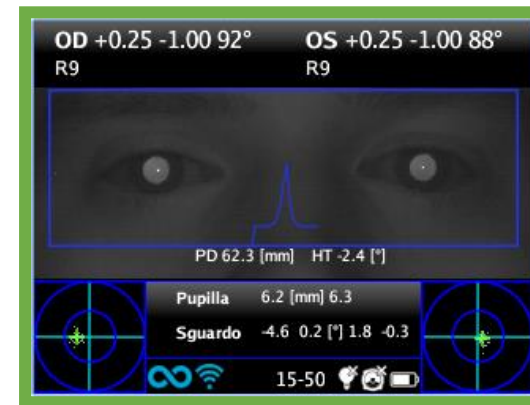ADAPTICA

2WIN

Troubleshooting & Measurement Tips

Rev 1

Troubleshooting | Light Conditions

The image looks brighter than usual due to the high presence of **IR light**.
2WIN is giving a low Reliability index (R5) and the related warning
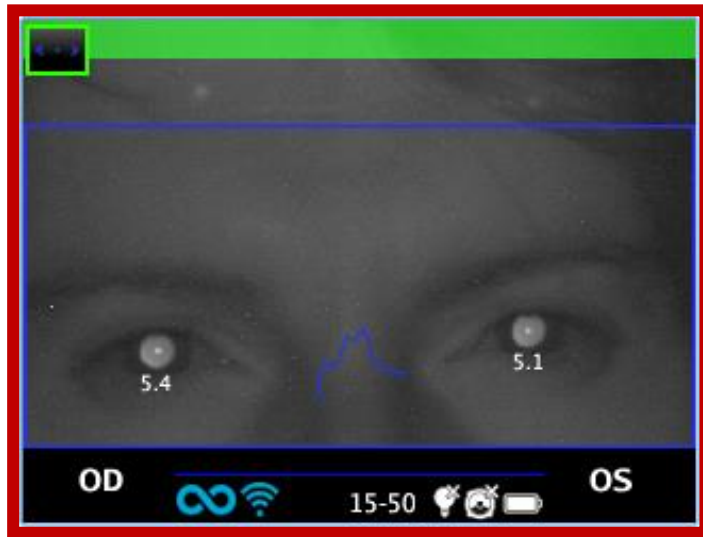

Not Good

Good
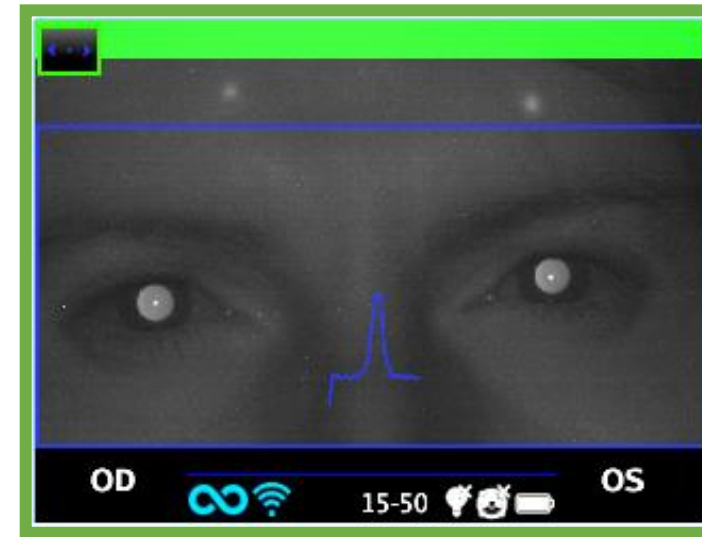
Troubleshooting | Out of Focus

To obtain the **best focused image**
adjust the distance in order to get the brightest and smallest corneal reflexes

Large corneal reflexes and not so bright

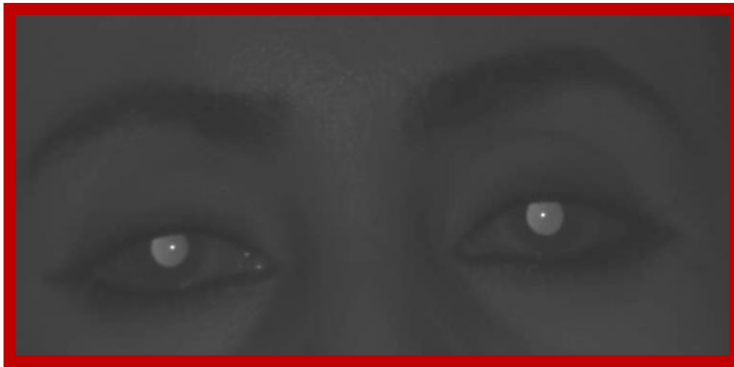Small and bright corneal reflexes

Not Good

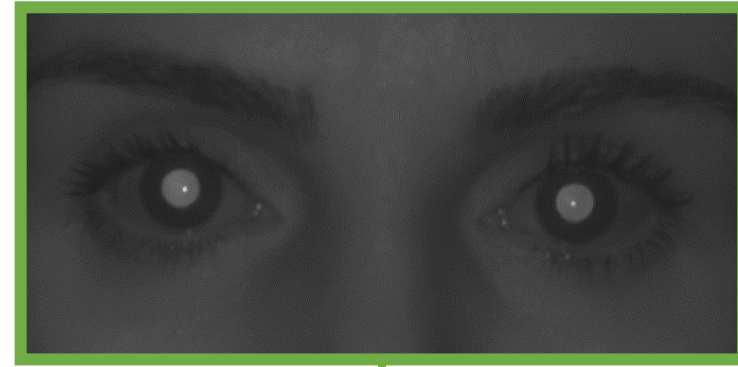**Good**

Troubleshooting | Eye Aperture

2WIN uses the signal light coming back from pupils
For a good quality exam 2WIN needs **full pupils aperture**

Eye's aperture is not good.
This may affect the Cylinder output, or
may result in a FIXATION error

Eye's aperture is good. 2WIN can
get all the info coming from the
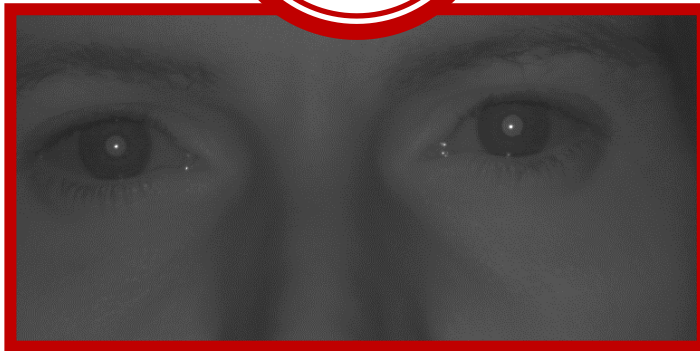pupil response

Not Good

Good

Troubleshooting | Pupils Size

2WIN's best performance is at **5 mm** of Pupil Size (PS)

Smaller pupils (e.g. 3 mm):
too little information to analyse

Larger pupils (e.g. 9 mm): possible presence of
high order aberrations on the eye's edge

Too small

Good

Too large

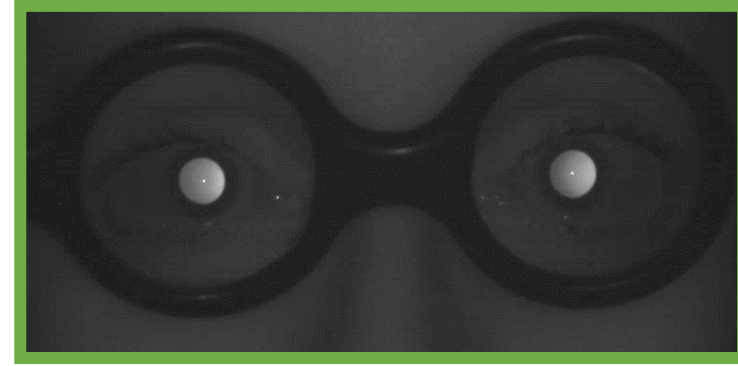# Troubleshooting | Spurious Reflections

Occlusor could generate some spurious reflexes, so
2WIN is not capable of detecting pupils.
The measure may fail or you can get FIXATION error.

To avoid this issue, please:
- Keep the lenses clean as any other usual pair of glasses
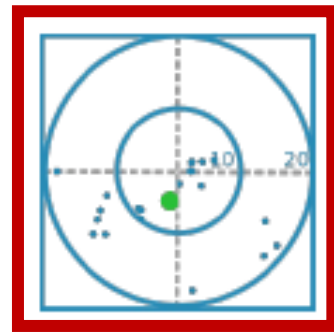- Ask the patient to slightly tilt the occlusor
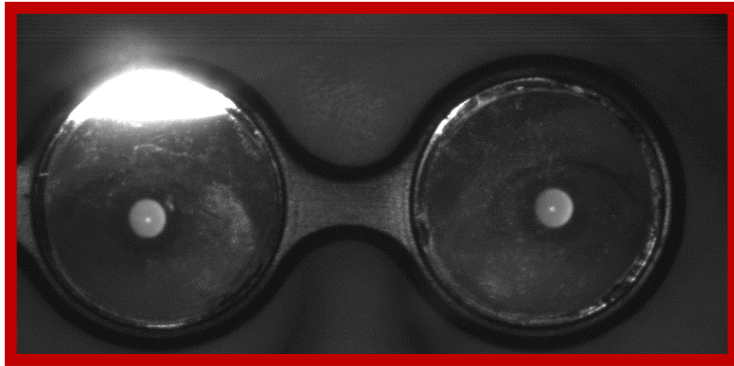
Not Good

Good

Troubleshooting | Fixation & Patient Attention

Patient is not looking at the 2WIN, as the position of corneal reflexes is spread.
It could appear an output error or a FIXATION error

Patient is looking at the 2WIN.
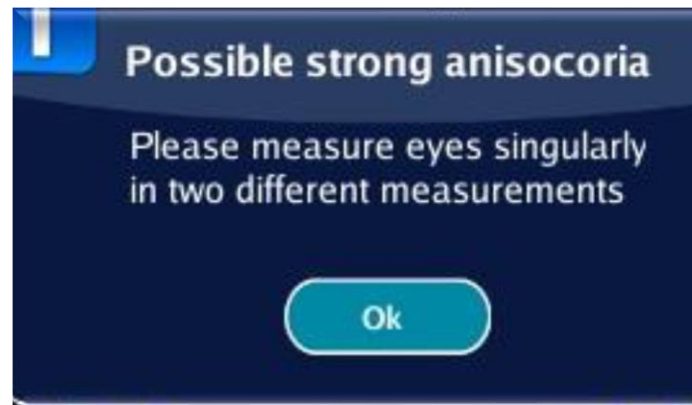The corneal reflexes are around a small area.

Not Good
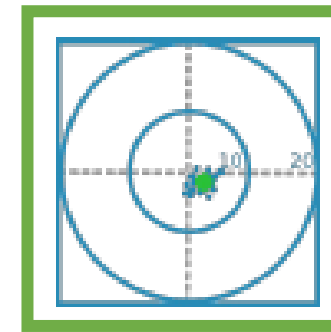
Good

Troubleshooting | Binocular or Monocular

One eye has some desease?
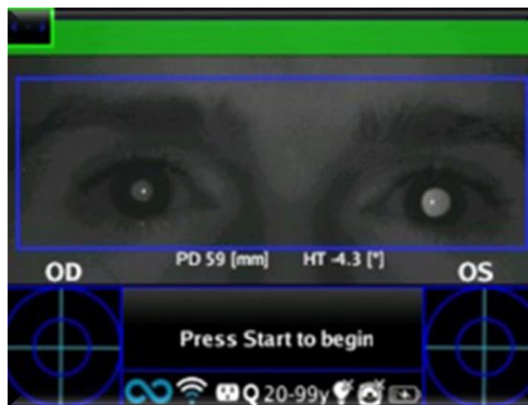
The 2WIN suggests to use the monocular mode in order to calibrate one eye at a time to be more precise

Measurement Tip | Age range selection

2WIN performs a software correction for the **accommodation**, based on the selected age range. If the correct age range is not selected, 2WIN measurement results could be affected, especially in case of young patients with a hyperopic defect.

How to select the age range?
Before starting a measurement, from the home screen, long press to the right the joystick button.

Can I use cycloplegic drops to avoid accommodation ?
Yes, selecting the age range 60-99yrs.

Measurement Tip | Attention features

In case of fixation problems, enable the central **fixation target** from 2WIN menu > Measurement > Fixation > Central Fixation.

In case of children or not cooperative patients, enable Sound and/or Visible **attention features** by pressing the Interactivity button.

We recommend activating first the sounds. Activate visible attention features only when the sounds are not enough.

Central fixation LED

Interactivity button

Measurement Tip | Glasses and CL

2WIN is able to measure refraction even if the patient is wearing glasses or contact lenses.

However, glasses and contact lenses wearing is not recommended, because they may cause **spurious reflections** during the measurement.

Measurement Tip | Clean 2WIN lenses

Periodically clean 2WIN lenses to prevent dust accumulation, which could affect the measurement results.
It is suggested to clean lenses at least once a year - more frequently if 2WIN is exposed to dust.

The cleaning of the lenses must be done with **compressed air** (the cans for cleaning PCs are fine). Detergents and solvents must be avoided.

Keep always clean:
- ✓ Frontal objective
- ✓ Telemetry lenses
- ✓ External LED

External LED

Frontal objective

2WIN

Telemetry lenses
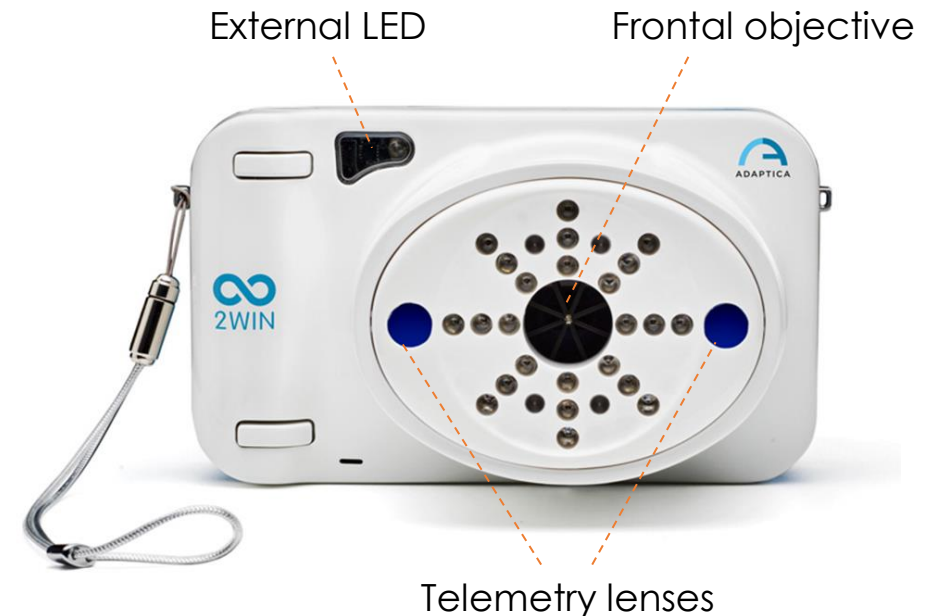
2WIN Dos and Don'ts

Dos:

- ✓ Always select the correct age range
- ✓ Check that the patient is looking at 2WIN and keeping his/her eyes wide open
- ✓ In case of fixation problems, enable the central fixation target, the attention features or select monocular mode
- ✓ Always check the Reliability Index. If needed, repeat the measurement

Don'ts:

- ✓ Don't use 2WIN as an autorefractometer. 2WIN is a vision screening device!
- ✓ Don't use 2WIN without practicing first

General tips

ADAPTICA

Software updates

Always keep 2WIN software updated to the last version, available here:
https://www.adaptica.com/products/2win/

Batteries

- ✓ Do not recharge 2WIN battery through the USB cable.
- ✓ Do not use swollen or damaged batteries.
- ✓ When 2WIN is used in 2WIN-S configuration 2WIN's internal battery must be removed.

Error messages

Carefully read warnings and error messages. If you need help, contact support@adaptica.com

Thank you!

adaptica.com
support@adaptica.com