



## Rise and shine

**Polishing up Win95's audio performance and upgraded Windows software for AWE-32 are at the top of Steven Helstrip's ladder this month. Plus, short-cuts to keyboard skills.**

Improving the audio performance of Windows 95 is a subject that seems to have every MIDI-related Web page talking at the moment. Although Windows 95 has bags of utilities to increase disk performance, sometimes these can have a negative effect when it comes to recording and playing back audio.

From the many hints and tips I have come across, I have found three that work effectively:

### 1. Read-ahead optimisation

This is a feature that Windows 95 uses to increase disk performance. It works by reading more data from disk than is actually requested by an application.

In most cases, full optimisation is recommended. However, you may find that turning this function off will provide better results when playing back multiple tracks of audio.

It is also worth experimenting with 16 and 32Kb settings. To adjust these settings, open the Control Panel and double-click "System". Then go into the Performance section and select File System: a slider enables you to choose from 4 to 64Kb of read-ahead optimisation. There is no definitive setting, since every machine is different.

### 2. Disk cacheing

Unlike Smartdrive, found in Windows 3.1, the disk cacheing system within Windows 95 does not have a fixed size. The amount of memory needed for cacheing can increase when disk-intensive applications are running, which in turn forces data stored in memory to be paged out to slower virtual memory. This can interrupt the data flow needed for solid audio performance.

By setting a maximum size for the cache, you can avoid some performance

degradation. To do this, you need to insert a line into the System.ini file, which can be found in the Windows directory. Under the heading [vcache], type

```
MaxFileCache=2048
```

If you have only 8Mb of RAM installed, this amount should be set to 512.

### 3. Virtual Memory

When left to its own devices, Windows 95 will determine the size needed for the SwapFile, or Virtual Memory.

Like its disk cacheing system, this can increase and decrease in size depending on how it sees fit. By setting a fixed size, audio performance can sometimes be improved. It is recommended that you allocate two and half times the amount of RAM you have, for a SwapFile. Therefore, if you have 8Mb of RAM, the SwapFile should be set to 20Mb. The applet to change these settings can also be found in the Performance section of the System dialogue.

### Windows 95 in AWE

Windows 95 software for the AWE-32 is now available from Creative Labs. It contains updated drivers and support for long file names in each application.

One of the best reasons to upgrade, though, is to take advantage of the new control

panel, which makes the handling of sound banks and samples much easier.

The control panel allows .wav files to be loaded into RAM without having to create sound banks and provides a "virtual" keyboard, enabling you to play samples without having to load up your sequencer.

I have several grudges, though. Firstly, Vienna doesn't like to share the AWE-32 with any other MIDI applications. Therefore, when you need to edit a sound bank, you must first close down any MIDI applications that are running.

Secondly, you still cannot save entire sessions, or the contents of user RAM, as one file. This is very frustrating: each time I need to go back to an old song, I have to load anything up to 20 files, individually.

Thirdly, several months back I mentioned that the paths and file names for user banks are stored in a file called sbwin.ini; in the new software, this file no longer exists. It's now stored in the Windows 95 Registry, as I recently discovered. In stumbling across this, however, I have devised a system that allows whole sessions to be saved and re-loaded. It's a bit cumbersome, I admit, but it works. The file you need can be found buried deep inside the registry editor. To run this, type "regedit" from the Run dialogue found in the Start menu.

To quickly find the folder needed, select "Find" from the Edit menu and type User-Bank. The contents will be displayed in the right-hand column. From the File menu you then need to export this file, preferably to a new folder since this will enable you to quickly find the files at a later stage.

There are two ways in which you can manipulate these files. By clicking the right

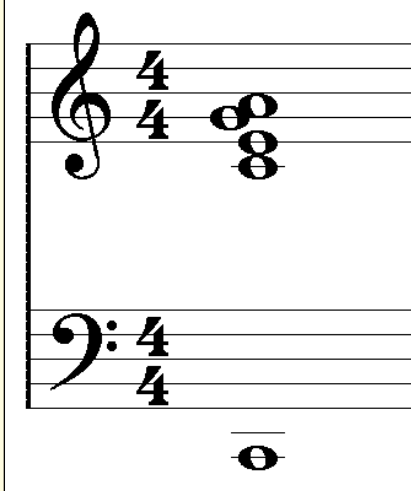


*The new control panel for the AWE-32 makes life easier, but not too much*

### Chord of the Month

This month's chord is C6. It is often used to thicken texture in blues pieces and is popular among guitarists.

When played with an A in the bass, the chord becomes Am7.



mouse button on the file icon, you can select either Edit or Merge. Edit displays its contents as text, which can then be copied and pasted into your sequencer's notepad for future reference. Alternatively, Merge enters the data back into the Registry. When you next restart Windows, the files will be automatically loaded, saving

you the time of finding and loading them individually.

● **Windows 95 tip:** The quickest way to restart Windows is to hold down Shift and select "restart computer". This restarts Windows only and not the PC.

### Cubase goes audio

Last month I wrote about an update for Cubase Score 2.0 that fixes problems with printing and enables Windows 95 users to see the MIDI activity display. Since then, and less than six months after Score 2's release, the boys at Steinberg have updated Cubase to version 3. They don't hang around, do they?

Although there's nothing new or exciting to be found in the MIDI department, audio has been added to each program along with 32-bit editing. Existing prices will remain, which means you can buy the industry standard package with audio thrown in for only £329 (incl VAT).

Like Quark XPress is to publishing, Cubase has always been the only serious option for the professional market. Before now, this was reflected in the price of Cubase Audio; a massive £900. Now, at a fraction of that cost, it will force the likes of Cakewalk and Musicator Audio to be significantly cut in price, which

is good news for all of us. If you want to find out more, there's a review in this month's First Impressions.

### Play-along-a-Liszt

I am often asked, "What's the best way to learn the piano, or keyboards?" Always, my answer is that

*Cubase now comes with eight tracks of audio as standard*

### Creative Essentials: Electric Dreamz

This is the fifth CD from the Creative Essentials library. Like the others in the series, it has over 200 samples in both audio and 16-bit .wav format. It starts with around 40 analogue pads (which bored the socks off me) before getting into some meaty Bass Station samples. Many of these have been recorded over several octaves, and with varying degrees of filter applied to them.

After the Bass Station come some mad analogue effects, which definitely belong in The X Files. Further into the CD come a load more effects, then some more and, er, some more. Some of the sounds available are quite curious, with names like Spanner in the Works, Welcome to the Machine, Glass Spider and Night Stalker.

Many samples originate from a wide range of analogue synths. However, some rather unorthodox instruments have been used, too. Screwdrivers, a frog and tin cans are just a few of them. If you're looking for original sound effects to use in games or film, this CD is a worthy buy. Otherwise it doesn't have much use. Electric Dreamz is available from Time + Space.





*Importing MIDI files into your sequencer enables you to view and print full scores*



*You, too, can be a great classical, jazz or ragtime pianist with the Pianist series*

there isn't a best way, and that nobody should go through ten years of classical training if all they want to do is play "Roll out the Barrel" down at the local on a Friday night.

At the end of the day, nothing can beat a solid practice regime: say, one hour a day, or more if you have the time. There are, however, lots of short-cuts if you own a PC with a sound card or MIDI setup.

Every style of music is now widely available in standard MIDI file format; from Bach to Bon Jovi and everything in between. By loading these files into a MIDI sequencer that has a score editor, not only can you view the music and print it out, you can also hear it being played by the professionals. The main advantage of using this method is that you can slow songs down, solo the left-hand part, and even loop difficult sections until you have per-

fected them yourself.

There are also plenty of programs around to help you learn technique and improve your reading. One of my favourites is the Pianist series, a collection of eleven programs covering classical, jazz, ragtime and Gospel styles.

Each program comes with around 90 MIDI files, all professionally recorded, with a weighted MIDI keyboard. An on-screen keyboard displays the keys being played and you can view each piece in traditional notation, too.

In addition, you can test your music knowledge with the trivia quizzes and find out everything you ever wanted to know, and more, about each composer featured in the programs. The accompanying MIDI files can be imported into any sequencer for further study.

The Pianist series is available for Win-

dows, Mac and Atari ST, from Turnkey. If you hurry, you'll get a free copy of The Ragtime Pianist with any order.

### PCW Contacts

Readers' contributions to the Sound column are music to our ears. If you have any hints or tips, any MIDI-related items or general comments, send them in to the usual PCW address, or to [steven\\_helstrip@pcw.ccmil.compuserve.com](mailto:steven_helstrip@pcw.ccmil.compuserve.com)

**Creative Labs** (Windows 95 software for the AWE-32 from around £12)

01743 248590

**Harman Audio** (Cubase updates, £329 incl VAT) 0181 207 5050

**Time + Space** (Electric Dreamz, £19.95) 01442 870681

**Turnkey** (Pianist series £49.95 incl VAT) 0171 379 5148