LARGEV

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

Email: inquiry@largev.com
Website: www.largev.com
Address:A-800B, Tongfang Building, Qinghua Yuan, Haidian District, Beijing 100084 P.R.China

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LARGEV

SMART3D-X

3-in-1 Intelligent CBCT

CBCT•Panoramic•Cephalometrics

LARGEV

Pursue innovation on everyday

Attentively, for every smile

SMART3D-X

CBCT · PANORAMIC · CEPHALOMETRICS

01 Extraordinary image, clear and differentiable

OuartZ 4 scan platform, realize any scan rail

Multiple curved tomography trajectories, fit the patient's dental arch

360°Scan 800 frame Images with High Clarity, combined with unique CT Algorithm, the fine structures can be observed

Cephalometric PA/ LAT & Carpus shot for all orthodontic treatment

02 Technology for Convenience, Experience for satisfaction

OuartZ 4 scan platform is patient-oriented, easy to posit the scan area

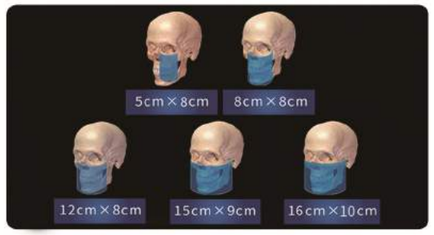
face to face communication between patient and doctors, equipped 6 lasers , precise positioning Pan

X type base support stability, Convent for the wheelchair patient

10“ LED touch screen More convenient to use

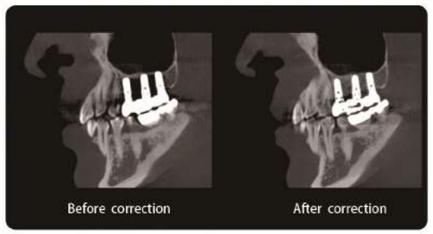
convenient storage-box design

Voice broadcast Friendly operation system

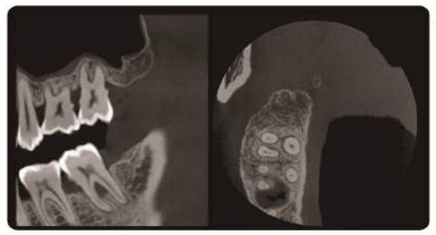


▶Flexible FOV for your option

▶High resolution up to 2.2lp/mm
Voxel size 0.05-0.25mm option

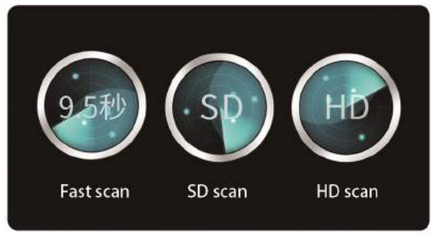


▶T-MAR Correction Module



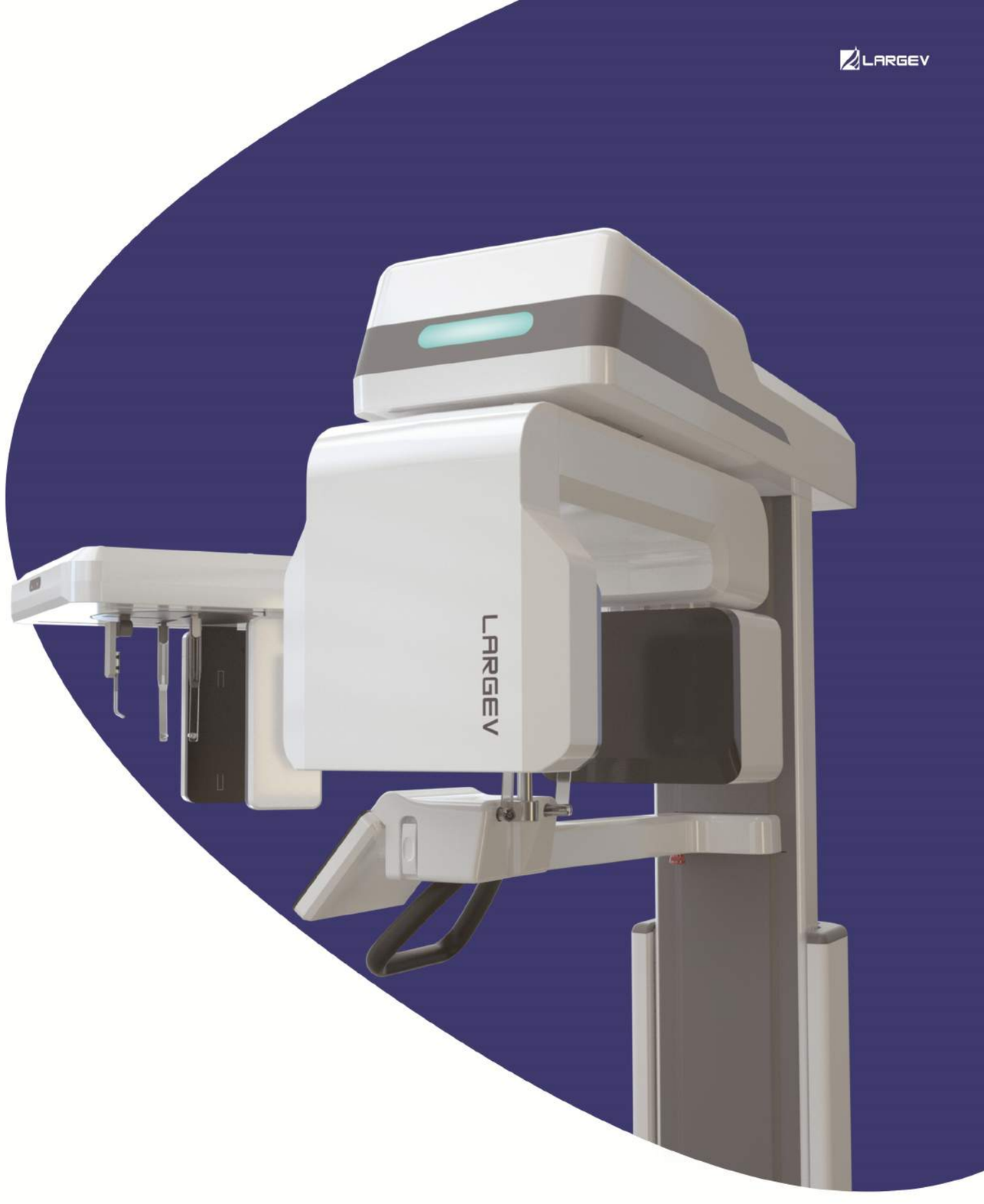
▶Small Focus Tube

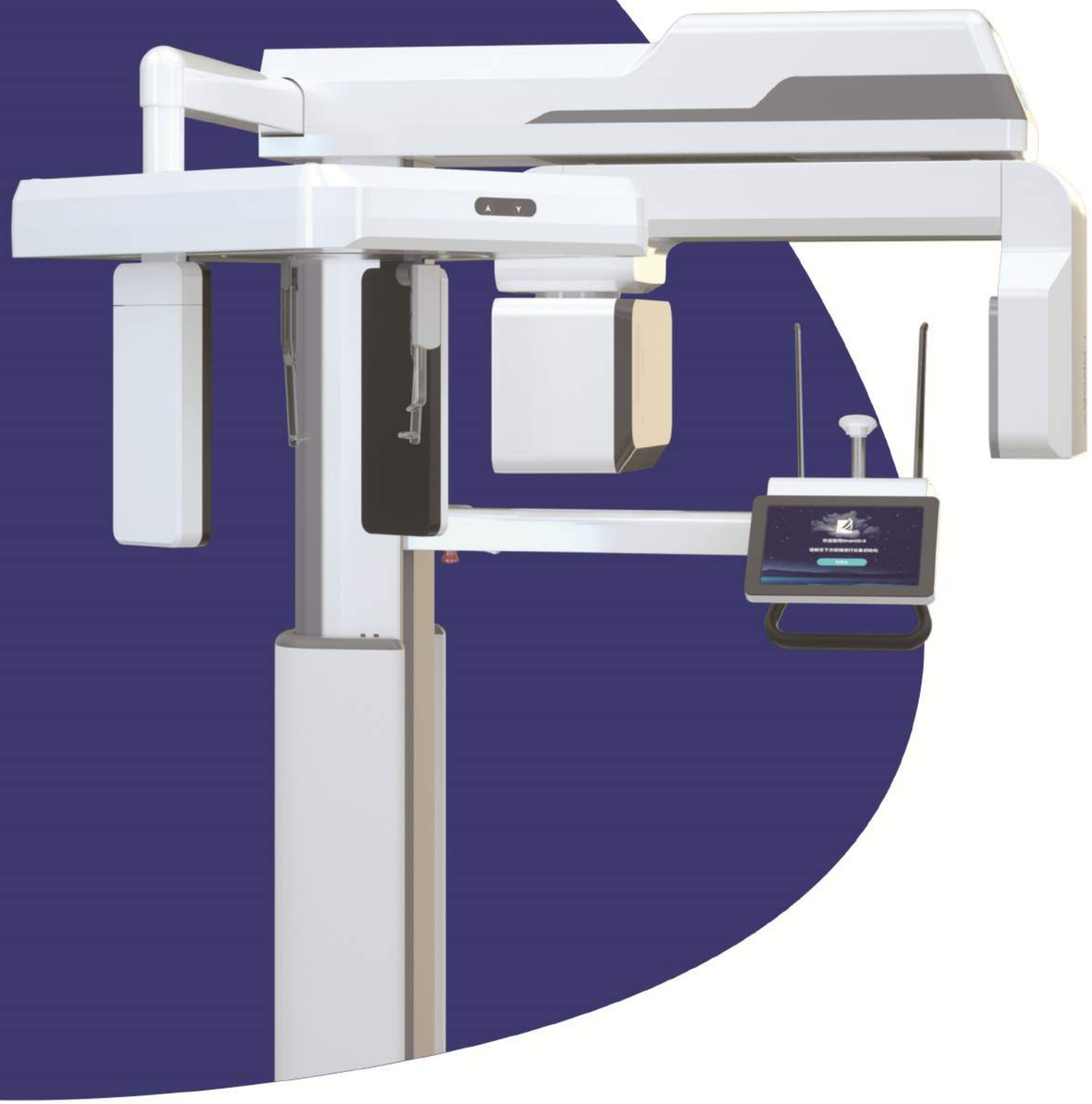
▶360° Scan get 3D image data



▶Three scan options

▶The new panoramic image can be reconstructed from 3D image data in 1:1 scale.





▶Providing the excellent panorama and joints imaging for dentists to clinical

Panoramic

Joint Shot

▶ Cephalometric PA/ LAT & Carpus shot

High-resolution iodinated color detector, Cephalometric PA/ LAT images are optional, optimize radiation dose, and shoot perfect Ceph images.

Carpus imaging: The doctor can determine the bone age based on the carpus bone, and lower end bone change center of the radius and ulna.

Cephalometric LAT(full shot)

Cephalometric LAT(half shot)

Cephalometric PA

Carpus image

LARGEV

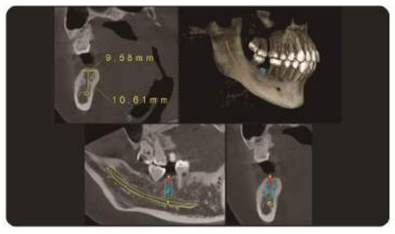
SmartVPro

▶Multiple oral images

Support CBCT\ Panoromamic\ Cephrolomitries images。

▶Simulated Planting

With the help of the full oral 3D images generated by HiRes3D, the bone and bone mass of the implant area can be evaluated; the neural tube delineated; the relationship between the location of the implant and the adjacent anatomical structure defined; the implant location and optimal length and diameter of the implant accurately selected; the success rate of the implant improved; and possible nerve or vascular damage avoided.

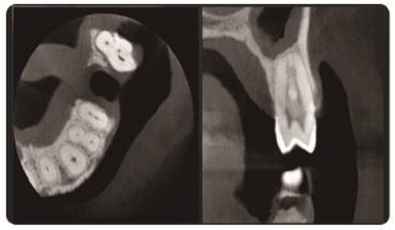


▶Cloud Storage Solution (optional)

The report can easily be uploaded to the cloud, and the excellent medical records shares with colleagues. Support cloud case storage, multi-terminal data sharing and synchronization.

▶Regional Statistics

Support area statistics are used to assess bone mineral density in selected areas.



▶3D Fine Reconstruction

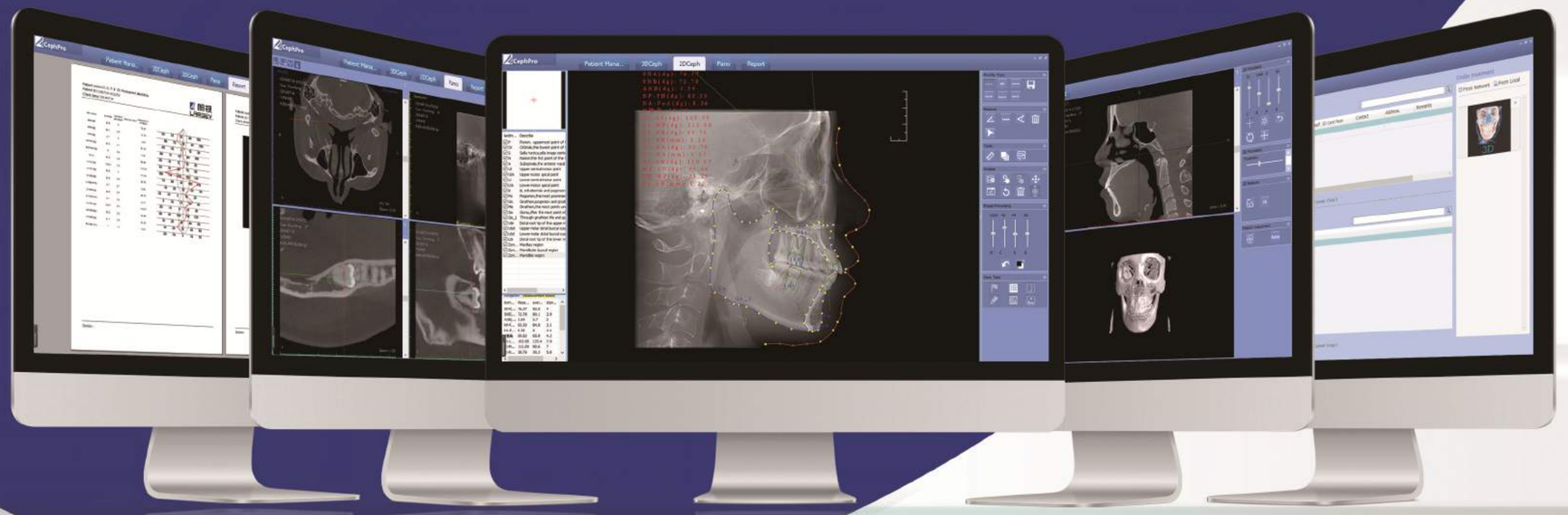
Local fine reconstruction is carried out on the designated area.

▶TMJ Diagnosis

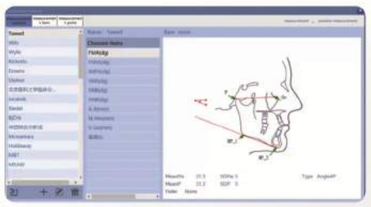
SmartV software has a visual pattern of contrast observation of left and right joints, allowing doctors to evaluate the diagnosis and treatment effect of temporomandibular joint diseases.

▶Airway Measurements

Convenient interaction and rapid segmentation of the airway, can automatically calculate the volume and the smallest area of the patient's airway in the form of chromatographic visualization.

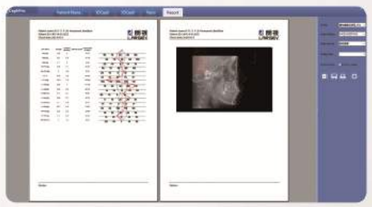


CephPro 2D



▶Custom Measurement Analysis Method

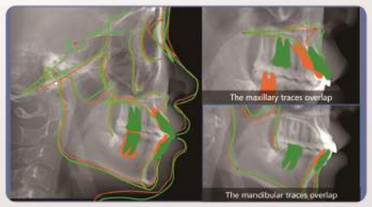
There are 15 measurement methods built into the software, which can be selected by doctors according to the actual clinical situation. Meanwhile, the software supports the optional addition of measurement items and the formation of new measurement methods in any combination, thus facilitating flexible and effective targeted analysis of clinical cases.



▶Visual presentation of report with the clear measurement effect

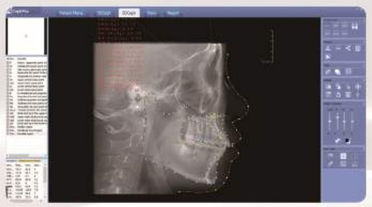
One-key generation, one-key export

It is convenient for doctors to conduct treatment planning and doctor-patient communication.



▶Intelligent Tracking of the Clinical Stage

The overlapping maps of different treatment stages can be obtained accurately and quickly. The overlapping process conforms to the American orthodontic certification standard (ABO) and meets the diagnostic needs of doctors. Before and after diagnosis and treatment, the trace contrast intuitively shows the diagnosis and treatment effect, making doctor-patient communication smoother, and the sharing of orthodontic cases convenient for doctors.



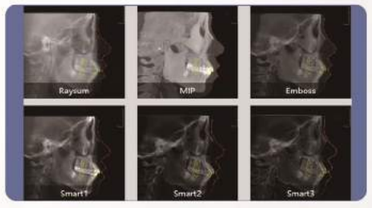
▶ AI Measurement (optional)

Following extensive data training, the neural network can automatically identify the orthodontic anatomical landmarks and structures, draw a lateral cephalic trace map, and easily obtain an accurate trace.

3D Module

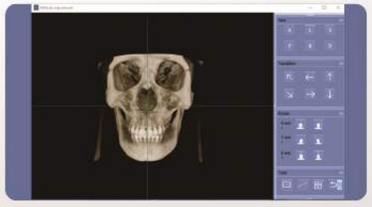
▶One-button Automatic Ear Point Correction

The CT film of LargeV can be effectively and automatically matched to correct the 3D model according to the position of the ear point of the CT film. It is intelligent and professional, which greatly simplifies the operation for the doctor.



▶Six Ways to Stack Images

Includes：Raysum, MIP, Emboss, Smart1, Smart2 and Smart3. Full coverage of the observation head shadow to measure all measurement points, users can, according to need, use different overlay methods to accurately trace points.



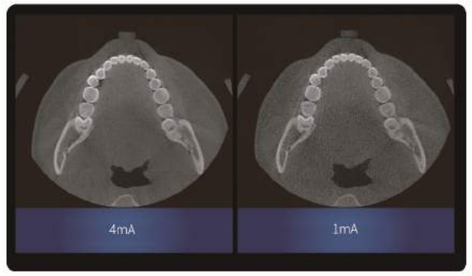
▶Head to Adjustment

With the 3D model’ s three views, two ways of adjustment and visual images, head adjustment is made simple and more accurate. The 3D model and three views can be adjusted in perfect synchronization. Only CT film is needed to satisfy all the basic operations of head shadow measurement.

▶ Panoramic Reconstruction

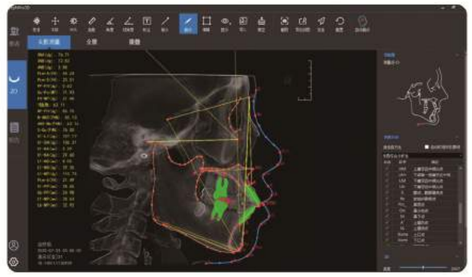
Reconstruction of the curved surface tomography from 3D images is supported by automatic generation mode, manual setting mode and multi-layer superposition, which is convenient for real-time observation of the diagnosis and treatment of teeth and joints in the orthodontic process. It also allows observation of the fault section at any position to assist in the formulation of the diagnosis and treatment plan.

Artificial Intelligence
the Future is coming



▶AI+Low dose

Boosted by the deep-learning based CT reconstruction algorithm, the Smart3D is now able to obtain the more defined tomography while further reducing the radiation dose by 75%, once again topping the industrious standard in respect of low dose control.



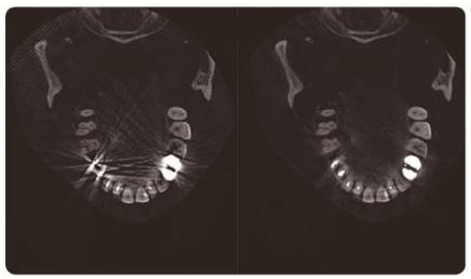
▶AI+Ceph Measurement

The neural network trained by big data, can automatically identify orthodontic anatomical landmark points, draw anatomical structures and output measurement reports accordingly to the selected measurement methods.

▶AI + Panoramic

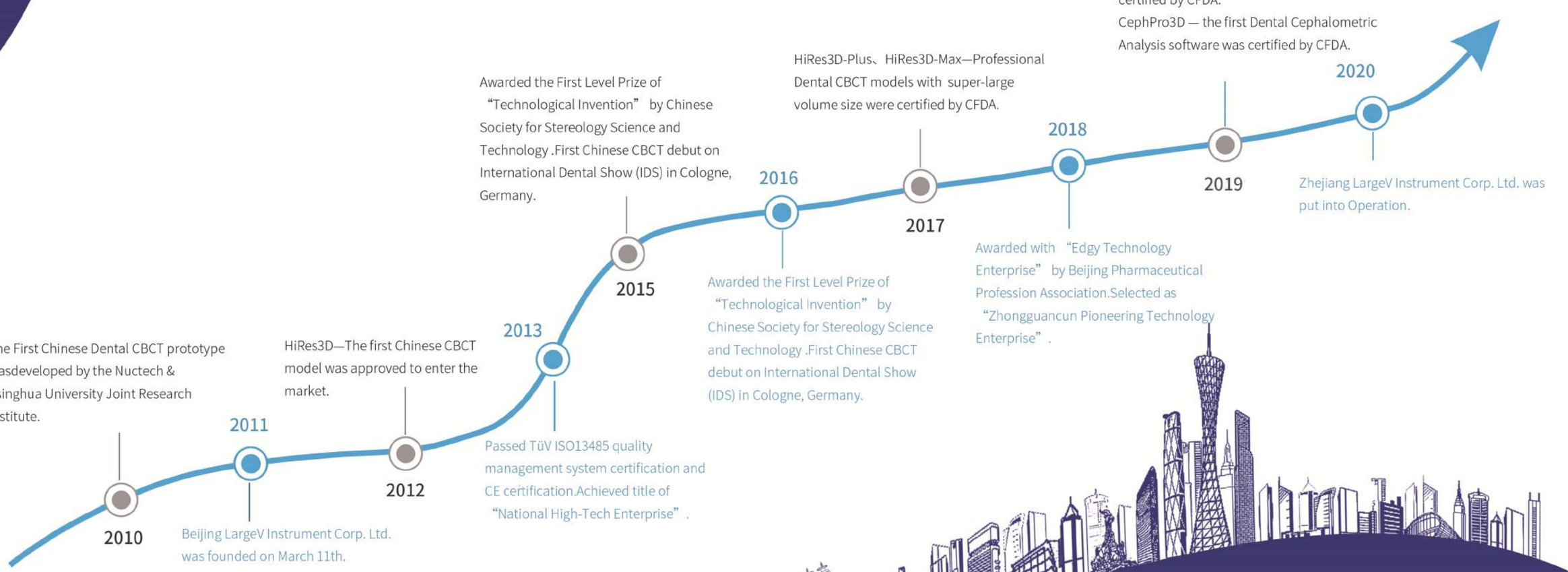
CT reconstruct panoramic: With the new deep-learning based CT reconstruction algorithm, the system can still obtain a good clear CBCT image

Panoramic: Together with new intelligent auto-focus technology and multi-layer panoramic hardware, the system can automatically fit the best panoramic curves and reconstruct a better image.



▶AI+ Metal Artifact Reduction

With the new T-MAR correction module for metal artifact removal, the system can intelligently correct metal artifact, avoid over modifying and save the original clinical data.



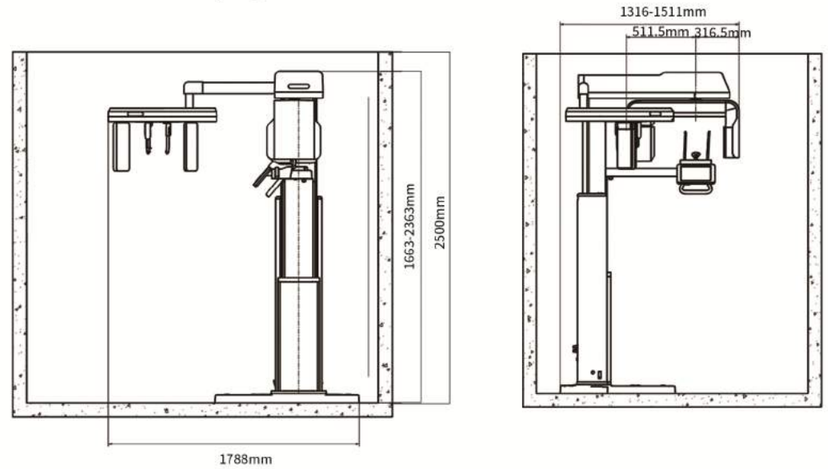
TECHNICAL SUPPORT

Response:24h/7d
Online technical support and training for all the time
Service Hotline: +86 136 9350 0305 (WhatsApp)
inquiries@largev.com

▶Smart3D-X Parameters

Configuration	Type	Panel Detector	FOV
	X1	CsI+CMOS	12cm×8cm 8cm×8cm 5cm×8cm
	X2	CsI+CMOS	15cm×9cm 8cm×8cm 5cm×8cm
	X3	CsI+TFT	
	X4	CsI+TFT	16cm×10cm 8cm×8cm 5cm×8cm
Technical Specfcation	Tube Voltage	CT\Pan\Ceph	60-100kV
	Tube Current	CT\Pan\Ceph	2-10mA
	Exposure Time	CT	9.5s / 12.5s / 18.5s
		Pan	8.1s / 18s
		Ceph	7.5s / 10.1s / 11.8s
	Focal Spot Size	CT\Pan\Ceph	0.5 (IEC60336)
	Spatial Resolution		2.2lp/mm
	Reconstruction Time		＜60s
	Voxel Size		0.05~0.25mm
	Weight		220kg

▶Product size display



▶Lead room diagram