**Videonystagmography**

The videonystagmography performed by a camera and infra red light measures and records the eye movement, which is analyzed by the software. NYSSTAR is the essential tool to study the various functions of balance, namely the oculomotricity (ocular saccades, pursuit, optokinetic nystagmus) and the study of the vestibular system (spontaneous and positional nystagmi, rotary tests, caloric tests). NYSSTAR is complementary with the nystagmography and is able to record all the eye movements, as well horizontal, as vertical and even the rotary movements. The calibration carried out by camera is stable and should only be made once at the beginning of the examination. The recording by camera removes all artefacts due to the changes of polarity between the electrodes and the skin like with the interferences of electric and electrophysiological origin.

**Disoft Software**

NYSSTAR is accompanied by powerful data-processing software, which simplifies the task of the doctor. According to the tests carried out, the software analyzes and measures various parameters:

- number of jolts or ocular movements
- amplitude, frequency
- slow phase speed of nystagmus
- latency, phase, distortion
- gain
- symmetry or asymmetry of the responses
- paresis or labyrinthic hypoexitability, directional preponderance of nystagmus
- comparison of the answers opened eyes, closed eyes and measure of ocular fixation indices

**The NYSSTAR System**

NYSSTAR is made up of a USB camera. Connected to a computer, it permits to localize the center of the pupil in real time. NYSSTAR is provided in its case with its accessories: USB camera, closed field mask, cap and USB HUB.

**Technical Specification**

- Number of channels: 1 or 2 (horizontal and/or vertical)
- Resolution: 640 x 480 pixels
- Sampling rate: 50 Hz
- Connection: USB 2.0
- Supplied by a computer
- Requires a recent computer equipped by Windows XP or Vista

NYSSTAR meets the actual IEC-601-1 standards Class I type B.