

# Planmeca mRomexis<sup>™</sup>

user's manual

Ц

# Table of contents

1	INTRO	DDUCTION	1
2	<b>GETT</b> 2.1 2.2 2.3	ING STARTED  Configuring Planmeca mRomexis server  Installing Apache Tomcat server for mRomexis desktop browser use  Configuring Planmeca mRomexis settings	1 2
3	VIEWI 3.1 3.2 3.3 3.4 3.5 3.6	NG PATIENTS Searching patients Sorting patients Selecting source Viewing comments Deleting single patients from local device memory Delete all local patient data	5 5 6
4	OPEN	ING PATIENT FILES	7
5	VIEWI 5.1 5.2 5.3 5.4	NG 2D IMAGES Adding annotations Adding measurements Adjusting brightness and contrast Save to gallery	9 10
6	VIEWI 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 6.10 6.11	Volume moving mode Axis moving mode Moving in the slices Slice rendered view Moving up or down slice by slice Rotate - volume mode Rotate - axis mode Zoom in Zoom out Maximize or minimize views Save to gallery	
	0.11	Save to gailery	10

The manufacturer, assembler and importer are responsible for the safety, reliability and performance of the unit only if:

- installation, calibration, modification and repairs are carried out by qualified authorised personnel
- electrical installations are carried out according to the appropriate requirements such as IEC 60364
- equipment is used according to the operating instructions.

Planmeca pursues a policy of continual product development. Although every effort is made to produce up-to-date product documentation this publication should not be regarded as an infallible guide to current specifications. We reserve the right to make changes without prior notice.

COPYRIGHT PLANMECA Publication number 10037441 Revision 1 Released 06 March 2015

# 1 INTRODUCTION

The Planmeca mRomexis is a software intended for displaying and visualizing dental and medical 2D and 3D images from imaging devices, such as radiographs, CBCT images and photographs. This manual describes how to use the software.

#### NOTE

Planmeca mRomexis software is not intended for diagnostic purposes.

The Planmeca mRomexis application has been designed to provide similar user experience on all supported platforms. Therefore nearly all the navigation methods are the same and the user should have little difficulty switching between different platform versions. All version differences are clearly marked in this documentation.

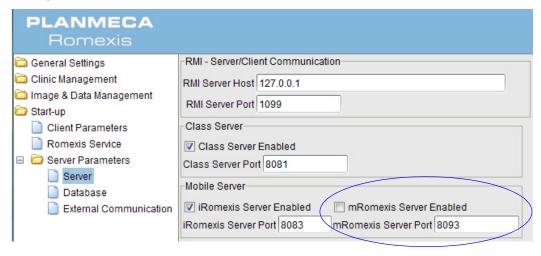
The web version follow the guidelines of the landscape oriented tablet version, unless otherwise stated.

# **2 GETTING STARTED**

# 2.1 Configuring Planmeca mRomexis server

Configure your Planmeca Romexis server to listen to Planmeca mRomexis (port 8093 by default) in the Configuration application as shown below.

Also configure your firewall to allow access the following executable: C:\Program Files\Planmeca\Romexis\server\Romexis\Service64exe.



## 2.2 Installing Apache Tomcat server for mRomexis desktop browser use

In order to use mRomexis in desktop browser make sure to select *Apache Tomcat server for mRomexis* installation component during installation.

#### Windows

- 1. Reboot computer after Planmeca Romexis installation.
- 2. Install Tomcat service by running **install\_mRomexis\_service.bat** as administrator from <installdir>|Planmeca|Romexis|apache-tomcat folder
- 3. Set *Apache Tomcat 8.0 mRomexis* service to start automatically from Windows services control and start it if not already started.
- 4. Go to <a href="http://RomexisServerIP:8080/mromexis/">http://RomexisServerIP:8080/mromexis/</a> (replace RomexisServerIP by the actual Romexis server IP address) in browser to open mRomexis.

#### os x

- 1. Install mRomexis Tomcat daemon by running **loadMRomexisDaemon.sh** as administrator from /Applications/Romexis/apache-tomcat.
- 2. Go to http://RomexisServerIP:8080/mromexis/ (replace RomexisServerIP by the actual Romexis server IP address) in browser to open mRomexis.

# 2.3 Configuring Planmeca mRomexis settings

Open Planmeca mRomexis.

There are two top-level selection menus in Planmeca mRomexis:

- Patients for viewing patient images
- Settings for setting up server connections

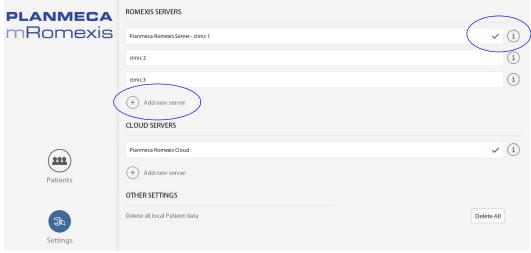


In the *Settings* menu you can enter and configure Planmeca Romexis server and Cloud server settings.

# 2.3.1 Adding a new Planmeca Romexis server

Tap or click Add new server.

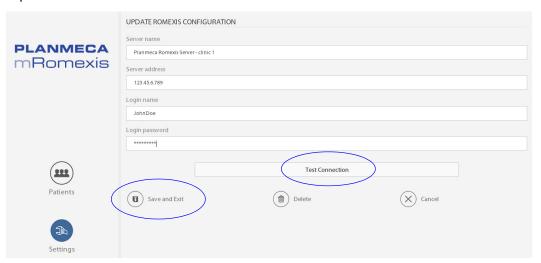
When multiple servers have been configured, the active server can be selected by ticking its name entry.



Enter the server address, login name and login password.

The connection can be tested using the **Test Connection** button.

Tap or click Save and Exit.





Go to Patients menu.

Select Source and then Server.



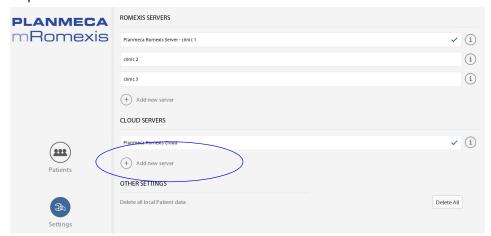
You can now start browsing patient images from the server.

### 2.3.2 Adding new Planmeca Romexis Cloud configuration

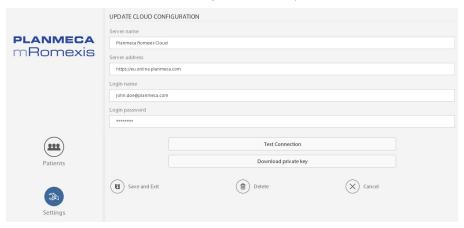
#### NOTE

These settings are applicable only for mobile devices.

Tap or click the Add new server button under Cloud servers.



Enter server name and address, login name and password.

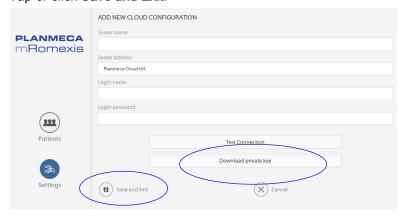


The connection can be tested using **Test Connection** button.

Private keys must be downloaded to receive cases from Planmeca Romexis Cloud. Note that you must be connected to a Planmeca Romexis server to transfer your private key from its database.

Tap or click Download private key.

Tap or click Save and Exit.



# 3 VIEWING PATIENTS



To access the Patients view tap the Patients button.

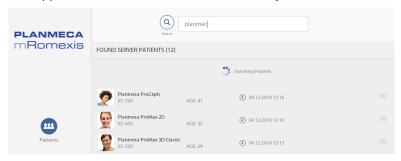
# 3.1 Searching patients



Tap or click the **Search** button on top of the window.

Enter your search criteria in the Search field.

The application starts the search automatically.



To exit the Search view and display the other buttons re-tap or re-click the **Search** button.

# 3.2 Sorting patients



The patients can be sorted by:

- activity
- name of the patient
- ID number of the patient

In addition the patients can be further sorted in ascending or descending order.



# 3.3 Selecting source

In the Source view you can select the source from where the images are viewed.



Tap the **Source** button

Choose the source from where the images are viewed.

- Local (applicable only for mobile devices)
- Server
- Cloud (applicable only for mobile devices)



### 3.4 Viewing comments

Tap or click the balloon icon next to the patient to view the patient comment.



### 3.5 Deleting single patients from local device memory

#### **NOTE**

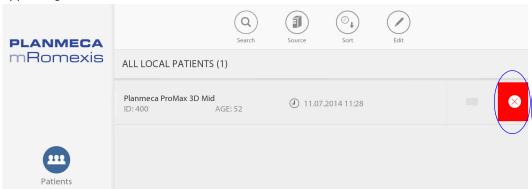
Applicable only to locally stored patients on mobile devices.



Set the source to local (see section 3.3 "Selecting source" on page 5).

Tap or click the **Edit** button.

To delete a patient swipe to the left on top of the patient line and tap or click on the appearing **Delete** button.



### 3.6 Delete all local patient data

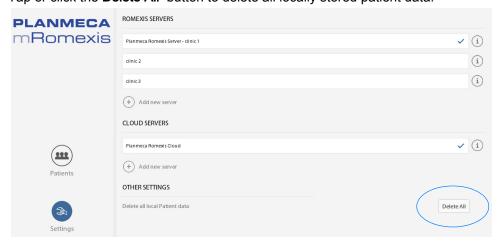
#### NOTE

Settings

Applicable only for mobile devices.

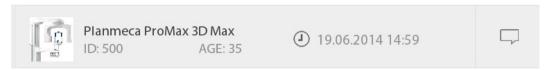
Go to Settings

Tap or click the **Delete All** button to delete all locally stored patient data.

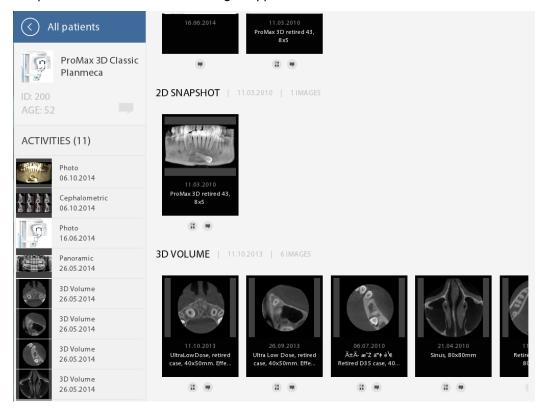


# 4 OPENING PATIENT FILES

Tap or click the patient to open the patient file.



The patient file and the list of all images appears.



The images are grouped according to image types. The different image types are the following:

- panoramic
- intraoral
- · cephalometric
- photo
- · 2D snapshot
- 3D volume
- 3D surface

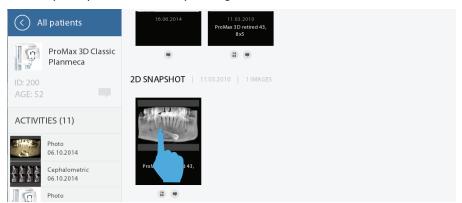
If the image category does not contain any images the category is not shown.

The following symbols are used to indicate that the



- Image belongs to a stack
- Image is part of a study
  - Image is part of a diagnosis

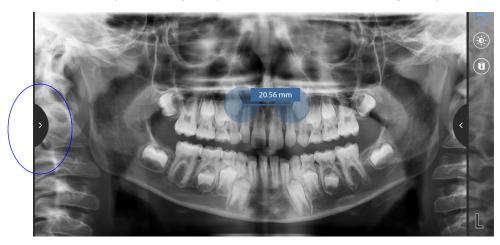
Tap the thumbnail of an image to open it. The image opens in full-screen either in landscape or portrait mode depending on the device's orientation.



#### **NOTE**

Only 3D images stored on the server can be viewed. The 3D images are not stored locally.

To view other patient images tap the arrow and select the image to open from the list.



The patient information is shown on top of the toolbar.

The information related to the current image is shown in *This image* field.

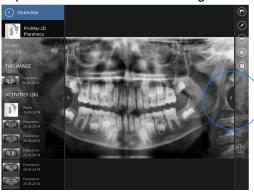


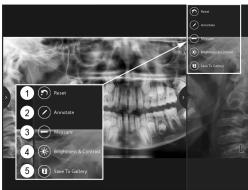
The activities list shows the last updated images for this patient.

To return to the patient file tap or click the **Overview** button.

# 5 VIEWING 2D IMAGES

Tap or click on the arrow on the right side of the screen to open the side control panel.





The menu with the following functions opens.

- 1 Resets the image to original state
- 2 Opens a text box for adding annotations on the image
- 3 Opens a ruler for making measurements
- 4 Opens the brightness & contrast adjustment tool
- 5 Saves image to gallery (Applicable only for mobile devices)

### 5.1 Adding annotations



To open a text-box for adding an annotation to the image tap or click this button.

Tap on the box to add a note. The added annotations show as small dots which can be moved on the image by dragging.

To edit an annotation tap or click the text box.

To move the text box drag it on the image.

To delete annnotation drag it down to the coloured bar at the bottom of the screen.



To show/hide annotations check / uncheck this check box Multiple annotations can be added.

#### NOTE

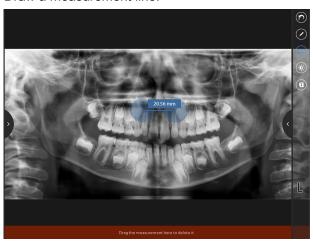
The annotations are not saved once you close the image. To save a view of the image with annotations select Save to gallery, see section 5.4 "Save to gallery" on page 11 for more information.

### 5.2 Adding measurements



To open the measurement tool tap or click this button.

Draw a measurement line.



To move the measurement line move your fingers around the image.

To move the measurement value box drag the dots on the image.

To move either end of the measurement line individually place you finger on the end of the line and drag it where needed. The measurement value automatically changes according to the new position(s).

To delete a measurement drag it down to the coloured bar at the bottom of the screen.

#### NOTE

The measurements are not saved once you close the image. To save a view of the image with measurements select Save to gallery, see section 5.4 "Save to gallery" on page 11 for more information.

# 5.3 Adjusting brightness and contrast

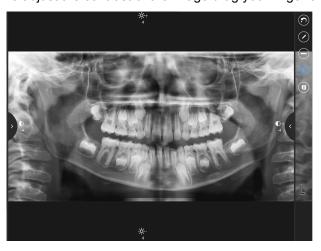


To open the brightness and contrast tool tap or click this button.

The brightness and contrast adjustment indicators appear on the top and the bottom and on the left and right side of the window.

To adjust the brightness of the image drag your finger or mouse up and down on the image.

To adjust the contrast of the image drag your finger or mouse left and right on the image.

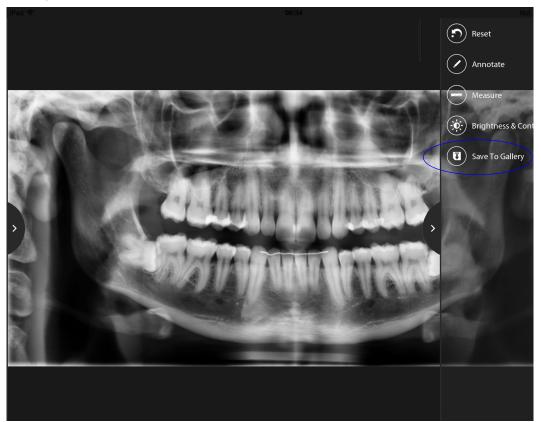


# 5.4 Save to gallery

The screen shot of images can be saved locally on tablets.

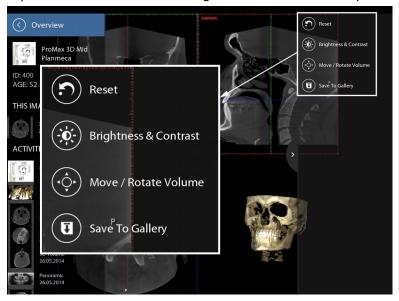
Tap the **Save to gallery** icon on the right side of the window to save the image to device memory.





# 6 VIEWING 3D IMAGES

Tap or click on the arrow on the right side of the screen to open the side control panel.



The menu with the following functions opens.



- 1 Resets the image to original state
- 2 Opens the brightness & contrast adjustment tool
- 3 Move / rotate volume mode toggle button
- Saves image to Gallery
   (Applicable only for mobile devices)

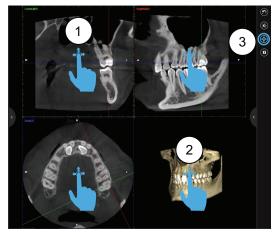
There are two modes for moving images; the volume mode and the axis mode. The behaviour is different depending on the mode selected.

# 6.1 Volume moving mode

When the *Volume* mode is on the volume icon is highlighted.

Move the volume by dragging the finger on the volume. (1)

Note that in the 3x3 view the one finger drag trackball rotates the 3D model around its origin. (2)





One finger drag

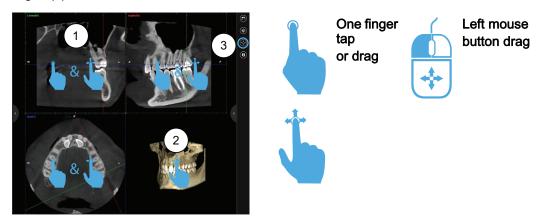


Left mouse button drag

## 6.2 Axis moving mode

To enable the *Axis* moving mode turn off the volume mode by de-selecting the volume tool. (3) The axis moving mode is enabled by default.

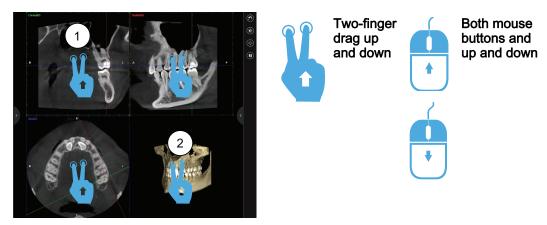
To move the origin of the axes drag your finger or tap anywhere on the window . (1) In the 3x3 view dragging with one finger with trackball rotates the 3D model around its origin. (2)



# 6.3 Moving in the slices

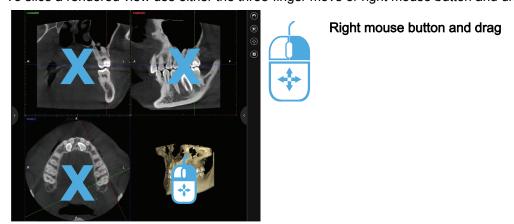
To move in the slices drag two fingers up or down. (1)

The 3D model is sliced perpendicular to what the user is seeing. The slicing is maintained even when rotating the model. (2)



### 6.4 Slice rendered view

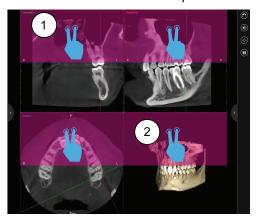
To slice a rendered view use either the three-finger move or right mouse button and drag.



## 6.5 Moving up or down slice by slice

To move up in the slices one step at a time two-finger tap or click both mouse buttons at the upper half of the view-port. (1)

To move down in the slices tap or click at the lower half of the view-port (2)





Twofinger tap



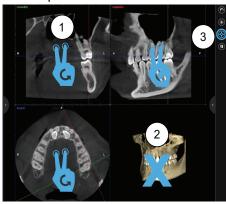
Both mouse buttons click

### 6.6 Rotate - volume mode

To turn on the volume mode select the Volume mode. (3)

To rotate the volume, turn two fingers or hold down the right mouse button while dragging up and down. (1)

It is not possible to rotate in the 3x3 view. (2)





Two-finger turn



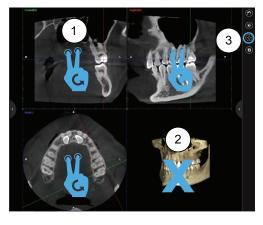
Right mouse button and up/down

### 6.7 Rotate - axis mode

To turn on the Axis mode deselect the Volume mode. (3)

To rotate the origin turn two fingers or hold down the right mouse button and drag up and down.(1)

It is not possible to rotate the volume in the 3x3 view. (2)





Two-finger turn

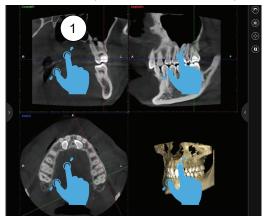


Right mouse button and up/down

# 6.8 Zoom in

To zoom in the image either spread two fingers (1) or turn the mouse wheel away from yourself.

On some track-pads this is also done by scrolling with two fingers.





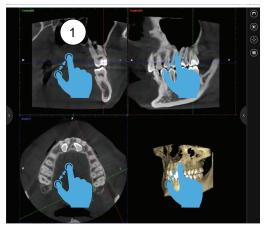
Two-finger spread



Mouse wheel away from user

### 6.9 Zoom out

To zoom out the image either pinch two fingers or turn mouse wheel towards yourself. (1) On some track-pads this can also be done by scrolling with two fingers.





Two-finger pinch



Mouse wheel towards user

### 6.10 Maximize or minimize views

Double-tap or double left-click on any view-port to maximize it. (1) To get back to the MPR view double tap/click again.





Double tap



Double left-click

# 6.11 Save to gallery

See section 5.4 "Save to gallery" on page 11.

# **PLANMECA**

Planmeca Oy | Asentajankatu 6 | 00880 Helsinki | Finland tel. +358 20 7795 500 | fax +358 20 7795 555 | sales@planmeca.com | www.planmeca.com



