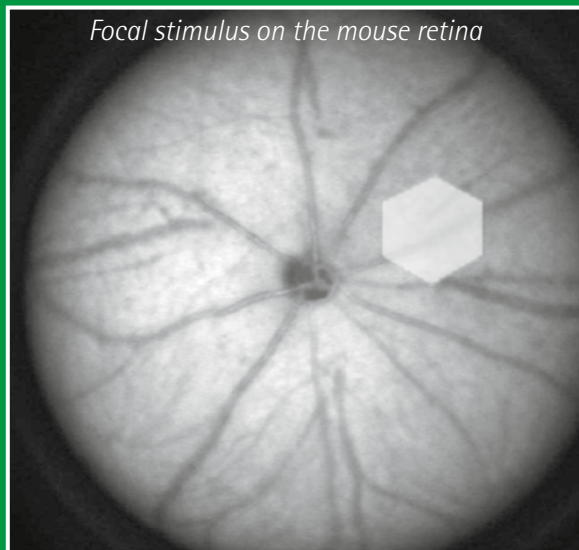


RETI^{map/animal}[®]

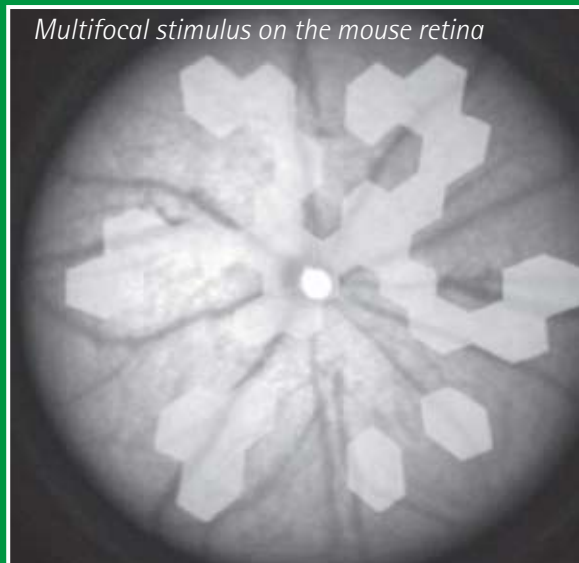
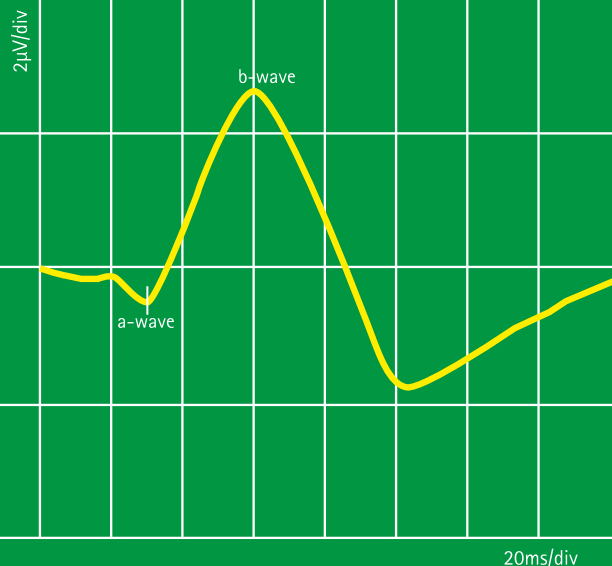
Electrophysiological unit combined with scanning laser ophthalmoscope
new advantage for research on animal retina



Infrared laser image



Focal stimulus on the mouse retina



Multifocal stimulus on the mouse retina

Certification:
 Quality Management System
 EN ISO 9001
 EN ISO 13485
 TÜV Rheinland CE 0197

Electrophysiological unit combined with scanning laser ophthalmoscope new advantage for research on animal retina

Simultaneous infrared laser monitoring during electrophysiological function testing with Roland RETI^{map}/animal[®]. For measurements on the retina; topography and function in the same time and same area.

An focal flash ERG, focal pattern ERG, focal pattern VEP and , focal flash VEP or mf ERG/VEP stimulus (RETI^{map}[®]) and a new confocal Scanning Laser Ophthalmoscope (883 nm) are connected to record ERGs and VEPs projected by a small traditional CRT-stimulus source. This allows topographic retinal function recordings with the technique of monitor stimulation combined with a laser retina fundus imaging system on the animal retina. This method is necessary to be sure to stimulate the right area on the retina. An eye tracking software helps you to remove and eliminate all eye movements during the test. This system allows also a topographic mapping of retinal function by concurrently stimulating a large number of retinal locations and extracting their local responses. Regionally confined areas of dysfunction can be detected. Simultaneous retina fundus monitoring during the examinations provides reliable information regarding the location of the stimulus on the retina.



next future advantages

- Fluorescein Angiography (FA)
- ICG Angiography (IA)
- Autofluorescence

Technical Data

Laser Scanning System:

Field of view: 30° x 30°
 Digital image size: 512 x 512 Pixel
 Digital image depth: 12 bit max. image frequency: 15 Hz
 Optical resolution: 23 µm

Laser Sources:

IR: 883 nm (IR Image)
 Blue: 488 nm (FA-Fluorescein Angiography)

Stimulation System: (CRT-Monitor or LED source)

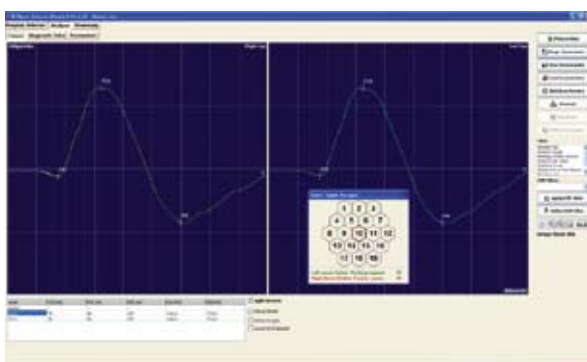
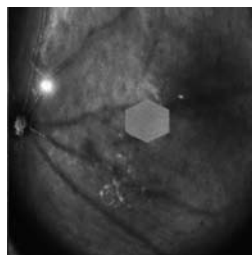
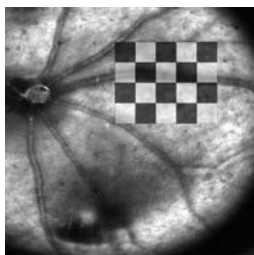
Field of View: 30° x 30°
 Brightness: 500 cd/m²
 Vertical frequency: 60 Hz
 Resolution: 800 x 600 pixel

Bio Signal Amplifier:

Type BF check voltage: 1.5 kV digital controlled amplifier
 Impedance: 2 x 100 MOhm
 Noise: <4 µV (SS)
 Common mode reaction: <110 dB
 Sensitivity: 10 µV/div to 2 mV/Div
 High pass: 0.02 Hz to 1 kHz
 Low pass: 20 Hz to 10 kHz

Software:

electrophysiology software for ERG-protocols and special focal and multifocal ERG and VEP protocols.



Distributor:



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