FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and the receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used with this product to ensure compliance with the Class B FCC limits.

The user may find further information in the booklet *How to Identify and Resolve Radio/TV Interference Problems*. This booklet is prepared by the Federal Communications Commission and is available from the U.S. Government Printing Office, Washington, DC 20042. Stock Number 004-000-00345-4.

This equipment is designed and manufactured to comply with approved safety standards (including UL478) for information processing and business equipment.

This equipment is a Class B digital apparatus which complies with Canadian Radio Interference Regulations, CRC c.1374.

921-0402-001
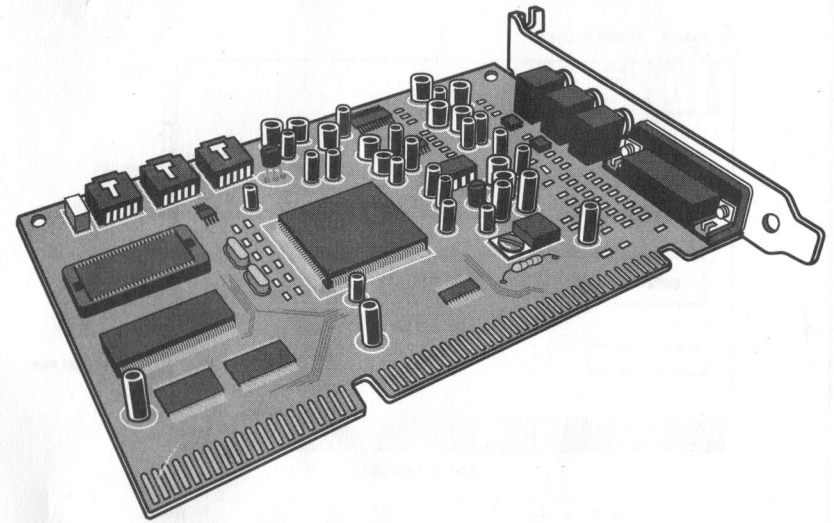
SOUNDRAGE 32

High-quality sound board for wavetable and FM synthesis

Features

- Full-Duplex record and playback at different rates
- Compatible with applications for Ad-lib, SoundBlaster and MS WSS; Roland MPU-401 interface
- SoundBlaster-compatible FM synthesis software emulation using actual instrument sounds
- Compliant with Microsoft Plug-and-Play 1.0a for Windows 95

- Stereo microphone input, line-in, joystick input and CD-ROM audio-in
- ADPCM, mu-law/a-law compression for audio recording and playback
- Includes Multimedia Essentials pack from Voyetra Technologies
- Frequency Response: 20 Hz to 20 kHz, ±3dB; Signal-to-noise ratio: 84 dB (A) average

STB Systems, Inc.

Manual and Software Updates
New or updated information about this product may be included on the software diskette in a file named README.TXT. Be sure to look for this file for information released since the last printing of this manual.
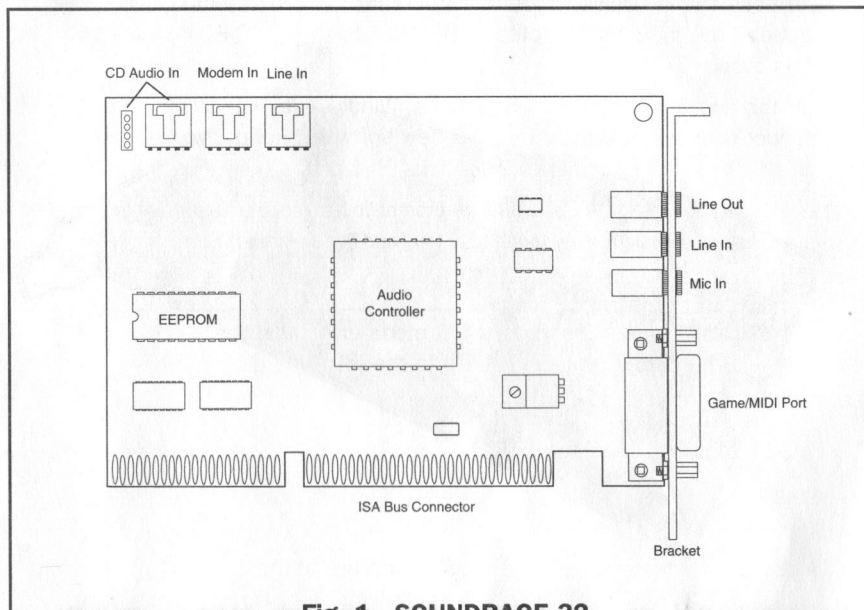
Fig. 1 - SOUNDRAGE 32

Windows 95 Installation Instructions

1. Shut down Windows 95 and turn off the computer.

NOTE: Do not install the SOUNDRAGE 32 adapter into your system until you have success-fully installed Windows 95. Otherwise, the "Found New Hardware" dialog will not prompt you to install the drivers from the SOUNDRAGE 32 disk set.

2. Disconnect all cables.

3. Remove the computer's cover.

4. Locate an empty 16-bit ISA expansion slot and install the SOUNDRAGE 32 adapter.

5. Connect the audio output cable(s) from your CD-ROM drive, modem, or other multimedia device(s) to the appropriate audio input connector(s) on the SOUNDRAGE 32 adapter. (See Fig. 1)

6. Replace the computer's cover and reconnect all cables.

7. Turn on the power to the computer and start Windows 95.

8. While Windows 95 is loading, a message will appear stating that "Windows has found new hardware". Select the option to install "Driver from disk pro-vided by hardware manufacturer" and then "OK".

9. Insert the SOUNDRAGE 32 disk #1 into your A: drive when prompted and select "OK" to continue.

10. Follow the on-screen instructions and insert the other SOUNDRAGE 32 disks as instructed.

11. Choose the Windows 95 default driver for the "Game Port/Joystick" option. You may be prompted for the Windows 95 CD-ROM or disks during this step.

12. At the end of the installation process, Windows 95 will prompt you to reboot your system to activate the new software. Reboot your system at this time.

NOTE: On some systems, Windows 95 may prompt you to reboot the system during the above process to complete some additional Plug-and-Play auto-configuration.

DOS Games in Windows 95

When DOS-based games are run in DOS mode under Windows 95, the SOUNDRAGE 32 card will be configured to the following settings, if available:

- SoundBlaster or compatible
- Address 220h
- IRQ 5
- DMA 1

If Windows 95 detects a resource conflict with any of these settings, then the SOUNDRAGE 32 card's setting that is in conflict will be changed to an alternate setting. If Windows 95 cannot find an alternate setting that is available on your system, then an error message will appear to give you more information about the problem.

DOS/Windows 3.x

1. Insert the SOUNDRAGE 32 disk #1 into your A: drive.

2. From a DOS prompt, type [A:\INSTALL] and [ENTER]. This starts the INSTALL.BAT file which will:

- Check your system for enough free memory to complete the installation
- Create the directory "C:\IWCONFIG.TMP" on your hard drive
- Copy the CONFIG files to the "C:\IWCONFIG.TMP" directory and run the CON-FIG.EXE file.

3. The CONFIG.EXE utility will:

- Extract, copy, and expand the files from your SOUNDRAGE 32 disks to the target directories
- Update your CONFIG.SYS, AUTOEXEC.BAT, WIN.INI, and SYSTEM.INI files
- Place the statement "Run=MAKEGRP.EXE" in your WIN.INI file so that the next time Windows starts, the installation of the SOUNDRAGE 32 software for Windows can be completed.

4. Follow the on-screen instructions to complete the DOS portion of the installa-tion. Reboot the system when prompted to do so, and then start Windows.

5. When Windows starts, the MAKEGRP.EXE utility will create a program group and icons for the SOUNDRAGE 32 Multimedia Applications.

NOTE: The MAKEGRP.EXE utility will automatically remove its "Run=..." entry in the WIN.INI file so that the utility will only execute the first time Windows is started after the installa-tion of the SOUNDRAGE 32 software.

SOUNDRAGE 32 - AudioStation

The Power Bar launches the various AudioStation components (Fig. 2). Each component is launched by pressing the appropriate icon button. To close a component, press the icon button again. Components are stacked from the top down, in the order they are launched.

- Power: Terminates the AudioStation application.
- Mixer: Launches or closes the Mixer Component.
- CD: Launches or closes the CD Player Component.
- Digital Audio Transport (DAT): Launches or closes the DAT Component.
- Help: Launches AudioStation Help.

Mixer

The Mixer Component controls the stereo volume levels on your sound card. The Power button at the left side of the Mixer terminates the Mixer Component. The Lock button controls the way the sliders are adjusted, and the Controls button invokes the controls used for audio recording, as described below.

The Mixer Component has slider controls for the left and right audio levels of each of the AudioStation inputs. Each pair of sliders can be "locked" together by pressing the Lock button so you can quickly adjust the volume of a component while preserving the relative left-right audio balance. There are six pairs of sliders on the AudioStation Mixer Component:

- Mic: Controls the microphone volume levels.
- Line: Controls the line input volume levels.
- CD: Controls the volume levels of the CD-ROM drive (CD Player).
- MIDI: Controls the MIDI playback volume levels.
- Wave: Controls the wave-file volume playback levels.
- Master: Controls the Master (output) volume levels.

Pressing the Controls button overlays the recording controls on top of the Mic, Line, CD, and MIDI sliders. The Source controls allow you to select a recording source (MIDI, Line, Mic, or Master). Use the Rec Gain and Effects sliders to adjust the recording levels and the effects level of the input source, and use the Monitor function to listen to the source as you record it.

CD

The CD Component plays regular audio CD's in your PC's CD-ROM drive. It features the same type of functionality as a home CD player including looping and shuffle play. You can also make playlists of your favorite songs and save the lists for future listening sessions.

The Playlist button lets you create lists of your favorite tracks on a CD and hear them in the order you wish to hear them in. These lists are automatically saved and loaded when you insert a new CD. The playlist also lets you name the CD and its tracks.

The Mode button selects one of the following CD playback modes:

- Playlist: Plays the CD tracks selected in the currently loaded playlist. The tracks are played in the order they are listed in.
- Shuffle: Plays the CD tracks in random order.
- Loop: Plays the CD tracks in the order they are listed on the CD. After the last track it loops back to the beginning of the CD.
- Single: Plays the CD tracks in the order they are listed on the CD one time through and stops.

To play a CD insert an audio CD in your CD-ROM drive. Press the Mode button to select the desired mode, then press Play to begin playing. If you select the playlist mode, you must first make a playlist.

To create a CD Playlist you first should name the CD and the CD Tracks. This will make it easier to identify the songs as you are creating the list. To name the CD press the Name CD button. This will bring up a dialog box which will let you type in the name of the CD. When you press OK the name will appear in the caption bar at the top of the playlist window.

To name a track press the Name Track button. Select the track number with the Track Select spin control and then type in the name of the track. The Next button advances to the next track in the list. Since the focus is on the Next button, pressing Enter will automatically advance to the next track, allowing you to quickly type in a number of track names.

Once you have named the CD tracks you can add them to your playlist by double clicking on each song you want to add or by highlighting them and pressing the Add button. The Add All button adds the entire CD to the list. This is helpful if you want to hear all but a few songs on the CD. Songs can then be removed from the list by highlighting the song and pressing the Delete button.
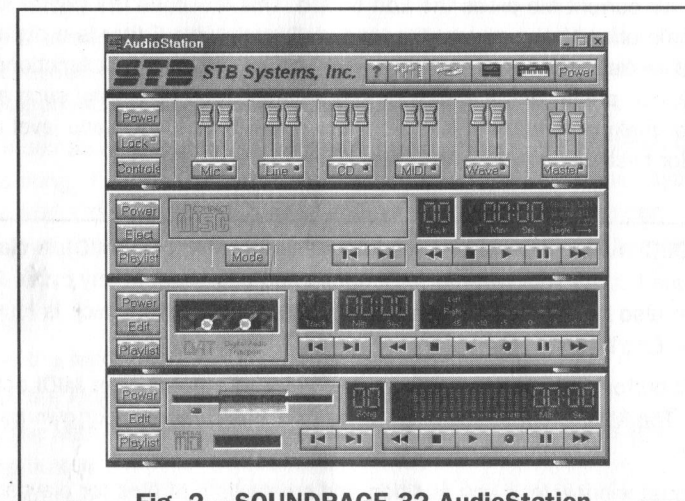

Fig. 2 – SOUNDRAGE 32 AudioStation

DAT

The playlist window lets you audition and create lists of files for playback. Playlists can be saved and loaded again during a different session. To play a .WAV or .VOC digital audio file you must first insert the files you wish to hear in the playlist. Once you have created a playlist press OK to close the playlist. Press play to hear the files in the playlist.

To create a list:

1. Select the file type.
2. Select the drive and directory with the desired files.
3. Highlight the file(s) you wish to add to the list and press the Add button, or double click on the file. The Add All button will add all of the files in the current directory to the playlist.
4. Once you have a completed list, save the list by pressing the Save button. This will present the File Save dialog box which will let you name and save your playlist.

To record a digital audio file you must have your source hooked up to your sound card.

1. Set the mixer source volume to a moderate level.
2. Press the Record button. This will put the Digital Audio Transport in record/standby mode and start the red light blinking.
3. Press the Play button to start recording.
4. When you are done recording press the Stop button.
5. To hear the file press Play. If the record level is too low or too high, adjust the source volume and try recording it again.
6. If you want to edit or save the file, press the Edit button.

To edit the current file press the Edit button. This launches the Digital Audio Editor program with the current file loaded. Digital Audio Editor is a digital audio wave editor/recorder which allows you to perform common edit functions such as copy, cut, paste, etc. It also offers more sophisticated editing such as mix paste for making composite files from two or more files and wave level adjustments for tweaking playback volumes.

MIDI

The MIDI Component plays and records standard MIDI files (.MID). A playlist lets you create lists of your favorite MIDI songs and play them in any order. MIDI files can also be mixed and edited in the MIDI Orchestrator which is launched from the Edit button.

The Edit button launches the MIDI Orchestrator with the current MIDI song loaded. The MIDI Orchestrator allows you to mix and record your own multi-track MIDI files.

The Playlist window let's you audition and create lists of files for playback. Playlists can be saved then loaded again during a different session.

To create a list:

1. Select the file type.
2. Select the drive and directory with the desired files.
3. Highlight the file(s) you wish to add to the list and press the Add button, or double click on the file. The Add All button will add all of the files in the current directory to the playlist.
4. Once you have a completed list, save the list by pressing the Save button. This will present the File Save dialog box which will let you name and save your playlist.

To play a MIDI file from the MIDI Component:

1. Press the Playlist button to call up the MIDI file playlist.
2. In the Files section, select the Drive and Directory where you know there are .MID files.
3. Highlight the files you want to hear and press the Add button. This will insert the files into the playlist.
4. Press OK to close the playlist and return to the MIDI Component.
5. Press the Play button in the transport controls.
6. If you have multiple files in your playlist, pressing the Next/Previous buttons will advance to or jump back to the previous song in the playlist.

The MIDI Component can record information from your MIDI keyboard and play it back through your MIDI keyboard. This is an easy and fun way to experiment with MIDI.

NOTE: To record a MIDI file you must have a MIDI interface installed in your computer and a MIDI keyboard hooked up to the MIDI interface.

If you want to experiment with multi-track recording, you need to do it from the MIDI Orchestrator. To start the MIDI Orchestrator press the Edit button on the MIDI Component.

The MIDI component receives on all or any of 16 MIDI channels. When it plays back the song, it sends the MIDI data out the MIDI interface to the keyboard on MIDI channel 1 (Most MIDI keyboards default to channel 1). If you can't hear your song when you play it back, make sure your keyboard is set to receive MIDI on channel 1.

To Record:

1. Press the record button. The red light will start blinking.
2. Press the Play button to begin recording.
3. Play the MIDI keyboard. When you are finished recording press the Stop button.
4. To hear what you've recorded press Play.