ADAPTICA

2WIN

2WIN APPs

CR
Corneal Reflexes
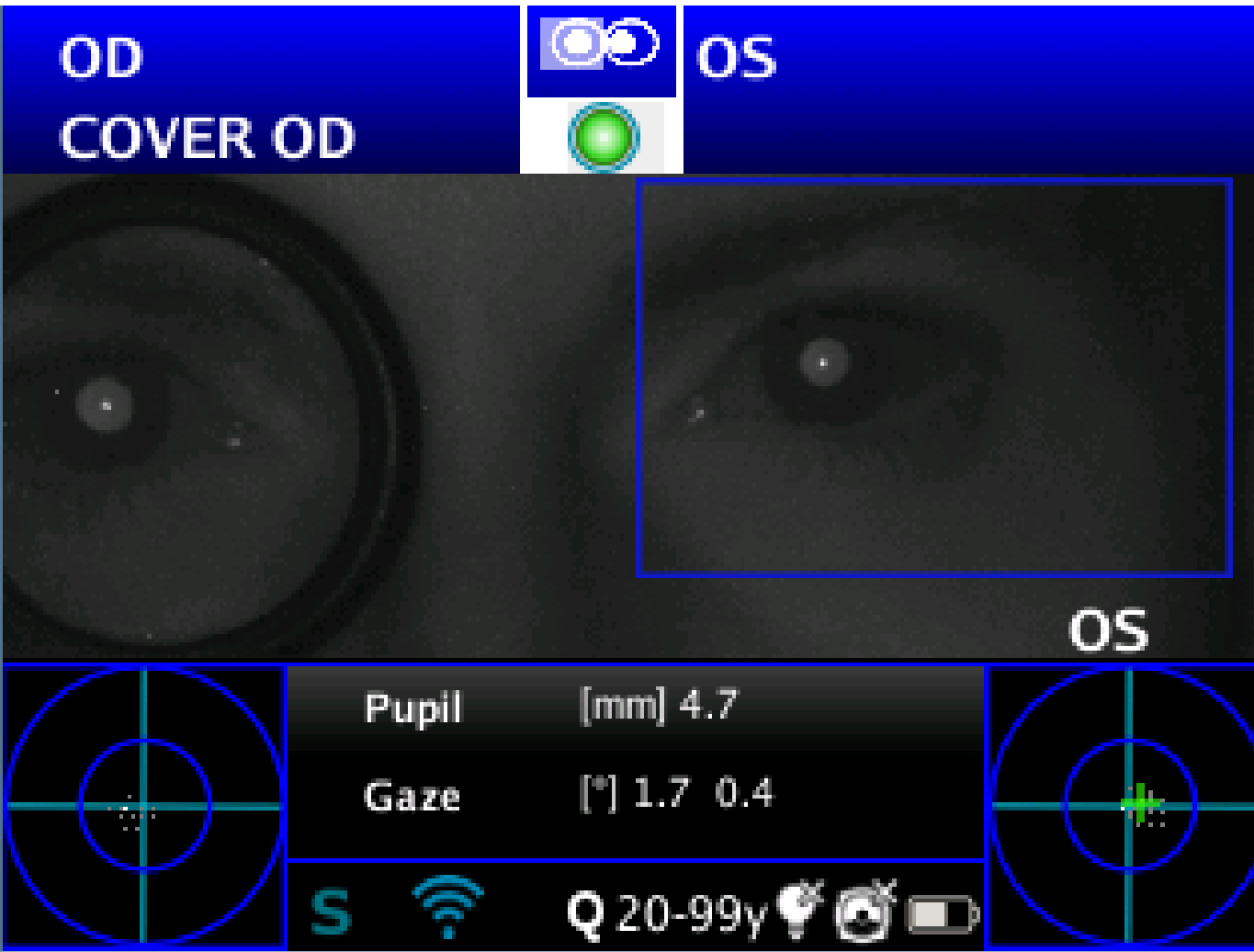
Dynamic Pupillometry

Lens Centering

.66
Intermediate Vision

Rev 1

Corneal Reflexes (CR-App)

Provides information regarding the Corneal Reflexes position, giving hints about possible phorias and tropias.

CR-App allows to collect data from 3 measurements:
- Binocular
- Right eye (cover left eye)
- Left eye (cover right eye)

CR-App results are expressed either in prismatic diopters or in degrees.

Corneal Reflexes (CR-App)

2WIN is provided with an infrared occluder to perform the cover tests.

The occluder:
- Blocks visible light, so the covered eye is free to look in any direction
- Let IR light pass through, so 2WIN is able to detect the covered pupil

The Occluder is useful also to:
- Reduce accommodation
- Increase pupil size

Corneal Reflexes (CR-App)

When a manifest asymmetry of the corneal reflexes is detected without cover test the output is:

Horizontal:
- ET: esotropia
- XT: exotropia

Vertical:
- HT: hypertropia
- IT: hypotropia

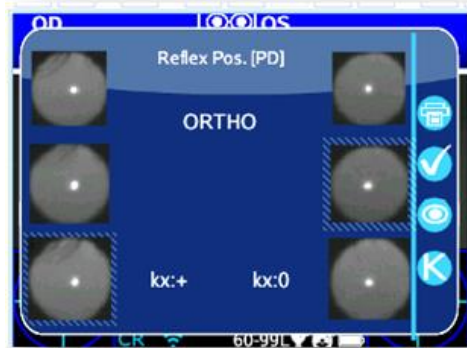When an asymmetry of the corneal reflexes appears only under infrared cover test the output is:

Horizontal:
- EP: esophoria
- XP: exophoria

Vertical:
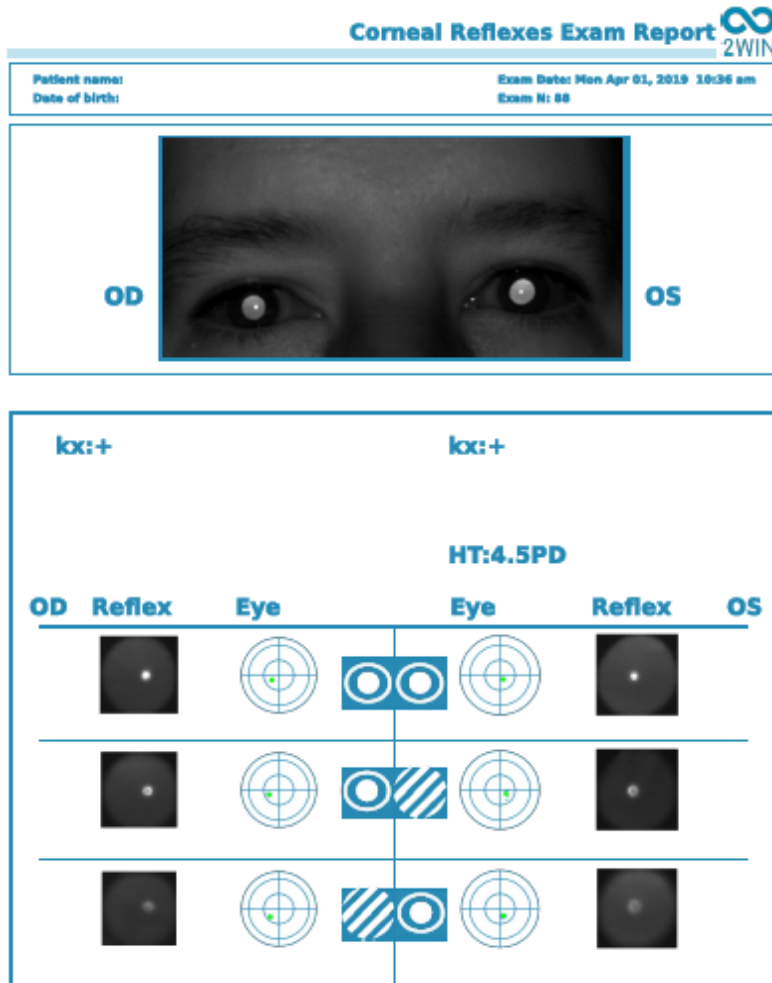- HP: hyperphoria
- IP: hypophoria

CR-App Report

Corneal Reflexes report generated by the application includes:

- Information regarding position of the corneal reflexes with respect to the pupillary geometrical center

- Graphs representing the position of the corneal reflexes

- Pupils' images

Dynamic Pupillometry (DP-App)

Automatic measurement of dynamic pupils response under programmable light stimulations. This function removes subjectivity from the pupillary evaluation and helps the detection of pupillary behavior.
The visible stimulus light can be programmed by the operator in intensity and duration.

Dynamic Pupillometry (DP-App)

DP-App exam is splitted in two steps:
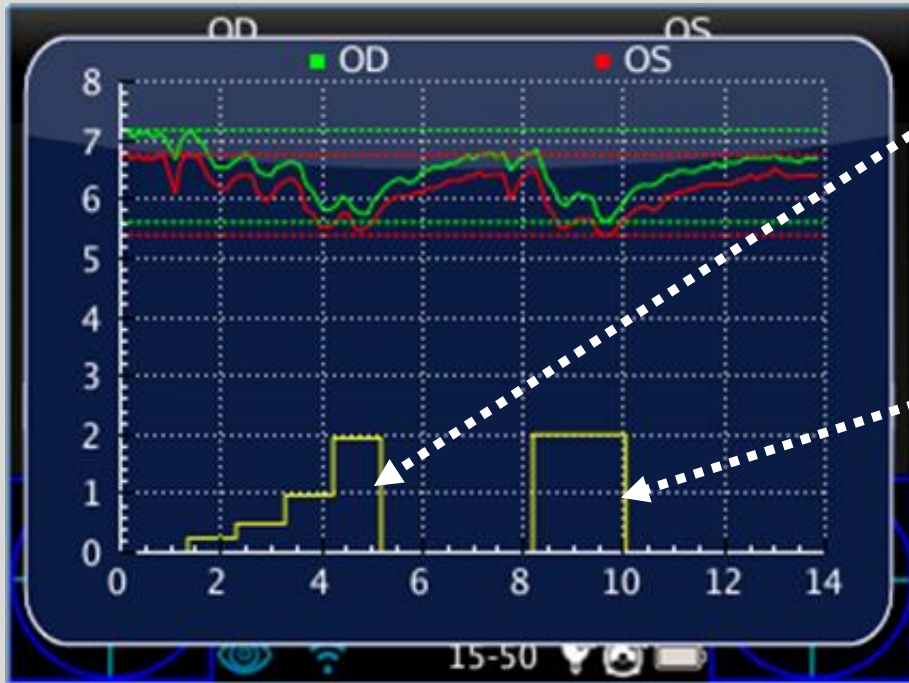
1. Calibration
2WIN emits incremental light for 1 second, measuring at the same time the pupil reaction to detect minimum and maximum pupil variation threshold.
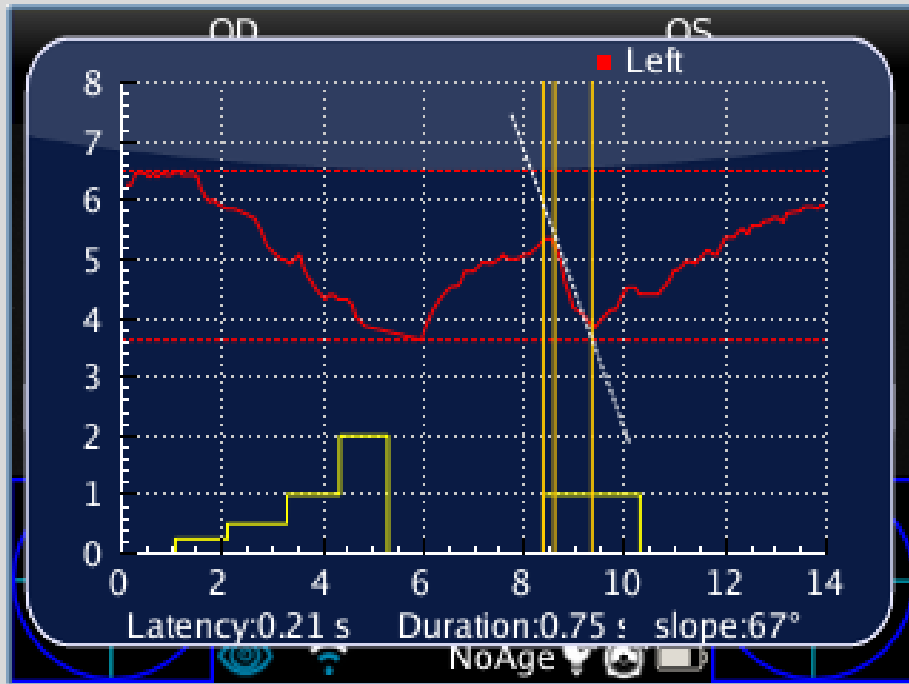
2. Exam
2WIN LEDs turn off for 3 seconds to allow pupil relaxation. Then 2WIN emits the maximum light intensity (calculated during calibration phase) for 2 seconds.
At the end 4 seconds of darkness to observe full pupil relaxation.

Dynamic Pupillometry (DP-App)

Post exam measurements

To analyze further parameters from DP-App results

Through adjustment of different lines:
- Start of pupil's reaction to light stimulus
- End of pupils' reaction to light stimulus
- Slope in the change of pupil's diameter

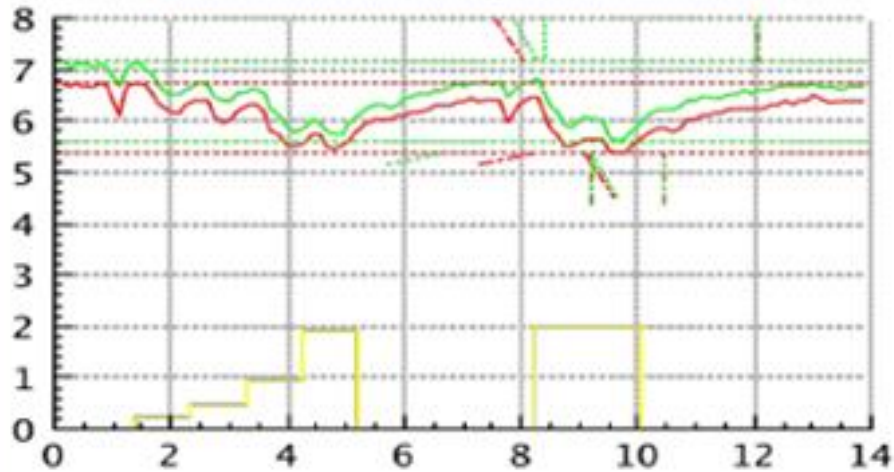You will be asked to adjust the lines for:
- Both descending and ascending side
- Both eyes

DP-App Report

Dynamic Pupillometry report generated by the application gives information regarding:

- Pupils response time

- Pupils reaction time

- Positive and negative slopes of the pupils response
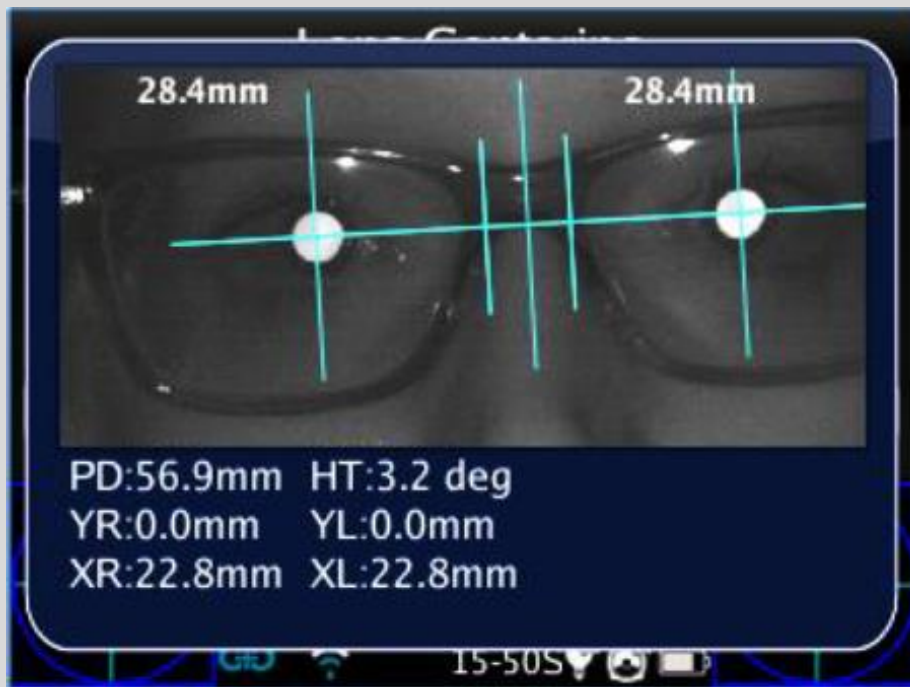
- Minimum and maximum pupils size

Lens Centering (LC-App)

Lens Centering application allows to obtain all the parameters needed for new glasses centering or to check if current glasses centering is correct.

During Lens Centering measurement the patient must wear glasses.

Lens Centering (LC-App)

LC-App provides the following parameters, after user interaction:

- Pupils distance, Head tilt

- Emi-distances: the distance between each optical axis and the central vertical reference

- The distance between the optical axis and the horizontal axis (YR, YL)

- The distance between the optical axis and the corresponding side of the bridge (XR, XL)
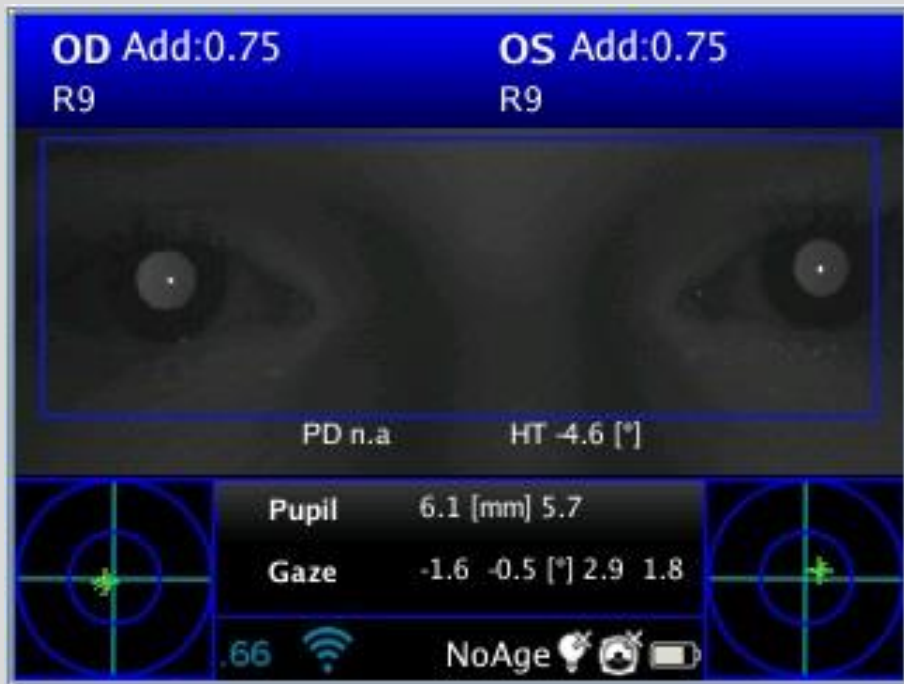
Intermediate Vision (.66-App)

Intermediate Vision application allows to measure the patient's refraction while reading at the distance of 66 cm (24"), at visual display unit (VDU).

If reading at VDU proves difficult, 2WIN calculates the necessary additional power (ADD) to restore best vision.

.66-App requires an additional mask composed of:
- A lens needed to measure refraction at 66cm
- A near point reading chart

Intermediate Vision (.66-App)

Intermediate Vision test must be realized asking the patient to wear usual glasses (if typically used) or contact lenses - not reading glasses.

.66-App provides:

- Detection of refraction at Intermediate Distance
- Identification of difficulty in visual accomodation at Intermediate Distance
- Definition of the power of the additional lens to add to the basic prescription (0 D – 3.25 D).
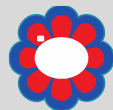
2Winny Accessory Kit

Checking kid's refraction can be a great deal of fun.

2Winny is a funny, attractive and removable mask to help the operators in daily interactions with infants and children.

It is an accessory designed to draw kid's attention on the 2WIN before starting the examination and activating the visible and audible fixation targets.

Thank you!

adaptica.com
support@adaptica.com