Default

COLLABORATORS

	TITLE : Default		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		August 9, 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

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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 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 "Porject/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 besaved 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 show 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 tha load of a new
       play list.

    Inter file delay:
       Wait time between two successives play.

    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 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
    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 a 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 to high for your
         computer (depending of 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 set the size of the audio buffer in memory.
             It correspond 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 show 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 if 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 =
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 (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 !

```
        / /
         / /
          / /
   \ \  / /
    \ \/ /
     \/\/
```
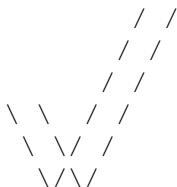
```
Stéphane TAVENARD (ANGERS/France)
Web: http://perso.wanadoo.fr/stephane.tavenard/
Email: stephane.tavenard@wanadoo.fr
IRC: Tatav
```

Send your gifts here :^)

Stéphane TAVENARD
La Bézanière
49070 Saint Jean de Linières
FRANCE

1.32 My Friend

```
      _____
  T  ================================================  |T
  |  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~|[
  | _____[|
  |I  __==_____  _____       .  ,. _ .   __   T|
  ||[_j  L_I_I_I_I_j  L_I_I_I_I_j    /|/V||(g/|   ==  l|
  lI _____  _____  _____I]
   |[__I_I_I_I_I_I_I_I_I_I_I_I_I_I_] [__I__] [_I_I_I_]|
   |[___I_I_I_I_I_I_I_I_I_I_I_L  I    ___   [_I_I_I_]|
   |[__I_I_I_I_I_I_I_I_I_I_I_I_L_I __I_]_  [_I_I_T ||
   |[___I_I_I_I_I_I_I_I_I_I_I_I____] [_I_I_] [___I_I_j|
   |  [__I__I_____I__L_]                  |
   |                                                |
   l_____j
```