



Armonicus 2.0

*Digital radiographic system with integrated tube-detector stand
and
flat panel detector*

Product Data



Armonicus is a single-detector DR solution providing the effectiveness of DR for all facilities. It is useful for general radiographic examinations, including frontal and lateral projections with the patient on a mobile stretcher or in standing position.

Armonicus is available in two main models differing for the bucky:

- with fixed detector, which is compatible with VDX 4343VS
- with cassette-tray, which is compatible with all VDX systems with wireless detector

Armonicus is integrated with all Villa VDX systems; it provides auto positioning and auto-centering functions.

Armonicus, when it is supplied with Stitching function, provides auto-stitching feature for full spine and full legs applications with patient in standing position.

Stitching function requires automatic collimation and 43x43 cm (17x17 in) flat panel detector.



Armonicus 2.0 stand

Vertical run	Motorized, 1300 mm (51.18")
Detector-center to floor distance	From 400 mm (15.75") to 1700 mm (66.93") (with arm at 90°)
Source to image distance	Motorized, 1000 – 1800 mm (39.37"–70.87")
Skin to detector distance	51 mm (2") on bucky with wireless detector 48 mm (1.89") on bucky with fixed detector
Detector rotation	Motorized, $\pm 45^\circ$
Tube assembly rotation	Manual, $\pm 180^\circ$ with detents every 45°
Arc rotation	Motorized, $+120^\circ$ / -30°
Touch Screen display	10" touch screen color display which shows the stand position, information (SID, arm angle, bucky angle, arm height) and the list of the available preset positions.
Controls	Two sets of buttons on the sides of the display for an easy system movement in every operational position displayed on the touch screen. One remote control allows all the functions available on the touch screen display One secondary keyboard mounted on the detector support: the bucky for VDX 4343VS has the same buttons available one the side of the display, while the bucky for wi-fi detector has only the arm buttons 'Up' and 'Down'.
Preset position	Automatic positioning for upright projections and under-table exams and up to 60 programs available with the VDX system
Safeties	Armonicus is provided with an emergency push-button and 7 light beams that stop the arc movement in case of contact or proximity of foreign parts. All the movements need the constant operator presence to be performed



Collimator

Type	Manual or automatic according to selected configuration
Field Type	Square and rectangular
Field size indicator	LED lamp with timer
Field coverage	48x48 cm @ SID=100 cm
Bucky centering	With cross reference lines and laser line
SID measurement	Retractable tape meter
Minimum inherent filtration	2 mmAl eq. @ 75kVp, IEC 60522/1999
Additional variable filtration	0,1 mmCu+1 mmAl 0,2 mmCu+1 mmAl 2 mmAl

Electrical features

Standard power supply voltage	from 200 to 240 V $\pm 10\%$, single-phase
Adsorbed power	1000 VA
Frequency	50/60 Hz

Mechanical features

Weight	340 kg (750 lb)	
Maximum dimensions	Width	2200 mm
	Depth	1770 mm
	Height	2600 mm
Minimum room dimension (with limitation on movements)	Width	2300 mm
	Depth	1760 mm
	Minimum ceiling height	2400 mm

Environmental conditions


Operating conditions	Temperature	+5 to +40°C (41° to 104° F)
	Relative humidity	10% to 75% non-condensing
	Pressure	700 – 1060 hPa
Conditions for transport and storage	Temperature	-20 to +70 °C (-4° to 158° F)
	Relative humidity	up to 95% non-condensing
	Pressure	> 630 hPa



Anti-scatter grids

Type	Armonicus can be equipped with: <ul style="list-style-type: none"> – 1 removable grid with focal distance of 140 cm – 2 removable grids kit with focal distance of 120 and 180 cm
Dimensions	460x460 mm
Material	Aluminum interspaces, Aluminum cover
Ratio	12:1 (for 120 and 180 cm focal distance grids) 10:1 (for 140 cm focal distance grid)
Lines	41 lines/cm (103 lines/inch)
Focal range	From 100 cm (39.37") up to 180 cm (70.86")
Grids parking	Up to 2 grids

Optional accessories

Mobile stretchers	Different types of mobile tables are available, with plastic laminate or carbon fiber tabletop. All with swiveling wheels and a maximum width of 66 cm.	
Patient positioning	Two-steps platform for weight-bearing feet examination It is equipped with two handles to assist the patient in remaining still while undergoing Stitching exams	
	Max patient weight	180 kg
	Inherent backrest filtration	0.8 mmAl _{eq}
	Wheels	Swivel, with parking brake
	Handles	2
	Additional components	Radiopaque meter 2 floor-installed mechanical stops, used as a reference for device positioning
	Dimensions W x D x H	750 x 852 x 2200 mm



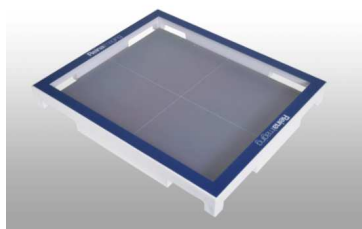
Weigh bearing foot stool
for fixed 43X43 detector



The U-Arm Footstool allows for standing feet x-rays without applying any patient weight to the imaging receptor. It is a simple single step platform with a clear top to allow the radiographer easy positioning during the exam. It is lightweight which allows for easy maneuverability of the footstool when needed.

Max patient weight	227 Kg (500 lb)
Base Dimensions	35x14x24 in. (88.9 x 35.56 x 60.96cm)
Handrail height	35 in. (88.9 cm)
Weight	33.6 lbs. (15.24 kg)
U-Arm Cavity	10.25 x 28.5 in. (26 x 72.4 cm)
Imaging Area	17.25 x 17.25 in. (43.8 x 43.8 cm)

Weight distribution
protector for wireless
detector



The Weight Distribution Cap is designed to protect your DR panel from direct patient weight during standing feet exams. This cap features slip-resistant feet, cutouts for any tether.

Max patient weight	340 Kg (750 lb)
Image receptor compatibility	35x43cm (14x17 in) or 43X43 cm (17x17 in) based on wireless FPD size

Standards and regulations

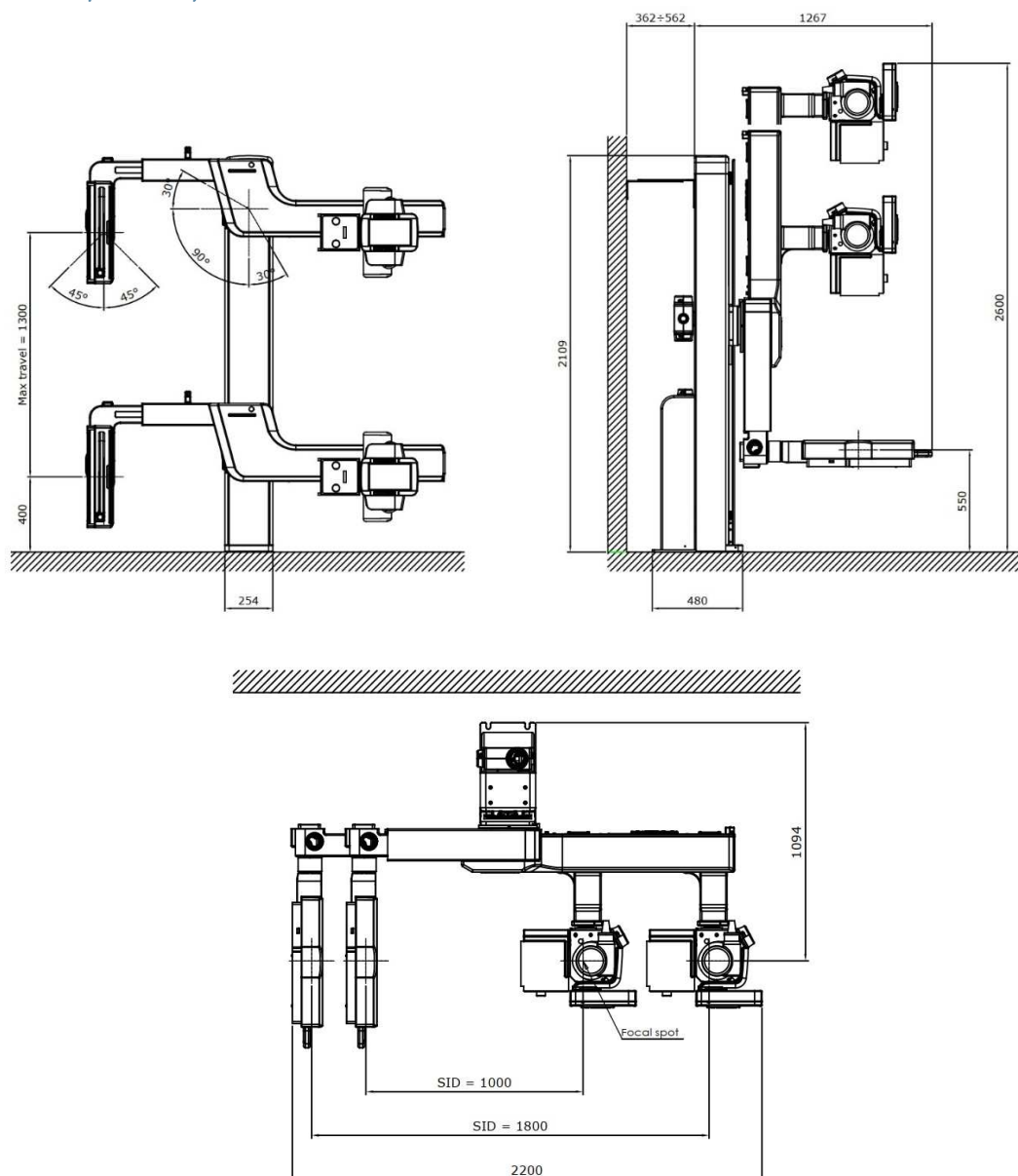


CE symbol marked on a component grants that the component itself is compliant with the European Directive 93/42/EEC and its revised versions or with the Regulation (EU) 2017/745 for Medical Devices

Armonicus is a system according to article 22 of the Regulation (EU) 2017/745 for Medical Devices



Dimensions (in mm)



Note: Products are continuously under review in the light of technical advancement. The actual specification may therefore be subject to improvement or modification without notice.

VILLA SISTEMI MEDICALI s.p.a.
 20090 BUCCINASCO (MI) – ITALY,
 Via delle Azalee, 3
 Tel. +39-02-488591, Fax +39-02-4881844

Company with Quality System certified by

