## **Mod4Win Help Index**

 $\label{eq:welcome} Welcome \ to \ the \ help \ for \ Mod4Win \ - \ the \ first \ HIGH-QUALITY \ MOD-Player \ for \\ IBM-compatible \ PCs \ running \ Microsoft @Windows^{TM}.$ 

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### **Features**

**Mod4Win** is a player for Commodore AMIGA SoundTracker and NoiseTracker Files on IBM-PC compatible machines under Microsoft Windows<sup>TM</sup>

- It supports:
  - \* sample rates between 11 and 48 kHz
  - \* 8 and 16 bit sample depth
  - \* Mono and Stereo
- Jukebox function for up to 999 MOD-Files in one session!
  - \* generates **playlists** (with files from up to 100 directories!)
- **Drag & Drop** feature of one or more files and of playlists.
- Launching of a file or playlist from a **command line** parameter.
- The program **remembers** several **settings**, for instance
  - \* window positions
  - \* actual and last play directory
  - \* hardware settings
- **Hotkeys** for all player functions

Drag and Drop is a feature of Windows<sup>TM</sup> 3.1 (and newer versions) and means, that you can drag a file out of the file manager or another desktop manager and drop it onto an application (by grabbing the file with the left mouse button in your file manager, dragging it over to the appropriate application, and releasing the left mouse button). It's then up to the application to process the file(s).

## **System requirements**

- A **sound card** with at least one DAC, that can process 11 kHz-Sampling and an appropriate asynchronous **wave driver** (**speaker.drv** won't run).
- AT 286 with 4 MB RAM minimum
- AT 386/33 for playing with the highest sample rate.
- AT 486/33 with 8 MB RAM to use Mod4Win as a background jukebox with 44 kHz and 16 bit stereo sampling.

When you sample with 48 kHz 16 bit stereo, and at the same time run an application that requires a vehement video output and intense interaction with your hard drive, the expansion bus of your machine has a heavy load to carry.

If you have a standard ISA-bus, this might easily strain your system (bus) capacity. With an advanced bus design, such as EISA, MCA, or VESA local bus, you don't have to worry about overloading the bus.

One way to overcome the bottleneck of a standard ISA-bus is to increase the clock rate of the bus.

### !! Caution !!

Some peripherals won't work properly at a clock rate higher than the 8 MHz that the ISA-bus standard suggests. In this case severe damage to some hardware components might occur. We don't assume any responsibility for damages resulting from changing your system's bus clock rate. Many machines however run at a higher clock rate of up to 12-16 MHz without problems.

If you have only 4 MB RAM then it is not very recommendable to work with sample rates higher than 32 kHz, and/or 16 bit, and/or stereo, because the buffer needs about 128 to 192 KB of your main memory for every second of sample data. Moreover the MOD-File requires some space (up to 2 MB, but normally about 100-300 KB), and after all, Windows<sup>TM</sup> itself and the other applications need memory too. Then your total memory can fill up very quickly.

To listen to a <u>MOD</u>-File from your Windows<sup>TM</sup> swap file in such a situation isn't exactly the excitement you were looking for.

Advice: For a machine with limited memory resources we recommend 32 kHz/8 bit stereo/40 buffers.

## **Authors**

Mod4Win was written and designed by **Kay Bruns** and **Uwe Zänker**. The English version of Mod4Win and the Help file was translated and adopted by **Jens Puchert**.

This program was thoroughly \( \beta\)-tested. However, if you discover any malfunctions or bugs (you never know), feel free to write your comments to:

JSInc. Jens Puchert 1037 Madison St Syracuse, NY 13210-2015

You can also reach me by phone or FAX on (315) 423-4775 or through e-mail to jpuchert@rodan.syr.edu.

**PS:** Please, constructive contributions only. All others are to be marked as junk mail, or even better, save yourself the trouble and send it to NIL (or for C-freaks to NULL).

## **Further projects**

If the months of development work for Mod4Win **pay off**, we plan the following projects for the near future:

Some day when most people will have an i486/DX50 or better, we will provide **digital software filters** for this and other programs. Actually we planned on solving the problem with the harmonics (<u>Harmonics?</u>) with this version of Mod4Win, but the still pretty common 386/40 (some folks even run Windows<sup>TM</sup> on a 386/SX16) just doesn't have the power to do that. With these filters, harmonics, tinkling and other distortions will be a matter of the past. But until then there's still some way to go...

Before that we're planning to develop a **semi professional PC sound studio** on sample basis. With that you'll have the tools to edit <u>MOD</u>-Files and a new type of music files. It will provide 16 channels, 16 bit, real stereo, professional mixer, sampler, sequencer, and MIDI-support.

We also plan for a **Mod-Player for the OPL-4** (voice synthesizer) chip from Yamaha. Then it will be possible to realize 16 bit sampling on 16 stereo or 32 mono channels, with relatively low exertion. Each of these channels will also have a filter and, depending on the sound card, CD quality.

## **Known problems**

### **Problems with sound cards:**

Several sound cards claim to support multiple sample rates, but then don't play at these rates but at any others they like, that means the **play** rate seems to be **too fast or too slow**. For instance the Soundblaster 16 ASP reports, being able to play at 48 kHz, then however starts to **howl terribly**, since it is only capable of playing at 44 kHz. The same thing happens if you switch from mono to stereo with the Pro Audio Spectrum. These errors are caused by neither Mod4Win nor the wave driver, but simply by the sound card hardware.

Solution: Buy a different sound card, bear the sound, or adjust to a sample rate that can really be played.

## **Problems with (BUGs in) sound drivers:**

### **General solution for these problems:**

Because we didn't have one bug free wave driver during the test phase of the program, we can only give the following advise:

Ask the manufacturer of your sound card for an updated wave driver!

The drivers of the Soundblaster and Audioblaster don't automatically adjust their filter frequency to the sample frequency. That results in the fact that the <u>MOD</u>-Files **sound dull.** 

Solution: Use your mixer utility to turn the filter off!

The wave driver of the Sound-/Audioblaster Pro 2.5/3/4 reports being able to sample more than 22 kHz 8 bit stereo, however when it comes to do that it starts to resist.

Solution: Switch to mono at sample rates higher than 22 kHz.

Windows<sup>TM</sup> only supports the following sample rates: 11, 22, and 44 kHz. Therefore it may happen that you see an error message like "Application violated system integrity" or "General protection fault" or something similar. The reason for that is not Mod4Win (because that asks the driver whether it can play the selected sample rate or not), but the clever programming of the wave driver.

Solution: Select only the sample frequencies 11, 22, or 44 kHz.

If you have only one wave driver installed, then it is possible that another application tries to access it while Mod4Win plays. This could happen for instance if an application wants to generate a system sound. Then some wave drivers will switch the actual sound output (that's the one from Mod4Win) from stereo to mono or modify the sample rate, without notifying Mod4Win. As a result you will hear a much **too fast sampled output**, or even **extreme distortions**.

Solution: Install a second wave driver that the other application can utilize while Mod4Win plays. If you don't have a second sound card or a second driver for your card, you can use **speaker.drv** as a last resort.

## **Problems with video drivers:**

With some video drivers you might notice that while Mod4Win (or any other sample output producing program) plays, that the wave output is **rhythmically interrupted**. This sounds like bubbling or scratching. This can be most easily resolved by choosing a different video mode or color resolution. You can also try to switch from stereo to mono.

## **Problems that look like BUGS (but are not):**

Windows<sup>TM</sup> or Mod4Win reports 'No memory available!' although you have plenty of it. The reason for that is that Mod4Win makes sure there is at least 500 KB left for other applications. If that's not the case, you'll see the error message. The same thing happens if Windows<sup>TM</sup> fragments the memory too much, that means the memory is divided into many little segments, and therefore not enough continuous memory available for other applications.

## Solution:

In the first case (less than 500 KB free): close applications, increase swap file size, or buy more memory.

In the second case (memory fragmented): stop Mod4Win (not pause!), start application, restart Mod4Win.

**Fast forward and rewind** takes longer at the end of the song than at the beginning. The reason for that is that it is impossible to rewind a <u>MOD</u>-File error free utilizing reasonable amounts of memory. There are effects that jump arbitrarily between <u>Patterns</u> and can't be tracked back easily anymore. Therefore it is necessary to recalculate the whole song from the beginning and that of course takes more time at the end than at the beginning.

While the **Setup-Dialog** is opened the current song has to be paused. During this dialog the wave driver is asked if it can handle certain settings. Some wave drivers then immediately change their settings to these values, whether we want them or not.

Some wave drivers don't recall exactly where they have been paused. Instead they will

perform certain byte flips that are not very pleasant for the ear. Therefore the song will be recalculated from the start after a **Pause**. This wastes valuable buffer time, but at least it resumes with the regular sound.

## What is a MOD-File?

A MOD file is a collection of **sample data** (similar to the WAVE format) and a **description** of how to play these samples in a certain order, pitch, and distortion on four channels.

The samples are called **instruments**, while they don't necessarily have to be samples of real instruments. It doesn't really matter, if the sound of a violin, an exotic oriental instrument, a human voice, or the noise of crushing tomatoes is used as a sample.

The description how to play these samples is divided into so-called <u>Patterns</u>. Each of these **patterns** contains exactly 64 note lines, that specify the play pitch and effects for each of the four channels.

Therefore the MOD format reveals a big advantage over the WAVE and MIDI format. Any naturally recorded sound can be used as an instrument (what MIDI is only able to do on sound boards with wave table lookup and a special synthesizer chip like Yamaha OPL-4). Moreover these sounds can be played in any desired order and with several effects (what MIDI can't do at all). This way the amount of data is reduced to a fraction compared to a WAVE file that produces the same sound.

Of course, there are also some important disadvantages! If played on regular sound boards with one or two channels MOD files clink (<u>Why is that?</u>). Samples are stored with 8 bit resolution in the file only, and the maximum possible sample frequency for a sample in a MOD file is about 32 kHz., which makes CD quality impossible (that's no problem for WAVE and MIDI files).

Another disadvantage is that the samples are only mono and the MOD player has to distribute them between left and right. Therefore listening to a bass drum through head phones can become a cruel experience, since our ear is used to receive low frequencies from all directions.

## Why do MOD-Files often clink?

## **Summary of the following paragraphs:**

The **sound card produces harmonics** like crazy and the average PC is too slow or doesn't have enough memory to implement a digital filter that filters them out again. The remedy here would be an AT 486/DX50 VLB with 16 MB RAM or better, but who has such a machine?

## Now it's getting a little theoretical...

The <u>MOD</u>-File originally comes from the COMMODORE AMIGA, that features a relatively intelligent sound chip, the PAULA. This chip can play samples on four channels in different pitches (sample rates) and volumes at the same time. That's why it is relatively simple to pass the PAULA a new pitch or volume value, or a new sample now and then, and an AMIGA <u>MOD</u>-Player plays almost by itself.

On a PC however we mostly deal with relatively **dumb sound cards**, that feature only one or two channels, which even have to work at the same sample rate. Therefore we are forced to mix the samples from the <u>MOD</u>-Files together at a new sample rate. That means sampling up or down, or to put it this way: we have to skip over some bytes, pack the rest together with other skipped bytes and pass the resulting pulp to the sound card. Also complicating is the missing volume control, which causes an immense loss of quality at low volumes. This can only be compensated by 16 bit sampling. Summary: on a PC we are forced to calculate some pulp, put it in relation to the volume and mix this all together. That takes time!

The big problem with sampling is the art of playing a noise back just as it was recorded, and as memory efficient as possible. But because the original can only be sampled with a certain frequency, it is not useful to record bird chirps with a sample rate of 1 kHz for instance, because the chirps contain frequencies of up to 20 kHz and higher and you would only record an arbitrary sequence of something. Summary: the signal has to be recorded to the memory in a way that it is reproducible, that means the original signal has to be modified in a way that the highest frequency in this signal is lower than half the sample frequency of the sound card. This is called the **sampling theorem**. If this is not obeyed, it is very likely that the signal is not reproducible or in other words it doesn't sound good.

The same problem exists for reproducing the signal with digital/analog converters. Because it doesn't know what to do between two bytes (or words) of a sample and simply holds the last output value constant until the next input arrives, and that way transforms our nice smooth input to rectangles. The result is the creation of **unwanted frequencies** that can be very high and disturbing and annoying to the ear. They are called **harmonics**. Harmonics can be filtered out from the signal with a low pass (Oversampling and Filtering), but that's a different problem! For more information about filters see Further projects!

The sound cards in our PCs often have these kinds of filters integrated, but they are not intelligent enough and can't be expected to be either. Considering the fact that in a MOD-File, samples with different sample rates (up to a ratio of 1:8) have to be mixed together over one channel to the sample rate of the sound card, which filter frequency is the sound card supposed to

use? So the DAC doesn't produce harmonics intentionally, but the <u>MOD</u>-Player passes these **rectangular deformed waves**, that contain harmonics below the filter frequency of the sound card, to it, and that clinks!

The only solution for that problem would be the implementation of a digital filter in the <u>MOD</u>-Player that has a variable filter frequency, but using this filter takes either memory or computing power in amounts not usual today on the PC market.

## What the hell are patterns?

A pattern can be seen as a **sheet of music**, in which 64 notes are stored for each channel. Because the regular MOD-Format supports 4 channels, that would come up to 256 notes plus information about effects and the instrument to play for each note. A MOD file holds up to 128 patterns. Under normal conditions that translates to about 17 minutes play time. But who can stand that much MOD at a time?

## **Hotkeys Overview:**

The program is ready to receive bashes of the user under any circumstances. To give you an idea what you are punching, we give you the complete hotkey overview here:

Main Dialog Setup Dialog Open Dialog Info Dialog

If you have No Idea at all you might want to start with this.

# **Hotkeys Main Dialog:**

Key	Normal	Shift/Control
F1	<u>Help</u>	Help
F2	<u>Shuffle</u>	Shuffle
F3	Repeat	Repeat
F4	<u>Introscan</u>	Introscan
SPACE	<u>Play</u>	Play
ESC	Stop	Stop
P	<u>Pause</u>	Pause
RIGHT, +	Fast Forward	Next Song
LEFT, -	Rewind	Previous Song
HOME	First Song	First Song
END	Last Song	Last Song
A	Aboutbox	Aboutbox
O	<u>Open</u>	Open
S	<u>Setup</u>	Setup
I	<u>Info</u>	Info

## see also:

Main Dialog, Setup Dialog Hotkeys Open Dialog Hotkeys Info Dialog Hotkeys

# **Hotkeys Setup Dialog:**

Key	Normal	Shift	Control	<b>Shift-Control</b>
F1	<u>Help</u>	Help	Help	Help
ESCAPE	Cancel 'NO!'	Cancel 'NO!'	Cancel 'NO!'	Cancel 'NO!'
LEFT, RIGHT	Wave Driver $\pm$	Wave Driver ±	Wave Driver ±	Wave Driver ±
UP, DOWN	Sample Rate $\pm$	Mono/Stereo	<u>8/16 Bit</u>	Buffers $\pm$
S	Save	Save	Save	Save

see also:

Setup Dialog,
Main Dialog Hotkeys
Open Dialog Hotkeys
Info Dialog Hotkeys

# Hotkeys **Open-Dialog**:

Key	Normal	Shift	Control
F1	<u>Help</u>	Help	Help
TAB	Next List Box	Next List Box	Next List Box
ENTER	Add/Delete/Save	Add/Delete/Save	<u>OK</u>
ESCAPE	Cancel 'NO!'	Cancel 'NO!'	Cancel 'NO!'
LEFT, RIGHT	Add/Delete	Add/Delete All	Add/Delete All
S			<u>Save</u>

see also:

Open Dialog,
Main Dialog Hotkeys
Setup Dialog Hotkeys
Info Dialog Hotkeys

# Hotkeys **Info-Dialog**:

**Key** F1 F1 Help ENTER, ESCAPE OK

see also:

Info Dialog
Main Dialog Hotkeys
Setup Dialog Hotkeys
Open Dialog Hotkeys

## How to use the dialogs in Mod4Win

To make life for the user of our program a little easier (and save his/her last nerves for more important daily tasks) we put everything you could possibly adjust, switch or change in little dialogs. If you want to start from the beginning you may have <u>No Idea</u> what to use, otherwise you can chose from the following:

Main Dialog, Setup Dialog, Open Dialog, and Info Dialog.

## **Main Dialog**

This is a picture of the main dialog of Mod4Win. Use the mouse to click at the area you'd like to learn more about!



see also:

Main Dialog Hotkeys
Setup Dialog
Open Dialog
Info Dialog

Open opens the Open Dialog.

Setup opens the Setup Dialog.

Help shows this Help file.

The help file is the document you're just desperately looking for help in!

# Info Window

shows the name of the song in the MOD-File that is currently playing, and opens the Info Dialog when clicked with the mouse.

The file name of a MOD-File may be different from the name of the song it contains.

MOD Time displays the elapsed time in the currently playing MOD-File in minutes and seconds.

**Song**This is the number of the song in the play list that is currently playing or will be played next if no song is playing.

**Song Count** displays the number of songs in the actual playlist.

**Pattern** displays the current <u>Pattern</u> in the song.

Pattern Count displays the number of <u>Patterns</u> in the current song.

**Shuffle Play** if highlighted signals that Mod4Win plays in **Shuffle Mode**.

**Shuffle Mode**In shuffle mode the titles from the playlist will be played in random order.

Repeat/Repeat One if highlighted signals that Mod4Win plays in Repeat/Repeat one mode.

Repeat Mode
In repeat mode the whole playlist will be repeated continuously.

In repeat one mode the current song will be repeated continuously.

Repeat One if highlighted signals that Mod4Win plays in Repeat One Mode.

**Introscan** if highlighted signals that Mod4Win plays in <u>Introscan Mode</u>.

Introscan Mode
In Introscan mode each song plays for 15 seconds, then the next song will be loaded and so on...

Sample Rate shows the actual Sample Rate, that the wave driver should play with.

The highest play back quality for  $\underline{\text{MOD}}$ -Files is already achieved with a sample rate of 32 kHz!

See also: Problems

Bits per Sample shows the actual sample depth.

16 bit sampling should only be used with at least 8 MB RAM!

See also: System Requirements

# Mono/Stereo

signals mono or stereo play mode.

If you listen with head phones you should stick with mono!

See also: Why is that in What is a MOD-File?

**CPU Usage** shows the actual CPU utilization in percent and should be considerably lower than 100.

CPU utilization is the portion of time that Mod4Win needs to calculate the song in relation to the time it needs to play what was calculated at the current sample rate.

See also: System Requirements

# **Buffer Time**

shows the time left that Mod4Win can continue playing if it doesn't get any CPU time anymore. This is important when another application occupies the CPU for itself, for instance when loading applications, loading files, saving data, or others.

**STOP** stops the <u>MOD</u>-Player if playing.

**PLAY** starts playing the actual song in the playlist if one exists.

# **PAUSE**

pauses PLAY until PAUSE or PLAY will be pushed again.

**PREVIOUS SONG**plays the song that is immediately before the actual song in the playlist if one exists.

**REWIND** jumps one <u>Pattern</u> backward in the current song if possible.

**FAST FORWARD** jumps one <u>Pattern</u> forward in the current song if possible.

**NEXT SONG**plays the song that is immediately after the actual song in the playlist if one exists.

**Shuffle Play** switches the **Shuffle Mode** on and off.

Repeat toggles between Repeat/Repeat one/Repeat none modes.

Introscan Play switches the Introscan Mode on and off.

# **Setup Dialog**

Use the mouse to click at the area you'd like to learn more about!



## see also:

Setup Dialog Hotkeys
Main Dialog
Open Dialog
Info Dialog

Wave Device Name shows the name of the selected wave driver.

Wave Driver Button selects the wave driver used for MOD output.

## **Sample Rate**

This deals with kilo Hertz. The sample rate determines the quality of the sound produced by Mod4Win. For instance 32 kHz means Mod4Win produces 32,000 samples per second.

On better sound boards Mod4Win is able to sample with up to 48 kHz, however 32 kHz are practically sufficient, since this is the highest frequency of any sample recorded in a MOD-File and therefore also the highest quality.

For comparison we show here the data of some digital devices:

DAT-Recorder : 32 -48 kHz CD-Player : 44 kHz DSR-Tuner : 32 -44 kHz

Sample Rate Button allows you to adjust the current Sample Rate.

Sample Depth determines the resolution of the sample output and should only be set to 16 bit if you have lots of memory at your disposal.

See also: Bits per Sample

Mono/Stereo toggles the output between mono and stereo.

See also: Mono/Stereo

## **Output Buffers**

shows the number of buffers that Mod4Win uses for sample output. One buffer is enough to play for 200 milli seconds.

**Buffers** are necessary, because under Windows<sup>TM</sup> it is uncertain when a task will get access to the CPU again. Therefore we have to calculate a certain amount of output in advance that can then be played.

Output Buffers Button selects the number of Output Buffers.

**Minimal Memory** shows the memory in Kbytes that is occupied by the selected number of **Buffers**.

For the total memory size you also have to consider the size of mod4win.exe, player.dll, the MOD-File that's playing, the system files of Windows<sup>TM</sup>, and other application that are running.

OK closes the Setup Dialog and passes the settings to the Main Dialog.

Save Settings
closes the Setup Dialog, saves the settings in the file
mod4win.ini, and passes the settings to the Main Dialog.

"No!"/Cancel closes the Setup Dialog, discards all changes and returns to the Main Dialog.

# **Open Dialog**

Use the mouse to click at the area you'd like to learn more about!



see also:

Open Dialog Hotkeys
Main Dialog
Setup Dialog,
Info Dialog

Played Songs
Songs with a check mark have already been played.

Current Song
The song marked with a double arrow is the currently selected song. Its name is also visible in the Info Window of the Main Dialog.

Selected Files
Selected files will be removed from the <u>Playlist</u> when you click the <u>Del</u>ete button or hit the cursor left key.

# Files in Current Playlist These songs are yet to be played.

# **Playlist**

This playlist holds the filenames without extensions, that Mod4Win already played or is going to play.

The order of the filenames is identical with the order the files are played unless you selected the **Shuffle Mode**.

## **Directory Window**

This window represents a list of all sub-directories of the current directory (<u>Path</u>) as well the parent-directory and all valid drive letters of your machine. You can use it to change the current directory or drive.

Directories: <xxx> xxx = directory name
Drives: [-y-] y = drive letter

# **Filelist of the Current Directory**

This list shows the filenames without extensions in the current directory (Path) except the ones already moved to the Playlist.

Only files with one of the extensions .mod, .nst, or .mol (these are the file types Mod4Win can handle) are displayed. Lists are enclosed in angle brackets like for instance <the best>.

**Path** shows the full path name of the current directory.

List Name
If you click <u>SAVE</u>, the actual <u>Playlist</u> will be saved with this name and the extension .mol in the current directory (<u>Path</u>).

# **Delete**

causes all selected files to be removed from the <u>Playlist</u>.

# **Delete All**

causes all files to be removed from the <u>Playlist</u>.

# <u>Add</u>

causes **all selected** files in the <u>Filelist of the Current Directory</u> to be added to the <u>Playlist</u>.

# Add All

causes **all** files in the <u>Filelist of the Current Directory</u> to be added to the <u>Playlist</u>.

OK closes the Open Dialog and passes the <u>Playlist</u> to the <u>Main Dialog</u>.

# **Save List**

closes the Open Dialog, saves the <u>Playlist</u> with the <u>List Name</u> and the extension **.mol** in the current directory (<u>Path</u>), and passes the playlist to the <u>Main Dialog</u>.

If no listname has been selected yet you will be asked to specify one. In case this list already exists, Mod4Win will prompt you again to make sure you really want to overwrite your list file.

"No!"/Cancel closes the Open Dialog and returns to the Main Dialog without passing the Playlist.

**List Files**Files enclosed in angle brackets symbolize saved <u>Playlist</u>s.

Selected Files
Selected files will be added to the Playlist when you click the ADD button or hit the cursor right key.

File in Current Directory
This is a song in the current directory (Path) that hasn't been added to the Playlist yet.

# **Info Dialog**

Use the mouse to click at the area you'd like to learn more about!



### see also:

Info Dialog Hotkeys

Main Dialog

Setup Dialog,

Open Dialog

# **OK** closes the Info Dialog.

Number of Patterns shows how many different <u>Patterns</u> are used in this <u>Mod</u>-File.

# **Instruments**

shows the names of the particular samples in this MOD-File.

This space is also frequently used as an aboutbox (or similar) by the Composer of the song.

**Song Name** shows the name of the song in the <u>MOD</u>-File that is currently playing.

The file name of a MOD-File may be different from the name of the song it contains.

**File Size** displays the size of the MOD-File in Kbytes.

One Kbyte stands for 1024 bytes!

Number of Instruments shows the number of samples in the MOD-File.

There is a maximum of 31 possible instruments. The actual number is usually lower.

# MOD-Format

Mod4Win supports Mod-Files with 15 or 31 instruments.

### **Shareware Notes**

### Differences between Shareware- and Full Version

Principally shareware- and full version are **equally powerful**. That, of course, shouldn't raise the question in you "Why should I buy the full version?" We figured, that a limited shareware version makes no sense, because naturally a function that hasn't been implemented in the shareware version can't be tested by you.

At the end of the program we refer to the necessity of the full version, if you want to use the program frequently. To motivate you, we also prescribe to you an **involuntary break** at the beginning of the program and whenever you try to close the Open and Setup Dialog. Of course you will be spared all of this, if you buy the program. Additionally you can determine by the text in the about box what version you are currently using. If you use the full version, you will find your name (the name of the license holder) here.

A handbook for this handy program seems to us much too clumsy and therefore probably won't be issued. If you like to have something on paper, feel free to spool this text to your printer or to a file and chop it further down with a word processor.

### The Full Version directly from JSInc.

Please refer to the section **Registration for Mod4Win 1.02**!

### Retail Sales of the Full Version in the U.S.

The full version can only be ordered from JSInc. at this moment. So please don't harass your favorite computer store around the corner with repetitive questions for the full version, they would have to order it explicitly from me. It is even possible that they will slander the quality of the program because of that. But of course you know better, right?

### **Update-Service**

For **registered users** it will be possible to always order the latest version from JSInc. All that's required is that you send me the original disk or just the label and the sum of \$10.

For details see **Registration for Mod4Win 1.02** please!

Please don't forget your **return address**, otherwise you'll keep waiting while I wouldn't know where to send the latest update to.

# **License Regulations**

This program is **not freeware**! Mod4Win is **shareware**, that means software you can test for a certain time and then have to purchase or delete from your disk. The copyright for this program (**mod4win.exe**, **player.dll**) and its help (**mod4win.hlp**) is held by **JSInc.** You are granted a period of **30 days**, in which you can test the program. If you use Mod4Win after this test period you are required by federal law to purchase a copy.

You are explicitly encouraged to spread the unregistered version of Mod4Win to other PC users, such that they also have a chance to test the program. This is valid with the following restrictions:

- 1. You are not allowed to make money with it (for copying and distributing), and
- 2. You have to distribute all files that belong to the program and to its documentation.

### Modifications of a file that belongs to the Mod4Win package are strictly prohibited!

This help is part of the program Mod4Win and may only be distributed together with the program as mentioned above.

Disassembling and/or patching of the program or its help file is generally prohibited. Preventively we'd like to mention that JSInc. owns the copyright for all routines used in this program. Intellectual theft on any of the programming and/or design techniques used in Mod4Win may be subject to prosecution.

The shareware version may be distributed by shareware dealers for not more than \$10. If you belong to those who pay more than \$10 to acquire shareware, then you should look around for a new source

With the purchase of the full version of the program Mod4Win, the user acquires the right to install this program on his/her machine and use one purchased copy on exactly one machine at a time. For each additional machine the user is required to purchase another copy, even if that wouldn't be necessary from a technical point of view.

The user may make copies of the original disk only for the purpose of data security. However, it is strictly prohibited to distribute copies of the software or make them available to a third party.

### Possession of the registered version is only permitted to the registered user.

Please keep in mind that the program did cost you money and us work. Therefore please don't distribute your copy to a third party. Commercial usage of the full version of Mod4Win requires the explicit written permission from JSInc. Mod4Win may not be sold with other products (hard-, or software) without an explicit written permission from JSInc.

We don't assume any responsibility for damages possibly caused by the usage of Mod4Win.

Owners and/or users of a version of Mod4Win absolutely agree to all conditions mentioned above.

### **Liability, Warranty and Trademark**

We wrote Mod4Win because the <u>MOD</u>-format is quite nice and there wasn't a really good MOD-Player for Windows<sup>TM</sup> yet. To let everybody enjoy it, we decided to issue a shareware version. As a practical side effect our programmers can make a few Dollars with it. But since they probably won't become millionaires, we don't assume any liability for damages caused by our program to hard- and/or software. Registration doesn't reserve you the right to purchase an error free program.

The program is distributed (or sold respectively) as is. The only thing we guarantee is that it will take up space on your mass storage device (and hopefully as long as possible). We also guarantee that it will use CPU time on your machine (only as much as absolutely necessary). You may assume though, that our program doesn't cause any harm to you and/or your system. That means by the best of our conscience and knowledge of Computer Science it is a fine program. After all we like it so much, we have it running as a background jukebox on our own machines

### You are fully responsible for everything you are doing with this program!

We reserve all rights for our program. That includes especially the right to completely redesign the program. Therefore it is very possible, that a feature from an older version will not be included in a new version, and a new version will have higher demands to your hardware.

### **Registration for Mod4Win 1.02**

To receive the full version you have to:

- 1. Fill out the Registration Form, and
- 2. Send it along with a check for \$30 and
- 3. A **self-addressed envelope** to the following address:

JSInc. Jens Puchert 1037 Madison St Syracuse, NY 13210-2015

Make checks payable to JSInc. Do not send cash!

# Unfortunately at the moment, we can't accept Mastercard, Visa, American Express or other Credit Cards.

Received orders will be processed at least every other day. Just make sure you don't forget your **return address**. If you haven't received anything within 2 weeks feel free to write, e-mail, or call as noted in the Authors section.

All disks will be mailed in the **3.5" DS-HD** format (the little, nice and durable ones), because they tend to survive the mail procedure with less problems and don't require padded envelopes. If you need another disk format please specify explicitly.

# **Registration Form for Mod4Win 1.02**

Name:	_	
Company:	_	
	ess: _	
E-mail Addres	SS: _	
How did you l	earn	about Mod4Win?
Comments, Su	ıgge	stions for Mod4Win:
Would you lik	e to	get informed about further developments?
(	)	YES
(	)	NO