



# The DR system in a suitcase for mobile X-ray



The portable DR system for mobile X-ray

*Practice-oriented robust solution for mobile X-ray*

OR Technology has been active in the fields of digital X-ray technology and image management for human and veterinary medicine for over 15 years. Big medical practices, clinics and hospitals as well as in smaller practices in more than 36 countries are using our solutions with great success.

## **LEONARDO DR 4336R -** portable digital X-ray system with outstanding features

The compact suitcase solution **Leonardo DR 4336R** is a fast and space saving alternative for ambulant digital radiography.

The handy, robust suitcase made out of shock proof materials, is easy to handle and transport with its extendable handle and the integrated wheels. It also offers the option to integrate a fold-out table.

An integrated 17" notebook with a very high resolution guarantees a qualitative good image viewing. The software offers numerous image processing functions.

The integrated and robust 4336R flat panel detector is suitable for rapid mobile radiography systems. The detector only weighs 3.6 kg and is based on the new Gigabit-Ethernet-Interface. The images are displayed on the work station within seconds.



### Areas of application:

- Ambulant departments in hospitals
- Intensive care units
- Rapid response medical vehicles
- Technical relief agency
- Military medical services
- Aid organisations
- Medical facilities on ships and oil rigs
- Medical facilities at mining companies (coal, diamonds)

# Professional software for image acquisition and diagnostic:

- Can be used intuitively - developed in cooperation with acknowledged specialists in the area of human medicine
- Image acquisition, work flow and diagnosis within one software
- Automatic display of recommended X-ray data (KVp, mAs etc.) for every image - depending on the X-ray equipment used
- Over- or underexposure are adjusted automatically
- Option to capture frequently repeated examination processes as makros, e.g. pre-purchase examinations
- Retake mode to repeat an image without interrupting the work flow
- Integrated radiographic positioning guide for correct preparation of each examination
- Outstanding image quality due to the special **dicomPACS®DX-R** image filter technology for each examination
- Easy adaptation of the image filters to the specific viewing habits of different doctors
- Option to suppress grid lines
- Integrated professional diagnostic software **dicomPACS®** - tried and tested on over 5,000 workstations worldwide
- Extensive measuring functions, including specialised orthopaedic measuring tools
- Compilation of patient CDs
- Extensive archiving and search functions
- Synchronisation with other databases
- Integrated remote maintenance software
- Option to integrate the **dicomPACS®** web server for image distribution via the internet
- Full DICOM 3.0 functionality for integration with other PACS systems
- Option to upgrade to PACS, incl. connection of all modalities (DICOM or non-DICOM) e.g. MRI, CT, NUK, arthroscopy, endoscopy, ultrasound etc.

## The suitcase:

- **Very small** and robust thanks to special developed materials and excellent workmanship
- **Easy to transport**
- **Very light** - only 22 kg incl. flat panel, notebook and cables
- **Highest possible resolution** and diagnostic image quality by the large 17" display (at least 1,600 x 1,200 pixel)
- **Very quick** - only approx. 4 to 5 seconds wait for the image and just approx. 2 seconds before the next exposure can be taken





## Leonardo DR 4336R operation:

For this solution, the images are received by so called flat panels. The systems are called DR (direct radiography) systems. The flat panels are usually connected to the computer (notebook) by cable.

All necessary components, cables included, are housed in a sturdy, compact case. Open up - switch on - ready!

A range of DR detectors of various sizes are available for various needs, and can be integrated in the case system as required for the application in question.

Such a compact system enables you to quickly create excellent images in DICOM format, as well as to process and archive them.

You will save time, space and money; repeat visits to the patient are avoided; the system operates under almost all conditions and is nearly maintenance free.

*A number of different DR detectors in various sizes are available for different requirements, which can be integrated into the suitcase solution as required.*

*For more detailed information please visit [www.or-technology.com](http://www.or-technology.com) or please feel free to contact us by [info@or-technology.com](mailto:info@or-technology.com)*

## Dimensions:



Closed:





# Leonardo DR 4336R

With *dicomPACS™ DR* Software  
Portable X-ray Systems for the Future

## Construction of **Leonardo** DR 4336R system



1.

The pull-out trolley handle allows easy transport from vehicle to treatment site.



2.

To set up the system, push in the trolley handle and lay the case on the ground.



3.

All the components, i.e. detector, laptop, cable etc. are neatly arranged in the case and at hand for immediate use.



4.

Network cable, connection for power supply and remote control are integrated with a special restraint system which prevents them from slipping and sliding.



5.

Just switch on the laptop, connect the detector with the X-ray unit and start making exposures.



Compartment for mouse and cables



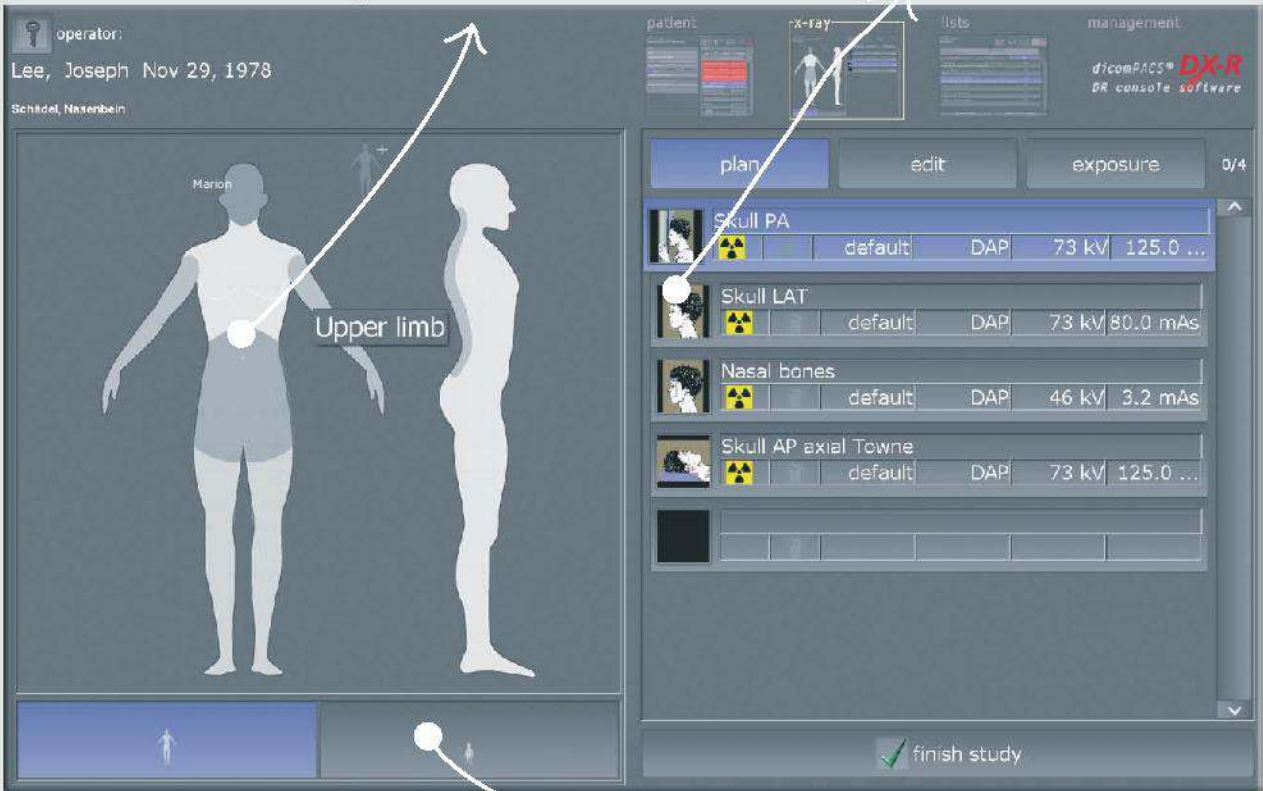
Compartment for patient CDs and general on-off switch



# Screenshots

*Chart for the planning of an individual X-ray job*

*The correct settings for adults and children at a mouse click*



operator: Lee, Joseph Nov 29, 1978  
Schädel, Nasenbein

plan edit exposure 0/4

Skull PA	default	DAP	73 kV	125.0 ...
Skull LAT	default	DAP	73 kV	80.0 mAs
Nasal bones	default	DAP	46 kV	3.2 mAs
Skull AP axial Towne	default	DAP	73 kV	125.0 ...

finish study

dicomPACS<sup>®</sup> DX-R job creation

*Switch to the planning of X-ray jobs for children*



operator: Steve Miller  
Yabara, Olivia Apr 11, 1990  
Shoulder L, Abdomen, Pelvis

plan edit exposure 3/6

Shoulder AP	default	DAP	66 kV	20.0 mAs
wrong position	default	DAP	66 kV	20 mAs
Clavicle PA	default	DAP	63 kV	16.0 mAs
Abdomen AP upright	default	DAP	85 kV	125.0 ...
Pelvis AP	default	DAP	81 kV	320.0 ...
Hip joint AP	default	DAP	77 kV	200.0 ...
Sacroiliac joint (Barsony)	default	DAP	81 kV	200.0 ...

finish study

dicomPACS<sup>®</sup> DX-R - preview of the X-ray image and worklist

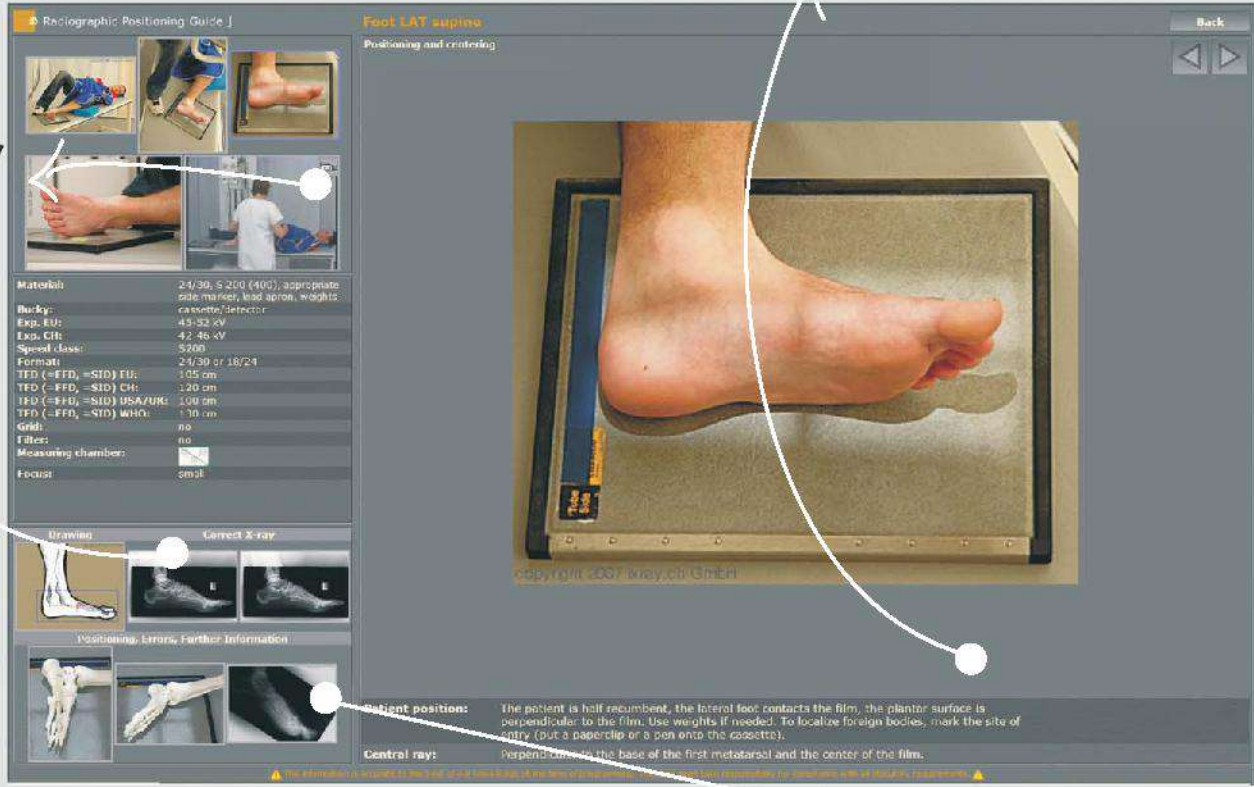
*Preview of the current X-ray image*

# Screenshots

*Presentation of helpful hints for the positioning of the patient, central beam, tips and tricks, frequent errors etc.*

*Video with sound for the step by step positioning of the patient*

*Shows an example of a correct X-ray image*



**dicomPACS<sup>®</sup> DX-R radiographic positioning guide**

*Opens examples of inaccurate X-ray images with comments*



**dicomPACS<sup>®</sup> DX-R generator control**

*The generator panel displays all values and settings (kVp, mAs, focus etc.) recommended for a specific examination*



**Specifications subject to revision without notice**

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