

PROGRAMMING ZEN FOR WIDEX ZEN THERAPY

INTRODUCTION

This quick fitting guide explains how to program ZEN in Compass® GPS, for both a basic ZEN fitting and an advanced ZEN fitting, according to what is recommended in Widex Zen Therapy tinnitus management protocol.

BASIC WIDEX ZEN THERAPY FITTING

When fitting the ZEN programs for tinnitus patients, it is recommended you start with a basic fitting, as this will fulfill the needs of most people with tinnitus.

STEPS FOR THE BASIC FITTING

- 1. After you have completed a Feedback Test and Sensogram, toggle to the **Fine Tuning** screen and select **Program manager**.
- In Available programs, select the ZEN program. Activate the program by either double-clicking on ZEN, or by highlighting ZEN and clicking on the small arrow between Available programs and Selected programs. Insert 2 ZEN programs and move them to Program slot 1 and Program slot 2 (Figure A).



Figure A.

 To adjust/change the ZEN programs, double-click on P1 ZEN under Selected programs list to open the ZEN Tuning window (Figure B).

Available Zen styles		Selected Zen style		Volun
Zen aqua			@ _ [
Zen coral	-	Zen aqua	(Q) 1.1	
Zen green				
Zen lavender				
Zen sand				
Zen noise				
No. Demonstrate Zen through landseallers				

Figure B.

- 4. Under the **ZEN style selection** tab, you will see the various ZEN tone options.
 - For Program 1: The default selection is ZEN aqua and it should be left in P1 ZEN. Click on the settings icon I to open the ZEN settings window. Adjust the Tone volume as needed to make the ZEN Tones audible but fairly soft (Figure C).

Zen aqu	la	
Micronhone	Noice	
• merophone	Tempo	
Slow	l Pitch	Fa
Low	Tone volume	Hij



 For Program 2: Change the ZEN style to ZEN aqua. Click on the settings icon to open the ZEN settings window and select Noise. Adjust the Noise volume to be audible but fairly soft. Leave the Microphones on (Figure D).

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CB Zen a	qua									
R										
Microphone					Noi	se	1			
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Figure D.

NO AMPLIFICATION

If the person does not require amplification:

- 1. Complete a Sensogram. Set values to at least 10-15 dB HL to properly establish the intensity of the ZEN tones.
- 2. Within the **ZEN programs**, click on the **Settings** icon and deselect **Microphone**. Click **OK** (Figure E).

R			
Microphone		Noise	
-	Tempo		
Slow	1		Fas
5104	Pitch		105
0		G	

VERIFICATION

When the fitting is complete, it is important to remember to verify that:

- The ZEN tones are audible, but relatively soft.
- The ZEN tones do not interfere with conversational speech.
- The volume of the ZEN tones is set to decrease the tinnitus awareness.

The greatest success for people with tinnitus will often be attained when the Hearing Healthcare Professional exercises flexibility in fitting the individual's needs. For example, some people will have a clear preference for a different tempo or pitch, which can easily be adjusted under the **ZEN settings** window.

ADVANCED FITTING

Some people may need individual changes in the setup of their ZEN programs. Below you can see some general guidelines for the advanced fitting.

If the person does not like the Aqua ZEN style

- Use the ZEN style library, select a ZEN style, and let the person listen to the five different default ZEN styles for approximately 30 seconds each.
- 2. Ask the person to choose the style that he/she finds most relaxing, and which produces the least tinnitus awareness. The criterion is NOT which style has the best sound or most pleasant rhythm (because we don't want the person to actively listen to the sound in daily life). To help the person choose, provide a dual 6 point scale, with 6 representing the style that produces the least tinnitus awareness and is the most relaxing. See Chart 1 at top of page 3.
- Select the ZEN tone style which is most relaxing and produces the least tinnitus awareness, and make it **Program 1**. Next, add the same ZEN tone style + noise as **Program 2**.
- 4. ZEN styles can be further individualized by adjusting the tempo, pitch and volume.
 - Go to Settings and adjust tempo and pitch until you match the person's preferences. Use the play button and let the person listen to the adjusted ZEN style for at least 10 seconds.

CHART 1.

ZEN Style	Tinnitus Awareness Score (6 = least awareness of tinnitus, 1 = most awareness of tinnitus)	Relaxation Score (6 = most relaxing, 1 = least relaxing)
Aqua		
Coral		
Lavender		
Green		
Sand		
Noise		

If the person needs a relaxation program

- Utilize ZEN+ : one of the Program slots can be used as a relaxation program, where the microphone is turned off in order to provide active listening to the ZEN tones. ZEN aqua (or other ZEN styles) or ZEN noise can be chosen depending on the person's preference (Figure F).
 - a. Go to **ZEN+** and select the person's ZEN preference.
 - b. Go to Settings and deselect Microphone.

Zan gean Zan oral Zan grean Zan hvender Zan sand Zan sand Zand Zand Zand Zand Zand Zand Zand Z	Available Zen styles		Selected Zen styles	t + 🗅
Zen oral A Ann appar	Zen aqua		A 700 0010	(B))
Zen green Zen lavender Zen sand Zen sand Zen sand B Zen coral (@)	Zen coral	4 8	A Zen aqua	101 1
Zen lavender Zen sand → B B Zen coral (6)	Zen green			
Zen sand	Zen lavender		B. Zee cerel	
Zen poise	Zen sand	4 8	B Zeli colai	107 2
	Zen noise			
	Demonstrate Zen through loudspeakers	→ C	C Zen green	@ ,

Figure F.

If the person needs a sleep program

Generally, it is not recommended to sleep while wearing hearing aids, but for some people with tinnitus, it might be preferable due to severe tinnitus annoyance at bedtime.

 Utilize ZEN+ : one of the Program slots (Recommended Slot B for Bedtime) can be used as a sleep program, where the Microphone is turned off and limited play time is activated to help manage sleep problems. ZEN aqua (or other ZEN tones) or ZEN noise can be chosen depending on the person's preference.

- a. Click on the settings and deselect Microphone.
- b. Go to the **ZEN+ options** (Figure G), click on **Limited play time** and use the pull-down list to select the play time duration, based on the person's needs.

Zen+ options	Gain and compression	Sound class settings
	Lim 18	iited play time A Zen aqua B Zen coral C Zen green iited play time duration minutes
	Pre ()	iference control effect on Zen+ Regulate Zen style volume Regulate microphone and Zen style volume

Figure G.

NOTES: The default setting of the volume control in ZEN+ permits independent adjustments of the ZEN tones and noise, independently of the amplification. When utilizing ZEN+, instruct the person to access ZEN+ by making a long key press either on the hearing aid program button (if it has one), on the remote control program shift button or utilizing the appropriate app. Also, instruct the person to adjust the volume of the ZEN tones or ZEN noise by using the volume control on the hearing aid (if it has one), on the remote control or utilizing the appropriate app. (The default setting of the volume control in ZEN+ allows the person to adjust ZEN volume independently of the hearing aid amplification.

If a person needs a masking program

Utilize **ZEN+** : one of the **Program** slots can be used as a masking program. Select either **ZEN noise** or **ZEN noise shaped** (Figure H).



Figure H.

ZEN noise can be used with the **microphone** left on or turned off. In addition, the volume of the **ZEN noise** can be adjusted.

ZEN noise shaped allows for frequency specific noise to be used for masking. Adjust the **Noise filter** to the desired frequency width and region. The **microphone** can be left on or turned off, and the volume of the **ZEN noise shaped** can be adjusted (Figure I).

1 Microphone Noise volume	✓ Microphone Noise volume
in Max	Min Noise filter
125 250 500 1k 2k 4k 8k	125 250 500 1k 2k 4k 8k

Figure I.

When and how to use each option

Instruct the individual to keep a ZEN program turned on all day. Their default program should therefore be Program 1 or 2.

The ZEN tones should not interfere with speech perception, because the Sensogram establishes a default volume for the tones. The person should therefore be discouraged from making frequent changes to the volume of the programs. Individuals who do not initially like the ZEN tones, or who feel that they interfere with their ability to concentrate or understand speech, should be instructed to turn the ZEN on for a few hours a day (this can be divided into shorter intervals, but should never be less than 15 minutes at a time) for the first two weeks, on the understanding that if they still don't like it after two weeks, it will be turned off.

For most people with tinnitus, their tinnitus perception is most prevalent in quiet environments. They should therefore be advised to avoid silence as much as possible.

FITTING WIDEX 2.4GHz DIRECT STREAMING HEARING AIDS FOR TINNITUS PATIENTS

Widex Zen Therapy is an established and proven* tinnitus management and relaxation program available in all current Widex hearing aids. Utilizing Widex Zen Therapy concurrently with Widex 2.4GHz direct streaming hearing aids and the new Widex Zen Tinnitus Management app provides **the most comprehensive tinnitus management protocol in the industry**.

Widex Zen Tinnitus Management app

The Widex Zen Tinnitus Management app streams directly through Widex 2.4GHz direct streaming hearing aids from an iPhone® and through various wireless DEX devices with both iPhone and Android[™] phones. Individuals can also use the app with external headphones/speakers or directly through the phone.

The app is designed for:

 Active sound stimulation for sleep and/or relaxation. The Widex Zen Tinnitus Management app provides a variety of relaxing sounds, including four combination sounds that are a mix of environments with ZEN tones. It is important to note that the tones/sounds played through the Widex Zen Tinnitus Management app are not a replacement for the ZEN fractal tones integrated within Widex devices. The ZEN algorithm used with the devices is built from the patient's individual hearing need providing specific sequencing of tones for passive listening resulting in successful long-term habituation.

- Additional counseling and learning as part of the clinically proven Widex Zen Therapy protocol.
 By providing built-in audio recordings of relaxation and sleep exercises, patients will learn the necessary strategies to reduce stress and sleep better.
- 3. Ability to learn more about ZEN in a controlled and safe environment. Detailed Questions & Answers with access to a tinnitus-focused Widex website gives wearers access to additional information.
- 4. Find a professional. If an individual with tinnitus finds the Widex Zen Tinnitus Management app on their own, an option to find a nearby professional is available. This will direct more patients directly to Hearing Healthcare Professionals.

MORE TINNITUS SOLUTIONS

Widex 2.4 GHz direct streaming devices offer a versatile and easy-to-use app compatible with most Apple[®] and Android[™] phones. This app provides the user with more control and options for comprehensive tinnitus management.

- Sound Mixer change the sound focus between the volume of the ZEN signal versus the surrounding environment
- Personal Programs with ZEN allows for customized features in numerous programs for easy access of specified ZEN options
- Easy Mute Access ideal for mild hearing loss, hyperacusis, and mysophonia individuals
- Easier Visual/Access to ZEN programs provide pictures and visual cues to better distinguish between ZEN personalized programs
- Streaming Music/Sounds More Consistently Throughout the Day — ideal for flexibility of options

SUGGESTIONS FOR FITTING THE WIDEX ZEN TINNITUS MANAGEMENT APP

The primary aspect of Widex Zen Therapy is direct auditory stimulation with the personalization and benefits found when using the ZEN fractal tones in 2.4GHz direct streaming hearing devices. The beginning stages of Widex Zen Therapy should be completed before implementing the use of the Widex Zen Tinnitus Management App.

It is recommended to reserve the Widex Zen Tinnitus Management App for subsequent visits (e.g. 30-day follow-up).



*A Compilation of Widex Zen Therapy Evidence by Ditte Balslev, M.A. in Speech and Hearing Sciences Audiological Affairs Specialist; WidexPress, May 2017, Issue no. 37



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