NaviSound - a project of www.Navi-Projekt.de

"How-to" for the Navi Sound tool

Disclaimer

The NaviSound tool was created with the best intentions but the authors cannot be held responsible for any issues that might occur because of NaviSound.

Be aware that you use this tool on your own risk!

This tool was created to be useful, not harmful. I something unusual happen and you can't find any answer to it neither in this document, the board (Forum) nor at the project website, please be so kind and inform the authors of it by using the board. There is a special tread called "problems" for this. The site and the board are almost complete in German language; still English spoken threads will be answered as well.

Basics

If you compare the MFD navigation system with some of its competitors, you will notice that the speech for the voice commands is limited to one voice and different languages, rather than for example systems from Becker which enable you to change also the voice itself. Actually there is also a voice update for this system around with voices of Bruce Willis, Pierce Brosnan etc. You see, there is a big gap with the MFD, but with this tool, you're able to change this, too.

MFD systems (like others, too) get the voice-files out of the actual navigation CD's. Once you insert a new CD, the navigation data and the voice files will be downloaded into system memory (first time only or anytime if you change the voice setup).

This unfortunately means that you have to do the voice changes to every navigation-CD you own, at least the one you like to be changed (there's no way so far to change this behaviour).

The voice is saved as a special file-type on the Navigation-CD. This tool will enable you to save the voice samples as WAV-files on your hard disk to modify them, or even to take completely new voice samples and burn a new navigation-CD with it.

A limit is the file size of the voice samples. The MFD has about 1 MB of RAM for everything. So you might get a problem if you use big files.

Things you need

You do need the NaviSound tool, as you can find it on the Navi-Projekt website.

You also need the navigation-CD you like to change.

And at last, an unused CD-ROM for burning an updated navigation-CD.

1. Installation:

Once you downloaded *NaviSound.zip*, extract it in a temporary folder for installation.

The zip-file contains three files:

Setup.exe, NaviSoun.001 and NaviSoun.002

Double click the "setup.exe" to start the installation and follow the instructions. A program folder will be created. Click on "*NAVI-SOUND Editor @ www.Navi-Projekt.de*" to start the tool (choose the second item to uninstall this tool).

Your second step should be copying your (whole) navigation-CD in a temporary folder on your hard disk. You only need to change few files of it, but all of it is needed to burn a new CD. To make life easier, name the folder exactly the same the existing Navi-CD is named ("*cd1-1592 v2*" for example).

2. Editing of the sound files:

When you start the tool, almost all buttons are grayed before you have opened one of the voice files.
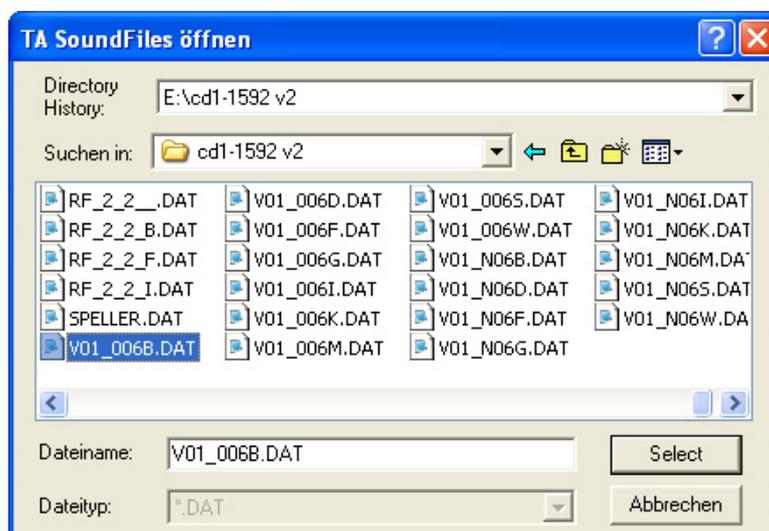
One first thought it might seem to be a good idea to edit a language you normally don't use. For example you edit the German voice files, so you could change back to the original English voice whenever you like to without moving the CD. One second thought it might be a bit tricky to do this because all the menu and text notes are now in German language! Think of it, we can't edit those! To stick with this example, let's say you are English native and want to edit the English voice.

Let's take a closer look at the tool window in the beginning, only three buttons are available.
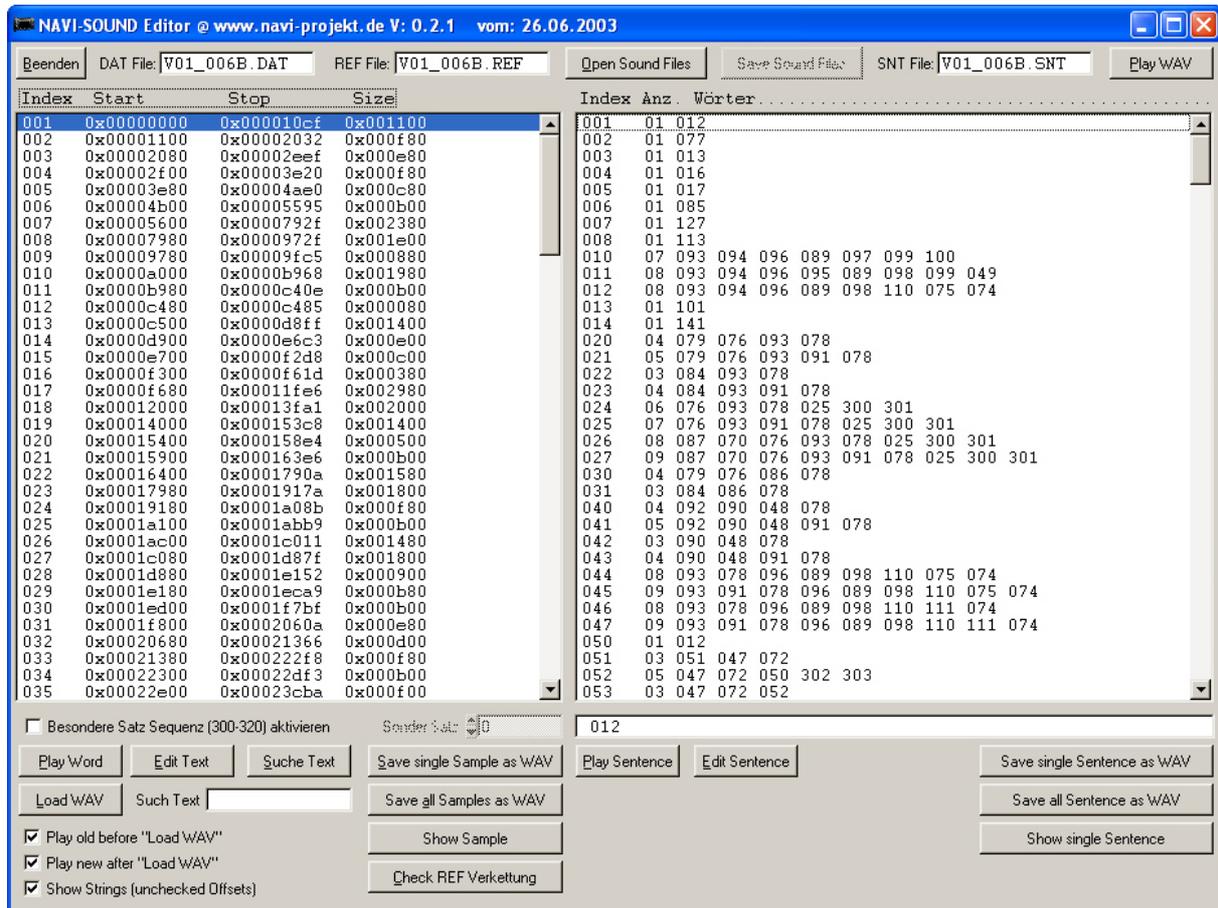

In the topper left, you will find the "*Beenden*"-button, that's German for Exit and it's the "program end"-button. Topper right corner, you find the "*Play WAV*"-button to play back a WAV-file on your hard disk. An "open file" window will appear when clicking this button.

In the middle you find the "*Open Sound Files*"-button we need to start the process. Also here an "open file" window appears we use to get to the temporary folder you copied the files of the navigation-CD.

Here you can see the files we need to change. There are two kinds of voice files, the ones starting with "*V01_*" contain the spoken words and the files starting with "*V01_N*" contain the spoken numbers from 1 to 99. The letter at the end shows the language it contains (please see the appendices).

Now we know that two files have to be changed. Choose the language you like to change and open the first file you like to start with (If you open the files directly from CD, you will get some error windows because of the write protection of it, remember to copy the files to your hard disk first). Now all button of the main window are usable. It is separated into the left side where all voice samples are and the right side where you find the samples combined to sentences.

Lets start with a simple example, I have chosen the "*V01_006B.DAT*" file which contains the English voice on my CD. I will now mark the first sample in the left window with the index "*001*". Double click it (or click "*Play Word*") to hear the spoken word "left". If you double click index "*002*", you will hear "right", so every words sample got its own index number.

To ease up your work (and not all of us want to know the hex start-, end- and size value), you can add the word as text after you marked a sample, just click on "*Edit Text*" and write it down, now you see only your text note instead of hex-values. Decide for yourself what is easier for you to handle. The text handle will also be shown in the sentence window on the right; there you can see the sense of this feature.

In total 156 words and 99 numbers, if you still want to change everything. Nevertheless, not all samples are actually used by the MFD and not all languages include the same amount of samples!

Back to my "left" example. To modify it with a WAV-editor, save it as a WAV-file (just mark it and click "*Save single Sample as WAV*". It will create a folder inside our working directory (the folder you opened the voice file from). The folder will be named after the voice file you opened, in my case "*V01_006B*". The file will be named similar to the sample index, in my example "*Sample_001.wav*".

Once you have finished editing the WAV-files, collected or recorded your own WAV-files, its time to prepare the "new" Navigation-CD. Therefore you mark in the left window the sample you want to change, for my example again the index "*001*" sample and click "*Load WAV*". Again an "open file"-dialog appears and you select the WAV-file you want to use (lets say my new "*leeeeeeeeeft.wav*" file). After you selected the new file, the marked sample will change its color inside the left window and to make a final control, a double click plays the new sample.

Do the same with every sample you like to change and when ready, you are basically done with it can continue with the burn process (If you changed a complete language you should read further).

Still there's another possibility, you might need for certain languages. The right side of the tool contains the saved sentences the MFD uses. You have to know that a sentence in Swedish may contain the same words like in English language, but the logical order of the words might differ.
So if your are from Sweden and as far as I know, the MFD doesn't know the Swedish language, you could use the English language files, change them with your Swedish samples and still use the English text notes with the MFD. But to hear the words in an order the sentences make sense, you need to change the order of the samples, too.
You will notice that there are indexes like 300, 301, 303, 322 and 323 which are wildcards for numbers, distance range and so on. Unfortunately, due to a leak of my knowledge, I can't explain it further in this version of the how-to.

You probably guessed already how to do. Just mark the sentence you like and press "*Edit Sentence*" to change the sequence or the sample.
Press "*Play Sentence*" or double click the sentence to hear it and that's it.

Finished with it too? Than continue with the burn process.

3. Burning the new CD:

The last step, to burn the CD is the easiest part. On the bottom of the window you see a "*Check REF Verkettung*" button. This was originally used from Grizzly (the author) to check the sample order in the voice file. Click it and hope you won't get an error message. ;-)

Let's continue with the burning, you won't need something special, simply use your known burning software to do it. You have to burn all files from your working directory to the new CD. (Attention, if you saved samples as wave files, you got another directory in your CD-directory, don't burn it, too!)

The burning setup should be as followed:

ISO Joliet,
Level 1 (max. 11 = 8+3 chars)
no multi session,
Finalize CD (no further writing possibility!)
And use the same name like the original.

Burn speed should be as slow as you got time to; it really helps avoiding unusable CD's.
The CD-reader inside the MFD will handle burned CD's, but it shows that fast burned CD's can be the problem if the MFD doesn't' except your one.

4. Finalize:

Now that you got your brand new CD, you want to test it right? Go for it.

Insert the CD and remember to go to the setup menu first and change the language. The MFD wont load the language itself if you used the original navigation-CD before.

If everything works as expected, enjoy the fun getting commanded by your own mom and keep the spirit of sharing the information!

5. Known problems:

Non so far, even that this software has been written by "Grizzly" for fun and there's probably all the time something to do, it seems to run stable and doing its job very well. Some users had problems with the MFD not excepting the burned CD's which normally is only a fault of the burning process (check the setup) or maybe the CD itself (try a different brand). If, like mentioned in the beginning, you got a different problem, check the website and the board for it and open a new thread if you didn't find any answer.

For further notes, found errors (grammar or technical) and hints for this how-to, please help making it useful and contact me on the project website. You will find me if you look for my nick "Spip".

6. Appendices

A. Languages:
It seems that the languages allocation changed since the beginning, this example is from a newer CD and may differ from your own ones. Just see this as an example and check it first.

B	English (Imperial?)
D	Dutch
F	French
G	German
I	Italian
K	? (No idea)
M	English (Metric?)
S	Spanish
W	? (No idea)

You probably have noticed that your MFD only shows seven different languages in the setup, compared to the nine possible languages on my CD. So somehow the MFD may have a hardware-setup which directs to the probably common languages for certain countries (just guessing here). Anyway, remember to choose a language you like to change, your MFD offers you to use.