

PLANMECA

2D imaging



Welcome

An introduction from our President

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“It’s my great pleasure to introduce you to our pioneering 2D X-ray units. Our comprehensive range of digital units meets all your daily imaging needs – working perfectly with our highly advanced **Planmeca Romexis®** software for the most detailed extraoral and intraoral examinations possible.

I’m extremely proud of our product innovations, and for over 40 years we’ve worked closely with dental professionals to set new standards in our field. What makes us a bit different is that all core product development and manufacturing takes place in Finland – ensuring exceptional quality and unmatched attention to detail at every stage of the process.

And we also have a dedicated team of R&D professionals behind the scenes, developing breakthrough innovations that make a real difference. Our robotic SCARA technology, for example, offers flexible, precise and complex movements needed for extraoral maxillofacial imaging. Our **Planmeca ProMax® 2D** X-ray units are all 3D-ready, which means you can easily upgrade at a later point. Therefore I’m thrilled to invite you to discover our world of 2D imaging.”

Heikki Kyöstilä, President
Planmeca Group

Industry-leading 2D X-ray units

*Introducing our world-class range of 2D X-ray units
– offering the most advanced and versatile devices and software
to meet all your 2D extraoral and intraoral imaging needs.*

Mac OS
and Windows
compatible



Planmeca ProOne®



Planmeca ProSensor®



Planmeca ProMax®

A new benchmark for extraoral imaging

*Planmeca extraoral units offer two alternative solutions to maxillofacial imaging. **Planmeca ProMax®** – the complete imaging centre – sets a new benchmark in panoramic and cephalometric imaging. **Planmeca ProOne®** is designed with simplicity in mind. It is a compact and easy-to-use panoramic X-ray unit that's both cost-effective and flexible.*



Planmeca ProMax® 2D



Planmeca ProMax® is a complete maxillofacial imaging system. The design and operation principles are based on the latest scientific research, technological innovations and the most demanding needs of modern-day radiology.

Key features:

Advanced technology

- **Autofocus** positions the focal layer automatically for perfect panoramic images
- **Dynamic Exposure Control** (DEC) measures the patient's radiation transparency and automatically adjusts exposure values
- Patented **SCARA** (Selectively Compliant Articulated Robot Arm) technology guarantees an anatomically correct imaging geometry for clear, error-free images
- Easy upgrades – add cephalostat or 3D imaging capability at any time

Effortless use

- Full-view patient positioning with triple-laser patient positioning lights
- Side entry for comfortable access
- Easy-to-use graphical interface
- Versatile **Planmeca Romexis®** 2D imaging software
- TWAIN support and full DICOM compliance

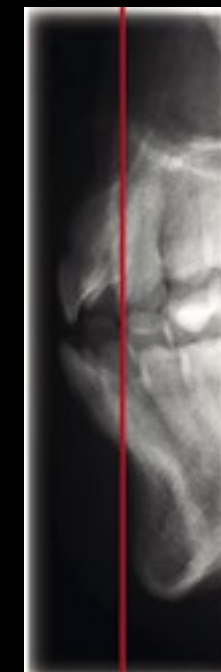
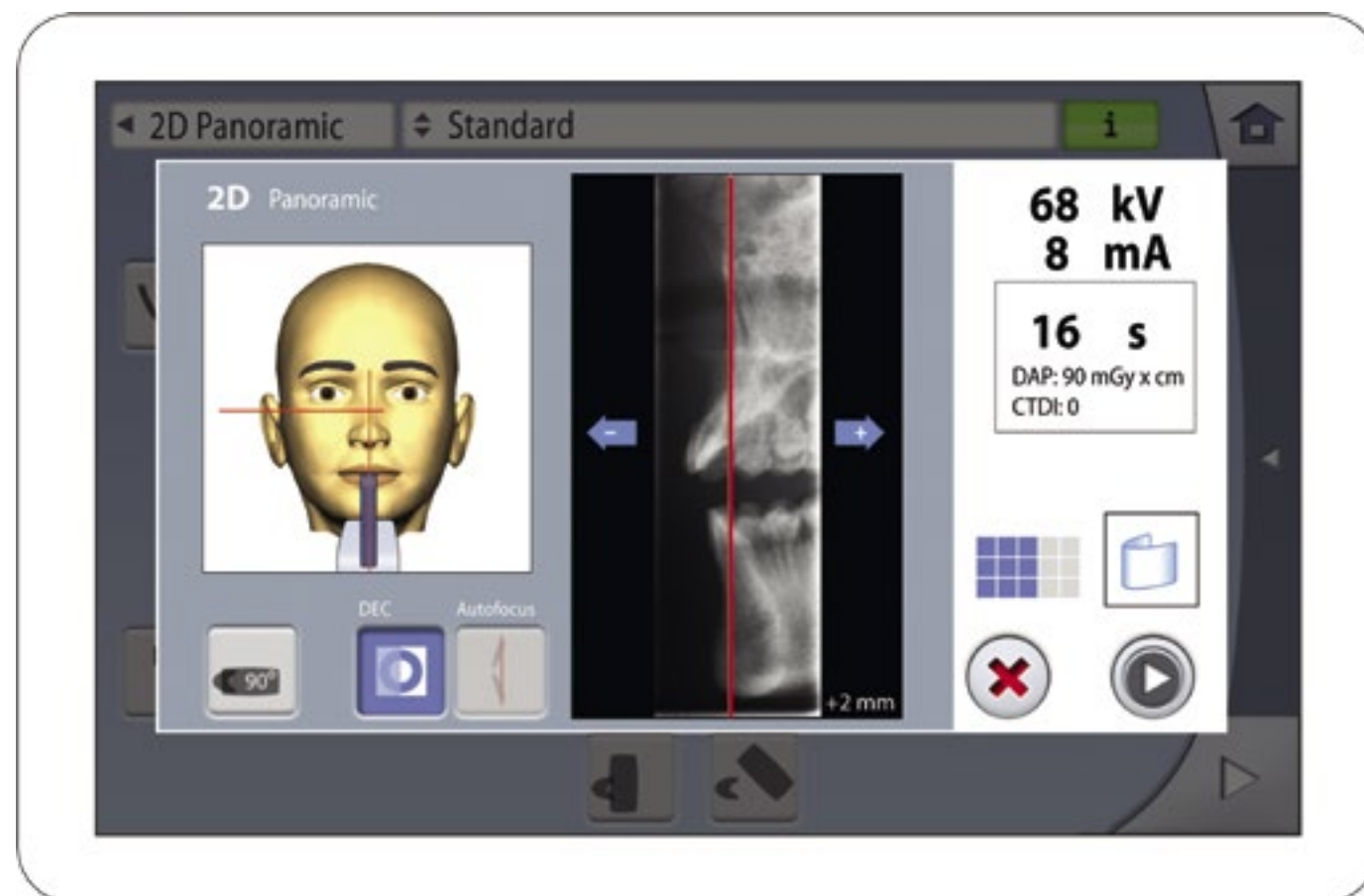


Perfect panoramic images – every time

Imagine if your X-ray unit could recognise your patient's anatomy

The unique **Autofocus** feature automatically positions the focal layer using a low-dose scout image of the patient's central incisors. It uses landmarks in the patient's anatomy to calculate placement, enabling practically error-free patient positioning and dramatically reducing the need for retakes. The result is a perfect panoramic image.

Our unique
Autofocus



Positioning errors are now a thing of the past – with SCARA technology you can take an ultra-low-dose scout image of your patient's central incisors for a fast diagnostic panoramic image every time.

Effortless and comfortable

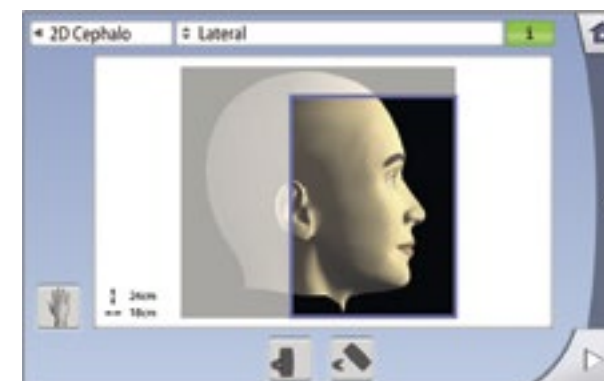
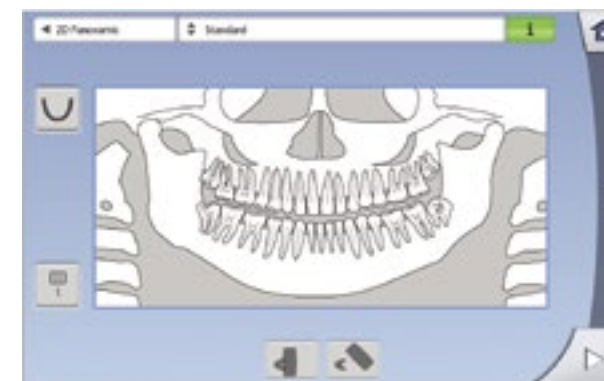
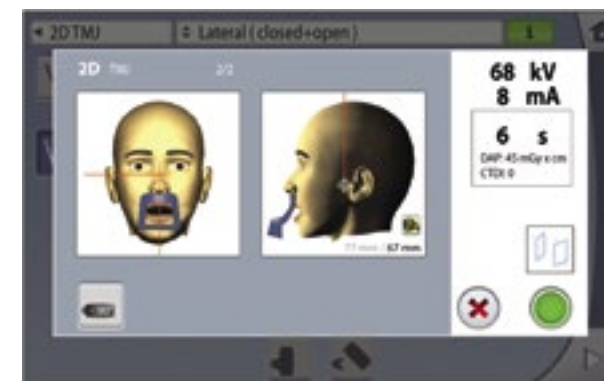
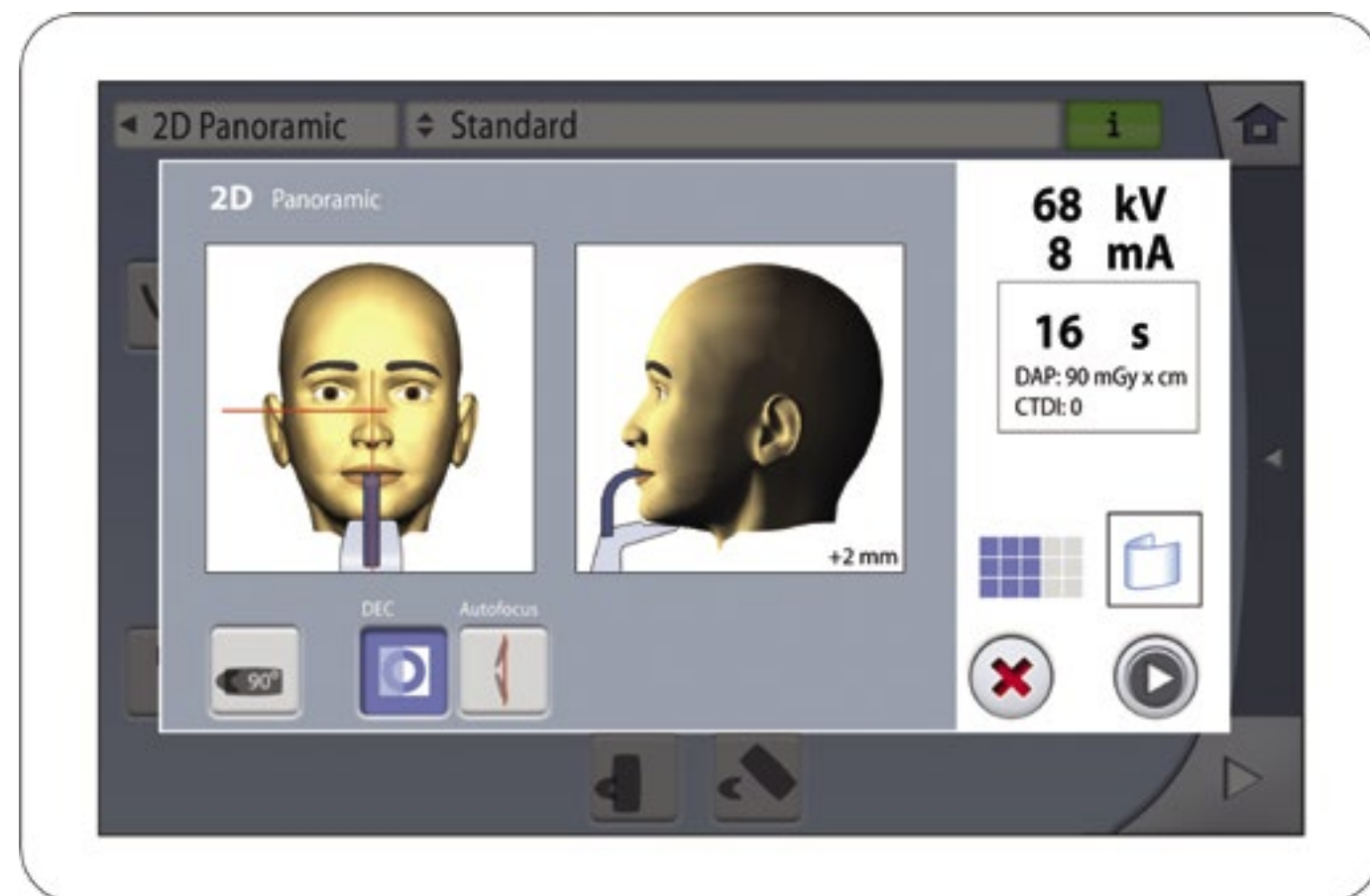
Our industry-leading **Planmeca ProMax®** unit is known across the world for incredible ease of use and exceptional patient comfort. A relaxed patient means a smooth imaging workflow and the best possible image quality.

Open patient positioning

- Position patients effortlessly thanks to open-face architecture
- Correct patient positioning either with Autofocus or manually
- Make fine adjustments using positioning lasers and joystick
- Work with an unrestricted view of your patient
- Avoid claustrophobic feelings in patients
- Accommodate wheelchairs easily with side-entry access

User-friendly control panel

- Clear and straightforward graphical user interface guides you smoothly through your work
- Pre-programmed sites and exposure values for different image types and targets save you time and allow you to focus on your patients



Improved image quality with Dynamic Exposure Control (DEC)

The unique digital Dynamic Exposure Control (DEC) automatically adjusts the exposure values for each individual patient based on their anatomic structure and bone density. DEC improves the quality of both panoramic and cephalometric imaging with more consistent brightness and contrast.



Laser-assisted patient alignment

- A triple laser beam system accurately indicates the correct anatomical alignment points for patient positioning
- The midsagittal plane positioning beam indicates the correct sideways alignment
- The Frankfort horizontal plane positioning beam shows the correct forward tilt of your patient's head
- The focal layer positioning beam indicates the focal layer position and ensures images are sharp and clear
- Fine adjustments can be made using the joystick

Adjustable focal layer

Developed based on scientific research, the imaging geometry matches the shape of the focal layer with the patient's anatomy, resulting in clear panoramic radiographs. Simply select the shape of the focal layer on the graphical user interface, according to the size and shape of the patient's jaw.



Robotic arm technology

***Planmeca ProMax®** features highly advanced and exclusive robotic SCARA (Selectively Compliant Articulated Robot Arm) technology – providing flexible, precise and complex movements required for rotational maxillofacial imaging.*

Unlimited movement range

Our revolutionary SCARA technology combines an electro-mechanical construction with real-time computation of dynamic rotation patterns. This enables optimised radiography for each individual patient, meeting virtually any diagnostic requirement for maxillofacial dentistry.

User benefits for SCARA

The precise free-flowing arm movements allow for a wider variety of imaging programs not possible with other X-ray units with fixed rotations. SCARA offers superior imaging capabilities for both existing and future technologies.



Different models for different needs

Planmeca ProMax® 2D S3

The three-joint model (SCARA3) **Planmeca ProMax® 2D S3** has been designed for all imaging needs: panoramic, true extraoral bitewing, TMJ, sinus and 2D tomography.

Planmeca ProMax® 2D S2

The two-joint model (SCARA2) **Planmeca ProMax® 2D S2** includes basic programs for panoramic, extraoral bitewing, TMJ and sinus imaging.

Both models can be easily upgraded to 3D imaging.

Imaging programs

	Planmeca ProMax 2D S3	Planmeca ProMax 2D S2
Basic panoramic programs	Standard panoramic	Standard panoramic
	Lateral TMJ (closed & open)	Lateral TMJ (closed & open)
	PA TMJ (closed & open)	PA TMJ (closed & open)
	PA sinus	PA sinus
	Horizontal and vertical segmenting for panoramic program	Horizontal and vertical segmenting for panoramic program
	True Bitewing	Bitewing
Advanced panoramic programs	Interproximal panoramic	
	Orthogonal (perio) panoramic	
	Lateral-PA TMJ	
	Lateral multiangle TMJ	
	PA multiangle TMJ	
	PA non rotational sinus	
	Lateral non rotational sinus	
Tomography programs	Digital linear tomography and Transtomography in digital unit	
	True linear tomography or Linear tomography in film unit	
	Child (Paediatric) mode for each program to reduce the dose	

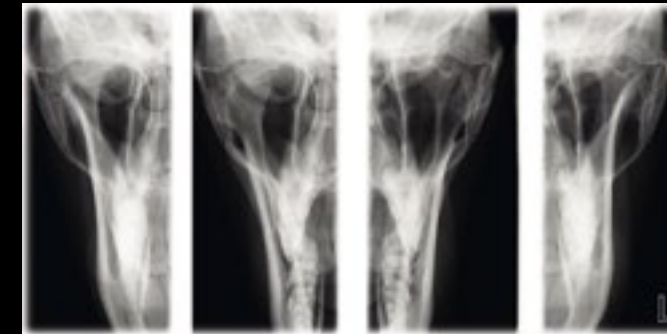
All the imaging programs *you need*



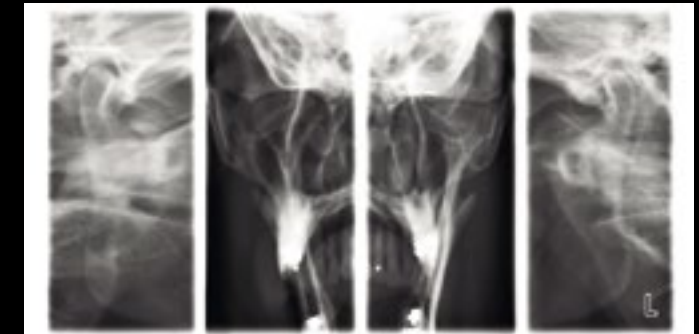
Standard Panoramic



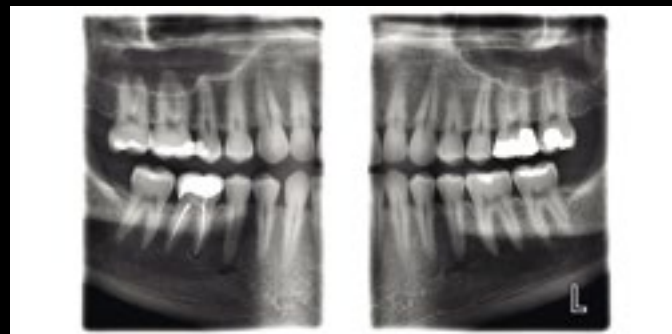
Horizontal and vertical segmenting



PA TMJ (closed & open)



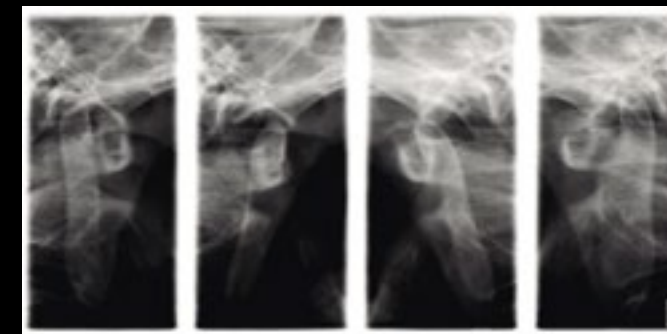
Lateral-PA TMJ



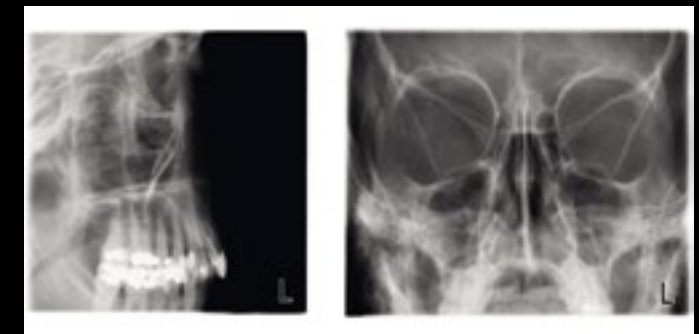
True Bitewing



Horizontal and vertical segmenting



Lateral TMJ (closed & open)



Lateral non-rotational sinus and PA non-rotational sinus

Our **Planmeca ProMax®** X-ray unit offers the widest variety of imaging programs available – easily meeting all your clinical needs.

Panoramic imaging

In addition to the Standard panoramic program, the following programs are offered:

- Interproximal panoramic program: generates an image, where interproximal teeth contacts are open. Primarily used for caries detection.
- Orthogonal panoramic program: produces an image with clearly visible alveolar crest for improved diagnostics. Ideal for periodontal imaging and implant planning.

Extraoral bitewings

The Bitewing program uses improved interproximal angulation geometry. The result is a bitewing image pair with low patient dose and excellent diagnostic quality.

Horizontal and vertical segmenting for panoramic program

With the Horizontal and vertical segmenting program, exposure can be strictly limited to the diagnostic region of interest. Patient dosage is reduced by up to 90% compared to full panoramic exposure.

TMJ imaging

The TMJ imaging programs produce lateral or posteroanterior views of open or closed temporomandibular joints. The imaging angle and position can be adjusted to correspond to the anatomy of each individual patient.

The Lateral-PA TMJ program captures lateral and PA views on the same radiograph. The multi-angle TMJ programs produce radiographs with images from three different angles, from either the lateral or PA view.

Sinus imaging

The Sinus programs provide a clear view of the maxillary sinuses.



Child mode for reduced dose

Child mode reduces the patient dose remarkably for all programs by reducing the imaging area and exposure values. In the panoramic program the focal layer can also be narrowed.

Extraoral bitewings

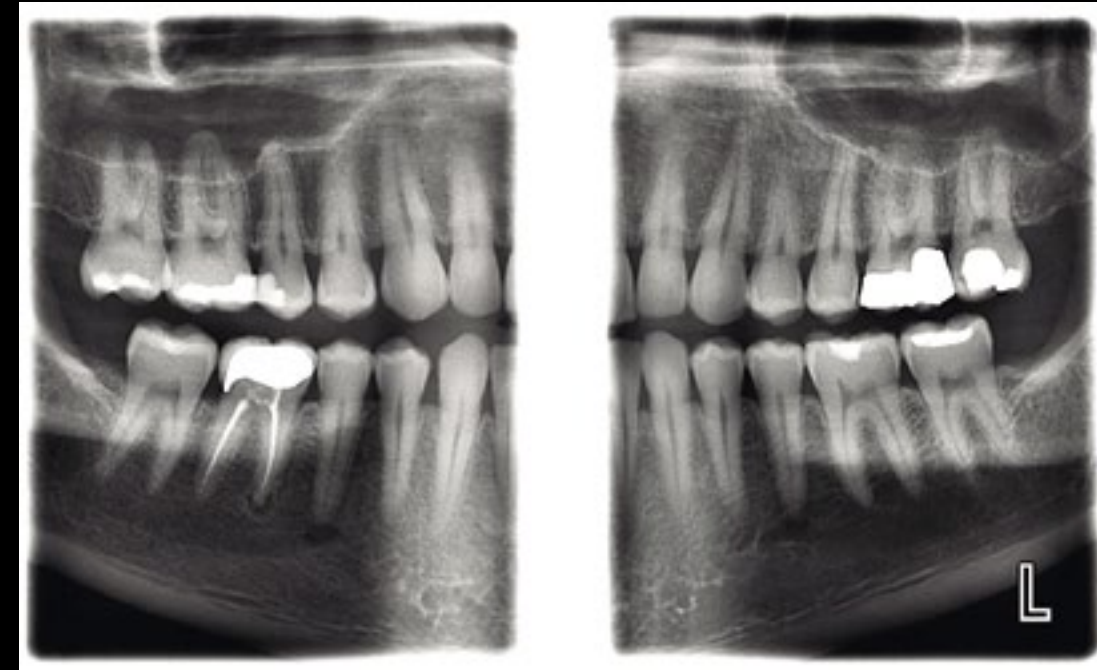
What if you could do all your routine diagnostic imaging extraorally?

Planmeca ProMax® extraoral bitewings are ideal for periodontics, elderly and child patients, claustrophobic patients, patients with a strong gag reflex, and patients in pain. Extraoral bitewings enhance clinical efficiency and take less time and effort than conventional intraoral bitewing imaging.

What are the advantages of extraoral bitewings?

- Ideal for all patients – no sensor positioning required
- Consistently opens interproximal contacts, giving better diagnostic value
- Larger diagnostic area than in intraoral modalities
- More clinical data: canine to third molar
- Enhanced clinical efficiency – takes less time and effort than conventional intraoral bitewings
- Enhanced patient experience and comfort – eliminates gagging

Better diagnostic value with extraoral bitewings

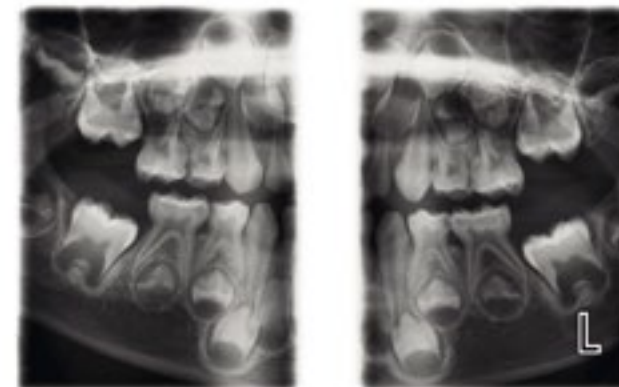


True Bitewing program, adult

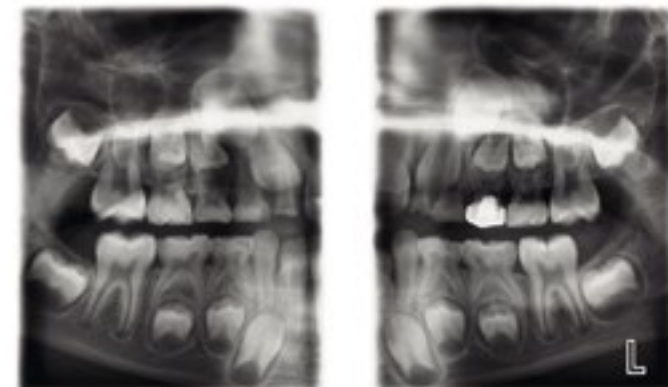


Standard panoramic image of the same patient as the bitewing above

True bitewings only possible with our SCARA₃ technology



True Bitewing program, 5-year-old child



True Bitewing program, 8-year-old child



Easy upgrade from 2D to 3D



Planmeca ProMax® – future proof and a great investment

Planmeca ProMax® 2D is designed with upgradeability in mind. The unit's modular structure allows easy conversion to different imaging modalities, while the software-driven SCARA is extremely flexible, allowing you to benefit from new imaging projections.

Whether you're upgrading your 2D unit to 3D, or adding a cephalometric arm, Planmeca has the right solution for you.

Individual options can be installed before delivery or added later, making Planmeca ProMax the most versatile all-in-one X-ray unit available.

2D unit

Planmeca ProMax 2D S3

3D unit

Planmeca ProMax 3D s

3D unit

Planmeca ProMax 3D Classic

2D unit

Planmeca ProMax 2D S2

2D unit

Planmeca ProMax 2D S3

3D unit

Planmeca ProMax 3D s

3D unit

Planmeca ProMax 3D Classic



Planmeca ProOne®



***Planmeca ProOne®** is our full-featured panoramic X-ray unit, designed with simplicity in mind. Featuring cutting-edge innovations, Planmeca ProOne combines extensive diagnostic capabilities and superior image quality into a compact, easy-to-use package.*

Easy patient positioning

Open patient positioning and side entry minimise errors caused by incorrect patient positioning by allowing you to monitor the patient freely from both the front and side. Side entry allows easy access for all patients – standing or seated. Patient positioning is assisted by our triple laser beam system, which indicates the correct anatomical positioning points.

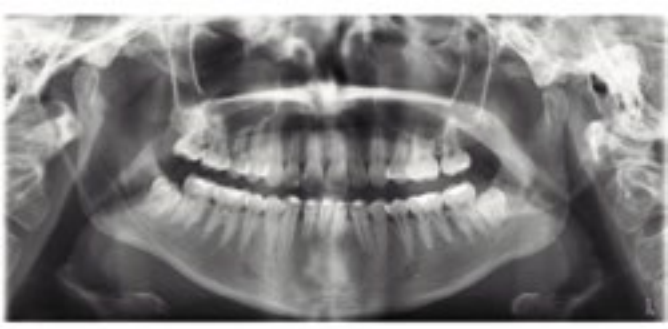
User interface provides guidance

The full-colour graphical user interface provides clear texts and symbols to guide you through your procedure. Settings are logically grouped and easy to understand, speeding up imaging and allowing you to focus on positioning your patient correctly and communicating with them.

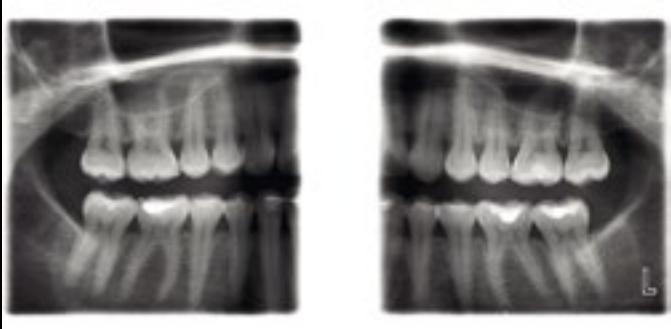
Autofocus – for perfect panoramics every time

The unique **Autofocus** feature automatically positions the focal layer using a low-dose scout image of the patient's central incisors. Landmarks in the patient's anatomy are used to calculate placement, enabling practically error-free patient positioning and dramatically reducing the need for retakes. The result is the perfect panoramic image, every time.

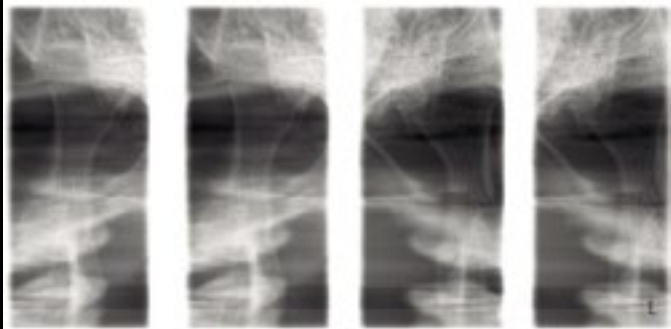
Optimal imaging programs



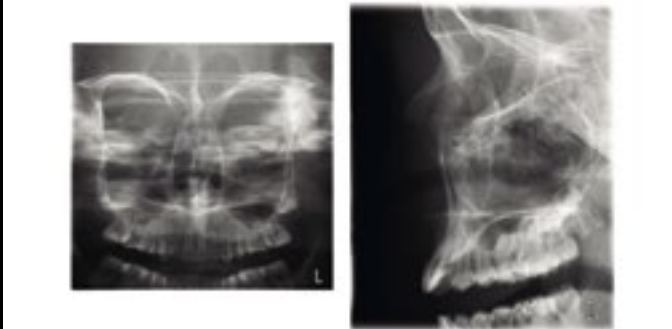
Standard panoramic



Bitewing



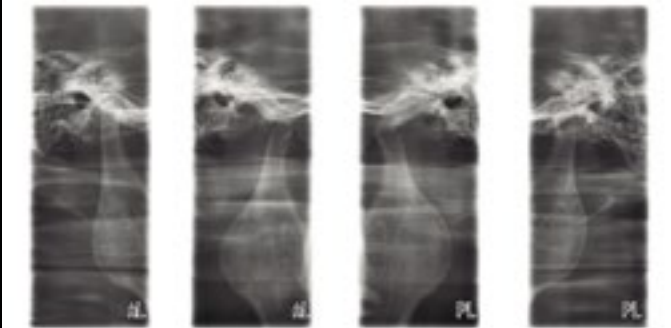
PA TMJ



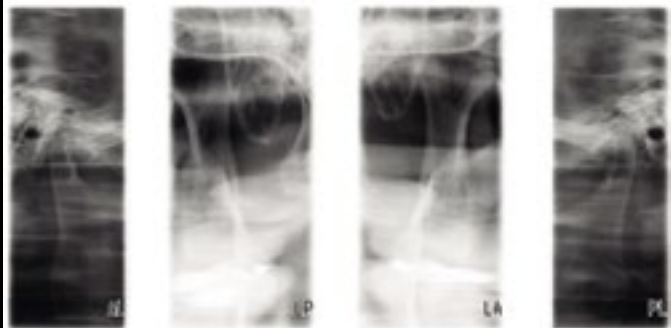
PA Sinus and Lateral non rotational sinus



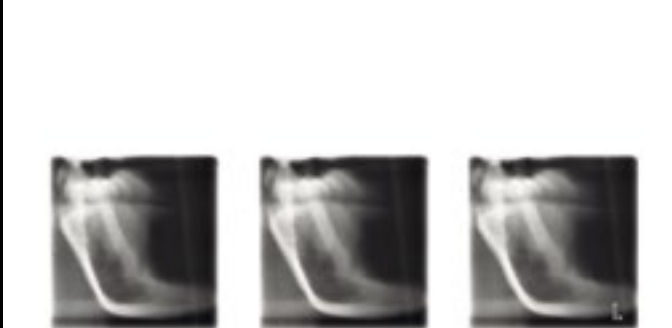
Horizontal and vertical segmenting for panoramic program



Lateral TMJ



Lateral-PA TMJ



Cross-sections

Planmeca ProOne® offers you a wide variety of imaging programs for different radiographic needs. You can also select the correct exposure formats to minimise the radiation dose for all types of patients and diagnostic purposes.

Imaging programs

Basic panoramic programs	Standard panoramic
	Lateral TMJ
	PA TMJ
	PA Sinus
	Horizontal and vertical segmenting for panoramic program
	Bitewing
Advanced panoramic programs	Interproximal panoramic
	Orthogonal (perio) panoramic
	Lateral-PA TMJ
	Lateral multiangle TMJ
	Lateral non rotational sinus
	Cross-sections
	Child (Paediatric) mode for each program to reduce the dose



Child mode for optimal paediatric imaging

In child mode, the imaging area and exposure values are reduced in all programs and also the focal layer can be narrowed in the panoramic program. The patient dose is reduced remarkably.

Planmeca Romexis® software for all images

Mac OS
and Windows
compatible

World leading imaging software



Planmeca Romexis® is an advanced, easy-to-use software suite providing a rich set of tools to meet the imaging requirements set by any dental facility – from a small clinic to a large hospital. It supports the most versatile range of 2D and 3D imaging modalities.



High-performance 2D imaging

Our advanced **Planmeca Romexis®** software suite offers the most versatile tools for 2D imaging. Diagnose images using our full range of enhancement tools – or view them wherever you are with our mobile apps. This flexible dental imaging suite adapts to your needs and will grow into the third dimension together with your practice.



Easy and powerful

Planmeca Romexis® is the software of choice for viewing and processing 2D images from Planmeca X-ray units. Powerful enhancement and analysis tools guarantee that accurate diagnosis is available to users in all specialties, while the intuitive interface guarantees confident, comfortable use from day one.

Sharing the results

Cases can be seamlessly transferred to mobile devices or partner clinics that use Planmeca Romexis or the free **Planmeca Romexis® Viewer**. Our integration with other systems allows you to freely utilise third-party products at your clinic. TWAIN support and DICOM standard compliance ensure that the software can be used together with most systems.

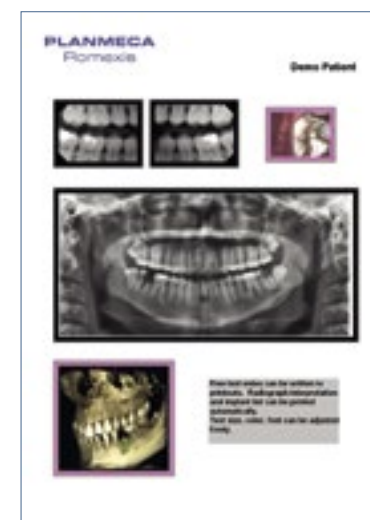
Free Planmeca Romexis® Viewer application

Full-featured viewer application
No installation required
Mac OS and Windows support
Distribute to specialists or patients

Integrated document management

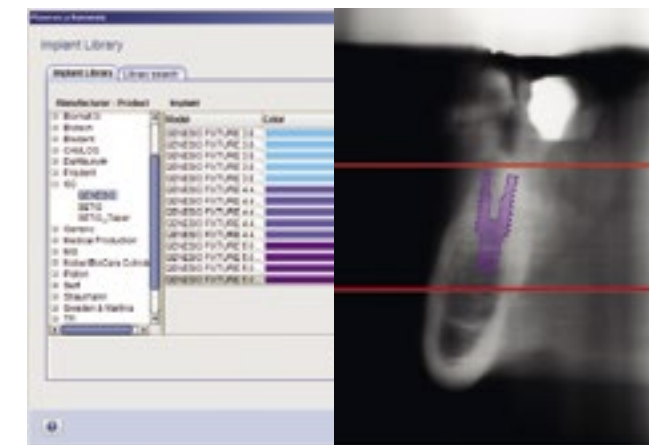
The printing module with multi-page support is ideal for creating professional, high-quality printouts and radiology reports to be sent to referring dentists.

Documents of any type can be attached to patient files, providing a convenient storage for cephalometric tracing reports, referral letters and other information.



Advanced implant planning

Planmeca Romexis provides powerful tools for implant planning, including realistic implant models from over 30 manufacturers.



Radiology interpretation module

The **Planmeca Romexis® Radiological Findings** module is the most advanced findings-recording tool on the market. Developed in cooperation with clinicians, its findings list is hierarchically categorised and can be freely edited. The module is especially designed for educational and radiology centres where uniformity of recordings is essential.

