Dr.Hearing®

Auditory Integration Training

Auditory Integration Training:



Main Functions

Our software supports auditory and audio-visual integration training, with tools for both group and individualized rehabilitation programs.

Tiger DRS, Inc.



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Auditory Integration Training is a modern rehabilitation approach that combines brainwave technology with targeted auditory interventions.

Through filtered and modulated music, it enhances auditory processing and supports improved emotional and behavioral regulation.

It also strengthens auditory and joint attention skills, including stabilization, selection, allocation, and redirection of attention.

Module	Rehabilitation Focus	Applicable Conditions
Emotional and Behavioral Intervention	Extroversion disorder intervention	Impulsive mood disorders
	Introversion disorder intervention	Depressive mood disorders
Auditory Desensitization Training	High-frequency desensitization training	Sensitivity to high-frequency sounds
	Low-frequency desensitization training	Sensitivity to low-frequency sounds
Auditory Balance Training	Auditory orientation training	Central auditory processing disorder
	Binaural balance training	Binaural hearing disorder
Brainwave-Induced Music	Delta wave: Stress relief	Low nerve excitability, fatigue
	Alpha wave: Inspiration	High nerve excitability, irritability
	Theta waves: Memory Enhancement	Poor memory, forgetfulness

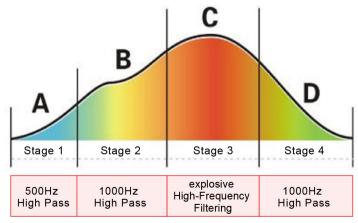


✓ Key functions include directional listening, frequency balancing (high and low frequency band migration), and high-frequency stimulation, achieved through advanced filtering techniques.

High-Frequency Therapy (Emotional & Behavioral Intervention)

- ✓ Uses music processed through high-pass and band-pass filters to stimulate the auditory system and reduce anxiety, helping regulate negative emotions and behaviors.
- ✓ Music is selected based on the emotional tone:
 - Positive music (bright and rhythmic) promotes emotional relief.
 - Neutral music (smooth and balanced) promotes emotional transition.
 - Negative music (slow and prolonged) promotes emotional stability.
- ✓ Therapy is tailored to each individual's emotional state, shifting from positive to neutral to negative music for heightened states, and reversing the sequence to uplift depressive states.

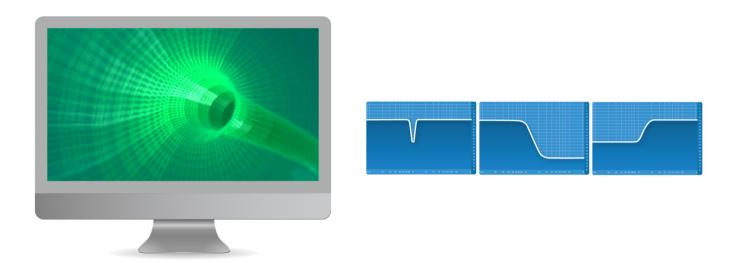




High-Frequency Filtering: Utilizes *high-frequency* music for audio-visual integration training.

Desensitization Therapy (Auditory Desensitization Training with Dynamic Frequency Absorption)

- ✓ Dynamic Frequency Absorption filters out sensitive sound frequencies, gradually improving auditory adaptability and reducing hypersensitivity.
- Systematic Desensitization gently expands frequency ranges and increases intensity levels over time, helping build resilience and support long-term auditory adaptation.



It's based on the theory of **dynamic frequency absorption**, utilizing advanced technology to filter out sensitive sound frequency bands.

Balance Therapy (Auditory Balance Training with Time-Frequency Filtering)

- ☑ Targets individuals with central auditory processing disorders and learning disabilities. Using time-frequency filtering, sound signals are delivered separately to the left and right ears to promote binaural balance.
- ☑ By modifying the physical properties of sound, the method stimulates the auditory nerves and cortex, leveraging brain plasticity to improve auditory function.
- ✓ It also uses sound source orientation and tracking to train attention skills, helping reduce attention deficits and strengthen focus.





Time-frequency Filtering: uses dual-channel filtering and intensity modulation to regulate binaural separation and integration.

Brainwave Induction Therapy (Brainwave Stimulation with Binaural Beats)

- ✓ Designed for emotional disorders and suboptimal health, this therapy uses auditory stimulation to induce targeted brainwave frequencies, guiding the brain into a desired state of consciousness for therapeutic effect.
- ✓ Combined with binaural beat technology and the principles of music therapy, this approach has shown effective results in clinical applications.



Designed based on binaural beat theory, this therapy targets specific brainwave states:

- Alpha waves support relaxation and creativity.
- Theta waves enhance memory and learning.
- Delta waves promote deep physical relaxation and restorative rest.



Metal Red Spectrum

Positive Level 2 Positive Level 1 Neutral Negative Level 1 Negative Level 2

Positive Level 2

Targets high-frequency auditory adjustment. Reduces over-sensitivity to high-frequency sounds, and enhances auditory filtering.



Recommended For

Emotional and behavioral regulation, Autism Spectrum Disorder (ASD)



Red Spectrum

Positive Level 2 Positive Level 1 Neutral Negative Level 1 Negative Level 2

Positive Level 2

Targets mid-to-high frequencies. Enhancing sound perception and recognition to support processing of complex auditory input.



Recommended For

Emotional and behavioral regulation, Autism Spectrum Disorder (ASD)



Red-Blue Spectrum

Positive Level 2 Positive Level 1 Neutral Negative Level 1 Negative Level 2

Positive Level 1

Combines red and blue frequency bands to target low and high-frequency auditory inputs. Facilitates the auditory system's ability to balance and integrate sounds across a wide spectrum, supporting more effective auditory processing.



Recommended For

Auditory balance, Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD)



Blue-Orange Spectrum

Positive Level 2 Positive Level 1 Neutral Negative Level 1 Negative Level 2

Positive Level 1

Integrates complementary blue and orange frequency bands to support dynamic regulation of auditory processing, enhancing the system's adaptability and coordination across a wide range of sounds.



Recommended For

Attention regulation, Attention-Deficit/Hyperactivity Disorder (ADHD), Learning Disabilities (LD)



Green Spectrum

Positive Level 2 Positive Level 1 Neutral Negative Level 1 Negative Level 2

Neutral

Targets mid-frequencies to stabilize auditory processing. Enhances clarity of common mid-frequency sounds like speech, aiding daily communication.



Recommended For

Auditory balance, attention regulation, Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD), Learning Disabilities (LD)



Metallic Black Spectrum

Positive Level 2 Positive Level 1 Neutral Negative Level 1 Negative Level 2

Neutral

Targets low-frequency auditory processing. Enhances the perception of low-frequency sounds and improving clarity in cases of under-responsiveness or reduced processing efficiency.



Recommended For

Auditory balance, Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD)



Pink-Purple Spectrum

Positive Level 2 Positive Level 1 Neutral Negative Level 1 Negative Level 2

Negative Level 1

Targets low and high-frequency auditory inputs through calming frequency bands, helping reduce hypersensitivity and creating a more soothing listening experience.



Recommended For

Auditory desensitization, Autism Spectrum
Disorder (ASD), Attention-Deficit/Hyperactivity
Disorder (ADHD), Learning Disabilities (LD)



Blue Spectrum

Positive Level 2 Positive Level 1 Neutral Negative Level 1 Negative Level 2

Negative Level 2

Targets high-frequency and sensitivity-prone bands. Supporting auditory attention regulation to help users focus on important sounds while reducing distracting or over-reactive responses.



Recommended For

Attention regulation, Attention-Deficit/ Hyperactivity Disorder (ADHD), Learning Disabilities (LD)

Personalized spectrums can improve processing disorders, reduce hypersensitivity, and enhance multisensory integration, leading to better communication, emotional regulation, and behavior. Spectrum selection should be guided by professional assessment.







