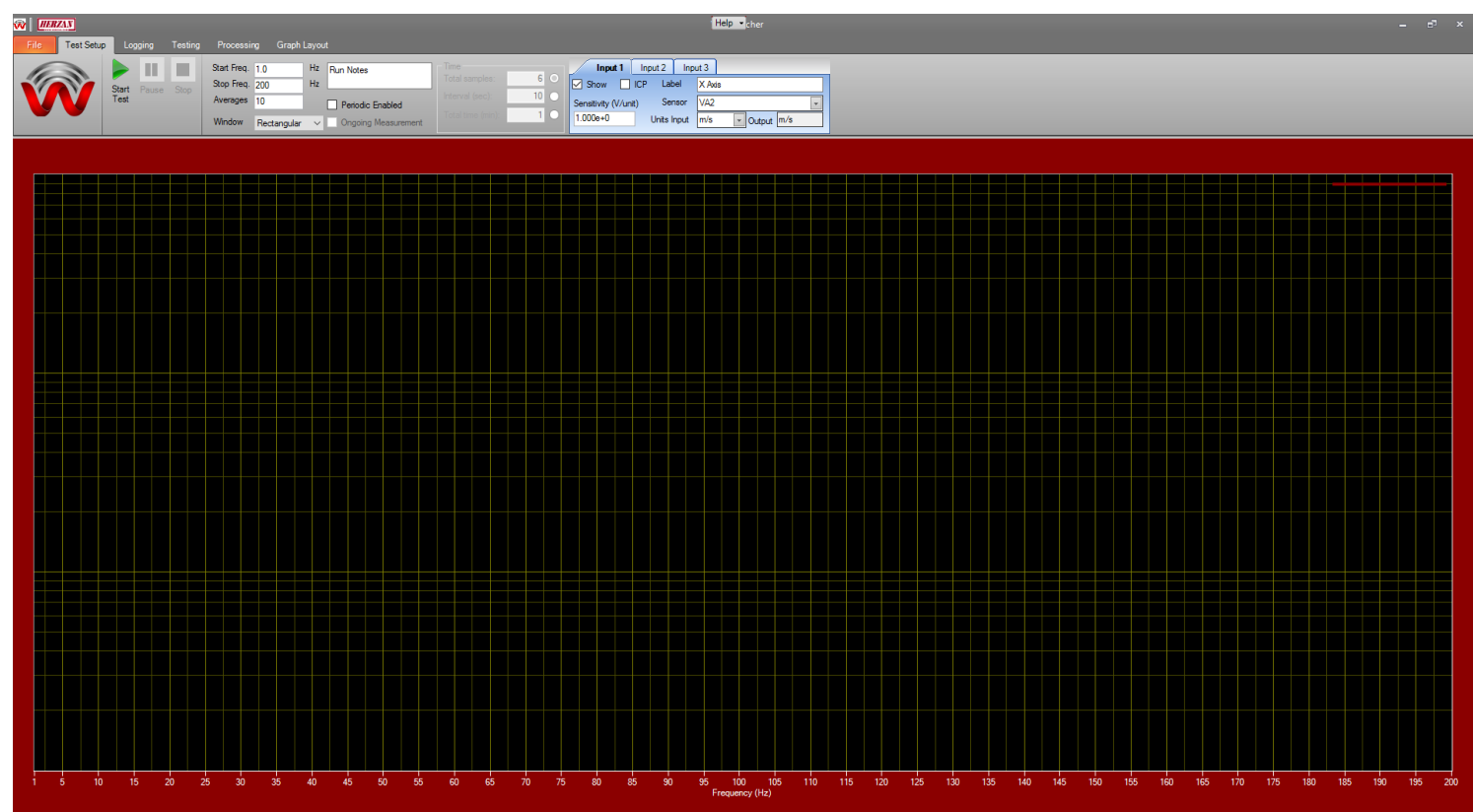




**Acoustic & Vibration
Isolation Specialists**

WaveCatcher 3.0 New Features Overview



Upgraded Software Improving
Features, Design, and Reliability

Contents

New Features	3
Visual Design Improvements.....	3
Tooltips.....	3
Post-Processing – Inputs > Outputs.....	4
Post-Processing – Dynamic Sampling.....	5
Intuitive Show/hide Functionality	5
Moveable Legend.....	6
Multi-Y Scale Functionality.....	7
Improvements	8
Loading Data.....	8
Protocols/QuickSets	8

New Features

Visual Design Improvements

The visual design of the WaveCatcher software is one of the more notable improvements over previous versions. The responsiveness, visual clarity, and overall customizability (you can change the background color if you'd like!), provides a fresh experience for users wanting to perform quick and easy measurements. The features of the WaveCatcher software have also been organized in a more clear and intuitive way, allowing users to set up measurements in less time.

Tooltips

Previous versions of the WaveCatcher software required the user to have prior knowledge of the software features or have the manual readily available when needing to perform quick measurements.

In the WaveCatcher 3.0 software, users can hover over any item in the software (for more than 3 seconds) to prompt a tooltip. The tooltip will provide a brief description of the item, enabling the user to quickly reference individual software features.

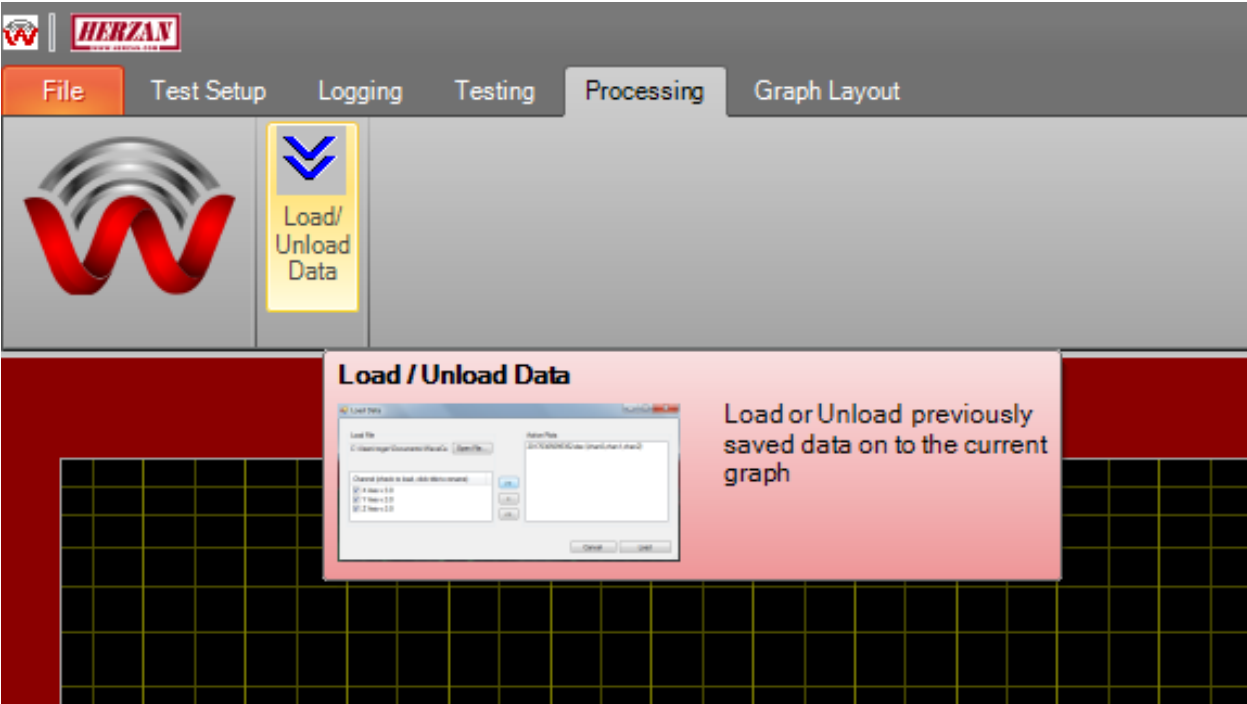


Figure 1: Example of a tooltip for loading/unloading saved data.

Post-Processing – Inputs > Outputs

Post-processing of measurement data was one of the primary focuses in creating an improved version of the WaveCatcher software. In previous versions of the WaveCatcher software, all post-processing work had to be performed outside of the WaveCatcher software itself.

In the WaveCatcher 3.0 software, users can quickly translate measurement data into a different unit set or measurement type (i.e. displacement > acceleration), through the software's internal conversion program.

Units are now selected as a set of **inputs** and **outputs**, with the input units being the native units measured by the sensor, and the output units being the desired units to be displayed after a conversion is performed (i.e. $\text{inch/s}^2 > \text{g}$). The input and output units are listed once the sensor is selected in the above drop down menu.

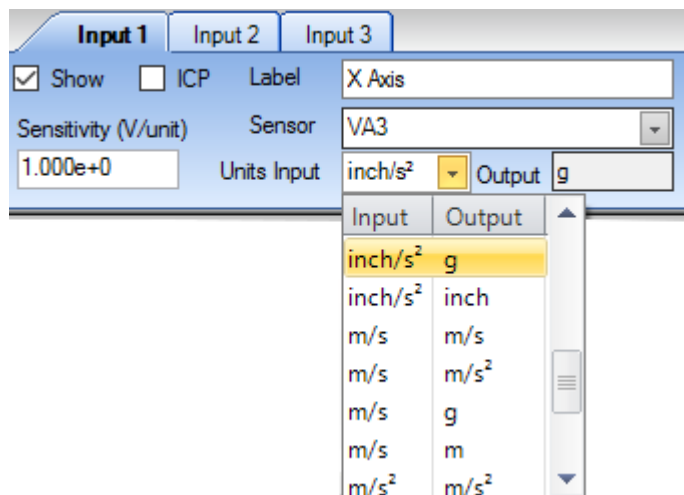
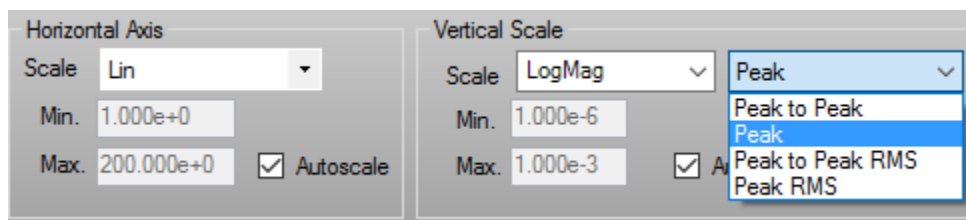


Figure 2: Drop-down menu to select Input and Output units.

Post-Processing – Dynamic Sampling

In previous versions of the WaveCatcher software, making changes to the sampling mode required the user to perform a new measurement to read data in the new sampling mode.

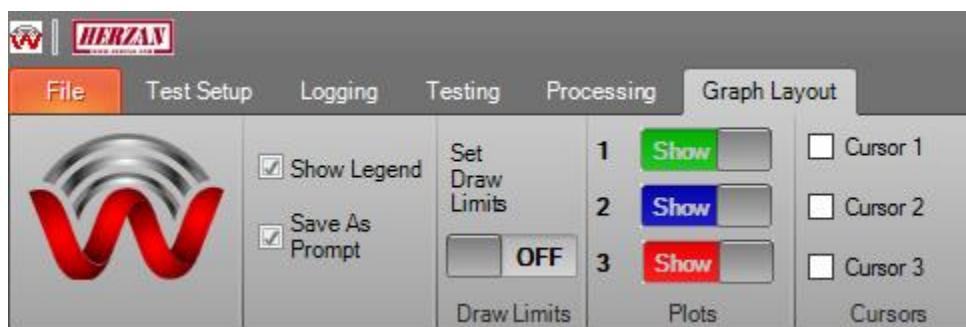
In the WaveCatcher 3.0 software, making changes to the sampling mode can dynamically change the plot and re-scale the graph to allow the user to review previously collected data in the new sampling mode. Also, the WaveCatcher 3.0 software includes new sampling modes, such as: Peak to Peak, Peak, Peak to Peak RMS, and Peak RMS.



Intuitive Show/hide Functionality

In previous versions of the WaveCatcher software, removing plots from a graph required the user to retake a measurement to view the desired number of inputs.

In the WaveCatcher 3.0 software, the process to do this is dynamic and can be achieved by "Showing/Hiding" each input found in the *Graph Layout* section of the software.



Moveable Legend

Previous versions of the WaveCatcher software had the Legend in a static position, causing some of the data to be missed by the overlapping Legend.

In the WaveCatcher 3.0 software, the legend can be moved seamlessly by clicking and holding the Legend and moving it to any location on the graph. Additionally, the Legend can be resized to adjust to varying label sizes and measurement needs.

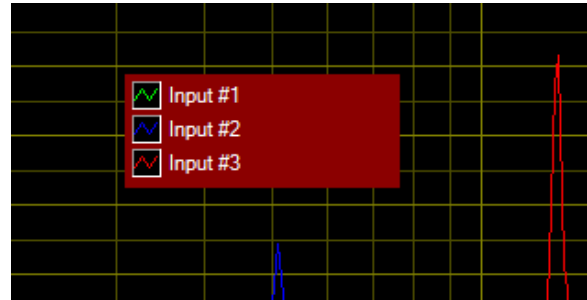


Figure 3: Image of the customizable Legend.

Multi-Y Scale Functionality

Building on the post-processing capabilities of the WaveCatcher 3.0 software, users can now perform measurements with individual inputs (i.e. Input 1, 2, and 3) displaying unique Y-Scales based on the selected output units. When output units under Input 2 or Input 3 are different than the output units of Input 1, secondary Y scales form to the right of the graph in their respective trace color. This is common when customers want to utilize different single axis sensors for individual inputs (another new feature!).

NOTE: Input 1 (the green plot) will always use the left Y-scale when performing a measurement, unless the show button has been unselected.

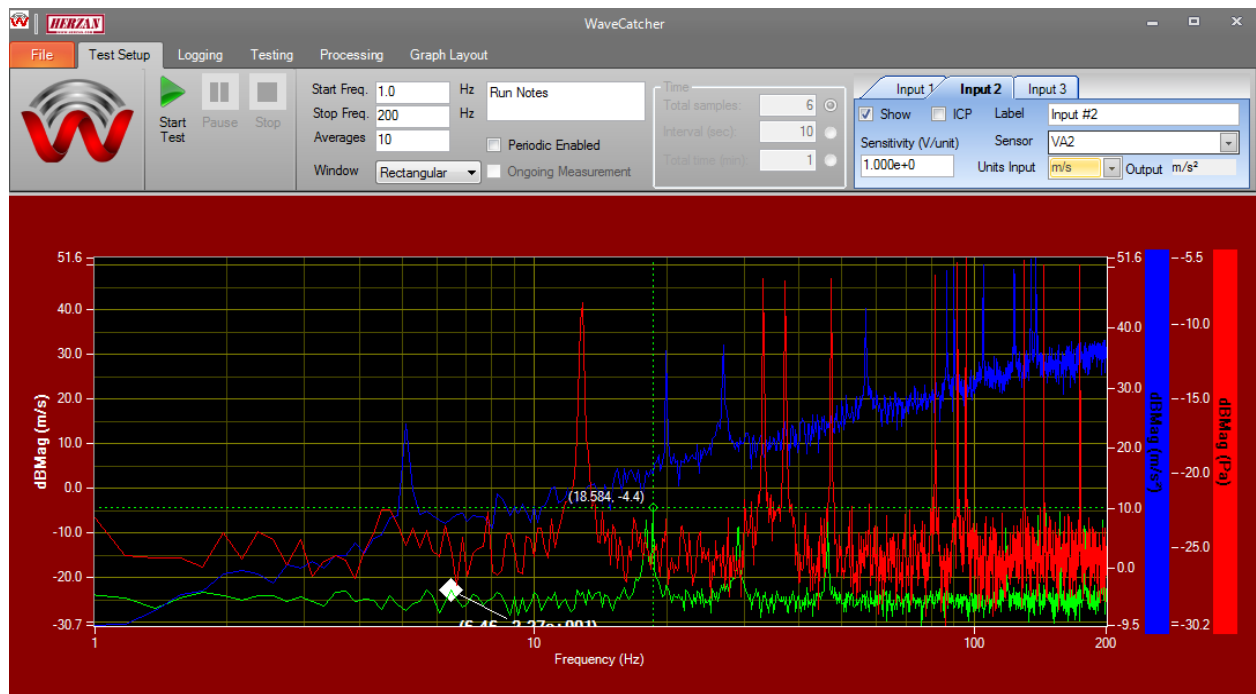


Figure 4: Example of three separate Y-Scales when performing a measurement.

Improvements

Loading Data

Saved data files in previous versions of the WaveCatcher software had a limited amount of data registered to them, requiring the user to catalog certain measurement details separately.

With the WaveCatcher 3.0 software, data files include all the original information previously saved, plus the sensor used (e.g. VA-3) and sample mode selected (e.g. Peak-to-Peak). Loading a saved file in the WaveCatcher 3.0 software will set the sensors, input units, and sample mode if no other plot is on the graph.

If a measurement plot is already on the graph (i.e. either a current test or a separate loaded save file), the save file will load the data if the sensors and input units match what is currently being displayed on the graph. A warning will prompt if the sensor and input units do not match, requiring the user to make the necessary changes and press the load button again.



Figure 5: Warning prompt when sensor and input units of the save file do not match the existing measurement plot.

Protocols/QuickSets

Due to the number of changes to the WaveCatcher software, new protocols must be created to remain compatible with the WaveCatcher 3.0 software. Previously saved protocols will not function properly in the new software.