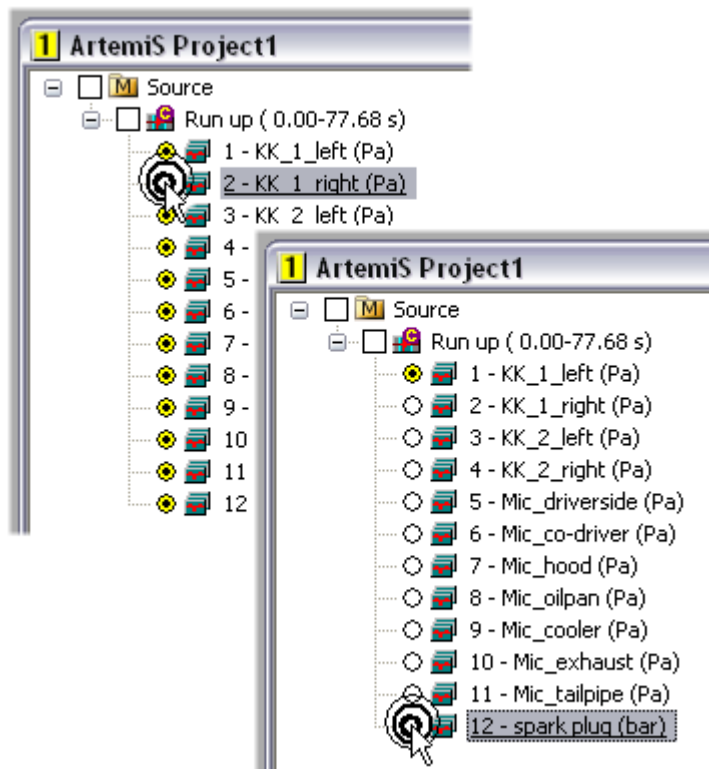


Tips and Tricks for Using ArtemiS

This Application Note is a compilation of many useful tips and tricks to facilitate and accelerate your work with ArtemiS. In the following, you will find instructions for many areas of ArtemiS.

Selecting Channels in the Source Pool



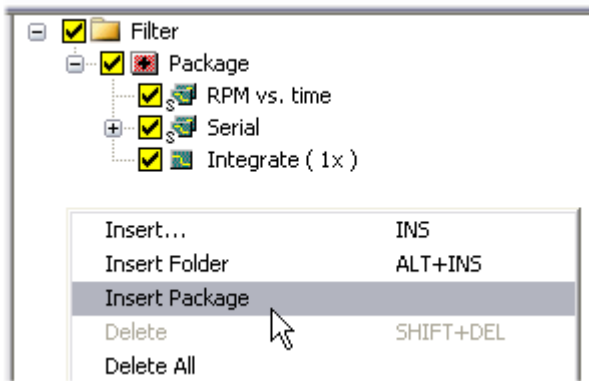
- In order to deactivate several channels of a mark at once, first click on the first channel with the left mouse button, then press the Shift key and keep it pressed while clicking on the last channel to be deactivated.

- This works just like selecting a range of items, for example, in the Windows Explorer and can also be used to activate a range of successive channels, as well as to (de)activate marks, analyses etc.

- In the same way, you can also (de)activate folders on the same level.

- This kind of multiple selection is possible elsewhere as well, e.g. with the channel selection on the property page of the diagram.

Package Function



- The Package function allows the successive processing of several elements in a Pool. Packaging is not only available in the Filter Pool, but also in the Statistic Pool. Here you can, for example, combine a Statistics element and a Channel Calc element.

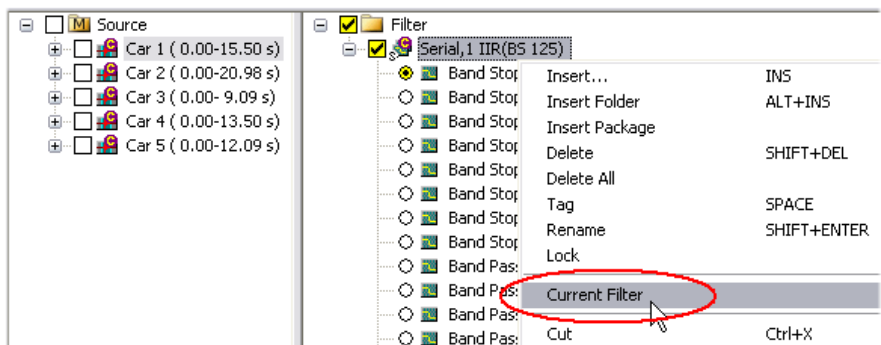
- The example shows a Package in the Filter Pool containing an RPM vs. time element, a high-pass filter and an integration function.

- When the Package is activated, these elements are processed successively. (If these elements were not in a Package, but selected individually in the Filter Pool, ArtemiS would generate three result files instead of one.)

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
Current Filter

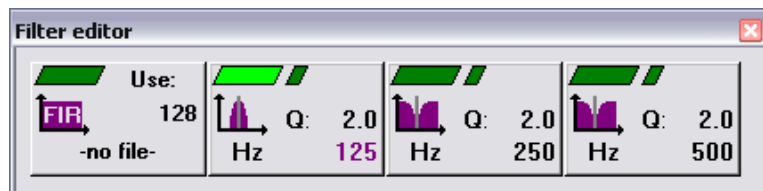
- Real-time filtering is also possible during playback¹ in the Source Pool. To use this function, open the context menu of the filter in the Filter Pool and select the menu item "Current Filter".



- The selected filter is now marked with a small "C", and every file selected in the Source Pool will now be filtered during playback.

- Furthermore, the usage of a filter during playback is indicated at the right bottom of the ArtemiS interface.

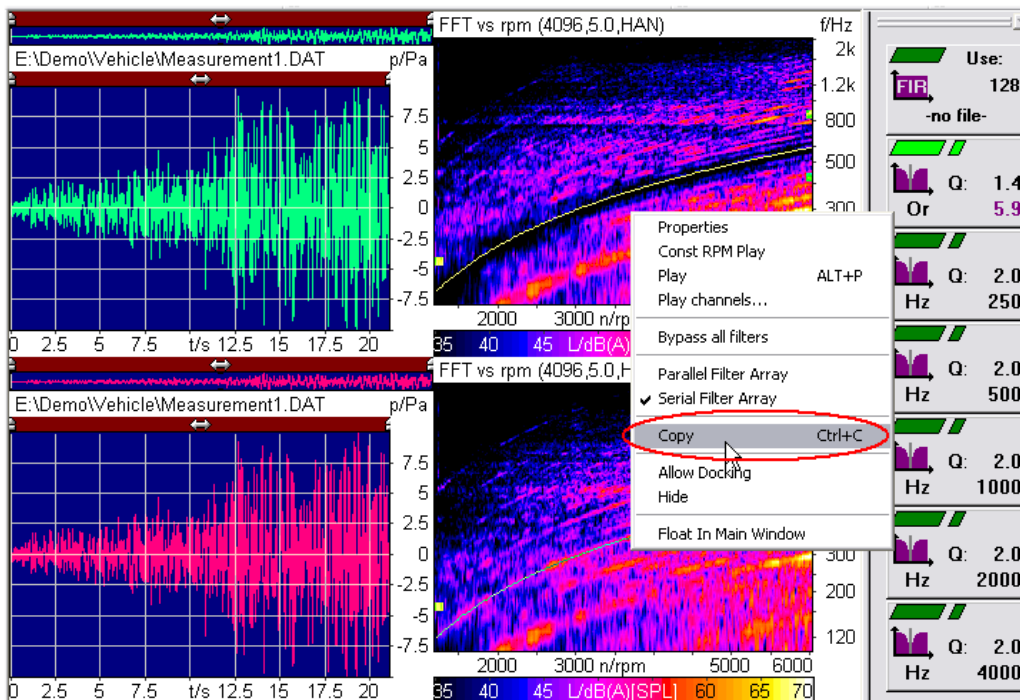
- The filter editor button  is used to open an editor allowing for an easy configuration of the current filter.



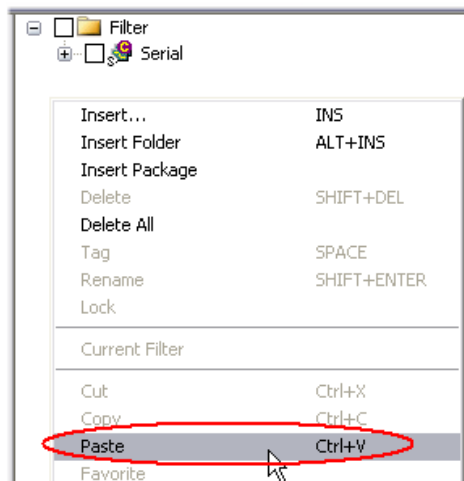
¹ In order to use the playback function you need ATP 01.

Copying Filters

- In the Mark Analyzer, the playback cursor and the real-time filtering allow for a detailed examination of a sound. The simultaneous listening and examination of the analysis results allow you to evaluate a sound comprehensively.
- By means of the real-time filtering using the filter editor you are in a position to find the optimal filter adjustments in order to optimize the sound quality of your recordings.
- If you want to save your filter settings in order to use them for other sound files, you can copy the filter and insert it into the Filter Pool of a project.

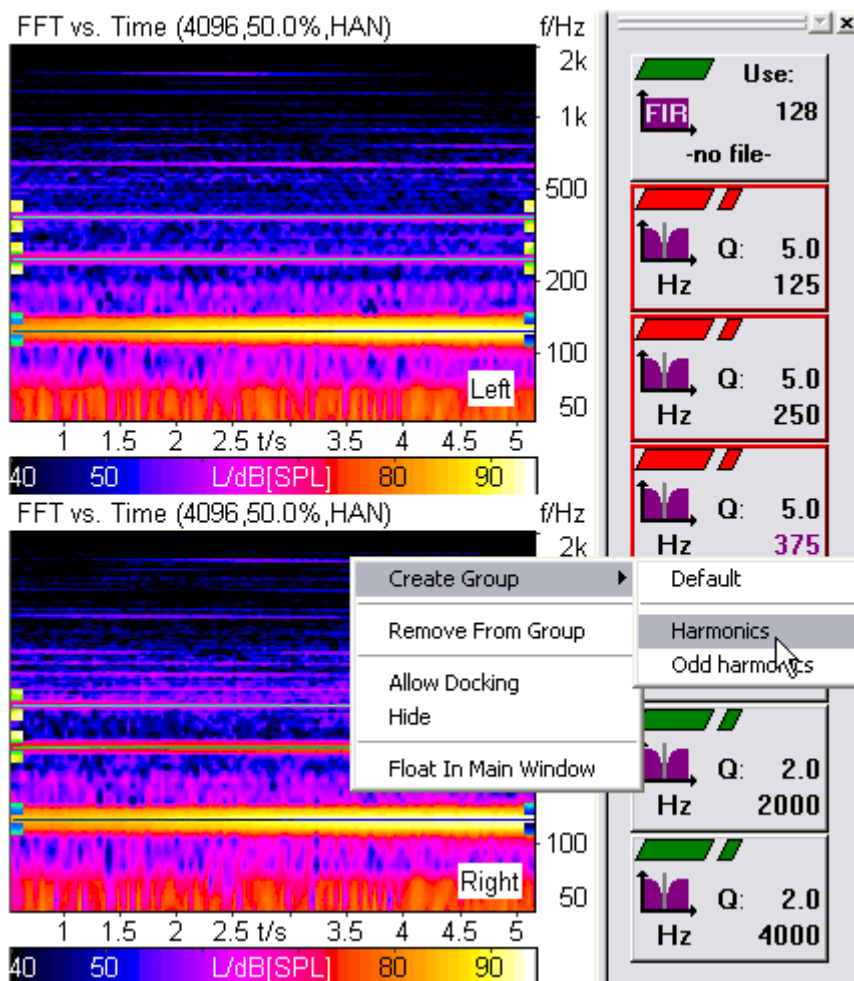


- To do so, copy the filter in the Filter Editor with the “Copy” command (or [Ctrl]+[C]) and insert it into the Filter Pool of an open project using the “Paste” command (or [Ctrl]+[V]).



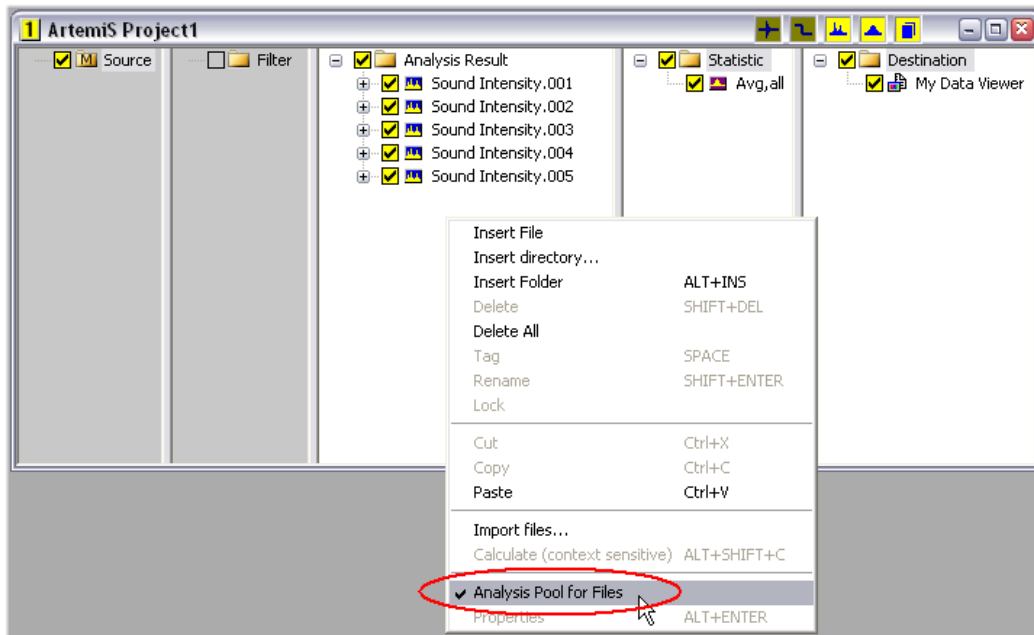
Grouping Filters

- For easier real-time filtering, the Filter Editor allows several filters to be combined in groups: While keeping the [Ctrl] key pressed, you can select the desired filters for a group by clicking in the upper right corner of the respective filter button with the left mouse button. Afterwards, open the context menu by clicking with the right mouse button and select the command "Create Group".



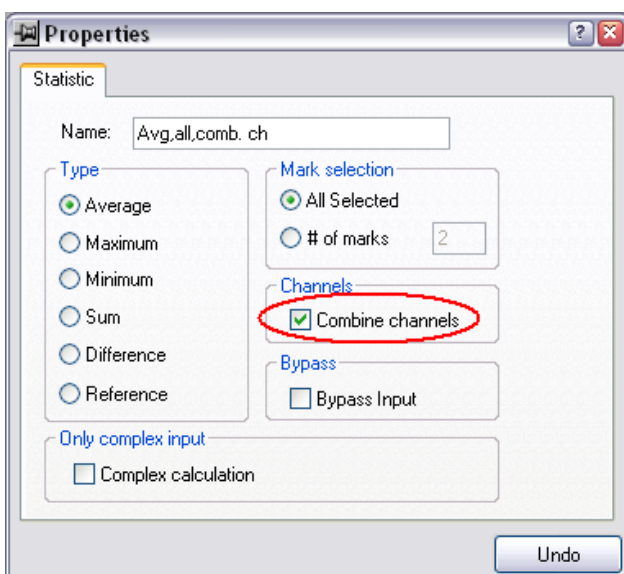
- The "Default" command that is now seen in the submenu does not change the frequencies of the individual filters, whereas the settings "Harmonics" and "Odd harmonics" adapt the frequencies to the frequency of the first filter, which is treated as the base frequency.
- The properties that can be changed for an entire group can now be configured in the Properties dialog of the filters. That way you can change, for example, the Q value of all filters in a group at once.
- ArtemiS allows up to four filter groups to be created.

Analysis Pool for Files



- The context menu of the Analysis Pool contains the command “Analysis Pool for Files”.
- Once the “Analysis Pool for Files” mode has been activated, the Source Pool and the Filter Pool of the project are grayed out, and the content of those pools is not used for the calculation. This allows you to insert previously calculated result files into the Analysis Pool.
- That way, you can rearrange existing results stored in files in a result window or further process them in the Statistics Pool.
- The File Export allows the analysis results to be directly written into the Analysis Pool for Files in order to guarantee a rapid processing

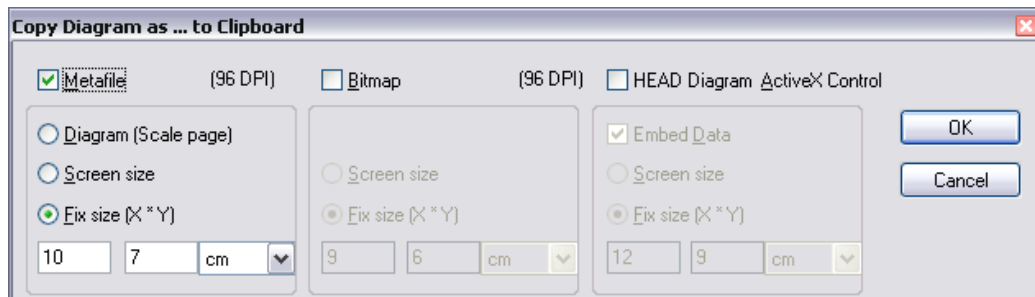
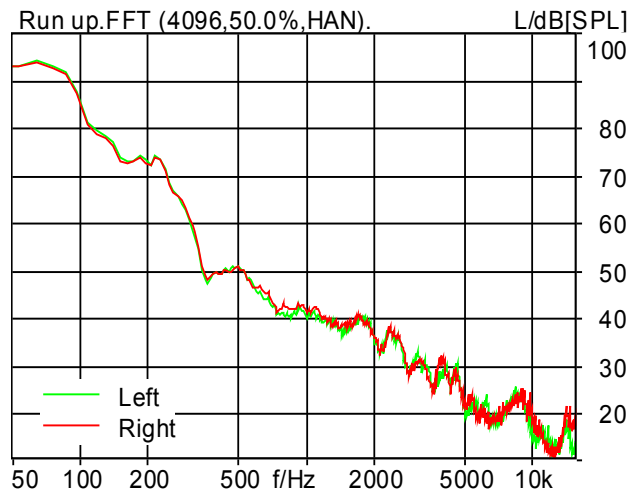
Statistics



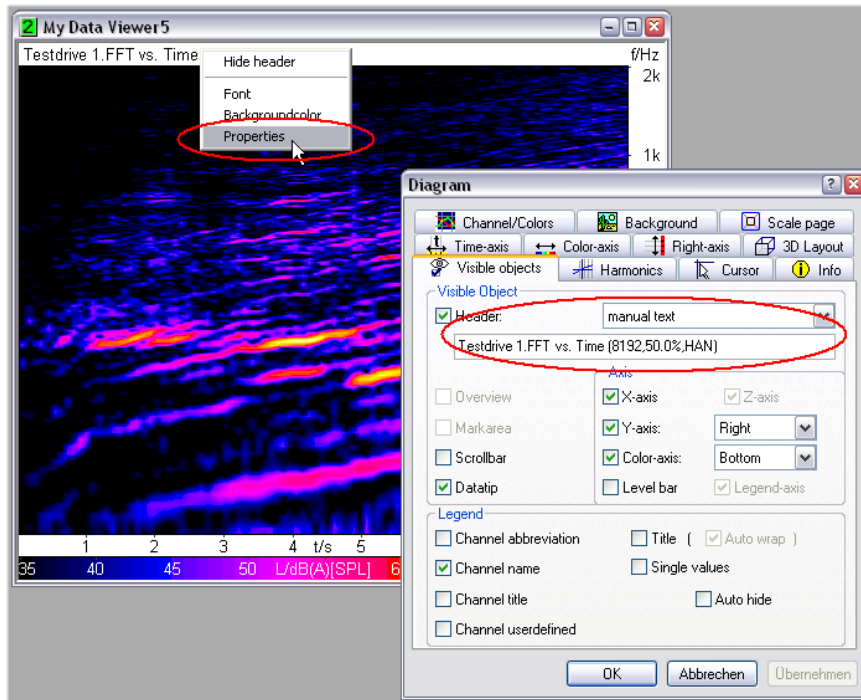
- In the Statistics Pool, you can use the Statistics element to perform statistic calculations (e.g. averaging, difference etc.). For these statistic calculations, the channels of one or several files can be combined in different ways. This is configured via the option “Combine channels”.
- If “Combine channels” is deactivated, corresponding channels of different files are linked, i.e. channel 1 of file 1, channel 1 of file 2, channel 1 of file 3 etc.
- If “Combine channels” is activated, the channels of one file are linked, i.e. channel 1 of file 1, channel 2 of file 1, channel 3 of file 1 etc.

Copying Diagrams to the Clipboard

- The command “Copy Metafile” in the Edit menu (or the keyboard shortcut [Ctrl]+[F]) allows the active diagram to be copied to the Windows clipboard.
- The format of the diagram is selectable on the property page (accessible via shortcut [Shift]+[Ctrl]+[F]). Afterwards, the diagram in the clipboard can be pasted, e.g. in a Word document, via shortcut [Ctrl]+[V].
- If the diagram is exported as metafile, it can be resized in the Word document without loss in quality. In contrast to a diagram in Bitmap format, the elements of a metafile are editable individually (Command: “Edit diagram” in the context menu of the diagram that was pasted in Word).
- If the diagram is exported as HEAD Diagram ActiveX Control Element, it can be actively configured, e.g. in Word, with the functions known from ArtemiS, such as modification of the axis size, curve coloring, etc. (see also Application Note “Living Diagrams”).



Header Text of a Diagram



- Generally, the header text of a diagram in ArtemiS is composed of the file name and the mark name. However, you can also edit the header text manually.
- To do so, open the context menu by right-clicking into the diagram and select the command "Properties". A window opens where you can change the header configuration from "auto text" to "manual text". Afterwards, the required header text can be entered into the beneath field.

Do you have questions for the author? Contact us at: imke.hauswirth@head-acoustics.de
We look forward to your feedback!