SensView
User Guide

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SensView User Guide

Table of Contents

SensView User Guide

1   Preamble

1.1   Software License Agreement

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2   Installing Sensview

2.1   Installing the Software

Before installing the software verify that the computer meets the following minimum systems requirements:

Operating System: Windows XP SP2, Vista, Windows 7

Note: USB driver support for 32-bit OS only – Ethernet support for all versions.

CPU:	Pentium 4, 1.4 GHz
System Memory (RAM):	1GB
Hard Disk:	2 GB free space (for data files)
Display:	1024 x 768, 32-bit "True Color"
Microsoft .NET Frameworks:	2.0 Service Pack 2 or newer and 3.5 SP1 or newer

This software is based upon Microsoft's .NET Framework. The user can download this environment from Microsoft using the Windows update utility. Depending on the update settings the "Custom" update option may need to be selected. The .NET Framework 3.5 is considered an optional component and is listed in the Software category.

> *You must install the .NET Framework 3.5 SP1 before you install the Sensview application.*

To install the Sensview application:

Sensview is contained in a compressed folder located in the Applications folder on the SENSR CD. Double-click the icon for the compressed folder, a window should open to show the contents of the compressed folder. Drag the folder inside the window to a location on your desktop. Sensview is now located inside this folder on your desktop and is ready to be launched.

> To execute the program, double-click the Sensview.exe file.

3   Sensview

3.1   Sensview Description

Sensview is the software interface that controls Sensr instruments. Sensview is an intuitive program that enables you to configure the instrument, collect and analyze data.

3.2   Using Sensview

Before launching Sensview connect your SENSR devices to the computer – Sensview is designed to look for devices upon start-up. To launch Sensview double-click the Sensview icon (See Figure 2), after a brief device search the Sensview launch screen will appear.

SensView User Guide

Sensview Launch Screen

From the Sensview launch screen the user can:

a) Select a device
b) Monitor and Record data
c) Review and Analyze data
d) Set-up a device
e) Configure software settings
f) Exit the program

3.2.1   Selecting a device

To select a device move your mouse cursor to the name of the device and left-click. The user must select a device before attempting to collect data or change settings.

If no devices are listed under Available Device - disconnect your device, close Sensview, reconnect your device and launch Sensview. The program only scans for devices upon start-up.

3.2.2   Monitor & Record data

Once a device has been selected the user can select the Monitor & Record data option by left-clicking the "Monitor & Record" button and the monitor & record screen will appear.

SensView User Guide
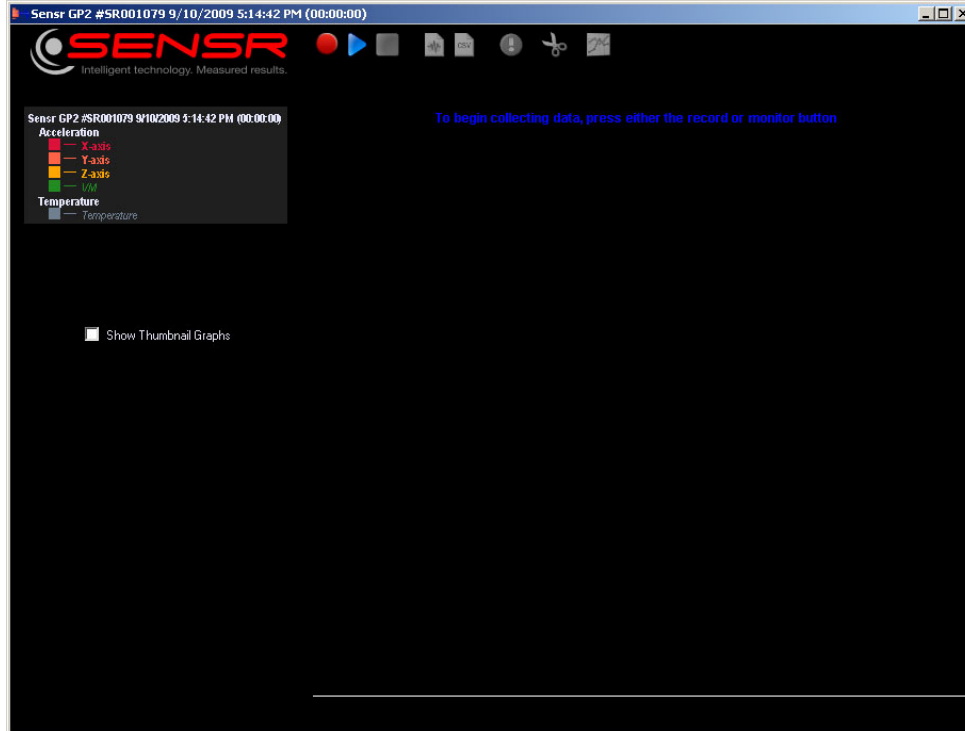
Monitor and Record Screen

From the Monitor and Record screen the user can:

Record data   >Left-click the red circle

Sensview is designed to be a short duration recorder, for longer recording sessions SENSR has other programs that are available by contacting customer support.

Monitor   >Left-click the blue triangle

This function will not record any data it will simply show the user what the current acceleration inputs are during the session.
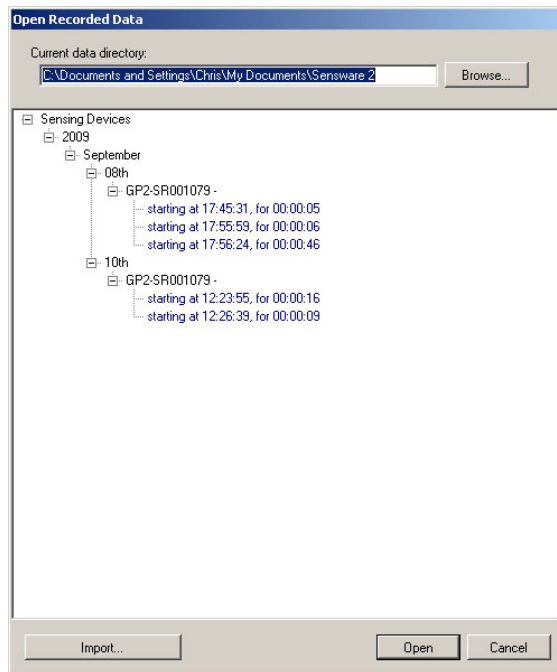
Show thumbnails   >Left-click the checkbox

This option allows the user to see alternative mini-views of the data during recording or monitoring, views such as Fast Fourier Transforms, and histograms.

3.2.3   Review & Analyze data

To view a recorded waveform left-click the "Record & Analyze" button to display the recording index screen.

SensView User Guide

Recording Index Screen

This screen enables the user to select a directory and navigate to a stored recording. To select a recording, left-click on the recording record and press the Open button. To import a recording that was collected with another SENSR program left-click the import button to invoke a directory search. Sensview can read in or import any data file that was created with a GP2x or CX1 sensing instrument. For performance reasons the maximum recording that can be imported is a 5 minute CX1 recording and a 20 minute GP2x recording.

Once a recording is loaded the data will appear in the Record & Analyze screen .
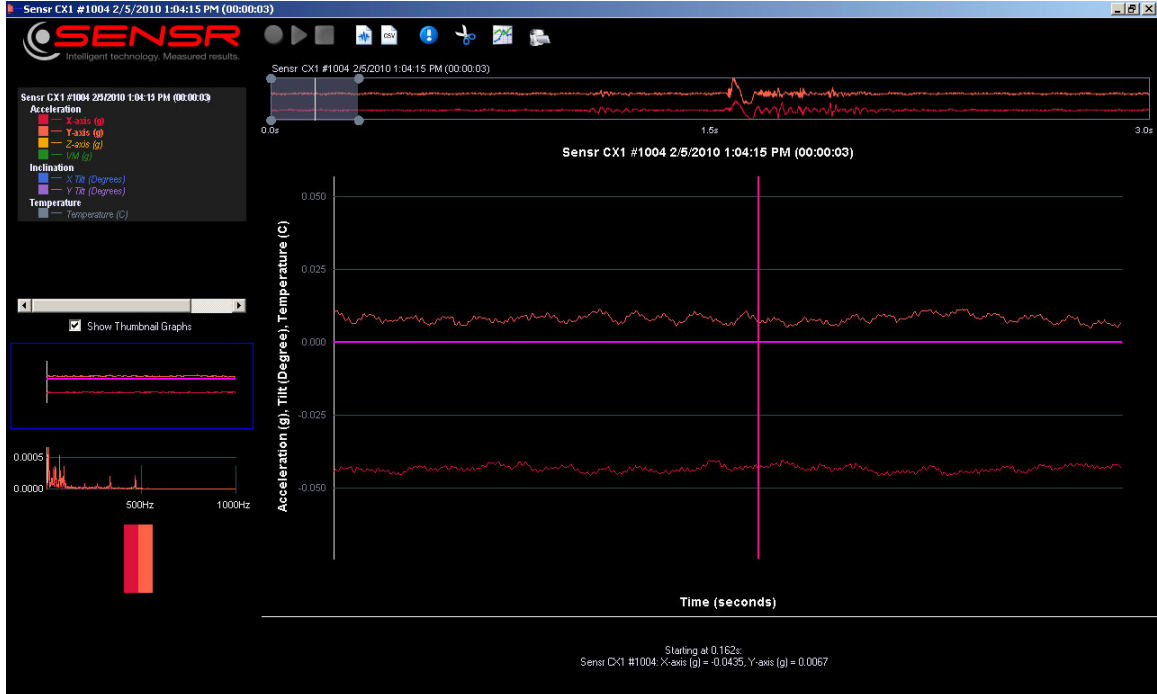
Review & Analyze screen

The Review & Analyze screen displays the recorded data in several ways:

Summary Bar

The summary bar shows the entire recording, a shaded selection box appears on the summary bar and this box controls the portion of the waveform that is viewed in the main display. The selection box can be moved and resized by left-clicking on the box or on the edges of the box and dragging the box to a new area.

Main Display

The main display area shows an enlarged view of the area that is shaded on the summary bar. This area can be configured to show: waveforms, Fast Fourier Transforms , histograms and tilt readouts. Up to 4 separate recordings can be displayed and compared in this area. Depending upon the selection there are different options for setting the X and Y-axis scale values. Hovering the mouse over a Main display waveform produces a cursor that reports the values of the highlighted area.

Thumbnail Display

This area lets the user see the data represented in different ways, as the selection box is moved or adjusted the thumbnails will dynamically update. Selecting different thumbnail displays controls what is being viewed in the Main Display area.

SensView User Guide

Sensview has several options for altering the displayed data:

Signal visibility
The visibility of the traces can be controlled by left-clicking on the trace name in the legend box at the top -left of the screen.
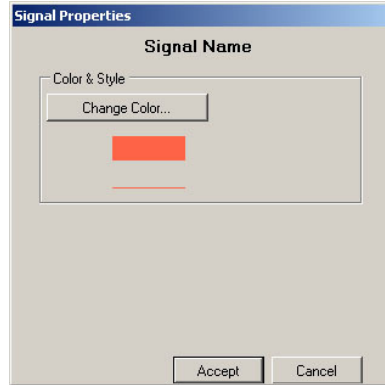
X-Y graph display
Left-clicking the thumbnail view of the waveform brings up a menu for setting graph display options (See Figure 7). The user can change graph labels and Y-axis viewing preferences.
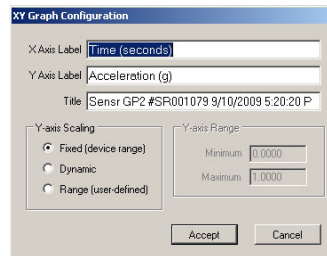
Graph display options

Waveform Trace properties
Right-clicking on the trace name displays a menu that allows the user to change trace colors.
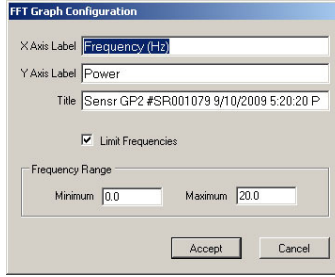

Trace properties

FFT Display properties
Right-clicking the FFT thumbnail graph brings up a menu that lets the user change the graph labels and specify a frequency range for viewing.

SensView User Guide

FFT properties

Additional functions can be invoked by the icons that run across the top of the Review & Analyze screen:

Export the main graph view as a .PNG file	> Paper with the blue trace
Export the main graph view as a .CSV file	> Paper with the CSV imprint
Statistics for the main graph view	> Blue circle with the exclamation point
Create new record for the main graph view	> Scissor icon
Graph and compare up to 4 data records	> Paper with the two waveforms
Synch and AVI movie to the data file	> Movie camera

3.3   Device Set-up

Some SENSR instruments have options for changing sensing ranges and specifying active channels, selecting an available device and then clicking the Device Set-up button on the Sensview Launch Screen (see figure 3) will bring up the Device Initialization screen.

Device Initialization screen

SensView User Guide

4   Technical Support

4.1   Technical Support

For questions about the Sensview application, e-mail support at support@Sensr.com or call 563.245.3750. Standard hours of operation are 8 am - 5 pm CST, M—F.