

fmsx_history ii

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	fmsx_history				
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Chapter 1

fmsx history

1.1 "

History

1.4: (12-05-97)

- Multiple MSX fonts are now supported.
- Updated the VDP command emulation from the newest UNIX sources. Among others, Treasure of Usas and Strategic Mars work now.
- It was possible that the sound was activated while the emulation was paused. Corrected.
- Added support for the Kanji ROM.
- Rewrote the following VDP commands in assembly: LMMM, LMMC, LMMV, HMMM, HMMC, HMMV, PSET, and STOP. The new commands are much faster and clip correctly, which solves a lot of guru's.
- Corrected a memory corrupting bug in the screen 6 refresh routine. This caused the flickering during the MSX2 boot sequence.
- Fixed music mode. It now closes the screen as it is supposed to do.
- Defaults for display modes are a bit more sensible now. Thanks to Mark Knibbs (markk@netcomuk.co.uk) for reporting this.
- Added crude line interrupts for screen 5. Refinement and other screens will follow.
- Added a window for setting pathes to external resources.
- Fixed highspeed mode for OCS/ECS machines. There may be some trash left at the bottom of the screen but at least the entire screen is visible now. Reported by Mark Knibbs.
- Odd frames are now also blanked when necessary in highspeed mode.
- Preferences are now saved to ENV:, and can be loaded and saved at will
- Direct color loading is turned off when the MSX screen is not active. Again, thanks to Mark Knibbs.
- Added an ARexx port.
- Added support for playing SCC and PSG at the same time, through AHI.
- Added support for SCC+.
- Added support for disabled SCC channels. This solves the random beeps in Parodius.
- Made the double buffer method user-selectable, to allow CyberGfx users to choose v36-style double buffering.
- fMSX was taking too much time when the MSX window became inactive. This caused the Amiga to drop upstroke events of the left mouse

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button. Fixed.

1.3: (20-02-97)

- fMSX can now create diskimages.
- Changing diskimages on the fly was broken.
- MSX2 sprites no longer have their colors drawn upside down. Firebird and Metal Gear 2 look much better now.
- Screen 7 has sprites now. As with screen 5, only 16*16 sprites are supported. This will be improved.
- Added support for tape. It's now possible to save your position in Metal Gear, Payload, and several others.
- There is no more need to 'insert' disks manually.
- Disks or diskimages can now be selected from a requester.
- Removed quite a few bugs from the doublebuffering routines. The system won't hang anymore when changing screenmode.

1.2: (28-01-97)

- Added support for screen 8.
- Added screen anchoring.
- Added support for 40-track disks.
- Added support for disk images. These can be changed on the fly, a feature that is carried over to device-based disk emulation.

1.1: (12-01-97)

- RAM is now swapped in during disk operations. This should lead to higher compatibility. Thanks to Sergi Martinez for reporting this.
- C2P was slightly improved, causing faster screen updates in screens 5 and 6.
- The MSX memory system was revised. This allows a 32K memory usage reduction when using cartridges.
- SCC now also works with diskloaded games.
- The ROM mapper was slightly improved. F1-Spirit works now.
- A serious error in the ROM mapping caused the Konami 1 and ASCII 2 megarom types to fail completely. After reparations were complete Andorogynous started working, as will no doubt many other games.
- The memory mapper now always reacts to writes to ports 0xFC..0xFF. This should enhance compatibility.
- All instructions that are emulated on 68060 have been replaced.
- The GUI was rewritten to use a (simple) GUI layout engine.
- A long-standing error in drive allocation was removed.
- Access routines were added for all gadgets. This greatly simplified the internal structure of fMSX and the preferences system.
- Added the ability to load a cartridge by dropping an icon on any of the windows.
- Added a key for pausing the emulator and returning to the workbench.
- Added the ability to start cartridges directly after selection.
- The ability to run on the workbench was removed. It may reappear later.
- Colors were not set in highspeed mode. This has been corrected.
- An elaborate system for mapping MSX screenmodes to Amiga screenmodes was added. This allows far better configurability for people with VGA monitors.
- The MSX version is now saved in the cartridge icon as well.

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- Loading 16K ROMs was broken. Fixed.
- Something caused garbage to be visible on screens 5 and 6 after they were opened. Fixed.
- Screens 5 and 6 refresh smarter and therefore faster now.
- Screens 5 and 6 are initialized much quicker.
- Colorchanges can now be applied to the screen as soon as they occur, which is necessary for certain graphical effects.
- Added limited (no sprites) support for screen 7.

1.0: (14-07-96)

- Screen redraw was completely rewritten as a separate task. This means redrawing is a lot more regular than it used to be.
- Rewrote handling of VDP blanking. There was really no need to have separate routines for each screenmode.
- Because many more video preferences are planned these have been given their own window. Some options from the old preferences window have been moved to this new window.
- Added the ability to ignore the VDP blanking bit. This is necessary because blanking is handled globally, and some games only turn off the screen for certain scanlines.
- Implemented alternate colors, colorblinking, 26.5 line mode, and running on the workbench for screen 0 (80).
- Changed the way the second joystick is activated from Amiga-J to '(' on the numeric keypad.
- Implemented music mode.
- Removed a spurious memory allocation. Chip RAM usage dropped by 64Kb.
- Implemented double buffering.
- Added the option to hide the title bar of the MSX screen.
- Removed a memory-corrupting bug from high speed mode, courtesy of ${\tt B} \texttt{ø} \texttt{rge} \ {\tt N} \texttt{ø} \texttt{st}$.
- Rewrote highspeed mode. It is far more OS-friendly now, but still as fast as it used to be. It should give no more trouble now.

0.8: (10-03-96)

- Supports two joysticks.
- Many Z80 commands were implemented. Arkanoid and Dambusters run fine now.
- Interrupt Mode 2 was implemented.
- Sergi Martinez pointed out a way to increase emulation speed by 30%.
- Removed a couple of errors from the Z80 emulation.
- Removed a memory corrupting bug from the SCC routines. SCC sounds cleaner now.
- Made a fresh start with emulating screens 5 and 6. It's a bit slower now but a lot more stable. Speed will follow later.
- Made some algorithmic changes to the way screen 2 is refreshed. It's much faster now, which means that Confused, Apeman, and others have become very playable.
- Don't know what caused it, but after poking around an afternoon in the graphics emulation the 'corrupted graphics' bug that showed up in almost every Konami game is gone.
- Two new megaROM mapper modes were added, and the others were revised.
- Soundmode is saved in the cartridge icon.
- No longer forgets the last part of the cartridge pathname when saving preferences.
- Separated the history from the rest of the documentation.

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- Added an option to suppress the automatic saving of preferences, as well as a menu option to save those preferences by hand.
- Changes in videomode are directly copied to the screen.
- Added limited sprite support to screen 5.

0.7: (28-10-95)

- The MSX will now recognize if the Amiga makes a change to a disk.
- Found and corrected a memory-corrupting bug.
- Resident programs will be flushed when Reset is pressed.
- Z80 emulation completely changed. MegaROMs are much faster, the rest is a bit slower.
- Memory mapper support added.
- Limited support for the SCC sound system added.
- Handling of cartridge filename is much better. It now appears in the requester and the path is remembered between sessions.
- Removed several minor errors from the drive allocation code.
- Improved support for screen 0 (faster, 80 columns).
- Removed the check that cartridge files are really cartridges. This is the software equivalent of an SCC switch.
- Rewrote critical memory management routines in assembly.
- Implemented many VDP operations.
- Partial support for screens 5 and 6 added.
- Now compatible with the v36 OS.
- Includes MSX2 ROMs.
- Several new options: freeze screen while window is inactive, use MSX2 ROMs, use internal ROMs only.

0.6: (23-08-95)

- Drive support added!
- A two-line enhancement to the VRAM-write scheduler causes a great deal of speedup in some games, for instance Tank Battalion.
- The user interface was enhanced and offers a lot more functionality now.
- The Z80 emulation is smaller and faster than before.
- Preferences are now automatically saved when quitting fMSX.
- No longer hangs when the right mousebutton is pressed in highspeed mode.
- MSX2 ROMs didn't work in v0.5. Fixed.
- Fixed a bug in the MSX2 palette code.
- Highspeed mode is automatically turned off if the fMSX screen is deactivated. This means that it should no longer hang if for some reason a window on another screen becomes activated.
- Added requesters for most errors and warnings.
- Removed the ability to use two cartridges at once. This will return in a future version.

0.5: (17-07-95)

- There was a bug in 0.4 that caused the emulation to run a lot slower than necessary.
- A simple change to the bankswitching code caused some speedup, especially notable when starting with MSX2 ROMs.
- If one of the libraries could not be opened the general shut-down routines would still call functions from that library.
- No longer hangs when it cannot allocate sound channels.

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- Rewrote some of the documentation.
- Added high-speed video refresh mode for screens 1 and 2.
- Rewrote the PSG emulation. As a consequence, the Dunkshot music no longer suffers from random beeps.
- Added noise to the PSG emulation.
- Sound output is a lot softer now, which allows for far better white noise emulation.
- The joystick now supports two firebuttons.

0.4: (02-04-95)

- Joined the ROMs together to one file.
- The ROMs are now internal, but external ROMs are still possible.
- It no longer closes and reopens the screen if the new screen has the same size and depth as the old one.
- The GUI has been made font sensitive.
- Started work on the hardware hitting screen drivers.
- Changed DoOut, DoIn, and VDPOut to conform to fMSX UNIX 0.7.
- Added VDP operations directly from fMSX UNIX 0.7.
- Will load MSX2 ROMs if available. MSX2 BASIC runs, but starting takes a long time.
- Screen 6 implemented (crudely).
- Fixed the problem with the joystick mechanism. Protector and Volguard work fine now.

0.3: (08-03-95)

- Some important routines were recoded in assembler, giving a nice speed increase.
- Turned off the low-pass filter for more authentic sound.
- Transparent sprites are made invisible.
- Task priority is lowered to -1.
- Uses a greater volume range (0-63 instead of 0-60).
- Keyboard handling is a bit smoother on slow machines.
- Keyboard mapping has changed.
- Removed the bug that caused the humming sound in Eggerland Mystery, Dunkshot, and other Hall Laboratories games.
- Rewrote the video drivers for greater speed.
- Sprites are now clipped against the top border.
- Interrupts are limited to at most 50 per second.

0.2: (20-02-95)

- Now supports loading two cartridges (for use with the Gamemaster).
- A GUI was added. It's topaz-8 sensitive for now.
- The help key is no longer used to quit the emulation, so insert works now.
- The interrupt mechanism was somewhat enhanced.
- It is now possible to set the number of interrupts per screenredraw.
- Added the ability to set the number of instructions per interrupt.
- Added joystick support for one joystick with one button.
- Refresh cycle and interrupt period are read from the cartridge icon.
- Added a 'save configuration' option.
- The emulator now detects if no sound channels could be allocated and runs without sound if so.

0.1: (13-02-95)

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- Screens 0..2 should work with ECS and graphics cards now.
- Sprites are clipped horizontally.
- Sprites support shift-left bit.
- Screens are no longer specified as being PAL.
- Screen 3 works fine now.
- Sprites no longer flicker.
- Sound is much better now, though some bugs remain (specifically: no noise generation, and no effects on channels 1 and 2).
- Vertical sprite position was off by 1 pixel.
- Removed a glaring bug that prevented 32K cartridges from loading. Software compatibility jumped to 85%.
- Added the ability to load a cartridge when starting from the workbench.
- Video emulation now respects the Disable Screen bit.
- Sometimes sprite number 0 wasn't displayed.
- Enlarged sprites were broken.

0.0: (09-02-95)

- First release. This is only for internal review, but people who really wanted it could get it as well.