

The IBM Digitized Sound Package

by

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What is the IBM Digitized Sound Package?

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Imagine having your computer talk to you when you turn it on in the morning, or being able to have a menu of choices spoken to you as you make your selection. Imagine having a large collection of great sound effects to add to your own programs or batch files. With the IBM Digitized Sound Package you can do all of this and more!

The IBM Digitized Sound Package is a collection of tools which allow you to explore the capabilities of your machine, sound board, and the exciting uses of digitized sound. (Digitized sound is audio which is recorded and stored using the same method as the sound on a compact disk.) These tools will allow you to play sound effects that you may have recorded yourself or collected elsewhere. You will also be able to perform operations on these sounds such as digital mixing and audio compression. You may include these sound effects inside your own programs to make your computer come to life with sound.

The IBM Digitized Sound Package was written by John W. Ratcliff, an expert in computer simulations and educational software products. John is the author of 688 Attack Sub from Electronic Arts and the Milliken Storyteller package from Milliken Publishing Company. Be sure and look for 688 Attack Sub for an exciting simulation and gaming experience. If you have little ones be sure and check out the Milliken Storyteller which will entertain your children with brilliant VGA graphics and stories told by a professional storyteller using these same digitized sound drivers.

What sound support does this include?

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The sound package will work on everyone's computer! In addition to support for all of the sound boards on the market capable of digitized sound you will be able to play your sound effects on the internal speaker that is included in all IBM compatible computers. The package includes sound drivers for the following hardware:

The Covox SpeechThing	- From Covox.
The Covox VoiceMaster	- From Covox.
The Covox SoundMaster	- From Covox.
The SoundBlaster	- From Creative Labs.
The Adlib Personal Music System	- From Adlib.
Tandy 1000 EX/TX/SX/HX	- From Tandy Computer.
Tandy 1000 SL/TL	- From Tandy Computer.
Internal IBM Speaker	- All IBM Compatibles.

What comes with it?

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In addition to the digitized sound drivers themselves you will receive a number of tools to make using digitized sound on your computer easier. These tools include the following:

ZOUNDS!
SOUNDS!

Either two 360k disks or one 720k disk will be sent to you filled with digitized sound samples which have been compressed using BCOMP. Nearly two megabytes of sound samples (sampled at 9khz) will be included. Sounds come mostly from sound effects compact disks plus a few other surprises as well.

WRIMAGE

The OFFICIAL version of Wrimage which has a 3,000 word, word list. It also includes many more fun and unique sound effects than in the preview version provided here.

PLAY

Play is a very small program which will allow you to play digitized sound files. You may invoke the PLAY program from a batch file or from within one of your own computer programs. The PLAY program will play either raw sound files or files which have been compressed using the BCOMP utility. The PLAY program in this demo package will play only the files included. Sending your check for the complete digitized sound package is a sure fire way to get the latest and greatest utilities and sound effects available for your computer. Don't be the only one around with a silent machine, send for the complete package and turn your computer system into a HAL 9000.

BCOMP

BCOMP is an audio compression utility. It has been optimized to compress human speech and will compress speech files to as little as 20% their original size! BCOMP also is very effective on any sound sample, even music, achieving between 2:1 to 4:1 compression.

UNCOMP

UNCOMP allows you to reconstruct the original 8 bit sound sample from a BCOMP compressed file.

CSAMP

CSAMP is the change sampling rate utility. This utility will downsample or upsample a digitized sound file to another frequency. Since most sound files available are for the Macintosh computer and were recorded at 22khz or 11khz, you often will want to downsample these to a lower frequency for the IBM. The digitized sound drivers, especially the IBM internal speaker sound driver, have optimum performance at 9khz.

MIX

This is a little digital mixing utility which will allow you to combine two different sound samples into one new one. For example if you wanted to add a dog barking sound effect onto a sound sample of someone talking the MIX utility would allow you to do so. Simple specify the level (volume) that you want the dog bark to be included and the file produced would have a dog barking in the background as the person talks.

SPLIT

The split utility allows you to take a large sound sample and split it into two pieces.

DIGPLAY

Source code examples are included for software developers who wish to use the digitized sound drivers within their own software. A lot of time and effort went into developing the complete digitized sound

support for such an array of audio devices. Software developers can add support for this entire range of hardware through an amazingly simple API (applications programmer interface) provided through the digitized sound drivers. Software developers producing commercial applications will be required to pay a \$250.00 liscensing fee for each product produced which uses the set of digitized sound drivers. However the digitized sound drivers can be used for private use on your own computer using your own programs with no liscensing fee necessary. All of the sound drivers except for the IBM internal speaker sound driver, operate in the background. That means that when you ask the sound driver to play a sound the sound driver will immediatly return. The sound will play in the background without affecting the operation of your program. You will be able to check the status of the sound driver by looking at a simple semaphore in the sound structure or by doing a software interupt, check status. The IBM digitized sound driver has the same interface as all of the others, however upon request to play a sound, it does not return from the software interupt until the sound has completed.

How do I use this demo package?

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Simply type DEMO which runs the DEMO.BAT batch file. Select the type of sound hardware you have on your IBM PC compatible. If you do not have an Adlib, Covox, SoundBlaster, Tandy, or any of the other sound boards listed, simply type 'H' on the menu for the Internal IBM speaker in your IBM compatible computer.

If you wish to run the digitized sound driver yourself simply do the following. Install the digitized sound driver you want by typing it's name. For example to install the ADLIB digitized sound driver, simply type ADLIB and press ENTER. The ADLIB digitized sound driver is now installed. To remove a digitized sound driver from memory when you are finished with it, simply type the sound driver name followed by the letter 'U' for unload. Ex: 'ADLIB U' and press ENTER.

All of the files with the extension '.BIT' are sound files which have been compressed with the BCOMP utility. Once a sound driver has been installed you may play any of these sound samples by running the PLAY program. Just type PLAY followed by the name of the sound file you want to play. You may optionally specify the frequency you want the sound played back at. WARNING!!! The play program defaults to 9khz, the frequency of all of the sound files supplied. If you have an 8088 XT type machine, do not play any sound files at a frequency higher than 9khz. Depending on the speed of your machine running the sound drivers at higher frequencies could lock up your machine. Play sound files at high frequencies only if you have a fast machine.

You may invoke the PLAY program from the DOS command line, from inside a computer program, or from a batch file whenever you want to play a sound.

DONT FORGET!

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Don't forget to send for the complete digitized sound package to receive all of the digitized sound tools and the huge collection of digitized sound samples that will bring your machine to life. Show your Macintosh

friends that your machine is fun too! If you spent money on a sound board and want to get greater use out of it, or if you own a Tandy computer, or you want to make your little IBM speaker come alive, be sure to order now!

To receive the complete IBM digitized sound driver package, just send a check or money order for \$19.95 payable to John W. Ratcliff.

Don't forget to specify whether you want 5 1/4" disks or 3 1/2". If you do not specify a preference, 5 1/4" disks will be sent to you.

The address is:

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