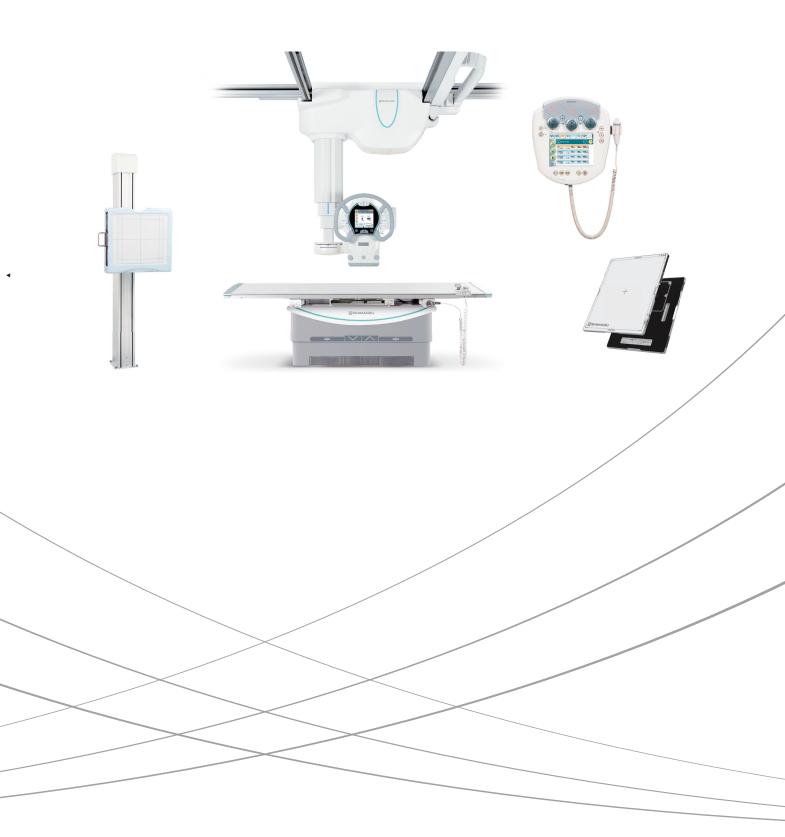


# RADspeed Pro style edition



# High-Performance General Radiographic System Improves Workflow and Achieves Dose Reduction

# RADspeed Pro style edition

This state-of-the-art automatic general radiographic system is based on the extensive experience and expertise Shimadzu cultivated as a pioneer in medical diagnostic imaging systems. It minimizes X-ray dose and improves examination workflow. Available only from Shimadzu, this system utilizes the latest technologies that are gentler to humans and provide a more comfortable examination environment for both the patient and the operator.



# Recommended DR system Shimadzu V series



V1417 14×17 inch Versatile use



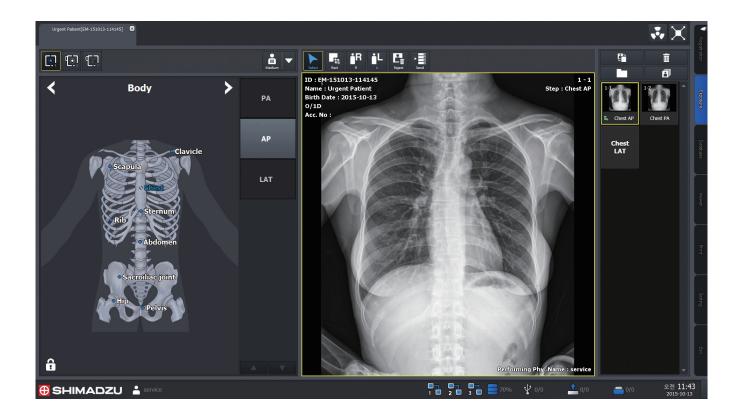
V1717 17×17 inch Chest stand, Trauma, and Surgery



V1012 10×12 inch Extremities and Orthopedics



# Experience New Clinical Values with an innovative DR system



Designed with the user in mind, the digital control console offers easy navigation and touch screen features to simplify procedures and improve workflow.

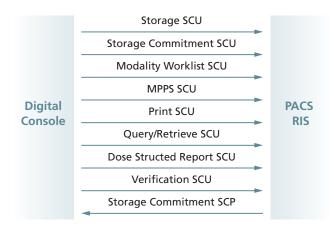
### Automatically Linked Radiography X-Ray Exposure Field

### **DICOM Standard Compliance**



# 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 support, which makes it easy to verify patient information.



# **Excellent Durability**

The elegance of the new design combines the robustness of product while creating a sophisticated, powerful and practical detector for any hospital environment.

### **Robust Design**



Drop resistance 1m (40 inch) height

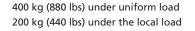
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400 kg (880 lbs)

#### IP67 - Dust and Water resistance

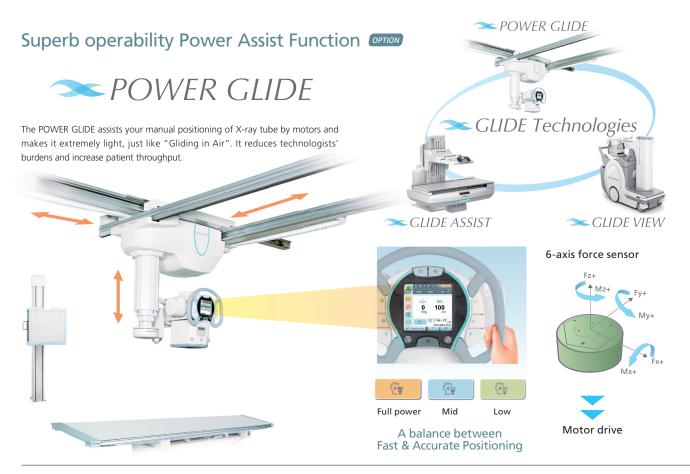
Have confidence in reliable operation against water and dust. The series has IP67 rating for splash, water and dust resistance. V-Series can operate safely in water for up to 30 minutes at depths of less than 1 m (40 inches).





# Our Caring Subtle Improvements Make Your Operation Even Easier

Extensive Functionality Matched to the Needs of Various Clinical Applications



## Revolutionary 5-axis (max.) 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.

(30 horizontal / 30 upright / 30 others, 90 positions max.)

Naturally, manual operation is also possible to make fine positioning corrections easy.



# Synchronized Vertical Movements of X-Ray Tube Unit and Bucky Unit

The focal point of the X-ray tube unit moves up and down in conjunction with the vertical positioning of the X-ray Bucky stand and X-ray Bucky table. This allows the operator to attend the patient in a standing position while positioning the equipment.

For a table study, the X-ray tube automatically moves to a pre-set SID, enabling accurate and fast positioning.



Automatic synchronization even at oblique positions

# Ceiling-Mounted X-Ray Tube Support for Versatile Positioning

X-ray tube support vertical range of 1,600 mm ensures sufficient SID when examining supine patients and low focal point radiography of standing patients. This support also rotates on the vertical and horizontal axis in addition to fixed positioning at any desired angle, enabling fast positioning at complex angles for orthopedic applications.

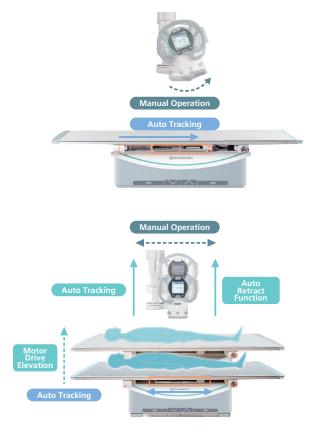


\* Photo showing in case of Power Assist option.

## Bucky Unit Automatically Follows Irradiation

Easily synchronize the longitudinal travel of the table's Bucky unit with the X-ray tube support position. In addition, for oblique radiography, the X-ray field can be controlled according to the APR.

Synchronization between the X-ray field and Bucky unit provides fast positioning even for complex orthopedic positioning.



Automatically follows changes in table height

### Orderly Cable Management OPTION

Shimadzu provides a tractable cable management system along the ceiling rails that supports smooth positioning.



# Confirm The Irradiation Field Clearly with LED Light

Newly accommodated LED light indicates the irradiation field more clearly. The long-life LED reduces replacement frequency.

#### Easily Attach Line Marker to Collimator OPTION

Red laser mark clearly indicates center of the radiation field.

### Click-Stop Collimator Rotation

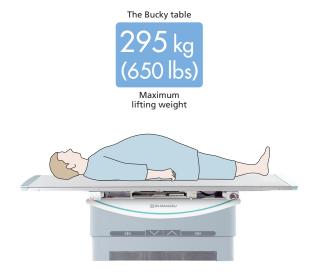
When rotating the collimator relative to the X-ray tube, the collimator can be click-stopped in 3 positions, 0 degrees and  $\pm$ 45 degrees, allowing quick adjustment of collimation. (The collimator can also be quickly returned to the original (0°) position.)

### **Design Concept Pursues Durability**

The Bucky table can support 295 kg (650 lbs).

The ceiling mounted X-ray tube support coupled with the Bucky device ensures easy operation and features a highly rigid construction and a durable shock-absorption mechanism.

RADspeed Pro is a high-reliability radiography system that offers extreme carefree longevity for the X-ray department.



# Easy-to-Operate, Fully Featured, Intelligent X-Ray High Voltage Generator

Color LCD and Touch Panel Allow Intuitive Operation

# Patient Care Concept

#### **Color-Coded Status Indicator**

The console panel indicates the status of the X-ray generator using color perimeter display with audible sound.

The hand switch also lights up to indicate 'Ready Status'.

This advanced feature allows the operator to concentrate on patient care:

- Infant and frail elderly patients who need constant attention.
- Split-second timing is required for patients who have difficulty holding their breath.
- Quick positioning and image capture when required

## **APRs Synchronized with** the DR system OPTION

The selected APR controls the radiography parameters, which can also be selected and 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 DR system, X-ray tube support and X-ray high voltage generator effectively exploits the convenience of multiple consoles.



#### Illumination Color and Alarm Sound When Preparation for Exposure Is Complete

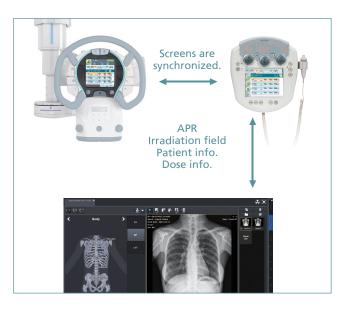
The LCD screen and illumination color can change according to the Bucky table or X-ray tube settings selected. Different alarm sounds can also be specified for various events, such as when preparation for exposure is complete.



Using Bucky stand



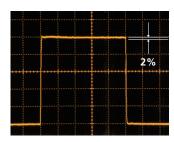
Using Bucky table



### **Generator Equipped with High-Frequency Inverter Technology**

The `High-frequency Inverter` with maximum frequency of 50kHz is used as the X-ray generation source, which generates low-ripple output with a high X-ray quantum efficiency.

This dramatically reduces X-rays that do not contribute to high-quality imaging.



**High-frequency** conversion



High efficiency. low-ripple output High-quality images

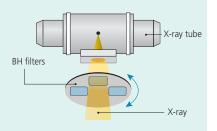
# New Ways to Improve Patient Care

Extensive Functionality Matched to the Needs of Various Clinical Applications

### 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.

# **Cushioning Gently Protects Patients**

If a patient suddenly sits up after an examination, they could potentially hit their head on the instrument.

Therefore, the bottom of the X-ray tube support is covered with rubber cushioning material to carefully protect patient.



### **Dose Display**

For dose monitoring, a Calculated Dose Area Product can be displayed on the console after exposure, which is based on the measured exposure parameters. Optional physical DAP meter is also available instead of the Calculated Dose Area Product display function.

In addition, Estimated entrance Dose based on the radiography parameters and the measured distance to the patient, is displayed prior to exposure as an option.

The measured exposure parameters and calculated or measured dose are displayed and can be sent to the RIS / PACS system.

\*) The optional Estimated entrance Dose display is not available if the optional DAP meter is combined.



### Radiography Can Also Be Performed Using a Foot Switch **OPTION**

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

# **Configuration and Options**

# X-Ray Tube Support

- •Color LCD Touch screen rotates automatically with tube rotation
- Individual programmable switches for locks
- •Quick positioning with new-style operation handle
- Easy to clean surface
- •All free button for full-way motion release
- •One-hand operation for vertical tube movement
- •Lock release buttons on rear of tube suspension
- •Spring balanced for easy movement
- Reliable locking system allows any angulations to be held in position



# Bucky Table

- Elevating horizontal radiographic table
- •Maximum lifting weight is 295 kg (650 lbs)
- •4-way floating top and electromagnetic locks
- Size sensing cassette tray
- Tabletop collision protection sensor
- •Convenient and safe foot controls by kick switch
- Selectable extensive options
- •Flat CFRP-tabletop (option)
- Grid is removable



# X-Ray High-Voltage Generator

- •Newly designed large capacity and high frequency inverter
- Large readout LED
- Touch screen display
- •Communication with CH-200 display
- •Quick setup with jog dials and Up/Down buttons
- Micro processor controlled
- Automatic exposure control
- •Self diagnostic function with display of error codes
- •80, 65 and 50 kW output selection



# Bucky Stand

- •Vertical travel to accommodate all patient ranges and studies
- Size sensing cassette tray
- •Remote collimation control (option)
- ·Compact design Bucky unit for easily examined sitting patients
- •Selectable extensive options
- •Equipped with a tilting Bucky unit (BR-120T)
- •Grid is removable



10

# DR (Recommended DR system)



V1417 14×17 inch Versatile use



V1717 17×17 inch Chest stand, Trauma, and Surgery



V1012 10×12 inch Extremities and Orthopedics

# Options



Grip switch



Remote

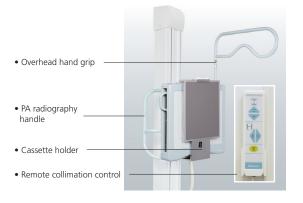
control



Bucky table handle



Bucky table compression belt



- Phototimer SPT-XD-A1A (1 field)
  Phototimer SPT-XD-A3B (3 fields)
  Phototimer SPT-XD-A4B (4 fields)
- Vertical tracking unit
- •Bucky synchronization unit\*
- •Auto positioning function\*
- •Bucky table handle
- •Bucky table compression belt •Bucky table drip holder
  - sion belt •Area Dosimeter
    - Orderly cable Management

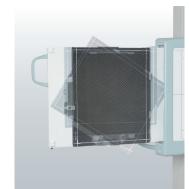
•Foot switch

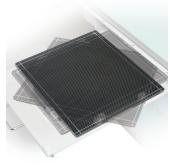
Bucky table dual-side kick switch option
Bucky stand compression belt
Bucky stand PA radiography handle

• Bucky stand overhead hand support

•Line Marker to Collimator (R-300)

• Detent unit (available with R-300)





FPD Rotation Tray

 $^{\ast}$  Auto positioning function and Bucky synchronization unit are not available with the CH-200 rear-mounting type.

Founded in 1875, Shimadzu Corporation, a leader in the development of advanced technologies, has a distinguished history of innovation built on the foundation of contributing to society through science and technology. We maintain a global network of sales, service, technical support and applications centers on six continents, and have established long-term relationships with a host of highly trained distributors located in over 100 countries. For information about Shimadzu, and to contact your local office, please visit our website at www.shimadzu.com



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Shimadzu Corporation Medical Systems Division has been certified by TÜV Rheinland as a manufacturer of medical systems in compliance with ISO9001:2015 Quality Management Systems and ISO13485:2016 Medical Devices Quality Management Systems.

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