## Eye tracker glasses ATV-2-200 with a neuroheadset for EEG recording

Neuroheadset EEG 24 (36) channels EEG recording unit 24 (36) channels

Recording Data — fully synchronized!

Eye tracker glasses Portable recorder

# Hardware and software system:

- sensory glasses
- portable recorder
- EEG recorder 24 (36)
- neuroheadset 24 (36) EEG

 Software for analysis of oculomotor activity, for EEG analysis (synchronously with eye tracker data) and other application Software



# Eye tracker glasses and portable recording unit in a transport case

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### Analysis of the process of visual perception for scientific and practical psychological or psychophysiological purposes for

marketing research;

 assessing the effectiveness of the impact of visual information;

 analysis of ergonomic solutions, including when designing computer interfaces;

 research in the field of cognitive and social psychology, education, sports, transport, art psychology (neuroaesthetics)





An analysis is provided of changes in the driver's FS depending on the influence of the road situation on him, driving speed, trip duration, distractions, and the suitability of the route in order to assess the significance of various circumstances affecting both the driver's accident rate and ensuring road safety.

Neurophysiological parameters are used, based on the analysis of brain biopotentials (electro– encephalogram) and somato– vegetative parameters, based on the analysis of electrocardio– gram signals, skin conductance, photoplethysmogram, respiratory effort, as well as parameters of oculomotor activity.

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### Psychology of art and neuroaesthetics

The study of human perception of works of art is based on the use of equipment and Soft– ware that allows one to analyze the direction of gaze, physiological signals



and parameters that reflect the viewer's emotional state and the degree of his involvement.

An important feature is the ability to freely move around the halls of a gallery or museum. Dynamically changing content is captured by the "scene camera" of the eye tracker glasses. The offered equipment provides the possibility of synchronous autonomous recording of physiological parameters (EEG, ECG, PPG, SkC, etc.).

Specialized equipment and software are used to record the dynamics of neurophysiological and somato– vegetative parameters of the human operator, the features of the distribution of his visual attention to the content presented on monitors, mnemonic diagrams and information panels.

Research with a multimodal dataset provides the most comprehensive strategy for uncovering human o perator behavior and performance during operator activities. Combining diverse data streams allows you to take into account a large number of factors affecting the operator's activities.

