

# RADspeed Pro

## Manual



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Manual

## High Productivity and Reliability: Hallmarks of Shimadzu X-Ray Systems!



With over a century of experience in manufacturing X-ray apparatus, Shimadzu's expertise in X-ray systems is well recognized. For years, Shimadzu's X-ray products have been associated with legendary reliability, cost-effectiveness and quality in the medical industry. Shimadzu's general radiographic systems are imbued with the Shimadzu heritage. Additionally, our general radiographic system features state-of-the-art technology that enhances productivity, user-operability, patient comfort and safety.

## Superb Performance & Efficiency

### MC Type

A ceiling-mounted X-ray tube system with a wide range of movement allows excellent imaging, technique flexibility and easy access to the patient. This enhanced flexibility is ideal for imaging centers that demand high productivity to meet fast patient throughput.



### Space Saving Concept

The compact, space-saving high voltage generator provides more working space as well as a flexible layout. A ceiling-mounted X-ray tube further increases the spatial area around the patient on a Bucky table or trolley.



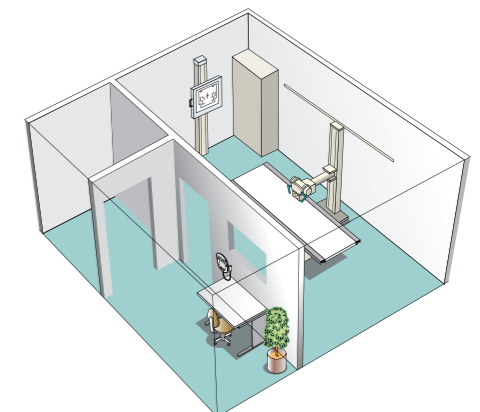
### MF Type

The system is for compact floor-mounted tube support installations. Designed to exacting specifications, the system delivers high-performance, high-quality, and cost-effective operation in a superior general radiographic system.



### Space Saving Concept

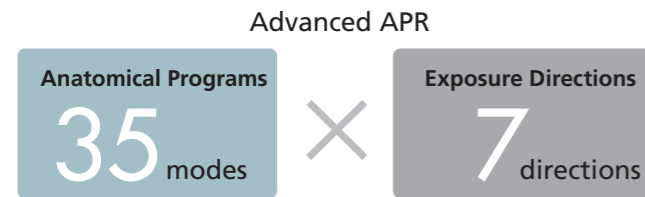
The compact, space-saving high-frequency generator and tube support provide greater working space and flexible layout.



# More Possibility to Make Your System Operation Even Easier

## One-touch Setting of Exposure Parameters Advanced APR

The system can register up to 245 exposure parameters. The 35 anatomical program keys can each register the exposure parameters for a series of examinations up to seven projections. After the examination is completed in one projection during a series of examinations, the exposure parameters are automatically updated to the next condition. This feature permits smoother examinations of areas requiring exposures from multiple projections. The Exposure Parameters can be freely setup to match the operator's normal method of operation.



Register up to **245** exposure parameters  
(In case of fluoroscopy option is added, the exposure parameters are limited up to 196 kinds.)

## Exposure Parameters Are Easy Set Using Hybrid keys

Exposure parameters can be easily changed the hybrid keys. Large changes can be made using the fast up/down buttons and small changes can be made using the up/down buttons. Using both adjustment methods allows exposure parameters to be quickly set.

- Fast Up/Down Buttons ▶ Exposure parameters large change
- Up/Down Buttons ▶ Exposure parameters small adjustment



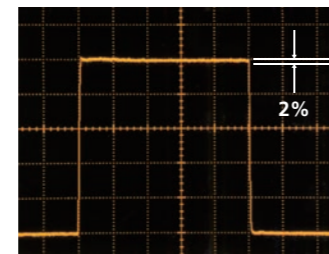
## New energy saving collimator with a bright irradiation field

LEDs have been adopted as the light source to indicate the irradiation field. This reduces power consumption while improving brightness levels and durability.



## 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  
**50** kHz  
High efficiency. low-ripple output  
High-quality images

## Illumination HandSwitch OPTION

The hand switch also lights up to indicate X-ray status.



## Two-way Communications with External Equipment Anatomical Program Communications Functions OPTION

The communications option permits exposure parameters (technique, kV, mA, sec, etc.) and anatomical program number to be received and set from external equipment (RIS, CR, etc.). It also allows the exposure parameters used for radiography to be automatically transmitted to the external equipment including Dose Area Product.

## Orderly Cable Management OPTION

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



## Free Rotation around the Support Axis

Rotation around the vertical axis is enabled, by activating the rotation-switch, which is located on the control panel. The lock can be set in any position, allowing precise, accurate positioning.



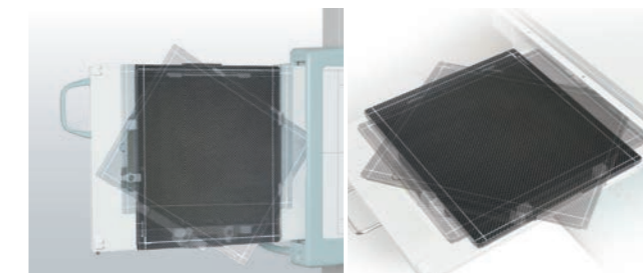
## Heavy Duty Height-Adjustable Bucky Table with 4-Way Floating Tabletop

The Bucky table BK-120MK can easily lift up to 200 kg. Patient positioning is made easier with the extremely smooth-moving tabletop. The unit's minimum height of 535 mm makes it easy for old and young patients alike to get on and off the examination table. The BK-120MK includes a Bucky unit with a cassette tray and grid.



## FPD Rotation Tray OPTION

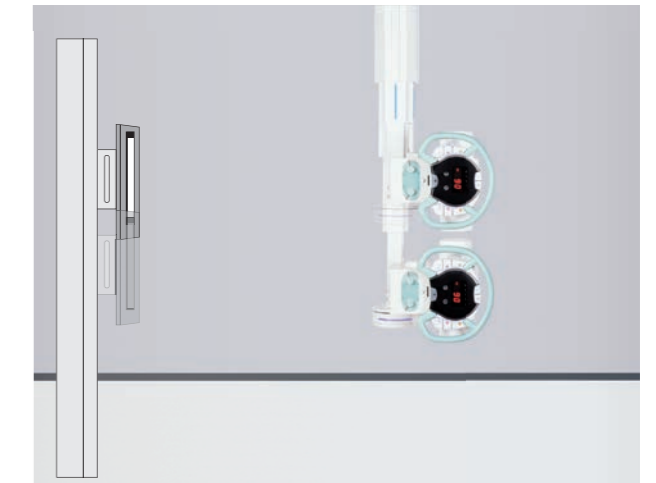
The FPD tray can be rotated 90 degree to change the orientation of FPD.



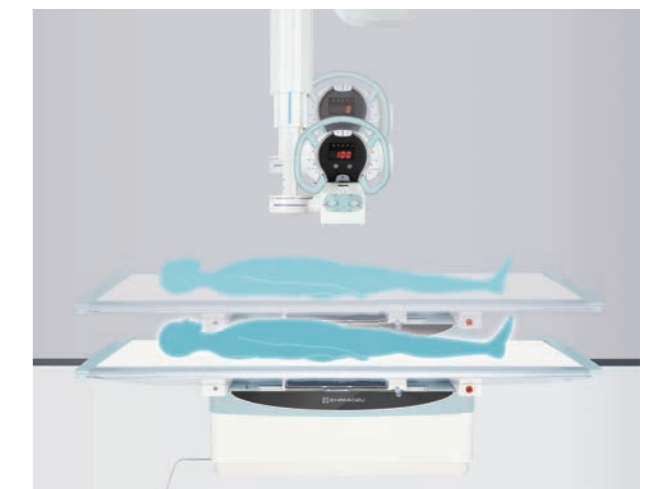
## Synchronized Vertical Movements of X-Ray Tube Unit and Bucky Unit OPTION



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 preset SID, enabling accurate and fast positioning.



Automatic synchronization



Automatically follows changes in table height (BK-120MK and BK-200 only)

# Wide Range of Choices to Meet Your Needs

## X-Ray Tube Support

### CH-200M

Ceiling-mounted tube support

Longitudinal travel: 2950 up to 4450 mm (selectable)  
 Lateral travel: 1400 up to 2700 mm (selectable)  
 Vertical travel: 1600 mm  
 Tube angulation around the horizontal axis: +120° to -180°  
 Vertical rotation: ±180°  
 Vertical tracking unit (option)  
 Orderly cable management (option)



### FH Series

FH-20HR: Floor-mounted tube support  
 (2 rails: both on floor)

FH-21HR: Floor/Wall or Floor/  
 Ceiling-mounted tube support  
 (2 rails: one on floor, other on ceiling or wall)

Longitudinal travel: 2500 mm  
 Lateral travel (telescopic arm): 250 mm  
 Vertical travel: 1550 mm  
 Tube angulation around the horizontal axis: ±180°continuous  
 Column rotation for lateral tabletop radiography: ±90°



FH-20HR

FH-21HR

## Bucky Tables

### BK-200

Heavy duty Bucky table

Height range: 535 mm to 850 mm (Vertical movement is not synchronized with CH-200M)  
 Max. lifting weight: 295 kg  
 Tabletop floating range: 1150 mm (long.), 250 mm (transverse)  
 Bucky unit movement range: 400 mm  
 Grid is removable  
 FPD rotation tray (option)



### BK-120MK

Height-adjustable Bucky table

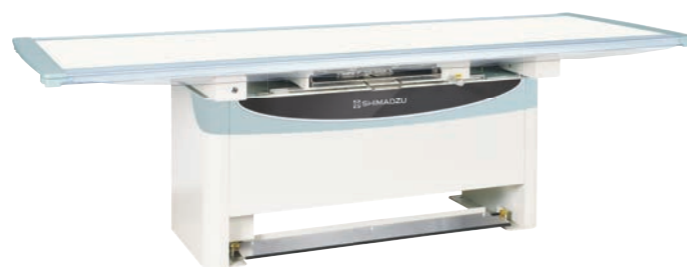
Height range: 535 mm to 850 mm  
 Max. lifting weight: 200 kg  
 Tabletop floating range: 1100 mm (long.), 250 mm (transverse)  
 Bucky unit movement range: 380 mm  
 FPD rotation tray (option)



### BK-12HK

Bucky table

Max. allowable load : 200kg  
 Tabletop floating range: 1100 mm (long.), 250 mm (transverse)  
 Tabletop height: 700 mm  
 Bucky unit movement range: 380 mm  
 Grid is removable  
 FPD rotation tray (option)



## Bucky Stand

### BR-120M

A Bucky unit height of just 552 mm and a convenient lower cutout make this unit both compact and convenient for patients.

Vertical travel range: 1500 mm  
 Grid is removable  
 FPD rotation tray (option)



## Collimator

### R-20J

Manual Collimator

Max. 430 mm x 430 mm irradiation field at 100 cm SID  
 Light switch with automatic off function  
 Accessory rails  
 LED lamp



## X-Ray High Voltage Generators



### High Grade Type

Large capacity and high-frequency inverter  
 Exposure timing indicated by light and sound  
 All APR units include a sharp, easy-to-read color LCD touch panel.

Model	D150BC-41	D150VC-41	D150LC-41
Max. output power (kW)	80	65	50
Tube voltage range (kV)	40 to 150		
Tube current (mA@100 kV)	800	650	500
(mA@80 kV)	1000	800	630
Exposure time (sec)	0.001 to 10		
Anatomical programs (APR)	1260		
Panel operation	Color LCD + Touch panel		



### Standard Type

High-frequency inverter  
 Exposure timing indicated by light and sound (option)  
 A large-character readout LED and hybrid keys allow easy, one-touch setting of APR exposure parameters.

Model	D150BC-41	D150VC-41	D150LC-41
Max. output power (kW)	80	65	50
Tube voltage range (kV)	40 to 150		
Tube current (mA@100 kV)	800	650	500
(mA@80 kV)	1000	800	630
Exposure time (sec)	0.001 to 10		
Anatomical programs (APR)	245		
Panel operation	Membrane keys		

Label Description: RADspeed Pro

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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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