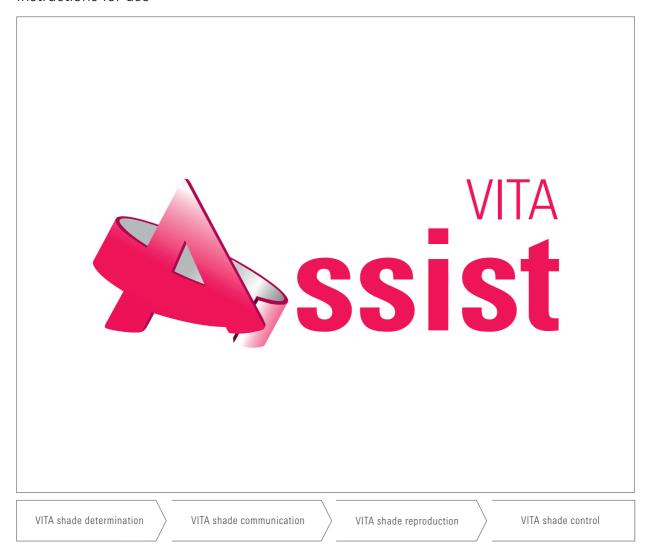
# VITA ShadeAssist (Photo note / Tooth outline note) VITA ToothConfigurator

Instructions for use



Date of issue 2022-12

VITA – perfect match.



VITA Assist is a program that supports communication between the dentist and dental technician, as well as between the practitioner and the patient. VITA Assist currently combines the

VITA ShadeAssist and VITA ToothConfigurator modules.

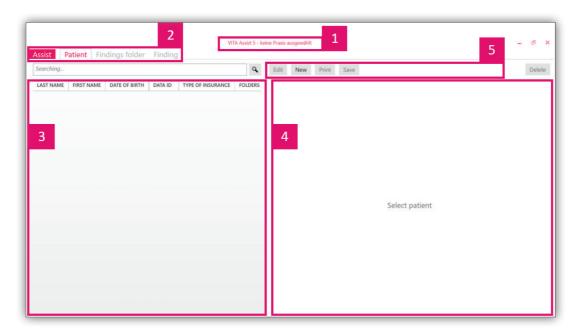
| <b>1</b><br>1.1 | Starting VITA Assist Main window                     | <b>4</b><br>4 | 6   | Help   | 50 |
|-----------------|--|---------------|-----|--|----|
| 1.2             | Patients, findings folders, findings                 | 4             | 7   | Information on the program, updates and licenses | 50 |
| 2               | Settings   | 5             |     |  |    |
| 2.1             | General settings                                     | 5             | 8   | Import/export data                               | 51 |
| 2.1.1           | Saving your own data                                 | 6             | 8.1 | Backup   | 51 |
| 2.1.2           | Creating a standard recipient                        | 7             | 8.2 | Export   | 51 |
| 2.2             | Display settings                                     | 8             | 8.3 | Import   | 52 |
| 2.3             | VDDS settings (relevant for Germany only)            | 9             |     |  |    |
| 2.3.1           | Installing the VDDS interface                        | 9             | 9   | Creating practice data                           | 52 |
| 2.3.2           | VDDS settings  | 10            |     |  |    |
| 2.4             | Establishing a connection with VITA Easyshade        | 11            |     |  |    |
| 2.5             | LivePhoto  | 12            |     |  |    |
| 2.6             | Directories  | 13            |     |  |    |
| 3               | Patient  | 14            |     |  |    |
| 3.1             | Creating patients                                    | 14            |     |  |    |
| 3.2             | Selecting/searching for patients                     | 15            |     |  |    |
| 3.3             | Editing patients                                     | 15            |     |  |    |
| 3.4             | Deleting a patient                                   | 15            |     |  |    |
| 4               | Findings folder                                      | 16            |     |  |    |
| 4.1             | Creating a new findings folder                       | 16            |     |  |    |
| 4.2             | Processing a findings folder                         | 17            |     |  |    |
| 4.3             | Deleting a findings folder                           | 17            |     |  |    |
| 4.4             | Printing, saving or emailing findings folder         |               |     |  |    |
|                 | and findings   | 18            |     |  |    |
| 5               | Creating findings                                    | 19            |     |  |    |
| 5.1             | Creating tooth contour findings                      | 20            |     |  |    |
| 5.1.1           | Adding VITA Easyshade measurements                   |               |     |  |    |
| <b>5</b> 4 0    | to the tooth contour findings                        | 21            |     |  |    |
| 5.1.2           | Display of the measured values                       | 22            |     |  |    |
| 5.1.3           | Drawing program for tooth contour findings           | 24            |     |  |    |
| 5.1.4           | Saving tooth contour findings                        | 25            |     |  |    |
| 5.2             | Creating photo findings                              | 26            |     |  |    |
| J.Z.I           | Adding VITA Easyshade measurements to photo findings | 28            |     |  |    |
| 5.2.2           | Display of the measured values                       | 29            |     |  |    |
| 5.2.3           | Photo findings processing program                    | 31            |     |  |    |
| 5.2.4           | Saving photo findings                                | 33            |     |  |    |
| 5.3             | ToothConfigurator                                    | 34            |     |  |    |
| 5.3.1           | Zooming  | 36            |     |  |    |
| 5.3.2           | Showing auxiliary and dimension lines                | 37            |     |  |    |
| 5.3.3           | Selecting a tooth line                               | 40            |     |  |    |
| 5.3.4           | Configuring tooth geometry                           | 41            |     |  |    |
| 5.3.5           | Selecting a gum/oral cavity shade                    | 44            |     |  |    |
| 5.3.6           | Selecting a tooth shade                              | 45            |     |  |    |
| 5.3.7           | _  | 46            |     |  |    |
| 5.3.8           | Comparing with original photo                        | 46            |     |  |    |
|                 | Undo   | 47            |     |  |    |
| 5.3.10          | Configuring the toolbar                              | 47            |     |  |    |
|                 | Saving/discarding                                    | 48            |     |  |    |
| 5.3.12          | Copying to the clipboard                             | 48            |     |  |    |
| 5.3.13          | Settings   | 49            |     |  |    |

# 1 Starting VITA Assist

After starting VITA Assist, the main window opens.

# 1.1 Starting VITA Assist

The main window of VITA Assist consists of the following areas:



- 1. Title bar: Your name (practice/laboratory) is displayed here. You can save this in Options (see section 3.1).
- 2. Navigation bar:
  - Assist: Access to Help, Program, Import/Export, Options and Practice
  - Patient: Patient overview, including search and rapid access to your most important patient data and findings.
  - Findings folder: Displays all findings folders of a patient
  - Findings: Displays all findings for a patient
- 3. Patient overview: Displays all saved patients in a list and enables a patient search.
- 4. Detailed view: Shows patient data and their findings.
- 5. Processing bar: Enables the processing of patient data, findings folders and findings.

# 1.2 Patients, findings folders, findings

VITA Assist administers data on three hierarchical levels: patient, findings folders, findings.

- **Patient:** A patient file contains all the data on a patient that has been entered with VITA Assist. For example, this includes address, insurance number, as well as findings folders and findings.
- **Findings folders:** Findings folders are "collection folders" for individual tooth findings of a patient.

  These can contain, for example, findings gathered over a longer period of time, from the initial to the final situation.

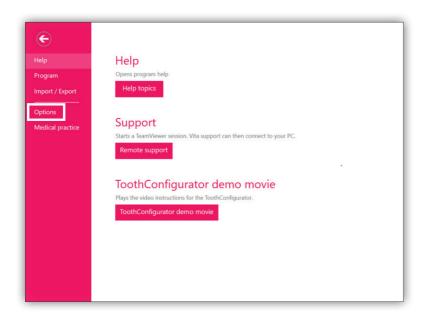
  The findings folder can be given to the patient as a printout or sent to a laboratory.
- Findings: Findings are the actual core of VITA Assist. A differentiation is made between
  - tooth contour findings (black symbol)
- photographic findings (green symbol)
- ToothConfigurator for dentures (blue symbol).

You can find a description of the types of findings in section 8.

# 2. Settings

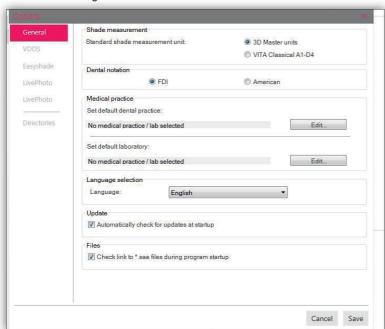
You can access settings under the "Assist" tab,





Select "Options."

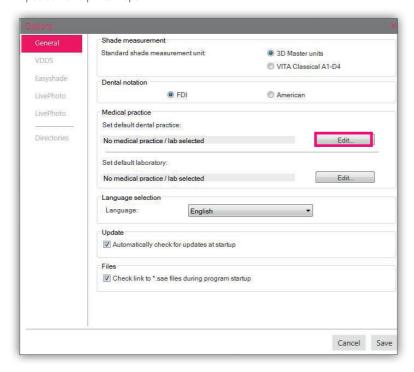
# 2.1 General settings



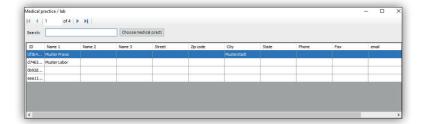
Here you can select the display of shade values, tooth layout and the language. You can also automatically search online for updates and decide whether you would like to check SAE files when starting the program. You can enter your data in Options.

# 2.1.1 Saving your own data

In the data, you determine which practice and which receiving laboratory should appear by default on a printed report.



From **"Enter the standard return address here (your data)":** go to "Process." Now you can select the default sender from the practices you have created. Refer to section 9 "Creating practice data" to learn how you can create a new practice.

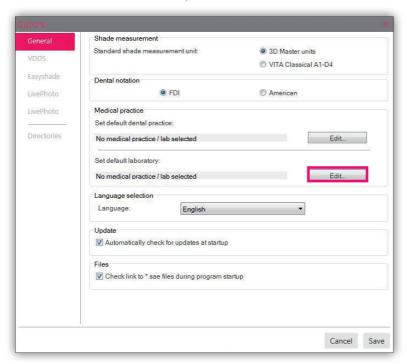




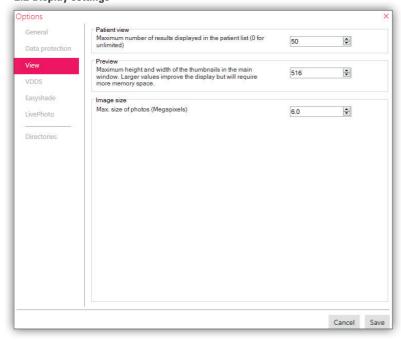
# 2.1.2 Creating a standard recipient

You can create a standard recipient for your reports by going to

"Process" in "Enter the standard recipient here."



# 2.2 Display settings



Under "Display," you can determine the maximum number of search results from the patient list, the maximum height and width for thumbnails and the image size.



#### 2.3 VDDS settings (relevant for Germany only)

The VDDS interface developed in Germany by the Verband Deutscher Dentalsoftware-Unternehmen e.V. is used for the exchange of patient and image information between different dental software solutions. If you already administer your patient data with another program but want to use VITA Assist to document findings, then data exchange via the VDDS interface is an ideal solution.

You can use your own software solution, as well as the special functions of VITA Assist.

Important: So that the data exchange functions, the VDDS interface must have been successfully installed and the VDDS connection configured in your patient administration (PVS)! If applicable, get information on this from your software manufacturer.

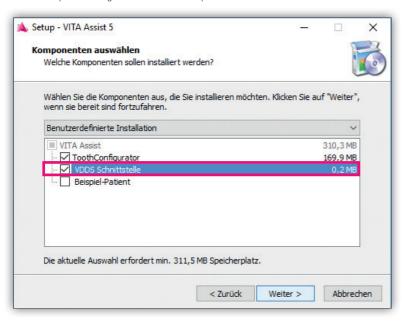
First, select a patient in the patient administration software. The PVS will now forward the patient data to VITA Assist. The data is prepared and displayed in VITA Assist. Now you can work in VITA Assist and create tooth contour findings for this patient, for example.

After you have saved the findings, these can be sent back to the PVS and displayed there.

A special findings image in JPG format is created for this purpose. As a result, you can only view the findings in the PVS. The processing of the findings (e.g., adding text, adding VITA Easyshade measurements) is always done in VITA Assist.

#### 2.3.1 Installing the VDDS interface

In order to be able to use the VDDS interface in VITA Assist, you must install it. This takes place during the VITA Assist setup.

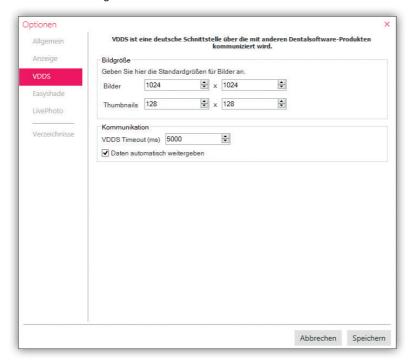


In the **"Select components"** dialog, check the box at **"VDDS interface."** Click on **"Next"** and continue the installation as usual. The VDSS interface is now set up automatically.

**Note:** You can also install the interface afterwards. Simply call up the setup once more. The steps for installation are the same as the ones described above.



# 2.3.2 VDDS settings



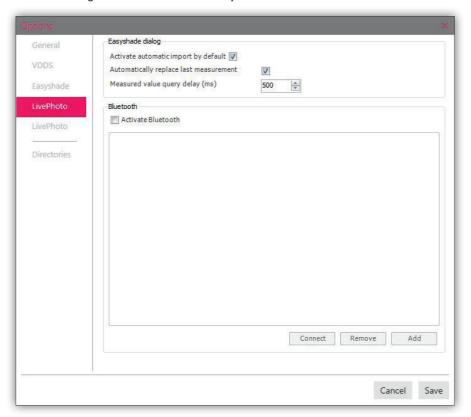
In the **"Image size"** area, set the size of the findings images to be sent via the VDDS interface to an external patient administration system. A pixel height and width of 1024 for full findings images and 128 pixels for preview images (thumbnails) are set by default. Increase the size to obtain more detail-rich findings images if the patient administration system supports this. However, this also increases the space that the images take up on your data carrier.

Under **"Communication"** you determine how long VITA Assist should wait for a response from the patient administration system during data exchange. If this time has expired (standard: 5000 ms = five seconds), an error is displayed (timeout).

If a checkmark is placed next to "Automatically forward data," new or altered image data are forwarded immediately to the patient administration system.

In this case, the most recently altered findings will always be displayed in your PVS (as long as the PVS supports this function). If you do not place a checkmark here, you must call up the image data for a patient manually via the PVS.

#### 2.4 Establishing a connection with VITA Easyshade

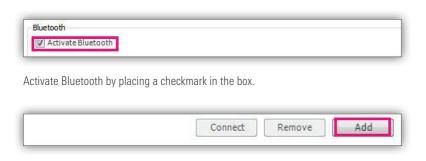


With the option "Activate automatic import by default," you switch on the auto-import of VITA Easyshade measurement results permanently.

The option "Delay of measured value inquiries (ms)" regulates the frequency of required new measurement data if auto-import is active. VITA Assist searches for new data from the VITA Easyshade every 0.5 seconds (500 milliseconds) by default. 500 ms is the recommended setting and should only be altered if the program reacts in a delayed manner. The value would then have to be increased.

# Important:

To establish a Bluetooth connection between VITA Assist and the VITA Easyshade, Bluetooth must be activated on your computer. Make sure that the Bluetooth interface of your VITA Easyshade is activated.



Click on "Add" to search for VITA Easyshade devices.

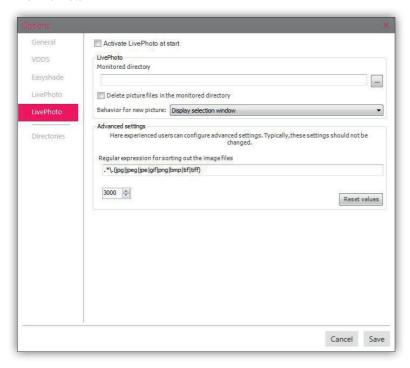


The software searches for available Bluetooth devices within range. If your computer and the VITA Easyshade are correctly configured, the device should appear in the list. If your device is not displayed, start the search again and make sure that both devices are connected to each other via Bluetooth.



Mark your VITA Easyshade and click on "Select" and then on "Save." The connection is now established.

#### 2.5 LivePhoto



With the option "**Activate LivePhoto at startup,"** you establish that the data directory monitoring is switched on automatically at each startup of VITA Assist. The most important setting for LivePhoto is the "**Monitored directory"** setting. Here you determine the data directory in which VITA LivePhoto is always searching for new image data.

**Tip:** If you have a camera with WLAN function that includes a Windows file share, enter the network path of the camera here (e.g., "\\CAMERAXY"). New photos are then transferred to VITA Assist automatically and wirelessly. Otherwise, enter the directory in which your camera software stores images (e.g., "My Images").

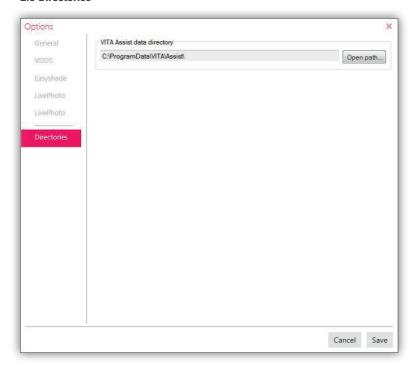
Under this, you will find the option **"Delete photo files in the monitored directory."**If you activate this option, the images are removed after a successful import in order to save memory space.

The option "Action with new photo" determines which action is to be carried out with each photo import. Under "Expanded settings," you can determine which file types are planned for import.

All other file types will be ignored by VITA LivePhoto.

You can also enter the maximum waiting time for import. If all you have available is a very slow network connection, or if there are problems with your camera, you can increase the value. Normally, these expanded settings should not be altered.

# 2.6 Directories



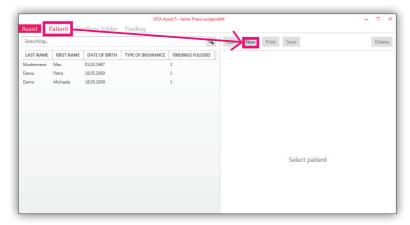
On the **"Directories"** tab, establish the path to the data directory of VITA Assist. All data generated with VITA Assist are found in this directory. This is also the directory that you should take into consideration with regard to data backup.

Tip: Perform data backup on a regular basis (see section 11.1.1).

# 3. Patient

A full-fledged patient management system is integrated in VITA Assist. You can create, process, delete and search for patients, etc. The selection of a patient is the first step in your daily work with VITA Assist. Only after selecting a patient can you enter findings, use VITA Easyshade, insert images, etc.

# 3.1 Creating patients



To create a new patient, select the "Patient" tab and then click on "New."



Now enter the patient data. There are no required fields here. You can enter or leave out data as you wish. When you are finished with the entry, click on "OK." The creation of a patient is now concluded. A findings folder opens automatically.

# 3.2 Selecting/searching for patients



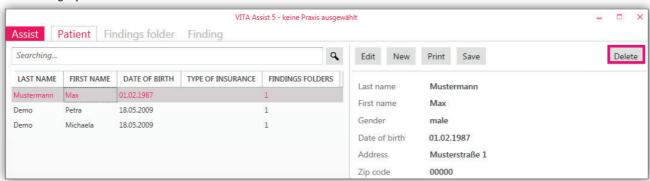
Through Search, you can select from existing patients.

# 3.3 Processing patients



You can process the currently selected patient by selecting the **"Patient"** menu. The patient's data are now displayed and can be altered by clicking on **"Process."** 

#### 3.4 Deleting a patient



To delete a patient, select "Delete" in the "Patient" menu.

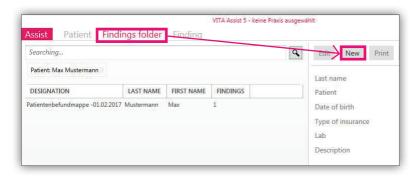
# 4. Findings folders

Findings folders are the "collection folders" for findings. They consist of a name, a descriptive text and the assigned findings. Each findings folder must be assigned to a patient. This means that a patient must always be opened first before you can create a findings folder.

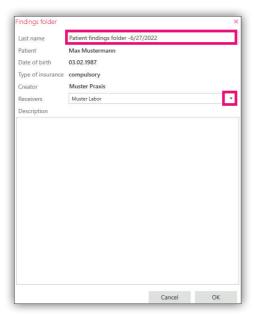
# 4.1. Creating a new findings folder

To create a findings folder, a patient must have been selected before this. A findings folder is always created for the currently selected patient.

After you have selected a patient, click on "Findings folder" and then "New."



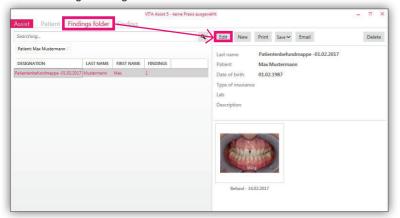
The **"Findings folder"** window opens. The fields for the patient, date of birth and type of insurance are already permanently entered (if they were created beforehand) and cannot be altered.



You can change the name of the findings folder. You can also select the recipient, i.e., the receiving laboratory or the receiving practice, for each report. The laboratory that you have entered in the options as standard is always used first. If you have added several practices / laboratories, you can click on the arrow beside the laboratory name and select another recipient.

Finally, you can enter another description. After clicking on **"OK,"** the creation of the findings folder is completed. You will now be taken directly to the creation of the first finding. Read Section 6 "Creating findings" for additional information.

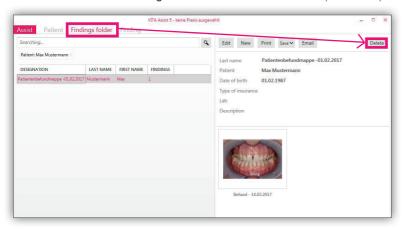
# 4.2 Processing a findings folder



You can process an existing findings folder by selecting the desired findings folder and then clicking on **"Process"** in the **"Findings folder"** menu. In the subsequent dialog, you can change the name, the description and the recipient of the report.

# 4.3 Deleting a findings folder

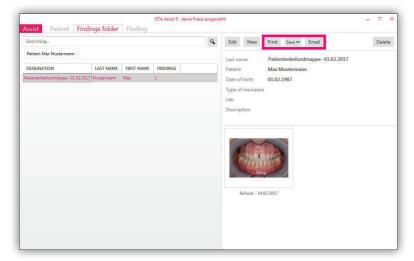
Click on "Delete" in the "Findings folder" menu to delete the currently selected report.



Warning: All findings belonging to the findings folder are also permanently deleted!

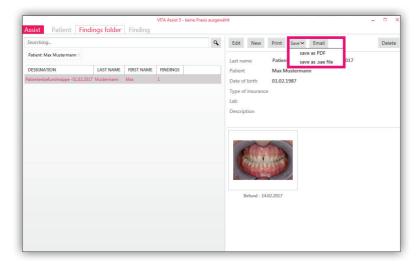
# 4.4 Printing, saving or emailing findings folder and findings

You can print out the findings folder or individual findings and give them to your patient or send them to a laboratory.



First select the findings folder or findings that you would like to print. Then go to "**Print**" to start printing.

It is also possible to save the findings folder or the findings as a PDF or .sae file.



You can send your created findings folder and individual findings by email as an .sae file to another practice or laboratory. To open the file, the recipient also needs the VITA Assist software.

# 5. Creating findings

Dental data are recorded and documented with the help of the findings. Basically, a differentiation is made between photo findings, tooth contour findings and dental prosthesis findings (ToothConfigurator).

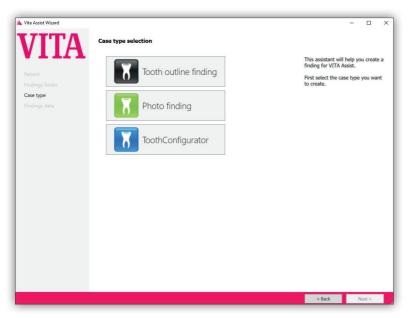
- **Tooth contour findings:** Here you are presented with a contour drawing of the affected tooth that you can provide with graphic and text commentary. Tooth shade measurements can also be saved with the VITA Easyshade or tooth shade determinations with shade scales.
- Photo findings: With photo findings, digital photographs can be saved and combined with tooth shade measurements of VITA Easyshade. Image processing and commentary functions are also available.
- **ToothConfigurator:** The change in appearance through prosthetic measures can be simulated with a patient photo. Load an available patient photo into the program and insert different VITA full dentures (can be selected for tooth line, shape, size, shade, etc.) to find the appropriate replacement for the patient.

**Important:** Before you create a finding, a patient must have been selected and a findings folder opened in which the findings are to be saved.

Select a patient for which a new finding is to be created by clicking. Then go to "Findings" and then "New."

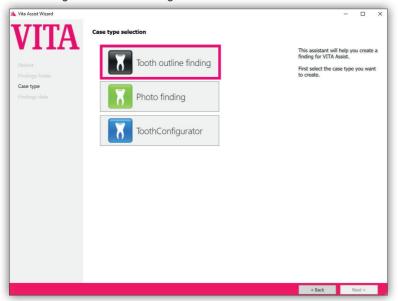


A window opens with the findings folders selection.

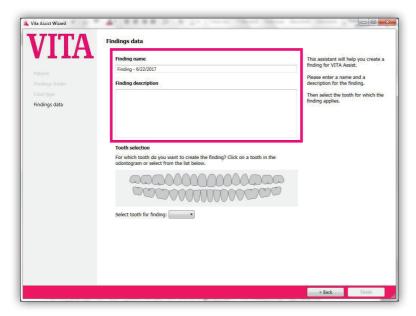


If you decide on a photo or tooth contour findings, you must then select the tooth for which the findings are supposed to apply. If you include a photo with several teeth, select any affected tooth. This selection is not necessary for the ToothConfigurator.

# 5.1 Creating tooth contour findings

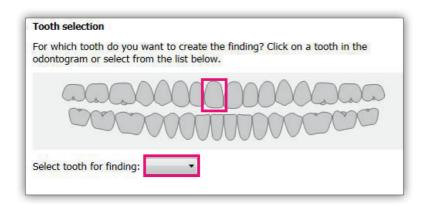


Select "Tooth contour findings."



You can change the findings name and enter a description.

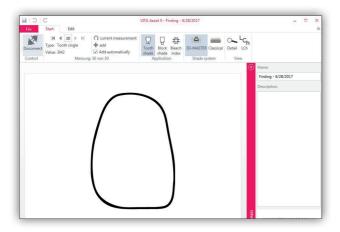
Now select the tooth for which the findings are to apply. You determine the tooth by either selecting a tooth number in the list on the right or by clicking on the tooth in the overview.



**Important!** Make sure that you have selected the correct tooth.

The assignment is permanently saved and can no longer be changed later.

For tooth contour findings, VITA Assist has a comprehensive drawing program available. If you create a tooth contour finding, the following window is opened.



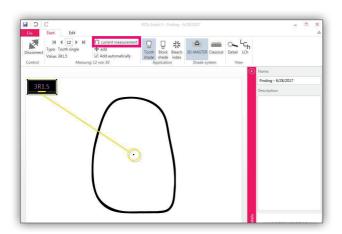
# 5.1.1 Adding VITA Easyshade measurements to the tooth contour findings

In this view, you can transfer measurement results from VITA Easyshade to the tooth contour findings. When doing this, make sure that VITA Easyshade and VITA Assist are connected via Bluetooth (see section 3.4).



Click on "Connect."

If you have activated "Activate automatic import by default" in the settings (see section 3.4), the current measurement results are automatically transmitted. If this is deactivated, you can transmit the value by clicking on "current value."



A maximum of 30 measurement results can be saved on the VITA Easyshade. The most recently recorded measurement results are always displayed first in the program. Use the arrows to navigate to older measurement results. Use the "current measured value" button to switch back to the measurement result that was just displayed on the device. Use "Add +-" to integrate an additional value.

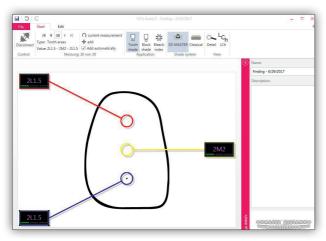
# ssist VITA ShadeAssist / Creating findings



The kind of measurement is displayed beside "Type." The VITA Easyshade can perform various kinds of measurements, e.g., individual tooth measurements, tooth region measurements or average measurements. The measurement type affects the display of the measured values.

#### 5.1.2 Display of the measured values

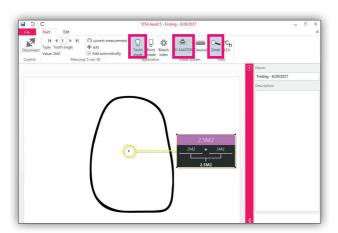
After you have imported measurements with the VITA Easyshade, the measurement results are displayed in the tooth contour findings. The display varies depending on which kind of measurement you have imported. For instance, with a tooth region measurement (3-point measurement), three new measured points are displayed.



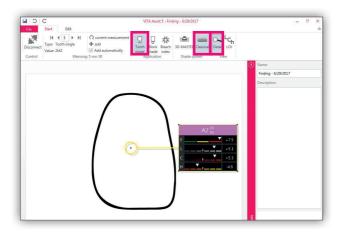
The shade measured values from the VITA Easyshade are displayed by default in the VITA SYSTEM 3D-MASTER shade system (e.g., "3.5R2.5"). You can have the results displayed as a tooth shade, VITABLOCS shade or bleached index. You can also have the results displayed in VITA SYSTEM 3D-MASTER or VITA classical A1—D4. Use the icon bar for this purpose.



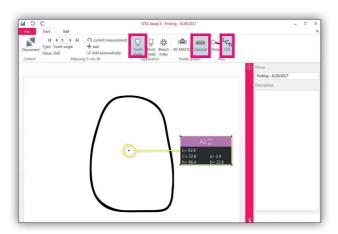
You can obtain additional information on intermediate shades and shade deviations via "**Detail"** (magnifier).







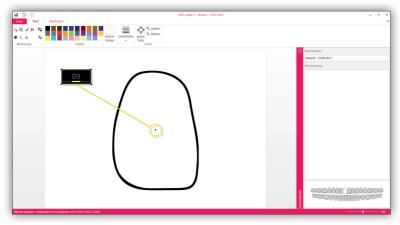
Clicking on "LCh" displays the LCh values (L = lightness, C = chroma, h = hue).



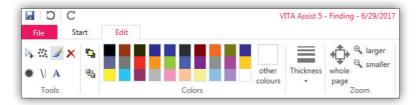
# 5.1.3 Drawing program for tooth contour findings

For tooth contour findings, VITA Assist has a comprehensive drawing program available. You can go there via **"Process."** 





The following tools are available:



Move your cursor over a symbol to discover what the associated tool is used for.

- Move/Mark
- 💸 Airbrush
- 🥒 Brush
- X Remove
- Point
- \| Line
- A Text

# You can also

- Pring elements forward
- Move elements back
- Use shades (select from the shade palette)
- Select line thickness
- 🗠 Zoom onto the entire page or zoom in or out

# 5.1.4 Saving tooth contour findings

No changes to tooth contour findings are saved until you click on the Save symbol in the icon bar or select **"Save"** in the **"File"** menu.





To exit the findings and return to the start page, close the window with "X" at the upper-right edge of the picture.

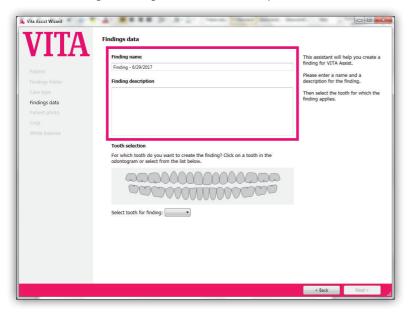
# **5.2 Creating photo findings**

Photo findings are processed in VITA Assist with the same program as the tooth contour findings. However, there are some new functions available that apply to photo processing in particular.

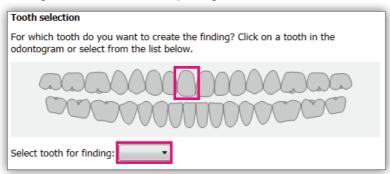
Select the photo findings.



You can now change the findings name and enter a description.



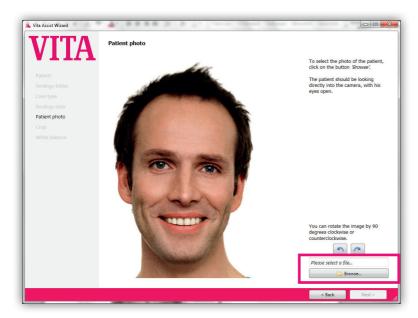
Select the tooth for which the findings should apply. You determine the tooth by either selecting a tooth number in the list or by clicking on the tooth in the overview.



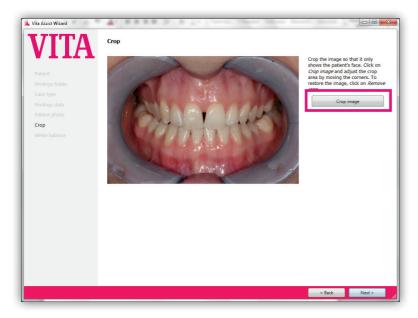
Important! Make sure that you have selected the correct tooth.

The assignment is permanently saved and can no longer be changed later.

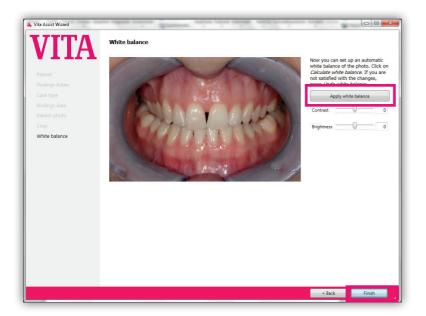
Select a patient image via "Search" and then click on "Continue."



One of the most important functions when processing photos is cropping. With this, you can reduce the photo to the precise area for which the findings are relevant.

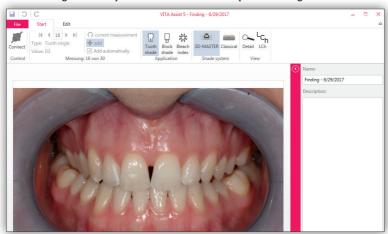


If desired, you can conduct a white balance.



Then click on "Finished."

# 5.2.1 Adding VITA Easyshade measurements to photo findings

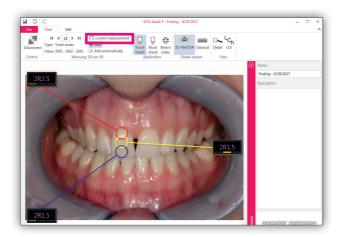


In this view, you can transfer measurement results from VITA Easyshade to the photo findings. When doing this, make sure that VITA Easyshade and VITA Assist are connected via Bluetooth (see section 3.4).

# Click on "Connect."



If you have activated "Activate automatic import by default" in the settings (see section 3.4), the current measurement results are automatically transmitted. If this is deactivated, you can transmit the value by clicking on **"current value."** 



A maximum of 30 measurement results can be saved on the VITA Easyshade. The most recently recorded measurement results are displayed in the program. Use the arrows to navigate to older measurement results. Use the "current measured value" button to switch back to the measurement result that was just displayed on the device. Use "Add +-" to integrate an additional value.



The kind of measurement is displayed next to "Type." The VITA Easyshade can perform various kinds of measurements, e.g., individual tooth measurements, tooth region measurements or average measurements. The measurement type affects the display of the measured values.

# 5.2.2 Display of the measured values

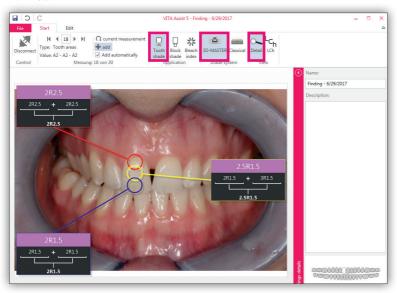
After you have imported measurements with the VITA Easyshade, the measurement results are displayed in the tooth contour findings. The display varies depending on which kind of measurement you have imported. For instance, with a tooth region measurement (3-point measurement), three new measured points are displayed.



The shade measured values from the VITA Easyshade are displayed by default in the VITA SYSTEM 3D-MASTER shade system (e.g., "2R2.5"). You can have the results displayed as a tooth shade, VITABLOCS shade or bleached index. You can also have the results displayed in VITA SYSTEM 3D-MASTER or VITA classical A1—D4. Use the icon bar for this purpose.



You can obtain additional information on intermediate shades and shade deviations via "Detail."



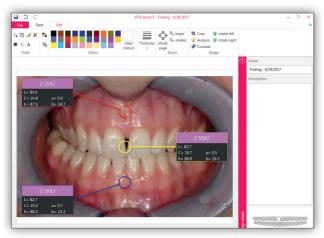
Clicking on  ${}^{\bf "LCh"}$  displays the LCh values (L = lightness, C = chroma, h = hue).



#### 5.2.3 Photo findings processing program

VITA Assist has a comprehensive processing program available for photo findings. You can go there via **"Process."** 





The following tools are available:



Move your cursor over a symbol to discover what the associated tool is used for.

- Move/Mark
- 🔐 Airbrush
- **/** Brush
- X Remove
- Point
- \| Line
- A Text

#### You can also

- Bring elements forward
- Move elements back
- Use shades (select from the shade palette)
- Select line thickness
- 🗠 Zoom onto the entire page or zoom in or out
- The following special functions are available for photo findings opposite the tooth contour findings:

#### • 💆 Cropping

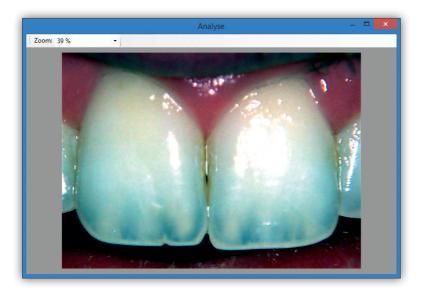
One of the most important functions when processing photos is cropping. With this, you can reduce the photo to the precise area for which the findings are relevant. This is how you crop a photo:

- 1. Click on the Crop symbol in the icon bar.
- 2. While holding the left mouse button down, draw a rectangle on the patient photo for the desired area and then let the mouse button go.
- 3. Click the symbol in the icon bar again. The photo is cropped.

# 

Click on the **"Analysis"** symbol in the icon bar to analyze the translucency (degree to which light shines through) and other effects of the teeth. **Important:** To use this function, you should first crop the photo so that only the patient tooth area to be analyzed is visible. The image should also be very high.

patient tooth area to be analyzed is visible. The image should also be very high resolution. The more precise the cropped image of the tooth is, the more precise the display. The results of the analysis are displayed in a separate window.



# 

Click on the symbol in the icon bar to regulate the lightness and contrast of the image. If you move the regulator to the right or left and let go of the mouse button, you will see the changes directly in the photo. However, the new settings for lightness and contrast are not permanently accepted until you click on "OK." If you select "Cancel," the photo is returned to the old settings.

**Note:** Once you have changed the settings for lightness and contrast and saved the image, you cannot restore the original values without loss of quality.



#### • @ D Rotate picture

Enables you to rotate the image to the left or right.

# 5.2.4 Saving photo findings

No changes to photo findings are saved until you click on the Save symbol in the icon bar or select "Save" in the "File" menu.





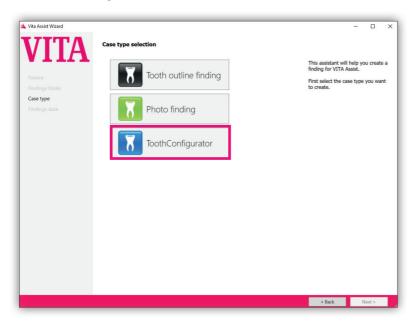
To exit the findings and return to the start page, close the window with "X" at the upper-right edge of the picture.

# 5.3 ToothConfigurator

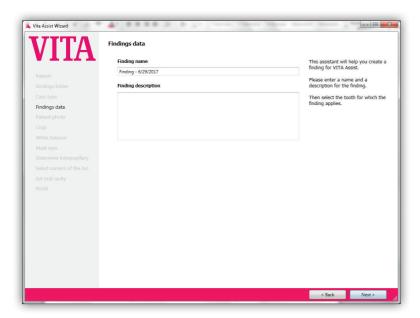
The ToothConfigurator is a module for the simulation of dentures. You can use this module to simulate the appearance of the patient with VITA prostheses in a patient photo. In doing so, you can make a selection from different VITA tooth lines (incl. size, shade, shape, etc.) to determine the optimum care for the patient.

**Note:** Please note that the VITA ToothConfigurator simulates the appearance of the dentures as realistically as possible. However, no liability can be assumed by VITA for the computer-assisted patient recordings to visualize the new appearance of the dental prosthesis in every detail. Deviations may occur.

# Select "ToothConfigurator."



You can now change the findings name and enter a description. Click on "Continue."



The program now guides you through the correct configuration of the image. Please follow the instructions and confirm each step with **"Next."** 

The VITA ToothConfigurator starts automatically. The following main window appears:



- **1. Patient photo:** The scanned patient photo is displayed here together with the simulated prosthesis. The area of the oral cavity can be selected using the tools (Move / Rotate / Scale) to modify the prosthesis.
- 2. Menu ribbon: The menu ribbon provides you with quick access to most of the functions of the VITA ToothConfigurator, e.g., for zooming or changing the tooth line. At the top left, you can switch between the "Selection," "Shades" and "Extras" tabs
- **3. Toolbar:** Use the toolbar to access additional or frequently used tools. This bar can be configured individually.
- **4. Findings details:** You can change the name and description of the finding at any time in the right-hand window area. Below this, you will find detailed information on the currently selected prosthesis and its properties.

# **5.3.1 Zooming**

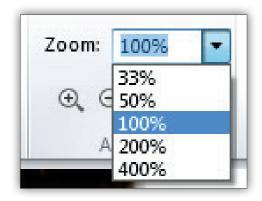
To view and process the dentures in the VITA ToothConfigurator, you should first adjust the **view** of the patient photo. For example, you can **enlarge** the depiction of the patient's oral cavity:



To accomplish this, use the View section of the "Selection" tab:

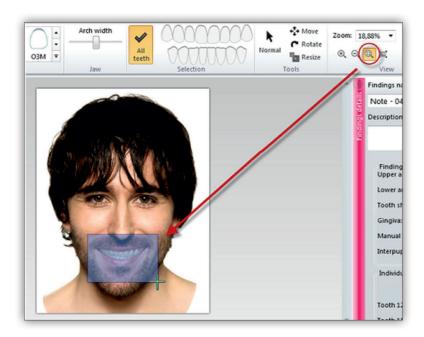


Use **"Zoom"** to enter the enlargement/reduction directly. By clicking on the small arrow next to the Zoom tool, you can also select fixed zoom levels:

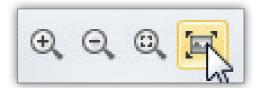




You can use the first two buttons to enlarge and reduce the view by a fixed value. The third button allows you to **selectively zoom in on a section** by clicking on it and then drawing a rectangle on the patient photo with the mouse:



The selected area is enlarged as soon as you release the mouse button. The last button allows you to **reset the view** so that the entire patient photo is displayed again.

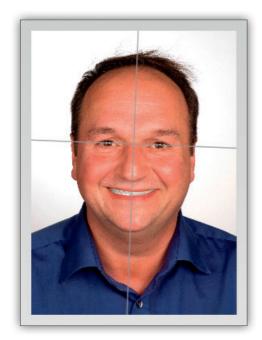


## 5.3.2 Showing auxiliary and dimension lines

You can show **auxiliary lines** on the patient photo to facilitate positioning and scaling of the dentition. To accomplish this, click on the **"Display auxiliary lines"** button in the **View** section on the **"Selection"** tab:

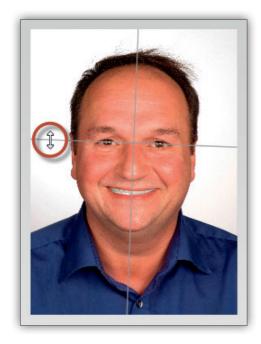




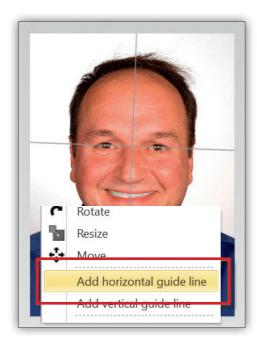


The auxiliary lines automatically adjust to the parameters of the patient image. In the example above, the lines are slightly rotated because the patient's head is also slightly rotated (clearly visible at the eyes).

You can select and move the auxiliary lines with the left mouse button:



To add **additional auxiliary lines**, right click with the mouse on the patient photo and select "**Add horizontal/vertical auxiliary line**":

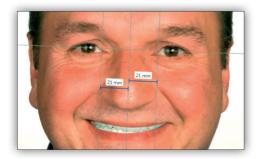


If you have created an additional auxiliary line, you can also display **dimension lines**. The dimension lines help to measure the patient by indicating the distance between two auxiliary lines.



**Note:** The **"Show dimension lines"** function is only available after you have created at least one additional auxiliary line.

In the example below, the dimension lines are used to determine the nose width. The appropriate tooth size can be selected on the basis of the nose width.



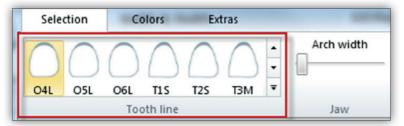
The displayed values (in millimeters) are calculated from the information regarding **pupil distance** that you specify at the time the findings are created (see section "Creating new denture findings," Step 5).

## 5.3.3 Selecting a tooth line

The first step in determining the optimum prosthesis is to select the **tooth line**. The tooth line determines the characteristics and material of the prosthesis.

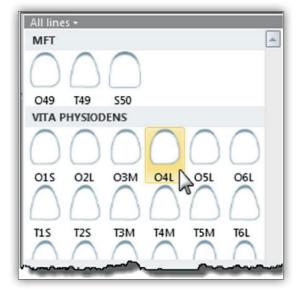
**Note:** The selection of the tooth line always affects **both the upper and lower jaw**. Separate treatment of the upper and lower jaw is possible only when the tooth geometry is changed.

You select the line in the **Tooth line** section of the **"Selection"** tab:



Use the arrows on the right-hand side of the tooth line selection to scroll through the available lines. Use the arrow at the lower right to open up a larger **selection window**:





The selected tooth line is **immediately visible in the patient photo**. For optimal viewing, you should enlarge the section of the patient photo.

#### **Mould Chart**

For **more information** and **photos** of the tooth lines, click on the **"Shape map"** button on the far right.



A PDF file is opened that contains an overview of all available VITA tooth lines.

**Important:** To view the shape map, a PDF viewer must be installed on the computer (e.g., Adobe Reader).

## 5.3.4 Adjusting tooth geometry

After you have selected a tooth line, you should make a fine adjustment to the **geometry**.

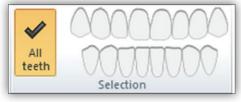
The **"Jaw," "Selection"** and **"Tools"** sections are available for this in the VITA ToothConfigurator:



#### Selection

By default, the **entire dentition** is changed when you adjust the tooth geometry. You can also process the upper and lower jaw separately. The processing of **individual teeth** is also possible.

You specify which teeth are to be changed in the **Selection** section.



In the image above, you can see the default setting: All teeth (upper and lower jaw) are selected. The **"All teeth"** switch is active. In addition, all teeth are marked in light gray.

To select only the **upper or lower jaw**, click on one of the two rows of teeth:



In this example, only the **lower jaw** was selected. The **"All teeth"** button is now inactive and the tooth line at the top is shaded dark gray.

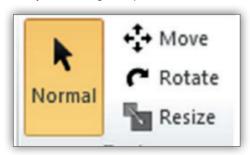
To select a **single tooth** (available only for the maxillary central and lateral incisors), move the mouse over the desired tooth and click it.



After you have made your tooth selection, you can process it using the tools.

## **Tools**

To adjust the tooth geometry, use the Tools section:



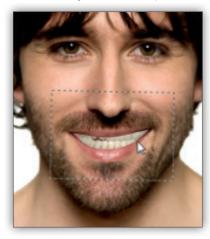
The **Normal** tool is always selected at the start. With this tool, you do not make any changes to the dentition but only move the patient photo if it is enlarged.

Click the "Move," "Rotate" or "Scale" buttons to select another tool.

**Tip:** You can also **right click with the mouse** on the patient photo to quickly switch to the next tool (in the order of the buttons, i.e., **"Normal" -> "Move" -> "Rotate,"** etc.).

# The following tools are available:

• **Move:** Use this tool to move the selected teeth (see the "Selection" section) within the oral cavity. Click on the dentition and drag it to the desired position with the mouse button.



• **Rotate:** Rotates the selected teeth. When you select this tool, a selection rectangle appears on the patient photo.

Move the corners of this rectangle to rotate the teeth.

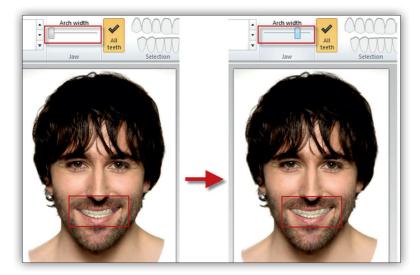


• **Scale:** Changes the size of the selected teeth. As with **"Rotate,"** a selection rectangle appears with corners that you can drag with the mouse to scale the teeth.



## Arch width

Use the slider on the left to set the **arch width** of the entire **dentition** (always upper and lower jaw together). Select a representation of the dentition within the oral cavity that is as realistic as possible:



## 5.3.5 Selecting a gum/oral cavity shade

You will find the "Gums" and "Oral cavity" sections in the Shades tab:

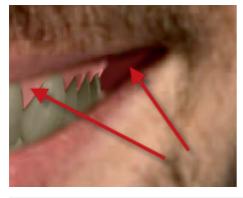


In these sections, you select the shading of the **gums** and **oral cavity** to match the patient photo as closely as possible. The shade of the oral cavity is usually visible to the left and right of the dentition at the corners of the mouth.

Click on one of the two shade displays to open a selection window:



The selected shades are immediately visible in the patient photo:



#### 5.3.6 Selecting a tooth shade

The selection of the **tooth shade** is very important for determining the optimum denture.

VITA Zahnfabrik offers various procedures for determining the shade of a tooth, e.g., VITA Linearguide 3D-MASTER, VITA Classical A1–D4 or VITA Easyshade.

Depending on the procedure, tooth shade values, e.g., "2L1.5", "5M2" (3D-MASTER), "A2" or "D3" (Classical) are determined. You can transfer these measured values to the VITA ToothConfigurator to obtain a simulation of the prosthesis that is as true to shade as possible.

You make this selection in the "Tooth shade" section on the "Shades" tab:



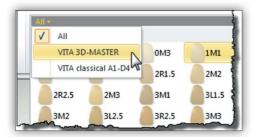
Use the arrows on the right-hand side of the tooth shade selection to scroll through the available shades. Use the arrow at the lower right to open up a larger **selection window**:



By default, both the 3D MASTER values and the classical values are displayed. If you use only a particular procedure in your practice, click **"All"** at the top left of the window to **limit** the selection.

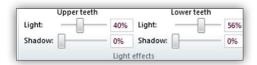
**Note:** Please note that the representation of all shades, especially tooth shades on the monitor of your computer, can only be an **approximation** of the real shade effect, even when using high-quality components.

The variance from the real tooth shade can be considerable, depending on the monitor, the settings made on the monitor or graphics card, as well as the ambient conditions and the viewing angle on the monitor.



## 5.3.7 Light effects

In the **Light effects** area of the "Shades" tab, set the illumination of the oral cavity:

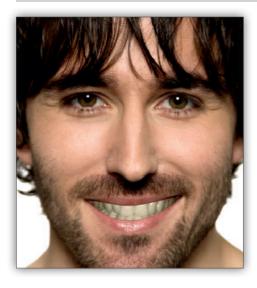


Move the sliders to adjust the illumination of the oral cavity so that it harmonizes with the patient photo.

The **Light** sliders for the upper and lower jaw increase the illumination of the bright areas of the oral cavity. Dark areas remain unchanged.

The **Shadow** sliders have the opposite effect: The dark areas become even darker, while the light areas remain the same.

**Note:** Please note that the use of the light effects may affect the shade effect in the photo.



## 5.3.8 Comparing with original photo

After you have found a suitable denture for the patient, you can compare the patient's future appearance with the **original photo** (before and after simulation).

To accomplish this, use the **"Compare"** button in the **"Process"** area on the **"Shades"** tab:



If you click the button, the prosthesis is **hidden** in the patient image and the original mouth section becomes visible.

**Clicking again** switches the view of the prosthesis back on.

**Note:** Use the **"Copy"** function to create photos of both views and compare them in an external program (e.g., Microsoft Word).

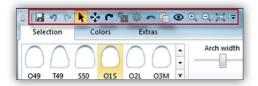
## 5.3.9 Undo

Use the button on the toolbar to **undo** the last action (move, rotate, change tooth shade ...) in the VITA ToothConfigurator. Restore once again with

**Note:** You can also press **CTRL-Z** on your keyboard to undo actions and **CTRL-Y** to restore them.

# 5.3.10 Configuring the toolbar

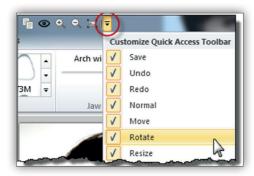
The **toolbar** of the VITA Tooth Configurator allows you to access additional or frequently used tools. This bar can be configured individually.



In the image above, some toolbar functions have been activated, e.g., Save and Undo/Redo.

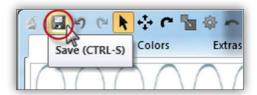
However, you can also add **other** useful functions, such as zooming or comparing with the original photo.

To do this, use the arrow on the far right of the bar:



## 5.3.11 Saving/discarding

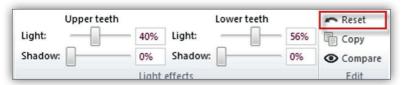
No changes to denture findings are saved until you click on the 🗾 icon in the toolbar.



Note: You can also press CTRL-S on your keyboard to save any changes.

The changes are also saved when you exit VITA ToothConfigurator.

If you want to discard the changes and **reset** the photo to the last saved state, click the **"Reset"** button in the **"Shades"** tab:

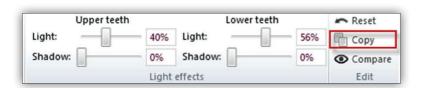


To exit the findings and return to the start page, close the window with "X" at the upper-right edge of the picture.

## 5.3.12 Copying to the clipboard

If you would like to use the image material from the VITA ToothConfigurator in **another program** (e.g., Adobe® Photoshop® or Microsoft® Word), the **"Copy"** function is available for this purpose.

Use the **Copy** button on the **"Shades"** tab to save the current patient image, **including the displayed dental prosthetics**, to the clipboard.



Note: You can also press CTRL-C on your keyboard to copy the image.

You can then **paste** the image into an image-editing or word-processing program, for example. As a rule, select **"Process," "Paste"** in the menu of the respective program to do this, or press **CTRL-V** on your keyboard.

# 5.3.13 Settings

You make general settings for the VITA ToothConfigurator in the **Settings** dialog box ("Extras" tab, "Settings").



The **Standard dentition** and **Standard shade** settings determine which tooth material is displayed **first** when a prosthetic finding is created.

If you use a particular VITA prosthesis frequently in your practice, you should select it here. This material is then already displayed during the last step of the patient photo scanning wizard.

The **Update dentition database** function should be used only if you have installed a new tooth line and it is not yet available in the program. The available tooth lines are uploaded once again.

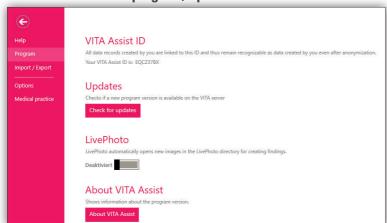


# 6 Help



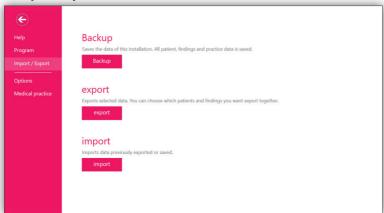
Under "Help," you will find program help and a remote support function. If you have installed TeamViewer, VITA Support can use this to connect with your PC.  $The \ Tooth Configurator \ video \ serves \ as \ instructions \ for \ the \ Tooth Configurator.$ 

# 7 Information on the program, updates and licenses



Here you will find your VITA Assist ID; you can check for updates, as well as activate the LivePhoto function. You can also find information on the program version here.

# 8 Import/export data



With the "Import" and "Export" functions, you can send a selected inventory of patients and findings, e.g., to another practice or laboratory, and add an outside data set to your local installation of VITA Assist.

## 8.1 Backup

All data that have been created with VITA Assist (patients, findings, etc.) can be found in a common data directory. You establish this data directory once during the installation of VITA Assist. It is independent of the program directory, which means that you can delete and reinstall VITA Assist at any time without losing your data. By default, the data directory is C:\VITA\VITA Assist. Make a note of which data directory you have specified. For a data backup, you back up all contents of this directory manually or with a backup program of your choice.

## 8.2 Export

For extensive export orders covering several patients and findings, use the menu command **"Export."** 



After clicking, a selection window opens which shows you all available patients, findings folders and findings.

Here, select the patients, findings folders or findings that are to be exported. All selected data are later collected in a single file with the file ending \*.SAE. All entries are given a checkmark by default and then selected for export. If you wish to only select some of the data for export, click on "Reverse selection" to deactivate all checkmarks, and then select individual patients, findings folders or findings.



**Note:** Remember that an export file on many patients, findings folders and findings can be relatively large, especially if it contains a lot of photo findings. Many email providers restrict the size of files that can be sent (e.g., to 10 megabytes), which means that a very large export file can no longer be sent via email in some cases. When you have made your selection, click on the Export... button at the bottom right to start the export process. First, the memory location of the export file (\*.SAE) must be determined. Select a location on your hard drive or on a removable storage device and make a note of this location for yourself. Then the export process starts.

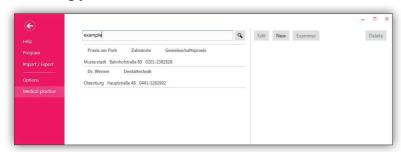
## 8.3 Import

With the import function, you import existing SAE files to your local installation of VITA Assist. If you received a file with the extension \*.SAE by email, proceed as follows to display and edit the data: Select the menu command "Import."



In the following dialog, indicate where the SAE file is located (e.g., on your hard drive or a USB drive). Double click on the SAE file to select it for import.

# 9 Creating practice data



Here you can create and process practice data and insert a logo or image.



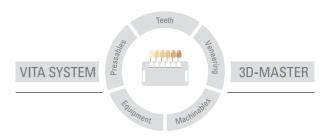
Select "New" to create a new practice.



Enter your own data here. In addition to the address data, you can also double click below the input fields to insert an image file from your computer (for example, a logo). This logo is then copied into the program and displayed on the printed reports. Images of the types BMP, JPG, JPEG, GIF or PNG are accepted.

To change your own practice, change the "Standard Examiner Practice" in Options. Click on "Process" and then on "Select Practice / Laboratory." Now select your practice / laboratory from the list by double clicking.

With the unique VITA SYSTEM 3D-MASTER, all natural tooth shades can be systematically determined and perfectly reproduced.



Please note: Our products must be used in accordance with the instructions for use. We accept no liability for any damage resulting from incorrect handling or usage. The user is furthermore obliged to check the product before use with regard to its suitability for the intended area of applications. We cannot accept any liability if the product is used in conjunction with materials and equipment from other manufacturers that are not compatible or not authorized for use with our product and this results in damage. The VITA Modulbox is not necessarily a component of the product. Date of issue of this information: 2022-12

After the publication of this information for use any previous versions become obsolete. The current version can be found at www.vita-zahnfabrik.com

VITA Easyshade  ${\bf V}$  is CE marked within the meaning of EC Directive 2006/95/EC, 2004/108/EC and 2011/65/EC.

# VITA

 $\begin{tabular}{ll} \textbf{WITA Zahnfabrik H. Rauter GmbH & Co.KG} \\ \textbf{Spitalgasse } 3 \cdot 79713 \ \textbf{Bad Säckingen} \cdot \textbf{Germany} \\ \textbf{Tel. } +49 (0) 7761/562-0 \cdot \textbf{Fax } +49 (0) 7761/562-299 \\ \textbf{Hotline: Tel. } +49 (0) 7761/562-222 \cdot \textbf{Fax } +49 (0) 7761/562-446 \\ \textbf{www.vita-zahnfabrik.com} \cdot \textbf{info@vita-zahnfabrik.com} \\ \end{tabular}$