

## User Guide for the HushTinnitus system

Thank you for purchasing the HushTinnitus system.

If you only do two things from this guide, please do these two!

1. Please read the **Safety Instructions** before playing your custom sound tracks. In particular, as with any sound, please avoid playing your tracks at loud or excessive volume levels.
2. Before playing any HushTinnitus sound tracks, please set your MP3 player to **Repeat Song mode** (also known as **single track repeat mode**). If you don't do this, the sound tracks won't work as intended, and you'll get disappointing results. *Normal* repeat mode (also known as Repeat Album mode) won't work for this (unless you load just one track onto your MP3 player at a time). It needs to be *Repeat Song* mode, to make your player repeat the same single track again and again.

### ***Safety Instructions***

- **Volume levels.** As with any sound, you should only ever listen to your HushTinnitus sound tracks at a safe and comfortable volume level. Listening to sound at loud or excessive levels can cause damage to your hearing, which may be permanent. If you normally use hearing aid(s) then you should wear your aid(s) while listening to your HushTinnitus tracks, and again you should listen only at a safe and comfortable volume level.
- **Ménière's disease.** If you have Ménière's disease, you should not use the HushTinnitus website preview or the HushTinnitus sound tracks. (Ménière's disease causes a spinning type of dizziness and hearing loss, in addition to tinnitus.) The HushTinnitus system may not calibrate correctly to hearing affected by Ménière's disease.
- **Hyperacusis.** If you have hyperacusis then please consult with your doctor or audiologist, regarding use of the HushTinnitus system with your condition, before using the system.

***Do you want to get your HushTinnitus tracks onto your Apple iPhone, iPad or iPod Touch?***

If so, there are two different ways you can do it:

1. One way is to first get your HushTinnitus tracks into iTunes on **your computer** (Windows computer or Apple Mac). Then you can get your tracks onto your Apple device just by “sync”ing it with iTunes on your computer. If you have a computer, and would like to use this method, please **see the next page**.
2. Another way is to **directly** download your HushTinnitus tracks onto your Apple iPhone, iPad or iPod Touch. This method is suitable if you *don't* have access to a Windows computer or an Apple Mac. If you want to use this direct method to get your tracks onto your Apple device, please **now to go to page 11**.

## ***Getting your HushTinnitus tracks into the music program on your computer***

If you haven't already done so, please download your HushTinnitus custom tracks onto the Desktop of your computer. (You can do that by clicking on the download link that we emailed you.) After following the instructions on the HushTinnitus download web page, you should have a folder on your computer Desktop called **HushTinnitus**.

Please check that the folder icon does *not* have a "zip" drawn on it. If it does, then it needs "unzipping" as follows. Please just right click on it, and select "Extract All...". Then in the pop-up window, click the "Extract" button, and your computer will put an unzipped version of the folder onto your Desktop. Please then delete the original folder with the zip drawn on it.

This section assumes that your computer uses Microsoft Windows. (Please note that if you're using an Apple Mac, then you can use the iTunes program in a very similar way to the following instructions.) This section also assumes that you want to get your HushTinnitus sound tracks into one of these music programs: *Windows Media Player*, or *Apple iTunes*. Regarding the version of Windows that you are using, the guide is written for Windows 7 or earlier, but the HushTinnitus tracks can be used in Windows 8 with either of these music programs.

- *About Windows Media Player...* Windows Media Player is a free music player program that is included in Microsoft Windows. It allows you to organize and play a music collection on your computer. It can play MP3 files, the file format used by the HushTinnitus sound tracks. If you want to put your HushTinnitus tracks onto CD (called "burning" a CD), using a CD-writer drive, then Windows Media Player can do that for you. It can also copy ("sync") music onto some MP3 devices. **Instructions for Windows Media Player are on the next page.**
- *About Apple iTunes...* Apple iTunes is a free program that includes a music player. It also allows you to organize and play a music collection on your computer. It too can play MP3 files, including the HushTinnitus sound tracks. If you want to play your HushTinnitus tracks on your Apple **iPod**, **iPhone** or **iPad**, then a good approach is to first get your HushTinnitus tracks into iTunes on your computer. Then you can get your tracks onto your Apple device just by "sync"ing it with iTunes. **Instructions for Apple iTunes are on page 7.**
- If you're not using Windows Media Player or Apple iTunes, then please see the instructions for your particular MP3 player. The HushTinnitus tracks are standard MP3 files, so they should play in any MP3 player.

## If you're using Windows Media Player...

### (1) Start the Windows Media Player program as follows:

- Click the Windows Start button on the bottom left of your screen.
- Click "All Programs".
- Click "Windows Media Player". (You may have to scroll to see it.)
- The Windows Media Player program should start.
- Look at the left hand side of the Windows Media Player program window. You should see a column of items you can click, starting with "Library". Please click on the item labeled "🎵 Music". This shows the albums and tracks already in the player's library.
- Please resize or move the Windows Media Player program window so that you can see the HushTinnitus folder icon on your computer Desktop **as well as** the Windows Media Player program window.

### (2) OPTIONALLY – move your HushTinnitus folder:

- There is nothing really wrong with keeping the HushTinnitus folder on your Desktop, but if you prefer you can move it somewhere else in your file system. Many people keep their music in a library folder called "**Music**" or "**My Music**". But you can keep the HushTinnitus folder wherever you like.
- If you want to move your HushTinnitus folder, you need to do it before the next step.

### (3) Get your HushTinnitus tracks into the player:

- If you skipped the optional step (2) above you should still be able to see the HushTinnitus folder icon on your computer Desktop as well as the Windows Media Player window. However, if you did move your HushTinnitus folder in step (2), you'll now need to make sure that you can see the HushTinnitus folder icon (in Windows Explorer) **as well as** the Windows Media Player window.
- **Drag** the HushTinnitus folder icon right into the **middle** of the Windows Media Player window, and drop it there. (To *drag* the folder icon with your mouse, left-click on it and *keep your left mouse button pressed down* as you pull the folder into the middle of the Windows Media Player window. At this point your mouse pointer should have some text next to it saying "+ Include in Music library". Now let go of the left mouse button. This will *drop* the folder into the music library.)
- You should now be able to see **five new HushTinnitus albums** listed in the player's library. (You may need to use the scroll bar to scroll up or down to find the new HushTinnitus albums.)
- **If you can't see** the new HushTinnitus albums, please try closing the Windows Media Player program, and starting it again (using step (1) above). You should then be able to see your new albums.

#### (4) Set up and play your HushTinnitus tracks

- The HushTinnitus tracks are designed to be played so that the **same chosen track simply repeats again and again**. On some players, this uses a player mode called “Repeat Song” or “single track repeat mode”. The Windows Media Player program doesn’t actually have Repeat Song mode – but you can easily do exactly the same thing with its **playlist** facility, as follows.
- Near the top right of the Windows Media Player window are three tabs: Play, Burn and Sync. **Please click the Play tab**. Each time you click it, an extra panel either appears or disappears at the right hand side of the window. This is the playlist panel. Please click the tab so that you can see the playlist panel.
- Please make sure that the playlist is empty to start with. If the panel simply says “**Drag items here** to create a playlist”, then it’s ready to use. Otherwise, please clear the playlist by clicking “**Clear list**” near the top of the panel.
- At the bottom of the Windows Media Player window, near the center, click the  button. This toggles the player between normal mode and repeat mode. In repeat mode, the player repeats the entire contents of the playlist again and again. In repeat mode, the  button has **light blue shading** around it. Please make sure you can see this light blue shading. (Click the  button again if you can’t.)
- Next, please test that the player can play a repeating HushTinnitus track through your computer’s speakers or headphones. Please start by finding the first track of the first HushTinnitus album (called “**01 Type 1a then 4 seconds silence**”) in the player’s library. You may have to scroll the central panel up or down to find it. Then, drag that track (with the title “01 Type 1a then 4 seconds silence”) over to the right and drop it onto the text that says “**Drag items here**”. The track should start playing immediately.
- Hopefully you can now hear the track playing. It consists of 2 seconds of “Type 1a” sound (a hissing type of sound) followed by 4 seconds of silence, and this should simply keep repeating. (If you can’t hear any sound, please see step (6) below for some further things to check.)
- To stop the repeating track click “**Clear list**” near the top of the playlist panel, which will clear your playlist. To play a different track, just drag the track you want onto “**Drag items here**”. Again, the track will keep repeating until you click “**Clear list**”. So, using this simple method, you can play any track as if the player had a genuine “Repeat Song mode”.

#### (5) Other things you can do in Windows Media Player

- This document is not meant to be a full guide to Windows Media Player, but below are a few pointers to help topics that you might be interested in.
- First, please click  near the top of the Windows Media Player window. This opens the program's help window. In particular, you may then be interested in clicking on:
  - “**Getting started** with Windows Media Player”
  - “**Burn a CD** or DVD in Windows Media Player”
  - “**Set up a device to sync** in Windows Media Player”

#### (6) If you can't hear any sound from the player

- In step (4) above you dragged a track onto the text “**Drag items here**”. The track should have started playing immediately. If you didn't hear any sound, here are some things to check.
- Please first check that there is a dark blue **moving bar**, constantly growing from left to right near the bottom of the Windows Media Player window. This indicates that the track is currently being played by the program. If you can't see the moving bar, please re-check that you've done all the steps above.
- If the bar is moving but you can't hear any sound, please check all the relevant **mute buttons and volume controls**. The Windows Media Player program itself has mute and volume controls at the bottom near the center.
- Windows has separate mute and volume controls. You can find these either by clicking on a small speaker symbol in the taskbar at the bottom of the screen, and then sliding a volume slider; or by clicking the Windows Start button, clicking Control Panel and then clicking on the sound options. This again gives you volume sliders that you can adjust.
- If you have **external speakers**, please check that they are plugged in properly, switched on, and the volume is turned up to a suitable level.
- If you're using **headphones**, please check that they are plugged in properly. They may have a volume control in the cord.

Please now go to page 14.

## If you're using Apple iTunes...

### (1) Start the iTunes program as follows:

- Click the Windows Start button on the bottom left of your screen.
- Click "iTunes".
- The iTunes program should start.
- Look near the top left of the iTunes program window. If you can see a button labeled "🎵 **Music**", then great, the player's music library is already showing. Otherwise, you need to get the player to show its music library. The button near the top left of the iTunes program window might currently say "Films", "TV Programs" or "Apps". If so, please **click the button**. It will then give you a choice of libraries: please click "🎵 **Music**". The player's music library will then be shown.
- Please resize or move the iTunes program window so that you can see the HushTinnitus folder icon on your computer Desktop **as well as** the iTunes program window.

### (2) OPTIONALLY – move your HushTinnitus folder:

- There is nothing really wrong with keeping the HushTinnitus folder on your Desktop, but if you prefer you can move it somewhere else in your file system. Many people keep their music in a library folder called "**Music**" or "**My Music**". But you can keep the HushTinnitus folder wherever you like.
- If you want to move your HushTinnitus folder, you need to do it before the next step.

### (3) Get your HushTinnitus tracks into the player:

- If you skipped the optional step (2) above you should still be able to see the HushTinnitus folder icon on your computer Desktop as well as the iTunes program window. However, if you did move your HushTinnitus folder in step (2), you'll now need to make sure that you can see the HushTinnitus folder icon (in Windows Explorer) **as well as** the iTunes program window.
- **Drag** the HushTinnitus folder icon right into the **middle** of the iTunes window, and drop it there. (To *drag* the folder icon with your mouse, left-click on it and *keep your left mouse button pressed down* as you pull the folder into the middle of the iTunes window. At this point your mouse pointer should have some text next to it saying "Link". Now let go of the left mouse button. This will *drop* the folder into the music library.)
- You should now be able to see **five new HushTinnitus albums** listed in the player's library. (You may need to use the player's scroll bar to scroll up or down to find the new HushTinnitus albums.)

#### (4) Set up and play your HushTinnitus tracks

- The HushTinnitus tracks are designed to be played so that the **same chosen track simply repeats again and again**. The iTunes player can do this, with its “Repeat Song mode”, as follows.
- Please start by finding the first track of the first HushTinnitus album (called “**01 Type 1a then 4 seconds silence**”) in the iTunes player’s library. You may have to scroll up or down in the player to find it. The iTunes player can display the library in various modes (by Songs, Albums, Artists, etc.). Depending on the mode, you may have to click on the HushTinnitus album cover image before you can see the track names.
- When you’ve found the track, please **double click** on it. The player will then start playing it.
- As it is playing, please put the player into **Repeat Song mode**, as follows. At the top of the iTunes program window, in the center, there is a rectangular panel that shows which track is playing. The far left of the panel shows the album cover image, and just to the bottom right of it there is a little symbol that shows if the player is in “Repeat Off mode”, “Repeat Album mode” or “Repeat Song mode”, as shown here:



↑  
**Repeat Song mode**



↑  
**Repeat Album mode**



↑  
**Repeat Off mode**

- As you **click on the little symbol**, it cycles through the three available modes. Please click on it until you get into **Repeat Song mode** (which has a small “1” in a circle, as shown above).
- Please now try double-clicking on other HushTinnitus tracks. You should find that each track now simply keeps repeating. (If you can’t hear any sound, please see step (7) below for some further things to check.)

**(5) Other things you can do in iTunes**

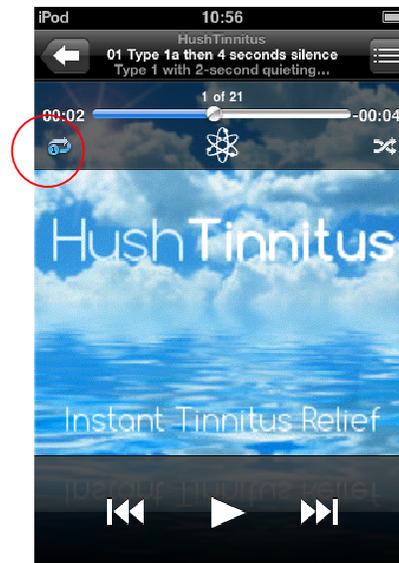
- This document is not meant to be a full guide to iTunes, but you can find out more from the program’s built-in help system. The help system can be accessed by clicking the **Help** menu on the iTunes menu bar – however, the menu bar is hidden by default. To see the menu bar, press **Ctrl+B**. Alternatively, click the icon in the far top left of the program window, and then click “Show Menu Bar”. The help system can give you an introduction to using iTunes, or help you copy (“sync”) your tracks onto your iPod, iPhone or iPad.

**(6) Playing your HushTinnitus tracks on the iPod, iPhone or iPad**

- To get your HushTinnitus tracks onto your device, first you need to **sync** it with the iTunes program. (If you don’t know how to do this, please see the iTunes help system, as described in step (5) above.)
- You need to set the device to play in **Repeat Song mode**. On the **iPod Touch, iPhone and iPad** you can select Repeat Song mode in a similar way to iTunes, as described above. First of all, please start by playing a track. On more recent versions of iOS (the operating system of your device) you’ll see a red “Repeat” word that you can tap. Please tap it, then select “Repeat Song”. You’re now in Repeat Song mode, as required.
- If you have an older version of iOS, please keep following these instructions. (But note that the following does not work in “cover flow” mode.) As the track is playing, try **quickly tapping the center of the screen**. Each time you tap it, an extra control bar should either appear or disappear at the top, as shown below. Please tap the screen so that you can see the control bar.



(a) No control bar shown



(b) Control bar shown, “Repeat Song” mode circled

- The control bar includes a little symbol, circled in red above, for selecting between the different repeat modes. (This works in the same way as in the iTunes player, as discussed earlier.) Please **tap the symbol** until it shows single Repeat Song mode, which has a small “1” in a circle, as shown in image (b) above. You should now find that each track you play simply keeps repeating.
- You may want to turn off the “**Shake to Shuffle**” feature, or your device may change to another random track whenever it is “shaken”. This can be annoying, as it can sometimes be triggered just by walking around with the device. To switch the feature off, open the Settings app, tap Music, and turn off Shake to Shuffle.
- On some iPods without a touch display, “Repeat Song mode” is selected in the main Settings menu of the device. Set “Repeat” to “One”.
- The iPod Shuffle does not have a “Repeat Song mode”. The best way to use it with HushTinnitus tracks is to load just one track onto the player at a time. The track will just keep repeating.

**(7) If you can't hear any sound from the iTunes player**

- Please first check that there is a grey **moving slider**, constantly sliding from left to right, in the top centre panel of the iTunes program window. (You can see the slider in the pictures of Step (4) above). This indicates that the track is currently being played by the program. If you can't see the moving slider, please re-check that you've done all the steps above.
- If the slider is moving but you can't hear any sound, please check all the relevant **mute buttons and volume controls**. The iTunes program itself has a volume control near the top left of the program window.
- Windows has separate mute and volume controls. You can find these either by clicking on a small speaker symbol in the taskbar at the bottom of the screen, and then sliding a volume slider; or by clicking the Windows Start button, clicking Control Panel and then clicking on the sound options. This again gives you volume sliders that you can adjust.
- If you have **external speakers**, please check that they are plugged in properly, switched on, and the volume is turned up to a suitable level.
- If you're using **headphones**, please check that they are plugged in properly. They may have a volume control in the cord.

Please now go to page 14.

## ***Downloading your HushTinnitus tracks directly onto your Apple iPhone, iPad or iPod Touch***

This section describes a way to *directly* get your HushTinnitus tracks onto your Apple device. This method is suitable if you *don't* have access to a Windows computer or an Apple Mac. With this direct method you need to first install a free App on your Apple device to allow you to browse to the HushTinnitus download web page. Then you can directly download and play your tracks. (Most web browsers on Apple devices (Safari, Chrome etc.) don't support direct download and playing of MP3 files. The free App described in this section allows you to avoid that restriction.)

To directly download your tracks onto your Apple iPhone, iPad or iPod Touch, we recommend first installing a free App called **Documents 5 – Fast PDF reader, media player and download manager**. It's written by **Readdle**, and is available for free in the Apple App Store. The App allows unlimited downloading, it has a built-in audio player, and it supports the types of files used by HushTinnitus (namely ZIP and MP3). (We recommend this particular App, but you might like to know that there are other Apps in the App Store that can download and play the HushTinnitus tracks too.)

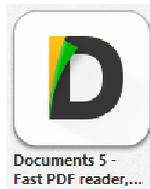
Please follow the instructions below for installing the Readdle App and using it to download and play your HushTinnitus tracks.

1. On your Apple device, tap on the “App Store” app:



2. Click the Search icon (a magnifying glass) at the bottom of your screen. At the top of your screen is a Search box for finding Apps. Please type “readdle” into the Search box, and tap the blue Search button.

3. The search should find the App below (along with Readdle's other Apps). (Please note that to see it, you might have to swipe the screen left a few times, to see it among the other search results.)



4. Please tap on the “+FREE” button by this icon, then tap the “INSTALL” button to install the App.
5. When it's installed, tap the “+OPEN” button to start the new App. There should be a strip of icons with a dark background at the bottom of the screen. Please tap the rightmost icon (a little blue compass, representing a browser). This takes you into the App's browser. (This has a strip of icons at the bottom of your screen with a white background.) This browser is where you'll start your download.
6. Please open the email we sent you titled “Your HushTinnitus custom sound tracks”, and cut-and-paste the download link into the address bar (at the top of the browser screen) of the new App. Then tap “Go” to go to the Download page of the HushTinnitus website. (Please be careful as you cut-and-paste the link. It needs to be the whole link. Any incorrect or missing characters will give an error screen: please try again if you get the error screen. If you type the link manually, please note that it is *case sensitive*, so please exactly copy all upper-case and lower-case letters.)
7. Then, on the HushTinnitus Download web page, please tap the orange “DOWNLOAD” button.
8. The App will then show a new screen with your download details. (It gives the download name as “HushTinnitus”, and confirms the download is a “ZIP archive”.) These details are all correct, so please now just tap the blue “Done” button in the top right corner.
9. Your tracks are now downloading. In the bottom left of your screen there's an icon that looks like a document: please tap it. This takes you back to the first screen, where the icons at the bottom have a dark background. On this screen you can look at your download: you can check whether it is still downloading, or whether it has finished downloading, as follows.
10. Please click the document icon in the bottom right of your screen. Then click the light-blue “Documents” folder. It should show a yellow icon with a zip on it. If it has a blue “growing” bar on it, that means your tracks are still

downloading to your device: in that case please wait until the blue bar disappears. Then please tap the yellow “zip” icon.

11. The App will now “unzip” (unpack) your download, and place a blue folder (called “HushTinnitus”) next to the yellow zip icon. When that appears, your tracks have downloaded, and are now ready to play.
12. Please tap the new “HushTinnitus” folder and have a look inside it. Inside the “HushTinnitus” folder you’ll find five other folders, one folder for each of your HushTinnitus albums. Then within each album folder you’ll find all the HushTinnitus tracks (as listed on the next page of this User Guide).
13. To play a track, just tap it. For the HushTinnitus tracks to work as intended **it’s very important to put the player into Repeat Song mode**. (This makes the player keep repeating the chosen track, which is how the tracks are meant to be played.) To do that, please tap the repeat-mode icon near the top left of your screen. (The icon is an oval shape, made of two black curved arrows “chasing” each other.) The first time you tap the icon it turns blue (indicating normal repeat mode, which you *shouldn’t* use). On the next tap a tiny blue circle appears on the lower arrow of the oval: that’s great, you’re now in “Repeat Song mode” as required.
14. You’re now up and running with your tracks. Please see the next page for guidance on finding the best tracks for you. Additionally, here are some further tips for using the player in the Readdle App:
  - There is a volume control near the bottom of the screen.
  - As your tracks are playing, if you want you can press the blue menu icon (three horizontal lines) in the top right corner of the screen. This lets you see all the tracks on the current album, and select a new track to listen to if you wish. (On the iPhone, please hold your device on the side (in “landscape” orientation) to see the full track names.)
  - From the player, to select another HushTinnitus album please tap the < symbol in the top left corner of the screen, then tap it again, to see the album folders. You can then click into an album folder and tap a chosen track to play it.
  - Your chosen track will keep playing even if you close the App, and even if your device auto-locks. (This allows you to keep listening when doing other things on your device, or when you’re not actively using the screen.) To stop the track, please just open the App and tap pause on the player.

## ***Finding the best HushTinnitus tracks for you***

To get the most out of your HushTinnitus sound tracks it's important to spend a little time trying to find the track, or tracks, that are the best "fit" for you. Tinnitus varies greatly from person to person. For example, some people have a strong residual inhibition response, so their tinnitus remains reduced (or even silent) for quite a long time after listening to a suitable *quieting sound*. Other people have no residual inhibition response at all. And there are all levels of response in between. However, nearly all people with tinnitus can keep their tinnitus suppressed while listening to a suitable continuous *masking sound*.

The HushTinnitus system tries to cater for the whole range of residual inhibition responses, from strong responses, to none at all. *All* of the tracks are designed to act as quieting sounds, for triggering residual inhibition, in people with sufficient response. Also, some of the tracks can act as masking sounds, as discussed further below.

The HushTinnitus system provides three types of basic sound "structure", called Type 1, 2 and 3. There are 67 sound tracks in total, grouped into 5 albums. All of the sound tracks are shown in the following table.

<b>Album name</b>	<b>Track name</b>
Type 1 with 2-second quieting sounds	01 Type 1a then 4 seconds silence
	02 Type 1a then 8 seconds silence
	03 Type 1a then 15 seconds silence
	04 Type 1a then 30 seconds silence
	05 Type 1a then 60 seconds silence
	06 Type 1a then 120 seconds silence
	07 Type 1a then 240 seconds silence
	08 Type 1b then 4 seconds silence
	09 Type 1b then 8 seconds silence
	10 Type 1b then 15 seconds silence
	11 Type 1b then 30 seconds silence
	12 Type 1b then 60 seconds silence
	13 Type 1b then 120 seconds silence
	14 Type 1b then 240 seconds silence
	15 Type 1c then 4 seconds silence
	16 Type 1c then 8 seconds silence
	17 Type 1c then 15 seconds silence
	18 Type 1c then 30 seconds silence
	19 Type 1c then 60 seconds silence
	20 Type 1c then 120 seconds silence
	21 Type 1c then 240 seconds silence
Type 1 with 4-second quieting sounds	22 Type 1a then 4 seconds silence
	23 Type 1a then 8 seconds silence
	24 Type 1a then 15 seconds silence
	25 Type 1a then 30 seconds silence
	26 Type 1a then 60 seconds silence

	27 Type 1a then 120 seconds silence
	28 Type 1a then 240 seconds silence
	29 Type 1b then 4 seconds silence
	30 Type 1b then 8 seconds silence
	31 Type 1b then 15 seconds silence
	32 Type 1b then 30 seconds silence
	33 Type 1b then 60 seconds silence
	34 Type 1b then 120 seconds silence
	35 Type 1b then 240 seconds silence
	36 Type 1c then 4 seconds silence
	37 Type 1c then 8 seconds silence
	38 Type 1c then 15 seconds silence
	39 Type 1c then 30 seconds silence
	40 Type 1c then 60 seconds silence
	41 Type 1c then 120 seconds silence
	42 Type 1c then 240 seconds silence
Type 1 with 8-second quieting sounds	43 Type 1a then 4 seconds silence
	44 Type 1a then 8 seconds silence
	45 Type 1a then 15 seconds silence
	46 Type 1a then 30 seconds silence
	47 Type 1a then 60 seconds silence
	48 Type 1a then 120 seconds silence
	49 Type 1a then 240 seconds silence
	50 Type 1b then 4 seconds silence
	51 Type 1b then 8 seconds silence
	52 Type 1b then 15 seconds silence
	53 Type 1b then 30 seconds silence
	54 Type 1b then 60 seconds silence
	55 Type 1b then 120 seconds silence
	56 Type 1b then 240 seconds silence
	57 Type 1c then 4 seconds silence
	58 Type 1c then 8 seconds silence
	59 Type 1c then 15 seconds silence
	60 Type 1c then 30 seconds silence
	61 Type 1c then 60 seconds silence
	62 Type 1c then 120 seconds silence
	63 Type 1c then 240 seconds silence
Type 2	64 Type 2
Type 3	65 Type 3a
	66 Type 3b
	67 Type 3c

The Type 1 tracks are aimed at people with quite a strong residual inhibition response. Each track plays a short quieting sound followed by a period of silence. (Your player should just keep repeating the chosen track, as already discussed, so this pattern will simply repeat.) The quieting sounds are 2, 4 or 8 seconds long, depending on the album chosen. The period of silence ranges from 4 seconds to 240 seconds (4 minutes), depending on the track chosen. There are 3 different waveform Types (called Type 1a, Type 1b and Type 1c), again depending on the track chosen. For people with enough residual inhibition

response, the right track can keep their tinnitus reduced throughout the silent periods.

The Type 2 sound track can be suitable for people whose residual inhibition response is shorter. This plays many ultra-short quieting sounds each second, subliminally embedded in a gentle and continuous noise signal. One study found that sound similar to this was less obtrusive than other types of tinnitus-suppressing sound. It was put forward that this may be because the sound continually refreshes the listener's residual inhibition response, allowing the sound to be played at a less obtrusive volume than standard masking sounds.

The Type 3 sound tracks can be used in two different ways. Like the Type 1 sounds, there are three waveform types to choose from: Type 3a, Type 3b and Type 3c. Type 3a can be used as an optimized masking sound, for suppressing tinnitus while the track is playing. So it can cater for people with little or no residual inhibition response. (Type 3b and 3c can be used in this way too, but most people find Type 3a less obtrusive.) Studies have shown that this type of sound can be played at a less obtrusive level than standard white noise masking sounds, while still keeping tinnitus suppressed.

The Type 3 tracks can also be used in another way. If the volume is turned up a little, and the track is played for a while (say a minute or two), then afterwards some people experience an extended period of residual inhibition. This might be useful before bed, for instance.

So which sound track works best for you? Below is a suggested step-by-step "fitting" procedure for helping you find out. First, a few recommendations for getting the most out of the procedure:

- Please try not to be disappointed if a particular sound track doesn't work for you. The procedure starts with the Type 1 sound tracks, which are designed for people with quite a strong residual inhibition response. If Type 1 doesn't work for you, it's likely you will still have a response to Type 2 or Type 3.
- Headphones, rather than speakers, are recommended for this.
- Please adjust the volume of your player so that it is moderately louder than your tinnitus. (Residual inhibition and masking both rely on this.) Of course, please always keep the volume at a safe and comfortable level.
- Please make sure your player is in "Repeat Song mode" as discussed earlier in this guide.

Here's the recommended fitting procedure:

1. Please start with the first track of the first album, "01 Type 1a then 4 seconds silence". After adjusting the volume as above, please make note of whether your tinnitus is reduced during the silent periods.
2. Then please try "08 Type 1b then 4 seconds silence". Again, after adjusting the volume, please make a note of your tinnitus level during the silent periods.
3. Likewise, then please try "15 Type 1c then 4 seconds silence".
4. You've now tried Type 1a, Type 1b and Type 1c – with each quieting sound lasting 2 seconds. If any of these kept your tinnitus reduced during the silent period, you can carry on with step 5 below. But if steps 1 to 3 didn't work for you, the next thing to do is to try making the quieting sound longer, to see if you get a stronger residual inhibition response – see step 7 below.
5. Please start by playing the sound that worked best for you, from steps 1 to 3. (If more than one sound worked equally well, please choose the sound you find the least obtrusive.) Now you're ready to try increasing the period of the silence between the quieting sounds. It's currently 4 seconds. Please try playing the next track on the album. (E.g. if you're currently playing "01 Type 1a then 4 seconds silence", because that worked best for you, now please play "02 Type 1a then 8 seconds silence".) On most players there is a  (skip forward) button to do this. (Please make sure that your player is not in shuffle mode, or it will skip to a random track.)
6. Please make note of whether your tinnitus remains reduced throughout the 8 seconds of silence. If it does, then you can try the next track (15 seconds of silence), and so on – up to a maximum of 240 seconds of silence. When you find the longest period of silence for which your tinnitus is kept reduced, you can stop the fitting procedure: you have found a "best fit" track for you.
7. If steps 1 to 3 did not keep your tinnitus reduced, or if you wish to try for longer periods of reduced tinnitus (residual inhibition), then you can try the second album. This uses longer quieting sounds (4 seconds each, rather than 2) to try to stimulate longer residual inhibition. Please repeat steps 1 to 6 above for the second album. In other words, start by trying "22 Type 1a then 4 seconds silence", "29 Type 1b then 4 seconds silence" and "36 Type 1c then 4 seconds silence", to see which works best for you. Then use  (or equivalent) to try different silent periods, to find out how long your tinnitus can be kept reduced.

8. Likewise, the third album has even longer quieting sounds (8 seconds each). Again, please repeat steps 1 to 6 above for this album, to try to find a track that works for you.
9. All of the above steps deal with Type 1 sounds. These are designed for people with quite a strong residual inhibition response, and so not everyone responds to Type 1. If Type 1 didn't work for you, then Type 2 is the next type to try. Please play the track "64 Type 2" (on the fourth album). This contains many ultra-short quieting sounds every second. The quieting sounds are "hidden" in a soft continuous noise sound, for comfortable longer-term listening. Please make a note of whether this can keep your tinnitus suppressed (partly or completely). Many people find that they can play this track at a less obtrusive level than standard white noise masking sounds, while still keeping their tinnitus suppressed.
10. Please try the track "65 Type 3a" (on the fifth album). This is a continuous smooth noise sound. It can be used as an optimized masking sound, and is suitable for people with little or no residual inhibition response. Like all the HushTinnitus tracks, it is pitch-tuned to your hearing. Again, many people can play this at a less obtrusive level than standard white noise masking, to keep tinnitus suppressed.
11. **One shot usage.** All of the above steps deal with playing the tracks continuously, for ongoing tinnitus reduction. However, any of the tracks on the fifth album (i.e. "65 Type 3a", "66 Type 3b" and "67 Type 3c") can also be used to trigger a "one shot" period of residual inhibition, in people with enough residual inhibition response. To try this, please play one of these tracks *a little louder*, for a minute or two. Then stop the track, and see if you experience a period of residual inhibition. For some people, their residual inhibition can last for a useful period after this.

## **Regular usage**

Before using the HushTinnitus system, please **consult with your doctor or audiologist**. They should be able to discuss with you a range of possible treatment approaches, including using the HushTinnitus sounds with other methods, such as Tinnitus Retraining Therapy (TRT).

You can listen to your HushTinnitus sound tracks through either headphones or speakers. If you have good quality speakers, and they remain at roughly the same distance from your head as you listen, then you can get good results. However, there are a number of **advantages to using headphones**:

- Headphones, and an MP3 player, can move around with you. They deliver the same level of sound to your ears wherever you go.
- Headphones are unaffected by the acoustics of your room. Sounds that cover just a narrow range of pitch (such as Type 1b and Type 3b) can be particularly strongly affected by room acoustics, when played through speakers.
- If you want to use a smartphone, tablet or laptop to play your HushTinnitus tracks, then headphones or additional external speakers are recommended. It is unlikely that the small speakers in these devices will be adequate (especially in terms of their frequency response).

If you do use headphones, you may prefer to use headphones that don't completely block your ears. The advantage is that this allows you to still hear any sound around you, so you can carry on with life normally as you use the system. Some examples of headphones like this are given in the table below.

<b>Headphone type</b>	<b>Suitability</b>	<b>Examples</b>
Open-ear	Best	AirDrives or AirDrives FIT ( <a href="http://www.airdrives.com">www.airdrives.com</a> ), AfterShokz ( <a href="http://www.aftershokz.com">www.aftershokz.com</a> )
Ear canal not sealed	Good	iPod/iPhone standard earphones (if worn loosely)

**Notes for hearing aid wearers.** If you normally wear hearing aid(s) then please wear your aid(s) when you listen to your HushTinnitus sound tracks. You can listen to your HushTinnitus tracks via speakers with any type of hearing aid. Additionally, if you wear in-the-ear aid(s) then your choice of headphones is essentially the same as above. If your aid(s) have a T coil, then you can also consider inductive systems, such as neck

loops or ear hooks. These use the T setting of the aid. However, for Type 1 use we recommend that you set your aid(s) so that you can still hear background sound from the microphone of the aid, as well as the HushTinnitus sound tracks from the T coil.

Regarding the **sound level** (volume) of your listening, there are a few things to consider. Firstly, to *completely* mask tinnitus, most people find that the masking sound needs to be a little louder than their tinnitus. (However, you may well want to use a lower volume level to just *partially* mask your tinnitus – see the discussion on habituation below.) To achieve residual inhibition, most people find that the volume level needs to be a little louder still. However, it is of course essential that sound levels are always kept within safe and comfortable limits. This is especially important for longer-term listening. (For this reason, if you have particularly loud tinnitus, the HushTinnitus system may not be suitable for you.)

If you're using the Type 1 tracks, you may find that your residual inhibition response varies throughout the day – or that it changes as you use the system. The Type 1 tracks have been grouped in order of increasing silent period, so the idea is that you can use the ⏮ or ⏭ buttons on your player to **adjust the “dosage”** of the quieting sounds, to accommodate for these changes. You may also find that you prefer different types of HushTinnitus sounds at different times. For example, for getting to sleep, you might prefer the continuous Type 2 or Type 3a sounds – perhaps played through a bedside sound system or pillow speaker.

An important subject for people with tinnitus is **habituation**. Habituation basically refers to your ability to “tune out” from being aware of your tinnitus, so you are less aware of your tinnitus as you go about your life, and you are less bothered by it. It is thought that the more you can tune your attention away from your tinnitus, and the more you can avoid any negative feelings towards your tinnitus, the better your brain gets at doing this – until (after perhaps many months of sustained practice) it comes naturally, with little effort. This is often described as “being habituated” to tinnitus. People who are habituated to their tinnitus may have the same tinnitus loudness as before they became habituated, but they can usually cope better, and live more happily with their tinnitus.

A proper discussion of habituation is really beyond the scope of this brief guide. However, your doctor or audiologist should be able to discuss this subject with you. One of the most popular approaches to helping achieve habituation is a structured program of treatment called Tinnitus Retraining Therapy (TRT). The researchers who developed TRT recommend that it is carried out by an appropriately trained audiologist. The treatment usually involves a combination of a number of counseling sessions, and the use of masking sound. However, the cost of several counseling sessions is beyond the budget of many people. Research suggests that about three quarters of people with tinnitus successfully habituate to their tinnitus without any help. The researchers who developed TRT

have written the following book, and some people have self-treated themselves using the book, with success.

Pawel J. Jastreboff and Jonathan W. P. Hazell. "Tinnitus Retraining Therapy: Implementing the Neurophysiological Model." Cambridge University Press, 2008.

One important idea in TRT is that the masking sound must be set to the correct volume level. According to TRT theory, you should set the volume so that it only *partly* hides your tinnitus. The idea is that this provides a partial distraction from the tinnitus sound, helping take awareness away from the tinnitus. However, it leaves enough of the tinnitus sound so that the brain can still learn to habituate to it. So, in TRT, masking should never be set so loud that it completely covers the tinnitus. As the TRT treatment progresses, patients are encouraged to reduce the volume level of the masking sound and/or spend less time listening to the masking sound, until it is ideally phased out completely. At that point, habituation is complete.

Although TRT traditionally uses masking sound, some researchers have suggested that residual inhibition could perhaps be used instead, in some form. Following the ideas of TRT, the quieting sounds should be used to just *partly* remove the tinnitus sound, allowing some tinnitus sound to remain for the brain to habituate to. For some people, their residual inhibition response is partial anyway: their tinnitus is reduced, rather than being completely silenced. For others, partial tinnitus reduction can be achieved by reducing the volume level of the sound tracks, or (in the case of Type 1) by increasing the duration of the silent periods, so that tinnitus is allowed to partly return before each quieting sound. As with masking, the amount of time spent listening to the sound tracks can be gradually reduced as habituation progresses.