

LARGEV

LargeV Instrument Corp., Ltd. was founded in 2011 and committed to the development and industrialization of high-end medical devices. The core team of LargeV was graduated from Tsinghua University and has a solid foundation in the technical fields of computed tomography, radiation protection, and image processing. We insist on a customer-centric business philosophy and focus on innovation and excellence.

Our mission: Provide doctors and patients with superior products and services.

Our vision: Be the world's leading manufacturer of medical equipment.



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SMART3D-X

3-in-1 Intelligent CBCT

CT • PAN • CEPH



LARGEV | Innovation for Every Smile

SMART3D-X

CT · PAN · CEPH

01 Extraordinary Image



Quartz 4 scan platform,
supporting flexible scan
mode



Multiple focus layers in
panoramic imaging, fitting
the patient's dental arch



360° scan and 800 frame
images with unique CT
algorithms



Cephalometric PA/ LAT
and carpus shot for
orthodontic treatment

02 User-friendly



Easy-to-target scan area



Six positioning lasers with
face-to-face communica-
tion to posit precisely



X-type base is
convenient for
wheelchair-bound
patients



10" LED touch screen



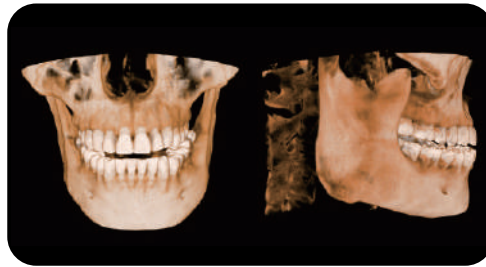
Storage box design



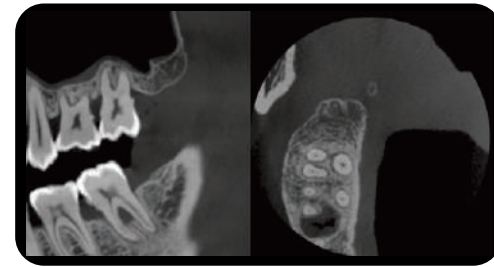
Voice reminder



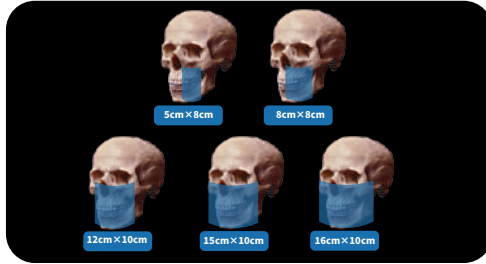
CBCT Photography



► High resolution up to 2.2 lp/mm
Voxel size 0.05–0.25 mm



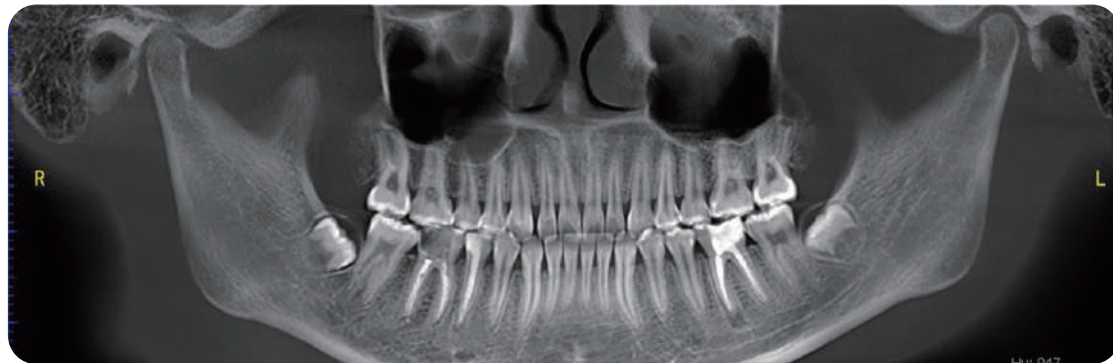
► Enhanced image by Small Focal Spot
X-ray Tube



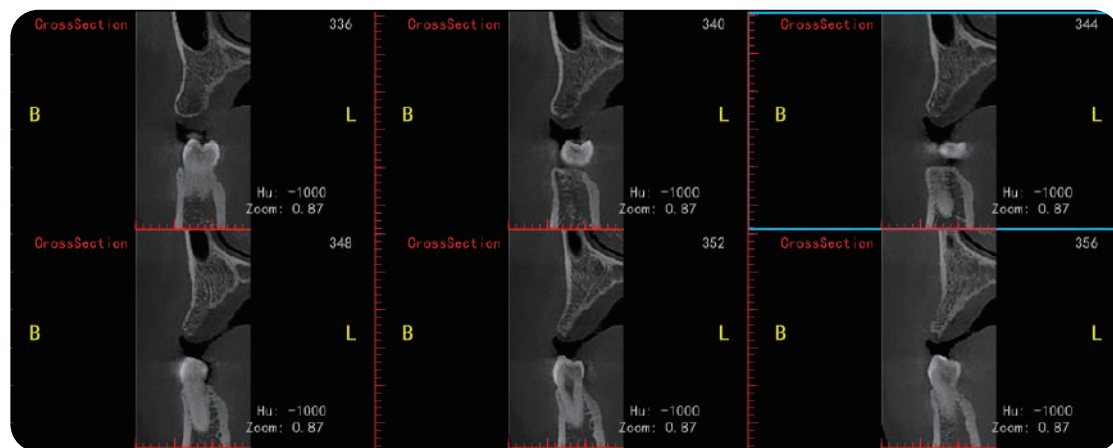
► Multiple FOVs



► Three scan modes



► Panoramic image reconstructed from 3D image data



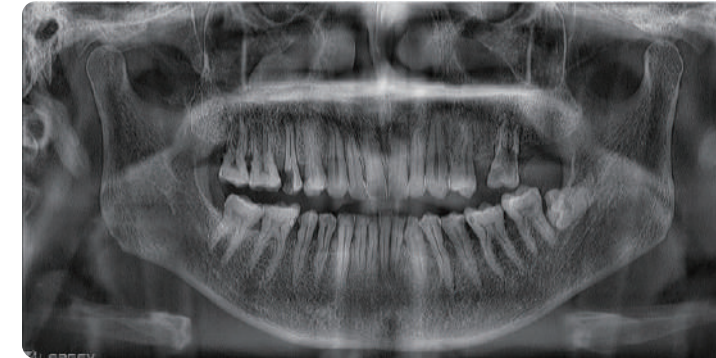
► Image slice for implanting

ONE FOR ALL

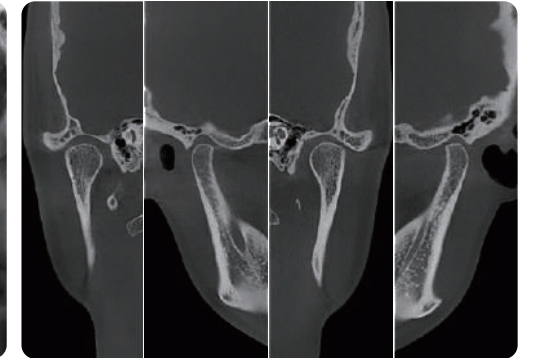




► Panoramic and TMJ images



PAN



TMJ

► Cephalometric PA/LAT and carpus images



CEPH LAT(full)



CEPH LAT(half)



CEPH PA



Carpus image

SmartVPro



► Multiple Images

Support CT / PAN / CEPH.

► Simulated Implanting

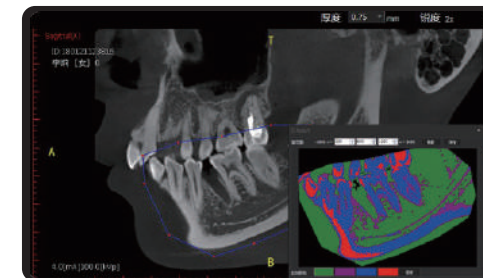
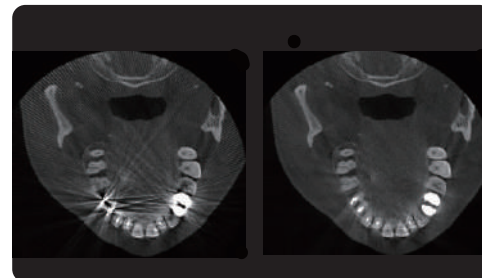
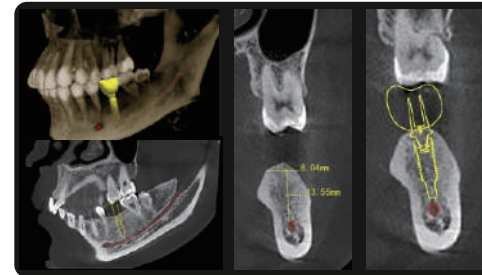
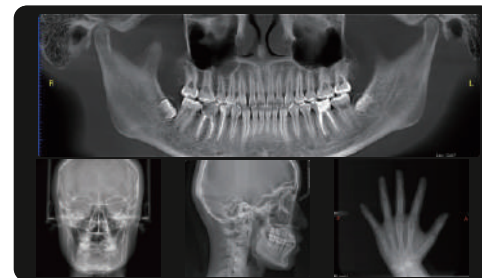
The bone and bone mass in the implant area will be evaluated by dental 3D images using Smart3D-X. The neural tube will be highlighted automatically, which presents the relationship between the implant and the neural tube. This is a better way to approach a successful implant surgery.

► AI+ Metal Artifact Correction

With the new T-MAR correction module for metal artifact removal, the system corrects metal artifacts intelligently. It avoids overmodification and saves the original clinical data.

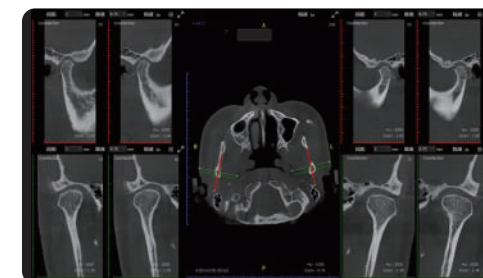
► Cloud Storage Solution (Optional)

It supports cloud case storage, multiterminal data sharing, and synchronization.



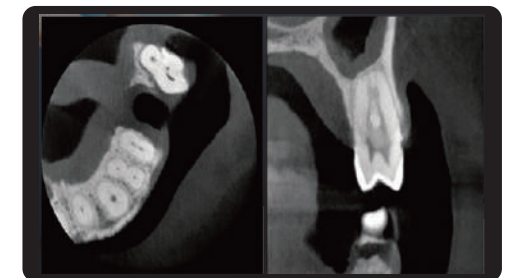
► Regional Statistics

Used to assess bone mineral density in selected areas.



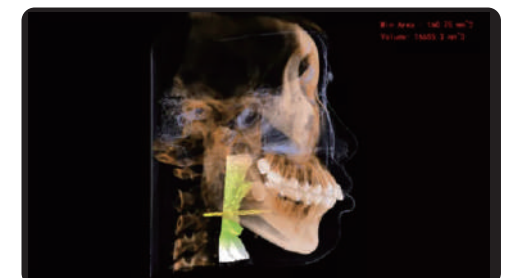
► TMJ Diagnosis

SmartVPro software has a visual pattern of comparing the left and right joints, allowing doctors to evaluate the diagnosis and treatment effect on temporomandibular joint diseases.



► 3D Fine Reconstruction

Local fine reconstruction is conducted in the designated area.

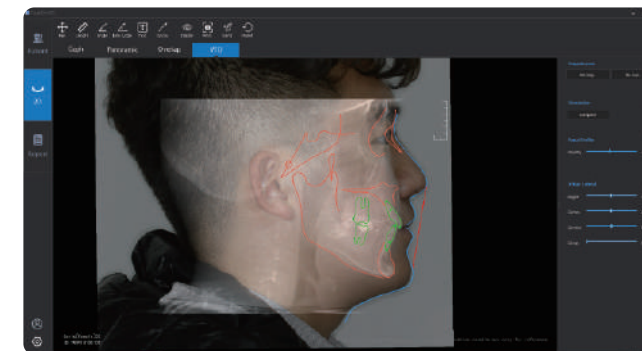


► Airway Measurements

The airway is segmented automatically, which calculates the volume and the narrowest area of the airway.

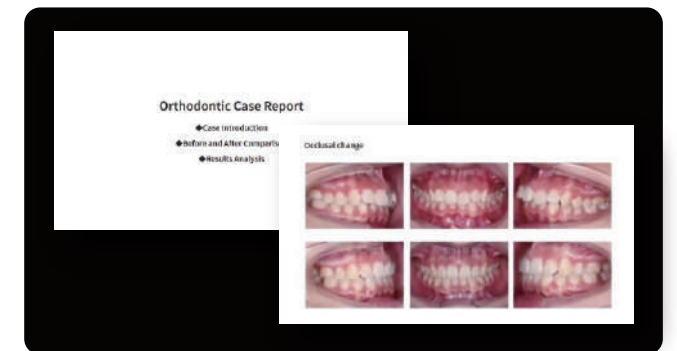
Orthodontic Software
(Optional)

CephPro3D



►VTO

CephPro3D superimposes patient's cephalic images with side photos. It can be fine-tuned through the anchor point to ensure that the image and photos are superimposed completely. Intuitive simulation of the orthodontic effect is generated by one click.



►Orthodontic Case Report

It integrates the basic information of the patients with oral and facial photos at different stages of treatment. Meanwhile, patients'eyes can be covered automatically, which protects their privacy. Case reports can be generated with a click, which is convenient for doctors to manage orthodontic cases.

►Custom Measurement Analysis Method

There are 19 measurement methods built into the software, which can be selected by doctors according to the actual clinical situation. Meanwhile, the software supports the optional addition of measurement items and the formation of new measurement methods in any combination, thus facilitating flexible and effective targeted analysis of clinical cases.

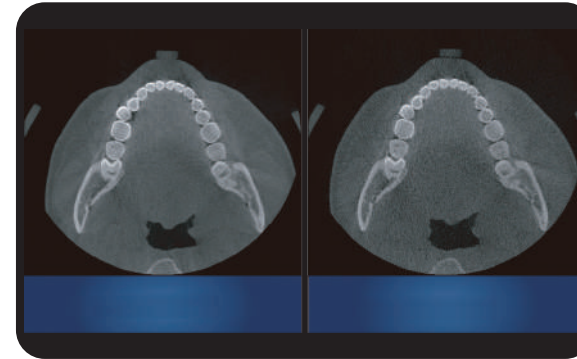
►Visual Presentation of Report with the Clear Measurement Effect

The report is generated with just one click. It promotes communication between doctors and patients

►Intelligent Tracking of the Clinical Stage

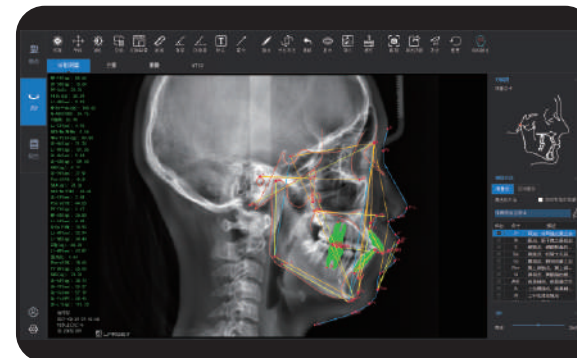
The overlapping maps at different treatment stages are obtained accurately. It conforms to the standard of the American Board of Orthodontics (ABO), which meets the diagnostic needs. The trace contrast shows the treatment effect intuitively, promoting smooth communication between doctors and patients.

ARTIFICIAL INTELLIGENCE



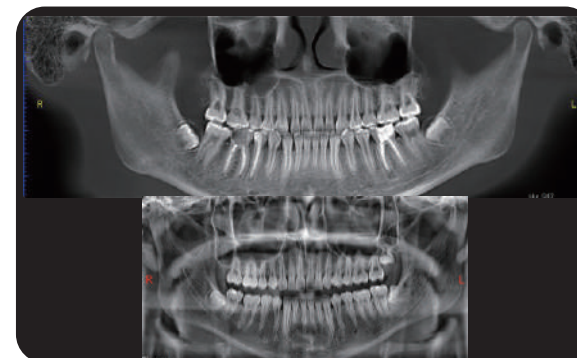
►AI+Low dose

Boosted by the deep learning-based CT reconstruction algorithm, the Smart3D-X can now obtain more defined tomography while further reducing the radiation dose, continuing to raise the industry standard for low-dose control.



►AI+CEPH Measurement(Optional)

The neural network is trained by mega data, which automatically identifies orthodontic anatomical landmark points, draws anatomical structures and outputs measurement reports according to the selected measurement methods.



►AI + PAN

CT reconstruct panoramically

With the new deep learning-based CT reconstruction algorithm, the system can obtain a precise CBCT image.

Panoramic images

Together with the new intelligent auto-focus and multilayer panoramic technology, the system automatically fits the best panoramic curves and reconstructs a better image.



►AI+Nerve

The system can label the neural tube automatically in the CT image, providing great convenience for diagnosis.

2011

LargeV Instrument Corp., Ltd. was founded on March 11.

2012

HiRes3D, the first seated Chinese CBCT model, was approved to enter the market.

2013

Passed TÜV ISO 13485 quality management system certification and CE certification. Achieved the title of "National High-tech Enterprise."

2015

Awarded the first level prize of "Technological Invention" by the Chinese Society for Stereology Science and Technology. The first Chinese CBCT debuted at the International Dental Show (IDS) in Cologne, Germany.

2016

The Multifunction Dental CBCT Smart3D was granted certification from NMPA.

2017

HiRes3D-Plus and HiRes3D-Max, professional dental CBCT models with super-large FOV were certified by NMPA.

2018

Awarded with "Edgy Technology Enterprise" by Beijing Pharmaceutical Profession Association and selected as "Zhongguancun Pioneering Technology Enterprise."

2019

SmartVPro, the first professional dental CBCT radiology software in China, was certified by NMPA. CephPro3D, the first dental cephalometric analysis software, was certified by NMPA.

2020

Zhejiang LargeV Instrument Corp., Ltd. was put into operation.

2021

Smart3D-X won the German iF Design Award.

2022

Ultra3D, the world's first CBCT with dual-source and dual-detector was launched. Ultra3D has won the Red Dot Design Award.

TECHNICAL SUPPORT

Service Hotline: +86 136 9350 0305 (WhatsApp)

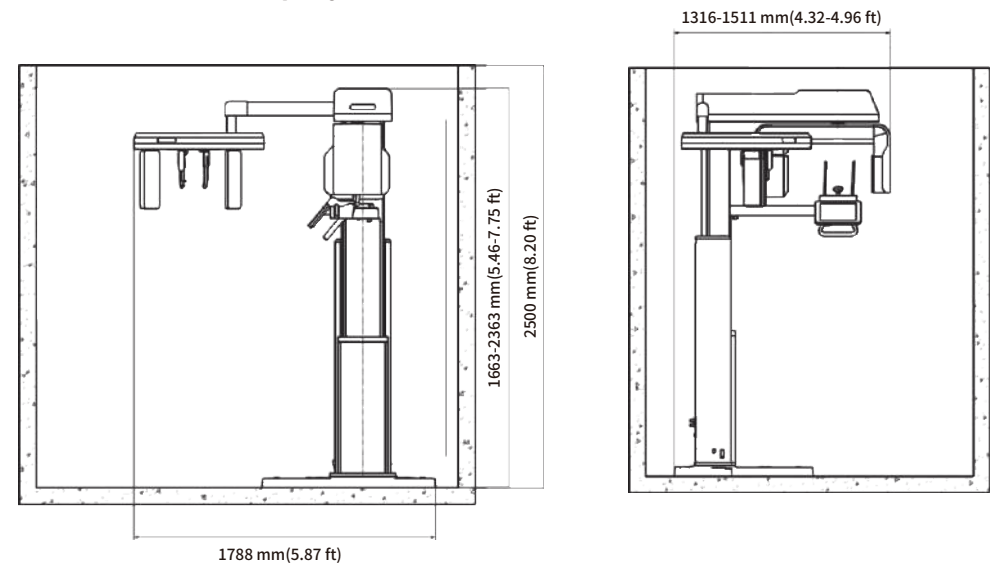
Response: 24/7 service

Email: inquiries@largev.com

►Smart3D-X Specifications

Technical Specifications	Field of View (cm×cm)	12 cm×10 cm 8 cm×8 cm 5 cm×8 cm	15 cm×10 cm 8 cm×8 cm 5 cm×8 cm	16 cm×10 cm 8 cm×8 cm 5 cm×8 cm
	Detector Type	CsI+(CMOS/TFT)		
	Tube Voltage	CT/PAN/CEPH:	60-100 kV	
	Tube Current	CT/PAN/CEPH:	2-10 mA	
	Exposure Time	CT:	9.5 s / 12.5 s / 18.5 s	
		PAN:	8.1 s / 18 s	
		CEPH:	7.5 s / 10.1 s / 11.8 s	
	Focal Spot Size	CT/PAN/CEPH:	0.5 (IEC60336)	
	Spatial Resolution	2.2 lp/mm		
	Reconstruction Time	<60 s		
	Voxel Size	0.05-0.25 mm		
	Weight	220 kg (485.02 lb)		

►Product Size Display



►Shielding Room Diagram

