plusoptiX S12C & S12R - Short Manual





plusoptiX S12C

Handling of the device

wrong





plusoptiX S12R

Touchscreen

USB

Mini

USB

SD

card

12VDC

input

Shutter

button

On/Off button

C

Measurement requirements

- The examination room should only be slightly illuminated, i.e. no direct daylight. Halogen spotlights and light bulbs are emitting infrared light and should be switched off during measurements. Fluorescent lamps and energy-saving lamps are permitted for lightning the room.
- 2. Please make sure that the child is not distracted during the measurement.
- 3. Switch on the device . When the start screen appears, please select the age-group of the child and start the measurement by pressing the orange measurement button next to the screen.
- 4. The measurement is performed from a distance of one meter (+/- 5 cm) from the child. Start the measurement from approximately 1,2 m distance to the child. Move forward until the pupils are clear and outlined with green circles. At this moment the sound will appear again to signalize that the measurement starts now.
- 5. It is important to hold the camera on eye-level when performing a measurement. Please make sure that the pupils are not covered by eyelashes, the eyelid or hair. If no screening result appears, a status message will be displayed. In this case please follow the instructions, outlined on the rear side of this page.



English, MS, 20.01.2016

Choose referral criteria



The examiner can choose between five different ROC curves (Receiver Operating Characteristics), which differ in sensitivity and specificity, due to different studies. ROC 1 is the pre-set curve, which is based on a study of the University Eye Hospital Munich.

To perform screenings with lower sensitivity but higher specificity choose one of the

other ROC curves (2-5). Keep in mind that choosing a lower sensitivity will increase the number of positive children, who are overlooked.

If the status message "Refer" is displayed, the child must be sent to an eye specialist for a

complete eye examination.

If the status message **"Refer or try again"** is displayed, follow the instructions on the screen and measure again. If you get **"Refer or try again"** again, please send the child precautionally to an eye specialist.

If the status message **"Try again"** is displayed, the measurement was aborted because of an user error. In this case, please follow the instructions on the screen and measure again.

Status-messages



A status message will appear in case no measurement result is displayed on the screen.

Failure message Instruction what to do Status message

Pupils not found: Restart the measurement on eye level of the child and make sure the pupils are not covered by hair, eyelashes or the eyelid.

Pupils too big: The size of one or both pupils is over 8 mm. Increase the lightning in the room so that the pupils get smaller.

Pupils too small: The size of one or both pupils is below 4 mm. Decrease the lightning in the room so that the pupils get bigger.

Camera picture out of focus: Please make sure to have the right distance to the patient (1m + - 5cm).

Too much IR ambiance light: Close the curtains to avoid too much daylight in the room.

Patient does not focus the camera: Please measure again and make sure the patient is focusing on the nose of the smiling face on the camera.

Measurement incomplete: The measurement result is n/a. Repeat the measurement and make sure that the pupils are not covered by hair, eyelashes or the eyelid.

Corneal reflexes are too dark: Dim room light so that the pupils get bigger.

A detailed description of the status messages and its reasons can be found in the user manual point 4.2.3. "Error messages when performing a measurement".

Screening Result of plusoptiX S12C & S12R