For those who need an easy to use multifocal electrophysiology system at an affordable price. This system is available in stand-alone form or as an addition to LKC’s visual diagnostic systems. Multifocal ERG testing measures the function of areas of the retina, while multifocal VEP testing provides objective assessment of the optic nerve. Testing with long binary m-sequences assures accuracy. LKC’s user interface provides simplicity and power in one.

Features

- Multifocal ERG and Multifocal VEP capability
- Uses long \( (2^{12} \text{ to } 2^{15}) \) binary m-sequences
- Easily added to any modern EPIC or UTAS
- Fully ISCEV compliant
- Core stimulus presentation and analysis software were developed at a major university research laboratory
- Fully automated control of amplifier, filters, and stimulus parameters
- Data Storage: Relational database
- Data Export: Graphics and data can be exported to other Windows programs

mfERG

- Stimuli: 19, 61,103 or 241 scaled or equal-sized hexagons
- Record from 1 or 2 eyes simultaneously
- Data Display:
  * Trace array of waveforms
  * 3-D amplitude map
  * Quantitative response data
  * Regional averaged waveform display
  * Ring ratios automatically calculated

mfVEP

- Stimuli: 4, 16, or 60 wedges with pattern reversal or onset presentation
- Multi-channel recording with automatic selection of best channel
- Data Display:
  * Trace array of waveforms
  * Overlapped interocular comparison
  * Regional average waveform display
  * Average multiple tracings for improved noise
Multifocal ERG/VEP Specifications

Hardware Configuration

- Works with UTAS-E 3000, UTAS-E 4000, UTAS, and EPIC-4000 systems. (Computer upgrade may be necessary for older UTAS-E 3000 and EPIC-4000 systems.)
- Available as a stand-alone system.
- Uses standard EPIC or UTAS pattern monitor (100 cd/m²) Optional high-brightness (500 cd/m²) monitor.
- Chin rest assembly to assure constant patient-to-screen distance.
- Patient monitoring camera with image visible on operator screen.

Research Papers Based on the Stimulus Presentation and Analysis Engine of LKC’s Multifocal ERG


All specifications subject to change.