



# **OkuStim**<sup>®</sup> Electrical Stimulation for the Eyes

Frequently Asked Questions and Advice for Applying the Therapy



#### 1. General Instructions for Use

The OkuStim system uses a weak electrical current to stimulate the eyes. For this purpose, the OkuEl® electrodes are placed on the surface of the eye with the OkuSpex frame.

To ensure optimal stimulation, the thin electrode thread has to be in contact with the surface of the eye over a length of at least 1 cm. The contact is controlled by measuring the electrical resistance. This is automatically done by the OkuStim during the entire stimulation period and is shown on the display for both eyes (OS=left, OD=right).

Usually the resistance is between 4,000 ohms and 6,000 ohms, lower and higher values are fine. The resistance varies from user to user and changes during stimulation. If the resistance is too high (above 15,000 ohms) the OkuStim will indicate this automatically with an acoustic signal.

If the resistance increases during use to the point where the stimulation is becoming painful or the OkuStim gives a sound, please check the fit of the OkuEl electrodes. Resistance is dependent on other influences, too, such as eyelid movement during stimulation and dryness of the eyes.

It is normal to feel the flow of current. Some users may find this uncomfortable. This is, however, no reason to stop the stimulation. The application of the therapy should not be painful.

The silver threads of the OkuEl electrodes can appear in different shades of grey and undulations, which may change during stimulation. This is normal and can have an influence on the resistance of the electrodes.

As long as the expiry date has not passed, electrodes can be used no matter which shade of grey and undulation. Electrodes must never be used more than once.

#### 2. Can I do anything wrong and cause myself harm?

The stimulation is safe as long as the system is used correctly. This has now been proven in five clinical studies.

It is important that the application is carried out according to the instructions in the user manual.

The correct application is trained in an individual instruction session.



#### 3. What is the meaning of the numbers in the display?

The numbers in the display indicate the electrical resistance between the OkuStim and the body. The OkuStim system measures the resistance continuously during the stimulation sessions and shows it in the display for both eyes (OS=left, OD=right). The resistance is a measure of the contact between the electrode thread and the surface of the eye.

Usually the resistance is between 4.000 ohm and 6.000 ohm, lower and higher values are fine. The resistance varies from user to user and changes during stimulation.

With increasing resistance, the stimulation can be perceived as unpleasant, but high resistance is no reason to stop the stimulation. The application of the therapy should, however, not be painful.

If the resistance is too high (over 15,000 ohm), the display will show >15k and the OkuStim will notify you with an acoustic signal.

Patient Name 00:22:45	
OS 5750	OD 5765
2020-01-31	12:14:15

Fig.: Display of the OkuStim during stimulation. In this example resistance left: 5750 ohm and right: 5765 ohm.

### 4. What is the meaning of OS>15k and OD>15k, resp. OS<200 and OD<200?

The display of OS>15k or OD>15k means that the resistance is greater than 15,000 ohm and the OkuStim cannot stimulate. You will also hear an acoustic signal .

Interrupt the stimulation with the pause (II) button and:

- check that the OkuSpex fits well and that the OkuEl electrodes are in good contact with the eyes
- moisten the eyes with eye drops
- check if the counter electrode cables are connected
- check that the OkuSpex plug is connected to the OkuStim
- continue the stimulation by pressing the start  $\bigodot$  button

Should the message and the acoustic signal persist, please contact your optician or dealer.

OS<200 or OD<200 indicate that the resistance is too low due to a technical error. In this case please contact your optician directly.

## 5. What can I do if the stimulation is painful?

If you find the stimulation painful and unbearable, interrupt the session. Usually pain is accompanied by high resistance. One reason may be that the OkuSpex frame has slipped.

Please make sure that the OkuSpex fits well, that the OkuEl electrodes are in good contact with the eyes and that the eyes are well moistened.

Before starting or continuing with the therapy session:

- make sure that the skin, where the OkuEl counter electrodes are attached, is well degreased (e.g. with alcohol pads) and that the counter electrodes have good contact
- moisten the eyes with eye drops
- check that the OkuEl electrodes are in good contact with the eyes. The electrode thread should have at least 1 cm of contact with the surface of the eye.

If you have used OkuEl counter electrodes from an open package, make sure that they have not dried out. In this case the resistance is much higher. If in doubt, replace the counter electrodes with fresh ones.

If you still find the stimulation unbearable or even painful, interrupt the session and moisten the eyes again with eye drops. After a short break, you can continue the stimulation.

If the therapy remains painful and unbearable, contact your doctor or optician.

# 6. Discoloured OkuEl electrodes

The silver threads of the OkuEl electrodes can appear in different shades of grey, which also change during stimulation. This is normal and can have an influence on the resistance of the electrodes. But even electrodes with dark silver threads can be used as long as the expiration date is not exceeded.

OkuEl electrodes must never be used more than once.



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