SonoWave 1.0

FreeWare from *OsoSoft*
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INTRODUCTION

There are lots of WAV file playing utilities available for *Windows* 3.1 but most of them do just that--play WAV files. *SonoWave* is a bit different; it plays them, but does a lot more too. Here's what you can do with this program:

1. Play WAV files on any system which can play WAV files.
2. View an oscilloscope-like view of the WAV file in .05 second chunks.
3. View the waveform in a continuous play mode.
4. View the waveform of the entire file in a single window.
5. View a sonogram image of the file.
6. View a cyclogram image of the file.
7. Compare WAV files, perhaps even matching voice identification features.
8. Save the graphic image for a file in a BMP file.
9. Load the graphic window's contents into Windows PaintBrush for editing or printing.
10. Load the WAV file into the Windows Sound Recorder for editing.

LICENSE INFORMATION

SonoWave is FreeWare. There is no registration fee for use by anyone for this program. However, you may not sell the program or use it as part of any other program or package without express written permission. Shareware distributors and BBSes, however, can distribute the program using their normal fee structure. If you distribute *SonoWave*, you must include the files, SONOWAVE.EXE and SONOWAVE.WRI

SonoWave and its documentation are protected under U.S. and foreign copyright laws. All rights are reserved.

The author of this program has made every effort to make it error-free. However, he takes no responsibility for its use by others.

For information on other *OsoSoft* programs, please see the end of this documentation.

SYSTEM REQUIREMENTS

SonoWave requires Windows 3.1, WAV file playing capabilities, a mouse and hard disk.

INSTALLATION

SonoWave was written in *Visual Basic 3.0*, so you need the VBRUN300.DLL library to use the program. If you don't already have a copy, you can download VBRUN300.ZIP from the *OsoSoft* BBS at (805) 528-3753.

Here's the installation process.

1. Copy VBRUN300.DLL to your WINDOWS\SYSTEM directory.
2. Copy SONOWAVE.EXE and SONOWAVE.WRI into another directory you want to use. It's

recommended that you give *SonoWave* it's own directory, since it looks for its files in that directory.

3. Start *Windows*, then use the File/New menu in the program manager to add the *SonoWave* Icon to your desktop. If you don't understand how to do this, consult your *Windows* manual. NOTE: If you use another program, such as *Norton Desktop for Windows,* as a program manager, you'll need to consult that program's documentation for instructions on adding a new program.

4. Once the *SonoWave* Icon is on your desktop, don't forget to check the Save Changes box when you exit *Windows*.

RUNNING *SonoWave*

To start *SonoWave*, double-click on its icon.

Playing Files with *SonoWave*

Before doing anything with *SonoWave*, you must select a WAV file in the file list. Choose the drive and directory which holds your WAV files, using standard Windows list selection conventions. To select a file to manipulate, click once on the file name. To play a WAV file, double click on the filename or click the [Play] button.

Viewing WAV Files in Other Ways

SonoWave can view your WAV files in several ways, each of them unique to this program. Each display mode is controlled by one of the buttons at the left of the *SonoWave* window. Here's a description of the function of each button, working from the top to the bottom of the button list:

[Play] - plays the current WAV file on your system. You need either a sound card or the SPEAKER.DRV driver from Microsoft.

[Waveform] - Displays the oscilloscope pattern of the first .05 seconds of the WAV file.

[Next Frame] - Displays additional .05 second chunks of the current WAV file. Each click advances .05 second in the waveform.

[Continuous] -- Displays .05 second chuncks of the WAV file continuously until the end of the file.

[Scatter] - This display plots every byte in the WAV file, with each layer in one of 16 colors. Each layer represents a .05 second chunk of the file, with layers stacked on top of each other. You can use this display as a pattern for comparing entire files.

[Sonogram] -- This display plots the frequency of occurrence of each dynamic level in the file. The levels are on the Y-axis, and the frequency those levels occured throughout the file are on the X-axis. In a typical Voice file, there will be a cluster of high value near the center of the display. Other sounds will produce their own unique Sonogram. You'll even find differences between two people saying the same word.

[Cyclogram] - Similar to the Sonogram, this display plots the average levels in the entire wave form as circles of varying sizes in the window. Again, you'll see distinct differences between different sounds, even between people's voices saying the same word or phrase.

[Dynagram] - This display plots the waveform of the current WAV file in a single window, sampling the WAV file to fit it into the space available. You can use this display to get a picture of the entire WAV file at once. Note: On long WAV files, the sampling rate may be too low to present an accurate picture of every waveform. Use this command for reference only on long WAV files.

[Save BMP] - This button saves the current image in the WAV window in a BMP file, which you can then load into any program which can read BMP files. Use this command to store images of interest to you on a permanent basis. You'll be prompted for a filename, with path information as necessary.

[PBrush] - This button creates a temporary BMP file and loads it into Windows PaintBrush for editing or printing. It's the fastest way to print a copy of an interesting display.

[Recorder] - This button loads the current WAV file into the Windows Sound Recorder mini application. There, you can edit the file, or even record a new sound in the file or record a new file. For editing, you don't need a microphone, but to record new sounds, you'll need a sound card and microphone.

Help Menu

The *SonoWave* Help Menu offers a Help command with brief help for the program, an About *SonoWave* command for version information, and an Other *OsoSoft* Programs command for information on and ordering of other *OsoSoft* programs.

OTHER PROGRAMS

OsoSoft offers a number of other Freeware and Shareware Products you may find of interest. If you enjoyed working with *SonoWave*, you'll want to look at some of these other applications. These are listed below. You can find the latest versions of these programs on Compuserve, in various forums. To find all my files, use Compuserve's IBM File Finder, searching for my CIS ID: 71571,222.

You can also download these programs from The *OsoSoft* BBS at (805) 528-3753. Anyone may log on to this system and download files immediately. Just follow the screen prompts. The *OsoSoft* BBS supports modem speeds from 300 to 14400 bps. Set your communications parameters to 8/N/1.

OsoSoft also publishes a number of free programs, like *SonoWave*, which you're welcome to try and use at no charge. You can find all *OsoSoft* programs on the *OsoSoft* BBS. Set your communications parameters to 300-14400 bps, 8 bits, No parity, and 1 stop bit. You can download any *OsoSoft* program on the first call. You can also find *OsoSoft* programs on CompuServe in the WINADV and IBMHW forums. Many shareware distributors also carry *OsoSoft* programs.

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