

ST-Sound v5.20

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(Windows Version)

WHAT DOES STSOUND ?

ST-Sound was previously a ATARI Music emulator. It's now a general "Nostalgic" Computer Sound Emulator ! ST-Sound includes many sound technics:

- Yamaha YM2149 SoundChip Processor emulation engine.
- AMIGA "PAULA" SoundChip Processor emulation engine.
- Specific ATARI-ST Sound programming emulation. (SID-Voice and DigiDrum emulation)
- Universal Digital Sound Tracker engine.

All these "Hardware" emulating capabilities allow ST-Sound to play such Computer musics:

- ATARI-ST Standard chip musics. (95% of all ATARI game's tunes)
- ATARI-ST specific chip tunes with SID Voice and/or DigiDrum. (80% of ATARI Demo's tunes !)
- ATARI-ST Digital Tracker tunes ! (All !! not only MODs, but all strange format, as "KnuckelBusters" in the Cuddly Demos or Digital Departement in the BIG Demo !)
- AMIGA "Future Composer" tunes.
- AMIGA All specific tunes (MODs, but Octamed too !! (Using the Universal Sound Tracker Engine)
- ZX-Spectrum chip tunes.
- AMSTRAD Chip tunes.
- MSX Chip tunes.
- Mattel Intellivision Chip tunes.
- Sega MasterSystem Chip tunes.

I'm sure you think I'm totally mad writing all these specific emulators !! In fact, I'm really very, very lazy. ST-Sound uses internally a universal DataFormat (YM files). ST-Sound can't replay original "file" tunes. You must "convert" them before playing. Well, only programmers can convert tunes, but many are already converted and you can download them trough the World Wide Web !! On the other hand, some programs such ATARI Emulator PaCifiST can produce YM-Files !

CARDWARE REGISTRATION

YM is "cardware". That means, if you like this program you are strongly encouraged to become a registered user by sending a nice illustrated postcard to me. This helps me getting motivated in programming upgrades and further productions. Please DON'T send letters or emails as a substitute for a real postcard.

WHAT'S NEW ??

- v1.0: YM emulate an YM2149 without volume and waveform.
- v1.1: Add volume emulation.
- v2.0: Add waveform emulation. (for madmax buzzer !)
- v2.1: Add graphic stuff (scopes...)
- v2.2: Add many options. (Direct to disk etc...)
- v3.0: Add madmax DigiDrum !!
- v3.01: Add File selector.
- v3.02: New Packed-YM format.
- v3.03: -Some bugs removed in FileSelector on CDROM (Thanks Lester!)
-Drive change in FileSelector
- v3.10 : Windows 95 version.
Envelope and Noise generator Improved.
(Better sound quality !)
Bug removed in WAV sample generation.
YM File format documentation.
- v3.12: - No change on the DOS-Version.
- Bug removed in each beginning of the song.
(Many thanks to Adam Lorentzon for the solution !)
- Music path-name is saved in YM.INI
- v3.2 -YM change to STSOUND
- StSound WEB Homepage : <http://www.mygale.org/09/leonard/>
- No change on the DOS-Version.
- New WINDOWS interface. (Soon a playlist !)
- v3.30 - Add Play-List.
- Bug fixed under Windows NT 4.0 (I hope !) Thanks Euan McFadyen !
- v3.31 - Add more option in the Play List.
- You can drag Directory in Play List.
- v3.31b - "YM3b" format support. (Read YMFORMAT.TXT)

- v3.32 - Bug removed in v3.31b.
- You can drag playlist file (.pym) in the playlist.
- v3.33 - Add YM5 format. (Not complete, only Music information)
- Add some dialog box (Music Info)
- v3.34 - YM5 advanced support: ATARI timer SID voice emulation. (Try music from Scavenger !)
- Windows interface minor changes.
- v3.35 - YM6 Support (Sinus-SID supported !)
- Better sound quality (44Khz)
- Low Pass filter
- Windows position are saved
- Minor change in Windows minimizing.
- v3.36 - Better Low Pass filter.
- Pause and Stop button added.
- Gravis support added for DOS Version.
- v4.00 - AMIGA Paula emulation.
- AMIGA Futur Composer replay music.
- v4.01 - AMIGA Futur Composer player bug removed in portamento.
- v4.02 - Bug removed in TAO Sinus-SID.
- PlayList is saved automaticly when you exit StSound.
- Full support of specific "volume reduction" in wavform. (Used by the two new MadMax tunes)
- v4.03 -Add "CPU Load" control.
- v4.04 -Add ATARI Digit Remix emulation.
- v4.05 -Now full support of extended player rate. (Ex AMSTRAD 100Hz player)
- v5.00 -Universal Digital Sound Tracker added. Capable of playing universal tracker music from 1 to n voices ! (Now tunes like ATARI Big-Demo digital departement are available under ST-Sound !!)
- v5.10 -St-Sound PlugIn available (Play YM tunes in your WEB Pages !!)
(Get it at <http://www.mygale.org/09/leonard/stsnd.htm>)
-VLDSP Added to StSound. (Very Limited Digital Sound Processing)
(Now you can listen to all your favarite tunes in a very big room !)
- v5.20 -Add time-counter and time-slider to seek where you want in a tune !!

- You can add a fade-in / fade-out in the WAV-Generator.
- Minor change in the GUI (the music information box is reduced a bit)

PLAY-LIST USAGE

The playlist allow you to hear a preselection of music in back-task. When a music is finished, ST-Sound runs the next one automatically. To build a Play-List you can use several methods: Add file with a dialog based FileSelector (ADD or INSERT button), "drag and dropping" files or directory in the list box or just loading a previously saved PlayList. (Please notice you that you can Insert files by dragging them between two files)

When your playlist is done (you can update it when you want), just save it on your hard disk. (The YM file PlayList has the PYM extension). You can start a PlayList by double-clicking on a music.

WAVE GENERATOR

ST-Sound is able to play music form various computer by emulating the SoundChip YAMAHA YM2149. and the other hand it can just use the WAV file format as output by creating a (generally big !!) sample on your disk. Just click on Generate Wave file to choose a music. Then choose a WAV file name and wait till the end.

The generator can produce 44100 or 22050Hz, 8 or 16 bits file. The new VLDSP is included in the WAV generator.

CREDITS, GREETINGS AND THANKS

To do YM, I have collected many documents and Tips around, so here are some thanks to people who helped me:

- Special thanks to Mister BEE to help me with YM2149 output signal analysis.
- GRIFF, for writing ST-Sound emulation part of the STonX emulator. (ATARI-ST emulator on UNIX system)
- BEN for technical informations about YM frequency and MADMAX's "buzz" usage.
- TGA to lend us (Mr.BEE and me) the oscillo.
- MCoder for ripping and collecting all these marvellous tunes (He wrote a demo with 257 MADMAX's best musics. Maybe I convert it later on PC...)

For sending me the C source code of his universal COSO player !

- Charles Scheffold and Thomas Pytel for their fantastic DOS-Extender.
- Haruyasu Yoshizaki for his powerfull archiver named LHA.
- Adam Lorentzon (<d93-alo@nada.kth.se>) to help me in the Windows version of YM.

- Olivier Lopicque (Great ModPlug author) for his precious help about digital signal processing and Plugin programming

Flying regards to:

OXYGENE members: Lester, Mon, Nap, Oxbab, Spiral, Sun Stark.

Others: -Frederic Gidouin for the WONDERFULL ATARI-St emulator
PACIFIST.
-DIM,
-Dogue de Mauve (So long time...)
-Ziggy Stardust
-Guillaume (GG) (New YM-Spectrum converter !!!)
-Ben & Jess,
-Claudius (Sol Carlus)
-Bozo (Bozo Tool Kit)
-Fury,
-BigFoot,
-Niko,
-Zappy,
-Griffon,
-Aeon of Aura (hi all !)
-Arnaud DA COSTA (Mage, Amstrad specialist !)
-David DUCASSU to help me to find a Web Page !

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Official Leonard Web Page (Featuring ST-Sound support and lotsa more !)

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