OctaMED

COLLABORATORS			
	TITLE : OctaMED		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		February 14, 2023	

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

OctaMED

1.1 OctaMED History

```
              This file contains the entire history of MED/OctaMED:

    Major Versions             Minor Revisions
    ~~~~~~~~~~~~~~             ~~~~~~~~~~~~~~~
MED
~~~

              V1.00 - V1.11

              V1.12

              V2.00

              V2.01

              V2.10

              V2.11

              V2.12

              V2.13

              V3.00
            MED/OctaMED
~~~~~~~~~~~

              V3.10/V1.00

              V3.11

              V3.11b/V1.01

              V3.20/V2.00

              OctaMED V2.00b

              V3.21
```

```
                        V3.22
                  OctaMED Professional
~~~~~~~~~~~~~~~~~~~~

                    V3.00

                    V3.00b

                    V4.00

                    V4.00b

                    V4.00c

                    V4.00d

                    V4.00e

                    V4.00f

                    V4.00g

                    V5.00
                  ------------------------------------------------------------------------
```

1.2   MED V1.00 - V1.11

```
== Version 1.00 - 1.11 (spring - summer 1989) ============================
Not released... V1.0 looks quite pitiful :-)
```

1.3   MED V1.12

```
== Version 1.12 (autumn 1989) ===========================================
```

This is the first released version (on Fish #255). It contained some mysterious bugs that crashed the machine sometimes... I never found them, but they have gone now (maybe they were compiler bugs).

1.4   MED V2.00

```
== Version 2.00 (8 Apr 1990) ============================================
```

Version V2.00 was the second released version. When I started to program it, I thought it'll be V1.20. But finally the list of improvements grew so large that I decided it must be V2.00!! And here's the the list of the new features/fixes:

   - Nearly completely rewritten code

    - New player routine made in assembler
    - Fast screen rendering routines also made in assembler
    - New user interface with file requester
    - MIDI support and up to 16 tracks
    - Extended keyboard, lots of new keyboard equivalents
    - Two equalizers (yes, imitating SoundTracker...)
    - Insert/delete in playing sequence list
    - Insert/delete blocks
    - Cut/Copy/Paste rectangular regions
    - Transposing and expanding/shrinking blocks
    - SoundTracker module load support
    - SoundTracker song saving
    - Can write icon with song
    - "MOD" save (song + samples)
    - Writes object files for your own programs
    - Song packing (not a real packer, but maybe "optimizing save routine")
    - More octaves (5)
    - Supports IFF 3- and 5-octave instruments
    - New commands (filter on/off, note off, stop playing, repeat note)
    - Repeat with beginning offset 0 works
    - "Quick note" feature
    - Insert effects when entering notes with Left or Right Alt
    - An option to turn off automatic advancing to next line
    - And maybe something else I've forgotten to put here...

1.5   MED V2.01

== Version 2.01 (10 Apr 1990) ==
Not a long time from previous release!!! I found a few bugs:

In Finnish version, version 2.00 didn't save the song to correct directory.
In both versions, the icon did not go to correct directory.
These are now fixed. What a pity I sent Fred Fish V2.00 (yes, the letter
was posted today...my luck!!).

1.6   MED V2.10

== Version 2.10 (17 Jul 1990) ==

Again lots of new features...

    - max. 63 samples
    - block length is modifiable (1 - 256 lines)
    - relative volumes for each channel and master volume
    - sample list
    - new commands (3, 4, B, FFA, FFB, FFD)
    - new MIDI commands (modulation wheel, pan, hold pedal)
    - now saves Sound/NoiseTracker modules (ST-song save removed)
    - programmable keys (Shift 0 - 9) can be edited/saved
    - real-time sample display (updated every frame), looks nice
    - new file format: module (MMD0)
    - intelligent sample loader, minimizes disk swapping, doesn't

reload samples which are already in memory
- automatic slide making (+ volume fade)
- track numbers always displayed, can be scrolled one track at a
  time
- free memory can be displayed
- screen outlook a bit better (more space for sample name),
  many panels enhanced
- an option to read volumes when entering notes with MIDI
- each sample can be independently transposed (like play transpose)
- it's possible to highlight lines (reversed colors) for easier
  positioning of notes
- the player tries to flush "serial.device" if allocation failed
- delete option in file requester
- volumes (command C) can be hex or decimal
- blocks can be splitted or joined (thanks to modifiable size)
- filename paths can be added/removed when loading samples
- better compatibility mode for ST/NT
- detaches from CLI (uses cback.o)
- a bug in MIDI preset changing fixed
- small enhancements everywhere

Also there's a new version of MEDPlayer, better instructions (I hope)
better play routine, "medplayer.library", module loader.......

1.7   MED V2.11

== Version 2.11 (21 Jul 1990) ==

This version contains two small fixes to the previous version:

- MED now doesn't insert entered MIDI notes with volume 0
  (because it means "note off")
- a very, very small bug fixed (when loading MMD0 modules, instrument
  names were not always deleted)

1.8   MED V2.12

== Version 2.12 (25 Jul 1990) ==

- MED had a bug which affected command FFF with MIDI. It's now fixed.
  The "modplayer.a" was correct, however. (strange...)
- There should be no files missing from the source archive any more
  (due to a bug in LHArc or me).

1.9   MED V2.13

== Version 2.13 (24 Sep 1990) ==

- MED loads now all 8 colors...
- Block display correctly cleared after "Clr song only".

1.10 MED V3.00

== Version 3.00 (31 Jan 1991) ==

New major version featuring:

   - built-in sample editor with sample handling/sampling abilities
   - simple (C64-style) synthsounds, built-in editor
   - "hybrid"-instruments (sample with synthsound "programming language")
   - MED now uses CIAB timers instead of CIAA. This means that MED is now
     compatible with Kickstart 2.0.
   - better sample list
   - an alternative note display method (more graphical) REMOVED IN V3.10!!
   - play-length timer
   - enhanced file requester (no need to wait until all names loaded,
     can list devices/assigns)
   - better control over playing speed (now TWO tempo-selection gadgets,
     leading to minor compatibility problems with previous versions)
   - option to start playing when a key has been hit (for real-time rec)
   - real-time recording works a bit better
   - "jump-to-last-used-sample-slot"-gadget
   - Hold/Decay implemented, allows accurate control over note
     duration (+ automatic decay after note end). THANKS TO ZAP FOR THE
     IDEA!
   - Insert Line/Delete Line -gadgets
   - an option to use the space bar as an empty note (DEL)
   - 2$\times$ option removed. Now there's "Spc" (space can be modified)
   - keypad working changed (can be used as track on/off switch or for
     selecting instruments)
   - now a range of notes (instead of just a single note) can be assigned
     to Shift 0-9
   - many other options are now also saved when saving keys (screen
     colors etc.), they're loaded as defaults during start-up
   - an option to use note B instead of H (in some countries (like Finland)
     it's H, in others (like USA) it's B)
   - Workbench screen can be opened/closed from MED
   - MED can be synced externally (through MIDI), or MED can send MIDI
     sync pulses
   - active sensing msgs can be switched off
   - gadgets to reset pitchbenders/modulation/presets, send a MIDI reset,
     and turn local control on/off
   - MIDI input channel can be specified (or data can be received from
     all channels)
   - MIDI key-up can be received (especially for long notes...)
   - range for all editing operations can be selected with the mouse
     (dragging using the right button) and is displayed
   - it's possible to individually select tracks used in editing ops
   - effect of editing ops can be selected:
       song/block/selected tracks/current track/range, current instr/all
   - it's possible to change/exchange notes individually e.g. F-2 => E-3
   - instrument numbers can be changed or notes with a specified instr
     number can be deleted
   - it's possible to type a short "anno" text, that contains e.g. song
     name, composer, ©... It's displayed when a song is loaded (in MED and
     MEDPlayer)
   - option to automatically advance in many directions (up, down,

```
next track, prev. track, next num, prev. num)
```
  - notes in one track can be "spread" to many tracks, similar to
    "polyphonize" in NoiseTracker...
  - chord-entering mode (the tracks that are used in chord can be
    selected)
  - tracks can be turned on/off by clicking the track on the note
    display
  - gadgets to turn on/off all tracks, and select all tracks
  - player recognizes new commands:
    8 = set hold/decay for note
    9 = change secondary tempo
  - samples can be saved in IFF format (optional)
  - outlook is now a bit better (gadgets are bigger etc...)

1.11   MED V3.10 / OctaMED V1.00

```
== Version 3.10 (14 Apr 1991) / OctaMED Version 1.00 (02 Apr 1991) ======
```

New features in OctaMED:

  - 8 channel playing with Amiga audio (like Oktalyzer etc...)
  - 8 tracks can be displayed at a time

New features in both OctaMED and MED:

  - new look (in MED-res 640 x 200/256), looks more professional
  - volumes in Instr-panel are displayed in both hex and decimal
  - expand and shrink space can be controlled
  - option to use 4-color screen (8 colors are quite slow on std Amiga
    especially in 8-channel mode)
  - option to load 8-channel samples in fast memory (mostly for listening
    purposes only, as they can't be played from the keyboard)
  - changing play rate and pitch in sample editor is easier
  - sample editor contains a delta-filter that can reduce noise
  - changing play rate and stretching in synth-editor now do some
    anti-aliasing
  - status line contains a button (CHRD) to activate/deactivate chord mode
  - backspace key can be used to delete/insert editing of notes
  - horizontal note display of MED 3.00 was removed
  - many MED 3.00 bugs (hopefully) fixed including:
    * Ext Sync (caused an instant travel to India)
    * Synth editor range dragging (trashed the screen in some instances)
    * MODULE SAVING (MED 3.00 didn't always align the fields, causing
      terrible results (Guru 00000003) with programs using modplayer.a)
    * Hybrid sound saving in object files
    * More reliable old ST-song loader. Doesn't necessarily crash when
      loading e.g. text files (but don't count on this!!).

1.12   MED V3.11

```
== Version 3.11 (07 May 1991) ==========================================
```

Minor perfections and bug fixes:

- timer reset gadget area fixed (yes, you can reset the timer by
  clicking on it!!)
- new Boost-option in the sample editor (the opposite of the Filter)
- only Left-Alt+Cursor up/down now moves you to the 1st/last block (to
  avoid accidental jump when using Alt+Cursor left/right)
- no more "Loading synthetic sound..." messages during module or
  sng+samples loading
- a bug in the player routine command 3 (slide) fixed (in certain
  conditions the period got down to $ffff....)

1.13   MED V3.11b / OctaMED V1.01

*** Release 3.11b (09 May 1991) / OctaMED Version 1.01 (20 May 1991)

Some more fixes (these bugs were totally harmless, but I'm a perfectionist)

- in addition: keyboard shortcuts of Cut/Copy/Paste range now function.
  They are Ctrl-X (Cut), Ctrl-C (Copy) and Ctrl-V (Paste).

1.14   MED V3.20 / OctaMED V2.00 (FREEWARE but Copyright RBF Software)

== OctaMED Version 2.00 (17 Aug 1991) / MED Version 3.20 (25 Aug 1991) ==

New features in OctaMED:

- Notation editor/printer.
- 5 - 7 channel modes. These allow you to use high quality, non-CPU-
  stressing audio and splitted channels at the same time.
- 16 track display (for MIDI use).

New features in both OctaMED and MED:

- numerous bugs fixed!! (including some nasty ones).
- MED_paths can be now loaded.
- insertion/deletion of tracks is possible.
- DEF gadgets for New block and New here create 64-line 4/8 track blocks
- MIDI note off messages can be suppressed for a particular instrument
- there can be multiple songs in memory at once, sharing instruments,
  can be saved as a multi-module.
- new synthsound commands: envelope, set vibrato waveform.
- proper loop markers in the sample editor.
- no more "Sample too short" messages in the sample editor: the display
  is no longer limited to minimum of 624 bytes (the minimum is now 1
  byte).
- the sample editor can generate noise (e.g. for wind/sea effects).
- a range in sample editor can be transferred to the synthsound editor.
- the "red line" in the sample editor.
- sample list displays the total number of samples in dir/memory.
- the MIDI works now better: commands are handled BEFORE sending out
  notes, notes with volume 0 are not sent out, some new commands:

channel/polyphonic aftertouch, pitchbender setting, controller change
- most of the graphics data is now loaded into fast ram, giving more
  chip ram for samples (in addition, the S2FST switch was removed).
- the range is now visible also on 2 bitplane-screen.
- direct object saving removed – removing this seldom used feature
  made the program a couple of Kbytes shorter. There's now another
  method for incorporating modules into programs (requires a bit more
  work, though).
- Topi, the jumping pointer, is now hidden if Jump setting is turned
  off. You can also save this (click Save prefs). Perhaps I'll "kill"
  Topi completely in the future (frees a couple of Kbytes)...
- when you real-time enter with SPC on, the notes will be now quantized
  correctly.
- an option to use the most common Protracker keyboard functions.

1.15   OctaMED V2.00b

== OctaMED V2.00 release B (21 Aug 1991) FREEWARE – Copyright RBF Software=

- a slight bug in the player routine audio channel freeing code fixed
  (didn't mark the channels as freed, could cause a crash in certain
   cases).
- a slight cleanup in OctaMEDPlayer.

== Small bug fixes (16 Oct 1991) ===

- "medplayer.library" now clears the _modnum during GetPlayer().
- A minor bug in modplayer.a signal freeing code fixed.

1.16   MED V3.21

== MED Version 3.21 (01 Jan 1992, Happy New Year :-) ==(this is still PD)==

A bug fix release of MED V3.2. Many bugs fixed, including:

- if SPC was set to 0, a Guru appeared.
- Range All + Show Range trashed the screen.
- the volume arrow gadgets had incorrect widths in their Gadget structs.
- problems with saving the extension struct in multi-modules...hopefully
  cured.
- a minor bug found in the synth editor JVS renumbering code.

WARNING: A deadly bug found in MED 3.20 player stuff
         (MEDPlayer/modplayer.a/medplayer.library). The bug can cause
         problems when playing multi-modules or old (pre-3.00) modules.
         Be sure to use the new versions from now on!
         (Also, some minor bugs have been exterminated.)

1.17   MED V3.22

== MED Version 3.22 (28 Jan 1992) =This is the VERY last PD version=

Some more known minor bugs fixed:

    - state of the E3 switch is now correctly saved to prefs file.
    - ST-module saving may *finally* work perfectly. I'm not sure if it
      helps, but I added some code to ensure clearing the unused entries
      of the pattern sequence table.
    - two load error traps fixed.
    - a seldomly occurring minor playseq list display bug fixed.

1.18   OctaMED Professional V3.00

** OctaMED Professional V3.00 (26 May 1992) *****not for sale***********

This is a major update to OctaMED V2.00!

** OctaMED Professional V3.00 (31 May 1992) ***************************
    - Found a serious memory-trashing bug in the relocation routine.
      Player routines/libraries/OctaMEDPlayer fixed..
      NOT FOR RELEASE

1.19   OctaMED Professional V3.00b

** OctaMED Professional V3.00 (03 Jun 1992) ** (release B)   **CUAMIGA**

    - Fixed some bugs in 8-channel effect handling.
    - New nice icons included, by Izrael Similä (Iz Productions).

1.20   OctaMED Professional V4.00

** OctaMED Professional V4.00 (17 Jul 1992) **Copyright RBF Software**

The major version number was lifted because of copyright reasons.
New features:

    - New note format. There are TWO digits for the command number, e.g.
      C-3 10201.

    - Finally, a decent file requester. Displays 13 file AND device names
      at a time. Also displays disk space. No danger of destroying your
      work by pressing accidentally LOAD SONG (there's also a confirmation
      requester to be sure of this).

    - Maximum block length: 3200 lines.

    - Supports many Protracker-equivalent commands which were not
      implemented in the previous versions, also many other new commands.

```
      5    slide + fade (Protracker compatible)
      6    vibrato + fade (PT compatible)
      7    tremolo (PT comp.)
      10   send MIDI message
      11   slide up (only once), equivalent to PT cmd E1x
      12   slide down once, equiv. to PT cmd E2x
      14   PT compatible vibrato, similar to cmd 4 except that
           depth is halved.
      15   set finetune
      16   loop (1600 marks the beginning, e.g. 1602 repeats the loop
           twice). (PT cmd E6x)
      18   cuts the note by zeroing the volume at the specified pulse
           (PT cmd ECx)
      19   sets the sample starting offset (in steps of 256 bytes)
           (PT cmd 9)
      1A   volume up, only once (PT cmd EAx)
      1B   volume down, only once (PT cmd EBx)
      1C   change the MIDI preset of an instrument
      1D   jumps to next block in playseq list (like cmd F00), but
           starts playing from the specified line. (PT cmd D)
      1E   play the current line the specified number of times (only
           effects, notes not replayed). (PT pattern delay)
      1F   combined note delay/retrigger: form 1Fxy
           x = note delay
           y = retrig
```

- Lots of new features for MIDI use:
  * MIDI message editor for hex-level editing/storing e.g. SysEx
    messages.
  * optional input remapping (e.g. control OctaMED from the MIDI
    keyboard).
  * you can now use either All Notes Off or note-off msgs to turn off
    all notes (not all devices recognize the former).
  * you can now access ALL MIDI NOTES (except one :( ) directly, without
    sample transpose etc. The octave range is C-1 -> F#B
    (A = 10, B = 11)
  * sample transpose +24/-24 limits changed to +127/-128. Don't use such
    values with samples, though (may cause problems).

- TOTAL PowerPacker load support (requires powerpacker.library). OctaMED
  will now load automatically powerpacked modules, songs, synthsounds,
  samples, even powerpacked MED_paths-lists!

  * Unfortunately, there are some memory maintaining problems when using
    this feature, I'm not sure if they are dangerous. The problem seems
    to be in powerpacker.library, not in OctaMED.

- There's a new module file format, MMD1. Loading/saving old MMD0
  modules is still supported. However, you are no longer able to save
  Sng+samples format files, for two reasons:

  * Sng+samples files are very complex and tricky to load. They are not
    particularly extendable, though. So I'd have been forced to design
    a new sng+samples format for the new OctaMED Pro note format. I
    thought it was not sensible to create "one new" file format, it
    would obviously have just caused confusion.
  * MMD-modules can be easily supported by player programs etc., I hope

    to make the life of authors of such programs a bit easier.
  * Some memory is saved. (OK, three reasons :)

  Although MMD files are longer than Sng+samples, you can now store your
  modules in powerpacked format (provided you have enough memory for
  decrunching them). (PowerPacker crunching support may be added to a
  future version.)

- You can now give names for each block and song (of a multi-module).

- It's now possible to control the playing speed more accurately in
  8-channel modes. Also, a HQ gadget will give better sound quality on
  accelerated Amigas (works also on standard Amigas in 5 and 6 channel
  modes).

- BPM-style tempo control now possible. Helpful for MIDI work.

- Sample-editor:

  * Freehand drawing.
  * Echo rate now in steps of 1 bytes.
  * Optional Display Pixel mode. Much quicker.
  * Cut and Paste won't unzoom any more.

- 2, 4, 6 and 7 octave IFF samples supported. (The highest octave of a
  7-octave sample can't be played, though.)

- Many proportional gadgets now use FOLLOWMOUSE, i.e. they will act
  immediately, not just when you release the mouse button.

- Tracks can be turned on/off using gadgets on the status bar.

- Constantly updated free memory display.

- Finetune (Protracker-compatible).

- Jumping mouse pointer totally removed.

- An optional keypad arrangement available (suggested by a user).
  See docs.

- An option to hear the notes while moving the cursor up/down. Useful
  for non-real-time editing.

- An option to load the synth/note/sample/MIDI editor graphics from disk
  when required. Saves some memory.

- An option to set cursor position with the left mouse button, instead
  of turning tracks on/off.

- Note Echo creates automatically "echoes" with the C command.

- Automatic Chord track resetting can be turned off. Real-time chord
  recording now works.

- SynthEd:

  * Current waveform number also displayed in hex (because there's no
    dec->hex conversion when entering the sequence).
  * G.Trn automatically creates "slides" e.g. 00->0F, which would be
    tedious to enter.
  * F6-F10 keys now work as in the note editor.

 - SList

  * When inserting names, the old name is automatically deleted.
  * Instruments can be saved to or deleted from the selected directory
    (no file requester actions required).
  * Can save all instruments of a song to the selected directory (handy
    for ripping samples from a module).

 - For real time recording: a gadget to temporarily decrease playing speed
   to 2/3 or 1/2 of the original.

 - Many minor fixes/corrections...

OctaMEDPlayer V3.00 contains the following additions:
~~~~~~
 - Support for OctaMED Pro MMD1 file format, and the new player features.

 - Loads powerpacked MMD0/MMD1 modules (requires powerpacker.library).

 - A simple ARexx interface, great for multimedia use! It's possible to
   e.g. control OctaMEDPlayer within a multimedia program supporting
   ARexx, to provide e.g. background music for your multimedia shows.

 - Loads delta-compressed IFF-samples.

 - The slider arrow gadgets now repeat when held down.

 - A new sample editor filter parameter (phase length). This affects
   the filtered/boosted frequencies, and can also produce some special
   effects.

 - The DOS requesters and propgadgets now have a 3-D look under 2.0.

 - Bug fixes, including:

  * DELETE now removes the file requester name correctly.
  * Samples already in memory won't be reloaded, when loading MMD1
    No Inst modules.
  * A volume-handling bug in the 8-channel routine.
  * The note editor had a display bug with very high notes.
  * When printing song header, the MIDI channel was negative for
    instruments with Suppr.N.Off.

(This revision not released to the public,but fully copyrighted))

1.21 OctaMED Professional V4.00b

** OctaMED Professional V4.00b (31 Jul 1992) ***Copyright RBF Software***

A revision to fix some bugs in 4.00, also adds some minor features.

- New MIDI command 13. This is equivalent to command 3 (set pitch-
  bender), but can also be used when there's a note next to it.

- New commands FF4 and FF5. Command FF4 delays the note 1/3 of a line,
  FF5 delays 2/3 of a line. Can be used e.g. to produce triplets:

  C-2 10000 D-2 30000
  D-2 10FF4 --- 00000
  E-2 10FF5 D-2 30000

  Works accurately only, when the secondary tempo is divisible by
  three, e.g. 3, 6, 9..

- When using V37+ icon.library (2.04), DEL FILE now deletes the file
  icon using DeleteDiskObject() => the icon disappears from Workbench.

- Command 19 (sample offset) now works in 5-8 channel modes.

- The sample editor line mode display is slightly faster.

- Bug fixes:

  * When Clearing/loading a song, the note editor might remain in
    3/4 mode...
  * Command FFE didn't work in 5-8 channel modes.
  * HQ is cleared, when loading 7/8 channel songs under 68000/010.

OctaMEDPlayer
~~~~~~~~~~~~~~
- Above new features added, bugs fixed.

- HQ gadget (only affects 5-8 channel modules).

1.22   OctaMED Professional V4.00c

** OctaMED Professional V4.00c (11 Aug 1992) ***Copyright RBF Software***

A single bug fix, the bug was dangerous: The ExtNewScreen tag array
wasn't terminated... (however, it appeared to work fine :-o)

(23 Aug 1992) - updated OctaMEDPlayer & octaplayer routines to support
                command 19.

1.23   OctaMED Professional V4.00d

** OctaMED Professional V4.00d (22 Sep 1992) ***Copyright RBF Software***

OctaMED:

    Two bugs fixed. The other probably didn't ever occur. Another was

more serious, causing the MIDI message editor Send to often fail.

Proplayer/Medplayer.library

Some bugs fixed. Proplayer.a's VBLANK option ought to work now.
(Thanks to Stephan Fuhrmann for finding the bugs!)

OctaMEDPlayer:

One bug fix. Also a new feature: If you shift-click the Play button,
OctaMEDPlayer will play all songs of the multi-module in succession.

1.24   OctaMED Professional V4.00e

** OctaMED Professional V4.00e (25 Oct 1992) ***Copyright RBF Software***

Distribution Copyright status change: => RBF Software

A bug in proplayers/OctaMEDPlayer/libraries fixed: The finetunes of the
previously played song remained uncleared in some cases.

1.25   OctaMED Professional V4.00f

** OctaMED Professional V4.00f (02 Nov 1992) ***Copyright RBF Software***

FINALLY found the bug in the Tracker save routine! Now it should work
fine, at last...

Fixed some bugs in OctaMEDPlayer (in particular, FFE in 8 channel mode
caused a crash – thanks to the user who reported it!) There are also some
new command line options (see OctaMEDPlayer docs).

1.26   OctaMED Professional V4.00g

** OctaMED Professional V4.00g (09 Nov 1992) ***Copyright RBF Software***

Changed the behaviour of the DEP2 gadget. The new depth will _only_ take
place when you Save Prefs and then reboot OctaMED, in other words, the
screen depth will no longer be changed immediately. This change had to be
made for AGA/OS 3.0 compatibility.

1.27   OctaMED Professional V5.00

** OctaMED Professional V5.00 (09 Jun 1993) ***Copyright RBF Software***

Welcome to another major release of OctaMED! In short, this release has
required more work than any other in the history of MED/OctaMED. Many

parts of the program have been entirely rewritten and the outlook of
OctaMED has changed radically.

This version, and all future versions will require Kickstart/Workbench
version 2.04 or later. OctaMED now heavily depends on the new features
of the OS Release 2. As 2.04 upgrade packages have been available for
more than 1.5 years, it's reasonable to expect every serious user to
have it available. (OctaMEDPlayer still works under 1.3.)

Below is a short list of the most important new features of this version
(in no specific order):

   - OS Release 2/Style Guide compliant window- and menu-based user
     interface.

   - Supports up to 64 tracks! (Instead of 16 as it has been since
     MED V2.00.) In addition, you're no longer limited to multiples
     of four tracks. You can now have 1, 2, 3, 4...64 tracks.

   - The limit of max. 100 blocks has been removed... (now 1000).

   - Now supports module packing, in either PowerPacker or SFCD format.
     SFCD is a packing format used in Stephan Fuhrmann's PowerPlayer
     module player program, it usually packs slightly better than
     PowerPacker. The SFCD format packing/unpacking requires
     'lh.library' .

   - Can calculate module length before saving, if you ask for it.

   - Save Timer brings up the Save window in a specified amount of time.

   - A menu option to display the last title bar message.

   - Fully localizable under WB 2.1 or later (uses locale.library)!

   - A new sample type: ExtSample. This is like a normal sample, except
     that you have two new very low octaves. However, ExtSamples should
     be used with care, as there's a nasty feature in the hardware.
     They are, therefore suitable mostly for effects (not melodies).
     The hardware 'feature' in question is a programmers' headache
     called "DMA-Wait". It would have been possible to make ExtSamples
     work correctly in every situation, this would, however, have
     required quadrupling the DMA-Wait time, which is unreasonable as
     ExtSamples aren't used very often. The problem is: after playing
     an ExtSample, using the low octaves, the following note will
     probably not be correctly triggered, the solution is: use the
     FFF command before triggering the next note, e.g:

   C-1 20000 ; ExtSample
   --- 00000
   --- 00FFF ; use FFF before playing the next sample
   C-2 10000 ; may be ExtSample, normal sample or whatever..

     However, due to the way channel splitting works, this problem does
     not exist at all on split channels!

   - New sample editor features:

* Invert: negates the ranged waveform.
* Chop: discards non-ranged parts of the sample.
* Remove Unused Space: removes empty space from both ends of
  the sample.
* Play Buffer Contents: allows you to listen to what the
  copy buffer contains.
* Change Volume enhanced: an option to avoid clipping and
  four presets for doubling, halving and fading in/out.
* Change Pitch enhanced: an option to cancel the current
  finetune value of the sample, an option to turn off
  anti-aliasing.
* Mix enhanced: source/destination levels can be set.
* Create Chord: creates chord¶of 2 - 4 notes from a sample.
* Pixel Density: allows you to set how many pixels are
  displayed per x-position (in pixel mode).
* An option to turn off voice monitoring during sampling
  (may enhance sound quality on slower machines).
* The play position pointer will no longer slow down during
  heavy system load.
* Internally rebuilt to allow adding 16-bit support easily,
  in case Commodore releases the rumoured new sound chip.
  (The manufacturers of 16-bit sound boards are welcome to
  donate one to the author, if they want it supported ;-)

- Sections. This is a major new feature that lets you organize
  the song more hierarchically. The idea is that you can create
  several play sequence lists (each can be named), and then
  define the order in which they are played. The section list
  works as the master play sequence, where the actual play
  sequences are kind of sub-sequences.

- The play sequence list displays block names.

- There can be 999 entries in a playing sequence.

- New list windows:

  * Song Selector displays all songs
  * Block List displays all blocks

- The MIDI Message Editor can now handle messages up to 1048560
  bytes long. Enough?

- You can now use 'Extended Preset' for a MIDI instrument. This
  is for some devices with > 128 presets, and works in the
  following way:

  * Presets 1 - 100 are sent as usual ($Cc $00 - $Cc $63)
  * Presets above 100 are sent by first sending the number
    of 100's followed by the 0 - 99 part.

  Therefore, it works only with MIDI devices which exactly support
  this method (see the manual of your device).

- You can enter a default pitch (note) for every instrument. When
  you press 'F', the current instrument is played/inserted using

its default pitch. Very useful for untuned instruments, such as
drums. This setting can also be saved into MED_Paths.

- You can now store an instrument's tuning / MIDI / default volume /
  default pitch values in the sample list, and you can add directories
  anywhere in the list (not just to the end).

- Instrument Load Window. Just for this, smaller and lighter than
  the Sample List Editor.

- The palette setting now supports 24-bit AGA colours.

- A lot of new options, including e.g.:

  * Display Max Tracks: chooses the maximum number of trcks that can be
    displayed on-screen at once (an extension to the old NO16 button)
  * Mouse Options: each mouse button can be configured to turn
    tracks/selected tracks on/off, set the cursor position or mark a
    range
  * Auto-Freeze Screen: automatically turns off screen updating
    when the OctaMED screen is not the frontmost
  * Play After Loading: for listening, automatically starts
    playing after loading
  * Can turn automatic flushing of unused instruments on/off when
    clearing the current song of a multi-module

- Play Timer can be reset by pressing the 'R' gadget next to it.
  If you click the Timer, the song will position to the reset point.

- New editing functions:

  * Insert / delete tracks throughout the whole song
  * Flush all unused instruments
  * Generic slide creates a hexadecimal volume slide (even in decimal
    mode)
  * Line highlighting: offset start and custom spacing options

- Supports multiple settings and programmable key files (during
  startup, OctaMED attempts to load 'S:OctaMEDPro.config' and
  'S:OctaMEDPro.defkeys').

- The config file format has changed (again). This time to a
  readable ASCII file, not likely to be changed any more.

- Online help (uses amigaguide.library). Activated by pressing a
  certain key on the keyboard (you may find it out yourself ;-).

- Many new keybaord shortcuts, including some new editing functions.

- There's (unfortunately) a new file format again, it was required
  for supporting 64 tracks, Sections and multiple play sequences.
  OctaMED defaults to the older MMD1 format if none of these
  features are used. Some new features (default pitch, extended
  preset, Instrument Parameters Loop flag) are available under
  older formats as well.

- HQ mode no longer slows down the tempo.

There are a number of smaller features not mentioned here, you will
quickly notice many of them when you start using OctaMED Pro V5. For the
ones you don't notice, press the Help key while using OctaMED and choose
the "Those upgrading from V4..." topic. Enjoy!