

**Default**

**COLLABORATORS**

|               |                           |                |                  |
|---------------|---------------------------|----------------|------------------|
|               | <i>TITLE :</i><br>Default |                |                  |
| <i>ACTION</i> | <i>NAME</i>               | <i>DATE</i>    | <i>SIGNATURE</i> |
| WRITTEN BY    |                           | April 15, 2022 |                  |

**REVISION HISTORY**

| NUMBER | DATE | DESCRIPTION | NAME |
|--------|------|-------------|------|
|        |      |             |      |

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# Chapter 1

## Default

### 1.1 Table of contents

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SongPlayer 1.53 (17-Feb-1999) GIFTWARE

---

Introduction

Requirements

Installation

Use

CLI Options

AREXX

Utilities

History

In the future

Distribution

Disclaimer

Thanks

About the author

### 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 mpega.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 information 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 resets 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.

These 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,         Add files to the playlist  
NOPLAYLIST/S        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 =<br>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 Fibonacci 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<br>Playlists<br>MPEG 1, 2 and 2.5 Layer III<br>Scopes<br>Karaoke<br>AHI.  |
| V1.2  | 23-Mar-1998 | Less bugs<br>Localization<br>More options !<br>Use mpeg.library for the audio decoding<br>AppIcon & AppWindow<br>Audio database<br>Random play<br>Intro mode<br>Arexx<br>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 (mpega 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 begining 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  
EMail: stuntz@sasg.com

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.

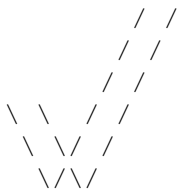
All Catalog translators

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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