



2WIN

Binocular Mobile Refractometer and Vision Analyzer



## Binocular objective refractometer

The 2WIN is a mobile binocular video refractometer and vision analyser that measures both eyes at the same time, in real life vision conditions. It embodies the best and the most complete technologies to fully detect refractive errors, eye abnormalities and vision problems.





# Additional features

## CR-App

Thanks to the “Analysis of Corneal Reflexes”, the 2WIN can help your daily work by automating the analysis of refraction with a documented information of phorias and tropias (horizontal and vertical). The CR-App compares the position of the corneal reflexes in three different measurements (the first binocular, the second and the third monocular under an infrared occluder).



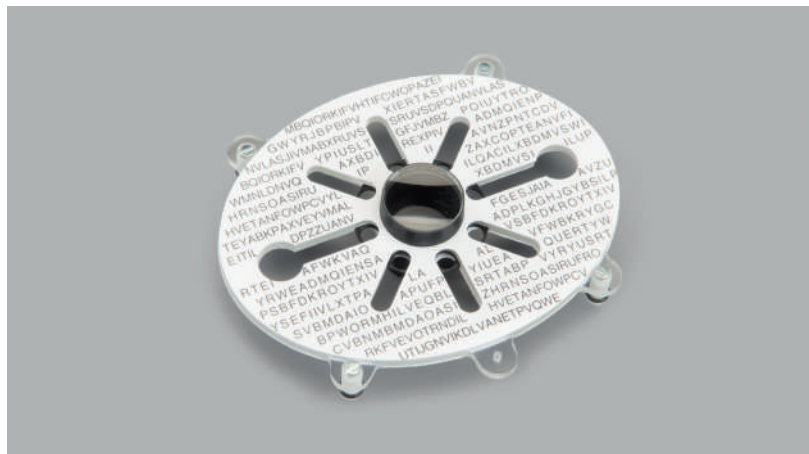
## DP-App

Automatic measurement of dynamic pupil response to programmable light stimulations enables the detection of subtle pupillary changes, removing subjectivity from the pupillary evaluation.



## 66cm-App

Thanks to the 2WIN application “Intermediate Vision”, it is possible to identify the difficulties in focusing at VDUs Distance and to estimate the power of the additional lens needed on top of the prescription. The 2WIN measures the patient's refraction while reading from VDUs, at a distance of 66 cm (2').



## LC-App

This feature allows to accurately center spectacle lenses with reference to the far sight optical axis of the eyes. The Lens Centering application can give information about: semi inter-pupillary distance, distance between the optic axis and the upper or lower limit of the frame, distances between the optic axis and the corresponding nose pad.

## Zoom

The 2WIN Zoom Application helps to detect infrared artifacts due to other eye abnormalities (opacities, foreign bodies etc.). This function allows you to get an automatic zoom of InfraRed retinoscopy to accurately inspect it.



## 2WINNY KIT

Refraction and vision measurement can be funny and useful at the same time: 2WINNY is meant to dress the 2WIN in order to make it more attractive and funny for infants and children. Each 2WINNY mask is designed to draw kids' attention through a specific shape and colour, according to their age and capabilities.



# Everyone

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2WIN allows to perform objective refraction of adults, children from 2 months age, seniors, impaired and non-cooperative patients. It works at 1m of distance from the patient, thus no direct contact is needed between the patient and the device.



## No need for cycloplegic drugs

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2WIN, thanks to an advanced accommodation correction technology, doesn't require any cycloplegic drugs. This allows a faster and more precise objective refraction, especially for kids and toddlers.

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In our experience 2WIN, housing in Alaska and in a remote Burma clinic, showed that this photoscreener yields refractive estimates very comparable to state-of-the-art Retinomax hand-held autorefractor. It is sturdy, reliable and provides valid early objective screening that will reduce amblyopia blindness for the program that uses it.

~ Dr. Robert Arnold (Paediatric Ophthalmologist)

# Technical Information

• <b>Operating mode:</b> Binocular/monocular	• <b>Working distance:</b> 1 m $\pm$ 5 cm
• <b>Refraction Measurement:</b> Automatic	• <b>Data Interface:</b> Wi-Fi, USB, microSD card
• <b>Sphere range:</b> +15, -15 D, step 0.25 D	• <b>Printer interface:</b> USB, Infrared (irda)
• <b>Cylinder range:</b> +5, -5 D, step 0.25 D	• <b>Power:</b> Rechargeable battery
• <b>Cylinder axis:</b> 1° – 180°, step 1°	• <b>Battery charger:</b> 110-220 Vac, 0.5 A
• <b>Pupil size:</b> Automatic detection, 4-11 mm, step 0.1 mm	• <b>Size:</b> 165x130x98mm
• <b>Pupil distance:</b> Automatic detection, 30-120 mm, step 1 mm	• <b>Display:</b> 3.5"
• <b>Fixation target:</b> Built-in	• <b>Weight:</b> 840 g (30 oz)
• <b>Acoustic target:</b> Built-in	• <b>Options/Accessories:</b> Supplementary battery, battery-charger, metal case, Wi-Fi connectivity
• <b>Measurement:</b> Contactless. Patient at more than 1 m	• <b>Medical Plastics:</b> Cleanable and Hygienically safe



Adaptica S.r.l.  
Via San Marco, 9/H  
35129 Padova, Italy

Ph. +39 049 773 968  
Fax +39 049 097 0901  
www.adaptica.com  
contact@adaptica.com