Vision Screener

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GERMAN
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2017

Short Manual 1

„Checking the scope of delivery and learning about the device"

Version: 16.12.2019

CE 0123

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This manual is a supplementary short manual. For important information about your device, such as the intended use, basic handling, technical information, maintenance, service and warranty information, refer to the user manual that was provided with your Plusoptix device. It can also be downloaded from our homepage (plusoptix.com) under "Support".

List of supplementary short manuals

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1 Checking the scope of delivery and learning about the device

Please check that the contents of the packaging are complete at time of delivery. If the delivery is incomplete, please inform the seller of the device immediately.

"plusoptiX S12R / S12C"	plusoptiX S16
Delivery scope	
- User Manual - Medical power adapter (GSM36B12-P1J) - Power cord (in compartment under the device) - 6 x rechargeable AA batteries - SD-Carte (inserted into device)	- User Manual - Medical power adapter (GSM36B12-P1J) - Power cord (in compartment under the device)
Interfaces	
- 12V connection for the medical power supply - USB-Interface - Infrared interface (IR) - Wifi interface (only S12C) - SD-carte - Mini-USB-Interface	- 12V connection for the medical power supply - 4 x USB-Interface - Infrared interface (IR) - Wifi interface - LAN interface (RJ45) - DVI interface
Optionale Accessories	
- Neck strap for „plusoptiX S12C" - Carrying case for „plusoptiX S12R / S12C" - Wireless label printer „plusoptiX P12" - Self-adhesive labels for „plusoptiX P12"	- Wireless label printer „plusoptiX P12" - Self-adhesive labels for „plusoptiX P12"

2   Putting the device into operation

Press the On / Off button briefly to turn the device on. The screen will come on immediately and the device will start up. After approx. 1 minute, the device is ready to operate. Press the On / Off button briefly to turn the device off.

Note:
If necessary, you can force the device to shut down by holding the On / Off button.

3   Learning about the „plusoptiX S12R / S12C"

The „plusoptiX S12R / S12C" is made up of the device with a child-friendly smiley face.

Speaker
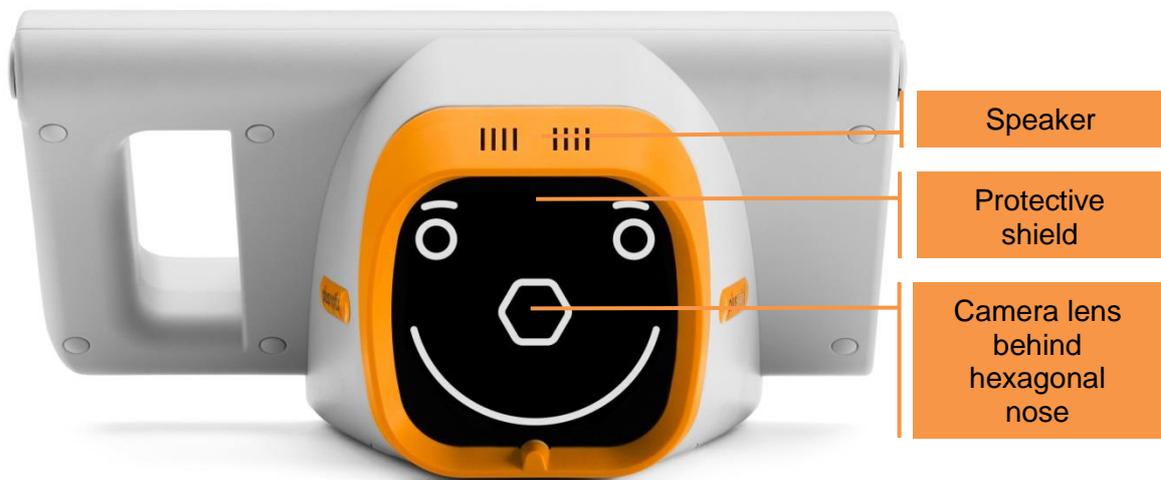
Protective shield

Camera lens behind hexagonal nose

Figure 1: Front view of the device (plusoptiX S12C)

During a measurement,the „plusoptiX S12R / S12C" records a series of images. To ensure children look into the camera during the measurement, the "plusoptiX S12" plays a warble sound.

The speaker, the camera lens and the LEDS needed to light the images are located behind the black protective screen with the smiley. This smiley helps to keep the child's attention.

Attention:
If a child does not look at the nose of the smiley face during the measurement, this can lead to a an aborted measurement. The patient's nose and knees must always be aligned with the device.

Attention:
If you need to put the device on its rear side, e.g. to insert or replace the rechargeable batteries, please place a soft cloth under the device.

Note:
To prevent the protective shield from becoming dirty, we recommend that you do not touch it. If the protective shield does become dirty, please follow the cleaning instructions in your user manual.

„plusoptiX S12C" has a 5.7 inch screen with capacitive touch sensor located on the rear side of the device. To activate one of the functions displayed on the screen, all you need to do is gently touch the screen. The screen and touch sensor are protected from damage behind a thin glass shield.

„plusoptiX S12R" has a 4.3 inch screen with resistive touch sensor located on the rear side of the device. To call up a function displayed on the monitor screen, it is sufficient to tap the screen with the tip of your finger or with your finger nail. Screen and touch sensor are protected behind a thin transparent plastic cover.

USB

Mini USB

SD-Card

12V input

Shutter

Screen

On/Off button

Figure 2: Rear view of the device

3.1.   Mini USB interface

⚠️ **Attention:**
To avoid damage to the device, do not connect any external devices other than an IEC 60601-1-approved computer to the mini-USB interface.

The device features a 5-pole-Mini-B-USB port. It can be used to connect the device to your workplace computer. The device is portrayed as removable medium in your Windows-Explorer or Apple Finder.

The mini USB connection of the SD card to your workstation is used for:

- Printing a screening report (PDF file)
  URL: removable medium:\pdf

- Download Software Updates

💡 **Note**:
To use the mini USB interface the WLAN interface must be deactivated. If there is an active WLAN connection, the Mini-USB interface is deactivated.

💡 **Note**:
All interfaces of the "plusoptiX S12C / S12R" and are positioned upside down, i.e. the plugs must also be turned upside down before plugging in (i.e. the USB symbol points downwards).

💡 **Note**:
The connection over a mini usb cable is available from the supplement "01F" in the serial number (Example: S/N 120xS-**01F**-xxxx xxxx). Because of the technical design, devices with older serial numbers are not compatible.

3.2. Inserting and charging the rechargeable batteries

Figure 3: Battery compartment view of the device (plusoptiX S12C)

Attention:
If you need to put the device on its rear side, e.g. to insert or replace the rechargeable batteries, please place a soft cloth under the device.

To insert the batteries, please put the device on a level working surface on its rear side.

Attention:
If you insert batteries other than those supplied, you should exclusively use rechargeable Nickel Metal Hydride NiMH/AA HR6 batteries with a capacity of at least 1,900 – 2,100 mAh and a quick-charge rate of min. 1 A.

Now remove the battery compartment cover using a 1-cent coin, and insert the supplied rechargeable batteries.

Note:
When inserting rechargeable batteries, please ensure that the contacts are located on the correct side.

Note:
The type plate with the serial number (S/N 120xS-xxx-xxxx xxxx) is located under the battery compartment. If you contact us regarding extended service or warranty questions, please remember to always quote the serial number of your device. The S/N number helps us to answer your question quickly.

After inserting the rechargeable batteries, close the battery compartment cover and place the device in front of you. Now connect the medical power adapter with its power cable to the wall socket and check whether voltage is present (green light diode at the top of the medical power adapter lights up). Then connect the 12V charging cable of the medical power adapter to the device.

The inserted rechargeable batteries will now be charged automatically. The charging time of the batteries depends on the charge level of the batteries. The maximum battery charging time is 3 hours for the supplied rechargeable batteries.

4 Learning about the „plusoptiX S16"and connecting it

The "plusoptiX S16" is made up of the device with a smiley, which is connected to the cradle with the device cable.
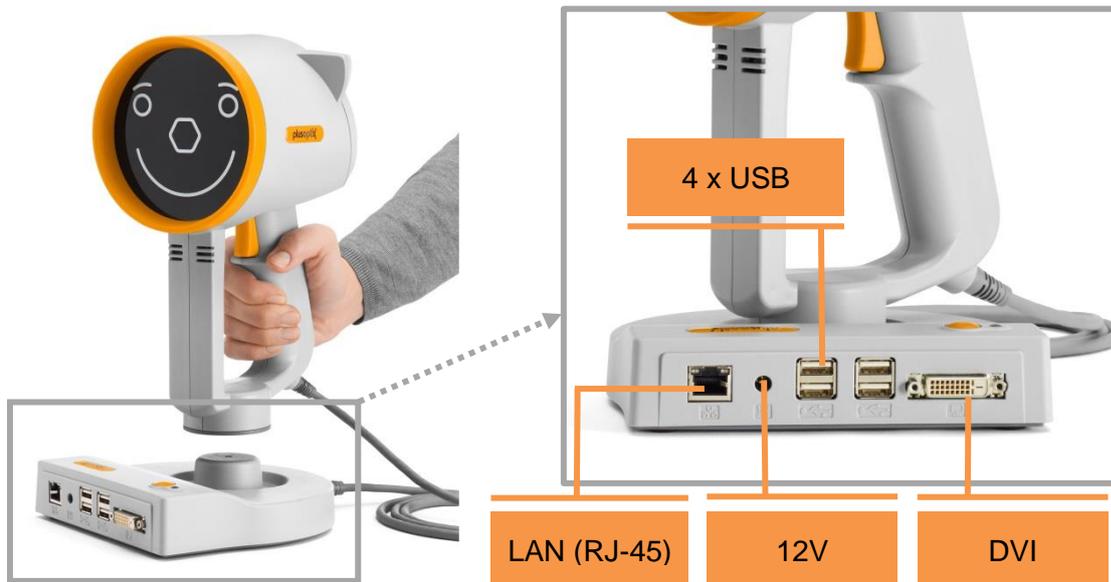

Figure 4: View of the device's cradle

During a measurement, the "plusoptiX S16" records a series of images. To ensure children look into the camera during the measurement, the "plusoptiX S16" plays a warble sound.

The speaker, the camera lens and the LEDS needed to light the images are located behind the black protective screen with the smiley. This smiley helps to keep the child's attention.

⚠️ **Attention**:
If a child does not look at the nose of the smiley face during the measurement, this can lead to a an aborted measurement. The patient's nose and knees must always be aligned with the device.

💡 **Note**:
To prevent the protective shield from becoming dirty, we recommend that you do not touch it. If the protective shield does become dirty, please follow the cleaning instructions in your user manual.

There is a 4.3" screen (resistive touchscreen) on the back of the "plusoptiX S16". To access a function displayed on the screen, simply tap the screen with your fingernail. The screen and contact sensor are protected behind a thin plastic cover.

On / off button

4.3" screen (touchscreen)

Trigger

Figure 5: View of reverse side

The type plate with serial number (S/N 1601A-xxx-xxxx xxxx) can be found on the bottom of the cradle. If you contact us regarding ongoing service or guarantee issues, please make sure you always have the serial number of your "plusoptiX S16". The serial number helps us to answer your question quickly.

Figure 6: Underside of the cradle with type plate

3.1. Connecting the „plusoptiX S16"

Connect the medical power supply to the power cord and then plug this in. The LED on the power supply lights up green for confirmation. Then connect the medical power supply to the "plusoptiX S16".

4.1 Connecting an external monitor (DVI-Interface)

The "plusoptiX S16" has a DVI interface to connect an external monitor. This enlarges the display of the results pages. This allows the results pages to be discussed easily with the patient.

Connect your monitor with the DVI interface in the cradle of the "plusoptiX S16". When the device is mounted on the cradle, the image is shown on the external monitor and the screen of the "plusoptiX S16" is turned off.

Remove the device from the cradle before the measurement. The screen of the "plusoptiX S16" is now active and the external monitor is switched off. This avoids the child being distracted by the picture on the external monitor during the measurement.

After the measurement, replace the device on the cradle. The screen of the "plusoptiX S16" is now turned off again and the screen of the monitor shows an enlarged view of the results pages.

5   Functions of the USB interface

The USB interface enables additional functions of the device. It can be used as follows:

5.1 Importing an infographic

An infographics is found on the lower edge of the screening report. You can design this as you wish.

Create your graphic in png format with a size of 2200 x 570 pixels (w x h) and call your graphic either "top" for the upper edge or "bottom" for the lower edge of the screening report. Copy your graphic into the main directory of a USB stick. As soon as you connect the USB stick to the operational device, your graphic will be uploaded automatically. You can find a sample graphic with the correct measurements for the information column in the download area on our homepage (plusoptix.com), under support.

You can find more information on the printing of measurement reports and the documentation of measurement results in Brief Instructions 6 and 7.

5.2   Importin / exporting patient data (S12C only)

With the plusoptiX S12C and S16 product models, all patient data and measured values are archived in the internal memory of the device. Back-ups of the database can be saved for safety and CSV tables can be exported for analysis or as a report.

3.3. Connection the USB keyboard and mouse (optional)

To ease patient data entry on the "plusoptiX S12", you can use a stylus (i.e Touchpen e.g. Stylus). Alternatively, you can connect a USB mouse or a USB keyboard. Connect your input device to the USB interface of the device. As an alternative to wired input devices, you can also connect wireless input devices.

A USB keyboard is necessary for:

- inputting and selection of patient data
- entering the password in the WLAN settings
- configuring network settings to connect to the practice network

If a connected mouse or keyboard is not working, please check whether the USB keyboard or mouse is switched on, connected with the "plusoptiX S16" and whether the batteries are inserted. If your input device still doesn't work, this means it is not supported by the drivers installed in the "plusoptiX S16". Use input devices from another manufacturer instead in this case.

Note:
Non-functioning external input devices do not constitute a service or warranty case!