

NEUROTRACKER ESPORTS APPLICATION

EXECUTIVE **S**UMMARY

With the rise of e-sports, professional gamers are now setting new standards for human mental performance. Players must process, manage and discern vast amounts of complex, dynamic sensory information and then quickly make critical decisions in real time. Each of these decisions plays a relevant role in teambased performance, as well as do the actions of the opposition. To be effective, players have to demonstrate exceptional levels of focus and react with professional speed; a tenth-of-a-second delay can mean the difference between victory and defeat.

The following will address how NeuroTracker—a novel technology that hones situational awareness, working memory, attention, executive function and cognitive stamina—responds to these challenges.

1.Performance Enhancement

Under stress and the influx of rapidly evolving information, athletes are understandably prone to make errors in judgment. Increasing a player's awareness and short-term memory specific to immediate conscious and perceptual processing will help in the tracking and management of allied and enemy movement patterns as well as in-game abilities. NeuroTracker training allows players to process complex and dynamic scenes while under extreme situations of stress. This mitigates errorrisk by allowing players to excel in circumstances of rising complexity. The enhancement of awareness and focal attention also promotes synergy in a team environment while fostering proactive agility (rather than reactive), and delivers a cognitive edge over the opposition.

2. ACCELERATED LEARNING AND RESILIENCY

In order to extract the maximum benefit from training programs, players must be constantly engaged and primed for learning.



NeuroTracker's has been shown to have physiological changes on brain chemistry—similar to those of attention enhancing drugs. By combining NeuroTracker training with context-specific dual tasks, the system replicates the stresses of live gameplay and through an increased resilience to mental fatigue ultimately prepares players for the cognitive demands associated with these high-speed and dynamic digital environments.

3. ASSESSMENT AND TALENT MANAGEMENT

The effective management of talent requires the ability to accurately assess and monitor cognitive capabilities. By providing accurate information on immediate cognitive state(s), NeuroTracker allows for crucial insight into player readiness and potential. Alongside performance enhancement, as NeuroTracker is non-specific, it can serve to profile an individuals potential to excel in situations that demand high levels of cognitive flexibility.

OUR CLIENTS INCLUDE



*These relationships are either direct or indirect through our sports performance partners.

SUMMARY

For e-sport athletes, the ability to anticipate and navigate complex digital scenes is paramount. Athletes must be capable of effectively turning information into actionable outcomes and making critical decisions constantly while maintaining heightened levels of focus and attention. NeuroTracker accomplishes this by optimizing the brain's ability to make sense of fast-moving visual information.