Pocket Recorder

Version 2.1

Release Notes

September 21, 1992

This document outlines enhancements and bug fixes in version 2.0 of the Pocket Recorder application, as well as items which will be addressed in future releases.

Enhancements in version 2.0:

I. Selecting A Region Of The Wave File.

It is 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 exactly as similar selection functionality found in many word processers, where you can select 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). Waveform scrolling functionality will be added in a future release of this application.

In the meantime, when the waveform view area is in 'zoomed-in' mode, it IS possible to select a region larger than that which can be displayed in the view area. To do this, use the following 'shift-click' functionality:

Set the current-position-cursor (the red line in the waveform view area) to the beginning of the region you wish to select, then scroll the view area to the part of the waveform where you want the region to end. Then, 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.

II. Cut, Copy, Paste And Delete.

The options in previous versions which allowed limited editing of the wave file have been replaced with standard Cut, Copy, Paste, and Delete options.

To use Cut, Copy, and Delete, select a region of the wave file as described above, 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 applictions in that it is not possible to paste into a region. Instead, the wave data which is pasted will always be pasted starting at the current position, and any selection which had been defined will be removed. Functionality to allow the pasting of wave data into a selected region will be added in a future release of this application.

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

III. Settings Saving.

The application's settings, which include sample rate, bits per sample, and number of channels, as well as the X and Y position of the window are now automatically saved when the application exits.

In the interest of keeping the menu-interface as minimal as possible, and from a consensus that in the vast majority of cases this settings saving functionality will be desired in the vast majority of cases, the option to NOT save the settings when you exit the application is not supported.

However, if you really want to change your settings in an instance of the application, without having it save the settings when you exit, there are two suggested ways to bypass this limitation:

1. Change the command line of your application to include a wave file to be loaded on program startup. The application's record parameters (sample rate, bits per sample, number of channels) will be set to those of the wave file specified. A deficiency of this method is that it will not save the X and Y positions of the applications windows.

2. Run two instances of the application, and change the settings of only one instance. When you are done, close the changed instance first, followed by the instance in which the settings were not changed. The settings saved when the first instance was closed will be overwritten by the settings of the

second instance, in which no settings were changed. This method will allow
you to save all settings, but it does require you to execute two instances
of the application.

If enough people complain that the lack of functionality for NOT saving
settings is a problem, it will be added in a future release of this application.

IV. Downsampling To 8 Bits.

An option was added to the Effects menu which makes it possible to convert
(downsample) a 16 bit wave file to 8 bits.

Because of problems associated with some versions of 16 bit capable hardware,
recording in eight bits may introduce more noise into the recording than
necessary. The solution to this problem is to record in 16 bits, then use
the Convert To 8 Bits menu option.

This option may also be used to effectively halve the size of a 16 bit file
when that quality of recording is not deemed worth the disk space it requires.

V. Setting Temporary Directory.

It is possible, through the Set Temp Directory option in the File menu, to
set the directory in which the application will create it's necessary
temporary files.

In previous versions of the application, the directory for temporary files
was derived from the TEMP environment variable in DOS. Because people often
set this variable to a RAM drive of limited size, it seriously limits the
size of recordings and/or file editing that can be achieved.

This option makes it possible to bypass the TEMP environment variable by
specifying a temporary directory which will only be used by this application.

To use this option, do the following:

1.   Select the Set Temp Drive option in the File menu.

2. 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.

3. 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.

For example, if D: is a RAM drive, 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 some other directory not on the RAM drive). 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, followed by clicking on the OK button. If the application is able to create a file in the supplied directory, all future instances of the application will default to the new temporary directory which was just defined.

As a justification for why any editing changes must be saved or discarded prior to changing the temporary directory, it should be noted that in the design of this application a trade off was made between speed of execution and the size of 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, because changes are not stored in memory.

In summary, it was decided that to specify a new temporary directory, followed by the copying of the current temporary file to the new temporary directory, with a possible failure condition due to lack or available space or access privileges, was too clumsy. With the file saved or with changes discarded, the temporary file is not used, so it can simply be deleted and recreated at a minimum size in the new directory.

VI. Auto-Stopping During Recording.

The application will no longer allow recording to be performed past the point when the temporary recording file grows to large to be saved. When this point is reached, a message box will appear indicating that the recording will be stopped.

It is suggested that the file be saved at this point if any editing is to be done which will increase its size. After any such editing, the file will probably not be saveable.

To calculate the amount of disk space which can be used to record a file, take the total free space of your temporary drive, subtract the size of the file (if any) currently loaded by the application, and divide by two.

Enhancements in version 2.1:

Pressing F10 brings up Playback Rate scale dialog. It can be used to vary playback rate only, not record rate.

File/New will not break OLE link.

Divide by zero crash has been prevented. Display bugs now occur.