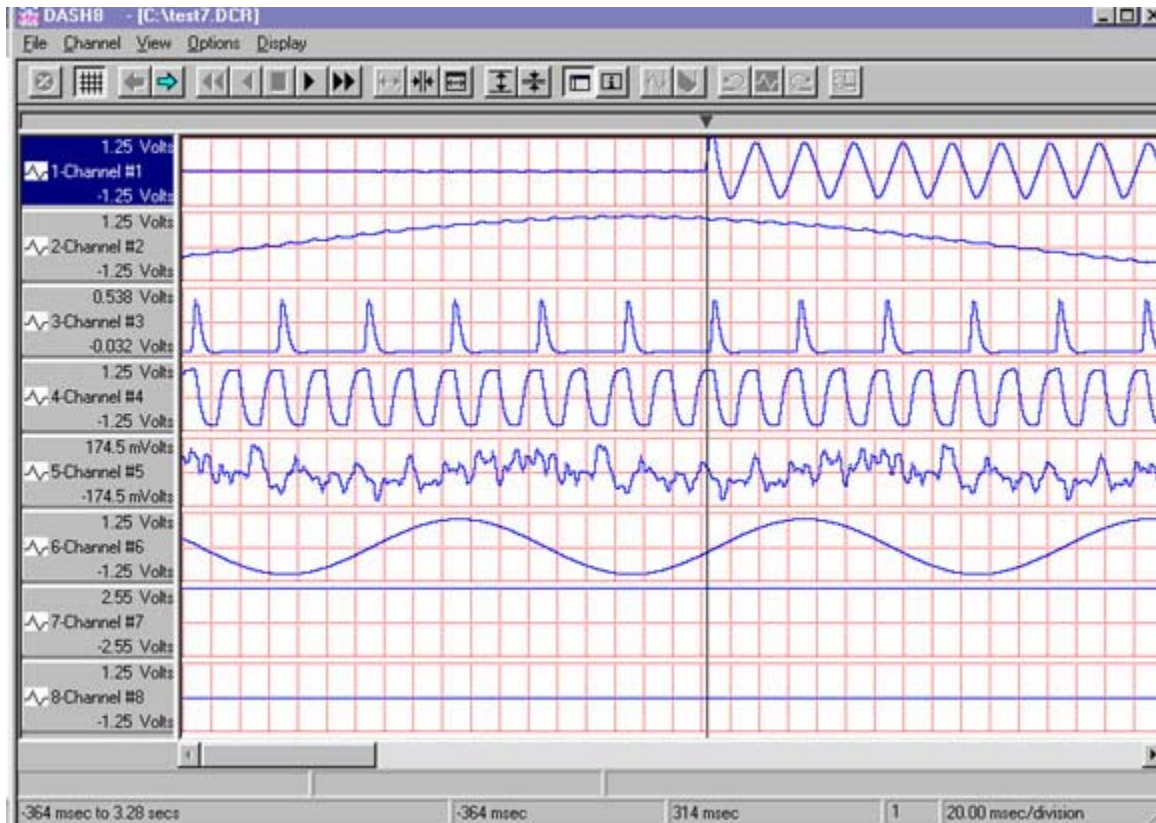
October, 2002

File Summary Dialog

When a Data Capture File is opened, the File Summary Dialog window shows details about the captured data such as the upper and lower limits of the channels, offset, filter, and type of channels.
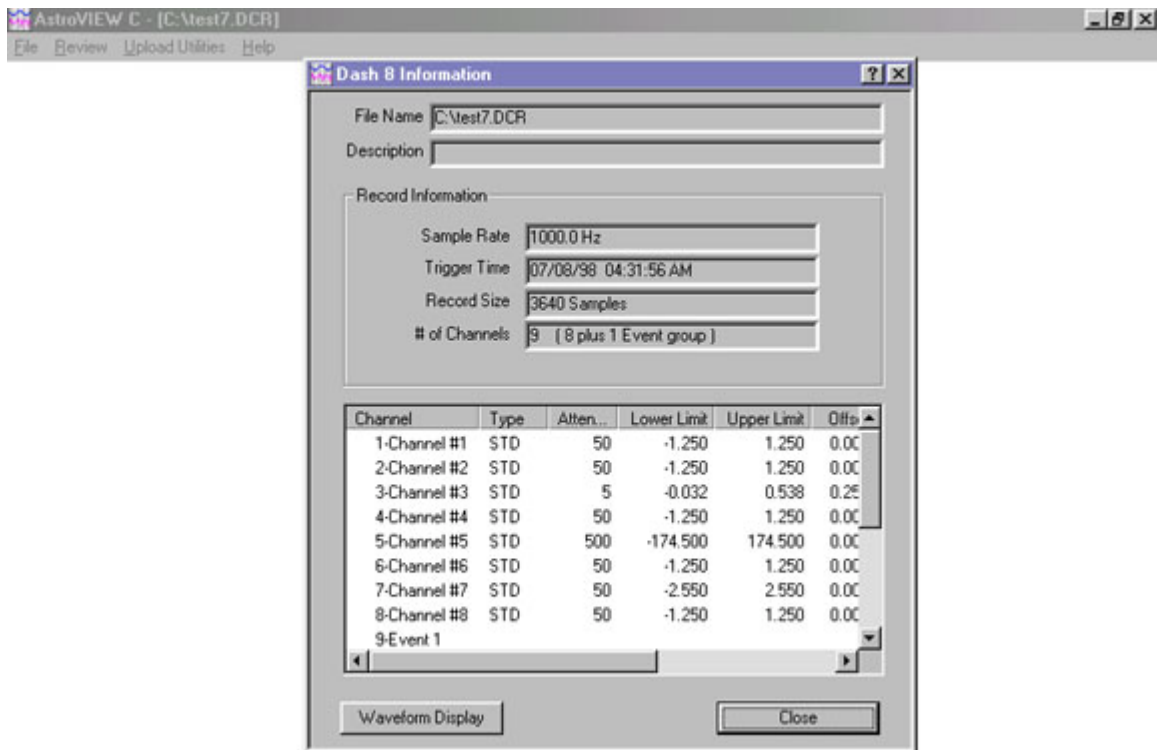
Click on the Waveform Display box at the bottom of
the File Summary Dialog window to view the waveforms.

Waveform Display

The Display Window shows the waveforms and includes a toolbar for popular functions of AstroVIEW C. Pull-down menus above the toolbar are used to access all functions of AstroVIEW C.

The trigger position is noted by a triangle at the top of the waveform along with a vertical line throughout the display.

On the left hand side of the Waveform Display is an area called Channel Limits that shows the upper and lower amplitude values and number for each channel.

Timing information is shown in the bottom row. The total time period of the data capture, beginning and ending times for the screen, the compression factor used to draw the screen and the amount of time per division.

Toolbar

Above the waveform display is a toolbar for quick access to popular functions of AstroVIEW C.

Navigation through the file is fast and convenient using several of the buttons on the left hand side of the toolbar. You can page forward and back, or use the VCR-like buttons to "play" the data forwards and backwards, stopping at points of interest.

View the entire file on one screen by pressing the Show All File button.

After you view the entire file, expand the timebase using the Expand View in Time button. Then compress the timebase by using the Compress View in Time button.

Time and Amplitude Measurements are made by putting down markers on the waveform and opening the Channel Information window.

Below is the summary of the buttons on the AstroVIEW C toolbar:

|							
	Stop file read / write		Scroll Stop		Expand Amplitude		Undo Selection
	Toggle grid on /off		Scroll Forward		Compress Amplitude		Show Selected
	Page Backward		Fast Forward		Channel Limits		Redo Selection
	Page Forward		Expand View in Time		Channel Information		Maximize All Windows
	Rewind		Compress View in Time		Goto Marks (Both)		
	Scroll Backward		Show All File		Clear Measurement		

Time and Amplitude Measurements

Time and Amplitude Measurements are made by putting down markers on the waveform and opening the Channel Information window.
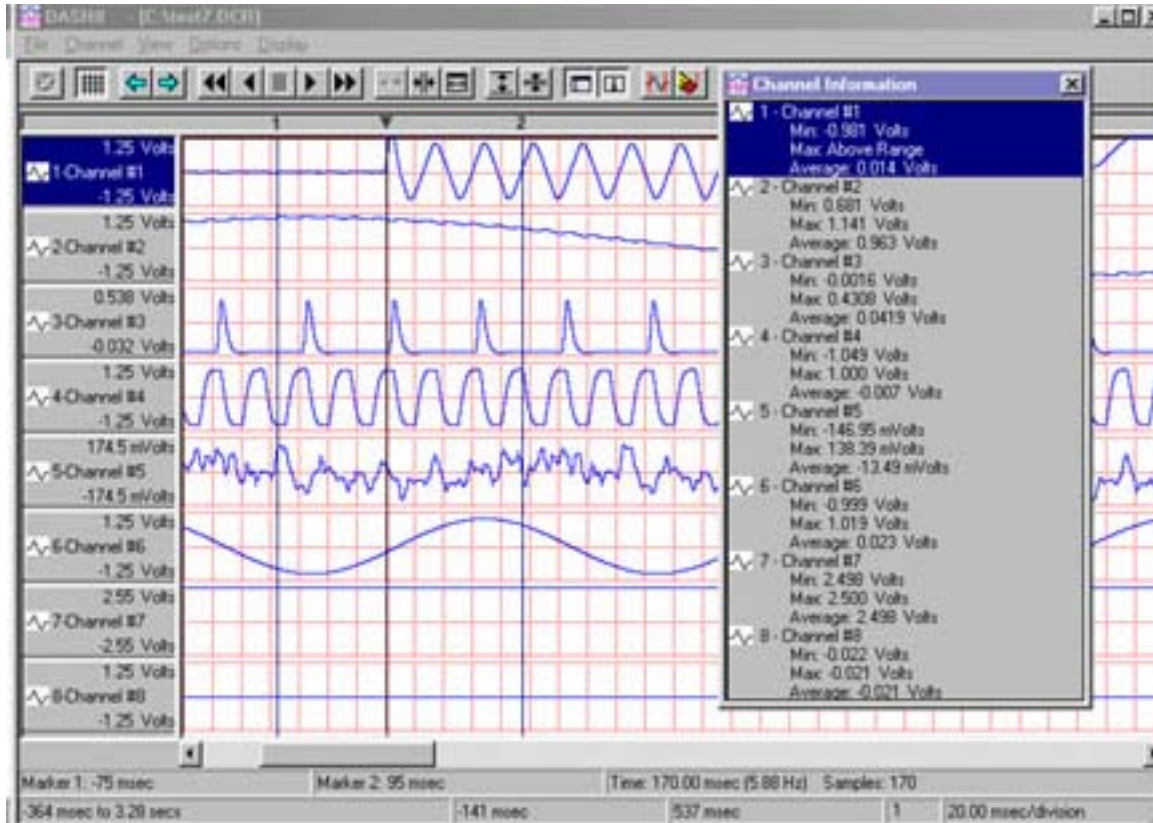
In the above image, two markers were placed around the trigger point (as noted by the triangle). Marker 1 is placed by left-clicking the mouse in the waveform display area and Marker 2 is placed by right-clicking the mouse in the waveform display area.

The Channel Information button on the toolbar was pressed which opens a window showing the maximum and minimum amplitude values between the markers as well as the average of the points between.

Below the waveform display is information about the time period.
In the image above, Marker 1 is at –75 msec and Marker is at 95 msec.
The time between the markers is 170.00 msec.

To move the position of the markers, left-click (Marker 1) or right-click (Marker 2) on a new location.
To remove the markers, press the Clear Measurement button on the toolbar.
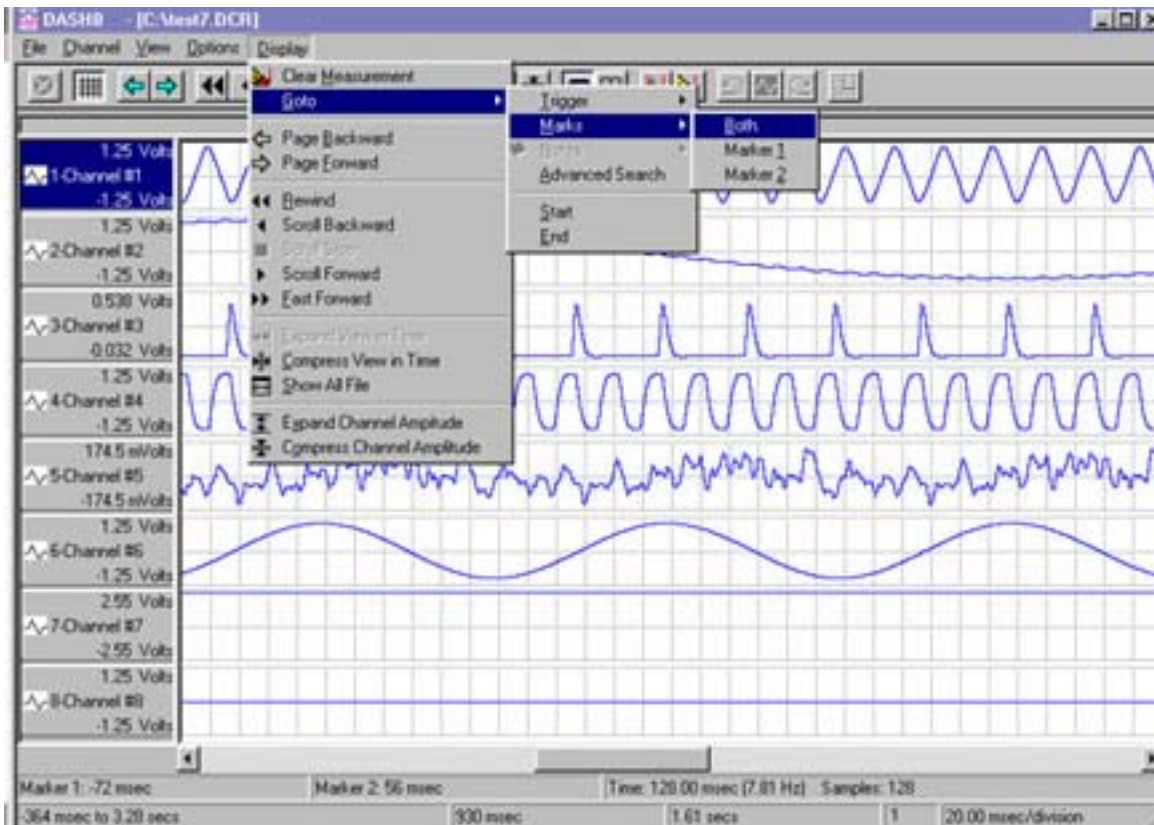
Locating the Trigger point

AstroVIEW C includes powerful navigation tools. No matter where you are within the data file, you can easily go to the Start, End, or the Trigger point.
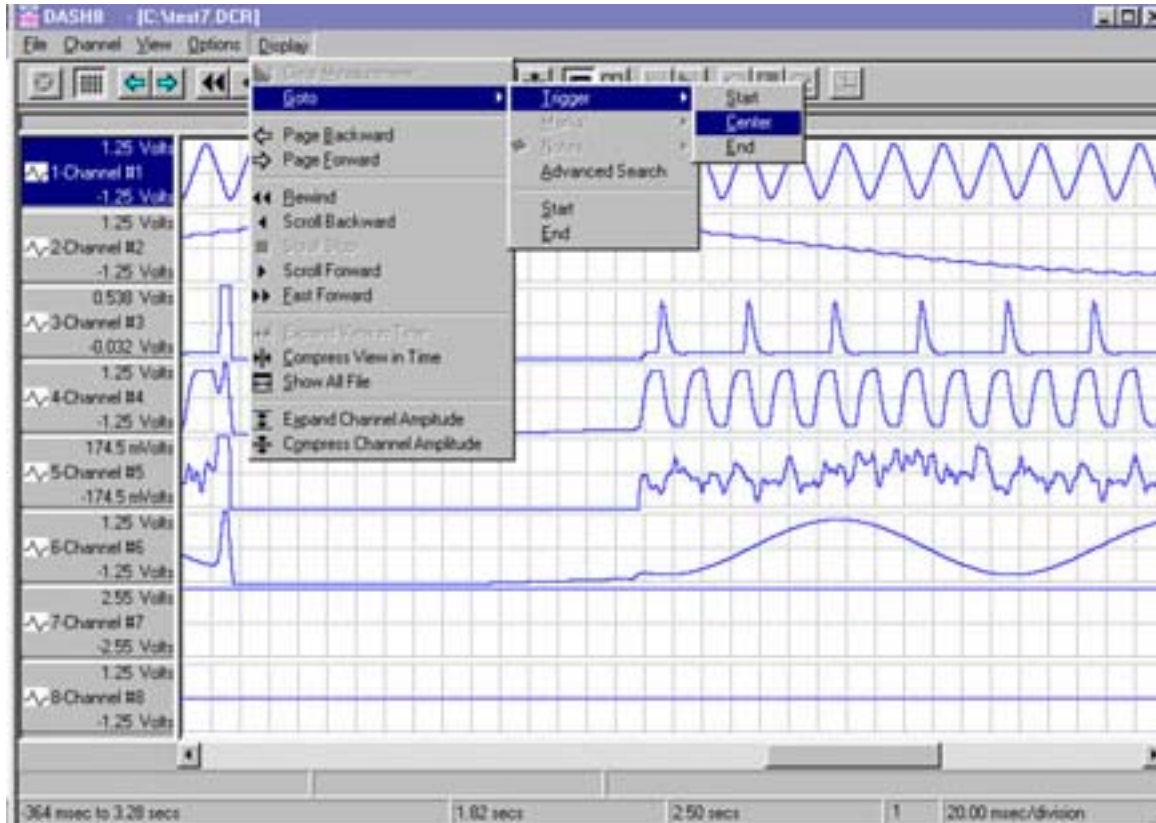
Using the Display pull-down menu as shown above, you can locate the trigger point and place it at the start, center, or end of the display screen.

Using Markers to Locate points of interest

With one or two markers, use the Display pull-down menu as shown above to display the marker(s) on the screen. When two markers are used, selecting the Both option will center the data between the markers on the screen. This is a convenient feature to use when you review large amounts of data and want to note the time between two events as well as make amplitude measurements. AstroVIEW C will compress the data to fit the range between the markers onto one screen.

In addition to the Display pull-down menu, you can also use the Goto Marks (Both) toolbar button.


When finished, you can clear any markers using the Clear Measurement toolbar button.

Altering the Waveform Display

When a data capture file is first opened in AstroVIEW C by pressing the Waveform Display box in the File Summary Dialog (see page 2), all the waveforms and events that were captured with the data capture record are displayed. Use the View pull-down menu to select the number of channels to be shown. For example, pick only one channel to view on the Waveform Display or to display the maximum number of channels.
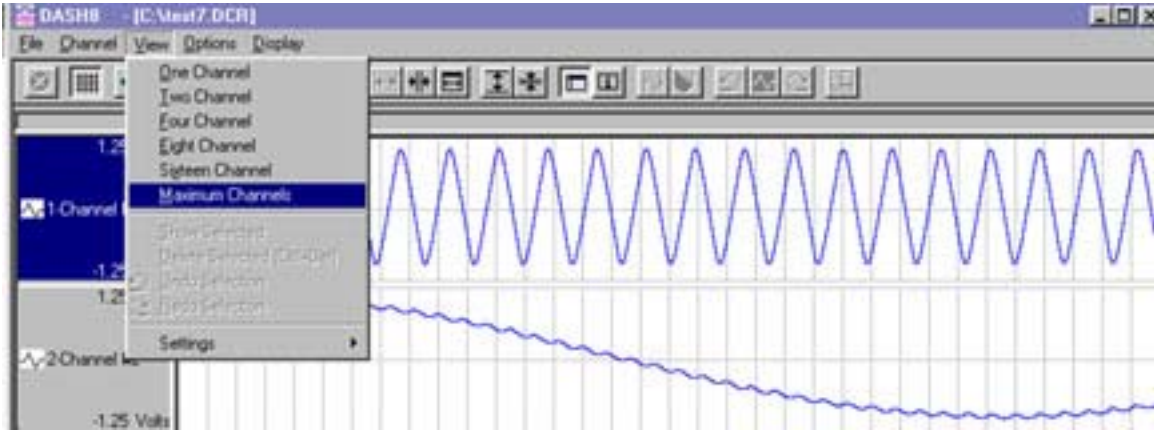
You can insert, replace or remove channels from the display using the Channel pull-down menu:
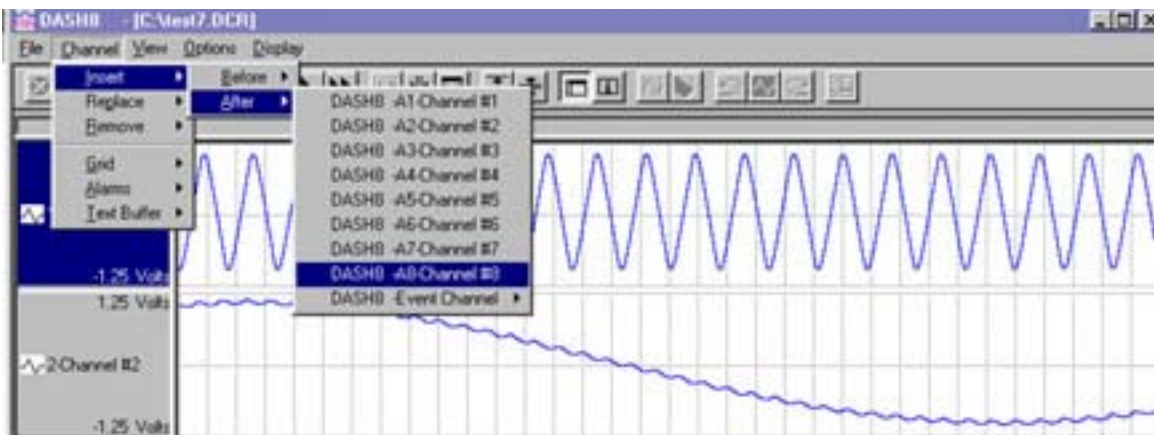
It is possible to change the number of grid lines per channel, change the channel size and even overlap the channels. The color scheme can be changed as well.
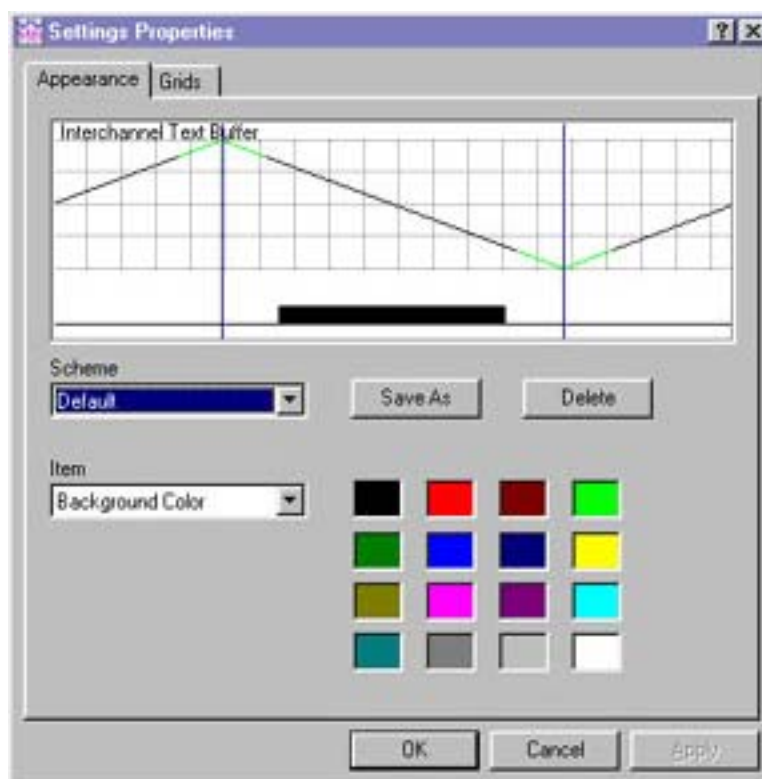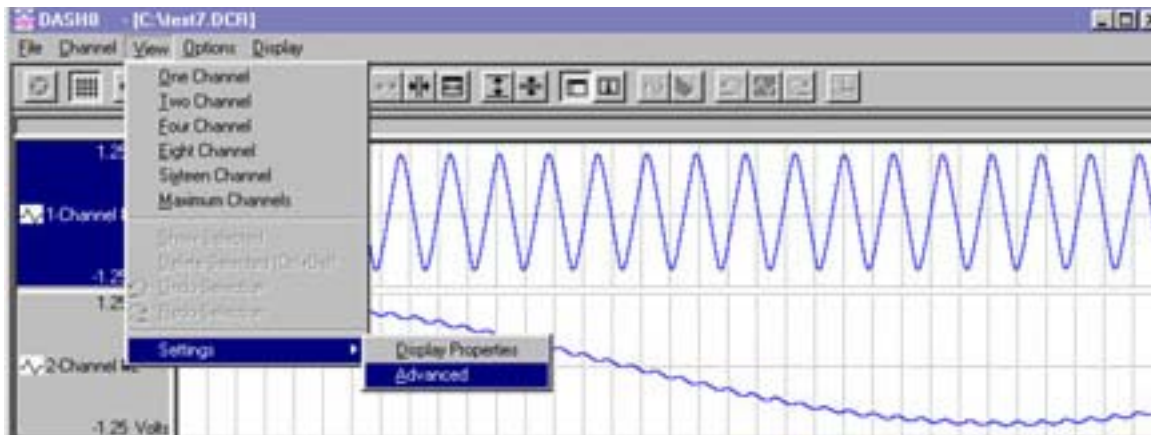
By selecting Display Properties from the Settings choice in the View pull-down menu, the above window appears where you can change the color scheme and create new grids. (To actually change the grid for a channel, use the Channel pull-down menu).
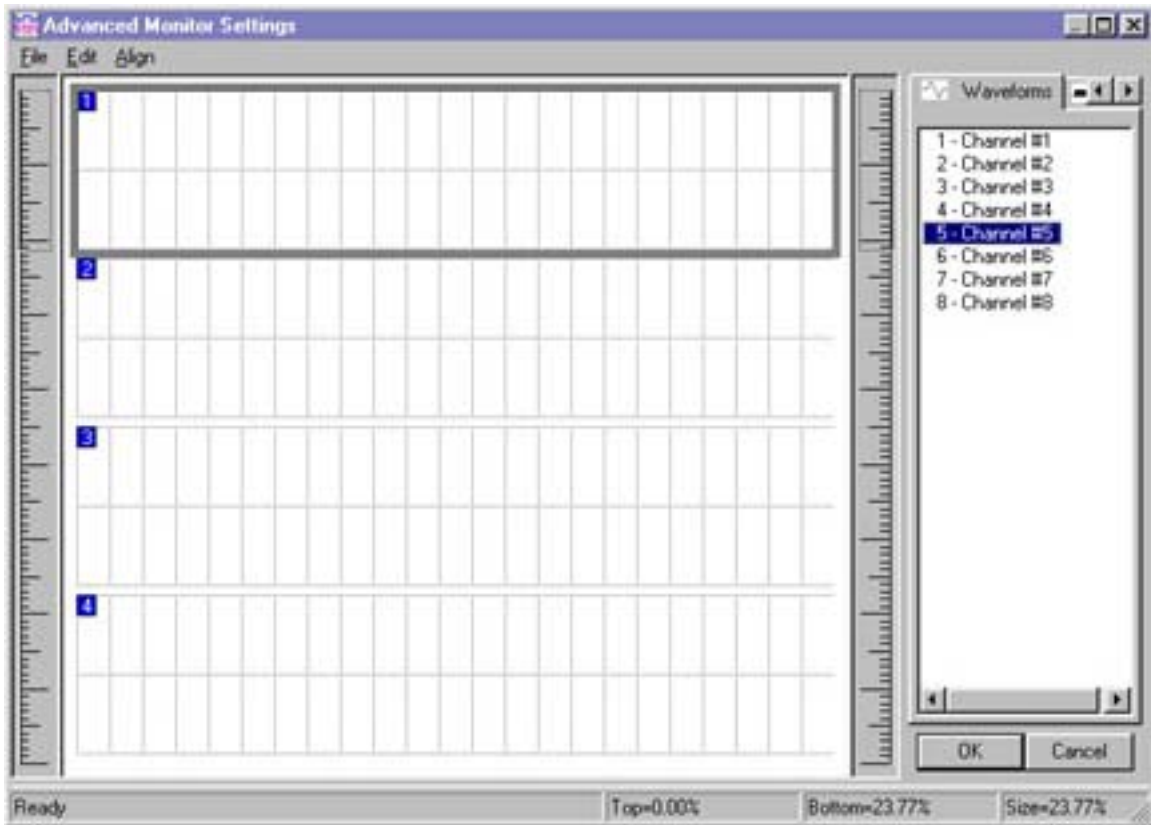
By selecting Advanced from the Settings choice in the View pull-down menu, the above window appears where you can change the size of the channels, overlap channels,

With the grid highlighted as shown above, you can make the channel larger or smaller. You can then right-click within the channel to change the number of grid divisions and color.

To overlap another channel onto a grid, highlight the channel from the column on the right and drag it onto one of the grids.

When finished, click OK. You will be prompted to save your changes as a View file. By saving the view file, not only can you use it for the existing data capture record under review, but you can also call up this view file for other data capture records.

Saving Data to Excel Format

AstroVIEW C supports saving the captured data in a variety of formats including Excel, MathCad, general ASCII, DADiSP, DAT file, and bitmap image. Oftentimes, data is saved to Excel for report generation. Following are the steps to save data in the Excel format:

Select Save Screen … from the File pull-down menu. The Save Screen Window appears:
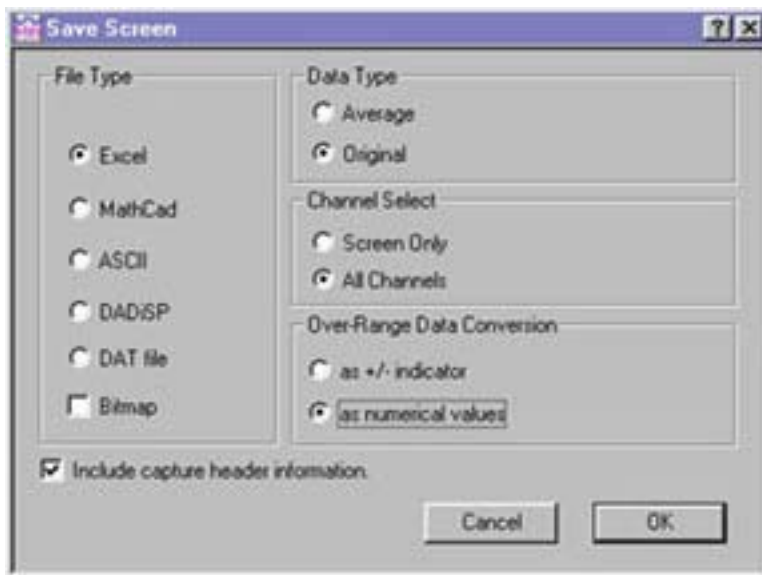
File Type:	Select Excel
Data Type:	Select Original to convert every data point. Select Average to get the average value based on the compression rate.
Channel Select:	Select All Channels or Screen Only to convert only the channels on the waveform display.
Over-Range Data Conversion:	Select as numerical values. If the data was above or below range, those data points will be limited to the channel upper and lower limits.
	Press OK to save the data file in the Excel format.

This guide reviews the basic and popular functions of AstroVIEW C. Feel free to call, fax, or email us your questions and comments using the contact information below.