

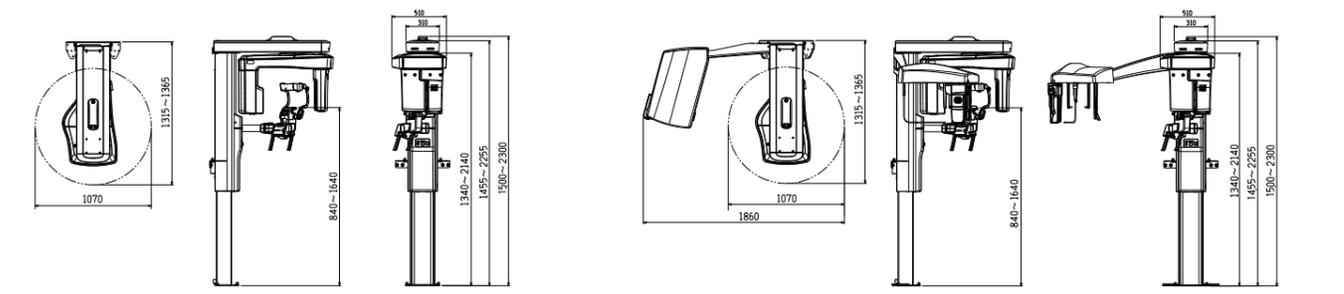


The history of Diagnostic imaging equipment of YOSHIDA

Ever since X-ray imaging equipment "ACMEX" in 1960, we have developed and manufactured the cutting edge equipment that is trusted by doctors.



Dimensions



Technical data

Panoramic	Cephalometric	3D	Common spec.
<ul style="list-style-type: none"> <li>•Sensor .....Direct CMOS Sensor</li> <li>•Grading .....16 bit (65,536 grading)</li> <li>•Exposure time .....7, 12 sec. (Panoramic) .....1.7 sec.x4 (TMJ)</li> <li>•Magnification factor ..1.3 -1.4 (Panoramic exposure, TMJ exposure)</li> <li>•Pixel.....100 μm isotropic/pixel .....1,510x3,341 pixel (Panoramic)*</li> </ul>	<ul style="list-style-type: none"> <li>•Sensor .....Direct CMOS Sensor</li> <li>•Exposure time ..... 8 sec./12 sec. (PA), .....10 sec./15 sec.(LA), .....8 sec./12 sec. (Carpus)</li> <li>•Magnification factor ..1.1</li> <li>•Pixel .....2605pixel×2266pixel (LA) .....2097pixel×2266pixel (PA/Carpus)</li> </ul>	<ul style="list-style-type: none"> <li>•Sensor ..... CMOS Sensor</li> <li>•Exposure size Xera MF φ44mm×64mm (61mm) 90μm φ80mm×79mm (72mm) 150μm φ110mm×79mm (69mm) 180μm φ156mm×79mm (65mm) 230μm Xera NF φ44mm×H64mm (61mm) 90μm φ85mm×H64mm (58mm) 150μm</li> <li>•Exposure time Standard .. 12 sec. (same for all exposure size) High def.. 16 - 20 sec. (Varies depending on the exposure size)</li> </ul>	<ul style="list-style-type: none"> <li>•Tube voltage.....70 - 90kV</li> <li>•Tube current .....2.0 - 4.0 mA</li> <li>•Power supply .....AC100-120V±10%, .....AC220V-240V±10%</li> <li>•Total filtration.....2.5 mm Aluminum</li> <li>•Operating condition Temperature.....10 to 40°C (50 to 104°F) Relative humidity...30 to 75% (no condensation) Atmospheric pressure .....700 to 1060 hPa</li> <li>•To install, the equipment needs to be wall-mounted.</li> </ul>

\*Horizontal pixel may change by the adjustment of layer.  
The product specifications vary depending on the area of purchase. Contact your local dealer for further information.

Quality Control



We are committed to quality control on a daily basis to provide products and services trusted by customers in the global market. In addition to compliance with the Japanese Pharmaceutical Affairs Law, the headquarters and Tokyo Factory have obtained ISO 13485 and ISO 9001 certification in an effort to systematically manage the quality control system.

All employees strive to meet the standard of ISO which expects us to achieve defective rate close to zero as well as creating a mechanism to minimize waste. Even if defectives are found, our quality control system has a mechanism to connect them with the improvements to ensure the continuous quality improvement.

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Distributor

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TEL +81-3-3631-2165 FAX +81-3-3631-2685 (International Business Div.)



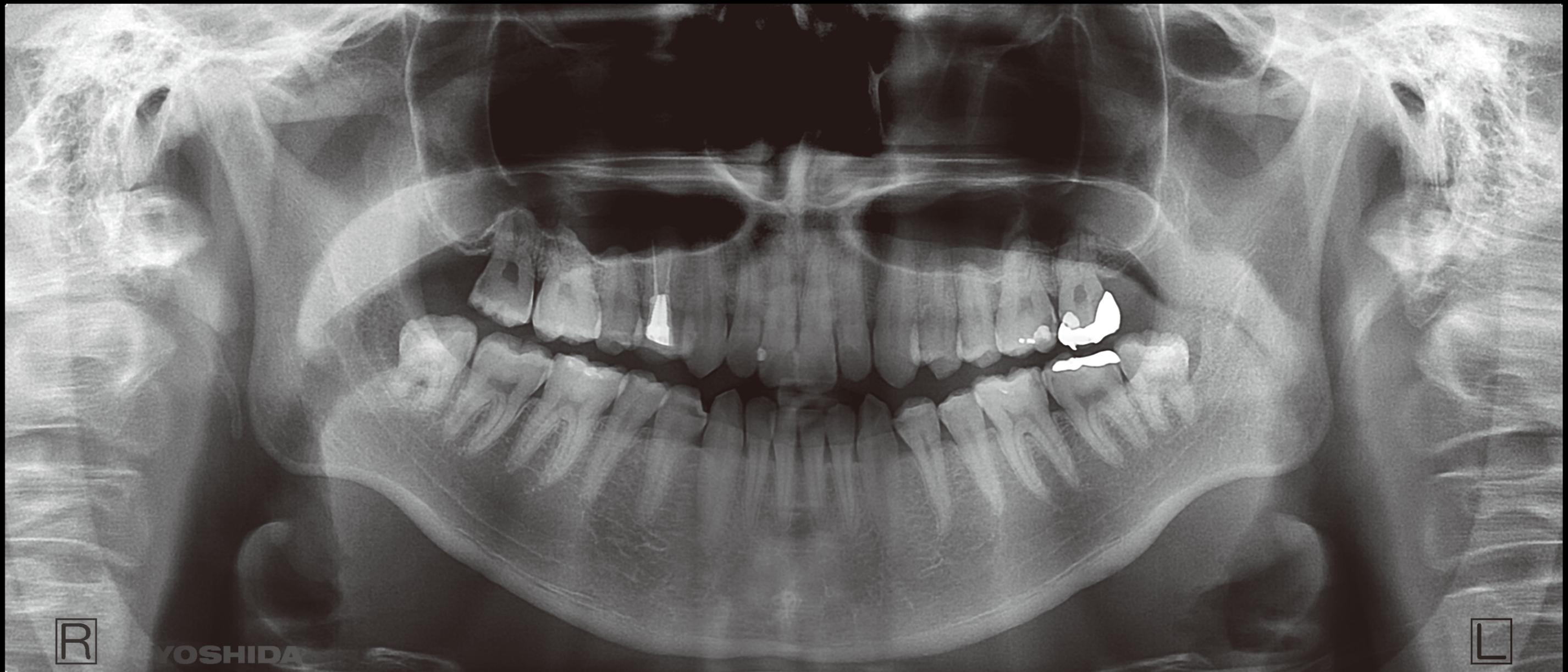
**DENTAL TI**  
simplifying dental technology



Panoura  
**X-ERA**

Panoramic and  
CBCT Imaging  
System

Transform Your  
Practice with 3D

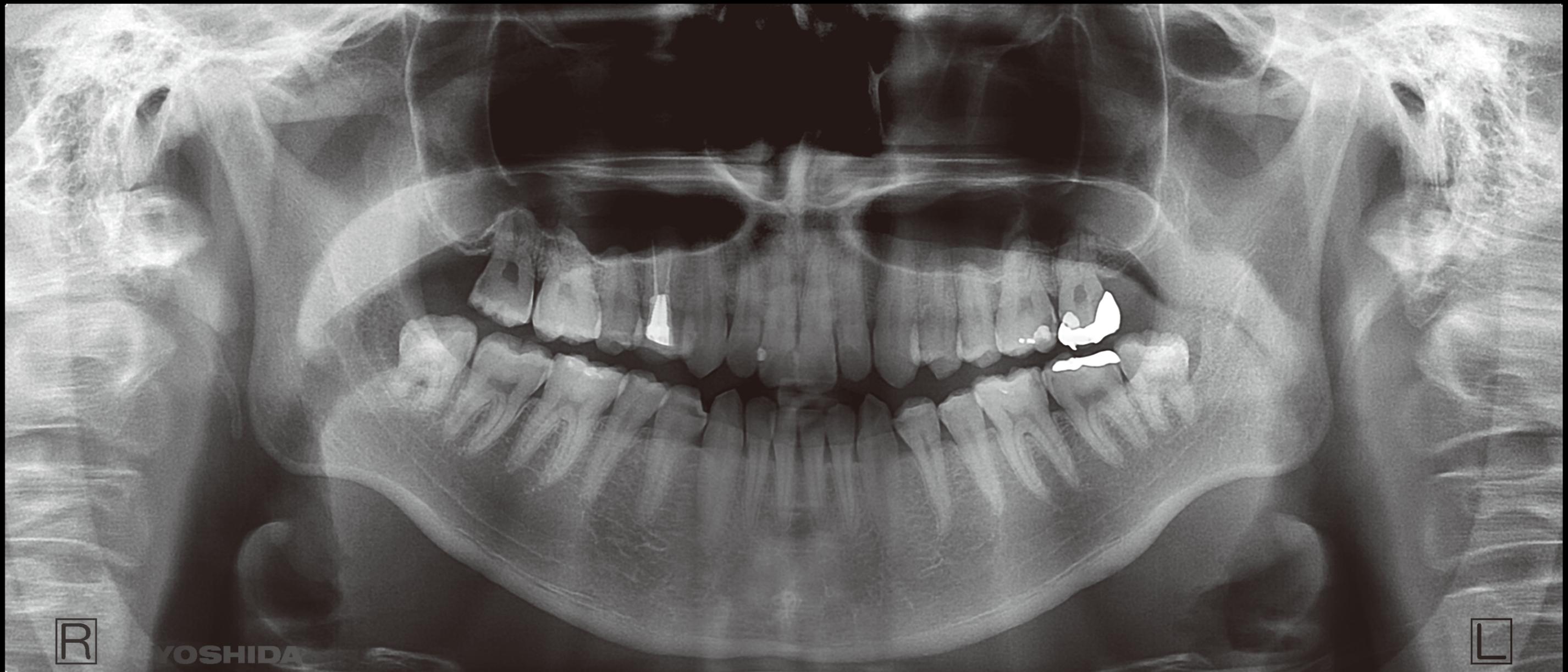


# 2D

*High image quality with confidence*

The X-era produces an uncompromised high-quality image providing the fine details. It also enhances workflow by minimizing the time spent on image enhancement by the software.





*2D*

*High image quality with confidence*

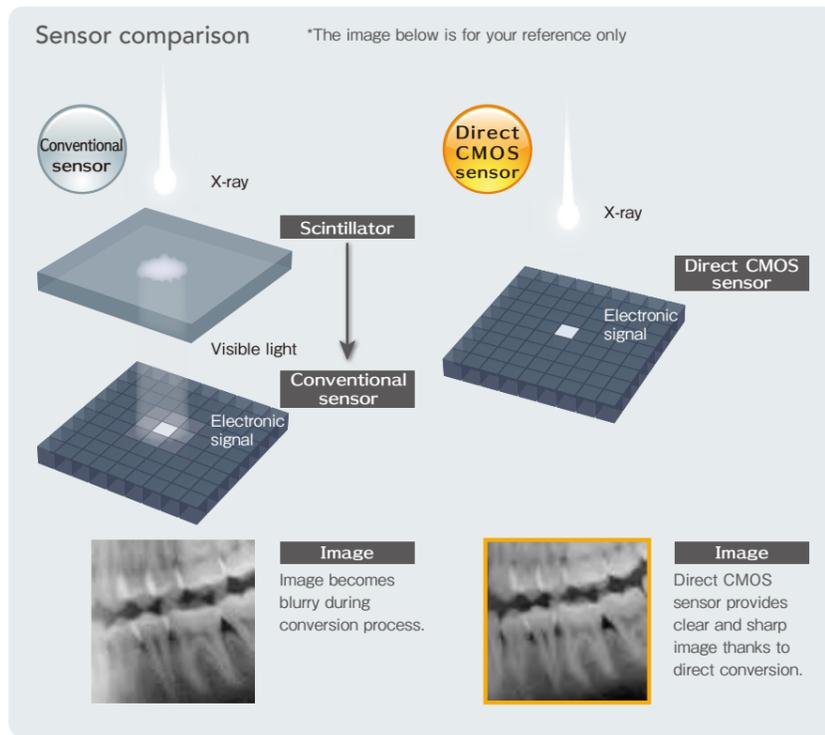
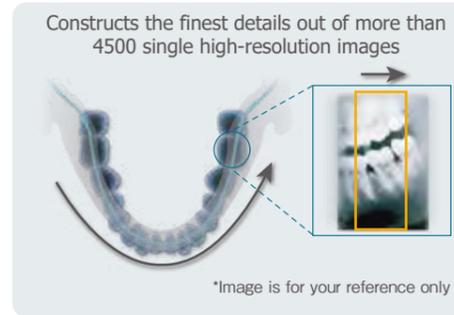
The X-era produces an uncompromised high-quality image providing fine detail. It also enhances workflow by minimizing the time spent on image the image-capture process.



## Super high-definition clinical image quality for accurate diagnosis

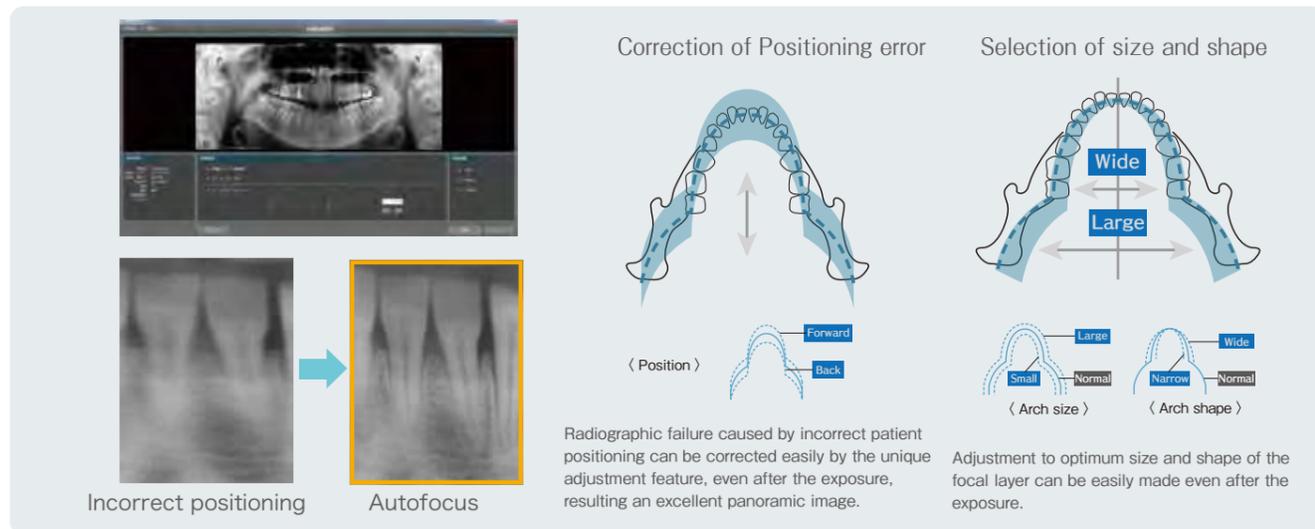
A Direct CMOS sensor and one-of-a-kind image construction technology creates blur-free and sharp images.

The sensor constructs the finest details of more than 4,500 single high resolution snapshots to provide extra crisp high-definition images. (16 bit 65,536 gray shades)

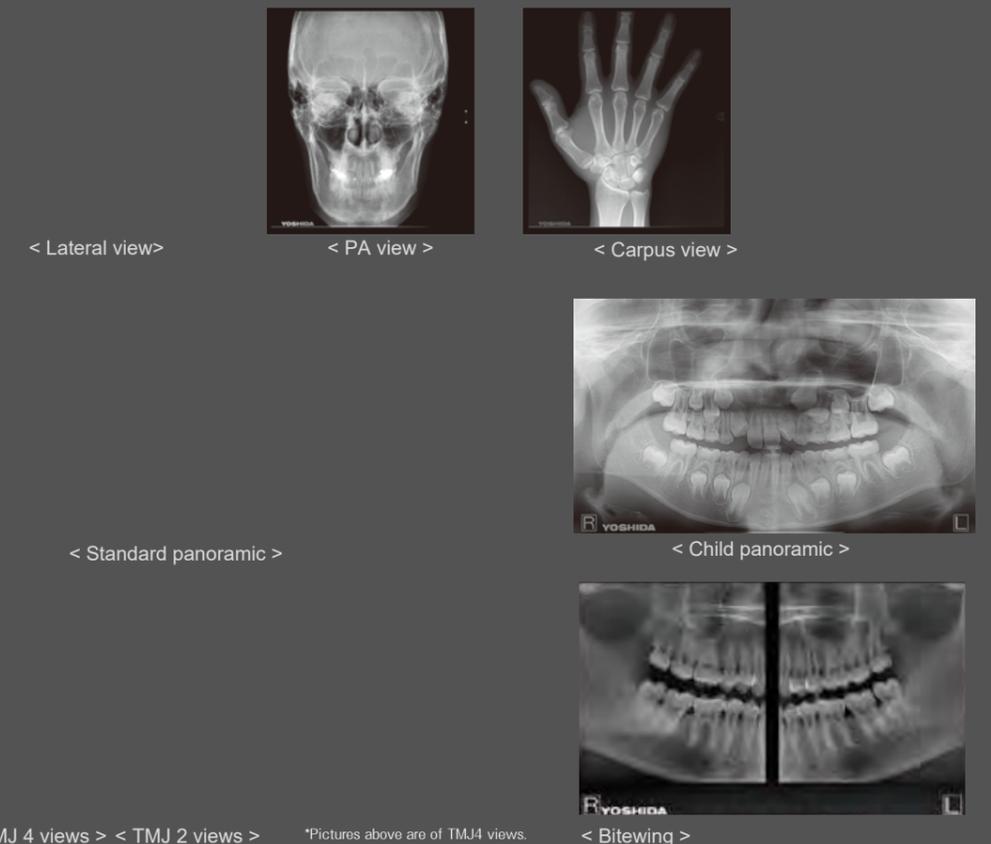
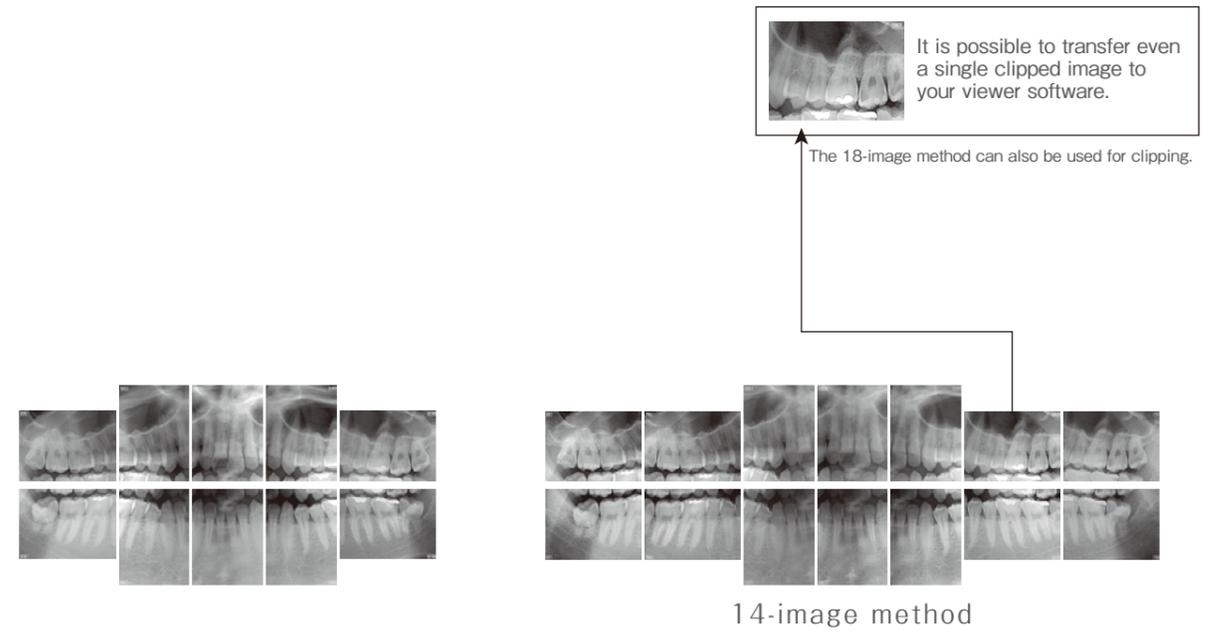


## Multi Focal Layer Technology enables optimal focus

Even after taking pictures, you can reconstruct images matching the patient's dentition size and shape, thus reducing the risk of re-take.



## Selectable Cephalometric sensor type

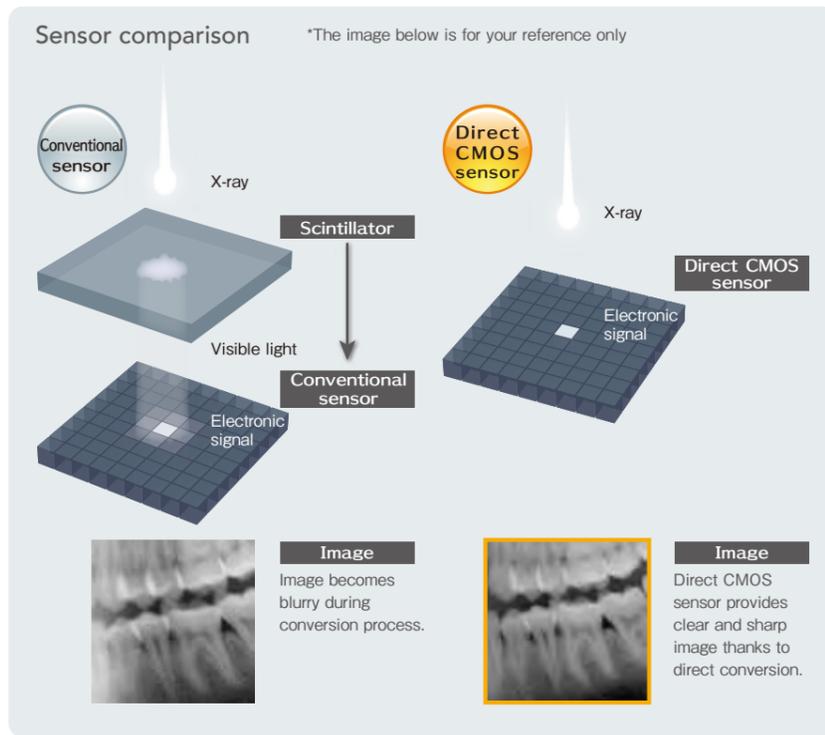
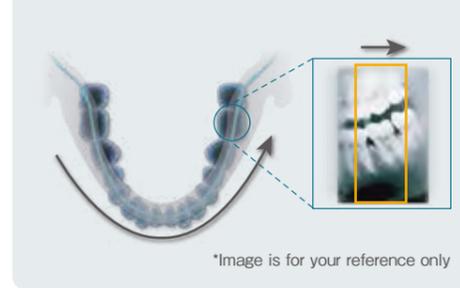


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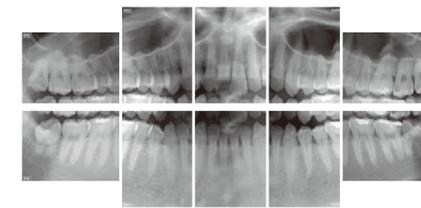


## Multi layer dental clipping

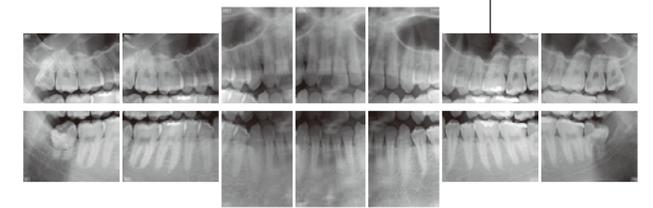


It is possible to transfer even a single clipped image to your viewer software.

The 18-image method can also be used for clipping.



10-image method



14-image method

## Multi Focal Layer Technology enables optimal focus

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**Correction of Positioning error**

**Selection of size and shape**

**Position:** Forward, Back

**Arch size:** Small, Normal, Large

**Arch shape:** Narrow, Normal, Wide

Radiographic failure caused by incorrect patient positioning can be corrected easily by the unique adjustment feature, even after the exposure, resulting an excellent panoramic image.

Adjustment to optimum size and shape of the focal layer can be easily made even after the exposure.

## Selectable Cephalometric sensor type

**Cephalometric (Type 1)**  
Switchable between Cephalometric and Panoramic sensor  
**Lower Cost**

**Cephalometric (Type 2)**  
Fixed type sensor for cephalometric and panoramic  
**Enhanced Efficiency**



## 2D exposure mode

Cephalometric exposure mode

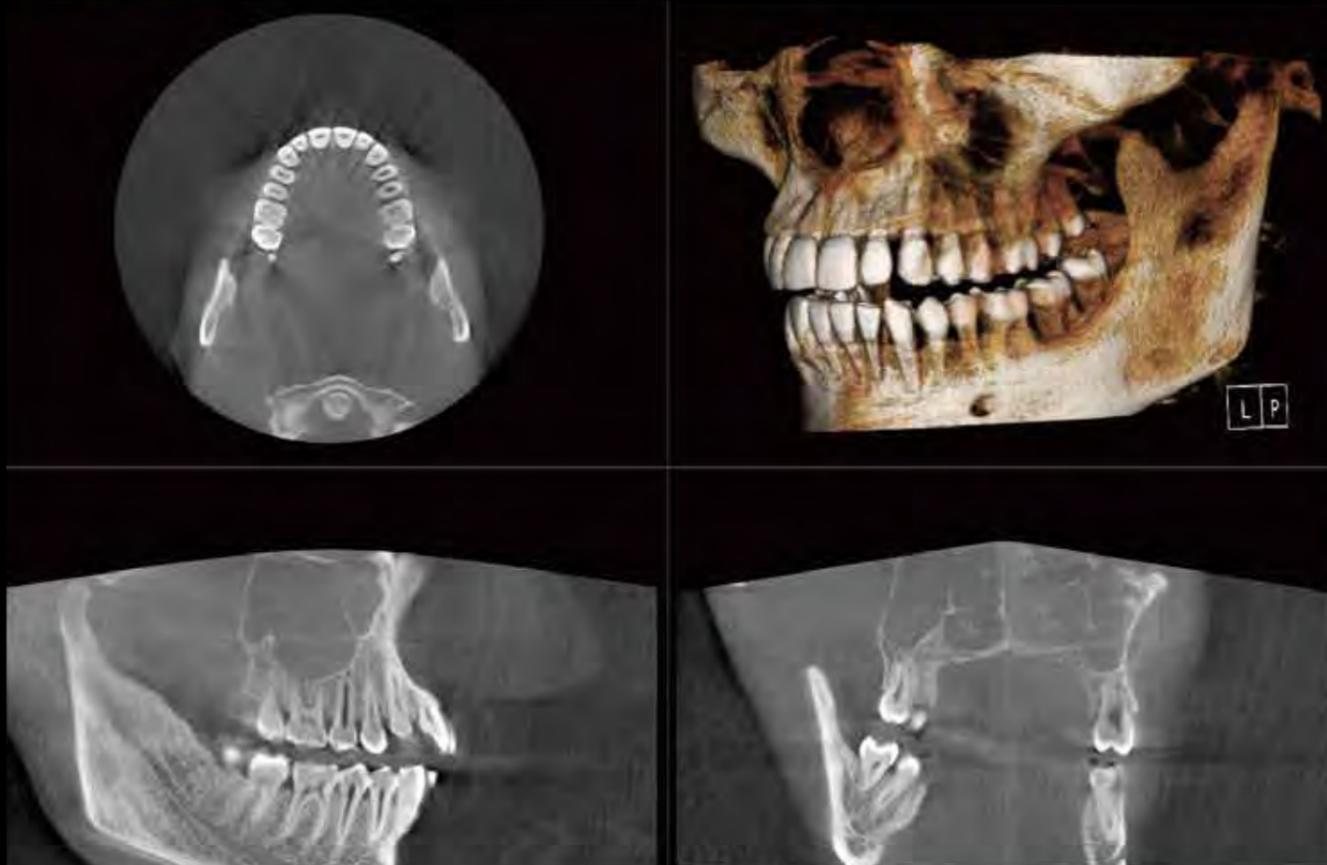


Panoramic exposure mode



\*Pictures above are of TMJ4 views.

# 3D



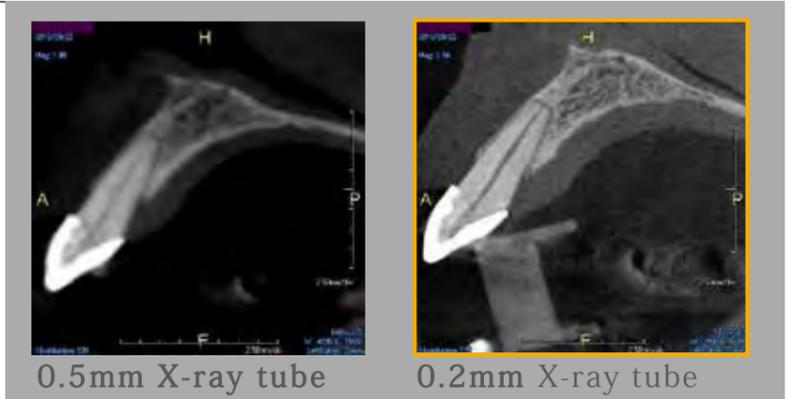
## 3D that benefits all doctors

Capturing high resolution 3D volumes have never been easier on the doctor and the patient. With industry-leading image quality in combination with intuitive software, fast scanning and universal integration, the X-era makes 3D imaging accessible for every dental professional.

## High definition 2D / 3D image requires focus

By incorporating one of the smallest focal sizes in the industry of 0.2 mm, the X-era creates ultra high-definition images with less blurring.

0.2  
mm  
X-ray tube  
focal spot



Comparison between two different focal spot scanned under the same condition

## Flexible for all dental clinical needs



FOV Dimensions  
 $\phi \times H$  (h) mm

18S

XERA

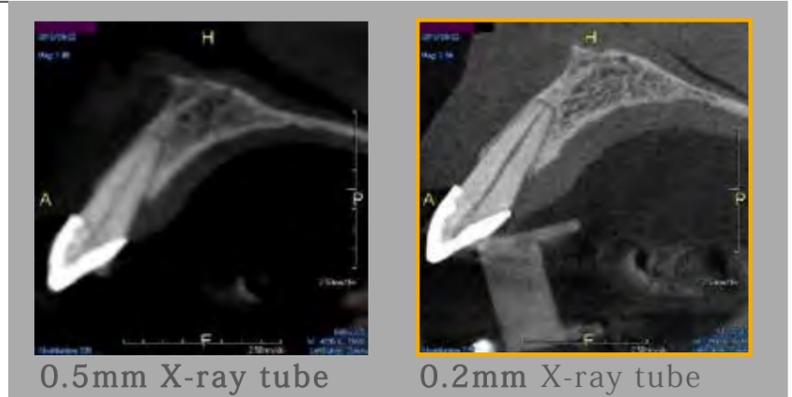
Endodontic, Impacted tooth extraction $\phi 44\text{mm} \times 64\text{mm}$ (61mm)			<input type="checkbox"/>	<input type="checkbox"/>
Perio Implant $\phi 85\text{mm} \times 64\text{mm}$ (58mm)			<input type="checkbox"/>	<input type="checkbox"/>
Maxillary sinus observation, Implant $\phi 80\text{mm} \times 79\text{mm}$ (72mm)			<input type="checkbox"/>	<input type="checkbox"/>
Both side Impacted tooth observation, Full mouth implant $\phi 110\text{mm} \times 79\text{mm}$ (69mm)			<input type="checkbox"/>	<input type="checkbox"/>
TMJ full mouth observation, Respiratory tract observation $\phi 156\text{mm} \times 79\text{mm}$ (65mm)			<input type="checkbox"/>	<input type="checkbox"/>

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TMJ full mouth,  
Respiratory tract  
 $\phi 156\text{mm} \times 79\text{mm}$  (65mm)



## 3D all doctor can benefit

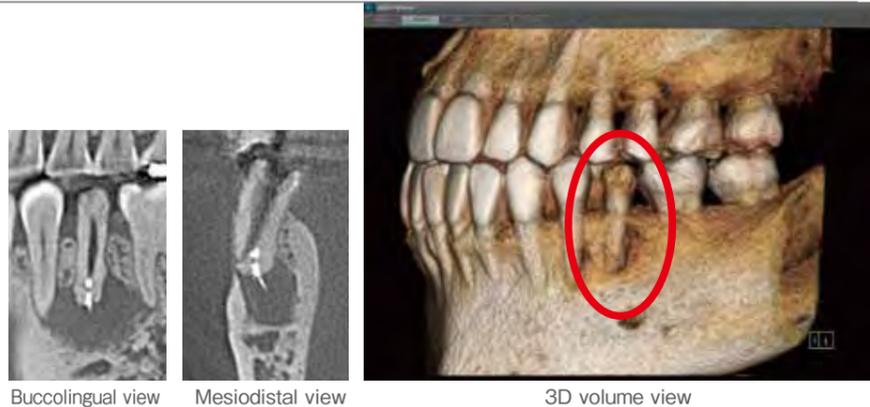
By making full use of all the mechanisms it was made possible to acquire high-definition 3D images. In addition, the burden on patients is reduced by shortening the scan time so 3D has become easier to incorporate into daily practice.

# Clinical Example

Scan modes that support every clinical need

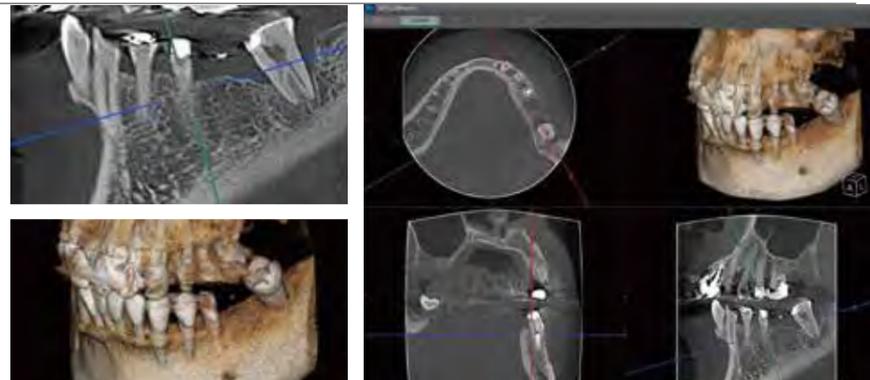
## Endo

Three-dimensional diagnosis is made possible so a case can be examined from all directions.



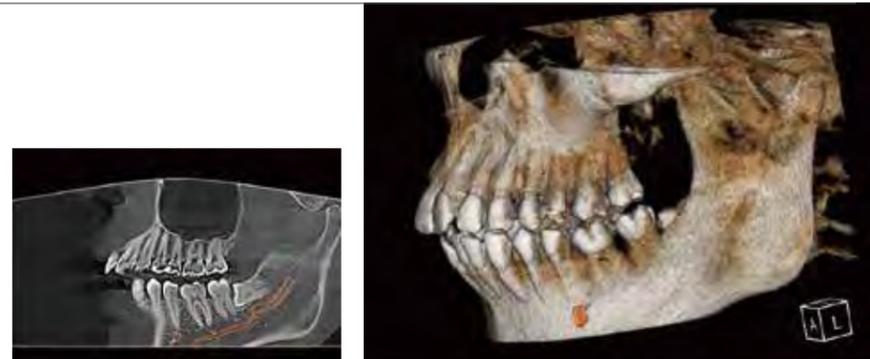
## Perio

Three-dimensional examination enables accurate diagnosis for areas that are hard to confirm in 2D. In addition, bone absorption can be better explained to the patient in three dimensions leading to greater case acceptance.



## Extraction (Horizontally Impacted Wisdom Tooth)

The relative position between the mandibular canal and the root apex can now easily be visualized in three dimensions. Creating the surgical plan is now dramatically more efficient and more effective.

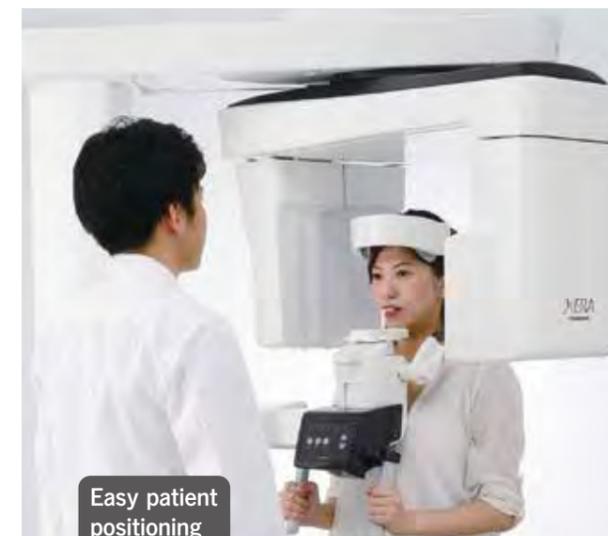


# Design philosophy

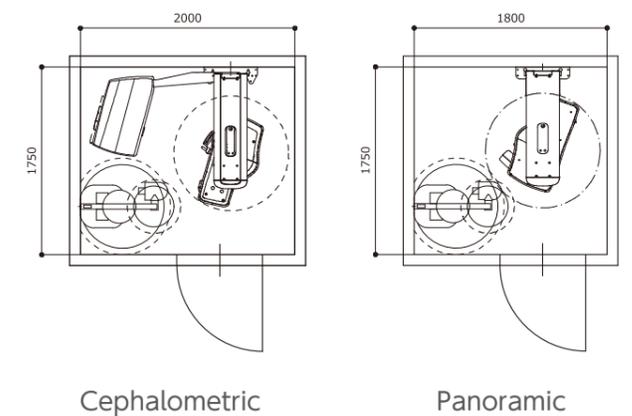
Designs and functions that are originally developed by YOSHIDA are sure to make the scan of the image optimal for desired purposes as easy as possible. It help reduces the burden on doctors and patients.

## Face-to-face positioning

The angle of the arm is designed to be 55 degrees as the most suitable for patient's entry and positioning. Introduction of wheel chair patient is also possible. Switching between Panoramic and 3D exposure is easily made by changing only bite blocks.



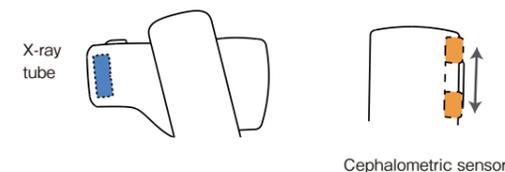
Compact design to fit in smaller X-ray room.



## Swing sensor technology

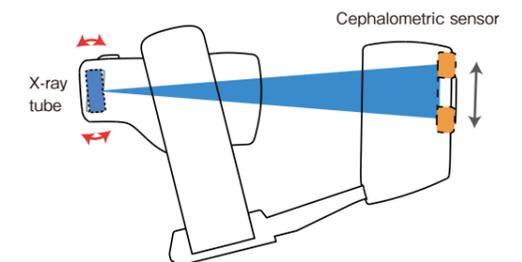
### Conventional scanning type

The X-ray tube stays in one position therefore, the intensity of the X-ray received by the sensor changes.



### New Swing technology

Since the X-ray tube swings according to the sensor, the intensity of X rays is uniform.

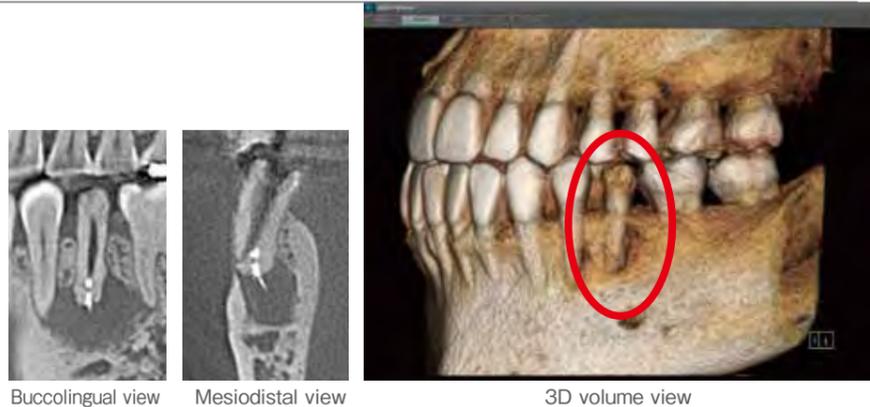


# Clinical Example

Scan modes that support every clinical need

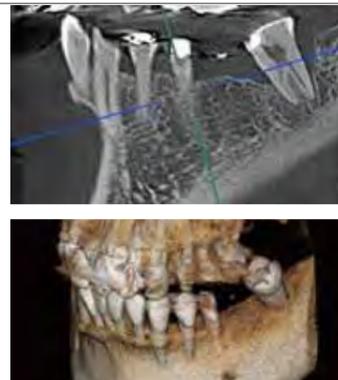
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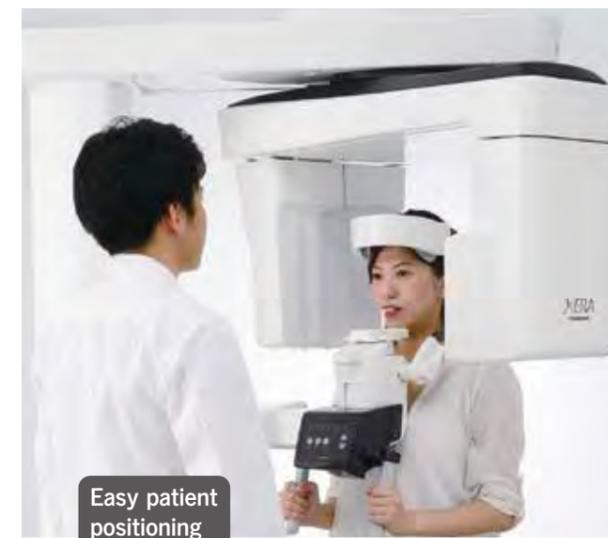


# Design philosophy

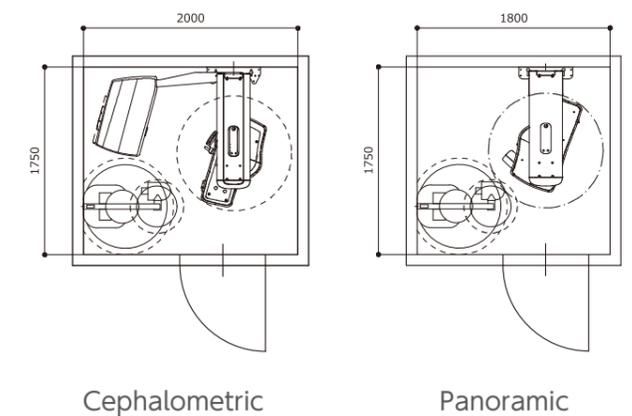
A design that not only creates a clinically invaluable image, but also makes the capture process easy on the doctor and the patient.

## Face-to-face positioning

The angle of the arm is designed to be 55 degrees, which is optimal for patient's entry and positioning. Patients in wheelchairs can also be scanned. Switching between Panoramic and 3D exposure is also very easy.



Compact design to fit in small X-ray room.



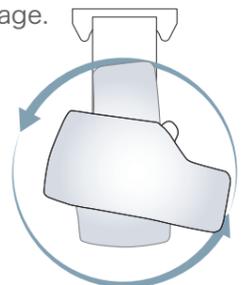
## 360° CT scan in just 12 seconds—with our largest FOV



Even with X-era's largest FOV size (Φ 156 mm × 79 mm), a full 360-degree 3D scan takes as little as 12 seconds. High-speed scans reduce the risk of patient movement, thus minimizing motion artifacts in the image.

12  
sec.

360°  
scan



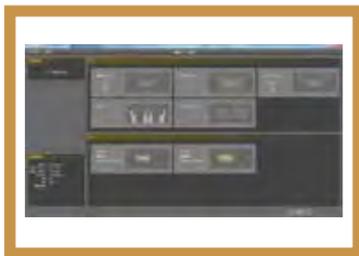
# VIEWER



## ONESYSTEM Imaging

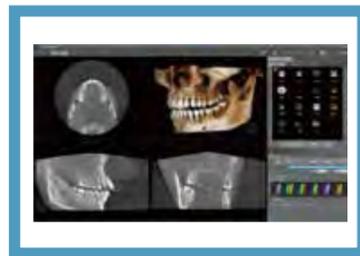
Viewer software offers intuitive operation for your daily practice, from scanning to the patient consultation.

### Scan



Quick and intuitive operation to select scan mode

### View



For viewing and manipulating images

### Edit



Stress-free operation

## 2Dviewer



Viewing of panoramic, intraoral and camera images are possible in one screen or images can easily be integrated into most major dental imaging platforms.

## 3Dviewer



With the click of a mouse, easily retrieve 3D volumes or plans created with those volumes.



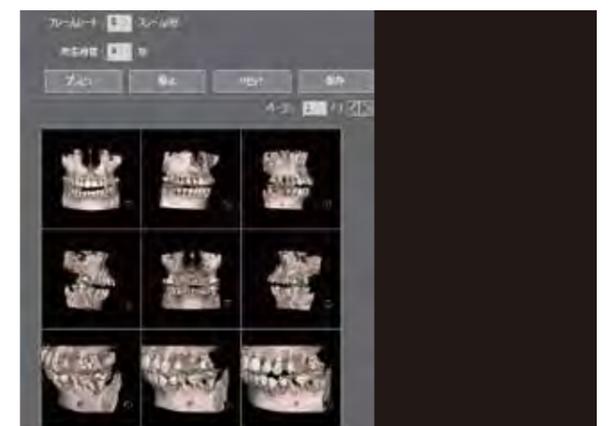
### Multiview

Comparing between pre/post-operative condition is possible by displaying all images on the screen.



### 3D cross-section

3D cross-sections allow a view of any desired sliced plane. With a simple, yet powerful interface, any location can quickly be viewed from any axis to gain information that cannot be generated from a 2D modality.



### 3D movie

3D Movie creates compelling presentation material to share with colleagues or patients. Bring your treatment plan to life in a way that static volumes can't!

# VIEWER



## ONESYSTEM Imaging

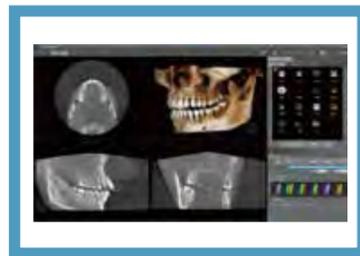
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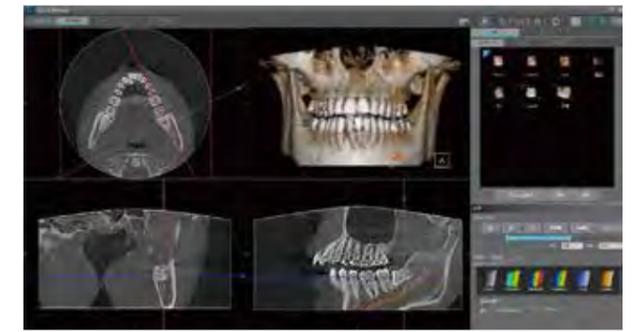
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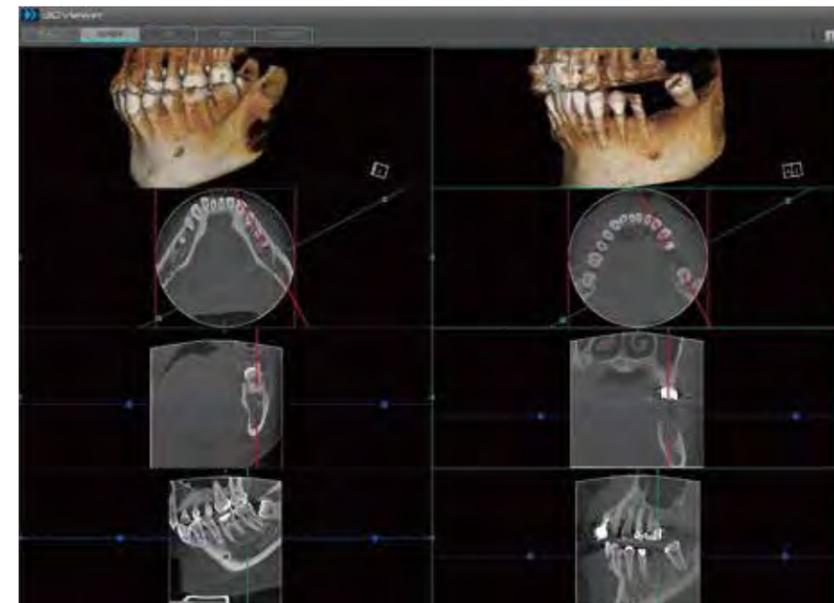


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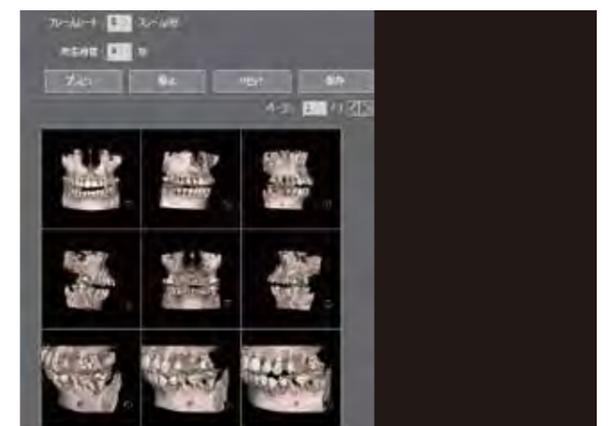
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