

HiP

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COLLABORATORS

	<i>TITLE :</i> HiP		
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Chapter 1

HiP

1.1 HippoPlayer - Table of contents

** Hippopotamus Design Presents: **

HippoPlayer v2.39

Copyright © 1994-1997 K-P Koljonen

** SHAREWARE **

HippoPlayer (HiP) is a multiformat module player for the Amiga. It works perfectly under Kickstart 1.2 and has all the same and even more features than the players requiring Kick2.0+ to run.

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Original guide modified from the doc by Tuomas Lukinmaa, revamped ↔
version

by Marius Sundbakken, final version by K-P Koljonen.

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1.3 An introduction to HippoPlayer

Introduction

One main reason why I started making this program was that there were no good Kick1.3 compatible players around, or I didn't know of one (that was back in 1994 when I had an A500). The other reason was that my good friend Jarno Paananen (Guru/Sahara Surfers) made a replay routine for Screamtracker]I[modules, and I wanted a good GUI for it.

The aim was to make a good module player that works on every Amiga configuration and has lot's of useful features. To achieve speed, little size and memory usage, HiP is entirely written in assembler. Project HippoPlayer was started 5.2.1994.

"Newcomers will run screaming away", said Nemesis1. At first HiP may seem complicated. Learn to use HiP, it should be worth the effort :)...

HiP has good support for Screamtracker]I[, Fasttracker 1 & 2, Taketracker, and Multitracker modules (from here onwards referred as

PS3Ms
)

), meaning that you can listen them with a 68000 Amiga with listenable

quality. All are played by the famous replayer by Guru. HiP was the second (or was it third?) program to use the PS3M-routines after Guru's own player.

1.4 HippoPlayer - Features

Some features in HippoPlayer

- Screamertracker]I[, Fasttracker 1 & 2, Taketracker, Multitracker, 1 to 32ch
- - SID-emulation
by Håkan Sundell & Ron Birk (works even on kick1.2)
- - TFMX-modules
, normal and the seven channel ones
- A bunch of 4-8 channel sample & synth music formats
- Easy to use, nice 3D-interface
- Full keyboard control
- AppWindow, drop modules into the window
- ARexx
- Public screen support
- Internal multitasking
- Loads and decompresses XPK, FImp, PowerPacker, LhA, LZX and Zip files

HippoPlayer has been tested on:

A500/000/7MHz, kick 1.2, 0.5+0.5M memory (my old Amiga)
 A500/000/7MHz, kick 1.3, 0.5+0.5M memory
 A500/000/28MHz, kick 3.1, 1+2M memory
 A1200/020/14MHz, kick 3.0, 2+0M memory
 A1200/030/28MHz, kick 3.0, 2+4M memory
 A1200/030/50Mhz, kick 3.0, 2+4M memory
 A4000/040/25MHz, kick 3.1, 2+8M memory

HippoPlayer was/is developed on:

v1.00-v1.25 A500/010, Kickstart 1.3/3.1, 1+2M memory, HD
 v1.27-v1.40 A1200/020, Kickstart 3.0, 2+0M memory, HD
 v2.00-v2.38 A1200/030, Kickstart 3.0, 2+4M memory, HD
 v2.39-v??.? A1200/030, Kickstart 3.0, 2+8M memory, HD

1.5 Registering HippoPlayer

Registration

HippoPlayer is shareware and copyright © 1994-96 K-P Koljonen.

I started making HippoPlayer on 5.2.1994, and since then I have spent countless of hours coding and debugging, trying to please the demanding users. It's not been easy or fun, but hard work!

So if you like using HiP and would like to encourage me to continue developing it and help me as well (as I'm a poor student ;), you really should consider registering.

To register, send a disk and some money to
my address

.

Remember to mention your address! And DO SEND A DISK!!

Amount of money needed for the registration in different currencies:

FIM: 40
CAD: 12
DEM: 14
GBP: 6
NOK: 57
SEK: 60
USD: 9

These are all worth 40 FIM, but I can't exchange coins so you should round the amount so that you can send notes (bills).

Other currencies are ok too, at least those used in Europe.

You will get the disk back with the latest version of HiP and a key file, which you must not spread (no point in doing that anyway). It is for your own use only. This key file will work with possible future versions too.

Registering by e-mail is also possible. Send the money by normal mail (no need for disk) and I will mail you the key file.

There's no functional difference between registered and unregistered versions!

Support quality software, register.

1.6 HippoPlayer distribution

Distribution

HippoPlayer can be freely distributed as long as all files are included unaltered. Not for commercial use without a permission from the author

.

Amiga magazines wishing to put HiP into a cover disk should send me the corresponding maggy number for free.

1.7 Where to get the latest versions

How and where to get the latest version

WWW surfers can go and get HiP from <http://kalahari.ton.tut.fi/~k-p>

Public beta versions will also be available there.

Those who have access to aminet can go and download HiP from mus/play/hippoplayer.lha.

You can also try the JuJu mAgicBoArD. Ask Zymosis membahs for numbahs. :)

1.8 HippoPlayer requirements

Requirements

Hardware:

Any Amiga with some memory and Kickstart 1.2 or higher.

Software:

reqtools.library (any version)

There is Kick1.3 reqtools.library included in the archive.

The following software is not required, but recommended:

In order to...	you need...
Use the AHI audio system	to install the AHI audio system :)
Load XPK files	xpkmaster.library and some sublibs
Load PowerPacker files	powerpacker.library
Load lha, lzx and zip files	to look at
archivers	
Load other packed file formats	to have xfdmaster.library
Play SID files	PlaySID.library
Play 4ch MED modules	medplayer.library V6+
Play 5-8ch MED modules	octaplayer.library V6+
Play 1-64ch OctaMED SS modules	octamixplayer.library V7+
Play MusiclineEditor modules	mline.library

The player libraries are found in the archive.

reqtools.library and powerpacker.library copyright © Nico François.
 xpkmaster.library copyright © Urban Dominik Müller.
 PlaySID.library copyright © Per Håkan Sundell & Ron Birk.
 medplayer, octaplayer and octamixplayer libraries copyright © Teijo Kinnunen.
 xfdmaster.library copyright © Georg Hörmann.
 AHI audio system copyright © Martin 'Leviticus' Blom.
 mline.library copyright © Conny & Christian Cyréus

1.9 Installing HippoPlayer

Installation

- Copy HiP and one of the info-files to wherever you keep your tools.
- Copy HippoPlayer.group into S: or define the location later in the preferences
 -
- Copy HippoPlayer.PS3M into S:.
- Copy the player libraries from libs-dir to Libs:.
- ~Copy reqtools.library in LIBS:
 - Note: If you already have reqtools.library installed, you should check the version of it and the version of the library included in the HippoPlayer archive. You should have the newest version in LIBS:.

1.10 Supported music formats

Supported music formats

Explanation of the list:

Stop/Continue	= 1 - The music can be stopped and continued.
Multiple songs	= 2 - Modules can have more than one song.
Volume	= 3 - Volume can be controlled.
End detect	= 4 - Songend can be detected.
Forward/backward	= 5 - You can jump forwards and backwards in the song.
CIA fast forward	= 6 - Play 2x or 4x faster with LMB/RMB and '>'
AHI support	= 7 - Music can be played thru the AHI device
	.

The module formats marked with a star ('*') have the replay code inside the module itself. I can't guarantee will they work or not. This is also the reason why they are not in the player group file (no replay code).

Replayer	1234567	Author

Built-in replayers

David Whittaker	xx---x-*	David Whittaker
Delta Music v2.0	x-x--x-*	Bent Nielsen
Fred	xx---x-*	Frederic Hahn & JC
Hippel	xx---x-*	Jochen Hippel
Maniacs of Noise	xxx--x-*	Maniacs of Noise
Mark II	x----x-*	Cachet Software
MED 1-64ch		
	xx-xx--	Teijo Kinnunen
Music Assembler	x-x--x-*	Oscar Giesen & Marco Swagerman
MusiclineEditor	xxx----	Conny & Christian Cyr�us
Old Soundtracker	xxxxxx-	K-P Koljonen
Protracker		
	xxxxxxx	K-P Koljonen
SID		
	xx--x--	H�kan Sundell & Ron Birk
SIDMon v1.0	x----x-*	Reiner van Vliet
Sonic Arranger	-x-----*	Carsten Schlote

Replayers in

player group file		
	BP SoundMon v2.0	x-xxxx- Brian Postma
BP SoundMon v3.0 (v2.2?)	x-xxxx-	Brian Postma
DIGI Booster	x-xxx--	Tomasz Piast (Tap)
Fasttracker 1	x-xxx-x	Jarno Paananen
Fasttracker 2	x-xxx-x	Jarno Paananen
Future Composer v1.0-v1.4	x-xx-x-	SuperSero (of the Superions)
Hippel-COSO	xxxx-xx	Jochen Hippel
IFF 8SVX/RIFF WAVE/AIFF samples		
	x-xx---	K-P Koljonen
JamCracker	x--x-x-	M. Gemmel
Multitracker	x-xxx-x	Jarno Paananen
Oktalyzer	--xx---	Armin Sander
TakeTracker	x-xxx-x	Jarno Paananen
TFMX		
	xxxxx--	Chris H�lsbeck
TFMX 7ch	xxxxx--	Chris H�lsbeck & Jochen Hippel
The Player 6.1A	x-x----	Jarno Paananen
THX Sound System	xxxx---	Martin Wodok (Dexter/Abyss)
Screamtracker 3	x-xxx-x	Jarno Paananen

1.11 Player group

Player group

Player group (HippoPlayer.group) is a file consisting of the replayers

not included in the main program. The reason for this is that by ↔
 moving
 seldom used replayers into a separate file, memory usage is reduced by
 about 40-50kB. Not that much you may think, but maybe just enough to
 prevent some actions from happening on low memory systems/situations. You
 can decide where HippoPlayer is to look for the player group file in the
 preferences
 .

1.12 Loading files

Loading files

Normally all modules will be loaded in CHIP.

The following formats can be played from FAST RAM and are loaded there if possible:

- SID
 - PS3M
 - TFMX
 (only song data, samples are always in CHIP)
 - Oktalyzer 8 channel modules
 - OctaMED
 8-64 channel modules
 - Protracker
 (only if you have selected PT FAST RAM play)
 - DIGI Booster
 - THX
- Compressed files are loaded to CHIP and then inspected if they should be moved to FAST.
 - XPK packed files can be identified by unpacking the first chunk of the file. That hunk will be used to determine whether the module should be loaded to FAST.
 - LhA, LZX and Zip files can be checked for loading to FAST.

Advantages of loading to FAST:

- FAST RAM is much faster than CHIP, so mixing and other processing can be done faster.
 - CHIP RAM is saved for other applications.
-

1.13 The Protracker format and the support for it in HippoPlayer

Protracker

Protracker is the most popular music format on the Amiga. HiP features my own Protracker play routine.

- Multisong modules

There are some modules around with several songs separated by the B command. HiP allows you to play these kind of modules correctly. Just use the '|<' and '>|' gadgets (or the respective keys) to select different songs. The first player on Amiga to support this feature :)

- Fast RAM player

This player can play PT modules from FAST RAM using only 1024 bytes of CHIP RAM. Useful for very big modules.

PT FAST RAM playing can be turned on from

Prefs

.

- Old Soundracker modules

HiP identifies old Soundracker modules and converts them to the Protracker format. This will take memory temporarily twice the module size, but I don't think it's a big problem because old ST tunes tend to be very small.

1.14 tfmX

TFMX

HiP can play both 4 and 7-channel TFMX modules, including the excellent Turrican 1, 2 and 3 intro tunes. A TFMX module consists of two files. They must be named 'mdat.<name>' and 'smpl.<name>'. To play, select 'mdat.<name>'. HippoPlayer will then try to load the 'smpl.<name>' file. Alternatively you can use the TFHD format TFMX modules.

The mixing rate of TFMX 7 channel replayer can be changed. The bigger value, the better quality and bigger CPU load. If you lose notes or hear 'crackling' in the sound try lowering the mixing rate in the

preferences

.

1.15 ps3m

PS3M

In the term 'PS3M', the following formats apply:

- Screamtracker]I[
- ~Protracker
- ~Fasttracker 1 & 2
- ~Taketrapper
- Multitracker

Jarno Paananen (Guru/Sahara Surfers) has made replayers for these. They have been integrated to a mixing engine which is able to play 1-32 voices simultaneously by mixing them through four channels. The routine is amazingly fast. Even on Amiga 500 eighth channel modules are very listenable. The replayer gobbles quite a bit of memory for its buffers, so don't be surprised.

Mixing rates can be changed. Again, the bigger value, the better quality and bigger CPU load. Using the system friendly mode on A500 will probably more or less jam the machine, therefore you should use the killer mode for the best quality.

PS3M allows mixing rates higher than 28 kHz, which is normally the hardware limit. In some AGA (ECS too?) screenmodes higher mixing rates are possible. This is what I found out after some experimenting. I used maximum overscan.

Maximum mixing rates for screenmodes

PAL	28 kHz
NTSC	28 kHz
Euro36	28 kHz
DblPAL	54 kHz
DblNTSC	54 kHz
Euro72	58 kHz
Multiscan	58 kHz
Super72	46 kHz

Note: If you use too high a mixing rate, the sound will be distorted.

The 14-bit mode supports CyberSound calibration for the best possible quality.

Killer mode will cause Enforcer hits! It bangs some of the interrupt vectors. Don't use Enforcer with killer mode.

These modules can and should be played from FAST RAM.

PS3M can be configured via the
 preferences
 or a
 configuration file
 .

1.16 PS3M configuration file

PS3M configuration file

It is possible to control PS3M via the config file 'S:HippoPlayer.PS3M'. HiP will configure PS3M according to the config file every time a module is loaded.

In HippoPlayer.PS3M you can enter PS3M settings for each number of channels and for specific modules. In channel and song settings you may replace the number you don't want to alter with '?'s. Useful when you want to control the mixing rate from HiP and the volume boost the PS3M from config file.

The file is quite self-explanatory so you should be able to edit it with no problem. If you don't want to use the config file you can delete it from S: or disable it from prefs.

1.17 sid

SID

These are tunes ripped from C64 games & demos. Both normal file + icon and one file formats are supported. The playing is done by PlaySID.library by Håkan Sundell and Ron Birk. Great job dudes!

*** Note 1: Under Kickstart 1.2/1.3 playsid.library v1.1 does not work because it uses some Kick2.0+ functions. I have made a little patch to bypass the problem. This patch works ONLY with lib version v1.1 and Kick1.2/1.3.

*** Note 2: If you are using the excellent Executive you should switch it to use some other timer than CIAB because playsid.library needs the CIAB timers for playing.

1.18 med

MED

HippoPlayer supports different MED formats: MMD0, MMD1, MMD2, and MMD3.

4 channel tunes are played with medplayer.library version V6 or higher.
5-8 channel tunes are played with octaplayer.library version V6 or higher.
1-64 channel tunes (made OctaMED SoundStudio) are played with octamixplayer.library version V7 or higher.

The few configurable items have been implemented by using the
PS3M settings
in
prefs
. They are as follows:

- High Quality mode with 5-8 channel modules and octaplayer.library is toggled on when the PS3M mixing rate is at least 25000 Hz. Otherwise it's off.
 - The mixing rate when using 1-64 channel modules and octamixplayer.library
-

is the same as the mixing rate in the PS3M settings.

- The play mode when using 1-64 channel modules and octamixplayer.library is 8-bit unless you have 14-bit stereo set in PS3M settings. If so, octamixplayer.library will also use 14-bit output.

1.19 Sample play support in HippoPlayer

Audio samples

HiP is able to play the following audio sample formats:

- IFF 8SVX 8-bit mono/stereo
- AIFF 8/16-bit mono/stereo
- RIFF WAVE PCM 8/16-bit mono/stereo

Samples can be unlimited in length because the data is loaded in small parts while playing. Currently this method is not very good for small samples (works ok though). Packed samples are not supported yet, but I'm planning to add XPK sample support.

Some memory is needed for data buffers. You can set the buffer size from

prefs

. The routine may use upto 12 buffers, of which 8 in CHIP memory. This can be a lot if the buffer size is big.

Screenmodes

with 15kHz horizontal refresh rates (eg PAL and NTSC) limit the maximum sampling frequency to 28kHz. HiP is able to play over 28kHz samples on these screenmodes by reducing the sampling frequency in real time. This (of course) takes some extra CPU power and memory. Because the reducing operation is triggered when the horizontal screen refresh rate is 15kHz, I don't know how this works on GFX CARDS.

As default 16-bit samples are converted to 8-bit samples before playing. However, much better sound quality can be achieved by selecting 14-bit output. This can be done from

Prefs

under

PS3M settings

, where you should

enable the CyberSound calibration. (Again, the different conversions eat CPU power.)

There's no 'standard' 14-bit output available for sample playing, the only choices are 8-bit output and 14-bit calibrated output.

Also note that with 14-bit sample output the volume gadget has no effect at all. This is because of the special way of outputting the sound.


```

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```

The window

Is an AppWindow. You can drop icons onto it and they will be added to the list and played.

Other keys

Right mousebutton:

Pressing the right mousebutton will shrink the window so that only the titlebar is shown. Press again on the activated window to expand.

[ARROW UP] and [Number pad 8]:
Select previous module.

[ARROW DOWN] and [Number pad 2]:
Select next module.

[F1-F10]: Load & play a module or a module program.
You can configure the function keys from
prefs

.

[Z]: Open/close the
scope window
.

[O]: Enter a file comment for the chosen file.

[E]: Execute a file chosen with a file requester.

[7/8/9/0]: Titlebar info
selector:
7 = time, pos/len, song number
8 = clock, free memory
9 = module name
0 = time, duration, pos/len

[G/H]: Quick setting of the play mode:
G = Set playmode to
'List repeatedly'
.
H = Set playmode to
'Modules in random order'
.

[[]]: Join a module program to the end of the module list.
See
'Prg'
.

[~]: Zip/unzip window so that only the titlebar is shown
and back to the original size.

You can do the same thing by doing the following:

- Click the window zoom gadget.
- Click the right mousebutton on something that doesn't
have a RMB function.

This button can also be used to bring the HiP window
to front with the
hotkey
. Useful if you have lost
it amongst dozens of screens and other windows.

[LAMIGA+LSHIFT+CONTROL]: The
hotkey
combination.

Press [HOTKEY]+[key] to use the HiP-keys WITHOUT first activating the
window. This is one of the two ways (the other is
ARexx
) to control HiP
when it is hidden!

[HOTKEY] + [H]: Hide the HiP main window completely.
This key also reveals the hidden window.
Also the key [~] will do, see above.

[HOTKEY] + [1]: Zip/unzip window for hotkeys. See [~].

1.22 Filebox

Filebox

This is the module list. There are two ways of selecting modules:

- Click left mousebutton on one of the names.
- Use arrow keys up and down to scroll the list. Shift increases scrolling speed.

The selected item will be enclosed in a selection bar.

1.23 File slider

File slider

You can scroll the module list by dragging this slider around.

1.24 Volume slider

Volume slider

Keyboard: [V], [B]

Number pad: [-], [+]

Allows you to set the volume. Note that not all music formats supports volume change.

1.25 Prefs

Left mousebutton:

Prefs

Keyboard: [R]

Pop up the prefs window. You can also close it with this button. Note that all the keys work from the activated prefs window too.

Right mousebutton:

Remove/restore filebox

Remove & restores the main window filebox.

1.26 sort

Left mousebutton:

Sort list

Keyboard: [S]

Sort list alphabetically. Divided sections in the list are sorted separately. With lot's of files this may be a bit slow.

Right mousebutton:

Find according to search pattern

Keyboard: [F], [SHIFT+F]

Find a text string from the module list according to a search pattern. [SHIFT+F] acts as a continue search-button.

1.27 move

Left mousebutton:

Move a file

Keyboard: [M]

Number pad: [.]

Remove a module from the list. To insert it back press [M] again (also play button (symbol: '>', key: [RETURN] or [ENTER]) will do).

Right mousebutton:

Insert a list divider into the list

Keyboard: [Q]

Insert a list divider into the list. With list dividers you can create sections into the list, for example a divided section for each composer etc. See

Prefs

.

1.28 Module program

Left mousebutton:

Load module program

Keyboard: [P]

Number pad: [.]

Pop up a file requester for selecting a module list file to load. The existing module list will be cleared.

Right mousebutton:

Save a module program

Keyboard: [W]

Save the contents of the list to a module program file.

1.29 delete

Left mousebutton:

Delete module

Keyboard: [D], [BACKSPACE]

Number pad: [[]]

Delete selected module from the list.

Right mousebutton:

Nuke file/delete divided section

Keyboard: [SHIFT+D], [SHIFT+BACKSPACE]

Delete selected file from the list and from the disk. Be careful.

Using this function on a divider will remove the divider and all the files below that particular divider from the list.

Notice that when using the gadget an 'Are you sure?' requester will pop up, but while using the keyboard no warnings are given.

1.30 add

Left mousebutton:

Add modules to the list

Keyboard: [A]

Number pad: [0]

Add modules to the end of the list using file requester. You can also select directories; HiP will perform a recursive directory scan adding all encountered files and dirs.

Each added directory can have its own
list divider

.

The file requester is the Reqttools.library file requester. To select multiple files and dirs click files with shift pressed.

Right mousebutton:

Insert files

Keyboard: [T]

Number pad: [/]

The same as 'Add', but the added files are inserted after the currently selected file in the list.

1.31 new

Left mousebutton:

New

Keyboard: [N]

Clear the module list, select new modules and play the first one.

Right mousebutton:

Clear

Keyboard: [C]

Clear the module list.

1.32 Module info

Left mousebutton:

Module info

Keyboard: [I]

Open the module info window. Various pieces of information of the currently loaded module are displayed in the window.

Scroll text with the scrollbar or with the arrow keys (faster scroll with shifts). The window can be closed by clicking 'i' again, pressing the [I] key, clicking the window close gadget or clicking right mouse button on the window.

Sample names are shown if the module is one of the following formats: Protracker, DIGI Booster, Screamertracker]I[, Fasttracker 1 & 2, Taketracker, Multitracker.

Sample playing

Only for Protracker modules that have been loaded to Chip memory. (The

PT replayer
must be set to 'Normal'.)

To play a sample click left mousebutton on a sample name. The note of the sample can be defined by the X coordinate of the mousepointer: the leftmost edge of the window is C-1 and the rightmost edge B-3.

Right mousebutton:

About HippoPlayer

Keyboard: [HELP]

Open the about window. Otherwise the same as above.

1.33 eject

Eject

Keyboard: [TAB]

Stop playing and eject the current module. The memory allocated for the module will be freed.

1.34 pause

Pause

Keyboard: [SPACE]

Number pad: [5]

Toggle between play music and don't play music. There will be a text message in the upper text area of the window when the pause is enabled (ie no music is being played).

1.35 Next module

Next module

Keyboard: [L]

Number pad: [6]

Load and play next module in the list.

1.36 Previous module

Previous module

Keyboard: [K]

Number pad: [4]

Load and play next previous in the list.

1.37 Next subsong

Next subsong

Keyboard: [ARROW RIGHT]

Number pad: [6]

Play next subsong.

1.38 Previous subsong

Previous subsong

Keyboard: [ARROW LEFT]

Number pad: [4]

Play previous subsong.

1.39 forward

Forward

Keyboard: [.]
Number pad: [3]

In general this function jumps forward one song position.

If the module format supports
pos/len
:

- Left mousebutton + 'Forward' = Jump one position forward
Keyboard: [.] , number pad [3]
- Right mousebutton + 'Forward' = Double the playing speed
Keyboard: [SHIFT+.] , [SHIFT] + number pad [3]

If the module format doesn't support
pos/len
:

- Left mousebutton + 'Forward' = Double the playing speed
Keyboard: [.] , number pad [3]
- Right mousebutton + 'Forward' = Quadruple the playing speed
Keyboard: [SHIFT+.] , [SHIFT] + number pad [3]

To restore the normal playing speed, you can do one of the following:

- Click 'Forward' button.
- Press 'Forward' key [.] , number pad [3].
- Click
 'Pause'
 button two times.
- Press
 'Pause'
 key two times.

1.40 backward

Backward

Keyboard: [,]
Number pad: [1]

Jump backwards one song position.

1.41 play

Left mousebutton:

Play

Keyboard: [RETURN]

Number pad: [ENTER]

Load and play a selected module. If you 'Play' a module that's already been loaded it will be restarted from the beginning. If there are no modules in the list a file requester pop up.

Right mousebutton:

Play a random module

Number pad: [*]

Load a random module and play it.

1.42 Modinfo/scope toggle

Left mousebutton:

Open/close module info window

This function is exactly the same as left mousebutton +
i
.

Right mousebutton:

Open/close scope window

Open and close the
scope
window.

1.43 Configuring HippoPlayer

Preferences

By clicking on the Prefs gadget you can configure HippoPlayer by using the gadgets. Multiple choice requester can be invoked by pressing right mousebutton on the cycle gadgets with 'ears'.

General

Play
Timeout
Alarm
Startup
Function keys
Hotkeys
Doubleclick
Continue on error
Early load
Divider / dir
Auto sort
Priority
Display
Show
Screen
Filebox size
Module info size
Font
Scopes
Prefix cut
Playing
Player group
Filter control
Fade volume
Nasty audio
VBlank timer
Protracker tempo
PT replayer
TFMX rate

Sample buffer

Force sampling rate
Loading

Modules

Programs

Archivers

Doublebuffering

XPK identify

XFDmaster library

File match pattern
PS3M

PS3M settings
AHI

AHI audio system settings

Save, Use, Cancel

1.44 Preferences: General/Play

Play

- List repeatedly
Play module list over and over.
- List once
Play list once and stop.
- Module repeatedly
Play one module over and over.
- Module once
Play one module once and stop.
- Modules in random order
Play modules in random order. When playing has started, same module will not be played twice unless all modules have been played first.

'Play' only affects the replayers where the end of the song can be detected.

1.45 show

Show (titlebar information)

- Time, pos/len, song

Show playing time, song position/length and song number/max song (#n/n) depending of what kind of a module is being played, and module name.

- Time/duration, pos/len

This does exactly the same as above with all but Protracker modules and audio samples. If enabled, HiP will calculate duration of PT modules and audio samples and show it in the titlebar.

- Clock, free memory

Show clock (24h) and free Chip and Fast in kilobytes.

- Module name

Show module name only.

1.46 Filter control

Filter control

Filter controlled by module, filter forced off or on.

1.47 Module directory

Module directory

Select default module directory.

1.48 Program directory

Program directory

Select default directory for module programs.

1.49 screen

Screen

Select a public screen. All HiP's windows and requesters will be opened on the defined screen. If the screen is not available, default screen will be used (usually Workbench).

1.50 Protracker tempo

Protracker tempo

Enable or disable Protracker tempo command. Useful for playing old modules that use speeds higher than \$1F. Applies also to The Player modules.

1.51 PT replayer

Protracker replayer

- Normal

Use normal Protracker replayer to play modules from CHIP RAM.

- Fastram

Play PT modules from FAST RAM.

- PS3M

Use Guru's

PS3M

to play modules from Chip or Fast. This way you can use those neat modes, eg listen Protracker modules with real surround

.

1.52 scopes

Scopes

Select one of the scopes by clicking the type gadget and the bar gadget. The 'Scope on/off' button or 'z' key or RMB on the 1/3 of the infobox will start it up. You can close a scope by closing it's window, clicking the gadget again or clicking RMB on the activated scope window.

These are for Protracker-modules only:

Type

- Quadrascope (& bars)

This is just like the one in Protracker.

Channel order: 1,2,3,4.

- Hipposcope (& bars)

Couldn't invent a better name.. Bass-sounds look nice with this one.

Channel order: 1,2,3,4.

- Frequency analyzer (& bars)

This one's more processor intensive. There is one for the left and the right side. It is supposed to display frequencies while not using period values. This is not FFT, but is based on Guru's strange idea. Bass-sounds are on the left and treble-sounds on the right. Bar channel order: 1,4,2,3.

- ~Patternscope

Protracker "emulator". Shows pattern data, four fake VU-meters and four tiny period boxes. Channels: 1,2,3,4.

- F. Quadrascope (& bars)

F. stands for filled. Inspired by Guru/S2's routine many years ago. Channels: 1,2,3,4.

Bars

These will try to visualize the volume and the period of each channel. The vertical position represents sample period and the width sample volume.

There are almost the same scopes for PS3M: Quadrascope (stereoscope), hipposcope, frequency analyzer and filled quadrascope (stereoscope). No bars.

The audio sample player has monoscope and filled monoscope.

The scopes will need some kilobytes of memory for buffers. They are run with priority of -30 so that they won't interfere with anything important.

1.53 TFMX rate

TFMX rate

Mixing rate for the 7-channel
TFMX
replayer.

1.54 Sample Buffer

Sample Buffer

Define the Chip RAM buffer size for
the audio sample player
. The actual
memory used is double the amount. Small value might be good for fast HDs,

while big is better with slower media.

1.55 Force sampling rate

Force sampling rate

This is a setting for
the audio sample player
.

Normally the sampling rate is stored in the header of a sample. This slider allows you to override that rate so that HippoPlayer will use this value instead of the one found in the sample.

To disable the override move the slider to the leftmost position.

** NOTE! The sampling rate can be over 28.0 kHz only with some specific
screenmodes
.

1.56 timeout

Timeout

Set playing time (mins:secs). Disabled in the leftmost position. Timeout can affect all modules or only those which the end can't be detected from. You can select this by pressing 'Timeout'.

Example: Play Protracker-modules until they end and PSIDs for, say 3 minutes. Or you can play all kinds of modules for only 30 secs (intro scan:).

1.57 Filebox size

Filebox size

Define the number of files shown simultaneously in the main window. Minimum is 3 and maximum is 50. If the value is too big for the current screen it will be truncated. The filebox can be removed from the window by selecting a size of 0.

1.58 Module info size

Module info size

Select the amount of lines the module info window can hold.

1.59 archivers

Archivers

HiP can decompress and play modules packed with LhA, LZX and Zip. You need to specify a path, a command and options for each.

Archives will be extracted into a temporary directory that will be created in the user defined path (RAM: is always the fastest while HD is good for saving memory). The directory is then scanned for files and the first encountered music module will be loaded.

Requirements

- LhA, LZX or UnZip, according to what kind of packed files you have. Define the exact location of each (eg dhl:bucket/lha)
- 'Run' and 'Delete' commands in C: (or in path).

Hints

- Archived files may be packed with XPK, FImp, Powerpacker or whatever format XFDmaster.library can decrunch. For example you could use xpkDLTA to encipher a module and then LhA it. Gives very good compression of sound related data.
- You can store both TFMX mdat.* and smpl.* files in one archive!

Kick 1.2/1.3 note

LhA is probably the only one that works fine.

If the default unzip command fails you could try something like this:

```
'C:unzip >nil: -o -qq "%s" -d '
```

Archiver commands

```
LhA: c:lha >nil: x -IqmMNXQw "%s"
```

```
c:lha          the program lha with complete path
>nil:         ignore any output
x             extract files
-IqmMNXQw I   ignore LHAOPTS variable
  q           be quiet
  m           no messages for query
  M           no autoshow files
  N           no progress indicator
  X           no need to have the .lha suffix in filename
  Qw         disable wildcards
"%s"         the %s is the archive to be extracted.
```

LZX: lzx >nil: -m -q -X0 x "%s"

```
-m -q -X0      m      no messages for query
              q      be quiet
      X0      no need to have the .lzx suffix in filename
x          extract files
```

Zip: unzip >nil: -qq "%s"

```
-qq          qq      be very quiet
```

1.60 PS3M settings

PS3M settings

This replayer (by Guru/S2) can play S3Ms, XMs, FTMs, MODs and MTMs. Some of these also affect in playing MED modules

.

Play mode

- Surround

Play some of the right side on the left and vice versa. The stereo value can be adjusted with the stereo level slider in Prefs. 50% is normal surround, 0% is mono and 100% is stereo.

- ~Stereo

Play half of the channels on left and half on right.

- ~Mono

Play all channels on both sides.

- ~Real Surround

About the same as Surround, but uses more memory.

- 14-bit stereo

Best quality, biggest CPU load, largest memory usage and lowest volume level.

The best play mode for most situations is Stereo. For modules with lots of channels use 14-bit stereo.

You can play modules in stereo or in mono with Surround play mode by adjusting the stereo value. The difference between this and the real Mono and the real Stereo modes is a lower volume level.

Priority

- -10 to +9

Set priority for the system friendly player process.

- Killer

Disable system and stop most of the DMA to get the best quality. The blue flickering represents free CPU time. Stop playing by pressing mousebuttons. Don't use enforcer!

Mixing buffer size

Smaller buffer gives faster response, but decreases the "backup" buffer possibly causing more "skipping".

Mixing rate

Mixing rate in kHz. See
PS3M

.

Volume boost

Makes the sound clearer and louder (use when there's 8 or more channels). You will hear the change almost immediately.

Stereo level

Works only with Surround play mode. 0% is mono, 100% is stereo, and 50% is the normal surround value.

Use CyberSound calibration

Set the enable switch and the name of the calibration file. CyberSound calibration takes effect when you have also enabled the 14-bit stereo mode. Also the 16-bit sample player will use this output mode if you have enabled it here.

Creating a machine specific calibration table will decrease the noise level and increase the sound quality. This can be done with 14Bit_Calibration, which can be found in HippoPlayer/Support/ directory. The program belongs to the CyberSound audio subsystem package by Christian Buchner. Thanks!

As default the calibration table will be saved to
ENVARC:CyberSound/SoundDrivers/14Bit_Calibration.

You really should try this out! The sound quality is very good compared to 8-bit or standard 14-bit output!

Use S:HippoPlayer.PS3M configuration file

Use a special
configuration file
for configuring PS3M.

1.61 Fade volume

Fade volume

This will cause those replayers that support volume to fade music in and out.

1.62 hotkeys

Hotkeys

Every key function in HiP can also be invoked by using this hotkey:

```
[LAMIGA+LSHIFT+CONTROL]+<key>
```

The purpose of the hotkey is to control HiP when the HiP window isn't active. For example you can draw with a paint program and change the tune HiP is playing by pressing the appropriate hotkey combination.

Here you can enable/disable hotkeys. Note that some other programs might use the same hotkey!

1.63 doubleclick

Doubleclick

When enabled, a module can be loaded and played by doubleclicking on its name.

1.64 XPK identify

XPK identify

When on, all XPKed files will be checked if they should be loaded in Fast memory. You should set this if you listen to modules played by PS3M.

1.65 XFDmaster library

XFDmaster library

Use XFDmaster.library to load packed files of almost any packer format. xfdmaster.library in Libs: is needed of course.

1.66 Continue on error

Continue on error

When this switch is enabled, errors that occur while loading will be ignored, file will be skipped and the next one will be loaded. After five errors the procedure will be halted.

1.67 doublebuffering

Doublebuffering

Normally when loading a module the one that already is playing is first ejected. With this button you can force HiP to play the current module and load the next one at the same time. Useful for floppy users, no delays between playing. If there's not enough memory to hold two mods at the same time, the current module will be ejected first.

1.68 Nasty audio

Nasty audio

Select allocation priority of the audio channels. When on, no program except HiP can use the channels. PS3M uses maximum priority at all times.

1.69 VBlank timer

VBlank timer

Select timing method to be used for playing: VBlank or CIA timer.

Use this switch if you don't want HiP to use one of the four CIA timers. VBlank plays with wrong speed on non-50Hz screens.

This switch has no effect on the following: PS3M, SID, Sonic Arranger, TFMX, TFMX 7c, MED, The Player 6.1a, DIGI Booster. They use their own way of timing.

Tempo will be disabled when playing PT mods with VBlank timer.

1.70 priority

Priority

Select a priority for HiP's processes: -1, 0, +1. All excluding HippoScope are affected.

1.71 startup

Startup

When enabled, HiP will start playing immediately on startup. The module or the program to be played can be chosen by clicking the 'Startup' gadget.

1.72 alarm

Alarm

Set a time for HiP to play a module (same as startup module). Control alarm with the slider, hh:mm. To enable alarm, set titlebar info to clock. To re-enable alarm, switch titlebar info to something else and then back to clock.

1.73 Function keys

Function keys

You can install a module or a module program for each of the function keys (F1-F10) by clicking this gadget. Then when you press a fkey, the corresponding module program or module will be loaded and played.

1.74 Player group

Player group

Status

Player group loaded/not loaded.

Mode

Loading conditions.

- All on startup: load the group immediately on startup.
- All on demand: load the group when there is demand for a replayer.
- Disable: don't load the group and unload if already loaded.
- Load single: load a single replayer from the group when needed.

File

Select

player group file

.

1.75 font

Font

Select a 8x8 pixel font (kick2.0+ only). All fixed width and 8 pixel high fonts will be scanned and only those that are 8x8 pixel fonts are displayed.

1.76 Divider / Directory

Divider / Directory

When adding directories it is sometimes useful to have a list divider for each scanned directory. This switch enables just that.

1.77 Auto sort

Auto sort

When enabled, the module list will always be sorted automatically after adding files & dirs via file requester.

1.78 Filename prefix cut

Filename prefix cut

Select filename prefix cut. Value 3 will cut prefixes like "mod.", "xm." etc. from the names in the filebox. This will also affect the sorting of the names.

1.79 Early load

Early load

Select a pattern from end to start loading next module. Works with formats supporting position/length.

Currently this is quite a lame function, because the newly loaded module starts to play immediately. Maybe someday I will finish this.

1.80 File match pattern

File match pattern

Match pattern for file requesters and for adding files.

1.81 AHI sound system

AHI sound system

AHI (Audio Hardware Interface) device and driver based audio system by Martin Blom <lcs@lysator.liu.se>.

The replayers in HippoPlayer that currently support AHI are:

- Protracker, Screamtracker 3, Fastracker 1 & 2, Multitracker, Taketracker, Hippel-COSO.

These music formats can thus be played thru any audio card that has an AHI driver installed. Amiga's own audio hardware can of course be used too (there are 8-bit and 14-bit modes available).

At least the following sound cards are currently supported:

- ~· Delfina
- Toccata
- Wavetools
- Prelude

Configure AHI from
 preferences
 .

AHI requires at least kickstart 2.0.

** NOTE! Don't try to use the external scopes while using AHI. You have been warned.

1.82 AHI sound system settings

AHI sound system settings

Enable AHI

Makes those replayers that support AHI use it for sound output.

The replayers that currently support AHI are:

- Protracker, Screamtracker 3, Fastracker 1 & 2, Multitracker, Taketracker, Hippel-COSO.

Disable non-AHI replayers

Do not play non-AHI supporting modules at all. An 'Unknown file format' error will be shown.

Mode

Select AHI audio mode.

Mixing rate

The bigger value the better quality and bigger CPU load.

Watch out! It's easy to jam up the system with too high a value.

Master volume

This value controls the volume level of AHI, just like volume boost

with
 PS3M
 . Value of 0 means no boost. With too high
 values the sound will break and turn out ugly. :)

Stereo level
 Change the stereo level. 0% is full mono, 100% is full stereo.

1.83 Save, Use, Cancel

Save, Use, Cancel

I guess you can guess these. If you close the prefs window it's same as 'Cancel'ling. The prefs-file will be saved in the S: directory.

Note: Positions of the windows and some requesters are saved too.

1.84 Command Line Options

Command Line Options

Add modules to the list

HiP <file2> <file2> ... <file16>

All the files will be added to the list and the first added one will be played.

Load a module program

HiP PRGM <module program>

The program will be loaded and the first module will be played. If the playmode is set as 'Modules in random order', then a random module will be picked and played. Existing list will be cleared. (The PRGM-keyword is not necessary, but is faster in terms of disk activity.)

All filenames must be entered with full paths!

Note: You can also do these things while HiP is already running!
 This allows you to use HiP as a command line module player. In Directory Opus it makes a good play button.

Hide on startup

HiP HIDE [other parameters]

HIDE makes HiP even more a command line player. It will force HiP not open it's window. Also reqtools.library is not needed (it will be loaded later if the window is opened). HiP can be controlled with hotkeys (if enabled) and/or ARexx if the window is not opened.

Quit

HiP QUIT

If there is already one HiP running, it will be terminated.

1.85 The ARexx interface in HippoPlayer

ARexx

The ARexx port for HippoPlayer is named 'HIPPOPLAYER'. It will be initialized at startup if REXXMaster is found running. There are some scripts in the ARexx directory.

Note: The ARexx-interface is not very thoroughly tested. If there appears any misbehaviour, please tell me!

Parameters in <> are required, while [] indicates optional parameters.

CHOOSE <num>	Choose file number <num> in list.
ADD [file]	Add file [file] to list. If not specified, open file requester.
DEL	Delete chosen file from list.
CLEAR	Clear list.
MOVE <num>	Move chosen module after file number <num>.
INSERT <file>	Insert file <file> after chosen file.
SORT	Sort file list.
LOADPRG [file]	Load program [file]. If not specified, open file requester.
PLAY [file]	If [file] is given, clear list and play it. Otherwise play chosen file. If there's no files in list then open file requester.
EJECT	Stop playing and free current module.
STOP	Stop playing.
CONT	Continue playing after stop.
SONGPLAY <num>	Play song number <num>.
RANDPLAY	Pick a random module and play it.
FFWD	Jump forwards in song.
REW	Jump backwards in song.
VOLUME <vol>	Set volume <vol> (0-64).
QUIT	Close all windows and exit program.
ZIP <0/1>	0: small main window, 1: normal main window
HIDE <0/1>	0: hide main window, 1: show main window
PUBSCREEN <screen>	Set public screen for HiP's windows & requesters. Note that this is case sensitive.
TIMEOUT <secs>	Set timeout (0-600 secs).
PS3MBOOST <value>	Set PS3M volume boost (0-8).
PS3MMODE <mode>	Set PS3M mode. 1: surround, 2: stereo, 3: mono, 4: real surround, 5: 14-bit stereo.
PS3MRATE <rate>	Set PS3M mixing rate (5000-56000).

```

LOADPREFS <file>          Load prefs file. Restart HiP with new settings.
                           HiP only saves prefs to S:HippoPlayer.prefs, so
                           you have to collect them manually somewhere for
                           ARexx-usage.

SAMPLES                   Open module info window.

GET <xxxx>                With this command you can get different information from HiP.
                           The <xxxx> can be one of the following:
                           xxxx:  result:
                           PLAY    0 if not playing, 1 if playing.
                           CFIL    Number of chosen file, 0 if none chosen.
                           NFIL    Number of files in list.
                           CURR    Number of loaded module.
                           NAME    Module name.
                           TYPE    Module type.
                           CNAM    Name of chosen file.
                           CSNG    Current song number.
                           NSNG    Number of songs available.
                           CSPO    Current song position.
                           MSPO    Maximum song position.
                           FNAM    Full name of loaded file.
                           COMM    File comment of loaded file.
                           SIZE    Size of loaded file.
DURA  Module duration in seconds (returns 0 if Time/
        duration is not enabled).
HIDS   0 if main window not hidden, 1 if hidden.
FILT   0 if filter off, 1 if filter on

```

1.86 Developers

Developers

HiP has a tiny interface for programmers who want to code some scopes of their own. Check out the example source!

What you do is `FindPort() "HiP-Port"`. If unsuccessful, HiP is not running. Otherwise, you get the pointer to HippoPlayer's port. It looks like this:

```

STRUCTURE      HippoPort,MP_SIZE
LONG           hip_privatel    * Private..
APTR           hip_kplbase     * Protracker replayr data area
WORD           hip_reserved0   * Private..
BYTE           hip_quit        * If non-zero, we must quit
BYTE           hip_opencount   * Open count (see below)
BYTE           hip_mainvolume  * Main volume, 0-64
BYTE           hip_play        * If non-zero, HiP is playing
BYTE           hip_playertype  * 33 = Protracker, 49 = PS3M
*** Protracker ***
BYTE           hip_reserved2
APTR           hip_PTch1       * Protracker channel data for ch1
APTR           hip_PTch2       * ch2
APTR           hip_PTch3       * ch3
APTR           hip_PTch4       * ch4
*** PS3M ***

```

```

APTR      hip_ps3mleft   * Buffer for the left side
APTR      hip_ps3mright * Buffer for the right side
LONG      hip_ps3moffs  * Playing position
LONG      hip_ps3mmaxoffs * Max value for hip_ps3moffs
*** Protracker ***
BYTE      hip_PTtrigger1
BYTE      hip_PTtrigger2
BYTE      hip_PTtrigger3
BYTE      hip_PTtrigger4

*** PT channel data block
STRUCTURE PTch,0
LONG      PTch_start    * Start address of sample
WORD      PTch_length   * Length of sample in words
LONG      PTch_loopstart * Start address of loop
WORD      PTch_replen   * Loop length in words
WORD      PTch_volume   * Channel volume
WORD      PTch_period   * Channel period
WORD      PTch_privatel * Private...

APTR      hip_private2
LONG      hip_colordiv  * See below

```

Note: Don't write anything to the port!

hip_opencount

As soon as you get the pointer to HippoPlayer's port, add 1 to hip_opencount. When you are done, subtract 1 from hip_opencount.

hip_quit

If this byte becomes non-zero, your scope (or whatever) must quit.

hip_colordiv

To find out how many bytes a sample is played in one vblank, divide the value here with the period of that sample.

PT hints

Each channel has it's own trigger byte: hip_PTtrigger1, hip_PTtrigger2 etc.. When a new sample starts to play, the corresponding channel trigger is incremented by 1.

PTch_start is updated so that it always points to the current playing position of the sample. PTch_length will decrease until it hits zero. When this happens, PTch_start is replaced with PTch_loopstart and PTch_length is replaced with PTch_replen. In other words, the sample loops. If the loop size is 2 bytes (PTch_length = 1, PTch_replen = 1), the sample stops (plays null). Don't read past the sample data; always check PTch_length.

The hip_kplbase points to the data area of my Protracker replayer. This makes it possible to do scopes like patternscope. Contact me if you want

the structure definition.

PS3M hints

hip_ps3moffs is an offset from the start of the buffers pointing to the current playing position. Don't read past bufferstart+hip_ps3mmaxoffs.

1.87 Known bugs

Known bugs

- Main window refresh may get dangerously confused when when zipping window via zoomgadget while loading module/program, saving program or sorting. One zip is allowed, two is too much, so be careful.
- Timeout and alarm don't work if there's no timer visible in the titlebar.
- Some Fred modules cause enforcer hits.
- Sonic Arranger tunes tend to crash sometimes.
- Scopes bug with PT 9xx command. This one originates from the Protracker itself (my PT replayer really is 100% PT compatible :)
- If you click outside the slider but in the gadget area at the same time when activating a window, the gadget might not respond. I've heard that this is a bug in in AmigaOS.
- Some mysterious bugs in ARexx... (?)

1.88 HippoPlayer history

History

Read this! Some things are not mentioned elsewhere!

v2.00 (19.3.1995)

- * ARexx support
 - * Public screen support
 - * Keyboard control changes: you can use the keys without activating the window first by pressing lamiga-lshift-control-<key>.
 - * New PS3M: support for Fasttracker 2 (XM) modules.
 - * Improved outlook.
 - * Patched playsid.library so that it's possible to play SID-tunes also on kick1.2/1.3.
 - * Prefs: continue on error, hotkeys, nasty audio, doublebuffering, program dir selector.
 - * Main window: move, insert, sort (hidden under insert)
 - + Timeout has now two modes.
 - + You can 'Add', 'New' and 'In' directories.
-

- + New The Player v6.1a replayer.
- + PT replayer causes no serialstops.
- + Command line: HIDE, QUIT.
- + Prefs: PS3M volume boost has immediate effect on music.
- + Included some support progs.
 - PSID-files are loaded in public mem if possible.
 - HiP can be hidden with lamiga-lshift-control+h.
 - Key for toggling current scope.
 - Uses less CPU than v1.40 when not playing.
 - Filebox routines optimized & jump scroll with shifts.
 - New algorithmic random generator (thanks Thomas!).
 - If PT replayer is set as 'Fastram', modules smaller than the replayer's chip buffers (256kB) will be loaded in chipram.. :)
 - Recognizes .Lha .lHa .lHA like suffixes too.
 - Only 8 channel Oktalyzer-tunes are loaded in fast ram.
 - Faster gadget disabling/enabling (OffGadget() was sloooow).
 - Fixed and enforcer hit when toggling prefs window.
 - Bug fix in the doc: the player table had some wrong info.
 - General good stuff and nice things.

v2.05 (3.5.1995)

-
- * Some fixes and improvements here and there.
 - * Keyboard: K/L swapped back with ARROW LEFT/ARROW RIGHT.
 - Added lot's of functions to number pad.
 - * MED: multisong support, song position/song length, forward, rewind, songend. Also no lib-error bug removed.
 - * New PT FAST RAM replayer which uses only 1024 bytes of CHIP RAM.
 - * Replaced GZip support with LZX.
 - * New music formats: Mark II, Maniacs of Noise, David Whittaker, BP SoundMon v3.0 (v2.2?).
 - * Prefs: VBlank timing selector, switch for scope bars.
 - Added zoom-gadget (kick2.0+).
 - Directories are added recursively (kick2.0+).
 - Fix: PS3M with killer mode caused crashes (my fault).
 - + Added Humble mode for PS3M: priority = -3.
 - + PS3M mixing buffer size can be as high as 64kB.
 - Fix: randomgenerator bugged heavily (jammed the machine).
 - Fix: PT replayer patterndelay + volslide.
 - Double buffering: if not enough memory, dump current module and try again.
 - When adding modules via AppWindow or commandline they are added to the end of the list, instead of first clearing the list and then adding.
 - Filter status saved in prefs file. Wasn't saved in prev. versions!
 - File selection bar is always kept visible.
 - Better init error handling.
 - The sort routine is six times faster than before.
 - Priority affects all processes excluding HippoScope.
 - Windows adapt with different border sizes (works with sysihack).
 - Titlebar info: clock and free mem shown at the same time.
 - Keys works from prefs window too.
 - A new icon by Cyclone.

v2.06 (19.5.1995)

-
- * External player group.

- + Selectable 8x8 pixel font (kick2.0+).
- + Title of the sample name window now contains name, comment and size.
- + Timing is done with CIAA timer. Serialstops should finally be gone now..
- Hide had a big bug! Terminated it. (Hi Yolk! (I'm an idiot))
- Fixed a bug in HiP-script (LZX extraction).
- Pressing 'Use' in prefs window will also change the scope.
- Fade volume on exit.
- A new icon by Roman Patzner.
- Fixed a bug in ZIP (ARexx).
- Some PS3M bugs removed.
- Some fixes...

v2.07 (26.6.1995)

Bug fixes:

- Continue on error no longer causes neverending load and fail-loops.
- PS3M buffer max size reduced to 32kB (64kB didn't always work well).
- Removed a bug in the font selector (no more memory and time waste).
- 'New' clears the list only if some mods were selected.
- PT fastram player bug removed (the one that jammed the machine).
- Timeout works with doublebuffering now.
- LhAed TFMX mdat+smpl loading with doublebuffering had a really serious bug. Killed it.
- Another bug with LhA and TFMX removed. Probably caused crashes if the length of the MDAT file was odd.
- Pos/len and NS/PS didn't work with MED MMD2 modules (I don't have the format description!), so I removed them.
- ARexx command PLAY was documented misleadingly. Corrected.

Improvements:

- Little fixes and improvements here and there.
 - Find files in list.
 - Alarm clock! :)
 - New music formats: Old Soundtracker, Hippel, Hippel-COSO.
 - SID-info and sample name windows update when a new module is loaded.
 - Totally new cycle gadget mult.choice requester with right mousebutton!
 - 'Center name' improved so that doubleclicking is more easier.
 - Option to show duration of Protracker modules.
 - MED-player will try to allocate the serial port for playing MIDI modules.
 - New PS3M replay version: 0.951. Lot's of bugs removed.
 - Moved PS3M into player group.
 - Config file for PS3M, like the one in PS3M the player by Guru.
 - PS3M Surround stereo slider.
 - PS3M Humble and Friendly modes replaced with priority selector.
 - PS3M now uses CIAA timer which doesn't cause serial stops like CIAB. (The CIAB can be selected in the PS3M config if the user really wants.)
 - New DMA wait routine for PT replayer by Peter Kunath.
 - Changing scope will have immediate effect.
 - No pop-screen-to-front at startup anymore.
 - Improved LhA, LZX and Zip file indentification.
 - Tools: WaitHiP, HiPlay, PSIDcomment.
 - New MWB icons by Roman Patzner.
 - New NewIcons icon by David Wiles.
 - HiP.guide by Tuomas Lukinmaa.
-

v2.08 (21.7.1995)

Bug fixes:

- 'Play Module once' bug removed.
- Changed to use the old DMA wait in the PT replayer because the new one didn't always work fine.
- Added RMB listselector for main program priority.
- Tried to play MED mods even when an init error occurred. Fixd.
- PT module duration calculation routinection (:-) locked up in some situations. Fxd.
- PT module end-detect fix.
- PS3M configuration file parser had a bug. Messed up priorities with killer mode. Fd.
- Doublebuffering works with dropped-icon modules.
- Dropped modules get played immediately even with random play.
- PSID file identification with .info now recognizes more files.
- Crashed when couldn't open font. F.
- Some problems fxd with song names and PS3M.
- 'Continue on error' failed with unknown modules.
- PT sampleoffset now actually works 100% correctly. Hi Yolk & Guru! :)
- Recognizes *.LZH.
- Major bug removed in random play..

Improvements:

- Added mouse waitpointer.
- Better MarkII, Hippel and Hippel-COSO identifying.
- Included a HiP brush by Roman Patzner.
- No volume fade on exit.
- Volume fade works a bit better with PS3M.
- Scope window is closed when no data is available.
- List selector in prefs can be cancelled by clicking outside the window.
- If a module that is played contains subsongs, all of them are played before next module is loaded. Works with play modes 'List repeatedly' & 'List once' and with end-detectable modules, and with timeout.

v2.09 (28.7.1995)

AARGH!! v2.08 had an old version of the PS3M! :-((((((((This version has the new one (same as the version in v2.07)...

Improvements:

- New scope
- A little change in PatternScope concerning VU-meters.

v2.10 (2.9.1995)

Bug fixes:

- Some little ones here and there.
- DMA wait bug fixes: Protracker, JamCracker, Soundmon, Hippel-COSO. Lost notes on screenmodes with high refresh rate.
- Enforcer hit with right mousebutton removed.
- Commandline stuff bugs removed.

Improvements:

- List dividers.
 - Filename prefix cut.
 - Early load.
-

- New fast forward mode.
- RMB function indicators (DOpus style).
- New Prefs organization.
- Changed the position of 'cursor' in patternscope.
- IFF 8SVX sample playing.
- Added SAMPLES ARexx command.
- ARexx command PLAYSONG bugged. Replaced with SONGPLAY that works.
- Little interface for programmers.
- Thickened the quadra/stereoscopes.
- Moved the info from the title of the sample window into the window itself.
- The position of the sample name window and the info window are saved.
- Sample windows not opened by the user no longer inactivate the main window.
- Join module lists with RMB and 'Lp'.
- Improved sort routine:
 - * Sorting accuracy 24 characters
 - * Divided sections are sorted separately
 - * Prefix cut compatible
 - * Not very fast. I'm still using bubble sort...
- Skip setting of values in PS3M config file with '?'s.
- Included Filer-ARexx script by Janne Simonen.
- Increased PS3M maximum mixingrate from 56 kHz to 58 kHz after finding out it is actually possible.
- HippoScope for PS3M: doubled the vertical pixel size, doubled the amount of pixels on 020+ Amigas.
- NOTE THIS: The PRG keyword has been changed to PRGM!

v2.11 (6.9.1995)

Bug fixes:

- Some little fixes.
- v2.10 had a test version Protracker replayer... Argh! :(Well it works fine and is faster but doesn't always sound the same as the original Protracker. So back to the old replayer in this version.

Improvements:

- Scope opens again when possible.
- Dir add with divider/dir now adds dividers to all dirs.

v2.12 (16.9.1995)

Bug fixes:

- Some.

Improvements:

- Redone the programmer interface.
- External scopes included.
- Example scope source included.
- Loading progress indicator for XPK files.
- Filled stereoscope for PS3M.
- Hipposcope for PS3M: 2x1 pixels instead 1x2 pixels. Also no extra dots with 020+ CPUs anymore.

v2.20 (27.10.1995)

Bug fixes:

- Some..
- PS3M stereo didn't get updated unless the Prefs window was opened.
- hip_play in HiP's port wasn't updated! Fixed.
- Nasty bug defeated in font requester! Corrupted the archiver commands..
- Some fixes in PT replayer.
- Bug fixed in Examplescope-source.

Improvements:

- New prefs system with paging.
- Listview for module info (sample names, PSID-info etc)
- New PS3M: 0.959 (20.9.1995). NOTE! The XM player is from the old PS3M, because the new XM player sucked.. Hi Guru!
- Removed the CIA selector from HippoPlayer.PS3M, currently PS3M always uses CIAA if possible.
- Pattern match for file requester.
- XFDmaster.library support for loading all kinds of packed files.
- Support for Alexis Nasr's combined TFMX mdat+smpl format (TFHD).
- If there's not enough chip memory, unpacked and XPK packed (with XPK identify) PT modules will be loaded to fast memory.
- If possible, CIAB is used for DMA wait. No interrupts included!
- Better Old Soundtracker identification.
- Max timeout increased to 30 mins.
- Alarm now has a slider (hh:mm).
- Included xVUmeter.
- Included HiPScope with the C source and header file by Thomas Skoldenborg.

v2.21 (16.12.1995)

Bug fixes:

- Quite a bunch removed.
- Found & killed many memory mangling bugs.
- Scope 'data follow speed' problems fixed. Should work on all the standard monitor drivers.

Improvements:

- New, fast and amazing LhA/LZX/Zip loader that scans each archive for music modules! Archives with 100 BBS adverts and one module will work fine. BTW, delete the HiP-script file. It's no longer needed.
 - New mode for player group: Load single.
 - Info & main window scrolling now with optimized blitter power.
 - PS3M mixing rate printed into the info window.
 - Info window open/close status saved in prefs file.
 - DIGI Booster support. May be removed from the later releases. You should try out the tracker, it's great. Thanks to Tomasz Piast (Tap) for giving me the replayer source.
 - Exit the module info by pressing Escape (in the window that is).
 - Nuke key: [BACKSPACE+SHIFT]. Will remove a file from the list as well as from the DISK!
 - Bigger jump in PSID fast forward.
 - Two new parameters for ARexx GET: DURA and HIDS.
 - Some cosmetic changes.
-

- Included installer-script by Tomasz Kepa. Thanks!
Some modifications by me.
- Included French docs by Alan Guillevic. Thanks!
- Included HiP-ARexx-Play.rexx script by Marcel Döring
<DonDoringo@GURU.rhein-main.de>. Thanks!
- Included a Hippo drawer icon by Richard Harris. Thanks!

v2.22 (26.12.1995)

Bug fixes:

- Forgot to fix in the last version: info window could only open to
Workbench screen.
- Player group handling had a random memory allocation bug.. :(
- PS3M is known to cause crashes when writing to floppy. I did something
to the PS3M interrupt servers and the problem seems to be gone now.
Who knows for sure...
- Installer script fixed. Tried to copy the obsolete HiP-script too.

Improvements:

- MED sample names are shown in the info window if possible.
- List dividers don't count as files anymore in the about window.
- Included SPIScope by Tuomas Lukinmaa.

v2.23 (7.4.1996)

Bug fixes:

- Multitude of major & minor bugs removed.
- A severe bug in Load Single player group mode removed.
- Alarm fixed. Probably didn't work at all.
- Something fixed in VUMeter, shouldn't crash anymore.

Improvements:

- Quality assurance by a bunch of betatesters (yeah, sure :-)
 - New PS3M 0.960. Bugs fixed in Fasttracker II (XM), Screamtracker III
(S3M) and Fasttracker I (FT) replay routines. Fixed & updated by Peter
Kunath / Delirium Softdesign (Hi! Thanks!)
 - SHIFT+BACKSPACE on a divider causes all the files 'under' that particular
divider to be deleted from the list.
 - Added RMB function for Del. The same as SHIFT+BACKSPACE = delete file or
delete divider and the files under it.
 - RMB on the left 1/3 of the infobox = scope on/off.
 - Info window: show the whole filecomment.
 - Monoscope and filled monoscope for IFF sample player.
 - Will now try CIAA first and then CIAB for timing. Should work with
other apps that require CIAA, like Shapeshifter.
 - New DigiBooster replayer v1.4 by Tap. (BEWARE: the replayer
-

- causes non-lethal enforcer hits!)
- Added volume control for DigiBooster modules.

- Prefs: Prefs page saved in the prefs file.
- Prefs: Use/don't use HippoPlayer.PS3M configuration file.
- Prefs: Save window zip status (big window/title bar).
- Prefs: Sample buffer size.
- The file match pattern is now applied to all filenames, not only to those shown in the filerequester (kick2.0+).
- Filebox size can be set to 0: remove the whole thing from the window.

- LhA archive extraction should work on kick1.3 now.

- Player group mode 'Load all' will load med and psidplayer libraries.
- Module name in titlebar in all but 'Show clock, free mem'.

- ARexx GET: FILT
- ARexx: Some new scripts added. Check them out.

- Scopes can be run from WB.

- Included a MWB drawer icon and MWB icons for scopes. Thanks go to Ilmari Karonen for these.
- Some history cut from the doc.

v2.30 (5.8.1996)

Bug fixes:

-
- Numerous!
 - More urouhack compatible.
 - Fixes in the sort routine and in the recursive file add.
 - Added some security to the PS3M killer mode. Don't know if it made any difference.

Major improvements:

-
- New GUI look.

 - Mega major enhancements in the sample player: IFF, AIFF, RIFF WAVE, mono/stereo 8/16-bit support, stop cont, end detect, duration calculation. 8/14-bit playing.

 - Protracker sample playing in the module info window! Finally after lot's of public pressure :)
Click a sample to play. The horizontal position of the mouse pointer defines the note.

 - Support for THX Sound System modules. Great chip tunes!
Needs 68020+ to work.

 - Archives (LhA, LZX, Zip):
 - A proper file identification in the archive extraction.
 - LhA, LZX and Zip archives without the suffix (.lha, .lzx, .zip)
-

can be now loaded. This feature needs some changes in the archiver commands, so be sure to change them!

- CyberSound calibration file support for PS3M. Totally amazing 14-bit quality!
- 'About' uses the module info window routines, no more reqtools.
- DIGI Booster sample names can be viewed in the module info window.
- Much improved guide-file. Hi Marius! :)

Minor improvements:

- Scopes now support quitting when HiP tells them to. Also they can be quit by clicking right mousebutton on the active scope window.
- Shift + I not only opens the moduleinfo window but also activates it.
- Pressing RMB on the module info window or about window will cause the window to be closed.
- Prefs: the string gadgets are now cyclable with TAB.
- Right mousebutton on the prefs gadget |Pr| will remove/restore the main window filebox.
- Keyboard changes:
 - Two new key functions: [G] and [H] for playmodes 'list repeatedly' and modules in random order'.
 - New key assignments:
 - Clear modulelist = [C]
 - Delete module = [D], [BACKSPACE]
 - Volume = [V], [B]
 - New = [N]
 - Prefs = [R]
- A new XPK load progress indicator.
- In 'Play modules in random order' mode the modules already played will be marked with '#' in the list.
- Adding files and dirs works more logically now.
- Added some reason to the init error management.

New support stuff:

- New MWB icon by Trevor Morris.
 - New ARexx-script: Suffer.rexx by Marcel Döring.
 - New ARexx-scripts: hip_playlb.rexx, hip by Filip "Eliot" Oscadal.
 - New version of the HippoPlay.filer ARexx-script by Janne Simonen.
-

v2.32 (6.10.1996)

Bug fixes:

- Fixed some problems related with 'HIDE' command line parameter.
- Window didn't refresh properly when zipping shrunked main window. Fixed.
- When loading archived TFMX modules HiP didn't delete the temp directory. Fxd.
- Some other little bugs removed. There's no end to these.. :-\
- Some fixes in the .guide file.

Improvements:

- AHI audio system support. Needs kick2.0+ and (probably) 68020+.
- New DIGI Booster replayer v1.6. Thanks Tap & Walt!
- PS3M:
 - 020+ mixing routines optimized a bit.
 - Some fixes in the replayers.
- Sample player:
 - 020+ optimizations.
 - Moved into player group.
 - The sampling rate can be set from prefs. This overrides the rate got from the sample's header. Hi Icebeat :)
- Auto sort option in Prefs.
- Major byte shaving throughout the source.
- Updated the doc file. It's still as messy as ever.. Guides rule.
- A new and improved installer script.
- Renamed the ARexx scripts to *.HiP.

New support stuff:

- New external scopes: Small versions of Quadrascope, FQuadrascope and HippoScope. WeirdScope the weird scope for PT. A BigScope pattern scroller & quadrascope for the whole screen (needs kick 3.0+).
- Italian docs translated by Valerio Russo. Did you get my letter?
- Polish docs translated by Tomasz Kepa.
- New ARexx script: Totalduration.hip by Tomasz Kepa.

Thanks a lot people! :)

v2.33 (8.10.1996)

- A patch released to fix the player group bug (see below).

v2.34 (12.10.1996)

Bug fixes:

- The player group loader only accepted the group if the player group mode was set to 'Load single'. Fixed.
- The Protracker sampleplaying feature in the infowindow didn't work. Fixed.
- Some fixes in the AHI support stuff.

Improvements:

- Disassembled and fixed the THX replayer so that it now works on 68000/68010 too.

v2.35 (23.11.1996)

Bug fixes:

- Fixed a bug regarding the random play mode and the Play-button.
- The lame & futile early load function had a bug. Fixed.
- A nasty bug fixed in the sample playing stuff concerning the player group.

Improvements:

- Support for MusiclineEditor modules (using mline.library).
- Support for OctaMed SoundStudio modules (using octamixplayer.library).
- Optimized the sort routine a bit.
- Optimized the PT fast ram player (speed up on 68000/010).
- Find name -function now always scans the whole list.

New support stuff:

- Updated French guide by Alan Guillevic. Thanks!

v2.36 (27.12.1996)

** NOTE! From v2.35 on, HiP requires V6 versions of medplayer.library and octaplayer.library, and V7 version of octamixplayer.library. All the required libraries are now included in the archive!

Bug fixes:

- Removed the previous fix in random play and play button..
 - Some small bugs removed.
 - Did something with the archive temp dir cleanup.
-

Improvements:

- Modules that are best played from fast ram but are loaded in chip ram will now be moved to fast ram if possible.
- RMB list selectors in Prefs can be cancelled by clicking RMB again.

New support stuff:

- Included all the required player libraries in the archive:
 - medplayer, octaplayer and octamixplayer.library for MED, OctaMED and OctaMED SoundStudio modules.
 - PlaySID.library for playing PSID modules.
 - mline.library for playing MusiclineEditor modules.All are installed by the supplied install script.
- German guide by Dominik Deobald. Thanks!
- Multi-archive-multi-file-player-script HiPPack v1.2a by Jari Karjalainen. Thanks!

v2.37 (31.12.1996)

A quick bug fix release. There were two bad bugs:
One crashed the 68000/68010 CPUs and one crashed the old pre-2.0 kickstarts.

v2.38 (9.2.1997)

Bug fixes:

- MusiclineEditor volume problems fixed.
- Add-files-run-out-of-memory-crash-bug removed.
- The AHI stereo level bug removed.
- Bug in the doc: key command for 'Insert files' is [T], not [I], which is 'Open info window'.

Improvements:

- A new lightning fast sort algorithm: comb sort! Based on the asm source by Origo/C-Lous^Subspace. With 2686 files the old bubble sort takes 40 secs where the new comb sort takes only 0.5 seconds.. Measured on my Amiga.
 - Possibility to enter file comments. Hit [O] for this feature.
 - New THX replayer. Some bugs fixed, no more 2x and 4x speeds :-\ May not work on 68000. :-\
 - Info window now shows THX sample names.
 - Sample player is now able to play >28khz samples on screenmodes where this is not normally possible (= horizontal refresh 15kHz). Needs some more CPU power and memory for scaling the sample data.
-

New support stuff:

- New French guide by Alan Guillevic.
- Spanish guide by Jose Antonio Diaz (Humphrey/Centolos). Thanks dudez!

v2.39 (19.4.1997)

** Do not use <kpk@pcuf.fi> or <kpkoljon@kauhajoki.fi> anymore.

Bug fixes:

- 'Error opening file'-bug with THX modules fixed.
- No need to have audio.device anymore, should work on Draco systems now.
- A bug removed in archive loader. I suppose.
- MED library opening fixed. I suppose..
- Numerous little things.
- The module name aesthetic preprocessor improved to handle Roman numerals ;)

Improvements:

- File comment with [O] now displays the old comment for editing.
- Hopefully more random random routine.
- RMB + 'Play' = play a random module.
- New key function [E]: execute a file chosen with a file requester.
- Halved the infobox sample play volume.
- Hacked the THX replayer (again) to make it 68000 compatible.

New support stuff:

- Updated Spanish guide by Humphrey/Centolos.
- Updated German guide by Dominik Deobald
- Updated Italian guide by Valerio Russo.
- New Swedish guide by Johan "S.Duvan" Alfredsson & Henrik "Puh" Nilsson.
Thanks a lot fellows! :-]

1.89 hellos

```
*****
*                                     *
*                               *** Hellos ***                               *
*****
```

Jarno Paananen (Guru/Sahara Surfers)

- Thanks for the PS3M etc. :)

Nico François

- Thanks for the reqtools.library!

Ron Birk & Per Håkan Sundell

- Thanks for making almost perfect SID-emulation.

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Icons by:

Tommi Lindström, Richard Harris (FOXX), cYClone/nEW-dEAL^PSD PC, Roman Patzner, David Wiles, Ilmari Karonen, Trevor Morris

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Hellos to those who have sent me email and to whom I've talked on IRC.

Thanks to all the ones who have sent me registrations, bug reports & suggestions!

1.90 About HippoPlayer

About HippoPlayer

HippoPlayer was made by using the Asm-One. Pure tricky optimized assembler, source code length without any includes or play routines is about 440kB.

Registrations, bug reports, comments & suggestions and C-64 warez are welcome!

Always mention your Amiga configuration and HiP version when sending bug reports!

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