# HiP

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| | *TITLE* :<br><br>HiP | | |
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|---|---|---|---|
| | | | |

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# Chapter 1

# HiP

## 1.1 HippoPlayer - Table of contents

```
                              ** Hippopotamus Design Presents: **

                      HippoPlayer v2.40


                 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.

## 1.2  Index

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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

 · Screamtracker ]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
DKK: 50
GBP: 5
ITL: 14000
NOK: 50
SEK: 60
USD: 8

These are all worth about 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 Cyréus
Old Soundtracker    xxxxxxx   K-P Koljonen

                Protracker
                                 xxxxxxx    K-P Koljonen

                SID
                                   xx--x--    Håkan Sundell & Ron Birk
SIDMon v1.0                     x----x-*  Reiner van Vliet
Sonic Arranger                  -x-----*  Carsten Schlote

Replayers in
                player group file
                Art Of Noise 4 channels        x-x----    Bastian Spiegel
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)
DIGI Booster Pro                x-xxx-x   Tomasz Piast (Tap) ** AHI ONLY! **
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 Hülsbeck
TFMX 7ch                        xxxxx--   Chris Hülsbeck & 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
 ·~Taketracker
 · 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 eigth 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.

## 1.20 How to use HippoPlayer

```
                How to use HippoPlayer


         Gadgets & keyboard
         How to control HippoPlayer with mouse and keyboard.

         Preferences
         How to configure HippoPlayer to fit your needs.

         Command line options
         How to use HippoPlayer from Shell.

         ARexx
         How to use the HippoPlayer ARexx interface.

         Developers
         How to make external programs for HippoPlayer.
```

## 1.21 Gadgets & keyboard controls

```
                              The user interface

  ----------------------------------------------------
  | -------------------------------------------------- |
  | |
            Modinfo/Scope
                                          | |
  | -------------------------------------------------- |
  |
             |<<
             |<
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              >|
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             Volume slider
             New
             Add
             Del
             Prg
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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
separatedly.  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 Reqtools.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], [I]+SHIFT to open and activate

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, Screamtracker ]I[, Fasttracker 1 & 2,
Taketracker, Multitracker, THX.

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 be 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 dh1: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 Inferface) 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 c0de some scopes of
their own.  Check out the example source!

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

```
   STRUCTURE          HippoPort,MP_SIZE
   LONG               hip_private1    * Private..
   APTR               hip_kplbase     * Protracker replayer 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_private1   * 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 occured. Fixd.
– PT module duration calculation routinetion (:-) 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 separatedly
   * 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 idenfication.
– 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 enchancements 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 the 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_play1b.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 shrinked 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 conserning 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! :-]

```
v2.40 (29.6.1997)
-----------------


Bug fixes:
----------

- THX subsongs work now.
- AHI volume problem fixed.
- Some problems with XMs and AHI fixed.
- The long time ago implemented SHIFT+[I] has been undocumented.
  Corrected (means Open-Infowindow-And-Activate-It).


Improvements:
-------------

- Support for Digi Booster Pro modules. NOTE! The replayer requires
  AHI and 68020 or better to work.
- Support for 4 channel Art Of Noise modules.
- PC to Amiga charset conversion performed in the moduleinfowindow.
- When using random play the random markers will be cleared after ALL
  modules have been played.
- Faster loading of module programs (needs twice the memory as before).
- Uses screennotify.library (if available) to watch changes in the
  Workbench screen.


New support stuff:
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- New external scope: WaterScope. Needs 020 or better.
- Updated French guide by Alan Guillevic.
- Updated Polish guide by Tomasz Kepa.
- Updated Italian guide by Valerio Russo.
- PlayNext.HiP by Nils Goers.
- Two new drawer icons by Tomas Amsrud.
```

## 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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-------------------------------------------------
```

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Nilsson


Icons by:
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---------------
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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 450kB.

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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