

LEADING THE WORLD IN SOUND INNOVATION

# Soundscape

#### 16-Bit ENSONIQ Wavetable Sound Board

# Hardware User's Manual Addendum





### Manual Addendum

#### What's New in Software Version 1.2?

The information in this addendum describes changes and new features added to the Soundscape software after the printing of the *Ensoniq Soundscape Hardware User's Manual*. Please also open and read the READ ME file included with the software for additional information.

#### Summary of Changes and New Features

Here is a summary of the changes made to the Soundscape software after the printing of the User's Manual. Detailed descriptions are provided in the section that follows.

- You no longer have to specify an operating mode (GM, FM, or MT-32) as described on page 27 of the User's Manual. Soundscape will now automatically select the appropriate operating mode. This enhancement eliminates the need for creating batch files to use with specific games as described on page 24 of the User's Manual. See the heading titled "MT32 Patch-change Utility (New)" on page 8 of this addendum.
- There are no longer any secondary synth/wave playback devices, as described on page 40 of the User's Manual.
- The DOS configuration program, SSInit, has been changed to make configuration of the card easier. There is no longer a Synthesizer Configuration screen, and the section titled Synthesizer Configuration screen on page 36 of the User's Manual no longer applies.
- A DOS utility called MT32 has been added to enable you to quickly switch from the General MIDI patch set to the MT-32 patch set. Use this utility when a game supports MT-32/LAPC-1 and not General MIDI/Roland Sound Canvas. See the heading titled "MT32 Patch-change Utility (New)" on page 8 of this addendum.
- A utility has been added that allows you to add CD-ROM drivers to your system after the software has been installed. See the heading titled "Later Installation of CD-ROM drivers (new feature)" on page 2 of this addendum.
- The Windows Driver Setup display has been changed. See the heading titled "Soundscape Setup Display (Change, replaces the section

titled Configuring the Soundscape Card under Windows on page 38 of the User's Manual)" on page 14 of this addendum.

- A digital audio/MIDI test utility has been added. See the heading titled "Soundscape Digital Audio/MIDI Test Utility (New)" on page 9 of this addendum.
- A small (less than 1k) terminate-and-stay-resident (TSR) program called VSB\_EMM.COM has been added for use with games that do not function properly, regardless of which sound option is selected. See the heading titled "Virtual Sound Blaster Driver (New)" on page 10 of this addendum.

#### **Detailed Description of Changes and New Features**

The following section contains detailed descriptions of the changes and new features in software version 1.2.

#### Later Installation of CD-ROM drivers (new feature)

If you decide to add a CD-ROM drive after you install the Soundscape software you can use the Soundscape CD-ROM installation utility to add the necessary drivers to your system.

To install CD-ROM drivers:

 Change to your Soundscape directory (i.e., C:\SNDSCAPE) and type CDINST. The CD-ROM Installation dialog box will appear.



Figure 1. The CD-ROM Installation Dialog Box

- 2. Select a CD-ROM drive from the choices given.
- Enter the letter that you would like to assign to your CD-ROM drive.
- 4. Click OK.

The program will then add the appropriate lines to your CON-FIG.SYS and AUTOEXEC.BAT files. Any changes made will take effect the *next* time your boot your computer.

The CD-ROM installation utility will write the driver lines to the top of your CONFIG.SYS and AUTOEXEC.BAT files. If you are using a version of DOS that allows for multiple configurations you must move the driver lines to the appropriate section in your CONFIG.SYS and AUTOEXEC.BAT files. Please consult your DOS manual for more information.

#### Quick Setup Screen of SSInit (Change)

The Quick Setup screen no longer has a box called *Current Mode* since Soundscape will automatically select the required mode.

#### The Hardware Settings Screen of SSInit (Change, replaces the section titled *Hardware Settings Screen* on page 31 of the User's Manual)

The Hardware Settings Screen has been changed in a number of ways. The following information replaces the section called *Hardware Settings Screen* on page 31 of the User's Manual.

The Hardware Settings screen is where you configure the hardware settings that determine how Soundscape communicates with your computer.



Figure 2. The Hardware Settings Screen

#### **MIDI Interface**

This box enables you to set the basic hardware parameters for your Soundscape card.

Port selects the MIDI interface port address used by Soundscape this also corresponds to the MPU-401 MIDI interface base port address. The default is 330.

- Many DOS games assume that your MPU-401 compatible MIDI interface uses port 330. Some games may not function if a different address is set.
- The Base Address Test screen, shown below, will be displayed if you have selected a MIDI port address that is different from the setting of Jumper #2 (JP2) on the actual card. If this screen should appear, select another address setting, and then click on the Test button to confirm that you have chosen correctly (i.e. selected the same MIDI port as the JP2 setting on the card).



Figure 3. The Base Address Test Screen

IRQ selects the interrupt request line that the Soundscape synthesizer and MPU-401 compatible MIDI interface will use for basic communications. The default is 2. This IRQ value must be different than the IRQ value selected in the Sound Blaster/Wave section of the Hardware Settings screen.

- IRQ 2 is the default IRQ setting for an MPU-401 in many DOS applications. Some applications may not work with a different selection.
- Setting the IRQ value to 10 will cause SSInit to generate a warning message since IRQ 10 is not a legitimate MPU-401 IRQ for some DOS applications. However, this will not affect Soundscape's operation under Windows.

#### Joystick

Joystick enables or disables the Joystick port on your Soundscape card. The default is Disabled. Enable the Joystick port only if your system has no other joystick card.

#### Sound Blaster/Wave

This box enables you to set Soundscape's Sound Blaster compatibility parameters. The Soundscape Sound Blaster emulation uses a fixed base port address of 220. Therefore, if you are running a DOS game or multimedia program that provides only for Sound Blaster compatibility, make sure that program expects to find a "Sound Blaster" card at Base Port address 220. **SB Emulation** enables or disables Sound Blaster mode. This option should be turned off only if you have a Sound Blaster or Sound Blaster-compatible card in your system. The default is Enabled. During the installation, you will be asked if you have a Sound Blaster or similar card installed in your system. If you answer yes, the SET BLASTER line will not be written to your AUTOEXEC.BAT file and SB Emulation will be disabled. If you later turn this switch on, make sure you add the following line to your AUTOEXEC.BAT file: SET BLASTER=A220 Ixx Dx T1.

IRQ selects the interrupt that will be used for Sound Blaster digital audio emulation. The recommended IRQ setting is either 7 or 5. The default is 5. This IRQ setting is also used by Soundscape's wave device under Windows.

DMA selects the DMA (Direct Memory Access) channel that Soundscape uses for board initialization and digitized sound transfer. This setting also determines the DMA selection for Sound Blaster digital audio emulation and the DMA channel for Soundscape's wave device under Windows. The default is 1.

WavePort selects the address of Soundscape's wave device (that is, the device that plays back wave sound files). The default is 534.

Settings changed in the MIDI Interface and Sound Blaster/Wave boxes will be reflected in your Windows Driver setup box. Likewise, changes made to your configuration in the Windows driver setup box will be reflected in the Hardware Settings screen.

#### Hardware Test Screen (New)

This screen allows you to resolve conflicts in your system that may affect proper operation of the Soundscape card. From this screen you can perform either an IRQ or a DMA test on your system to help resolve any conflicts. The tests use information obtained from the Hardware settings page to test the current IRQ and DMA selections. If you make an IRQ or DMA change in the Hardware settings page, you can test them from this screen. To run the IRQ test, select "IRQ test". To run the DMA test, select "DMA test".



Figure 4. Hardware Test Screen

#### **IRQ and DMA Test Screens (New)**

Running the IRQ test displays the current IRQ settings reflected in the Hardware page. After the test is complete, you can make changes on the Hardware Settings screen.



#### **IRQ** Test Screen

Running the DMA test displays the current DMA channel settings reflected in the Hardware page. After the test is complete, you can make changes on the Hardware Settings screen.



Figure 5. DMA Test Screen

#### MT32 Patch-change Utility (New)

Most DOS games offer a menu choice for sound when they start up. Soundscape supports all of the popular music options. The only time you will need to provide "instructions" to Soundscape is when MT-32/LAPC-1 is offered and Sound Canvas/General MIDI is not.

Because General MIDI provides the highest quality sound, the majority of today's popular games offer it as an option. Those that do not almost always offer MT-32 in its place. If you have a choice between General MIDI and MT-32, always choose General MIDI, since it will provide you with the best sound quality. If you need to use MT-32, you must first switch from the General MIDI patch set (the default) to the MT-32 patch set. When you're finished using the MT-32 patch set, be sure to switch back to the General MIDI set.

Soundscape provides two sets of patches: a General MIDI compatible patch set and a patch set which emulates a Roland MT-32 sound module. These patches cannot be used simultaneously, so a utility called MT32 is provided to allow you to easily switch from one patch set to another. Use this utility whenever a game supports MT-32 as a music/sound option. The usage for MT32 is as follows:

#### MT32 [(ON/OFF0]

Where ON selects the MT-32 patch set and OFF selects the General MIDI patch set.

Typing MT32 without any arguments (i.e. ON or OFF) will also switch you to the MT-32 patch set. Here are some examples:

Type this (from a DOS prompt):	To do have this effect:
MT32	switches patches to the Roland MT-32 patch set
MT32 OFF	switches patches to the General MIDI patch set
MT32 ON	switches patches to the Roland MT-32 patch set

Table 1: How to Use the MT32 Patch-change Utility

#### Soundscape Digital Audio/MIDI Test Utility (New)

The Soundscape Digital Audio/MIDI Test Utility is a resource you can use to help identify common problems related to DMA, IRQ and port settings. To run the test, simply type DMTEST.EXE from within your Soundscape directory.

The test sequence begins with initialization of the board followed by a test of the digital audio hardware. If you get a "Board not detected" message during initialization, check the port settings on the Hardware Settings screen of SSinit and make adjustments as needed. The two possible error messages during the digital audio hardware test are "DMA error" and "IRQ error". If either occurs, use the Hardware Settings screen to evaluate and/or reassign DMA and IRQ settings. Upon completion of the hardware test, you are prompted to press any key to initiate the digital audio test. As soon as you press a key, you will hear a sound effect, indicating that the test was successful.

After completing the digital audio test, you can either run the MIDI hardware portion of the test or repeat the first test. Pressing the letter "c" initiates the MIDI hardware test. A "MIDI port not detected" message means that the board was not initialized, in which case you should reinitialize it by typing SSINIT/I from within the Soundscape directory (this is different from the initialization performed at the beginning of the test sequence). The only other possible error message for this test is the "IRQ error" message. If it appears, use the Hardware Settings screen of SSinit to re-evaluate your IRQ selections. Upon completion of the MIDI hardware test, you will be prompted to press any key to initiate the MIDI audio test. As soon as you press a

key, you will hear a sound effect, indicating that the test was successful. Like the digital audio test, you can repeat this test as often as you like. Once the test sequence is completed, the "Soundscape Digital Audio Test Complete" message appears.

#### Virtual Sound Blaster Driver (New)

The Virtual Sound Blaster (VSB) driver is a less-than-1k TSR that you can use to run games that do not function properly no matter which sound option you choose. This virtual driver uses the I/O trapping capabilities present in EMM386 v4.46 or higher. The current version of EMM386 is provided on the Soundscape distribution disk. If you have a DOS version below 6.22 you should use this version.

The VSB works by "pretending" to be a Sound Blaster. It emulates a portion of both the Sound Blaster DSP and the OPL2 FM synthesizer. Functions not emulated are passed to the Soundscape card; therefore, you must have Sound Blaster emulation enabled on the Soundscape card.

You should use the VSB when a game does not have direct Soundscape support and:

- the Sound Blaster digital audio emulation is not working properly, or
- a game that allows General MIDI music and Sound Blaster digital audio requires OPL2 detection to verify the presence of a Sound Blaster, or
- your machine is too fast for the built-in OPL2 detection (some systems, usually Pentiums, tend to run faster than the built-in OPL2 detection can handle, causing some games to give you no sound at all).

You can use the VSB either from the command line or from inside a batch file. You cannot use it in a Windows DOS box. Follow the procedure outlined below if you want to create a VSB boot disk.

To use the VSB, switch to your Soundscape directory and type Vsb\_Emm. The VSB does not require any arguments. The defaults are: BasePort 330, WavePort 534, virtual DSP emulation, virtual FM detection. The template for the VSB is as follows:

Vsb\_Emm [ ( /B:<MIDI Port> /W:<WavePort> ( /NODSP / NOFM)) | /? ]

Where <**MIDI Port** > options are 320, 330, 340, 350 and <**Wave-Port**> options are 534, 608, E84, and F44.

/NODSP - Does not virtualize the Sound Blaster DSP /NOFM - Does not virtualize OPL2 detection. /? - Displays Vsb\_Emm usage.

Once the VSB is loaded it cannot be removed. Under most circumstances it can remain resident. However you may notice a very slight degradation in performance with games that do not require this driver. This is caused by overhead associated with "virtualizing" devices. Games that provide direct Soundscape support will not show any degradation in performance with the VSB driver resident.

The VSB provides two flags which allow you to optionally disable one of the virtual devices. By default the VSB "virtualizes" both the DSP and the OPL2 chip. In many cases you may not need to "virtualize" both devices. The following chart illustrates some possible configuration options:

Symptom	Virtual OPL-2 device enabled	Virtual DSP device enabled
No sound at all*	x	x
Music works OK, but there is no digi- tal audio playback	x	
Music works OK but digital audio sounds "garbled"		x
Game supports both General MIDI and Sound Blaster simultaneously. MIDI music works OK but there is no digital audio sound	x	

**Table 2: Configuration Options** 

\* In this case either virtual OPL2 or virtual DSP may work.

#### Creating A VSB Boot Disk

If you tried running Vsb\_Emm and are still having trouble, try creating a boot floppy. This is one way to rule out the possibility that your problems are memory related.

The Soundscape software provides you with a utility to create a Vsb\_Emm boot floppy. It is called MakeBoot. This program can be used to create a "bare-bones" boot floppy that loads EMM386, sets up your Soundscape environment, initializes your card, and loads the VSB. You can use this boot floppy as a starting point for a custom boot floppy or as a template for multiple game boot floppies.

To use MakeBoot, switch to your Soundscape directory and type MAKEBOOT. This program requires one argument: the drive letter which contains a high-density floppy disk. Optionally, if you do not have DOS 6.22 or do not wish to use the EMM386 provided with Soundscape software, you can specify an EMM386 path with the /E argument. The template for MakeBoot is as follows:

#### MakeBoot ( <letter> [ /E:<emmpath>] ) | [/?]

Where <letter> is the location of the floppy you wish to make bootable (either A: or B:) and <**emmpath**> is the location of EMM386.EXE (either your DOS 6.2 or Windows for Workgroups directories).

/? - Displays MakeBoot usage.

Examples:

MakeBoot a: /E:c:\DOS - Creates a boot disk on drive A:; uses EMM386 from the directory C:\DOS.

MakeBoot b: - Creates a boot disk on drive B:; uses EMM386 in your Soundscape directory.

MakeBoot will try to find your mouse driver. If it cannot, you will be asked if you want to install a mouse driver onto the boot disk. If you want to use a mouse with the boot disk, type **Y** <**Enter**>. You will then be prompted for the location of the mouse driver. Enter the location your mouse driver (i.e., c:\mouse) and press <Enter>. MakeBoot will then prompt you to enter a disk into the drive you specified. It will format this disk using the standard DOS format command. When the program asks you if you want to format another disk type **N** <**Enter**>. MakeBoot will then create a CONFIG.SYS and an

AUTOEXEC.BAT based on the information you provided. When it is finished, your boot floppy's CONFIG.SYS and AUTOEXEC.BAT will look like this:

```
CONFIG.SYS
DEVICE=c:\DOS\HIMEM.SYS
DEVICE=<emmpath>\EMM386.EXE
DOS=HIGH
```

AUTOEXEC.BAT @ECHO OFF PROMPT \$p\$g PATH=C:\;C:\DOS SET SNDSCAPE=<sndscapedir> SET BLASTER=A220 Ixx Dx T1 LH SMARTDRV.EXE /x <sndscapedir>\SSINIT GM LH <sndscapedir>\VSB\_EMM.COM /B:<BasePort> /W:<Wav Port>

Where <emmpath> is the location of EMM386.EXE and <sndscapedir> is the directory in which your Soundscape files are located, specified by the SNDSCAPE environment variable (this should be set automatically every time your system boots). Also, if you installed a mouse driver in your system, you will have either:

```
CONFIG.SYS
DEVICEHIGH= <mousepath>\mouse.sys
or
DEVICEHIGH= <mousepath>\mouse.com
or
AUTOEXEC.BAT
LH <mousepath>\mouse.exe
```

Where <mousepath> is the location of your mouse driver.

If you wish to add drivers after creating your boot floppy, , simply edit either your CONFIG.SYS or AUTOEXEC.BAT files and add the appropriate lines. If you are unsure about how to edit a file, switch to your DOS directory and type HELP EDIT or consult your DOS manual.

If you still need more memory after creating your boot disk, consult your DOS manual for help in using the MemMaker program.

#### Soundscape Setup Display (Change, replaces the section titled *Configuring the Soundscape Card under Windows* on page 38 of the User's Manual)

The Soundscape software installation process installs all required Windows wave and MIDI drivers. These drivers allow you to run standard Windows Multimedia applications.

Because Windows provides a standardized method of communicating with sound devices, the following two rules must be observed:

- Do not run any DOS based sound applications (e.g., games, DOS sequencers, etc.) under Windows.
- Do not run any applications under Windows that are not Windows Multimedia compliant. Applications that are compliant will usually be referred to as "Multimedia for Windows," "MPC (Multimedia PC)," or something similar.

The Soundscape Windows driver inherits all the hardware settings made by SSInit. If you will be using Soundscape with Windows applications, we recommend that you run the Windows driver setup routine following installation in order to view all hardware configuration settings and to make any necessary changes.

To open the Soundscape Windows driver setup display:

- Open the Main program group under the Windows Program Manager.
- 2. Open the Control Panel applet inside the Main program group.
- 3. Open the Drivers applet inside the Control Panel.
- 4. Inside the Drivers applet, select the item entitled Soundscape DVD MIDI, WAVE, AUX and then click on the Setup button.

Pgn ○ 320 ④ 330 ○ 340 ○ 350	ligterrup/	Centrel
MIDI Synth Status: Driver OK		[DMA Chan]
© 534 O 508 O E84 O F44	O 2/9	0 8 0 1 € 3
Primary Wa	we Record/Play	back Status:

#### Figure 6. The Soundscape Windows Driver Setup Display

The top half of the setup display presents the configuration options for the MIDI Synth. The bottom half of the setup display presents the configuration options for the Soundscape wave device (the device that plays back wave sound files). This is the area of Soundscape used for the recording of digital audio sound and the playback of digital audio sound.

#### Wave Driver Setup

**Port** selects the MIDI port address of Soundscape's Wave device. This corresponds to the WavePort selection made in the Hardware Settings screen of SSInit (Soundscape's DOS configuration utility) and also must correspond to the JP3 jumper setting on the card itself. The default is 534.

**Interrupt** selects the interrupt request line (IRQ) of Soundscape's Wave device. This value corresponds to the IRQ selection made in the SB IRQ/Wave section in the Hardware Settings screen of SSInit. The default is 5.

**DMA Chan** selects the DMA channel that Soundscape's Wave device will use for wave (digital audio) data transfer. This value corresponds to the DMA selection made in the Hardware Settings screen of SSInit and is also the DMA channel that is used when Soundscape emulates Sound Blaster digital audio under DOS. The default is 1.

#### MIDI Synth Setup

**Port** selects the MIDI interface port address of the Soundscape synthesizer and MPU-401 compatible MIDI interface. This value corresponds to the MIDI Port selection made in the Hardware Settings screen of SSInit and also must correspond to the JP2 MIDI Port Address jumper setting on the card itself. The default is 330.

Interrupt selects the interrupt request line that the Soundscape synthesizer and MPU-401 compatible MIDI interface use for basic communications. This value corresponds to the IRQ selection made in the MIDI Interface section in the Hardware Settings screen of SSInit. The default is 2.

The Test button checks the driver configuration for possible Port and Interrupt conflicts. Due to the nature of DMA usage, DMA conflicts cannot always be detected. The test status information will be displayed on the status lines under General MIDI Synth Status and Wave Device Status. Under normal conditions, both of these lines should read "Driver OK".

The Cancel button exits the Driver Setup box without applying changes.

The OK button exits the Driver Setup box and applies any changes.

#### ENSONIQ Automatic FAX Retrieval System (new service)

The ENSONIQ Automatic Fax Retrieval System is an on-line service that provides the latest information on ENSONIQ products. The service is available 24 hours a day, 7 days a week. The number to call is 1-800-257-1439.

# VIEW FROM THE SOUNDSCAPE

Volume 1.01



#### Please ... Send in your registration card today !

One registration card takes care of SuperJAM jr., Voyetra Audiostation, and the warranty registration for your ENSONIQ Soundscape board. Please take a minute to fill in the registration card and send it to us. We plan to update you regarding changes to both hardware and software, customer service, Soundscape BBS's, and other important information. We need your registration card to keep you updated.

#### COMPATIBLE GAMES LIST

On the following pages is a list of over 100 games that ENSONIQ's experts (a group of teenagers) have tested on Soundscape. This is by no means the only games that play on SOUNDSCAPE. Each game on the list has an entry for the best combination of music and sound settings that work with the card. Try these settings first to get your game configured properly. Generally the best games provide their music in general MIDI or MT-32 format. SOUNDSCAPE produces the sound of real instruments in these modes. When you get a new game try these modes first before you experiment. All of the newer, better games support these modes.

ENSONIQ works very closely with game developers to ensure compatibility. Many of the game developers use ENSONIQ professional keyboards, samplers, and synthesizers to develop their game sounds. Look for a Soundscape driver when you set up your game. Ask the software company for a Soundscape driver; many are available now or are under development.

#### **ENSONIQ Professional Sound**

ENSONIQ has been a leader in the professional musical keyboard market for over ten years. We have as many years experience using wavetable synthesis. Soundscape is the result of ENSONIQ applying our professional music experience to PC sound cards. Our goal is to design a sound board that produces the highest quality sound, and the highest level of game compatibility, at the price of many of the FM sound boards on the market. Up until now to get Soundscape's features you had to pay hundreds of dollars more.

Soundscape uses integrated circuit technology developed by ENSONIQ. The wavetable synthesizer used on Soundscape is the same as we use in our \$2500+ professional keyboards and synthesizers.

We are so sure you will be pleased with Soundscape, we unconditionally guarantee it for sixty days or your money back. That's ENSONIQ's NO NONSENSE GUARANTEE. See the warranty card for details.





LEADING THE WORLD IN SOUND INNOVATION

#### **Configuring Soundscape for Games**

In order to run games with Soundscape and ensure optimum sound quality, two things must be considered:

# 1. The game should be configured to the highest quality audio mode it supports. From highest quality to lowest, these would be:

General Midi mode (GM) MT-32 mode (Roland MT-32 Emulation) FM mode (Sound Blaster Emulation)

This is accomplished either through the installation routine for each game or as an option that is available each time the game starts up. Try <u>not</u> to use the FM mode unless absolutely necessary.

### 2. The Soundscape card must be configured to run the mode you designated for each game, prior to running that game.

Batch files have been installed in your root directory to configure Soundscape for each of the three audio modes.. These routines can be run from a DOS prompt in any directory. Prior to running a game, type the following letters (followed by the Enter key) to access the appropriate audio mode:

GM	(for the General Midi Mode)
MT32	(for the MT-32 Emulation)
FM	(for FM Synthesis (Sound Blaster) Emulation)

You should also run one of these three routines prior to installing or reinstalling your game software. This will ensure that the installation program will recognize the existence of the Soundscape hardware in the appropriate mode.

It is best to run DOS games (those that are not Windows MultimediaPC compliant) from a DOS prompt. If you try to run them from the Windows DOS prompt, you may run into some memory problems.

A list of the optimal modes for many tested games is included below. For further assistance in configuring a specific game, it is best to check first with the game manufacturer's technical support team.

#### TITLE

#### PUBLISHER

#### SOUNDSCAPE MODE

Aces of the Pacific
Alone in the Dark
Amazon
Ambush at Sorinor
B 17 Flying Fortress
Battle Chess
Battles of Destiny
Blue Force
Carriers at War
Castles of Dr. Brain
Chessmaster 3000 MPC edition
Civilization
Comanche CD
Comanche Maximum Overkill
Conquered Kingdoms
Crusaders of the Dark Savant
Cuckoo Zoo
DOOM
DUNE (CD-ROM)
Eric the Unready
Eye of the Beholder II
F-117 A
F-15 Strike Eagle III
Flight Simulator 5
Front Page Sports Football
Gateway
Global Effect
Great Naval Battle
Gunship 2000
Hardball III
Heart of China
Hong Kong Mahjong Pro
Hoyle Book of Games
Indianna Jones and the Fate
of Atlantis
Iron Helix
Jack Nicklaus Championship
Golf
Jones in the Fast Lane MPC
King's Quest VI
Lakers vs. Celtics
Legacy Realm of Terror
Legends of Valour
Links
Links 386 Pro
LOOM
Lord of the Rings CD-ROM
Mad Dog McCree CD-ROM
Maniac Mansion2 Day of the
Tenticle CD

Dynamix	MT32
I-Motion	FM
Access	MT32
Mindcraft	FM
Microprose	MT32
Interplay	FM
QQP	MT32
Tsunami	GM
SSI	FM
Sierra	MT32
Software Toolsworks	MPC
Microprose	MT32
Nova Logic	MT32
Nova Logic	MT32
QQP	FM
Sir Tech	FM
Electronic Arts	FM
iD	GM
Virgin	GM
Legend	FM
SSI	FM
Microprose	MT32
Microprose	MT32
Microsoft	GM
Dynamix	MT32
Legend	MT32
Electronic Arts	FM
SSI	MT32
Microprose	MT32
Accolade	MT32
Dynamix	MT32
Electronic Arts	MT32
Sierra	FM
0.0110	
Lucas Arts	MT32
Spectrum Holobyte	GM
Accolade	MT32
Sierra	GM
Sierra	FM
Electronic Arts	MT32
Microprose	MT32
SSI	MT32
Access	FM
Access	FM
Lucas Film Games	FM
Interplay	FM
American Laser Games	FM
Lucas Arts	CH
Lucas Aits	GM

#### TITLE

#### PUBLISHER

#### SOUNDSCAPE MODE

Mantis CD-ROM Mario Teaches Typing Martian Memorandum Master of Orion Mech Warrior Megafortress Might and Magic III Mixed Up Mother Goose CD-ROM Monkey Island II Opus and Bill Brain Savers Pacific War Police Quest 1 Police Quest 3 Power Monger Prince of Persia Prince of Persia 2 Privateer Putt Putt Join's the Parade CD-ROM Rags to Riches Railroad Tycoon Rebel Assault CD-ROM Return of the Phantom Rex Nebular Seal Team Secret of Monkey Island Secret Weapons of the Luftwaffe CD-ROM Seven Cities of Gold Commerative Edition Shadowgate Sim City 2000 Solitaire's Journey Space Quest IV MPC Space Quest V Space Shuttle - CD-ROM Spear of Destiny Spellcasting 301:Spring Break Star Control 2 Star Legions Star Trek 25th Aniversary Star Wars Chess Strike Commander Stunt Island The 7th Guest The Adventures of Willy Beamish The Dagger of Amon Ra The Heroes of the 357th The Incredible Machine

	HOL
Microprose	FM
Interplay	MT32
Access	MT32
Microprose	GM
Activision	FM
Three Sixty	FM
New World Computing	MT32
Sierra	MT32
Lucas Arts	MT32
Delrina	GM
SSI	MT32
Sierra	GM
Sierra	FM
Electronic Arts	FM
Broderbund	MT32
Broderbund	GM
Origin	GM
ongin	O.M.
Humongous Entertainment	FM
Interplay	GM
Microprose	MT32
Lucas Arts	FM
Microprose	MT32
Microprose	MT32
Electronic Arts	GM
Lucas Arts	FM
Lucas Arts	FM
Electronic Arts	FM
ICOM	FM
Maxis	GM
QQP	FM
Sierra	MT32
Sierra	GM
Software Tool Works	FM
ID-Software	FM
Legend	FM
Accolade	FM
Mind craft	FM
Interplay	MT32
Software Toolworks	GM
Origin	MT32
Disney	MT32
	GM
Virgin	GIVI
Dynamix	MT32
Sierra	GM
Electronic Arts	FM
Sierra	MT32

#### TITLE

#### PUBLISHER

#### SOUNDSCAPE MODE

The Island of Doctor Brain	Sierr
The Lost Admiral	QQF
The Lost Files of Sherlock	
Holmes	Elect
The Perfect General	QQF
The Prophcey	SSI
The Seventh Guest	Virgi
Tony LaRussa Baseball II	SSI
Tornado	Spec
Turbo Science	Sierr
Ultima Underworld	Origi
Ultima Underworld II	Origi
Ultima VII Part II Serpent	
Isle	Origi
Ultima VII The Black Gate	Origi
Ultrabots	Nova
Uninvited	ICON
Unlimited Adventures	SSI
V for Victory - Market Garden	Thre
V for Victory Velikye Luki	Thre
V for Victory: Utah Beach	Thre
Veil of Darkness	SSI
Warlord II	Strat
Warlords	SSG
Where in America's Past is	000
Carmen Sandiego	Brod
Where in Space is Carmen	Diod
Sandiego?	Brod
Where in the World is Carmen	Diod
Sandiego	Brod
Where in Time is Carmen	biod
Sandiego	Brod
Wing Commander	Origi
Wing Commander 2 Deluxe	Ong
Edition CD-ROM	Oriai
	Origi
Wing Commander 2 Deluxe	Orial
Edition	Origi
Wing Commander Academy	Origi
Wing Commander II	Origi
Wolfenstein 3D	iD
World Circuit	Micro
X-Wing	Luca

Sierra	GM
QQP	FM
Electronic Arts	MT32
QQP	FM
SSI	
Virgin	GM
SSI	MT32
Spectrum Holobyte	MT32
Sierra	MT32 MT32
Origin Origin	MT32
Origin	11132
Origin	MT32
Origin	MT32
Novalogic	MT32
ICOM	MPC
SSI Three Sints	MT32
Three-Sixty	FM
Three-Sixty Three-Sixty	FM FM
SSI	MT32
Strategic Studies Group	GM
SSG	FM
Broderbund	GM
Broderbund	GM
Broderbund	MT32
Broderbund	FM
Origin	MT32
iD	FM
Microprose	FM
Lucas Arts	GM

#### Soundscape Tech Notes 1.001

#### USING SOUNDSCAPE WITH PC'S THAT HAVE BUSINESS AUDIO/1848 BUILT- IN COMPAQ DESKPRO XE-466

#### 1. Using Soundscape in a PC with built in business audio.

PC's that have built in audio capabilities (i.e., Compaq Deskpro XE 466) typically use either an Analog Device AD-1848 chip or a Crystal Semiconductor CT-4248 chip. The *Soundscape* board also uses the AD-1848 chip for digital audio playback and could cause a conflict with these systems. The easiest solution is to turn off the built in chip and use the *Soundscape* card for all digital audio record/playback functions. This usually can be done via the BIOS setup routine or a jumper setting on the motherboard.

Also these PC's typically have Windows Sound System (WSS) installed. While Soundscape is compatible with the WSS 2.0 specification we do not use the WSS drivers (WSS functionality is provided in the Soundscape drivers). If WSS is installed you need to remove the WSS drivers BEFORE using Soundscape. This also means you must remove any virtual (.386) driver associated with it. Typically this will be the VSNDSYS.386 driver.

We have tested this configuration on several configurations with excellent results. If you have any further problems please contact ENSONIQ Multimedia at 215-647-3930.

> The above information will be added to future revisions of the Soundscape Hardware User's Manual.

#### TECHNICAL SUPPORT

Ensoniq Soundscape technical support may be contacted via the Ensoniq multimedia group at 610-647-3930 Monday through Friday 8:30 AM to 6:00 PM Eastern time. BBS: (610)647-3195

- Before calling, please make sure you have installed the card properly
- Rebooted your computer to see if that clears the problem
- Tried a different operating mode (ie: GM, MT-32, FM)
- Consulted the Hardware User's Manual

Particularly appendix B - Troubleshooting

It would be helpful if you are sitting near your computer when you call.



#### Soundscape Software Update Ver. 1.2.03

We want to take a moment to thank you for purchasing an ENSONIQ Soundscape wavetable sound board. Soundscape produces the highest quality sound and provides the best compatibility with current sound standards. The enclosed software update provides new functionality, greater compatibility and ease of use. Version 1.2.03 is the latest production release of the Soundscape Operating System, Windows applications and drivers.

Soundscape has an operating system because it is a complete computer on a sound board. It has a 68000 family CPU, ROM and RAM memory, and it has internal and external bus control logic. This gives Soundscape the flexibility in software to meet the compatibility requirements of current and future products.

This version of the software makes Soundscape compatible with almost all of the most popular basic Sound Blaster software titles. It also provides the user with drivers for new products using Windows. The Microsoft Audio Compression Manager is provided for programs like ENCARTA that don't always load the driver from the CD when installing. There is a new uninstall program to remove old versions of sound software, clean up ".ini" files in Windows and prepare your system for installation of this new version of software. There is a new simpler look to the Soundscape drivers setup box in the Windows Control Panel. There are also fixes for some of the AUDIOSTATION window applications. Many more updates and 'bugfixes' are also included with this release.

SPECIAL ALTEC LANSING SPEAKER OFFER INSIDE STOP! Please read this document and any README files on the disks before installing this software!

#### SOFTWARE INSTALLATION

The two disks that comprise the Soundscape installation are included with this update. You may also receive a third disk that contains SuperJAM Jr. However, SuperJAM jr. has not been updated and is identical to the disk that came with your system.

The files on the two installation disks (1 and 2) should be copied to a temporary directory on your hard drive (eg: C:\SNDTMP). You will see an UNINST.EXE file that can perform a clean-up of your system. If you have had another sound board installed or have made several installations of the Soundscape software, performing the UNINSTALL is HIGHLY recommended.

#### PROCEDURE FOR UNINSTALL

From Windows File Manager RUN the uninstall software by double clicking on the UNINST.EXE file in the temporary directory that you created. Follow the instructions. At some point the system will restart Windows and you will see a GROUP with the UNINSTALL icon. For many systems uninstall will continue to run automatically. However, because of some options that the user may have set in Windows, the uninstall will pause with an open group window containing the UNINSTALL icon. The UNINSTALL icon should be double clicked to continue the uninstall process. At the end of this process you are ready to install the updated software.

#### **INSTALLING UPDATE 1.2.03 SOFTWARE**

Under Windows you may start the installation by double clicking the SETUP.EXE file in the File Manager. Follow the directions in the program. You may refer to the hardware users manual for more information on installing the Soundscape software.

NOTE: Some PCI Bus PENTIUMS systems, like Gateway's, will require that the base port IRQ be relocated to INT 10 instead of INT 2/9..so CUSTOM INSTALL should be selected in the opening screen.

Want more information on ENSONIQ professional keyboards, synthesizers, effects processors, and other musical instuments? Call 1-800-553-5151

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PA Residents must add 6% sales tax to TOTAL order including shipping

ENSONIQ is the largest manufacturer of professional keyboards and synthesizers in the United States. All of our multimedia and musical instrument retail products are manufactured in the U.S.A. In the professional world, wavetable technology dominates over FM. ENSONIQ has pioneered wavetable technology for over ten years.

SONIO

The Soundscape wavetable sound board is based upon the same chip set design in our over \$2000 keyboards. Several of the top rated wavetable sound boards either contain our synthesizer or is based upon the ENSONIQ technology. The ENSONIQ Soundscape board uses instrument and sound waves that are "hand crafted" in our own studios. The Ensoniq Soundscape chip set produces the highest quality sound in a much smaller ROM size than the competition, thus bringing the quality of more professional sound at a price that leads the market. ENSONIQ is dedicated to bringing the highest quality sound and best compatibility of any wavetable sound board.

Soundscape PACKED WITH PROFESSIONAL SOUND!

# HOT PHONE NUMBERS

**ENSONIQ** Corporation

Customer Service 610-647-3930 Fax Number 610-647-8908 BBS System 610-647-3195 (8.n.1) 28.8kbps Password = SOUNDSCAPE Fax On Demand System 1-800-257-1439 Sales 1-800-7SOUNDS

Gateway 2000 customer BBS 605-232-2224 Voyetra Software Upgrades 914-966-0600 MIDIMAN (MIDI cables,etc.) 1-800-969-6434 Pacific Interconnect (CD ROM cables,etc.) 1-800-706-0510

ENSONIQ monitors the Gateway, Reveal, and MIDI, music, and sound forums on Prodigy, America Online, Compuserve, and the Gateway BBS. We plan to have an INTERNET FTP site on-line by mid-February 1995.





Malvern, PA 19355