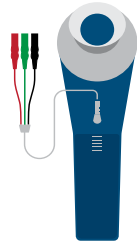


## 1. SET UP

- 1 Press the power button near the bottom right of the screen.
- 2 Connect the RETeval adapter cable for DIN electrodes as shown to the right (cable towards the top of device).



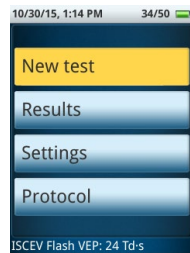
The electrodes and supplies required for VEP testing are not included with the RETeval device package. Please order the RETeval Flash VEP Electrode & supply kit from your distributor or from LKC at [store.LKC.com](http://store.LKC.com).

## 2. CONFIGURE DEVICE FOR TESTING

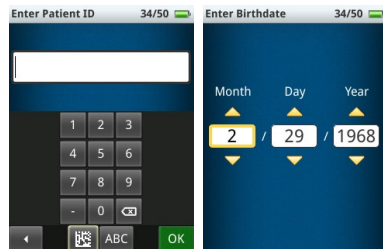
- 1 Choose the testing protocol you'd like to use:
  - Go to "Protocol" then "Change" then "Common ISCEV"
  - Choose either ISCEV Flash VEP protocol and then "Save"

*TIP: Candela protocols (ending in cd-s/m<sup>2</sup>) should be used with DILATED patients. Troland protocols (ending in Td-s) can be used with either NON-DILATED or DILATED patients.*

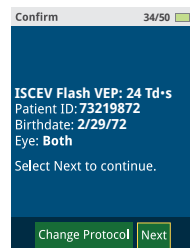
- 2 Select "New Test" on the main menu.



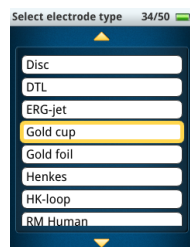
- 3 Use the joystick or patient data barcode application (<https://lkc.com/barcode>) to enter the patient ID and birthdate.



- 4 Confirm that the protocol, patient ID, and birthdate are correct. Select "Next" to proceed.

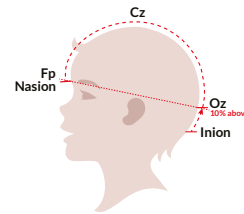


- 5 Select the appropriate electrode.



## 3. PATIENT PREPARATION

- 1 Prior to beginning the test, the patient's eyes should NOT be dark adapted.
- 2 The test should take place in a dimly lit room.
- 3 Clean the top of the forehead and one earlobe using NuPrep skin preparation gel.
- 4 Identify the Oz position, part the patient's hair, and clean with a skin cleanser pad.
  - For an adult with a normal-sized head, the Oz is located about 2.5 cm above the inion on the midline.
  - For children, the Oz point is located on the midline, 10% of the distance above the inion towards the nasion.



## 4. CONNECT ELECTRODES

- 1 Connect the electrodes as follows:

### a Active recording electrode

Place the recording electrode to the identified Oz position (positive).

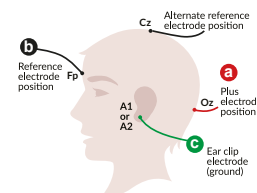
- In case of a gold cup electrode, apply electrode conductive adhesive paste inside the gold cup.
- Separate the hair away from the recording site and press the electrode in place. The electrode should contact (mostly) scalp and not sit on top of hair.

### b Reference electrode

Place reference electrode on the forehead, just below the hairline (usually an ECG electrode with a ground reference lead attached).

### c Ground electrode

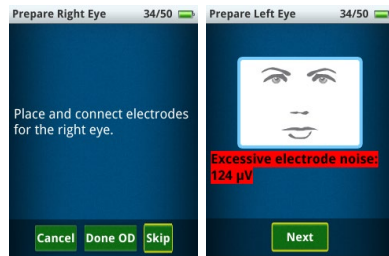
Apply electrode gel to the ear clip and place it on the earlobe.



- 2 The screen will present options prior to connecting the electrodes to the RETeval adapter cable for DIN electrodes. "Cancel" will cancel the entire test. "Done OD/OS" will skip all tests of the specified eye. "Skip" allows the user to skip current test step.



- 3 Connect the electrodes to the RETeval adapter cable for DIN electrodes, which is connected to the device. The device waits for the electrodes to be connected and also warns you if the connection is noisy. Select "Next" after any noise issues are resolved.

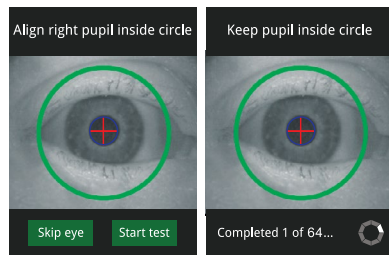


Device waiting for electrode connections      Warning screen for too much noise

## 5. BEGIN TEST

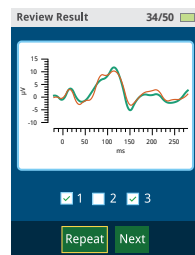
- 1 Ask patient to cover the eye that is not being tested with their hand. Children may prefer to keep the contralateral eye uncovered.
- 2 Make sure the patient is relaxed and does not tense any muscles. Ask them not to talk.

- 3 Place the eye cup of the device so that it rests evenly over the patient's right eye first, if doing a bilateral test. Ask the patient to look at the red light in the center of the ganzfeld. Ensure the patient's pupil is located within the green circle shown on the screen. Select "Start test." Device will progress through each step.

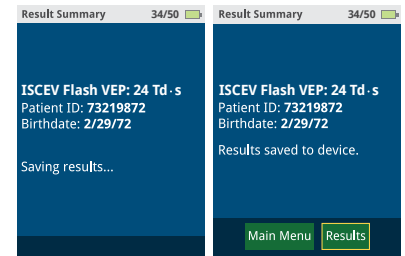


**TIP:** For Td protocols, the whole pupil must be visible to the operator. The test will not proceed if it is not visible. Make sure to wait for the blue circle with red crosshatch to appear over the pupil.

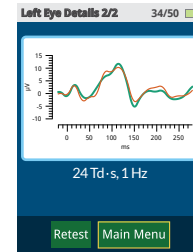
- 4 Upon completion of a step, the waveform will be displayed. Repeat each step at least once to demonstrate reproducibility. Uncheck any undesired replicates to remove them from the report. Select "Next" to proceed to the next step.



- 5 After all steps are completed, the device will automatically save the results.



- 6 You will have the option to "Retest" the patient once you've viewed their results.



- 7 Once testing is completed, disconnect the RETeval DIN adapter cable from the electrodes. Remove electrodes and clean any leftover gel/paste from the patient and electrodes. Both the gel and paste are water soluble.

## 6. FILE REPORT

- 1 Connect the RETeval device's docking station to your computer using the USB cable. Set the RETeval device in the docking station. On your computer, the RETeval device will show as an external drive. The PDF reports are located in the "Reports" folder. The PDF report follows the format of "PatientID\_DOB\_TimeStamp."

## 7. CLEAN DEVICE

- 1 Clean the eyecup and DIN adapter cable between patients. The RETeval device exterior can be cleaned with either 70% isopropyl alcohol or alkyl dimethyl benzyl ammonium chloride.
- 2 Please follow the instructions of the manufacturer of the VEP electrodes for cleaning and disinfection.

Reordering electrodes? Please visit [LKC's online store at store.lkc.com](http://LKC's online store at store.lkc.com).

### LKC Technologies, Inc.

2 Professional Drive, Suite 222, Gaithersburg, MD 20879 USA  
t: +1 301.840.1992 | e: sales@lkc.com | www.lkc.com

### LKC Europe | Finland

t: +358 40 8486625 | e: europe@lkc.com | www.lkc.com



Questions? Send us an email at [support@lkc.com](mailto:support@lkc.com) or call +1 301.840.1992



Refer to user manual before use.

© 2023 LKC Technologies  
Part #96-050 Rev-C  
MM-014 11/2023