

ULTRASOUND



BONUS SOFTWARE

SOUND IMPRESSION™

RECORDING SESSION®

POWER CHORDS DEBUT™

GRAVIS™

TRUE WAVETABLE SYNTHESIS MULTIMEDIA SOUND CARD

Part No. 9800-180-000



Sound Impression™

Multimedia Sound Software
by MidiSoft™

© 1991-1994 Dennis James McMahon. All Rights Reserved.

Reprinted under license by Advanced Gravis Computer Technology Ltd. Information in this manual is subject to change without notice. The software described in this manual is furnished under license and may be used or copied only in accordance with the license agreement. It is unlawful to copy the software except as specified in the license agreement. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying or scanning, for any purpose, without the express written permission of Dennis James McMahon.

Sound Impression is a trademark of Dennis James McMahon.

UltraSound and Advanced Gravis are trademarks of Advanced Gravis Computer Technology Ltd.

Microsoft, MS and MS-DOS are registered trademarks of Microsoft Corporation. As used in this manual, Windows refers to Microsoft Windows, Microsoft Corporation's implementation of a windowing system.

TrueType is a registered trademark of Apple Computer, Inc.

All other brand and product names referred to in this manual are trademarks or registered trademarks of their respective holders.

Contents

1: General Procedures	1
<i>Starting Sound Impression</i>	1
<i>Using Button Help</i>	1
<i>Supported Sound Types</i>	1
<i>Loading Wave Files</i>	2
<i>Playing a Wave File</i>	3
<i>Recording a Wave File</i>	3
<i>Editing a Wave File</i>	4
<i>Opening and playing a MIDI File</i>	4
<i>Initializing and Playing an Audio CD</i>	4
<i>Closing Sound Impression</i>	4
2: The Rack	5
<i>Components overview</i>	5
<i>The Waveform Editor</i>	6
3: General Functions	8
<i>File Open/Initialize</i>	8
<i>Viewing a MIDI File in Recording Session</i>	8
<i>Save</i>	8
<i>Record</i>	9
<i>Pause</i>	10
<i>Stop</i>	11
<i>Search</i>	11
<i>Skip</i>	11
<i>Loop</i>	11
<i>Object Linking and Embedding</i>	12
<i>Help/About</i>	12
A: Troubleshooting	13
B: Program Notes/Tech Info	14
<i>Wave watching</i>	14
<i>The Wave file-size formula</i>	14
<i>Hard disk space and the TEMP area</i>	15
<i>RAM/Virtual Memory Recommendations</i>	16
<i>The Windows Swap File</i>	17
<i>CPU</i>	18
<i>Arial TrueType Font</i>	18
<i>Recommendation: 32-Bit Disk Access</i>	19
<i>Setting up: CD-ROM drivers</i>	19
<i>Setting up: Multimedia Timer Driver</i>	20
Index	21

1: General Procedures

This chapter guides you through the basics of running Sound Impression and performing routine operations.

More detailed information on the functions mentioned here, as well as accounts of special features, such as Object Linking and Embedding can be found in later chapters and in Sound Impression's on-line Help system.

Starting Sound Impression



Opens the main screen "Rack"

You can start Sound Impression in various ways and have it take various forms on startup, including having it open with files already loaded. To start Sound Impression:

Click one of the Sound Impression program icons in the Program Manager.

The icons are placed in a Gravis group window during installation.

Using Button Help

Sound Impression's Button Help feature provides instant reminders on the functions of all buttons (and some other interface features as well) in all areas of the program.

To use Button Help, simply click and hold your right mouse button down on an area of the Sound Impression interface. If Button Help is available for the feature beneath the cursor, a label pops up with a brief description, as shown here:



Button Help

Supported Sound Types

Sound Impression processes the following sound types:

- Wave files (extension *.WAV)
- MIDI files (extension *.MID or *.RMI)
- Audio compact discs (if you have a CD-ROM drive)

To run Sound Impression you'll either need to load one or more of the sound types listed above or create new sound files in the Wave Recorder/Player or Waveform Editor.

Loading Wave Files

Method 1: Use the Wave Recorder/Player's File Open button to load a .WAV file into the current session.



Skip buttons



File Open button

1. Click the *Skip* buttons (forward or backward) until you reach the session number you want to load.
2. Click the *File Open* button, then locate and select a Wave file using the standard File Open dialog box.

When a Wave file is loaded into the Wave Recorder/Player, the file is simultaneously loaded into a Waveform Editor session, making it available immediately for editing or modification.



Waveform Editor button

To open the Waveform Editor window for the current session, click the *Waveform Editor* button (located below the session number window).

Method 2: Open a Waveform Editor session and use its File Open button.



File Open button

1. Click the *File Open* button on the edit window's top toolbar.
2. Use the File Open dialog box to locate and select a Wave file.

If the session is occupied and the waveform hasn't been saved, you'll be given an opportunity to either cancel the operation or save the unsaved file before the new file is loaded. If the session contains a waveform that has already been saved, the new file will replace the current file automatically.

Method 3: Drag-and-drop

To drag-and-drop one or more Wave files into Sound Impression:

1. Activate File Manager (or equivalent) and locate a directory containing one or more *.WAV files. Position the directory on your screen so that some portion of the Wave Recorder/Player or a Waveform Editor window is visible behind File Manager.
2. Select one or more Wave files. Use your shift or control keys to make group selections (check your Windows manual if you're not familiar with group selection procedures).
3. Drag the file or group of files to the visible portion of the Wave Recorder/Player or a Waveform Editor window.

4. Release the mouse button to drop the selection into Sound Impression.

Files are loaded in the order in which they are listed in File Manager. The first file is dropped into the current session. If the current session is occupied but the occupant file hasn't been changed, the new file automatically replaces it. If the occupant file has been changed but not saved, you are given an opportunity to save it.

Other files in the group are loaded in order into unoccupied sessions. If there are more files than unoccupied sessions, the extra files are not loaded.

Playing a Wave File



Play button

You can play Wave files by clicking the *Play* button on the Wave Recorder/Player or in any Waveform Editor window.

Recording a Wave File

To make a recording from the Wave Recorder/Player or a Waveform Editor window:



Input source selectors

1. Check that your external sound feed (microphone or line) is turned on and connected to the correct input jack on your sound card, then click the appropriate input button on the left side of the Mixing Panel.
2. Set input recording volume levels by sliding the input volume levers and master volume levers to the desired recording levels.
3. Click the *Record* button on the Wave Recorder/Player, or open an edit session window and click its *Record* button. If the current session contains an unsaved waveform, you'll be asked if you want to save it before recording. If you answer "no," the recording will begin, replacing the waveform in the current session. If the current session is unoccupied or contains a saved waveform, recording begins immediately. The newly-recorded waveform will be untitled and will be immediately available for editing or modification in an edit session.



Record button

4. When you're finished recording, click the *Stop* button. Note: turning off a microphone or other external input feed doesn't stop a recording; to end a recording you must click the *Stop* button.



Stop button

To play the recording, click the *Play* button on the Wave Recorder/Player or Waveform Editor.

Editing a Wave File

Each Waveform Editor window contains its own complete set of waveform editing and modification tools.

To check the function of any tool, use Sound Impression's Button Help feature (click and hold your right mouse button on any tool button).

Opening and playing a MIDI File

To load *.MID or *.RMI files into the MIDI Player:



Skip buttons



*MIDI File
Open
button*

1. Click the *Skip* buttons (forward or backward) until you reach the track number you want to load.
2. Click the *File Open* button, then locate and select one or more *.MID or *.RMI files.

Note that the MIDI File Open dialog box allows you to load groups of files.

Initializing and Playing an Audio CD



*Initialize CD
button*

To play an audio compact disc:

1. Place an audio compact disc in your CD-ROM drive.
2. Click the *Initialize CD* button. Note: Initialization can take as long as 60 seconds on some CD-ROM drives.
3. Click the *Play* button.



Play button

Important: *If you receive a "CD Player not available" message, check the Troubleshooting guide (Appendix A) for possible solutions.*

Closing Sound Impression

You can close Sound Impression by choosing either of the following menu items:

File|*Exit* (keyboard: Alt,F,X); or

Close from the Control Box menu (keyboard: Alt,Spacebar,C or Alt+F4).

2: The Rack



The main screen “Rack” is made up of five components, which are summarized below and described in more detail in the Sound Impression on-line Help system.

Components overview

Title Panel

Provides easy access to a range of screen and file management functions, including the ability to call any program feature or conceal any Rack component with a single click or keyboard command. The Preferences dialog—accessible only through the Title Panel’s menu or button bars—lets you change Sound Impression’s startup configuration and customize the program’s window colors.

Mixing Panel

The primary sound level control panel. Lets you control volume and balance levels for all Rack components and all external input devices attached to your sound card. Levels can be adjusted and

retained for both monitor and record modes, and volume can be set independently for left and right channels on all devices. A Master control is available for quick system-wide adjustments.

Wave Recorder/Player

In addition to being an easy-to-use multiple-session wave recorder and player, this component serves as the gateway to Sound Impression's Waveform Editor. *Scan* and *Skip* functions help you find exactly what you're looking for, and *Loop* lets you run that special selection *ad infinitum*.

MIDI Player

Fast, easy-loading player for files that conform to the popular Musical Instrument Digital Interface standard. Features a programming panel that lets you organize your favorite MIDI tracks and save your Play Lists to disk, as well as a link button that launches Midisoft *Recording Session* with the song currently loaded in the MIDI Player. Also includes a handy popup reference list and quick-switch box, plus *Skip*, *Scan* and *Loop* capabilities to help you hit just the right note. Uses *.MID or *.RMI files. Capacity: 48 files.

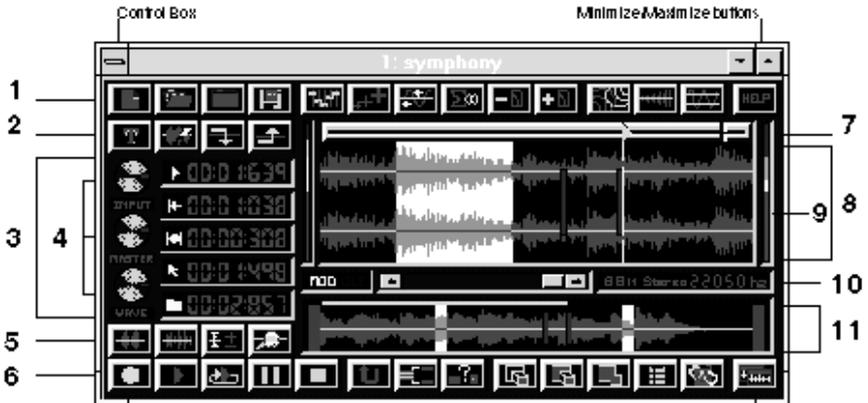
CD Player

Plays audio compact discs. Includes a programming panel that lets you choose which tracks you want to hear and in what order. Your Play Lists are saved to disk for later retrieval whenever you load the same CDs. Also has *Skip*, *Scan* and *Loop* capabilities. To use this component, your system must be equipped with a CD-ROM drive.

The Waveform Editor

Each Waveform Editor window is a self-contained sound production "studio," complete with a full set of editing and modification tools. Any edit window can be summoned quickly from various points in the program, and any can be independently moved, enlarged, minimized, maximized or hidden.

You can work in an unoccupied edit session as if it were a blank page in a Windows word processor or graphics program. The main elements of a Waveform Editor "page" are two view areas, a paste bar and paste/play cursor, a set of volume controls, a set of measurement/positioning displays, a pitch scroll bar and four levels of toolbars. Two of the toolbars (top and bottom) are further subdivided by function.



1. Top toolbar
2. Second level toolbar
3. Timing/positioning displays
4. Volume controls
5. Third level toolbar
6. Bottom toolbar
7. Paste bar/paste cursor
8. Edit area
9. Sound level meters
10. Modified waveform indicator, OLE indicator, Pitch scroll, waveform information display
11. View/scroll area

Among the tasks you can perform in a Waveform Editor window:

- Cut or copy entire waveforms or selected segments, then paste the data into another area of the window or into any other edit window.
- Quickly “clean up” any waveform using *Noise Filter*, *Remove Silence*, *Add Silence*, *Cut*, *Crop* and other tools.
- Add special effects such as *Echo*, *Chorus*, *Flange*, *Fade*, *Pan* and *Crossfade* to entire sessions or segments.
- Use the *Pitch Scroll* or *Falsify* function to speed up or slow down the sound of a waveform.
- Modify the data format of any file by changing sample sizes and rates and switching between mono and stereo.
- Increase or decrease volume (gain) for an entire session or segment.

3: General Functions

The following is a list of Sound Impression buttons and functions that either offer the same functionality in two or more components or share a common button interface between components.

Component-specific functions and features, as well as other special elements of Sound Impression, are covered in subsequent chapters.



File Open
(Wave Recorder/
Player, MIDI Player)
Initialize CD
(CD Player)

File Open/Initialize

On the Wave Recorder/Player, MIDI Player and all Waveform Editor windows, the *File Open* button calls a standard File Open dialog from which you can select a file (or group of files, for the MIDI Player) for loading into the selected component.



File Open
(Waveform Editor)

The same button on the CD Player has a different function: it initializes (prepares for playing) an audio CD that you have loaded into your CD-ROM drive.

You can also load files or initialize a CD by choosing File|Wave (Alt,F,W), File|MIDI (Alt,F,M), or File|CD (Alt,F,C) from the Title Panel's menu bar.



*Start
Recording
Session*

Viewing a MIDI File in Recording Session

Load a MIDI file into the MIDI Player, either by clicking on the *File Open* button (located on the MIDI Player) or by selecting *MIDI* from the File menu. Select a MIDI file and choose *OK*.

The *Link* button on the MIDI Player is now activated. Clicking this button will launch *Recording Session* with the song currently loaded into the MIDI Player. To return to Sound Impression, choose *Return to Sound Impression* from the File menu.



Save
Wave Rec/Player

Save

Wave saves

On the Wave Recorder/Player the *Save* button calls a standard Windows File Save dialog box, which lets you decide where and by what name you want to save the current session.



File Save:
(Waveform Editor)

In Waveform Editor windows, the same button offers a “quick save” capability. Rather than calling a File Save dialog, it simply saves the current waveform to file under its current name. If the waveform is unnamed (if, for example, the window contains a segment pasted from another window), the button is unavailable.



File Save As:
(Waveform Editor)

Whenever anything “saveable” exists in a Waveform Editor window, the *File Save As* button is available to call a File Save dialog.

Saving a MIDI session



Save MIDI Session
(MIDI Player)

Calls a standard File Save dialog box, except the purpose is to save your programmed MIDI Session instead of a file.

The dialog box appears with the default *.MDS (MIDI Session) extension inserted into the file name box. Simply move to the drive or directory where you keep your MIDI files and sessions, and replace the asterisk with a session name.

CD Close



Close CD
(CD Player)
Save Play List
(CD Program Panel)

What serves as the *Save* button on the face of other components is used by the CD Player to deinitialize, or “close,” the disc in the CD drive.

It’s a good idea to use the *Close CD* function before changing discs.



Record

Records from the currently selected input device to the current Wave session.

Recording begins immediately if the current session is unoccupied.

If the session is occupied by an unchanged or saved file—a replaceable file, in other words—recording will begin immediately and the recording will replace the occupant file.

If the current session contains unsaved changes, recording is delayed; a message box appears to give you the opportunity to either save the session or cancel the *Record* operation.

When recording starts, the arrow cursor changes to a microphone and a red recording indicator comes on in the window directly above the *Record* button. As you record, the Sound Level indicator moves in response to signal strength and the Timer displays the elapsed time of the recording.

Play



Wave Recorder/Player, MIDI Player, CD Player

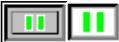
Plays the current track or selection. As a session plays, the mouse pointer changes to a set of headphones and elapsed time is shown in the Timer window. On the Wave Recorder/Player, the Sound Level indicator is activated.

If playing a single track or session, the track or session automatically returns to the beginning when finished. If *Loop* is active, play continues until you click either the *Pause* or *Stop* button.



Waveform Editor

The *Play* button has added usefulness in Waveform Editor windows. On the main screen, you have limited control over the starting and ending points of a sound; you can start anywhere you like (within a second), but play continues until the track reaches the end or you press the *Stop* button.



Pause

Interrupts play of a Wave session or MIDI or CD track.

When a track or session is paused, the Pause indicator in the Active Function area remains highlighted and the Timer shows the point at which the session was interrupted. To resume playing or recording, press *Pause* again.

While *Pause* is active, you can click the *Stop* button to halt playing or recording.

When used on the Waveform Editor, the *Pause* button graphic changes from green or blue to yellow when activated.

When used from a main screen component, a double-bar indicator light comes on in the right digital display window next to the timer, and the timer shows the point at which the track was interrupted. While play is paused, you can still use the *Search* buttons to move forward or backward to another point in the current track. **Note** If you pause and then scan to the end of the current track, play will start from the beginning of the same track when you resume if *Loop* is *not* active. If *Loop* is active, play will resume at the beginning of the next track.



Stop

Immediately stops any playing or recording activity on the current track or session. If you're playing a loop, *Stop* deactivates it.

Note!

Your microphone on/off switch will cut off input, but it won't stop a recording. You must press the Stop button to stop recording.



Search

Takes you to a new point in the current session. These buttons emulate the Fast Forward and Rewind functions on an analog tape player.

Click once or click and hold your mouse button on a *Search* button to quickly move backward or forward to any point in the current session. A single click takes you forward or backward one second. The Timer shows the current point in time as you move.



Skip

Changes the current session or track.

Click once or press and hold your left mouse button on a *Skip* button to move forward or backward through both edit sessions on the Wave Recorder/Player or through all available tracks on the MIDI or CD players.



Loop

Loop
(Wave Recorder/
Player,
MIDI Player, CD
Player)

Click *Loop* then *Play* to run all occupied tracks in a continuous loop. The *Pause* button interrupts a loop, *Stop* or *Loop* ends it.

The MIDI Player and CD Player *Loop* buttons are located on the Program Panels of the respective components. To access the Program Panel, click the *Program Panel* entry button on the right side of the component.



Loop
(Waveform Editor)

You can add a *segment* of a Wave file to a loop by opening a Waveform Editor session and selecting a segment. To deselect the segment and include the entire file in the loop, click anywhere in the session's Edit Area.

The *Loop* indicator in the Active Function area on Rack components is highlighted when *Loop* is active.

A running loop can be paused any time or stopped by clicking either the *Loop* or *Stop* buttons.

On the Wave Recorder/Player or Waveform Editor you can start a loop at any session number, but the playing order will always follow the session number sequence (lowest to highest). You can plan a wave loop sequence in advance by loading files in the order in which you want them played.

On the MIDI and CD Players, loops run according to the Play List order.



OLE

Object Linking and Embedding

Object Linking and Embedding (OLE) allows you to transfer any sound file or composition from Sound Impression to any other Windows application capable of receiving OLE data.

Sound Impression's unique implementation of OLE permits the transfer of any supported sound data—Wave, MIDI, CD, even the current Mixing Panel settings—to an OLE “client” application with just a few clicks or keystrokes. The implementation is also self-registering, which means that Sound Impression takes care of all OLE registration issues for you.



Help

Help/About

The *Help* button calls the Sound Impression on-line Help system.

The menu bar's *Help|About* item shows the version number of your copy of Sound Impression.

A: Troubleshooting

- Q:** When I try to initialize and play an audio CD, an error message tells me the CD-ROM isn't available. I know my drivers are installed correctly, so what else could it be?
- A:** Some CD-ROM drives need as much as a minute to properly initialize a CD. To find out if yours is one of these, click the *Close CD* button, remove your CD, then reload it and wait a little longer before clicking the *Initialize* button.
- Q:** When I click the *Play* button on the Wave Recorder/Player, only a portion of my session plays back. Where's the rest of it?
- A:** A portion of your session is probably highlighted in the Waveform Editor. When you select a segment of a waveform and then press *Play*—either from the editor or from the Wave Recorder/Player—Sound Impression plays back only that segment. To deselect the segment, click anywhere in the Edit area. Make sure you don't drag your mouse and accidentally select a "sliver" of the waveform. Then click the Waveform Editor's *Play* button, and you should hear the entire session.
- Q:** I used the Preferences dialog box to change colors for the Waveform Editor and order an edit session window to appear at startup. I restarted Sound Impression, and the Waveform Editor came up, but my color changes were ignored. Why?
- A:** You clicked the *Save* button to record your startup configuration change but you didn't click the *Save* button for your color changes. If you make changes in both areas of the Preferences dialog, you must click both *Save* buttons.
- Q:** When I click *Eject* on the CD Player, my CD doesn't eject.
- A:** Some CD-ROM drives can't use this feature. With some, you have to use the eject button on the CD-ROM drive.
- Q:** Why don't some of my Wave files play on Sound Impression?
- A:** Your files may be Waves in name only. Wave files have a specific format, and adding a *.WAV extension to sound files created in other formats doesn't make them Waves. Same goes for *.MID files. You can't load a non-compliant MIDI file into the MIDI Player. If you have a binary file viewer, you can check the veracity of Wave and MIDI files. Waves have the word "RIFF" at the top of the file and the identification "WAVEfmt" following shortly thereafter. MIDI files begin with "MThd," with "MTrk" following close behind (the two identifying strings are separated by other characters).

B: Program Notes/Tech Info

Wave watching

“Wave” is the popular name for the *.WAV file format used by Sound Impression’s recording and editing features.

Wave files require a lot of storage space on your hard disk, and a great deal of disk space and virtual memory while you work on them (particularly when *Undo* is active). Be particularly mindful of available disk space when reformatting or recording a file. Otherwise, you could exceed available system resources in the midst of an editing procedure, risking data loss or system “freezes.”

The rule of thumb: make sure you have at least twice as much virtual memory and twice as much available disk space as is required by any single edit session.

The Wave file-size formula



Examples

File Length: 10 seconds

Sample rate (samples/sec.)	Sample size/Number of channels			
	8-bit mono	8-bit stereo	16-bit mono	16-bit stereo
11kHz	110K	220K	220K	440K
22kHz	220K	440K	440K	880K
44kHz	440K	880K	880K	1.76MB

File Length: 60 seconds

Sample rate (samples/sec.)	Sample size/Number of channels			
	8-bit mono	8-bit stereo	16-bit mono	16-bit stereo
11kHz	662K	1.32MB	1.32MB	2.64MB
22kHz	1.32MB	2.64MB	2.64MB	5.28MB
44kHz	2.64MB	5.28MB	5.28MB	10.56MB

Hard disk space and the TEMP area

Minimum: Sound Impression program files occupy approximately 2MB of space on your hard disk drive. Above that, the only disk

space requirement is an amount that exceeds the byte size of the largest Wave file you are currently editing.

For best results: Ensure that your “Temp” directory is assigned to the hard disk drive partition with the most available disk space.

RAM/Virtual Memory Recommendations

For Best Results: 16MB or more of virtual memory, which should include:

8MB or more of RAM; a permanent swap file; and 32-bit disk access.

Sound Impression runs with as little as 4MB of RAM, but performance may be sluggish with large Wave files, and the maximum size of Wave files that you can record or play in any single edit session is restricted to an amount less than the environment’s.

CPU

Requirement: Sound Impression requires that your computer be equipped with at least an 80386 processor.

For best results: A 486-based computer is highly recommended for recording and playing Wave files formatted at 44kHz or higher.

A 386-based machine may have problems recording or playing back Wave files formatted at 44kHz or greater. You may still be able to *produce* 44kHz files, but you probably won’t be able to hear the results at peak quality unless you play back the same file on a 486 computer with a fast hard disk drive and a sound card capable of generating 44kHz output (some cards are limited to 22kHz).

The fundamental problem is that at 44kHz, data moves faster than an average 386 system can store it. This limitation is more pronounced when dealing with 44kHz files formatted in stereo. When such files are played on a 386-based system you may get erratic, interrupted output; at worst, the system could lock up.

Arial TrueType Font

Requirement: Sound Impression requires the Arial TrueType font for correct display of text attributes.

The Arial font is part of the Windows 3.1 package but, like most fonts, it can be removed. If you’re not sure whether or not Arial is installed, open the Windows Control Panel and double-click the Fonts icon. A dialog box shows the fonts currently installed on your system.

Setting up: CD-ROM drivers

If the line “**CD-ROM driver not detected**” appears on the system status list during Setup and you have a CD-ROM drive installed, you will probably need to reinstall one or more of the unit's software driver(s).

Windows requires the installation of three separate drivers in order to access a CD-ROM drive. Two of these—the sound card system driver and the Microsoft CD-ROM driver—are installed at DOS level. The third, MCICDA.DRV, is installed through Windows Control Panel. The warning above is issued when Setup fails to find the latter driver in its proper location.

If you know you have the first two drivers correctly installed (you can test these at DOS level with your sound card testing software), you will need to install MCICDA.DRV. Please consult your sound card manual or the *Windows User's Guide* for further assistance.

If you don't have a CD-ROM drive, you can ignore the status report warning.

If you do have a CD-ROM drive, and your card is designed to support it, you will be reminded of the absence of the correct CD-ROM driver(s) by the absence of the CD Player on startup. You can change this order for subsequent startups by checking the box labeled “Start the CD Component” in the Title Panel's Preferences dialog box (remember to save any Preference changes).

After installing the correct CD-ROM software drivers, you can check the result either by running Setup again (which will automatically restore the startup configuration to its defaults) or by checking CD-ROM output with Sound Impression or through your sound card's Windows testing software.

Setting up: Multimedia Timer Driver

If the line “**Multimedia Timer not detected**” appears on the system status list during Setup, you may need to reinstall Windows' TIMER.DRV through the Windows Control Panel.

This driver, normally installed by Windows 3.1 during its own setup, controls the timing functions of Windows multimedia devices. If it is not present and installed, you'll experience difficulties when attempting to run two or more multimedia devices simultaneously.

If the “Timer” item is listed among your drivers in the Control Panel's Drivers utility, the driver is probably installed and you may ignore the warning. For instructions on installing multimedia drivers, check your *Windows User's Guide*.

Index

A

Arial TrueType Font 16

Audio CD

initializing 4. See also Initializing an Audio CD
playing 4

B

Button Help 1

C

CD Close Button 9

CD Eject Button 13

CD Player 6. See also Audio CD

CD-ROM Drivers 16

CD-ROM Not Available 13

Closing Sound Impression 4

CPU 15

D

Drag-and-Drop 2

F

File Open/Initialize Buttons 8

H

Hard Disk Space 15

Help Button 12

L

Loop Button 11

M

MIDI File

opening and playing 4

MIDI Player 6

Mixing Panel 5-6

Multimedia Timer Driver 17

O

Object Linking and Embedding 12

P

Pause Button 10

Play Button 10

R

Rack 5-17

RAM/Virtual Memory Recommendations 15

Record Button 9

Recording Session link to view a MIDI file 8

S

Save Button 8

Search Button 11

Skip Buttons 11

Starting Sound Impression 1

Supported Sound Types 1

T

TEMP Area 15

Title Panel 5

Troubleshooting 13-17

W

Wave File Size 14

Wave Files

editing 4

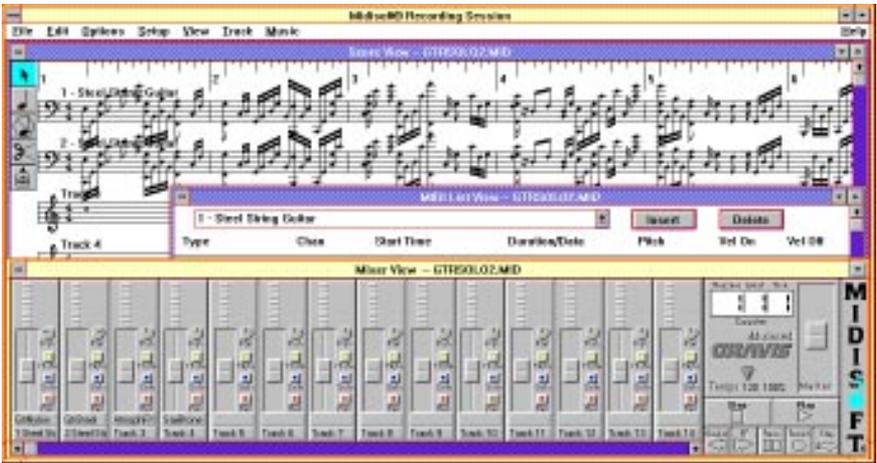
loading 2-3

playing 3

recording 3

Wave Recorder/Player 6

Waveform Editor 6-8



Recording Session[®]

by Midisoft[™]

© Copyright 1994, Advanced Gravis Computer Technology Ltd. and MidiSoft® Corporation.

The information contained in this document is the property of Advanced Gravis Computer Technology Ltd. and MidiSoft Corporation, and may not be copied or reproduced in whole or in part without the expressed written permission of Advanced Gravis Computer Technology Ltd. and MidiSoft Corporation.

Advanced Gravis and Gravis are trademarks of Advanced Gravis Computer Technology Ltd.

UltraSound is a trademark of Advanced Gravis Computer Technology Ltd.

Microsoft Windows and Multimedia Windows are trademarks of Microsoft Corp.

Other product names, trademarks, and registered trademarks contained in this document are the property of their respective holders.

Contents

Overview of Recording Session.....	1
On-line Help.....	2
MIDI setup.....	3
Creating a Song	5
Recording a Song	5
Playing a Song	6
Basic Editing.....	8
A Message from Advanced Gravis	11
Questions & Answers about Recording Session	11
Index.....	12

Overview of Recording Session

Recording Session is a powerful sequencer offering standard MIDI sequencing features and a musical notation display that can be edited.

The program contains three windows, or views, that you use to record, play, and edit your musical compositions.

Score View

This window displays your music in standard musical notation. As you record, notes will appear on screen. When you play back the song, you can see the notes highlighted as they play. You can also add, delete and edit notes and phrases from this window.



Figure 1.
Score View

In addition, there is a Toolbox in the Score View window, containing tools for Selection, Note Add, Note Delete, Cut tool, and Paste.

Mixer View

This window is where you record, play, name, and adjust tracks. You have real-time control of the playback characteristics of each track, so you can experiment before making permanent changes.

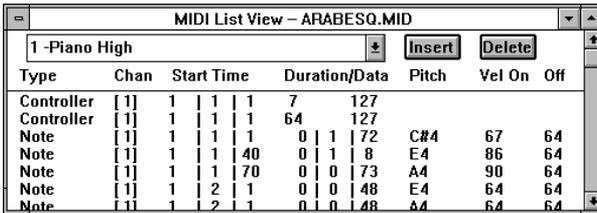


Figure 2.
Mixer View

This window also contains transport buttons similar to an audio tape deck, as well as a Tempo slider, a Master Volume control, and a song location display (Counter).

MIDI List View

This window displays your music as MIDI events. If you are more comfortable with a traditional MIDI sequencer, this affords you the flexibility of minute adjustments to the shape of each note. In addition, you can enter and edit MIDI messages such as Program Change, Aftertouch, Pitch Bend, and others.



Type	Chan	Start Time	Duration/Data	Pitch	Vel On	Off
Controller	[1]	1	1	7	127	
Controller	[1]	1	1	64	127	
Note	[1]	1	1	0	72	C#4 67 64
Note	[1]	1	1	40	8	E4 86 64
Note	[1]	1	1	70	0	73 A4 90 64
Note	[1]	1	2	0	48	E4 64 64
Note	[1]	1	2	0	48	A4 64 64

Figure 3.
MIDI List
View

On-line Help

On-line Help is available at all times. Press F1 to open the Windows Help program. The information available on line is comprehensive. We highly recommend that you use it.

If you need information about using the Help feature, choose Using Help from the Help menu.

You can navigate the Recording Session Help by clicking on a topic. The information is organized in two ways: (1) by procedure, and (2) by command reference.

The On-line Help also includes a glossary.

Note! **Windows 3.1 or Multimedia Windows is required to access the On-line Help.**

MIDI setup

The UltraSound installation automatically sets up and installs your MIDI interface for you. However, there a few items you should be familiar with.

MIDI Interface

Recording Session works with the UltraSound interface, which is supported by Windows 3.1. The interface should be set up when the UltraSound Drivers are installed.

MIDI Driver

When you start Recording Session for the first time, you will have to specify the MIDI Driver you would like to use. The MIDI Drivers dialog box will appear.

You have three choices: Multimedia Drivers, Midisoft Drivers, and No Drivers.

The Multimedia Drivers option uses generic drivers written to work with any MIDI program that supports Windows 3.1/Multimedia Windows. You must have MIDI properly set up in the Windows Control Panel. Use this option if you need to use the Windows MIDI Mapper.

The Midisoft Drivers option uses a driver created specifically for Recording Session. If you use this, you will need to disable any standard MIDI driver settings in the Windows Control Panel.

The No Drivers option allows you to use the program for display and editing, but not playback. This is useful if you have not yet purchased a MIDI interface.

Note!

Choose Multimedia Drivers for your UltraSound card. Also choose the Extended-level Setup to enable MIDI channels 1-10.

If you choose Extended-level Setup under the Multimedia Drivers, channels 11-16 won't make any sounds. If you want all 16 channels for UltraSound, you must chose the **General MIDI Setup**. Then change the MIDI Mapper to tell it to use all 16 channels. The MIDI Mapper is usually found in the Program Manager's Main group. To change the MIDI Mapper, do the following:

- ◆ Double-click on MIDI Mapper.

- ◆ In the MIDI Mapper dialog box, click on the Setups button and choose UltraSound from the Name list.
- ◆ Click on the Edit button. A window entitled "MIDI Setup: 'UltraSound'" will appear.
- ◆ Click on the Port Name for each channel from 11-16. Each time you click on Port Name it will be highlighted.
- ◆ Click on the arrow at the right side of the box and choose Ultra Wave and MIDI Synth from the list.
- ◆ Click OK to confirm your changes.

Creating a Song

Creating a song in Recording Session is easy, although some basic knowledge of music notation is an asset. If you don't own a MIDI keyboard (synthesizer), you can create a song by clicking on the note icon in the Toolbox and then clicking the note to any location on the staff. Or, you can edit existing MIDI files and modify them to your liking. Please refer to the On-line Help for more detail.

Recording a Song

A MIDI keyboard is required to record a song. To record, first clear the memory by choosing the New command from the File menu.

Make sure the Mixer View is open. If not, choose the proper item from the View menu. When you first record, the MIDI data is placed into Track 1 by default.

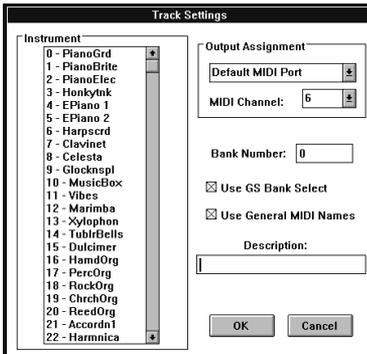


Figure 4.
Track
Settings

Assuming you have a MIDI keyboard connected correctly with the Gravis MIDI Adaptor (optional), you are ready to record. Click on the Record button in the Mixer View (Fig. 2), and the metronome will start to tick. Play a simple part, such as a bass line or chords—remember that you can play each part of your music separately. When you are done, click on the Stop button.

Click in the Track Name field for the track you have recorded to assign a name to it. A dialog box (Fig. 4) opens to allow you to name the track, rechannel the MIDI data, and assign a patch to the track.

Playing a Song

Play

Click on the Play button in the Mixer View. The button will be highlighted (the symbol displays in a different color).

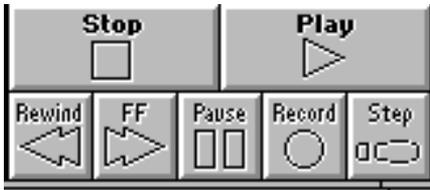


Figure 5.
Mixer View;
Tape Deck
Buttons

The music plays back, with an optional lead-in measure and a metronome beat if enabled. As the music plays, the Counter displays the present location within the song.

Tempo

You can adjust the tempo of the song as it is playing. Click and drag the Tempo slider to the left to decrease the tempo. Click and drag to the right to increase the tempo.



Figure 6.
Mixer View;
Counter,
Tempo,
and Master
Volume

Stop

To stop play, click on the Stop button in the Mixer View. The button will be highlighted momentarily and the music stops. (The Play button returns to the normal inactive color.)

Pause

If you wish to pause the music, click on the Pause button in the Mixer View. The button will be highlighted to show that you are in pause mode. The Play button will remain highlighted also because

you have not stopped playback. To resume playback, click the Pause button a second time.

FF (Fast Forward)

You may want to move forward to a particular location in the song. To do this, click on the FF button in the Mixer View. Time will advance rapidly in the Counter display. When you are near the location you seek, click on the Stop button.

If you click on the FF button while a song is playing, the music will play at double tempo. To return to normal playback, click a second time on the FF button.

Rewind

To return to an earlier point in the music, click the Rewind button in the Mixer View. You will see the location in the Counter display decrease rapidly. To stop rewinding, click on the Stop button. (If you rewind to the beginning, the program will automatically pop out of Rewind mode.)

Clicking on the Rewind button with the right mouse button causes the song to rewind instantly to the beginning of the song.

Auto Rewind

If enabled, Auto Rewind rewinds to the beginning of the song after Play has stopped.

Note!

Press the Space bar on your keyboard to switch between Play and Stop.

Basic Editing

One of the most powerful features of word processors is the ability to cut, copy and paste text to different parts of a document before committing to a final copy. Recording Session is like a word processor for music, in that musical notes can be easily edited to help you create your masterpiece!

The basic editing operations can be found in the Edit menu.

Clipboard

An important element of the basic editing functions is the Clipboard. This is a temporary storage space for MIDI note and event information. The Cut and Copy commands place information into the Clipboard area, while the Paste command retrieves previously stored information from the Clipboard. The Clipboard is only a temporary storage area, so any information in it will be overwritten by a new Cut or Copy command.

Note! *The Clipboard used in Recording Session is independent of the Windows Clipboard.*

Edit Menu

Select All

This command selects the entire song file for editing and transformation. The selection will remain in effect until you make a different selection, or until you click within the Score View.

Note! *You must have something selected (score, track, measure, note) to use an editing operation.*

Select Measures

This command opens a dialog box. Two radio buttons (small buttons) appear --New Selection and Add to Selections.

New Selection (the default) allows one selection to be made at a time, while Add to Selections allows you to have multiple-measure selections. (An example of multiple selections would be Measure 20 through Measure 25 and Measure 32.)

Select Tracks

This command opens a dialog box. Two radio buttons (small buttons) appear --New Selection and Add to Selections.

New Selection (the default) allows one track selection to be made at a time, while Add to Selections allows you to have multiple track selections. (An example of multiple selections would be Track 3, Track 5, Track 6.)

Note! *There are other methods of note and event selection available. You may select one note, or a phrase, or multiple phrases.*

Cut

This command removes selected notes or events and places the selection into the Clipboard, leaving a blank space. Adjacent notes or events are not affected. You use Cut in conjunction with Paste.

You can access this command by clicking on the Cut icon in the Toolbox in Score View. This icon looks like a pair of scissors, and lets you click and drag to select a region of music in the Score View. When you release the mouse button, the selected region is cut.

Copy

This command creates a copy of selected notes or events, and places the copy in the Clipboard. The existing music is unchanged. Once a selection is copied, you can paste it to the location you want.

Paste

This command places the contents of the clipboard into the music at the selection point. The notes or events are merged into any existing music, so no subsequent notes or events are shifted in time. The Paste command is not active until you have cut or copied a selection of notes.

You can access this command by clicking on the Paste icon in the Score View Tool box. This icon looks like a bottle of glue, and lets you paste the contents of the Clipboard to a location in Score View.

Keyboard Shortcuts

	Command Keys	Result
Button Commands	Spacebar	Play/Record toggle
	F2	Stop button
	F3	Rewind button
	F4	Fast Forward (FF) button
	F5	Play button
	F6	Record button
	F7	Pause button
	F8	Stop Record
	F9	Stop Play
Menu Commands	Alt or F10	Activate menu bar
	Alt+S	Setup menu
	Alt+H	Help menu
	F1	Help Contents
	Alt+F	File menu
	Ctrl+N	(File) New
	Ctrl+O	(File) Open
	Ctrl+S	(File) Save
	Ctrl+X	(File) Exit
	Alt+E	Edit menu
	Shift+Del	(Edit) Cut
	Shift+Ins	(Edit) Paste
	Ctrl+Ins	(Edit) Copy
	Ctrl+A	(Edit) Select All
	Alt+V	View menu
	Ctrl+1	(View) Score
	Ctrl+2	(View) Mixer
	Ctrl+3	(View) MIDI List
	Alt+M	Music menu
	Ctrl+C	(Music) Clef
	Ctrl+E	(Music) Tempo
	Ctrl+G	(Music) Time Signature
	Ctrl+K	(Music) Key Signature
	Ctrl+Q	(Music) Quantize
	Ctrl+T	(Music) Transpose
	Ctrl+V	(Music) Velocity
	Alt+T	Track menu
Ctrl+I	(Track) Insert	
Ctrl+D	(Track) Delete	
Alt+O	Options menu	
Ctrl+W	(Options) Auto Rewind	
Ctrl+M	(Options) Metronome Enable	
Ctrl+B	(Options) Split Input at Middle C	

A Message from Advanced Gravis

Recording Session is complimentary software provided by Advanced Gravis. Gravis did not write this software and does not provide detailed technical support for Recording Session.

This manual gives you the essentials of Recording Session. For more extensive information, please refer to Recording Session's On-line Help.

Questions & Answers about Recording Session

When I record with my MIDI keyboard, the notes that I play appear on screen, but don't make any sound. They do make sound when I play my sequence back. What's wrong?

Check that MIDI Thru is enabled. You will find MIDI Thru in the Options menu.

When I try to use channels 11-16, they don't make any sound. What's happening?

The default setting does not enable channels 11 through 16. This is part of the Extended MIDI specification. Confirm that the MIDI Drivers in the Setup menu are set to General MIDI. Channels 11-16 must also be enabled in the MIDI Mapper. Please refer to the MIDI Setup section in this guide for more information.

Where can I get more information?

Recording Session includes extensive On-line Help, which can be accessed by pressing the F1 key at any time.

Index

A

Auto Rewind 7

B

Basic Editing 8

C

Clipboard 8

Command keys 10

Copy 9

Cut 9

E

Edit Menu 8

***Extended-level Setup
3***

F

FF (Fast Forward) 7

G

***General MIDI Setup
3***

K

***Keyboard Shortcuts
10***

M

MIDI Driver 3

MIDI Interface 3

MIDI List View 2

MIDI Setup 3

MIDI Thru 11

Mixer View 1

O

On-line Help 2

P

Paste 9

Pause 7

Play 6

Q

***Questions & Answers
troubleshooting 11***

R

Recording 5

Rewind 7

S

Score View 1

Select All 8

Select Measures 8

Select Tracks 9

Stop 6



Power Chords Debut™

by Howling Dog Systems



© Copyright 1994, Advanced Gravis Computer Technology Ltd. and Howling Dog Systems.

The information contained in this document is the exclusive property of Advanced Gravis Computer Technology Ltd. and Howling Dog Systems, and may not be copied or reproduced in whole or in part without the expressed written permission of Advanced Gravis Computer Technology Ltd. and Howling Dog Systems.

Advanced Gravis, UltraSound, and UltraSound MAX are trademarks of Advanced Gravis Computer Technology Ltd.

Microsoft Windows and Multimedia Windows are trademarks of Microsoft Corporation.

Other product names, trademarks and registered trademarks contained in this document are the property of their respective holders.

Contents

Upgrading to Power Chords Pro	1
Welcome to Power Chords Debut!	2
<i>Power Chords Debut Basic Concepts</i>	2
Cool Things You Can Do Right Away!	4
<i>The Rhythm Editor</i>	4
<i>Fun With the On-screen Guitar</i>	6
<i>Chord Parts</i>	7
UltraSound Support: Banks and more!	9
<i>Patches and UltraSound</i>	9
<i>More Sounds For Your UltraSound</i>	9
<i>UltraSound Options: Bank Switching and More</i>	10
Experimenting with Songs	12
<i>Changing Instrument Sounds for Individual Parts</i>	12
<i>Song Window Overview</i>	12
Troubleshooting Guide	15
Index	17

Welcome to Power Chords Debut by Howling Dog Systems!

Power Chords Debut is a powerful music composition tool. It combines the best of a sophisticated drum machine, guitar chord computer, MIDI sequencer, and more. Its unique, object-oriented approach to music makes song writing quick and easy. Music objects are represented graphically so no knowledge of notation or MIDI data is required to make full use of the program.

Best of all, Power Chords Debut fully supports UltraSound patch caching and bank switching, so you can access all the advanced features of your UltraSound.

About This Manual

This manual does not cover every aspect of Power Chords Debut. Instead, it gives a fun (we think) introduction to the program. Full documentation for Power Chords Debut is available from the Help menu. Just press F1, or choose Help... from the main menu.



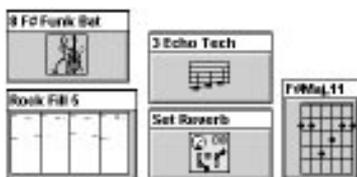
How to Get Started

The best way to learn Power Chords Debut is to run the tutorials and demos included with the program. This manual contains lots of “Cool Things You Can Do Right Away” to get you making music instantly.

Power Chords Debut Basic Concepts

Power Chords Debut Music Objects

In Power Chords Debut, music is composed of small chunks of various types. These music “objects” include melodies, bass parts, chords, chord rhythms, drum parts, and controls.



*Music
Objects*

To write a song in Power Chords Debut:

First, create (or import from another song) the objects that make up the song using the on-screen instruments, Rhythm Editor, or MIDI Input. Then drag the music objects into place in the Song window.

Each type of music object has its own palette, or storage area. You can store objects in palettes until you need them, and you can copy objects to as many locations in the Song as you like.

Auditioning Any Part

Audition any music object or chord easily by clicking on it with the right mouse button. Power Chords Debut allows you to exchange different music objects at will as the song takes shape. Don't like the drum fill in bar 12? Try out two or three replacements by right clicking on them in the Drum Palette—choose one, and just drag it into bar 12. It's done!

Editing Parts

To edit a chunk of music, you simply drag it to the Rhythm Editor, make your changes, audition as you go, then drag the item back to its place in the song.

Palettes

Palettes are “holding places” for parts that you want to keep, but may or may not use in the song. They also provide a convenient place from which to load parts into the song.

Automatically Repeating Parts

Once you place a drum part, bass part, or chord rhythm in a bar in the song, it repeats automatically until you place a different part of the same type later in the song.

Pattern-Based Advantages

Most sequencers are track-based—they store music in linear tracks that run the entire length of the song. Power Chords Debut is pattern-based: the music consists of a number of patterns that can be easily swapped in and out of the song. A single pattern can appear more than once in the song, so you only have to record or enter the same information once. You can move a pattern into the song with one mouse movement, and change it just as easily.

Feedback

Power Chords Debut is designed to give you lots of auditory feedback throughout the songwriting process. The chord on the stringed instrument plays when you click the stringed instrument window with the right mouse button.

The right mouse button will also play any chord or rhythm phrase displayed on the palettes. Just click the desired item once. (Click on it again to stop playing.)

Cool Things You Can Do Right Away!

Let's have some fun with the Rhythm Editor.

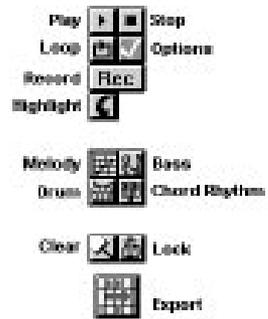
The Rhythm Editor

To use Power Chords Debut as a Drum Machine:

1. Hide all windows—hold the Shift key and click the main window button bar located on the left side of the screen.
2. Show the Rhythm Editor—click the top button in the main window button bar.
3. Show the Drum Palette—click the Drum button on the main window button bar. Move the Drum Palette so it doesn't overlap the Rhythm Editor.
4. Switch to editing drum parts—click the Drum button in the Rhythm Editor. The names of the drums are displayed down the side of the grid.
5. Click in the grid to create notes.
6. Play the part—click the *Play* button.



Left:
Rhythm
Editor—
Drum Part;
Right:
Buttons



Rhythm Editor Controls

To make a note louder or softer, click on it with the right mouse button and drag up and down.

Loop the part by clicking the *Loop* button. While it's looping, add or remove drum notes. Click the *Stop* button to stop looping.

Click the Resolution Scroll Bar in the Rhythm Editor (the only vertical scroll bar in the window). As you change the resolution,

the number of grid divisions changes so you can make quarter notes, eighth notes, eighth note triplets and even smaller notes.

To save your part to the Drum Palette at any time, click the *Export* button (bottom right hand corner of the Rhythm Editor).

To play any of the parts in the drum palette, click them with the right mouse button.

To Make a Melody in Power Chords Debut:

1. Hide all windows—hold the Shift key and click on the main window button bar.
2. Show the Rhythm Editor—click the top button in the button bar at the left of the screen.
3. Show the Melody Palette—click the *Melody* button (blue, with a staff and notes on it) on the main window button bar.
4. Switch to editing melodies—click on the *Melody* button in the Rhythm Editor. The title bar of the Rhythm Editor changes to "Rhythm Editor: Melody Untitled."
5. Click in the Rhythm Editor grid to create notes.
6. Play the part—click the *Play* button.
7. Click the Resolution Scroll Bar to change the default note sizes. Add notes of different lengths.
8. To save your part to the Melody Palette at any time, click the *Export* button (bottom right hand corner of the Rhythm Editor).
9. To play any of the parts in the Melody palette, click them with the right mouse button.

Fancy Editing, Changing the Instrument Sound for a Melody, and More!

To make longer notes in the Rhythm Editor, hold the Shift key, and click and drag to the right with the mouse.

To change the instrument sound of a melody, click the *Options* button (red check mark). This brings up the Edit Rhythm Parameters dialog where you can change all sorts of things.

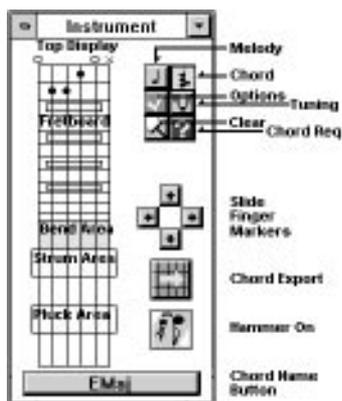
Select a new instrument sound from the list by clicking on it. You can test how a part sounds by clicking in a blank area of the Edit Rhythm Parameters dialog with the right mouse button. Click *OK* to save your changes.

In the Rhythm Editor, move groups of notes by clicking the *Highlight* button (it has a curved arrow on it, beneath the loop button). Click and drag in the grid to encircle the notes you want to move. They turn red when selected. Once you have made a selection, click inside the selected area and drag to the new location. This method is handy for moving a part from one drum to another.

To copy groups of notes, highlight the notes as described above, then hold the Ctrl key while clicking on the selected notes and dragging.

Fun With the On-screen Guitar

There are some really neat things you can do with the on-screen stringed instrument window, as well. It comes configured as a guitar, but it can be configured to emulate any stringed instrument such as banjo, guitar, bass, etc.



Instrument Window

Stringed Instrument Window

Recording From the On-Screen Guitar

1. Hide all windows—hold the Shift key and click the main window button bar.
2. Show the Rhythm Editor—click the top button in the button bar at the left of the screen.
3. Switch to editing melodies—click the *Melody* button in the Rhythm Editor.
4. Show the Guitar—click the *Guitar* button on the main window button bar.
5. Click the *Rec* button on the Rhythm Editor.

You will hear the metronome click off 1 bar to prepare to record. After this bar, the beat marker in the Rhythm Editor moves to indicate that you are recording.

6. Strum the strings, bend strings, play chords with the right mouse button in the fretboard, or click new notes on the fretboard itself.

All this will be recorded. Now you can change the instrument sound of the recorded part and play back your melody.

More Fun Guitar Stuff—Including Bending Strings

To strum the strings, click and drag in the lower yellow rectangle below the fretboard. (The cursor changes to a pick when over the pluck, strum or bend areas.)

To bend the strings, click and drag in the blue rectangle below the fretboard. The string will bend up and down in pitch. To bend all the strings at once, click in the string bend rectangle with the both mouse buttons and drag back and forth.

To slide chords, click on one of the four direction arrow buttons. The chord will be shifted in the direction indicated.

To play Melodies on the fretboard, switch to Melody mode by clicking the *Melody* button in the Instrument window (the button with one note on it). Click or drag in the fretboard to produce sustained tones.

To change the instrument sound the guitar plays (yes, you can play a fretboard piano, organ, vibes or any of the 125 other sounds!), click the *Tuning Fork* button. Then click any of the buttons marked “P” for “Patch” to select new instrument sounds.

To use Chord Request, the built in “chord computer,” click the button with the question mark on it. Now you can dial up all sorts of chords and hear them played.

Chord Parts

Making Chords on the Guitar

1. Switch to Chord mode—click the *Chord* button (button with 4 notes on it).
2. Make a chord—click in the fretboard, or use Chord Request to help you.
3. Show the Chord Palette—click the green button in the main window button bar with a picture of an artist’s palette on it.
4. To save a chord to the palette, click the *Export* button (large button with arrow pointing right) once, or click the chord and drag it to the palette.
5. To add a “hammer-on” or “pull-off” to a chord, click the button below the export button with the grace note on it.

Now notes you click the fretboard will be “grace” notes. Click and hold the right mouse button in the guitar window to hear them.

Making a Chord Part in the Song

1. Make chords and store them in the Chord Palette (see above).
2. Show the Song window—click the *Song* button (second from the top) in the main window button bar.

3. Drag chords from the Chord Palette to each of the first four bars in the Song window—click the chords in the palette, hold the mouse button, and drag them to the bar in the Song window.
4. Now show the Rhythm Editor—click the top button in the main window button bar.
5. Switch to editing chord rhythms—click the *Chord* button (see previous illustration).

The title of the Rhythm Editor should change to read “Rhythm Editor: Chord Untitled.”

6. Create a chord rhythm—click notes in the grid.
7. Drag the chord rhythm to the first bar of the song—click the *Export* button, hold the mouse button down, and drag to the bar in the song window.

This is the rhythm that will be used to play the chords you dragged to the song previously.

8. Click the *Play* button to play the song.

The chord rhythm is used to play the chords in each bar. You can have a new chord rhythm any time you want (e.g., one per bar if it suits you), or you can stick with one or two. The chord rhythm will repeat until you put a new one in a following bar.

A chord rhythm is a strumming or plucking pattern used to play chords. A chord rhythm represents the pattern played by the right hand of a guitarist, plucking or strumming the strings, while the chords indicate where the left hand of a guitarist would fret the strings. The Chord Rhythm provides the timing information which indicates when the strings are to be played.

You can create an entire song by combining chord parts, drum parts, melodies, and bass parts which you create in the rhythm editor and store in palettes, or import from other songs.

To edit a rhythm from one of the palettes or from the song, click the rhythm below its title and drag it to the Rhythm Editor. The Rhythm Editor will then switch to the correct type and display the part. Note that the part of that type that was already in the Rhythm Editor will be overwritten. The other parts of different types that you were working on are still there, and you can switch back and forth between them.

For a more complete overview of the program, please, please, please run the tutorials!

UltraSound Support: Banks and more!

Power Chords Debut has full built-in support for your UltraSound card. Patch caching (loading the needed instrument sounds into the RAM on your UltraSound card) is automatic.

Power Chords Debut also directly supports one of the most exciting parts of your UltraSound design—changing to different banks of sounds. This capability lets you access an unlimited number of sounds from Power Chords Debut using your UltraSound card.

Patches and UltraSound

Where the Instrument Sounds Come From

When you play MIDI music on your UltraSound from a program such as Power Chords Debut, the instrument sounds you hear come from 'patch' files—files containing digitally recorded samples of various instruments.

You can have any sound on your UltraSound

Applications like Power Chords Debut command the UltraSound card to load the needed instrument patches from your hard disk into the card's memory. It then plays the patches back at different pitches as instructed by the MIDI note commands sent to it. Any sounds that can be recorded (trumpets, violins, guitars, drums, cymbals, whatever) can be made into patch files for playback on the UltraSound. These sounds don't have to be instruments: they also include speech and sound effects.

Since the UltraSound gets its patches from your hard disk, you can replace or add to the sounds available. The UltraSound software also allows you to organize different patch files into groups, or banks. Power Chords Debut can specify different banks just by changing one command to the UltraSound card.

More Sounds For Your UltraSound

Howling Dog Systems UltraSound Power Patch CD-ROM

Your UltraSound, UltraSound Max, or certified UltraSound-compatible sound card is actually a sophisticated sample playback synthesizer. The card originally shipped with over 5 megabytes of sampled sounds.

How about launching into the sonic stratosphere with a blistering 40 megabytes of professionally recorded instrument sounds?

You'll find over 750 instrument and drum sounds: everything under the sun, from blistering overdriven guitars and thundering pipe organs to hundreds of drum sounds of all descriptions, from classic analog synthesizer collections to sound effects.

The Power Patch CD-ROM adds many times the music power of your original UltraSound at a fraction of the cost. To make it simple to turbocharge your UltraSound with sonic power, we include all the information you need—bank setups so you can quickly switch patch sets, Power Chords .KIT files, and more.

You can access the preconfigured banks of sounds directly from Power Chords Debut or Power Chords Pro, right off the CD-ROM!

The Howling Dog Systems UltraSound Power Patch CD-ROM Volume 1 is only \$99 US! Order today!

The CD-ROM contains all 10 patch sets listed below...or you can order diskette-based patch sets "a la carte" (\$29.95 each).

Patch Sets on Diskette

FD-1 Real Instrument UltraSound Patch Set	WOFS-1 Wall of Sound 707/808/909 Drum Kit Collection
FD-2 UltraSound Drum Patch Set	WOFS-2 UltraSound Dance/Pop Patch Set Collection
FD-3 Super Sound Effects UltraSound Patch Set	WOFS-3 Latino Collection
FD-4 UltraSound Analog Synth Patches	WOFS-4 Sound Effects 1 Collection
	WOFS-5 Techno/Rave Collection
	WOFS-6 Super/Dance Loops Collection

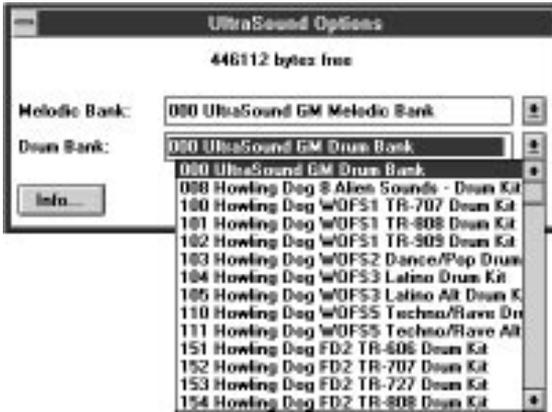
Order one or more of these exciting patch sets created by the such sound pros as Francois Dion of IdMEDIA, and the experts at Wall of Sound Productions. Because the UltraSound holds its sounds in RAM, adding a new set of patches is almost like getting a whole new sound card for a fraction of the cost.

Phone 1-800-267-HOWL and order your Power Patch CD-ROM for only \$99 US* today!

**Please include \$5 US for air mail shipping in Canada or the US. Outside Canada and the US, add \$10 US for shipping. For Federal Express overnight shipping in Canada and the US only please add \$15 US.*

UltraSound Options: Bank Switching and More

Power Chords has a special UltraSound Options dialog box available. To access it from Power Chords Debut, select *MIDI...* from the Main Menu, then *UltraSound Options...*



UltraSound
Options
Dialog

When you use additional UltraSound patches such as those on the Power Patch CD-ROM, your ULTRASND.INI file is updated with the new banks, file names, and locations. You can then select which banks to use from the UltraSound Options dialog.

The UltraSound Options dialog displays the Patch Memory Left on your card, and lets you set alternate melodic and drum banks.

When you edit the Rhythm Parameters in the Rhythm Editor (by clicking the red checkmark button), you will find a similar set of list boxes to select the Drum and Melodic banks.

Getting Instant Bank Info

Both dialogs have an *Info...* button. Click it to see a list of Melodic and Drum bank information as listed in the ULTRASND.INI file. It also lists any banks that are defined more than once.

UltraSound Options Dialog Box

Automatic Fallback to the Default Bank

UltraSound banks do not have to include entries for every patch; a bank can include as little as one patch. If you select a patch that is not defined in the current bank, your UltraSound selects the patch from Bank 0, the default General MIDI bank.

Creating a New UltraSound Bank

Because Howling Dog Systems patch sets are shipped with full INI file sections ready to be appended to the ULTRASND.INI file, you may never have to create a bank on your own. However, if you wish to customize your setup, its easy to create your own bank. Just flip to the chapter in your *UltraSound User's Guide* on "Patch Manager," and skip to the section on "Bank Manager."

Experimenting with Songs

Changing Instrument Sounds for Individual Parts

Here's a fun way to experiment with some of the sample songs provided with Power Chords Debut.

1. Hide all windows—hold the Shift key and click the main window button bar.
2. Load a song—select *File...* then *Open* from the Power Chords Debut menu bar. Choose a sample song, for example one of the demo songs.
3. Double-click on melodies (blue) , or bass parts (purple) to bring up the Edit Rhythm Parameters dialog box.
4. Change the instrument sound for the part—click the instrument list.
5. Hear your changes—click on a blank area of the dialog (e.g. just to the left of the instrument list) with the right mouse button.

You will hear the part played with whichever instrument you choose.

Reorchestrate, or be a producer! Change the instruments the way you think they should be! Have a blast!

To Change the Instrument for the Chord Part

...continuing from the previous example:

1. Show the guitar window—click the *Guitar* button on the button bar.
2. Click the *Tuning* button on the guitar window. It has a small tuning fork on it. This shows the Instrument Tuning dialog.
3. Click one of the buttons marked with a "P" to access the Instrument Sound Selection dialog. Select a new instrument sound.
4. Click *OK*, then *OK* in the Tuning dialog to return to the program.
5. Strum the strings on the guitar, or click with the right mouse button in the fretboard to hear the guitar played with a new sound!
6. Play the song to hear how the chord part sounds with its new instrument.

To change the instrument sound for a single part in a palette, double-click on it to bring up the Edit Rhythm Parameters dialog.

Song Window Overview

The Song window provides a bar-by-bar framework for song creation. You drop the various music elements (chords and rhythm phrases) into place in the Song window to create a song.

You can configure the display in many ways to show you the information you need to perform the current editing task, and edit options are available for copying, moving, and deleting song elements.

There are “slots” in each bar to hold parts of the various types including chords, chord rhythms, drum parts, melodies, bass parts and control parts.

NOTE: Chord rhythms, bass parts, and drum rhythms automatically repeat in the Song window, so you do not need to insert a repeating pattern more than once consecutively. A chord rhythm or drum pattern, once in the song, repeats until superseded by a different one.

Song Window Controls



Play. Starts the song playing.

Stop. Stops the song playing.

Cleaver. Sub-divides bars for putting in multiple chords.

Repeat. Click to enter a repeat.

Tempo. Click to enter a tempo change.

Highlight. Click, then click and drag in the bars to highlight bars for copying, deleting, moving, or to indicate the area to insert blank bars over.

Insert Bars. Inserts bars over highlighted area and shifts existing bars in that area to the right.

Options. Accesses the Song Options dialog to control display, time signature, which items play, etc.

Playing the Song

Click on the *Play* button to play the song. Your selections in the Song Options Dialog (accessed via the red checkmark button) determine which parts you hear when you play the song.

Click the *Stop* button to stop playing the song.

Playing the song from a particular bar

Double-click a blank part in the bar where you want to start playing.

Playing a single part in the song

Click the right mouse button on a part or chord in the song to hear it alone.

Playing a single particular bar

Click the right mouse button on a blank part of the bar you want to hear.

Playing the rest of the song from a particular bar forward

Double-click on a blank part of the bar you wish to start from.

Importing Parts From Other Power Chords Files

Power Chords Debut can audition and quickly import chords, drum, melody, bass, control and chord rhythm parts from other Power Chords Debut and Power Chords Pro files. This facility makes it easy to re-use parts from other files, build libraries of parts, etc.

To import parts from other Power Chords files, choose *Import From Power Chords File* from the File menu. Select the file you want to import from.

The Select Items to Import dialog box lets you choose parts to audition and import from either the palettes of the song file you selected or the song itself.

To audition a part for importing, click on its name with the right mouse button. Click again with the right mouse button to stop playing. This will sound chords as well. When you audition a part, the name of the part selected is displayed in the upper left corner of the dialog box.

To select a part for importing, click on it with the mouse. It will be highlighted if it is selected for importing.

To select all parts of one type for importing, click the type label button above the list of parts of that type. Click on it again to clear the selections.

To import the marked parts, click the *Import* button.

Exporting the song to a MIDI file

To export your song as a standard type 1 MIDI file, choose *File/Export to MIDI File* from the main menu. Enter a valid filename for the MIDI file. Your song will be saved to that file.

Standard MIDI files can be used by many other DOS and Windows music programs, or played using the Windows Media Player.

Troubleshooting Guide

Why don't I get any sound?

Power Chords Debut UltraSound Edition uses the UltraSound MIDI Synth driver and is pre-configured to use this driver. If you just can't get it to work, try all the drivers available from the MIDI Configuration Dialog (Select MIDI..., then MIDI Configuration... from the main menu bar).

If you are still not getting any sound, check the following:

1. Are your sound card and MIDI interface properly installed?
2. Are your speakers or headphones plugged in properly?
3. Is the volume turned up on the sound card or mixer program?
4. Is the proper Windows driver installed—the most current version?
5. Check sound with another program (e.g.: Media Player). If you can play a MIDI file with the Media Player, your drivers are okay, and you have to select the correct output driver in Power Chords Debut.
6. Is another program competing for the sound resource?

I have stuck notes (notes that don't turn off).

To clear stuck notes, choose the *Panic Button* from the MIDI menu. This will stop all stuck notes from playing.

I don't hear all the parts in my song.

Check the *Song/Options* dialog box play parameters. The song parts missing may be turned off.

I have sound when auditioning parts, but when I play a song, parts are missing.

You may be running out of patch memory. Use the *Conserve Memory* option for the UltraSound driver. To access the *Conserve Memory* radio button, run UltraSound Setup or choose the UltraSound driver in your Windows Control Panel and click *Setup*. We recommend that you increase the memory on your UltraSound to its maximum: contact Advanced Gravis for more information on this.

I can't change the instrument for the chords.

The instrument patch for the chord part of any song is changed in the Instrument tuning. Click the little tuning fork button on the Instrument window, and change the patch by clicking on the button marked "P."

I put chords in the song, but don't hear them.

Chords in the song will not play unless accompanied by a Chord Rhythm. In the Rhythm Editor, switch to editing Chord Rhythms, click in some notes in the grid, and drag the part to the song.

I created a new bank, but the sounds don't play, even though they show in the instrument lists.

Make sure that the patches you specify in your bank are actually at the location indicated by the PatchDir= statement. In other words, make sure your PatchDir statement actually indicates where the patches are to be found.

You can check out your ULTRASND.INI file by clicking the *More...* button in the UltraSound Options or Edit Rhythm Parameters dialogs. This function automatically checks for repeated bank numbers.

Make sure you didn't put patch file names in the ULTRASND.INI file with .PAT extensions. For example, 1=anasyn12 works but 1=anasyn12.pat does not.

Make sure that you do not repeat any patch numbers in your bank. Make sure that you do not have more than one bank with the same bank number in the ULTRASND.INI file. (Click the *Info...* button to check this—see above). Make sure that you have not misspelled the names of any patch files. If you have a mistake in a bank, any entries in the bank below that one will not load.

I can only store melodies in the top slot.

This is part of the design of Power Chords Debut. You can load songs that have up to 16 melodies in a bar, but can only store melodies in the first slot. Power Chords Pro will let you access all the melody slots.

Upgrading to Power Chords Pro



HOWLING DOG SYSTEMS

We hope you're enjoying Power Chords Debut. We packed a lot of features into this version of our award-winning composition product, Power Chords. The Pro version has even more features and exciting capabilities to bring your music to life!

We are pleased to offer a very special price on the full retail version of Power Chords Pro for Power Chords Debut owners.

 **Upgrade to the full retail version of Power Chords Pro for a special price of only \$79 US!**

Power Chords Pro (list price \$199.95 US) is even more powerful than Debut. Here are some of the added features you can expect:

A Full 16 Melodies per Bar. Access up to a full 16 melody parts per bar for complete creative freedom!

Power Effects Generate Cool Sounds! Power Chords Pro's Power Effects can actually generate realistic-sounding strums (up, down, and alternating), drum rolls, alternate picking effects, and more. Quantize effects, humanize parts, arpeggiate, and create random patterns—give your creativity a boost!

Standard MIDI File Import Opens Up Thousands of Sources of Drum, Melody, and Other Parts. This terrific feature gives you access to the output of dozens of music and sequencer programs, and the literally thousands of MIDI files available on BBSs. Bring a track at a time into Power Chords Pro, or just a few bars. Audition every bar and track if you like. Power Chords Pro automatically creates a consolidated drum track containing all the drum sounds, making it a snap to import and use drum parts from MIDI files.

Global Part Editing. Want to change the instrument sound of all bass parts in a song? Switch the melodies on channel 4 up an octave? Or make all the drum parts just a bit louder? With Global Editing, you can accomplish any of these feats from a single set of controls with just a couple of mouse clicks!

Alter key characteristics of all parts of a type in a single action. Filter by MIDI channel, etc., to select just the parts you want to change. Change MIDI channels, alter velocities, or change instrument patches for up to 128 parts at once.

Unlimited MIDI Access. With the full retail version of Power Chords Pro, you can use any MIDI input or output device you like.

Includes a comprehensive, 120-page, spiral-bound manual.

Phone 1-800-267-HOWL and order your Power Chords Pro Upgrade for only \$79 US (plus shipping) today!

Please include \$5 US for air mail shipping in Canada or the US. Outside Canada and the US, add \$10 US for shipping. For Federal Express overnight shipping in Canada and the US only, please add \$15 US.

Symbols

.KIT files 10

A

Auditioning parts 3

B

Bank switching 10

Banks 9-11

Bass parts

2, 8, 12, 13

Bending strings 7

C

Changing instruments 5-6, 7, 12

Chord button 7

Chord Parts 7-9

Chord Request 7

Chord rhythm

2, 3, 7, 8, 13, 14, 16

Chords 2, 6-8, 12-14, 16

Cleaver 13

Conserve Memory 15

Controls 2

D

**Drum machine,
Using the Rhythm
Editor as a 4**

Drum parts 2

E

Edit Rhythm Parameters dialog 5

Export 5, 7, 8, 14

G

Guitar button 6

H

Help 2

Highlight 5, 13

I

**Import parts from
other files 14**

Info... button 11

Insert Bars 13

**Instrument window
3, 6-7, 16**

L

Loop button 4

M

**Melodies 2, 5-8,
12, 13, 16**

Melody 5-7, 14, 16

MIDI music 9

O

Options button 13

Options dialog 15

P

**Palette 3-5, 7, 8, 12,
14**

Panic Button 15

Patch caching 2, 9

Patches 9, 10, 11, 16

Playing a song 13

**Playing melodies on
the fretboard 7**

**Power Patch CD-
ROM 9-11**

R

Rec button 6

Repeating parts 3

**Resolution Scroll Bar
4, 5**

**Rhythm Editor 2-8,
11, 16**

**Rhythm parameters
11**

Right mouse button 3

S

Sliding chords 7

**Song Options dialog
13**

**Song window
2, 7, 12-15**

Strumming 6

**Stuck notes
clearing 15**

T

Tempo 13

**Troubleshooting
Guide 15**

Tuning 7, 12

U

**UltraSound MIDI
Synth driver 15**

**UltraSound Options
dialog 10, 11**

**Upgrade to Power
Chords Pro 1**

AD 1
FILM PROVIDED FOR THESE 2
PAGES

AD 2
FILM PROVIDED FOR THESE 2
PAGES