RADspeed Pro
GENERAL RADIOGRAPHIC SYSTEM
EDGE package
High-Performance General Radiographic System Providing New Clinical Value
DR SYSTEM
(DR-ID 900)

- DR-ID602SE
  (17×17 inch, GDS)

- DR-ID615SE
  (14×17 inch, Csl)

- DR-ID911SE
  (17×17 inch, Csl)

- DR-ID601SE
  (14×17 inch, GDS)

- DR-ID613SE
  (24×30 cm, Csl)
Providing New Clinical Value

Tomosynthesis (Digital Multislice Tomography)

Tomosynthesis is a new digital imaging technology that combines cone-beam CT reconstruction with digital image processing. It allows images of any cross section to be obtained easily from volume data acquired from a single tomographic scan. (Only with DR-ID911SE)

Flexible Examinations with Freedom in Choosing Body Positions
This allows images to be obtained with loads applied in the standing position, or in the supine position on a table. Consequently, it can be used to obtain images of the elbow or knee in the bent position, which is difficult using CT.

Fewer Metal Artifacts Make Tomosynthesis Especially Useful for Orthopedic Areas
Tomographic images can be viewed with fewer metal artifacts than with CT images. This is especially useful for follow-up examinations after surgery in orthopedic areas with embedded metal objects.

Low Exposure Imaging
Tomosynthesis enables the imaging of multi-frame volume data with low dose exposures. Thanks to irradiation field size selection and collimation, X-ray exposure beyond the desired area can be suppressed even in imaging of the femur, so there is no excessive exposure.

Display of Oblique Cross Sections
Tilting the tomosynthesis cross section slightly from horizontal improves the visibility of spines, hip joints, and other areas that are not parallel to the tabletop.

Captured volume data is sent to a dedicated workstation (Side Station RAD) in real time, where it is automatically reconstructed. The workstation allows reconstruction to be repeated with different parameters as many times as necessary. Using the imaging console allows transfer to the next imaging immediately after the data transfer is finished.
**T-smart (*)**

*T-smart* is our latest and highest grade tomosynthesis technology evolved further with iterative reconstruction method. T-smart automatically divides the original projection images into two projection image sets metal-free projection images and metal-only projection images by using advanced metal extraction algorithm. Then, it performs iterative reconstruction to each of them, and finally integrates the two data in one. That is how “T-smart” image is provided.

(*) Tomosynthesis Shimadzu Metal Artifact Reduction Technology

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**Metal Artifact Reduced Further**

T-smart provides even clearer Tomosynthesis images suppressing the artifacts around metal objects even further. This application will be a great help in the orthopedics especially for the patients with metal implants or fixators, as it enables you to diagnose the status of the boundary between bone and implant very exactly.

**High Image Quality with Low Noise**

Since the reconstruction process is performed without filtering, it improves visibility of trabeculae, hairline fractures, and other details, even around metal objects, without accentuating noise. Consequently, this allows images to be viewed with even higher image quality.
Speed Stitch (Auto stitching of long view images)

The X-ray tube swings and the FPD moves automatically to capture image data. The captured image data is then automatically stitched together in the DR system. This makes it easy to create long images that extend across larger areas of the body in the anteroposterior direction.

Dual Energy Subtraction

By taking successive high and low voltage images and applying a calculation process, soft-tissue images and bone images can be viewed separately. Shadows of nodes obscured by ribs can be rendered in soft-tissue images, or calcification can be rendered in bone images. (Only with DR-ID911SE)
Check Reference Images About One Second After Exposures

Reference images can be displayed a mere one second after exposure. The wireless FPD has no cables connected to it, so it can be kept clean even in infectious disease wards.

Never Replace a Cassette

This eliminates the stress caused to patients from changing cassettes. Without any worry of accidentally using the wrong cassette or having to read barcodes, like on IP systems, radiography can be performed for a large number of patients quickly.

Automatically Linked Radiography X-Ray Exposure Field

The collimator X-ray exposure field is automatically linked to the exposure area size selected in the DR system.

Verify the Patient Name in the Examination Room

The patient name and ID number registered in the DR system are displayed on the X-ray tube unit, which makes it easy to verify patient information.
Sophisticated Functionality Makes It Even Easier to Operate

Revolutionary Auto-Positioning Feature Allows the Operator to Focus On Patient Care

The auto-positioning feature is interlocked with the APRs. This function moves the ceiling-mounted X-ray tube support to any desired position at the press of a single button and can automatically set the X-ray tube angle. Effortless tube positioning allows the operator to focus on patient care. Naturally, manual operation is also possible to make fine positioning corrections extremely simple.

Pressing a single button on the remote control smoothly moves the ceiling-mounted X-ray tube support to pre-registered positions. Movement stops immediately after the remote control button is released. Up to two remote control units can be used.

Optional automatic rotation around the X-ray tube support axis is also available.

Radiography Can Also Be Performed Using a Foot Switch

Operators can perform radiography using a foot switch even when they are standing next to a child or elderly patient.

APRs Synchronized with the X-Ray High Voltage Generator

Radiography parameters can be changed beside the patient as well as on the wall-mounted console in the control room. The operator can prepare for radiography without leaving the patient. This sophisticated synchronization of the X-ray tube support and X-ray high voltage generator effectively exploits the convenience of dual consoles.

Screens are synchronized through communication.

Offers the same operations and displays as the X-ray high voltage generator.

- Examination Regions: max 10 regions
- Radiography Methods: max 20 methods
- Exposure Directions: 7 directions
New Ways to Reduce Patient Exposure

Realizing Our Commitment to Reducing Patient Exposure

Auto-Filtering Feature Automatically Switches to the Optimal Filter for Each Selected Protocol

Select a protocol to suit the type of examination, and the filter in the collimator will change in accordance with the protocol. This ensures the correct filter is always automatically selected.

Removable Grid

Remove the grid during pediatric radiography to reduce patient exposure. The type of grid inserted is displayed on the integrated console and on the LCD on the ceiling-mounted X-ray tube support.

Dose-Area Product Meter / Calculated Dose

For dose monitoring, either a Dose-Area Product Meter (DAP) or a Calculated Dose is available. The DAP measures the actual dose and displays it on the DR operator’s console. The Calculated Dose displays the expected dose, in advance of the exposure, based on the radiography parameters and the distance to the patient. After the exposure, the calculated dose, based on the actual exposure parameters, is displayed. With either option, the resulting exposure parameters and dose are displayed and can be sent to the RIS/PACS system. Note: The calculated dose is not available if the DAP meter is optioned.
Configuration

X-Ray Tube Support
CH-200

Automatically follows changes in table height

Bucky Table
BK-200

“Lock release buttons” on rear of tube suspension
Bucky Stand
BR-120/BR-120T

X-Ray High-Voltage Generator
UD150B-40/V-40/L-40

Automatic synchronization even at oblique positions

DR System
DR-ID 900

Note 1: Of the recommended DR systems, the DR-ID911SE cannot be installed in the Bucky stand or the Bucky table.

Note 2: If the DR-ID911SE is used in combination with a Bucky stand or Bucky table, then the FPD unit cannot be replaced with DR-ID602SE, DR-ID601SE or DR-ID611SE.
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Shimadzu Corporation

Headquarters
1, Nishimokyo-Kuwabara-cho, Nakagyo-ku, Kyoto 604-8511, Japan
http://www.shimadzu.com


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• Every value in this catalogue is a standard value, and it may vary a little from the actual at each site.
• The appearances and specifications are subject to change for reasons of improvement without notice.
• Certain configurations may not be available pending regulatory clearance. Contact your Shimadzu representative for information on specific configurations.
• Before operating this system, you should first thoroughly review the Instruction Manual.