Ad Lib Gold Mixer and Windows Drivers

Version 1.01
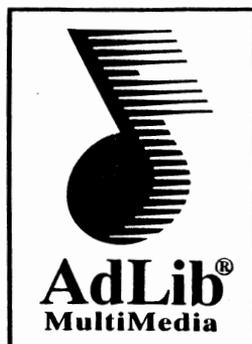
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MultiMedia

This document will instruct you on how to install the Ad Lib Gold Mixer and drivers for Windows 3.1 (found on the diskette entitled "Windows 3.1 Mixer and Drivers").

Contents of the diskette

Ad Lib Gold Windows Drivers, version 1.01

There are 2 separate Ad Lib Gold Windows Drivers. Each of the driver covers separate aspects of the Ad Lib Gold multimedia capabilities.

The first driver, called the Yamaha GSS Midi Synth, is used by Windows to play back MIDI data using the internal synthesizer of the Ad Lib Gold Card (which uses an FM synthesizer). Once loaded, this driver will install a special configuration applet in the Control Panel.

The second driver, called the Yamaha GSS Wave/Midi/Aux driver, covers all other multime dia capabilities of the Gold Card. The Wave section enables digitized sound playback under Windows for all applications that use wave files (such as the Sound Recorder, StudioSonic 8 or the System Sounds). The MIDI section is used to play back and record MIDI data through the Ad Lib Gold MIDI Port. Finally, the AUX section of the driver provides the applications with a mechanism to dynamically control the various mixer controls (volume, bass, treble) of the Gold Card.

Ad Lib Gold Mixer for Windows

You can use this application to control the Ad Lib Gold card's programmable mixer.

Configuration file for Windows MIDI Mapper

This configuration file can be used to replace your current MIDI mapper configuration with setups that make optimal use of the Gold Card's capabilities.

Configuring the Gold Card

In order for the drivers to function properly, an interrupt and at least one DMA channel must have been allocated to the Gold card. To allocate an interrupt and DMA channel, use the Gold Setup program, supplied on the Gold program disks, under DOS.

You should take note of the interrupt line (IRQ) and DMA channel that you've selected. This information will be needed when installing the Yamaha GSS Wave/Midi/Aux driver.

Installing the drivers

To install the drivers, you will need to activate the "Drivers" applet found in the "Control Panel" (you'll find this last one in the "Main" program group).

This is where you will add the new Ad Lib Gold Windows Drivers:

Click on the "Add..." button. You will be shown a list of the available drivers that can be added to Windows. From this list, click on "Unlisted or Updated Driver". A new dialog box will appear asking you to specify the location of the new driver. Once you have answered this question you will be given a choice of the two drivers to install: the Yamaha GSS Midi Synth and the Yamaha GSS Wave/Midi/Aux. You should install both of these drivers in sequence, first installing the Yamaha GSS Midi Synth, and then the Yamaha GSS Wave/Midi/Aux.

When you will select the Yamaha GSS Midi Synth driver, this driver will be installed in Windows. This driver doesn't require any more installation than that. Windows will prompt you with "Don't Restart Now" or "Restart Now." If you haven't yet installed the Yamaha GSS Wave/Midi/Aux driver you should choose to postpone the restarting of Windows until you've installed both drivers. Otherwise select "Restart Now."

Configuring the Yamaha GSS Wave/Midi/Aux driver according to your current Gold Card configuration

The specified address should be "38C." Even if the Gold card's address is "388" the correct address setting for the driver under Windows is "38C" (address should always be Gold card base address + 4 in hexadecimal).

The DMA Buffer size (Memory allocated to the driver) should be set to the maximum available value.

The interrupt line and DMA channel should correspond to those you've allocated to the Gold Card using the Gold Setup program.

Windows will prompt you with "Don't Restart Now" or "Restart Now." If you haven't yet installed the Yamaha GSS Midi Synth driver you may as well choose to postpone the restarting of Windows until you've installed both drivers. Otherwise select "Restart Now."

Restarting Windows

In order for the changes to take effect, Windows must be restarted.

Reconfigure the MIDI Mapper

The MIDI Mapper applet from the control panel contains standard configurations that maximize the use of your existing hardware.

A complete set of configurations for the Ad Lib Gold Card has been supplied in the MIDIMAP.CFG file. This file can be used to replace your existing MIDIMAP.CFG file in the "..\WINDOWS\SYSTEM" directory. If you wish to use this configuration, just copy the supplied MIDIMAP.CFG file in this directory.

Installing the Ad Lib Gold Mixer for Windows

Copy the Mixer program (MIXERGLD.EXE) to the "...\WINDOWS" directory.

Now, in Windows, create a new program item in the Program Manager's "Accessories" program group:

Open the "Accessories" program group. Now select the "New..." option in the "File" menu heading. "Program Item" should be highlighted so that you simply have to click on "OK."

You will be prompted to fill in 4 fields: Description:, Command Line:, Working Directory:, and Short Cut Key:. The suggested "Description:" is "Gold Mixer." For the "Command Line:" you should type in "MIXERGLD.EXE" (specifying its path is optional). The last two fields don't require any entry so you can simply click on "OK" and a new icon will appear in your "Accessories" program group.

This completes the installation of the Ad Lib Gold Windows drivers and mixer.

Changes to your SYSTEM.INI file

A new virtual devices driver has been added to the "386Enh" section

You should find the line "device = vgss.386" in this section.

The "drivers" section of the SYSTEM.INI file has been altered.

A new section, [GSS.DRV] has been added to the SYSTEM.INI file.

This section reflects the configuration of the Yamaha GSS Wave/Midi/Aux driver.

A new section, [GSSOPL3.DRV] has been added to the SYSTEM.INI file.

This section reflects the configuration of the Yamaha GSS Midi Synth driver.

The Gold Card must use at least 1 DMA channel.

In order for the drivers to function correctly, at least one DMA channel must have been allocated to the Gold Card, and that DMA channel must have been specified in the drivers configuration.

To access the driver configuration, use the "Setup..." button in the Control Panel "Drivers" applet.

To allocate a DMA channel to the Gold Card, use the Setup program, supplied in the program disks, under DOS.

The Drivers Configuration must reflect the Hardware Configuration

If the digitized sound playback does not occur or "loops", it may indicate that the driver configuration do not reflect the actual hardware configuration, in terms of DMA channel allocation or interrupt line (IRQ) selection. It could also indicate that your choice of interrupt conflicts with some other peripheral in the system.

To access the driver configuration, use the "Setup..." button in the Control Panel "Drivers" applet.

To allocate a DMA channel to the Gold Card or alter interrupt line selection, use the Setup program, supplied in the program disks, under DOS.

Running DOS applications under Windows

If a DOS application uses the the ressources of the Ad Lib card, the Windows drivers are allocated exclusively to that DOS application for the duration of the DOS application. Therefore, you will not be able to share those ressources between simultaneously opened Windows and DOS applications.