



**AdLib**<sup>™</sup>  
**GOLD**

**Stereo  
Sound  
Adapter**



**User's  
Guide**



AdLib®

**Ad Lib Gold™**  
**Stereo Sound Adapter**

**User's Guide**

- Before reading this User's Guide and returning your registration card, please note below the serial number of your Gold card (which can be found on the back of the card) and the version number of the Gold software (which can be found on the Ad Lib Gold Program Disks). This information will be needed when calling our Customer Service or Technical Support Department.

Serial Number 201664

Software Version Number 1.0

! **WARNING:** Your Ad Lib Gold card is packaged in special material designed to protect it against static electricity. We recommend that you keep it in this package until you are ready to install it in your computer. Electronic boards can be easily damaged with static electricity and must be handled with care. Users should ground themselves before handling the card. Please read the manual before beginning installation.

## Copyright

This manual and the product and programs it describes are protected by copyright laws and therefore may not be reproduced (except to make a backup copy), in whole or in part, whether for sale or not, without written consent from Ad Lib Inc. Under copyright law, copying includes translation into another language or format.

The purchaser may use the programs on any computer in his or her possession, but only on one computer at a time.

Ad Lib, Visual Composer, Juke Box and Voice Pad are registered trademarks of Ad Lib Inc. Autodesk Animator is a trademark of Autodesk, Inc. IBM PC, XT, AT and PS/2 are registered trademarks of International Business Machines Corporation. Tandy is a registered trademark of Tandy Corporation. PC/MS-DOS, Windows and Microsoft are registered trademarks of Microsoft Corporation. Mouse Systems is a trademark of Mouse Systems Corporation.

## Limited Warranty

Ad Lib Inc. warrants the Ad Lib Gold Stereo Sound Adapter to be free of any defects in materials or workmanship for a period of twelve (12) months from the date of purchase. Ad Lib Inc. warrants Ad Lib Gold software programs to be free of any defects in material or workmanship for a period of ninety (90) days from the date of purchase. These warranties are limited to the original purchaser of the product and are not transferable.

Ad Lib Inc. will refund, repair or replace any product component or documentation, at its option and at no additional charge, if found defective within the warranty period. The purchaser is responsible for returning the product to Ad Lib Inc., and must provide a dated proof-of-purchase and/or have a registered warranty card for said product on file with Ad Lib Inc.

Ad Lib Inc. will not be held responsible in any way whatsoever for refund, repair or replacement resulting from improper installation, accident, misuse, or from service or modification of the product by anyone other than Ad Lib Inc. or an authorized Ad Lib service center.

Ad Lib Inc. will not be held responsible in any way whatsoever for direct, indirect, special, incidental, or consequential damages resulting from possession, use, improper installation, accident, service, modification or malfunction of the product.

This warranty is in lieu of all other warranties, whether oral, written, expressed or implied, including any warranty of merchantability or fitness for a particular purpose, and no other representation or claims of any nature shall be binding on or obligate Ad Lib Inc.

This warranty gives you specific legal rights. You may have other rights according to your locality.

## Warning

This equipment generates and uses radio frequency energy, and if not installed and used properly (i.e. in strict accordance with the manufacturer's instructions), may cause interference to radio and television reception. It has been tested and found to comply with the limits for a class B digital device in accordance with the specifications in Subpart B of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.

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.

Only peripherals (computer input/output devices, terminals, printers, etc.) certified to comply with the class B limits may be attached to this equipment. Operation with non-certified peripherals is likely to result in interference to radio and TV reception. Furthermore, the use of a non-shielded I/O cable with this device will not enable the device to meet the maximum emission limits mandated by U.S. federal law.

There is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception (this 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:

- Reorient the receiving antenna.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user is hereby notified that changes or modifications not expressly approved by Ad Lib Inc. could void the user's right to use the equipment.

The user may find it helpful to consult the booklet: "How to Identify and Resolve Radio-TV Interference Problems", prepared by the Federal Communications Commission. This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

## Technical Support

Ad Lib Inc. is firmly committed to providing the highest level of customer service and product support. If you experience any difficulties when using our product, or if it fails to operate as described, we suggest you first consult the User Guide, and then, if you are still in need of assistance, call our Technical Support Department:

Telephone: (418) 529-6252

Hours, Monday to Friday:

- North American Eastern Time: 10–12 a.m., 2–5 p.m.
- North American Pacific Time: 7–9 a.m., 11 a.m.–2 p.m.
- Greenwich Time: 3–5 p.m., 7–10 p.m.

## Notice

Ad Lib Inc. reserves the right to make changes or improvements in the product described in this manual at any time and without notice.

656 17400

418 529 6252

1-800-368-1111

Ad Lib  
BBS

*Ad Lib Inc.*  
*220 Grande-Allée East, Suite 850*  
*Quebec, QC, Canada G1R 2J1*

*50 Staniford Street, Suite 800*  
*Boston, MA 02114*

*Copyright ©1992, Ad Lib Inc.*

*1st edition*

*All rights reserved. No part of this publication may be reproduced or used in any form or by any means — graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems — without the express written permission of the publisher.*

*ISBN 2-920858-30-0*

*Printed in Canada*

# Table of Contents

---

---

<b>Introduction</b>	9	Activating the Mixer Panel	34
		Using the Mixer Panel	34
		Hot Keys	38
		Closing the Mixer Panel	38
		Removing the Mixer Panel TSR	38
<b>Quick Start</b>	11	<b>Juke Box Gold Music Playback Program</b>	39
Installing the Hardware	11	Loading Juke Box Gold	39
Installing the Software	11	Selecting Songs	40
Using the Gold Card	12	Playing Music	40
		Adjusting the Sound	41
<b>Description of the Hardware</b>	15	Asking for Help	41
Functionality	15	Exiting the Program	42
Layout of the Card	16	Using the ROL2 Playback TSR	42
		<b>Voice Pad Record &amp; Playback Program</b>	43
<b>Getting Installed</b>	23	Loading Voice Pad	43
System Requirements	23	Recording a Voice Note	44
Installing the Hardware	23	Setting the Recording Parameters	44
Software Installation and Configuration	28	Listening to a Voice Note	45
Testing the Hardware	31		
<b>Mixer Panel TSR</b>	33		
Loading the Mixer Panel TSR	33		

---

---

## Table of Contents

---

Managing Voice Notes	46	<b>Soundtrack Playback Driver</b>	61
Setting the Alarm	47		
Setting the Voice Note Display Options	49	<b>Autodesk Animator Playback Utility</b>	63
Adding a Written Comment	49		
Adjusting the Sound	50	<b>Batch File Utilities</b>	65
Asking for Help	50	ROL2 Playback Utility	65
Exiting the Program	50	Digitized Sound Playback Utility	65
Using the Alarm Driver	50		
<b>Soundtrack Synchronization Editor</b>	51	<b>Appendices</b>	67
Loading Soundtrack Sync Editor	51	Appendix A: Troubleshooting	67
Using the Soundtrack Sync Editor	51	Appendix B: List of Installed Files	75
About the Sync Files	52	Appendix C: Error Messages	79
The Editor Boxes	52	Appendix D: Drivers / TSRs	85
The File Menu	55	Appendix E: Connecting Internal PC Speaker	89
The Edit Menu	56	Appendix F: Technical Specifications	91
The Play Menu	58		
The Options Menu	59	<b>Index</b>	93
The Help Menu	59		

---

# Introduction

---

## Welcome to Ad Lib Gold™

Welcome to Ad Lib Gold, the powerful line of multimedia audio adapters from Ad Lib Inc. Ad Lib Gold is an advanced audio solution for those who use all the great new sound-enabled applications for business, multimedia, training, education and entertainment.

The tasks you can enhance with Ad Lib Gold are countless:

- Add soundtracks and unique sound effects to your multimedia sales presentations to motivate or inspire
- Record voice notes as verbal explanations or reminders right into your sound-enabled spreadsheet or word processing programs
- Listen to excerpts from great composers or the sounds of battles of yore just by browsing through the audio database of a computer CD-ROM encyclopedia
- Enjoy all the amazing new entertainment titles with soundtracks specially written for Ad Lib Gold
- Compose your own musical pieces right on screen or using a MIDI device

- Improve your productivity using Ad Lib Gold and text-to-speech software to proofread texts or spreadsheet figures.

The applications for Ad Lib Gold are as limitless as your imagination!

This manual provides a complete description of Ad Lib Gold hardware and installation for models 1000 and 2000 and explains how to use the handy software Ad Lib has included to help you get the most out of your audio adapter. Be sure to read the chapters on:

- Mixer Panel TSR, which controls mixing functions such as volume, balance and tone
- Juke Box Gold™, a music playback program that includes a music clip library in a variety of styles and that even lets you listen to songs you have composed yourself
- Voice Pad™, an application for recording, editing, managing and playing back voice memos and voice alarms
- Soundtrack Synchronization Editor, which allows you to time-synchronize computer soundtracks to your slide shows or animated presentations

- Soundtrack Playback Driver, for playing back your Sync files created with Soundtrack Synchronization Editor
- Autodesk Animator Playback Utility, for synchronizing frames and sounds in presentations created with Autodesk Animator or Animator Pro
- Batch File Utilities, for playing back ROL2 and Digitized Sound files

You'll quickly come to appreciate Ad Lib Gold for its unrivalled flexibility and usefulness. And, thanks to Ad Lib Gold's open architecture design, you'll be able to upgrade your audio adapter to keep pace with your changing requirements. Ad Lib offers three different add-on modules:

- The Ad Lib PC Telephone Answering System (for North America only) — This tiny card and software is a complete system for turning your PC into a telephone management productivity tool. It allows you to record telephone conversations and messages right onto your hard disk and build your own personalized voice mail system.
- The Ad Lib Surround Sound Module — This piggyback card clips right onto your Gold card and adds a whole range of unique sound enhancements, such as reverb and echo.

- The Ad Lib SCSI CD-ROM Adapter Kit — This piggyback card offers Ad Lib Gold 1000 owners a convenient upgrade path for adding SCSI CD-ROM capabilities to their Ad Lib Gold cards.

For complete information on Ad Lib's add-on products, call us today on our toll-free customer service line at 800-463-2686 (North America). International purchasers can call Ad Lib at 418-529-9676 or write Ad Lib Inc., Customer Service Dept., 220 Grande-Allée East, Suite 850, Quebec, QC, Canada G1R 2J1.

This Quick Start is intended for the experienced PC user who has already installed and used various hardware and software applications. Do not attempt a Quick Start installation if you are not familiar with the PC environment; installation errors could occur that will be difficult to correct afterwards. This Quick Start includes references to the User Guide for those who need more complete information on a particular hardware or software installation step.

## Installing the Hardware

### Installing the Gold card

1. Make sure that the on-board jumpers, the "game port enable jumper", the "port address jumper" and the "dual joystick selector jumpers", are in the desired position.
  - See pages 20 and 24.
2. Plug the Gold card into the computer in a free slot as far as possible from the video adapter card.

**\*** *NOTE: Certain cards, such as video adapters, produce high-frequency signals which can interfere with the sound quality of the sound card.*

- See "Getting Installed: Installing the Hardware".

### Connect the Other Peripherals

- Plug headphones or external speakers into the main audio output of the card, or connect the output to the input of a stereo system.
- Connect your low impedance microphone to the microphone input of the card.
- Connect the output of your stereo source (CD player, CD-ROM drive, synthesizer or cassette player) to the stereo auxiliary input of the card, using a stereo cable.
- Connect your joystick to the DB-15 game port of the card. If you plan to use the MIDI interface, connect your MIDI device with the Ad Lib adapter cable.
  - See "Getting Installed: Installing the Hardware".

## Installing the Software

### Read the README.TXT File

We suggest that you examine the README.TXT file prior to installing the software. This file contains information on the latest program updates, and other necessary information.

## Quick Start

### Installing the Software

---

- Insert the Ad Lib Gold Disk 1 into the floppy drive, set the current drive to A (or B, depending on which drive you are using), and type the following command:

```
A:\>type readme.txt
```

### Install Gold Applications and Resources

- Run the Gold Setup Program by typing the following commands:

```
A:\>ctrldrv
```

```
A:\>setup
```

- See "Getting Installed: Software Installation and Configuration".

### Test Hardware and Software

Once installation is complete, run the Test program to verify that the Ad Lib Gold hardware and software are functioning properly.

- Go to the directory where you placed the Gold Test Program at installation and load this program by typing the following command:

```
testgold
```

- See "Getting Installed: Testing the Hardware".

### Using the Gold Card

---

#### Running Gold DOS Applications

Once the Gold hardware and software are installed, you can run any Ad Lib Gold application by proceeding as follows:

1. Set the current directory to the one where you placed the Gold programs during the installation process.
2. Load the Mixer Panel TSR program first, which serves to control the different sound parameters (balance, tone, volume, etc.), by typing the following command:

```
mixer
```

3. Load the program you want by typing the corresponding command:

```
jukegold    Juke Box Gold Music Playback  
             Program
```

```
voicepad    Voice Pad Record and  
             Playback Program
```

```
stracked    Soundtrack Synchronization  
             Editor
```

```
strkdrv     Soundtrack Playback Driver  
             (followed by the Sync file  
             name)
```

<code>playanim</code>	Autodesk Animator Playback program (followed by the .FLI file name)
<code>playrl2</code>	ROL2 Playback batch file utility (followed by the .RL2 file name)
<code>playdigi</code>	Digitized Sound Playback batch file utility (followed by the .SMP file name)

Except for the Mixer Panel TSR, applications offer on-line Help containing summarized information on how to operate the program and how to use the various features.

### Running a Third Party Program

To run a third party program supporting the Gold card, proceed as follows:

1. Make sure the Ad Lib Gold hardware and software are correctly installed and working properly.
2. Install the program or game according to the manufacturer's instructions, making sure you specify the Ad Lib Gold card in the installation options, if requested.

3. Load the Mixer Panel TSR program first, by typing the following command:

`mixer`

4. Load the program by typing the appropriate command.

When running a program with the Gold card, you can adjust output volume at any time, without opening the Mixer Panel, using the following shortcuts:

`[Alt]-[↑]-[U]` For increasing output volume.  
`[Alt]-[↑]-[D]` For decreasing output volume.

- See "Mixer Panel TSR".

1870  
1871

1872  
1873  
1874

1875

1876  
1877  
1878

1879

1880

1881

1882

1883

1884

1885  
1886

1887

1888

1889

# Description of the Hardware

---

---

## Functionality

---

Your Ad Lib Gold Stereo Sound Adapter is a multifunction card with digital recording, playback of digitized and synthesized sounds, analog audio mixing, MIDI recording and playback, game port, and SCSI/CD-ROM interface (optional with Gold 1000 and included on-board with Gold 2000).

### Digital Recording

With the Ad Lib Gold card, you can record from:

- A low impedance microphone, using Voice Pad or third party software;
- An audio tape or a compact disk, using Voice Pad or third party software;
- A telephone, using the optional add-on board contained in the Ad Lib PC Telephone Answering System.

### Digitized and Synthesized Sound Playback

With the Gold card, you can play back:

- Digitized sounds: The Gold card has two channels for digitized sounds. These channels can be used in a variety of ways, such as for voice notes with the Voice Pad program, percussion sounds in the Juke Box Gold songs, voiceover in Soundtrack Playback Driver, or third party software using stereo music or music with voiceover.
- Synthesized sounds: The Gold card has a 20-voice FM synthesizer which is used for Juke Box Gold songs and third party software music.

The sound capability of the Gold card also features:

- Audio mixing: The internal analog mixer of the Gold card controls the volume of various audio sources, through programming, such as within third party software, or manually using the Mixer Panel (see "Mixer Panel TSR" section).
- Volume control: The output volume of the Gold card is software controlled (see "Mixer Panel TSR").

## Description of the Hardware

---

### Functionality

- Tone control: Bass and treble controls are software controlled (see "Mixer Panel TSR").

### MIDI Recording and Playback

The MIDI (Musical Instrument Digital Interface) interface of the Gold card allows MIDI files to be recorded and played back using a MIDI adapter cable, any external MIDI instrument and an Ad Lib Gold supporting sequencer program.

### Game Port

The Ad Lib Gold card allows a standard IBM compatible joystick to be connected.

### SCSI Interface

The Gold card SCSI interface (optional with Gold 1000 and included on-board with Gold 2000) allows a CD-ROM drive or any SCSI type peripheral to be connected.

**?** *SCSI: Small Computer System Interface; a standardized hardware/software protocol for sending data between computers or computers and peripherals. It is especially suitable for transferring large volumes of data (such as with hard disks or CD-ROM drives).*

## Layout of the Card

---

### Bracket Connectors

Ad Lib Gold Stereo Sound Adapters have three 1/8" connectors and one DB-15 connector on the support brackets, as shown in the diagrams (Figures 1 and 2).

These connectors are:

- The low impedance microphone input (No. 7), for sampling and/or mixing with other audio sources.
- The stereo auxiliary input (No. 8), for connecting an external source such as a CD or cassette player, a synthesizer or any audio source, in order to sample and/or mix with other audio sources.
- The main stereo audio output (No. 9), for connecting to standard headphones, bookshelf speakers or a stereo system.
- The Game Port/MIDI connector (No. 10), for using a standard PC joystick and/or a MIDI device. This requires an optional MIDI cable adapter available from Ad Lib.

## On-Board Connectors and Main Components

Ad Lib Gold Stereo Sound Adapters have on-board connectors to support many different options and internal/external devices. These connectors are shown in the diagrams (Figures 1 and 2).

These connectors are:

- On model Gold 2000, the SCSI port connector (Figure 2: No. 22), to connect a SCSI device, such as a CD-ROM, hard disk or tape backup drive. A 50-pin flat cable is provided for connecting an internal device. Cabling for connecting an external device is optional.
- On model Gold 1000, the SCSI option connectors (Figure 1: No. 20), to snap on a SCSI piggyback board.
- The Surround Sound option connectors (No. 1), to connect a Surround Sound Module. This module is used to provide stereo and depth enhancements.
- The telephone option connector (No. 2), to connect a telephone line interface add-on board. This board allows the Ad Lib Gold card to be connected to a standard telephone line and provides access to various functions, such as creating a completely digital telephone answering system capable of leaving

personalized messages for callers and recording and playing back messages left by callers directly to and from a hard disk, or creating an interactive automated telephone routing and database navigation station. It is also capable of automated dialing.

- The internal stereo auxiliary input (No. 4), to connect a PC internal audio device (such as an internal CD-ROM drive) for direct input. This connector is in parallel with and has exactly the same functions as the external stereo auxiliary input connector on the support bracket.

*\* NOTE: It is not recommended to use both the external and internal stereo auxiliary input at the same time, because this will decrease the volume of the auxiliary audio source.*

- The PC speaker connector (No. 3), to connect the signal of the PC's internal speaker directly to the Ad Lib Gold card, so that it is mixed with the other audio signals on the card and can be heard through the headphones or speakers.

## Description of the Hardware

### Layout of the Card

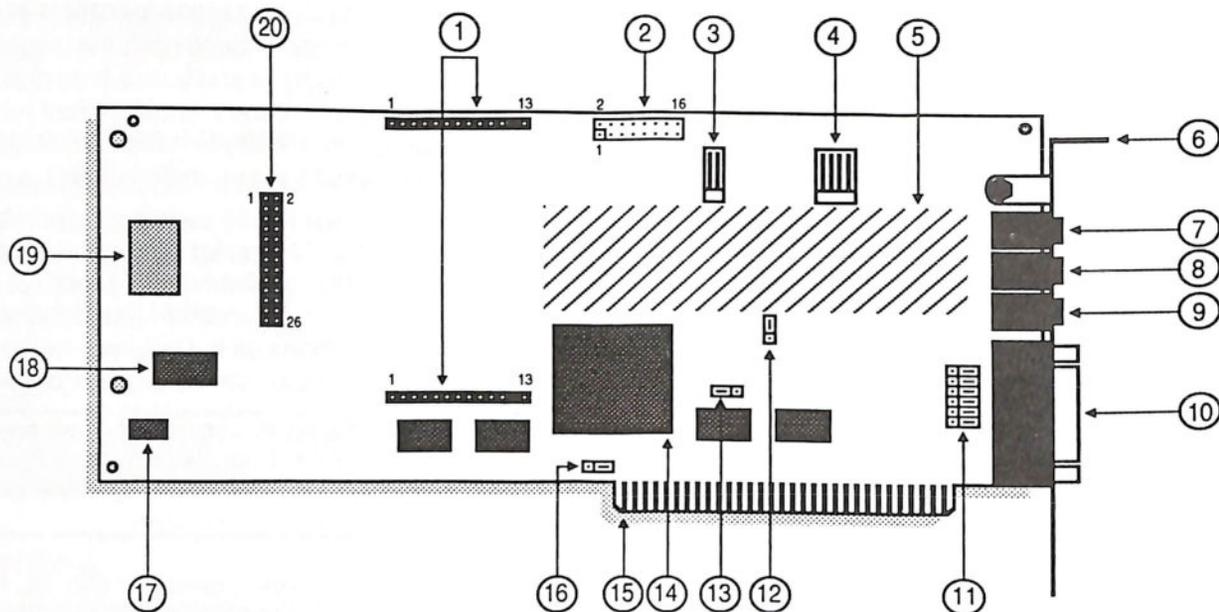


Figure 1: Gold 1000 diagram

- |  |  |                                       |
|--|--|---------------------------------------|
| 1. Surround Sound option connectors      | 8. Stereo aux. input                       | 15. Bus connector                     |
| 2. Telephone option connector            | 9. Main audio output                       | 16. Game port enable jumper (JP1)     |
| 3. PC speaker connector                  | 10. Game port/MIDI DB-15 connector         | 17. 16-bit FM DAC                     |
| 4. Internal stereo aux. input            | 11. Dual joystick selector jumpers (JP2-7) | 18. Professional FM synthesis chip    |
| 5. Power amp and analog mixer            | 12. Port address jumper (JP8)              | 19. Sampling 12-bit DAC and MIDI chip |
| 6. Bracket                               | 13. Control chip reset jumper (JP9)        | 20. SCSI option connector             |
| 7. Low impedance microphone input (mono) | 14. Custom control VLSI chip               |                                       |



#### The On-board Jumpers

To make it easier to configure the Ad Lib Gold card, we have made the Interrupt lines (IRQ) and DMA channels software selectable, thereby keeping the amount of jumpers to a minimum. The four remaining jumper sets are the game port enable jumper, the dual joystick selector jumpers, the port address jumper and the Control chip reset jumper.

? **DMA** stands for Direct Memory Access. With DMA, a peripheral can access computer memory without intervention of the central processing unit (CPU). This technique allows the speed up of overall operation.

The Gold card jumpers are the following:

- **Game port enable jumper** (No. 16)  
This jumper lets the user enable/disable Ad Lib Gold's on-board game port interface. The interface should be disabled in cases where the user already has a standard PC game port interface inside his/her PC, to avoid conflicts.

Jumper setting is shown here:



Game port enabled

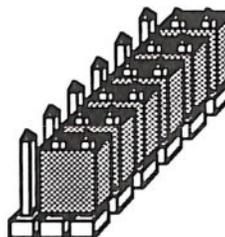


Game port disabled

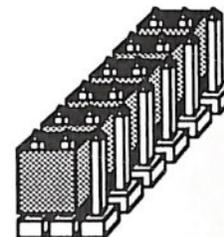
**Figure 3:** Game port jumper enabling

\* **NOTE:** The jumper is factory set to the game port enabled position.

- **Dual joystick selector jumpers** (No. 11)  
These jumpers let the user change the factory-set "joystick plus MIDI" option (all jumpers on the bracket side, pins No. 2–3) to the "two joysticks without MIDI" option (all jumpers on the opposite side, pins No. 1–2). All jumpers in this selector must be changed to the same position, as shown in the following illustrations.



Single joystick with MIDI option (factory-set)



Dual joystick option

**Figure 4:** Dual joystick jumper selection

- *Port address jumper (No. 12)*

This jumper lets the user choose a single or double port address for the Gold card. The Ad Lib Gold card addresses can be assigned by software programming. The default port address of the Gold card is 388H and can be changed by software in cases where another card inside the PC uses the same address, in order to avoid conflicts. In the case where the software cannot recognize the programmed address, the port address jumper is used to force the Gold card into answering at both the programmed address and at the default factory address 388H.

※ *NOTE: The port address jumper is factory set to single port address position (jumper plugged on the two upper pins) which enables only one port address to be used at a time.*

The port address jumper can be changed to double port address position (jumper plugged on the two lower pins) which forces the default address 388H to be used in conjunction with any other user-defined one.

- *Control chip reset jumper (No. 13)*

This jumper is used where the programmed configuration of the Control chip is lost. In some cases, losing the configuration can cause the card to use addresses that are already in use by other hardware. Changing the position of the Control chip reset jumper from the two left pins to the two right pins disables certain functions of the Gold card that could cause hardware conflicts. Once the jumper is plugged on the two right pins, reconfigure the Gold card to the factory preset values by issuing the following command:

**setup /R**

Once the Gold card is reconfigured, replug the Control chip reset jumper onto the two left pins.

※ *NOTE: You do not need to change the position of the Control chip reset jumper to issue the command setup /R. Change the position of the jumper only when the hardware conflicts prevent the computer from rebooting. (See "Appendix A: Troubleshooting", Problem No. 12, for details.)*

## Description of the Hardware

---

### Layout of the Card

---

#### Available Interrupt Lines and DMA Channels

- There are four software selectable interrupt lines (IRQ 3, 4, 5 and 7) on the Gold 1000, and four additional choices on the Gold 2000 (IRQ 10, 11, 12 and 15).
- DMA channels 1, 2 and 3 are software selectable on the Gold 1000, and DMA channels 0, 1, 2, and 3 are software selectable on the Gold 2000.

**?** *Interrupt is a computer instruction that halts program processing momentarily, so that other operations can take place. Once this operation is finished, the computer resumes the initial program processing.*

## System Requirements

---

To use the Ad Lib Gold card and the Gold software, you need the following:

1. For the Gold 1000: an IBM PC, XT, AT (286), 386, 486 compatible computer, PS/2 Model 25 and 30, or Tandy 1000 (except EX/HX), a disk drive (1.2 MB 5 1/4" or 720 KB 3 1/2") and 640K of RAM.

For the Gold 2000: an IBM AT (286), 386 or 486 compatible computer, a disk drive (1.2 MB 5 1/4" or 720 KB 3 1/2") and 640K of RAM.

2. A hard disk.
3. Graphics adapter, any model.
4. PC/MS-DOS 3.0 or higher.
5. Headphones, an external speaker or a home stereo system.
6. A microphone.

## Installing the Hardware

---

We suggest that you read this section thoroughly before you begin. This will familiarize you with the standard installation procedure.

These instructions are for installing your Ad Lib Gold card in your computer. We recommend that you read the owner's manual supplied with your computer for instructions specific to your model of computer.

### Hardware Configuration Settings

To install the Ad Lib Gold card, there are two types of configuration settings: hardware settings and software settings. The Gold card uses software for most of the configuration settings (see the sections on installation and configuration below). Only three hardware settings, made with jumpers, are necessary: game port enabling/disabling, dual joystick selection and port address. These should be made before installing the Gold card in your computer.

## Getting Installed

### Installing the Hardware

---

#### To Set Game Port Enable/Disable Jumper

The game port enable/disable jumper lets the user enable or disable Ad Lib Gold's on-board game port interface. The interface should be disabled in cases where the user already has a standard PC game port interface inside his/her PC, in order to avoid conflicts. To obtain the desired setting:

1. Locate the jumper for the game port enable/disable setting (refer to Figure 1 or 2, No. 16).
2. If your computer does not have a game port, make sure that the jumper is over the two right pins as shown in Figure 3. This jumper is factory set in the game port enabled position.
3. If your computer has a game port, unplug the jumper from the two right pins and replug it onto the two left pins as shown in Figure 3.

#### To Set Dual Joystick Selector Jumpers

The dual joystick selector jumpers let the user change the factory-set "joystick plus MIDI" option to the "two joysticks without MIDI" option. All jumpers in this selector must be changed to the same position, as shown in Figure 4. To obtain the desired setting:

1. Locate the dual joystick selector jumpers (refer to Figure 1 or 2, No. 11).
2. If you wish to use the Gold card's game port in the "single joystick with MIDI option", leave the jumpers in the factory-set position (i.e. plugged onto the bracket side of the card, pins No. 2-3) as shown in Figure 4.
3. If you want to use the Gold card's game port in the "dual joystick option", unplug all six jumpers and replug them onto the opposite side (pins No. 1-2), as shown in Figure 4.

#### To Set Port Address Jumper

The port address jumper lets the user choose a single or double port address for the Gold card. The default port address of the Gold card is 388H. It can be changed with the Setup program in cases where another card inside the PC uses the same address as the Ad Lib card.

The port address jumper is factory set to the single port address position which enables only one port address to be used at a time. These port addresses can be modified by software. It can be changed to double port address position, which forces the default address 388H to be used in conjunction with any other.

To obtain the desired setting:

1. Locate the jumper for the port address setting (refer to Figure 1 or 2, No. 12).
2. If you wish to use only one port address at a time (388H or any other), make sure that the jumper is over the two upper pins. This jumper is factory set in the single port address position.
3. If you wish to force the default port address 388H to be used in conjunction with another one, unplug the jumper from the two upper pins and replug it onto the two lower pins.

### Removing the Computer Cover

1. Switch off the computer.
2. Disconnect the power cord and all peripheral devices and cables.
3. Set the computer on a flat, clear surface.
4. Remove the mounting screws that hold the computer cover.
5. Remove the computer cover.

### Removing the Slot Cover

1. Choose a free slot as far as possible from the video adapter card.

**\* NOTE:** *Certain cards, such as video adapters, produce high-frequency signals which can interfere with the sound quality of the sound card.*

2. Remove the screw that holds the slot cover in place.
3. Lift the slot cover to remove it.

**!** **WARNING:** *If a screw falls into the computer, you absolutely must remove it before switching your system back on. If a metal object is left loose inside the casing of your computer, it may cause a short circuit that will damage your system.*

### Installing the Gold Card

1. Place the card immediately above the slot without inserting it into the socket.
2. Make sure that the bracket is inserted in the groove previously occupied by the slot cover.
3. Press the card down into the socket.

## Getting Installed

### Installing the Hardware

---

4. Put the card's bracket screw back on and tighten it.
5. Put the computer cover back on and tighten the screws.
6. Reconnect the power cord and other cables.

### Connecting Other Peripherals

The card is equipped with jacks and plugs for connecting various peripherals. These allow devices to be connected to: stereo audio output, microphone input, line-level stereo audio input, MIDI/game port, PC internal speaker and SCSI port (Gold 2000 model only).

#### Audio Output

The Gold card is equipped with three 1/8" jacks for connecting audio equipment. The main audio output is the lowermost of the three jacks, located above the DB-15 connector (refer to Figure 1 or 2, No. 9). This jack can be connected to headphones, external speakers or a stereo system using stereo adapters and cables. Model Gold 2000 comes with a cable. To avoid distortion when connecting to a stereo system, connect the card to an auxiliary-type input.

#### Microphone Input

The low impedance microphone input is the uppermost of the three audio jacks on the card's bracket (refer to Figure 1 or 2, No. 7). This connector lets the audio signal from a standard microphone be mixed with other audio sources or to be used as a source for sampling sounds.

*\* NOTE: The microphone input impedance of the Gold card is 1 K $\Omega$ . The microphone should have a maximum impedance of 1 K $\Omega$  if you do not want to lose too much input level due to an impedance mismatch.*

#### Stereo Auxiliary Input – External Connector

The external stereo auxiliary input connector is located in the center of the three audio jacks on the card's bracket (refer to Figure 1 or 2, No. 8). This connector lets audio signals from a stereo source (such as a CD player, CD-ROM drive, synthesizer or cassette player) be mixed with the other audio sources or to be used as a source for sampling sounds.

**!** **WARNING:** *To avoid distortion, it is important to keep the audio level of the device you are connecting to this input jack at low volume and to adjust the volume using the software controls explained in the next section. Also, make sure that you are using the auxiliary output of the device you are connecting to the card, instead of using the speaker output which would overload the card's amplifier.*

#### Stereo Auxiliary Input – Internal Connector

As mentioned in the "Description of the Hardware: Layout of the Card" section, there is an internal connector (refer to Figure 1 or 2, No. 4) for connecting the audio output of an internal CD-ROM drive. This connector is electrically in parallel with the external stereo auxiliary input connector. Thus, to obtain good sound results, you may only use one of these at a time.

#### MIDI/Game Port

The Ad Lib Gold card features a standard DB-15 connector at the bottom of its supporting bracket (refer to Figure 1 or 2, No. 10). This connector lets the user connect one of the following three options:

1. An IBM compatible joystick.
2. A MIDI device. (This requires an adapter cable.)
3. Dual joystick. (This requires a special adapter, which is usually supplied by the joystick manufacturer. — See Figure 4 for related jumper settings.)

#### Software Installation and Configuration

The running and using of the Ad Lib Gold card drivers and programs require hard disk space of approximately 3 megabytes. They must be installed onto the hard disk following a precise procedure. For this purpose, the Gold software package includes a special Setup Program. This program enables you to install the drivers and all associated programs, to configure your Ad Lib Gold card and to change the hot keys used by Mixer Panel and ROL2 Playback TSRs.

#### Using the Setup Program

The Ad Lib diskettes are not copy-protected. We recommend that you make a back-up copy before installing Gold software. Put the originals away in a safe place. This way, if a diskette is lost or damaged, you will have a replacement. We suggest that you use the DISKCOPY command. (For all details concerning the copy commands, refer to your DOS manual.)

#### To Load the Setup Program

To load the Ad Lib Gold Setup Program:

1. Insert the Ad Lib Gold disk 1 into the floppy drive.

2. Set the current drive to A (or B, depending on the drive you are using).
3. Load the Setup program by typing the following command at the DOS prompt:  

```
A: \>setup
```

When the program opens, a window entitled "Installation Notes" introduces you to the Setup Program and its basic commands. To activate a command, use one of the following methods:

1. Using the Tab key: Scroll and choose the command you want with the **Tab** or **⇧-Tab** keys.
2. Using the keyboard shortcuts: To activate the command you want, press the **Alt** key and the letter highlighted in its name.
3. Using a mouse: To activate the command you want, click on it with the mouse.

Two main buttons are displayed at the bottom of each screen: <Cancel> and <Continue>.

Activating the <Continue> button in the Installation Notes introductory screen makes the Setup Program open the Main Selection menu (see Figure 5).

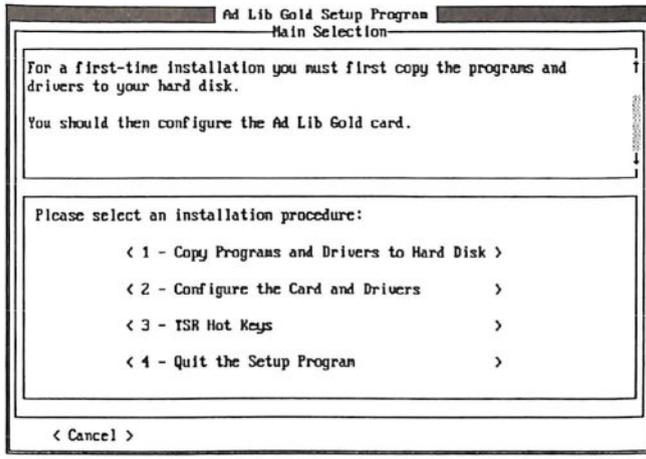


Figure 5: Setup Program's Main Selection menu

This menu lets you choose and access the four following submenus:

1. Copy Programs and Drivers to Hard Disk
2. Configure the Card and Drivers
3. TSR Hot Keys
4. Quit the Setup Program

#### To Cancel the Setup Process

At any moment, you can interrupt the setup process by clicking on the <Cancel> button at the lower left corner of the screen, or by pressing the **Esc** key.

Doing this will abort the setup and cancel the steps you have made. The changes you made are not saved in permanent memory on the card. When you reboot your system, these changes will not be restored. So, if you have a problem after making a change, just reboot your system.

\* *NOTE: Certain elements cannot be reversed and will remain installed, such as copied files. To cancel the entire operation, it is necessary to re-run the Setup Program and reverse the corresponding steps, or delete the copied files. See Appendix B for a list of the installed files.*

#### To Continue the Setup Process

In the setup process, activating the <Continue> button lets you close the current dialog box and access the next step. Doing this will initiate the changes you made in this dialog box, if there were any.

#### To Answer Program Questions

During each step of the setup procedure, you will be asked to choose between different options or to enter answers in edit fields. The program suggests an answer that will be correct in most situations. You can use this default, or enter your own answer.

#### Configuration Environment Variables

A special environment variable, called "GOLD" is used by the software to recognize the base address of the Gold card. When the card is relocated by the Setup program, the program automatically modifies the environment variable in the AUTOEXEC.BAT file.

To change the GOLD environment variable, type the following command, which should be preferably put in the AUTOEXEC.BAT file:

```
SET GOLD = xxx
```

Where *xxx* is the hexadecimal value of the Gold card base address (Control chip address).

When the GOLD environment variable is not defined, the programs assume a default base address of 388H.

Another environment variable, called "GOLDPATH" is used by some software (the ROL2 Playback TSR, for example) to determine the location of the data files (.SMP, .BNK and .EQU files).

To change the GOLDPATH environment variable, type the following command, which should be preferably put in the AUTOEXEC.BAT file:

```
SET GOLDPATH = path1;path2;...
```

Where *path1* and *path2* are directories where data files can be found.

When the GOLDPATH environment variable is not set, the applications look for the data files in the directory they were started from.

---

## Testing the Hardware

---

The Ad Lib Gold Test Program, which is supplied with the Gold software, enables you to verify that the Gold card is functioning properly. These tests are not only used to test the Ad Lib hardware, but also to test the connections to all associated peripherals (MIDI ports, joystick, SCSI, etc.).

### Preparing the Test Program

Prior to running the Test Program:

1. Make sure that the Gold card is properly installed. If necessary, refer to the section "Installing the Hardware".
2. Connect headphones, a speaker or stereo system to the audio jack.
3. Connect the peripherals you plan to use with the Gold card.
4. Turn on your computer. If it is already on, we recommend resetting it.

### Loading the Test Program

To load the Test Program:

1. Make the directory where you placed the Gold software the current directory. For example:  

```
C:\>cd gold
```

2. Load the Test program by typing the following command at the DOS prompt:

```
C:\GOLD>test
```

When the program opens, a first window entitled "Installation Notes" introduces you to the Test Program and its basic commands. Two main buttons are displayed at the bottom of each screen: <Cancel> and <Continue>.

Before each test, the program will explain what the test does. It will also point out the procedure to follow to complete the test. This information is shown at the top of each test screen. To see the whole text, click on the scroll bar with the mouse, or select the scroll bar with the **Tab** key and use the vertical arrow keys (**↓** and **↑**).

If a test does not succeed, a message will appear giving probable causes and solutions.

### To Continue the Test

The <Continue> button lets the user access the next step of the test.

### To Cancel the Test and Exit the Program

When all tests are finished, or anytime within the test procedure, you can exit the Test Program and return to DOS by activating the <Cancel> button.

#### Choosing Test Options

Clicking on the <Continue> button in the Installation Notes introductory screen opens the Selection Panel dialog box (see Figure 6). This dialog box presents the list of the tests you can execute:

- Configuration
- Joystick
- Audio
- MIDI Interface
- SCSI Interface
- Sampling and Playback
- Timers
- Telephone
- FM Sound
- Mixer

Some of these options may be grayed to indicate that they are disabled depending on the available hardware. Checking off any of these check boxes will let you access the corresponding tests.

The options can be selected by using one of the following methods:

1. Using the Tab key: Scroll and choose the option you want with the Tab key (**Tab**) or **⇧-Tab**) or the arrow keys (**←** or **→**).
2. Using the keyboard shortcuts: To select the option you want, press the **Alt** key and the letter highlighted in its name.
3. Using a mouse: To select the option you want, click on it with the mouse.

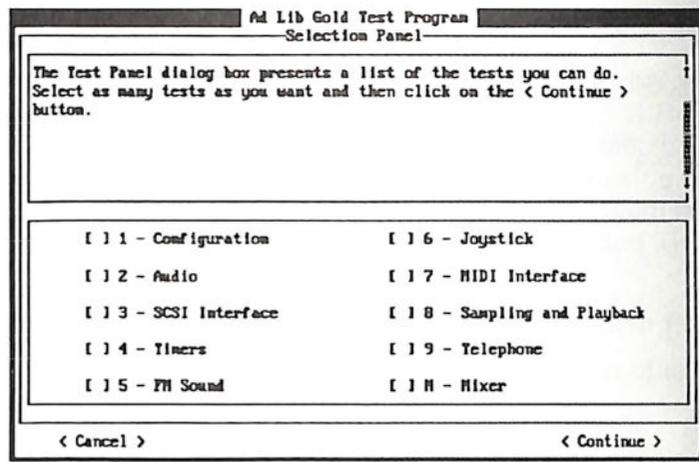


Figure 6: Test Program's Selection Panel

Select the option you wish to test and then activate the <Continue> button. You can also test several options in a row by selecting the options you want and activating the <Continue> button. Any test can be executed more than once if desired.

Each test panel displays information on the test currently being performed and describes the problems and solutions which may be encountered during the test.

# Mixer Panel TSR

---

The Ad Lib Gold cards (models 1000 and 2000) have an on-board analog mixer that permits the volume of different audio sources to be controlled, as well as overall output volume, balance and tone. These features can be accessed using the Mixer Panel TSR.

The Mixer Panel TSR is a program that allows you to set the different sound parameters of the Ad Lib Gold card at anytime and from within any application. This memory resident program includes three different control windows:

1. Sound Parameters
2. Sub Mixer
3. Surround Features



*TSR stands for Terminate-and-Stay Resident program, which is also called memory resident program. It is a utility program designed to remain in the computer's memory at all times after loading so the user can activate it with a keystroke at any time, even while running another program. For more information on TSRs, see Appendix D.*

## Loading the Mixer Panel TSR

---

To load the Mixer Panel TSR, set the current directory to the one where you placed the Mixer Panel at installation and type the following command:

```
mixer
```

\* *NOTE: This command can be placed in a batch file so that it is loaded automatically. See your DOS user guide for details.*

When the program is loaded, it will display a message indicating that the program has been successfully loaded. It will also indicate which keys must be used to activate the Mixer Panel.

The Mixer Panel window will not open upon loading and has to be activated as explained in the next section. If you want the Mixer Panel window open upon loading the program, you can use the option "/a" with the loading command. To do this, go to the appropriate directory and type the following command at the DOS prompt:

```
mixer /a
```

## Mixer Panel TSR

### Activating the Mixer Panel

#### Activating the Mixer Panel

**Alt** - **↑** - **M** are the default activation keys. (In order to avoid conflicts with other programs, you may change the last key in the combination of keys used to activate the Mixer Panel by using the Setup program.) To activate the Mixer Panel, press all of the activation keys down at the same time and release them. Upon releasing the keys, the main Mixer Panel window will appear as shown in Figure 7.

This TSR can be activated at any time with applications supporting the Ad Lib Gold. The screen will be returned to its original state and mode when you exit the Mixer Panel window.

\* *NOTE 1: If you use a Hercules card with a MGA monitor, the Mixer Panel can be activated only in text mode. If you activate the Mixer Panel while in graphics mode, this may cause problems with your system.*

\* *NOTE 2: The Mixer Panel cannot be activated in some applications which bypass the use of the PC's ROM BIOS to use the keyboard. For this reason, the Mixer Panel cannot be activated in a number of computer games, for example.*

#### Using the Mixer Panel

Each window of the Mixer Panel displays the different parameters and options of the Gold card (see Figure 7). To set one of these:

1. Select the item you want using the vertical arrow keys (**↓** and **↑**).
2. After this, you can modify the chosen item in one of the following ways:
  - decrease or increase the numerical parameters and option words one step at a time using the horizontal arrow keys (**←** and **→**);
  - decrease or increase the numerical parameters ten steps at a time using Shift with the horizontal arrow keys (**⇧** - **←** and **⇧** - **→**);
  - toggle On/Off parameters using the Space bar.

#### Sound Parameters

When the program is activated, you will see a window appear for setting the basic sound parameters of the Gold card.

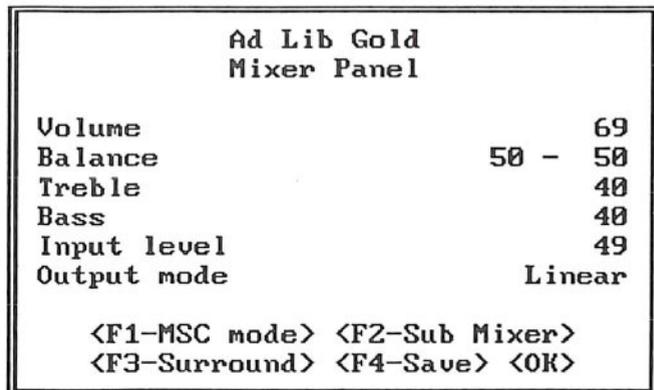


Figure 7: The main Mixer Panel window

#### Volume

Sets the master output volume of the board.

#### Balance

Sets the relative volume of the two stereo channels. Setting the right channel will automatically set the left channel; when you increase the right by one unit, the left channel decreases by one unit, and vice versa.

#### Treble

Sets the relative loudness of the high frequencies of the sound.

#### Bass

Sets the relative loudness of the low frequencies of the sound.

#### Input level

Sets the gain (input level) of the external auxiliary source and of the microphone.

#### Output mode

Sets the output mode of the audio source to one of four options:

- Linear: without any effect on the audio source;
- Pseudo: pseudo stereo effect that can be applied when the source is mono;
- Mono: forced mono effect that can be applied when the source is stereo;
- Spatial: light surround sound effect that can be applied when the source is stereo.

The default setting is Linear.

#### <F1-MSc mode/Gold mode>

Resets the Gold card so it is compatible with the original Ad Lib Music Synthesizer Card. This might be necessary in cases where a third party application that does not properly put the Gold card in its default mode for full compatibility with the original Ad Lib card.

#### <F2-Sub Mixer>

Opens the Sub Mixer window.

#### <F3-Surround>

Opens the Surround Features window (when using the add-on Surround Sound Module).

## Mixer Panel TSR

### Using the Mixer Panel

#### <F4-Save>

Opens a dialog box that allows the current configuration of the Gold card to be saved in permanent memory. The saved configuration will be in effect when you power on the computer.

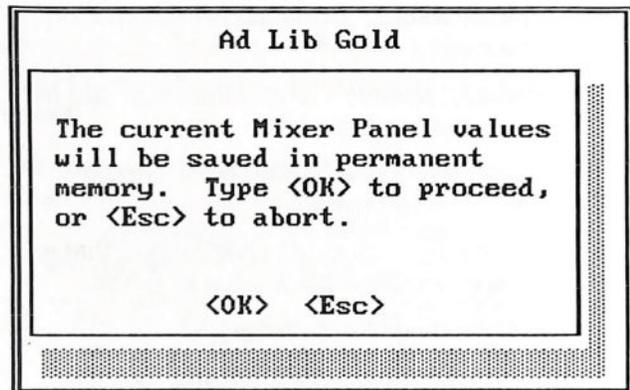


Figure 8: The Save dialog box

<OK> (  ) or (  )

Closes the Mixer Panel main window and returns to the current application saving the changes you made in the settings.

#### Sub Mixer

Activating the  key when in the Mixer Panel main window will open the Sub Mixer control window.

Sub Mixer parameters allow the output volume from the five different audio sources to be controlled:

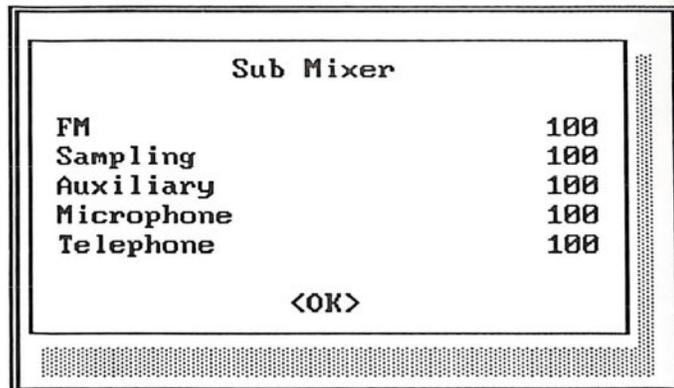


Figure 9: The Sub Mixer control window

#### FM

Sets the output volume of the FM source.

#### Sampling

Sets the output volume of the Sampling source.

#### Auxiliary

Sets the output volume of the auxiliary source (external or internal).

#### Microphone

Sets the output volume of the microphone.

**Telephone**

Sets the output volume of the telephone (when using the add-on Telephone Module).

<OK> (**F4**) or (**ESC**)

Closes the Sub Mixer control window and returns to the main Mixer Panel window saving the changes you made in the Sub Mixer parameter settings.

**Surround Features**

Activating the (**F3**) key when in the Mixer Panel main window will open the Surround Features control window.

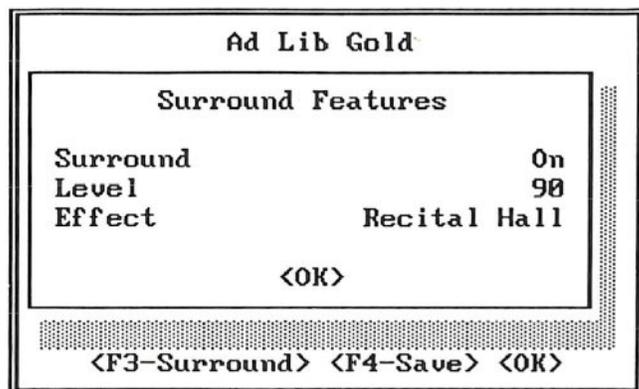


Figure 10: The Surround Features control window

\* *NOTE: If the Surround Sound Module is not installed, the program will display the message "OPTION NOT INSTALLED" and the changes you make to the parameters will have no effect (Fig. 11).*

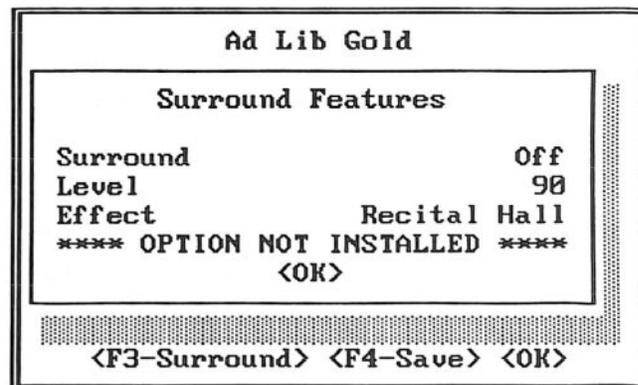


Figure 11: The Surround Features control window when option not installed

**Surround**

A toggle On/Off allows the Surround Sound option to be enabled or disabled. The default setting is Surround Off.

**Level**

Sets the level of the surround sound effect produced by the Surround Sound Module.

## Mixer Panel TSR

---

### Using the Mixer Panel

---

#### Effect

Sets the type of surround sound effect you want to enhance the sound ambience selected from a variety of presets.

<OK> (**↵** or **Esc**)

Closes the Surround Features control window and returns to the main Mixer Panel window saving the changes you made in the parameter settings.

### Hot Keys

---

You can use three combinations of keys to set the master volume and to turn On and Off the Surround Sound at any time, without opening the Mixer Panel window. The program default hot keys are the following:

**Alt**-**↑**-**U** Increases the master volume one unit at a time.

**Alt**-**↑**-**D** Decreases the master volume one unit at a time.

**Alt**-**↑**-**S** Enables and disables the surround sound effect.

In order to avoid conflicts with other programs, you may change the last key in the default combinations of keys by using the Setup program.

### Closing the Mixer Panel

---

When in the main window of the Mixer Panel, press the **↵** or **Esc** key to leave the program and return to where you were when the Mixer Panel was activated.

### Removing the Mixer Panel TSR

---

When the Mixer Panel TSR is already installed but you do not wish to use it, you can unload the program with the option `/r`. This option removes the Mixer Panel TSR from the computer's memory. To remove the Mixer Panel TSR, go to the appropriate directory and type the following command:

```
mixer /r
```

Once this command is entered, the program will display a message indicating that the Mixer Panel has been removed.

# Juke Box Gold Music Playback Program

Juke Box Gold is a music playback program specially designed to demonstrate the sound capabilities of the Ad Lib Gold card itself. It enables you to play pre-programmed songs, or those you create yourself using the Visual Composer Gold music composition program (sold separately). Selected songs can also be played at any time while other applications are running, with the use of the ROL2 Playback TSR commands.

## Loading Juke Box Gold

To load Juke Box Gold, set the current directory to the one in which you placed Juke Box Gold at installation and type:

```
jukegold
```

Once the program is loaded, the main Juke Box Gold window will appear as shown in Figure 12.

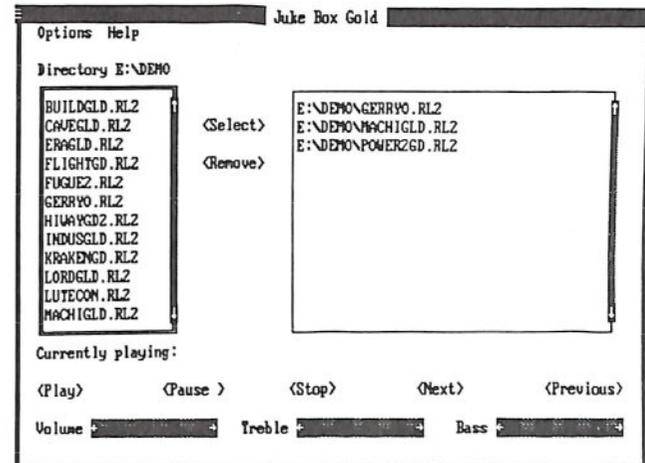


Figure 12: The main Juke Box Gold window

This window displays the various menu titles and command buttons (see Figure 12). Other possible options are contained in the menus. To activate a menu or command, use one of the following methods:

1. Using the Tab key: Scroll and choose the command you want with the **Tab** or **⇧-Tab** keys.
2. Using the keyboard shortcuts: To activate the menu or command you want, press the **Alt** key and the letter highlighted in its name. To activate a command in an open menu, press the highlighted letter.

3. Using a mouse: To activate the menu or command you want, click on the menu or button command with the mouse.

## Selecting Songs

---

### Creating a Selection of Songs

The main Juke Box Gold window contains two large boxes for song selection. The box located at the left of the screen displays the contents of the current directory. This is a list of files, subdirectories and drives through which you can navigate by selecting a name and pressing the **[↵]** key, or by double clicking with the mouse. The name of the current directory is displayed above the box. When the program is loaded, the default directory is the directory where you placed Juke Box Gold.

To create a selection of songs, go to any directory containing ROL2 files, highlight the file and activate the Select command, or press **[↵]**, or double click with the mouse, for each song you wish to add to the selection. As each song is selected, its DOS file name will be displayed in the Selection box at the right of the screen in its order of selection. You may select as many songs as you wish (depending on memory capacity), but only from a single directory.

### To Remove Songs from the Selection

The box at the right of the screen displays the list of songs contained in the selection you have made. To remove a song from the selection, highlight its name and activate the Remove command.

### To Clear a Song Selection

To remove all the songs contained in the selection at once, simply choose the Clear all command from the Options menu.

## Playing Music

---

### To Play Songs

To play your selection of songs, activate the Play button. Each song in the list will be played in order.

Once the music begins playing, the name of the song currently playing is displayed at the bottom of the window.

### To Stop Music Playback

To stop music playback, activate the Stop button.

**To Pause and Resume Music Playback**

To pause music playback, activate the Pause button. When the music pauses, the Pause button toggles to Resume.

To continue music playback at the exact place where it stopped, activate the Resume button. Once the music starts up again, the Resume button switches back to Pause.

**To Scan Songs**

To skip to the next song during playback, activate the Next button. This will immediately start the next song if there are any left in the song selection list.

To return to the previous song during playback, activate the Previous button. This will immediately start the previous song.

---

**Adjusting the Sound**

The Ad Lib Gold card has an on-board analog mixer that allows volume and tone controls to be adjusted. These features can be accessed from any application by using the Mixer Panel TSR program (see the section "Mixer Panel TSR"). But you can also adjust the sound directly inside the Juke Box Gold program. Three sliders located along the bottom of the window allow you to adjust volume,

bass and treble controls while listening to Juke Box songs.

**To Adjust the Volume, Bass or Treble**

To adjust one of these three parameters, activate the slider you want and use the left and right arrow keys ( and ) to lower or raise the value of the chosen parameter. You can also scroll the indicator inside a slider with a mouse.

**To Set the Stereo/Mono Option**

The Gold card output can be set either to stereo sound (distinctive signals for the left and right channels) or mono sound (identical signals from both channels). To change from one to the other, choose the Stereo or the Mono option from the Options menu.

---

**Asking for Help**

When you choose the Help command from the Help menu, a window opens up on the screen containing summarized information on how to operate Juke Box Gold and how to use the various features.

## Juke Box Gold Music Playback Program

### Exiting the Program

#### Exiting the Program

To leave the program and return to DOS, use one of the following methods:

- Activate the Exit command from the Options menu.
- OR
- Click on the System menu box at the upper left corner of the window and activate the Close command.

#### Using the ROL2 Playback TSR

The music files played by Juke Box Gold are called ROL files (.ROL or .RL2). In order to play these music files, the application uses a TSR driver, which we refer to as ROL2 Playback TSR (see Appendix D for more information on TSRs).

Since TSRs stay in memory while we use other programs, the ROL2 Playback TSR allows you to play the songs previously selected in Juke Box Gold, while using other applications.

For details on the loading options of the ROL2 Playback TSR, see "Appendix D: Drivers / TSRs".

The playback commands of this TSR can be used at any time by the following key combinations:

- |                                  |  |
|----------------------------------|--|
| <b>Alt</b> - <b>⌘</b> - <b>P</b> | Plays the selected songs.                        |
| <b>Alt</b> - <b>⌘</b> - <b>R</b> | Pauses and resumes the music playback.           |
| <b>Alt</b> - <b>⌘</b> - <b>T</b> | Stops the music playback.                        |
| <b>Alt</b> - <b>⌘</b> - <b>N</b> | Skips to the next song from the selection.       |
| <b>Alt</b> - <b>⌘</b> - <b>V</b> | Returns to the previous song from the selection. |

In order to avoid conflicts with other programs, you may change the last key in the combination of keys used to activate the above commands by using the Setup program.

When in Juke Box Gold, you should preferably use the program playback commands instead of the TSR playback commands.

**!** **WARNING:** *Do not use the ROL2 Playback TSR while running other music applications, as this will cause conflicts with the ROL2 Playback driver.*

# Voice Pad Record and Playback Program

Voice Pad is an Ad Lib Gold program that enables you to record, edit, manage and play back your "voice notes". A voice note can contain the following information:

- recorded digitized sounds, which are usually vocal notes entered by the user;
- a brief written comment added to a vocal note;
- an alarm time, which is used to trigger a later playback of a note.

Voice notes can be heard using the Playback command within the Voice Pad program, or automatically by a memory-resident section of the program (Alarm driver) which will play back voice notes at the time specified in the voice note description. Voice notes can be played back daily, at a specified time ("Daily Alarm"), or played back only once at a specified date and time ("Date Alarm"). Voice notes with alarms will be played back, even while other applications are being used.

## Loading Voice Pad

To load the Voice Pad program, set the current directory to the one where you placed the Voice Pad program during installation, and type:

```
voicepad
```

When the program is loaded, the main Voice Pad window will appear as shown in Figure 13.

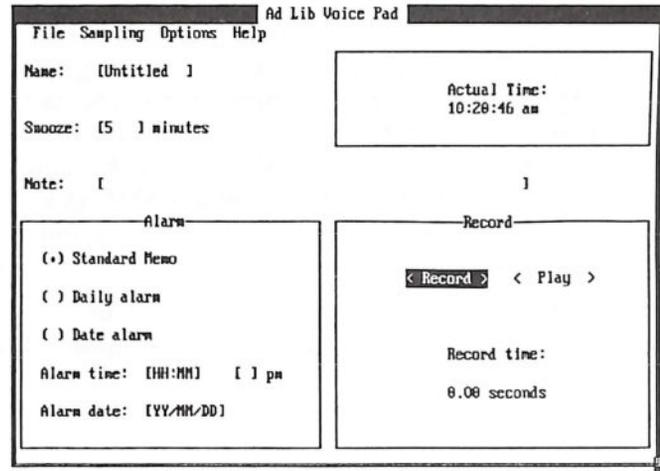


Figure 13: The main Voice Pad window

This window displays various menu titles, command buttons, options and edit fields. There are other possible commands contained in the menus. To activate one of them, use one of the following methods:

## Voice Pad Record and Playback Program

---

### Loading Voice Pad

---

1. Using the Tab key: Scroll and choose the command or edit field you want with the **Tab** key or **⇧-Tab** keys.
2. Using the keyboard shortcuts: To activate the menu or command you want, press the **Alt** key and the letter highlighted in its name, or press the appropriate function key; to activate a command in an open menu, press the letter highlighted in its name. Special shortcuts for the File commands are also displayed in the File menu.
3. Using a mouse: To activate the menu or command you want, click on the menu or button command with the mouse.

### Recording a Voice Note

---

#### To Record a Voice Note

1. Activate the Record command. The Record button will then toggle to Stop.
2. Immediately enter the message you wish to make, speaking not too far from the microphone (maximum of approximately one foot).

#### To Stop the Recording

To stop the recording, if the recording time has not run out, activate the Stop command. The Stop button will then return to Record.

### Setting the Recording Parameters

---

#### To Set the Recording Time

The default recording time is 10 seconds. To change the recording time, activate the Sampling Duration command from the Sampling menu and enter the desired number of seconds from 1 to 999.

#### To Set the Sampling Rate

The sampling rate is the number of sound samples per second the program takes. The higher the sampling rate (and the higher the bit resolution), the higher the quality of the recorded sounds (and the higher the amount of disk space required to store the voice note).

You can change the sampling rate to adjust the sound quality and amount of disk space your voice note uses. The default sampling rate is 11.025 KHz. To change the sampling rate, open the Options menu and choose one of the following sampling rates: 22.05, 11.025, 7.35, or 5.5125 KHz.

\* *NOTE: The sampling rate of 44.1 KHz is not available for recording with Voice Pad. To minimize the disk space, voice notes are recorded and stored in compressed data format (ADPCM). The ADPCM recording sampling rate is limited to a maximum of 22.05 KHz.*

### To Set the Microphone Gain

To set the microphone gain:

1. Activate the Mixer Panel.
2. Using the vertical arrow keys (, ) , choose the Input level parameter.
3. Using the horizontal arrow keys (, ) , lower or raise the value of the Input level, which ranges from 0 to 100 with a default setting of 49. We suggest you adjust the volume of your recording by proceeding as follows:
  - Make a first recording at the default Input level of 49.
  - Activate the Playback command to listen to the sound quality of the recording.
  - If the sound is distorted, decrease the Input level (and/or speak at a greater distance from the microphone) and start again. If the sound is too weak, increase the Input level (and/or speak at a shorter distance from the

microphone) and start again.

- Repeat the procedure until you are satisfied with the volume of the recording.

? *The microphone **gain** is the input level of the microphone. This parameter directly affects the overall volume of your recording. A gain set too low will give a recording weak in volume and possibly full of parasitic noise. A gain set too high may introduce distortion into the recording.*

---

### Listening to a Voice Note

#### To Listen to a Voice Note

To listen to a voice note, open the voice note (see below "To Open an Existing Voice Note") and activate the Play command. The Play button will then toggle to Stop.

#### To Stop the Playback

To stop the playback at anytime, activate the Stop command. The Stop button will then switch back to Play.

#### Managing Voice Notes

---

When you create a voice note, the digitized recording is stored independently in a .PAD file. For each voice note created, other basic information (description parameters, alarms, written comment, etc.) are stored in a bank file, which contains information on a collection of voice notes.

Voice Pad only recognizes the bank file named DIRVOICE.PAD. This file is not delivered with Voice Pad. The first time you save a voice note, the program will automatically create the DIRVOICE.PAD file to store your voice note. From then on, any additions and modifications of voice notes will be written to DIRVOICE.PAD.

*\* NOTE: DIRVOICE.PAD bank file must remain in the same directory as the Voice Pad program (VOICEPAD.EXE) for it to work properly. The digitized recording .PAD files can be placed in any directory.*

The commands used for managing voice notes are found in the File menu. You will use these commands often, whether you are saving your work, opening a new voice note, finding, or deleting a previously saved voice note.

#### Saving a Voice Note

Prior to storing a newly recorded voice note, you must first name it. To save a voice note:

1. Select the Name edit field.
2. Enter the name you wish, to a maximum of ten characters.
3. Activate the Save command from the File menu.

If the voice note has already been named, it will automatically be saved. If not, the program will save it by default under the name "Untitled" in the bank.

#### Creating a New Voice Note

To create a new voice note, activate the New command from the File menu. This command will close any open voice note and will open an empty and untitled voice note.

#### To Open an Existing Voice Note

To open an existing voice note:

1. Activate the Open command from the File menu. A dialog box appears on the screen listing all the voice notes in the bank.
2. Select a voice note from this list.

3. Activate the Open button to confirm your choice. This command will close any open voice note to make room for the new one.

### **To Delete a Voice Note**

To delete a previously saved voice note:

1. Activate the Delete command from the File menu. A dialog box appears on the screen listing all the voice notes of the bank.
2. Select a voice note from this list.
3. Activate the Delete button to confirm your choice. This command will automatically delete the chosen voice note in the bank.

---

### **Setting the Alarm**

Voice Pad has a built-in alarm clock which allows you to set a date and time at which to start playing a given voice note.

#### **To Set a Daily Alarm**

If you set a daily alarm for a voice note, the recorded message will start playing at the specified time on every day. To set a daily alarm:

1. Choose the Daily Alarm option in the main

window.

2. Activate the Alarm Time edit field.
3. Enter the hour and minute using the appropriate format.

Doing this will automatically create a "DLY" type voice note.

#### **To Set a Date Alarm**

If you set a date alarm for a voice note, the recorded message will start playing at the specified time on the specified date.

To set a date alarm:

1. Choose the Date Alarm option in the main window.
2. Activate the Alarm Time edit field.
3. Enter the hour and minute using the appropriate format.
4. Activate the Alarm Date edit field.
5. Enter the date you wish using the standard format (year/month/day), as shown in parentheses.

Doing this will automatically create a "DTE" type voice note.

## Voice Pad Record and Playback Program

---

### Setting the Alarm

---

\* *NOTE: If you do not use the alarm option, or if you choose the Standard option, this will create a "STD" type voice note.*

#### To Set the Snooze Option

Voice Pad offers a Snooze option that allows a voice note with alarm to be repeated following a time delay chosen by the user. The Snooze ensures that you will not miss a voice note message, in the event you are gone while the alarm is playing.

To set the Snooze time delay for a voice note:

1. Activate the Snooze edit field located in the middle of the main window.
2. Enter the desired time for the delay between the voice note repetitions, from 0 to 60 minutes. If you do not need snooze, enter a time of 0, which means the voice-note has no snooze setting.

If you want to stop an active snooze repetition, proceed as follows:

1. Activate the Stop Snooze... command from the Options menu. A dialog box opens displaying a list of all currently snoozing voice notes.

2. Highlight the voice note you want to stop snoozing.
3. Activate the Stop Selection command.  
You can also activate the Stop All command to stop all snoozing messages at once.

\* *NOTE: Snooze is only effective for one day. Message repetitions will stop at the moment the system date changes.*

The following gives summary information about the three types of voice notes Voice Pad creates depending on the alarm you specify:

1. "STD" type, or Standard, voice notes:
  - No alarm has been specified.
  - Voice note will not be played.
2. "DLY" type, or Daily, voice notes:
  - Daily alarm has been specified.
  - Voice note will be played daily at the time specified.
  - Voice note will be repeated until the date changes, according to the time delay specified in the Snooze setting.

3. "DTE" type, or Date, voice notes:
  - Date alarm has been specified.
  - Voice note will be played at the date and time specified.
  - Voice note will be repeated until the date changes, according to the time delay specified in the Snooze setting.

### **To Change the Time Format**

The 12 hour clock is the default format used for the alarm. You can change the time format by opening the Options menu and selecting the "24 Hour Clock" or the "12 Hour Clock" option.

The actual time is displayed in the box at the upper right corner of the screen in the chosen time format.

### **Setting the Voice Note Display Options**

The option DISPLAY, located at the top right of the Open and Delete dialog boxes, allows you to display the following three categories of voice notes:

- All types of Voice Notes: "STD", "DLY" and "DTE";
- Daily Alarm voice notes only: "DLY";
- Date Alarm voice notes only: "DTE".

The option SORT, located at the bottom right of the Open and Delete dialog boxes, allows the displayed voice notes to be sorted in one of the following four ways:

- By Record Date
- By Alarm Date
- By Name
- By Size

### **Adding a Written Comment**

You can also add a brief written comment to your voice note. To do this:

1. Activate the Note edit field in the main window.
2. Enter the text you want to a maximum of 51 characters.

This written comment will be displayed each time you open the voice note.

#### Adjusting the Sound

---

The Ad Lib Gold card has an on-board analog mixer that allows volume and tone controls to be adjusted. These features can be accessed in the Mixer Panel TSR, if it is installed. Upon opening the Mixer Panel, you can set the different sound parameters, such as input level, overall output volume, balance, treble and bass. For complete information, consult the section "Mixer Panel TSR".

#### Asking for Help

---

When you choose the Help command from the Help menu, a window opens up on the screen containing summarized information on how to operate the Voice Pad and how to use its various features.

#### Exiting the Program

---

While in the main window of Voice Pad, activate the Exit command from the File menu or press **Ctrl-X** to leave the program and return to DOS. Before this command is carried out, a dialog box appears to ask if you wish to save the changes you have made to your active voice note, if there were any.

#### Using the Alarm Driver

---

The Voice Pad program uses three memory resident drivers that are necessary for the playback of voice notes. The executable files for these drivers are CTRLDRV.EXE, WAVEDRV.EXE and ALARMDRV.EXE. These drivers must be loaded into memory to allow voice note alarms to be played. When you use the Voice Pad program, you do not have to load these drivers separately. The program has a batch file that automatically loads these drivers. If you do not wish to use the application program, you can load the drivers independently by typing the following commands at the DOS prompt:

```
drivers
alarmdrv
```

**\*** *NOTE: It may be advisable to load these drivers from the AUTOEXEC file, so that they are loaded automatically when you start the computer. Place the contents of the DRIVERS.BAT file and the ALARMDRV command into the AUTOEXEC.BAT file. See your DOS user guide for details.*

- For more information on drivers, see "Appendix D: Drivers / TSRs".

# Soundtrack Synchronization Editor

Soundtrack Synchronization Editor is an Ad Lib Gold program that allows you to mix and synchronize pictures created with a graphic or animation program using the various audio sources of the Gold card: FM synthesized music, digitized samples (voice and/or sound effects) and CD audio.

## Loading Soundtrack Sync Editor

To load the Soundtrack Synchronization Editor, set the current directory to the one where you placed the program at installation, and type the following command:

```
stracked
```

When the program is loaded, the Soundtrack Sync Editor will appear as shown in Figure 14.

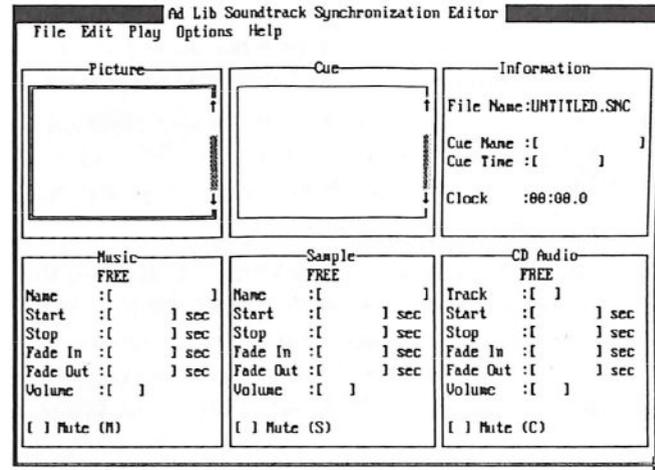


Figure 14: The Soundtrack Sync Editor

## Using the Soundtrack Sync Editor

When the program opens, you will see a window displaying the different boxes, options and edit fields (see Figure 14). There will also be commands in menus at the top of the screen. The various program features can be used as follows:

1. Using the Tab key: Select the edit field or command you want with the **Tab** key or **↑-Tab** keys. You can then enter the requested data or press **↵** to activate the selected command.

## Soundtrack Synchronization Editor

---

### Using the Soundtrack Sync Editor

---

2. Using the vertical arrow keys: Select the name you want in a scroll list, or a command in an open menu with the  key or the  key.
3. Using the left and right arrow keys: Position the cursor where you want in an edit field, or move from an open menu to another with the  key or the  key.
4. Using the keyboard shortcuts: To activate the menu or option you want, press the  key and the highlighted letter simultaneously, or press the corresponding function key. To activate a command in an open menu, press the letter highlighted in its name. Special shortcuts for the File commands are also displayed in the menu.
5. Using a mouse: To activate a menu or command, or select an edit field, click on it with the mouse.

### About the Sync Files

---

The Ad Lib Soundtrack Synchronization Editor is for creating, editing, managing and storing .SNC — or Sync — files containing one or several cue descriptions. A cue is a chosen moment of time at which you want one or more events to start. For multimedia applications, cues link sound and music

from various audio sources with a picture file or an animation file.

Once a Sync file is created, you may use the Ad Lib Soundtrack Playback driver or the Autodesk™ Animator Playback Utility to play back your multimedia presentation with the music and sound synchronized with the visuals.

Using the Soundtrack Playback driver, sound files linked to given picture files automatically start to play when a graphic program displays the specified pictures. Using the Autodesk™ Animator Playback Utility, sound files linked to given animation files automatically start to play when the Autodesk™ Animator program displays the specified animation files. (Refer to the corresponding sections of this user guide for details concerning these two utility programs.)

### The Editor Boxes

---

The Soundtrack Sync Editor displays three boxes at the upper part of the screen with information on the current Sync files. These are the Picture box, the Cue box and the Information box.

**Picture Box**

This box displays the names of the pictures (.PIC, .PCX, .GIF, .TIF, .BMP, .WPG, etc.) or animation files (.FLI) and highlights the name of the one selected.

**Cue Box**

This box displays the names of the cues linked to the current or selected picture and highlights the name of the selected cue.

**The Information Box**

This box displays basic information on the Sync file and the current cue.

**File Name**

This field displays the name of the current Sync file.

**Cue Name**

This is the edit field used to enter and display the name of the current cue.

**Cue Time**

This is the edit field used to enter and display the time (after picture loading) that the current cue will be activated. The unit (seconds or frames) used for this field depends on the picture synchronization mode specified in the Options menu (Time Mode or Frame Mode).

**Clock**

This is a field that displays the elapsed time of the current picture at playback or displays the elapsed number of frames for the current animation file, depending on which picture synchronization mode has been specified in the Options menu.

**Cue Parameter Boxes**

The Soundtrack Sync Editor displays three boxes at the lower part of the screen showing the parameters of three possible audio sources: Music, Sample and CD audio. The following describes the parameters included in these boxes:

**FREE/USED**

This information indicates if the sound source is active or not.

FREE is displayed if the sound source activated at the preceding cue does not play past the current cue for the same sound source.

USED is displayed if the total length of the sound source activated at the preceding cue plays past the current cue for the same sound source. To remedy this, either increase the cue time for the USED sound source or decrease the Stop Time of the preceding cue.

#### **Name**

This is the edit field used to enter and display the name of the .RL2 file played in the Music source or the name of the .SMP file played in the Sample source.

To enter a file name:

1. Activate the Name edit field in the Music box or in the Sample box.
2. Choose the Open... command from the File menu, or type the shortcut **Ctrl-O**.

A dialog box will appear listing all the files in the current directory (on the left) and the drives, directories and subdirectories (on the right). The path of the current directory will be displayed at the top of the dialog box.

3. Choose a file name from this list, or open another directory and/or drive and choose a file name from that directory.
4. Press OK to confirm your choice.

You can also type the file name you want directly into the edit field.

#### **Track**

This is the edit field used to enter and display the track number played from the CD Audio sound source.

#### **Start**

This is the edit field used to enter and display the time (after the cue) at which the sound source will start to play.

#### **Stop**

This is the edit field used to enter and display the time (after the cue) at which the sound source will stop.

#### **Fade In**

This is the edit field used to enter and display the amount of time (after Start Time) over which the volume of the audio source will fade in from 0 to the level specified in the Volume edit field.

#### **Fade Out**

This is the edit field use to enter and display the amount of time (before Stop time) over which the volume of the audio source will fade out from the level specified in the Volume edit field to 0.

#### **Volume**

This is the edit field used to enter and display the main volume of the audio source, which ranges from 0 to 100.

**Mute**

This is a playback option that allows an audio source to be disabled so that one or two other audio sources can be listened to individually. Use the mouse or the Space Bar to toggle the check box between On and Off.

※ *NOTE: This option is not saved within the Sync file.*

**Elapsed Time**

This is a field that replaces the Start edit field when a selected sound source is active and identified as USED. It indicates the time which has elapsed since the preceding cue.

**Remaining Time**

This is a field that replaces the Stop edit field when a selected sound source is active and identified as USED. It indicates the time left before the sound event finishes.

---

**The File Menu**

The File menu contains the commands used for managing your Sync files and for exiting the program. These are New, Open, Save, Save As... and Exit.

**New**

To create a new Sync file:

- Activate the New command from the File menu. This command will close any open file and will open an empty and untitled file.

**Open...**

To open an existing Sync file:

1. Activate the Open... command from the File menu. A dialog box will open on the screen listing all the .SNC files in the current directory.
2. Choose a file from this list, or open another directory, subdirectory and/or drive and choose a file from that directory. You can also type the file name directly into the edit field.
3. Press OK to confirm your choice. This will close any open file to make room for the new one.

**Save**

To resave a Sync file that has been saved before:

- Activate the Save command from the File menu.

#### Save As...

To save a newly created Sync file:

1. Activate the Save As... command from the File menu.
2. Enter the name you want to a maximum of eight characters. Since files created by Soundtrack Sync Editor use .SNC as their DOS extension, it is not necessary to include the .SNC part of the file name.
3. If necessary, change the current directory, subdirectory and/or drive using the directory paths.
4. Press OK to confirm your choice. The file will be saved under the name you have entered.

#### Exit

To exit the Soundtrack Sync Editor and return to DOS:

1. Open the File menu.
2. Activate the Exit command.  
Before this command is carried out, a dialog box will ask if you wish to save the changes you have made to your active file.

### The Edit Menu

---

The Soundtrack Sync Editor allows you to modify text in edit fields with the edit commands found in the Edit menu: Undo, Cut, Copy, Paste and Clear.

It also allows you to add and delete pictures and related cues or cues only, using Add Picture..., Add Cue, and Delete Picture and Delete Cue commands.

#### Undo

To undo typing or an edit text command:

- Activate the Undo command from the Edit menu, or type the shortcut **Alt**-**⌫**. This will undo the last modification you made to the text.

#### Cut

To cut text in an edit field:

1. Highlight the text you want to cut by clicking and dragging the mouse or using **⌘**-**⌫** or **⌘**-**→**.
2. Activate the Cut command from the Edit menu. This will remove the selected text from the edit field and place it in the clipboard.

## Copy

To copy text in an edit field:

1. Highlight the text you want to copy by clicking and dragging the mouse or using - or -.
2. Activate the Copy command from the Edit menu. This will copy the selected text from the edit field and place it in the clipboard.

## Paste

To paste copied text:

1. Activate an edit field and position the cursor where you want the text to be pasted.
2. Activate the Paste command from the Edit menu. This will paste the contents of the clipboard where the cursor is positioned in the edit field.

## Clear

To clear text in an edit field:

1. Select the text you want to clear.
2. Activate the Clear command from the Edit menu. This will remove the selected text from the edit field without placing it in the clipboard.

## Add Picture...

To add a picture to a Sync file:

1. Activate the Add Picture... command from the Edit menu. A dialog box will appear listing all the files in the current directory (on the left) and the drives, directories and subdirectories (on the right). The path of the current directory will be displayed at the top of the dialog box.
2. Choose a picture file from this list, or open another directory, subdirectory and/or drive, and choose a file from that directory. You can also type the file name directly into the dialog box.
3. Press OK to confirm your choice. This will add the picture file to the list.

## Add Cue

To add a new cue to a picture:

1. Activate the Add Cue command from the Edit menu. This will add a new cue to the list with the name "UNTITLED".
2. To name the cue, activate the Cue Name edit field. The name entered must not contain spaces or exceed 12 characters.

#### Delete Picture

To delete a picture from a Sync file:

1. Select the picture in the Picture box.
2. Activate the Delete Picture command from the Edit menu.
3. Press OK to confirm your choice. This will remove the selected picture from the list and all corresponding cues.

#### Delete Cue

To delete a cue from a picture:

1. Select the cue in the Cue box.
2. Activate the Delete Cue command from the Edit menu.
3. Press OK to confirm your choice. This will remove the selected cue (and all related sound source information) from the list.

#### The Play Menu

---

The Soundtrack Sync Editor allows you to play the current Sync file's three sound sources back during editing. The Play menu contains the playback commands that allow you to listen to the Sync file

you are working on. These are Play Scenario, Play Picture, Play Cue, Pause, Continue and Stop.

#### Play Scenario

This command, which is available in Time mode only, activates all cues for the entire Sync file.

#### Play Picture

This command, which is available in Time Mode only, activates all cues for the selected picture.

#### Play Cue

This command activates the selected cue.

#### Pause

This command interrupts all music and sound playback in progress, but the commands, options and edit fields are unavailable (grayed out) for editing until the Continue or Stop commands are activated.

#### Continue

This command restarts playback of whatever was interrupted at the exact place it was when the Pause command was activated.

## Stop

This command stops all music and sound playback in progress, and the commands, options and edit fields become available for editing.

## The Options Menu

---

Sync file playback can be done in two different modes depending on the graphic program used for the multimedia presentation. Choose either Frame Mode or Time Mode from the Options menu.

### Time Mode

This option is for Sync files to be played back with the Soundtrack Playback Driver. It displays the Cue Time edit field in seconds.

### Frame Mode

This option is for Sync files to be played back with the Autodesk Animator Playback utility, which plays back Autodesk™ Animator .FLI files. It displays the Cue Time edit field in frame units.

## The Help Menu

---

### Help...

When you choose the Help... command from the Help menu, a window opens on the screen containing summarized information on how to operate the Soundtrack Synchronization Editor and how to use its various features. To navigate through the different topics, use the following buttons, which are displayed at the top of the window:

#### Index

Goes back to the Index page, which lists the various topics contained in Help.

#### Back

Goes back to the previous topic that was selected.

#### << Browse

Displays the previous topic in the index.

#### >> Browse

Displays the next topic in the index.

#### Close

Closes the Help window.

To get information on a given subject:

1. With the Help window open, press the <Index> button.
2. Select the topic you want in the list.

3. Press OK. A page will open giving information on the selected topic. Use the vertical scroll bar or the vertical arrow keys (↑ and ↓) to access all the information on that topic.
4. Use the buttons at the top of the window to navigate from one topic to another.

### **About...**

When you choose the About... command from the Help menu, a window will open on the screen giving the date and version number of the Soundtrack Synchronization Editor.

# Soundtrack Playback Driver

---

The Soundtrack Playback driver is a memory resident program that synchronizes picture files with Sync files created using the Soundtrack Synchronization Editor.

The Soundtrack Playback driver uses five memory resident drivers that are necessary for the playback of music and sampled sounds. The executable files for these drivers are CTRLDRV.EXE, WAVEDRV.EXE, FMDRV.EXE, RL2DRV.EXE and TIMERDRV.EXE.

- ❑ For more information on drivers, see "Appendix D: Drivers / TSRs".

These drivers must be loaded into memory to allow playback of Sync files created with the Soundtrack Synchronization Editor. When you use the Soundtrack Synchronization Editor program, you do not have to load these drivers independently. The program has a batch file that automatically loads the drivers. If you have not previously used the editor, you can load the drivers independently by typing the following command at the DOS prompt, which loads all the necessary drivers:

```
drivers
```

You can then load the Soundtrack Playback driver by typing:

```
strkdrv fileName
```

Where *fileName* is the name of the Sync file you want to use for your presentation. Once the drivers are loaded, you can begin your graphics presentation. Afterwards, you may remove the Soundtrack Playback driver from memory by typing the following:

```
strkdrv /r
```

Once loaded, the Soundtrack Playback driver resides in memory where it traps the DOS commands issued by applications to load a file. When the filename of a loaded file corresponds to the one of the pictures defined in the Sync file, it starts running the sequence of cues defined for that picture.

For example, on a presentation graphics package, one picture could be defined in the Soundtrack Synchronization Editor for each of the images that would be played in a presentation. The Soundtrack Playback driver could then trigger different audio events on each picture to enhance the dramatic effect of the presentation.

The Soundtrack Playback driver does not limit itself to synchronizing with picture files and is not dedicated to any graphics package. It could, for instance, synchronize audio events to files that would be typed in from a batch file, or to text files opened by a word processor.

# Autodesk Animator Playback Utility

---

The Autodesk Animator Playback utility is a program that synchronizes Autodesk™ Animator .FLI files with Sync files created using the Soundtrack Synchronization Editor.

Where *fileName* is the name of the Sync file you want to use for your presentation.

The Autodesk Animator Playback utility uses five memory resident drivers that are necessary for the playback of music and sampled sounds. The executable files for these drivers are CTRLDRV.EXE, WAVEDRV.EXE, FMDRV.EXE, RL2DRV.EXE and TIMERDRV.EXE.

- ❑ For more information on drivers, see "Appendix D: Drivers / TSRs".

These drivers must be loaded into memory to allow playback of Sync files created with the Soundtrack Synchronization Editor. When you use the Soundtrack Synchronization Editor program, you do not have to load these drivers independently. The program has a batch file that automatically loads the drivers. If you have not previously used the editor, you can load the drivers independently by typing the following command at the DOS prompt, which loads all the necessary drivers:

```
drivers
```

Once the drivers are loaded, you can begin your animation playback by typing the following:

```
playanim fileName
```



# Batch File Utilities

---

## ROL2 Playback Utility

The ROL2 Playback utility is a small program that allows the user to play RL2 music files from the DOS command line or from a batch file.

The format of the command running the ROL2 Playback utility is the following:

```
playrl2 fileName [/q]
```

Where *fileName* is the name of the ROL2 music file (.RL2) to be played.

The optional "/q" parameter can be used to start the playback of the RL2 song file and immediately returns control to DOS. The playback of the song will be taken in charge by the memory-resident ROL2 Playback driver.

If you enter "playrl2" alone or with the option "/" ("playrl2 /?"), the program displays help lines giving summarized information on program parameters.

The ROL2 Playback utility uses the following five drivers, which have to be loaded before running it:

- Control driver (CTRLDRV.EXE)
- FM driver (FMDRV.EXE)
- Wave driver WAVEDRV.EXE

- Timer driver (TIMERDRV.EXE)
- ROL2 Playback driver (RL2DRV.EXE)

Drivers can be loaded by typing the following batch file command at the DOS prompt:

```
drivers
```

## Digitized Sound Playback Utility

The Digitized Sound Playback utility is a small program that allows to play back digitized sound files (recorded in the .SMP format) from the DOS command line or from a batch file.

The format of the command running the Digitized Sound Playback utility is the following:

```
playdigi fileName [/p] [/n]
```

Where *fileName* is the name of the digitized sound file (.SMP) to be played.

Where "p" in the option "/p", may be "c" (center), "r" (right), or "l" (left), indicating the stereo position you want for the playback of the digitized sound file.

Where "n" in the option "/n", may be a number from 0 to 100, indicating the volume you want for the playback of the digitized sound file.

## Batch File Utilities

---

### Digitized Sound Playback Utility

---

If you enter "playdigi" alone or with the option "/?" ("playdigi /?"), the program displays help lines giving summarized information on program parameters.

The Digitized Sound Playback utility uses the following two drivers, which have to be loaded before running it:

- Control driver (CTRLDRV.EXE)
- Wave driver (WAVEDRV.EXE)

# Appendix A: Troubleshooting

---

In this section, you will find solutions to problems you may encounter when installing and using the Ad Lib Gold Card. The following list of usual problems is addressed in detail afterwards.

## Usual Problems

1. The Setup program seems to indicate that the Gold card is properly installed but does not produce any sound.
2. When trying to save a sample created with the Voice Pad program, the computer locks up.
3. The serial mouse does not work properly with the Ad Lib card installed.
4. The FM synthesis, MIDI or sampling does not work.
5. When running software for the Gold card, the computer hangs.
6. The FM synthesis and the digital sampling work fine but the MIDI does not work.
7. The CD-ROM does not work.
8. The joystick does not work.
9. Hard disk or floppy disk does not work when the Gold card is present in the computer.
10. When recording with a microphone, the level is too low.
11. The sound quality is poor when recording from a CD player or other electronic audio device.
12. The computer does not boot.

**1. Problem:**

*The Setup program seems to indicate that the Gold card is properly installed but does not produce any sound.*

**What could be wrong:**

- The headphones, external speaker(s) or stereo system are incorrectly connected.
- The volume in the Mixer Panel is set too low.
- There is no musical program running.

**What to do:**

- Execute the Test program.
- Make sure that all connectors are securely inserted.
- Disconnect any external loudspeaker or stereo system and try the card with headphones.
- Open the Mixer Panel and make sure that the volume is set high enough.
- Check the Sub Mixer parameters: the FM and Sampling parameter settings should be at 100.
- Reset the computer.

**2. Problem:**

*When trying to save a sample created with the Voice Pad program, the computer locks up.*

**What could be wrong:**

- The controller card for the hard disk is using the same DMA channel as the Gold card.

**What to do:**

- Run the Setup program and change the setting of the DMA channel. (Be aware that DMA channel 3 is frequently used by the hard drive controller card.)

**3. Problem:**

*The serial mouse does not work properly with the Ad Lib card installed.*

**What could be wrong:**

- The serial mouse is using the same interrupt line as the Gold card.

**What to do:**

- To change the interrupt, run the Setup program and, being in the Main Selection menu, select "Configure the Card and Drivers". Note that COM 2, which is used quite often by a mouse or a modem, is frequently assigned to IRQ3, and COM1 to IRQ4.

**4. Problem:**

*The FM synthesis, MIDI or sampling does not work.*

**What could be wrong:**

- This problem could be caused by a parallel printer port which is using hardware interrupt 7. The Ad Lib Gold card can share this interrupt with the parallel printer in most cases. However, on some PC's the parallel port may prevent the Gold card from receiving this interrupt.

**What to do:**

- Run the Setup program and, being in the Main Selection menu, select "Configure the Card and Drivers", then change interrupts.

**5. Problem:**

*When running software for the Gold card, the computer hangs.*

**What could be wrong:**

- This could be caused by an interrupt or port address conflict with another board.

**What to do:**

- Remove the drivers for all the boards and reinstall them one by one, trying the application every time until the conflict occurs.

**6. Problem**

*The FM synthesis and the digital sampling work fine but the MIDI does not work.*

**What could be wrong:**

- The software does not support the MIDI interface.
- The Dual joystick selector jumpers are not set properly.
- The MIDI cables are not properly connected.
- The MIDI interface is not set to the proper port address or interrupt.

- The appropriate drivers are not loaded.

**What to do:**

- Make sure that the MIDI software does support the Gold card. If not certain, you should contact the manufacturer.
- Set the Dual joystick selector jumpers in the "single joystick with MIDI option" position. Refer to the section "Getting Installed: Installing the Hardware" for the complete procedure.
- The MIDI cables should not be inverted, the MIDI Out of the interface must go into the MIDI In of the device and vice versa.
- If the port address or interrupts must be changed run the Setup program and, being in the Main Selection menu, select "Configure the Card and Drivers".
- Make sure that the appropriate drivers are loaded for the MIDI application.

**7. Problem:**

*The CD-ROM drive does not work.*

**What could be wrong:**

- The cables are not properly connected.
- The appropriate drivers are not loaded.
- There is a DMA conflict.

**What to do:**

- Make sure that the cables are properly connected and that the SCSI drivers are loaded. Verify that the SCSI DMA channel is not being used by another peripheral. If no DMA channels are available, then you can address the SCSI port by interrupt. To select this option run the Setup program and, in the Main Selection menu, select "Configure the Card and Drivers".

**8. Problem:**

*The joystick does not work.*

**What could be wrong:**

- The jumpers on the Gold card are improperly set.

- This will also happen when trying to use a joystick with another game board, or trying to use the game port on the Ad Lib card with another game card installed.

**What to do:**

- Make sure the jumpers are not missing on the game port switch.
- If you want to use your former game port you must disable the game port on the Ad Lib card. Refer to the section "Installing the Hardware: Hardware Configuration Settings".
- Should you want to use the game port on the Gold card, then you should remove the conflicting game board or disable it if possible.

**9. Problem:**

*Hard disk or floppy disk does not work when the Gold card is present in the computer.*

**What could be wrong:**

- The hard disk or floppy disk is using the same DMA channel as the Gold card.

**What to do:**

- To change a DMA channel used by the Gold card run the Setup program and, being in the main Selection menu, select "Configure the Card and Drivers". If no DMA channels are available for the Gold card, you can choose a configuration that lets you use drive the Sampling and SCSI by interrupt.

**10. Problem:**

*When recording with a microphone, the level is too low.*

**What could be wrong:**

- The microphone is not properly connected or it is connected to the wrong connector on the card.
- The microphone input impedance of the Gold card is 1 K $\Omega$ . The microphone should have a maximum impedance of 1 K $\Omega$  if you do not want to lose too much input level due to an impedance mismatch.

\* *The **impedance** is the equivalent of the electrical resistance in a circuit. The impedance of the source should be smaller than the impedance of the input it is feeding, in order not to reduce the voltage involved, thus the output level.*

- The microphone Input level is too low.

#### **What to do:**

- Make sure that the microphone is correctly plugged into the microphone input on the card (No. 7 on Figures 1 and 2), and not the auxiliary input (No. 8) nor the audio output (No. 9).
- If possible, try another microphone.
- Go into the Mixer Panel and increase the Input level parameter.

#### **11. Problem:**

*The sound quality is poor when recording from a CD player or other electronic audio device.*

#### **What could be wrong:**

- The output of the audio device is plugged into the microphone input rather than the auxiliary input.
- The Input level in the Mixer Panel is set too high.

#### **What to do:**

- Make sure that the device is correctly plugged into the auxiliary input on the card (No. 8 on Figures 1 and 2), and not the

microphone input (No. 7) nor the audio output (No. 9).

- Go into the Mixer Panel and decrease the Input level parameter.

#### **12. Problem:**

*The computer does not boot.*

#### **What could be wrong:**

- The programmed configuration of the Control chip has been lost because of a configuration error or a program failure.

#### **What to do:**

- Reset the Control chip configuration by proceeding as follows:
  1. Shut down the computer.
  2. Remove the computer cover.
  3. Locate the Control chip reset jumper (refer to Figure 1 or 2, No. 13).
  4. Unplug the Control chip reset jumper from the two left pins and replug it onto the two right pins.
  5. Replace the computer cover (optional).

6. Turn on the computer and load the Control driver by typing `ctrldrv`. The program will not be loaded and will indicate "Card not found".
7. Then reset the Control chip configuration by typing `setup /R`.
8. Shut down the computer.
9. Remove the computer cover (if replaced), unplug the Control chip reset jumper from the two right pins and replug it on the two left pins.
10. Replace the computer cover.
11. Turn on the computer and load the Control driver by typing `ctrldrv`. The program will now be normally loaded in memory.
12. This procedure restores the Control chip default configuration, which is: no DMA, card address 388H, and IRQ 7-0. If you wish change this default configuration, run the Setup program by typing `setup`.

Each Ad Lib Gold card is systematically checked prior to shipping in order to ensure that it is free from technical problems. However, if you encounter a problem that you are not able to solve after following the directions in this guide, do not hesitate to call our technical support department. Our technical support number is: 418-529-6252. You will need the following information on hand when you call:

- the serial number located on the back of your Ad Lib Gold card;
- this manual.



# Appendix B: List of Installed Files

---

The Ad Lib Gold Software included with the program disks contains, when decompressed and installed, several files related to the utilization of the Gold card: drivers, application programs, music, sounds, and other various files. These files are:

- **README.TXT**  
This file is not compressed on the program disk. It contains information on the latest program updates, if there are any, and any other pertinent information.
- **CTRLDRV.EXE**  
This file is not compressed on the program disk. It contains the Ad Lib Gold Control chip driver. This low level driver is used by other programs, such as the Setup program, to implement: DMA channel & interrupt number select; sampling source select; sampling gain and input filter; microphone input gain; sampling output filtering and volume & tone control; mixing control; card localization setup and ID code reading; saving registers in non volatile memory.
- **SETUPGLD.EXE**  
This file is not compressed on the program disk. It contains the Setup program. This program enables you to install the drivers and all associated programs, to configure your Ad Lib Gold card and to change the hot keys used by Mixer Panel and ROL2 Playback TSRs.

- **SETUP.BAT**  
This file is not compressed on the diskette. It contains the DOS command sequence which loads the necessary drivers and calls the Setup Program.

## Drivers and TSRs

- **FMDRV.EXE**  
This file contains the FM driver. This low level driver implements: preset change; note on; note off; pitch bend; volume and stereo positioning.
- **WAVEDRV.EXE**  
This file contains the Wave driver. This low level driver implements: recording and playback of samples by DMA and interrupt.
- **TIMERDRV.EXE**  
This file contains the Timer driver. This low level driver implements: the five timers of the Yamaha Magic Chip Set.
- **MIDIDRV.EXE**  
This file contains the MIDI driver. This low level driver implements: MIDI In and Out serial port control.

## Appendix B

### List of Installed Files

---

- **RL2DRV.EXE**  
This file contains the ROL2 Playback driver. This low level TSR driver implements: playback of the .RL2 music files and user control commands.
- **MIXER.EXE**  
This file contains the Mixer Panel TSR. This memory resident application allows for the control of the programmable volume and tone control, mixer settings, and surround features.
- **ALARMDRV.EXE**  
This file contains the Alarm driver. This low level driver implements: playback of Voice Pad alarms.
- **SYNCDRV.EXE**  
This file contains the Soundtrack Playback driver. This low level driver implements: playback of Soundtrack Synchronization Editor Sync files (.SNC).
- **SOUND.COM**  
This file is the sound driver for the original Ad Lib Music Synthesizer Card. This program might be necessary in some cases for running programs compatible with the original Ad Lib card.

### Application Programs (Executables)

- **TESTGOLD.EXE**  
This file contains the Ad Lib Gold Test Program. This program enables you to verify that the Gold card is functioning properly in all of its different components.
- **JUKEG.EXE**  
This file contains the executable code of Juke Box Gold.
- **VPAD.EXE**  
This file contains the executable code of Voice Pad.
- **SNDTRACK.EXE**  
This file contains the executable code of Soundtrack Synchronization Editor.
- **ANIMGLD.EXE**  
This file contains the executable code of Autodesk Animator Playback utility.
- **PLAYRL2.EXE**  
This file contains the executable code of ROL2 Playback utility.
- **PLAYDIGI.EXE**  
This file contains the executable code of Digitized Sound Playback utility.

**Batch Files**

- **TEST.BAT**  
This file contains the DOS command sequence which loads the necessary drivers and calls the Test Program.
- **JUKEGOLD.BAT**  
This file contains the DOS command sequence which loads the necessary drivers and calls the Juke Box Gold Music Playback Program.
- **VOICEPAD.BAT**  
This file contains the DOS command sequence which loads the necessary drivers and calls the Voice Pad Record and Playback Program.
- **STRACKED.BAT**  
This file contains the DOS command sequence which loads the necessary drivers and calls the Soundtrack Synchronization Editor.
- **STRKDRV.BAT**  
This file contains the DOS command sequence which loads the necessary drivers and calls the Soundtrack Playback driver.

- **PLAYANIM.BAT**  
This file contains the DOS command sequence which loads the necessary drivers and calls the Autodesk Animator Playback utility.
- **DRIVERS.BAT**  
This file contains the DOS command sequence which loads all drivers necessary to run Ad Lib Gold programs.

**Other Files**

- **\*.RL2**  
The ".RL2" files contain the pieces of music that will be played with the Juke Box Gold.
- **\*.SMP**  
The ".SMP" files contain the PCM digitized sounds. TESTGLD1.SMP is the sound file that will be used by the Test program.
- **SAMPLES.BNK**  
This file contains the ADPCM digitized instrument sounds.
- **SAMPLBNK.EQU**  
This file contains a translation table of digitized instrument sound names, which is used by the ROL2 Playback driver.

## Appendix B

---

### List of Installed Files

---

- **FMSOUND.BNK**  
This file contains the FM synthesized instrument sounds compatible with the OPL3 FM synthesis chip.

### Files Created by Programs

- **\*.PAD**  
A ".PAD" file is created for each voice note you save in the Voice Pad program to store the digitized recording.
- **DIRVOICE.PAD**  
This is a bank file created the first time you save a voice note in the Voice Pad program to store information about the voice notes.
- **JUKEBOX.DAT**  
This file is created the first time you make a selection of songs in the Juke Box Gold program, permitting not to lose your selection even after rebooting the computer.
- **\*.SNC**  
A ".SNC" file is created for each Sync file you save in the Soundtrack Synchronization Editor program. SYNCDEMO.SNC is an example of a Sync file created with this program.

# Appendix C: Error Messages

---

---

## Setup Program

---

"An error has occurred while modifying the file."

The Setup program was unable to complete the modification of the AUTOEXEC.BAT or CONFIG.SYS files.

- See "Software Installation and Configuration".

## Test Program

---

"Error loading sample."

Test program was able to open the sample but found that the contents have been corrupted. Using the Setup program, reinstall the TESTGLD1.SMP file from your original diskette.

"Error playing sample."

Test program is unable to play the sample. The memory may be full. Check the configuration of the card.

"Error recording sample."

Test program is unable to record the sample. The memory may be full. Check the configuration of the card.

"Problem with TIMER 1 on the FM chip"

"Problem with TIMER 2 on the FM chip"

"Problem with TIMER 1 and 2 in concurrent mode on the FM chip"

"Problem with TIMER 0 on the MMA chip"

"Problem with TIMER 1 on the MMA chip"

"Problem with TIMER 2 on the MMA chip"

"Problem with TIMER 0, 1 and 2 in concurrent mode on the MMA chip"

All these messages state that the Test program detected a Timer problem. First check the configuration of the card. If the problem persists, reboot the computer, reload the Test program and try again.

## Juke Box Gold Program

---

As the error messages are the same as for the ROL2 Playback driver, see this section below.

**Voice Pad Program**

---

"There is no DIRVOICE.PAD file. This file is created after the first recording. No alarm will be played."

This message appears at the loading when the program does not find the DIRVOICE.PAD file, which is a collection of voice notes. If you want voice note alarms be played, the DIRVOICE.PAD bank file must be in the same directory as the Voice Pad program. If there is no DIRVOICE.PAD file present, the first time you save a voice note, the program will automatically create the DIRVOICE.PAD file to store your voice note.

**"File handling error"**

The Voice Pad program cannot handle the file because its format is not compatible with the version you are using.

**"Out of memory"**

Voice Pad cannot function because the memory space (RAM) is insufficient. The space required by the program is greater than the space available.

**"Wave driver error"**

The Voice Pad program cannot function because the Wave driver does not respond.

**"Error when opening"**

The program cannot load the file, because a reading error occurred.

**"Disk error"**

An error occurred while writing or reading the file on the disk. Simply trying again will be sufficient in many cases to make the same operation work normally. If the problem persists and the same message keeps appearing, refer to your DOS manual for more details on possible solutions.

**"A problem occurred with the alarm manager. No alarm will be played."**

The Voice Pad alarm manager cannot function because Alarm driver (ALARMDRV.EXE) is not loaded in memory or does not respond.

**"Unable to save. The disk you are saving to is probably full."**

There is not enough space on the disk to save the file. Clean up your disk by deleting all unnecessary files and try again.

"Error in date alarm. The voice note is not saved. Use this format: yy/mm/dd."

The program cannot store the voice note because the date alarm specified does not correspond to the required format. Correct the date alarm format as requested before saving the file.

"Error in time alarm. The voice note is not saved. Use this format: hh:mm."

The program cannot store the voice note because the time alarm specified does not correspond to the required format. Correct the time alarm format as requested before saving the file.

"Error in snooze alarm. The voice note is not saved. Use this format: mm."

The program cannot store the voice note because the snooze specified does not correspond to the required format. Correct the snooze format as requested before saving the file.

"There is nothing to save."

The program does not save the opened file because there have been no changes or modifications entered since the last save, or because it is an empty file.

"Last voice note was not saved. Do you really want to exit?"

The program warns you that there were changes or modifications entered since the last save and asks if you want to save them before exiting.

### **Soundtrack Synchronization Editor**

"Picture name already exists."

This message appears when you type in the Add Picture... dialog box a picture name that is already included in the picture list. The program cannot make a Sync file that refers to the same picture twice in the picture list.

"Memory full."

Soundtrack Synchronization Editor cannot function because the memory space (RAM) is insufficient. The space required by the program is greater than the space available.

### **ROL2 Playback Driver**

"Program already installed."

The ROL2 Playback driver will not be installed because it has been previously installed in memory, probably within a program batch file.

## Appendix C

### Error Messages

---

"No more user interrupts available."

The ROL2 Playback driver will not function because there are no software interrupts available, they are being used by other programs.

"Cannot remove as driver not previously installed."

The ROL2 Playback driver will not be removed because it was not installed in memory.

"Unable to remove as other software has been loaded after this one."

The ROL2 Playback driver will not be removed because there are one or more drivers/TSRs that have been installed after it. In the list of drivers/TSRs installed, only the last one can be removed.

"Missing driver(s) or SAMPLES.BNK"

The ROL2 Playback driver cannot be loaded because an underlying driver necessary to its functioning cannot be found in memory.

OR

The ROL2 Playback driver cannot be loaded because the SAMPLES.BNK file cannot be found in the same directory or the directories specified by the GOLDPATH environment variable.

### Other Drivers

---

"xxx already installed."

The driver *xxx* will not be installed because it has been previously installed in memory, probably within a program batch file.

"Gold Card not found."

Driver cannot identify the Gold card. Reset the configuration by typing: `setup /R`.

"Control Driver not found (CTRLDRV.EXE)."

The driver, called separately or by a program batch file, cannot be loaded because the file cannot be found in memory. Type `ctrldrv` and try again.

"Unable to link with Control Driver (CTRLDRV.EXE)."

A program cannot function because the driver does not respond. Reboot the computer and try again.

"Timer Driver not found (TIMERDRV.EXE)."

The driver, called separately or by a program batch file, cannot be loaded because the file cannot be found in memory. Type `timerdrv` and try again.

"Unable to link with Timer Driver  
(TIMERDRV.EXE) ."

A program cannot function because the driver does not respond. Reboot the computer and try again.

"MIDI Driver not found  
(MIDIDRV.EXE) ."

The driver, called separately or by a program batch file, cannot be loaded because the file cannot be found in memory. Type `mididrv` and try again.

"Unable to link with MIDI Driver  
(MIDIDRV.EXE) ."

A program cannot function because the driver does not respond. Reboot the computer and try again.

"FM Driver not found  
(FMDRV.EXE) ."

The driver, called separately or by a program batch file, cannot be loaded because the file cannot be found in memory. Type `fmdrv` and try again.

"Unable to link with FM Driver  
(FMDRV.EXE) ."

A program cannot function because the driver does not respond. Reboot the computer and try again.

"Wave Driver not found  
(WAVEDRV.EXE) ."

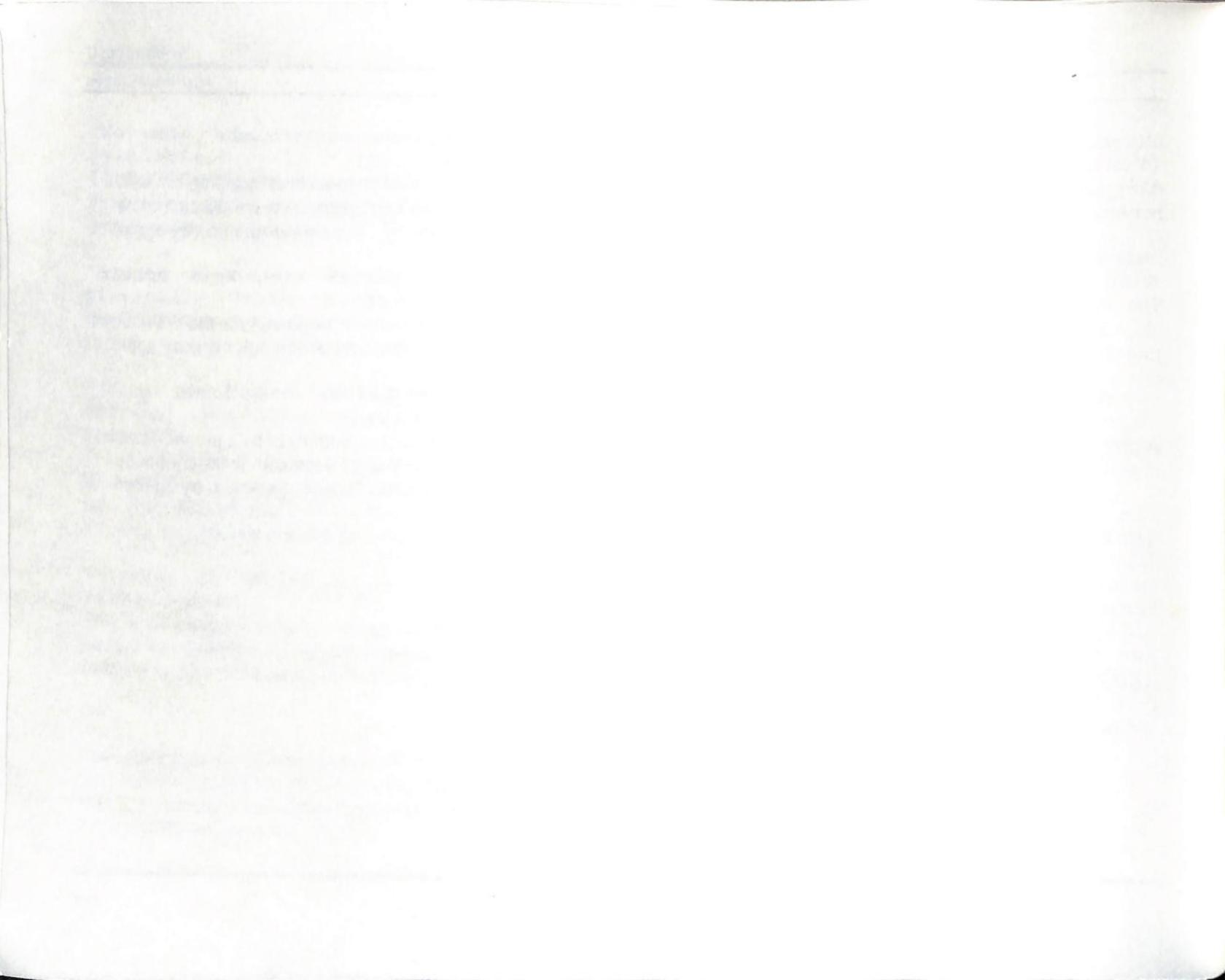
The driver, called separately or by a program batch file, cannot be loaded because the file cannot be found in memory. Type `wavedrv` and try again.

"Unable to link with Wave Driver  
(WAVEDRV.EXE) ."

A program cannot function because the driver does not respond. Reboot the computer and try again.

"Playback Driver not found  
(RL2DRV.EXE) ."

The driver, called separately or by a program batch file, cannot be loaded because the file cannot be found in memory. Type `rl2drv` and try again.



# Appendix D: Drivers / TSRs

---

Ad Lib Gold applications, like Juke Box, Voice Pad, as well as third party applications, use memory resident programs as resources. These programs are referred to as drivers or TSRs (Terminate and Stay Resident).

We usually refer to memory resident programs as drivers when they work in the background as low-end resources for other programs (i.e. without a user interface). Although any memory resident program may also be called a TSR program, we usually keep this generic name for programs designed to be controlled by the end user, whether using specific key stroke combinations, as with the ROL2 Playback utility (PLAYRL2.EXE), or through a pop-up window, as in the Ad Lib Gold Mixer Panel (MIXER.EXE).

TSRs and drivers are loaded in memory much like a standard executable program: whether their name is typed in or appears in a batch file. Once loaded the TSRs and drivers remain in memory, ready to offer services to the end user or to the application that requires them. Being independent from the applications, TSR and drivers are a simple method of providing hardware independence to applications and to ease software upgrades.

When loaded, a TSR or a driver usually prints its name and version number to the screen. If a driver has already been loaded once, it will indicate that it is already present in memory, and will not load a

second time.

A message indicating that the TSR or the driver is already loaded is a normal message, and should be no cause for alarm.

While most TSRs are simply low-end resources working in the background without any user interface, they can also be designed to be controlled with specific key stroke combination, like the ROL2 Playback utility (PLAYRL2.EXE), or through a pop-up window like the Ad Lib Gold Mixer Panel (MIXER.EXE).

The drivers supplied with the Ad Lib Gold card are the following:

## **CTRLDRV . EXE**

Control Driver: Offers services related to the basic configuration of the Gold Card, and to the Gold card mixer.

It also acts as the manager of all other Ad Lib Gold drivers in memory. For this reason, the Control Driver should always be the first driver to be loaded in memory, as is the case in the provided batch files.

## **FMDRV . EXE**

FM Driver: Provides applications with services related to the generation of FM sounds on the Gold card.

#### **WAVEDRV.EXE**

Wave Driver: Provides applications with services that allow the recording and playback of digitized sounds.

#### **TIMERDRV.EXE**

Timer Driver: Gives access to the high-resolution hardware timers available on the Gold card. These timers may be used, for example, by games and music sequencing programs.

#### **MIDIDRV.EXE**

MIDI Driver: Can be used by applications to read and write data to and from the MIDI port.

#### **ALARMDRV.EXE**

Alarm Driver: Used to play back alarms of voice notes created by the Voice Pad program.

#### **RL2DRV.EXE**

ROL2 Playback Driver: Is used by applications to control the playback of Ad Lib music files (.RL2 files). It is a powerful utility that uses the services of the other underlying drivers to simplify the task of integrating music and digitized sound to applications. It is used, for example, by the Ad Lib Juke Box Gold program. (See below for the options supported with this driver.)

#### **SYNCDRV.EXE**

The Soundtrack Playback driver is used to synchronize files loaded by a third-party application with audio events, according to the information contained in the Soundtrack Synchronization Editor Sync files (.SNC).

Applications can use one or more of these drivers. To make sure that the drivers are properly loaded when calling an application, each application is provided with a batch file that loads the appropriate drivers.

The following batch file command loads all drivers necessary to run Ad Lib Gold programs:

```
drivers
```

### ROL2 Playback Driver Options

You normally do not have to load the ROL2 Playback driver independently to run Juke Box Gold. The application has a batch file that automatically loads the RL2DRV.EXE file. But if it is necessary for some reason, the driver can be loaded and removed by typing the following commands and options at the DOS prompt:

```
r12drv
```

Loads the ROL2 Playback driver into the computer's memory (RAM).

**r12drv /r**

This option removes the ROL2 Playback driver from the computer's memory when it is installed but you do not wish to use it. Once this command is entered, the program will display a message indicating that the ROL2 Playback driver has been removed and is no longer loaded.

**r12drv /vn**

This option disables the specified sampling voice "n", which can be "1" or "2". Use two options consecutively, "/v1 /v2", to disable the two sampling voices.

The playback of sampled voices consumes a lot of computer resources. On slower PCs, or when the ROL2 Playback driver is used in conjunction with more demanding applications, this option can be used to insure a proper functioning of all parts involved.

**r12drv /spath**

This option specifies to the driver where it can find the data files used for song files. You can specify a path if the data files are not in the current directory and are not in the directories specified by the GOLDPATH environment variable.

1870

1871

1872

1873

1874

1875

1876

1877

1878

# Appendix E: Connecting Internal PC Speaker

---

**!** **WARNING:** *Do not attempt to connect the PC internal speaker to the Gold card yourself, unless you are sure you have the appropriate technical capabilities. If you are not sure of your capabilities, you may damage your computer or your Gold card. Ad Lib Inc. and its distributors will not be liable for such damages.*

The Ad Lib Gold card has an internal PC speaker connector. You can use it to connect the signal of the PC's internal speaker directly to the Ad Lib Gold card so that it is mixed with the other audio signals on the card and can be heard through the headphones or speakers. We strongly recommend that you ask an experienced technician to connect the PC internal speaker for you.

The procedure consists of the following steps:

1. Remove the computer cover, following the steps stated in the "Getting Installed: Installing the Hardware" section.
2. Unplug the cable connected to the internal PC speaker.
3. Consulting your motherboard user's manual, identify the GND (ground) and speaker drive out pins on the motherboard.
4. Locate the PC speaker connector ("Molex" type) on the Ad Lib Gold card (refer to No. 3 on Figures 1 and 2). Then identify the GND pin, which is the No. 2 (the left one), and the speaker drive out pin, which is the No.1 (the right one).
5. Connect a wire (not supplied with the Gold card) from the motherboard GND pin to the left pin of the PC speaker connector on the Gold card.
6. Connect another wire from the motherboard speaker drive out pin to the right pin of the PC speaker connector on the Gold card.
7. Replace the computer cover, and reconnect the power cord and other cables.



# Appendix F: Technical Specifications

---

This section is a general reference guide that details the capabilities of the Ad Lib Gold card and the parameter values of its different components.

## FM Synthesis

---

FM Synthesizer Chip	YMF262
Number of FM Voices When Used in Mono	20
Number of FM Voices When Used in Stereo	20
Two Operator FM Synthesis	√
Four Operator FM Synthesis	√
Number of FM Waveforms	8
Wait Time Between Chip Writes	0.28 μs
FM DAC	16 bits
FM Dynamic Range	96 dB

## Sampling

---

Sampling Chip	YMZ263
Sampling DAC (Sampling Resolution)	12 bits
Sampling Dynamic Range	72 dB
PCM Data Accepted	16, 12 and 8 bits
Sampling Record and Playback Channels	2

Sampling Rates (Stereo & Mono)	44.1 KHz
	22.05 KHz
	11.025 KHz
	7.35 KHz
	5.5125 KHz

Digitized Sound Data Format	PCM & ADPCM
Hardware Compression/Decompression	3 to 1
Simultaneous Use of two DMA Channels	√
Sampling FIFO Buffer	2 x 128 Bytes
Programmable Interrupts	√
Interrupt Conditions	8 choices
Variable Antialiasing Filter	√
Double Oversampling Digital Filters	√
Double Undersampling Digital Filters	√

## Mixer

---

On-Board Analog Stereo Mixer	8 entries
Accepts CD-Audio (RedBook) Input	√
Volume Control on Each Source	42 dB
	128 steps
Stereo Output Power Amplifier	1.2 Watt RMS in 8Ω
Output Volume Range	80 dB
	2 dB steps

## Appendix F

### Technical Specifications

---

Bass and Treble Range	±12 dB
Programmable Gain for Audio Input	√
Input Impedance	1 KΩ
Input Sensitivity	1–100 mV

### Interfaces

---

MIDI Interface Ports	In, Out & Thru
Simultaneous MIDI In & Out	√
MIDI FIFO Buffer	16 byte
Joystick Port	√
SCSI CD-ROM Interface (Gold 2000)	1.5 MBytes/sec
Individual Timers	5

### Programmable Parameters

---

Programmable Output Volume Control	√
Programmable Output Treble Control	√
Programmable Output Bass Control	√
Programmable Gain for Mike & Aux. Input	√
Programmable Card Localisation	128
Programmable DMA Channel Selection	√
Programmable Interrupt Selection	√

Programmable On-Board Chip Select	√
-----------------------------------	---

### Registers

---

ID Code Available	√
Directly Accessible Control Registers	√
Readable Control Registers	√
Registers Stored in Non-volatile Memory	√
Non-volatile Memory (EEPROM)	256 bit

### Option Connectors

---

Connectors for Surround Sound Option	√
Connector for Telephone Option	√
Connector for PC Speaker	√
Connector for Internal Stereo Aux. Input	√
Connector for SCSI (Model 2000)	√
Connector for SCSI Option (Model 1000)	√

## A

Alarm 47  
    Alarm driver 50  
    daily alarm 47  
    date alarm 47  
    snooze 48  
ALARMDRV.EXE 76, 86  
ANIMGLD.EXE 76  
Audio output 16, 26  
Autodesk Animator Playback  
utility 63  
AUTOEXEC.BAT 30, 50  
Auxiliary input 16, 26, 27  
Auxiliary volume 36

## B

Balance 35  
Bass 35, 41  
Batch File Utilities 65  
Bracket connectors 16

## C

Connectors 17  
CTRLDRV.EXE 75, 85  
Cue 52, 61

## D

Digitized Sound Playback utility 65

DIRVOICE.PAD 78  
DMA channels 22, 68  
Drivers / TSRs 85  
DRIVERS.BAT 77

## E

Environment variables 30  
Error messages 79  
    Juke Box Gold program 79  
    ROL2 Playback driver 81  
    Setup program 79  
    Soundtrack Synchronization  
    Editor 81  
    Test program 79  
    Voice Pad program 80

## F

FM volume 36  
FMDRV.EXE 75, 85  
FMSOUND.BNK 78  
Frame mode 59

## G

Game Port/MIDI connector 16  
GOLD environment variable 30  
GOLDPATH environment variable  
30

## H

Hot Keys  
    enable/disable Surround 38  
    pause and resume 42  
    play songs 42  
    scan songs 42  
    set master volume 38  
    stop playback 42

## I

Input level 35  
Internal PC speaker  
    connecting 89  
Interrupt lines 22, 68

## J

Juke Box Gold 39  
JUKEBOX.DAT 78  
JUKEG.EXE 76  
JUKEGOLD.BAT 77  
Jumpers 20  
    Control chip reset jumper 21  
    dual joystick selector  
    jumpers 20, 24  
    game port enable jumper 20,  
    24  
    port address jumper 21, 24

## M

Messages

See Error messages

Microphone gain 45

Microphone input 16, 26

Microphone volume 36

MIDI/Game port 27

MIDIDRV.EXE 75, 86

Mixer Panel TSR 33

MIXER.EXE 33, 76

## O

Output mode 35, 41

## P

PAD files 78

PC speaker

See Internal PC speaker

PLAYANIM.BAT 77

PLAYDIGI.EXE 76

PLAYRL2.EXE 76

## Q

Quick Start 11

## R

README.TXT 11, 75

RL2 files 77

RL2DRV.EXE 76, 86

ROL2 Playback driver  
command line options 86

ROL2 Playback TSR 42

ROL2 Playback utility 65

## S

SAMPLBNK.EQU 77

SAMPLES.BNK 77

Sampling volume 36

Setup program 28, 68, 69

SETUP.BAT 75

SETUPGLD.EXE 75

SMP files 77

SNC files 78

SNDTRACK.EXE 76

SOUND.COM 76

Soundtrack Playback driver 61

Soundtrack Synchronization Editor  
51

STRACKED.BAT 77

STRKDRV.BAT 77

Surround features 35, 37

choosing effect 38

enabling and disabling 37

setting level 37

Sync files 52, 63

SYNCDemo.SNC 78

SYNCDRV.EXE 76, 86

## T

Technical specifications 91

Telephone volume 37

Test program 31

TEST.BAT 77

TESTGLD1.SMP 77

TESTGOLD.EXE 76

Time mode 59

TIMERDRV.EXE 75, 86

Treble 35, 41

Troubleshooting 67

## V

Voice note 44, 45, 46

daily 48

date 49

display options 49

standard 48

Voice Pad program 43

VOICEPAD.BAT 77

Volume 35, 41

VPAD.EXE 76

## W

WAVEDRV.EXE 75, 86



AdLib®

Ad Lib Inc.  
220 Grande-Allée East, Suite 850  
Québec, Qc, Canada G1R 2J1

Ad Lib Inc.  
50 Staniford Street, Suite 800  
Boston MA 02114