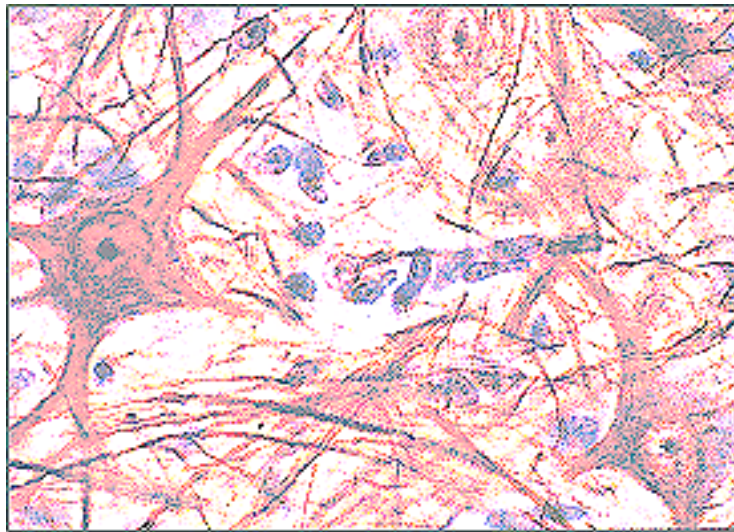


# Tinnitus Tamer



## User Guide

*Version 3 (Windows)*



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*Note: In some versions of Adobe Reader, clicking on the page number in the above table of contents will take you to the clicked page.*

*If this does not work in your version of Adobe Reader, click on the thumbnail tab in Adobe Reader to show the thumbnails of the pages, and click on the thumbnail with the page number you want to see.*

*Another method is to double-click on the page number indicator to highlight the page number currently displayed, then type the page number you want to see, and click the Enter key.*

## **What is the TinnitusTamer?**

The TinnitusTamer is what is known as a habituation trainer. When you run a tone sequence with the TinnitusTamer, your Tinnitus sound will be less bothersome. With continued use the TinnitusTamer will reduce your Tinnitus so that you are no longer aware of your Tinnitus between tone sequences. You will have to concentrate on your Tinnitus to hear it, and even then, it will no longer be annoying. Many Tinnitus sufferers will find that the TinnitusTamer completely eliminates the Tinnitus. Some treatment methods use loud sounds, which are uncomfortable and may even worsen the Tinnitus. The TinnitusTamer works best at comfortable or even low sound levels.

The process of no longer hearing Tinnitus is known as habituation.

## **What is Habituation?**

Our sensory systems are very adaptable. We can get used to sensations on the skin, such as the touch of a spider, that at first, bother us. We can get used to all kinds of smells that on first exposure seem intolerable. We can get used to taste sensations that initially are quite unpalatable.

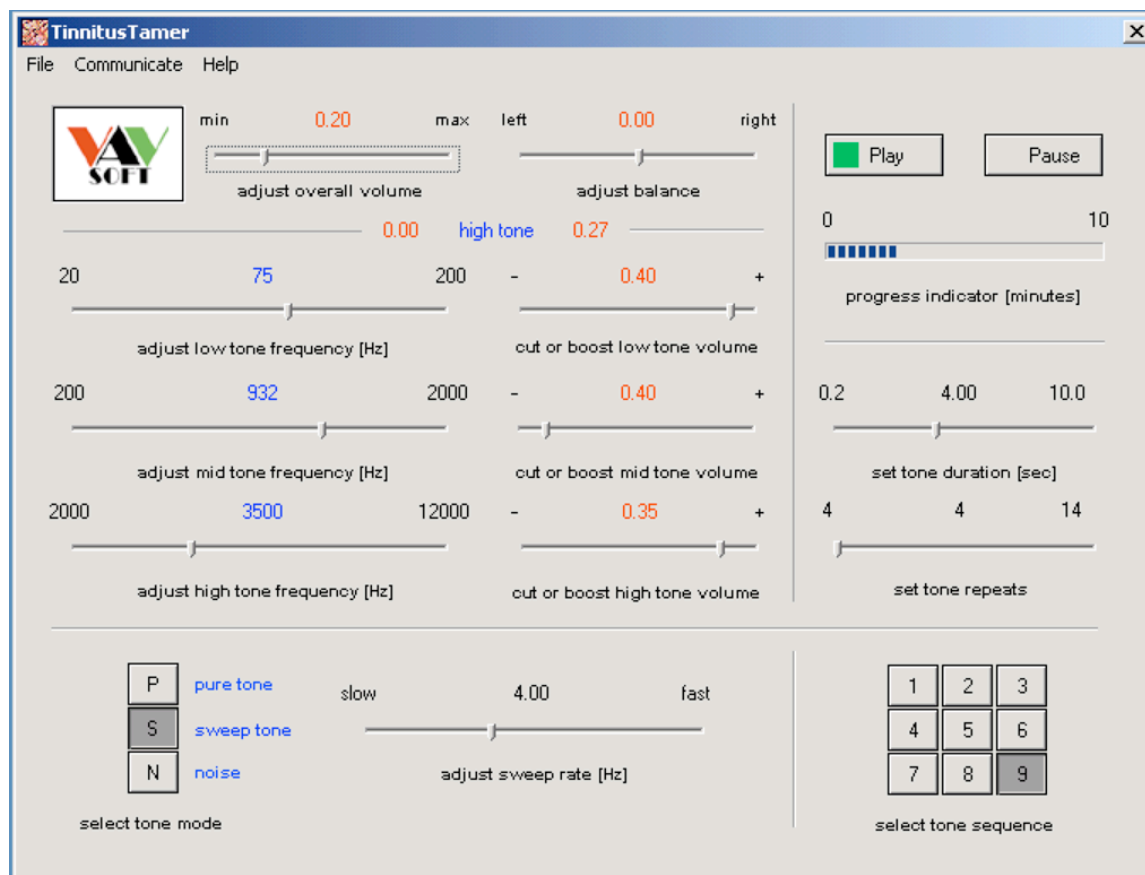
When we move from a quiet country environment to live on a busy city street we are constantly aware of the traffic noises and believe that we will not be able to live with this constant level of noise. If someone would ask us in 12 months time whether we are bothered by the traffic noise, we would most likely reply that we no longer hear the traffic, unless we pay attention to it.

Getting familiar with a sensation so that it no longer feels unpleasant or painful is called habituation. Actually, habituation has changed what goes on in our brain.

Another example of habituation occurs when we take steps to stop smoking tobacco. Our brain stops craving for tobacco consumption. Habituation has changed what goes on in our brain.

The TinnitusTamer will help you to habituate your Tinnitus.

## Fast Start



1. You may put the TinnitusTamerWin3 folder anywhere on your computer, but we suggested that you put the TinnitusTamerWin3 folder into the **Program Files** folder. Please do not remove any items from the TinnitusTamerWin3 folder as this may affect functionality.
2. To improve your Tinnitus you must use TinnitusTamer with earphones. Listening to the tones over loudspeakers will not help your Tinnitus. For now, use any pair of earphones you have handy. After you had your first session with TinnitusTamer, read the section on earphones to find out the type of earphones that give the best results.
3. Double-click the TinnitusTamer Icon to start it.
4. You will see a window looking as shown above. (The window is shown with basic tone mode selected.)
5. Click the **Play** button to start TinnitusTamer playing its sound sequences. A green light will come confirming that you are in play mode.

6. Adjust the sound level to a comfortable level using the slider labelled **adjust overall volume**. If your keyboard has volume keys, you can use them for additional control.
7. If your hearing is better in one ear than the other, adjust the left to right balance using the slider labelled **adjust balance** until you perceive the sound to be at the same level in each ear.
8. Listen to the sound sequence to get a feel for the TinnitusTamer. A tone sequence will run for 10 minutes. The **progress indicator** will show you how the tone sequence is progressing.
9. To listen to another of the preset tone sequences, click one of the eight **select tone sequence** buttons that are light grey.
10. To exit the TinnitusTamer at any time select **Exit** from the **File** menu.

## How does the TinnitusTamer Work?

### Where do we perceive Tinnitus?

In about 96% of all Tinnitus cases, there is no detectable physical cause.

It has been known for a long time that people with amputated limbs can feel pain, itching, heat, or cold at specific parts of the limb they no longer have.

When, in a group of people, the loudness of the Tinnitus was measured by comparison with calibrated test tones, it was found that the loudness of the Tinnitus was not related to the irritation it caused.

In the past, some people had such severe Tinnitus that they had their aural nerve cut by a surgeon. This made them deaf in the ear with the cut nerve. However, in most cases this did not stop the Tinnitus, hence this operation is no longer performed today.

In recent years, PET scans of the brains of Tinnitus sufferers have confirmed that the Tinnitus sound does not originate in the cochlea or other parts of the ear. It originates from within the central auditory system in our brain.

***Tinnitus does not originate in the ear. It originates in the central auditory system and is perceived by the consciousness centre in our brain.***

### What Determines How Loud We Perceive a Sound?

Obviously, a sound with a higher sound pressure level is louder than a sound with a lower sound pressure level, everything else being equal.

However, most of the time, everything else is not equal.

We have all heard of, or experienced, situations where there is a continuous noise in the environment. Yet, we barely perceive it, after we got accustomed to it. The brain is obviously capable of selective hearing. It can decide not to hear a sound, although the signal is passed from the ear through the auditory nerve to the hearing centre in the brain. The hearing centre decodes the signals sent by the ear, and in conjunction with some importance criteria, decides how loud the sound is presented to our consciousness.

The opposite effect has also been observed. An example frequently quoted is the ability of a mother to pick out very faint distress sounds from her child in environments filled with lots of other loud sounds. The low-level sounds from the child are passed from the ear, through the auditory nerve, to the hearing centre in the brain mixed with much louder other sounds. The auditory nerve centre decodes the signals sent by the ear, and in conjunction with some importance criteria, presents the child's sounds to the consciousness at an enhanced level.

We all have experienced that when we are deeply involved with what we are doing, such as being absorbed by a book, we do not hear many sounds that are present in our environment. This may go so far that we do not respond to our own name.

The carotid artery runs right next to the inner ear and yet we usually do not hear the pulse or heart sounds that are carried in the artery.

***The loudness of a sound as perceived by our consciousness does not necessarily reflect the true physical loudness of the sound received by the auditory centre in our brains, but is modified by the importance of the sound to our well being.***

Our inborn subconscious and past experiences determine how loud a sound is perceived. In animals, the sound of a predator is enhanced, as is the sound of a potential prey. Our brains enhance sounds that might be an indication of danger to us, or our social group. On the other hand, sounds that have no association with danger or pleasure and that have no meaning are perceived at a low level.

***This has a great impact on Tinnitus. If we perceive Tinnitus as a threat to our well being, the Tinnitus sound will be presented to our consciousness at a level out of proportion to the strength of the signal from the auditory nerve centre.***

### **How Do We Perceive Silence?**

Our first intuition would be to say that in the absence of sound, our ears send no signals to the auditory nerve centre in our brain. This turns out to be wrong. Measuring the signals in the auditory nerve has shown that when no external sounds are perceived by the inner ear, the auditory nerve carries random signals to the brain. The auditory centre recognizes these random signals as an indication that no external sound is present, and does not pass this signal as noise to our consciousness. This is another example of sound filtering done in the brain. We may even speculate that this random noise plays a role in how our brain adjusts the sensitivity threshold of our hearing.

***How our auditory nerve centre perceives and processes silence is as important as how it perceives and processes sounds.***

### **Why does the TinnitusTamer use Low Frequencies?**

The middle ear contains two tiny muscles, tensor tympani and stapedius, which play an active role in the functioning of the ear. Lack of tone in these muscles prevents the transmission of certain frequencies to the inner ear. The TinnitusTamer uses the low frequencies to exercise these tiny muscles. As their muscle tone improves, the transmission of external sounds to the inner ear also



improves, the sensory cells, the hairs, in the inner ear is stimulated and restored to better respond to all frequencies.

In addition, lack of muscle tone in the stapedius may also impede the ear's ability to adjust and balance the fluid pressure in the inner chambers.

### **Why does the TinnitusTamer use Mid Frequencies?**

The normal ears are not equally sensitive to all frequencies. They are most sensitive at the centre of the audible frequencies, at about 2 kHz. Frequencies in this range help the ears to establish a proper relationship between the low and high frequencies.

### **Why does the TinnitusTamer use High Frequencies?**

Tinnitus is frequently perceived in the higher frequency range. If your Tinnitus is in that range, you should, in most but not all sessions, include frequencies that are close to the one you perceive as your Tinnitus. Because Tinnitus is generated within the brain rather than coming from the ears, it is normal that most people can not exactly match Tinnitus with an external sound. Using the [Sweep](#) or [Noise](#) tone mode of the TinnitusTamer makes it easier to mimic certain Tinnitus sounds.

### **Why does the TinnitusTamer use Fast Repetitions?**

Using fast repetitions trains your ears to perceive sounds switching rapidly from one ear to the other, or depending on the mode, perceive sounds interspersed with silent periods. Put another way, you train your ears to perceive silence to move from one ear to the other, or to come and go.

Very fast switching rates produce a mild but beneficial confusing affect.

### **Why does the TinnitusTamer use Slow Repetitions?**

Slow repetitions allow you to concentrate and compare the absence of sound with the sound when it was present. After a while you will be able to better hear the silence, that is, you will hear less Tinnitus.

### **Why does the TinnitusTamer use Silent Periods?**

As mentioned above, during periods of silence, the inner ear transmits random signals through auditory nerve to the brain. When the TinnitusTamer alternates sounds and silent periods, it challenges the auditory nerve centre in the brain to decode sound as sound, and random nerve signals as silence.

### **When should I use the Sweep tone mode?**

Certain types of Tinnitus are better habituated if the frequency is varied as it is being played. Depending on how your Tinnitus sounds to you, the sweep control can help you to create a habituation tone that is closer to your Tinnitus sound. For example, some people perceive their Tinnitus as a *motor-boating* sound, which can be imitated by setting the Sweep control to a low sweep rate.

### **When should I use the Noise tone mode?**

If you perceive your Tinnitus as noise, the TinnitusTamer can imitate the sound by selecting the Noise tone mode. However, you should also include pure or sweep tones in your habituation regimen.

### **How long do I have to use the TinnitusTamer to eliminate the Tinnitus?**

The time required to completely eliminate the Tinnitus varies from one individual to the next. However, most users find that they notice a reduction in their Tinnitus after using the TinnitusTamer for about four weeks. You may have to use the TinnitusTamer for as long as six months to completely eliminate the Tinnitus. Do not be discouraged by this. Think how well you will feel after you got rid of the Tinnitus.

It would certainly be nice if you could take a pill that would immediately rid you of your Tinnitus. Unfortunately, such a pill does not exist. And should there ever be one, it will probably have as many terrible side effects as many other drugs have. The TinnitusTamer uses the resources of your own body to take care of the Tinnitus in a natural way. However, you have to make up your mind to work on this problem to make it go away. It will not be as simple as taking a pill. It will take time and patience, but getting rid of your Tinnitus will make it worth the effort.

## **Medical Advice You Should Seek**

If you have not already done so, you should consult your doctor and an Ear-Nose-Throat specialist to re-assure yourself that the sounds you hear are nothing more than Tinnitus.

This is important for two reasons.

If there is an underlying cause you will want to have it treated.

If no physical cause for your Tinnitus can be detected, you can put your mind at ease that it is not a sign of a serious medical condition. This is extremely important, because as long as you perceive Tinnitus as a threat to your physical wellbeing, your consciousness will perceive your Tinnitus louder than it actually is.

However, should you be told that nothing can be done about your Tinnitus, please take that to mean only that the person telling you this can do nothing about your Tinnitus. While that person may not be able to do anything for your Tinnitus, you can do something about it!

## Getting the Most Out of the TinnitusTamer

Concentrate on the sounds produced by the TinnitusTamer. Listening to the TinnitusTamer while doing other things is not as effective as intently concentrating on the sounds produced by the TinnitusTamer.

*Set the sound levels to be comfortable, no louder.*

When you start out, try to run three ten-minute sessions each day. If convenient, do one in the morning, one during your lunch break, and again before going to bed. As your Tinnitus subsides, you might use the TinnitusTamer only as you feel the need for it.

Also use the TinnitusTamer when your Tinnitus bothers you, because using the TinnitusTamer is likely to reduce the perception of your Tinnitus sound.

Use the **adjust balance** slider to set for equal sound level in both ears at the mid frequency. This is best done with a fast tone duration around one second.

Use the **adjust overall volume** slider to adjust the sound level when the mid frequency is playing. Because the human hearing response is not linear, there will be situations where reducing the **adjust overall volume** slider to a very low setting, will make the high or low frequencies imperceptible. Use the **cut or boost low tone volume**, **cut or boost mid tone volume**, and **cut or boost high tone volume** sliders to make the low, middle, and high tones play at about the same level.

Adjust the low frequency volume only as high as you can hear the sound more or less as a pure tone. How high a volume you can use depends on your individual hearing curve and on the low frequency response of your earphones. It is normal that you will have to set the **cut or boost low tone volume** slider to positive value.

For some sessions, try to set one of the tones to be similar to your Tinnitus sound you hear. For other sessions, set it slightly lower or higher than your Tinnitus. Depending on how your Tinnitus sounds, this may require the use of the Sweep or Noise tone modes.

Select sweep tones by clicking the button (or buttons in advanced tone controls mode) to the left of the **sweep tone** label. The adjust sweep rate control will be visible in the lower centre of the TinnitusTamer window. To mimic your Tinnitus sound, adjust the low, middle, or high tone, as appropriate, and the **adjust sweep rate** slider.

*Do not set the high frequency to a value beyond your hearing range and increase the high frequency volume to a high level trying to hear the tone.*

At some time, set the high frequency volume so low that you can barely hear the sound. Then slowly change the high frequency, with the **pure tone** button selected, and listen for the sound to increase or decrease at a certain frequency in either one ear or the other. The increase or decrease usually occurs over a range of frequencies rather than at one specific frequency. Use the centre of the increased or decreased frequency range for some TinnitusTamer sessions with and without the sweep button being selected. You may find that, over time, the spots at which the sound gets softer or louder will occur at different frequencies, or you may find that the peaks and valleys in your hearing curve may disappear altogether.

When the sound switches from the left to the right ear and back, concentrate on where it is. It may help if you close your eyes and move them to the side from which the sound is coming, or up and down when the sound appears and disappears in both ears simultaneously.

***Concentrating on the sound while running a tone sequence will improve your Tinnitus much faster compared to listening to the tone sequences while doing other things, such as reading a book or using your computer.***

Having said this, listening to the TinnitusTamer while you are doing other things will likely make you be less bothered by your Tinnitus. So you may do it, but keep the tone volume at a low setting. Just do not count this use as one of your daily tone sequences.

For some sessions, set the **tone duration** to a low value, i.e. make tones alternate fast. This challenges your hearing to determine if there is sound or no sound.

For most sessions set the **tone duration** to a longer value, i.e. make tones alternate slowly, to allow you to concentrate on the location of the tones and silent periods. This will exercise you skill to hear silence when there is no real sound present. If needed, start with a one or two seconds setting. As you become more skilled in hearing the silence, increase the time towards the maximum value of ten seconds.

This is very important, so we repeat it:

***Concentrate to listen to the tones and the silence. This will exercise you skill to hear silence when there is no real sound present.***

Set the sound level very low for some sessions, and at a comfortable listening level for most others.

Tinnitus is usually more marked at bedtime, when one's surroundings become quiet. You may want to run a session with the TinnitusTamer just before going to bed.

If your employer does not allow you to install programs on the computers you use at work, ask the human resources department to intervene on your behalf to have the TinnitusTamer installed on your computer for your use during lunch breaks or possibly before or after working hours. If granted, do not abuse this privilege.

If you find yourself in a situation where you have no access to a computer for a few days, you can make a tape recording of the TinnitusTamer output using your most recent settings. Test the tape player and earphones you intend to use beforehand to ensure their frequency range is adequate. There are some utility programs that allow you to rip the sound output from the TinnitusTamer in a format suitable to transfer your recent sound training set on your iPod. (We have plans for a future TinnitusTamer update that will include an export menu item that will allow you to write a tone sequence sound file.

Experiment with different settings. Find out what works best for your Tinnitus. There are many different types of Tinnitus, and only you can judge what works best for you.

Once you created one or more tone sets that reduce your Tinnitus, use them. You do not have to fine-tune the settings every day, but when it appears that the current tone sets create little progress, modify the settings or create another tone set.

Tell us about your success story. Tell us if you need some help with the use of the TinnitusTamer. Select **Technical Support** from the **Communicate** menu to contact us.

Note: The **Technical Support** item will only work if you have registered your TinnitusTamer, and have a default e-mail application set-up on your computer. If your set-up is correct, your e-mail application will launch and automatically enter our e-mail address in the message.

If you have to enter our e-mail address manually, use [vavsoft@kagi.com](mailto:vavsoft@kagi.com), or [support@vavsoft.com](mailto:support@vavsoft.com).

## Other Things to Consider

1. Attempt to obtain adequate rest and avoid over-fatigue.
2. Avoid exposure to loud sounds and noise. Use hearing protection if appropriate.
3. Limit the use of stimulants such as caffeine and nicotine
4. If you are taking prescription medications, check with your doctor whether the medication may be ototoxic (harmful to the ear).
5. If you regularly use non-prescription medications, check with your pharmacist whether they may be ototoxic.
6. Improve your circulation through physical exercise.
7. Learn as quickly as possible to accept the existence of Tinnitus as an annoying reality and then promptly and completely ignore it as much as possible.
8. Tinnitus will not cause you to go deaf, will not result in your losing your mind, or cause your death. Forget such distracting and terrifying thoughts.
9. Some patients, who find it difficult to "live with" their Tinnitus, may become depressed. If your doctor suspects a major depression, he or she may suggest therapy for this.

## Earphones

The TinnitusTamer only works with earphones. (You can hear the TinnitusTamer sounds from speakers, but listening to the TinnitusTamer on speakers will not improve your Tinnitus.) Reasonably good earphones are required. The earphones must have a wide frequency response, good isolation from external noises, and good ear-to-ear isolation. Quite a few suitable earphones are available for less than \$ 30 US, or equivalent local currency.

Traditional earphone designs use ear cups that are either open-back (open-air) or closed-back, and ear pads that are either circumaural (around the ear) or supra aural (on the ear).

The lightweight headphones that come with portables and most headphones with foam ear pads are supra aural, that is, the ear pads sit on the ears. The foam seal is very leaky whether they are of the open-air or closed-back design. Ambient noises are heard quite clearly and there is significant sound leakage from one ear to the other.

Another type of headphone has circumaural ear pads but open-back ear cups that are acoustically transparent. In this case, the circumaural ear pads are more of a comfort feature because they provide no acoustic isolation.

***Headphones with foam ear pads and headphones with open-back ear cups are not suitable for use with the TinnitusTamer.***

Closed-back headphones with circumaural ear pads are categorized as *sealed*, because the listener's ears are completely enclosed in the ear cups with almost airtight seal to block out external noise. Thus, the sound quality is usually very clear and detailed, and there is practically no sound leakage from one ear to the other. They also have excellent bass response.

***Closed-back headphones with non-foam circumaural ear pads are the preferred design for use with the TinnitusTamer.***

The portable audio revolution has introduced a new type of headphones, the In-ear headphones (intra aural). These are either *ear bud* type or *canal* types.

Ear buds are worn in the opening of the ear. A headband either supports them or they have an attached earpiece that fits around the ear. They are comfortable, after a period of acclimatization, but may not fit all ear shapes well.

Canal headphones are seated in the ear canal itself, forming an airtight seal. The high acoustic isolation of these headphones greatly attenuates external noise, but emphasizes internal sounds, such as breathing. Custom moulded canal stems that fit deep into (around the second bend of) the ear canal can reduce



this effect and provide superior acoustic isolation. Good canal headphones are known for their crystal clarity and detailed presentation. They are excellent for outdoors listening, because they can be played at safer volume levels.

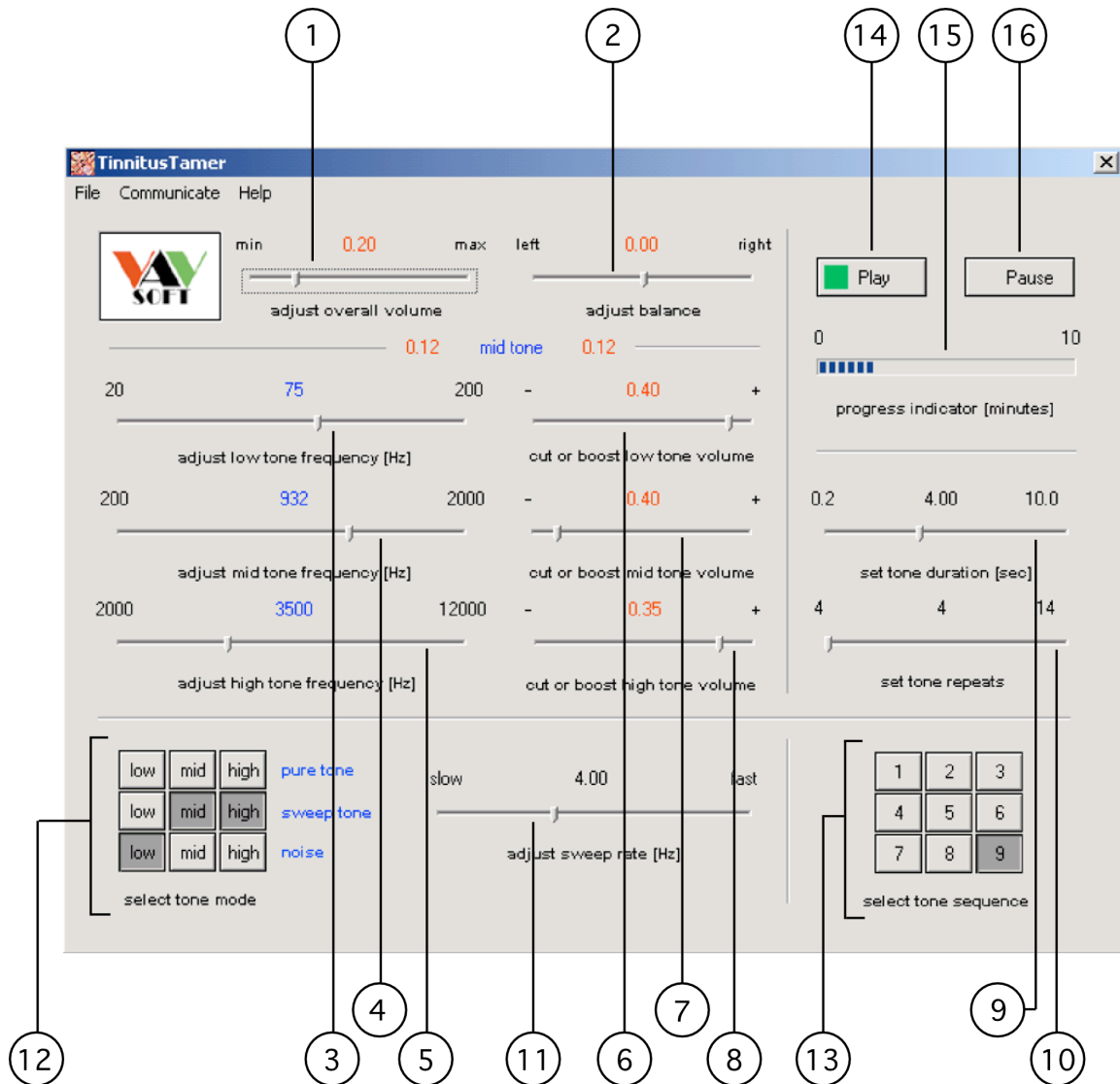
*In-the-ear headphones may be used with the TinnitusTamer provided they fit well.*

This is very important, so we repeat it:

*The most important characteristics of suitable earphones are:*

- 1. A sound played at one ear cannot be heard by the other ear.*
- 2. When no sound is played, you cannot hear environmental background noises.*

## The TinnitusTamer Window



To see a description of how a control works, go to the paragraph corresponding to the call-out in the figure.

1. The **adjust overall volume** slider adjusts the low, middle, and high tones by equal amounts. It is usually best to adjust this slider while the mid tone is playing. In addition, you can use the volume control keys on the keyboard to adjust the overall volume up or down.

Note: To move any slider, click on the slider, and while holding down the mouse, move the slider to the desired position.

Note: In each slider control you can click in the slider channel to the left or right of the slider button to make the slider move one step in the direction of the mouse click.

2. The **adjust balance** slider adjusts the volume balance between the left and right ear. If your hearing is about equal in both ears, you need not adjust this slider.
3. The **adjust low tone frequency** slider adjusts the frequency (pitch) of the tone that plays whenever **low tone** is displayed in the middle of the divider line, which is located below the **adjust overall volume** and **adjust balance** sliders. The red number above the centre of the **adjust low tone frequency** slider shows the frequency (pitch) selected by the slider.
4. The **adjust mid tone frequency** slider adjusts the frequency (pitch) of the tone that plays whenever **mid tone** is displayed in the middle of the divider line, which is located below the **adjust overall volume** and **adjust balance** sliders. The red number above the centre of the **adjust mid tone frequency** slider shows the frequency (pitch) selected by the slider.
5. The **adjust high tone frequency** slider adjusts the frequency (pitch) of the tone that plays whenever **high tone** is displayed in the middle of the divider line, which is located below the **adjust overall volume** and **adjust balance** sliders. The red number above the centre of the **adjust high tone frequency** slider shows the frequency (pitch) selected by the slider.

Note: If you adjust the frequency slider for a frequency other than the one that is playing, the sequence will shift to that frequency, and play for a while to let you judge the affect of the new setting. The playing will then resume with the rest of the tone sequence.

6. The **cut or boost low tone volume** slider adjusts the relative volume of the low tone whenever the low tone is playing. For most users this slider will need to be set towards the + sign to boost the low tone volume. The amount of boost required depends on the setting of the **adjust low tone frequency** slider, and the hearing curve of your own ears. Lower settings of the **adjust low tone frequency** slider require more boost. Higher settings of the **adjust low tone frequency** slider require less boost.
7. The **cut or boost mid tone volume** slider adjusts the relative volume of the mid tone whenever the mid tone is playing. Usually this slider will need to be set near zero or towards the - sign to cut the mid tone volume. The amount of cut required depends on the setting of the **adjust mid tone frequency** slider, and the hearing curve of your own ears.

8. The **cut or boost high tone volume** slider adjusts the relative volume of the high tone whenever the high tone is playing. Usually this slider will need to be set towards the + sign to boost the high tone volume. The high frequency boost need usually not be set as high as the low frequency boost. The amount of boost required depends on the setting of the **adjust high tone frequency** slider, and the hearing curve of your own ears.
9. The **set tone duration** slider adjusts the length of the tone and silent periods you hear when listening to a tone sequence. At its shortest setting, each tone will play for 2 tenth of a second; at its longest setting each tone will play for 10 seconds.
10. The **set tone repeats** slider adjusts how many times the left-right and on-off sequences are repeated during a tone sequence. At its lowest setting each sequence is repeated four times; at its highest setting each sequence is repeated 14 times.
11. The **adjust sweep rate** slider is only visible if the sweep button (or one of the three sweep buttons in advanced tone controls mode) is selected. The **adjust sweep rate** slider adjusts the rate at which pure tones are varied about their centre frequency during a tone sequence. Each tone is varied by one full octave, which is cantered on the selected frequency. At very slow sweep rate settings, you can actually hear as the tone changes its slowly changes its frequency (pitch). At fast sweep rate settings, the tones change their frequency (pitch) so fast that it actually sounds as if there were many similar sounds played at the same time. In basic tone control mode, the **adjust sweep rate** slider set the sweep rate for all three frequencies. In advanced tone control mode, the **adjust sweep rate** slider sets the sweep rate for the tones that have their corresponding **Sweep** button selected.
12. The nine buttons visible over the select tone mode label in advanced tone control mode (or the three buttons visible in basic tone control mode—see picture in the Fast Start section) determine whether tones are played as **pure tones**, **sweep tones**, or **noise**. When a button is selected it turns into a darker grey.
13. The nine buttons above the **set tone sequence** label allow you to select any one of nine tone sequences. If you click any of the buttons while a tone sequence is in progress, you will automatically switch to the settings corresponding to that tone sequence. The button that is selected shows up in a darker grey, and indicates the training set that is selected.

Note: The factory presets of the nine preset buttons are typical user settings. There is no progression from 1 to 9. You might find that anyone of the nine sets may be close to what works for you. Each set can be, and indeed at least one set should be, customized by you to work best with the type of Tinnitus you have.

Note: Every time you exit the TinnitusTamer it will remember the last tone sequence you used, and on the next opening of the TinnitusTamer that tone sequence will be automatically selected.

14. Clicking the **Play** button starts a tone sequence. A green indicator lights up in the button confirming that the play mode has been activated. Click the button again anytime you want to stop playing, and reset the playing sequence to the start position. The green indicator will extinguish showing that you are ready to start play again from the beginning. The progress indicator will be reset to zero.
15. The **progress indicator** shows the progress you make during a tone sequence. Each tone sequence lasts ten minutes.
16. The **Pause** button lets you pause in the middle of a tone sequence. A red indicator lights up in button confirming that the pause mode has been activated. Click the button again to resume playing again. When **Pause** has been activated, the progress indicator will stop moving. When you click the **Pause** button again, the red indicator will extinguish, the tone sequence will continue from where you paused, and the progress indicator will start up again.

While a tone sequence is in progress, three indications appear in the centre of the separator line, which is located below the **adjust overall volume** and **adjust balance** controls. The tone being played is shown in the centre as **low tone**, **mid tone**, or **high tone** in blue text. To either side of the blue text, the volume being played is shown in **red** numbers. The left number shows the volume being played in the left ear, and the right number shows the volume being played in the right ear. The value of each volume number reflects the combined impact of the settings of the **adjust overall volume** slider, the **adjust balance** slider, the **cut or boost ... tone** sliders, and the current left-right or on-off training status. A minimum volume of 0 represents silence. The maximum volume is 100.

# The TinnitusTamer Menus

## ***File Menu***

### **Save Current Tone Sequence**

Select this menu item any time you want to save the currently active tone sequence. If no changes have been made to the currently active tone set, this menu item is greyed out.

### **Disable Save Alert / Activate Save Alert**

Select this menu item to turn the Save Alert on or off. When the save alert is turned on, the menu item shows **Disable Save Alert** to allow you to turn the save alert off again. When the save alert is disabled, the menu item shows **Activate Save Alert** to allow you to turn the save alert on again.

### **Show Basic Tone Controls / Show Advanced Tone Controls**

Select this menu item to show either the basic tone controls or advanced tone controls. When Basic Tone Controls are selected, there are three buttons to select Pure Tone, Sweep Tone, or Noise. The tone mode you select applies to all three frequencies. When Advanced Tone Controls is selected there are nine buttons to select a specific tone mode for each frequency.

When basic tone controls are turned on, the menu item shows **Show Advanced Tone Controls** to allow you to switch back to advanced tone controls. When advanced tone controls are turned on, the menu item shows **Show Basic Tone Controls** to allow you to switch back to basic tone controls.

### **Load Default Tone Sequence**

Select this item if you want to load the default values for the currently active tone set. You might do this as a starting point for making a new custom sound set. Loading the default set does not erase the values that existed before you loaded the default tone set, if you switch to another tone set without saving the default tone set. To make the loaded default set part of your custom set, you must save it before switching to another tone set or exiting the TinnitusTamer.

### **Make File From Tone Sequence**

This item is currently not implemented, but will be available in a future update.

### **Exit**

Select this menu item to exit the TinnitusTamer. You can also click the close icon on the window to exit TinnitusTamer

## ***Communicate Menu***

### **Purchase License...**

Select this item to purchase a license. If you have entered your personal license code, this item is greyed out.

### **Register...**

Select this item to enter your license code. If you have entered your personal license code, this item is greyed out.

### **Technical Support...**

Select this item to send an e-mail for technical support to VAVsoft. If you have not yet registered, this item is greyed out.

## ***Help Menu***

### **TinnitusTamer Help**

Select this item to get on-screen help while the TinnitusTamer application is open. The on-screen help is an HTML version of the information in this user guide.

### **About TinnitusTamer**

Select this item to get information about the TinnitusTamer, such as the web site to check for updates. The **About** window also shows your registration code, which you will need to install a TinnitusTamer update on your current computer, or to install the TinnitusTamer on a new computer.

## Installation

1. After you have uncompressed the download file—your download application may do this for you automatically—you can drag the TinnitusTamer3 folder to any location on your hard disk. The preferred location is the **Application Files** folder. Make a shortcut of the TinnitusTamer application icon, and place it at a convenient location for daily use.
2. The first time you run the TinnitusTamer, it will create a preference file, called **TinnitusTamerPrefs**. The preference file is located in the TinnitusTamer folder.
3. The **TinnitusTamer Help** folder, and the **register.exe** and **register.hlp** files must remain in the TinnitusTamer3 folder to be accessible from the TinnitusTamer menu. Do not move these files and folders out of the TinnitusTamer3 folder. If you want to move the TinnitusTamer to a different place on your hard disk then move the TinnitusTamer3 folder with all its contents.
4. Run the TinnitusTamer as you would any other application.
5. The files and folders installed by the TinnitusTamer are all located in the TinnitusTamer folder. If you want to un-install the TinnitusTamer, you need only delete the TinnitusTamer folder.
6. If you are upgrading from TinnitusTamer version 2.5, and you want to start out using TinnitusTamer3 with the tone sequences you customized in version 2.5, you can copy the TinnitusTamerPrefs file from your TinnitusTamer 2 folder into the TinnitusTamer3 folder. The first time you run the TinnitusTamer3 after copying the TinnitusTamerPrefs file into the TinnitusTamer3 folder, the copied preference file will be converted into a version 3 preference file.

If you choose this option, you can at any time load individual default tone sequences by using the **Load Default Tone Sequence** from the **Edit** menu.

If you do not copy the version 2.5 preference file into the TinnitusTamer3 folder, the TinnitusTamer3 will create a new preference file, which contains nine tone sequence example for the TinnitusTamer3.



## How to Register

The TinnitusTamer is distributed as shareware. All features of the TinnitusTamer are functional during the trial period. You may evaluate the TinnitusTamer for fourteen days to find out how it works. Once the trial period has expired, you must purchase a license to continue the use of the TinnitusTamer.

A single user license is \$35 (US). Please consider that this price is less than you would have to pay for just one habituation training session at a clinic, assuming that you had convenient access to a clinic near where you live. After purchasing a licence, you will receive a registration code. Registered users will receive upgrades and technical support.

If you are using the TinnitusTamer to treat other persons, you must purchase a site license for \$750 (US). A site license allows you to use the TinnitusTamer on one or more computers at one location. After paying for a site licence, you will receive upgrades and technical support. You can also request a version of the TinnitusTamer that has a lock feature preventing the change of settings. On this version, settings can only be changed after entering your own password.

You can purchase the TinnitusTamer via mail, e-mail, fax, or online through a secure or regular web server. You can pay by cash, check, VISA, MasterCard, Discover, American Express, First Virtual, or Money Order.

To purchase your licence, click on the **Purchase License** button in the flash dialogue that appears when you open the unregistered copy TinnitusTamer, or select the **Purchase License...** item in the **Communicate** menu.

You can purchase your license now by connecting to:

<https://order.kagi.com/?5MR>

## **Disclaimer**

The information contained in this user guide is intended as a guide for the use of the TinnitusTamer. It is not a comprehensive description of what should or should not be done if you have Tinnitus. You should not alter, discontinue, or refrain from having any medication or other medical treatment because of information contained in this user guide. VAVsoft expressly disclaims liability for anything done, or omitted to be done, by any person in reliance, whether whole or partial, upon any part of this user guide.