



PANO Perimeter for functional glaucoma diagnostics

Stimulus

- PANO measures the contrast sensitivity
- Targets are squares and have a size of $5^{\circ} \times 5^{\circ}$ (degrees of arc)
- Targets are made of bright and dark pixels that flicker with a frequency of 15Hz
- The contrast level ranges from 2 to 64, with 2 being the lowest contrast and 64 being the highest
- The density of the pixels is adjusted to the field of vision and decreases from the center (72×72) to the periphery (9×9)
- Targets are presented on a grey background. The average luminance of the targets equals the luminance of the background
- Targets are displayed on 54 possible locations and have a similar pattern to the 24-2 analyzer protocol of the HFA-II

Testing strategy

- Targets are displayed for 0.5 seconds at alternating positions on the screen
- The examinee has between 0.1 to 0.5 seconds after the appearance of the target to respond
- The time interval between one target and the next is random
- Determination of the threshold follows a binary staircase algorithm
- An algorithm based on multidimensional approximation reduces testing time without reducing sensitivity
- In case of a follow-up examination, PANO uses the information that is already present to further reduce testing time
- A feedback loop increases patient focus
- PANO measures false positives by registering erroneous motor responses outside the time frame

Examination procedure

- In case of a refractive error, the examinee needs to be corrected for far vision with spectacles / contact lenses
- The examinee must fixate the green square at the center of the screen and is asked to respond to stimulus by mouse click
- A simulation phase precedes the actual testing phase



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Technical data

- Base unit: 290x375x470mm (WxDxH) - approx. 5 kg
- Laptop: 15", preconfigured

Scope of delivery

- Base unit, partly disassembled
- Laptop with Kensington lock
- Computer mouse, modified
- Software package on USB dongle



Subject to change without notice

The device will only be sold to institutions in developing countries for cost price. There are no costs for the software.

Please contact us

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