PLANMECA

Planmeca ProX

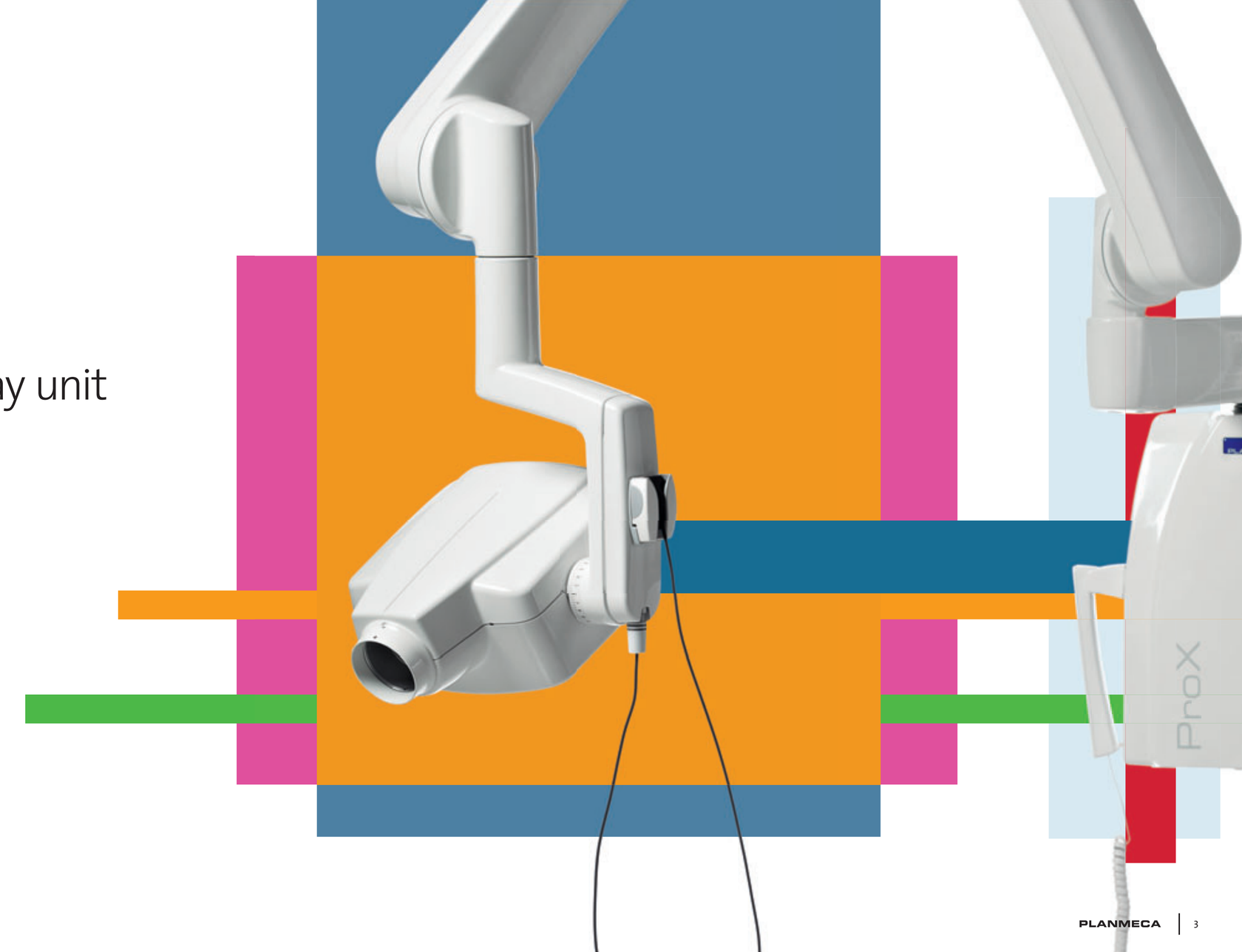
ENGLISH

The premium intraoral X-ray unit

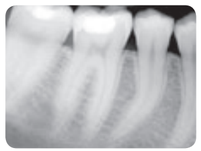
Planmeca is proud to increase its comprehensive collection of imaging products with a new intraoral X-ray unit – **Planmeca ProX**. The advanced unit provides easy and precise positioning, a straightforward procedure and high-quality, high-resolution images.

The unique Planmeca ProX design concept makes intraoral imaging easier and more trustworthy than ever before.

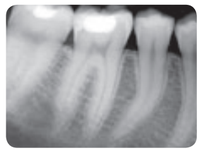
- Optimal images for all diagnostic needs: variable kV and mA
- Easy and fast to use: pre-programmed quick settings, practical design
- Digital ready with Planmeca ProSensor
- Perfect wokflow with Planmeca Romexis
- Versatile installation options



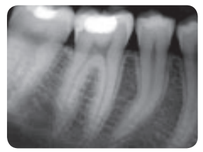
Optimised, high-quality imaging



50 kV



60 kV



70 kV

Optimal images for all diagnostic needs

Advanced technology and practical design make the Planmeca ProX X-ray unit the premium choice for intraoral imaging. The freely selectable exposure parameters (kV, mA and exposure time) maximize the diagnostic value of intraoral radiography. The focal spot size of the X-ray tube is 0.4 mm, which ensures an optimal resolution and clear images.

Planmeca ProX provides tremendous freedom of choice that assures the best image contrast and density for every diagnostic need and anatomical condition. This is enabled by variable kilovolts (50–70 kV) and milliamperes (2–8 mA).

50 kV: Low kV settings result in high-contrast images that are extremely useful for endodontics, apex and bone structure diagnostics.

60 kV: Medium kV settings provide a wide grey scale for general diagnostics where a wide range of clinical information is required.

70 kV: High kV settings produce images with a long grey scale spectrum, which is useful in caries detection and periodontal diagnostics.

Reduced radiation

The very high-frequency operated constant potential X-ray generator of Planmeca ProX provides significant advantages:

- reduced radiation dose by up to 25% when compared to conventional AC generators
- extremely good and uniform image contrast
- absolute reproducibility of images
- improved reliability and prolonged life span of the X-ray tube
- the X-ray unit output is not affected by line voltage fluctuations.

Easy and fast to use

Ergonomic design for easy imaging

The unique design of the X-ray tube head makes aiming exceptionally easy and precise. Both the short cone (20 cm SSD) and the long cone (30 cm SSD) imaging techniques can be used. An additional rectangular collimator can be adapted to the long cone for maximal radiation hygiene.

The extremely steady X-ray unit arm provides smooth and precise movements. This ensures a drift-free and accurate positioning of the lightweight tube head. Versatile installation options ensure that the unit is well sufficient for different practice designs.

Quick settings with intuitive operation

The imaging parameters are selected from the intuitive control panel. The unit is pre-programmed with 66 quick settings for different exposure value combinations. Imaging parameters are automatically retrieved according to the selected exposure region and the diagnostic need:

- periapical imaging of the incisors, premolars/ canines and molars separately for upper and lower jaw
- upper and lower occlusal plane imaging
- bitewing imaging
- endodontic imaging.

The control panel displays the selected values and they can be manually adjusted if needed. The operator can also store the altered setting in the quick setting memory. There are distinct optimally adjusted settings for adults and children.

Easy imaging mode selection

Planmeca ProX offers a smart control for maintaining a constant darkness of the radiographs whenever imaging conditions change. The unit has 11 density steps that adjust all quick settings when changing e.g. the film type or between the short cone and the long cone technique.

The selection of the imaging mode allows a rapid transformation of all pre-programmed settings when changing to a new image receptor type. There are predefined imaging modes for film, imaging plate, and digital sensor. This allows very fast and trouble-free transition to new imaging technologies without any reprogramming of the quick settings.

Self-diagnostic system

The unit's self-diagnostic control system monitors all functions and displays error messages in case of abnormal operation. This assists in the correct use of the unit and speeds up technical service. After each exposure, the automatic duty cycle control displays an overheat countdown ensuring reliable long-term operation of the X-ray tube.

Digital ready with Planmeca ProSensor

Integrated control electronics for digital sensors

The Planmeca ProSensor digital intraoral X-ray imaging system supports the chairside workflow of dental treatment. A simple selection of the image receptor automatically adapts the pre-programmed settings for digital sensors.

Ultimate user-friendliness is achieved when Planmeca ProX is used together with the Planmeca ProSensor digital sensor system:

- The user can easily position the sensor into patient's mouth with the sensor holder.
- The Planmeca ProSensor interconnection cable is routed inside the X-ray unit arm, which results in a clear and clean working area with no interfering cables.
- The imaging parameters (kV, mA, exposure time) are transferred to the imaging software to be recorded with the patient's images.

To guarantee a smooth worklow, Planmeca ProX has integrated control electronics and magnetic connector for Planmeca ProSensor intraoral sensors. This ensures that Planmeca ProSensor is always in the right place and within easy reach. All the components of the imaging system – the sensor, the control box and the PC can be optimally placed in the treatment environment.

Always ready for an image

When taking an image, the first step is to position the sensor in the patient's mouth. As the sensor is always ready for taking an image, no interaction with the pc, keyboard or mouse is required during the imaging procedure.

After the exposure, the image is displayed on the screen within seconds. Instantaneous viewing dramatically shortens the time needed for an intraoral X-ray examination, when compared to imaging plates or conventional film.

Technical specifications

Planmeca Romexis imaging software

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

Supported 2D X-ray modalities	Intraoral Panoramic Cephalometric 2D linear tomography
Supported 3D X-ray modalities	3D CBVT 3D photo 3D surface scan
Supported photo sources	Intraoral camera Digital camera or scanner (import or TWAIN capture)
Operating systems	Windows XP Windows Vista Windows 7 Windows 2003 Server Windows 2008 Server Mac OS X For detailed information please see system requirements for Planmeca Romexis www.planmeca.com
Image formats	JPEG or TIFF (2D image) DICOM (3D image) STL (import) TIFF, JPEG, PNG, BMP (import/export)
Image size	2D X-ray image: 1–9 MB 3D X-ray image: typically 250 MB
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)
Installation options	Client–Server Java Web Start deployment

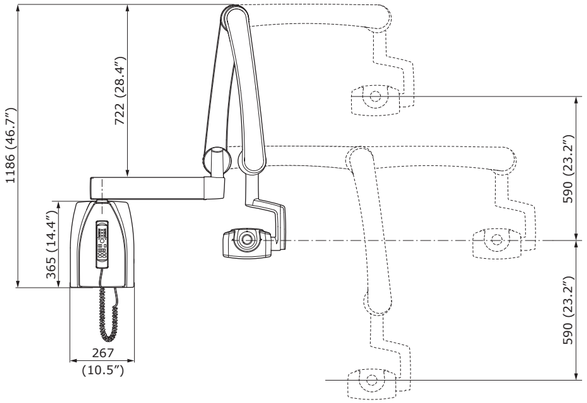
Planmeca ProX

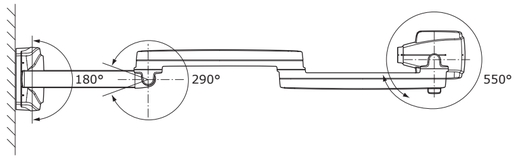
Generator	Constant potential, microprocessor controlled, operating frequency 66 kHz
X-ray tube	Toshiba D-041SB
Focal spot size	0.4 mm according to IEC 60336
Cone diameter	60 mm (2.36 in.) Rectangular 33 x 43 mm (1.30 x 1.69 in.)
Max. symmetrical radiation field	Ø60 mm at SSD 200 mm Ø60 mm at SSD 300 mm according to IEC 806
Total filtration	min. 2.5 mm Al equivalent at 70 kV according to IEC 60522
Inherent filtration	1 mm Al equivalent at 70 kV according to IEC 60522
Anode voltage	8 mA: 50, 52 kV, ±2 kV 7 mA: 50, 52, 55, 57, 60 kV, ±2 kV 2–6 mA: 50, 52, 55, 57, 60, 63, 66, 70 kV, ±2 kV
Anode current	8, 7, 6, 5, 4, 3, 2 mA ±(5% + 0.2 mA)
Exposure times	0.01–2 sec. ±(5% + 0.001 sec.), 24 steps
SSD (Source-Skin Distance) Standard/Long	200 mm (8 in.)/300 mm (12 in.)
Mains voltage	100 V~/110-115 V~/220-240 V~, 50/60 Hz
Duty cycle	1:30, automatic control
Electrical classification	Class I Type B
Weight	total 29 kg (64 lbs) tube head with standard cone 4.2 kg (9.3 lbs) tube head with long cone 4.5 kg (10 lbs)
Colour	White (RAL 9016)

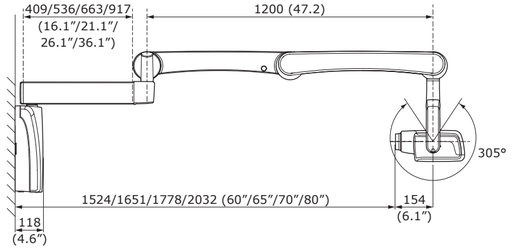
Planmeca ProSensor

	Size 0	Size 1	Size 2
Sensor size	33.6 x 23.4 mm (1.33 x 0.92 in.)	39.7 x 25.1 mm (1.56 x 0.99 in.)	44.1 x 30.4 mm (1.76 x 1.2 in.)
Active area	25.5 x 18.9 mm (1.0 x 0.74 in.)	31.5 x 20.7 mm (1.24 x 0.81 in.)	36 x 26.1 mm (1.42 x 1.03 in.)
Number of pixels	850 x 629	1050 x 690	1200 x 870
Physical pixel size	15 µm x 15 µm		
Pixel size	30 µm x 30 µm		
Theoretical resolution	33 lp/mm		
Resolution	17 lp/mm		
Interface	USB or Ethernet		
View delay	<5 sec.		

Dimensions

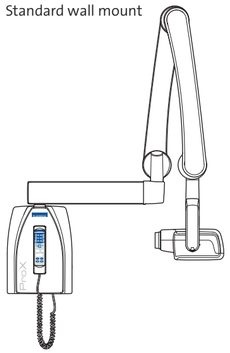




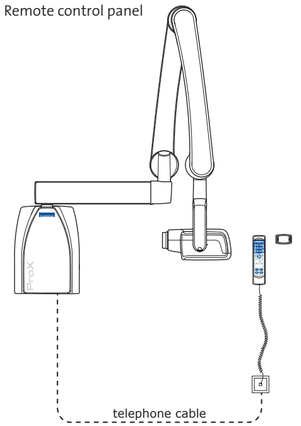


Installation options

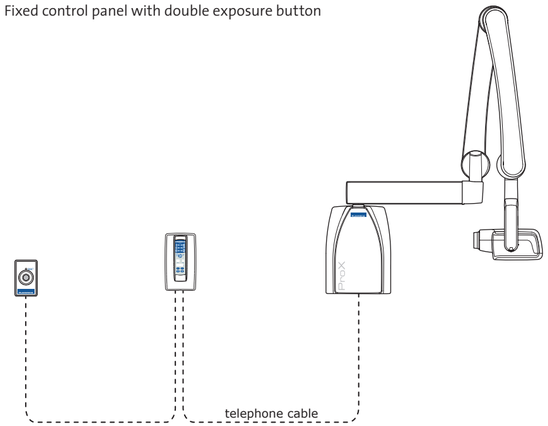
Standard wall mount



Remote control panel



Fixed control panel with double exposure button



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

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

Images may contain optional items not included in standard delivery. Available configurations and features may have country or area specific variations.
Some products displayed above may not be available in all countries or areas. Rights for changes reserved.

10030512/0112/en