

EEG

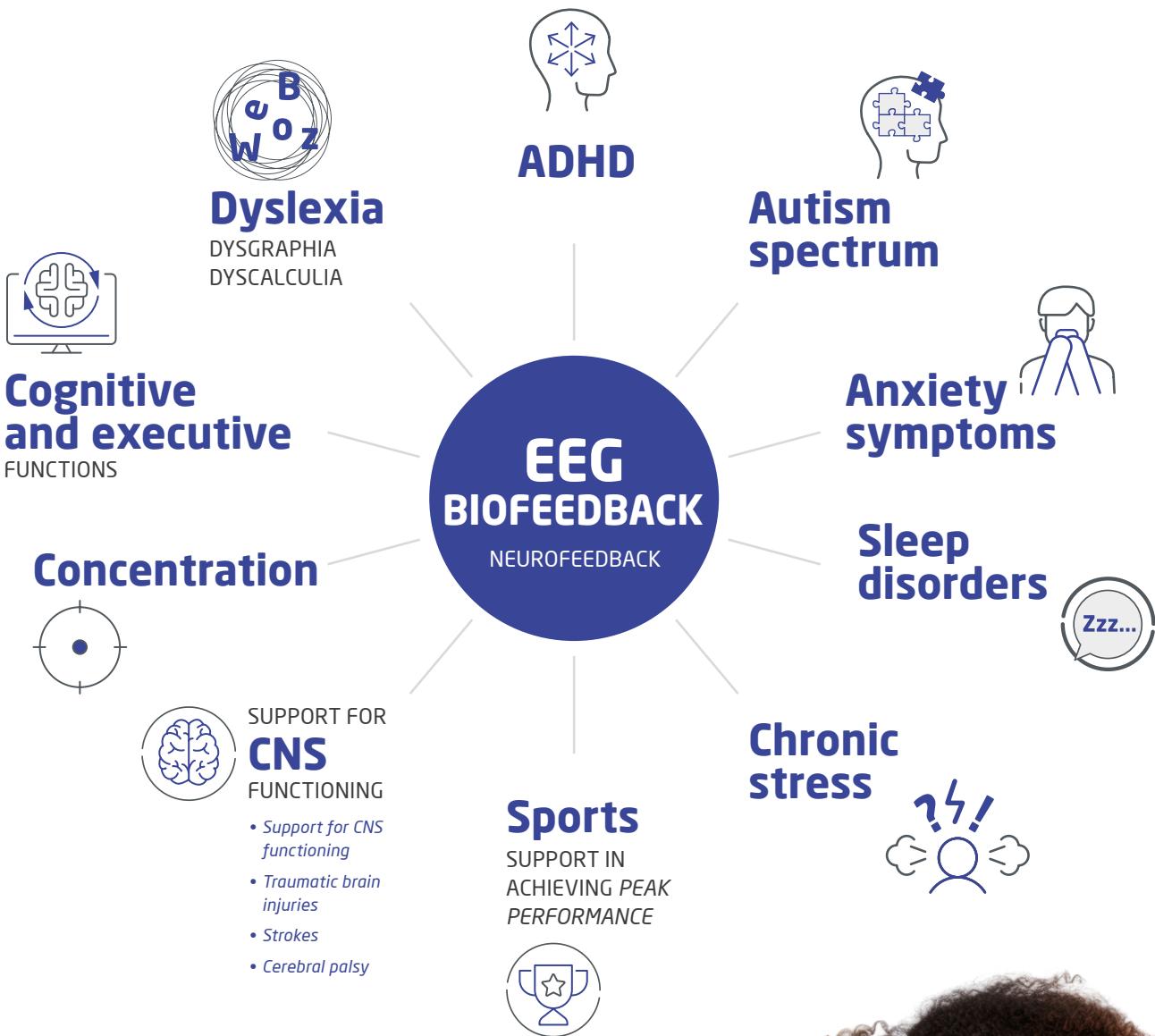
BIOFEEDBACK

NEUROFEEDBACK



ELMIKO
EEG BIOFEEDBACK
SYSTEM
WITH 32 CHANNELS
CERTIFIED MEDICAL DEVICE

el **mi**ko
Create to Help



Create to Help

THE ELMIKO EEG BIOFEEDBACK SYSTEM PROVIDES SOLUTIONS FOR:



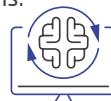
WHAT IS EEG BIOFEEDBACK?

EEG Biofeedback (Neurofeedback) is a method of regulating brain activity based on real-time monitoring of brain waves. It enables individuals to learn how to consciously influence their brain activity through immediate feedback from EEG signals.

The goal of therapy is to improve brain self-regulation, which translates into better cognitive, emotional, and overall functioning. Most people experience improvements such as better concentration, reduced tension, and greater stress resilience, positively impacting daily functioning and social relationships.

The method is safe and suitable for children, adolescents, and adults, and can also serve as an alternative or complement to pharmacological treatment in selected neurodevelopmental and mental disorders.

The effectiveness of therapy is based on neuroplasticity—the brain's ability to adapt and form new connections. The effects can be long-lasting, especially with regular use. Additionally, the therapy increases self-awareness and supports emotional self-regulation even outside training sessions.



APPLICATION OF EEG BIOFEEDBACK

Neurofeedback is increasingly used in neurological, psychiatric, and physiological therapies to support brain-based rehabilitation and optimize neural functioning. It integrates seamlessly with clinical practice and complements both diagnostic and therapeutic pathways.

Common Clinical Applications:

- Neurodevelopmental disorders such as ADHD, autism spectrum, and tic disorder
- Cognitive rehabilitation following stroke, traumatic brain injury (TBI), or surgery
- Emotional and behavioral dysregulation in conditions like anxiety, PTSD, or depression
- Chronic neurological conditions such as epilepsy, cerebral palsy, or multiple sclerosis
- Sleep disturbances and fatigue syndromes related to neurophysiological imbalance
- Memory, focus, and executive function difficulties in neurodegenerative disorders (e.g., mild cognitive impairment, early dementia)



ADDITIONAL APPLICATIONS

- Support for cognitive and executive functions (**attention, working memory, planning**)
- Training in tension regulation and **stress resilience**
- **Support in achieving peak performance in sports** and in high cognitive or emotional load situations





ADVANTAGES OF THE EEG BIOFEEDBACK SYSTEM

- **Intuitive and user-friendly interface**
- **2D and 3D brain activity mapping** with intuitive heatmaps for interpretation of brainwave patterns
- **Over 130 specialized training screens** in 2D, 3D, and VR technology (standard package: 63 screens / 20 types, with an additional 73 screens / 29 types available)
- **Flexibility** - easy customization of training protocols and point sets, with the option to add additional frequency bands
- **QEEG diagnostics** available in the optional Biofeedback PLUS module
- **Artifact and noise removal** during signal analysis (available in the Biofeedback PLUS module)
- Database ensures compliance with **GDPR** data protection regulations



WHY ELMIKO?

- **Custom frequency protocol creation:** Adjust training wave ranges to align with individual mental profiles
- **Advanced visualization tools:** Track progress through real-time learning curves and topographic brain maps

ADVANTAGES OF THE ELMIKO AMPLIFIER

- **Advanced EEG Biofeedback amplifier** with 32 channels
- **Continuous impedance monitoring** for high-quality EEG signal
- USB and WiFi communication
- Durable, lightweight, and **impact-resistant design**
- **32-channel** configuration, enabling simultaneous OEEG diagnostics from a larger number of electrodes



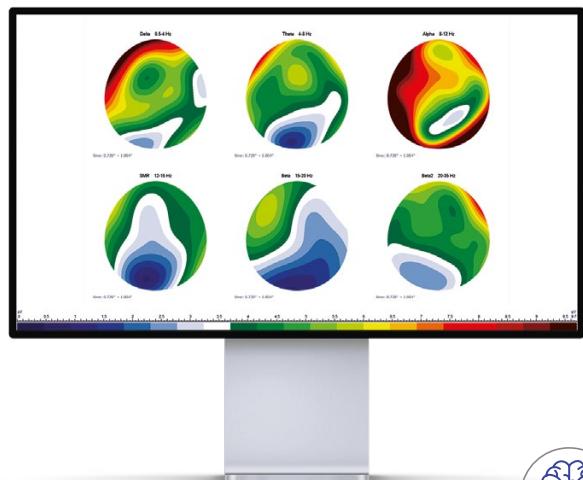


CLINICAL POTENTIAL IN NEUROLOGY, PSYCHIATRY & PHYSIOLOGY

- **Neurology:** Neurofeedback is applied to facilitate functional neurorehabilitation by enhancing cortical self-regulation mechanisms, particularly in patients with traumatic brain injury, epilepsy, stroke, or other central nervous system disorders.
- **Psychiatry:** The technique serves as an evidence-based adjunctive method for managing mood disorders, anxiety, ADHD, and other neurodevelopmental or affective conditions by modulating dysregulated brainwave patterns.
- **Physiology:** By engaging central-peripheral integration, neurofeedback contributes to optimizing autonomic nervous system regulation, stress resilience, and neuromuscular control, supporting recovery in psychosomatic and stress-related conditions.

ADVANCED TOOLS FOR MENTAL PERFORMANCE

- **2D and 3D Mapping:**
Understand which brain regions are engaged during specific tasks
- **Time Potential Mapping:**
Observe how the brain responds over time in training cycles
- **Color-coded progress indicators:**
Make mental performance visible to both coaches and athletes



ELMIKO CERTIFICATIONS



ELMIKO has implemented and certified a quality management system for medical device manufacturers in accordance with **EN ISO 13485:2016**



EEGDigiTrack® electroencephalographs comply with the requirements of the **93/42/EEC Medical Device Directive**

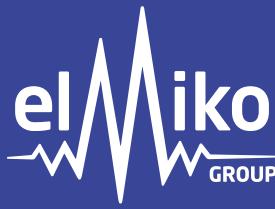


EEGDigiTrack® database complies with **GDPR** regulations



Management System
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Create to Help

The **ELMIKO GROUP** is a Polish brand with extensive, international experience, providing interdisciplinary support to clinicians and therapists in neurology and related fields. Together, we provide high-quality equipment and modern diagnostic methods, while simultaneously training specialists and focusing on patient well-being.



Our brands



ELMIKO is a manufacturer and distributor of cutting-edge medical apparatus and innovative solutions for neurology and neurotherapy, including systems for EEG, CFM, EEG Biofeedback, tES, TMS, and EMG.

The **AKSON Education Centre** organizes and conducts training in neurodiagnostics and neurotherapy for physicians, medical technicians, psychologists, educationalists, and therapists, including EEG, EMG, QEEG, EEG Biofeedback, tES, TMS, and others.

NEURODIAGNOSTYKA, a centre for neurological diagnostics and neurotherapy, provides services to individual patients. It offers services on-site, in neurological clinics and at the patient's home, as well as providing diagnostic services and equipment leasing in hospitals and clinics.

ELMIKO VET, a manufacturer of veterinary neurological equipment. It offers advanced solutions that support veterinary clinicians in the field of animal neurology and neurotherapy, including EEG diagnostics, and pain management and treatment.



ELMIKO BIOSIGNALS
Sp. z o. o.



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