Multimedia Sound Recorder

Version 3.1

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Sound Recorder is a VOC, WAV, and SND file player, editor and recorder for multimedia Windows. In order to run this software, the following is needed:

- sound card (or Microsoft speaker driver)

- Microsoft Windows with Multimedia Extensions or Windows 3.1

- Microsoft-compatible mouse

Three files are included with this release:

MSREC31.EXE   Multimedia Sound Recorder Program, Version 3.1
MSREC31.HLP   Online Help File
MSREC31.WRI   This Windows Write File

Multimedia Sound Recorder can read/write .VOC, .WAV and .SND files. VOC files are files based on the Creative Labs "Creative Voice File Format". SND files contain only digitized sound data, while .WAV files are Windows 3.1 sound files. This allows easy translation of files between all different formats.

LISCENSE AGREEMENT

* YOU MUST READ THIS IN ORDER TO USE THE PROGRAM!! *

YOU MAY NOT DISTRIBUTE THE PROGRAM MSREC31.EXE WITH ANY OTHER PROGRAM FOR PROFIT WITHOUT THE EXPRESSED WRITTEN PERMISSION OF DAVID MULLEN.

No one may modify or patch MSREC31.EXE in any way, including but not limited to decompiling, disassembling, or otherwise reverse engineering the program.

INSTALLATION

Copy MSREC31.EXE to your hard disk using the DOS "copy" command or Windows FIle Manager. Refer to your Windows manual for instructions on how to create a Program Manager program group for Multimedia Sound Recorder.

INSTRUCTIONS

Start Windows bu typing win. Start Multimedia Sound Recorder by performing one of the following:

- double-clicking on the Multimedia Sound Recorder icon
- selecting File - Run from Program Manager's main menu and typing MSREC31.EXE
- double-clicking on MSREC31.EXE from File Manager.

When Multimedia Sound Recorder is started, it first checks for the availability of sound input and

output devices. If none is found, you may need to install a sound device through the Windows Control Panel. See "Installing and Configuring Drivers" in your Windows User Guide for details.

After the drivers have been checked, the main window will appear containing a menu and four buttons. If this does not appear or an error message is shown, refer to the ERROR MESSAGES and PROBLEMS sections of this text file.

VOC SOUND FILES

Multimedia Sound Recorder 3.1 represents all sound files internally as .VOC files. All sound files are recorded/edited in memory - playing from or recording directly to disk is not currently supported.

VOC files consist of individual data blocks that are grouped together to form a complete sound data file. There are currently eight different types of data blocks:

End Block - This is the terminating block in all VOC files. It indicates the end of the VOC file.

New Voice Data Block - This block contains sampling rate and packing information as well as digitized sound data. All VOC files will contain at least one of these blocks.

Continuation Data Block - This block contains only digitized sound data. It uses the same sampling rate and packing format as the preceding block.

Silence Block - This block represents a silence period of the voice data.

Marker Block - This type of block marks a position in a VOC file. It is often used to synchronize the sound with some other event.

Message Block - This block can be used to store text information in a file.

Repeat Start Block - This block marks the begining of a repeated sequence in a VOC file. It also contains the number of times the sequence is repeated.

Repeat End Block - This block marks the end of a repeated sequence.

When a file is first loaded into memory, its block structure is displayed using the above icons to represent the different block types. Clicking on an icon will display information about the block. Double-clicking on New Data Blocks or Continuation Data Blocks will draw a graphical display of

the sound data.
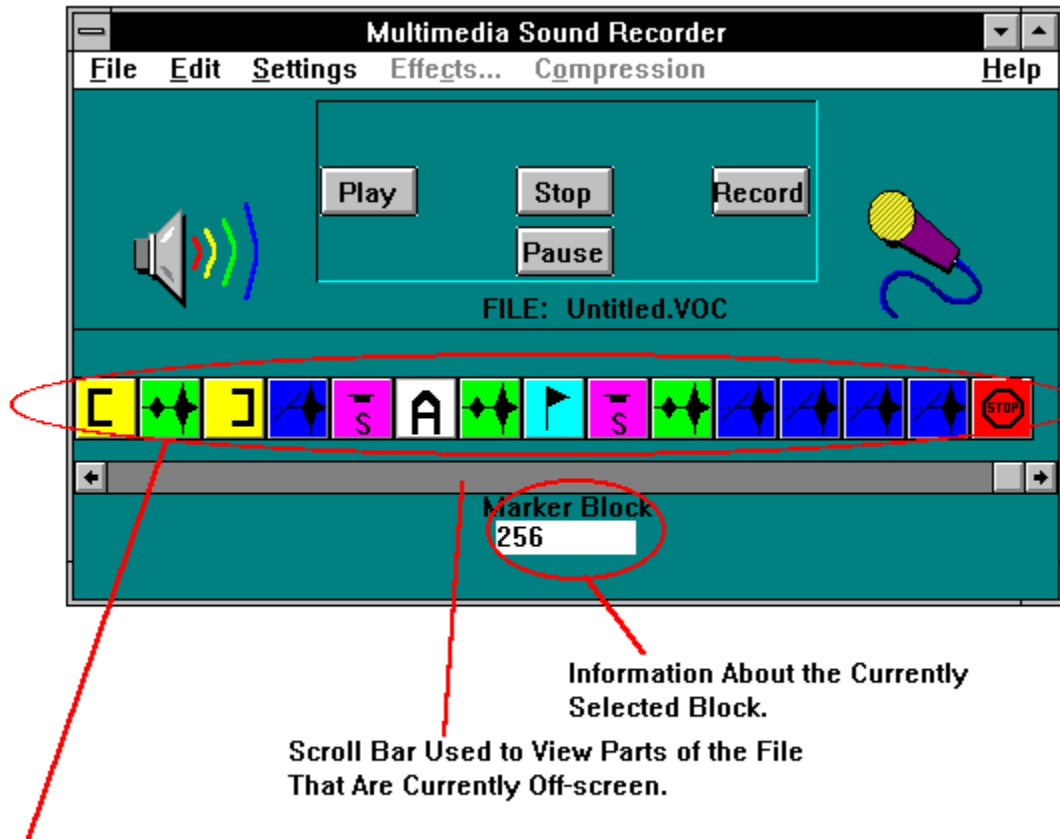
Information About the Currently
Selected Block.

Scroll Bar Used to View Parts of the File
That Are Currently Off-screen.

Graphical Representation of the Data Block Structure of the Loaded .VOC File
[A red bar above and below the block indicates that it is the currently selected block].

MENU COMMANDS

The menu in this version of the program contains six items - File, Edit, Settings, Effects...,
Compression and Help.

File - Open: Select this to load a voice file into memory. Click the ".VOC" button to load a file that
is in the "Creative Voice File" format, ".SND" to load a raw voice data file, or ".WAV" to load a
Windows sound file.

File - Save: Choose this to save the current file to disk.

File - Save As: This option allows you to save the current file under a different name or in a
different format. Click ".VOC" to save in the "Creative Voice File" format, ".SND" to save as raw
voice data, or ".WAV" to save in Windows sound format.

File - New: Choose this to erase the current file in memory.

File - Exit: Select this to end Multimedia Sound Recorder.

Edit - Cut: This allows "cutting" or removal of the selected section of the sound. The selection is
saved in Window's clipboard.

Edit - Copy: This allows the selected portion of wave data to be copied into the clipboard.

Edit - Paste: Select this to insert the contents of the clipboard into the sound file.

Edit - Insert New Block: This option allows you to insert a VOC file data block.

Edit - Delete Block: This option allows you to remove the current VOC data block.

Edit - Merge: Select this to combine the contents of the clipboard with the data file.

Edit - Play Clipboard: This will play the sound data stored in the clipboard.

Edit - Clear Clipboard: This will remove all data from the clipboard.

Settings - Hardware: This option allows you to change the sound input and output devices.

Settings - Data: Select this option to change the data file's sampling rate and packing format. Information about the file length and data blocks is also displayed.

Effects... - Invert: This will reverse the data in the selected block, allowing it to be played backwards.

Effects... - Amplify: This option allows the volume to be changed in the selected block by a user-defined amount.

Effects... - Echo: Select this to add an echo effect. You can control three different parameters to produce the desired echo.

Effects... - Filter: This will cause all data below a user-defined threshold to be removed. This can be used to clean up data with high background noise.

Effects... - Fade In: The volume of the sound data is increased linearly from zero to maximum volume starting at the begining of the data block and ending at the insertion point.

Effects... - Fade Out: The volume of the sound data is decreased linearly from maximum volume to zero starting at the insertion point and ending at the end of the data block.

Compression - 4-Bit ADPCM: The selected sound data block is compressed 2:1 using adaptive differential pulse code modulation.
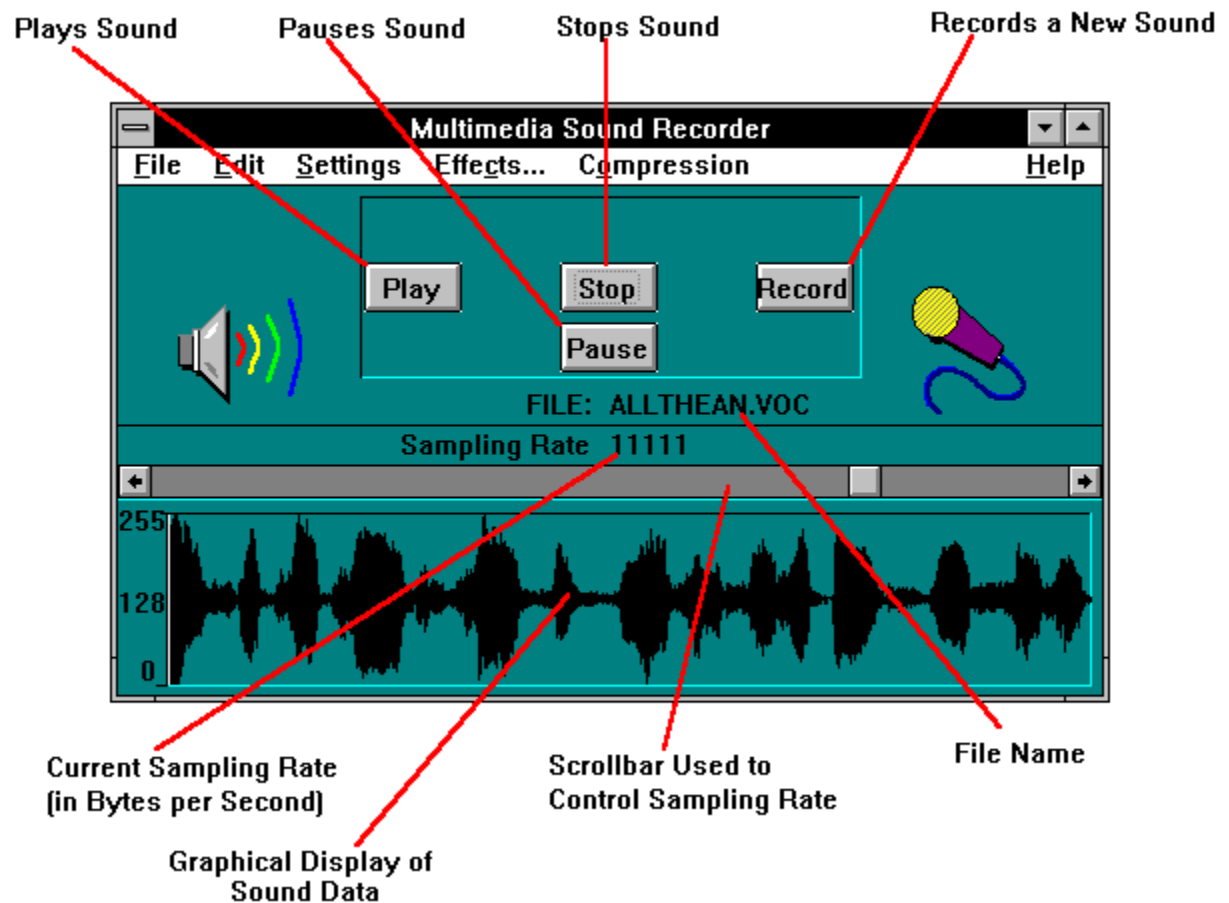
Compression - 8-Bit Uncompressed: Choose this to uncompress data blocks that were compressed by 4-bit ADPCM.

NOTE: WINDOWS 3.1 DOES NOT CURRENTLY SUPPORT ADPCM. ALL FILES MUST BE IN DECOMPRESSED FORMAT TO PLAY PROPERLY.

Compression - Silence Packing: This option allows long periods of silence in a data block to be replaced by silence blocks, decreasing the size of the data file.

Help - Help: This option brings up on-line help.

Help - About...: This option displays information about Multimedia Sound Recorder.

Plays Sound — Pauses Sound — Stops Sound — Records a New Sound

Current Sampling Rate (in Bytes per Second)

Graphical Display of Sound Data

Scrollbar Used to Control Sampling Rate

File Name

BUTTON CONTROLS

The four buttons Play, Stop, Recorder, and Pause have the following functions:

Play - This button causes the current voice data in memory to be played through the current sound output device starting at the selected block. If no block has been selected, the sound is played from the begining of the file. If a new data block or continuation data are open when this button is selected, only the current block will be played.

Stop - Push this to stop playing the voice file or stop recording voice data.

Record - This button allows you to record sound into memory. Pressing this button causes another button, Start, to appear. Push the Start button to begin the recording process and the Stop button when finished.

Pause - Push this to pause the currently playing sound. Push again to continue the sound.

EDITING SOUND DATA

To open a voice data block for editing, double-click on the data block using the mouse. When a voice data block is opened, a horizontal scroll bar appears along with a graphic representation of the sound. The scroll bar can be used to easily change the sampling rate. This can also be changed by selecting Settings - Data from the main menu and entering a numerical value for the sampling rate in bytes per second.

Sections of a voice data block can be selected by pointing to the start of the selection, clicking

and holding the mouse button, dragging the mouse to the end of the selection and releasing the mouse button. An inverted rectangle represents the selected section. Once the section is selected, it can be copied or cut to the clipboard.

To paste a section of sound into a data block, first select the section to be pasted into the clipboard using the above procedure. Then open the data block where the section is to be pasted (by double-clicking on the data block), move the mouse pointer to the place where the selection is to be pasted and click the mouse once to select the insertion point. When Edit - Paste is selected from the main menu, the selected data will be copied into the block.

Data can be exchanged with other Windows sound applications that use the clipboard. Also, because multiple copies of Multimedia Sound Recorder can be run at the same time, editing sound files by cutting and pasting to the clipboard is much easier.

ERROR MESSAGES

If the message "No memory available!" appears when attempting to load a voice file, the file is too large to load into memory. If this message occurs when pasting data, adding effects, or decompressing a file, there is not enough memory to perform the function.

The message "No voice data in memory!" will appear if the Play button is pushed with no voice file loaded. Select File - Open and choose a file to load.

"Bad file block header!" will appear if you try to load a non-VOC file in VOC format. "Bad WAV file header block!" will appear if you try to load a non-WAV file in WAV format. Select the correct file type from the File - Open dialog box, or select .SND to load any file as a raw sound data file.

If the message "Too many clocks or timers!" appears, close some aplications which make use of timing functions (Windows Clock, etc.).

PROBLEMS

Because this program has been tested only on a limited variety of computer hardware, a problem may arise on some machines which may not have been previously observed. To distinguish this type of problem from other commonly occurring ones, common problems and their solutions are listed below.

If error messages involving the current input or output device are received, try selecting a new device, or check control panel for correct driver settings.

An UNRECOVERABLE APPLICATION ERROR message may appear if an attempt is made to play a corrupted voice file. Try playing the file with VOXKIT or some other .VOC or .WAV player to check the integrity of the file.

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Please send your comments, criticisms, and features you would like to see in this program to the author at the address below or via Prodigy (THRF83A), America Online (DavidM348), or Compuserve (70164,2120).

All correspondence regarding Multimedia Sound Recorder, Version 3.1, should be directed to :

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