

# Vision Monitor

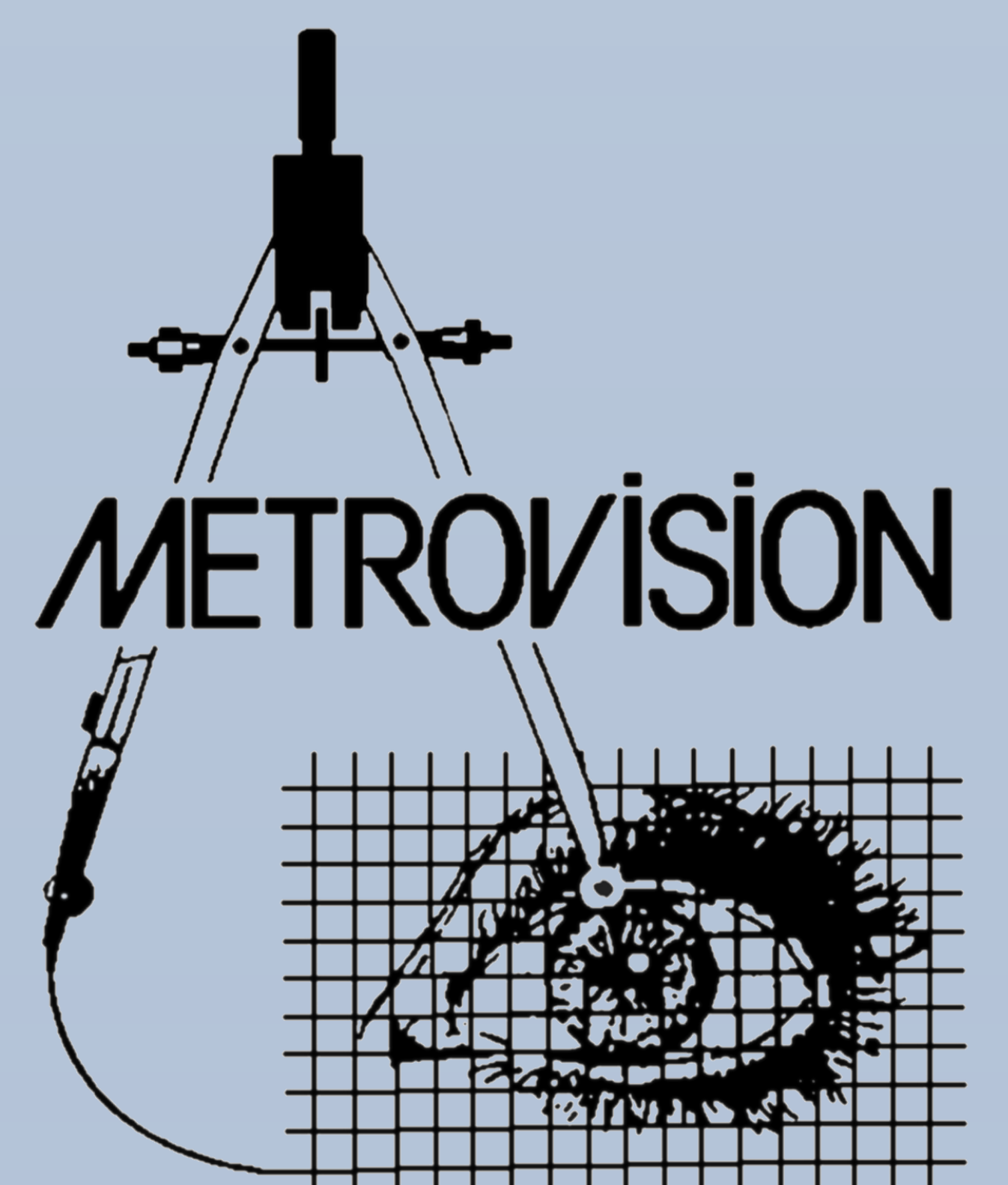
## Vision electrophysiology system

- Electro-retinography (ERG)
- Visual evoked potentials (VEP)
- Electro-oculography (EOG)



Manufactured by Metrovision  
ISO 13485: 2016  
certified quality system

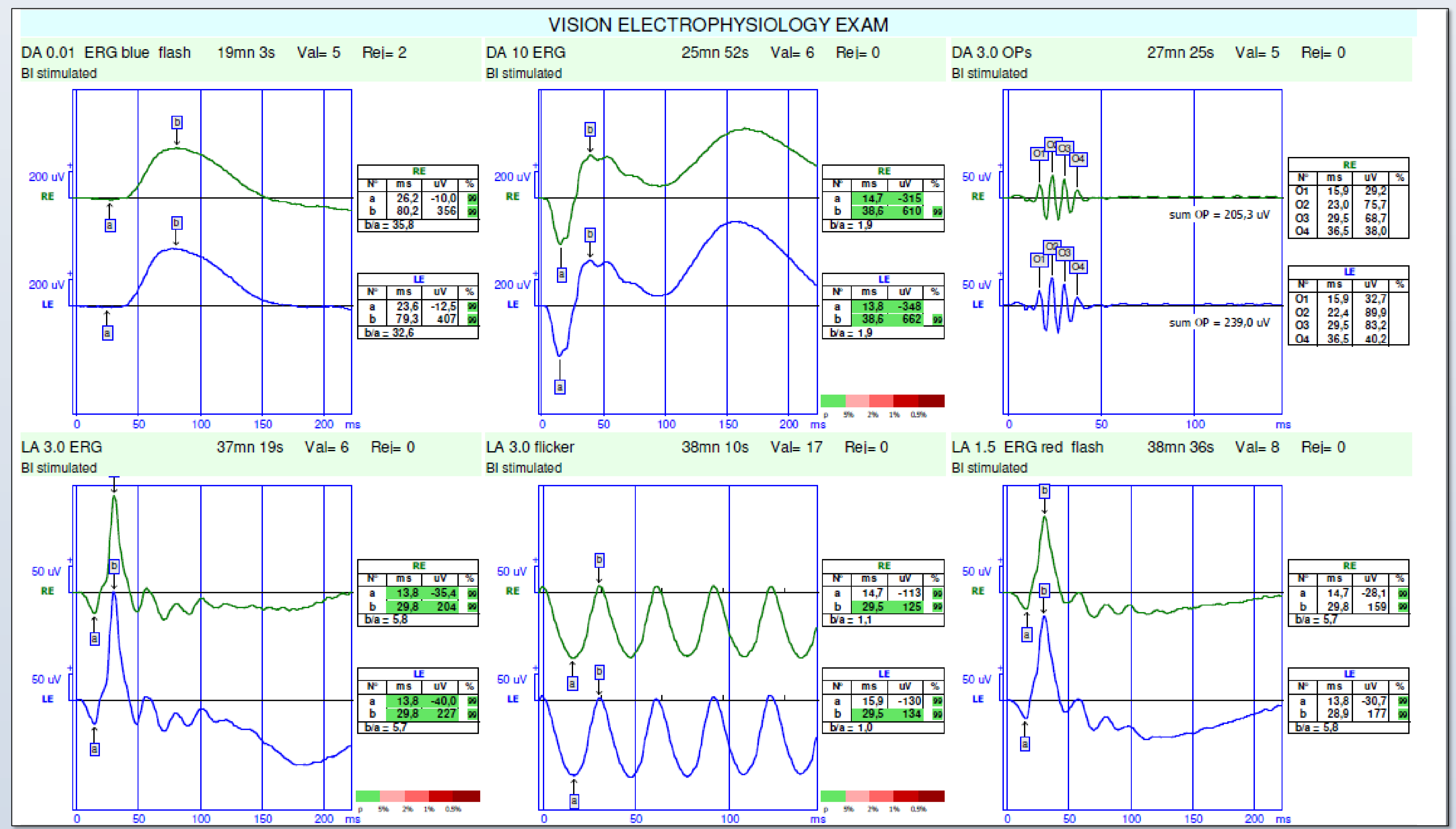
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# Flash ERGs

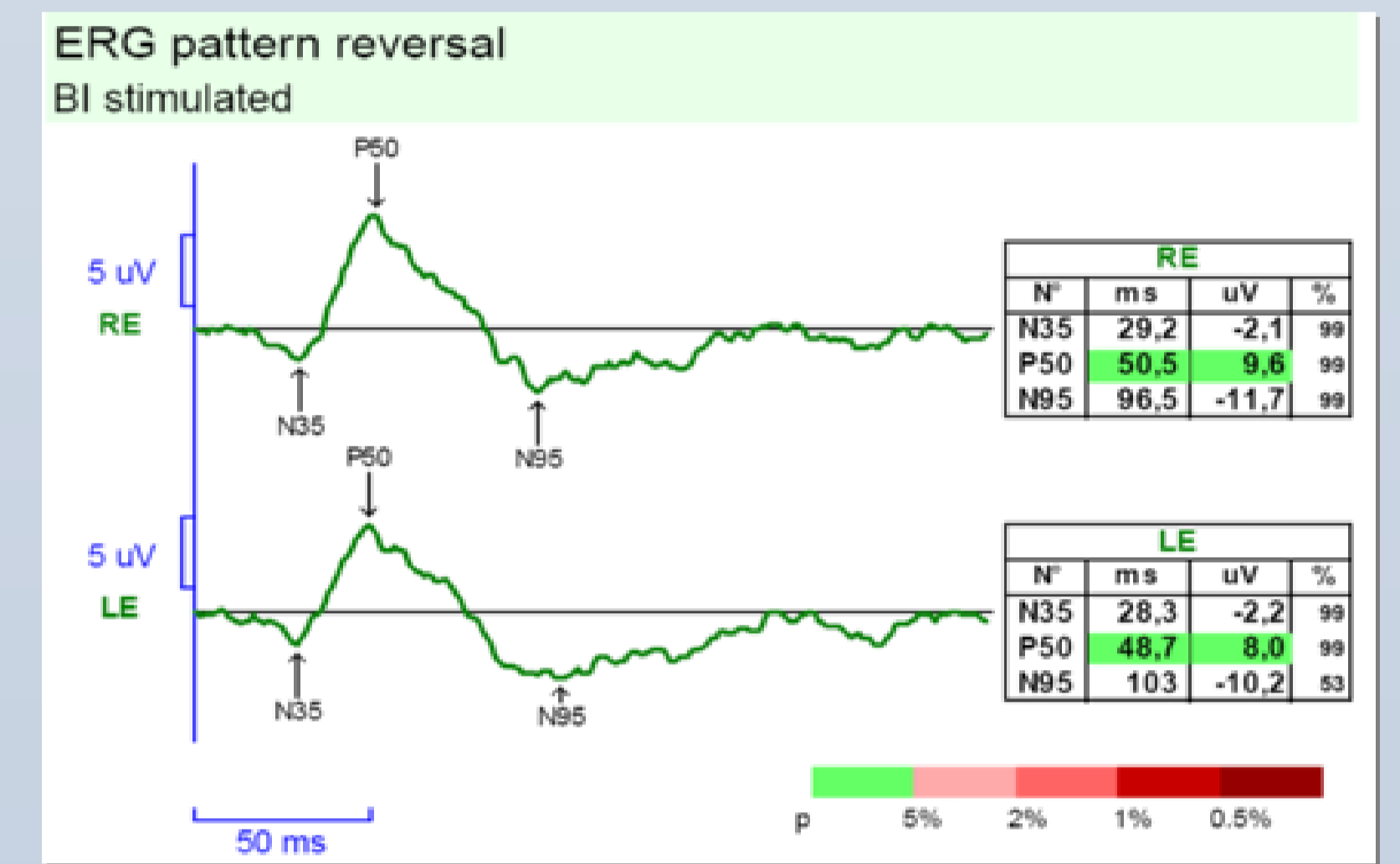
Evaluation of responses from the different layers of the retina and from the rod and cone systems.

Realization of ISCEV protocols and of research protocols.



# Pattern ERGs

Evaluation of responses from ganglion cells and from the macula.

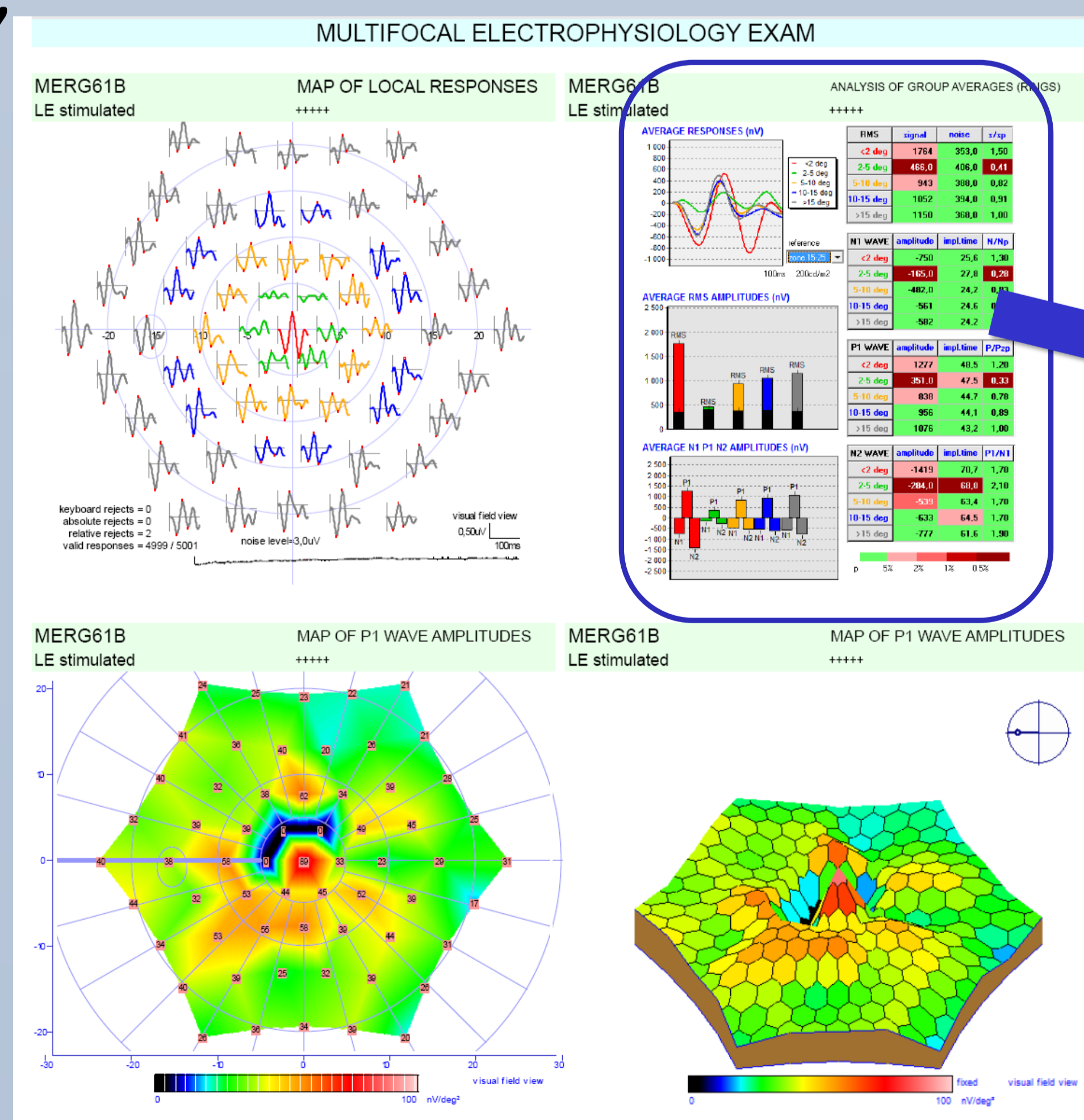
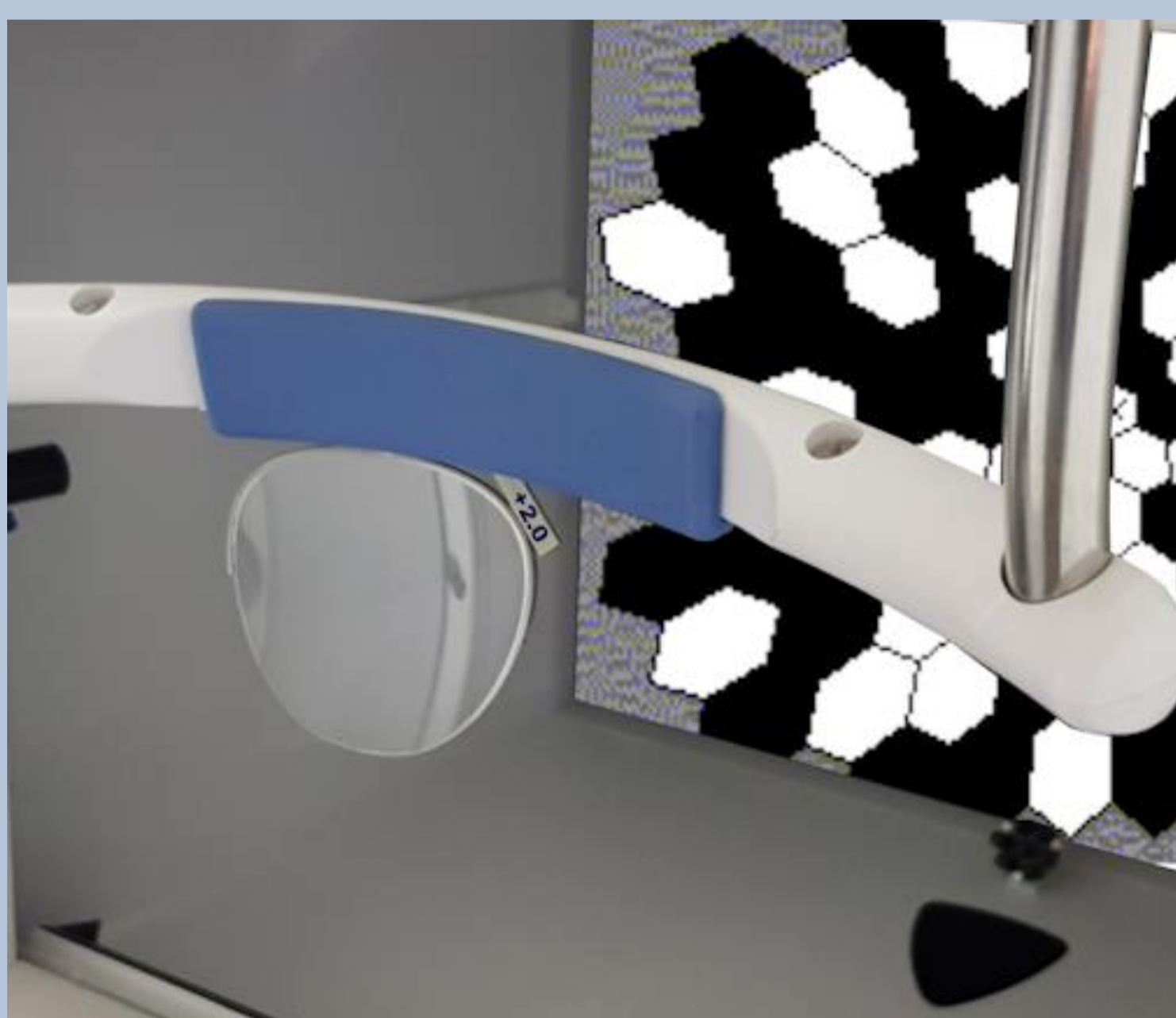
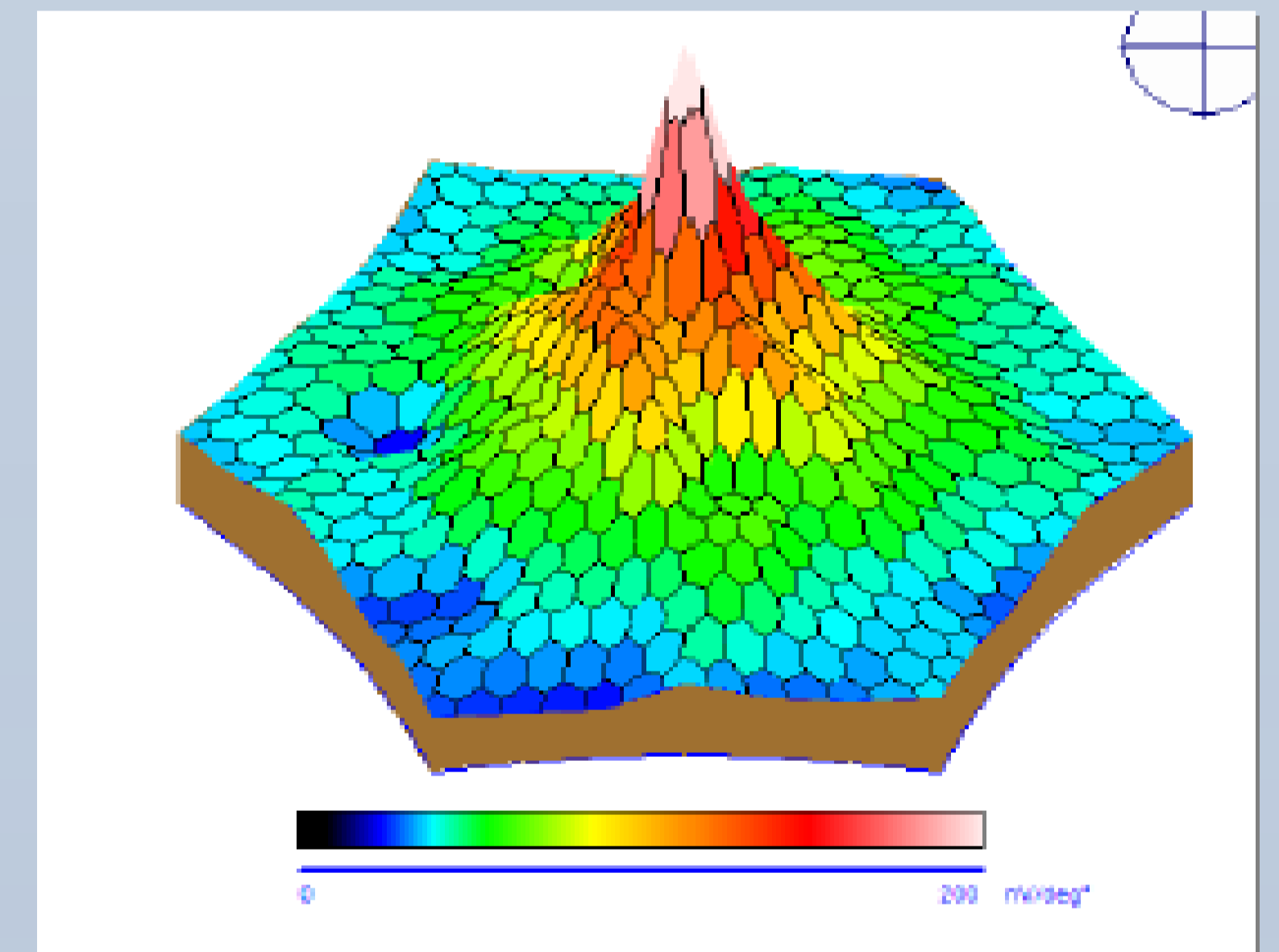


# Multifocal ERGs

Realization of a detailed and objective cartography of the electrical activity of the retina.

Unique features:

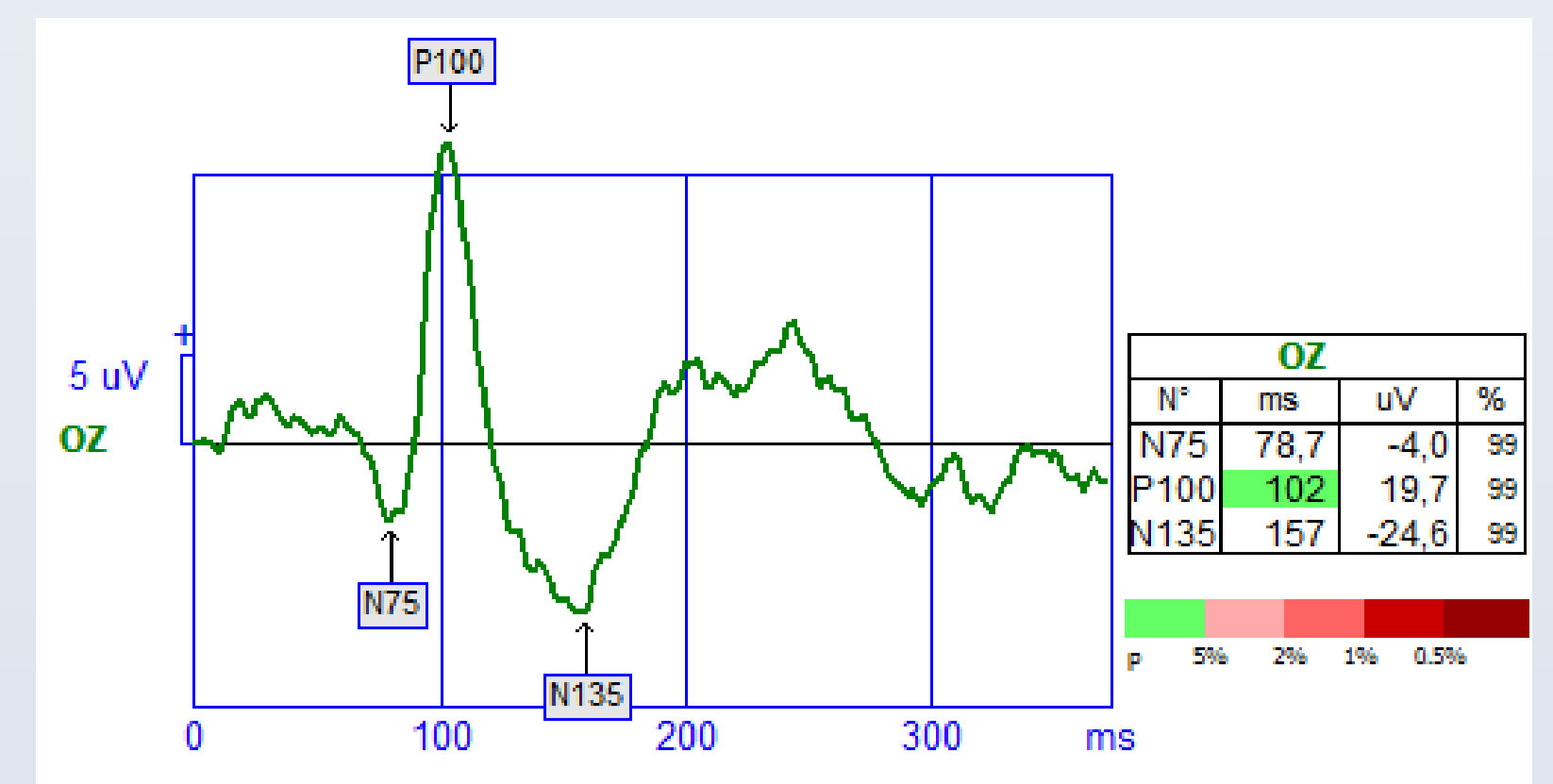
- high luminance stimulation,
- precise control of stimulation timing,
- large field refractive lenses,
- age corrected normative database,
- ring ratio analysis



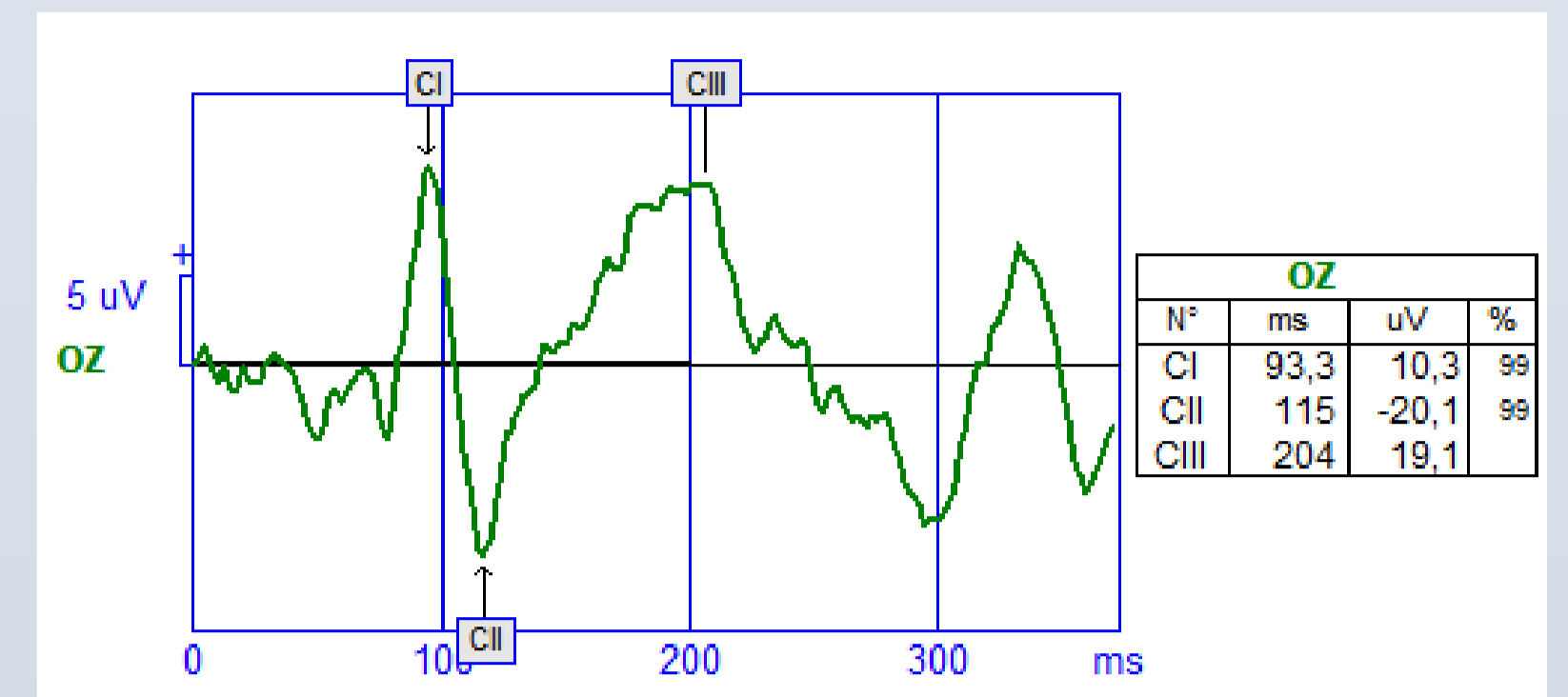
MfERG in hydroxychloroquine intoxication showing a reduction of amplitude between 2 and 5 degrees of eccentricity.

# Flash and pattern VEPs

Evaluation of cortical responses to flash and pattern stimulations.



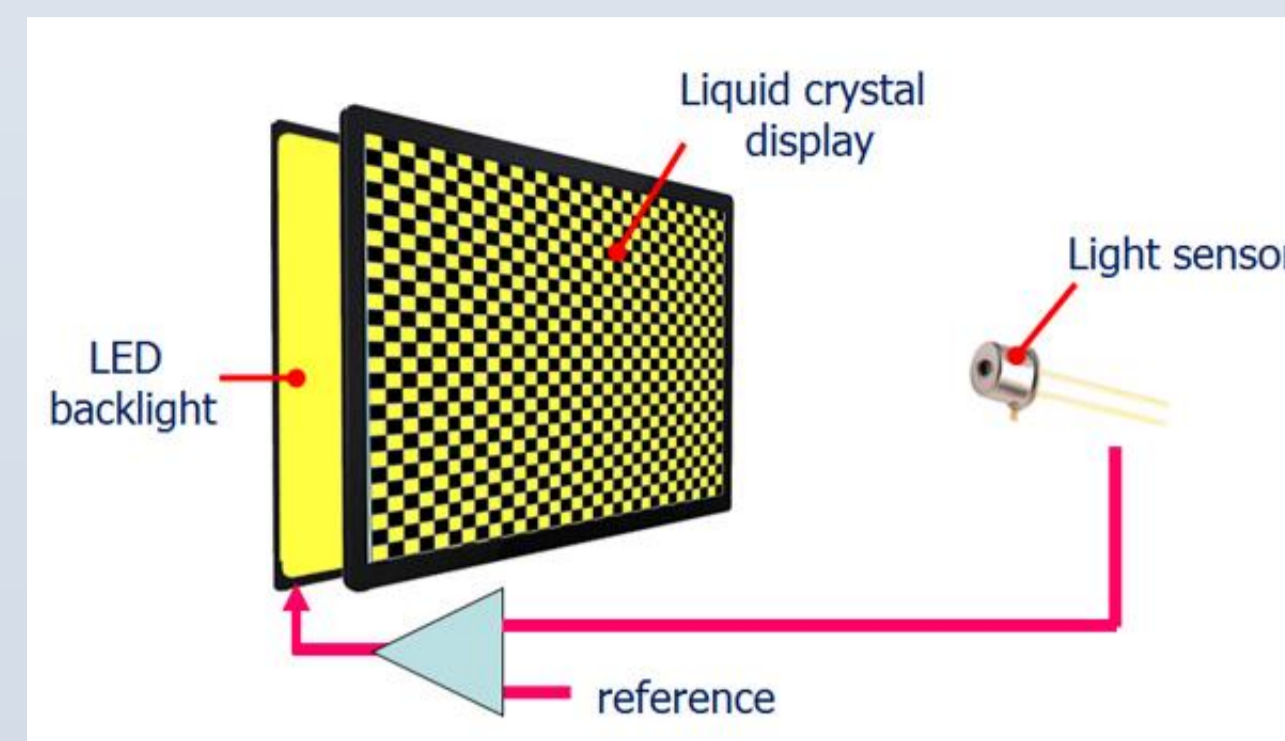
Response to a pattern reversal stimulation



Response to a pattern on-off stimulation

Unique features:

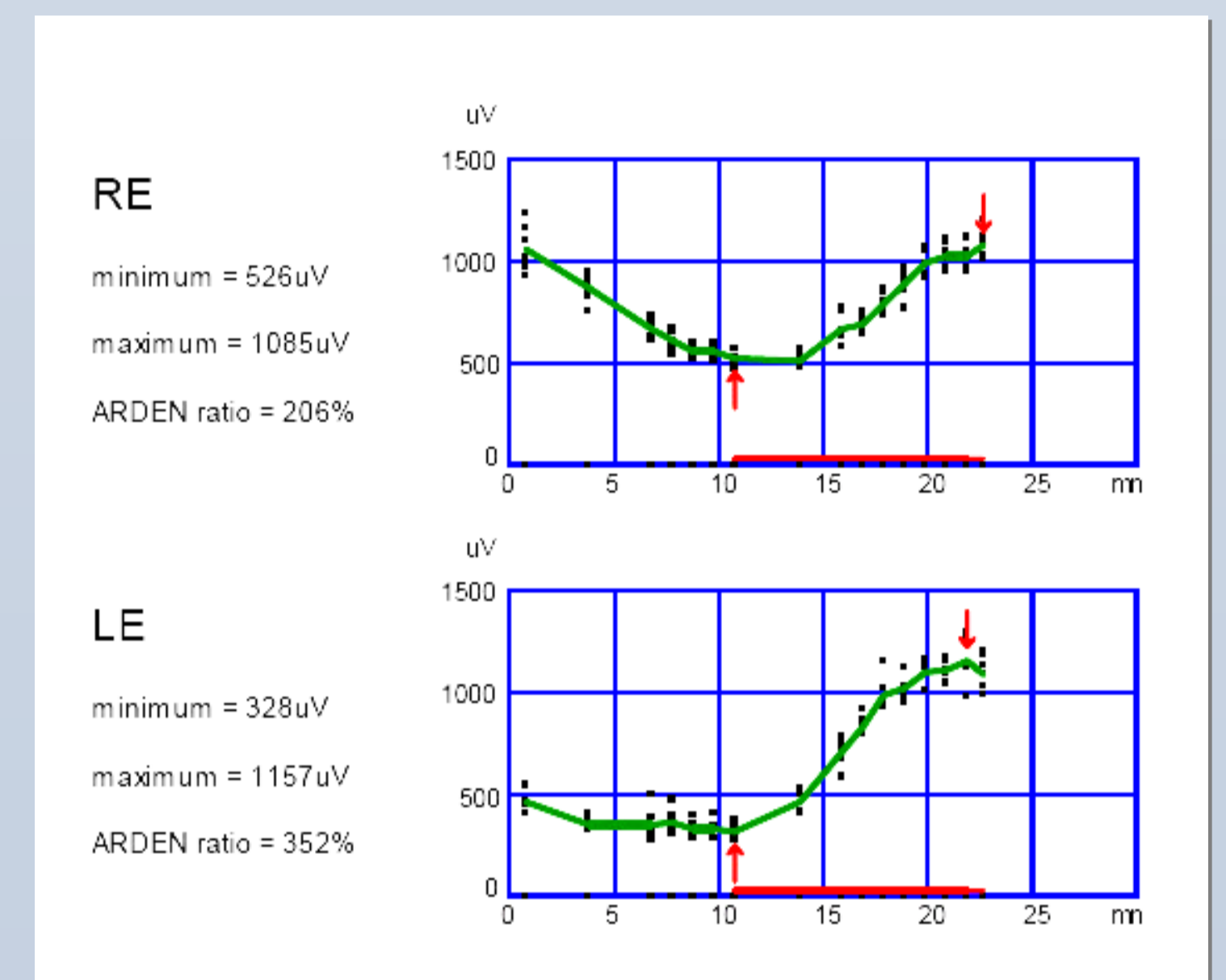
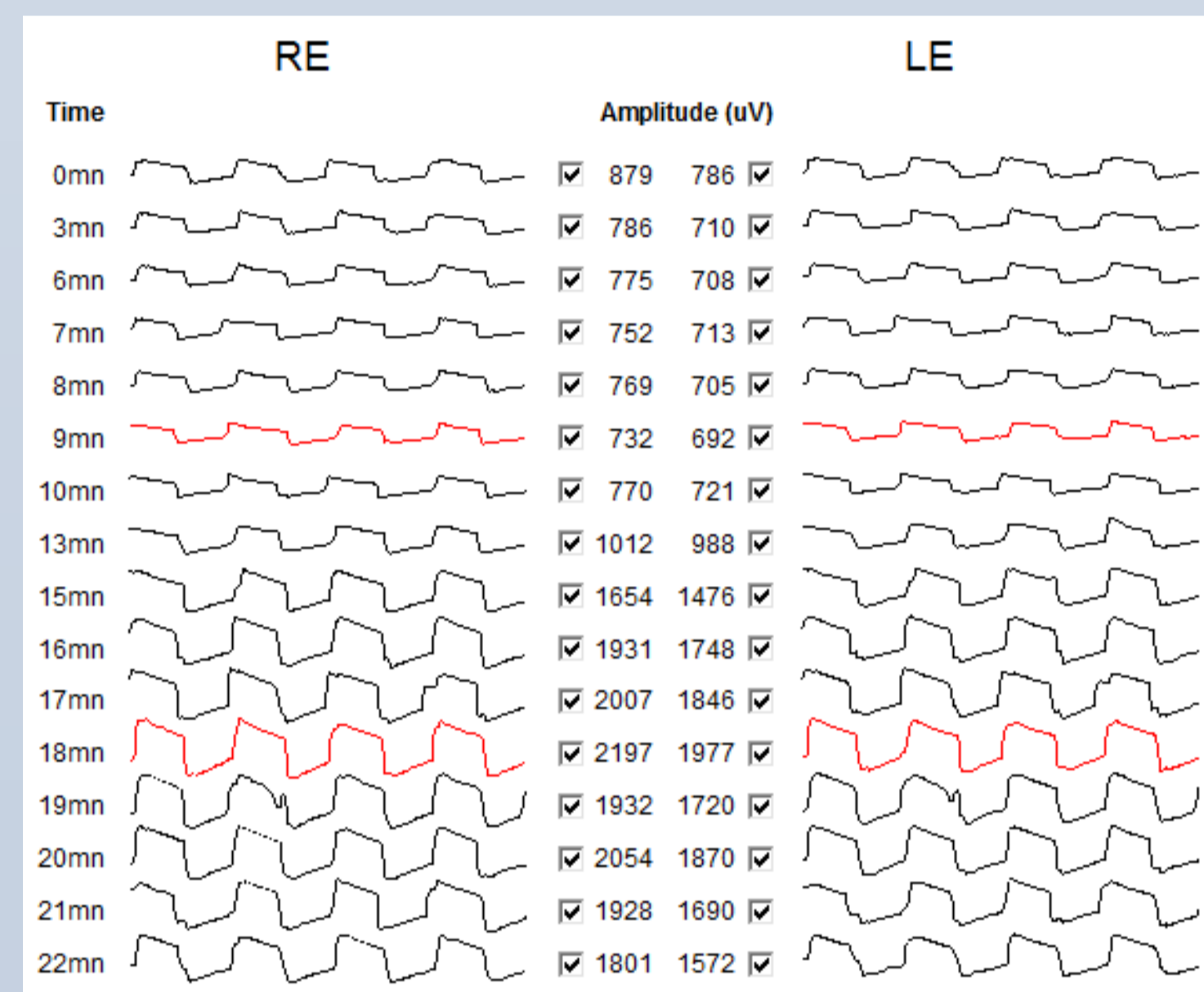
- Active control of luminance
- Statistical analysis of the reliability of responses



Principle of the active control of luminance

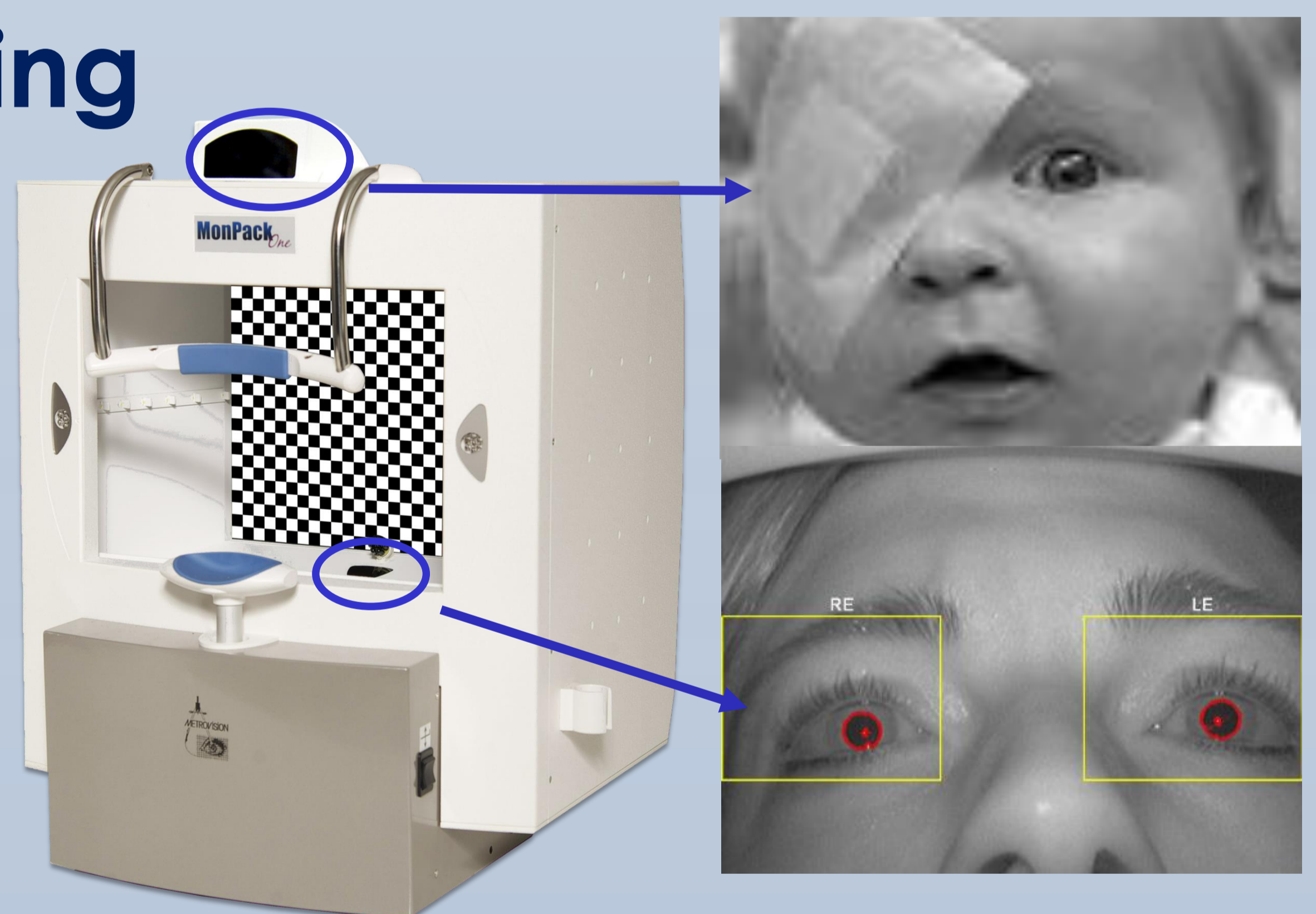
# Sensory EOG

Evaluation of responses from the pigment epithelium.



# Fixation control and video imaging

All stimulators are equipped with a near-infrared camera for near vision tests (30 cm).  
On the MonPackONE stimulator a second camera is proposed as an option for distance tests (1 m).  
Another option allows the video recording of exams which may be used for a post-exam analysis of responses .



# Examinations and options

## Vision electrophysiology exams

- Flash and pattern ERG and VEP exam PVM-EL
- Sensory EOG exam PVM-ES
- Multifocal ERG and VEP exam PVM-MU
- Sweep VEP exam PVM-SS
- Multifrequency VEP exam PVM-ST

## Options

- Electric table HVM-TABLE
- Additional camera for distance tests HVM-CAMERA
- Set of large field refractive lenses HVM-OPTI
- High speed camera (200Hz) HVM-camera-200
- Video and eye movement recording (during visual field and other exams) PVM-CF
- Portable flash stimulator for children and patient in lying position HVM-MonBaby

## Vision psychophysic exams

- Contrast sensitivity exam PVM-SC
- Dark adaptometry exam PVM-AO (ganzfeld dark adaptometry and FST)
- Visual aptitude exam PVM-AC (Landolt rings, ETDRS, glare test, color test)
- Visual field exam PVM-CV (automated static perimetry)
- Visual field PRO exam PVM-CW (Goldmann, Blue/Yellow & Motion perimetry)
- Attention visual field exam PVM-UF
- Macular pigments exam PVM-PI
- Metamorphopsia exam PVM-ME

## Eye movement exams

- Electro-nystagmography exam PVM-EO
- Video-oculography exam PVM-YE
- Pupillometry exam PVM-PU
- Scan path analysis exam PVM-SA
- Baby vision exam PVM-EN



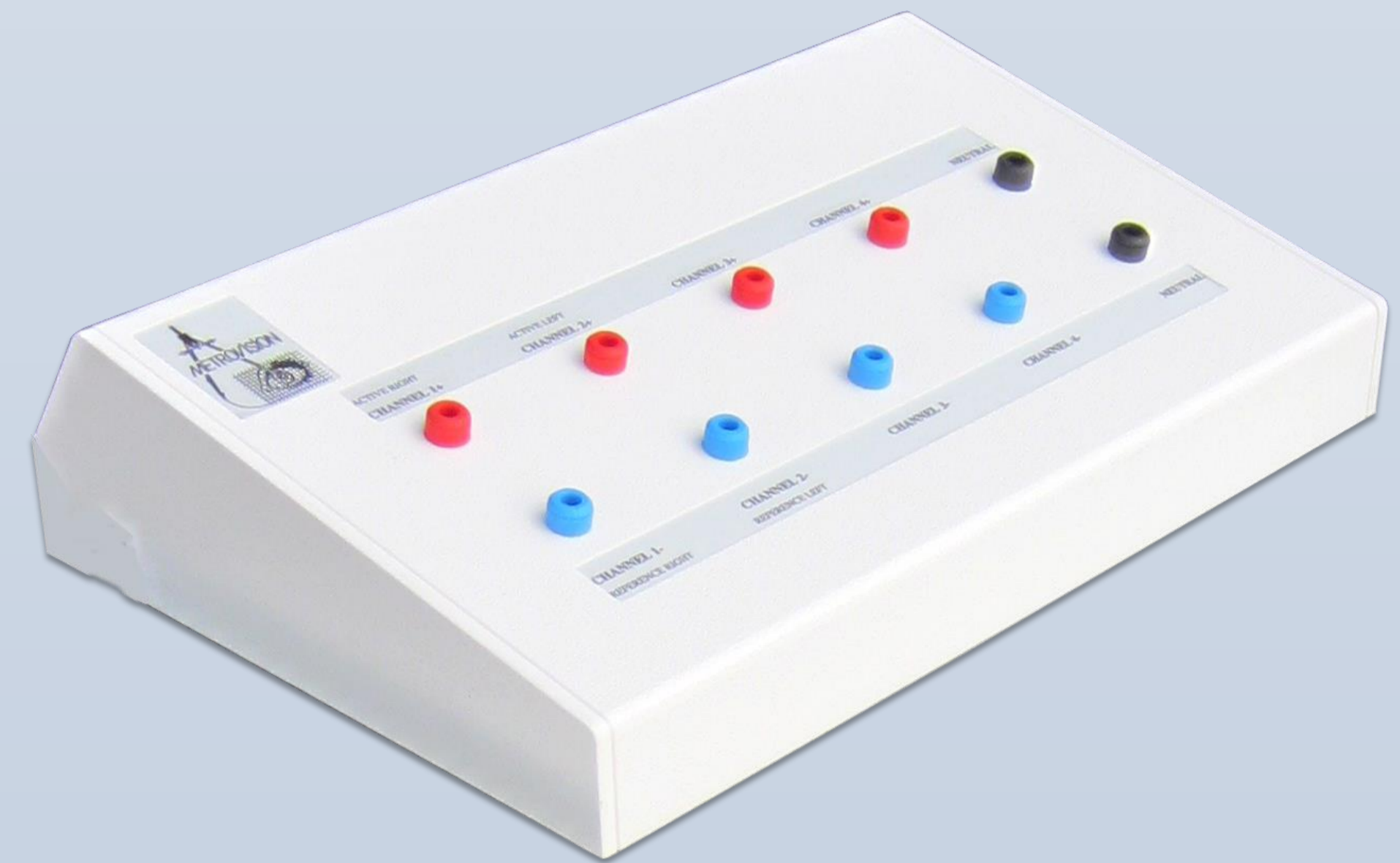
## MonPackONE stimulator

Compact and universal stimulator:

- Combines ganzfeld, pattern and multifocal stimulation functions
- Active control of luminance (patent pending)

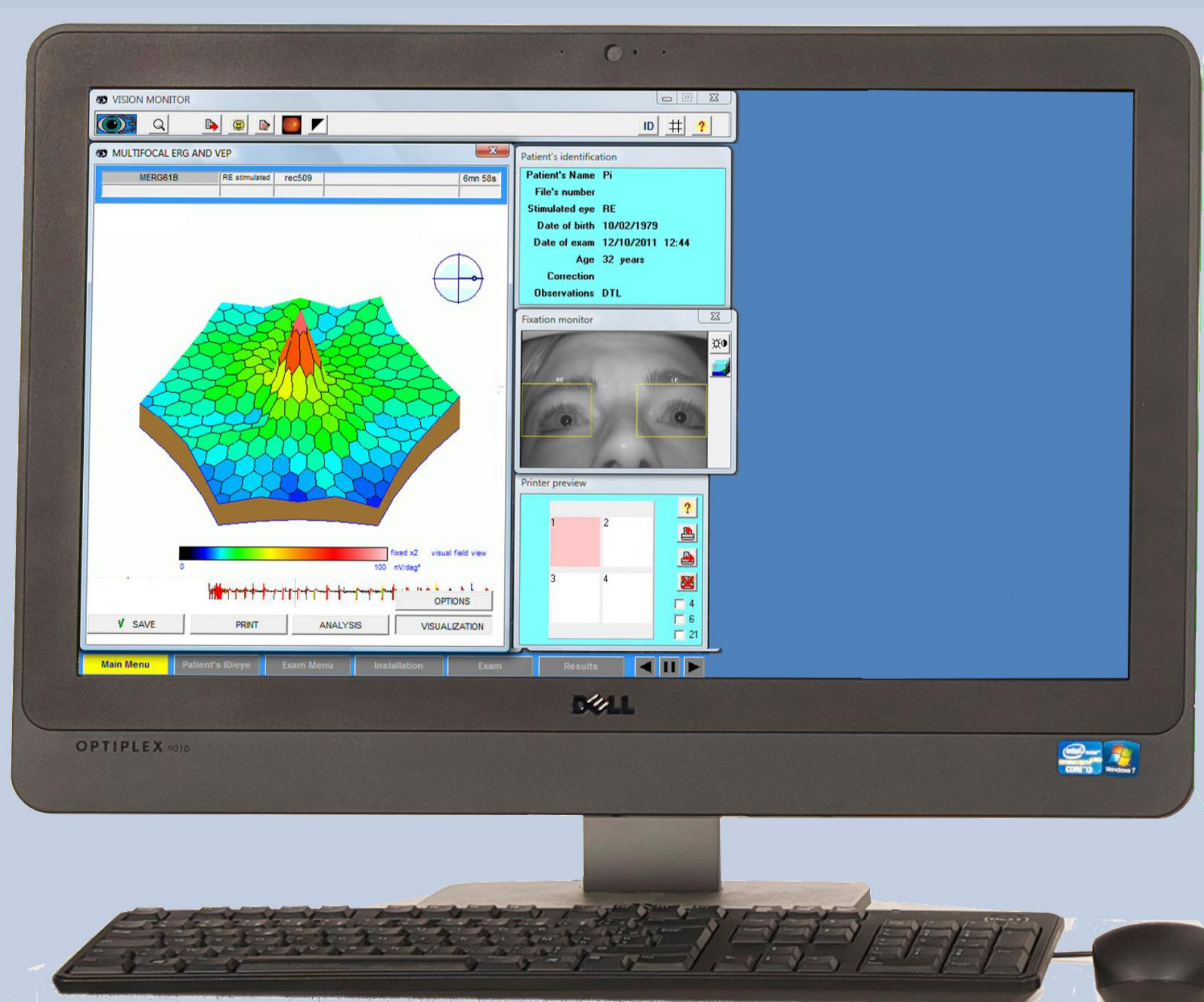
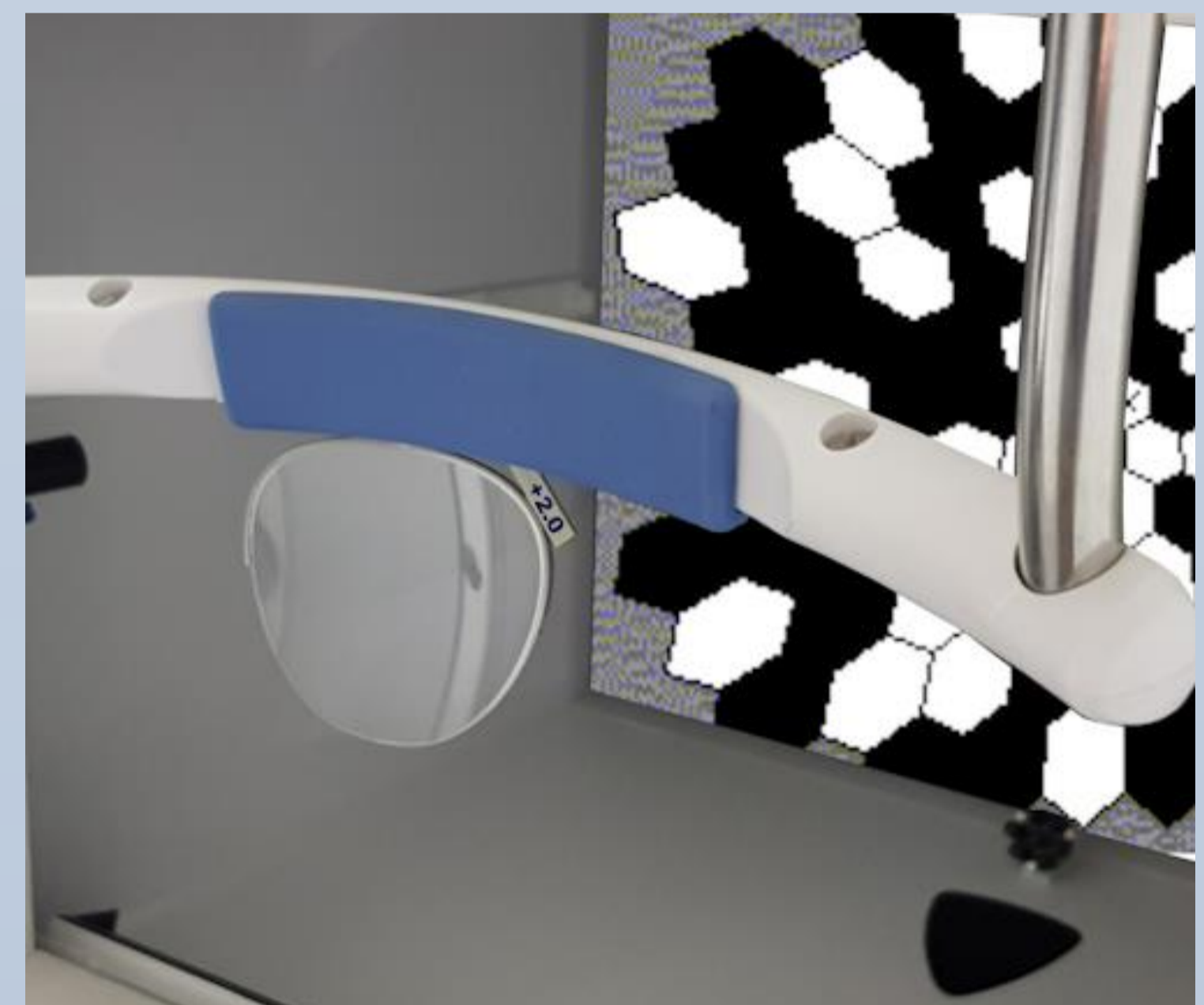
## Bioelectric amplifiers

- 2, 4 or 5 channels
- High performances (input noise <math>< 0,5 \mu\text{V pp}</math>, CMRR > 115 dB, input impedance > 200 Mohms)
- Optoelectronic isolation
- Automated control of electrode impedances



## Correction of refractive errors

A set a large field lenses (55 mm in diameter) prevents errors resulting from the lens rim or lens misalignment in multifocal ERG exams



## User interface

- Standard PC with Windows 10 or 11 environment
- Access to results through the computer network
- Easy exportation of data
- Video monitoring window
- Single data base for all exams
- Internet assistance and maintenance
- DICOM option

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MonPackONE-US version 26/02/2024

