

 Amadeo X-ray Systems *vet*

Digital radiography with the complete X-ray system **Amadeo V-DR** for small animals



Amadeo vet DR complete X-ray systems for digital X-ray imaging



## Amadeo V - DR

# The universal complete solution for digital X-ray imaging

So you would like to invest in an efficient and universal X-ray system and make use of the numerous advantages of digital X-ray imaging? And you insist on a system that is easy to install and operate and requires little space? OR Technology has a complete solution tailor made for your requirements.

**Amadeo V-DR** was specially developed for use in veterinary practices and includes all the necessary components and functions for digital X-ray imaging without cassettes – such as a patient positioning table with floating tabletop, a generator, a flat panel, a PC and the **dicomPACS® DX-R** acquisition and diagnostic software.

The compact construction of the **Amadeo vet** system allows installation in extremely confined spaces. The X-ray generator uses minimal space and is integrated directly into the X-ray table. The system is easy to operate and flexible for various imaging techniques.

The optimised workflow of the **Amadeo vet** system reduces the number of steps that have to be taken. This saves you time as well as personnel and financial resources.

The **dicomPACS® DX-R** control console includes all functions required to operate the X-ray system: from controlling the X-ray generator to capturing the complete high quality image ready for diagnostic evaluation. All the necessary adjustments can be made from one single control console. In addition, the integrated multimedia X-ray positioning guide provides numerous hints on the correct adjustment technique and the positioning of the patient.

# Benefits

## Digital X-ray imaging with **Amadeo V-DR**

### Economical

You will be able to make use of the numerous benefits of the **Amadeo vet** system at low daily running costs.

Your advantage: The most up to date digital X-ray technology at an affordable rate.

### Excellent image quality

The high quality flat panel detector based on a caesium iodide (CsI) scintillator stands out with top image quality even at low X-ray doses.

Your advantage: Edge in quality compared to the widely used GadOx ( $Gd^2O^2S:Tb$ ) panels.

### User friendly

The professional **dicomPACS®DX-R** acquisition software provides an intuitive and modern graphic user interface. Examinations may be conducted comfortably at the monitor while all necessary adjustments of the X-ray values are automatically communicated to the generator.

Your advantage: X-ray values do not need to be entered manually at the control console of the X-ray system.

### Optimised workflow

By using the direct radiography detector, the annoying extra effort of transporting cassettes to the imaging plates system is no longer necessary. Waiting periods at the units no longer occur. In addition, the legally prescribed X-ray journal is kept for you digitally.

Your advantage: Enables easy workflow with optimal documentation.

### Fast

Shortly after taking the shot (6 – 8 seconds), the X-ray image is already available for viewing and diagnostic evaluation.

Your advantage: Provides quick results with optimal documentation.





**4-way floating tabletop** (152 x 72 cm) with generous maneuvering options and silent brakes, can be operated from the front panel.

## Efficient

Since it can be integrated into your existing practice administration system, patient data is transferred by just "pressing a button".

Your advantage: The tedious process of entering patient data manually is no longer necessary.

## Cleverly designed

An integrated X-ray positioning guide provides information on the correct positioning technique for any examination of cats and dogs.

Your advantage: The X-ray process becomes easier.

## Unique

Special measuring functions such as HD measuring, TTA, TPLO and heart measuring are provided without any extra cost.

Your advantage: Evaluation of images becomes much easier.

## Convenient and easy

The patient positioning table is equipped with a floating tabletop.

Your advantage: Allows generous maneuvering and can be operated conveniently from the front panel.

## Compact construction

The X-ray generator is incorporated directly into the table of the **Amadeo** vet system using up minimal space.

Your advantage: Space saving installation / no additional cable ducts or generator floor space required (space and cost saving)



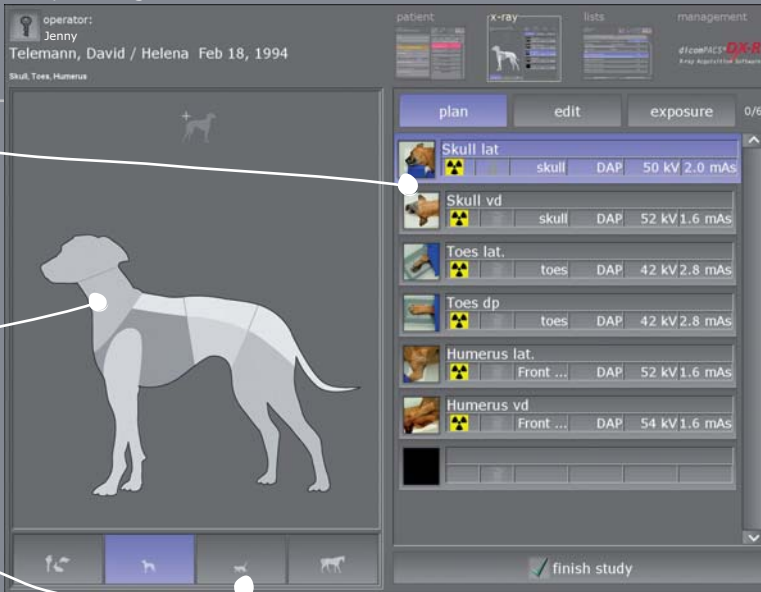
# Software

## Advantages of the professional **dicomPACS®DX-R** X-ray acquisition software

- Modern graphic user interface (GUI) adaptable to almost **any language**
- **Touchscreen** operation - to ensure quick and efficient work and a smooth workflow
- Capture of patient data via **DICOM Worklist, BDT/GDT, HL7** or other protocols - data may also be captured manually
- Use of **DICOM Procedure Codes** for the transfer of all relevant examination data directly from the connected patient management system (HIS/RIS)
- **Freely configurable** body parts with more than **200 projections** and numerous possible adjustments in **veterinary medicine** already included
- Safe and fast **registration of emergency patients**
- Allows the user to **switch between examinations** of a patient, for instance to avoid having to re-position the patient frequently
- Special tools for veterinary medicine, such as an extra dialog box for patient and owner data, integrated **hip dysplasia measuring, special image filters, TPLO, TTA, Buchanan's Vertebral Heart Score, distraction index, multi generator operation** for alternating between mobile and stationary systems and much more...
- Entry of recurring **examination procedures as macros**
- **Fully integrated radiographic positioning guide** for each examination incl. comprehensive notes, photos and correct X-ray images
- A single work station with installed **dicomPACS®DX-R** software may be upgraded by the following options (selection):
  - **Image stitching** - tools for stitching an overall image from separate X-ray images (optional)
  - Planning and working with **digital prostheses templates/ operation planning** (optional)
- Facilitates the use of a flat panel and an intraoral sensor



## Job planning

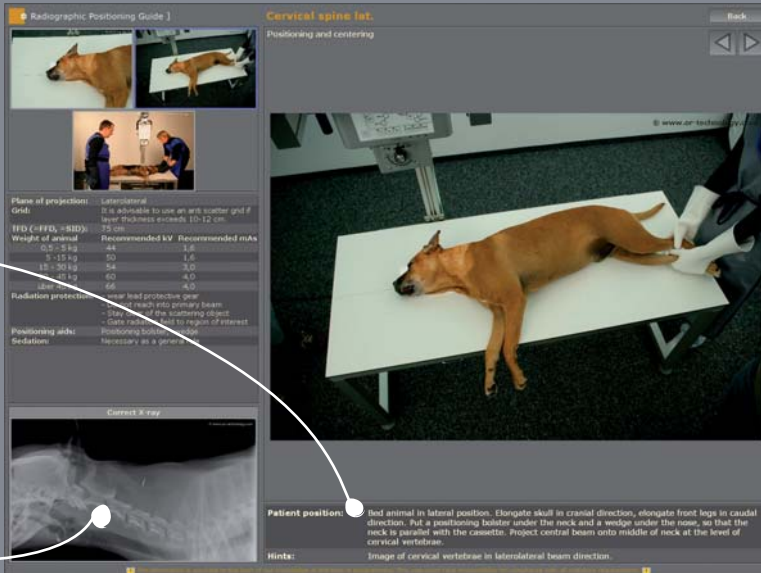


A single click opens the X-ray positioning guide for horses, dogs and cats

Diagram for planning a specific X-ray job

Switch to planning X-ray jobs for cats, horses or small animals/exotic animals

## X-ray positioning guide



Provides numerous hints on patient positioning, central ray, tips and tricks, common mistakes etc.

Shows an image of a correct X-ray examination

## Preview of the X-ray image and worklist



Preview of the current X-ray image

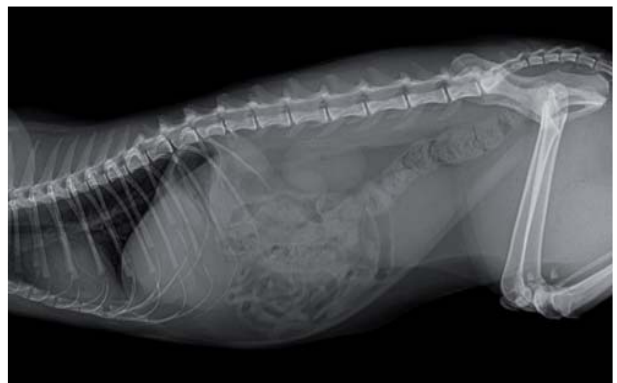
# Image processing

Automatic image processing for optimal quality

- Perfect images at all times - generally **no adjustment** required
- Integrated software for **automatic image optimisation**
- Professional, **adaptable image processing** for each individual examination to obtain best possible image settings for the needs of each customer
- Due to specially developed processes, the image processing allows the user to **vary the X-ray settings on a large scale** while the image quality remains virtually the same (**possibility of reducing the dosage**)
- **Bones and soft tissue** in one image - this enables the user to significantly improve his diagnosis
- **Details of bones and microstructures are very easy to recognise**
- Noise suppression
- **Black mask** (automatic shutters)
- Cropping of images (Crop function)
- Automatic **removal of grid lines** when using fixed grids



Exposure with **standard** image processing

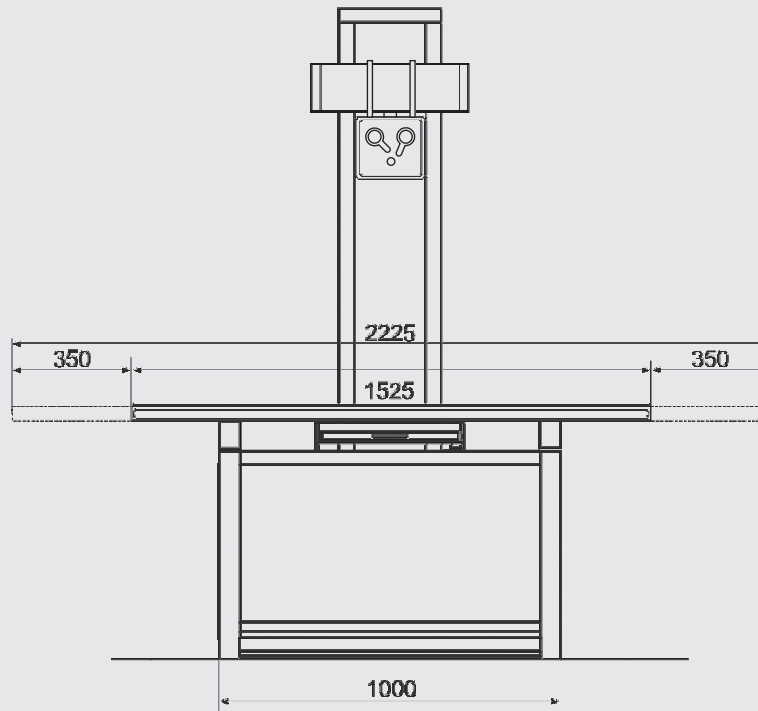


Exposure with **dicomPACS<sup>®</sup> DX-R** image processing

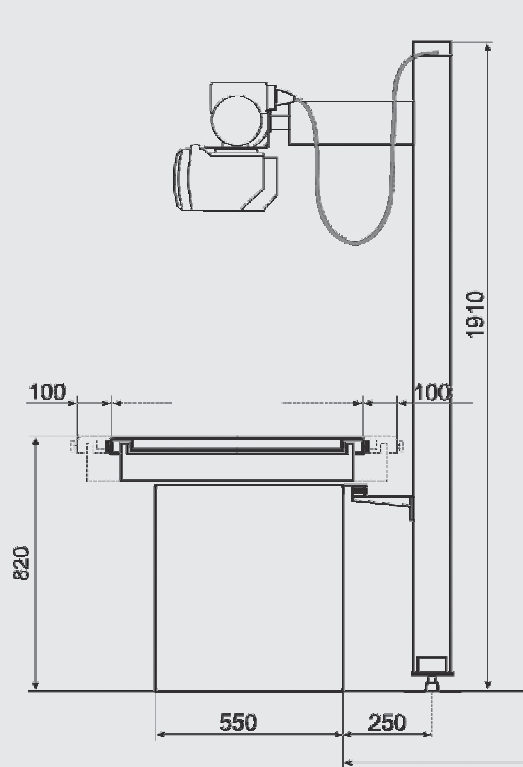


## Dimension bucky table **Amadeo V-DR**

Front





Profile





# Delivery includes

The **Amadeo-V** systems includes the following components

Components	Amadeo V-DR DR system with integrated fixed dual flat panel	Amadeo V-AX System for film/ CR cassettes without generator control
<b>HF generator</b> 32 kW generator output (max 400 mA, 40 - 125 kVp, 0.5 - 500 mAs)	✓	✓
<b>Bucky table</b> <ul style="list-style-type: none"> <li>▪ Stable and robust column construction, firmly flanged to the table</li> <li>▪ FFA= 100 cm</li> <li>▪ 4-way floating table (152 x 72 cm), generous maneuvering, silent brakes</li> <li>▪ Trigger with double-stage foot switch or optional hand switch</li> <li>▪ Dose optimised table top, side mounted stabiliser bars</li> <li>▪ Integrated grid</li> <li>▪ Compact construction allows installation in very confined spaces</li> <li>▪ Low maintenance powder coating – resistant to impact damage</li> <li>▪ Easy to clean</li> </ul>	✓	✓
		
<b>X-ray tube 125 kVp</b> 1.0 / 2.0 mm	✓	✓
<b>Collimator, symmetric</b> <i>with close and far focus lead plates, with halogen or LED lighting, manual operation via the brake panel, extended illumination period (approx. 2.5 min)</i>	✓	✓
<b>Motorised bucky with removable grid</b>	✓	✓
<b>Flat panel detector 35 cm x 43 cm</b> <ul style="list-style-type: none"> <li>▪ very high sensitivity and high resolution with low X-ray dosage</li> <li>▪ CsI screen</li> <li>▪ Response time: no time delay for the release of the X-ray shot</li> <li>▪ Active area: 13.8 x 16.8 inch (35.0 x 42.6 cm)</li> <li>▪ Pixel matrix: 2,448 (H) x 2,984 (V) (7,3 Mio Pixel)</li> <li>▪ Pixel pitch: 143 µm</li> <li>▪ Size: 38.4 x 46.0 x 1.5 cm (B/H/T)</li> <li>▪ Weight: Sensor unit: approx. 3 kg</li> </ul>	✓	-
		



**Amadeo V-DR**

**Amadeo V-AX**

Operation by **dicomPACS® DX-R** acquisition station

- Mini PC with 23" monitor including **dicomPACS® DX-R** acquisition and diagnostic software with modern graphic user interface
- Flat panel control
- X-ray generator control
- Adaptable organ-related image processing CoP (Cognition Optimised Processing)
- Multimedia X-ray positioning guide
- DICOM Send SCU for image transfer to a PACS system
- Worklist SCU/SCP for connection to the EDP system of the practice
- Patient CD



**Optional components to upgrade the Amadeo-V system:**

Integrated monitor



Stored energy 6,5 Kws

Power supply with 230 VAC/ 16 A, max 6,5 kW/ 150 mAs



X-ray tube, Focus 0.3 / 1.0 mm



X-ray tube, Focus 0.6 / 1.5 mm



HF generator with 50 kW generator output



# Vet portfolio

## Overview - products of OR Technology



### Medici DR Systems *vet*

**DR retrofits** - digital upgrade set for existing X-ray systems incl. **dicomPACS®DX-R** acquisition software, available for stationary and mobile X-ray machines



### Leonardo DR Systems *vet*

**DR suitcases** - compact suitcase solutions for mobile and portable X-ray incl. **dicomPACS®DX-R** acquisition software



### Amadeo X-ray Systems *vet*

**Complete digital X-ray systems** (incl. stand, Bucky, generator, flat panel etc. and incl. **dicomPACS®DX-R** acquisition software), mobile X-ray solutions as well as portable X-ray solutions



### Divario CR Systems *vet*

**CR solutions** - CR systems for digital X-ray with cassettes incl. **dicomPACS®DX-R** acquisition software



### X-ray Accessories

**Accessories for X-ray**  
e.g. radiation protection walls, gloves



### dicomPACS® *vet*

**Image management (PACS)** - comprises acquisition, processing, diagnosis, transfer and archiving of image material



### ORCA

**Cloud-based archive solution** - safe, long-term archiving of patient data with intelligent usage of internal databases communication platform with colleagues and specialists and transfer of image data to patients



**dicomPACS®DX-R**  
X-ray Acquisition Software

**X-ray acquisition software** [only for OEMs] - acquisition and diagnostic software for X-ray images from flat panels or CR systems



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