

# WaveCompactor 1.2

## Improve WAV File Compressibility

### INTRODUCTION

When creating multimedia applications, one of the most difficult problems most programmers encounter is the relative incompressibility of WAV files. The random nature of these files keeps compression software like PKZIP and Microsoft's COMPRESS programs from reducing the size of the file to the same degree you find in other files.

That means that distributing your application is difficult due to the large size of WAV files. In some cases, it's almost impossible. Especially for shareware authors, for whom ZIP file size can mean the difference between a user downloading a file or skipping it, some method for increasing the compressibility of WAV files is essential.

Until now, however, that's been impossible. *WaveCompactor 1.2* is the first program which can help you turn monster WAV files into easily-compressed files. How it does that is a trade secret, but it works.

Any time you modify a WAV file, you risk losing some sound quality, and *WaveCompactor* is no exception. But the compromise is worth it, and *WaveCompactor* offers three different levels of operation, ranging from one which disturbs sound quality the least to one which maximizes compressibility at the expense of more sound quality. It's up to you which level to use.

### WAVECOMPACTOR'S FEATURES

*Three Levels of Compaction*

*Compact a Single File or an Entire Directory*

*Automatic File Renaming*

*WCV Output Files Can Be Used As-Is or Renamed to WAV*

*Increases Compressibility up to 1000%*

### SYSTEM REQUIREMENTS

*WaveCompactor* requires a 386SX or better PC, Windows 3.1, and a minimum of 2 MB of memory. You'll also need a mouse and a sound card or speaker driver for Windows.

### LICENSE INFORMATION

*This is the **UNregistered** version of WaveCompactor. You may use this program*

*for a trial period of up to 30 days. After that time, you must register your copy if you continue to use it. For complete registration information and an order blank, select the OsoSoft Program Info and Registration command in the Help Menu. The Registration Fee for WaveCompactor is just \$15.*

Registered users of this program will receive the very latest version of this program on disk, with an automated installation routine. Registered users also are entitled to full support by voice, fax, CompuServe, or the OsoSoft BBS. All registered users are entitled to unlimited free updates of this program on the OsoSoft BBS. No printed manual will be shipped with the registered version of the program, due to its extreme simplicity.

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OsoSoft is a member of the Association of Shareware Professionals and the Software Publishers' Association.

### **OsoSoft**

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### **HOURS**

OsoSoft business hours are 7 AM to 4 PM, Pacific Time, on weekdays. Calls outside those hours are not appreciated.

### **ASP OMBUDSMAN NOTICE**

This program is produced by a member of the Association of Shareware Professionals (ASP). ASP wants to make sure that the shareware principle works for you. If you are unable to resolve a shareware-related problem with an ASP member by contacting that member directly, ASP may be able to help. The ASP Ombudsman can help you resolve a dispute or problem with an ASP member, but does not provide technical support for members' products. Please write to the ASP Ombudsman at 545 Grover Road, Muskegon, MI 49422-9427 USA FAX 619-788-2765 or send a CompuServe message via CompuServe mail to ASP Ombudsman 70007,3536.

### **INSTALLATION**

The Shareware version of *WaveCompactor* uses a manual installation technique. The Registered Version includes an automated installation program. To install this program, take the following steps. If you need help with any of the file and

directory procedures, consult your Windows or DOS Manual.

1. Copy all files from the distribution diskette or the ZIP file containing the program into a directory on your hard disk. OsoSoft recommends that you create a directory called **WAVECOMP** for the files.

## 2. VBRUN300.DLL REQUIRED

This program requires that the **VBRUN300.DLL** file, the runtime file for *Visual Basic* 3.0 programs, be installed in your **WINDOWS\SYSTEM** directory. If a copy of that file was not included with this copy of *WaveCompactor*, you may obtain a copy of this file as **VBRUN300.ZIP** on the OsoSoft BBS, at the number below. The file is also available from many other online sources, including the **WINSHARE** forum on CompuServe and the **Windows** section of America Online.

3. If Windows is not running, start it. Then, from the Program Manager, click once inside the program group where you want the *WaveCompactor* icon. Then, select the **New** command from the Program Manager's **File** menu. Make certain the **Program Item** option is selected, then click **OK** or press **<Enter>**.

4. In the **Description** field of the resulting dialog box, type **WaveCompactor**, then press **<Tab>**.

5. In the **Command Line** field, type **C:\WAVECOMP\WAVECOMP.EXE**, substituting other drive and directory information, if necessary. Press **<Tab>**.

6. In the **Working Directory** field, type **C:\WAVECOMP**, or substitute other drive and path information, if necessary.

7. Press **<Enter>** or click **OK** to complete the installation. The *WaveCompactor* icon will appear in the program group you selected earlier.

## STARTING WAVECOMPACTOR

To start *WaveCompactor*, double-click its icon in the *Program Manager*. Once *WaveCompactor* starts, you'll see its main window. You'll see a standard Windows file selection group of windows, three command buttons, and three option buttons.

## TUTORIAL

*WaveCompactor* is extremely easy to use, since it has just a few commands. To help you understand how the program works, here's a tutorial giving the steps used to modify WAV files into a more compressible format:

1. Start by selecting one or more WAV files to compact. To select multiple files, drag the mouse over several filenames or press <Ctrl> while you click on individual files, using standard Windows list selection routines.
2. Select an option for the quality and compressibility ratio you want. The default setting is for maximum compressibility (the third option button).
3. Click the [Compact] button to begin compacting your file or files. While this process continues, you'll see a status message showing you the Read, Compact, and Write steps. Large WAV files may go through this process more than once before being completely compacted. Wait while the process continues. If you have selected multiple files, the process will repeat until all files are compacted. Please be patient...the process can take some time, especially on large WAV files.
4. Once the normal mouse pointer returns, you'll see new files in your file list, with WCV extensions, rather than WAV. The files will have the same file root name as the original file. These are your compacted files. To hear the effect of the compaction process, select the original WAV file, then click the [Play Selected] button. Follow this by clicking the related WCV file and click [Play Selected] again. Compare the sound quality and choose a different ratio if desired, then re-compact.
5. After you've compacted all the WAV files you wish, exit the program with the [Exit] button, then move the WCV files to a working directory for renaming, if desired, and for compression. You may use the File Manager or DOS prompt for these operations.
6. To see the difference in compressibility, try compressing the original WAV file, then the WCV file. The results will be dramatic in most cases. NOTE: If you compress the original file with PKZIP, delete the resulting ZIP file before compressing the WCV file if they will have the same name. Otherwise, PKZIP does not create the smaller ZIP file, but leaves the file size the same as the first ZIP file. It's best to do your zipping in separate directories, if possible, to avoid confusion.

That's all there is to using WaveCompactor.

## **HINTS**

Shareware authors: Distribute your applications as shareware using compacted files, then distribute the full scale files to registered users to give them maximum sound quality. You can use this as an incentive, while still allowing your shareware users to try your complete program.

Different WAV files will result in different compressibility. In some cases, the

results are dramatic, while in others compressibility is not increased as much. Some WAV files which actually become larger when compressed with Microsoft's Compress program, compress to just 23% of their size when compacted with *WaveCompactor*.

WAV files which are at full volume work best with *WaveCompactor*. Low volume files often degrade more when compacted.

Music files in WAV format do not compact as well, losing more quality than voice files.

Files with high-pitched sounds lose more definition than those with medium to low-pitches.

Don't expect extremely high-quality sound in compacted files. Modifying WAV files always causes some degradation of sound quality. It's a trade-off.