

**CRANEX<sup>®</sup> D**



Quality  
Ease of use  
Flexibility

 **SOREDEX**

Digital panoramic X-ray unit

# CRANEX<sup>®</sup> D solution for demanding dental clinics and imaging centers

SOREDEX has over 30 years of expertise in state-of-the-art dental imaging systems. CRANEX<sup>®</sup> D – a direct digital panoramic and cephalometric X-ray system – is the advanced unit of the famous CRANEX<sup>®</sup> family.



## Summary of benefits

### Quality

- Superior diagnostic image quality
- Unique VPC panoramic collimator
- Wide anterior layer thickness
- Enhanced imaging geometry

### Ease of use

- Excellent usability
- Easy, stable patient positioning
- Automatic exposure value selection

### Flexibility

- Upgradeability
- Single or dual sensor design
- Small footprint and compact design



# True diagnostic value

CRANEX® D's excellent signal-to-noise ratio, high resolution, wide dynamic range, wide anterior layer thickness and stable patient positioning provide superior image quality and more diagnostic value.



## Enhanced cephalometric imaging geometry

CRANEX® D features advanced cephalometric imaging movements that provide a true central projection image. This results in non-distorted constant magnification in both the vertical and horizontal planes.

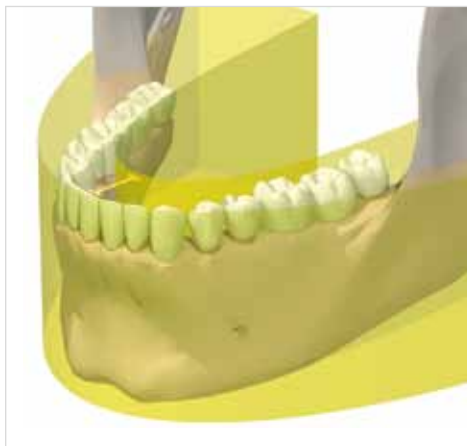


The patented unique Variable Panoramic Collimator (VPC) is one of the keys to the outstanding panoramic image quality of CRANEX® D. By narrowing the width of the collimator while imaging the anterior teeth, we are able to expand the focal trough by 50% compared to conventional fixed collimation. The advantage is superb anterior image quality regardless of the patient's dentition.

The VPC is patented technology by SOREDEX.

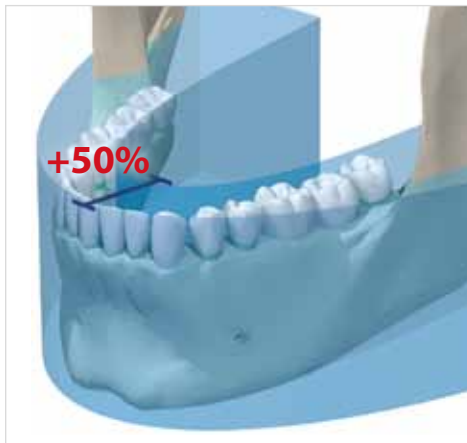
#### Typical panoramic system

Most panoramic systems have a narrow anterior layer thickness, which leads to difficulty in positioning all of a patient's dentition within the focal trough.



#### CRANEX® D

CRANEX® D's anterior layer thickness is 50% wider than traditional techniques. The result is superb anterior image quality.



Quick and easy-to-use





# 11 second fast scan – 17 second HiQ scan

## Superb panoramic image quality with fast panoramic programs.

- Adult program in 11 seconds
- Pediatric program in 8.6 seconds
- Especially suitable for follow-up patients and in busy clinics

## Even better high quality images achieved with High Quality (HiQ) panoramic programs.

- Adult program in 17 seconds
- Pediatric program in 13.8 seconds
- Especially suitable for complicated diagnostic cases

## Easy-to-use control panel

- Imaging program selection
- Exposure value selection
- Fast and High Quality panoramic program
- Same selections available in the Graphical User Interface of the computer
- All of the required settings visible



# Patient positioning made easy



## Patient positioning

- 3 positioning lights for accurate positioning
- 4-point head support for patient stability
- Open design for accessibility





Optimal image quality can only be achieved if the patient is positioned correctly and held stationary during imaging. CRANEX® D's three positioning lights, swivel mirror and 4-point head support help you to attain the required optimal image quality for your diagnostic purposes. The open design and the unique column increase patient comfort and allow easy access for handicapped or wheelchair- bound patients.

#### Automated ease-of-use

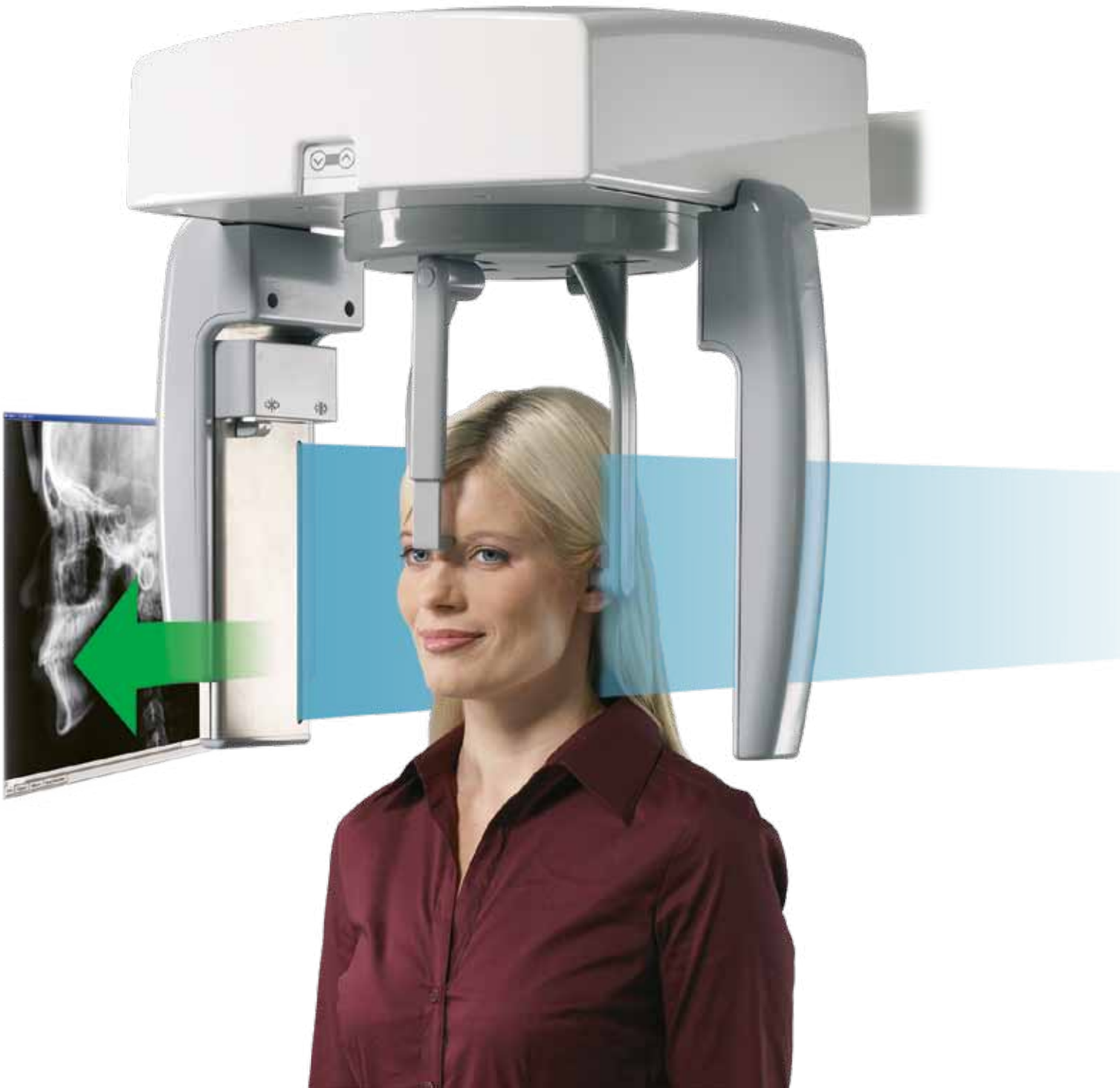
CRANEX® D automatically selects proper collimation for the selected imaging program by using the Automatic Collimator Selector (ACS).

The Automatic Exposure Setting (AES) function automatically recommends proper exposure values based on the size of the patient's head. The operator can also override the recommended values, if required, before the exposure.

The AES is patented innovation by SOREDEX.

# Cephalometric imaging

CRANEX® D's cephalometric option can be configured as either left-handed or right-handed for flexible installation. Soft tissue filtration is adjusted automatically for the best diagnostic quality possible. With the use of the patented AES function, exposure values are selected according to patient size.



## Maximum flexibility

CRANEX® D Ceph can be equipped as a single or dual sensor system for optimal workflow. Cephalometric capabilities can be added at any time to CRANEX® D. This allows CRANEX® D to grow along with your practice.

CRANEX® D panoramic unit is easily upgradeable to a left- or right-handed cephalometric unit in the field.

CRANEX® D Ceph  
head support  
in the lateral position.



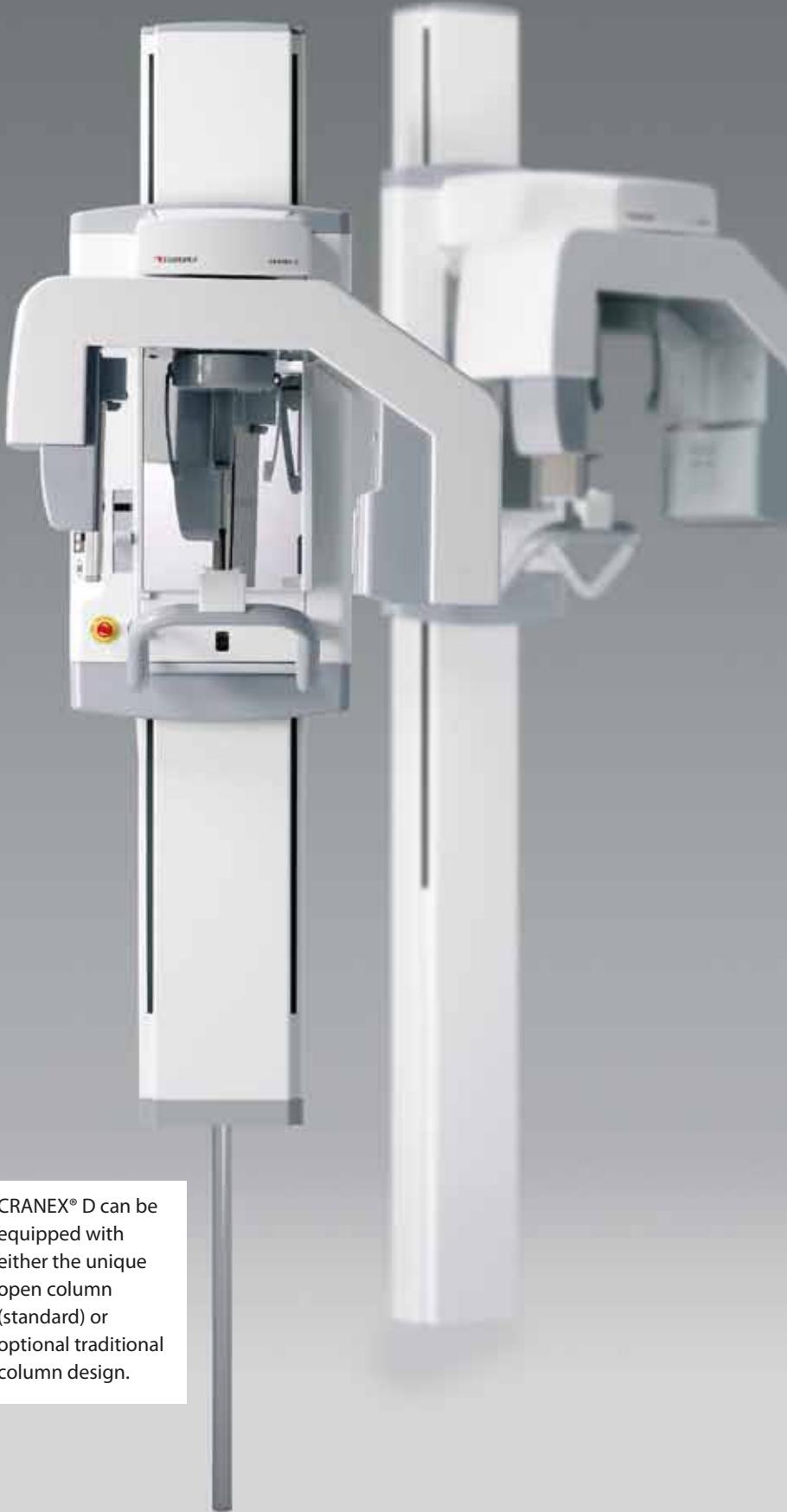
CRANEX® D Ceph  
head support in the PA  
projection. The nasion  
support is rotated out  
of the way.



### Cephalometric field sizes

Full width: 22 x 26 cm (8.66" x 10.24")  
Reduced width: 22 x 18 cm (8.66" x 7.09")

# Compact design



CRANEX® D can be equipped with either the unique open column (standard) or optional traditional column design.

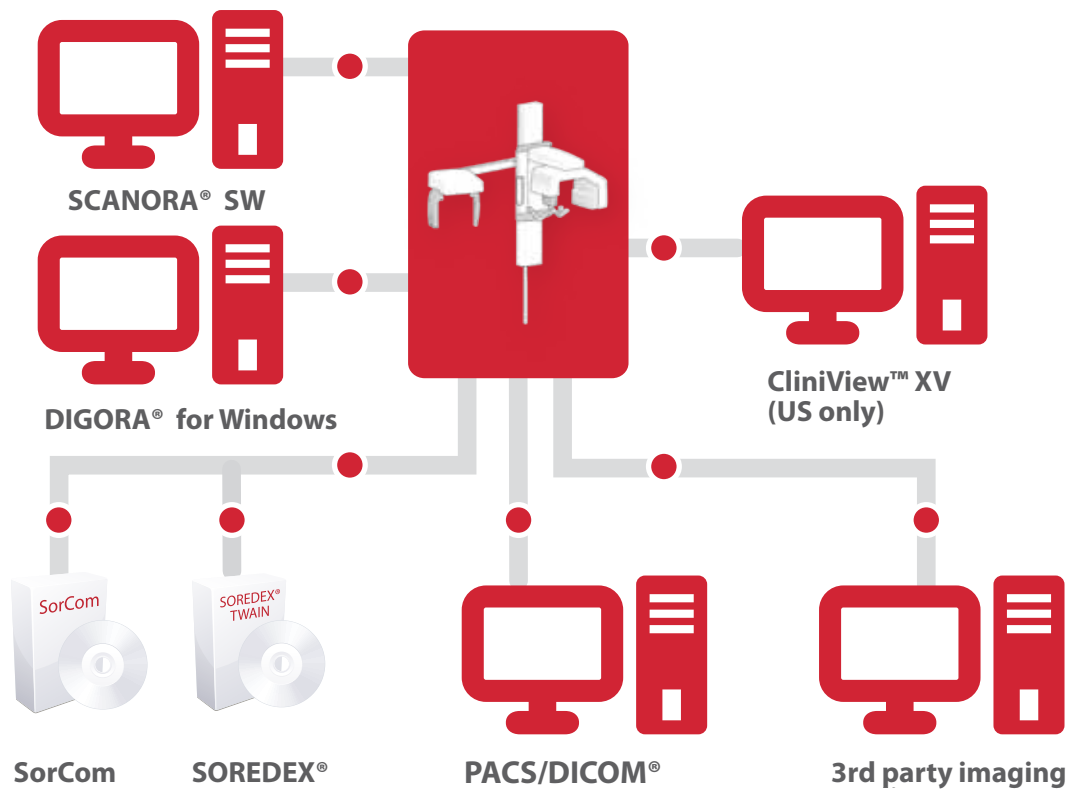


Positioning controls and accessories are located close to the operator for improved workflow.



The stainless steel CCD housing is designed to last.

## CRANEX® D is compatible with your choice of several software options.



- **DIGORA® for Windows** offers a comprehensive set of imaging tools for your day-to-day imaging needs. Network multi-user versions and full DICOM® support are available as options.
- **SCANORA® SW** provides a full range of imaging tools for viewing and planning. Network and DICOM® licences are available.
- **CliniView™ XV (US only)** offers the capability of capturing images from all of the digital treatment planning devices. It is geared to be used in operatories for quick and easy image capture, viewing and treatment planning.
- **SOREDEX® TWAIN** utilizes the industry standard TWAIN interface to capture images directly into 3rd party imaging applications.
- **SorCom** provides a simple "DICOM® bridge" for capturing images to a PACS/DICOM® environment, where 3rd party DICOM® imaging software is used for viewing images.

# Imaging programs

With CRANEX® D you can perform standard, pediatric or sectional panoramic examinations as well as TMJ and sinus. Optional cephalometric programs include full width and reduced width lateral programs PA and optional carpus programs.



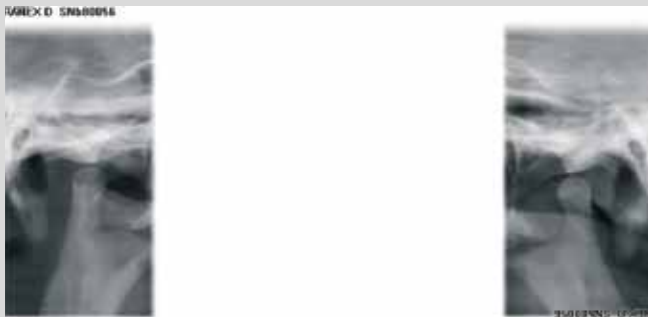
## Adult panoramic

All panoramic programs include automatic spinal compensation for an excellent view of the anterior teeth without a distracting spinal shadow.



## Child panoramic

A shorter exposure time and reduced exposure field lowers patient dose.



## TMJ

TMJ images are taken mouth open and/or closed for functional evaluation and condyle anatomy.



## Sectional Imaging

Any combination of 1 to 5 panoramic image sections can be selected. This reduces the patient radiation dose as only the region of interest is exposed.



## Cephalometric

PA images can be taken with CRANEX® D.



## Cephalometric

Lateral images can be taken with CRANEX® D.

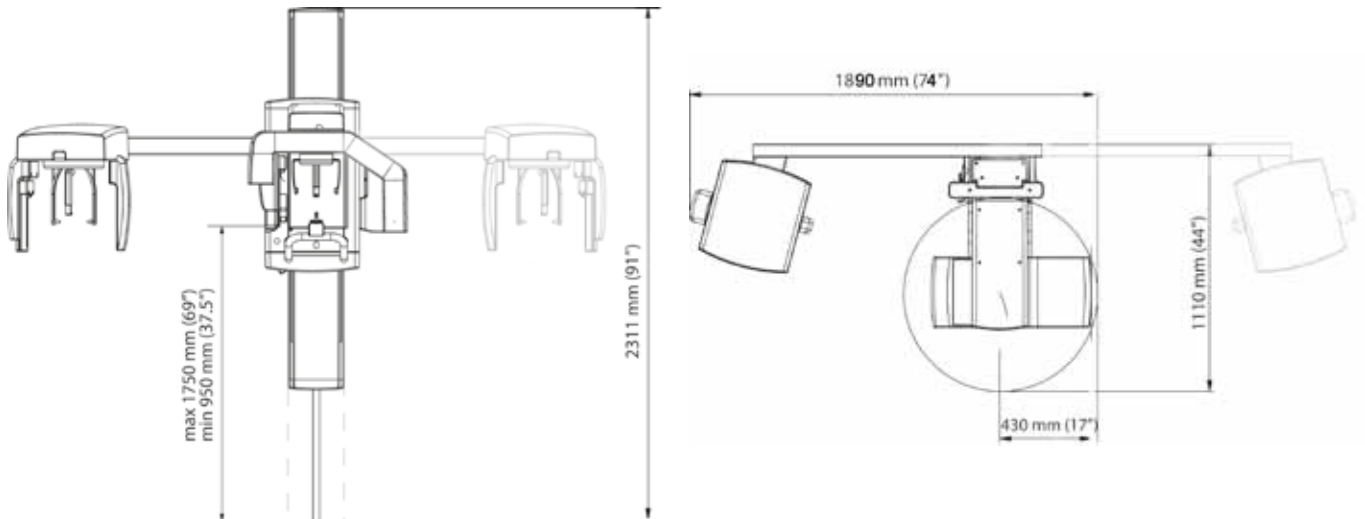


## Carpus

Optional Carpus imaging is also available with CRANEX® D Ceph. (not in North America)



# Technical data



## General

Generator	High frequency DC generator, operating frequency 40 kHz
Focal spot size	0.5 mm
Minimum total filtration	2.7 mm Al
Line voltage	230/240 Vac $\pm$ 10% / 115 Vac (50/60 HZ)
Anode voltage	57 - 85 kV
Anode current	10 mA
Exposure time	17.6 s High Quality panoramic, 11 s fast panoramic, 8 - 20 s cephalometric
SID	520 mm (20.47") panoramic, 1721 mm (67.75") cephalometric
Fusing	8 A / 16 A slow (230/115 Vac)
Weight	Pan 120 kg (264 lbs), Ceph 165 kg (363 lbs)
Electrical safety classification	EN 60601-1 class 1/B
Color	RAL 7040, RAL 9003

## Digital Unit

Sensor	CCD-detector
Active sensor surface	PAN: 147.5 x 6.1 mm, CEPH: 221.2 x 6.1 mm
Pixel size sensor	48 $\mu$ m
Pixel size image	96 $\mu$ m
File size	PAN max: 9.5 MB, CEPH max: 11.5 MB

## Workstation computer recommendations

Operating system	Windows Vista / Windows XP Professional / Home / SP1 or SP2, Windows 2000 Professional / SP4
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# Digital imaging made easy™

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## Pride. Passion. Performance.

Since 1977 SOREDEX has been a leader in providing innovative imaging solutions for demanding professionals. Through continuous evolution and refinement we have set the highest industry standards for Quality, Reliability and Efficiency.

We are committed to following this path today and in the future.

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