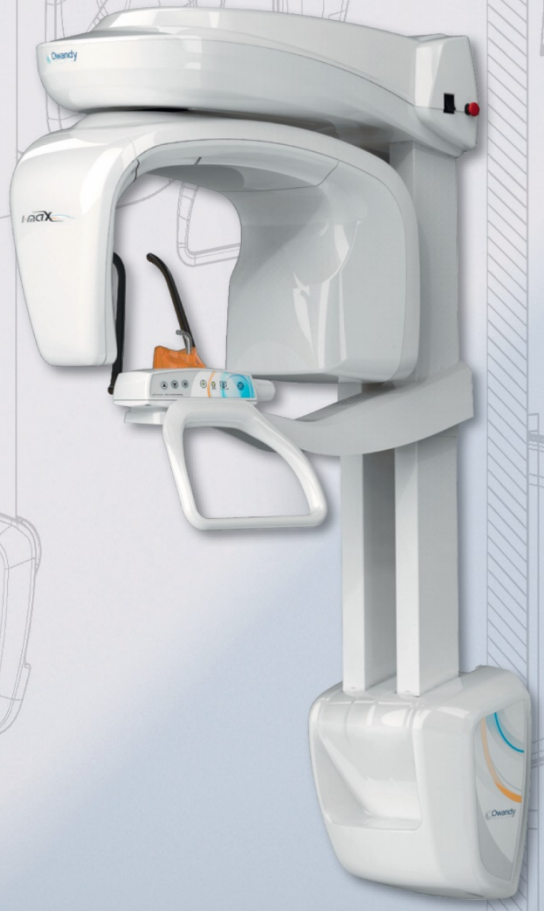
Owandy RADIOLOGY



EN • PRODUCT LAUNCH DOCUMENT

I-MAX

LD_IMAX_EN_062021 • REV 02

I-MAX

2D PANORAMIC UNIT

INDEX

1. PRODUCT IDENTITY AND POSITIONNING

Name & logo	Unit design
Sales designation « IMAX »	

Main competitors advantages	
1- Light and stylish design	• Drive a new generation of wall mounted Panoramic units, • Practice valorization to patients, • The lightest unit on the market, • Only a wall to fix the unit as an Intra-oral Xray generator
2- Image quality with a full range of programs	• Patient positionning face-to-face, • Control panel software intuitive and very fast to perform, • Enhancement filters and imaging tool directly included in the new designed control software
3- Easy and fast practice installation	• Compact and Light delivered in one solo packaging, • Exclusive Easy-To-Instal system: the unit is delivered entirely amounted, with an “intelligent” system to fix it directly on the wall by one technician, • High level of electronic optimization, only 1 PCBoard: service intervention easy to fix the default, • Unit fully controlled remotly.
4- A controlled budget	• Unit industrially optimised, • A minimal Installation cost, economical shipment, • A failure rate largely reduced, • The best ratio Investment/Performance of the market.

2. TECHNICAL CHARACTERISTICS

General features		
Manufacturer	**OWANDY RADIOLOGY** **77183 Croissy-Beaubourg, France**	
Class	Class I with type B applied parts according to IEC 60601-1	
Protection degree	IPX0 standard device	
Rated line voltage	220-240 V	110-220 V
Rated line voltage	50/60Hz	
Maximum line current	3,5 A @ 230 V~ 50/60 Hz	
Power consumption	1.3 kVA @ 230 V~ 50/60 Hz	
Line apparent resistance	0.5 Ω max	
Line voltage regulation	--	< 3% at 99 V ~
Rated output voltage (kVp)	60 ÷ 70 kVp, with 2 kVp steps	
Anodic current	2 ÷ 7.1 mA, according to r20 scale	
Mechanical characteristics		
Focus-receptor distance	50 cm (20")	
Telescopic motorized column run	66 cm (26")	
Maximum total height	218 cm (86")	
Weight (complete unit, wall mounted version)	62 kg	
Weight of optional unit support	6 kg	

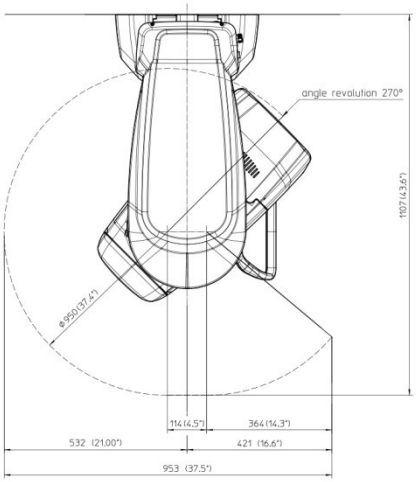
Working conditions	
Minimum room size	120x120cm (47.2"x47.2")
Recommended room size	120x140cm (47.2"x55.1")
Unit footprint dimensions (mm)	***1107 (wall side) x 953 = 1m²***
Maximum working temperature range	+ 10° ÷ + 40°
Relative working humidity (RH) range	30% ÷ 75%
Temperature range for transport and storing	- 20° ÷ + 70°
Humidity range for transport and storing	< 95% without condense
Minimum atmospheric pressure for transport and storing	630 hPa

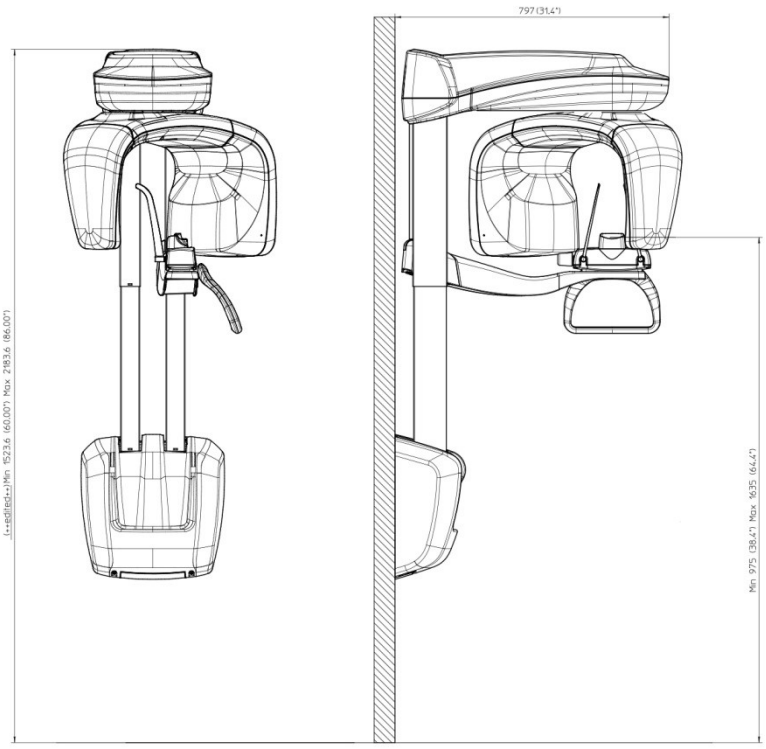
3. SENSORS AND XRAY GENERATOR CHARACTERISTICS

Tube-head features	
Model	MPV 05
Manufacturer	Owandy Radiology
Maximum tube voltage with accuracy	70 kVp ± 8 %
Maximum anodic current with accuracy	7 mA ± 10 %
Duty cycle	1:16
Nominal power	490 W (70 kVp – 7 mA)
Total filtration	2 mm Al eq. @ 70 kVp
HVL (Half value layer)	> 2.5 mm Al eq. @ 70 kVp
Transformer insulation	Oil bath
Cooling	By convection
Leakage radiation at 1 m	< 0.5 mGy/h @ 70 kVp - 7 mA - 3 s duty cycle 1/16
X-ray tube features	
Manufacturer	Toshiba (Japon)
Type	D-058
Nominal focus size	0.5 mm EN60336
Inherent filtration	1.0 mm Al eq.
Anode tilt	15.5°
Anode material	Tungsten
Nominal maximum voltage	70 kVp
Filament max current	3 A
Filament max voltage	3.6 V
Anode thermal capacity	13 KJ
Digital Sensor features	
Sensible area (H x L)	PAN sensor : 146 x 6 mm
Sensor pixel dimensions	48x48µm
Pixel (H)	PAN : 1536
Laser centering devices	
2 laser beams are used for patient positioning. Beams align mid Sagittal and Frankfurt planes. Class 2 laser product according to IEC Standard 60825-1:2007	
Wave length	650 nm ± 10 nm
Divergence	< 2.0 mRad
Optical power on the working surface	< 1 mW

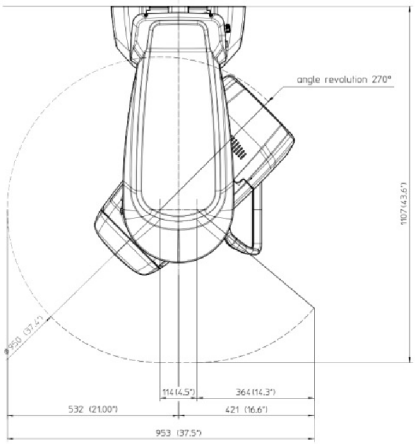
4. UNITS VERSION AND DIMENSIONS

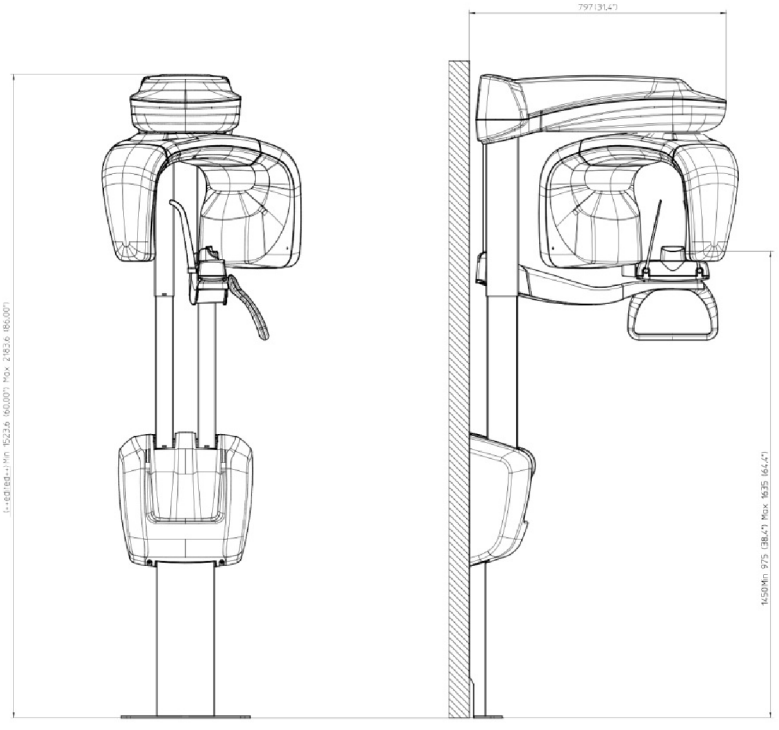
Wall mounted unit



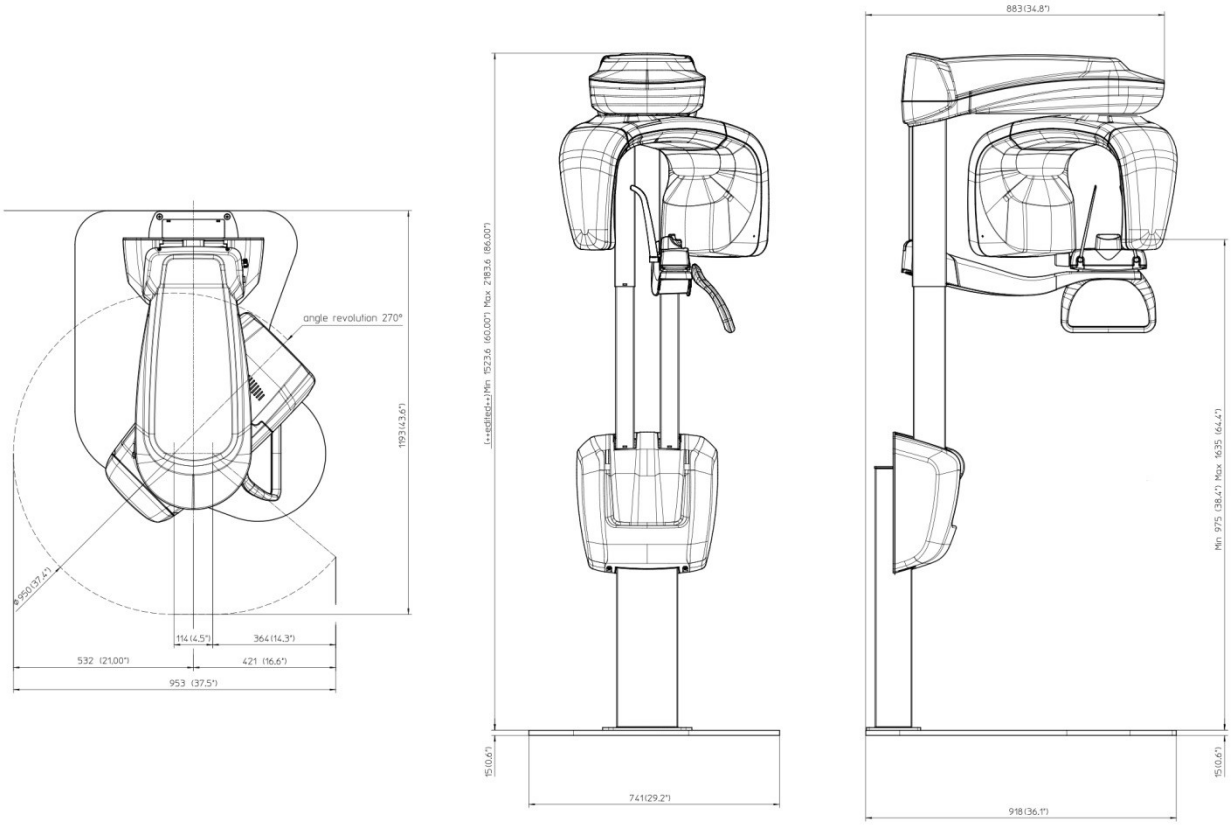


Simple foot version unit



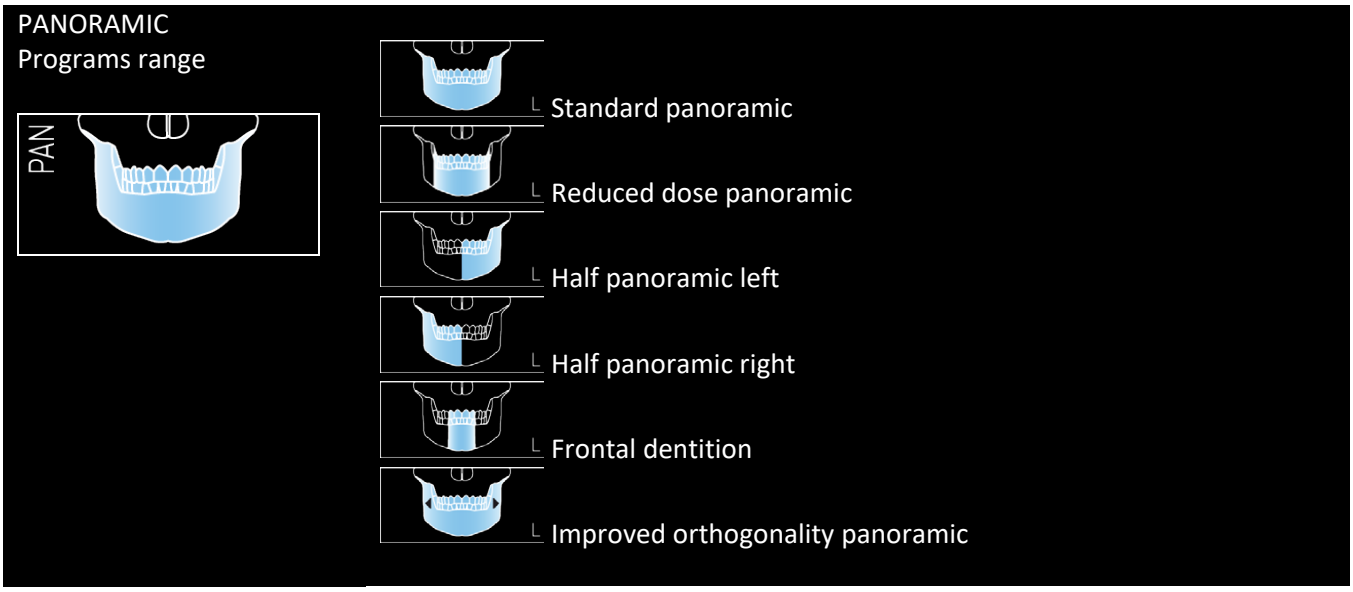


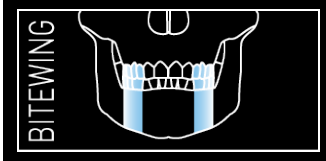
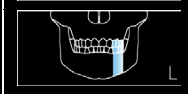
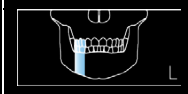
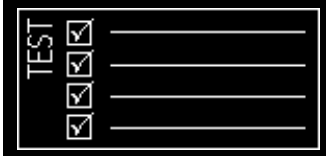
Floor mounted version unit



5. EXAMINATION MODES

Exposure times	
Panoramic (PAN)	14.4 s PAN Adult / 13.3 s Child
Emi-panoramic	7.8 s Adult / 7.3 s Child
Improved orthogonality Panoramic	11.9 s Adult / Child
Reduced dose Panoramic	11.9 s Adult / 10.8 s Child
Frontal dentition	4.4 s Adult / Child
TMJ mouth closed/open	4,8 s per image for left and right joint in open and closed condition
Sinus P/A projection	9.4 s
Image magnification	
Adult / Child standard Panoramic	1 : 1.23 (constant over dentition part))
TMJ open/closed mouth, 4 images	1 : 1.20 (nominal)
Sinus	1 : 1.23 (nominal)
Programs	
Examination selection type	• Automatic selection for Adult and Child, 3 Sizes • Manual selection also possible for each programs • Collimator with automatic positioning

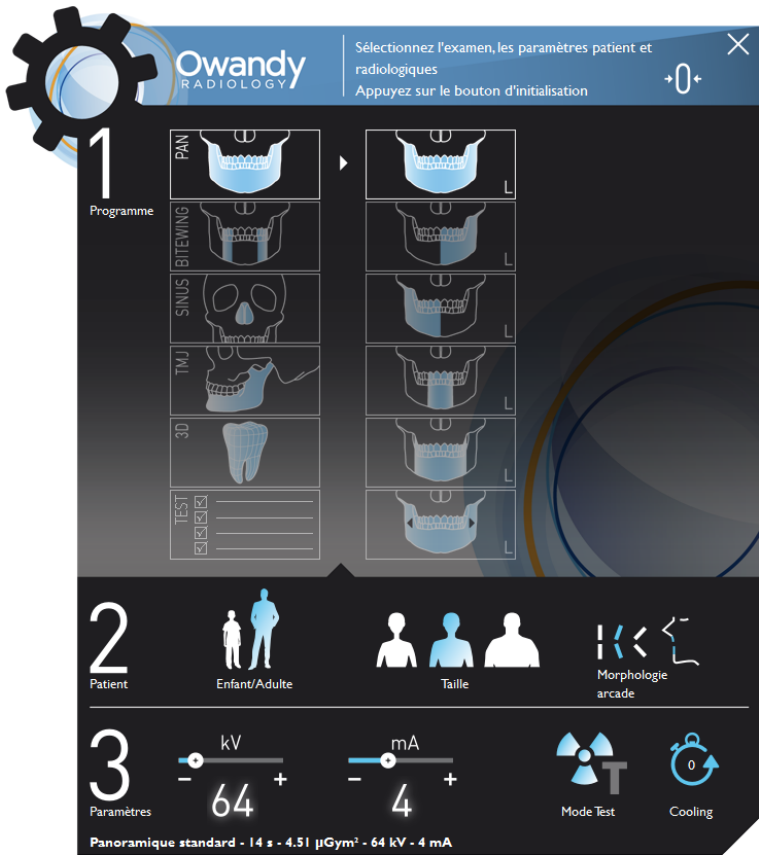


BITEWING Programs range 	 Standard bitewing  Half bitewing left  Half bitewing right
SINUS 	Sinus P/A projection
TMJ (Temporal Mandibular Joint) Programs range 	 Standard TMJ, open/closed mouth  Half TMJ sequence exam
TEST MODE 	 Test mode for 2D

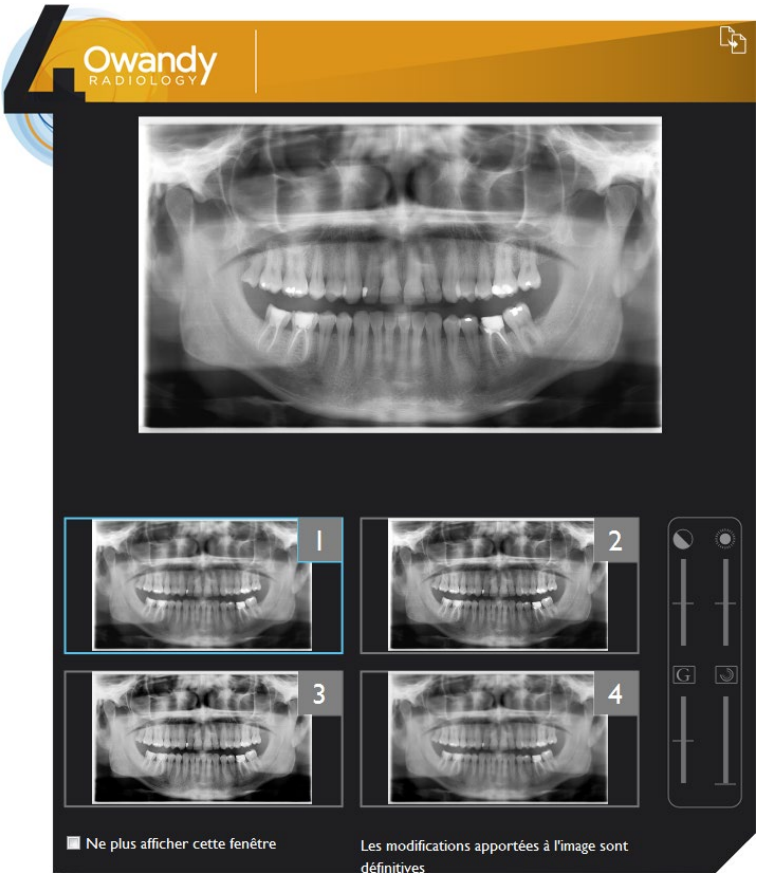
6. USER SOFTWARE INTERFACE

▶ Main settings window: default exam selected Automatically..

▶ Main window with complete program selection menu, in extended view



▶ Main window with the image live preview.



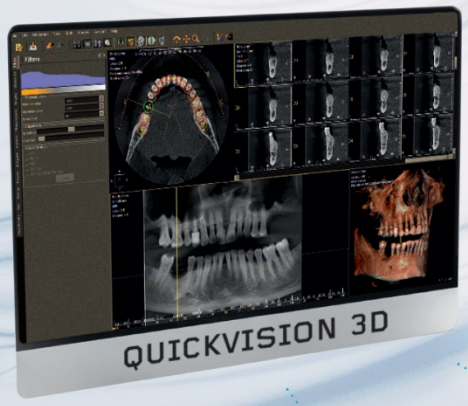
DIGITAL WORKFLOW OWANDY RADIOLOGY

A COMPREHENSIVE RANGE TO MEET ALL YOUR REQUIREMENTS

2D/3D UNITS

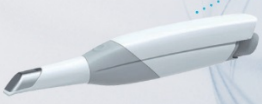
CEPHALOMETRIC UNITS

HF INTRA-ORAL GENERATOR



FACE SCAN
.PLY IMPORT

INTRAORAL
PLATE SCANNER



DENTAL IMPRESSIONS
.STL IMPORT

SURGICAL
GUIDE

DIGITAL USB
INTRAORAL CAMERA

EXPORT TO
3D PRINTER

DIRECT USB
SENSORS

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