

### Fovea-to-Disc (FoDi™) Alignment Technology

The SPECTRALIS® platform features a unique fovea-to-disc (FoDi) alignment technology that automatically tracks and anatomically aligns circle scans, improving accuracy and reproducibility of RNFL measurements. FoDi alignment technology helps overcome measurement errors due to changing head/eye position during scanning.

The exclusive SPECTRALIS FoDi alignment technology improves data integrity of the normative database for RNFL thickness. Using TruTrack™ technology, all scans in the database are aligned along the fovea-to-disc axis ensuring point-to-point thickness comparisons so you can be confident in the accuracy of the results.

# 1. Patient Position Can Influence RNFL Measurements

### Without Alignment

Head tilt and eye rotation affect the anatomical alignment of the scan

Exam 1 Head Position

Exam 2

Head

Position









2. Attain Higher Confidence When Comparing to Normative Data

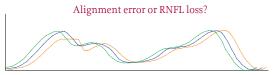
Databases without alignment have wider confidence intervals



Even a slight head tilt can shift the start/stop point of the circle scan, adding alignment error to normative databases.

3. Improve Accuracy to Detect Individual Change

## Test-Retest variability is greater without alignment

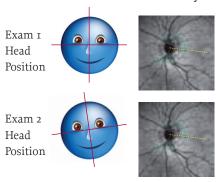


In this example, RNFL loss cannot be distinguished from alignment error.

Baseline — Exam 2 — Exam 3 —

### With FoDi Alignment

Fovea-to-Disc alignment corrects for unwanted rotation and follows the anatomy of the eye



### Using FoDi narrows the database confidence interval

SPECTRALIS FoDi alignment comparison to normative database

FoDi technology ensures all circle scans start/ stop at the same anatomical point, providing point-to-point accuracy between scans and eliminating alignment error in the database.

### FoDi alignment reduces noise caused by misalignment of scans



Change over time can clearly be identified as RNFL loss.

Baseline — Exam 2 — Exam 3 —

RNFL Single Exam Report OU with FoDi™

Name, diagnosis, and any information entered into the "Patient Comment" field.

#### **Fundus Image** information

The string above each fundus image notes the settings used for that image. In this example:

- "IR" is imaging modality (IR, FAF, FA, IC GA, RF).
- ■"30°" is the field of view.
- "ART" indicates that the automatic real time function was activated during image capture.
- "[HS]" is resolution setting (High Speed/ High Resolution).

#### **OCT Image** Information

The string above each OCT image notes the settings used for that image. In this example:

- "ART" indicates that the automatic real time function was activated during image capture.
- "(16)" is the number of averaged frames.
- "Q:25" is the quality score.
- "[HS]" the resolution setting (High Speed/High Resolution).

Tracking Laser Tomography Patient: Demo- Spectralis, Glaucoma DOB: 11 Mai 1964 Exam. Diagnosis: IR 30° ART IHS1 R 30° ART IHSI OD Symmetry OD - OS OS

### Classification

Notes

Date: 15.04.2010

The pie charts show average RNFL thickness (microns) for each sector of each eye. Global (G) average is shown in center. Sector color indicates classification versus normative database. The classification bar displays the classification of the worst sector in the pie chart.

#### Combined RNFL Profile

Classification OD

Outside Normal Limits

Plots the RNFL thickness graph of both eyes. If the correlation between eyes is good, the lines on the graph will be very similar.

#### RNFL Thickness Profile

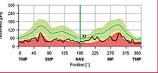
RNFL Single Exam Report OU with FoDi

OS

Classification OS

Outside Normal Limits

The black line is thickness values of the patient's scan around the optic disc from temporal, superior, nasal, inferior, to temporal (TSNIT). Colors indicate normative data ranges (see Classification Colors). The dark green line is average thickness of the normative database.



### Symmetry

HEIDELBEIG

Displays the difference (in microns) between thickness of corresponding quadrants of right and left eyes. If the correlation between eyes is good, the values will be close to zero.

#### Fovea-to-Disc Alignment

All patient images track fovea-to-disc alignment to ensure anatomically accurate start/stop of the TSNIT data. This helps minimize variability due to patient head orientation for both follow-up exams and comparison to normative data.

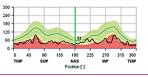
#### Classification Colors

Indicate comparison versus normative database. Green: Within normal limits, with

values inside the 95% normal range. Yellow: Borderline, with values outside 95% but within 99% confidence interval of the normal distribution (.o1 < P < .05). **Red:** Outside normal *limits*, with values outside 99% confi-

dence interval of the

normal distribution.





### Headquarters

Heidelberg Engineering GmbH Tiergartenstr. 15 69121 Heidelberg · Germany Tel. +49 6221 6463-0 · Fax +49 6221 646362 www.HeidelbergEngineering.com

Heidelberg Engineering, Inc. 1499 Poinsettia Avenue, Suite 160 Vista, CA 92081 Tel. +1 760-598-3770 · Fax +1 760-598-3060 www.HeidelbergEngineering.com