

# SICATJMT<sup>+</sup>



## ***SICAT JMT<sup>+</sup>***

Instructions for use – English

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# 1 FOREWORD

Welcome to the instructions for use for SICAT JMT<sup>+</sup> software. The instructions provide you with basic information on the operation of the software. It explains the installation and provides advice on the preparation of the measurement and data acquisition.

Please consult the safety relevant information in the technical instructions for use, and keep all handbooks in the immediate proximity of the measurement system. The handbooks are a key component of the product and help you to operate the measurement system in the proper way.

SICAT GmbH & Co. KG assumes no liability for the infringement of personnel or patients and/or damage to the system that is caused by the failure to observe the information provided in the handbooks or the misuse of the measurement system.

Should you discover any errors when working with the instructions for use or if you have any suggestions, we will be thankful to hear from you at all times.

## REGISTERED TRADEMARK

Differing brand names are referenced within these instructions for use. All of these product names are only used for the purposes of clarification and for editorial reasons, and are trademarks of the corresponding companies. By using brand names, the trademarks themselves as well as the rights of the corresponding owners remain unaffected.

## 1.1 CONVENTIONS AND SYMBOLS USED

The following conventions are used in these instructions for use.

Warnings are as labelled follows:



Warning instructions designate a potential danger to the health and safety of users and/or patients. The instructions explain the type of danger and how it can be avoided.

Notices are identified as follows:



Notices designate a potential danger that can cause damage to or lead to the destruction of the device. The instructions explain the type of danger and how it can be avoided.



Notices that are relevant to the completion of the measurement are labelled as such. The instructions for use are to be stored such that the information they contain are available to the user at all times.

## COMMENTS ON CHANGES

To guarantee our product quality, we consistently try to further improve our product range. It may be the case that there may be an update to the software or hardware configuration after these instructions for use have been printed. It can therefore be the case that some of the illustrations differ from what you were actually given.



Please note that a new version of these instructions for use is not released with every software release, as technical changes invisible to the user are often carried out in releases. You can download the latest version of the instructions for use in the service area on our homepage.

## 2 INSTALLATION

### 2.1 SYSTEM REQUIREMENTS SOFTWARE

- Processor: Intel Core2Duo (or comparable), at least 2.0GHz
- Internal memory: 4GB DDR2 RAM
- 3D-compatible graphics card: min. 512 MB, OpenGL 3.3, DirectX 9.0c (comp. Geforce GT 420/315M, AMD Radeon HD 6000/M Series)
- Color monitor, min. 1280x800 pixel
- Operating system:
  - Windows 7 64/32 bit
  - Windows 8 64/32 bit

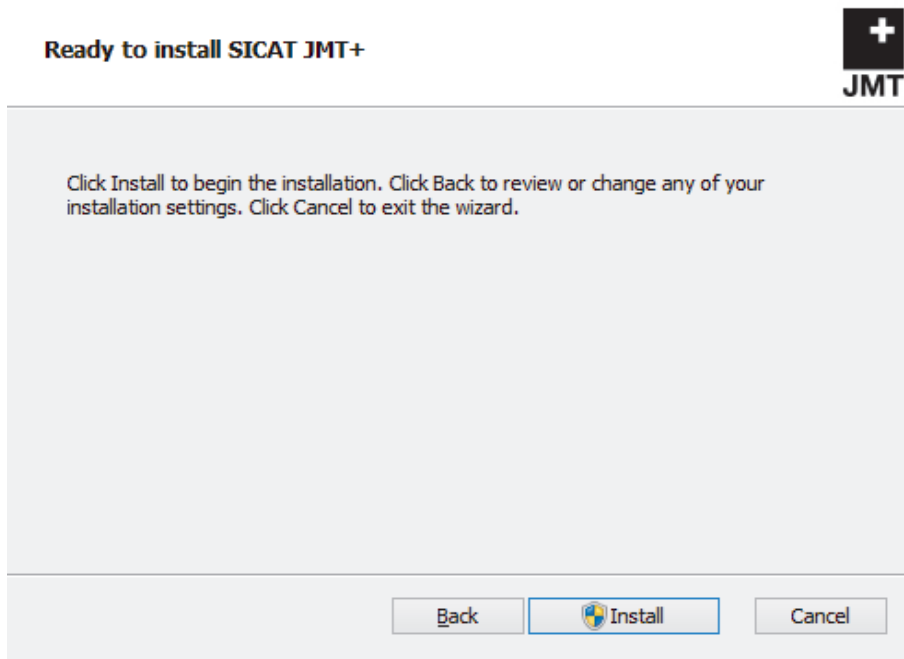
### 2.2 INSTALLING THE SICAT JMT+ SOFTWARE

#### 2.2.1 STEP-BY-STEP INSTALLATION

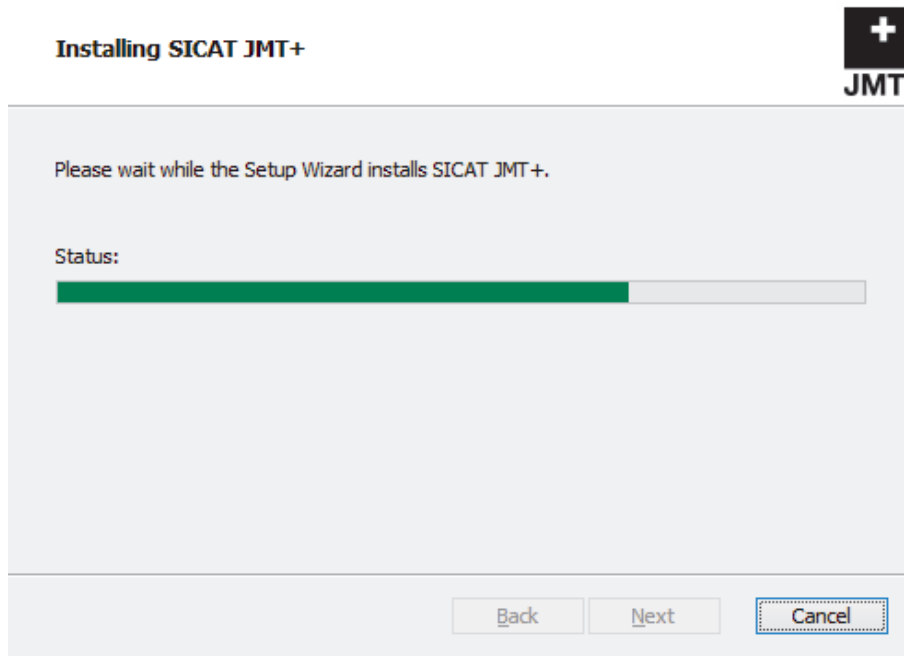
1. Double-click on the **sicat\_jmt+.exe** file, where the file name contains the version of the SICAT JMT+ software.



2. After that, please click on the **Next** button to start the installation.



- To start the installation, click on the **Install** button and then confirm the prompt on the user account control.



- ▶ The installation process can take a few minutes.
- ▶ After the installation is complete, the following window opens:



- Click on the **Finish** button to finish the installation.
  - ▶ The software is now installed. A symbol with the name **SICAT JMT+** was created on the desktop. To start the software you can either double click on this symbol or start **All Programs** from the program group > **SICAT** > **SICAT JMT+**.



If you receive the prompt that your graphics hardware does not support OpenGL 3.3 during the installation, you cannot operate the software with this computer. Updating the graphics driver can be helpful in this case.

## 2.3 INSTALL DEVICE DRIVER

- The device driver of the SICAT JMT<sup>+</sup> measurement system is installed automatically when the device is connected.

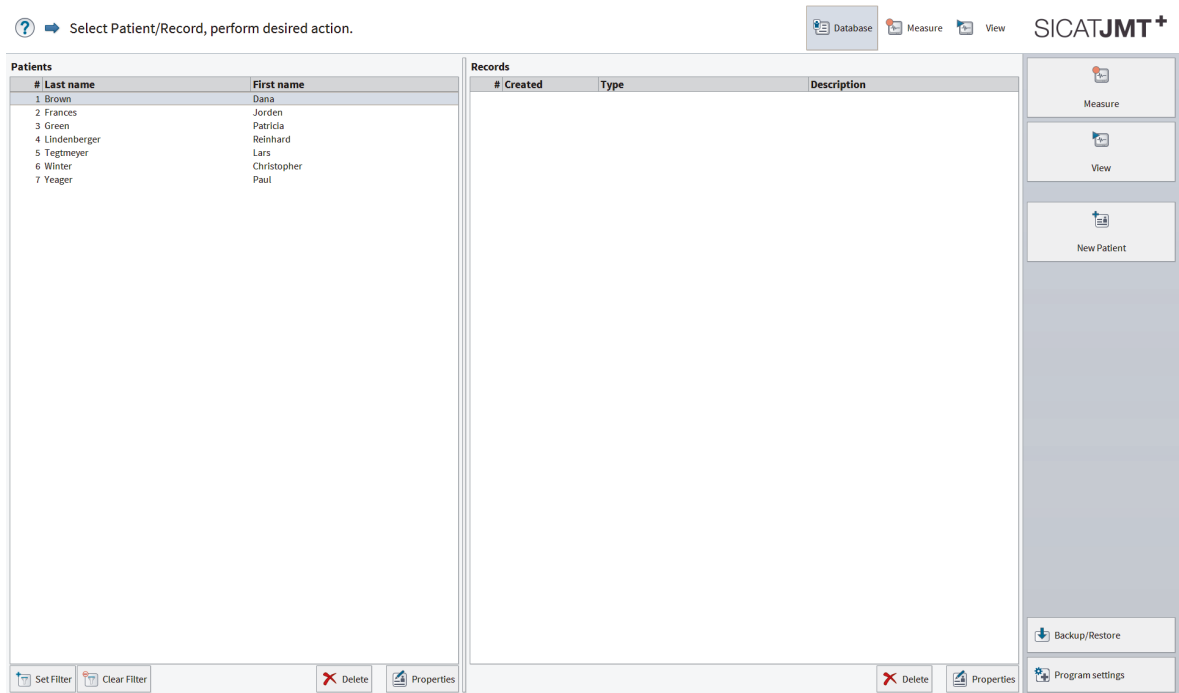
### 2.3.1 USB DRIVER

The USB driver required for the SICAT JMT<sup>+</sup> measurement system is installed by Windows in the background after connecting the device and requires no special action.




### 3 THE PATIENT DATABASE

After the program starts, you are in the patient database.



Here, you can manage the patients as well as the available measurements, and have access to import and export functions. In the following, please find a detailed description of the user interface.

#### 3.1 DATA BACKUP

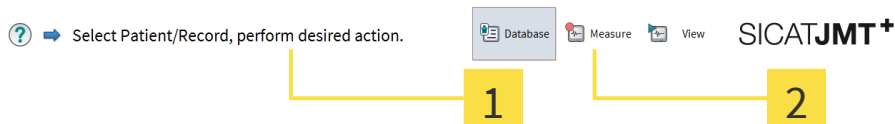


**WARNING**

The manufacturer SICAT GmbH & Co. KG expressly states that the user is alone responsible for completing a data backup. SICAT also recommends creating a regular backup of the patient database. The SICAT JMT+ database is located in the user directory

1. Windows 7: C:\ProgramData\SICAT\sicat\_JMT
2. Windows 8: C:\ProgramData\SICAT\sicat\_JMT

#### 3.2 INFORMATION AND NAVIGATION



**1 Hints** - Help and instructions on the operation of the software.

**2 Navigation** - You can see in which section of the program you are here. The currently active section is highlighted in color.

### 3.3 PATIENTS

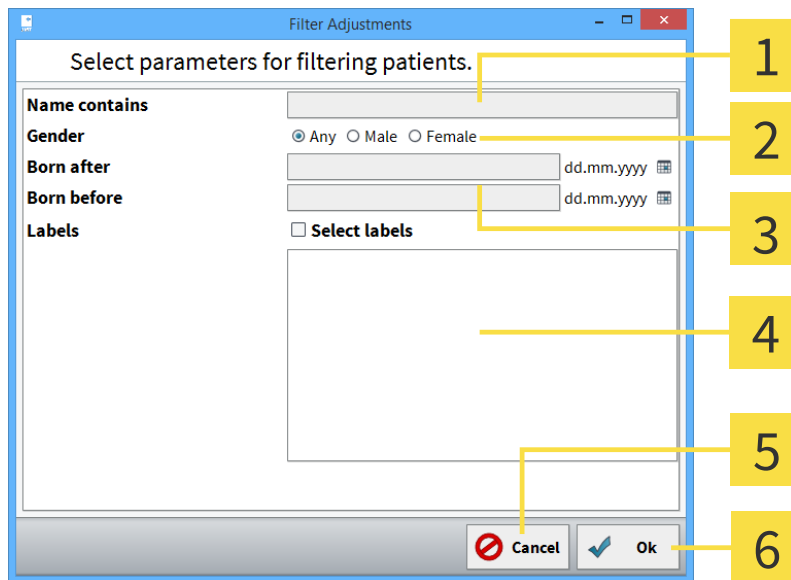
| Patients |              |             |
|----------|--------------|-------------|
| #        | Last name    | First name  |
| 1        | Brown        | Dana        |
| 2        | Frances      | Jorden      |
| 3        | Green        | Patricia    |
| 4        | Lindenberger | Reinhard    |
| 5        | Tegtmeyer    | Lars        |
| 6        | Winter       | Christopher |
| 7        | Yeager       | Paul        |

Below the table are four buttons: **Set Filter**, **Clear Filter**, **Delete**, and **Properties**. Yellow callout boxes with numbers 1 through 5 point to the following elements:

- 1: The patient list table.
- 2: The **Delete** button.
- 3: The **Properties** button.
- 4: The **Clear Filter** button.
- 5: The **Set Filter** button.

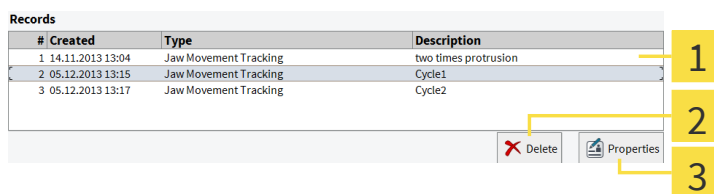
- 1 Patients list** - The patients are listed here. The currently active patient is highlighted in color.
- 2 Delete** - After a special confirmation, the patient and all of the measurements assigned to them is irretrievably deleted.
- 3 Edit patient record** - Clicking on **Properties** opens the patient file (see *Patient file / New patient* [▶ Page 12]).
- 4 Show all patient records** - Clicking on **Clear Filter** resets the filter.
- 5 Set Filter** - After the **Filter Adjustments** window has been opened, you can set up a filter so that the list of patients only shows certain patients.

## FILTER ADJUSTMENTS



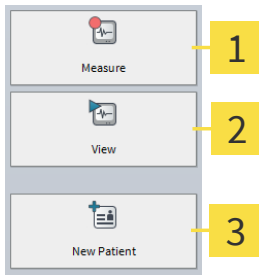
- 1 Name contains** - The name or a part of the name of the patient
- 2 Gender** - The gender of the patient
- 3 Born after and Born before** - Dates after or before the patient has been born.
- 4 Labels** - A list of labels
- 5 Cancel** - The **Filter Adjustments** window closes and the changed filter is not applied.
- 6 Ok** - The filter is applied to the list of patients.

## 3.4 RECORDS



- 1 Records list** - All of the records of the currently selected patient are listed here. The currently selected record is highlighted in color.
- 2 Delete** - After an additional confirmation, the selected measurement is irretrievably deleted.
- 3 Properties** - Edit the description and comments on the record here (see *Record properties* [▶ Page 16]).

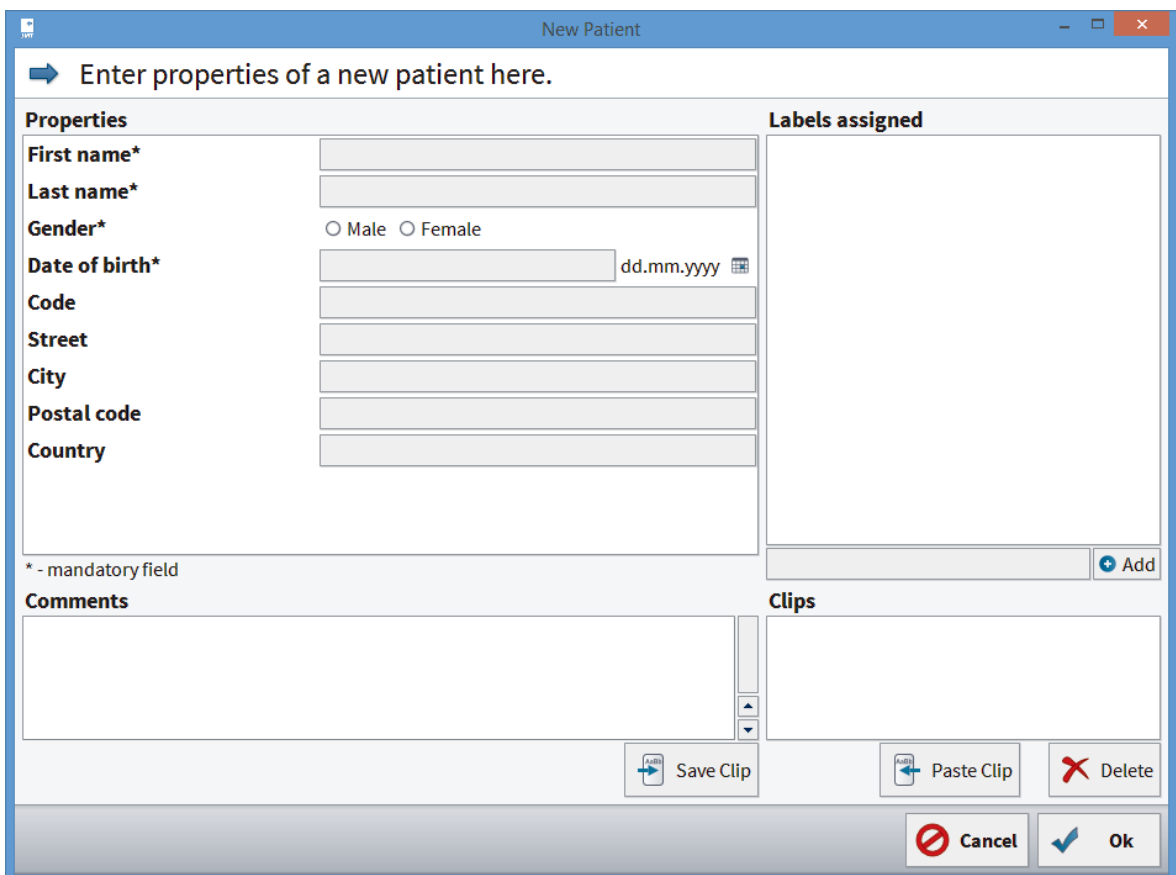
### 3.5 FUNCTIONS



- 1 Measure** - One click leads you to the selection of the measuring application.
- 2 View** - The currently selected measurement is opened for viewing and editing.
- 3 New patient** - Click here to create a new patient.


### 3.6 PATIENT FILE / NEW PATIENT

If you create a new patient or edit the file for an existing patient (**New patient** button or **Properties** button), the following dialog opens:



The individual areas and their function are explained in brief as follows.

### 3.6.1 PROPERTIES

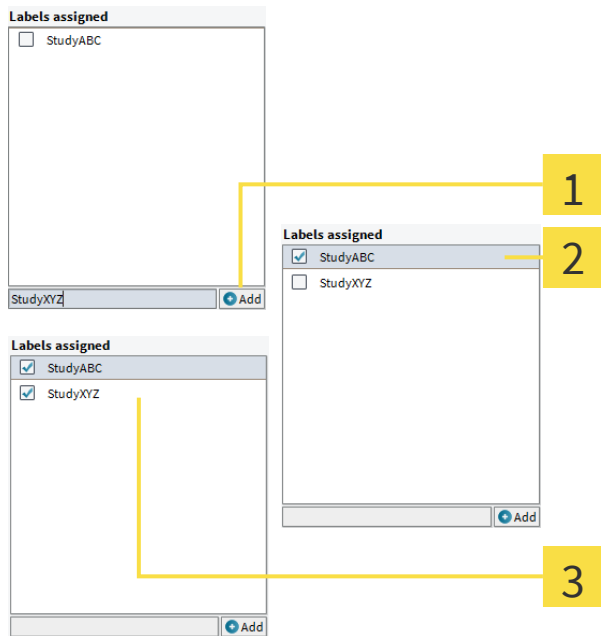
| Properties            |   |
|-----------------------|---|
| <b>First name*</b>    | <input type="text"/>  |
| <b>Last name*</b>     | <input type="text"/>  |
| <b>Gender*</b>        | <input type="radio"/> Male <input type="radio"/> Female   |
| <b>Date of birth*</b> | <input type="text"/> dd.mm.yyyy  |
| <b>Code</b>           | <input type="text"/>  |
| <b>Street</b>         | <input type="text"/>  |
| <b>City</b>           | <input type="text"/>  |
| <b>Postal code</b>    | <input type="text"/>  |
| <b>Country</b>        | <input type="text"/>  |

**Properties** - Please enter the patient details here. The first name and surname and the gender are mandatory fields.

The **Code** field gives you the opportunity to assign the patient entry with a clear labelling.

### 3.6.2 LABELS

Via this field, you can assign the patients to a group. You are then able to display patients from a specific group only in the database.



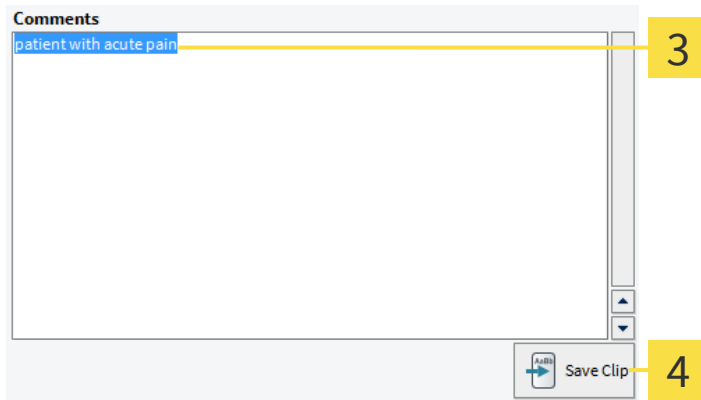
- 1 Create new label** - Enter the name for the label that is to be created here and click on the **Add** button.
- 2** The newly added group is shown in the list. The check mark before it shows that the patient is assigned to this group.
- 3 Assign to multiple labels** - By clicking on the check mark, you can complete or remove the assigning. Groups to that no more patients are assigned are removed automatically after leaving the dialog.

### 3.6.3 COMMENTS & CLIPS



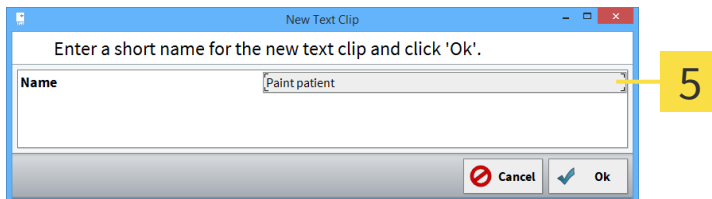
- 1 Comments** - Write a random free text as a comment on this patient here.
- 2 Clips** - This list contains all of the text clips you defined.

## CREATE TEXT CLIP



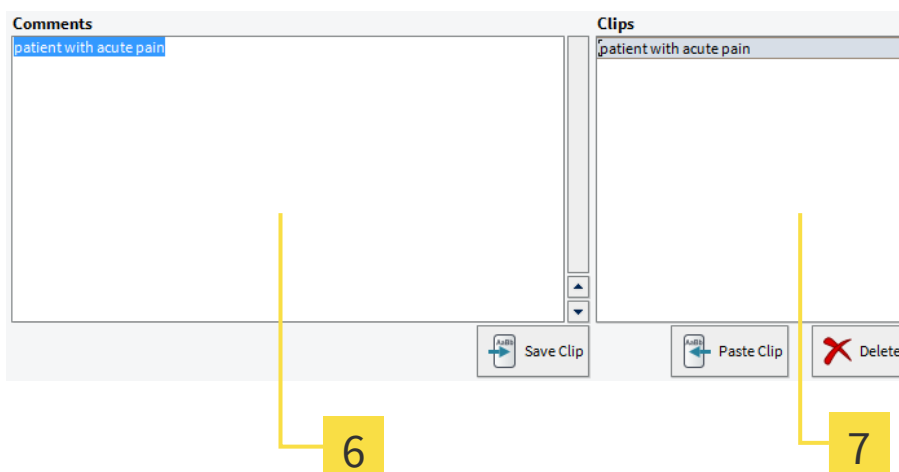
**3 Mark text** - In the **Comments** field, highlight the section of text you want to create as a text clip.

**4 Save** - To create the highlighted section of text as a text clip, click on the **Save** button.



**5 New Text Clip** - In this dialog, you can specify a name for the text clip; your selection will be adopted automatically as a suggestion. Your selection will be adopted automatically as a suggestion. With a click on **Ok**, the text clip is created, and opens in the list with the specified name.

## PASTE TEXT CLIP

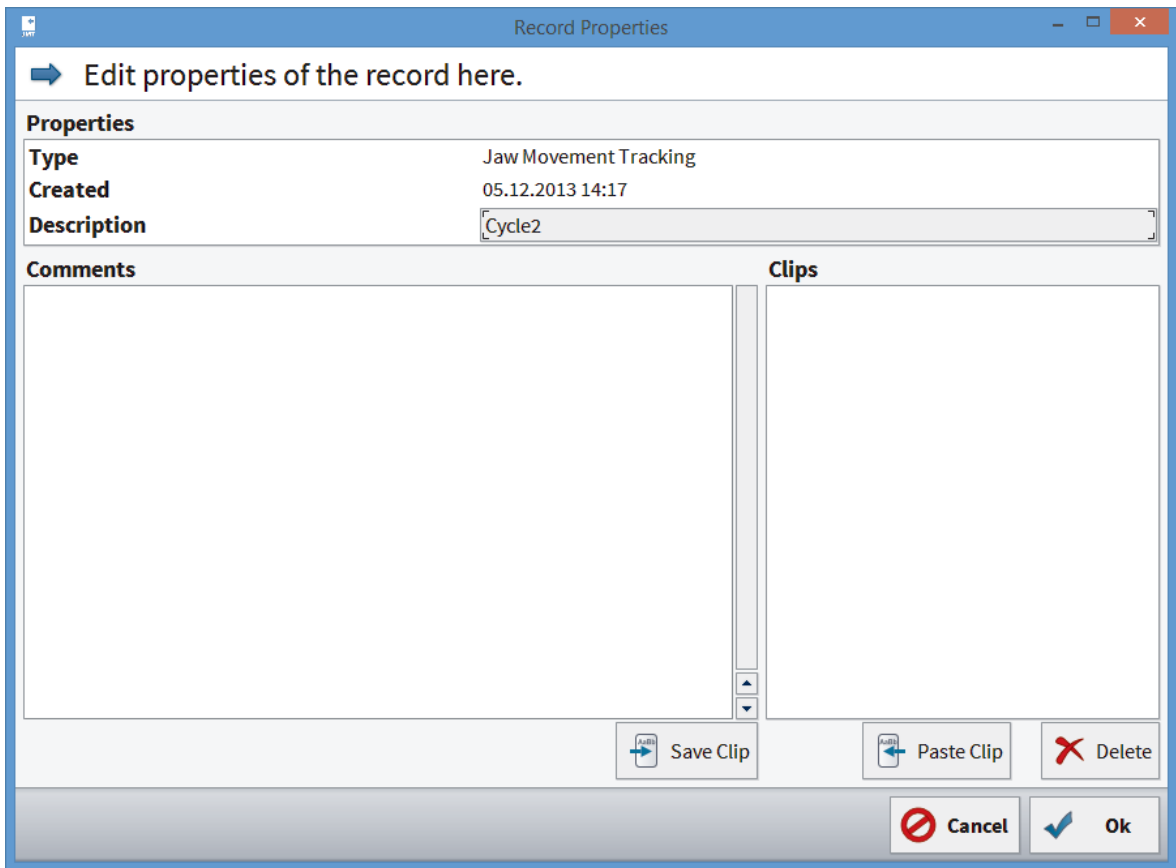


**6 Specify cursor position** - With a left click, position the cursor at the point at that you want to paste your text clip.

**7 Paste selected text clip** - With a left click, select a clip from the list that you subsequently adopt in the current position in the comments field by clicking on **Paste Clip**.

### 3.7 RECORD PROPERTIES

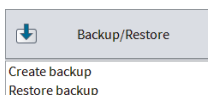
You recall this dialog by clicking on the **Properties** button right under the list of records. You can change the description of the record and add comments for the record (see *Comments & clips* [▶ Page 14]). Text clips are saved separately from those in the patient file.



### 3.8 BACKUP PATIENT AND MEASUREMENT DATA

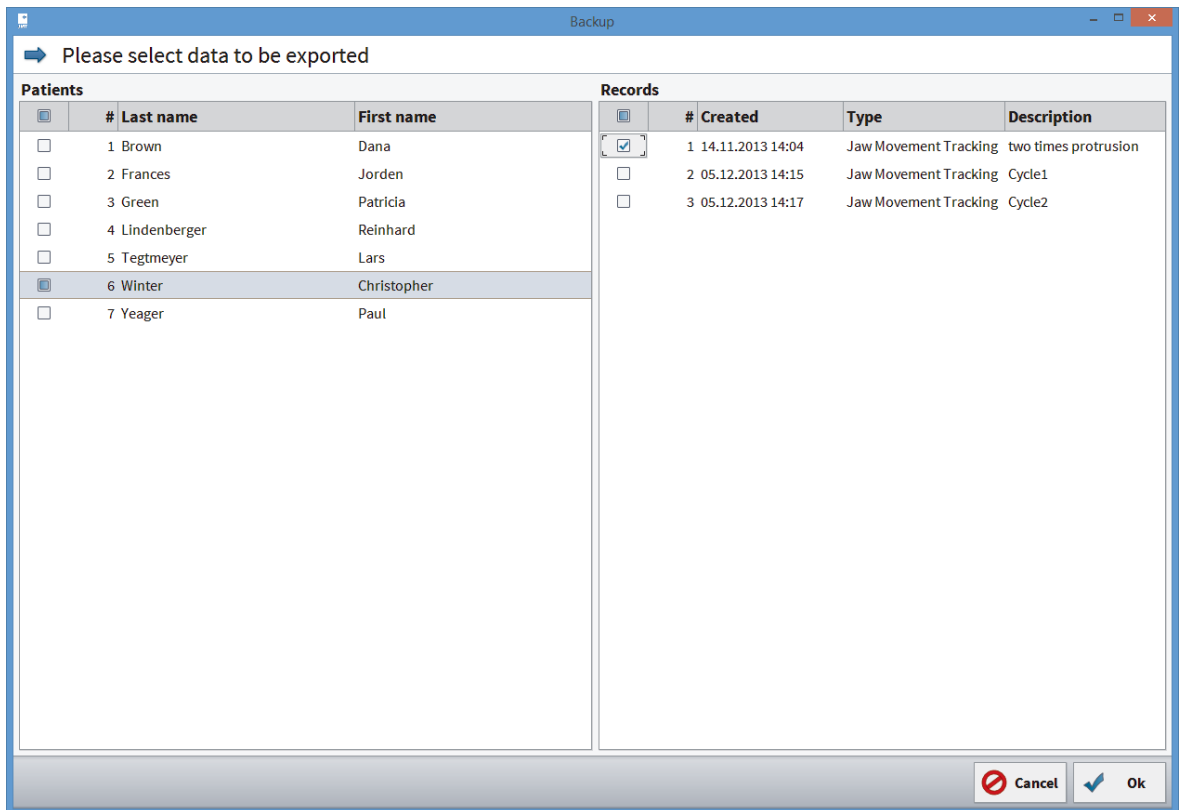
You can backup patient and measurement data from the patient database. You can adopt saved data in your database again with the **Restore backup** function.

This function also enables the exchanging of individual datasets, e.g. with colleagues who are also working with SICAT JMT+.

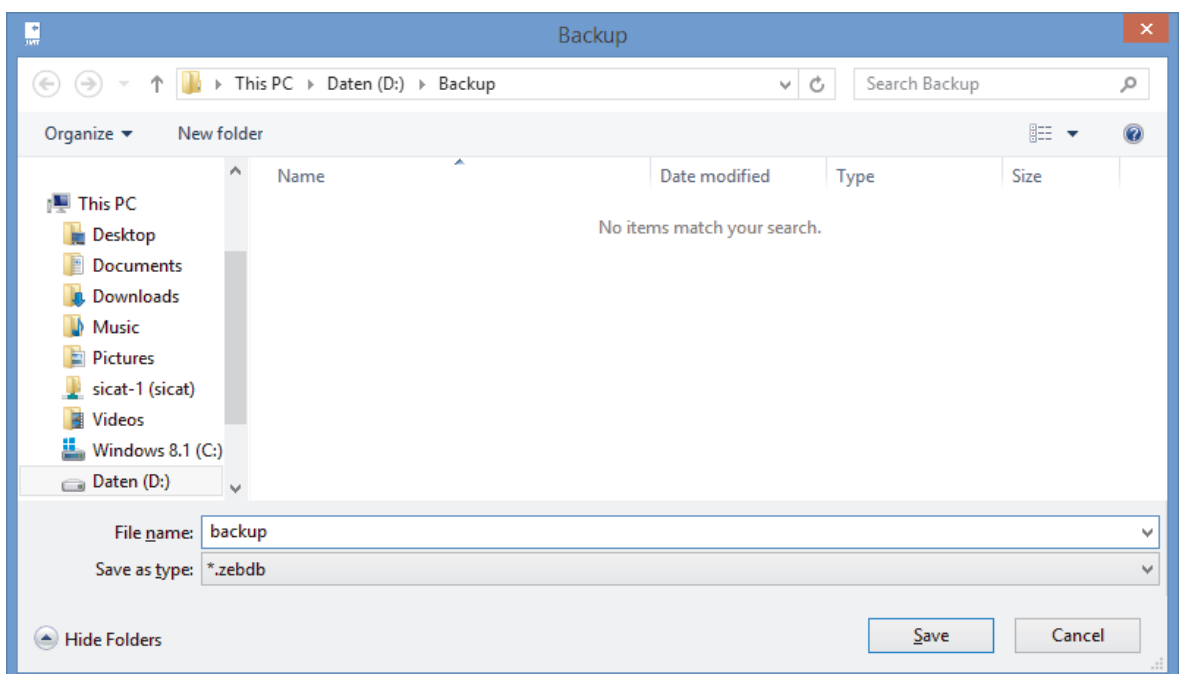




1. **Create backup...** - Click on the **Backup/Restore** button on the below right in the function bar. Next, select **Create backup** from the list that is shown.



2. **Select datasets** - Apply the check mark before all the datasets to be exported. If you want to export all the measurements pertaining to a patient, apply the check mark before the patient's name. If you click in a line with patient names, all the measurements for the patient are shown on the right hand side. You can then select them individually.



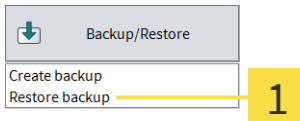
3. **Select the destination folder** - On your hard disk, navigate to the location at that the exported file should be saved. Give it a name and then click on **Save** to get to the data selection.



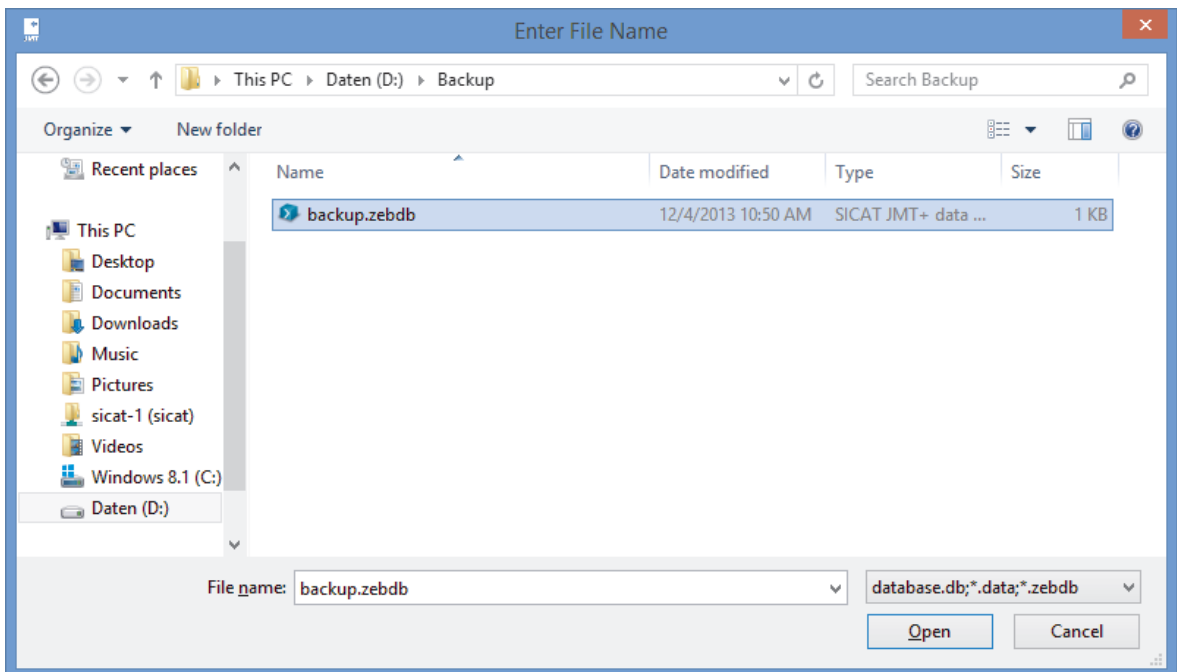
Please note that the data backup does not take place automatically.

### 3.9 RESTORE A DATA BACKUP

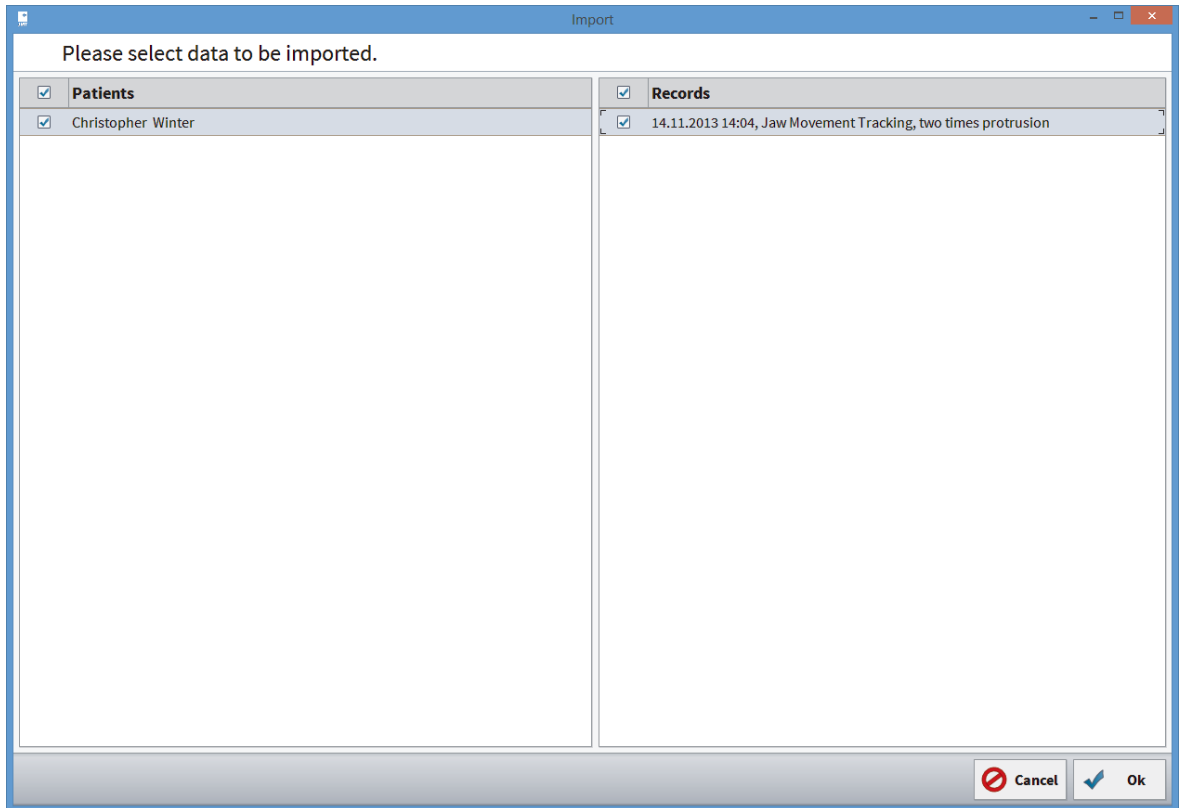
You can save backed up patient and measurement data in the database. The exact procedure is described as follows:



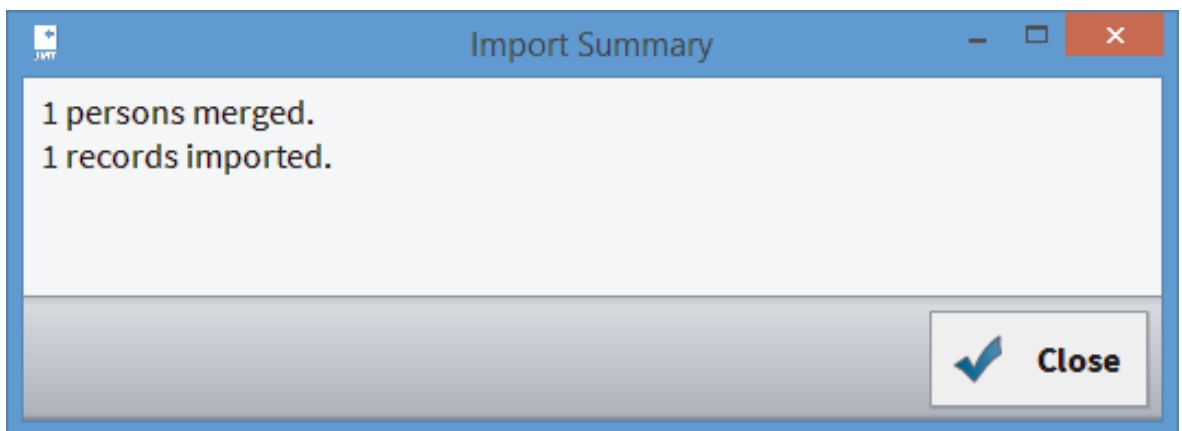
1. **Restore backup...** - Click on the **Backup/Restore** button on the below right in the function bar. Next, select **Restore backup** from the list that is shown.



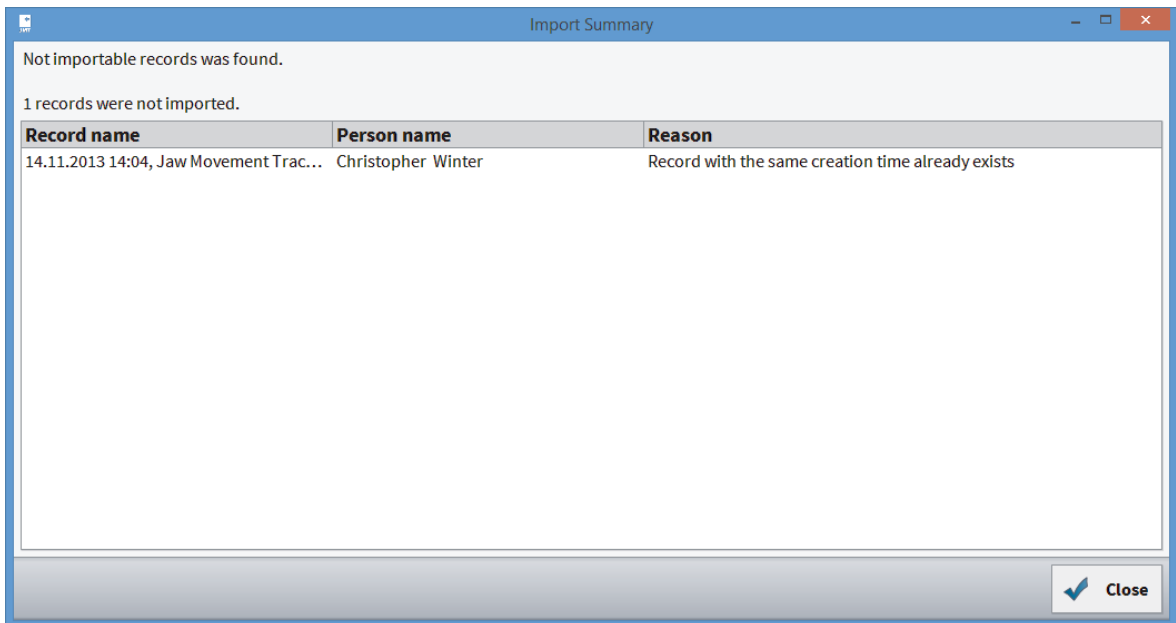
2. **Search for and select data** - On your hard disk and/or other storage media connected to your computer, search for the datasets that you would like to import. The files you have to select depend on the format. For further information, see *Datenformate* [▶ Page 20].



3. **Select datasets** - Apply the check mark before all the datasets to be imported. To adopt all patients from the backup, apply the check mark at **Patients** above the first column. If you want to import all the measurements pertaining to a patient, just apply the check mark before the patient's name. If you click in a line with patient names, all the measurements for the patient are shown on the right hand side. You can then select them individually.



4. **Import Summary** - Subsequent to the completion of the data import, the dialog shows you a summary of how many patients and measurements were imported. Faulty datasets as well as patients and measurements are stated in the list that have already been created and were not therefore imported.



**Errors/duplicates** - If errors occur during the import or if you want to import datasets that are already available in your database, you will be shown a summary with corresponding information.

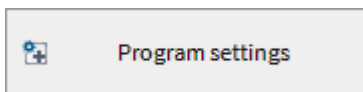
### 3.9.1 DATA FORMATS

- **.zebdb** - If you want to import data from old or new software packages, simply select the corresponding file with the ending .zebdb.

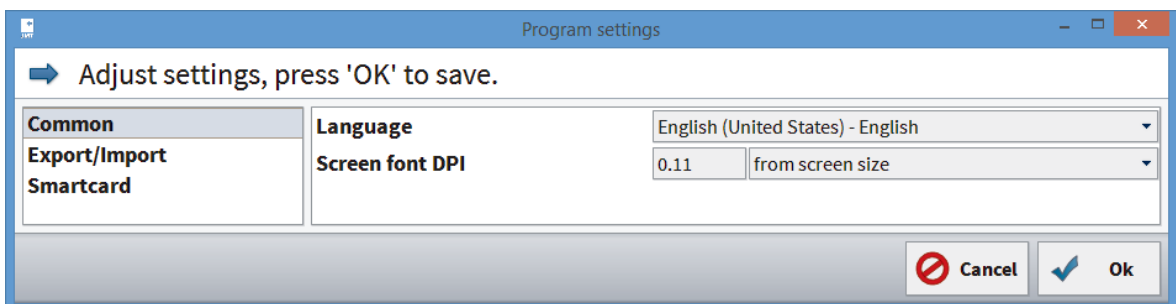
## 3.10 PROGRAM SETTINGS

Here, among others, you can change the language and apply settings for the smartcard reader.

### 3.10.1 COMMON SETTINGS



1. **Program settings** - Click on this button on the below right in the function bar.



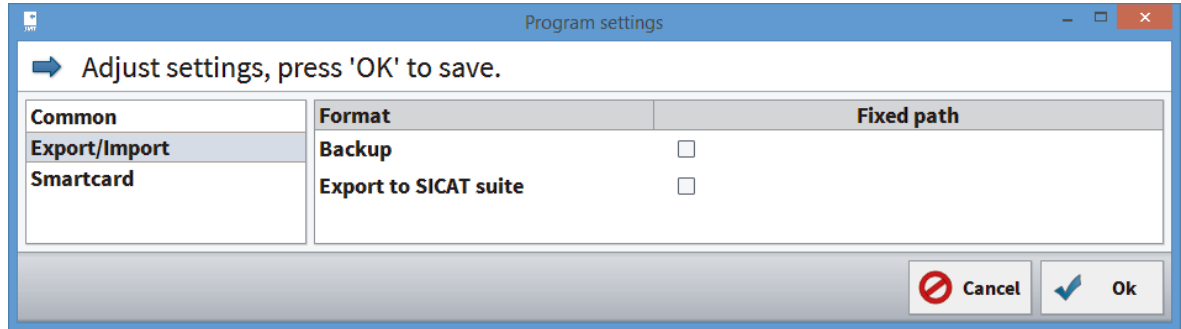
2. **Select common settings** - Click on the left hand side on **Common**.

**Language** - Select the required translation of the program interface from the list.

**Zoom factor** - This factor determines the size of all elements displayed in the software: Select **User defined** in order to enter an individual value in the dpi unit in the input field. **Screen height ratio** can be used as an alternative to the dpi setting. **Use system settings** returns the value to the Window Standard.

### 3.10.2 EXPORT SETTINGS

1. **Program settings** - Click on this button on the below right in the function bar.



2. **Select export settings** - Click on the left hand side on **Export**.

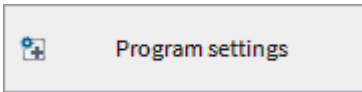
**Save** - Activate the check box and choose the desired backup folder.

**Export to SICAT Suite** - Activate the check box and choose the desired folder for the export to SICAT Suite.

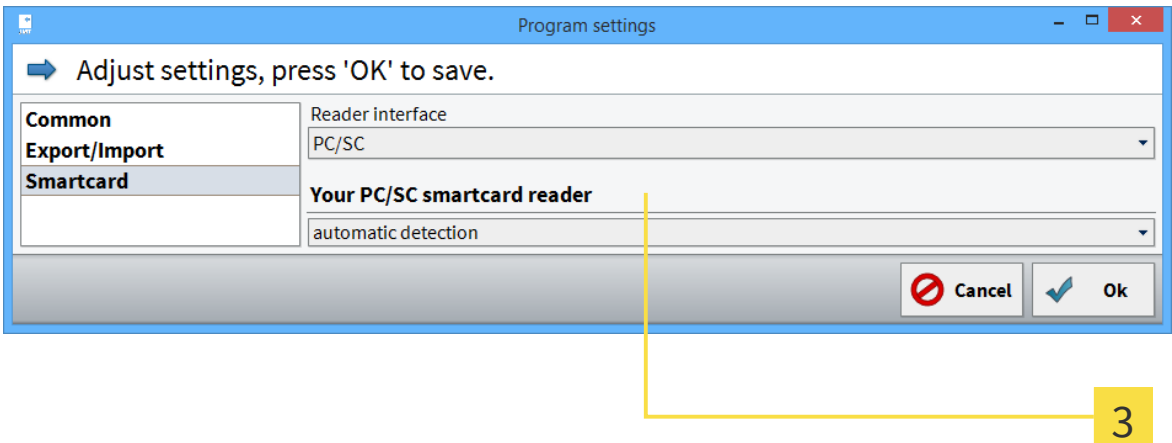
### 3.10.3 SMARTCARD

You can set up the smartcard reader here for health insurance cards / electronic health cards. The requirement for this is a SmartCard reader and/or special reader devices for health insurance cards, such as chip card keypads from the German manufacturer Cherry.

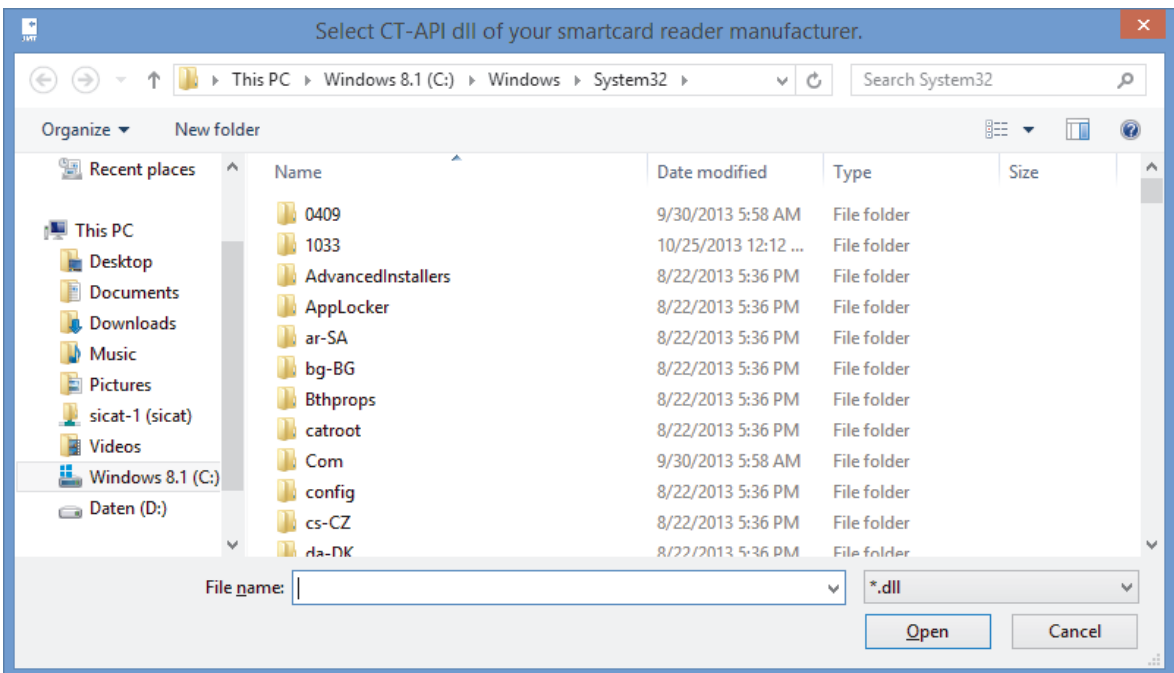
The old health insurance cards only work if the CT-API driver is installed.



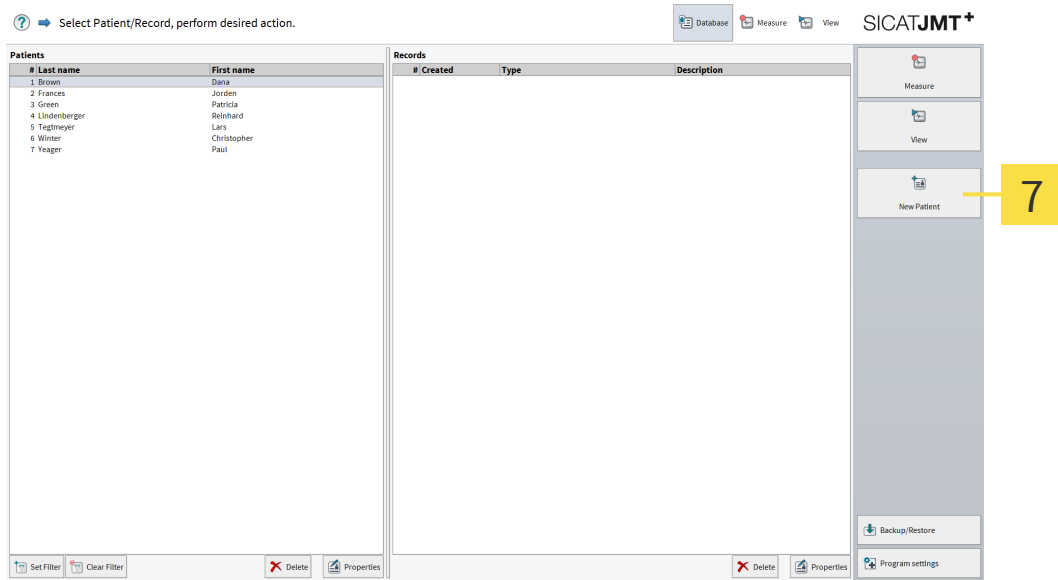
1. Click on the **Program settings** button on the below right in the function bar.



2. **Select the Smartcard** entry on the left hand side.
3. **Select the interface** - On the right hand side, select the interface and/or the device with that you read the health insurance card and/or electronic health card. PC/SC for electronic health card CT-API for health insurance card and electronic health card. If you have selected PC/SC, confirm it with **Close**.
4. **CT-API** - CT-API can read health insurance cards and electronic health cards. The pre-set suggestion is the driver from the EHEALTH-BCS keypad G87-1504 from manufacturer Cherry. Next, click on **Browse** in order to select the corresponding dll file for your CPI-API driver.



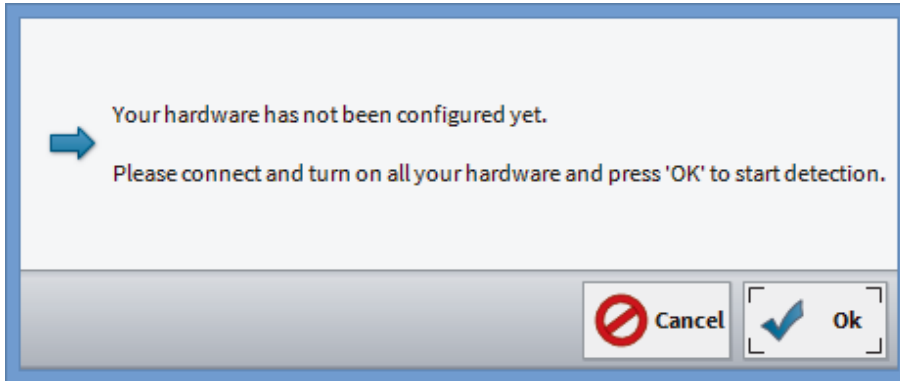
5. **Select the driver dll** - Select the corresponding CT-API driver on your hard disk. The details are in the instructions for use provided by the smartcard reader manufacturer.



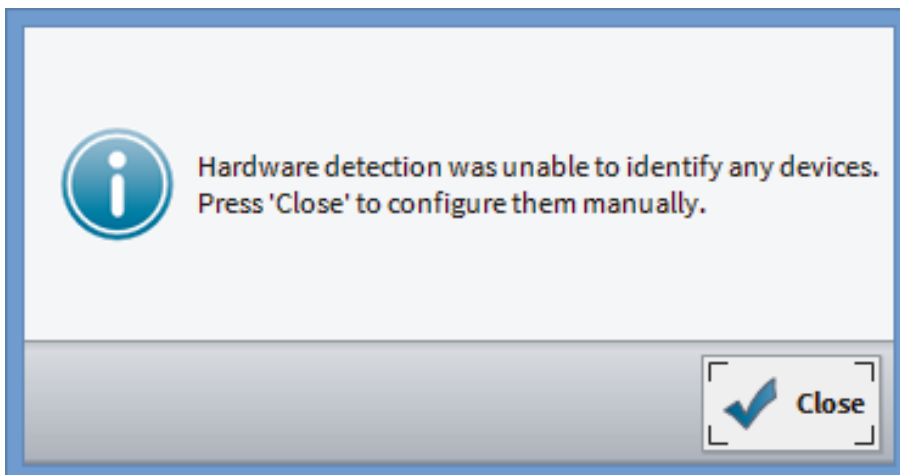
6. **Inserting the card** - Insert the card in the reader device.
7. **Creating new patients** - Click on the **New patient** button and the freely readable information on the card is automatically pasted onto the appropriate fields of the patient file.

## 4 HARDWARE SETUP

Before you can use your measurement devices, you have to create a device profile (meaning one or several devices in a group). You can find this function after clicking on the **Measure** button below right under **Hardware Setup**.



**Automatic recognition** - Connect all devices with the PC you want to use for the measurement. Next, confirm with a click on **Ok**.

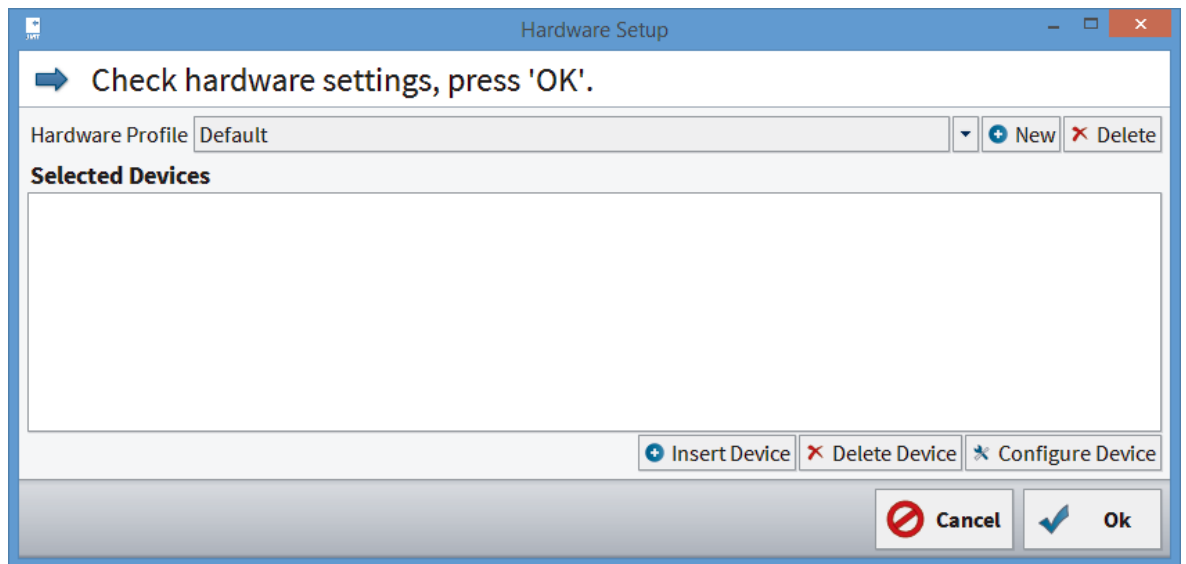


**Devices recognition fails** - It was not possible to recognize any devices. If you have already inserted the devices, please check the power supply.

By clicking on the **Close** button, you can add the devices to a profile by hand.



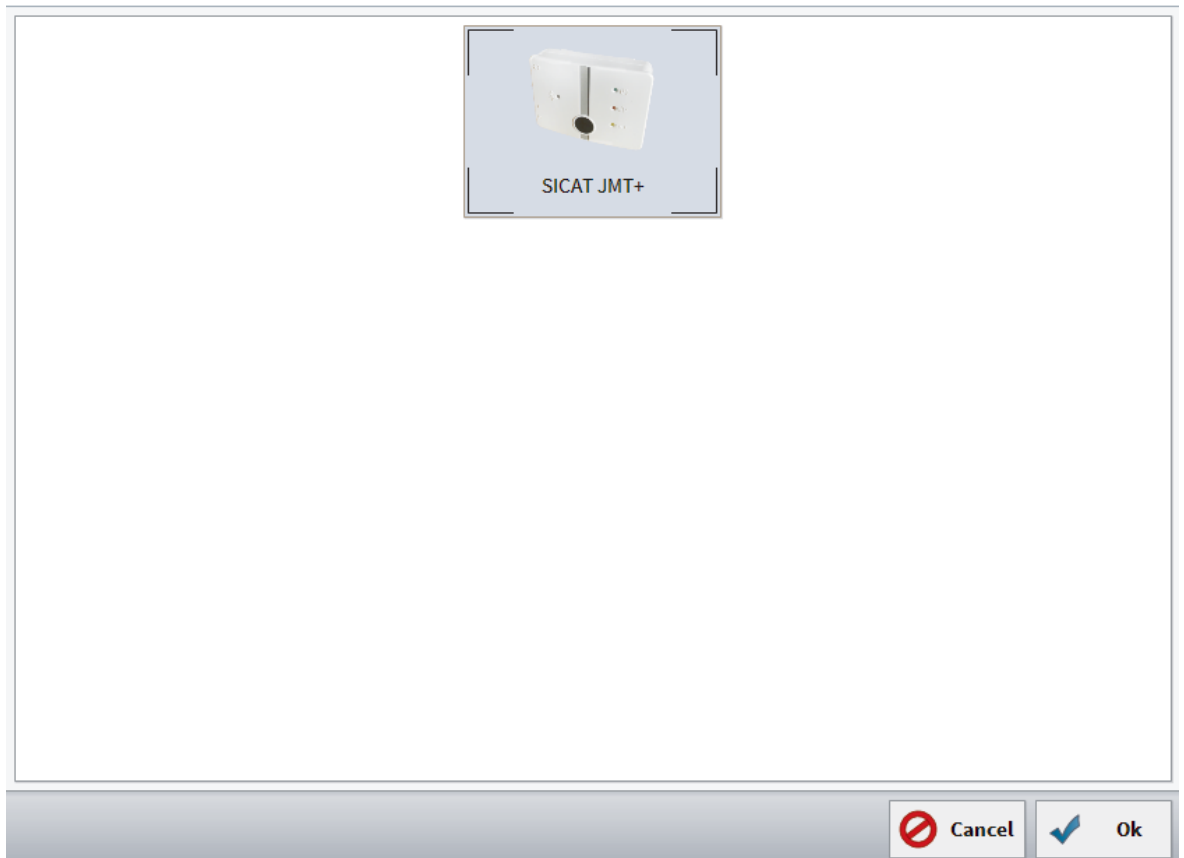
## SELECT DEVICES MANUALLY



1. **Create device profile** - Click on the **Insert Device** button.

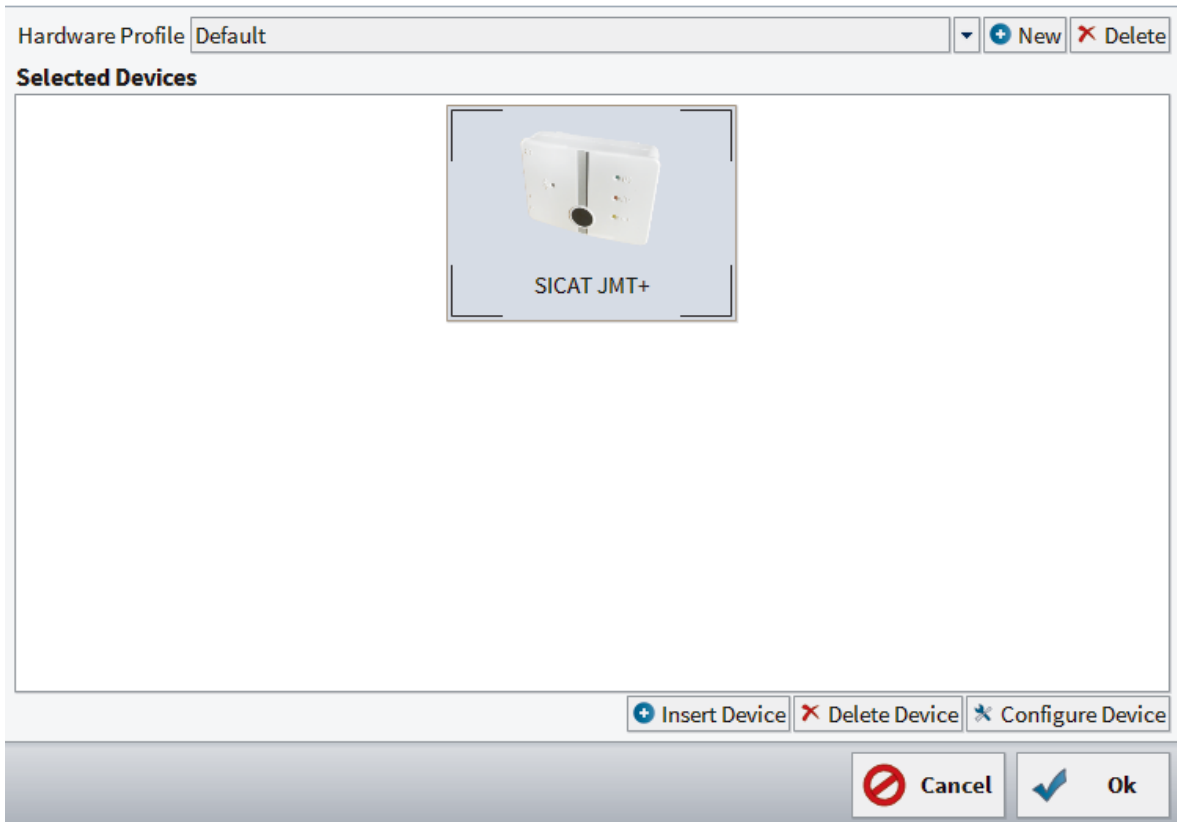
▶ A new window opens:

➔ Double-click a device to make it available for measurement. A device-specific setup ...



2. **Insert Devices** - In this dialog window, you are shown all of the recognized devices (and those activated according to your license). Please select the device that you want to add to your profile and click **Ok**. Repeat this step until you have added all the devices with that you want to carry out your message.

Check hardware settings, press 'OK'.

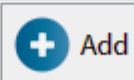

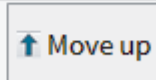
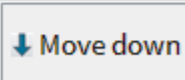
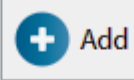

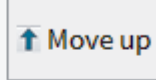
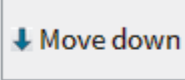
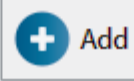

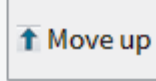
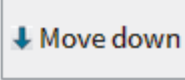


3. **Finished profile** - Once you have added all the devices you want to use for the measurement to the profile, you can add a name in the input field behind **Hardware Profile**.
4. Next, click on **Ok**.

## 5 JAW FUNCTION MEASUREMENT

With this software, you can carry out jaw motion recordings in combination with a SICAT JMT+ system.

### 5.1 PREPARE MEASUREMENT (MEASUREMENT SETTINGS)

| <b>Adjustments</b>  |                                     |   |                       |  |                       |
|---|-------------------------------------|---|-----------------------|--|-----------------------|
| Calculate kinematic axis  | <input checked="" type="checkbox"/> |   |                       |  |                       |
| Orbital point by pointer  | <input type="checkbox"/>            |   |                       |  |                       |
| <b>Face symmetry</b>  |                                     |   |                       |  |                       |
|   | <b>0</b>                            | <b>1</b>  | <b>2</b>              | <b>3</b>   | <b>4</b>              |
| Left eye corner   | <input checked="" type="radio"/>    | <input type="radio"/>   |                       |  |                       |
| Right eye corner  | <input checked="" type="radio"/>    | <input type="radio"/>   |                       |  |                       |
| Left mouth corner   | <input checked="" type="radio"/>    | <input type="radio"/>   |                       |  |                       |
| Right mouth corner  | <input checked="" type="radio"/>    | <input type="radio"/>   |                       |  |                       |
| Lines   | <input checked="" type="radio"/>    | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
|     |                                     |   |                       |   |                       |
|   |                                     |   |                       |  |                       |
| <b>Lower jaw positions</b>  |                                     |   |                       |  |                       |
|   | <b>0</b>                            | <b>1</b>  | <b>2</b>              | <b>3</b>   | <b>4</b>              |
| Habitual occlusion  | <input checked="" type="radio"/>    | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
| Rest Position   | <input checked="" type="radio"/>    | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
| Jaw Relation  | <input checked="" type="radio"/>    | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
|    |                                     |  |                       |  |                       |
|  |                                     |   |                       |  |                       |
| <b>Movements</b>  |                                     |   |                       |  |                       |
|   | <b>0</b>                            | <b>1</b>  | <b>2</b>              | <b>3</b>   | <b>4</b>              |
| Live preview  | <input type="radio"/>               | <input checked="" type="radio"/>  |                       |  |                       |
| Lateral left  | <input type="radio"/>               | <input checked="" type="radio"/>  | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
| Lateral right   | <input type="radio"/>               | <input checked="" type="radio"/>  | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
| Protrusion  | <input type="radio"/>               | <input checked="" type="radio"/>  | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
| Opening   | <input type="radio"/>               | <input checked="" type="radio"/>  | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
| Chewing   | <input checked="" type="radio"/>    | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
|    |                                     |  |                       |  |                       |
|  |                                     |   |                       |  |                       |

With the **Calculate kinematic axis** setting, the kinematic axis is determined iteratively according to the greatest possible similarity of the condyle-opening path and the condyle-protrusion path.

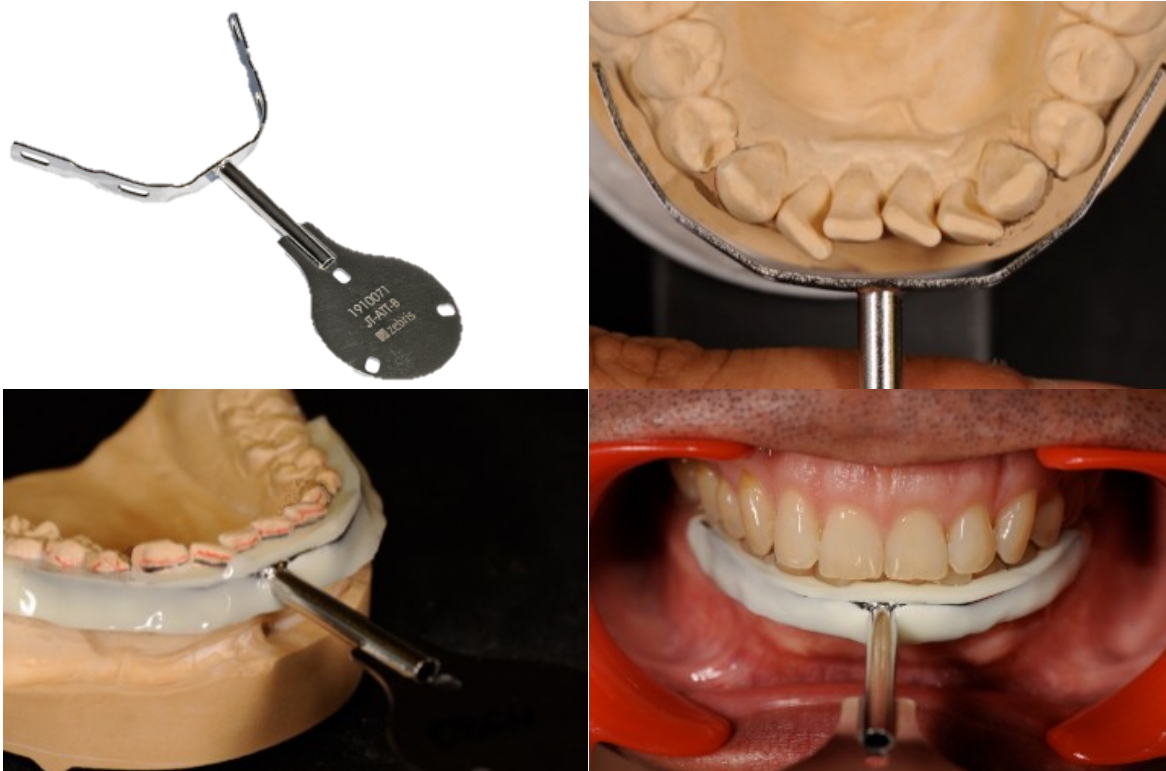
With the **Orbital point by pointer** setting, the orbital point is activated for the reference to the axle-orbital level.

The **Face symmetry** serves the specification of the individual anatomical points on the patient.

With the settings under **Lower jaw positions**, it is possible to register individual points.

With the settings under **Movements**, the **Live preview** is activated and the sequence of movements is specified in the measurement.

## 5.2 PREPARE (PATIENT)



ZTM Hans-Jürgen Joit, Linie Düsseldorf

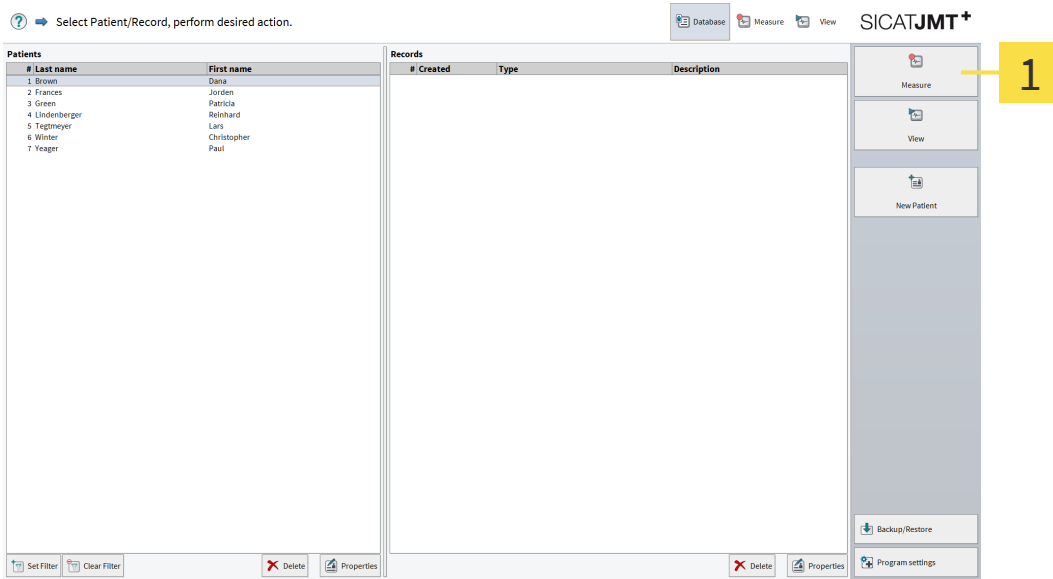
The **Para-occlusal attachment 90** is to be attached to the patient. It is adjusted to the LJ dental arch, supplemented with light-curing or auto-polymerising composite, and adapted and hardened to the tooth surfaces in the plastic phase of this material.

With this procedure, the incisor surfaces of the upper jaw (UJ) teeth are not in contact with the **Para-occlusal attachment 90** in order to guarantee an undisturbed functional sliding of the jaw in the occlusion. The production can take place in the dental laboratory and in the dental practice.

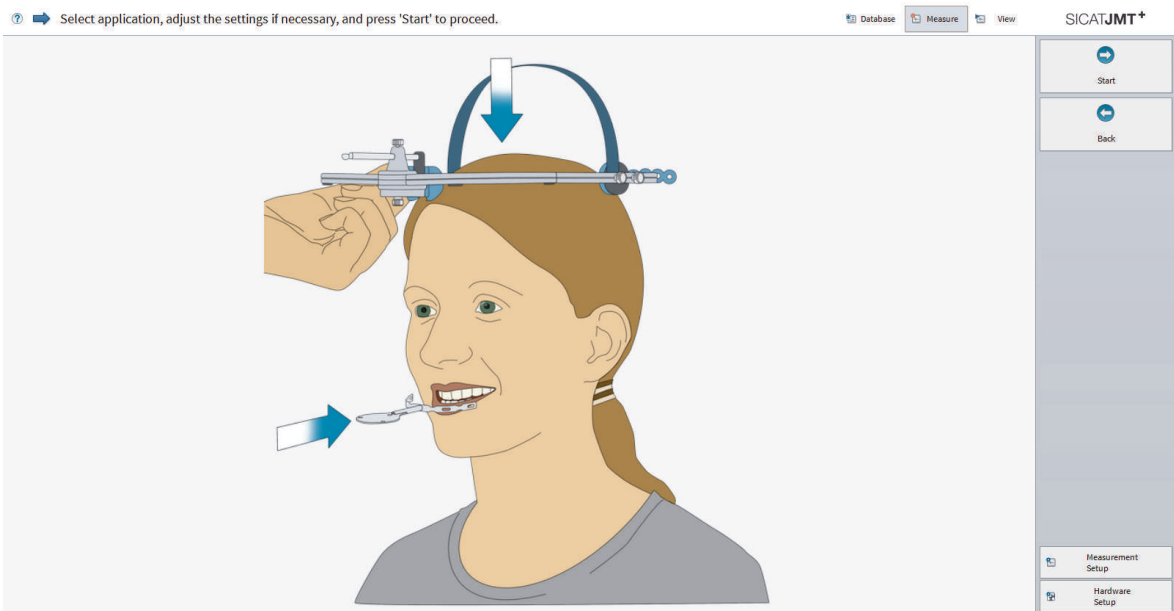


The **SICAT Fusion Bite** is adapted to the terminal occlusion prior to a measurement using bite registration material. In this context, the **SICAT Fusion Bite** is initially filled with the registration material with the magnetic plate facing upwards and fitted in the patient for hardening in the UJ. After that, the same procedure takes place for the LJ side.

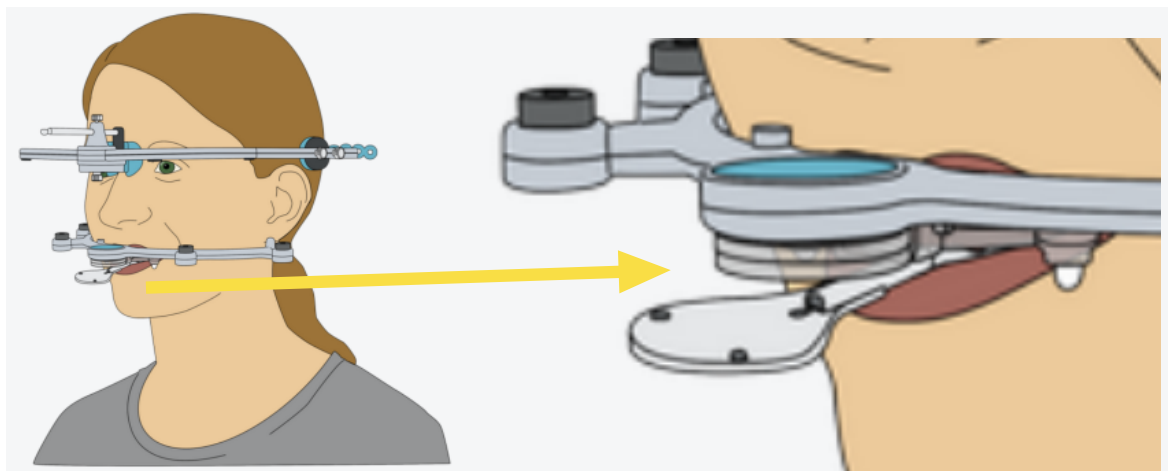
## 5.3 CARRY OUT MEASUREMENT (MEASUREMENT MODE)



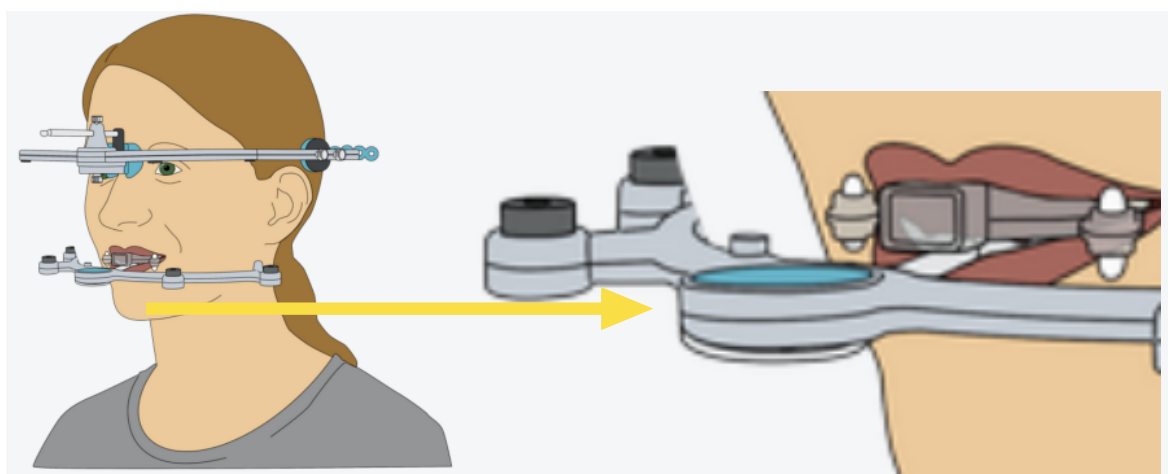
**1 Database** - Click in the right hand function bar on the **Measure** button.



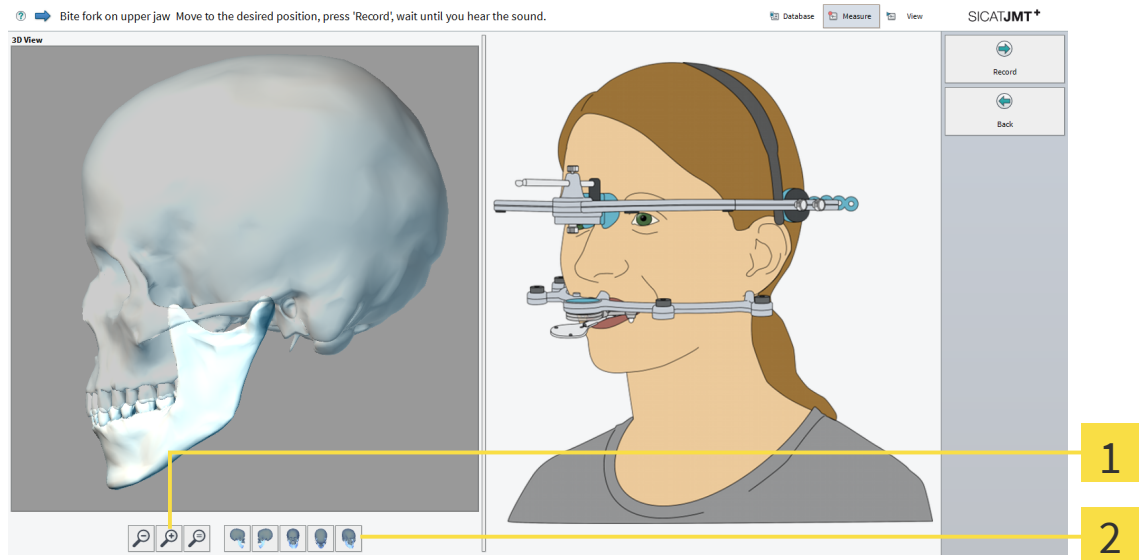
**Preparation** - The **Facebow type 13R** is to be positioned stably on the patient head. It is necessary to ensure that: The **white headband** is on the patient's skull and the **Nasion support** without stretching the skin in the nasion area. The **white elastic neckband** is tightened comfortably for the patient. Instruct your patient to betake the starting position, according to the method of examination.



For the subsequent match procedure, in addition to the fixed **Para-occlusal attachment 90**, the prepared **SICAT Fusion Bite** is also positioned on the patient over the occlusal impressions between the UJ and LJ. For the measurement procedure, the **Lower jaw sensor type 24T** is positioned on the **SICAT Fusion Bite Adapter** and initialized using the **Measure** button.



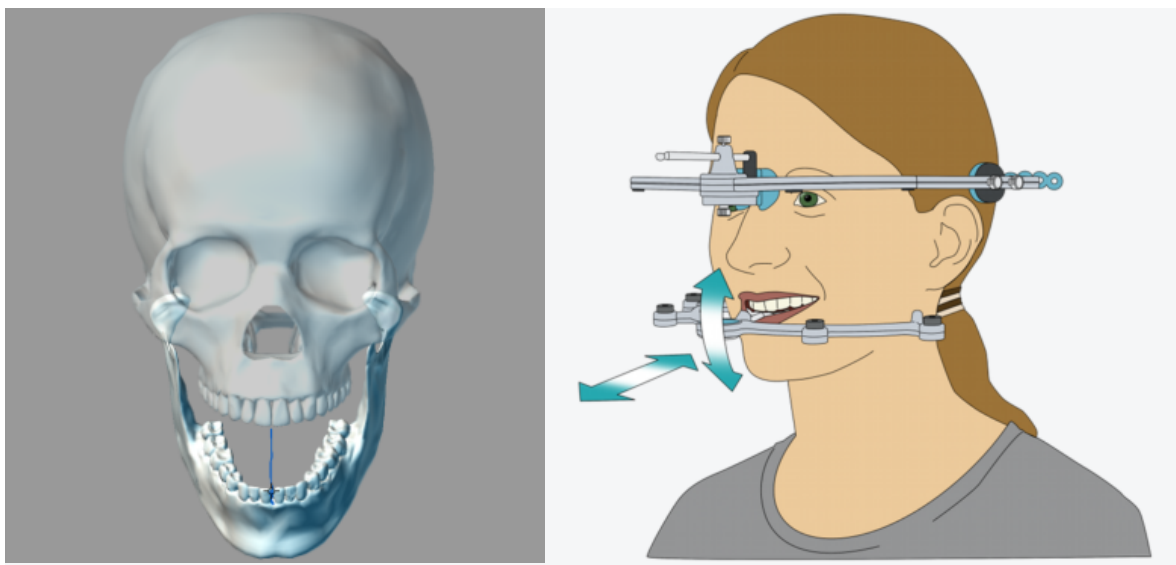
The patient stays in the bite registration position and the **SICAT Fusion Bite Adapter** of the **SICAT Fusion Bite** is removed in order to enable the implementation of the lower jaw sensor technology on the **Para-occlusal attachment 90**. The measurement procedure is initialized using the **Record** button.



**1 Zoom function** - The zoom buttons serve the purpose of magnifying ("+" icon) or shrinking ("-") icon) the presentation of the skull. A left click in the 3D display before zooming determines the zooming in point. The magnifying glass with the "=" icon adjusts the graphic to the size of the window. It is also possible to zoom by turning the mouse wheel. In this way, the area displayed with the mouse is magnified or shrunk.

**2 Side view** - The buttons next to the zoom function enable the choice of view.

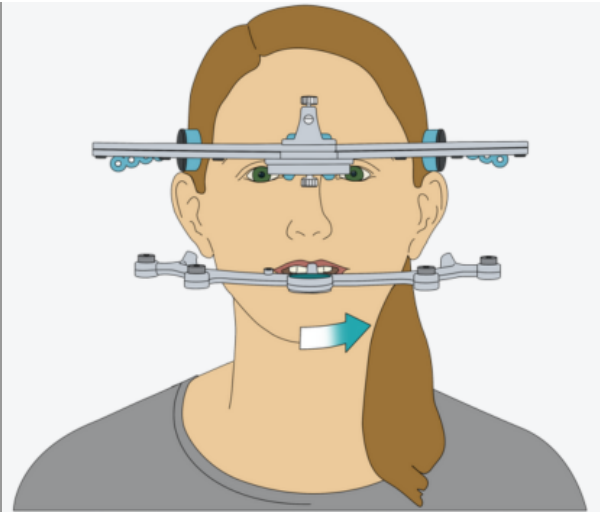
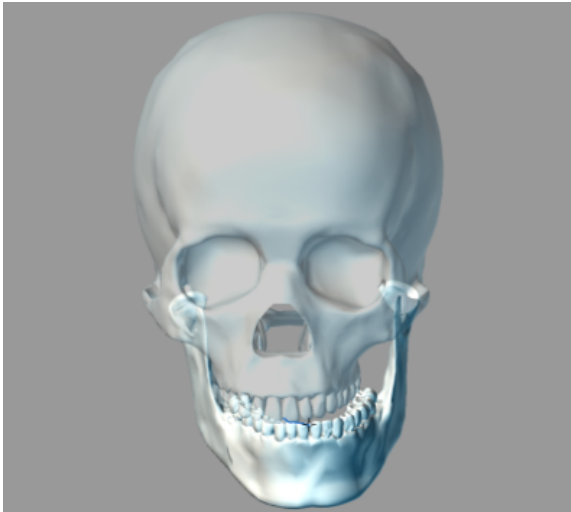
**Live preview** - In the live preview it is possible to display, inspect and illustrate movements to the patient without saving the measured values. Via the live preview, it is also possible to practice special functional movements with the patient. Please activate this function with a click on the **Start Preview** button.



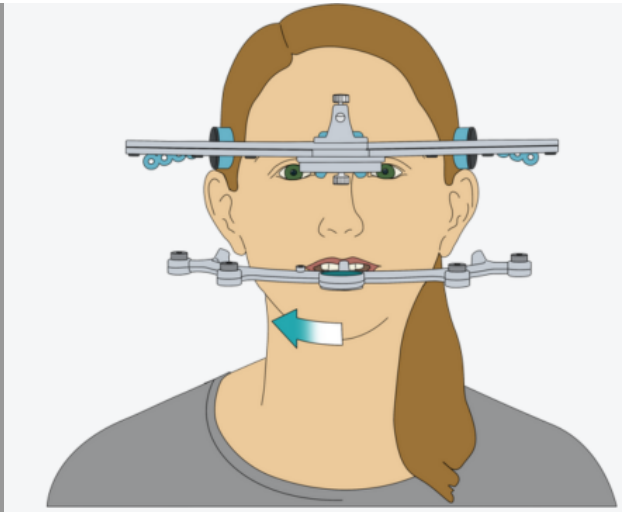
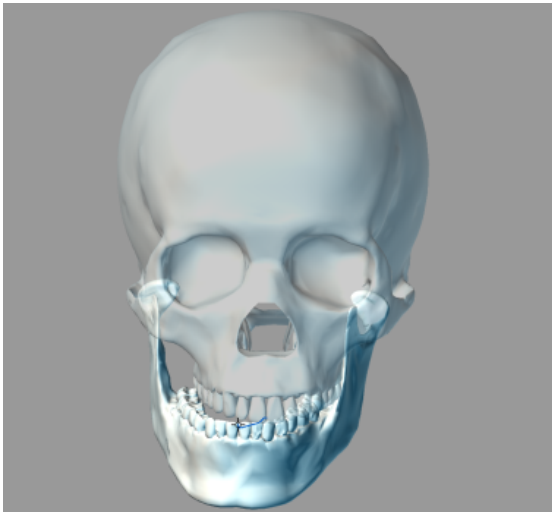
**Measurement** - In the **Settings** menu, movement patterns can be selected (up to 4x) for repetitions. The selection and sequence of the movements can be changed and varied at random.



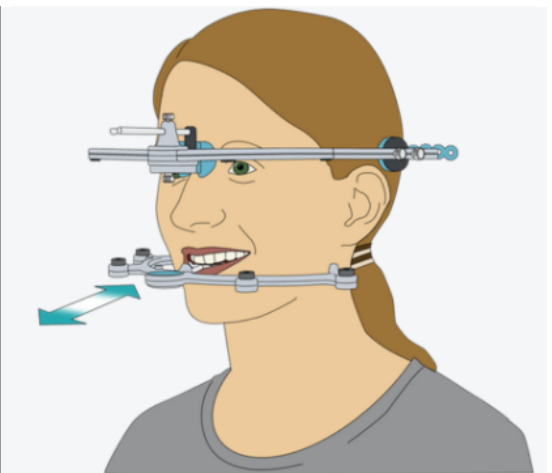
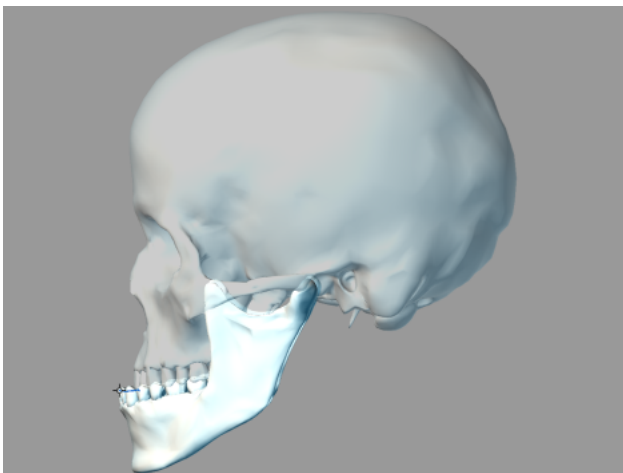
**Lateral movement left**



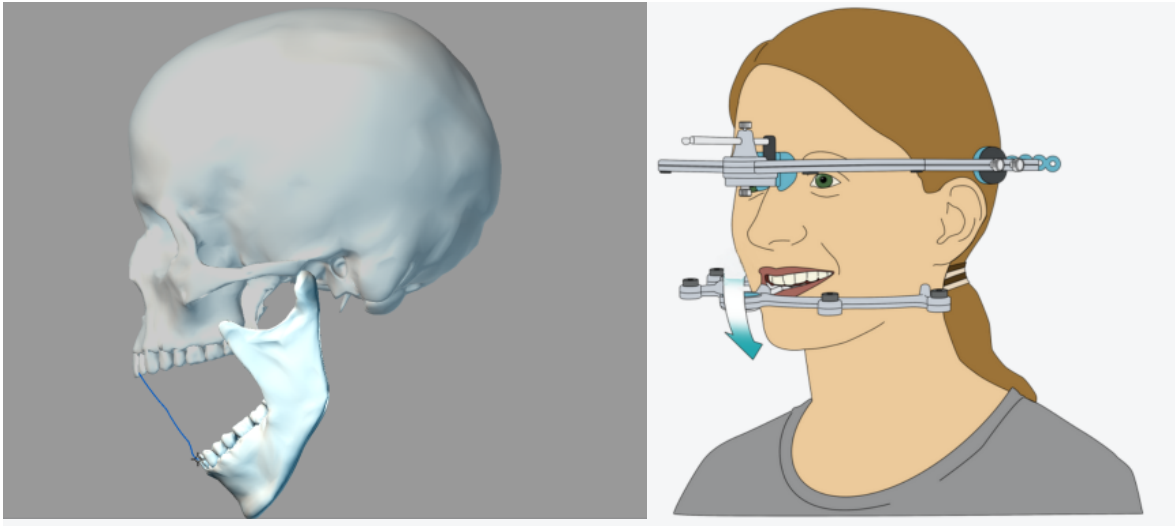
**Lateral movement right**



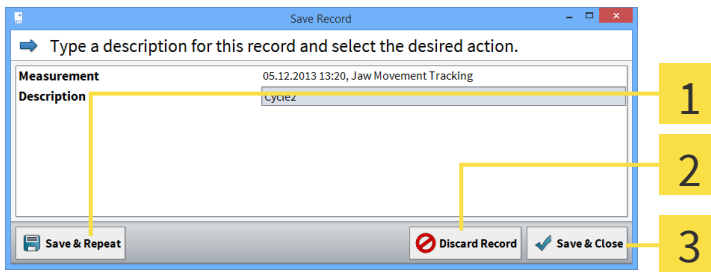
**Protrusion movement**



### Opening movement



A dialog window opens after the end of the measurement:

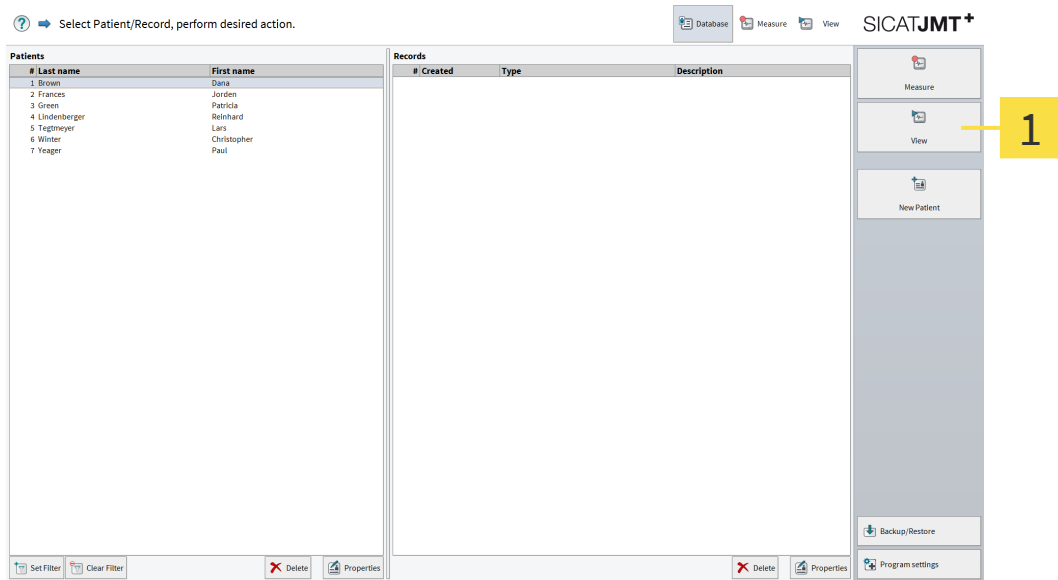


- 1 Save & Repeat** - The record is saved and the user returns to the preview mode in order to carry out a new measurement.
- 2 Discard Record** - The record is discarded and the user returns to the preview mode in order to carry out a new measurement.
- 3 Save & Close** - The record is saved and the user returns to the database.

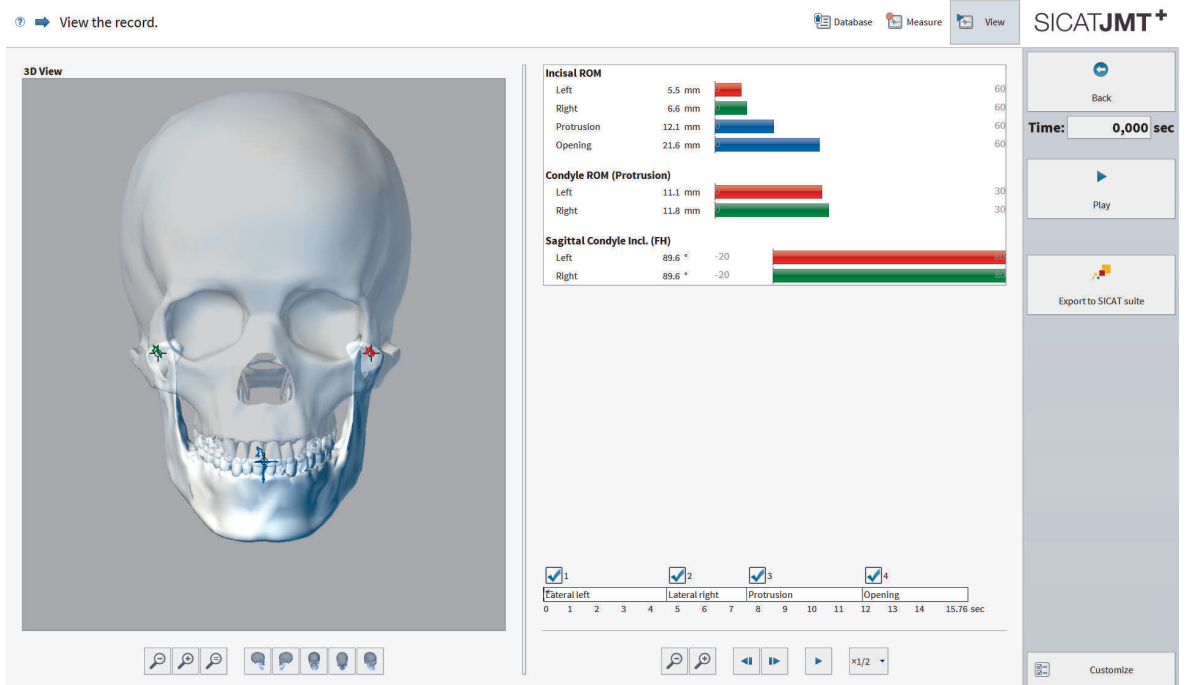
## 5.4 EDIT MEASUREMENT (VIEW MODE)

In the **View** mode, you can view the measurements, play them back, and limit the measurement interval. The individual functions of the view mode are explained in detail as follows.

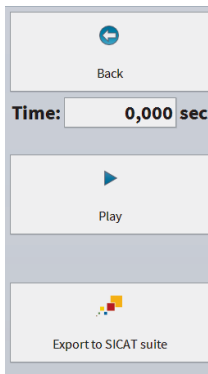
## 5.4.1 BASICS



**1** Open measurement dataset - Select a dataset in the measurements database and click in the right hand function bar on the **View** button.

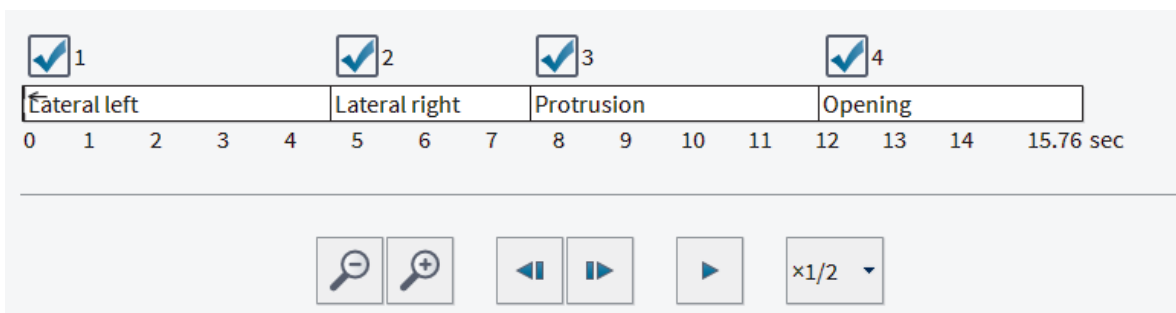


**Playback mode view**



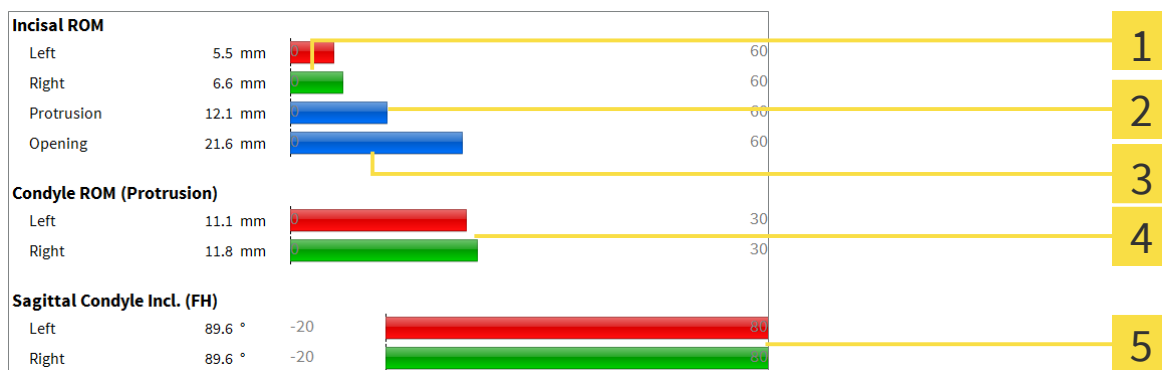
**Playback measurement** - The time display shows the currently shown point in time of the measurement in seconds. Click in the right hand function bar on the **Play** button in order to animate the graphically displayed skull in movement.

By clicking on the **Back** button, you return to the database.

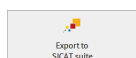


**Time bar** - The actual point in time of the movement sequence shown is displayed here. In the fields shown above the time bar, using the **check mark** it is possible to show or hide movements. With Zoom (+) and (-) it is possible to view a specific time segment of the movement selectively and to analyze it. The real time presentation can be played back at up to 10x or 1/10 of the actual **speed**.

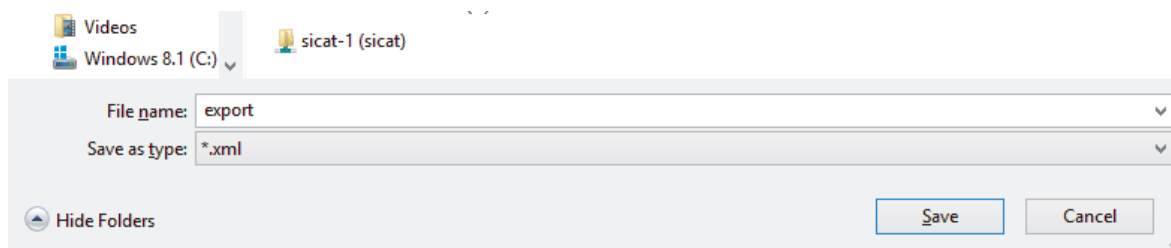
**Bar charts**



- 1** Laterotrusion
- 2** Protrusion
- 3** Opening movement
- 4** Range of condyle motion
- 5** Condyle track inclination



**Data handover of xml file** - Once the measurement is complete, by clicking on the **Export to SICAT Suite** button, the file is deposited and saved.



The document file is opened and the recorded movement data is saved as \*.xml dataset after the entry of the file name.

## 6 TROUBLESHOOTING

This section lists the error messages that frequently occur due to incorrect operation, and offers some suggested solutions. If you receive such an error message, please start by following the suggested solutions in this list before contacting our support team.

The list does not claim to be complete.

### 6.1 COMMON

"3D view impossible, your graphics driver does not support OpenGL 3.3 (Irrlicht)."

"3D view cannot be created (OpenGL x.y)".

| POSSIBLE CAUSE   | SOLUTION  |
|--|---|
| OpenGL 3.3 not supported / graphics driver was changed | <p>During the software installation, a check takes place to ascertain whether your graphics hardware supports OpenGL 3.3 that is required for the correct implementation of the software. If you receive this error message after the installation, it may mean that you could have two graphics chips, or your graphics driver has been changed in the intervening period.</p> <p>Systems that have two graphics chips normally offer a switching option. In the event of changing a driver, please complete an update to the graphics driver.</p> |

"Timeout reading from USB"

| POSSIBLE CAUSE           | SOLUTION  |
|--------------------------|---|
| USB cable not plugged in | Connect the USB cable on your device with the PC.   |
| Device not switched on   | Switch the device on with the corresponding switch and/or create the power supply via the power supply unit. Please refer to the Hardware instructions for use for details. |

## *GLOSSARY*

### SICAT JMT<sup>+</sup>

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SICAT JMT<sup>+</sup> records the motion of the lower jaw.

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<http://www.sicat.com>

**CE0197**

Material number: 6458777

Change number: 119044

LAST UPDATE: 2014-08-12

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⋮

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