

Default

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Chapter 1

Default

1.1 Table of contents

SongPlayer 1.53 (17-Feb-1999) GIFTWARE

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1.2 Introduction to SongPlayer

SongPlayer is an audio file player of various formats .

It can play 8 or 16 bits samples, mono or stereo ones, compressed or not.

It can be used as a shell utility thanks to its command parameters or with the Workbench with its graphical interface MUI .

The 16 bit sounds are played in 14 bit with the calibration principle of Christian ←
BUCHNER or
in real 16 bit via a sound card with AHI .

Others features:

- Playlists
- Karaoke mode to see lyrics
- Pseudo-stereo effect for mono files
- Scopes (CPU, Vu-meters, Level-meters, Spectrum analyzer)
- Treble and bass adjustment
- Audio data base
- AREXX
- Read of compressed XPK files

1.3 Supported audio formats

IFF 8SVX PCM format and Fibonacci delta

AIFF 8 or 16 bits and ADP4 (ADPCM 4)

WAVE 8 or 16 bits

AU 8 or 16 bits and ULAW

MPEG Layer I, II and III. Norm 1, 2 and 2.5

CDDA

1.4 adp4

I have implemented an ADPCM 4-bits (ADaptative Pulse Code Modulation) compression ↵
for the AIFF format.

This format divide by 4 the size of the original 16-bit sample.

The Compress/Expand processes are relatively simple and give very good results, ↵
that's why

I decided to add this format.

See Utilities

1.5 Requirements

An Amiga

A MC68EC020 or +

Amiga Workbench 3.0 or +

MUI V3.3 or + (not needed for a command line use)

Only one version of SongPlayer is provided for 68EC020 to 68060.

The mpeg.a.library (aminet/util/lib) that correspond to your CPU.

1.6 Installation of SongPlayer

Click on the installation icon (you should have the 'Installer' utility)

That's all :)

1.7 Use

The main window

The scopes window

The karaoke window

The karaoke editor window

The audio data base window

The options window

The menus

The keys

1.8 Main window

Song List:

The song list contains the current files selected for playing. This list can be filled or loaded with the eject button or with the menu "Project/Open". You can choose audio files or play lists. It is possible to add files to the current list with the menu "Project/Append". To remove an entry in the list, just select the line to remove and press DEL key or select the menu "Project/Close". The list can be cleared with the menu "Project/Close all". The entries of the list can be moved to change the list order. This list can be saved with the record button or with the menu "Project/Save" or "Project/Save as". The total play time and the number of songs of the list are always displayed at the top of the list.

File Info:

The file info text area shows informations about the selected file. It is composed of a maximum of 3 lines. When the play list is not active, one more line shows the duration and the title of the current file. These 3 lines are:

- Artist and album of file
 - The file format
 - The file comment
-

Time Slider:

This slider allows to seek into the current file.

Volume:

The volume button switches between Normal volume and Boost volume. Normal volume gives a slider from 0 to 64 and Boost volume from 0 to 256 (256 = 400% boost).

Balance:

The button reset the balance. The slider goes from -64 (full left) to +64 (full right).

Bass & Treble:

These features are available when the Bass & Treble adjust is enabled in the Audio Options. The buttons reset the bass or the treble (set to 0dB). The sliders adjust the bass or treble from -20dB to +20dB.

Buttons:

Most of the buttons can be hide (see the option window) in order to simplify the control bar.

1.9 Scopes window

This window contains the various scopes selected in the Options/Scopes window. There are 4 types of scopes.

Vu-meter: A hand indicator of the sound level.

Level-meter: A bar graph indicator of the sound level.

Spectrum analyzer: An 8 frequencies band level indicator.

CPU usage: A gauge that indicates the CPU % used for audio decoding.

1.10 Karaoke window

This window display the song text in a karaoke way. One or two lines can be displayed. In case of a 2 lines display, the bottom line is the coming text.

1.11 Karaoke editor window

This window allows you to create or modify a karaoke file. Each line of the list correspond to one karaoke line. A line is composed of a time and a text line.

The time format is MM:SS.T, i.e. minutes, seconds and 1/10th second.
This time indicate when the text has to be displayed.

EDITING

Copy: Copy the current line to the clipboard
Cut: Copy the current line to the clipboard and remove it from the list
Paste: Insert the clipboard line after the current line

The string text just bellow the list allows you to modify the selected karaoke line (you must press Enter to validate the modification).

Pick Time: When you click on this button, the current playing time is copied to the editing line. This feature is very interesting:
You only have to enter all the song text without considering the time. Then, select the first line, play the song and click on this button each time the selected line must be displayed.

FILES

Load: Load an existing Karaoke file (.kok).
Import: Import a text file to the editor.
Save: Save the editor content to a Karaoke file (.kok).

Karaoke file format:

Each line of this text file has the following format:

MM:SS.T <Karaoke text>

MM:SS.T is the time of display the karaoke text.
The karaoke text is the rest of the line.

Lines must be ordered by time.

1.12 Options window

The options window allows you to customize SongPlayer.
Theses options are saved in file "SongPlayer.cfg" of the SongPlayer program directory.

There are 5 separate settings:

The Main settings
The Audio settings
The Karaoke settings
The Scopes settings
The MPEG Audio settings
The CDDA Audio settings

1.13 Main settings

File

Auto play:

Start to play automatically after the load of a new play list.

Inter file delay:

Wait time between two successive plays.

Initial drawer:

It's the starting drawer of the audio file selector.

Initial file:

It's the file to load automatically at SongPlayer start.

File pattern:

It's the pattern of the file selector used at the load time.

Playlist pattern:

It's the accept pattern of the playlists. Only playlist filenames that correspond to this pattern will be examined.

Load in RAM:

Every audio file is loaded in RAM before playing.

Buffer size:

Size of memory buffer used for file access.

Use XPK:

Use XPK library for loading compressed files.

Display

File list	Show/hide the current play list
Playlist window	Open a window for the playlist
Artist & album	Show/hide artist and album of current file
File format	Show/hide the current file format
File comment	Show/hide the current file comment
Volume & Balance	Show/hide the volume and balance
Bass & Treble	Show/hide the bass and treble
Time slider	Show/hide the time progress bar
Sizable window	Enable the window resizing
List pattern	Set up the display of the title column of the list
	This string can include the following special chars:
	%a artist %A album
	%c comment %d duration
	%f filepath %g genre
	%t title %T type
	%y year

Buttons

Allows to choose the buttons to show in the control bar.

Intro duration: play duration of the intro mode

1.14 Audio settings

Use AHI: Use the AHI system for the audio output.
You have to select an AHI audio mode with the selector button at the end of the line.

Mixing Mode:

There are 3 mixing modes: Off, On and Auto.
Off: No mixing, the audio output frequency is equal to the audio file frequency.
On: The mixing is always performed. The audio output frequency is set to the value of the "Mixing frequency" Slider.
Auto: The mixing is only enabled when the audio file frequency is lower than the "Limit frequency" Slider.

Note: If the requested audio frequency is too high for your computer (depending on the video mode for built-in audio), the mixing is automatically enabled and set to the maximum frequency supported.

Bass & Treble Adjust:

This feature allows to adjust the bass and the treble in the Main Window.
WARNING this function may use a lot of CPU time on slow machines.

Priority: It's the audio decoding process priority.

Buffer Size: This slider sets the size of the audio buffer in memory.
It corresponds to the amount of pre-decoded audio.

1.15 Karaoke settings

Karaoke Window: Opens or closes the karaoke window.

Display:

The karaoke window can display 1 or 2 lines. When 2 lines mode is selected, the bottom line shows the coming text.

Advance Time:

This value allows to display the karaoke lines a little time before it should appear normally. This value is subtracted to the time of the karaoke line to get the corrected time of display.

Has priority:

The default karaoke path has priority against current directory.

Default path:

You can specify here the location of your karaoke files. Normally, these files are in the same directory as the associated audio file. But, sometimes, it is not always possible to do so (like on a CD-ROM already burned). If the karaoke file can't be found, then it is search with this default path.

Fonts:

You can choose your own fonts for each line of the karaoke window.

1.16 Scopes settings

Scopes window:

Opens or closes the scopes window.

Vu-Meters

The vu-meters are indicators with a hand. They show the current sound level.

None: No vu-meter

Normal: Use a standard MUI indicator

Custom: Customized indicator

The following colors can then be modified:

- Back
- Scale
- Needle

Level-Meters

The level-meters are line indicators. They show the current sound level.

None: No level-meter

Normal: Use a standard MUI gauge

Custom: Customized level-meter

The following colors can then be modified:

- Back
- Body
- Top

Spectrum-Meters

The spectrum meters are bars indicators. They show the current levels of 8 bands of frequency.

None: No spectrum-meter

Normal: Use standard MUI gauges

Custom: Customized spectrum-meter

The following colors can then be modified:

- Back
- Body
- Top

Show CPU Usage:

When enabled, the current CPU usage used for audio file decoding is displayed in a scale gauge.

Fixed levels:

When enabled, the scopes are volume independant.

Priority:

It's the indicators display process priority.

Refresh delay:

It's the refresh rate of the indicators in video frames.

1.17 MPEG Audio settings

These options allow to setup the decoding quality of MPEG Audio files. Because this audio decoding is very CPU intensive, on slow CPU (<68040), you will need to decrease the quality and/or the decoding frequency. You can have 2 different settings for Mono files and Stereo files because stereo files need almost 2 time more CPU than mono files. There are 2 separates options for MPEG I & II and MPEG III because MPEG III needs more CPU power than I or II. So you can have better settings for MPEG I & II than MPEG III.

Quality:

High: Perform the full decoding process
Medium: Perform almost 1/2 of the decoding process
Low: Perform almost 1/4 of the decoding process

Max Freq:

If the audio file frequency is greater than this value, the MPEG decoder try to divide by 2, then by 4 the output audio frequency. When the frequency is divided the decoder needs less CPU. So if you have a slow CPU, set the Max Frequency to a low value.

Force to Mono:

In order to reduce the CPU usage when decoding stereo files, you can force the decoder to use only 1 voice (left), so saving almost 50% of CPU.

1.18 CDDA Audio settings

This options allow to set up the cdrom method to make the audio extraction

Device:

Name of the SCSI device

Unit:

SCSI unit number of the cdrom

CD titles:

Drawer of the audio cd descriptions (ID's)

Méthod:

Audio extraction method

Auto change:

Auto update when the audio CD is changed.

If this option is not activated, you have to use the CD button for loading an audio cd in the playlist.

1.19 The menus

PROJECT

Open...	Load audio files or playlists
Append...	Add audio files to the current list
Close	Remove the current file of the list
Close all	Clear the list

Edit	Edit informations of the current file

Save	Save the current playlist
Save as...	Save the current playlist with a new name

About...	Infos about the author and greetings
About MUI...	Infos about MUI

Quit	Quit SongPlayer

DISPLAY

File list	Show/hide the current play list
Artist & album	Show/hide artist and album of current file
File format	Show/hide the current file format
File comment	Show/hide the curent file comment
Volume & Balance	Show/hide the volume and balance
Bass & Treble	Show/hide the bass and treble
Time slider	Show/hide the time progress bar
Sizable window	Enable the window resizing

Playlist window	Show playlist in a window
WINDOWS	
Scopes	Open/close the scopes window
Karaoke	Open/close the karaoke window
Karaoke editor	Open/close the karaoke editor window
Audio database	Open/close the audio database
SETTINGS	
Options...	Open the settings window of SongPlayer
MUI...	Open the settings window of MUI

1.20 The keys

The following functions are mapped to the numeric pad:

.---.---.---.---			
[] / *	[Previous file	+ Pitch +	
.---.---.---.---] Next file	- Pitch -	
7 8 9 -	/ Volume reset	* Pitch reset	
.---.---.---.---	9 Volume +	4 Backward	
4 5 6 +	6 Volume -	5 Forward	
.---.---.---.---	2 Balance left	0 Play / Pause	
1 2 3 E	3 Balance right	1 Stop	
.---.---.--- N	ENT Balance reset	. Load	
0 . T			

1.21 Audio database

The audio database allows you to class all your audio files. It is build in an hierachical manner, 4 levels:

```

Genre
  Artist
    Album
      Title

```

For each file you can associate a title, an album, an artist, a genre, its duration and a comment.

At the input of this informations, SongPlayer use the informations in the file to fill by advance several fields. So, for an MPEG file, if this one had TAG ID's, they will be used to fill all the fields.

The window of this database allows you to navigate through the hierarchy and to use drag & drop to the current play list. Four buttons are located at the bottom of the window:

```

New:      Create a new element in the database
Edit:     Edit an element in the database

```

Delete: Remove an element from the database
Save: Save the database

The database is located in the file 'SongPlayer.aub'

1.22 CLI use

CLI Usage : SongPlayer Name/M,V=Verbosity/N,AHI=AHIMode/N,
MIX=Mixing/N,BUFF=Buffer/N,EXP=Expand/N,
VOL=Volume/N,BAL=Balance/N,B=Bass/N,T=Treble/N,
Filter/N,
GUI/S,ICONIFIED/S

Name: Names of audio files to play

Verbosity: 0 = no display, 1 = info about samples

AHI: AHI Mode ID in HEXADECIMAL

Mixing: Mixing frequency on audio output (0 = no mixing)

Buffer: 50..10000 = size of audio buffer in milliseconds

Expand: 0 = normal, 1 = pseudo stereo.

Volume : 0..256 (65 to 256 are boost values)

Balance: -64 (full left) to +64 (full right)

Bass: -20 to +20 dB

Treble: -20 to +20 dB

Filter: Enable audio filter (only Amiga build-in audio hardware)

GUI: Open the Graphical User Interface

ICONIFIED: Starts into icon mode

1.23 AREXX commands

The Arexx address is SONGPLAYER.x, x is the number of the SongPlayer active copy. If SongPlayer is launched only one time, the adress is also SONGPLAYER.1.

The Arexx commands available are:

ICONIFIY STATE/F Iconify or not the application

OPEN FILES/M, Load files into the playlist
NOPLAYLIST/S Don't load playlists if specified

ADD FILES/M, NOPLAYLIST/S	Add files to the playlist Don't load playlists if specified
CLOSE	Remove the current file from the playlist
CLEAR	Clear the playlist
PLAY	Start the audio playing
PAUSE STATE/F	Set the pause state
STOP	Stop the audio playing
NEXT	Select the next file in the playlist
PREV	Select the previous file in the playlist
SELECT INDEX/N	Select the given file number in the playlist
QUIT	Quit SongPlayer
RANDOM STATE/F	Enable or disable the random mode
INTRO STATE/F	Enable or disable the intro mode
EXPAND STATE/F	Enable or disable the pseudo-stereo mode
FILTER STATE/F	Enable or disable the audio filter
VOLUME LEVEL/N	Adjust the volume
BALANCE LEVEL/N	Adjust the balance
BASS LEVEL/N	Adjust the bass
TREBLE LEVEL/N	Adjust the treble
SEEK SECS/N	Seek time
GET_TIME	Get the current time position of the playing file
GET_STATE	Get the state of the audio part { STOP PLAY PAUSE }
GET_SELECTED	Get the index of the selected file
GET_NAME = GET_TITLE	Get the name of selected file
GET_DURATION	Get the duration of selected file
GET_GENRE	Get genre info of selected file
GET_ARTIST	Get artist info of selected file
GET_ALBUM	Get album info of selected file
GET_TYPE	Get type of selected file

GET_COMMENT	Get comment of selected file
GET_YEAR	Get year info of selected file
GET_FILEPATH	Get file path of selected file
GET_COUNT	Get number of files in the list
GET_TOTAL	Get the total duration of the list
GET_CDID	Get the ID of current audio CD
GET_CDLENGTH	Get the total duration of current audio CD
TIME_TYPE TYPE/N	Set the time format of the returned infos

TYPE: 0 -> time in seconds (par défaut)
 1 -> MM:SS
 2 -> HH:MM:SS
 3 -> MM:SS or HH:MM:SS according to the duration

Note: STATE = { ON | OFF | TOGGLE | 0 | 1 | 2 }

1.24 Distribution of SongPlayer

This program is copyright (c) 1994-1997 by Stéphane TAVENARD .
 It may be distributed freely under the condition that no profit is
 gained from its distribution, nor from any other program distributed
 in the same package.

Permission is granted to distribute this package by Bulletin Board
 systems or network sites, under the condition that no fee is charged
 on downloading it.

All files that are part of this package have to be distributed
 together and none of them may be changed in any way other than
 archiving or crunching. The only exception to this rule are the
 icons, including the tooltypes, which may be changed to accommodate
 them to the rest of the disk it is distributed on.

This program is distributed as GIFTWARE .

1.25 Utilities

AudioConvert

This utility allows you to convert a raw file (RAW) or AIFF in
 AIFF ADPCM4 . Other options allow to convert in mono a stereo file or to
 change the sampling frequency.

Usage: AudioConvert [<options>] <input file> <output file>

options:

```
-if <freq>      input frequency (for raw file)
-it <tracks>     input tracks (1 or 2, only for raw file)
-f <freq>       output frequency
-m              force mono output file
-t <type>       output type {RAW|AIFF|ADPCM}
-is            input swap little <-> big endian in 16-bit input file
```

To convert a 16-bit AIFF file in ADPCM4 AIFF, the command is:

```
AudioConvert -t ADPCM <input file> <output file>
```

1.26 In the future...

- Support of other audio formats
- Use of PPC ?
- More audio effects
- Real karaoke function (suppress of voices)

1.27 History of SongPlayer

V0.1	08-May-1994	Initial version, unique format: IFF 8SVX
V0.2	10-Nov-1994	Added IFF Fibonnacci delta
V0.3	29-Jul-1995	Added AIFF, AU, WAVE
V0.5	05-Nov-1995	Added MPEG format
V0.6	07-Jul-1996	use of MUI
V0.63	09-Feb-1997	First Aminet release
V1.0	28-Aug-1997	New design Playlists MPEG 1, 2 and 2.5 Layer III Scopes Karaoke AHI.
V1.2	23-Mar-1998	Less bugs Localization More options ! Use mpega.library for the audio decoding AppIcon & AppWindow Audio database Random play Intro mode Arexx XPK Support
V1.3	15-Jun-1998	Fixed bug when filling fields in audio data base from TAG ↔ 's ID Added Loop button Updated TAG's ID list Added "Load in Ram" option Level meters can be independant from volume (option) XPK use as option now Increased stacks of all processes

		Corrected some bugs in Audio process (mp3 library for PPC can be used now)	↔
		Added File buffer configuration	
		Enhanced File loading (more speed)	
		Karaoke default path can have priority against current directory as option	↔
		The playlist can have its own window (option)	
		Added NOPLAYLIST/S option in Arexx open & add commands to prevent loading playlists	↔
		Fixed bug on playlist handling that caused GURU's Custom Fonts for Karaoke window	
V1.42B	12-Oct-1998	Corrected drawing bug of vu-meters	
		Added info into playlists to speed up loading ...	
		Fixed a GURU bug when stop & load new sound.	
		Added Arexx: GET_NAME GET_DURATION (for selected file)	
		Added year field into Audio Database	
		Display of song info at the beginning of the Karaoke window	↔
		Use of ASyncIO library as an option (config)	
		Better use of drag & drop (respect of insertion position)	
		Allow SongPlayer to be started by project icon (playlist icon works now)	↔
		Added path config for Audio Database	
		CDDA Support (still beta and support only Sony mode, and bad interface)	↔
V1.43B	24-Oct-1998	Enhanced CDDA support (Auto mode and Sony, Toshiba, Philips, Nec, Yamaha and	↔
		MMC MultiMedia Commands compatibles)	↔
		Compatible with Audio CD ID's files	
V1.45	16-Nov-1998	Aminet release	
V1.50	28-Dec-1998	Added TAG MPEG ID editor	
V1.51	07-Jan-1999	Fixed bug: intialisation of ASL requester when saving playlist with record button	↔
		Documented functions of numeric keypad	
		Added Arexx: GET_GENRE GET_ARTIST GET_ALBUM GET_TYPE GET_COMMENT GET_YEAR	↔
		GET_FILEPATH GET_COUNT GET_TOTAL GET_CDID GET_CDLENGTH	↔
		TIME_TYPE TYPE/N	
		Fixed bug: Mutiselection in menus	
		Added Hide/show of bass & treble part	
		Added custom display in playlist	
V1.52	06-Feb-1999	Added toggle mode in Arexx	
		Fixed bug: close pb for indicator window	
		Fixed bug: Pause then slection of a file in the list	
		Added of option karaoke screen	
V1.53	17-Feb-1999	Changed MPEG Tag edit shortcut into Amiga-T	
		Fixed bug in Volume/Balance Bass/Treble display	

1.28 Copyrights

MUI is copyright (c) Stefan STUNTZ
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AHI is copyright (c) Martin BLOM
EMail: lcs@lysator.liu.se
Web: <http://www.lysator.liu.se/~lcs>

1.29 Thanks

Stefan STUNTZ for his fantastic graphical interface MUI !

Christian BUCHNER for his 14-bit audio calibration principle

Martin BLOM for his great AHI.

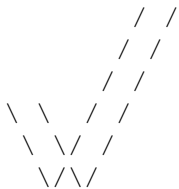
All Catalog translators

Amiga , the best computer ever made.

1.30 Disclaimer

This package is provided "as is" without warranty of any kind.
The author assumes no responsibility or liability whatsoever
for any damage or data loss caused by using this package.

1.31 About me !



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Send your gifts here :^)

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1.32 My Friend

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