Planmeca
ProOne®

PLANMECA

Planmeca ProOne®

Efficiency with elegance

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. Planmeca ProOne truly inherits Planmeca's expert knowledge and long traditions in dental imaging.*

Learn more:
Planmeca Showroom

Available on the
App Store

for iPad

Simple is beautiful

For every dentist

The fully digital **Planmeca ProOne**® X-ray unit provides absolute ease of use with cutting edge technology. The wide selection of exposure programs and easy-to-use graphical user interface ensures fast and effortless radiographic examinations in every situation. The compact Planmeca ProOne brings the benefits of digital imaging within the reach of every dentist the world over.

Patient positioning made easy

One of the most common reasons for failed radiographs is incorrect patient positioning. The side entry and open positioning system make patient positioning quick, precise, and easy. You can freely observe your patient from the front and sides to minimise errors related to patient positioning.

Side entry allows easy access and examination of the standing or seated patient. The patient can even remain seated in a wheelchair during exposure and maintain direct eye contact with the radiologist or, in case of a child, with the accompanying adult during the whole exposure cycle.

Precise positioning with triple laser beam system

Patient positioning is assisted by a triple laser beam system, which accurately indicates the correct anatomical positioning points. Patient positioning has never been easier and more accurate. The midsagittal laser and the horizontal Frankfort laser ensure correct sideways alignment and forward tilt of the head while the focal layer beam helps to position the patient accurately inside the focal layer for a sharp and clear image.

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. The full colour TFT display is easy to wipe clean for impeccable infection control.
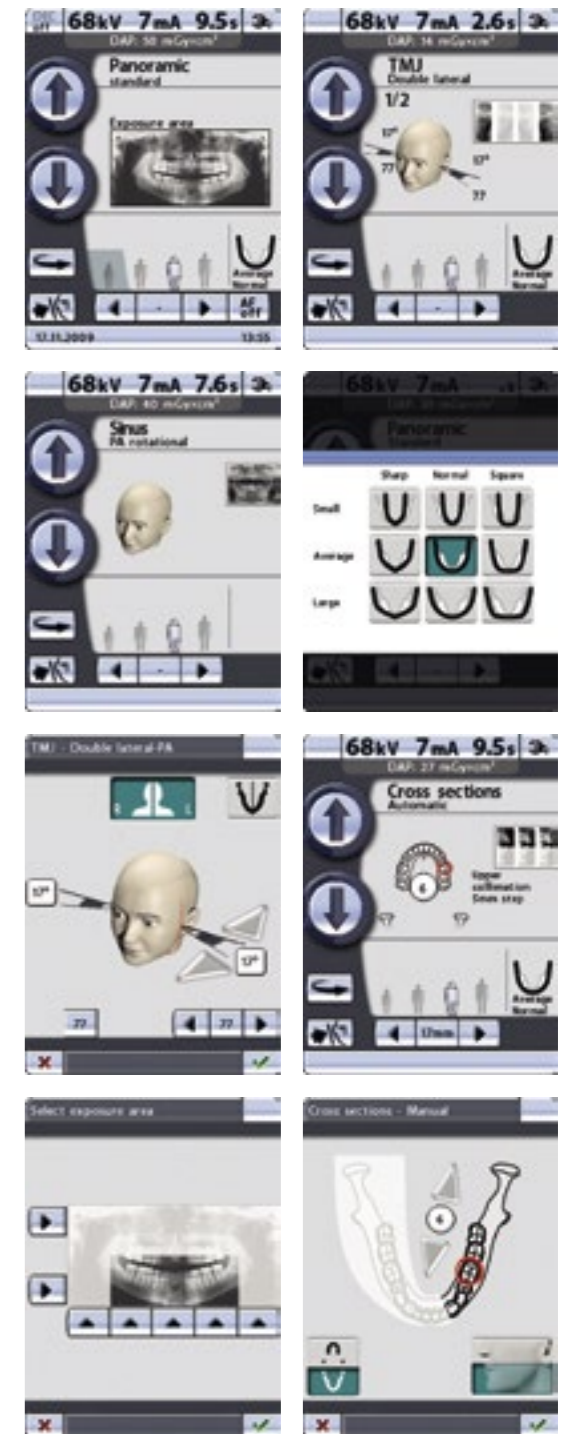
Versatile imaging programs

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.
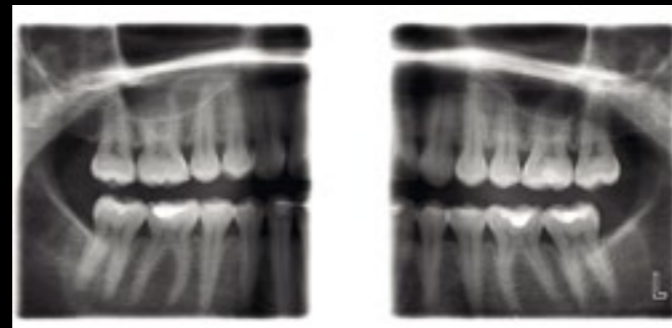
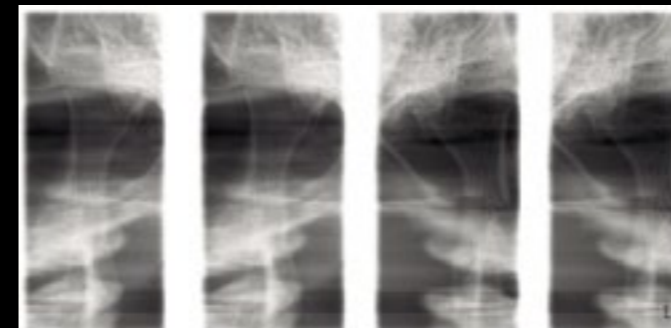

Child mode for optimal paediatric imaging

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.
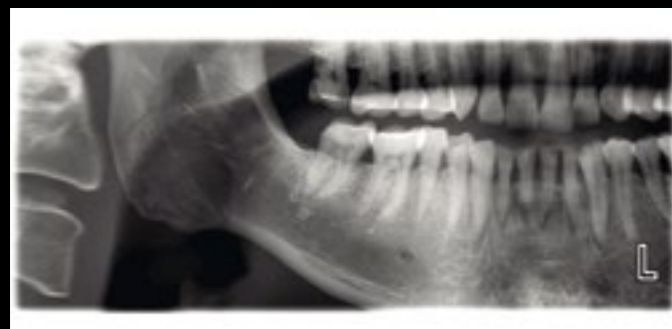

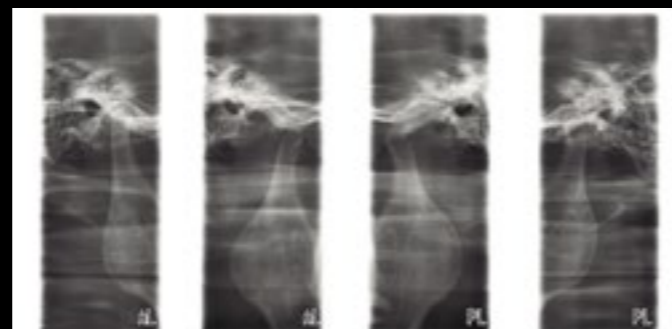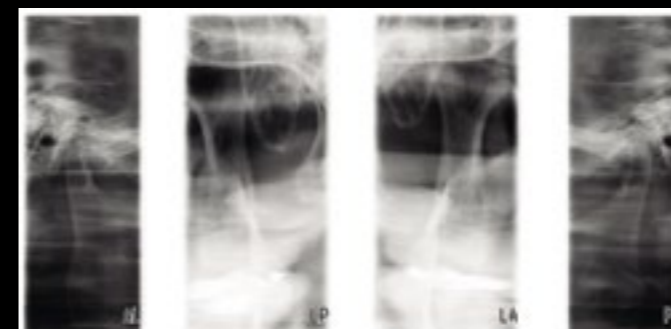Standard panoramic

Bitewing

PA TMJ

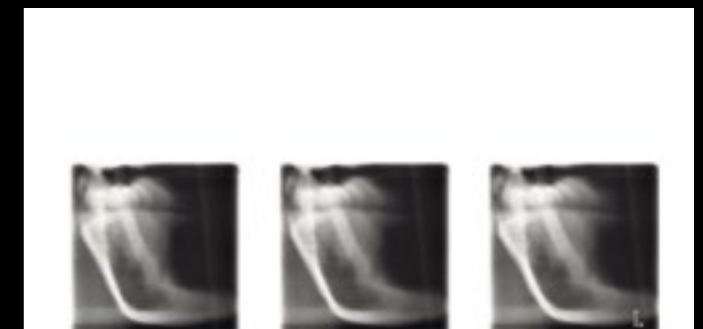PA Sinus and Lateral non-rotational sinus

Horizontal and vertical segmenting for panoramic program

Lateral TMJ

Lateral-PA TMJ

Cross-sections

Optimised imaging programs for precise diagnosis

Planmeca ProOne® provides a variety of all-round imaging programs for different radiographic needs.

Besides the Standard panoramic program, Planmeca ProOne offers Improved interproximal, Orthogonal and Bitewing programs for more specific diagnostic needs.

The *Interproximal panoramic program* produces a panoramic image where interproximal contacts are open. Ideal for caries detection.

The *Orthogonal panoramic program* produces an image where the alveolar crest is clearly visible. It enhances the diagnostics of periodontal conditions and traumas.

An image taken with the *Bitewing panoramic program,* which uses improved interproximal projection geometry, is similar to an intraoral bitewing image pair. The advantage is that the image is obtained with one simple extraoral exposure and a very low radiation dose.

The *Horizontal and vertical segmenting program* limits the exposed area strictly to the diagnostic region of interest. Patient dosage is reduced by up to 93%* compared to a full panoramic exposure.

The automatic *Double TMJ program* produces a lateral or posteroanterior view of open or closed temporomandibular joints in a single radiograph allowing easy diagnosis of the TMJ condition.

The *Sinus program* has a specially designed image layer providing a radiograph with a clear view of the maxillary sinuses.

The *Cross-section program* is intended for simple cross-sectional imaging of TMJs and jaws in the molar and premolar region. These images convey valuable information on cross-sectional dimensions and the structure of the jaw.

* Absorbed dose reduced by sliced exposure using sector selector system with rotational panoramic radiography, Y. Hayakawa, N. Kobayashi, Y. Kousuge, H. Fujimori and K. Kuroyanagi, Bulletin of Tokyo Dental College, Vol. 35, No. 3, pp. 127–131, August, 1994

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

Functional technology

Scientifically accurate adjustments

As the size and shape of the jaw varies from one individual to another depending on size, gender, race, and age, one fixed panoramic focal layer form cannot be optimal for every patient. On the graphical user interface, the operator may adjust the shape of the focal layer according to the shape and size of the jaw characteristic to the patient.
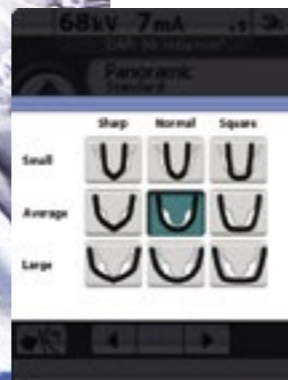
Digital workflow

Direct digital radiography offers many advantages both for the patient and for the imaging workflow:

• Time is saved. The image appears on the computer screen within seconds after the exposure, and is immediately available for diagnosis.

• With film processing and darkrooms left behind, the most common reasons for failed radiographs are eliminated.

• Digital images can be enhanced in the imaging software for more accurate diagnosis.

• Digital archives and networks enable efficient image communications.
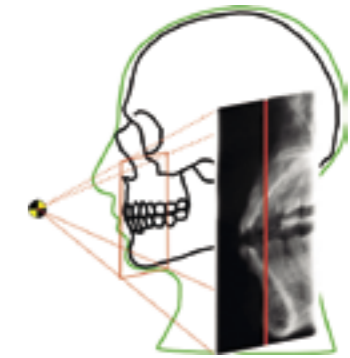
Diagnostic clarity

To produce accurate and undistorted radiographs with clearly superior clinical quality, the focal layer was designed to follow the scientifically defined shape of the human dental arch and jaw. The imaging geometry eliminates shadows and ghost images caused by objects outside the image layer, significantly increasing the diagnostic value of the radiograph.*

## 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.

Exposure control

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 clearly improves the image quality with more consistent brightness and contrast.

Self-diagnostic system for assisted use and servicing

A self-diagnostic control system continuously monitors the unit. The system displays help messages that assist the operator and enable correct use of the unit. In case of abnormal operation, the system displays messages which are stored in a log to help both the operator and the technical service.
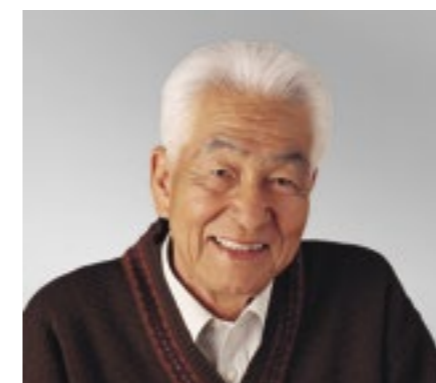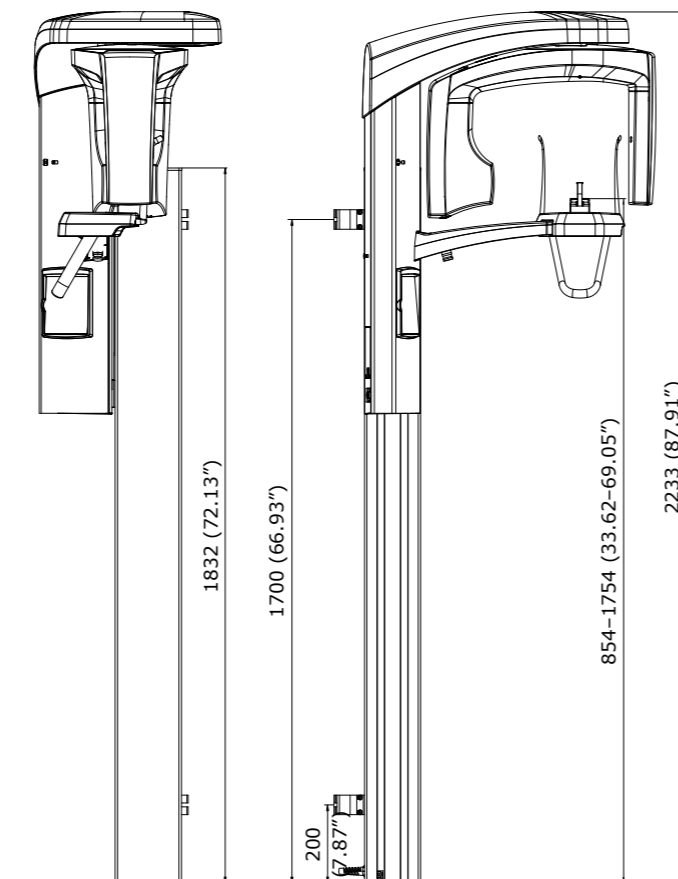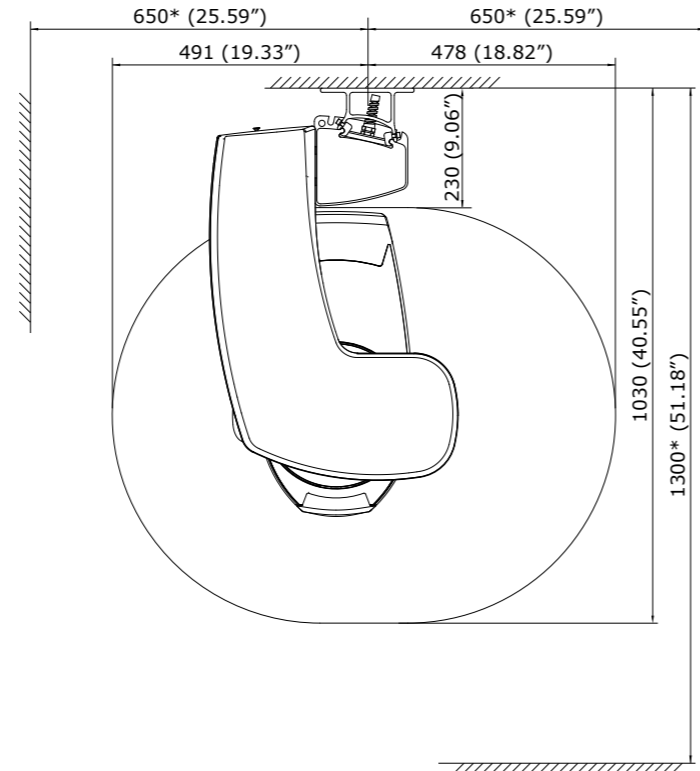
* Standard Forms of Dentition and Mandible for Applications in Rotational Panoramic Radiography, U. Welander, P. Nummikoski, G. Tronje, W.D. McDavid, P.E. Legrell and R.P. Langlais, Dentomaxillofacial Radiology, 1989, Vol. 18, May

Technical specifications

Technical data

Generator	Constant potential, resonance mode high frequency 60–80 kHz
X-ray tube	D-058SBR
Focal spot size	0.5 x 0.5 mm (IEC 336)
SID	480 mm (19 in.)
Total filtration	min. 2.5 mm Al eq.
Anode voltage	60–70 kV
Anode current	2–7 mA DC
Exposure time	2–10 s
Magnification	1.22–1.29
Line voltage	100–132 V~ 50/60 Hz, 180–240 V~ 50 Hz
Regulation	±10 % (automatic)
Line current	8–16 A
Power uptake	max: 850 W
Chin rest level	95–178 cm (37.4–70 in.)
Colour	White (RAL 9016)
Weight	67 kg (148 lbs)

Imaging programs

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	Lateral TMJ
	PA TMJ
	PA Sinus
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	Bitewing
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	Lateral multiangle TMJ
	Lateral non rotational sinus
	Cross-sections
	Child (Paediatric) mode for each program to reduce the dose

*Minimum operational space requirements

Width	Depth	Height
130 cm	130 cm	223 cm
51 in.	51 in.	88 in.

Dimensions

650* (25.59") 650* (25.59")
491 (19.33") 478 (18.82")
230 (9.06")
1030 (40.55")
1300* (51.18")

1832 (72.13")
1700 (66.93")
854–1754 (33.62–69.05")
2233 (87.91")
200 (7.87")

Planmeca Romexis® imaging software

Planmeca Romexis® is a comprehensive software for acquiring, viewing and processing 2D and 3D images. Full support for both Windows and Mac OS operating systems provides additional freedom in operating your clinic.

Planmeca iRomexis™

Planmeca iRomexis™ is a mobile companion application for Planmeca Romexis imaging software designed for iPhone and iPad devices. The application can be downloaded from the App Store free of charge.

Learn more:
Planmeca Showroom
for iPad

True 2D and 3D imaging:
Planmeca iRomexis™
for iPhone and iPad

Available on the App Store

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Planmeca Romexis®

Supported 2D modalities	Intraoral
	Panoramic
	Cephalometric
	2D linear tomography
	Photos
	Stack images (CBCT slices and panoramic slices)
Supported 3D modalities	3D CBCT
	3D photo
	3D surface scan
Supported photo sources	Intraoral camera
	Digital camera or scanner (import or TWAIN capture)
Operating systems	Win XP / Win Vista Pro/ Win 7/ Win 8
	Win 2003 Server /Win 2008 Server
	Mac OS X*
	For detailed information please see system requirements of Planmeca Romexis www.planmeca.com
	*Cephalometric Analysis module and 3D Ortho Studio module are not supported on Mac OS
Image formats	JPEG or TIFF (2D image)
	DICOM (2D and 3D image)
	STL (3D image)
	TIFF, JPEG, PNG, BMP (import/export)
Image size	2D X-ray image: 1–9 MB
	3D X-ray image: typically 50 MB–1 GB
Installation options	Client–Server
	Java Web Start deployment
DICOM 3.0 support	DICOM Import/Export
	DICOM DIR Media Storage
	DICOM Print SCU
	DICOM Storage SCU
	DICOM Worklist SCU
	DICOM Query/Retrieve
	DICOM Storage Commitment
	DICOM MPPS
Interfaces	TWAIN Client
	PMBridge (patient information and images)
	VDDS (patient information and images)
	InfoCarrier (patient information)
	Datagate (patient and user information)
3rd party software integrations	Dolphin Imaging
	Nobel Clinician
	Materialise Dental Simplant
	Straumann coDiagnostiX
	Cybermed N-Liten

Planmeca Oy designs and manufactures a full line of high technology dental equipment, including dental care units, panoramic and intraoral X-ray units, and digital imaging products. Planmeca Oy, the parent company of the Finnish Planmeca Group, is strongly committed to R&D, and is the largest privately held company in the field.

PLANMECA

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