Beltone Tinnitus Management – An Overview

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Beltone

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Learning Outcomes

After this course, participants will be able to describe the end user benefits of using the tinnitus features offered by Beltone.
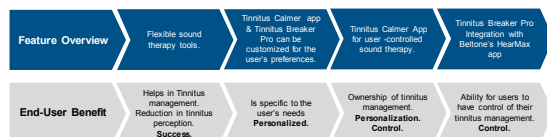
After this course, participants will be able to list the features available within the Tinnitus Calmer App.

After this course, participants will be able to navigate through the Beltone Tinnitus Calmer App and the Tinnitus Breaker Pro feature within the Beltone Solus Max software with specific detail.

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Tinnitus Breaker Pro: Overview

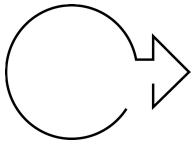| Feature Overview	Flexible sound therapy tools.	Tinnitus Calmer app & Tinnitus Breaker Pro can be customized for the user's preferences.	Tinnitus Calmer App for user-controlled sound therapy.	Tinnitus Breaker Pro Integration with Beltone's HearMax app
End-User Benefit	Helps in Tinnitus management. Reduction in tinnitus perception. **Success.**	Is specific to the user's needs **Personalized.**	Ownership of tinnitus management. **Personalization. Control.**	Ability for users to have control of their tinnitus management. **Control.**

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Background Knowledge

Tinnitus: Background Knowledge

- Tinnitus is the perception of sound, even where there is no actual external sound present.

- Often heard as **ringing, buzzing or humming**, but can manifest in many ways

- Approximately 90% of people with hearing loss also have tinnitus

- Can be non-bothersome, bothersome, or debilitating

- Affected by many factors, including stress, mental health & fatigue

Sound Therapy

- Tinnitus perception and degree of irritation are not necessarily correlated.

Perceived Volume

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Reaction to Tinnitus

Sound Therapy

- Can cause anxiety and depression
  - Can lead to secondary problems

- Treating bothersome tinnitus is most successful when focused on managing reaction to tinnitus

- Hearing healthcare professionals (HCPs) need to play a key role in tinnitus management

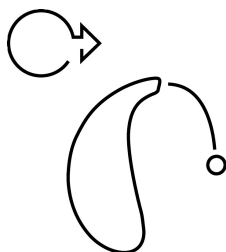- Have a good understanding of all sound therapy tools available

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Tinnitus: Background Knowledge

- Audiogram should always be performed, and acoustic reflex testing and otoacoustic emissions where available

- Tinnitus can sometimes require further medical investigation

- Unilateral or pulsating tinnitus should be investigated by an Ear, Nose & Throat Specialist or a Neurologist.
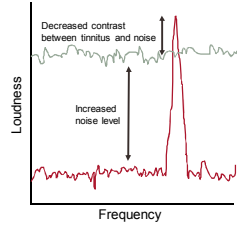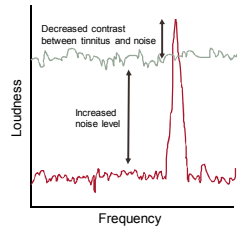

Sound Therapy

- Several **different mechanisms** for tinnitus

- For many, **hearing aids can be a valuable component** of tinnitus management
  - Sometimes hearing aids are enough

- In other cases, a **tinnitus sound generator** or sound therapy app can be of assistance

Sound Therapy

- The purpose of sound therapy is to provide sound to **reduce the perception of tinnitus**

- A tinnitus masker should be set at a level **equal to, or lower than**, the perceived level of tinnitus

- Thus **not completely masking** perceived tinnitus

- Total masking can be used as needed for short period of times. This should not be the standard setting.

Sound Therapy

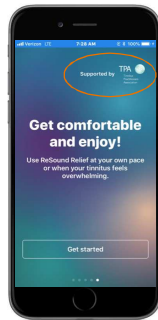- The purpose of sound therapy is:
  - Distraction
  - Habituation
  - Relief

Beltone Tinnitus Calmer App

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Beltone Tinnitus Calmer App

- App that provides sound therapy, engaging exercises, and education to assist in tinnitus management
  - 4 Categories

- Interactive, multisensory and customizable

- Available on Android and Apple phones

- Free to download

- Supported by recognized associations

Supported by
Get comfortable and enjoy!
Use ReSound Relief at your own pace or when your tinnitus feels overwhelming.
Get started

App Store | Google play

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Beltone Tinnitus Calmer App

- Direct to hearing aid streaming capabilities via MFi, compatible Android or PhoneLink 2
- Or over standard earbuds or Bluetooth-paired devices
- The app provides the user with personalized control over their tinnitus management

App Store | Google play

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Beltone Tinnitus Calmer App

- Direct to hearing aid streaming capabilities via MFi, compatible Android or PhoneLink 2
- Or over standard earbuds or Bluetooth-paired devices
- The app provides the user with personalized control over their tinnitus management
- App is user friendly – easy access to a variety of features
- Contains important information about tinnitus and sound therapy, including additional professional references
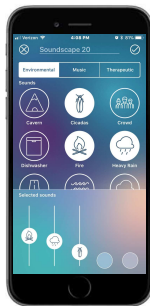
App Store | Google play

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Beltone Tinnitus Calmer App – Play a Soundscape

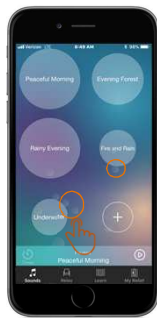- Simply tap the bubble to start the soundscape

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Beltone Tinnitus Calmer App – Creating a Soundscape

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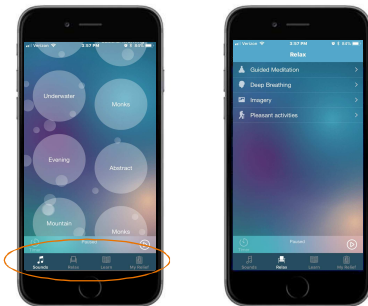## Beltone Tinnitus Calmer App – Play bar & Edit a Soundscape

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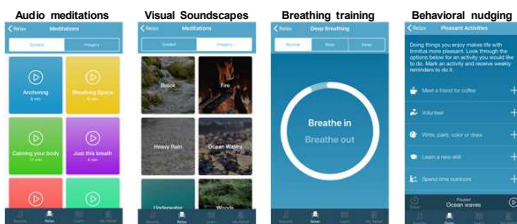## Beltone Tinnitus Calmer App – Multisensory, Popping Bubbles

- A tactile gamified exercise/distraction
- Does not keep score or time
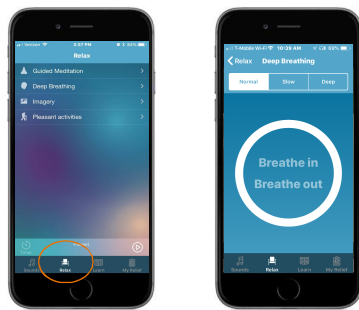- Tap the bubble to pop it!

Download on the App Store | ANDROID APP ON Google play

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Beltone Tinnitus Calmer App – Main Menu Bar

Download on the App Store | ANDROID APP ON Google play

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Beltone Tinnitus Calmer App – Relax

Audio meditations **Visual Soundscapes** **Breathing training** **Behavioral nudging**

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Beltone Tinnitus Calmer App - Relax

Beltone Tinnitus Calmer App - Learn

Beltone Tinnitus Calmer App – Learn

Our LEARN section provides the latest information on tinnitus and tips for improving the relationship with tinnitus.

Quick access to our online hearing test, since we know that 90% of those suffering from tinnitus also have some degree of hearing loss, this is a relevant place to start learning about hearing loss as well.
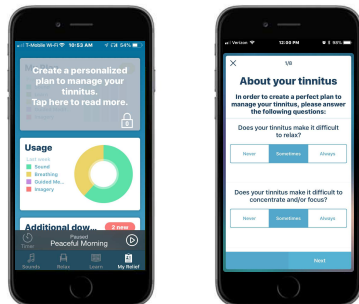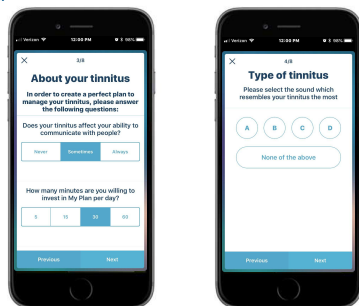
Beltone Tinnitus Calmer App - Learn

Beltone Tinnitus Calmer App – My Plan
Screening Tool

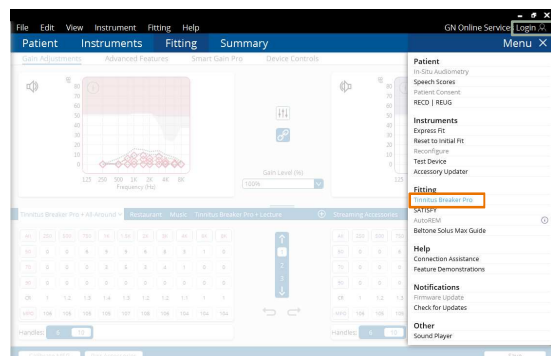## Beltone Tinnitus Calmer App – My Plan
Screening Tool

Beltone Tinnitus Calmer App – My Plan
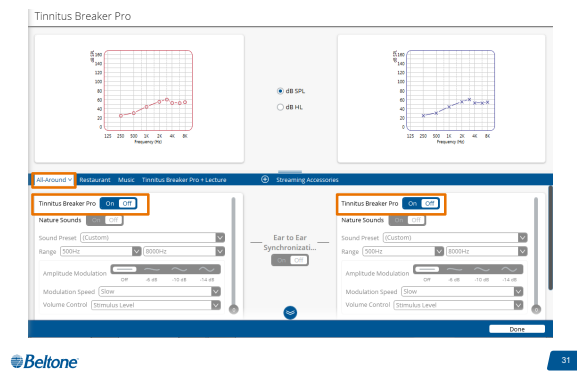### *Customized Plan/Tracks Progress*
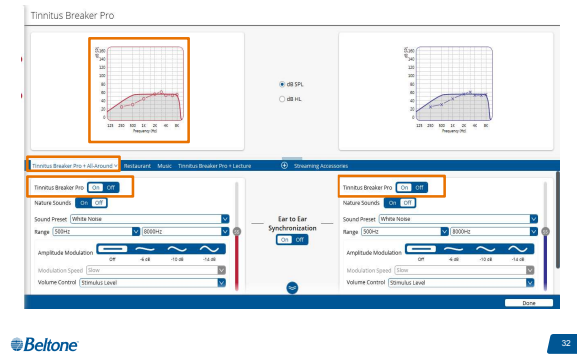
Tinnitus Breaker Pro: Solus Max

Tinnitus Breaker Pro: Solus Max Fitting Software

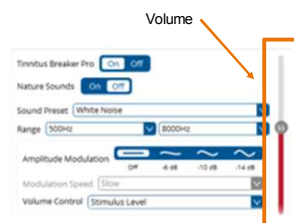**Tinnitus Breaker Pro: Solus Max Fitting Software**

Tinnitus Breaker Pro: Solus Max Fitting Software

Tinnitus Breaker Pro: How does it work?

Volume

- Volume of the Tinnitus Sound generator is set with the volume bar

- The level given is in dB SPL

- Recommended level is the same or softer than tinnitus perception.
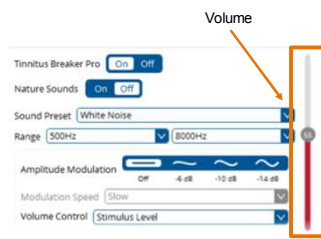
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Tinnitus Breaker Pro: How does it work?

- Volume of the Tinnitus Sound generator is set with the volume bar

- The level given is in dB SPL

- Recommended level is the same or softer than tinnitus perception.

- Threshold of Audibility
  3 Steps
  - Find threshold of whitenoise
  - Find MML (lowest level of effective total masking)
  - Set volume slider 5-10dB above threshold

Volume

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Tinnitus Breaker Pro: How does it work?

- What type of sound is played is determined by Sound Preset or Range
- White Noise is default (a change to the Range or Volume will result in a Custom label)
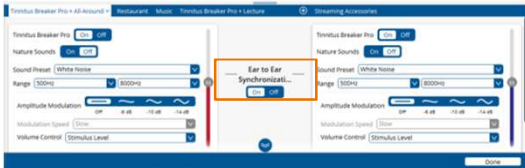- Settings chosen should depend upon user preference.

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Tinnitus Breaker Pro: How does it work?

- Amplitude modulation determines whether the sound generated fluctuates in level
- The fluctuation is a randomized decrease in level and then a return to the set level
- Modulation speed determines how quickly the generated sound goes from it's softest portion back to the set level

Tinnitus Breaker Pro: How does it work?

- Ear to ear synchronization is applicable to amplitude modulation

- Synchronizes the modulation cycle between the two devices

Tinnitus Breaker Pro: How does it work?

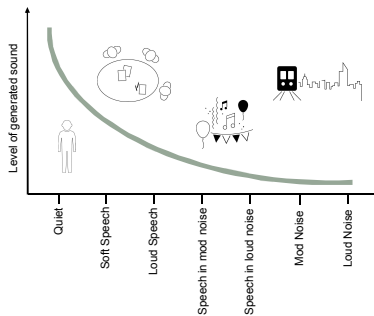- When set to Stimulus Level, the level of the TSG can only be manipulated using the HearMax app

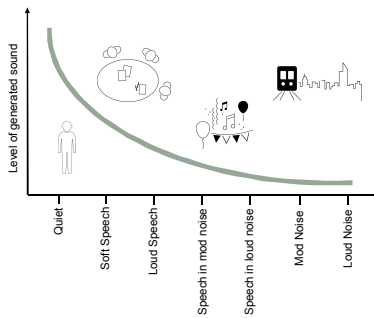## Tinnitus Breaker Pro: How does it work?

- Environmental steering changes the level of the TSG depending on the environment the hearing aid is in

- Environmental steering can be combined with Stimulus Level so that the Stimulus Level can be used to override environmental steering
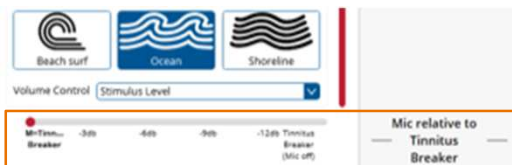
Tinnitus Breaker Pro: Environmental Steering

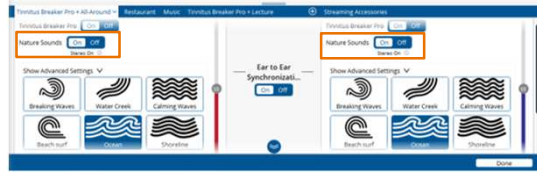## Tinnitus Breaker Pro: Environmental Steering

Tinnitus Breaker Pro: How does it work?

- If HI microphone is off, where the TSG is active, only the TSG will be played through the hearing aid (TSG Only program)

- Auditory stimulation often key in minimizing tinnitus perception, so a combination program (HI + TSG) can be beneficial for some.

Tinnitus Breaker Pro: Nature Sounds

Tinnitus Breaker Pro: How does it work?

- Models the ebb and flow of water-based sounds

- Each Nature Sound mimics its natural environmental modulation characteristics

- Must be the same option in both ears to appear in HearMax app

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Tinnitus Breaker Pro: Advanced Settings

- Some frequency control over Nature Sounds

- Advanced settings provide a low, mid and high frequency filters to shape the Nature Sound to user preferences
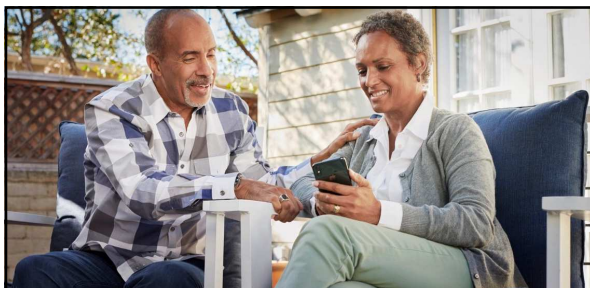
Tinnitus Manager: HearMax App

Learning Outcomes

- End user benefit associated with the Tinnitus Calmer App and Tinnitus Breaker Pro

- Highlighted the features of the Beltone Tinnitus Calmer App and the Tinnitus Breaker Pro within the Beltone Solus Max fitting software

- Navigated through the Beltone Tinnitus Calmer App and Tinnitus Breaker Pro within the Beltone Solus Max fitting software

- Described appropriate volume level setting for Tinnitus Breaker Pro

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Questions?