MORITA

Veraviewepocs 2D

High speed panoramic X-ray
Crystal clear images with reduced radiation

Thinking ahead. Focused on life.

Thinking ahead.


Focused on life.

High speed Digital Panoramic / Cephalometric
7.4 seconds for Panoramic, 4.9 seconds for Cephalometric

Our new cutting edge technology features extremely high quality images with low X-radiation.
Veraviewepocs 2D features a variety of specialized programs, such as the Orthoradial Panoramic projection, which reduces the overlapping of neighboring teeth, and the Shadow Reduction Panoramic projection, which reduces obstructing shadows, as well as our AF function for easy, accurate patient positioning.
High definition, refined image processing offers multi-plane observation – enabling accurate diagnosis and analysis.
Veraviewepocs 2D is also completely upgradeable to our Veraviewepocs 3D R100 / F40 model.

Highlights at a glance
Digital Panoramic

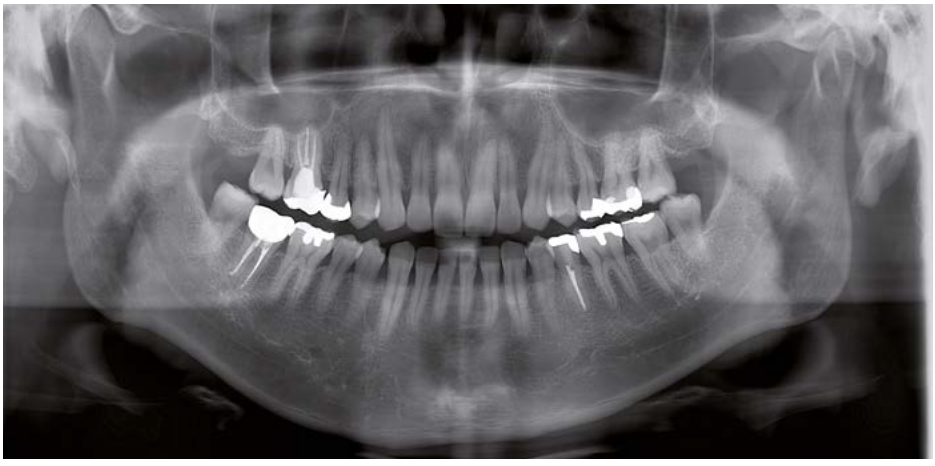
- **Fine high speed,** exposure time 7.4 seconds, 1/4 X-radiation*
- **High quality images** using both Digital Direct Automatic Exposure (DDAE) and Automatic Image Enhancer (AIE)
- **High resolution images** even in Fine High Speed Mode
- **Easy patient positioning with AF automatic positioning,** triple laser beams, and power assisted movement
- No film or film development necessary

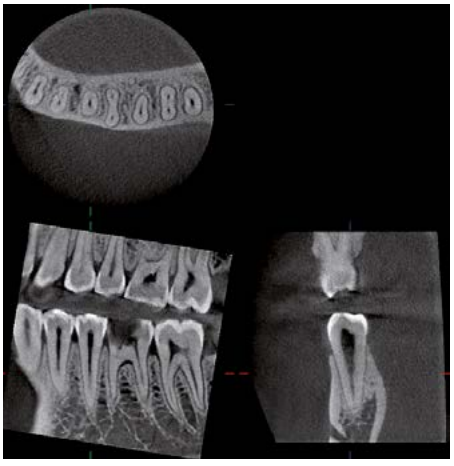
Digital Cephalometric

- High speed, exposure time approx. 4.9 seconds, 1/10 X-radiation*
- **More diagnostic information** – greater dynamic range
- **Imaging process** can be completed within 20 seconds
- **Fully automatic irradiation** settings for easy operation
- No film or film development necessary

* This comparison is made with the Veraviewepocs film-based system

High quality images with less X-ray dosage to upgrade Veraviewepocs 3D R100 / F40

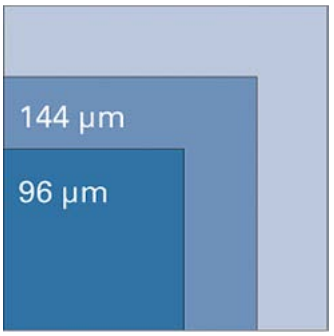




3D image available only with Veraviewepocs 3D R100 / F40.

Super high quality Digital Panoramic Images

**Super high quality images –
The Veraviewepocs has high resolution even in Fine High Speed Mode. The resulting image has high resolution, with superb density and contrast. Digital Direct AE (automatic exposure) and Automatic Image Enhancer always obtains the optimal image.**



Fine High Speed Mode: pixel size 144 µm
Super Fine Mode: pixel size 96 µm

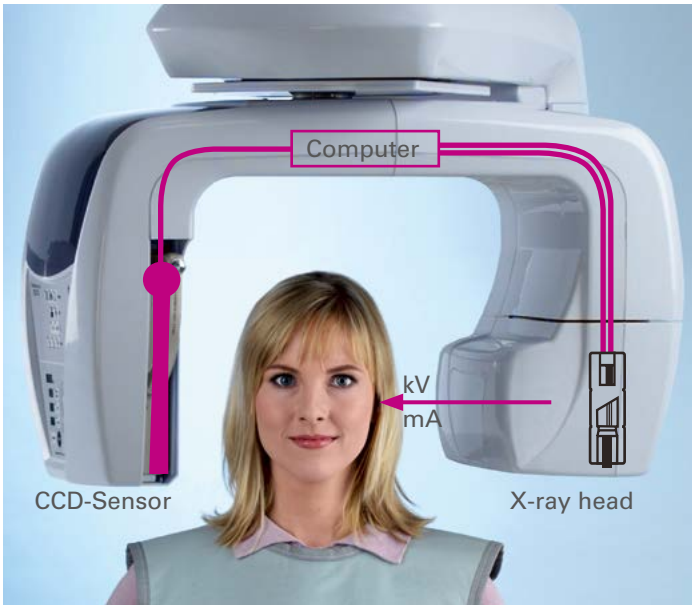
High resolution

Fine High Speed Mode:
Pixel size is reduced to 25% compared with the former model, so it produces superior images of a higher resolution.

Super Fine Mode:
Produces an even better image with increased resolution.

Panoramic sensor

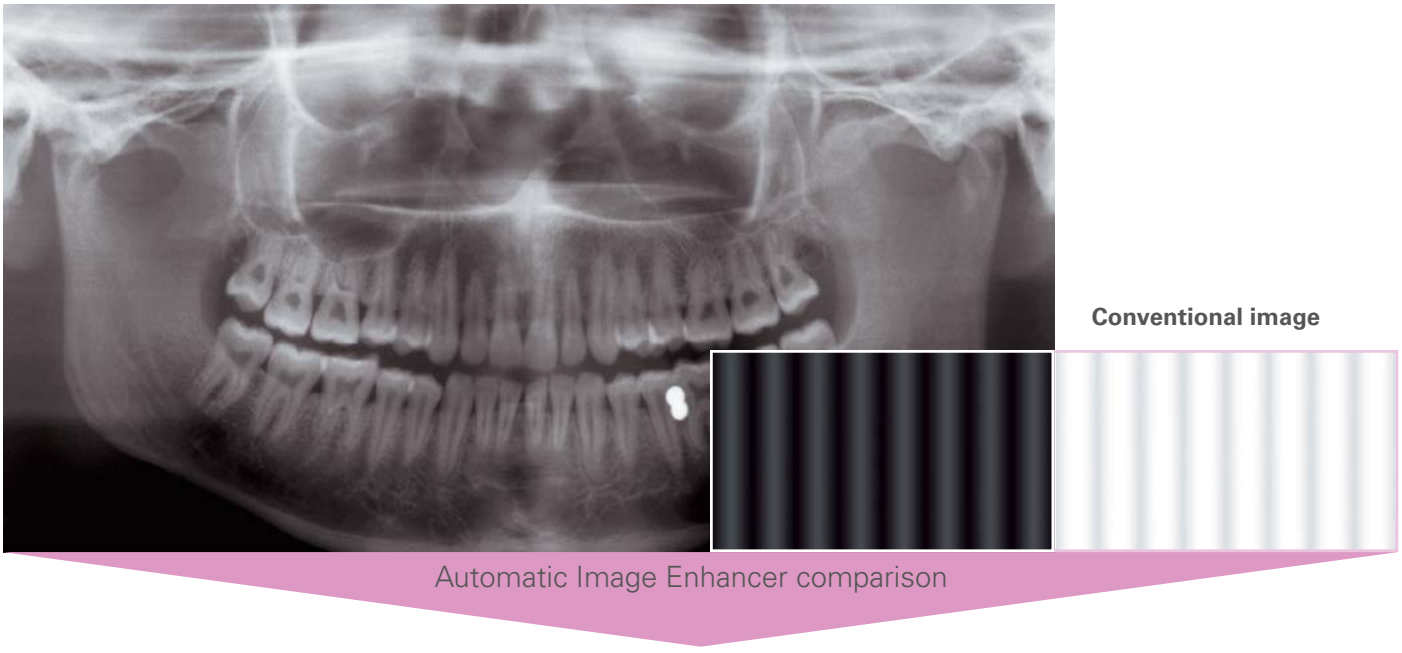
The high resolution CCD sensor (32-bit microprocessor) produces high quality digital panoramic images.



Digital Direct Automatic Exposure (DDAE)

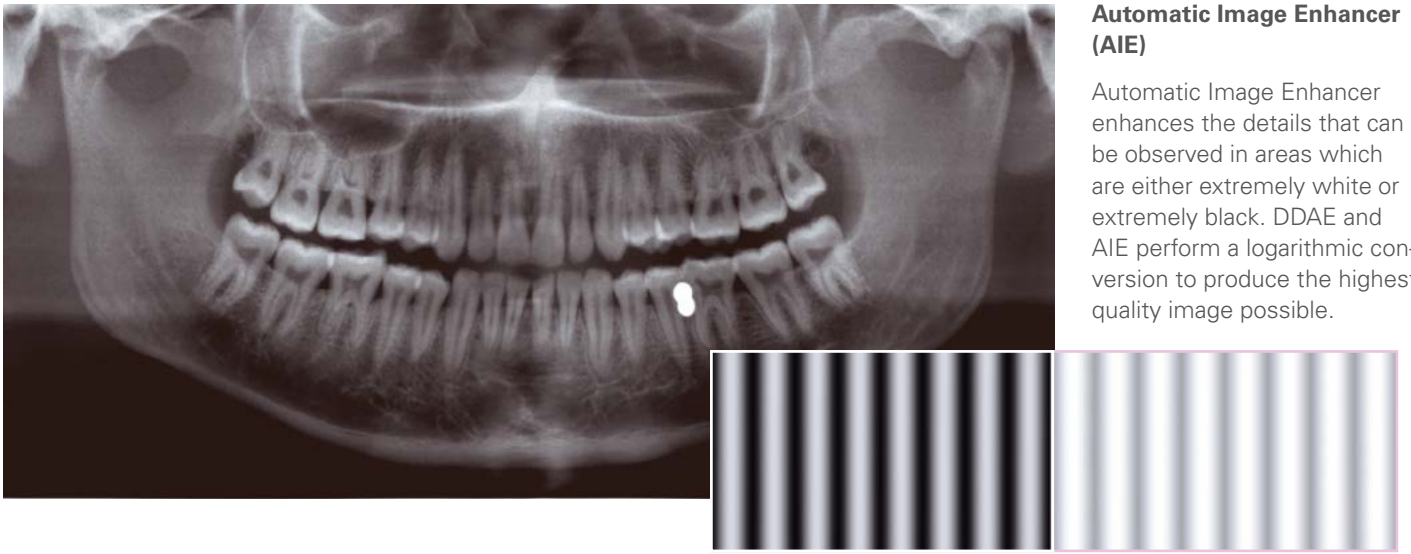
DDAE controls the X-ray tube voltage (kV) and current (mA) simultaneously by detecting X-rays passing through the patient. This improves the dynamic range, and, along with Automatic Exposure (AE), results in exceptionally clear images with the best possible contrast and even density. The automatic exposure level can be adjusted to meet your individual requirements.

There is no need to set the tube voltage and current.
Digital Direct AE guarantees the optimum tube voltage (60 to 90 kV) and current (1 to 10 mA). (Voltage and current may also be set manually.)



Conventional image

Automatic Image Enhancer comparison

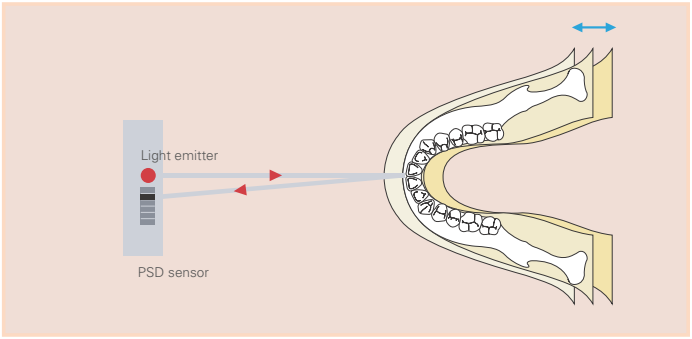


Automatic Image Enhancer (AIE)

Automatic Image Enhancer enhances the details that can be observed in areas which are either extremely white or extremely black. DDAE and AIE perform a logarithmic conversion to produce the highest quality image possible.

Easy positioning for Panoramic Images
AF, power-assisted movement and 3 laser beams

Easy, optimal patient positioning made possible by innovative technology.



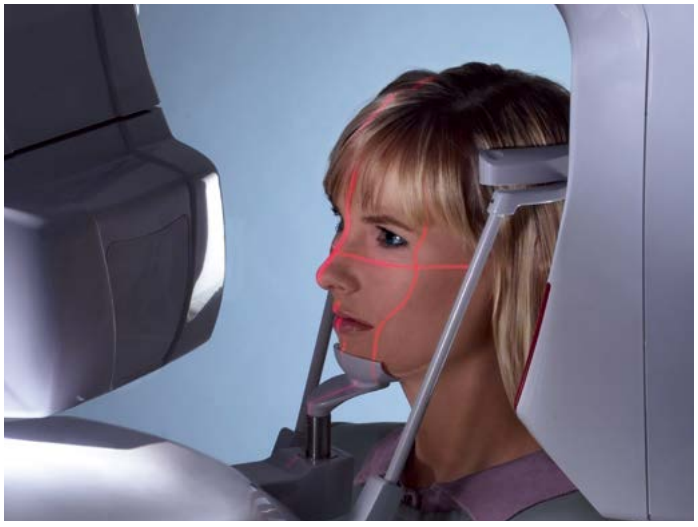
AF automatic positioning

The Light beam sensor automatically positions the C-arm without the patient having to move. It then measures the distance to the patient's anterior teeth and AF automatically moves the C-arm into the optimum position. This creates images with a high degree of reproducibility.

The semiconductor position detector (PSD sensor) measures distance with an extreme accuracy of 0.2 mm for high reproducibility. AF makes positioning easy and precise.

Power-assisted movement: C-arm is lined up to the patient

The electric motor of Veraviewepocs 2D enables convenient lift movement for smooth slow-starts and slow-stops. It is equipped with an automatic overload stop function for safety. In addition, the C-arm is lined up to the patient for easier patient positioning. Since the arm moves back and forth to line up with the patient, the patient does not have to move and can maintain a comfortable posture.

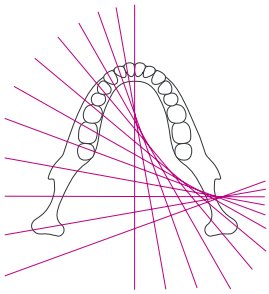


3 laser beams for accurate positioning

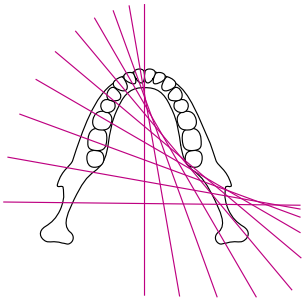
The patient's position is checked with the triple laser beams: the frankfurt plane beam, the sagittal plane beam, and the image layer beam for accurate positioning. The carbon temple stabilizing rods absorb almost no X-radiation and reduce the shadow of the rods in the image. The chin rest can be set at three different heights.

Consistent magnification throughout the image: Versatile projections; wheelchair support

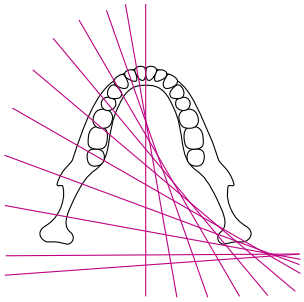
Multi-projections fit a variety of purposes. Consistent magnification is maintained throughout the image.



Standard Panoramic



Orthoradial Panoramic



Shadow Reduction Panoramic

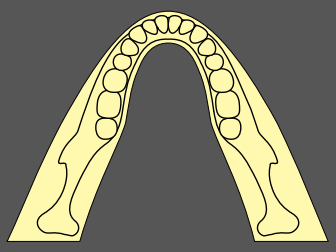
The Veraviewepocs 2D has various projections.

Distance from the X-ray tube to the patient is consistent, providing uniform magnification. In this way the overlapping of neighboring teeth or the shadow on the mandibular ramus is reduced, providing optimal results for jaw exposures.

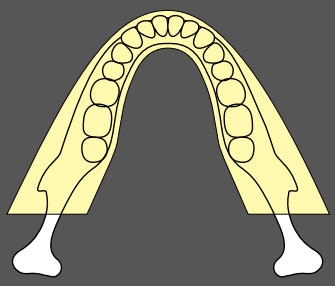
Wheelchair support

The Veraviewepocs 2D offers a width of up to 480 mm to accommodate patients in wheelchairs. For patients with a wheelchair span greater than 480 mm, there is an optional wall-mounted version available.

Multi-mode, versatile design

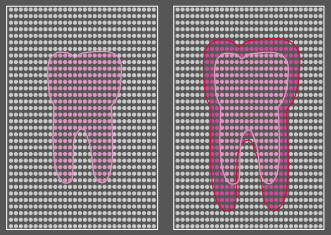


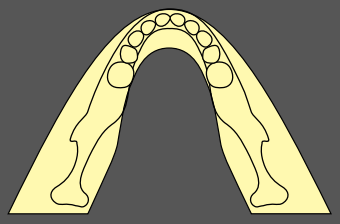
Clear, sharp images with a wide image-layer
Standard Panoramic, Mag.: 1.3 x constant
The thick / specially-designed image layer accommodates all the possible variations of dental arch shapes and sizes to produce extremely clear and sharp images.



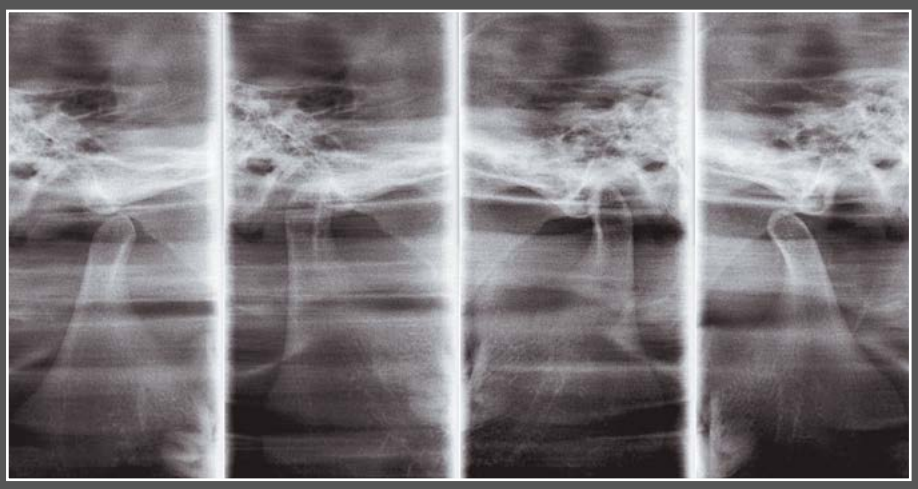
Images with greater detail
Standard Panoramic, Mag.: 1.6 x constant
The X-ray image is enlarged by a factor of 1.6 – the best prerequisite for an even better diagnosis.

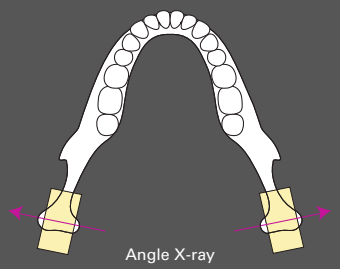
The enlarged exposure does not simply magnify the standard exposure; it actually provides greater detail because the distance between the patient and the X-ray tube is reduced.





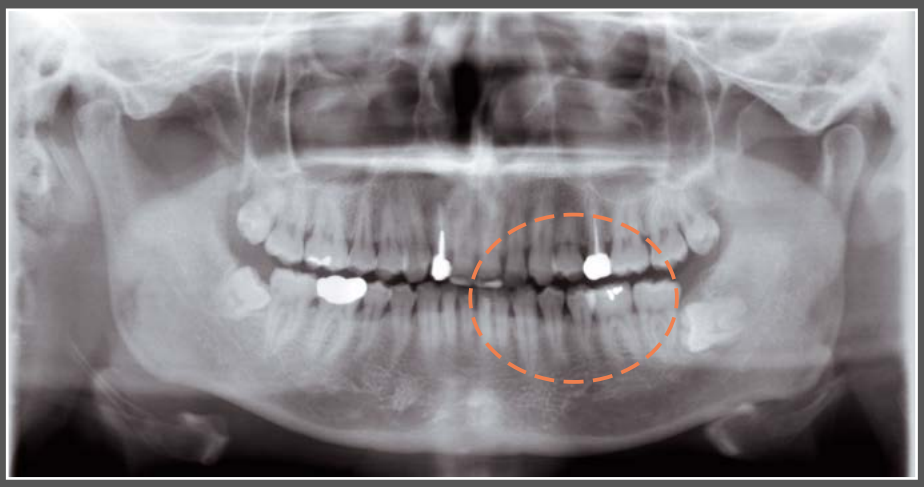
Reduced X-radiation
Pedodontic Panoramic, Mag.: 1.3 x constant (Mag.: 1.6 x is also available)
For children or people with small jaws. The arm's rotation range is reduced, and thus lessens the X-radiation.

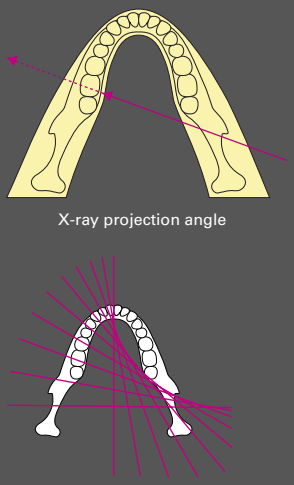




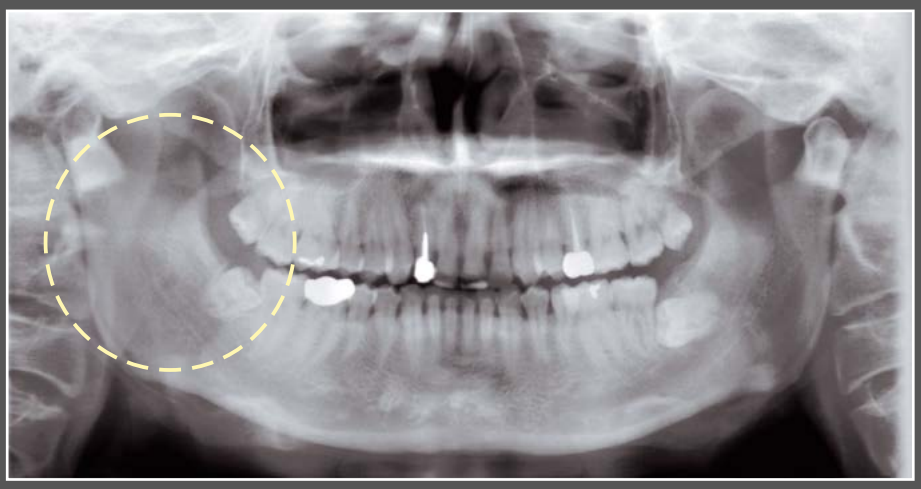
X-ray penetration angle aligned with the longitudinal axis of the TMJ condyle
TMJ 4 Views, Mag.: 1.3 x constant
Sharp, clear images of the TMJ are produced by aligning the angle of X-ray penetration with the longitudinal axis of the mandibular condyle head.

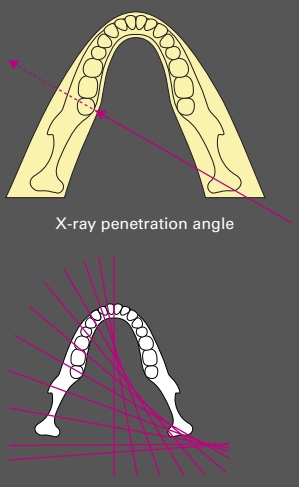
The various X-ray projection angles use the same image layer to suit your diagnostic purpose





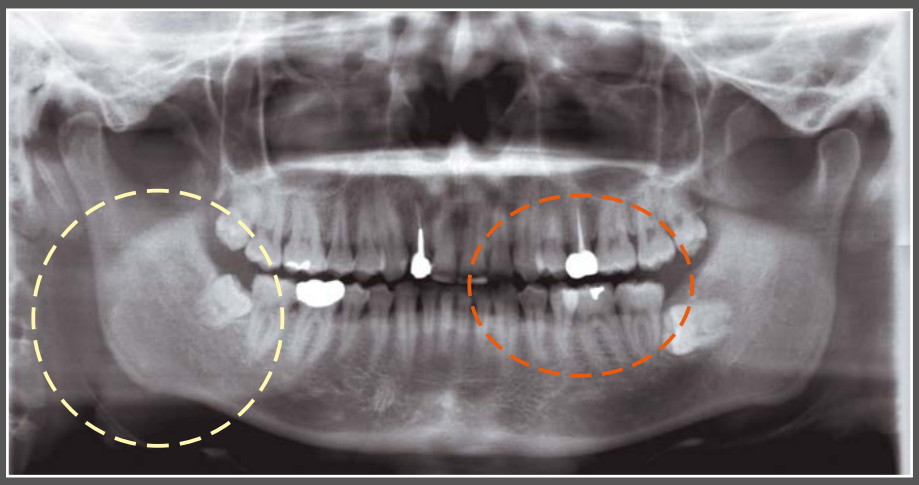
Images with less overlapping of teeth
Orthoradial Panoramic, Mag.:1.3 x constant (Mag.: 1.6 x is also available)
The perpendicular projection of the X-ray reduces the amount of overlapping with emphasis on the maxillar bicuspid region.



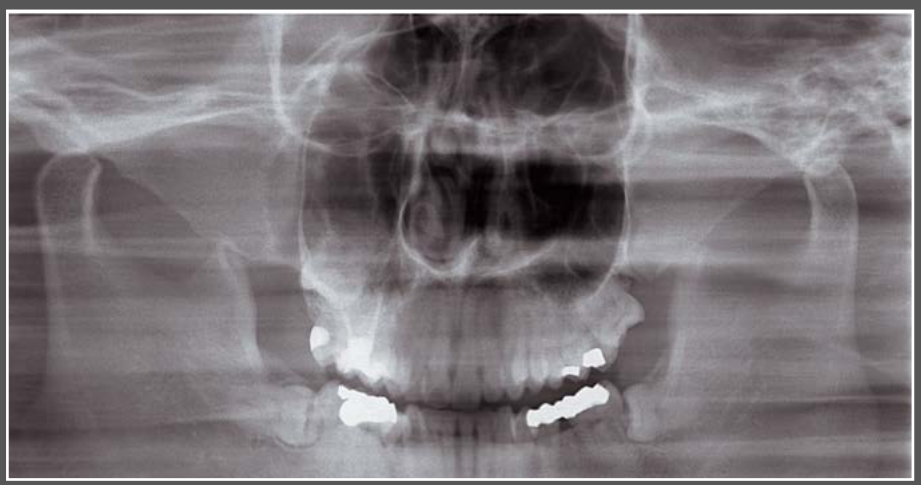


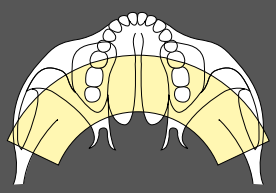
Shadow Reduction Panoramic, Mag.:1.3 x constant (Mag.: 1.6 x is also available)
Produces images with less mandibular ramus shadow.

Special panoramic images are made by changing the X-ray projection angle, not by changing the image layer orbit. In this way the overlapping of neighboring teeth or the shadow on the mandibular ramus is reduced. These images are good for diagnosis of dento-maxillo facial areas.



Orthoradial Panoramic, shadow reduction panoramic, and standard panoramic are taken for the same patient. Please compare.
Standard Panoramic, Mag.: 1.3 x constant
– Orthoradial panoramic for better observation of interproximal spaces
– Shadow reduction panoramic for better observation of jaw





Clear Images of the Maxillary Sinus Region
Maxillary Sinus Panoramic, posterior Mag.: 1.5 x constant.

Superfast, gentle and economical Digital CCD Cephalometric

The Veraviewepocs System offers high speed performance requiring only 4.9 seconds for a cephalometric scan. The speed helps ensure high quality images each and every time. For pediatric patients, the reduced scan time is especially helpful as repeat images due to patient movement is virtually eliminated.

That's gentle to all concerned: only 1/10* X-radiation level
With only a tenth of the X-ray radiation, the radiation exposure is reduced significantly compared with conventional X-ray.

High quality image with wide dynamic range
You obtain far more information about hard and soft tissue – with just a single acquisition.

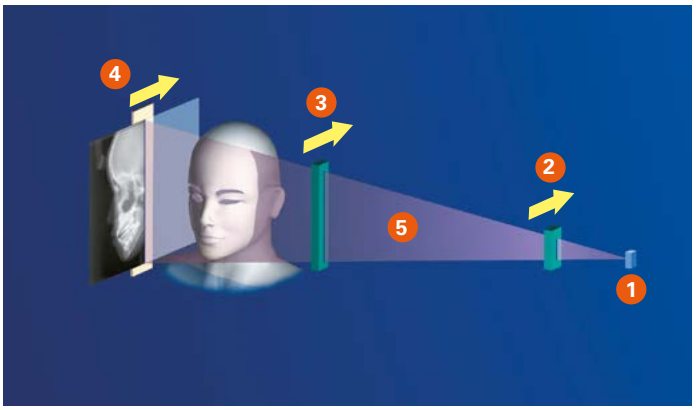
Fine High Speed CCD digital cephalometric
Fastest scanning time: 4.9 seconds

The variable image processing technique generated optimum gray-scale

Imaging process can be completed within 20 seconds

A single digital cassette for panoramic and cephalometric

A brand-new development: our special high-resolution CCD sensor with a height of 225 mm now makes digital cephalometric possible! Simply insert the new digital cassette. One digital cassette can be used for both digital panoramic and digital cephalometric imaging.



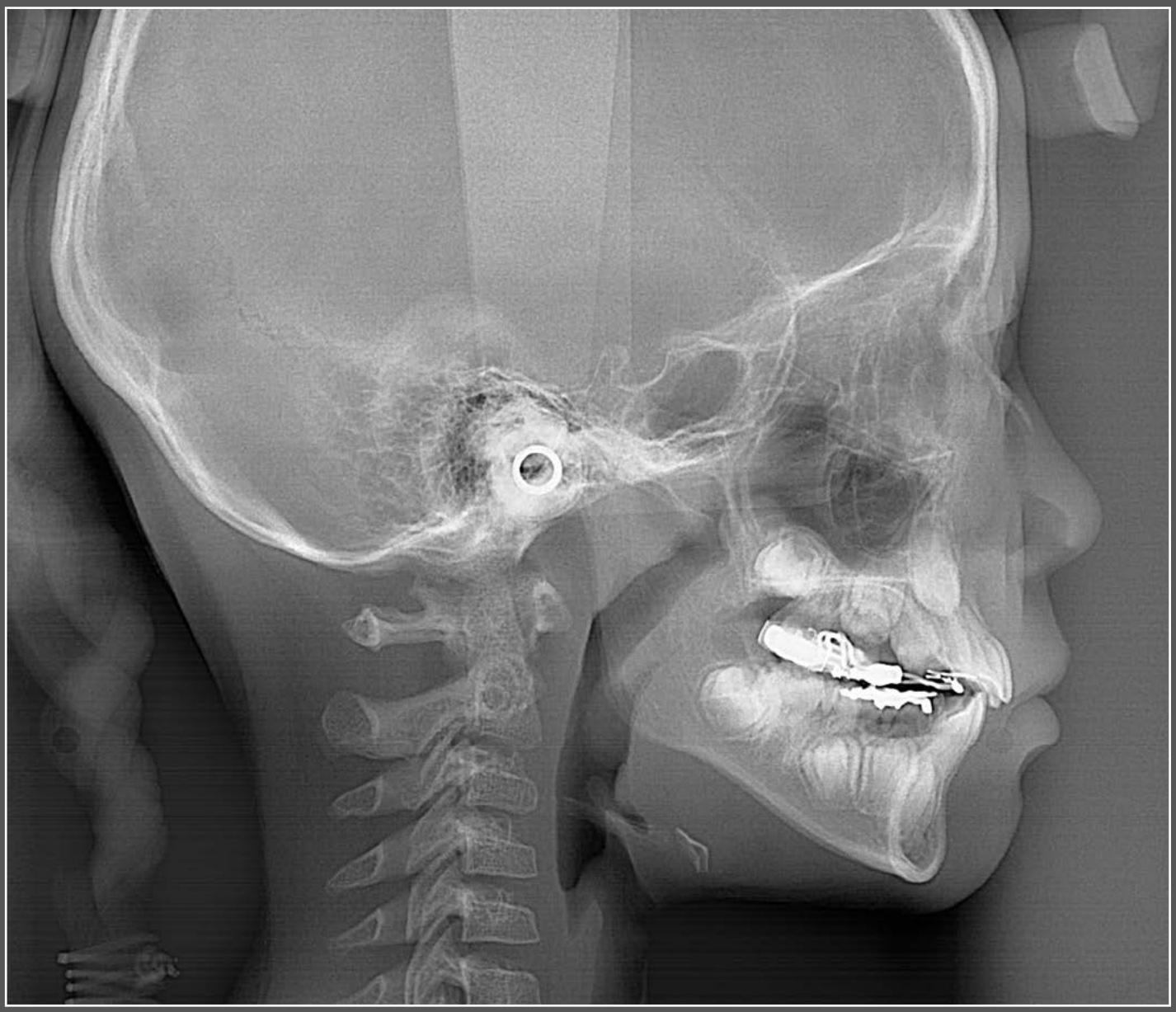
Variable image processing capabilities

The variable image processing technique generates optimum grayscale values – by offering different cassette running speeds for hard and soft tissue.

1 Focal spot of X-ray tube
2 Primary slit
3 Secondary slit
4 CCD sensor
5 X-ray beam

* This comparison is made with the Veraviewepocs film-based system

The variable image processing technique generates optimum gray-scale values



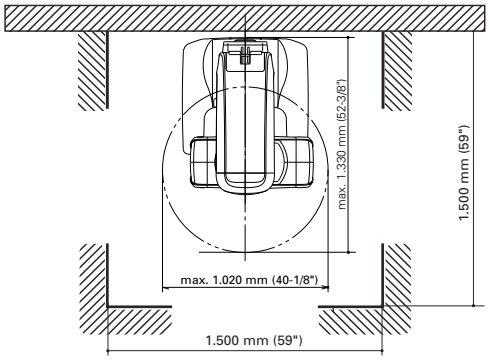
Posterior-anterior projection

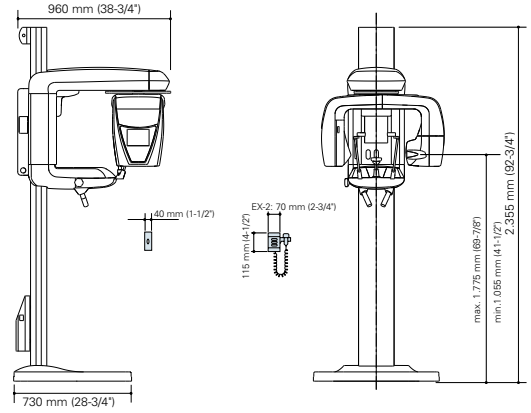
With the variable speed image processing technique, the entire exposure time is only 4.1 seconds.
Without the variable speed image processing mode, the processing time is 5.0 seconds.

Specifications / Dimensions

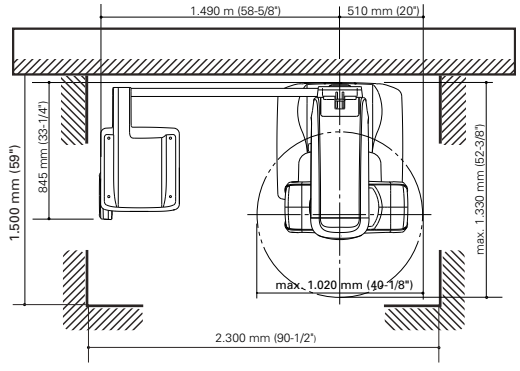
Machine dimensions & Suggested operating space requirements

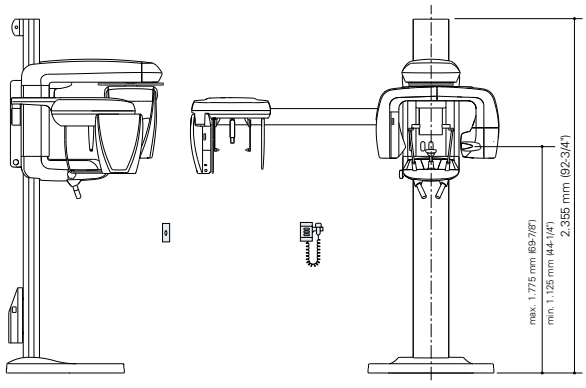
Veraviewepocs 2D
Panoramic





Veraviewepocs 2D
Panoramic Cephalometric





* The Veraviewepocs 2D should be anchored to a concrete floor and / or wall. The upgraded Veraviewepocs 3D R100 / F40 should be anchored to a concrete wall and floor. Ask the nearest Morita office or dealer for more details.

Veraviewepocs 2D – Technical Specifications

	Panoramic	Panoramic / Cephalometric
		
Trade name	Veraviewepocs 2D	
Model	X550	
Type	2D	2D CP
Sensor	Pan	Pan/Ceph
Input voltage	EX-2: 220/230/240 V 50/60 Hz	
Power consumption	2.3 kVA	
X-ray generator		
Tube voltage	60 – 90 kV	
Tube current	1 – 10 mA	
Effective focal spot	0.5 mm	
Panoramic		
Exposure time	Fine high-speed mode approx. 7.4 seconds, Super fine mode approx. 15 seconds	
Magnification ratio	1.3/1.5/1.6	
Positioning	Electric motor and AF optical distance sensor	
Cephalometric		
Imaging area	—	LA 225 x 254 mm, PA 225 x 203 mm
Magnification ratio	—	1.1
Dimensions		
Main unit	W 1,020 x D 1,330 x H 2,355 mm (W 40-1/8" x D 52-3/8" x H 92-3/4")	W 2,000 x D 1,330 x H 2,355 mm (W 78-3/4" x D 52-3/8" x H 92-3/4")
Control box	EX-2: W 70 x D 40 x H 115 mm (W 2-3/4" xDT 1-1/2" x H 4-1/2")	
Installation area	1.35 m^2 (14.53 ft^2)	2.60 m^2 (27.99 ft^2)
Weight	Approx. 190 kg (418 lb.)	Approx. 258 kg (568 lb.)

Imaging Program

Magnification ratio			
Standard Panoramic	Standard, orthoradial, and shadow reduction	1.3 constant	1.6 constant
Pedodontic Panoramic	Standard, orthoradial, and shadow reduction	1.3 constant	1.6 constant
Maxillary Sinus Panoramic	Posterior		1.5 constant
TMJ 4 views	Left and right sides	1.3 constant	

* Clinical images are provided by Kitasenju Radist Dental Clinic, i-View Imaging Center, Japan, and the department of dentomaxillofacial radiology at University of Leipzig, Germany.

* X-ray protection should be provided for the patient whenever X-rays are emitted.

* Design and specifications are subject to change without notification.

* Veraviewepocs 2D is fully upgradeable to the Veraviewepocs 3D R100 / F40.

* Component replacement, calibration, etc. are necessary for the 3D upgrade.

* Please refer to the Veraviewepocs 3D R100 / F40 brochure for more details.

Upgrade to Veraviewepocs 3D R100 / F40

	R100 / R100 CP	F40 / F40 CP
Additional functions		
LCD-Display Partial panoramic and cephalometric images	X	X
Image Layer Adjustment	X	X
3D Field of View		
Ø 40 x 40 mm	X	X
Ø 40 x 80 mm	X	X
Ø 80 x 40 mm	X	—
Ø 80 x 50 mm	X	—
Ø 80 x 80 mm	X	—
Ø R100 x 40 mm	X	—
Ø R100 x 50 mm	X	—
Ø R100 x 80 mm	X	—

Diagnostic and Imaging Equipment

Treatment Units

Handpieces and Instruments

Endodontic Systems

Laser Equipment

Laboratory Devices

MORITA

Distributed by
J. Morita Europe GmbH
Justus-von-Liebig-Str. 27a
63128 Dietzenbach
Germany
T +49. 6074. 836 0, F +49. 6074. 836 299
www.morita.com/europe

Developed and manufactured by
J. MORITA MFG. CORP.
680 Higashihama Minami-cho, Fushimi-ku
Kyoto 612-8533
Japan
T +81. 75. 611 2141, F +81. 75. 622 4595
www.morita.com

JME DE PUB 2030 1216 *1.