ImageWorks
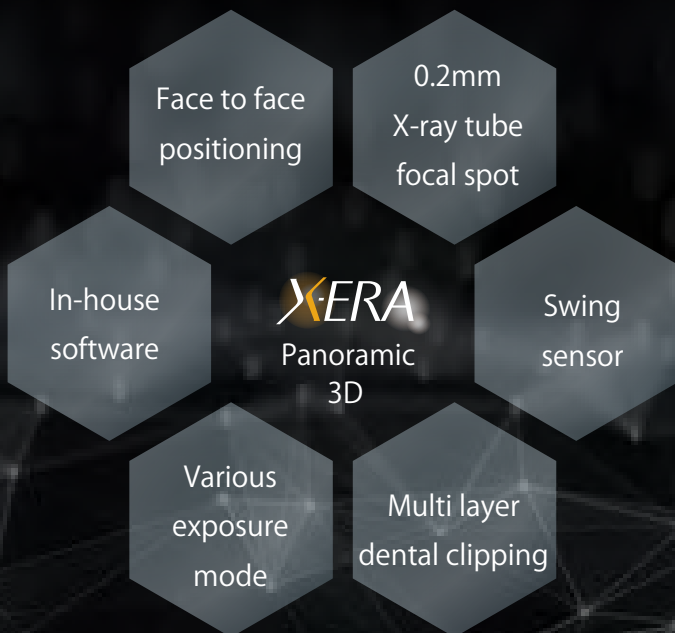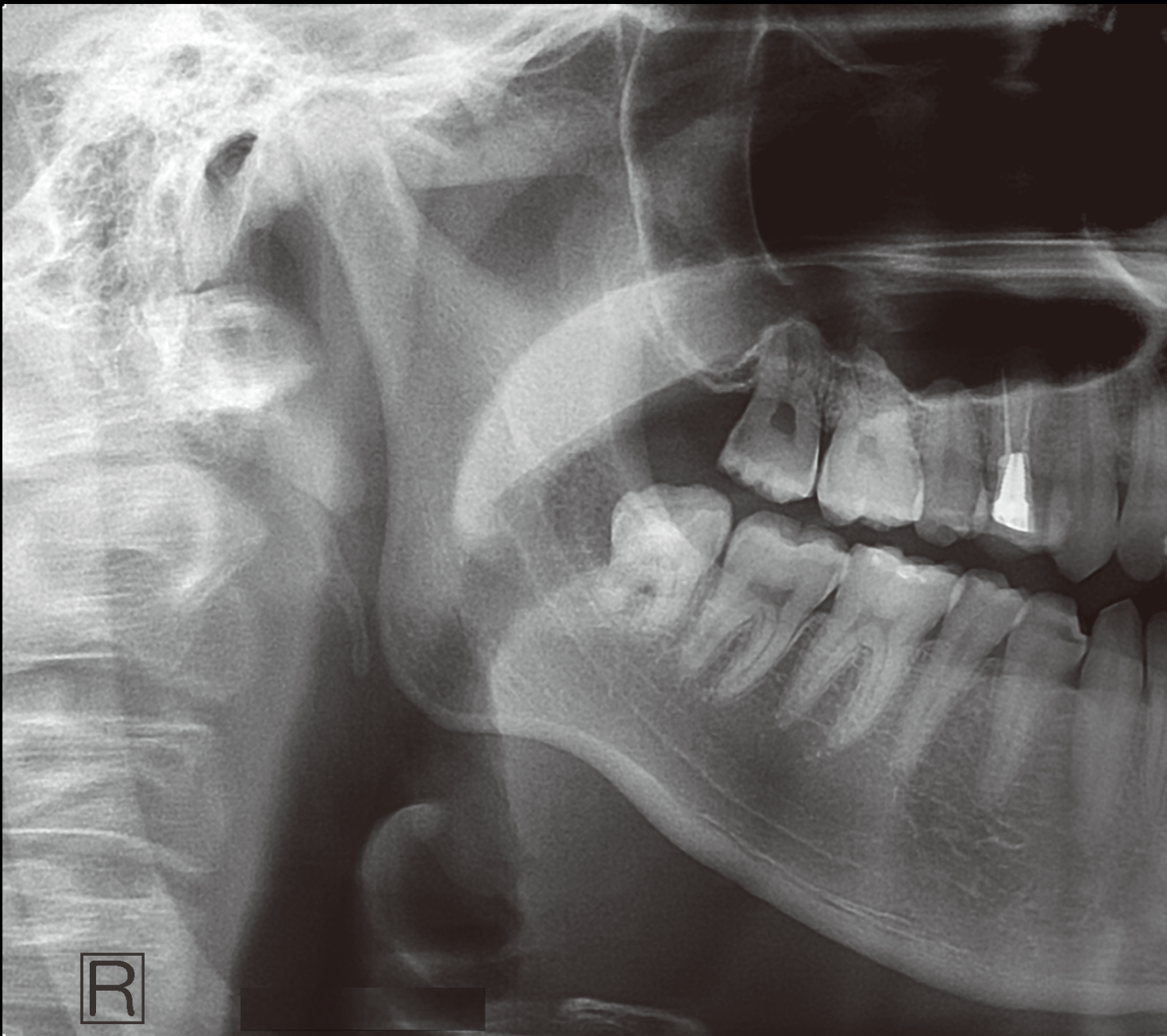
Panoura

X-ERA

Panoramic and CBCT Imaging System

Transform Your Practice with 3D

Face to face positioning

0.2mm X-ray tube focal spot

In-house software

XERA
Panoramic 3D

Swing sensor

Various exposure mode
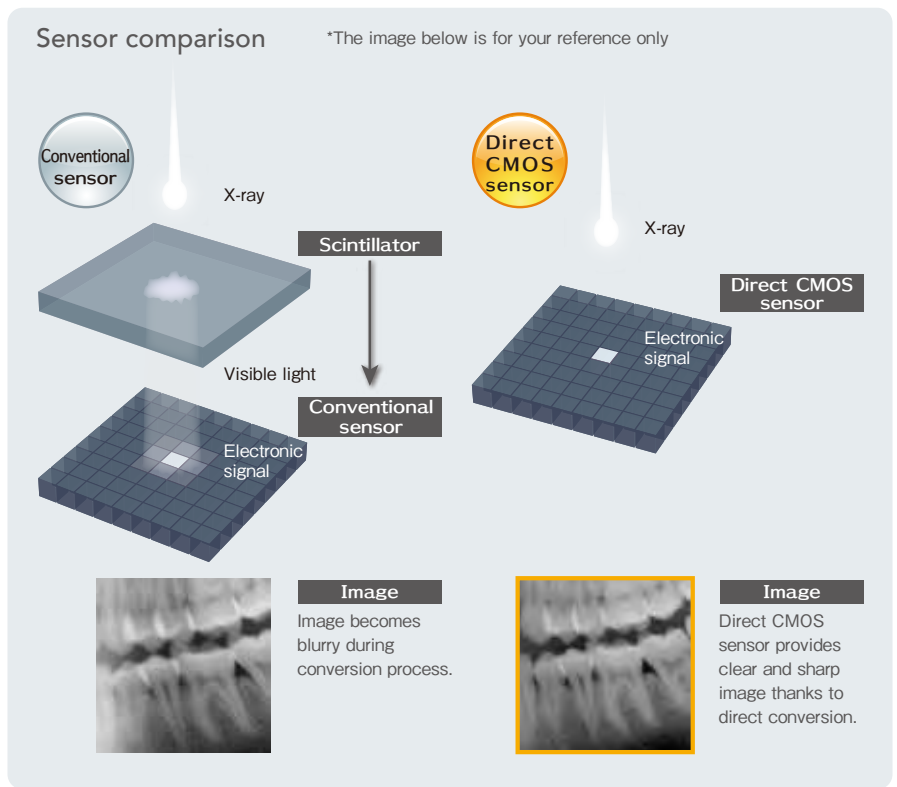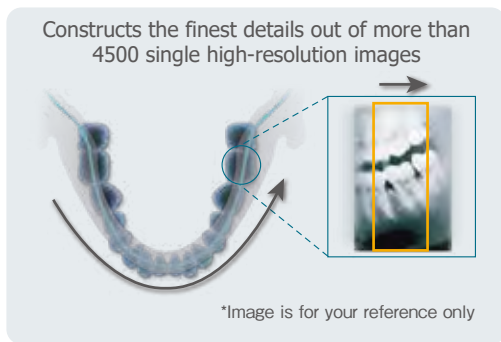
Multi layer dental clipping
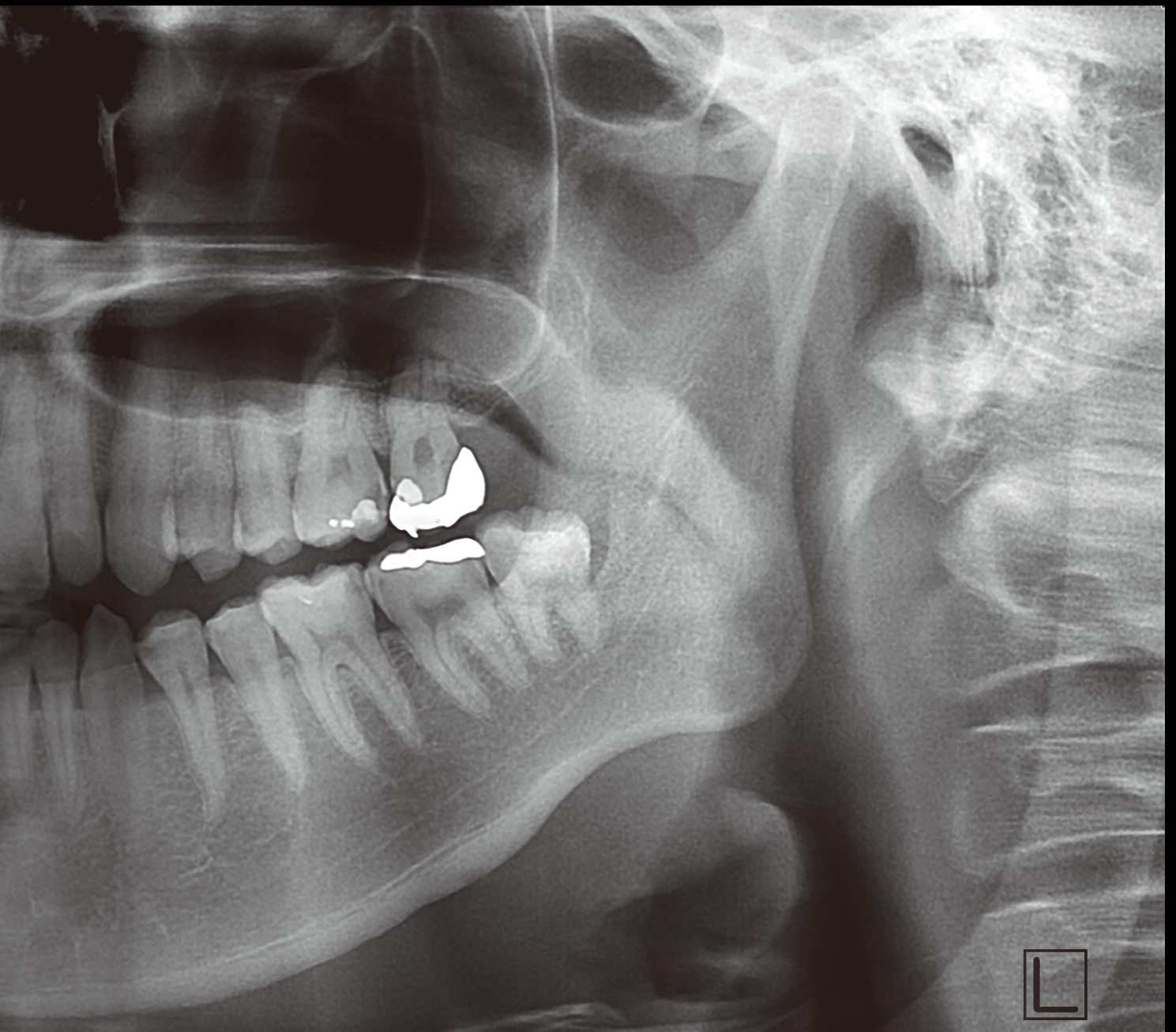
2D

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.

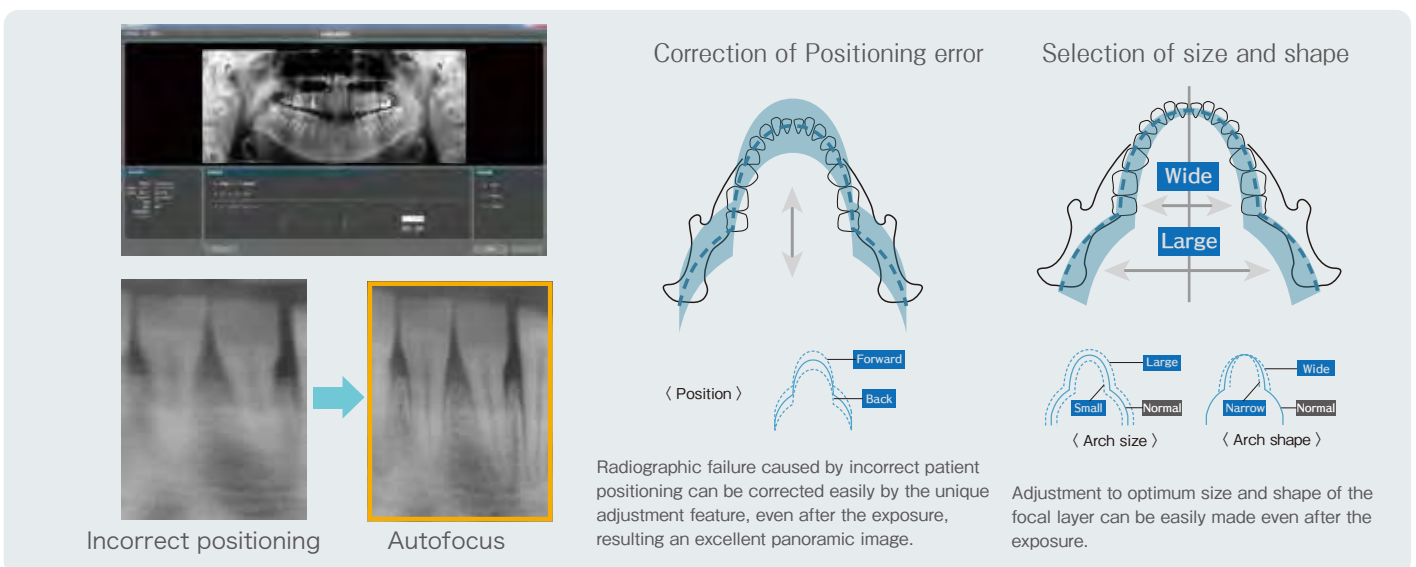# Super high-definition clinical image quality for accurate diagnosis

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)

Constructs the finest details out of more than 4500 single high-resolution images

*Image is for your reference only

Sensor comparison

*The image below is for your reference only

Conventional sensor

X-ray

Scintillator

Visible light

Conventional sensor

Electronic signal

Direct CMOS sensor

X-ray

Direct CMOS sensor

Electronic signal

Image
Image becomes blurry during conversion process.

Image
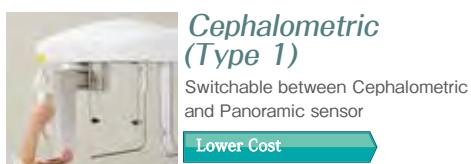Direct CMOS sensor provides clear and sharp image thanks to direct conversion.

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.

Incorrect positioning

Autofocus

Correction of Positioning error

⟨ Position ⟩

Forward

Back

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.

Selection of size and shape

Wide

Large

Large

Small

Normal

⟨ Arch size ⟩

Wide

Narrow

Normal

⟨ Arch shape ⟩

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)
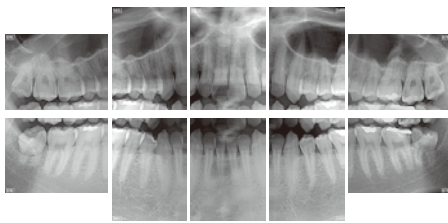Fixed type sensor for cephalometric and panoramic

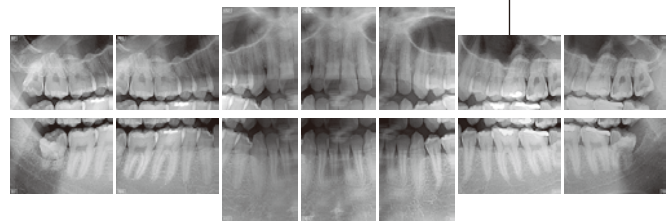Enhanced Efficiency

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

2D exposure mode

Cephalometric exposure mode

< Lateral view>
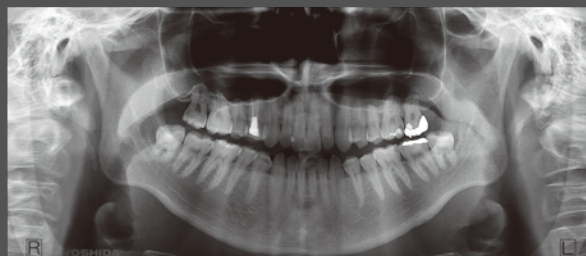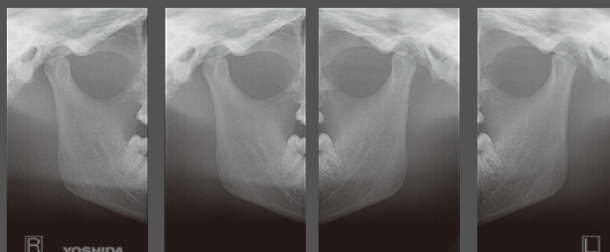
< PA view >

< Carpus view >

Panoramic exposure mode

< Standard panoramic >
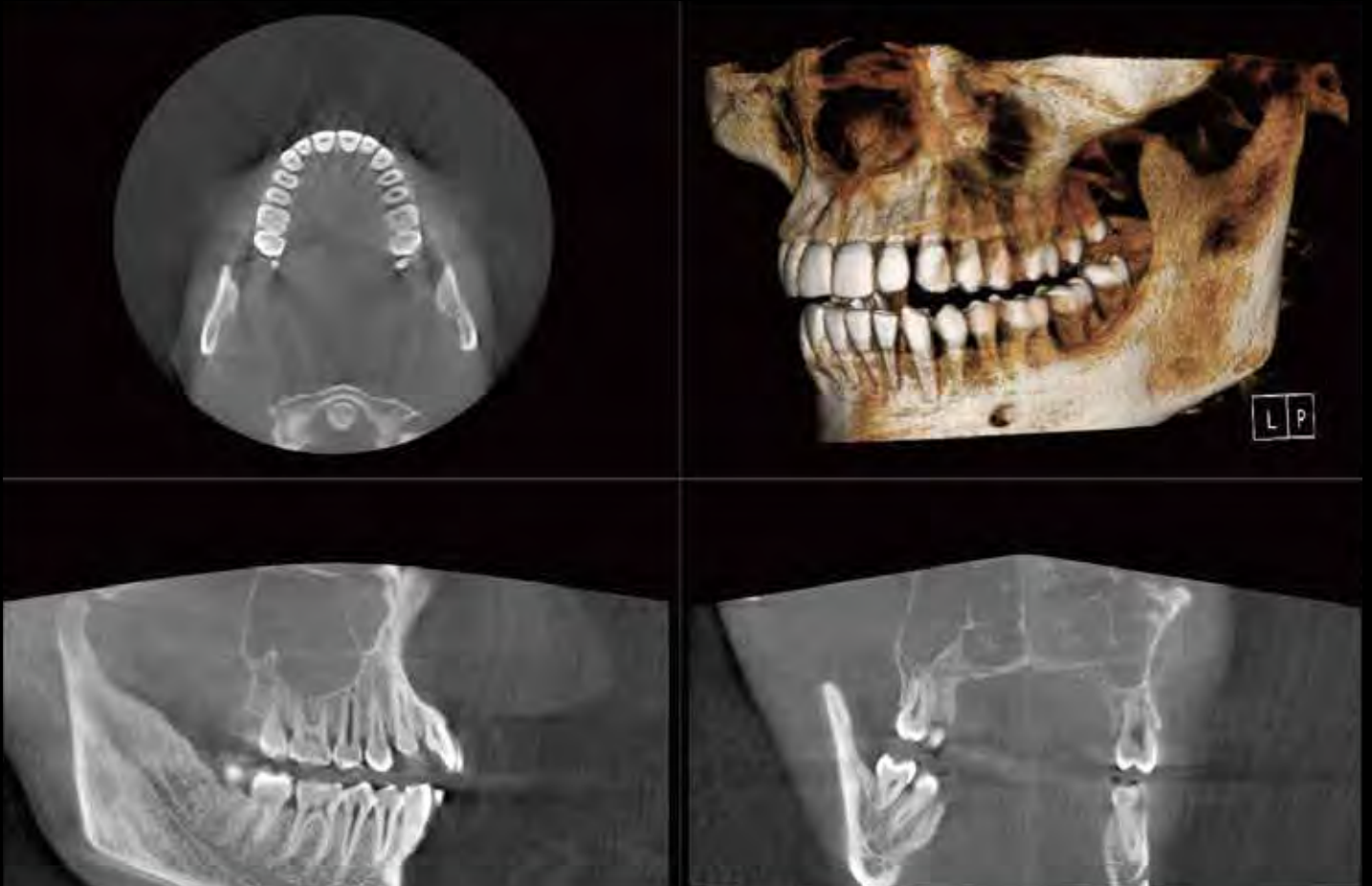
< Child panoramic >

< TMJ 4 views >   < TMJ 2 views >   *Pictures above are of TMJ4 views.

< Bitewing >

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 acessible for every dental professional.
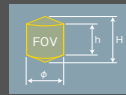
High definition 2D / 3D image requires focus

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

0.5mm X-ray tube   **0.2mm X-ray tube**
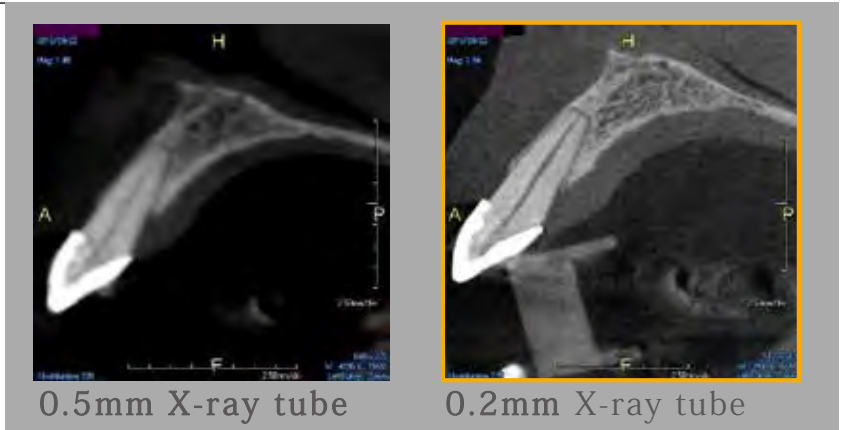
Comparison between two different focal spots scanned under the same conditions

Flexible for all dental clinical needs

FOV Dimensions
φ×H(h)mm

X-ERA

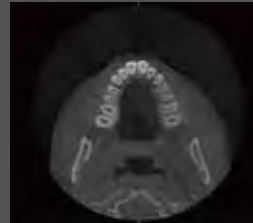|			X-ERA
Endodontic, Impacted tooth extraction φ44mm×64mm(61mm)			◯
Maxillary sinus, Implant φ80mm×79mm(72mm)			◯
Full mouth implant φ110mm×79mm(69mm)			◯
TMJ full mouth, Respiratory tract φ156mm×79mm(65mm)			◯

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.
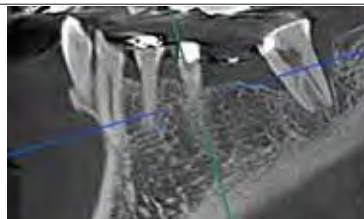

Buccolingual view   Mesiodistal view   3D volume view

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

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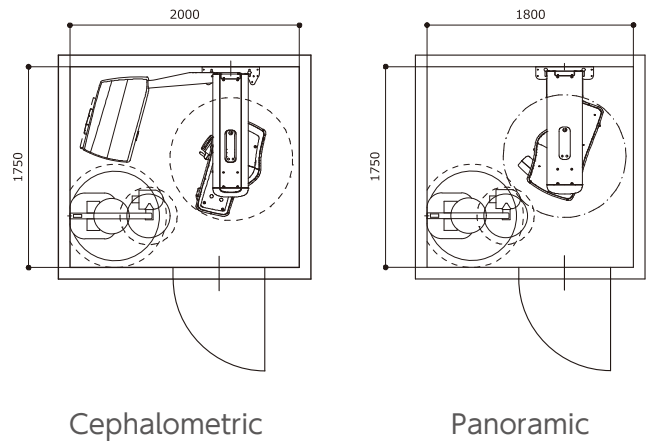
Face-to-face positioning

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.

Easy patient positioning

*Compact design to fit in small X-ray room.*

2000	1800
1750	1750

Cephalometric   Panoramic

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

φ156mm

79mm (65mm)

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.
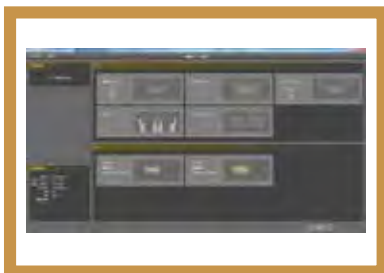
12 sec.   **360°** scan
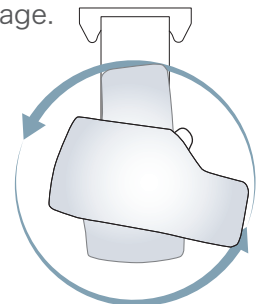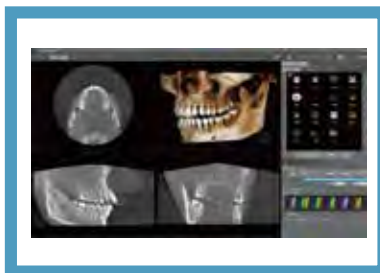
VIEWER

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

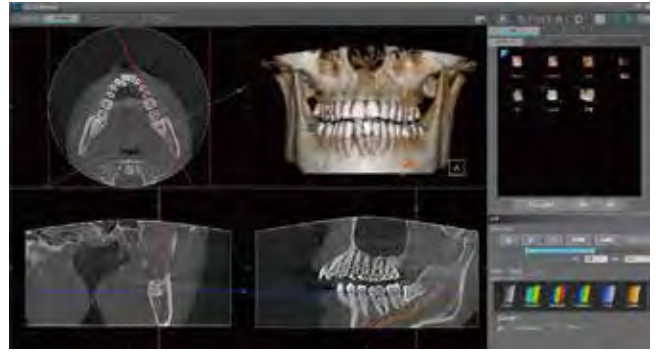For viewing and manipulating images
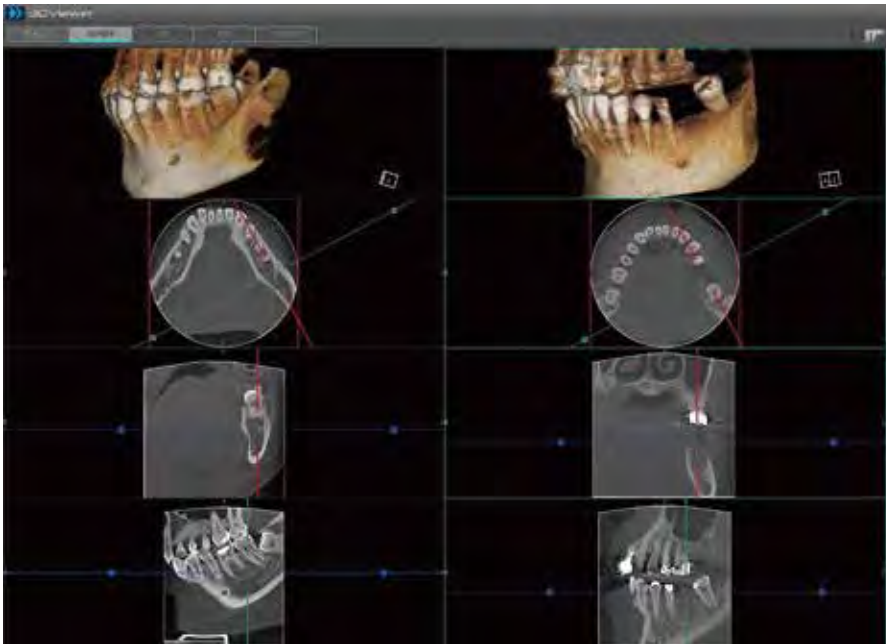
Edit

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.
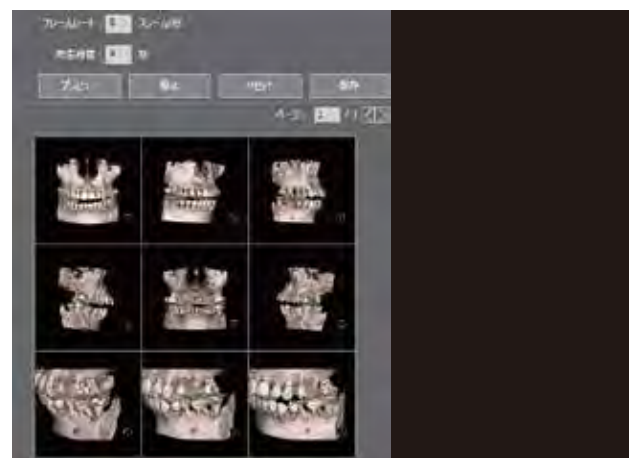
3D movie

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.

![ImageWorks logo]

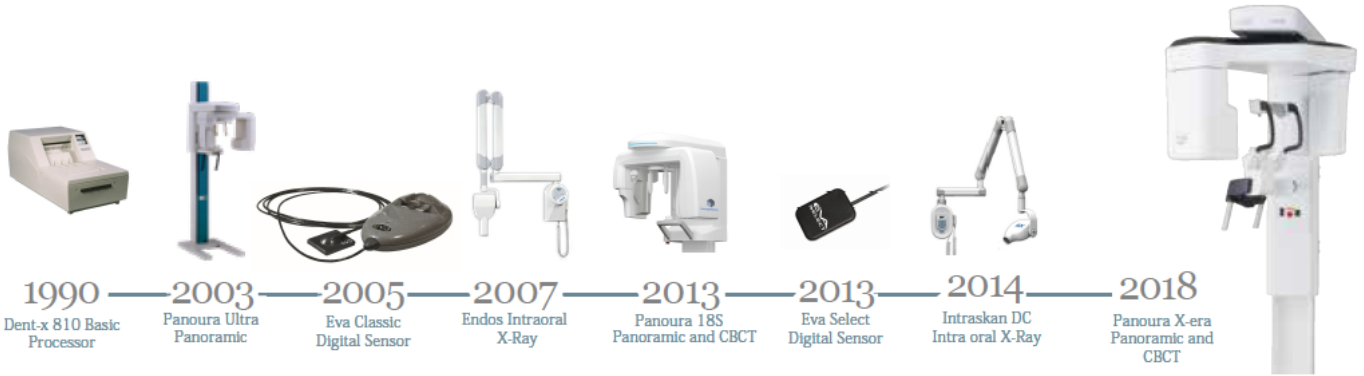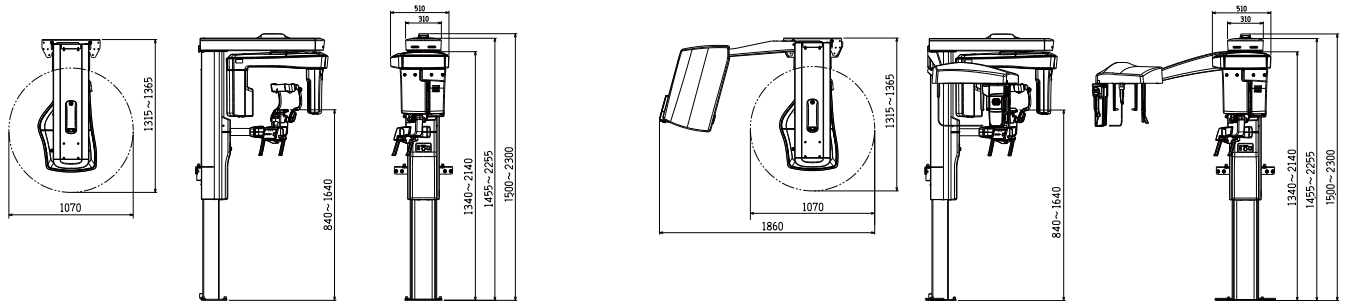*ImageWorks has been providing innovative dental imaging solutions for over 30 years. Our focus is helping dental practices maximize the return on their imaging assets.*

Timeline:

- **1990** — Dent-x 810 Basic Processor
- **2003** — Panoura Ultra Panoramic
- **2005** — Eva Classic Digital Sensor
- **2007** — Endos Intraoral X-Ray
- **2013** — Panoura 18S Panoramic and CBCT
- **2013** — Eva Select Digital Sensor
- **2014** — Intraskan DC Intra oral X-Ray
- **2018** — Panoura X-era Panoramic and CBCT

Dimensions

510
310
1315~1365
1070
840~1640
1340~2140
1455~2255
1500~2300

510
310
1315~1365
1070
1860
840~1640
1340~2140
1455~2255
1500~2300

Technical data

Panoramic

- Sensor ....Direct CMOS Sensor
- Grading ....16 bit (65,536 grading)
- Exposure time .....7, 12 sec. (Panoramic)
  .....1.7 sec.×4 (TMJ)
- Magnification factor ..1.3 -1.4 (Panoramic exposure, TMJ exposure)
- Pixel......................100 µm isotropic/pixel
  ....1,510×3,341 pixel (Panoramic)*

*Horizontal pixel may change by the adjustment of layer.

Cephalometric

- Sensor ....Direct CMOS Sensor
- Exposure time ...... 8 sec./12 sec. (PA),
  .....10 sec./15 sec.(LA),
  .....8 sec./12 sec. (Carpus)
- Magnification factor ..1.1
- Pixel ....2605pixel×2266pixel (LA)
  ....2097pixel×2266pixel (PA/Carpus)

3D

- Sensor .... CMOS Sensor
- Exposure size   Voxel 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
  Exposure time
  Standard .. 12 sec. (same for all exposure size)
  High def… 16 – 20 sec.

Common spec.

- Tube voltage.........70 - 90kV
- Tube current ....2.0 - 4.0 mA
- Power supply ....AC100-120V±10%,
  ......AC220V-240V±10%
- Total filtration........2.5 mm Aluminum
- Operating condition
  Temperature........10 to 40°C (50 to 104°F)
  Relative humidity...30 to 75% (no condensation)
  Atmospheric pressure ....700 to 1060 hPa
  To install, the equipment needs to be wall-mounted.

We know that most dentists are also business owners who focus on getting the best value for their investment. Based in Elmsford, NY for over 30 years, ImageWorks has been manufacturing dental imaging solutions that provide great return on investment. This value stems not only from the quality of our products, but also the quality of our people.

The ImageWorks Full Dental Imaging End to End Solution
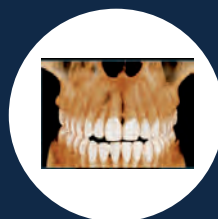
- **Imaging Software**
- **Digital Intraoral Sensors**
- **Intraoral X-Rays**
- **Panoramic and Cephalometric X-Rays**
- **CBCT Systems**

Call 914-592-6100 or email Custserv@imageworkscorporation.com

Visit us at www.imageworkscorporation.com