

Vision Screener



reddot award 2014
winner



Short Manual 5

“Entering, retrieving or deleting patient data”

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This manual is a supplementary short manual. For important 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 www.plusoptix.com, under support.

List of further supplementary short manuals

1. Checking the 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 measurement interruptions

1 Entering or retrieving patient data – an overview

In the plusoptiX S12C and S16 model, patient data can be entered or retrieved before a measurement to prepare for an examination (see Chapter 2) or assigned after a measurement to document the measurement results (see Chapter 3)

As an alternative to manual entry of the patient data, the device can also be integrated into your EMR software (see Chapter 0) or the patient data can be imported into the database through the USB interface in the form of a CSV table (see Chapter 5).

The “plusoptiX S12R” model does not have an internal patient database. Touching the printer button after the measurement in the “plusoptiX S12R” model will display a single line to enter individual patient data. This data will be portrayed on the Measurement report and on the self-adhesive label. Following explanations are for the “plusoptiX S12C” and “plusoptix S16” model, only.

If the measurement results are to be documented anonymously, touch the checkmark (2) in the navigation bar as well. This will allow you to skip the patient data entry screen. The device then saves the measurement under a consecutive patient ID. This is composed as follows: <last 4 digits of the serial number>-<consecutive number>-<date>-<time>

2 Entering or retrieving patient data before the measurement

To prepare for a measurement, the patient data can be entered or retrieved from the database before the measurement. The subsequently started measurement will then be performed under the previously entered or selected patient data.



Note:

In the plusoptiX S16 model, a USB keyboard must be connected for entering the patient data.

You do not have to switch between individual fields on the intuitive patient data entry screen. Simply enter the personal details of the patient into the entry field, separated by a space, e.g. “Emily Smith”.



Figure 1: Entering patient data

To be able to clearly identify a patient in the database, the first name, last name and date of birth or alternatively a patient ID and date of birth must be entered. Information about the examination location and contact information are optional.

Now allocate the entered data by tapping the relevant field in order of the information:

- “Emily” is the first name → Tap the “First name” field
- “Smith” is the last name → Tap the “Last name” field

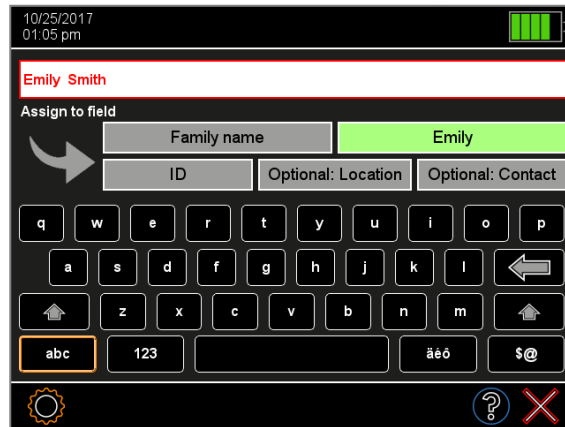


Figure 2: Allocating entered patient data

After allocating all the entered data, the display will change to the input overview page. If any information needed to enable an identifiable patient data entry is missing, the relevant field will be marked in red. The data can only be saved when all the red fields have been filled.

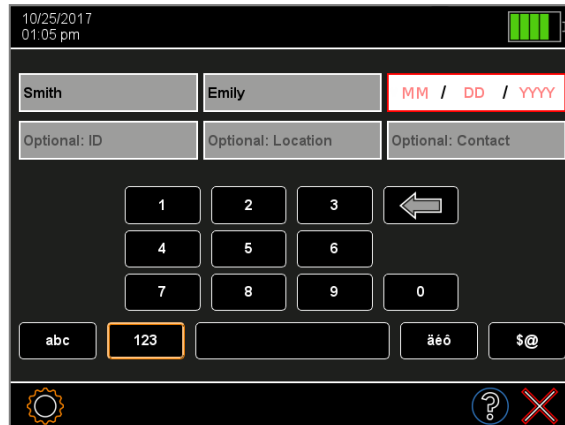


Figure 3: Missing patient data

As soon as all the necessary patient data, i.e. either first name, last name and date of birth or patient ID and date of birth, have been entered, a green checkmark (1) will appear in the navigation bar. You can now save the patient data by touching the green checkmark (1) or reallocate the data by touching the red “X” (2). By touching the red “X” (2) again, you can discard all the entered data.

If data is already saved in the database, the software will automatically search for matching database entries during the entry process. If up to 4 data records with the same character string are found, these are displayed in a shortlist (see figure 4). To select a patient from this shortlist, simply touch the relevant entry in the shortlist.

If no entries with identical character strings are found, the patient data entry screen will be displayed in order to entry new patient data (see Figure 4).

- 1) 
- 2) 



Figure 4: Shortlist with entries with identical character strings

After selecting an entry, you will see the patient data overview. If the patient has been retrieved from the database, all this patient's saved measurement values are shown.

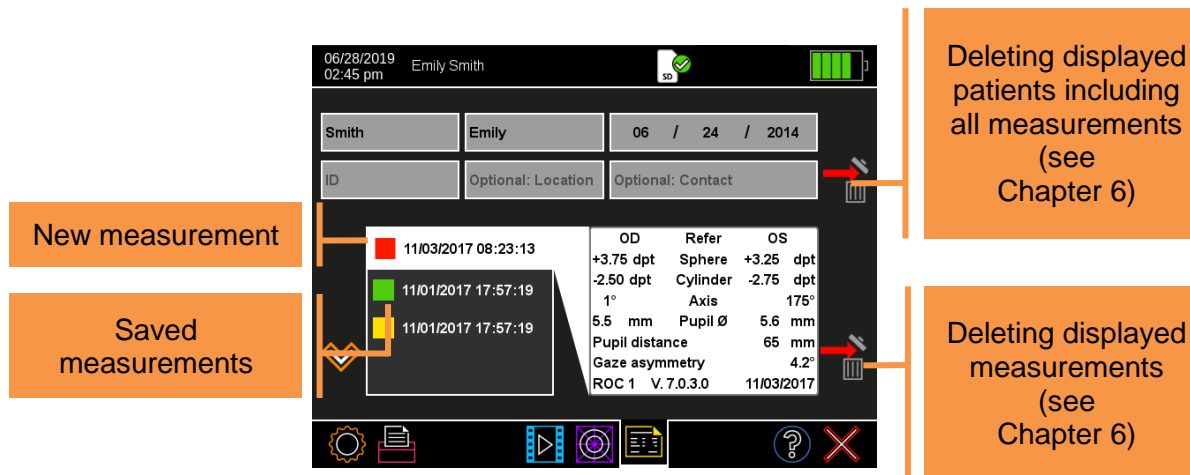






Figure 5: Patient data overview

From the patient data overview, you can:

  	<p>Measure the entered or retrieved patient in the appropriate age group by pressing the GO button or the trigger.</p>
	<p>Touch the red "X" to return to the home page and enter a new patient or begin an anonymous measurement.</p>

3 Entering or retrieving patient data after the measurement

Patient data can be entered after a measurement to document the measurement results or existing or imported patient data can be retrieved from the database. An already performed measurement can thus be assigned to a specific patient in the database.



Note:

In the plusoptix S16 model, a USB keyboard must be connected for entering the patient data.

You do not have to switch between individual fields on the intuitive patient data entry screen. Simply enter the personal details of the patient into the entry field, separated by a space, e.g. "Emily Smith".

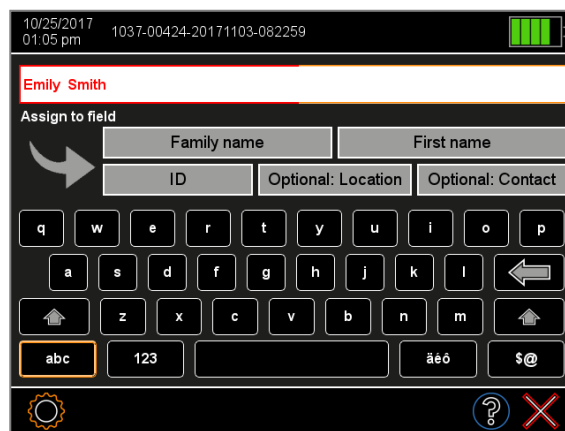


Figure 6: Entering patient data

To be able to clearly identify a patient in the database, the first name and last name or a patient ID must be entered. Information about the date of birth, examination location and contact information are optional.

Now allocate the entered data by tapping the relevant field in order of the information:

- "Emily" is the first name → Tap the "First name" field
- "Smith" is the last name → Tap the "Last name" field

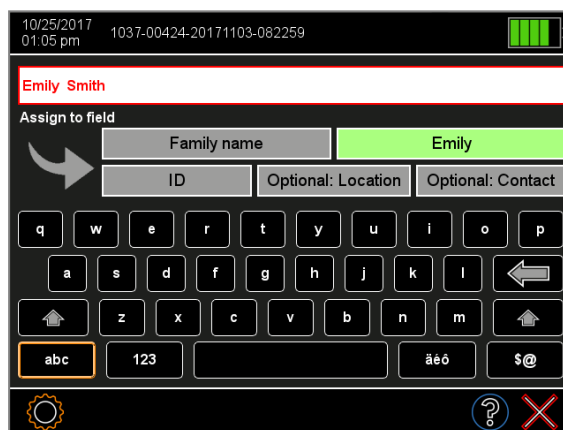


Figure 7: Allocating entered patient data

After allocating all the entered data, the display will change to an overview page. If any information needed to enable an identifiable patient data entry is missing, the relevant field will be marked in red. The data can only be saved when all the red fields have been filled.

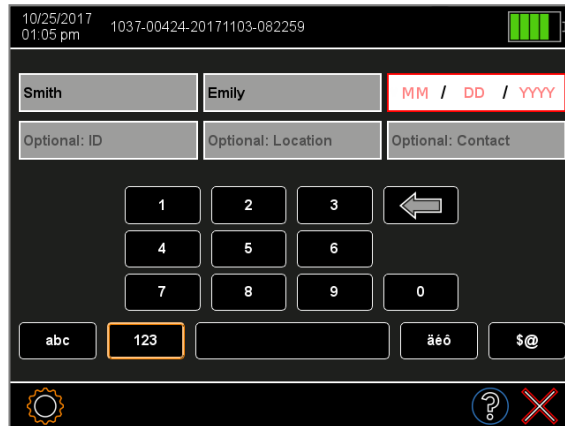


Figure 8: Missing patient data

As soon as all the necessary patient data, i.e. either first name, last name and date of birth or patient ID and date of birth, have been entered, a green checkmark (1) will appear in the navigation bar. You can now save the patient data by touching the green checkmark (1) or reallocate the data by touching the red "X" (2) (Figure 7). By touching the red "X" (2) again, you can discard all the entered data.

If data is already saved in the database, the software will automatically search for matching database entries during the entry process. If up to 4 data records with the same character string are found, these are displayed in a shortlist (see Figure 9). To select a patient from this shortlist, simply touch the relevant entry in the shortlist.

If no entries with identical character strings are found, the patient data entry screen will be displayed in order to entry new patient data (see Figure 7).



Figure 9: Shortlist with entries with identical character strings



After confirming the entered or selected patient data, you will be returned to the previous results page. The name of the patient (or patient ID) is shown in the header. A database entry (see Figure 10) has been created on the “database” results page, the measurement report is saved on the SD card and a print job has been sent via the infrared interface (see supplementary short manual 6). If the patient has been retrieved from the database, all this patient’s saved measurement values are shown.

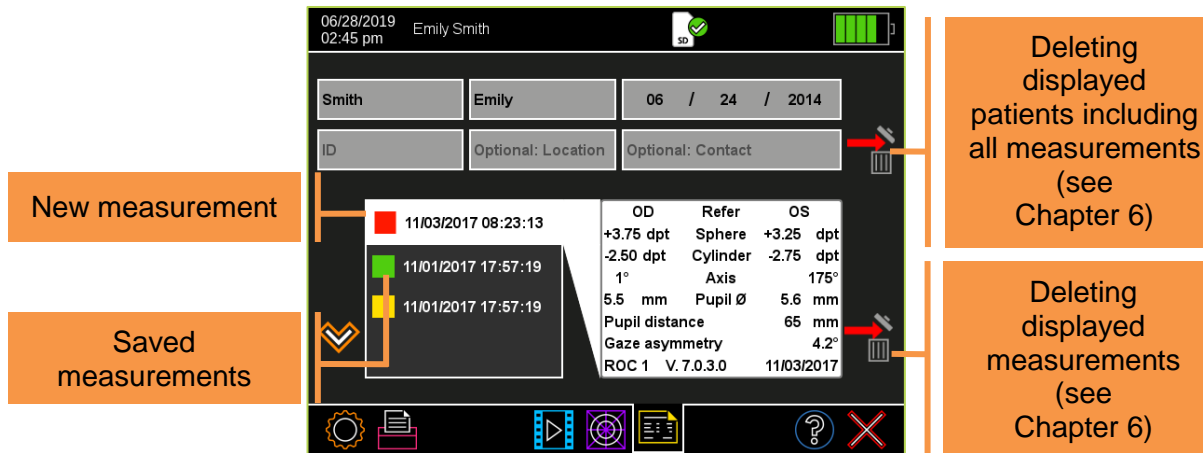


Figure 10: New entry on the “database” results page

From the “database” results page, you can do the following after a successful measurement (“Refer” / “Pass”):

	<p>Return to the home page by pressing the trigger. Previously entered or selected patient data is discarded. This is only possible within the software version CAD. In the software version PAD (Pay-per-use), 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”), you can:

	<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>



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.

4 Importing patients from the EMR software before the measurement (CSV) (only S12C and S16)

As an alternative to manual entry of the patient data, the “plusoptiX S12C” and “plusoptiX S16” can also be integrated into your EMR software. The patient data is automatically transferred from your EMR software to the device before the measurement and the measurement results are automatically transferred back to your EMR software after the measurement.

You can download instructions about incorporating the „plusoptiX S12C“ or „plusoptiX S16“ model into your EMR software from our homepage (plusoptix.com).

More information about documenting the measurement results via a full integration with your EMR system, see short manual 5 and 6.



Note:

Your EMR software must support this interface to enable data transfer to work with your EMR software. Find out from the supplier of your EMR software whether this is compatible with the Plusoptix device.

5 Importing patient data via the USB interface (only S12C and S16)

All patient data and measurement values are archived in a database on the internal memory of the device. Back-up copies of the database can be saved and additional patient data can be imported into the database through the USB stick in the form of a CSV table. For more information about exporting back-up copies to a USB stick, refer to supplementary short manual 8 “

a) Restoring a back-up copy

To restore the database, connect the USB storage with the exported db file in its directory “db” to the Plusoptix device. You will be asked whether the saved database should be restored. If there are several database in the main directory of the USB stick, the most up-to-date (by save date) will be restored.



Note:

When restoring a database, a back-up copy of the internal database will first be saved to the USB stick. Then, the internal database will be overwritten by the restoring database. The two databases will not be merged.

b) Importing additional patient data in the form of a CSV table



Note:

Imported patient data is always added to existing entries in the database. No pre-existing data records are deleted.

The data fields of any CSV table being imported must:

- be separated with the separator selected in the settings – either “,” (comma) or “;” (semicolon)
- contain 5 separators (a concluding separator at the end after “contact” can also be added)
- follow this order: LastName,FirstName,DateOfBirth,ID,Location,Contact
- contain either the last name, first name and date of birth or ID and date of birth in every line; entry of the examination location and contact is optional
- use the same data format as the date format selected in the settings (e.g. 31.01.2013 or 01/31/2013). Years have four digits.

	A	B	C	D	E	F
1	Last name	First name	Date of birth	ID	Location	Contact
2	Chair	Amber	03/02/2012			
3			15/02/2017	0123456789		
4	Smith	Emily	12/08/2019	AB12CD24	Atlanta	Emily@smith.com
5			06/18/2009	A-12-B-34-C		030-123456

Figure 11: Sample of a CSV table



Note:

The column headings in the first line are not imported.

Save your CSV table under the name “input” on a USB stick in the directory “/db” and then connect this to the device“. Following, touch the data import button (2) in the settings (1). A list of all CSV tables in the “/db” directory will be shown. Select the CSV table to be imported and confirm your choice by touching the green checkmark (3) in the navigation bar.

Before the patient data is now imported, the device will automatically check whether the data records are correct (e.g. no figures in the “Name” field). However, muddled data entries (e.g. first names instead of last names) cannot be automatically recognised. You are prompted to check whether the patient data shown on the screen is in the correct order. If yes, confirm the data import by touching the green checkmark (3) in the navigation bar.



6 Deleting entries from the database (S12C and S16 only)

Saved measurement values can be deleted from the database.

Touch the measurement that you want to delete and then touch the Delete button (1) at the right next to the label. Confirm the confirmation prompt with the green checkmark (2).

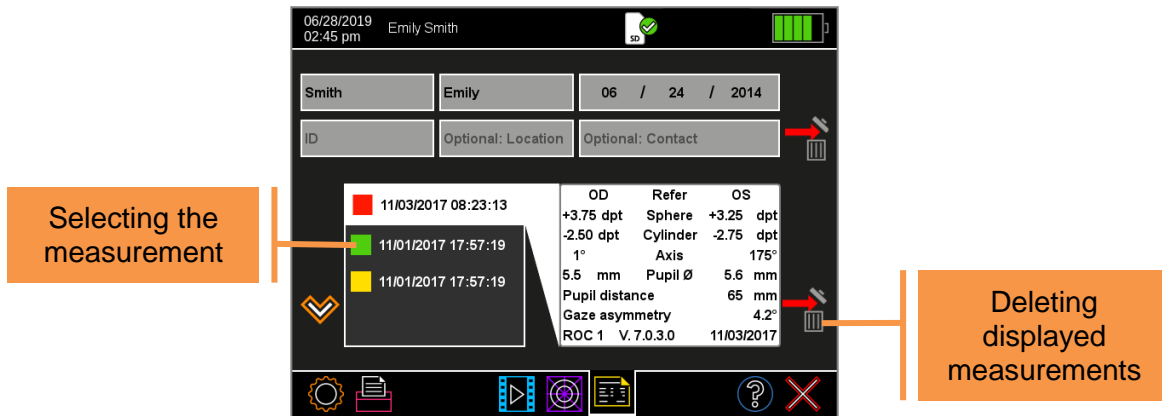


Figure 12: Deleting entries from the database

If you want to delete the patient along with all saved measurement values, touch the symbol (1) next to the entry fields and then confirm the confirmation prompt by touching the green checkmark (2).

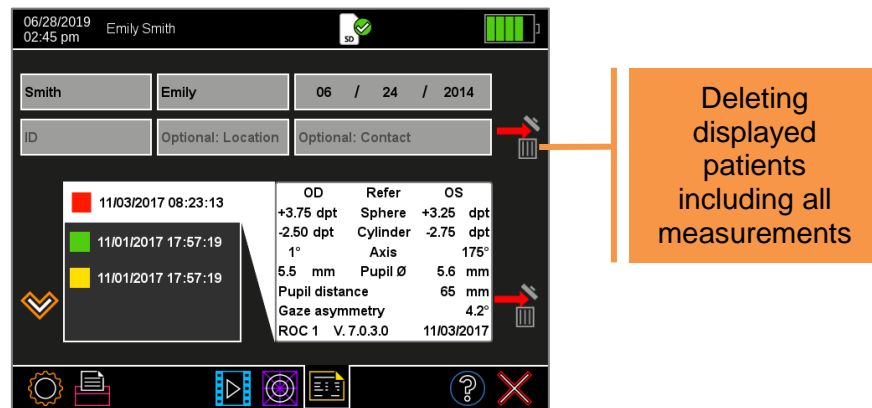


Figure 13: Deleting patients from the database

If you do not want to delete the measurement values or patient, reject the selection by touching the red "X" (3) in the navigation bar.

By touching the red "X" (3) or trigger again, you will return to the home page.

Deleting the whole database

If necessary, the entire database can be deleted at once. Connect a USB stick and go to the settings menu. Touch the button (4) to delete the database and follow the instructions.

A back-up copy of the database is stored on the USB stick and can be restored by importing this back-up copy again. For more information about importing patient data, refer to chapter 5 "Importing patient data via the USB interface".

