



EEG

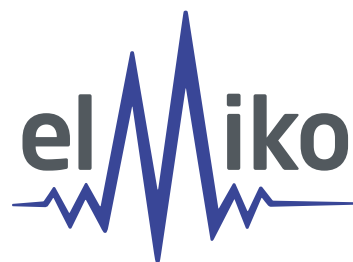
BIOFEEDBACK

NEUROFEEDBACK



ELMIKO
EEG BIOFEEDBACK
SYSTEM
WITH 32 CHANNELS

CERTIFIED MEDICAL DEVICE



Create to Help



Create to Help

THE ELMIKO EEG BIOFEEDBACK SYSTEM PROVIDES SOLUTIONS FOR:



DIAGNOSTICS



THERAPY



SCIENCE



WHAT IS EEG BIOFEEDBACK FOR ATHLETES?

EEG Biofeedback (Neurofeedback) is a training method that helps athletes optimize their mental performance by learning to regulate brain activity through real-time feedback from EEG signals.

By improving brain self-regulation, athletes can enhance **focus, mental clarity, emotional control, and resilience under pressure** – all of which are critical during training and competition.

The method is non-invasive, safe, and effective **for athletes of all ages and disciplines**. It can be used as part of performance psychology routines or post-injury recovery plans.

The effectiveness of EEG training is based on neuroplasticity – the brain's natural ability to adapt and build new connections. With regular sessions, athletes develop **long-lasting improvements** in focus, stress recovery, and mental stamina, helping them stay at their peak both on and off the field.



APPLICATION OF EEG BIOFEEDBACK IN SPORTS

Neurofeedback training can significantly enhance mental performance, stress regulation, and cognitive efficiency in athletes. It is one of the most advanced applications of neuroscience and sports technology – combining real-time data analysis with interactive training tools.

Benefits for athletes and sports professionals:

- Improved **focus**, attention stability, and reaction time
- Faster **recovery** after concussion or mental fatigue
- Better **stress and arousal regulation** before and during competition
- Enhanced **mental stamina** and decision-making under pressure
- Support for **peak performance** during high-stakes events
- Increased **self-awareness** and emotional balance for consistent results
- Neurofeedback is increasingly used in **elite sports** environments – from Olympic training centers to esports and rehabilitation clinics – to support both mental and physiological readiness.





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



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 QEEG diagnostics from a larger number of electrodes

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
- **Biofeedback Plus module** extends standard neurofeedback by adding full EEG recording and advanced signal analysis (including QEEG, CSA, DSA, spatial brain mapping, artifact removal, and multi-channel diagnostic capabilities)
- **Portable, wireless solutions** for use in training camps, on the field, or in recovery settings



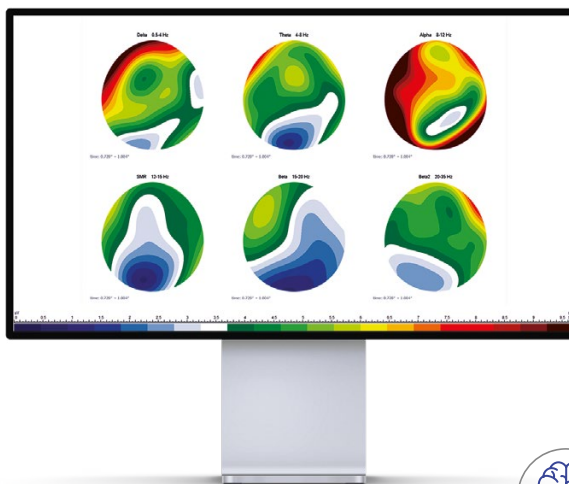


SPORT NEUROFEEDBACK FOR COMPETITIVE EDGE

- Neurofeedback was originally developed by NASA to help astronauts **regulate stress and maintain focus** in high-pressure environments. These same principles are now applied in elite sports
- **Athletes at all levels use neurofeedback to train mental sharpness**, improve focus, and recover faster from cognitive fatigue
- Regular sessions **improve reaction time, emotional regulation, and the ability to stay in the "zone"** – especially under pressure
- The technique helps maintain **optimal mental states during competition**, leading to better decision-making, faster reflexes, and improved resilience in critical moments

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

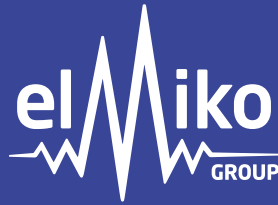


Management System
EN ISO 13485:2016
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Create to Help

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.

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