Micro Music Player Documentation

Micro Music Player 3.0, Dec 19, 2016 Eddie Brüggemann Copyright © 2016, Brüggemann Eddie

Table of Contents

1	\mathbf{m}	nmp (Micro Music Player)	. 2
	1.1	Presentation from mmp (Micro Music Player)	. 2
	1.2	Features	
	1.3	What mmp not does:	. 5
	1.4	mmp menus and shortcuts	
	1.5	Notes	. 6
	1.6	mmp supported filetypes:	. 7
	1	.6.1 Music files filetypes:	. 7
	1	.6.2 Cover image filetypes:	. 8
	1.7	Changelogs	10
	1	.7.1 mmp version 2.0	10
	1	.7.2 mmp Version 2.1	10
	1	.7.3 mmp Version 3.0	10
	1.8	Credits	11
	1.9	License	12

Contents:

1 mmp (Micro Music Player)

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version: 3.0

Language: C++

Release Time: Dec 19, 2016

License: GPLv3

1.1 Presentation from mmp (Micro Music Player)

mmp is a little, minimal features, music player program with following simple functionalities:

- + Play, Stop, Pause, Resume music playing.
- + Playing Next, Previous, song control options.
- + Shuffle, Repeat All and Repeat One features.
- + **Timeline** view, control and current elapsed time displaying.
- + Volume control setting.

mmp is an easy music folder or files playing concept music player so that you only have to select a folder which contains some mmp compatible music file(s) to play it content, or selecting a list of compatible music files.

After listing the folder content or file(s) and searching for an cover image to display; **mmp** will give you full access to the music folder content or file(s) and display the album cover image if found.

A cover image is in form of a compatible image file resized to **mmp** 3 differents, free choosable, fixed interface sizes (**little**, **middle**, **big**).

Then **mmp** play the folder content or the selected music files in lexicographic sorted order (so as your O.S present you the files) or in shuffle mode.

And the cover image is displayed, except you're using the Minimal interface.

You can access the playlist to choose a music file to play immediatly.

1.2 Features

- + Play a folder content.
- + Play files, to play the selected file instead of an entire folder.

+ Display playlist:

Display a window displaying the playable files from the folder content i.e the file playlist.

The current playing music file is marked with an icon in the marging.

You can double-click on a file to play it.

+ Minimal interface:

You can switch between the normal interface which present a cover if possible or a minimal interface which doesn't present any cover image.

note: The Minimal Interface looks like a car radio!

+ Recent folders:

Everytime you open music file(s) or a directory for listening music, **mmp** will store it in the recent folders list.

note: Only the folders registered by **mmp** will appear in the recent folder list.

- + **Timeline progressbar**: displaying the progress of the music file reading, which you can drag the slider from to change the current position of the music file.
- + Elapsed time of the current music file reading displaying.
- + Send notification to the user at song playing start (Not available on Windows nor Mac and subject of restrictions on GNU/Linux).

Warning: Restriction on GNU/Linux systems.

For using Gtk notification a dbus connection is required.

And I doubt that all GNU/Linux distribution use the

DBus desktop messaging processing system.

And notify that: I cite the Gtk documentation,

There is no guarantee that the notification

is displayed immediately, or even at all.

+ Configure program: at your convenience.

The **Configure program** window is divided into 3 pages:

- 1. Player settings
- + You can *click-on*, *click-off* the **repeat all** | **Repeat one** and **shuffle** mode to be set as you want.

- + You can change the **volume intensity** (from **0.0** to **1.0**, which default to **0.5**.) to be set as the default volume intensity from the program.
- + You can set the **default music folder** used when you open a folder, you immediately in !

warning: Feature not available on **Windows** but **Windows** store your precedent location in the file selector.

- 2. Appearance
- + You can choose the icons set to use in the interface: 2 different sets available.
 - * The **HighContrast** icon set *theme*: black and white icons.
 - * The Oxygen icon set theme: colored icons.
- + You can choose the theme variant:
 - + Light.
 - + **Dark** (if available).
- + You can choose the main size from the interface from 3 available sizes:
 - * Little size.
 - * Middle size.
 - * **Big** size.
- 3. Misc (Not available on **Windows** nor **Mac**)
 - * Set Micro Music Player as default music player.
 - * Reset files associations.
 - * Enable/Disable Send Notifications.
- + You can **Enable** and **Disable** the **Minimal interface** as you want.

Note: Changes are immediately applied on the program,

You must press the **Apply** button to store the settings, so that you can get it back at every new start from the program.

+ Magic behavior:

When you press the **stop** button or your playlist is finished, you can simply press the **play** button to relaunch it from the beginning.

+ Current song presentation:

The current playing song displaying entry field is formatted like this:

```
[N°/Total] - Author - Title
```

You can open a folder or files with **mmp** through your file navigator or start it with the commandline:

\$ mmp [folder|file(s)]path # mmp is a symbolic link.

1.3 What mmp not does:

mmp provide nothing else features:

- + No music library indexing feature.
- + No database connection for cover images downloading or any indexing.

So **mmp** stay as simple as possible: as a simple *play files* or a *folder content*, with no internet connection required anyway, only your music folder and **mmp**.

This is because i implement it at start only for personnal usage so it's a personnal requirement builded program,

but finally i decide to distribute it because **mmp** is so easy, as in the concept as the short source code,

so that you can use it like this or modify it, in the way you want, according to the terms of the **GPLv3** license.

1.4 mmp menus and shortcuts

```
1. Files
         + Ctrl + F \rightarrow Open file(s).
         + Ctrl + D -> Open directory. (Not available on
            Windows).
         + Recent folders list.
         + Ctrl + Q -> Quit the application.
2. Music
         + Ctrl + P -> Play | Pause the music.
         + Ctrl + S -> Stop music.
         + Ctrl + N -> Next song in the playlist.
         + Ctrl + B -> Previous song in the playlist (Back-
            ward).
         + Ctrl + R -> Enable | Disable Repeat all feature.
         + Ctrl + Maj + R -> Enable | Disable Repeat one
            feature.
         + Repeat off.
         + Ctrl + S -> Enable | Disable Shuffle feature.
         + Ctrl + + -> Increment volume.
         + Ctrl + - -> Decrement volume.
         + Ctrl + Maj + P -> Display playlist.
```

3. Config

- + Ctrl + M -> Enable | Disable Minimal interface.
- ___
 - + Ctrl + T -> Enable the light theme.
 - + Ctrl + Maj + T -> Enable the dark theme (if available).
- ___
 - + Ctrl + I -> Enable the Oxygen icon set.
 - + Ctrl + Maj + I -> *Enable* the **HighContrast** icon set.
 - + Ctrl + C -> Display Configuration window.

4. **Info**?

+ Ctrl + N -> Display The notice.

Warning: On Windows: This works well as long as the start command is still present on your system.

Else you can type 'Micro Music Player notice' into your **Windows** O.S search bar to read the notice.

+ Ctrl + A -> Display the About window.

1.5 Notes

This program, mmp version 3.0, was written on an Ubuntu 16.10 distribution.

Then adapt to:

- * Windows 7 (64 bits), and compiled with a native x86_64-w64-mingw32-g++ compiler.
- * MacOS Sierra, and compiled with the g++ compiler.

So some functionalities are not available on some portages, very sorry!

Windows: This program was tested on a Windows 7 64 bits system and should work on Windows versions ≥ 7 .

MacOS: This program was tested on a **Mac OS** Sierra, I don't know about retro-compatibility and future O.S release compatibility.

1.6 mmp supported filetypes:

1.6.1 Music files filetypes:

The most common music filetypes:

- * mp3 (MPEG-1 Audio Layer III or MPEG-2 Audio Layer III).
- * ogg (Oqq Vorbis).
- * flac (Free Lossless Audio Codec).
- * wav (WAVEform audio file format).
- * wma (Windows Media Audio).
- * aac (Advanced Audio Coding).
- * ac3 (Dolby Digital).
- * **mid** or **midi** (Musical Instrument Digital Interface).
- * ape (Monkey's Audio).
- * **mov** (QuickTime).

Else the complete supported filetypes list:

- * *.3ga
- * *.669
- * *.a52
- * *.aac
- * *.ac3
- * *.adt
- * *.adts
- * *.aif
- * *.aifc
- * *.aiff
- * *.amb
- * *.amr
- * *.aob
- * *.ape
- * *.au
- * *.awb
- * *.caf
- * *.dts
- * *.flac
- * *.it
- * *.kar
- * *.m4a

```
*.m4b
* *.m4p
* *.m5p
* *.mid
* *.mka
* *.mlp
* *.mod
* *.mpa
* *.mp1
* *.mp2
* *.mp3
* *.mpc
* *.mpga
* *.mus
* *.oga
* *.ogg
* *.oma
* *.opus
* *.qcp
* *.ra
* *.rmi
* *.s3m
* *.sid
 *.spx
* *.tak
* *.thd
* *.tta
* *.voc
* *.vqf
* *.w64
* *.wav
* *.wma
* *.wv
* *.xa
```

1.6.2 Cover image filetypes:

* *.xm

The most common images formats:

+ jpeg, jpg, jpe (Joint Photographic Experts Group).

- + png (Portable Network Graphics).
- + bmp, dib (bitmap image file or device independent bitmap).
- + tiff, tif (Tagged Image File Format).

In fact all the image filetypes supported by gdk-pixbuf. Which are on my system:

- + .gdkp
- + .bmp
- + .pnm
- + .pbm
- + .pgm
- + .ppm
- + .wmf
- + .apm
- + .gif
- + .tiff
- + .tif
- + .ani
- + .icns
- + .png
- + .svg
- + .svgz
- + .svg.gz
- + .tga
- + .targa
- + .jpeg
- + .jpe
- + .jpg
- + .xpm
- + .xbm
- + .qtif
- + .qif
- + .ico
- + .cur

note: The supported image files are automatic detected in relationship to gdk-pixbuf.

1.7 Changelogs

1.7.1 mmp version 2.0

has totally change the audio engine and the images management:

Instead of using the SDL2_mixer library it use the libvlc library (with which the famous media player vlc is build).

The opency-3.0.0 library is no more needed. mmp uses gtk+-3.0 for the cover images resizing.

Nothing change for the user except that the program will never more crashing due of my missuse of the SDL2_mixer library.

1.7.2 mmp Version 2.1

Introduce some few new usefull concept.

mmp use some few metadatas from the files with fallback if not found for:

1. Formatting the displaying to the user of the current playing music file, in following manner:

N° of track Artist - Title Duration

- 2. Getting the duration of the music file what permit:
 - + To display the duration of the music file to the
 - + Provide a timeline bar which you can drag the slider to change the current position in the track.
- 3. Displaying a timeline bar.
- 4. Getting the correct cover image.

Because in version below 2.1 it could append that **mmp** display the back face of the a cover image or any other image.

note: It can still append but very much least as before: per example if **mmp** cannot access the metadata, but not necessarily in this case (because of fallback success).

1.7.3 mmp Version 3.0

New features:

- + Adding the **Repeat one** feature.
- + Adding the **Minimal interface** feature.
- + Adding the **Recent folders** feature.
- + Adding the possiblity to switch between the light and dark (if available) variant of your theme.

Changes:

+ Reformatting the displaying to the user of the current playing music file, in following manner:

- + The total duration of a song is now set aside the elapsed time.
- + Full change of the menu bar and many *items* and *shortcuts* was added.
- + Full change of the "Configure program" window.
- + Using the **GtkApplication** instead if the traditonnal **gtk_init(...)** / **gtk_main(...)** what implies big changes.
- + Changing the **Repeat** and **Shuffle** features buttons to normal buttons which switch their images.
- + Adding the number of total songs of the playlist to the current song displaying entry wigdet.
- + Bug fix the display playlist windows, which updating was enterely rewritten.

Final word:

I have rewritten a big part of the program.

What the user doesn't sea, if he don't get interest into the source code, which can be usefull for them which start the \mathbf{C} ++ language coming from the \mathbf{C} language.

Because mmp always claim to be written in C++ in a C-like style.

Note: The source code is available in the folder: /usr(/local)/share/MicroMusicPlayer/source On GNU/Linux/UNIX systems.

1.8 Credits

Thanks to my beloved **mother**, my **family** and to the **doctors**.

Stay away from drugs: drugs destroy your brain and your life.

Thanks to my **uncle** too, who let free usage of his **Mac O.S**, for the development of **mmp** version **1.0**,

during my holydays where i write this lines from...

By the way **Mac O.S** seems to me a little bit strange the first times but i think it's good stuff finally.

I think that **Mac** compile right with his C++ compiler but not verbose enough about errors.

The Mac terminal is near enough from the GNU/Linux terminal,

so that i could work...

1.9 License

Micro Music Player a very simple play a folder or a file music player. Copyright (C) 2015, 2016 Brüggemann Eddie.

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