



GENERAL RADIOGRAPHIC SYSTEM

RADspeed

Automatic



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Remarks:

- ※ 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.

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Sophisticated Synchronization Functions Make System Operation Even Easier

Advanced X-Ray Tube Support Allows Efficient System Operation

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

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.

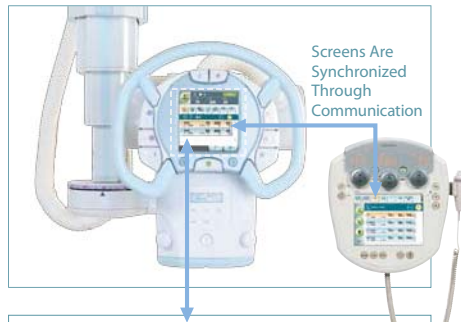


Pressing a single button on the remote control smoothly moves the ceiling-mounted X-ray tube support to pre-registered positions. Movement stops immediately after the remote control button is released. Up to two remote control units can be used.



APRs Synchronized with the X-Ray High Voltage Generator

Radiography parameters and techniques 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.



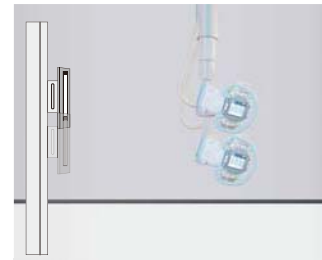
Offers the same operations and displays as the X-ray high voltage generator.



Examination Regions max 7 regions
 Radiography Methods max 15 methods
 Exposure Directions 7 directions

Synchronized Vertical Movements of X-Ray Tube Unit and BK-200 Bucky Table 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 even at oblique positions



Automatically follows changes in table height

BK-200 Bucky Unit Automatically Follows Irradiation option

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.



Supports Highly Accurate Linkless Linear Tomography option

Linear tomography can be performed easily by simply setting the section height and other parameters at the X-ray tube unit.



Next-Generation Collimator Reduces X-Ray Dose to the Patients

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

When the APR is selected for the region being imaged, the collimator filter also switches. Using the filter preset for each APR, such as the extremities or abdomen, minimizes unnecessary exposure to obtain high-quality radiographic images at the optimal X-ray dose.



Rubber-Cushioned Collimator

The perimeter of the collimator emission port is covered with rubber to cushion the impact if a patient bumps into the collimator.



Smooth Manual Collimation

The collimator leaves are motor-driven in response to knob operation, allowing rapid operation of the aperture with minimal effort.

Confirm X-Ray Beam Projection Field Immediately Before Exposure

When controlling radiography operations from the control room, the irradiation field lamp automatically turns on before exposure to allow confirmation of the region to be imaged.

Easily Attach Line Marker to Collimator option

Red laser mark clearly indicates center of the irradiation field.

Click-Stop Collimator Rotation option

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



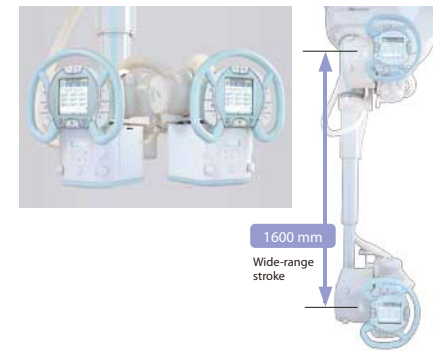
Our Caring Subtle Improvements Make Your Operation Even Easier

Extensive Functionality Matched to the Needs of Various Clinical Applications

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.



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.



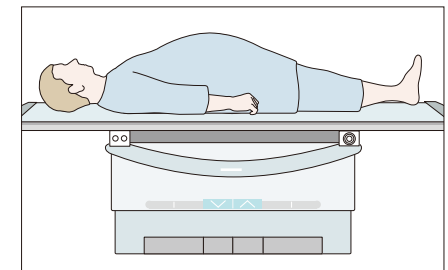
Design Concept Pursues Durability

The Bucky table can support 295 kg (650 lbs). The ceiling-traversing overhead X-ray tube crane coupled with the Bucky device ensures easy operation and features a highly rigid construction and a durable shock-absorption mechanism. RADspeed is a high-reliability radiography system that offers extreme carefree longevity for the X-ray department.

The Bucky table

295 kg (650 lbs)

Maximum lifting weight



Tilting Bucky Stand

These novel Bucky stands have been launched to synchronize vertical movement with the X-ray tube support and synchronize the irradiation field with the collimator. A tilting stand is also available that allows switching of the Bucky table angle.

This provides even smoother positioning for the many positions required for general radiography.



BR-120

BR-120T

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



Illumination switch

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

Advanced APR Allows 400 Different Radiography Parameter Configurations

Examination Regions

Maximum **7** regions

Radiography Techniques

Maximum **15** techniques

Seven Exposure Directions

Advanced APR (Anatomical Program)

Up to 400 Anatomical Programs can be registered on the system. Registering the conditions as programs associated with examination area and technique allows conditions to be set up smoothly.

Each technique selection has 7 anatomical regions that can be selected. Each anatomical region has 15 user-definable techniques associated with it.

Furthermore, up to 7 different directions can be stored in each technique key; each time one direction is taken, the exposure conditions can be automatically changed according to the next direction. This feature is particularly effective for inspections of areas requiring exposure from several different directions, such as for orthopedic surgery.



Low Exposure Levels and High Image Quality

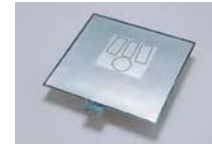
Maximum Inverter Frequency: 50 kHz

Stable X-ray output and superior response are the key to obtaining high image quality at low exposure levels.

Shimadzu achieves high image quality by using superior high-frequency inverter technology to reduce unwanted exposure from low-energy X-rays and by inhibiting voltage ripple in the X-ray tube to provide quick start-up characteristics.

Phototimer with Four Photo Pickup Fields option

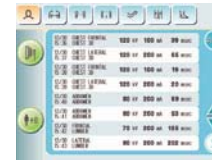
Dedicated photo pickup fields are provided for abdomen and chest regions to achieve appropriate dosage control for each region. This acquires good images appropriate for each type of examination, while reducing the exposure levels.



Displays Exposure Back-Log of 64 Cases

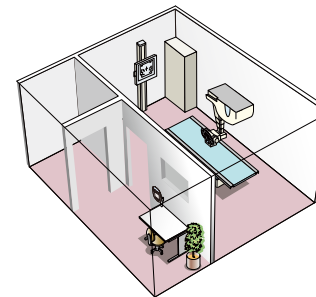
Up to 64 cases can be archived and displayed as the exposure back-log.

The radiography parameters used to obtain the results can be reset.



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.



Configuration and Options

X-Ray Tube Support

CH-200

- 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

BK-200

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



X-Ray High-Voltage Generator

UD150B-40/V-40/L-40

- 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

BR-120/BR-120T

- 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)



BR-120

BR-120T

Options



Grip switch



Lateral cassette holder



Remote collimation control



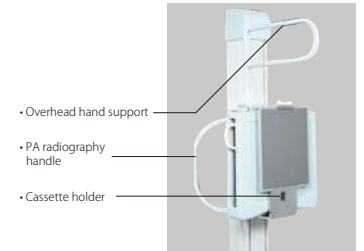
Bucky table handle



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
- Electric tomography and Bucky synchronization unit*
- Bucky table handle
- Bucky table drip holder
- Bucky table dual-side kick switch option
- Bucky stand compression belt
- Bucky stand PA radiography handle
- Bucky stand overhead hand support
- Auto filtering for R-300
- Line Marker to Collimator (R-300)
- Detent unit (available with R-300)

* Electric tomography and Bucky synchronization unit is not available with the CH-200 rear-mounting type.



- Overhead hand support
- PA radiography handle
- Cassette holder

