



Massoth Service Tool Sound Modification

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1. Introduction

The Massoth Service Tool (MST) offers the possibility to create your own sounds for Massoth sound decoder.

For this purpose, however, sound files must be prepared so that they can be used in the MST.

This preparation of the sounds is explained here.

Requires minimum V4.1 of the sound file for sound decoders.

2. Needed programs

We recommend the program “Audacity” for sound editing.

Audacity is freely available and can be obtained here:

<http://www.audacityteam.org/>

2.1 Presets

After installing Audacity, open the program and make the settings.

Click on “Edit” and at the bottom click on “Preferences”.

Then click on Quality

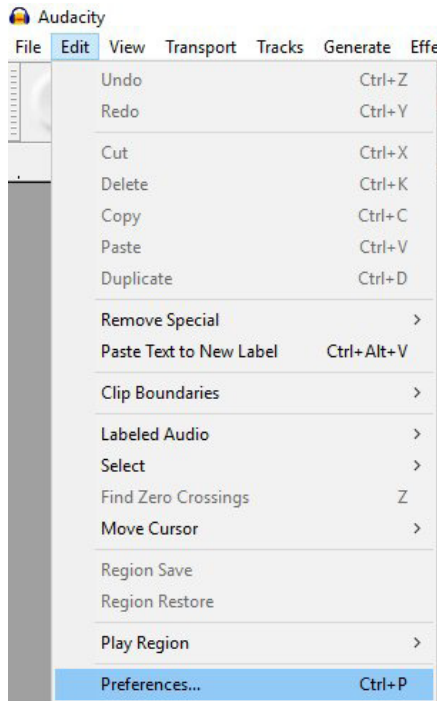


Figure 1: Change settings

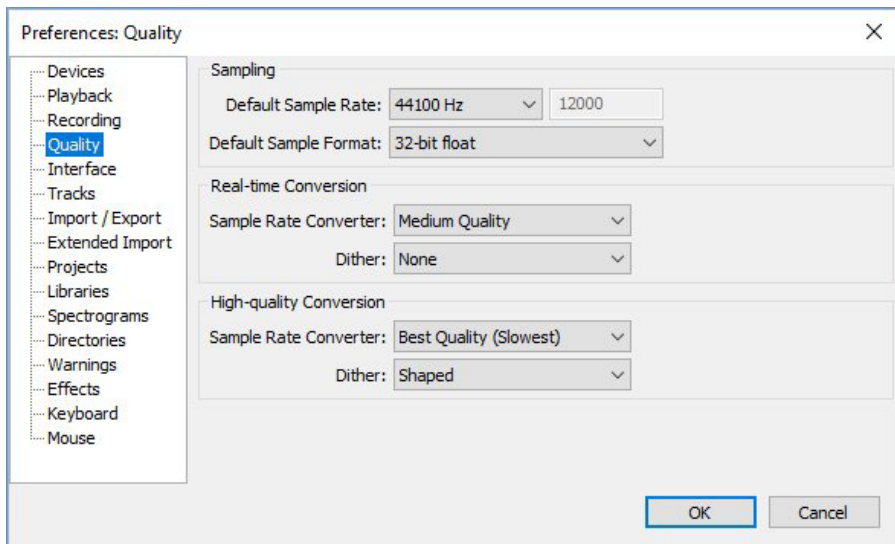


Figure 2: Setting menu

Set the standard sampling rate to “Other” and change it to 12000 Hz.

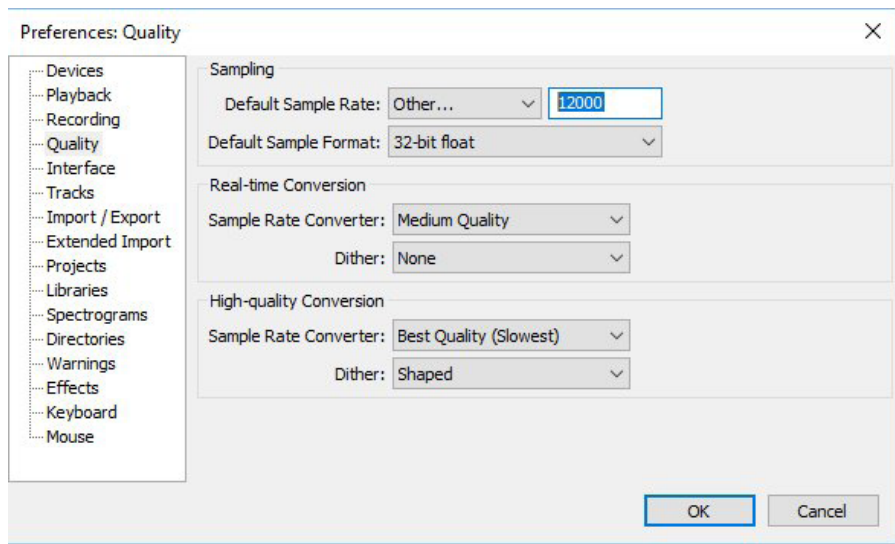


Figure 3: Changing the Standard Sampling Rate

Edit chain processing now.

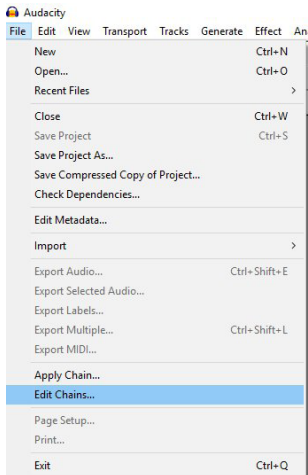


Figure 4: Edit chain processing

Add new chain processing.

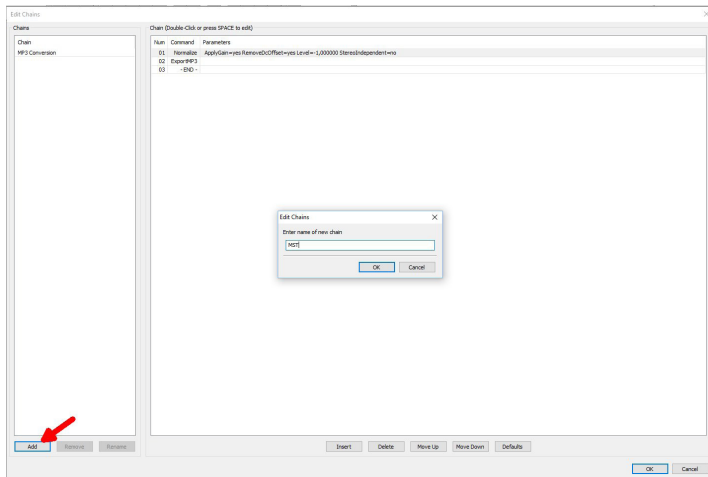


Figure 5: Add chain processing

Then use "Insert" to add a new command "StereoToMono".
Then insert command "Normalize".

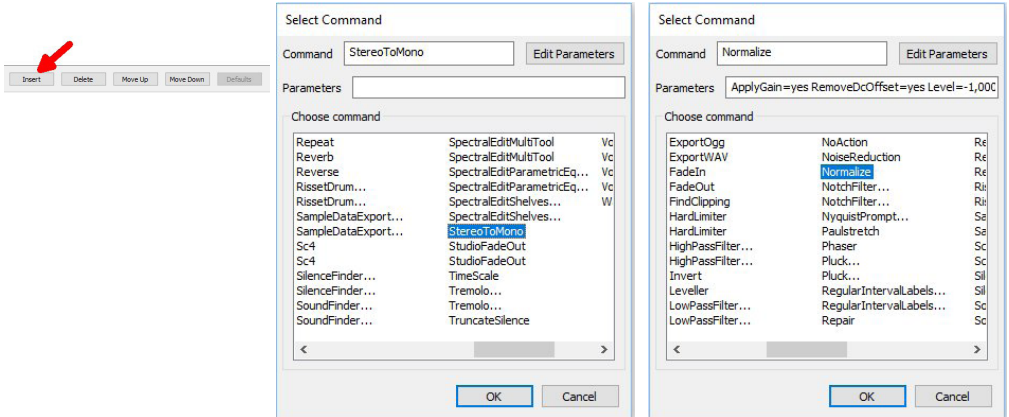


Figure 6: Add commands

3. Sound modification

3.1 Import sound

Here in this example we import a *. mp3 file, but it can be any other format supported by Audacity.

Click on “File” - “Import” - “Audio”.

Then select your sound file.

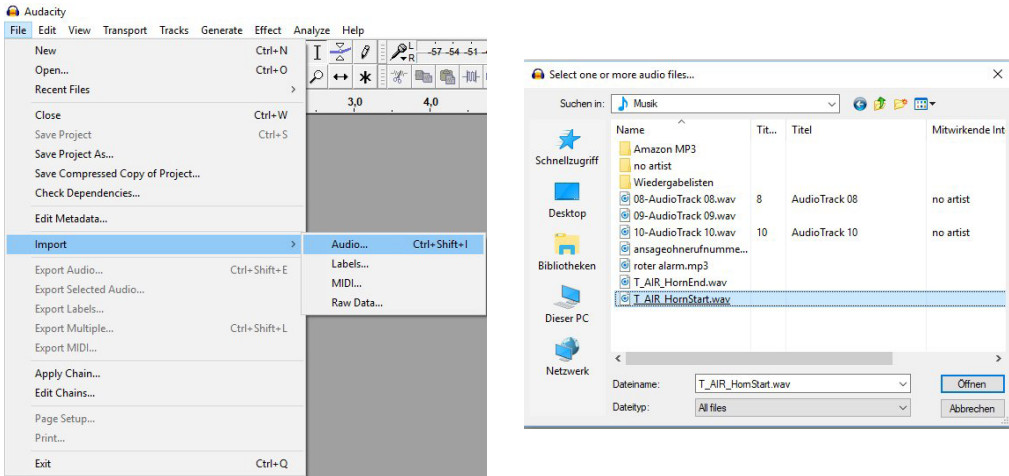


Figure 7: Importing sound

The sound file is now displayed graphically.

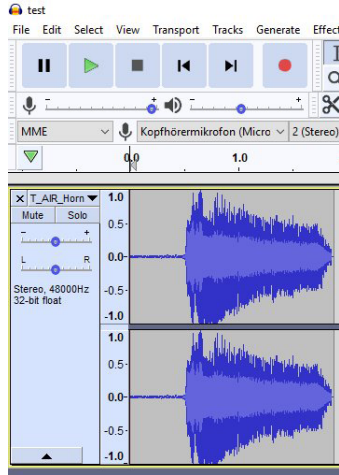


Figure 8: Edit sound file

There is a magnifying glass function to enlarge the image.

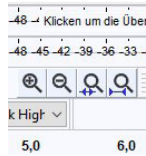


Figure 9: Magnifying function

After enlargement it looks like this.

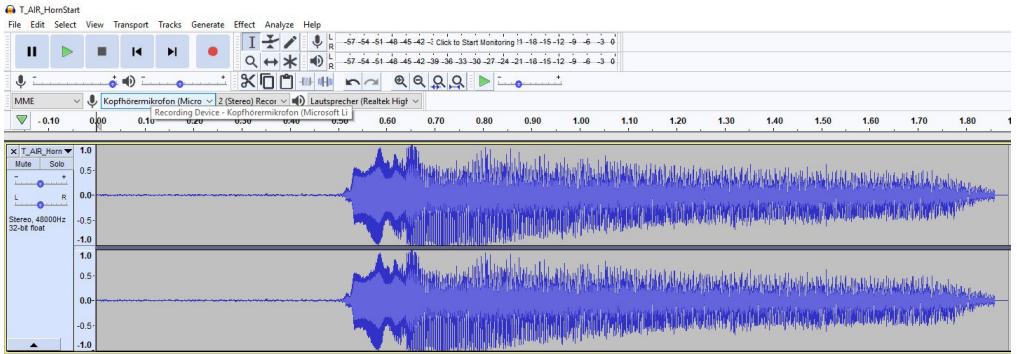


Figure 10: Enlarged view

3.2 Convert sound

Now the stereo sound has to be converted into a mono sound.

The volume level should also be adjusted. This is now done by batch processing.

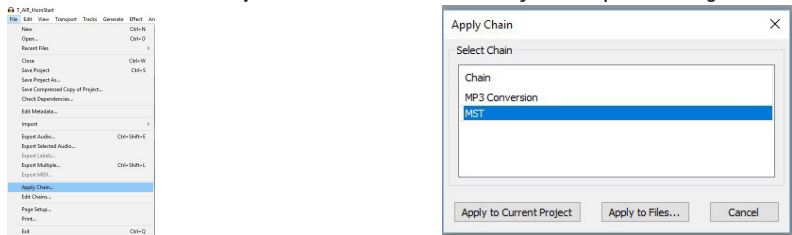


Figure 11: Converting sound with chain (batch processing)

After the conversion, you will only see one sound channel as shown in Figure 12.

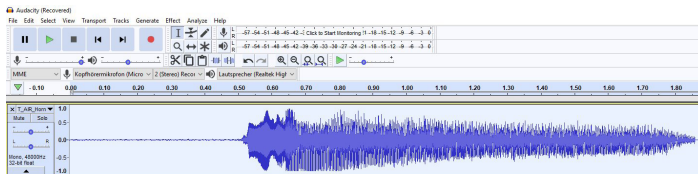


Figure 12: After processing with the chain (batch processing)

How a sound file is edited can't be explained here. That's too extensive, so we will publish it in a video on Youtube.

Here we have marked the silent sequence (flat line at the beginning) and deleted it with Remove.

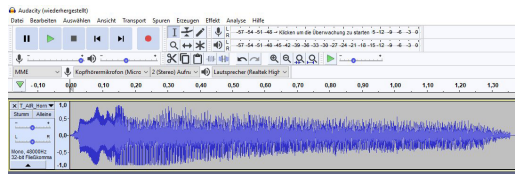


Figure 13: Display after removing the silent area

Now the project rate has to be changed in the lower left corner. Overwrite the value with 12000.

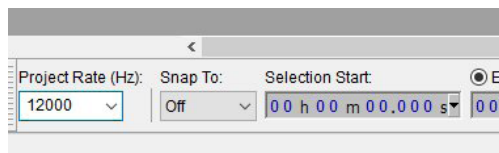


Figure 14: Changing the Project Frequency

3.3 Export sound

Now the sound is exported as *. wav.

The WAV file has the format 8 bit mono unsigned and 12KHz.

In the file dialog select “Other uncompressed files” and then set the properties as shown in the picture below.

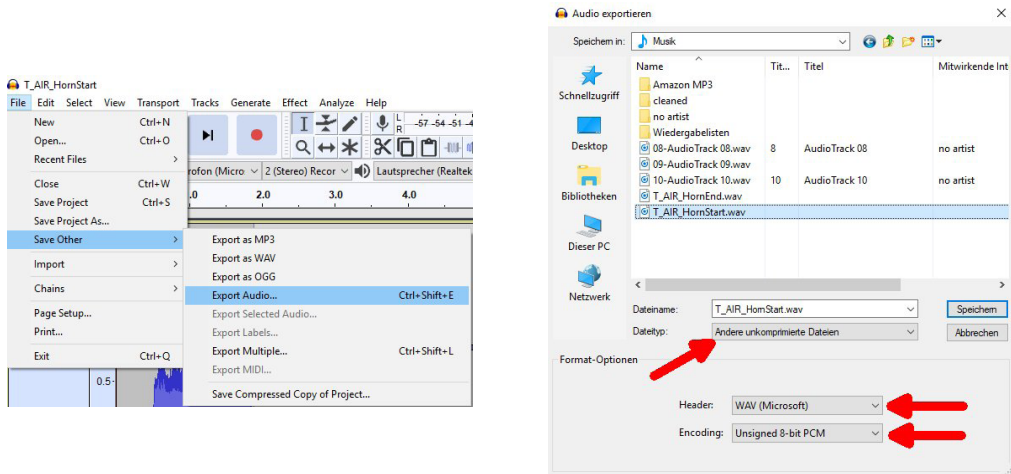


Figure 15: Export soundfile

Now the file is prepared for the Massoth Service Tool.

Note the maximum total duration of the possible sounds when creating your own additional sounds.

The display of the available time is explained on page 12.

4. Integration in MST

Basically you need the original sound of the decoder as a basis. If the sound has the required version, the “Copy” button is active. This creates an editable copy of the original sound.

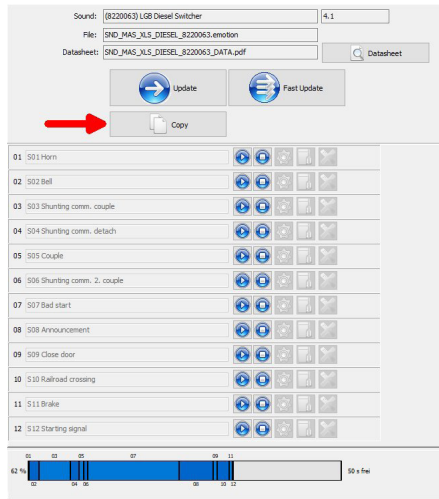


Figure 16: Copying the original sound

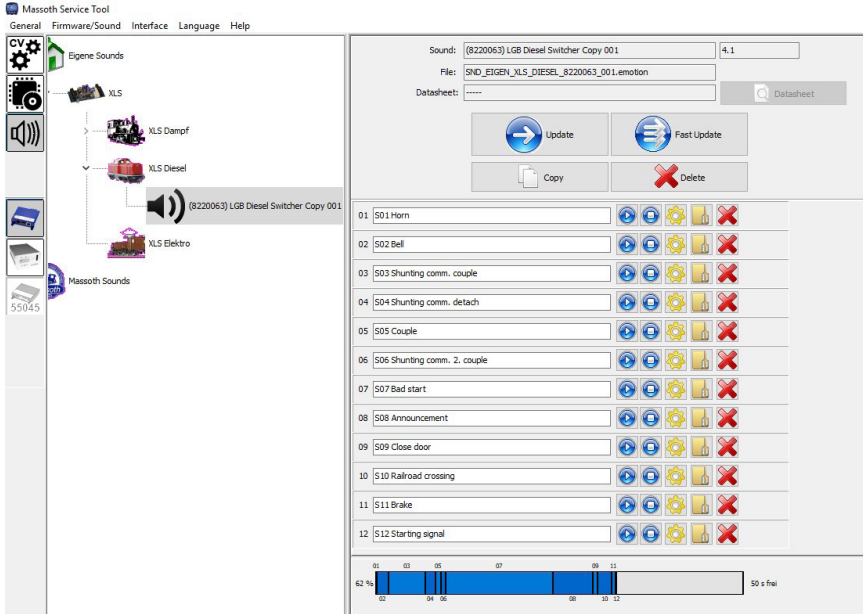


Figure 17: Copy of the original sound

The following properties are available here.



Figure 18: Edit Functions

In the white field you can enter a description of the new sound.

- 1 = Play sound
- 2 = Stop sound playback
- 3 = Edit sound file for loop (not yet realized)
- 4 = Insert new sound file
- 5 = Delete sound

The sound status display shows the assignment of the individual sounds. To the left of it is the percentage of the occupancy, to the right of it the total free space in seconds is displayed.

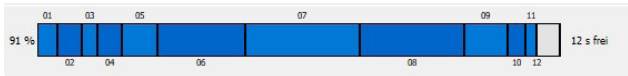


Figure 19: Sound Status Display

You must take this space into account when creating the additional sounds. If there is not enough free space, you may have to delete other sounds.

Adding in the MST is now very easy.

First click Button 4, then select the file previously created with Audacity.

With button 1 you can listen to the sound again.

If all sounds are changed, simply update the decoder, preferably via SUSI cable.

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