INTRODUCTION TO MidiSoundSynth

V. 1.000

Compiled by Kenneth Rundt / Synthfont.com, 2022

MidiSoundSynth is a program for playing MIDI files or MIDI data from an input port, using only the best SoundFonts available on the market. MidiSoundSynth is the result of a collaboration between Alberto Galluzzo at "GoldMidiSF2.com" (long recognized producer of high quality SoundFont) and Kenneth Rundt on "SynthFont.com" ("Viena", "SynthFont1 & 2" and "VSTSynthFont").

MidiSoundSynth has a very simple user interface, with only the features you really need, relying on the SynthFont2 synthesis engine (+10 years), which in turn is based on the original SynthFont1 synthesis engine (+20 years). MSS is the first program on the market that can use the new proprietary SoundFont format “SFKR” (“SoundFont KompRessd”) designed and developed by SynthFont in collaboration with GoldMidiSF2.

This new compression algorithm is optimized for compressing sampled SoundFont audio data at 44100Hz and 16-bit. Compression is almost lossless, only noise and other irrelevant artifacts are removed. Thanks to a compressed size of about 25% compared to the original one, we have the possibility to create and distribute large SoundFonts.

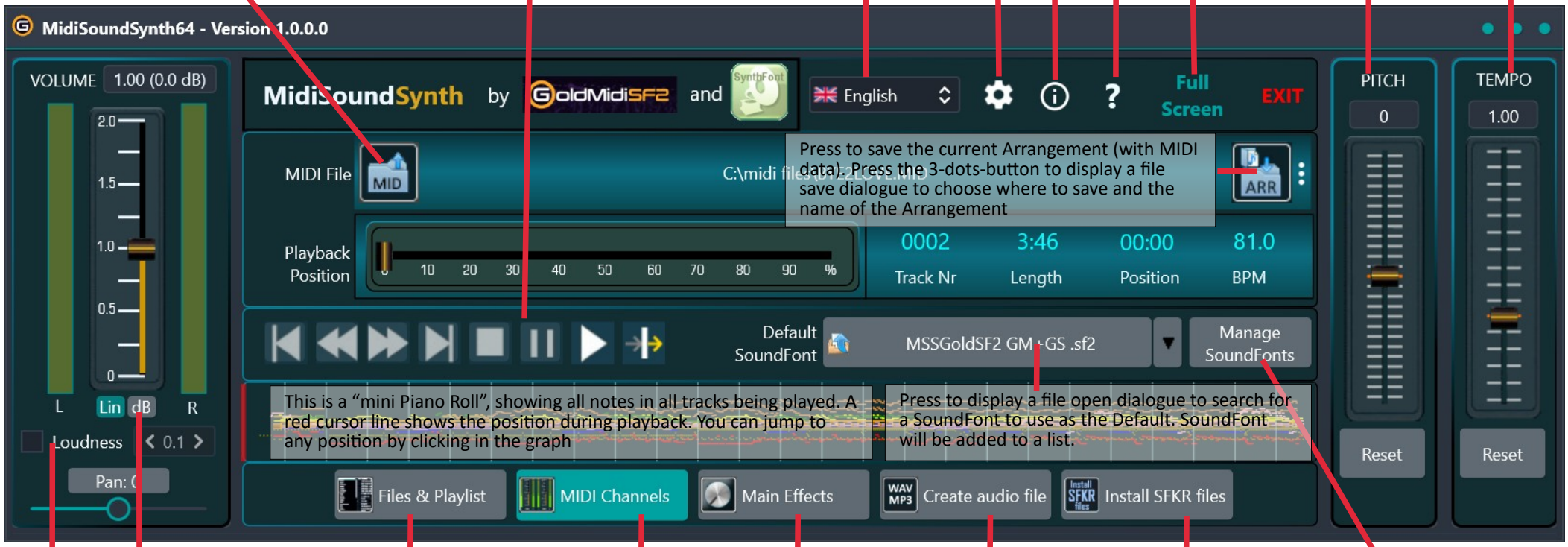
One of the main features of MidiSoundSynth is the ability to choose and assign any SoundFont / Preset separately to each of the 16 MIDI channels present in the MIDI file. Additionally there are five built-in audio effects that can be assigned to each of the MIDI channels. All “MIDI arrangements or modifications” such as Tempo change, Key, Effects, Preset, etc., will be saved for later use in a file called "Arrangement", which also contains the original MIDI. MidiSoundSynth can generate audio files in various popular formats, such as WAV, MP3, MP4 and OGG.

For live playback and excellent performance, MidiSoundSynth supports low latency WASAPI technology.

MidiSoundSynth is the software of choice for the most demanding musicians, who wants to express their music reaching the highest quality with the minimum investment and hassle, using MIDI and SoundFonts as the basis for their music.

Thanks to its simple and intuitive design and our high quality SoundFonts, great results can be achieved and a splendid time is guaranteed for all.

Page 1 - the main window



Press to display a file open dialogue to search for a MIDI file (extension ".mid" or ".kar")

Playback transport buttons. Jump to previous file, rewind (keep CTRL down to go to beginning of song), forward 10 bars, next file, stop, pause, play and start MIDI input playback ("live mode")

Here you can choose the application language

Information and version check

Port options: audio out and MIDI in

Help – press to show this PDF file

Press to toggle Full Screen and normal view mode

Change Pitch: transpose the MIDI notes up/down

Change Tempo = change MIDI Beats Per Minute (BPM)

Press to save the current Arrangement (with MIDI data). Press the 3-dots-button to display a file save dialogue to choose where to save and the name of the Arrangement

This is a "mini Piano Roll", showing all notes in all tracks being played. A red cursor line shows the position during playback. You can jump to any position by clicking in the graph

Press to display a file open dialogue to search for a SoundFont to use as the Default. SoundFont will be added to a list.

Use these two buttons to switch the VOLUME slider mode between Linear and Decibel mode

Loudness is a basic low level effect to slightly increase the level of sound without causing too much clipping of peaks

Press to display the Files & Playlist page. "Files" containing a simple Explorer view and "Playlist" gives access to your own lists of MIDI files

Press to display the MIDI Channels page. This page contains the MIDI channel tools and effects ("Mixer")

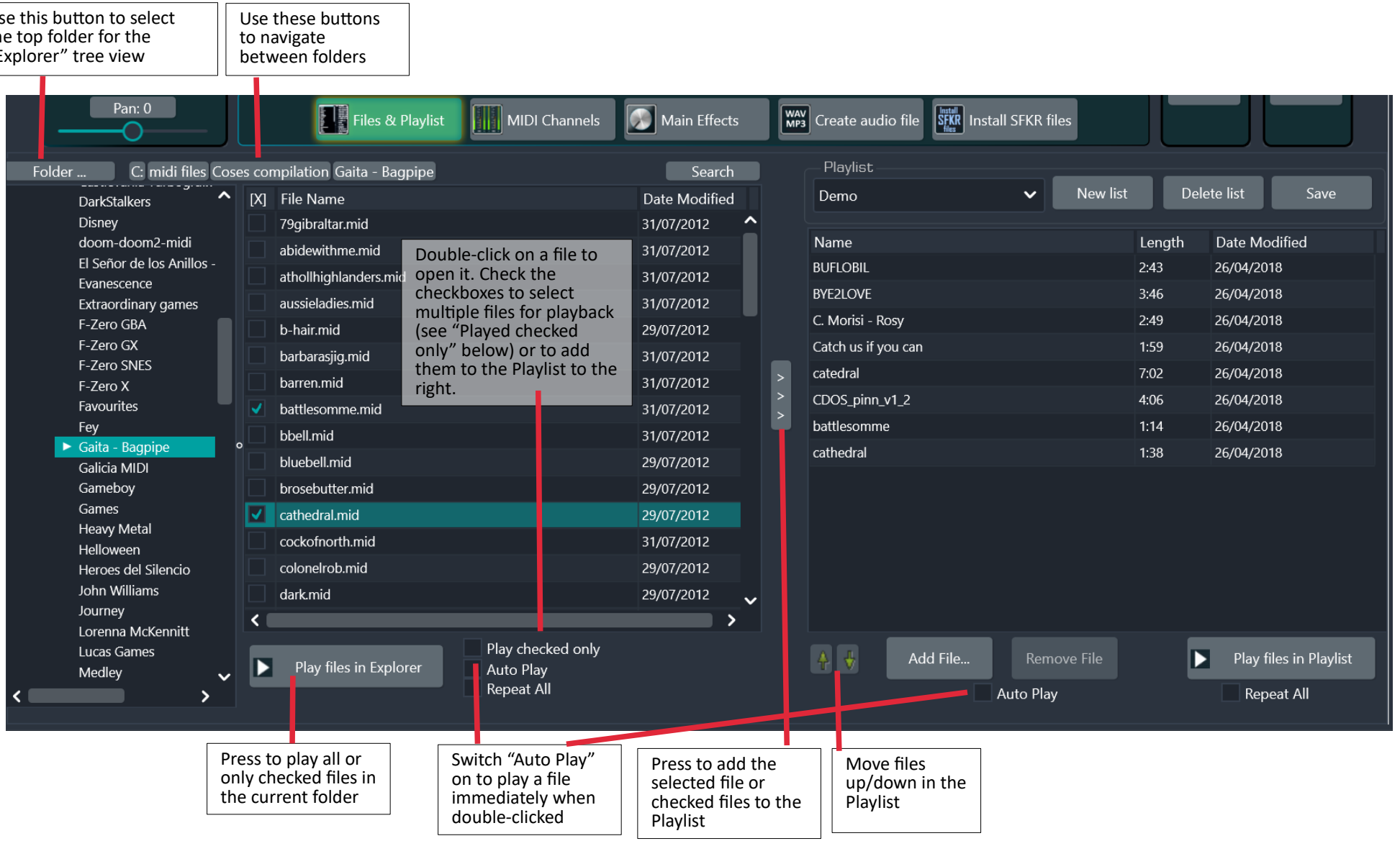
Press to show the Main Effects page. Main Effects contains four common audio effects for the main route

Press to show the Create audio file page. On this page you can define audio format, file name and path

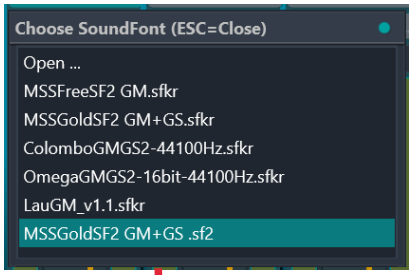
Press to show the page where you can find some more SoundFonts in SFKR format to download and install

Press to manage the list of SoundFonts. You can remove SoundFonts, choose the Standard GM SF2 and uninstall or reinstall SFKR files

2 – Files & Playlist



3 – MIDI Channels



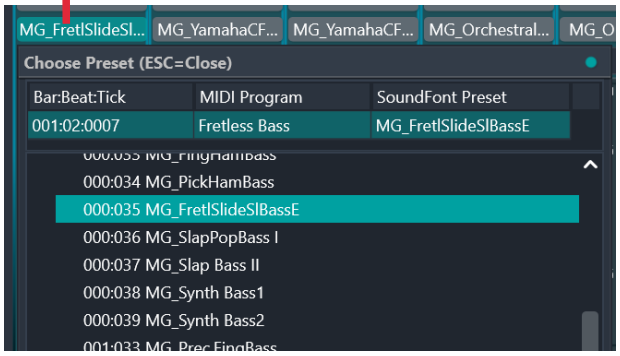
Press this button to choose the SoundFont to be used by the selected MIDI channel

Press this button to choose the SoundFont Preset to be used by the selected MIDI channel

"M" = Mute, "S" = Solo

Loudness and level

Press to display a window with four audio effects



Use this slider to change the Pan position

Press this button to reset the Pan position

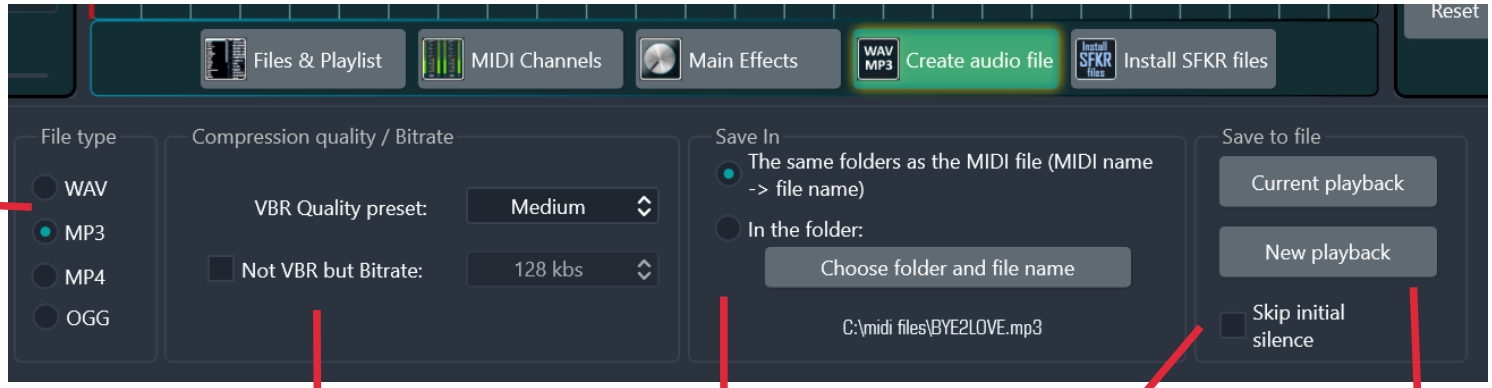
4 – Main Effects

MidiSoundSynth has five inbuilt audio effects: Loudness (see page 1 and page 3). Reverb, Chorus, Compressor and Equalizer. Of theses, only the Reverb is equipped with some Presets (that cannot be edited). For the other three effects on this page you can create your own Presets.

Press the Effects button for a MIDI channel (page 3) to show the effects window for a channel

For information only: this window also contains information on the MIDI Continuous Controllers (CC) for the selected MIDI channel. Note that the MIDI file may contain multiple values for a particular CC. In this case the Value will be updated while playing

5 – Create audio file



1: Select the file type

2: Depending on the file type, you may be able to select a Compression mode and quality

3: Choose where to save the file and optionally give it a name other than derived from the MIDI file name

4: Switch on if you want to skip the initial silence of the file – if it is present

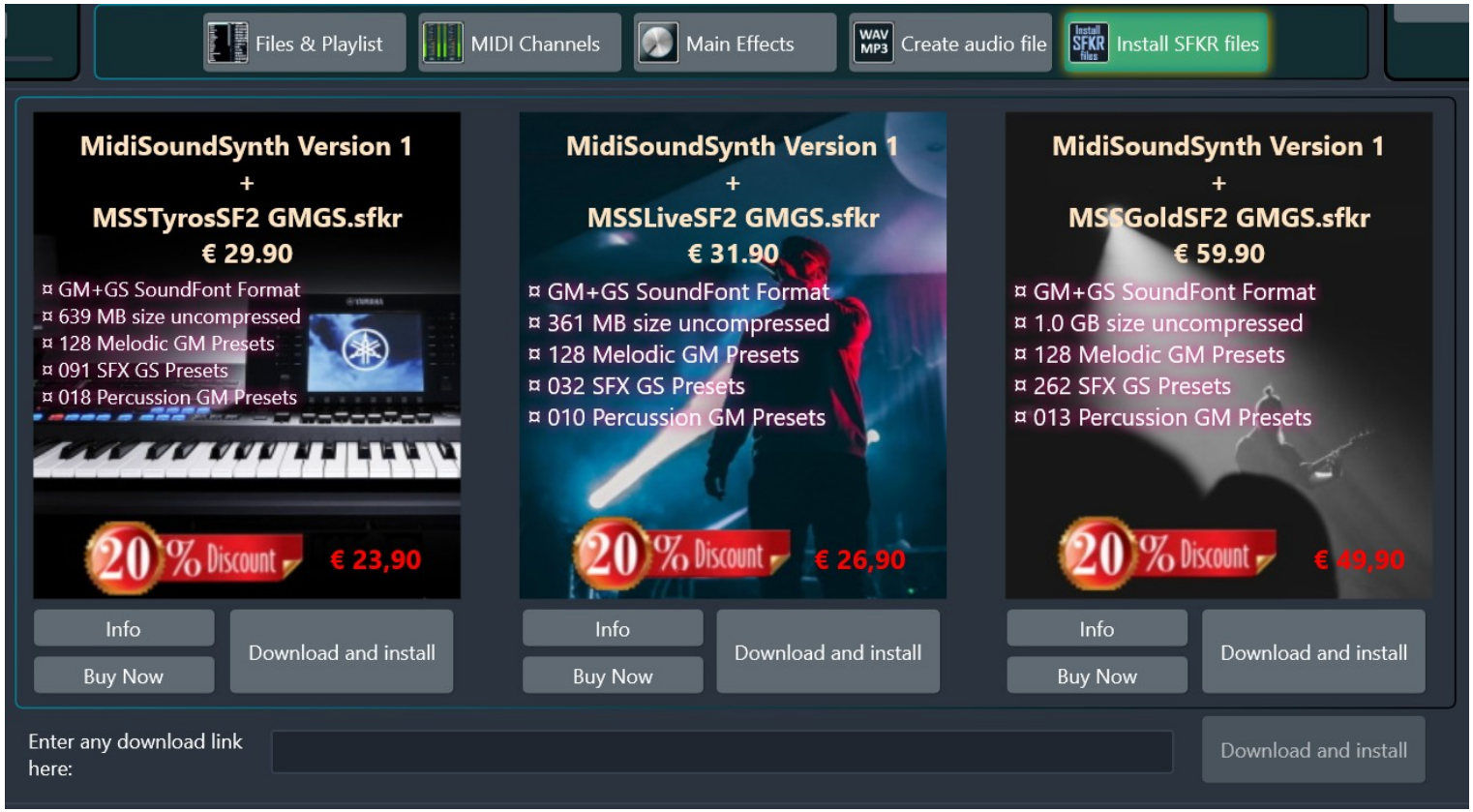
5: Finally press either “Current playback” or “New playback”.

Choose “Current playback” if you have played at least once through the file and are happy with the Arrangement.

Choose “New playback” if you have not played at least once through the file or have changed the Arrangement since then (changed SoundFont or Preset or any audio effect).

6 – Install SFKR files

MidiSoundSynth comes delivered with two free GM SoundFonts: the rather small and basic GMGSxV2.sf2 (in regular SoundFont format) and the larger “MSSFreeSF2 GM” in the proprietary SFKR format. MidiSoundSynth can be used with any SoundFont in the regular SoundFont format you have (or can be found on the Internet). Users of MidiSoundSynth have the option of purchasing any of three high quality SoundFonts using links on this page. More will be added later.



7 – Port options

The standard audio out port will be used when playing a MIDI file. This is an MME (Microsoft Multimedia Environment) port. MME is a native Windows audio driver, with rather high latency but minimum hardware requirements

For live playback (“MIDI In”) a low latency port should be used. MidiSoundSynth offers use of Windows’ own WASAPI (Windows Audio Session API), which is Microsoft's recommended method for accessing WDM (Windows Driver Model) Audio drivers

For live playback you need to choose a “MIDI Input” port. This can either be a hardware port belonging to an external keyboard, or a virtual MIDI port created by a Virtual MIDI port driver program. LoopMIDI is the preferred one

Additional options:

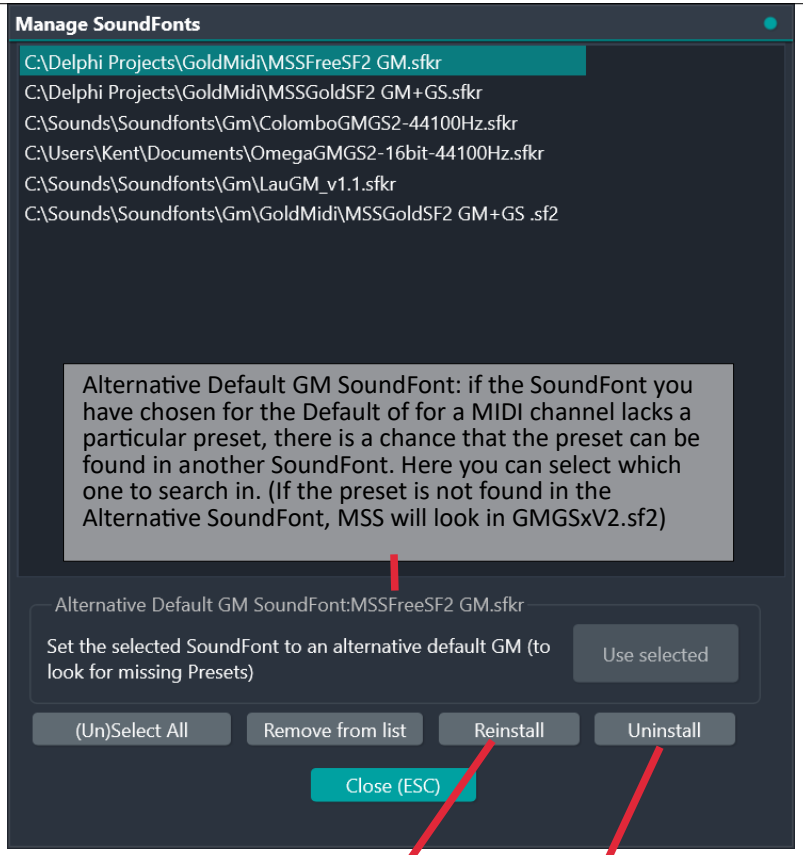
1) If playing from an external keyboard you may choose to monitor only one MIDI channel. If not checked, all 16 MIDI channels will be monitored.

2) You may choose to minimize MidiSoundSynth to an icon in Windows notification area.

3) You can ask MidiSoundSynth to start up in Live playback mode

8 – Manage SoundFonts

MidiSoundSynth keeps a record of all SoundFonts you have used so eventually the list may grow too long for a convenient use. Manage SoundFonts lets you remove SoundFonts from the list – **no file is deleted from the disk**!



Compressed SFKR SoundFonts can be reinstalled, meaning that the audio data is anew extracted from the compressed file

Compressed SFKR SoundFonts can be uninstalled, meaning that both the original file and a the audio data is deleted