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LKC TECHNOLOGIES

RETeval™ Visual Electrodiagnostic Device

This revolutionary device measures the 30 Hz flicker ERG, which has a strong correlation to retinal ischemic diseases such as diabetic retinopathy.

▷ Design Features

- Handheld
- Utilizes skin electrodes
- Mydriatic-free

▷ Clinical Capabilities

Reports 30 Hz flicker implicit time and amplitude, which have been

- Shown to correlate well with vision-threating diabetic retinopathy, and
- Used in the monitoring of Vigabatrin toxicity

▷ Easy to Use

- Instant results displayed on screen
- Test duration is less than 5 minutes per patient
- Built-in pupillometry adjusts flash and background intensity enabling testing without pupil dilation
- Single electrode array is placed on skin for each eye (*Patent Pending*)
- IR camera allows visualization of eye during test
- Simple joystick control
- Multi-lingual capable user interface
- Fixation LED for the patient
- Blink and electrode-disconnected detection for more reliable results
- Built-in photometer ensures correct brightness and color of stimulation
- EMR interface available

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The RETeval device is CE Marked and licensed for sale in Canada, but not yet FDA approved. In the United States, it is currently available for research use only under IRB approval and control. The RETeval device may be covered by one or more of the following US patents and their foreign counterparts: 7,540,613. Additional patents pending.

▷ Specifications

Input Type	Custom 3 pin connector with positive, negative, and right leg drive signals.
Light source	Red (621 nm), Green (530 nm), Blue (470 nm) LEDs
Noise	< 0.1 µV at the flicker frequency
CMRR	> 100 dB at 50-60 Hz
Frequency Range	DC-coupled
Flicker Frequency	Approximately 28.3 Hz
Data Resolution	Approximately 71 nV / bit
Input Range	± 0.6 V
Sampling rate	Approximately 2 kHz
Timing accuracy (electronic eye)	< ±0.1 ms
Timing precision (human eye, 1σ)	Typically < 1 ms for retinal illuminances ≥ 4 Td•s
Safety	Battery-powered. Complies with optical, electrical, and biocompatibility safety standards.
Power source	Li-Ion battery allows testing of approximately 70 patients before recharging
Recharge time	4 hours - charger included
Size	2.8″ W x 3.8″ D x 9″ H (7 cm x 10 cm x 23 cm)
Weight	8.5 oz. (240 g)
Docking station	Convenient storage location, charging stand, and USB connectivity to your computer and network
Protocols	Choose from 8 retinal illuminance (Td•s) and 6 luminance (cd•s/m^2) protocols that run 1 or more tests. Custom protocols possible.

All specifications are subject to change.

LKC Technologies, Inc., established in 1975, is an ISO 13485:2003 & 2012 certified, CE marked, and FDA-registered medical device manufacturer with quality products installed in fifty countries.

Scan barcode or type in link to see a video demonstration of the **RET***eval* device.

http://fqrct.com/t/474682e

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