



Installation manual

Software v3.0



dental Scan

A product from smart optics Sensortechnik GmbH



Legal Notice

Dear Customer,

Thank you for choosing a product from smart optics !

With the aid of the dental Scan you will be able to control the scanning processes of your smart optics 3D scanner quickly and conveniently. No matter whether you scan using the stand-alone mode or integrated with a CAD software, the dental Scan software offers the perfect scanning strategy for every situation.

In the dental field, our trained resellers are responsible for providing first level support. If you require additional information or if you have any questions about the software, therefore please contact your smart optics reseller.

We hope you enjoy working with dental Scan!

Your smart optics team

CHANGES AND SERVICE

We reserve the right to implement product changes as part of continuous improvement and technical progress and to make changes to this documentation. You can find the current version of this documentation in the download-center on our homepage: www.smartoptics.de.

Please note that the current version of this documentation may contain information which does not apply to older versions.

On request we are also glad to send you a printed paper version of the documentation. If you require a copy, please send an e-mail to communications@smartoptics.de.

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1. About this manual

Please read through this Installation manual carefully. Keep the Installation manual in a safe place. If you pass on the device to somebody else, please make sure that you hand them this Installation manual as well.

smart optics accepts no liability for damages due to failure to comply with the Installation manual.

Which operating manuals are there?

Generally there are several manuals for the smart optics scanners:



Operating manual

This manual contains the description of the device components, the general notes on safety and the technical data. They will tell you how to operate the scanner and how to handle the accessories.



Installation manual

Here you will find out how to install the dental Scan scanner software for the first time and how to receive and install updates at a later date.



User manual dental Scan

All scanning methods and the use of optional modules are described in this manual.

Graphic symbols and highlighting of important information

In this manual, graphic symbols and text highlights are used to present the information more clearly. In this way you may understand the instructions better.

- ▶ A triangle on the left indicates a step involving an action.
- ✓ A tick on the left tells you what the outcome should be if you have followed one or more steps correctly.

1. An element in a sorted list

— An element in an unsorted list

Important statements are highlighted in bold type.

Important **KEYWORDS** are highlighted with capital letters in bold type.

 Section NN

 Page NN

Cross-references within a manual are highlighted with a book icon. Cross-references act as hyperlinks in the electronic version. Click on the number to follow the link.



Cross-references to other manuals are highlighted with a symbol for the type of manual: a scanner for the operating manual, a software package for the installation manual and a user on the PC for the dental Scan user manual.



The signpost shows a selection of topics related to your current issue.



This icon points towards functions or modules that are not included in the standard scope of delivery and that can be purchased separately.



Variants in operation and functionality which do not apply to this scanner type are marked with this symbol.



Standard settings specified by the manufacturer are indicated with a steering wheel.



TIP

The word "Tip" and the information icon are used to highlight tips on operation and information that require your special attention.



The manufacturer of the product is indicated by the factory symbol.

Figures

Figures showing equipment and screenshots from the software are used for illustration purposes.

The images shown in this manual may differ from the appearance of your actual device or from the software supplied with your device. The screenshots show realistic examples but they do not contain actual, real data.

Software controls

The software controls are highlighted as follows:

OK Names of buttons in the software are shown with a colored background.

Name Names of fields in the software are highlighted in bold type.

File | New Names of menus and menu options are separated by a vertical line.

Name .txt File and path names are shown in Courier font.

Units of measurement and numbers

In this operating manual the numbers are given according to the decimal system with decimal places.

Units of measurement comply with the legal units in Germany as well as the international system of units (SI).

Further information as well as measurement converters can be found on the Internet.

Measurement	Unit	Abbreviation
Measurements/weight	Kilogram	kg
	Gram	g
Length	Meter	m
	Centimeter	cm
	Millimeter	mm
	Micrometer	μ
Angle	Degree	°
Time	Hour	h
	Minute	m
	Second	s
Electrical power	Watt	W
Electrical voltage	Volt	V
	Alternating current	AC
Electrical frequency	Hertz	Hz
	Gigahertz	Ghz
Electrical current	Ampere	A
Protection class	International Protection	IP
		1. digit: solids protection,



Measurement	Unit	Abbreviation
		2. digit: fluids protection
Temperature	Degree Celsius	°
Memory (PC)	Random Access Memory	RAM
Data volume	Megabyte	MB
	Gigabyte	GB
CAD data format	Polygon file format	PLY
	Standard Triangulation Language	STL
	American Standard Code for Information Interchange	ASCII
	Mesh PointCloudMeasurement	MSH PCM
Picture element	Pixel	px (monitor), dpi (print)
	Megapixel	Mpx



Warnings

Warnings provide information on how damage to objects and injury to persons can occur and give instructions on how to avoid risks. Warnings are categorized into four levels depending on the severity of the possible consequences.



NOTE

This combination of signal word and symbol warns you about possible *material damage* that might occur if the instructions are not followed correctly.



CAUTION

This combination of signal word and symbol warns you about possible *minor injuries* that might occur if the instructions are not followed correctly.



WARNING

This combination of signal word and symbol warns you about *severe to lethal injuries* that might occur if the instructions are not followed correctly.



DANGER

This combination of signal word and symbol warns you of dangerous situations which could lead directly to death or severe injuries.



2. About dental Scan

dental Scan is a scanning software with which you control the scanning process for digitization of jaw models. You will receive the software exclusively together with a 3D dental scanner from smart optics.

If you already operate one of the following 3D dental scanner from smart optics, it is possible to install a new version as update:

Vinyl, Activity 885 Mark 2, Activity 885, Activity 855 or scanBox.

dental Scan cannot be combined with 3D scanners from other manufacturers.

System requirements

	RECOMMENDED
Operating system	Windows 10 64-BIT
Processor (CPU)	Quad-Core i7 16 GB RAM
Free hard drive space	approx. 80 – 150 GB
Graphics card	2,056 MB RAM
USB connections (Ports)	USB 2.0/3.0 P

Compatibility with exocad® Dental CAD

System requirements exocad®
Dental CAD
wiki.exocad.com

 Installation
exocad® Dental CAD

dental Scan can be installed and used together with exocad® Dental CAD. In this case also ensure that the system requirements for exocad® Dental CAD are complied with.

exocad® Dental CAD has to be prepared for the use with dental Scan. Information is given in this installation manual as well as in the installation manual for exocad® Dental CAD.



TIP

smart optics is a distribution partner of exocad GmbH. If you are interested in exocad® please contact your smart optics reseller or smart optics directly.



Calibration data

Every software package includes calibration data which are stored in a special folder. These calibration data are unique for every device. Only with this calibration data the software works optimally with your scanner.

Should you install dental Scan for several scanners at different workstations it is therefore important that you use the installation data carrier with the correct calibration data for each scanner.

Modules

The following modules are integrated in dental Scan:

- secondDie
- Texture scan ^{monochrome}

The following optional modules are available:

- Articulator scan
- Fixator scan
- multiDie
- multiCase
- Texture scan ^{color}
- Triple-Tray[®] impression scan



It depends on the connected scanner type as to whether a module is available and whether it belongs to the standard scope of delivery or can be purchased extra. Optional chargeable modules must be authorized in the software.



3. Initial installation

You only need to install dental Scan if you purchased your scanner without a computer. If you purchased your scanner together with a computer, then dental Scan is already completely pre-installed so that you can start scanning immediately.

Section 4, page 23, 34

Users with a pre-installed system can inform themselves about updates, changing scanners and file locations in this manual.

3.1. Copy operating manuals

To ensure that you always have the operating manuals for your scanner at the ready for your daily work, you should copy these from the installation data carrier to your computer.

- ▶ Place the installation data carrier in the appropriate computer drive.
- ✓ After a short waiting period the content of the installation data carrier will be displayed automatically. If this is not the case, open the appropriate drive in Windows Explorer.



- ▶ Copy all PDF files from the data carrier to your computer, e.g. to the desktop.
- ▶ You can read the PDF files on the screen with a PDF reader or print them. If applicable, install a PDF reader. Various PDF readers are available free of charge on the Internet.



TIP

The current manuals available for a device can be found online at www.smartoptics.de.

3.2. Prerequisites for the installation

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- ▶ Make sure that your computer meets the system requirements.
- ▶ Ensure that all the important Windows updates are installed on your computer.
- ▶ Ensure that your computer is free of viruses and malware.



- ▶ Allow your virus protection program to execute the setup and execute the dental Scan application.
- ▶ It is recommended, but not a condition, to connect the scanner to the computer and switch it on before starting with installation.

3.3. Execute setup

Installation of the software consists of two steps: executing the setup and loading the calibration data.

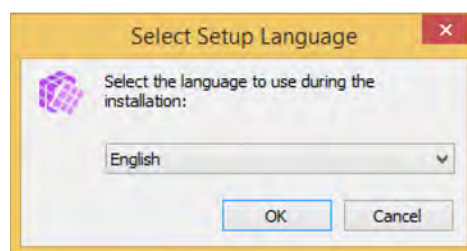


Depending on for which type of scanner dental Scan is to be installed, the setup may differ marginally from the procedure described here.

- ▶ Place the installation data carrier in the appropriate computer drive.
- ✓ After a short waiting period the content of the installation data carrier will be displayed automatically. If this is not the case, open the appropriate drive in Windows Explorer and then the installation directory.



- ▶ Double-click the executable EXE file.
- ✓ The Windows user panel may ask you whether the program is allowed to make changes to your computer.
- ▶ Click **Yes**.
- ✓ The setup will ask you to choose a language for the setup dialogs. The suggested language is the one selected in the operating system.



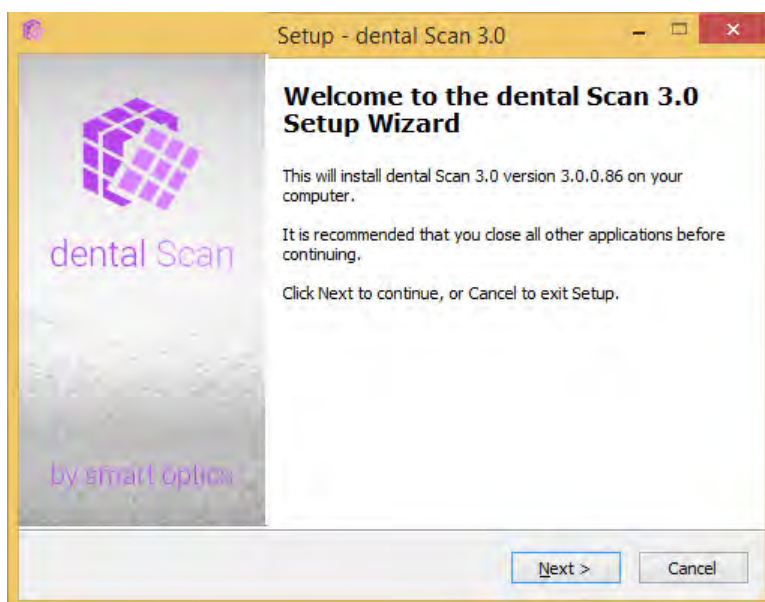
- ▶ To choose a different language for the setup, simply select it from the dropdown list. The following are available: German, English, Spanish, French, Italian, Czech, Portuguese, Romanian, Turkish, Greek, Russian, Japanese, Korean, Chinese (traditional and simplified).



TIP

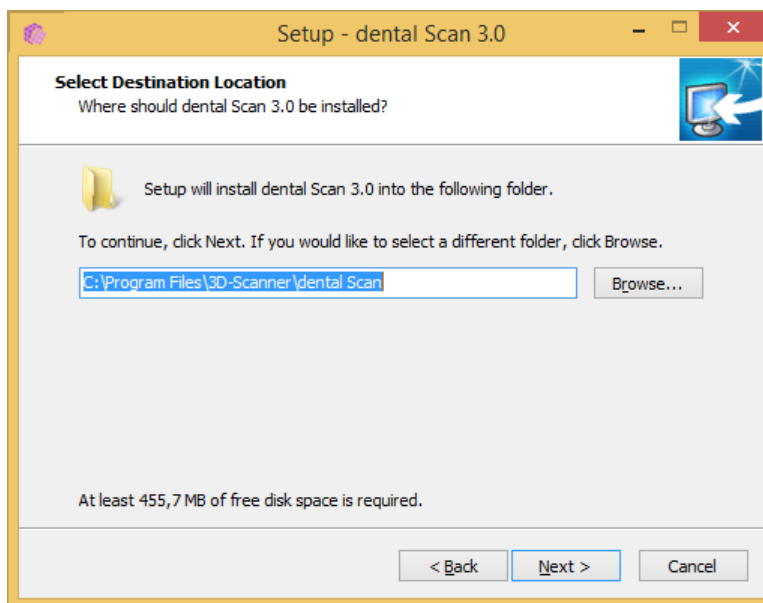
The language in which the software controls are displayed can be changed in the software settings after installation. The current language of the operating system is selected by default.

- ▶ Click **OK**. Please note that you cannot revert back to the choice of language during setup.
- ✓ The welcome screen then pops up with information about the setup process and on the version.



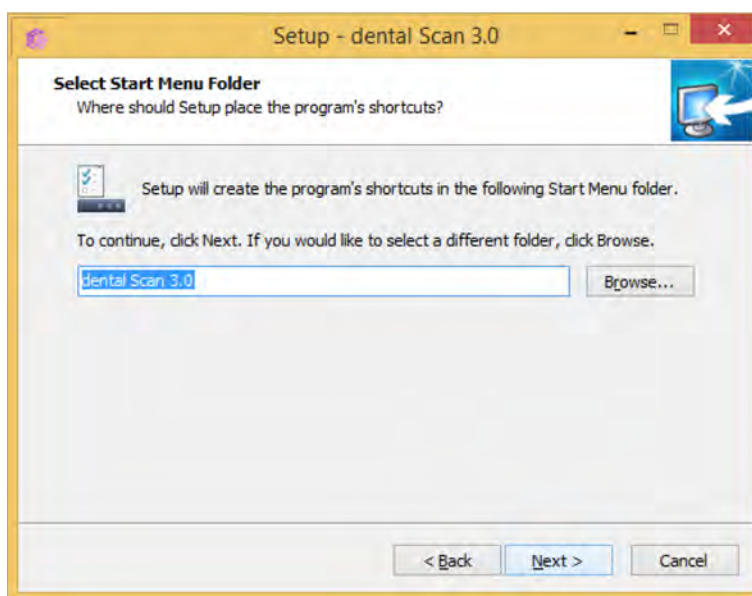
- ▶ Click **Next**.
- ✓ The setup will ask you to choose a destination folder for the installation.

Target folder = installation folder

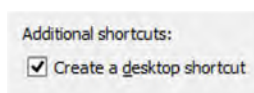
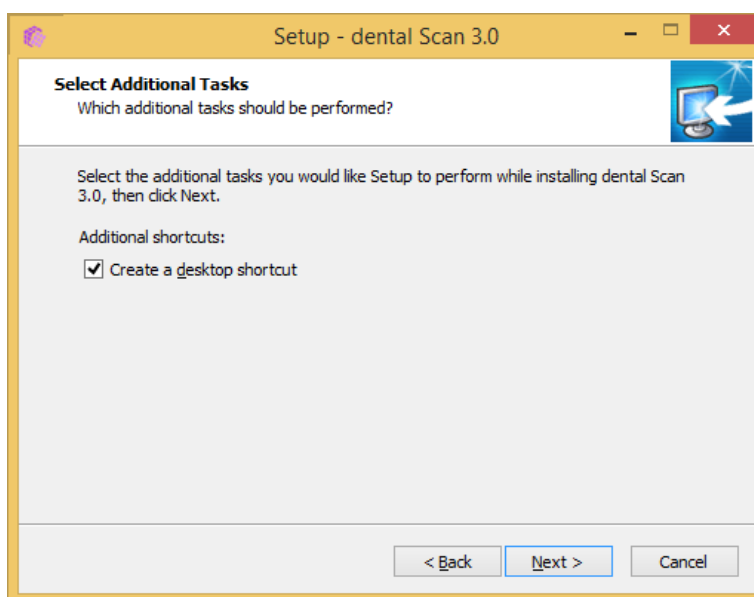


- ▶ Accept the suggested destination folder. If the suggested folder is not desired, then you can click on **Browse** and select a different local folder.
- ▶ Click **Next**.
- ✓ The setup will ask you to select a Start menu folder.

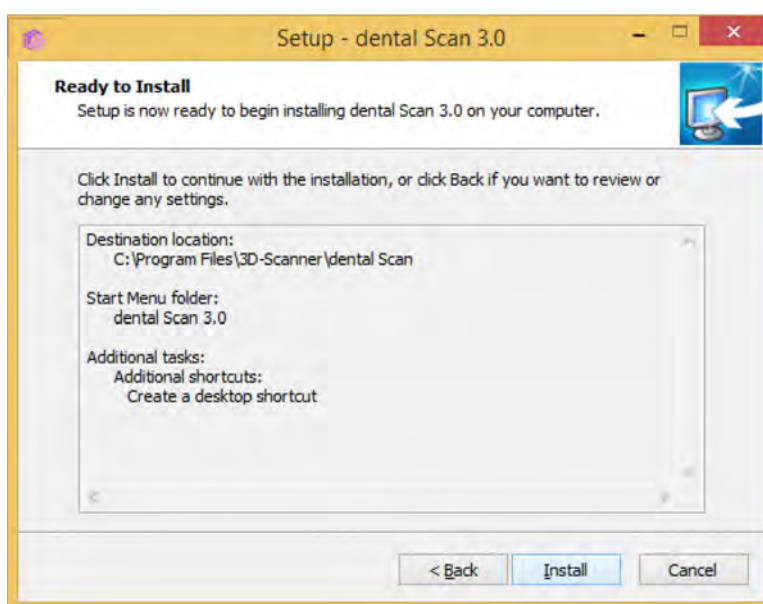
Start menu folder = app overview



- ▶ Accept the suggested Start menu folder. If the suggested folder is not desired, then you can change the name or click on **Browse** and select a different folder.
- ▶ Click **Next**.
- ✓ The setup will ask you whether or not you want to create a desktop shortcut for launching the software.

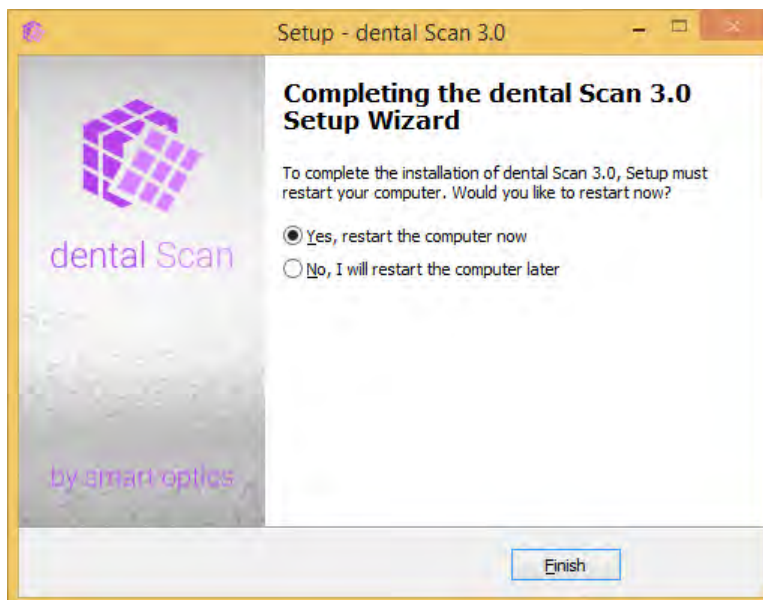


- ▶ If applicable, activate the **Create desktop symbol** checkbox.
- ▶ Click **Next**.
- ✓ The **Ready to install** window pops up. All selected settings are displayed.



- ▶ Check the settings (destination folder, Start menu folder and desktop shortcut icon). If you would like to change any of the chosen settings click **Back**.
- ▶ To start the installation with the displayed settings click **Install**.
- ✓ The installation process starts and the progress is displayed on the screen. In addition to the scanner software, the device drivers, the camera software as well as missing Windows components are installed.

- ✓ The final window for finishing the setup is displayed. You will be asked to decide whether the computer is to be restarted immediately or later. smart optics recommends activating the option for a restart.



- ▶ Click **Finish**.



- ✓ The setup is completed. If applicable, the computer will restart. A new icon is now available on the desktop and the Start menu contains a new software icon.

3.4. Load calibration data



NOTE

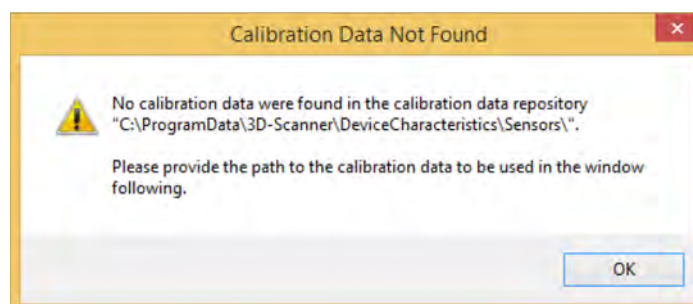
Measuring error due to incorrect calibration data

Without the correct calibration data the software will not be able to work optimally with your scanner. The calibration data are saved individually for each device on the installation data carrier.

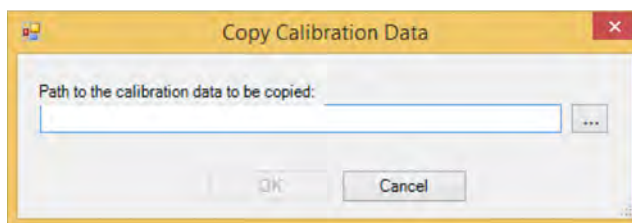
- ▶ Check whether the name of the calibration folder on the data carrier corresponds to the serial number of the 3D sensor on the type plate of the scanner. Depending on the device, the SO number can also be on a label.
- ▶ If the numbers do not correspond, you may not use the calibration data.
- ▶ Never mix up the installation data carriers of different scanners. Keep all installation data carriers in a safe place.
- ▶ In case of loss, please contact your reseller to obtain the appropriate calibration data for your scanner.



- ▶ Start dental Scan by double-clicking the desktop icon or by selecting the Start menu entry.
- ✓ When starting the program for the first time, you will receive a message stating that the calibration data is missing in the Windows directory `C:\ProgramData\3D-Scanner\DeviceCharacteristics\Sensors`.



- ▶ Click **OK**.
- ✓ You will be asked to give the path to the calibration data which is to be copied into the mentioned Windows directory.



- ▶ If the path is not found automatically, click on the button **...** and select directory `\SO-202...` on the installation data carrier. The complete name of the directory is always different as it is individual for every device.



NOTE

Measuring error due to incorrect calibration data

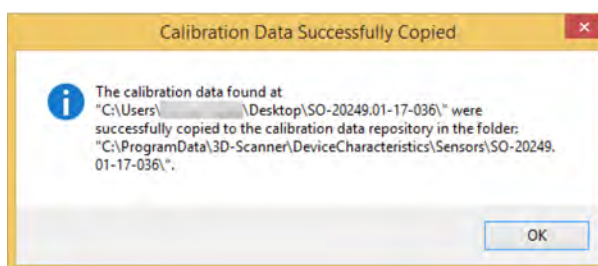
The name of the SO directory on the data carrier must correspond to the serial number of the 3D sensor on the type plate or SO label.

- ▶ Compare the SO numbers on the scanner and the data carrier. If the numbers do not correspond, you may not use the calibration data.
- ▶ Contact your reseller or the manufacturer to obtain the matching SO data for your device.



Device components

- ▶ Click **OK**.
- ✓ The data will be copied into the protected Windows directory `C:\ProgramData\3D-Scanner\DeviceCharacteristics\Sensors\SO-202...`



Connecting the scanner

- ✓ From now on, the calibration data will be found when starting the software. The software will only start if the scanner is connected and switched on.



Calibration

- ▶ After installation, follow the instructions for calibrating your scanner.



4. Update

Updates contain improvements and corrections to your software version. The scanner software is programmed ex-works such that updates may be installed free of charge for a period of 12 months from the authorization date. It is possible to continue using the version provided with your scanner for an unlimited period without the installation of software updates.



TIP

smart optics recommends the installation of updates to give you perfect use of your scanner at all times.

Your reseller would be pleased to inform you about available updates. To prepare an individual quote for you, the reseller will require your serial numbers.



Components of the device

You will find the serial number (SO number) of the scanner and the 3D sensor on the back of the scanner.

4.1. Installation

Proceed as follows upon receipt of an update from your reseller:

- ▶ Download the installation file or store locally on the computer on which the software is installed.
- ✓ As a rule, the installation file is provided in a packed format, for example, RAR. For unpacking you need a tool such as WinRAR, 7Zip or similar tools, which can partly be downloaded free of charge from the Internet.
- ▶ Unpack the packed file with your tool.
- ✓ You will receive an executable EXE file.
- ▶ End the scanner software (if opened).
- ▶ Double-click the EXE file.
- ✓ The update starts automatically. The installation steps correspond to the normal software installation.



Section 3.3

- ▶ Follow the instructions on the screen. To replace the version, install in the existing target directory and the existing Start menu directory.
- ✓ After successful completion and a restart of the computer, you can start the software and work as usual. The folder with the calibration data already exists and therefore does not need reloading.
- ✓ If you adjusted the software settings in the previous version, these changes will automatically be transferred to the new version.



TIP**Adapting the work directory**

If you work with dental Scan in the stand-alone version and use the standard setting of the work directory

C:\Users\[Username]\Documents\3D-Scanner\Work\[JJJJ]
please observe the following:

In case of an update at the turn of the year, a new directory is automatically created for the new year, e.g 2017. This new directory is, however, not automatically transferred as new work directory. If you wish to save new projects in the new year's directory, please change the settings of dental Scan. Otherwise the projects will continue to be saved in the existing work directory, i.e.

C:\Users\MyName\Documents\3D-Scanner\Work\2016.

4.2. Renewal of activation code

You can continue to use the software for an unlimited period without the installation of chargeable software updates. If you wish to install an update after 12 months, you require an activation code which is available from your reseller.

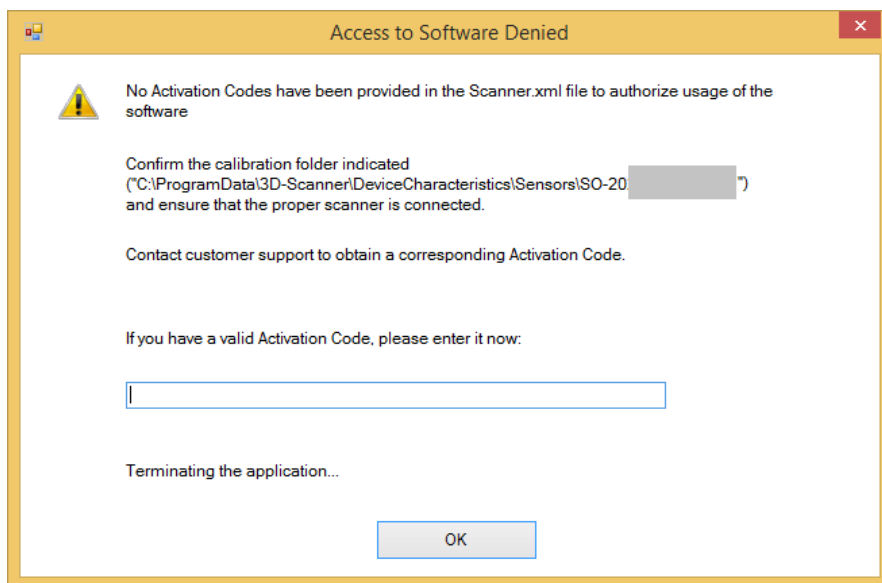


TIP

Please note that an activation code may possibly only become available on the following work day as every code is generated individually by the manufacturer for a specific scanner.

- ▶ Install the update as described.
- ▶ Start the software.

- ✓ After installation of a chargeable update you will receive the following message:



- ▶ Enter the activation code provided by your reseller in the **Activation Code** field.
- ▶ Click **OK**.
- ✓ The activation code is saved and the software starts.
- ▶ Proceed as described for every chargeable update.



NOTE

Limitation of use due to loss of activation code

It is impossible to reinstall a chargeable update without an activation code. This can, for instance, happen if you wish to use dental Scan on a different computer.

- ▶ Keep all activation codes in a safe place.



5. Special cases

Trial version

A trial version of dental Scan is a full version of the currently available release. Chargeable additional modules as well as the user manual are not included.

Please ask your reseller whether a trial version is currently available.

You need one of the following smart optics 3D dental scanners for using the trial version of dental Scan:

Vinyl, Activity 885 Mark 2, Activity 885, Activity 855 or scanBox.



TIP

You can test all modules which are not running with your actual equipment in the showroom of your reseller. Please contact your reseller for a live presentation.



Section 4.1

Trial versions of dental Scan are delivered like an update. Please follow the instructions for installing an update.

Period of time for trial

Trial versions are valid for a fixed period of time, usually for 30 days. Be aware that this period starts on the date you receive the activation code.

After the trial period is over you cannot start the trial version any more. If you decide to purchase it, you can authorize the trial version with an activation code, just like a chargeable update.

Purchasing

You can purchase dental Scan exclusively from a reseller of smart optics products.



Replacing scanners

Should you replace your 3D dental scanner with another device from smart optics, then it is necessary to also replace the calibration data of the old scanner with the calibration data of the new scanner. This also applies to scanners of the same type.

- ▶ Open the directory `C:\ProgramData\3D-Scanner\DeviceCharacteristics\Sensors`. This directory is protected and is only displayed if you enter the path manually in Windows Explorer.
- ▶ The folder `SO-202...` contains the calibration data of the old scanner. Rename the folder, for example to `xx_SO-202...`. It is important to prefix with at least one character. If you no longer require the calibration data of this scanner you can also delete the folder. If required, the calibration data of the installation data carrier of the old device can be reloaded.
- ▶ Load the calibration data of the new scanner for the first start of the program or copy the folder with the new calibration data into the directory `C:\ProgramData\3D-Scanner\DeviceCharacteristics\Sensors`.

Section 3.4

Authorizing a module

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An additional installation is not necessary if you wish to complement your software version with chargeable modules.

In the case of pre-installed systems, the modules are generally already authorized, so that you need not do anything.

To have a module authorized subsequently, your reseller will provide you with an activation code. Execute the following work steps once only. If you have received several activation codes, please repeat the steps for each code:

- ▶ Select the menu item **Options | Access | Add Activation Code**.
- ▶ A window for entering the code opens.
- ▶ Enter the activation code.
- ▶ Click **OK**.
- ✓ The validity of the code is checked and confirmed. You can now use the module. The activation code also remains valid after an update.
- ✓ Information on operation is given in the user manual for dental Scan.



NOTE

Limitation of use due to loss of activation code

It is impossible to re-authorize a module without an activation code. This can, for instance, happen if you wish to use dental Scan on a different computer.

- ▶ Keep all activation codes in a safe place.



Update from Activity to dental Scan with exocad®

If you have been using an Activity version together with exocad® so far and are updating to dental Scan, then an adaptation of the exocad® installation is necessary. Otherwise exocad® will not find the installation path of the scanner software.



NOTE

Defective exocad® application through manipulation of the installation files

In order to adapt the exocad® interface to the scanner software, it is necessary to manually adapt an exocad® system file. If this is done incorrectly, it could be that the exocad® Dental DB or the interface to the scanner software no longer work.

- ▶ Only execute the following work steps if you have completely understood them.
- ▶ If you are not sure, please ask an experienced Windows user or your exocad® supplier for support.
- ▶ Should an error occur nonetheless or if exocad® no longer starts, re-install the application.

- ▶ Log in under Windows as a user with administrator rights.
- ▶ Open the installation path for the exocad® application DentalDB in Windows Explorer C:\Program Files (x86)\exocadFramework\DentalDB\config\
- ▶ Open the file defaultsettings-db.xml with the Windows WordPad application.
- ▶ Look for the parameter **ExecPath value**.
- ▶ Depending on your scanner software, enter the following line:
 - For dental Scan:
<ExecPath value="C:\Program Files\3D-Scanner\dental Scan\dentalScan.exe">
 - For Activity:
<ExecPath value="C:\Program Files\3D-Scanner\Activity\Activity.exe">
- ▶ If your scanner software is installed in another installation path, adapt the data accordingly.
- ▶ Ensure that the path data is embraced by double inverted commas.
- ▶ Save the file.

- ✓ You can now start your scanner software via exocad®.

Adaptation of exocad® is no longer necessary when you next update from dental Scan.

Deletion of user settings from the previous version



NOTE

Loss of program functions due to deletion of files

In order to reset the settings of dental Scan to original delivery state, it is necessary to delete a file from a protected directory. If several or other files were deleted by accident, it is possible that dental Scan no longer works.

- ▶ Only execute the following work steps if you have completely understood them.
- ▶ If you are not sure, please ask an experienced Window user or your reseller for support.
- ▶ Should an error occur nonetheless or if dental Scan no longer starts, re-install the application.

During installation, the standard settings are saved in the installation directory. A copy is created in the local user directory when the program is first started as follows: `C:\Users\[Username]\AppData\Local\3D-Scanner\UserSettings.xml`

All changes you perform within the application are saved in this file: `UserSettings.xml`. dental Scan will from now on always access your personal settings and no longer access the original settings in the installation directory.

Section 6

Activity ▷ dental Scan

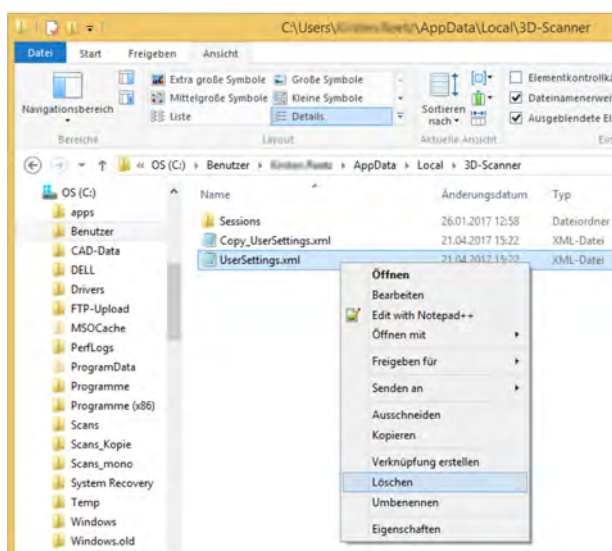
The personal settings are retained even when you update or uninstall the software.

The personal settings will be overwritten automatically once after an update from an Activity version to dental Scan.

Procedure

To reset your personal settings to the original state of delivery, please proceed as follows:

- ▶ Open the directory `C:\Users\[Username]` in Windows Explorer.
- ▶ Check the checkbox **Hidden Elements** under **View**.
- ✓ The `AppData` folder will be displayed.
- ▶ Open the folder `..\AppData\Local\3D-Scanner\`.
- ▶ For safety reasons, create a copy of the file `UserSettings.xml` under a different name.
- ▶ Delete the file `UserSettings.xml`.



- ✓ The personal settings are deleted.
- ▶ Start dental Scan.
- ✓ The file `UserSettings.xml` is created new in the directory `C:\Users\[Username]\AppData\Local\3D-Scanner\`.
- ✓ dental Scan now works again with the standard settings. These settings will as of now be saved and maintained as personal settings.



TIP

If applicable, you can rename your back-up copy in order to recreate your old personal settings.



6. Uninstallation

If you no longer require the software, you can delete this completely from your computer in three steps.



NOTE

Loss of data or program functions due to deletion of files

To fully uninstall dental Scan, it is necessary to delete data from protected folders. Should other files have been deleted by accident, it is possible that programs no longer work on your computer.

- ▶ Only execute the following work steps if you have completely understood them.
- ▶ If you are not sure, please ask an experienced Window user or your reseller for support.
- ▶ Create a back-up of your computer before executing the following work steps.



TIP

As a rule it is not necessary to uninstall the previous version when installing an update. As a rule you can even simply execute the setup again after an interrupted installation.

In rare cases, components of a previous older version can cause problems, so that uninstallation is recommended before an update. For example, such a case is given by a changed directory structure in the new version.

Activity ▷ dental Scan

In order to switch from an Activity version to dental Scan, uninstallation is not required.

Uninstall program

You can uninstall dental Scan like any other Windows program via the Windows control panel. Alternatively you can use an uninstallation tool belonging to dental Scan.

- ▶ Open the target directory of your installation which is `C:\Program Files\3D-Scanner\dental Scan` as standard. If you wish to uninstall an Activity version, open the file `C:\Program Files\3D-Scanner\Activity`.
- ▶ Double-click the `unins000.exe` file.
- ▶ Follow the instructions on the screen.
- ✓ The content of the target directory `C:\Program Files\3D-Scanner` is deleted.
- ✓ The scanner software has been removed from your computer.

Deleting data for the 3D scanner

The folder with the calibration data is not deleted automatically when uninstalling the program. Service files are also retained.

For complete uninstallation, delete these files manually.

- ▶ Activate the checkbox **Hidden Elements** under **View** in Windows Explorer.
- ✓ The protected folders are displayed.
- ▶ Open the folder `C:\ProgramData`.
- ▶ Delete the complete sub-folder `\3D-Scanner`.
- ✓ The calibration data and service data are removed.

Deletion of local user data

During operation the software saves user settings and session protocols in the local user folder. These data are not deleted automatically during uninstallation of the program.

For complete uninstallation, delete these files manually.



NOTE

Loss of user data due to deletion of folders

Settings and protocol files will be irretrievably lost if you delete the local user data.

- ▶ Only delete the local user data if you do not wish to have a new installation of dental Scan.
- ▶ Only delete the local user data if no support cases of your scan results are still open.

- ▶ Activate the checkbox **Hidden Elements** under **View** in Windows Explorer.
- ✓ The protected folders are displayed.
- ▶ Open the folder `C:\Users\[Username]\AppData\Local`.
- ▶ Delete the sub-folder `\3D-Scanner`.
- ✓ User settings and session protocols are deleted.
- ✓ dental Scan is fully uninstalled.



7. Checklists

Initial installation

- Does the computer meet the technical requirements of the scanner?
- Is the computer free of viruses?
- Is the operating system up-to-date (important Windows updates)?
- Is the scanner connected correctly to the computer (USB cable and mains cable)?
- Was the setup executed correctly?
- Did you restart the computer after installation?
- Have you loaded the calibration data (SO folder)?
- Does the name of the folder correspond to the calibration data of the SO sensor number (on the back of the scanner)?
- Does the software start without errors after correct installation and with correct calibration data?
- Have you had your optional modules authorized (activation code)?

Update

- Do you have your serial numbers "Serial no" and "3D-Sensor" (SO-202...) available (on the back of the scanner)?

Ask your reseller:

- Is an update available?
- Is the update compatible with your scanner type?
- Was your scanner authorized less than 12 months ago?
- Is the available update free of charge for you?

The first authorization is less than 12 months ago

- Have an update sent and install without activation code.

The first authorization is longer than 12 months ago

- Have an activation code and update sent!
- Install update.
- Enter the new activation code when starting the program.

After an update

- If applicable, was the Activity software uninstalled?
- If applicable, were the old user settings deleted?
- If not: was the work directory changed to the new year, if applicable?
- Is exocad® Dental CAD being used? If yes: was the start parameter for the scanner software adapted in the exocad® installation?



8. Glossary

Activation code	<p>A) Code which starts a countdown of 12 months. Updates can be installed free of charge during this period. After this period, a new activation code must be entered following the installation of an update.</p> <p>B) Code, with which a chargeable module is authorized for use.</p>
Work directory	Directory in which the scan results are saved, subdivided by years and projects.
Export data	3D data generated from the scan data. Basis for the CAD software. The format of the export files (e.g. STL) is open for many applications.
Calibration	<p>A metrological term, here:</p> <p>A) alignment of the scanner to the values of an industrially calibrated model.</p> <p>B) alignment of the motion axes with regard to the individual calibration data.</p>
Scan data	Individual images taken during a measurement.
Calibration data	<p>Individual calibration data which only apply to a single scanner. The calibration data is assigned an explicit sensor number, i.e. SO-20242.01-13-062. The first digits SO-202 are always the same, the subsequent numbers differ. You can find the number in the following places:</p> <ul style="list-style-type: none">— Label or type plate with the appendix "Sensor"— as name of the folder in which the calibration data are saved.

Important file paths

Windows directories are sometimes indicated differently in Explorer than in conventional spelling. For example, the designation

► This PC ► OS (C:) ► Users corresponds to the directory C:\Users.

Some Windows directories are protected so that these are only displayed by entering the path name in Explorer. The placeholder sign % can replace parts of the path, i.e. %appdata%.

File paths in the current software version

Program files	C:\Program Files\3D-Scanner\dental Scan
Work directory (stand-alone)	C:\Users\[Username]\Documents\3D-Scanner\Work\[JJJJ]
Work directory (with exocad®)	C:\Program Files (x86)\exocadFramework\CAD-Data\[Versionnumber]
Folder for calibration data	C:\ProgramData\3D-Scanner\DeviceCharacteristics\Sensors
Folder for user settings and session protocols	C:\Users\[Username]\AppData\Local\3D-Scanner

File paths in older software versions

Program files	C:\Program Files\3D-Scanner\Activity
Work directory (stand-alone)	C:\Users\Public\Documents\3D-Scanner
Work directory (with exocad®)	C:\Program Files (x86)\exocadFramework\CAD-Data\[Versionnumber]
Folder for calibration data	C:\Programs(x86)\3Dscanner/Activity/Data
Folder for session protocols	C:\Users\[Username]\AppData\Roaming\3D-Scanner\Sessions



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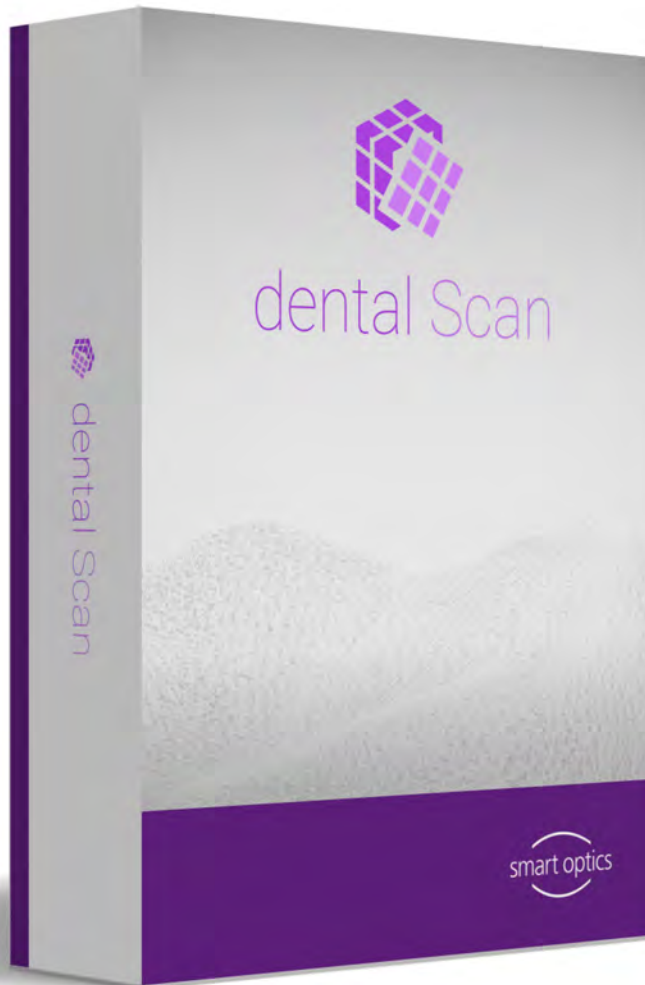
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