

Vision Screener



reddot award 2014
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2017

Short Manual 4

“Viewing measurement results”

Plusoptix GmbH
Neumeyerstrasse 48
90411 Nuremberg
Germany
www.plusoptix.com

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This manual is a supplementary short manual. For general information about your Plusoptix device, such as its intended use, basic handling, technical information, maintenance, service, and warranty information, please refer to the user manual that was delivered with your device. This user manual can also be downloaded on our homepage (plusoptix.com), under “Support”.

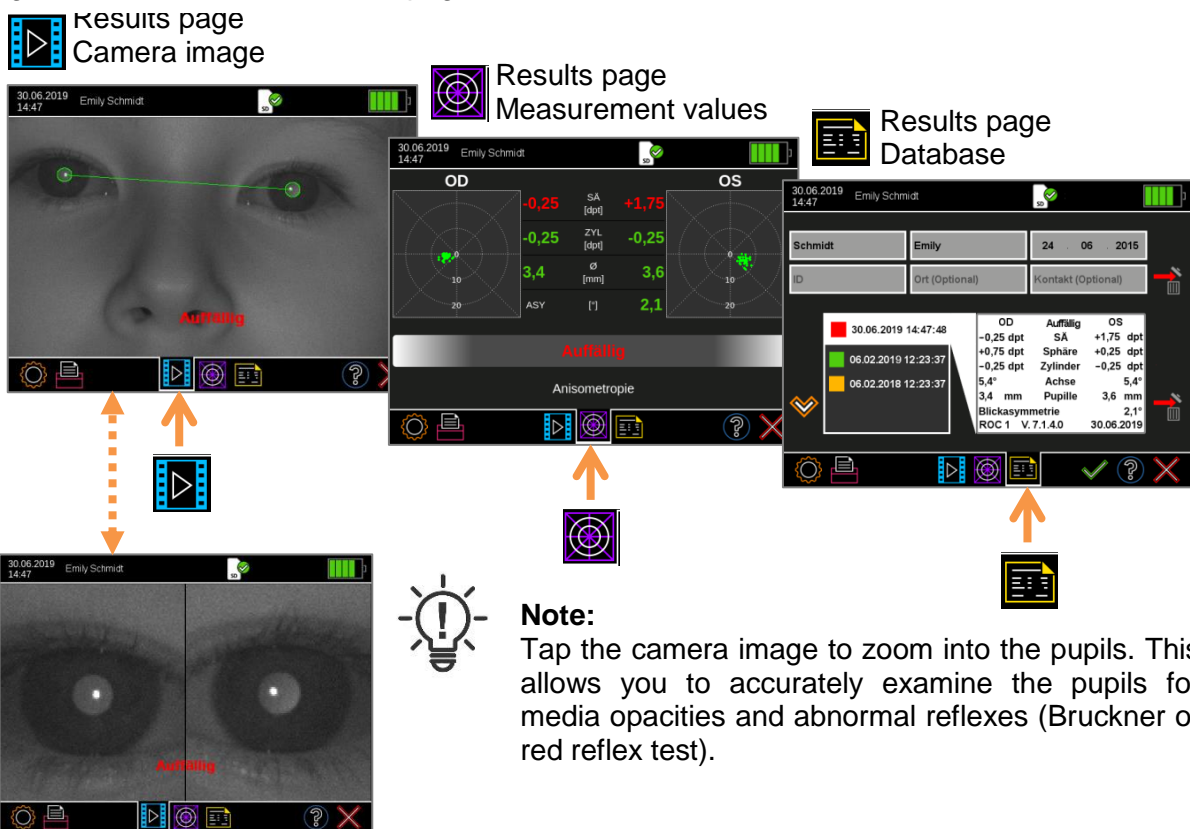
List of further supplementary short manuals

1. Checking scope of delivery and learning about the device
2. Adjusting settings and setting up WLAN
3. Preparing and performing a measurement
4. Viewing the measurement results
5. Entering, retrieving or deleting patient data
6. Documenting measurement results electronically
7. Documenting measurement results on paper
8. Exporting back-ups and reports (only plusoptiX S12C and S16)
9. Downloading software updates
10. Troubleshooting malfunctions and measuring interruptions

1 Viewing measurement results

As space on the screen is limited, the measurement results are spread across a total of two (plusoptiX S12R), or three screens (plusoptiX S12C and S16) respectively. After the measurement, you will first see the “camera image” results page. By touching the appropriate button in the middle of the navigation bar, you can access each of the three results pages.

Figure1: Overview of the results pages



If an anonymous measurement has been taken, a consecutive ID number will be displayed in the header. Touch the button with the printer (1) to assign patient data, and/or document the measurement results (see supplementary short manual 6 and 7).

If the patient data was entered, retrieved or imported from the EMR software before the measurement, the measurement values are saved automatically. If you see the status message “Try again”, the screening report must be saved manually.

- 1)  2) 



Attention:

Following an anonymous measurement, a screening report is not saved automatically. As soon as you return to the home page without previously saving, the screening report can no longer be saved and printed.

However, even the measurement values of an anonymous measurement will be saved in the patient database under a consecutive ID number (only S12C and S16). A self-adhesive label can be printed anytime afterwards from the patient database.

After viewing the measurement results, you can return to the home page by touching the red “X” (2) and continue with the operation. You can find more information about this in Chapter 5 “Performing the next measurement“.



2 “Camera image” results page

After the measurement you will first see the result page “camera picture”, including the screening result “pass” or “refer”. Checking the last camera image helps you detecting media opacities, which did not lead to a measurement interruption.



Note:

After every measurement, check on the “Camera image” results page whether both pupils are the same lightness and whether structures can be seen within the pupils. If differences in lightness or structures can be seen, the eye must undergo a comprehensive eye examination by an eye care professional.

Touch the camera picture on the screen, to zoom in the pupils. This feature enables you to check for visible media opacities and abnormal reflexes more accurately. The feature which enables you to zoom in the picture of the pupils is available as of software version 7.1.4.0.

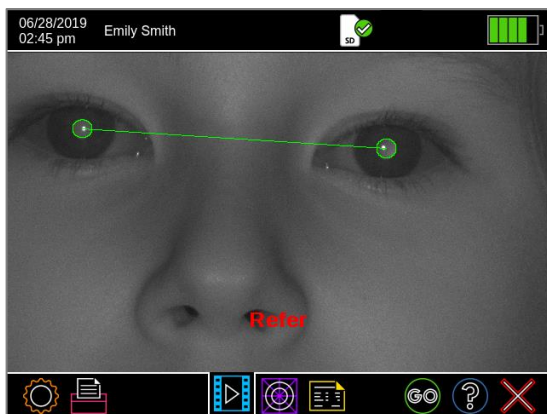


Figure 2: Result page „Camera image“



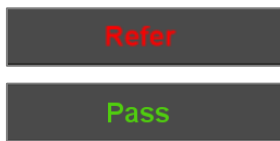
Figure 3: Enlarged view of the pupils



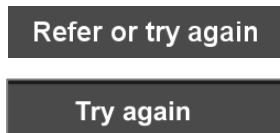
Note:

If only one of the two pupils is shown enlarged when touching the screen, the device has recognized only one of the two pupils. For more information on inconclusive measurements, please refer to short manual 10.

In addition to the measurement values, a screening result is displayed:



The measurement has been successfully completed and the “Refer” or “Pass” screening result is displayed.



The measurement has been interrupted inconclusively and a “Try again” or “Refer or Try again” status is displayed.



Attention:

If you receive the “Refer or Try again” screening result three times in a row and the surrounding conditions for the measurement are correct, the child must be referred for a further examination by an ophthalmologist.



If applicable, a red error message is also displayed:

If a red error message is displayed above the screening result, please refer to short manual 10.

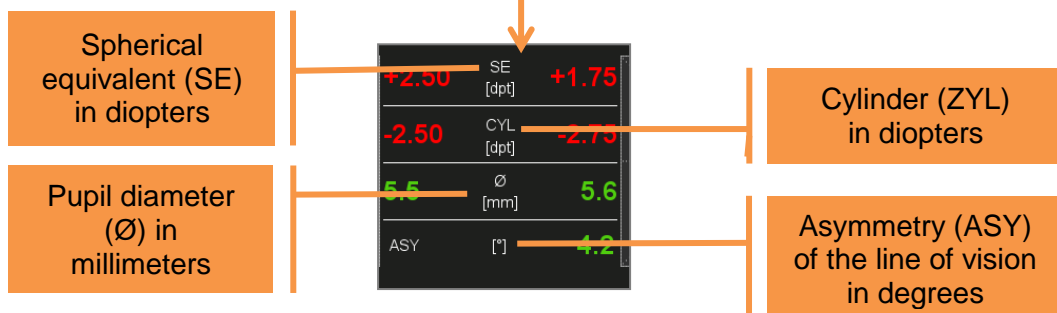


3 “Measurement values” results page

The measurement values are shown separately for the right eye (OD) and the left eye (OS):



Figure 4: Viewing the measurement values



If the measurement values are exceeding the measuring range, "HYP" (for hyperopia) or "MYO" (for myopia) is displayed as the measurement of the spherical equivalent instead of a quantitative numerical value.

The spherical equivalent is shown instead of the sphere in order to ensure that the referral criteria can be applied irrespective of the cylinder setting. The spherical equivalent is defined as "sphere + ½ cylinder".

You can see the gaze map for each eye on the left and right edges of the screen. This illustrates the lines of vision of the eyes during the measurement. As soon as one eye is focussed more than 10 degrees away from the camera (this relates to the inside of both circles), the points on the gaze map are shown in red. Hence, a measurement is not possible and it will be interrupted inconclusively.

The device compares the lines of vision of both eyes and calculates the asymmetry of the lines of vision (ASY). An asymmetry of 0° is equivalent to perfect symmetry. Asymmetrical lines of vision can be caused by strabismus or decentralised fixation.



Attention:

The displayed asymmetry of the line of vision is not equivalent to the squint angle.



Note:

If a child is not looking at the nose of the smiley face during the measurements, this can cause an inconclusive measurement. Knees and nose of the child always have to point towards the device.

4 “Database” results page (only plusoptiX S12C and S16)

Every successful measurement is automatically documented in the database in chronological order. Green entries indicate “Pass” results and red entries indicate “Refer” results. Inconclusive measurements are shown in Yellow.

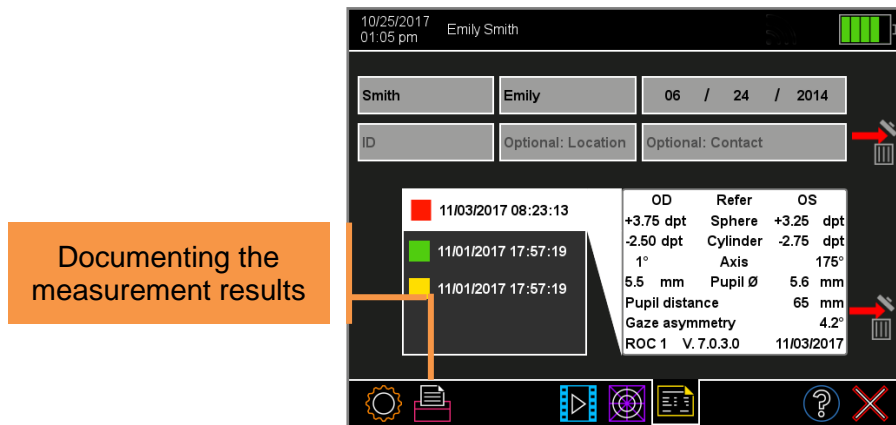


Figure 5: “Database” results page

After a measurement, the measurement values can be saved as a screening report and printed as a label. Touch the printer (1) button in the navigation bar of a results page to assign patient data, and to send the print job via the infrared interface and save a screening report on the SD card (plusoptiX 12) / USB stick (plusoptiX 16). For more information about the documentation of measurement results, please see supplementary short manual 6 and 7.



Attention:

All print jobs in the print spooler are deleted once the device is switched off or switches off automatically for power saving. Screening reports saved to a SD-card / USB stick are not deleted by switching off the device.

5 Performing the next measurement



Attention:

Following an anonymous measurement, a screening report is not saved automatically. As soon as you return to the home page without previously saving, the screening report can no longer be saved and printed.

However, even the measurement values of an anonymous measurement will be saved in the patient database under a consecutive ID number (only S12C and S16). A self-adhesive label can be printed anytime afterwards from the patient database.



Attention:

If you receive the “Refer or Try again” screening result three times in a row and the surrounding conditions for the measurement are correct, the child must be referred for a further examination by an ophthalmologist.



Attention:

If patient data was entered, retrieved or imported from the EMR software before the measurement, the measurement values are saved automatically. If you see the status message “Try again”, the screening report must be saved manually.

After a successful measurement (“Refer” / “Pass”), you can:

	<p>Return to the home page by pressing the trigger. Previously entered or selected patient data is discarded.</p>
	<p>This is only possible with software version CAD. Using software version PAD, you can only return to the homepage by touching the red “X” button”.</p>
	<p>Return to the home page by touching the red “X” button”. Previously entered or selected patient data is discarded.</p>

After an inconclusive measurement (“Refer or Try again” / “Try again”):

	<p>Measure the same patient again in the pre-selected age group by pressing the GO button or the trigger.</p>
	<p>Return to the home page by touching the red “X” button”. Previously entered or selected patient data is discarded.</p>