Tinnitus Help
for Windows PCs

Operation

**Version
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1 Installation

Tinnitus Help is – as well as many other *IND* software products – designed in a way that it does not have to be registered in the operating system of the computer. It requires system resources only during starting process. Therefore it does not occupy the registry files, does not slowdown the operation system and does not extend the computer start time.
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Tinnitus Help is delivered via download (DVD optional at extra cost) as a ZIP-archive. The ZIP-archive contains the folder „TinnitusHelp", under that all needed subdirectories and files lie.

For the installation the ZIP-archive is to be unpacked into an arbitrary folder. To do this one extracts the complete folder „TinnitusHelp" including its subdirectories and files onto an arbitrary place on the hard disk.

Notice: You must have administrator-rights!

1.1 System requirements

The least system requirements are:

- Operation system: Windows XP, Vista, Windows 7,8,10 or higher
- Internet-browser for the display of help-files
- Free main memory: 512 MByte (recommended > 1 GByte)
- Free hard disk place: 1,7 GByte
- Processor clock: 2 GHz
- Free USB-Port   1 (for Dongle if purchased)

1.2 Software installation

Software installation is simple – equal how you ordered **Tinnitus Help**.

1.2.1 Installation from the Microsoft store

Please follow the advices of the Microsoft store.

1.2.2 Download from „ind-technik.de" or „tinnitus-help.net": For expert users

Please copy the contents of the ZIP archive under retention of the directory structure onto an arbitrary place of your hard disk.

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1.2.3 Download fr. „ind-technik.de" or „tinnitus-help.net": For less practiced users

Maybe you wish to save the „TinnitusHelp"-folders in a new subdirectory e.g. with the name „MyTinnitusHelp". Please proceed then in following steps:

Step 1: Creation of a folder named „MyTinnitusHelp" on the hard disk.

- Open the Windows-Explorer e.g. with the key combination „<Windows> + <E>",
- Choose a folder on the preferred hard disk drive or create one at a preferred folder place by pressing the right mouse button, then ->New->Folder. Now enter e.g. „MyTinnitusHelp" and confirm with the „return" –Key.

Step 2: Unpack the ZIP archive into the new created folder. According to that, as you acquired the TinnitusHelp-ZIP archive,

- it is stored on DVD or
- lies as download e.g. in your download folder or
- is managed by your download-manager-software.

Please open the ZIP-archive by double-click with the left mouse button onto the ZIP-file or by clicking the key „Proceed" (or comparably similar) in your download-manager.

The indicated contents of the ZIP-archive are to be copied with the right mouse button and to be pasted into the folder created in step 1.

Possibly you would like to create further subfolders in the folder „MyTinnitusHelp" e.g. for your profiles. In this case your directory structure looks e.g. as follows:
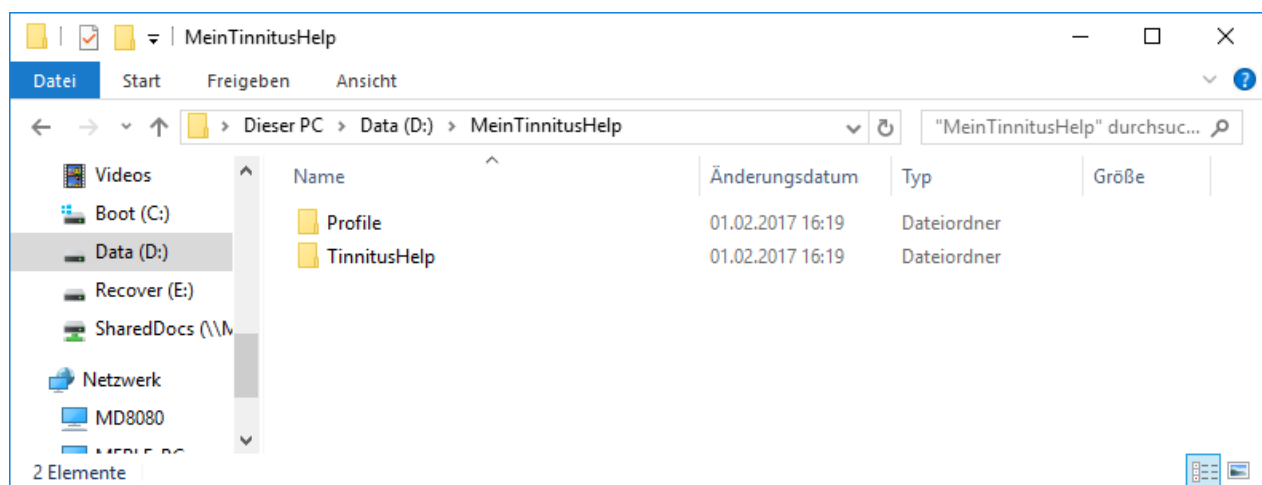

Figure 1-1: Possible directory structure for the program installation

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1.3   Licensing of the software

Tinnitus Help is available in two versions - the basic version and the profi version. The profi version includes especially for tinnitus composed music tracks that can be exported for free.

1.3.1 Download via the Microsoft Store

Both versions are available in the Microsoft Store. A demo version is available via „ind-technik.de" or „tinnitus-help.net", see next section.

1.3.2 Download from „ind-technik.de" oder „tinnitus-help.net"

Without licensing as one of those versions the function of **Tinnitus Help** is limited as a demo version:

- The operating time is limited to 5 minutes.
- Furthermore the export function is not available.

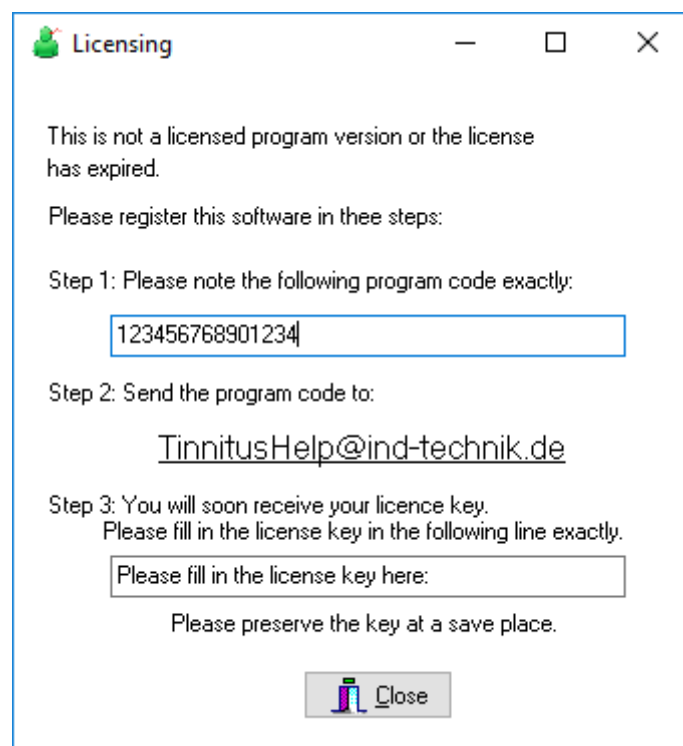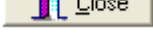In this case the following window indicates a not yet licensed program installation:

Figure 1-2: Licensing

Licensing is possible in two ways.

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- Licensing via entering the licence key
- Licensing via plugging in an USB-dongle

Licensing via entering the licence key

For licensing please mail the indicated program code to tinnitushelp@ind-technik.de or info@tinnitus-help.net. After receipt of payment you will get your license key to fill in the line below. Please close the window with the button [Close]. The licensing is now completed. Please consider that the license key cannot be assigned to another PC.

Licensing via plugging in an USB-dongle

If you purchased an USB-Dongle for your desired version, you can use **Tinnitus Help** with several PCs but only one at the same time. The Licensing according to the chapter drops. Please plug in your Dongle in a free USB slot. It is recommended to use a slot at the PC's backside for it is better protected against mechanical hazard.

1.4 Installation of updates

Microsoft-Store installations are updated wie the Store.

Regarding downloads from „ind-technik.de" oder „tinnitus-help.net:

Please simply copy new files into the TinnitusHelp-folder and hereby overwrite older files with the same name.
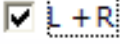
1.5 Deinstallation

The complete deinstallation is simple:

- Open the Windows-Explorer e.g. with the key combination „<Windows> + <E>".
- Choose the folder into which the installation was copied.
- Click with the right mouse button on this folder and select the command "delete".

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2 Short and precise: How to use Tinnitus Help

2.1 Step by step

1. Put on your headphones
2. Click on "Start"
3. Select the tinnitus frequency that matches your left ear, your right ear or both ears
4. Set the volume so that your tinnitus is just covered, taking care that the frequency is not too loud. It should only be heard softly in the background. If you have difficulties finding your tinnitus frequency this will probably be because the tinnitus reflects the range of your hearing loss, i.e. a frequency range that is difficult to hear for you. This is a common occurrence. If this happens, don't give up, stay with this frequency even if you can hardly hear it. Your auditory cortex will be stimulated nevertheless, that will encourage your auditory perception.
5. Do you hear your tinnitus sound oscillating or fluctuating? Or at different noise levels or different pitches? Then use the set up variations in volume, vibrato and tremolo.
6. If you hear a hissing, roaring or chirping noise sound in addition to your tinnitus, select that sound too and set it to the same volume.
7. You have now set up your tinnitus profile and you can check under "settings".
8. Mix your chosen tinnitus profile with a pleasing additional sound (trickling water, summer rain, bird song etc.) and start the process of masking. Your tinnitus will move more and more into the background and becomes thereby less and less obvious.
9. Would you like to add music to your tinnitus setting? If you do, select a pleasing piece for "reprogramming". Please read below what you have to notice when listening to music.
10. On the screen "setting" you will see all information concerning your personal tinnitus profile at a glance. In the bottom third of the screen you will see the masking sound that you have chosen or the piece of music you have selected for reprogramming.
11. On the screen "settings" save your personal tinnitus profile and your 'Tinnitus Help' mix by using the "save" button and access it wherever you are and whenever you need it. Do you want to make changes to your profile or your mix? Go back directly to the accordant view. Do you want to create an entirely new profile? You can do this via the view "settings" and the button "New". Via the view "start" and the following pages you can now create a new profile.
12. Do you still hear your tinnitus whilst using your personal tinnitus setting? Don't be tempted, don't turn your profile louder, but go back to "start" and choose a different tinnitus frequency. This new frequency needs to be very similar to the one you selected previously. Mix this frequency with a pleasing sound as a diversion from your tinnitus.
13. Use your personal tinnitus setting at least for 15 minutes each day.
14. When you are on edge and very stressed, you can use the program up to 2 hours. However, only do this if you have mixed your tinnitus profile with pleasing music.

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Hint: Press the (L+R) button ☑ L + R for settings that are identical for both ears.   When L+R has been set, the slide switches will automatically move simultaneously.

2.2   Tinnitus Help with music

Only use this function if you find yourself in a relaxing environment - free from any disturbances. It will have the best effect if you can lie down and relax your whole body. This is how it is done:

1. Select one of the pieces of music on offer and mix it with your personal tinnitus profile. When music is added, your individual tinnitus setting should be barely perceptible. The music is now playing the leading role.

2. Once you have chosen a piece of music you should initially stay with this piece for at least a fortnight. This is necessary to achieve a reprogramming of the brain (see "Why can **'Tinnitus Help'** relieve the effect of noises in your ear?").

2.3   Why can ‚Tinnitus Help' relieve the effect of noises in your ear?

'Tinnitus Help' is a program that has been developed over the last five years whilst working with tinnitus patients. sufferers. It has been established and Experience has shown that indeed it can really can be used to achieve changes in the ear change subjective hearing and in a person's the auditory perception. This will have a positive effect on the sufferer's physical as well as mental condition.

'**Tinnitus Help**' utilizes the fact that the same brain activities that enable us to perceive auditory stimuli, i.e. real sounds, also cause the perception of the tinnitus sound in the ear or head. Thus '**Tinnitus Help**' is able to intervene in all central auditory processes.

'Tinnitus Help' reflects forms an image of your individual tinnitus frequency and offers you the option to mix this frequency with pleasant sounds or even music. This means that **'Tinnitus Help'** can assist you to change the way you perceive your tinnitus sound by letting it gradually fade into the background. Regular listening to your individual **'Tinnitus Help'** setting will enable you to learn how to increasingly fade out the sound in your ear and eventually ignore it. Experts call this "habituation".

This means that **'Tinnitus Help'** can assist you to change the way you perceive your tinnitus sound by letting it gradually fade into the background. By listening regularly to your individual **'Tinnitus Help'** setting you will be able to learn how to increasingly cut off the sound in your ear, enabling you to ignore it. Experts call this "habituation".

The association "I am hearing one or several sounds or music that are pleasing"
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will at first be stored in the hippocampus, our memory centre. If the experience is repeated by using **'Tinnitus Help'**, the hippocampus works like a trainer for your cerebral cortex. It will repeatedly offer the stored information to the cerebral cortex with the result that this new input will be learnt and new programmes will be etched into the auditory cortex.

It will repeatedly offer the stored information to the cerebral cortex, resulting in the new input being learnt and new programs etched into the auditory cortex. It has been proved shown that regularly recurring musical structures act like a massage on certain areas of the brain. Where tinnitus is present, this will be experienced as a negative effect. However, you , the tinnitus sufferer, can turn this to your advantage by calling up your very own personalized music in your head. It is retrievable whenever you need it.

To achieve a positive activation of the various systems in the brain, the hearing experience needs to be

- pleasing and enjoyable
- corresponding to the tinnitus noise and the hearing loss.

This means that, the tinnitus sufferer, can influence your perception processes and learn to set up the reprogramming of your central auditory pathway.

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3 The program's functions in detail

The following sections describe all controls of the various views in order of the sequential arrangement of the program tabs above ….
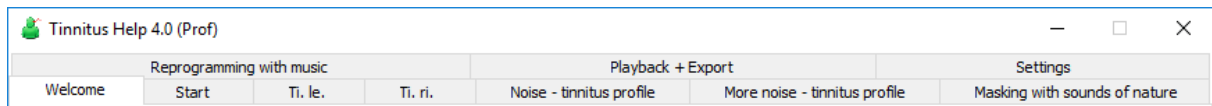
Figure 3-1: Selection of a program view via tabs

…. respectively their chain-linking when pressing the view's button „next" in their bottom region.

There are the following views:

- Welcome
- Start
- Ti. le. – Tinnitus-profile detection left
- Ti. ri. – Tinnitus-profile detection right
- Noise tinnitus-profile
- Masking with sounds of nature
- Reprogramming with music
- Playback + Export
- Settings

Before explaining them, some controls are shown, that are common to all or several program views.

3.1 Common controls

In the column heading panel there are the buttons to minimize or quit **Tinnitus Help**.

The checkbox (L+R) indicates if the setting of right and left channel are linked together.
While it is marked both channels are coupled and a setting provokes an identical setting of the other channel. A missing check mark color indicates decoupling of the channels. Both channels can be set up independently.

Purpose of a left-right-coupling is an easier handling for patients who perceive the same noises on both ears.
Pressing the checkbox switches the coupling on and off.

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The status lamp at the right bottom window border – idle green – has two purposes. It turnes to red when

- the software loads requested sound- or music files in the memory and the system is therefore used to capacity,
- one or more volume settings in the tinnitus-profile-mix are set too high. Although Tinnitus Help tries to balance this it is recommended to reduce the volume for the concerning sound.

The progress bar is only visible if requested sound- or music files are loaded into memory. That also happens at each program start and shows the remaining loading time.

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3.2   Welcome

Performing a double click on the file „tinnitushelp.exe" starts **Tinnitus Help**. The following view appears and a gentle bird's twitter can be heard:
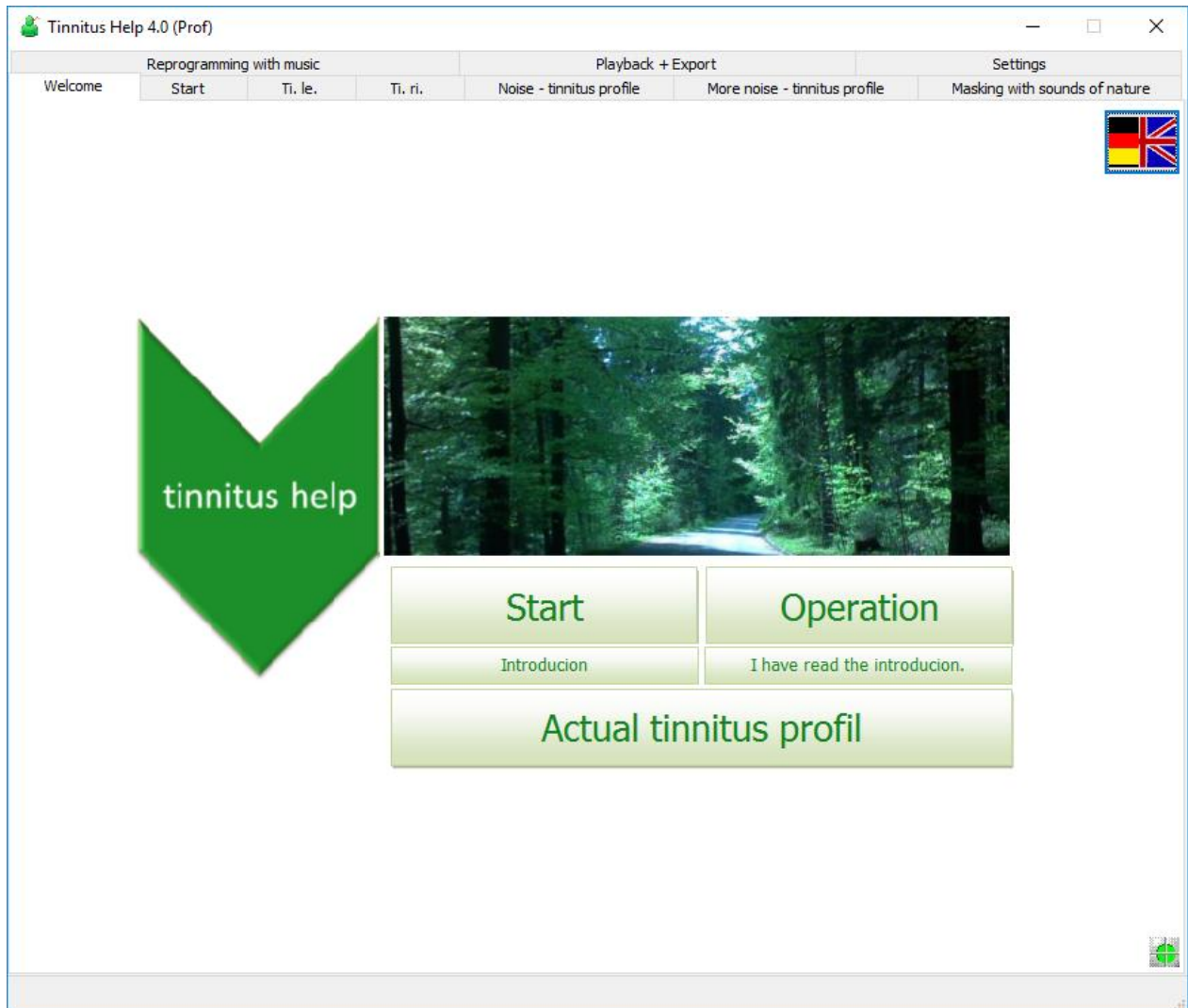
Figure 3-2: View „Welcome" after start of program

From top to the bottom there are six buttons:

- Selection of the language English / German
- Start
- Operation
- Introducion
- „I have read the introducion."
- Actual tinnitus profile

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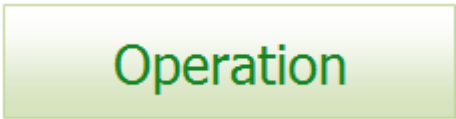
The two **flags** serve for selecting the language. Depending on the selected language the buttons show an accordant caption. Pushing one of the flags lets the language toggle. It does not matter which flag is pushed.

Pushing the button leads to the view „Start" which is the starting point to all functions – but only if the user has read the short **introduction** and has confirmed this. The confirmation is necessary because here you can read important information concerning the handling of the program. Thus it is prevented that the user damages accidentally his ears.

Pressing the button shows this documentation. A system installed internet browser opens and shows this text in the html-format. An internet connection is not required.

Pressing the button opens the introduction text. A system installed internet browser opens again and shows the text in the html-format. An internet connection is not required.

After reading the introduction and confirming the attention pressing the button

 is required. This confirmation is saved automatically.

Pressing the button

one gets to the Settings view.

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3.3   Start

The view „Start" is the starting point to all functions as the following figure indicates:
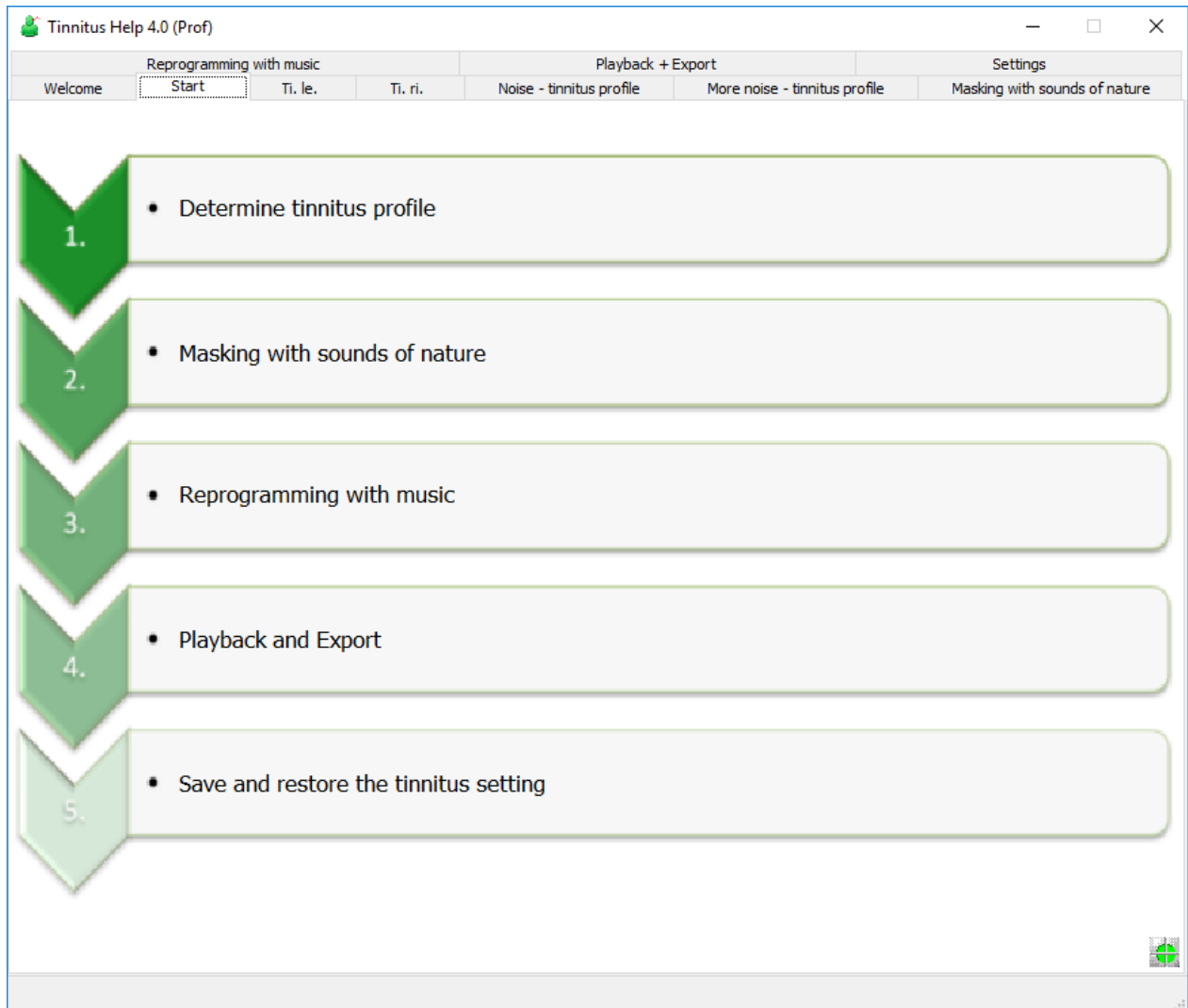
Figure 3-3: View „Start"

Via the view „Start" one gets to the program sections:

- 1. Detection of the tinnitus profile, beginning with Ti. le. – Tinnitus-profile detection left
- 2. Masking with sounds of nature
- 3. Reprogramming with music
- 4. Playback of the mix and export, see Playback + Export
- 5. Save and restore the tinnitus setting, see Settings

An alternative to this view „Start" is the selection of the wished program section via the program's tabs, see Figure 3-1 „The program's functions in detail".

3.4 Ti. le. – Tinnitus-profile detection left

With the view „Ti. li." the pathway through the setting of **Tinnitus Help** begins. First of all the tinnitus profile of an eventually perceived tone has to be created for the left ear, see the following figure:
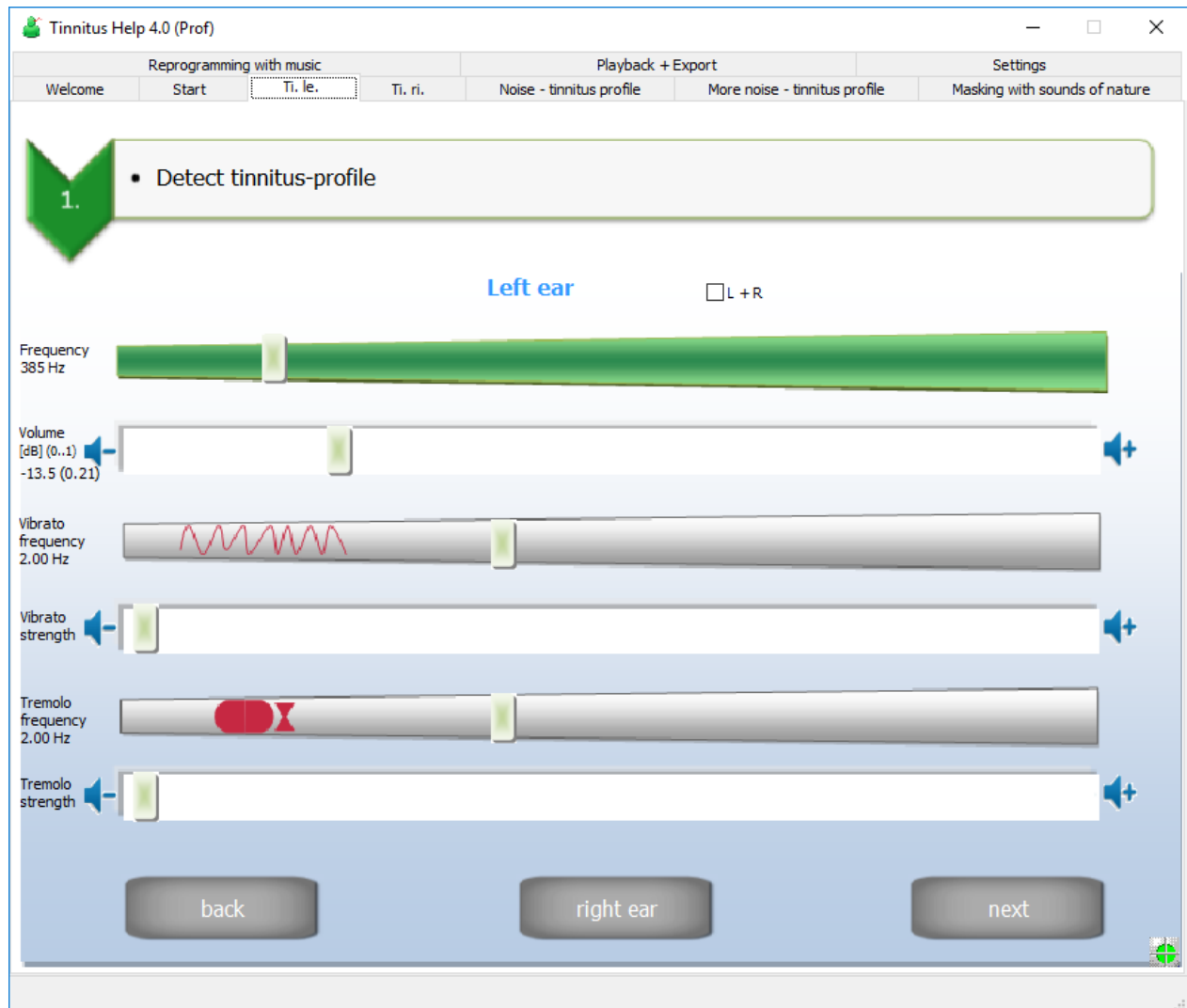
Figure 3-4: View „Ti. le."

From top to the bottom there are ten buttons:

- Frequency
- Volume
- Vibrato frequency
- Vibrato strength
- Tremolo frequency
- Tremolo strength
- back
- right ear

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- next

They shall be explained in the following.

3.4.1 Tinnitus frequency

Starting point is the generation of an initially constant tone that corresponds to the perceived tone as far as possible. For this two controls are available.

Frequency

The tinnitus frequency may be controlled via two manners, via

- the slider and

- the keyboard keys [ALT] + [left arrow] to reduce respectively [ALT] + [right arrow] to increase the frequency.

The keyboard keys change the frequency only minimally. So a precise setting can be achieved.

Volume

The volume may be controlled via two manners, via

- the slider and

- the keyboard keys [ALT] + [arrow down] to reduce respectively. [ALT] + [arrow up] to increase the volume.

3.4.2 Vibrato/Tremolo

Many patients perceive a tinnitus tone that is not constant but varies in its frequency and or volume. For emulation of a frequency variation (vibrato) as well as a volume variation (tremolo) there are 2 sliders each available.

The **Vibrato frequency** is set via the slider

and the **Vibrato strength** via the slider .
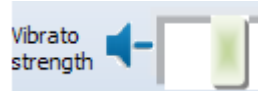
The **Tremolo frequency** is set via the slider

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and the **Tremolo strength** via the slider .
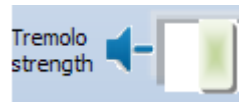
The button leads back to the view [Start](#).

The button opens the view [Ti. ri. – Tinnitus-profile detection right](#) to perform the steps above for the right ear.

Via the button one gets to the view [Noise tinnitus-profile](#).

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3.5   Ti. ri. – Tinnitus-profile detection right

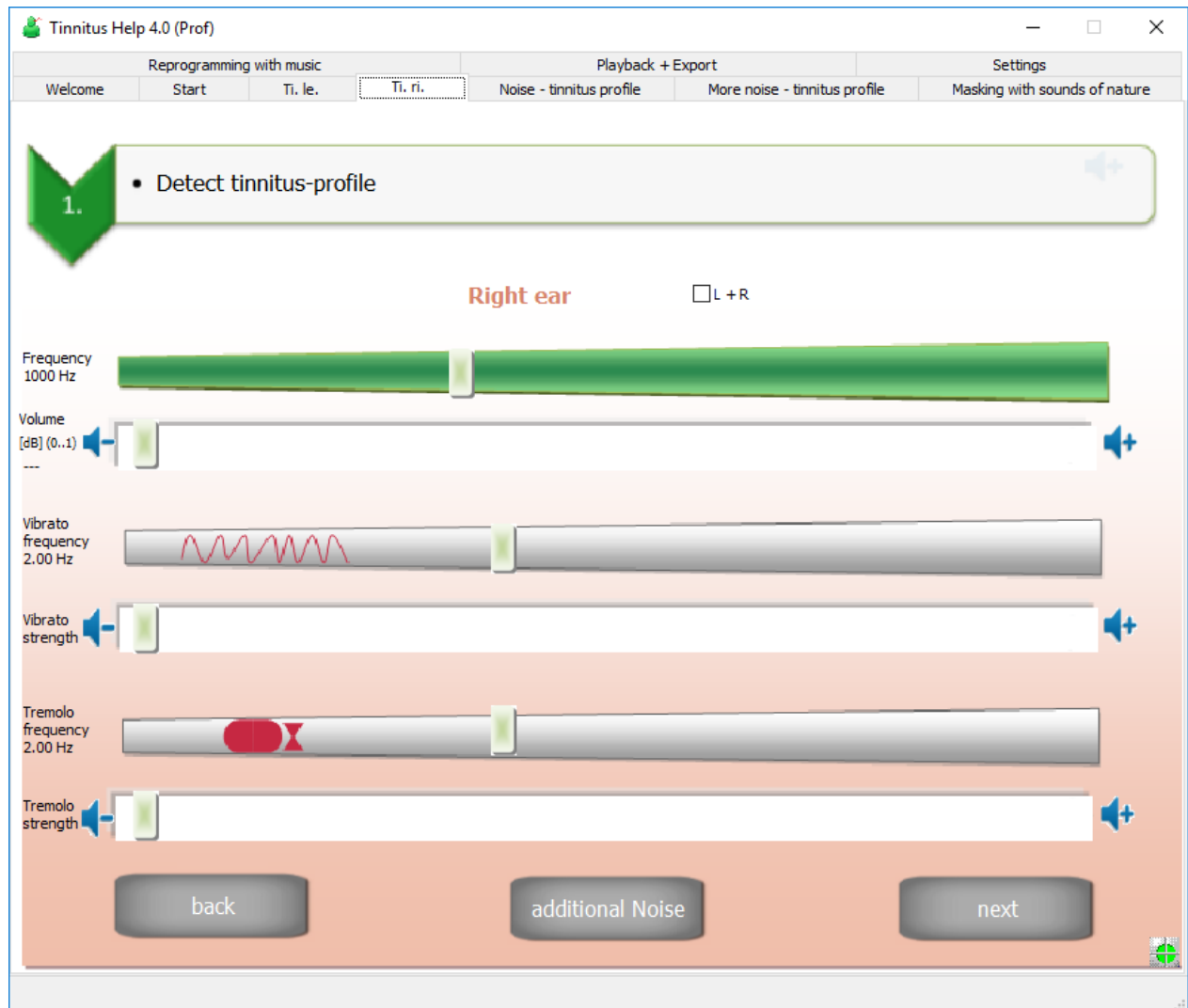After an eventually perceived tinnitus tone is determined for the left ear the determination for the right ear follows in the same manner, see the following figure:

Figure 3-5: View „Ti. ri.“

The operation does not differ from the left ear. For this reason it shall be pointed to the according section Ti. le. – Tinnitus-profile detection left.

The button [back] leads back to the view Ti. le. – Tinnitus-profile detection left.

Via the button **additional Noise** one gets to the following view Noise tinnitus-profile.

The button **next** leaves the section tinnitus profile and leads to the view Masking with sounds of nature.

3.6 Noise tinnitus-profile

A lot of patients perceive e.g. cricket-, or cicada-like noises instead of tinnitus tones or additionally to them. Such noises can be added to the tinnitus profile with the following module:

Figure 3-6: View „Noise – tinnitus profile"

From top to the bottom there are the following controls:

- Eight noise sounds with each
    - Volume slider for left and right
    - On/Off-switch and On/Off-indicator for left and right
- back
- back to the beginning
- next

Each of the eight **Noise groups** consists of

- **Volume slider for left and right**.
- **On/Off-switch and On/Off-indicator for left and right.** Left and right

    from the noise symbol there is a green or grey point. The color green indicates that the noise next to it takes part in the mix. The point looks grey if the noise is not contained in the mix.

    The point becomes green if the volume for this noise is set to higher then zero. It turns to grey if the volume slider is set to zero (quiet).

    A noise which volume is not zero – and therefore takes part in the mix – can be switched off without changing the volume simply by pressing the green point. The noise can be reactivated by a further pressing on the point.

The button leads back to Ti. le. – Tinnitus-profile detection left.

The button opens the view Start and by means of

 one gets to the following view More noise tinnitus-profile.

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3.7   More noise tinnitus-profile

This page is an extension of the previous one with the same handling.

Figure 3-7: View „More noise – tinnitus profile"

The button leads back to [Noise tinnitus-profile](#).

The button opens the view [Start](#) and by means of

 one gets to the following view [Masking with sounds of nature](#)

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3.8   Masking with sounds of nature

Sounds of nature are very relaxing for most people. **Tinnitus Help** uses this effect for the treatment of tinnitus. The program offers a multisided range of sounds of nature. They can be added to the mix via the following program module:
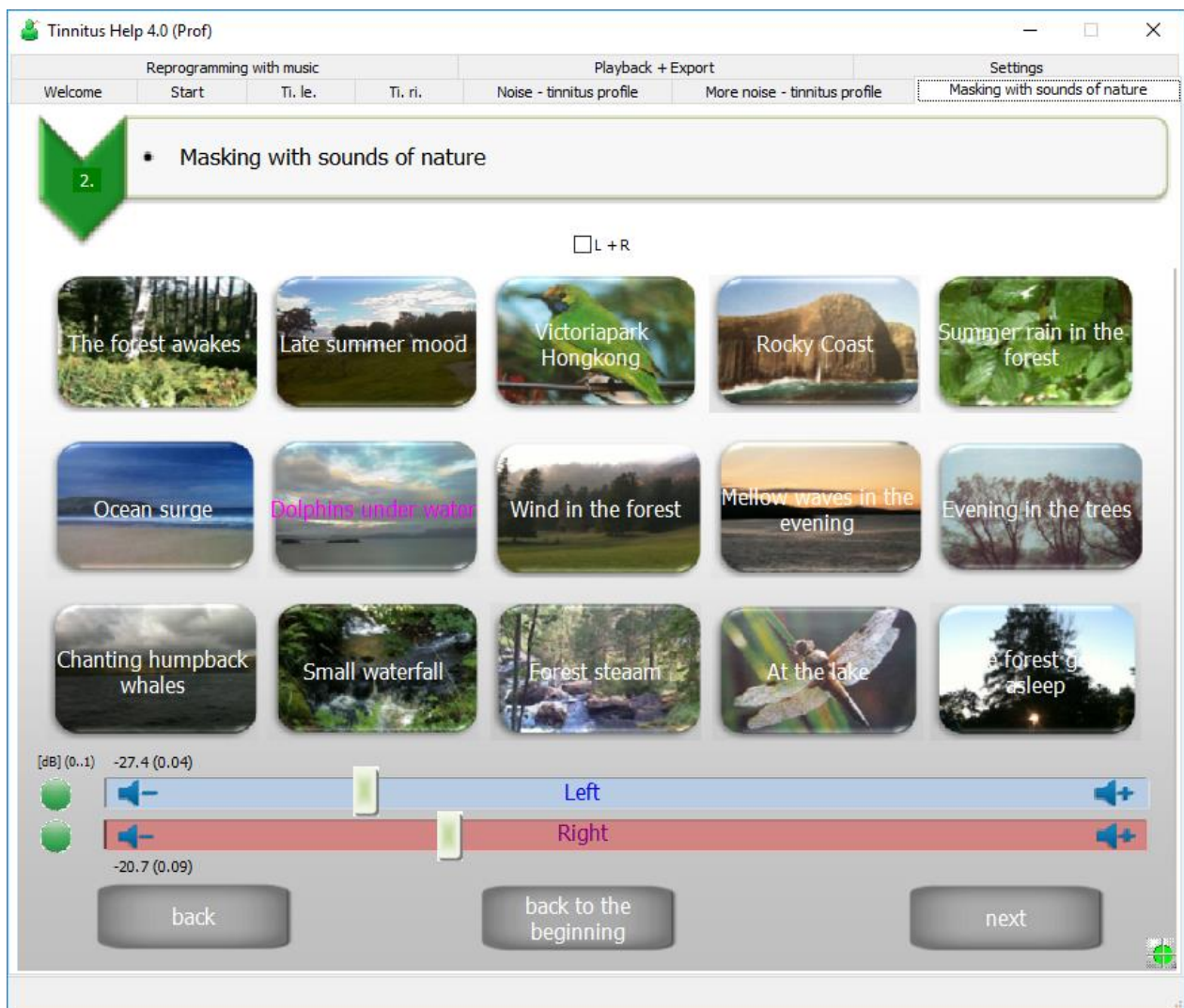
Figure 3-8: View „Masking with sounds of nature"

From top to the bottom there are the following controls:

- 15 sound of nature symbols: Choose a sound of nature …
- On/Off-switch and On/Off-indicator for left and right channel
- Volume slider for left and right channel
- back
- back to the beginning
- next

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15 sound of nature symbols: Choose a sound of nature …

A click on a desired sound of nature eg. loads it in the memory and plays it back. The loading progress is indicated via the progress bar, see [Common controls](#). A magenta coloured text indicates the selected sound of nature.

Volume slider for left and right channel
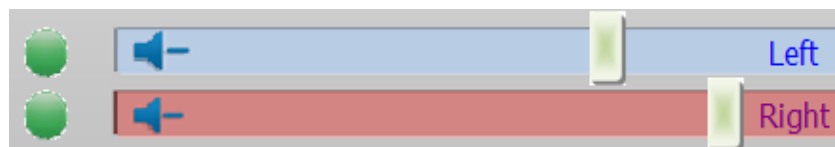
By means of the sliders one controls the volume for each ear.

On/Off-switch and On/Off-indicator for left and right

Left from each slider there is a green or grey point. The color green indicates that the sound of nature is enclosed in the mix. The point looks grey if the sound is not hearable in the mix.

The point becomes green if the volume is set to higher then zero. It turns to grey if the volume slider is set to zero (quiet).

If the volume is not zero – and therefore the sound takes part in the mix – it can be switched off without changing the volume simply by pressing the green point. The sound can be reactivated by a further pressing on the point.

The button leads back to [Ti. le. – Tinnitus-profile detection left](#).

The button opens the view [Start](#) and by means of

 one gets to the following view [Reprogramming with music](#).

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3.9   Reprogramming with music

The active listening to relaxing music coming from natural instruments is very important for the treatment of tinnitus. This leads to an exaltation of metabolism processes in the brain, the auditory cortex is stimulated, the brain is reprogrammed, the tinnitus takes a back seat and the auditory perception is simultaneously enhanced.

Tinnitus Help offers **several pieces of music**, which are composed and produced especially for the treatment of tinnitus. They have proved themselves in therapeutic practice and it is highly recommended to test them for your own therapy.

Some persons prefer music from their own library. For this **Tinnitus Help** offers the possibility to add a piece of music to a tinnitus profile setting. But please be careful about your choice of music: It should be really relaxing and if possible not produced synthetically.
The view of this program module shows the following figure:
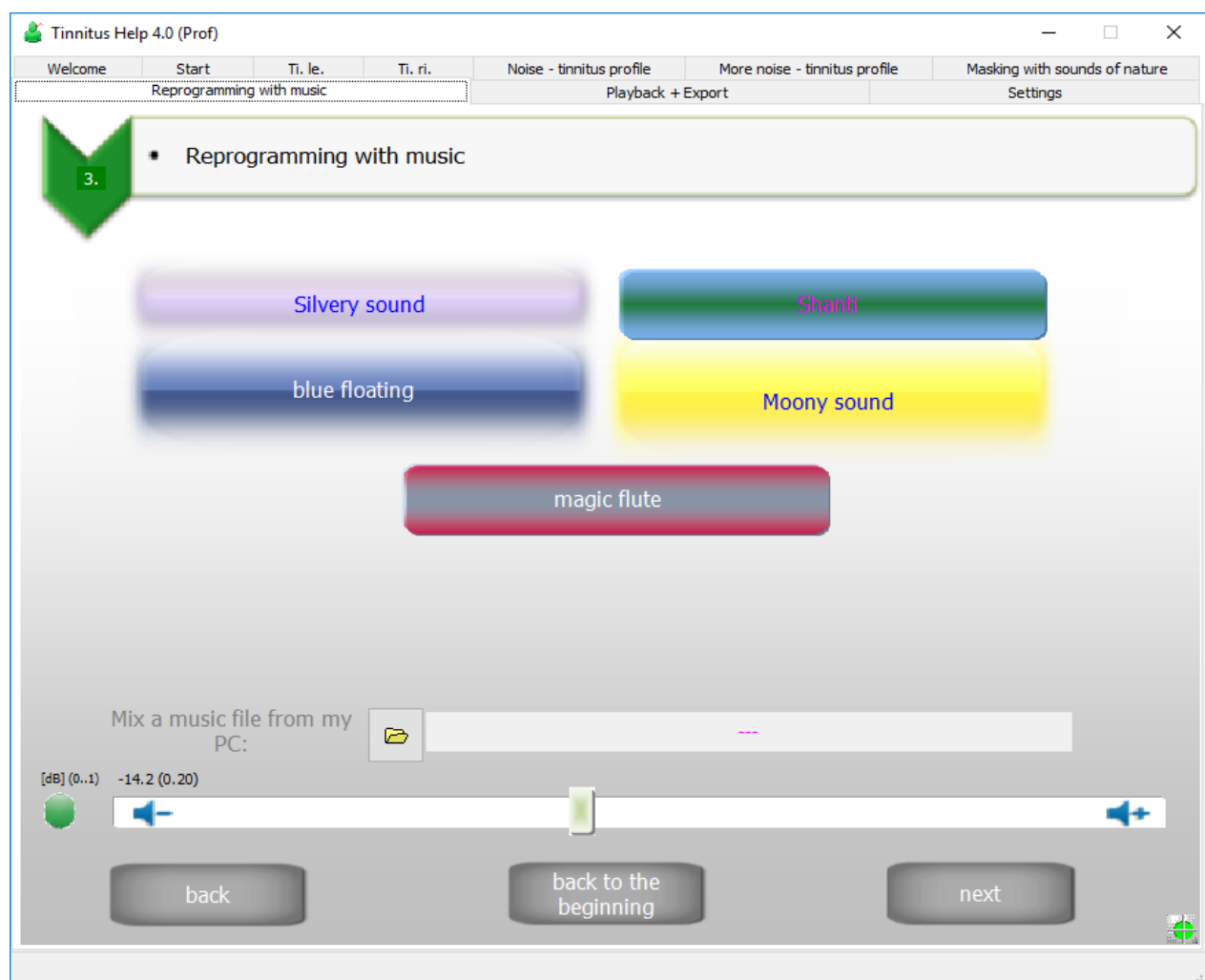
Figure 3-9: View „Reprogramming with music"

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From top to the bottom there are the following controls:

- Selection of one of 5 pieces of music
- File-open-dialogue to choose music from the PC
- On/Off-switch and On/Off-indicator
- Volume slider
- back
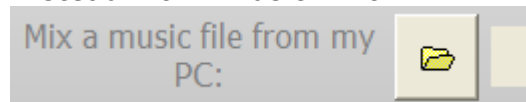- back to the beginning
- next

They shall be explained now.

Selection of one of 5 pieces of music

The view's region ⟨image⟩ offers the possibility to select a piece of music from the music library of **Tinnitus Help**. The magenta coloured caption indicates the choosen piece.

File-open-dialogue to choose music from the PC

Instead of music from **Tinnitus Help's** music library this dialogue can access music from the PC. The file name appears at the right of this button.

Note: Only music that offers CD quality (stereo, 16-Bit, 44.1 kHz) is allowed.

Volume slider

The slider controls the volume.

On/Off-switch and On/Off-indicator

Left from the volume slider there is a green ⟨image⟩ or grey ⟨image⟩ point. The color green indicates that music takes part in the mix. The point looks grey if the music is not hearable in the mix.

The point becomes green if the volume is set to higher then zero. It turns to grey if the volume slider is set to zero (quiet).

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If the volume is not zero – and therefore the sound takes part in the mix – it can be switched off without changing the volume simply by pressing the green point. The sound can be reactivated by a further pressing on the point.

The button [back] leads back to Masking with sounds of nature.

The button [back to the beginnig] opens the view Start and by means of

[next] one gets to the following view Playback + Export.

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3.10 Playback + Export

After the creation of a tinnitus profile you can start with your individual treatment. In practice there are two possibilities to playback and hear the result. Playback via

- headphones connected to the PC
- other equipment like CD-Players etc.

Tinnitus Help does support both, see the following module:
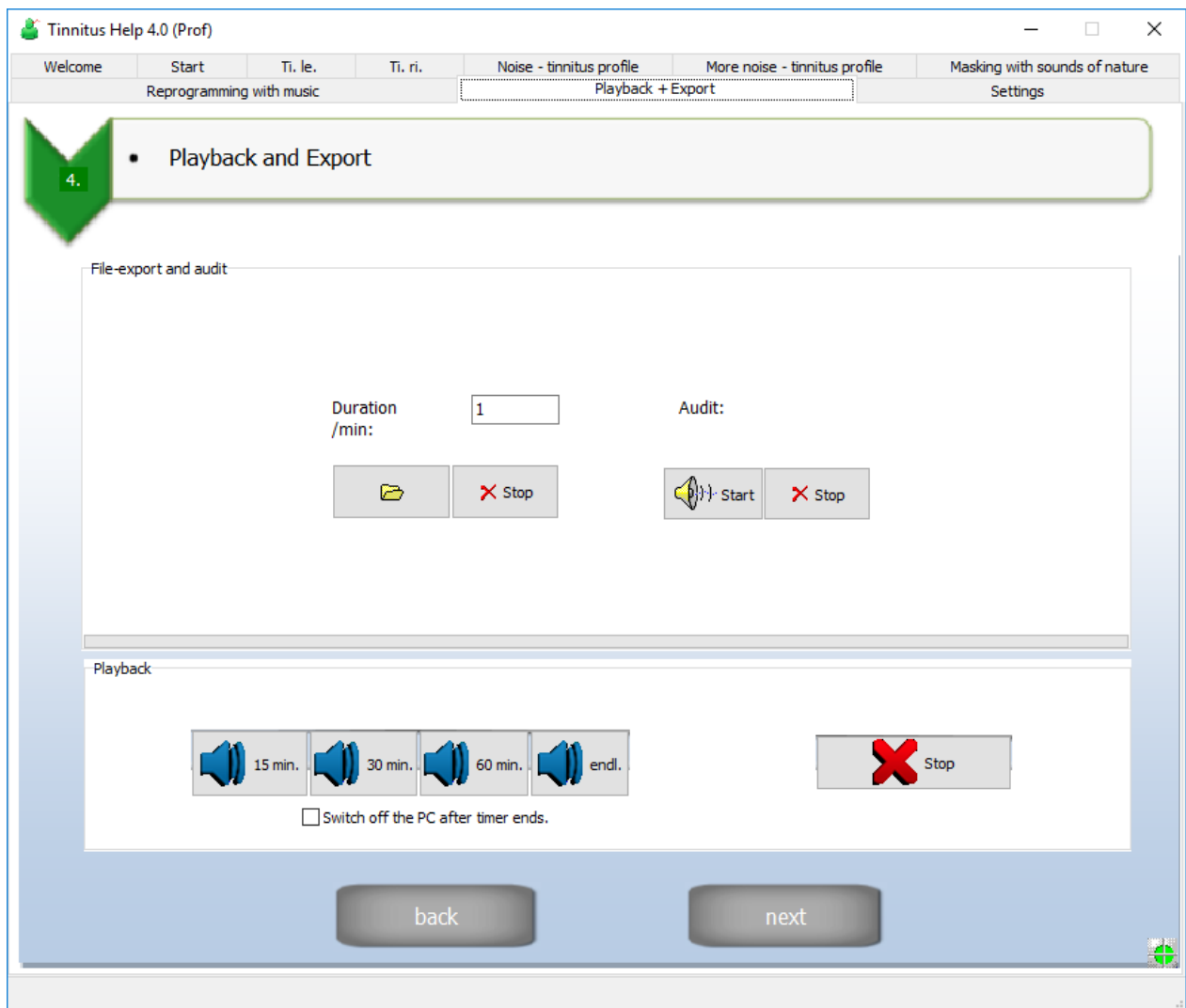
Figure 3-10: View „Playback + Export"

From top to the bottom there are the following controls:

- File export and audit
  - Export duration / min
  - Export file open

- o Export Stop
- o Audit Start
- o Audit Stop
- Playback
  - o Timer 15min./30 min./60 min./endless
  - o Stop
  - o Checkbox „Switch off the PC after timer ends."
- back
- next

They shall be explained now.

File export and audit
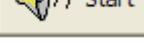
The group „Export and audit" contains functions to create and save tinnitus profiles as music files on hard disk drive..

The input field serves to determine the desired duration of the exported music file.

Use the dialogue to choose a filename and the storage location as usual. Creation and export start immediately and can be aborted any time by means of the button .

A created WAV-file can for example be burned on a CD and played back with every CD-player. The playback on other devices like some MP3 players sometimes requires conversion to another file format. Please have a look at the device's manual. The needed software usually belongs to its scope of delivery.

To verify the new WAV-file there is the button , the playback stops after the desired duration or when pressing the button right aside.

Playback

Of course the treatment is also possible directly with by means of the PC. A timer terminates the playback after the desired duration. The button terminates the playback too.
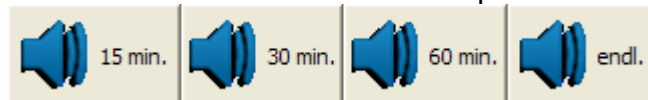
For the usage of **Tinnitus Help** e.g. to fall asleep there is a function to shut down the PC after the playback duration. The automatic shut down is active if the checkbox ☑ Switch off the PC after timer ends. is marked as shown.

The button [back] leads back to the view Reprogramming with music and with [next] one gets to the following view Settings.

3.11 Settings

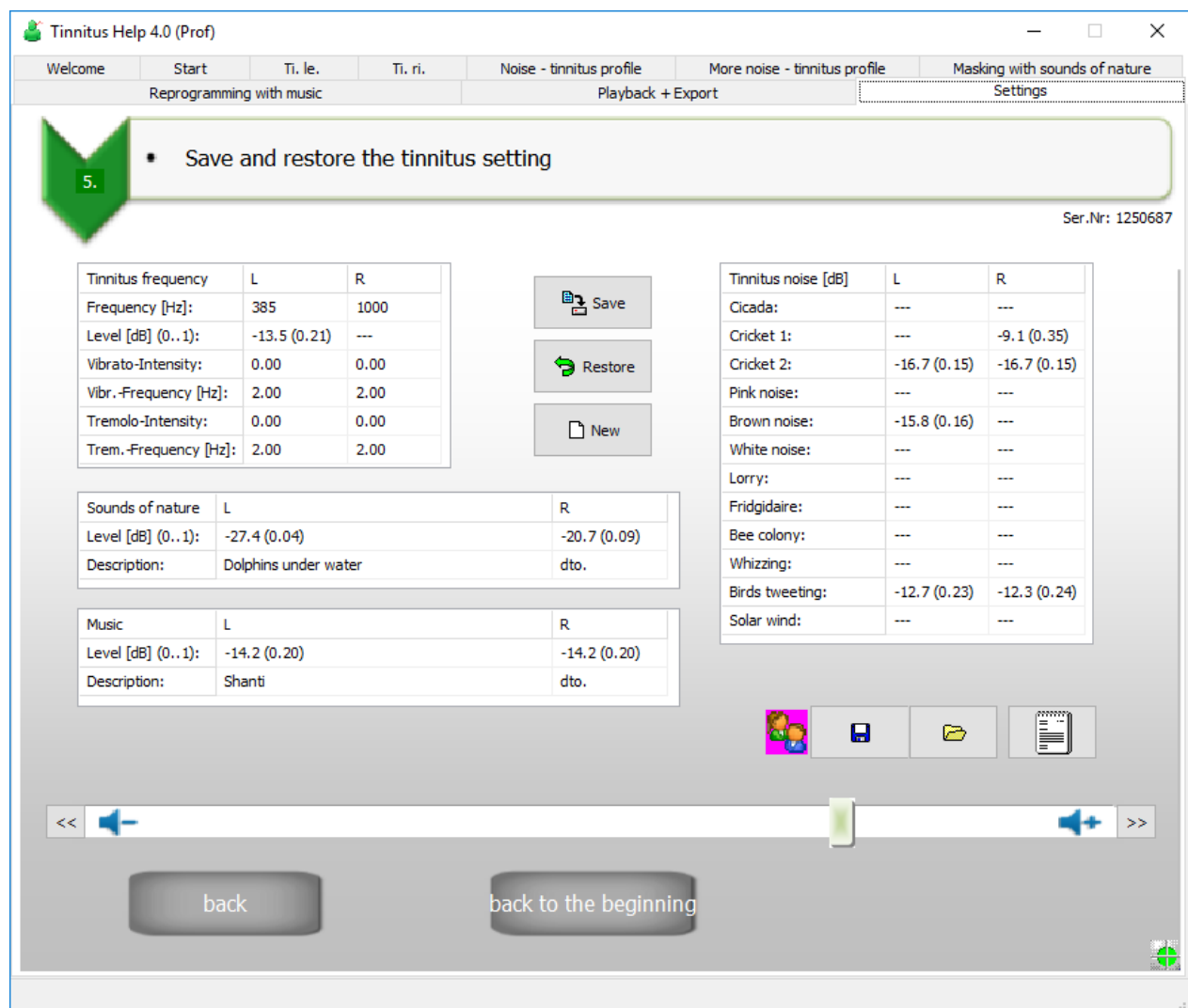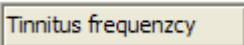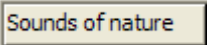The view „Settings" shows all ingredients of the actual profile. Furthermore several profiles can be saved and loaded, see the following figure:
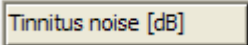

Figure 3-11: View „Settings"

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From top to the bottom there are the following controls:

- Tables „Tinnitus-frequency", "Sounds of nature", "Music", "Tinnitus noise"
- Save
- Restore
- New
- Profile Save
- Profile Load
- Documentation, Editor, Printer
- Volume slider with 1 dB increment and decrement
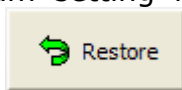- back
- back to the beginning

The tables , , and concentrate all settings of the program views.

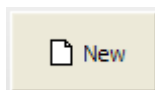‚A complete program setting can be written to hard disk via the button
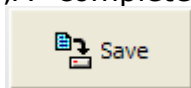
. Settings not saved get lost after closing the program.

As long as a new program setting is not saved, the original setting can be

restored via the button . This allows free experimentation with different settings at any time.

The button deletes all settings of the actual profile and brings them to their starting position. Since all volumes are set to zero the program remains quiet, but the actual profile is not overwritten. This only happens through saving the profile, see above. An original setting can be restored any time via the button "Restore".

In order to allow several persons to use **Tinnitus Help** and to save and load their actual profile there are the following buttons:

- The button opens a save-profile-dialogue as usual to name a profile and determine any storage location.

- Such profile can be loaded via the button .

The button opens the **Tinnitus Help** editor for documentation and
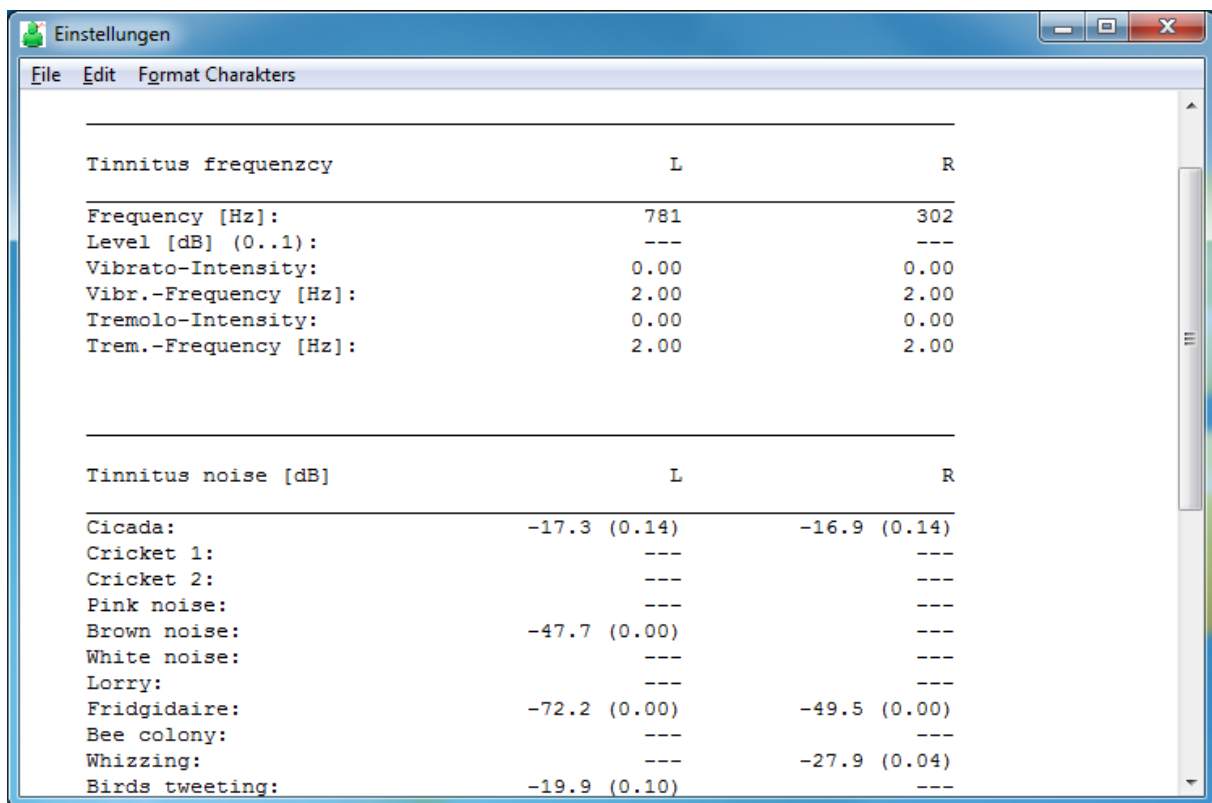
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printing all settings:

Figure 3-12: The Tinnitus Help editor

The items "File", "Edit" and "Format Characters" function as usual.

With the slider

it is possible to change every volume from the tables. For this click the entry with the mouse. This will setup the slider to the corresponding position. Additionally the buttons and allow to change the volume in 1-dB steps.

The button leads back to the view Playback + Export.

The button opens the view Start.

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