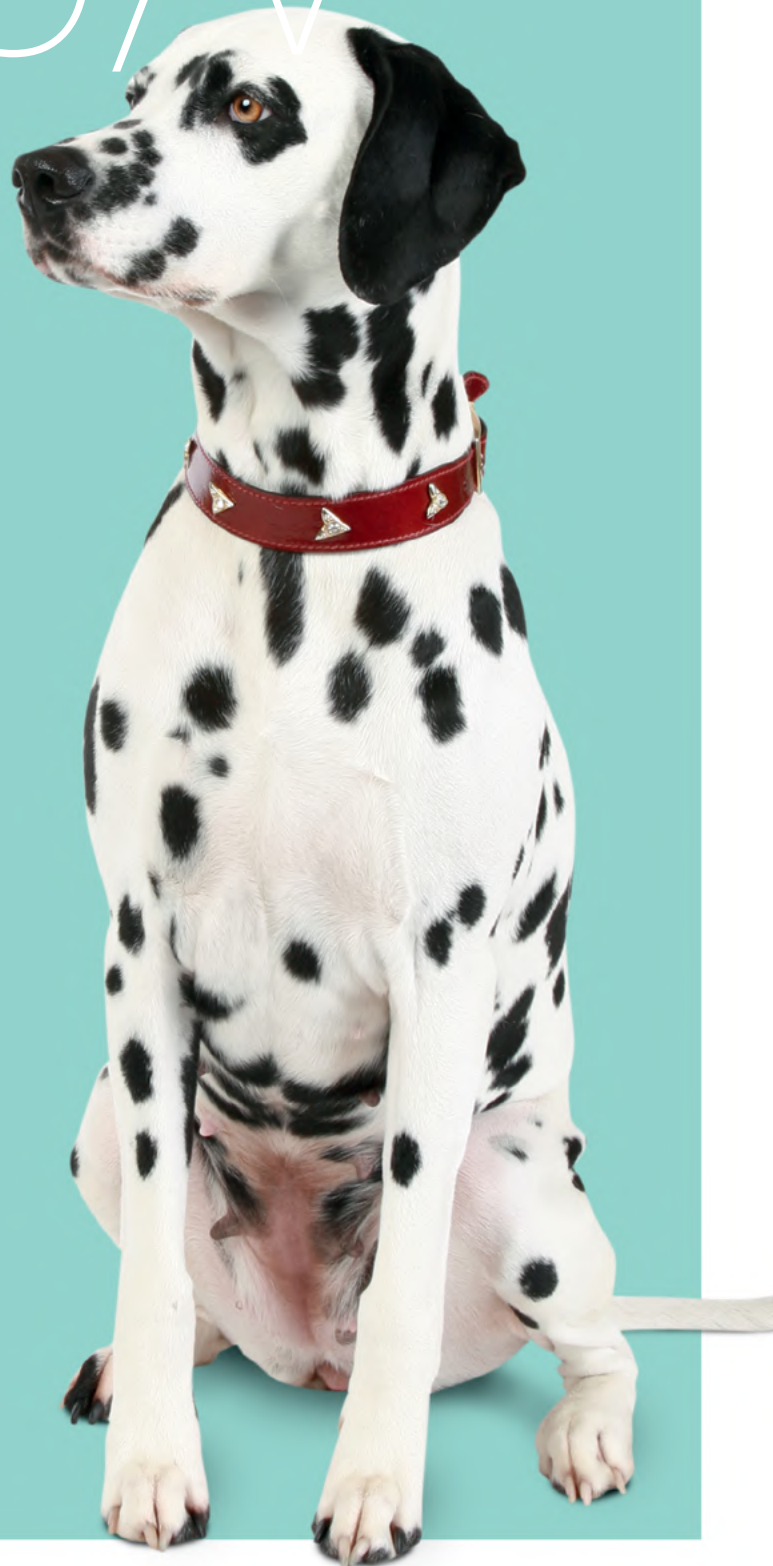


NEURO- AUDIO/V

veterinary digital system for
diagnostic hearing testing





DIAGNOSTIC HEARING TESTING FOR ANIMALS

Hearing is the second, with regard to vision, source of learning essential information about the world around. Therefore, hearing impairment is a significant problem not only for people but for animals as well. Hearing impairment refers to total (deafness) or partial (hearing loss) inability to hear sounds. It is observed in animals of various age, sex and breed groups.

Usually, sensorineural hearing loss affects sound perception. It may occur due to the damage and hypoplasia of cochlea, dysfunction and abnormalities of vestibulocochlear nerve and auditory processing centers of the brain. In other words, the anatomical substrate of the sensorineural hearing loss is located not in the outer and middle ears, but in the inner ear and brain as a rule.

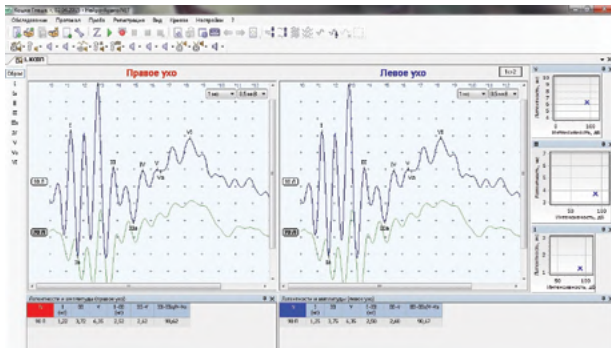
The main causes of the sensorineural hearing loss include: hereditary factor (for example, in Dalmatian, Bull terrier, Dogo Argentino and other breeds), infectious and viral diseases of a mother dog during pregnancy (herpes simplex virus, toxoplasmosis), neonatal asphyxia, intracranial birth injury, bacterial meningitis and meningoencephalitis, receiving ototoxic medications such as aminoglycoside antibiotics.

To diagnose sensorineural hearing loss, auditory brainstem response/brainstem auditory evoked potentials test (ABR/BAEP) is used. During the test, the electrical response of the brain to the auditory stimulus is recorded. ABR test is a minimally invasive method for objective assessment of auditory function in animals. To prevent excessive motion during ABR test the animal should be slightly sedated.

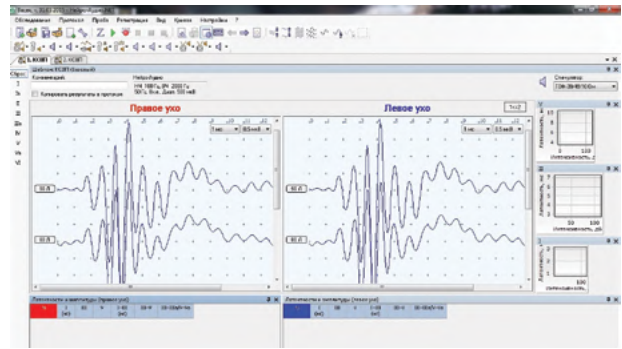
ABR (BAEP) TEST IS THE GOLD STANDARD FOR EVALUATING HEARING IMPAIRMENT IN ANIMALS

ABR (BAEP) test allows for quick and accurate diagnostics of hearing impairment of various etiologies, as well as for diagnostics of hearing impairment associated with a disease or caused by ototoxic drugs treatment. For being minimally invasive, this technique can be used in young animal patients (three weeks and above).

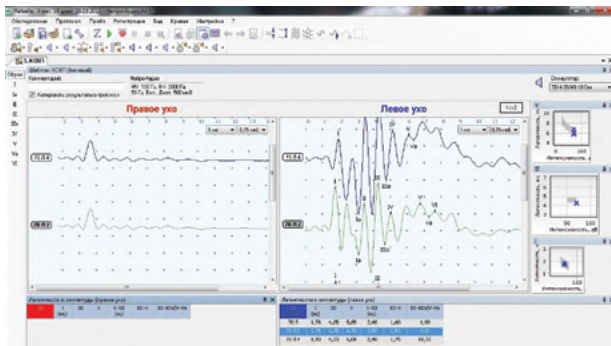
EXAMINATIONS



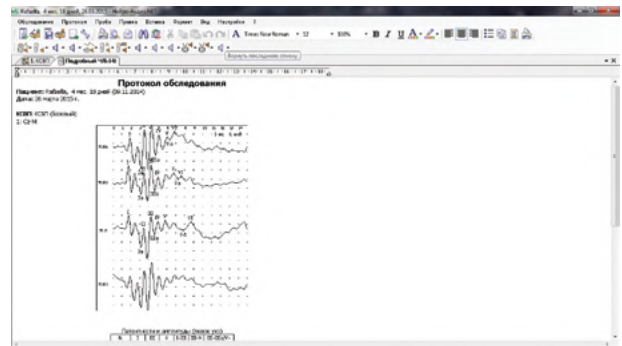
BAEP traces obtained from the normal cat



BAEP traces obtained from the normal dog



BAEP traces obtained from the cat with unilateral deafness



BAEP test. Examination report

DELIVERY SET



- Neuro-Audio electronic unit
- Disposable subdermal single-use needle electrode with cable (5 pcs.)
- Insert audiometric earphones ER-3C
- Set of disposable eartips for insert earphones
- Technical and user manuals
- Software
- Transportation bag