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SHIMADZU GENERAL RADIOGRAPHIC SYSTEM

RADspeed

Provides a Comfortable Examination Environment
for Operator and Patient



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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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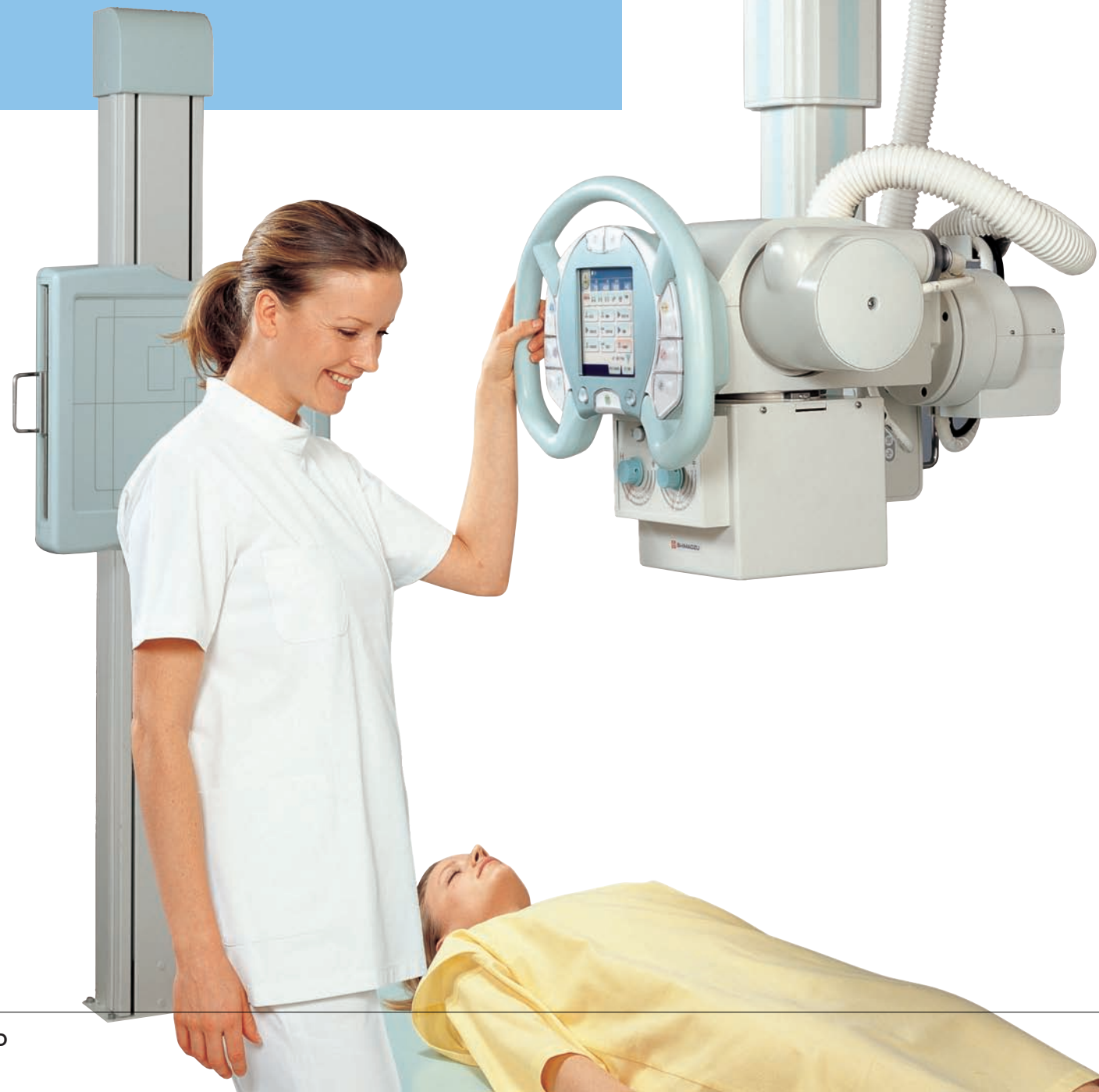
 **SHIMADZU**

SHIMADZU CORPORATION, International Marketing Division
3, Kanda-Nishikicho 1-chome, Chiyoda-ku, Tokyo 101-8448, Japan
Phone: 81(3)3219-5641 Fax: 81(3)3219-5710
URL <http://www.shimadzu.com>

RADspeed

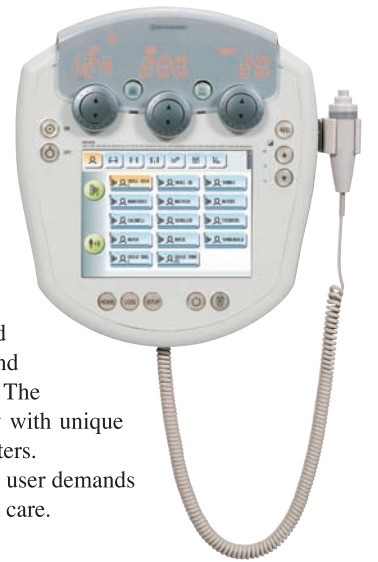
Provides a Comfortable Examination Environment for Operator and Patient

To simplify the general radiography examinations required for various techniques, the ceiling type X-ray tube support features excellent operability and incorporates an LCD touchpanel to set both the exposure parameters and Anatomical Programs (APR). In combination with Bucky table interlock functions, these features reduce the labor required for examinations. The system provides a comfortable examination environment for operator and patient alike.



Setting the Conditions Next to the Patient Enhances Sense of Security

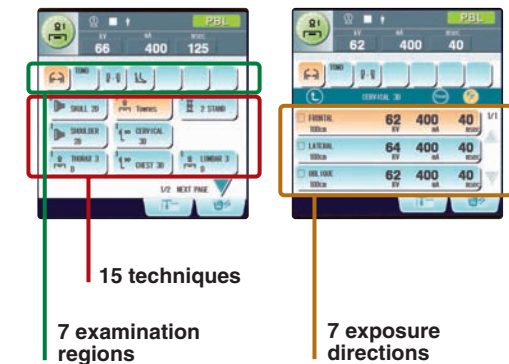
Communication between the generator control console and the X-ray tube support, permits exposure parameters and APR to be set and changed on the X-ray tube crane. The combination of operations from a clear color LCD display with unique advanced APR functions allows rapid setting of the parameters. These system functions have been developed in response to user demands to be able to make settings while continuing optimal patient care.



Rapid Exposure Parameter Settings from X-ray Tube Support

Exposure parameters can be set easily using advanced APR, permitting operation from the X-ray tube support as well as from the generator control console. Options are available for communication of the exposure parameter with the CR Series, providing rapid set up for all examination procedures.

400 maximum number of APR setting



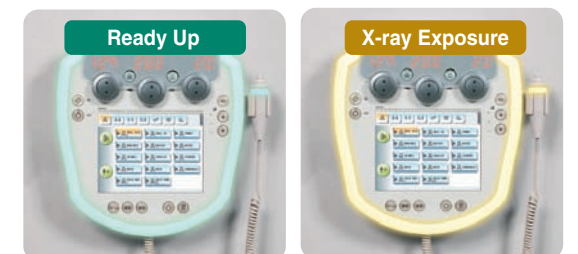
Equipped with a Tilting Bucky, this Bucky Stand Accommodates a Wide Range of Positioning



The BR-120T Bucky Stand's unit can be adjusted from a standing position to horizontal (0 degrees) in 15 degree increments. Furthermore, the Bucky unit's ability to incline 20 degrees downwards from vertical allows it to accommodate a wide variety of positioning for standard radiography.

Exposure Timing Indicated by Light and Sound in the Examination Room

System status, such as Exposure Ready or X-ray Exposure, is indicated by perimeter illumination of the generator control console panel and the hand switch. These indicators clearly show system status while allowing the operator to concentrate on the patient.



Illuminated faces

Easy Preparation

Quick and Easy Preparation for Examination

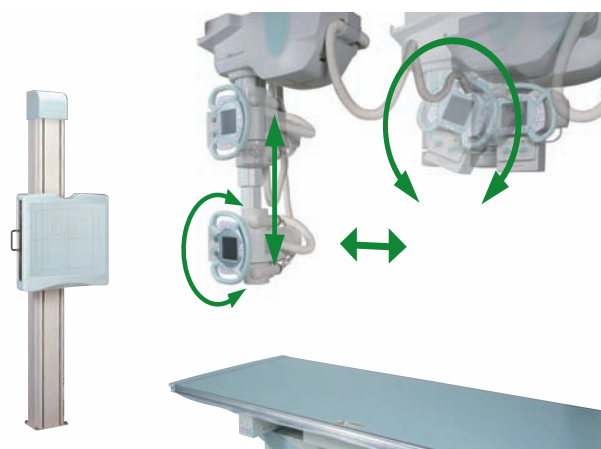
Ceiling Suspended X-ray Tube Support for Versatile Positioning



Revolutionary New Auto-Positioning Feature for Smooth and Safe Positioning

option

Advanced-level positioning can automatically move the ceiling-mounted X-ray tube support to the optimal imaging position, relative to the Bucky Stand and the Bucky Table.



A single button press automatically moves the ceiling-mounted X-ray tube support to the imaging position, relative to the Bucky Stand, Bucky Table and, if used, stretcher. This automatically switches the SID or X-ray tube angle, allowing an operator to change position from one examination area to another, easy tube support preparation and stowage, and provides a significantly improved, trouble-free, efficient examination workflow. Of course, manual positioning is also available for high-precision positioning.

A single button press moves the ceiling-mounted X-ray tube support smoothly to the registered position. Movement stops immediately when the remote control button is released. Uses up to two remote-control units.



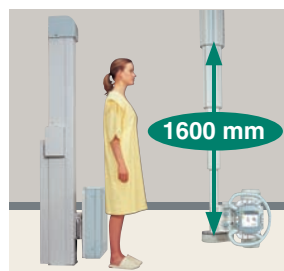
Auto-Positioning Via Linkage with Anatomical Programs (APR)

Up to 90 positions - 30 for Bucky stand exams, 30 for Bucky table exams and 30 for general radiography, can be registered in APR for one-button auto-positioning.

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.



1600 mm vertical stroke



Column rotates freely and can be held at any angle

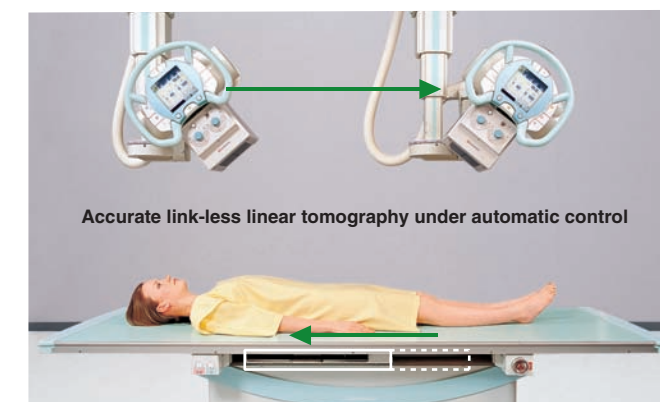
High Performance

High Performance to Meet All Clinical Needs

High-Performance Features Simplify Tomography

option

This system provides high-performance electronic tomography. Tomography is possible at any table height without mechanical linkages through easy-to-set parameters at the X-ray tube support.

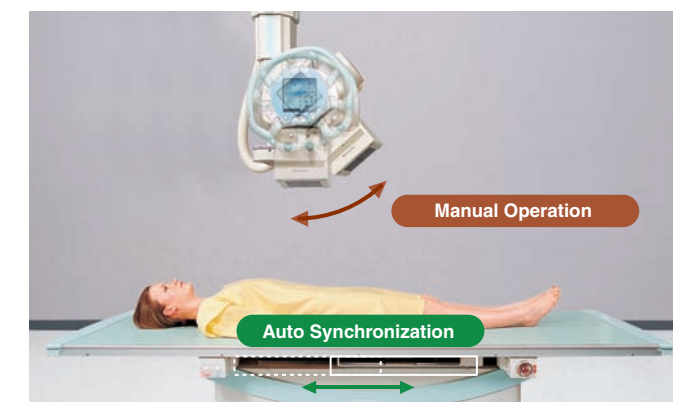


Accurate link-less linear tomography uses automatic control

Bucky Unit Longitudinal Travel Follows X-ray Field

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.

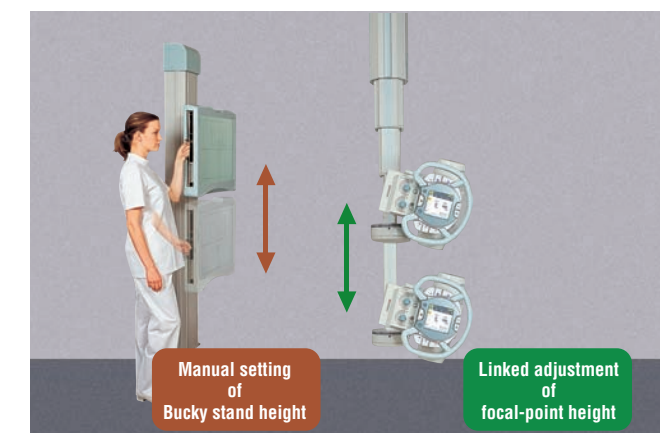


Bucky unit synchronization for oblique radiography

Ceiling-Mounted X-ray Tube Support Linked with X-ray Bucky Stand and X-ray Bucky Table

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 supine patient, the X-ray tube automatically moves to a preset SID, enabling accurate and fast positioning.



Collimation Function for Fast and Reliable FOV Adjustment

The aperture is equipped with an auto collimator for automatic adjustment of the aperture according to the view size and SID. (PBL compatible auto-collimation function)

The exposure field can be adjusted from the X-ray Bucky stand (via optional collimation remote function). This enables fast and reliable adjustment of the field of view and prevents unnecessary patient X-ray exposure.

Easily Set X-ray Tube Parameters and Communicate with X-ray High-Voltage Generator

Use both the high-voltage generator and the X-ray tube to change radiography conditions (kV, mA).

When settings are changed on the X-ray tube, the intercommunication function immediately updates the settings in the generator and displays new settings there.

High Reliability

High Reliability Supports Frequent Examinations

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 table 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
295kg
Maximum lifting weight

High-performance inverter-type high-voltage generator

High-Frequency Inverter
50kHz
Low-ripple output
High X-ray quantum efficiency

The 'High-Frequency Inverter' with a maximum frequency of 50 kHz 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-precision rapid control for exposure

The frequency changes according to the X-ray load conditions. The 'mA' value setting can be increased or decreased with no increase in kV ripple. The rise and falling times of the X-ray tube voltage are very short enabling high-precision rapid control.

Detailed exposure parameter settings

The exposure time, mA value, and mAs value can be set in steps of 12.5%, allowing exposure parameters to be set with greater precision.

Bucky stand overhead radiography handles and Bucky table grip switch are optional.



Configuration and Options

X-ray Tube Support CH-200

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



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

- Large capacity and high frequency inverter
- Large readout LED
- Quick setup with jog dials and Up/Down buttons
- Micro processor controlled
- Automatic exposure control
- Self diagnostic function with display of error codes



Bucky Stand BR-120/BR-120T

- Vertical travel to accommodate all patient ranges and studies
- Size sensing cassette tray
- Remote collimation control (optional)
- Compact design bucky unit for easily examines sitting patients
- Selectable extensive options
- Equipped with a tilting Bucky unit (BR-120T)

Bucky Table BK-200

- Elevating horizontal radiographic table
- Maximum lifting weight is 295kg (650lbs)
- 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 tabletop



Options

- Phototimer SPT-XD-A1A (1 field)
- Phototimer SPT-XD-A3B (3 fields)
- Vertical tracking unit
- Electric tomography and bucky synchronization unit*
- Bucky table handle
- Bucky table compression belt
- 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
- Line Marker to Collimator (R-30H)
- Detent unit (available with R-30H)



Grip switch



Lateral cassette holder



Remote collimation option

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