New as of: 04.2015



SIDEXIS 4

ORTHOPHOS SL Panorama editor

Addendum to "SIDEXIS 4 User Manual"



Table of contents

1	About this user manual			3
	1.1	Scope		
	1.2	Other	relevant documents	3
2	Func	tional description		
3	Impo	rting raw data		
4	Operating panorama editor			
	4.1	Starting the panorama editor		9
	4.2	Selecting, renaming, and deleting views		11
		4.2.1	Selecting the view	11
		4.2.2	Renaming the view	12
		4.2.3	Deleting views	12
		4.2.4	Generating a new view	13
		4.2.5	Creating a "scaled" view	14
		4.2.6	Full frame mode	15
	4.3	Execute positioning corrections		17
		4.3.1	Correcting the shape of the mandibular arch	18
		4.3.2	Correcting the head position	19
		4.3.3	Correcting the head inclination	20
	4.4	Adjusting layer orientation		21
		4.4.1	Shifting the layer orientation	23
		4.4.2	Tilting the layer orientation	24
	4.5	Closin	g the panorama editor / saving the views	25

1 About this user manual

1.1 Scope

This User Manual is a supplement to the technical documentation "SIDEXIS 4 Operator's Manual" (REF 6447028).

It describes operation of the SIDEXIS 4 plugin "ORTHOPHOS SL panorama editor".

Information about the user interface and general operation of SIDEXIS 4 or operation of the ORTHOPHOS SL X-ray unit can be found in the corresponding technical documentation.

It is essential that the warnings and safety instructions contained in these technical documents are observed.

All technical documentation required for the safe operation of the panorama editor can be found listed in the chapter entitled Other relevant documents [\rightarrow 3] .

1.2 Other relevant documents

In addition to this user user manual, you need the following documents:

- "SIDEXIS 4 Operator's Manual": REF 6447028
- "ORTHOPHOS SL Operating Instructions": REF 64 94 947

Online portal for technical documents

We have set up an online portal for the Technical Documents at http://www.sirona.com/manuals. From here, you can download this User Manual along with other documents. Please complete the online form if you would like a hard copy of a particular document. We will then be happy to send you a printed copy free of charge.

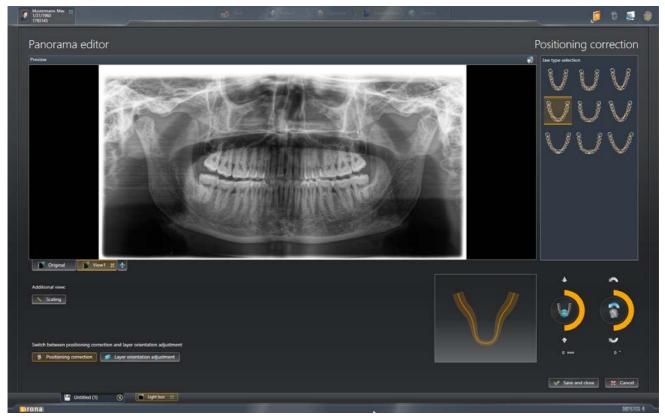
Functional description

IMPORTANT

The exposures displayed in the panorama editor are previews. A reading can only be taken in the lightbox

The SIDEXIS 4 plugin "ORTHOPHOS SL Panorama editor" offers a tool in SIDEXIS 4, which can be used to perform position corrections and layer adjustments in panoramic images, which have been created using the ORTHOPHOS SL X-ray unit and the following programs:

P1, P2, P10, P12, BW1, BW2, TM1, TM3, S1, S3



"ORTHOPHOS SL Panorama editor"

In order to be able to apply the "Panorama editor" function in SIDEXIS 4 to a panoramic image, its raw data must be imported [\rightarrow 5] once into SIDEXIS 4.

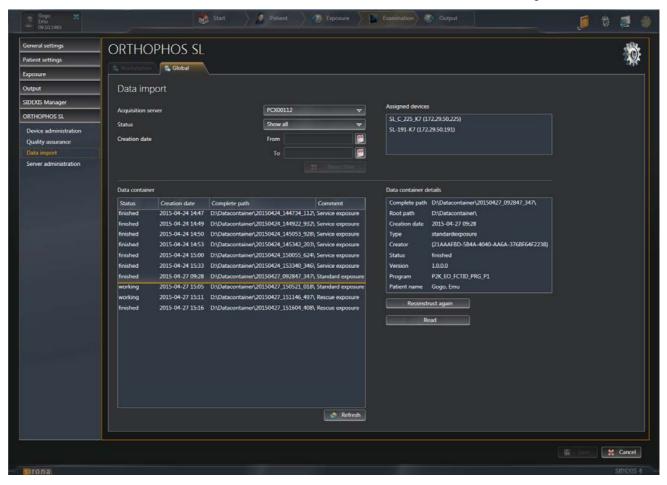
Once the raw data has been imported, the corresponding panoramic image can be processed [\rightarrow 8] in SIDEXIS 4 using the "Panorama editor"

•

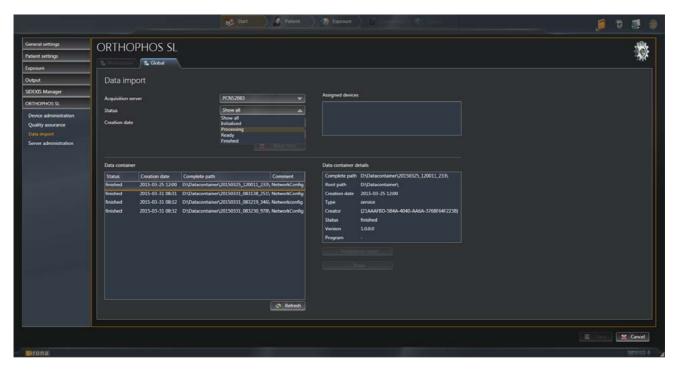
3 Importing raw data

The X-ray exposure could be transferred by the unit, yet was downloaded to SIDEXIS 4 without raw data for further processing.

- ✓ The workstation software is installed on the workstation for the corresponding X-ray component.
- 1. Start SIDEXIS 4.
- 2. In SIDEXIS 4, call the ORTHOPHOS SL configuration menu.

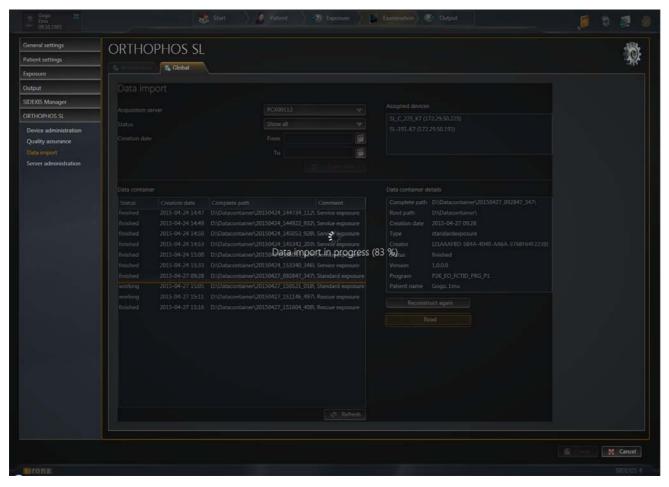


3. Select the "Data Import" button.



4. In the "Acquisition Server" drop-down list box, select the Acquisition Server used to create the exposure, whose raw data you wish to download to use in the panorama editor.

To simplify searching for the specific exposure, you can limit the number of exposures displayed by sorting by date and transmission state.



- 5. If the exposure, which is to be imported, is marked as "ready" in the data container, click on the "Read" button to import it.
 If the exposure, which is to be imported, is marked as "working" in the data container, click on the "Reconstruct again" button to import it.
 - The program tries to establish a connection to the data container. If it is not possible to establish a connection, check the network. Once a connection is successfully established, the data is transmitted and becomes available in SIDEXIS 4.

Operating panorama editor

In order to process panoramic images in SIDEXIS 4 using the *"Panorama editor"*, the following prerequisites must be met:

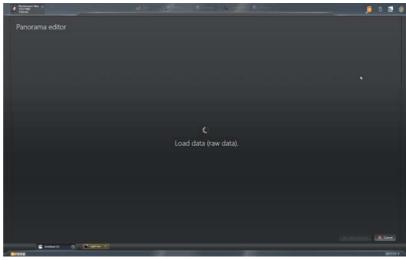
- In the SIDEXIS 4 database, there is a panoramic X-ray image that has been generated by the X-ray system ORTHOPHOS SL in a suitable exposure program (P1, P2, P10, P12, BW1, BW2, TM1, TM3, S1, S3).
- The raw data of the panoramic image is imported into SIDEXIS 4 once [→ 5].

It is only when these prerequisites have been fulfilled, that the "Panorama editor" button can be selected in the SIDEXIS 4 tool kit.



4.1 Starting the panorama editor

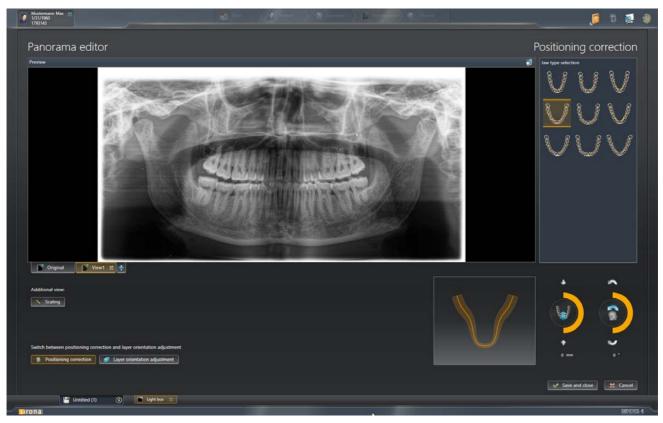
- 1. Start SIDEXIS 4.
- 2. Register your patients.
- **3.** Open the panoramic image in the "Light Box" of SIDEXIS 4 ("Examination" work phase).
 - ♦ The "Panorama editor" button is displayed in the "Tools" tool kit.
- 4. Click on the "Panorama editor" button with the mouse.
 - ♦ The "Panorama editor" starts.



Loading an ORTHOPHOS SL exposure in the panorama editor

- ♦ The data is downloaded for the "Panorama editor".
- The panoramic image is downloaded with all the views available in the "Panorama editor". The views can be selected via the tabs below the panoramic image.





"ORTHOPHOS SL Panorama editor" After the first loading of a panoramic image

4.2 Selecting, renaming, and deleting views

The views of a panoramic image are presented in index form in the "ORTHOPHOS SL Panorama editor". You can navigate between the views by selecting the tabs.

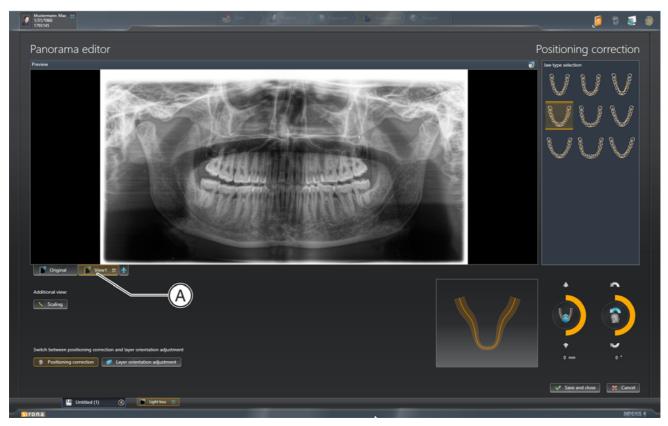
The "Original" view is always displayed. This view represents the original of the panoramic image. The "Original" view cannot be edited, renamed or deleted.

When first opening a panoramic image, a copy of the original is automatically generated under the name "View1". The "View1" is automatically selected after loading the exposure and can be edited, renamed, or deleted.

You have the option to create additional pan views, to rename pan views, or to delete them, and to create a scaled view based on the original exposure.

4.2.1 Selecting the view

✓ The "ORTHOPHOS SL Panorama editor" is started.



Selecting the view

- > Click on one of the tabs (A) below the panoramic X-ray image.
 - ♦ The selected tab is shown highlighted.
 - ♦ The respective view is displayed.

4.2.2 Renaming the view

Views that have not yet been saved in the SIDEXIS 4 database can be renamed in the "ORTHOPHOS SL Panorama editor".

NOTE: The views "Original" and "Scaling" cannot be renamed in principle.

- Click on the tab of the view you wish to rename with the right mouse button.
 - An input field appears in the tab. The name "Viewx" is preentered.
- **2.** Enter the desired name in this field by highlighting and writing over the displayed name.
- 3. Confirm your input by pressing the RETURN key.

4.2.3 Deleting views

Views that have not yet been saved in the SIDEXIS 4 database can be deleted in the "ORTHOPHOS SL Panorama editor".

NOTE: In principle, the view "Original" cannot be deleted.

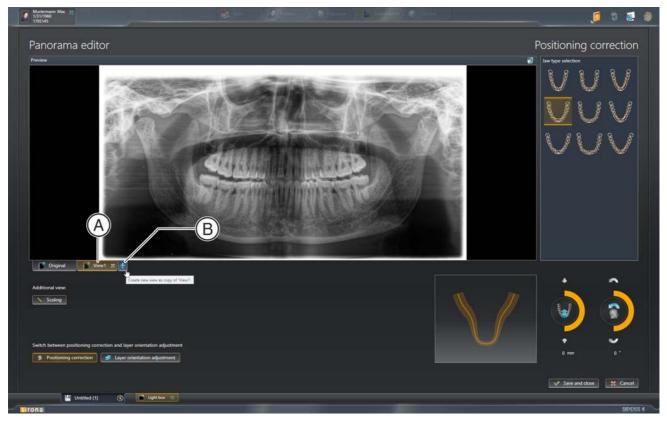
- ➤ Click on the button "Delete (x)" (C) in the tab of the view that you want to delete.
 - The tab and the related view are deleted.





4.2.4 Generating a new view

✓ The "ORTHOPHOS SL Panorama editor" is started.



Creating a new pan view

1. Select the view (A) ("Original" or "View1-x"), on the basis of which you wish to create the new view $[\rightarrow 11]$.

IMPORTANT

No copy can be created of a scaled view. This view can only exist once per panoramic X-ray image and has the original exposure as a basis.

- 2. Click on the "Add (+)" button (B) near the tabs.
 - The previously selected view is copied and displayed in a new view.

4.2.5 Creating a "scaled" view

The "scaled" view presents the image structures at a constant aspect ratio. This view enables the measurement of image structures in an image region (see document SIDEXIS 4 Operator's Manual, REF 6447028).

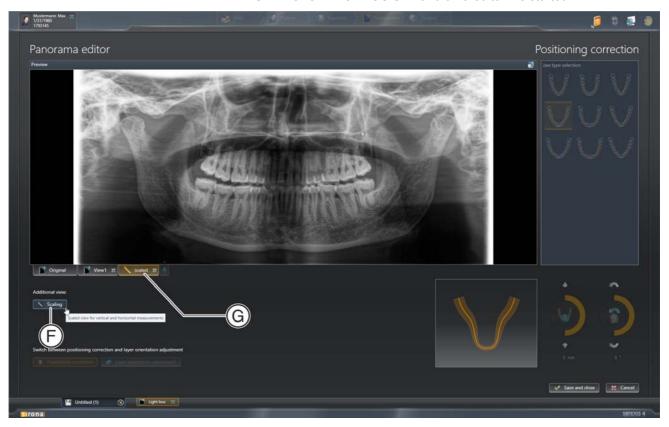
IMPORTANT

The reference test phantom (REF 63 10 838) for calibrating the measurement function must also be used for this view.

Only one "scaled" view can be created per panoramic X-ray image. The "scaled" view cannot be renamed. Provided the "Scaling" view has not yet been saved in the SIDEXIS 4 database, this can be deleted again in the "ORTHOPHOS SL Panorama editor".

Positioning corrections and layer adjustments are not possible in the "scaled" view.

✓ The "ORTHOPHOS SL Panorama editor" is started.

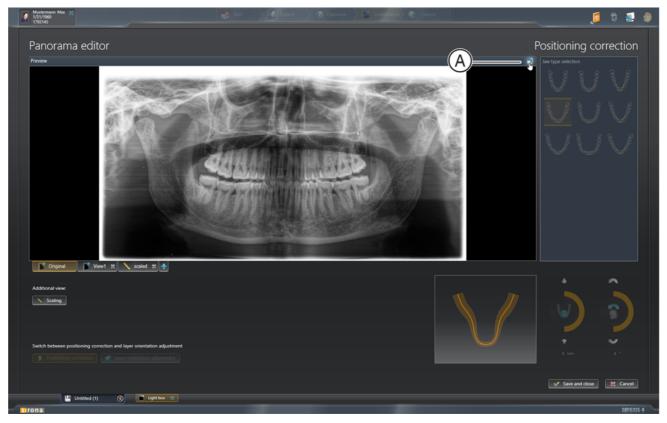


"Scaling" view

- ➤ Click on the "Scaling" button (F).
 - ♦ This creates a "scaled" view.
 - ♦ The "scaled" tab (G) is displayed.

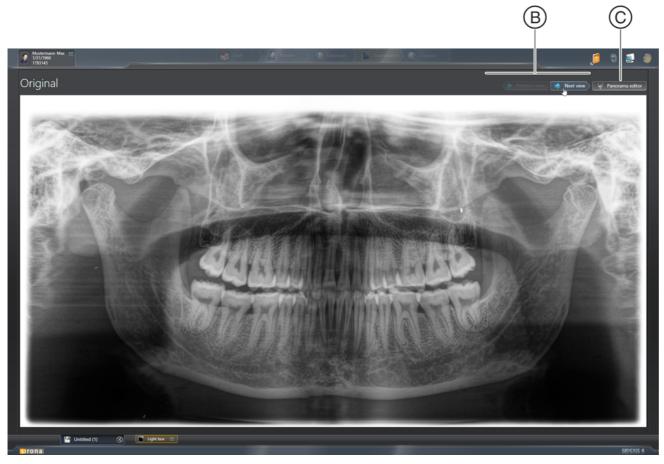
4.2.6 Full frame mode

You can look at the views in full frame mode.



Opening full frame mode

- 1. Click on the screen icon (A) in the header line of the view.
 - ♦ The view is displayed in full frame mode.



- 2. By clicking on the buttons "Next view" and "Previous view" (B), you switch between views.
- 3. Click on the "Panorama editor" button (C) to exit full frame mode.

 ⇔ The "ORTHOPHOS SL Panorama editor" is displayed again.

4.3 Execute positioning corrections

NOTE: The positioning corrections are only available for panoramic X-ray images that have been created with the ORTHOPHOS SL X-ray system and the exposure programs P1, P2, and P10.

In the "ORTHOPHOS SL Panorama editor", SIDEXIS 4 offers you the option to carry out subsequent positioning corrections to panoramic X-ray images that have already been created.

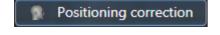
Using the "ORTHOPHOS SL Panorama editor", you can subsequently adjust the dental arch shape, the head position and angle of the head.

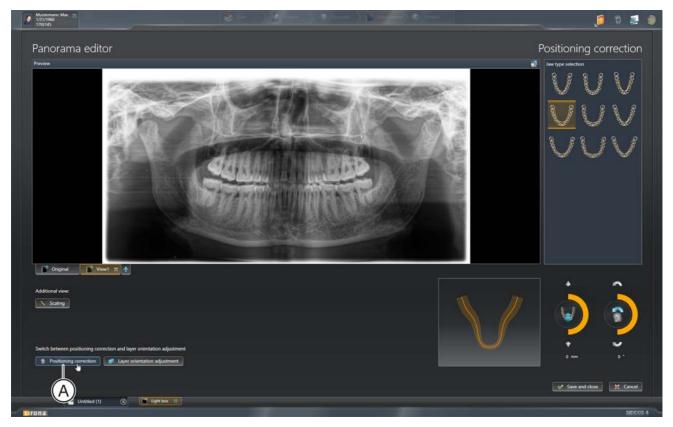
NOTE: After starting the editor, the "Positioning correction" button and the menu belonging to it are selected automatically.

➤ If not selected yet:

Click the "Positioning correction" (A) button.

♦ The "Positioning correction" menu is displayed.

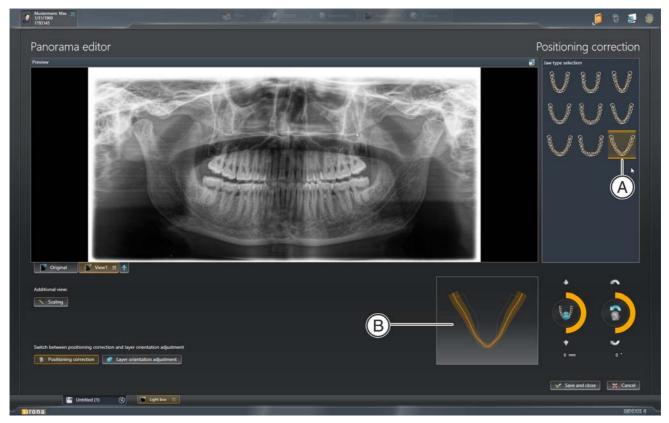




Opening the "Positioning correction" menu

4.3 Execute positioning corrections

4.3.1 Correcting the shape of the mandibular arch

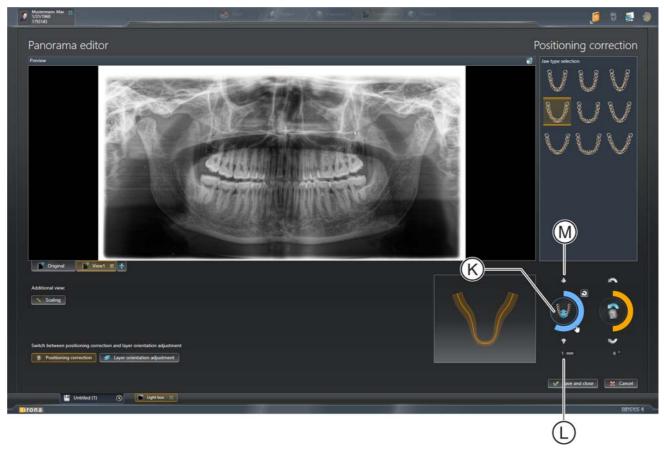


Correcting the shape of the mandibular arch

- ➤ Click the button for the desired shape of mandibular arch in the "Jaw type selection" window.
 - ♦ The selected button is shown highlighted (A).
 - The changed layer orientation is displayed in the schematic diagram (B).
 - ♦ The pan view is recalculated.

4.3.2 Correcting the head position

You have two different options for correcting the head position.



Correcting the head position

➤ Move the mouse pointer over the control dial (K). Press the left mouse button. Move the mouse pointer in a vertical direction with the mouse button pressed down.

or

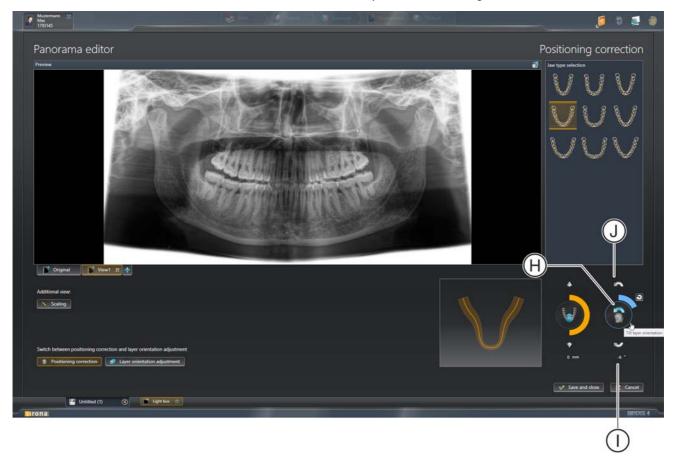
➤ Enter the desired movement in mm in the corresponding input field (L) and confirm the entry with the RETURN key.

or

- Click on the arrows (M) above or below the control dial using the mouse.
- ♦ The position of the head is corrected.
- The pan view is recalculated.

4.3.3 Correcting the head inclination

You have different options for correcting the head inclination.



Correcting the head inclination

➤ Move the mouse pointer over the control dial (H). Press the left mouse button. Move the mouse pointer in a vertical direction with the mouse button pressed down.

or

➤ Enter the desired inclination in degrees in the corresponding input field (I) and confirm the entry with the RETURN key.

or

- Click on the arrows (J) above or below the control dial using the mouse
- ♥ The head inclination is corrected.
- The pan view is recalculated.

4.4 Adjusting layer orientation

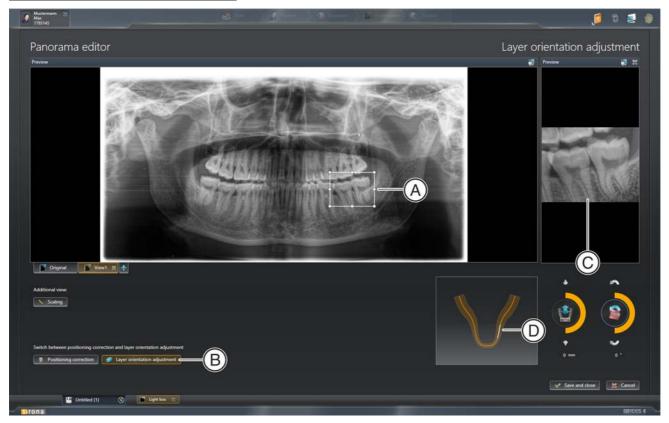
In the "Panorama editor", SIDEXIS 4 offers you the option to subsequently adjust the layer of panoramic X-ray images that have already been created.

You can select any image region through the "Panorama editor". You can move and tilt the layer in this image region.

There are two options for opening the menu for the layer adjustment:

> Click on the "Layer orientation adjustment" button.





"Layer orientation adjustment" menu

- The "Layer orientation adjustment" menu is displayed.
- The "Layer orientation adjustment" button (B) is shown highlighted.
- One image region (A) is preselected in the pan view. You can scale and move this image region at any time using the mouse.
- In addition to the pan view, the content of the selected image region is displayed (C).
- The selected image region is presented as a white line in the schematic image (D).

Or

- ➤ Move the mouse pointer over the pan view and select an image region with the left mouse button held down.
 - You can scale and move the image region at any time using the mouse.
 - The "Panorama editor" switches automatically to the menu "Layer orientation adjustment".
 - The "Layer orientation adjustment" button (B) is shown highlighted.
 - In addition to the pan view, the content of the selected image region is displayed (C).
 - The selected image region is presented as a white line in the schematic image (D).

Selecting image region

Using the mouse you can change the size of the image region, select a new image region or move the image region inside the pan view.



Modifying the image region

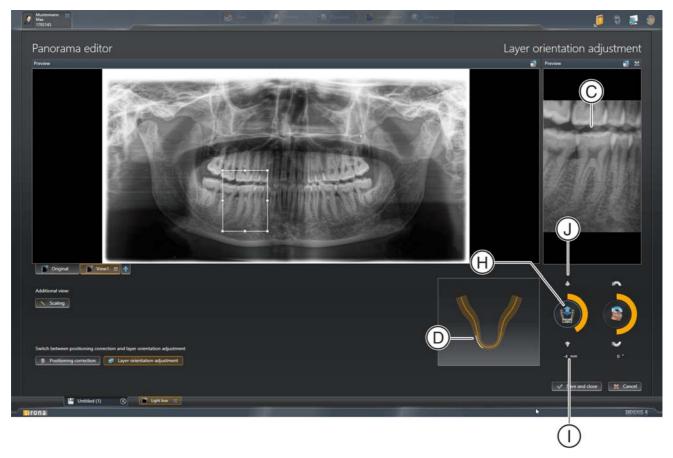




The image (C) displays the current content of the image region and is recalculated after every change to the image region.

4.4.1 Shifting the layer orientation

You have different options for shifting the layer orientation.



Shifting the layer orientation

➤ Move the mouse pointer over the control dial (H). Press the left mouse button. Move the mouse pointer in a vertical direction with the mouse button pressed down.

or

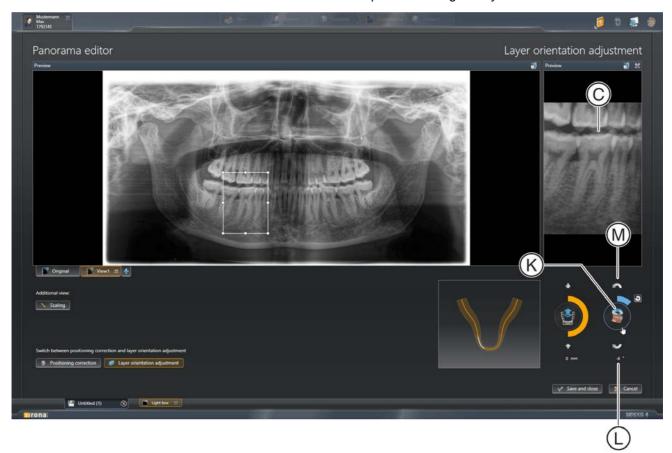
➤ Enter the desired movement in mm in the corresponding input field (I) and confirm the entry with the Return key.

or

- Click on the arrows (J) above or below the control dial using the mouse.
- ♦ The layer orientation is shifted.
- ♥ The image (C) (content of the image region) is recalculated.
- The layer orientation of the selected image region is presented as a white line in the schematic image (D).

4.4.2 Tilting the layer orientation

You have different options for tilting the layer orientation.



Tilting the layer orientation

➤ Move the mouse pointer over the control dial (K). Press the left mouse button. Move the mouse pointer in a vertical direction with the mouse button pressed down.

or

➤ Enter the desired inclination in degrees in the corresponding input field (L) and confirm the entry with the Return key.

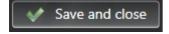
or

- ➤ Click on the arrows (M) above or below the control dial using the mouse.
- The layer orientation is tilted.
- ♥ The image (C) (content of the image region) is recalculated.

4.5 Closing the panorama editor / saving the views

When closing the panorama editor, you can discard the modified / newly created views or save them in the SIDEXIS 4 database.

➤ If you want to close the "Panorama editor" and save the newly produced views in the SIDEXIS 4 database, click on the "Save and close" button.





Saved views in the SIDEXIS 4 "Light Box"



- The views are displayed in the SIDEXIS 4-"Light Box".
- ➤ If you want to close the "Panorama editor" and discard the changes to the views, click on the "Cancel" button.

We reserve the right to make any alterations which may be required due to technical improvements.

© Sirona Dental Systems GmbH 2015 3592.208.02.01.02 04.2015

Sprache: englisch Ä.-Nr.: 000 000

Printed in Germany

Sirona Dental Systems GmbH

in the USA:

Fabrikstraße 31 D-64625 Bensheim Germany www.sirona.com Sirona Dental Systems LLC 4835 Sirona Drive, Suite 100 Charlotte, NC 28273 USA Order No

65 44 550 3592