

Media Vision AudioPort Software Release 1.2

1. Overview

This release of Media Vision's software for the AudioPort contains enhancements and new functionality in several key areas:

- * Virtual Services
- * Pocket Recorder

2. Virtual Services

Media Vision's virtual device driver for Windows allows you to run DOS applications and games with your AudioPort after you start Windows in enhanced mode (Windows' default mode is enhanced, unless you do not have 2MB of free memory of available - in that case Windows will start in standard mode), then use the DOS shell within Windows to run any DOS-based games, applications, and/or multimedia titles you have loaded on your system.

NOTE: Not all games and/or applications can be run in a DOS shell from Windows. If you experience difficulty with one or more applications in this regard, it is recommended that you contact the software vendor for an updated version of the software, or for further technical assistance.

Generally speaking, running Windows in enhanced mode allows you to have a DOS application active (in a DOS shell) at the same time with one or more Windows applications. If the active DOS application is using the AudioPort hardware, it must share it with any Windows applications that also wants to use it. However, since only one software application is able to use the audio hardware at a time, Media Vision's virtual device driver for the AudioPort will block access to the hardware until the first application is finished using it. This is one of the fundamental requirements of supporting multitasking, and it prevents harmful conflicts from arising out of the shared use of the hardware.

The basis of this scheme is the rule that the application currently using the hardware has first precedence. Thus, if you are running a DOS-based game from the DOS shell in Windows that is actively playing digital audio (also known as 'waveform'), Windows applications will not be able to play digital audio until after the game has stopped playing. For example, if you first launched a DOS-based game from Windows and it started using the AudioPort hardware for playing waveform sounds, then the sound from your alarm clock in Windows would not be heard until after the waveform from your DOS game finished playback. However, if your DOS game was not playing waveform at the time the Windows alarm clock went off, the audio from your alarm clock would be heard! Likewise, if you are using a Windows application to playback waveform sounds when you launch a DOS game from Windows that tries to play waveform sounds, the

Windows application takes precedence and its waveform sounds will continue until they are finished. Once they are finished, the DOS game will be able thereafter to play waveform sounds.

3. Pocket Recorder

Several new editing features and functions have been added recently to Pocket Recorder to allow for more flexibility in editing and using recorded waveform data. In addition, the file function 'Set Temp Directory' has been added so that the temporary storage directory on disk volumes which are filling up (something likely to happen if you are accumulating multimedia data) can be moved to disks and volumes which have more free storage space. These new additions to Pocket Recorder include:

Drag and Drop

Pocket Recorder now supports drag and drop of waveform files (i.e., files that contain the .wav file extension). To use this feature place Pocket Recorder in a minimized state on the Windows desktop. Then, select one or more waveform files, e.g., using Windows' File Manager, and drag and drop the selected group to Pocket Recorder and release. Pocket Recorder will play It is now possible to select a region of the wave file by clicking down on a mouse button while in the waveform view area, and, while continuing to hold the mouse

Selecting A Region Of The Waveform File

It is now possible to select a region of the wave file by clicking down on a mouse button while in the waveform view area, and, while continuing to hold the mouse button down, moving the mouse to a new position within the same view area. Similarly, 'shift-click' selection is possible by simultaneously holding down the SHIFT key and clicking the mouse button at a point in the waveform view area. This will select a region between the current position and the position where the mouse was clicked.

This functionality works similar to the selection functionality found in many word processors in selecting a region of text, with the exception that you cannot scroll the waveform view while you are selecting (i.e., you cannot hold down the mouse button and drag the mouse cursor outside of the waveform view area to cause the waveform to scroll).

When the waveform view area is in 'zoomed-in' mode, it is possible to select a region larger than what can be displayed in the view area. To do this, use the following 'SHIFT-click' functionality:

- a, Set the current-position-cursor (the red line in the waveform view area) to the beginning of the region you wish to select.
- b, Scroll the view area to the part of the waveform where you want the

region to end.

- c, While holding down the SHIFT key, simultaneously click on a mouse button, and the region between the current position (which may have scrolled out of view), and where you clicked the mouse, becomes the selected region.

Note that if there currently is a region selected, clicking on any mouse button in the waveform view area will remove that selection. This does limit selecting to one zoom mode at a time. That is, you cannot select a region in 'zoomed-in' mode, then zoom-out while maintaining that selection, because to zoom-out you must double click on the waveform view window, which will remove any defined selection.

Cut, Copy, Paste And Delete (Edit Functions)

The options in previous versions of Pocket Recorder which allowed limited editing of a waveform data have been replaced with standard Cut, Copy, Paste, and Delete options.

To use Cut, Copy, and Delete, select a region of the wave file and use one of options in the Edit menu to perform the desired action. These options behave similarly to other windows applications: Cut will copy the deleted region to the clipboard, then delete the region from the wave file; Copy will simply copy the selected region to the clipboard; Delete will delete the selected region from the wave file without affecting the contents of the clipboard.

To use the Paste function, place the current-position-cursor at the position in the waveform view area where you want the paste to occur, and select the Paste option from the Edit menu. The Paste functionality differs slightly from many standard Windows applications in that it is not possible to paste into a region. Instead, the waveform data which is pasted will be placed starting at the current position, and is appended to any selection currently defined.

Please note: It is only possible to paste data which is of the same format as the waveform which is being displayed. Format includes sampling rate, bits per sample, and number of channels. You cannot paste a 44kHz, 16 bit, stereo format into a 22kHz, 8 bit, mono file. Functionality to enable pasting different waveform formats will be added in a future release of this application.

Set Temporary Directory

Through the Set Temp Directory option in the File menu you can set the directory in which the application will create it's necessary temporary files.

In previous versions of Pocket Recorder, the directory for temporary files was derived from the TEMP environment variable in DOS. Because people often

set this variable to a RAMdrive of limited size, it unnecessarily constrained the size of recordings and/or file editing operations that could be performed by Pocket Recorder.

The **Set Temp Directory** option makes it possible to bypass the TEMP environment variable by specifying a temporary directory which will be used only by this application.

To use this option, perform the following steps:

- a, Select the Set Temp Directory option in the File menu.
- b, If a file is loaded and has been modified, a message box querying whether the modifications should be saved will appear. Either the Yes or No option must be chosen to change the temporary directory.
- c, A Set Temp Directory dialog box will appear in which it is possible to select the current drive and directory for the applications temporary files.

Selecting the OK button in this dialog box will cause the applications temporary files to be recreated on the newly specified drive and directory. Selecting the Cancel button in this dialog will cause the application to ignore any changes made to the specified drive and/or directory. Selecting the Remember check box makes it possible for the specified temporary drive and directory to be remembered in future instances of the application.

As an example, if volume D: is a RAMdrive, and the TEMP environment variable in DOS is set to a directory on this drive, it may be desirable for this application's temporary files to always be created on C:\TMP (or in some other directory not on the RAMdrive). In this case, use the Set Temp Directory dialog box to change the drive and directory to the desired settings, and check the Remember check box, then click on the OK button. If the application is able to create a file in the assigned directory, all future instances of the application will default to the new temporary directory just defined.

It should be noted that in the design of Pocket Recorder a trade off was made between speed of execution and the size of waveform files which can be recorded or edited. Because the ability to handle large files was considered a primary design criterion, all editing changes are stored in a temporary file which is essentially a mirror image of the original file, plus (or minus) any modifications. This makes the Revert option possible - by simply reinitializing the temporary file - and makes large amounts of editing possible, since changes are not stored in memory.