

**SHIMADZU**

# PRODUCT DATA

Ceiling Type  
X-ray Tube  
Support

## CH-200M



### GENERAL

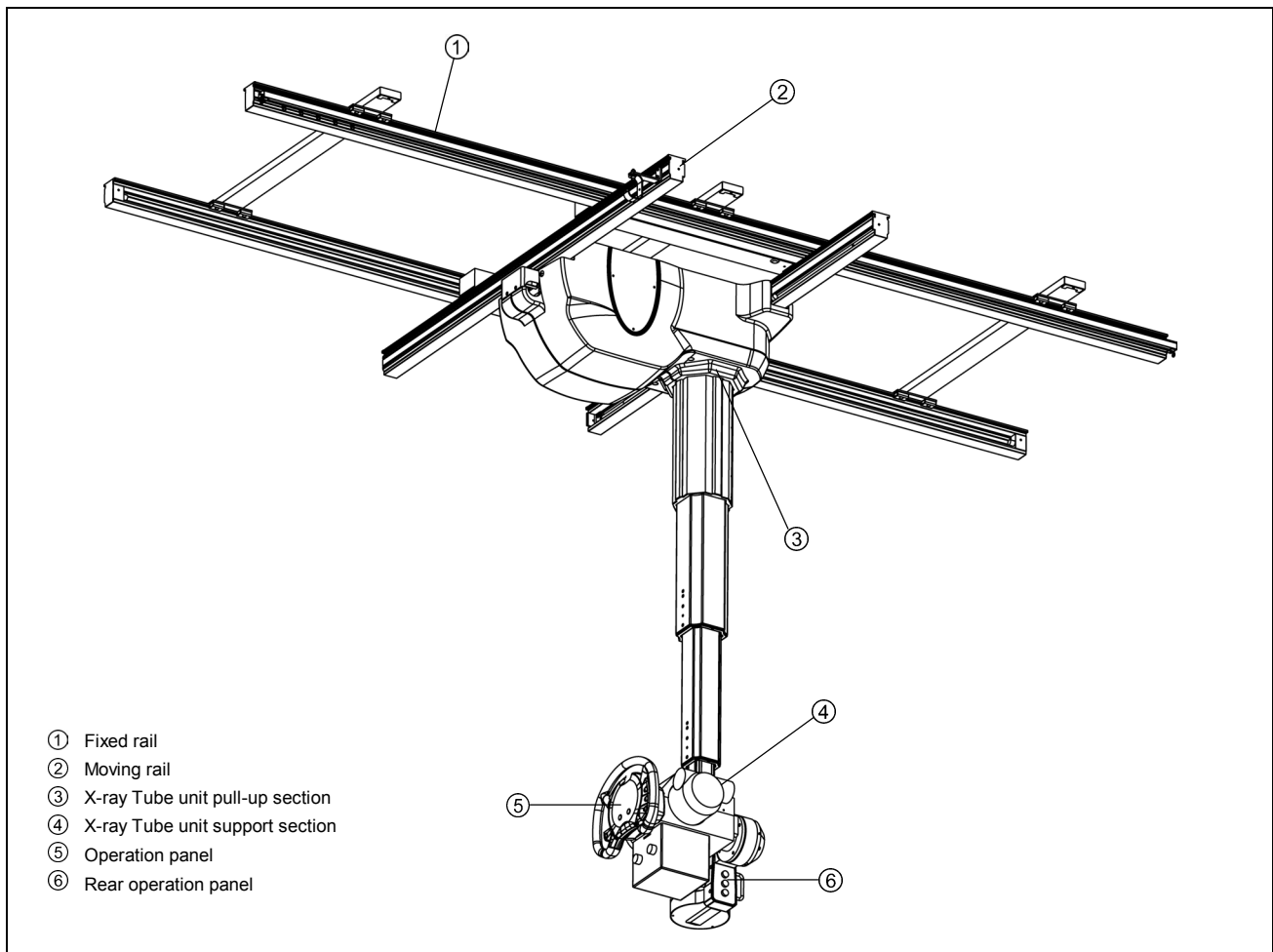
The Ceiling Type X-ray Tube Support CH-200M is a device that holds an X-ray tube unit and collimator combined with an X-ray voltage generator, radiographic stand, and table, it is designed to perform the radiography of patients either in a standing or supine position.

### FEATURES

- (1) Easier Positioning with the New-Style Handle  
The handle's easy-to-grip ergonomic design allows for the fast, accurate single handed maneuvering that is necessary for complex angles in orthopedic procedures and emergency use.
- (2) Impressive Flexibility for Erect Procedures with Increased Vertical Movement  
There is an "All Lock-Release Switch" on the upper part of the handle, allowing one-handed operation for procedures in the standing position.
- (3) Free Rotation about 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.
- (4) User-definable Brake-release Buttons  
The 8 brake-release buttons positioned on the control panel can be customized to suit each user's individual preferences.

- (5) V/H (Vertical/Horizontal) angle display conversion  
When taking images in the Vertical position the angle display can be converted to vertical angle mode and specific degree angulations that are required can be made.
- (6) Long Vertical Travel  
The long vertical travel range, which is 1600mm, provides sufficient SID (Source Image Distance) for images in the supine position as well as for low position images in the standing position.
- (7) Aluminum Rails Ensure Smooth Operation  
The aluminum rail has a dual structure that incorporates a hardened steel inner-rail wear strip, reducing unevenness on the bearing surface and providing a smooth operation.
- (8) Stops Precisely at the Required Position Using a Pin-stop Mechanism  
The ceiling support is equipped with a pin-stop mechanism, which accurately locates the column assembly in the 'Center-Find Position'. Due to its precise pin-stop mechanism this allows rapid preparation for taking X-ray images. There is also a mechanism for suppressing shock when the support is stopped quickly and suddenly, ensuring greater durability.
- (9) Handy Brake-release Buttons on the Rear of the Support Assembly  
Buttons allowing rotation around the vertical axis and motion in 3-direction, as well as a collimator-illumination button, are provided on the rear of the support. This feature the versatility to perform positioning in emergencies or any other situation.
- (10) Three models depending on installation requirements  
Three models, standard type, rear-mounting type, low-ceiling type are prepared. Rear-mounting type is available to set up the radiographic table near the wall. Low-ceiling type keeps same vertical stroke with standard type although ceiling height is 2700mm.

**CONFIGURATION**



**SPECIFICATIONS**

Item	Standard type	Rear-mounting type (*2)	Low-ceiling type
Maximum supportable weight	39 kg		
Balancing system	Spring-balanced type		
Ceiling fixtures Rail	Fixed rail: 4 m; Traveling rail: 2 m (Other lengths are also available.)		
Movement of X-ray tube assembly			
Range of movement Vertical travel (*1)	With ceiling height of 2850 mm: 400 to 2,000 mm	With ceiling height of 2850 mm: 400 to 2,000 mm	With ceiling height of 2700 mm: 400 to 2,000 mm
	Continuous		
Longitudinal travel	2,950 mm (with a 4-m fixed rail)		
Transverse travel	1,400 mm (with a 2-m traveling rail)		
Operation	Manual, electromagnetic lock (released when activated)		
Rotation about the vertical axis			
Angle of rotation	±180°, continuous (click stops at 90° intervals)		+30° to -90°, continuous (click stops at 90° intervals)
Operation	Manual, electromagnetic lock (released when activated)		
Rotation about the horizontal axis			
Angle of rotation	+120° to -180°, continuous Click stops at 0° and ±90°		
Operation	Manual, electromagnetic lock (released when activated)		
Display	Angle of rotation displayed digitally.		
Standard ceiling height	2,850 mm (*3)		2,700 mm

\*1 Distance between focus and floor with standard rails (The values are 10 mm less if a wide fixed rail is used.)

\*2 Low-ceiling type are not available with the rear-mounting design.

\*3 Installation with the focus 350 mm lower is possible, thus vertical travel movement 400 to 2,000 mm is maintained although the ceiling height is 3200 mm.

**OPERATION PANEL**

① [Vertical release] button  
 ② [3-directional release] button  
 ③ [Longitudinal release] button  
 ④ [Transversal release] button  
 ⑤ [3-directional release] button  
 ⑥ [Horizontal axis rotation release] button  
 ⑦ [Vertical axis rotation release] button  
 ⑧ [Vertical release] button  
 ⑨ Vertical/Horizontal angle convert button  
 ⑩ [Collimator lamp] button  
 ⑪ [Center find] button  
 ⑫ Grip  
 ⑬ X-ray tube selection indicator  
 ⑭ Transversal center position indicator  
 ⑮ Longitudinal center position indicator  
 ⑯ Breaking of wire indicator  
 ⑰ Center find mode indicator  
 ⑱ Rotation angle indicator  
 ⑲ Angle unit indicator

Their functions are explained as per the standard arrangement.  
 Arrangement of buttons ① to ⑧ can be changed by installing.  
 A function of the button ⑨ can be selected.  
 Should the arrangement be changed, read the explanation with respect to that new arrangement.  
 To change the arrangement, please contact the SHIMADZU Service Representative.

**REAR OPERATION PANEL**

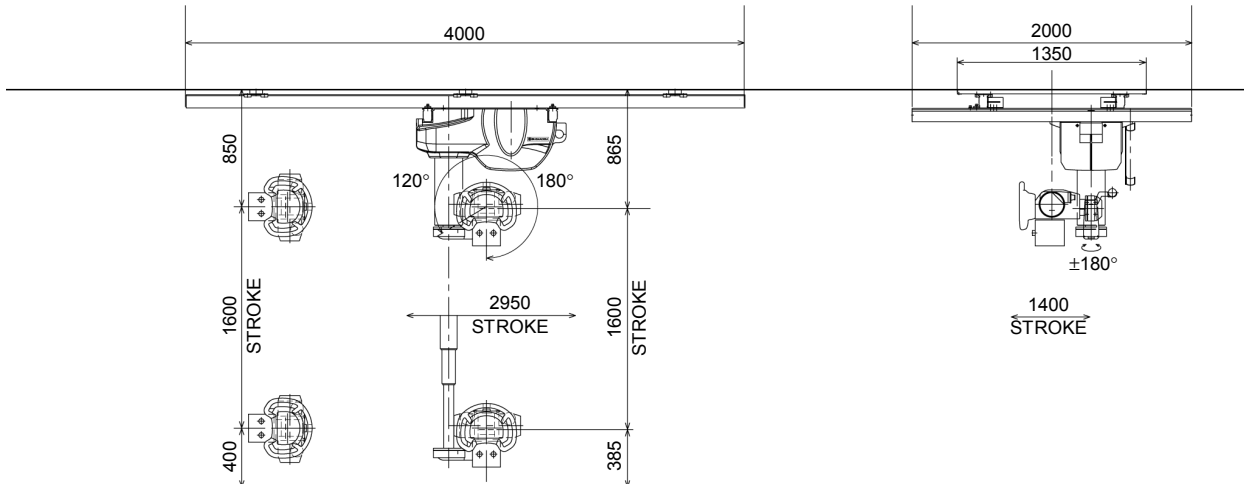
① [Vertical axis rotation release] button  
 ② [Collimator lamp] button  
 ③ [3-directional release] button

# PRODUCT DATA CH-200M

## DIMENSIONS

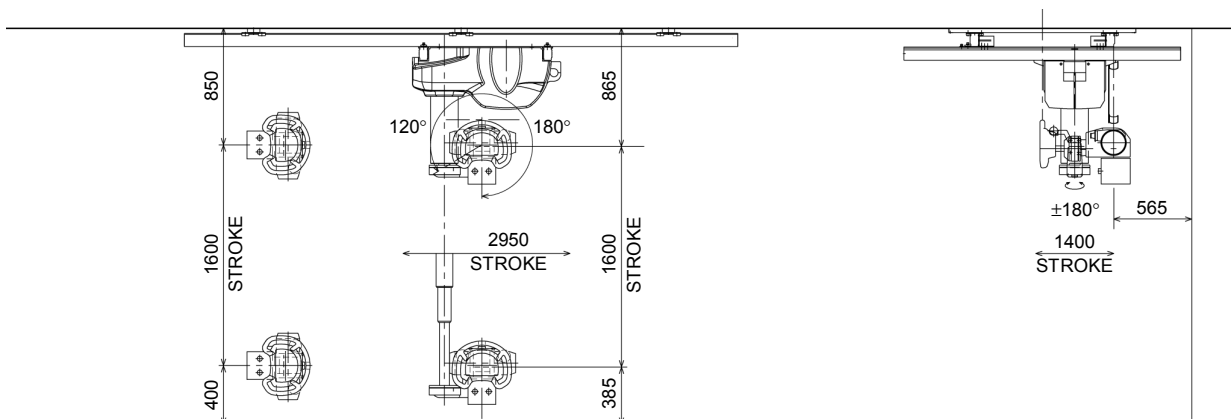
Weight	250 kg (including support, 4-m fixed rail, and 2-m traveling rail)
Power source	Single phase, 100 VAC, 0.7 kVA, 50/60 Hz (supplied from X-ray high-voltage generator)

### Standard type



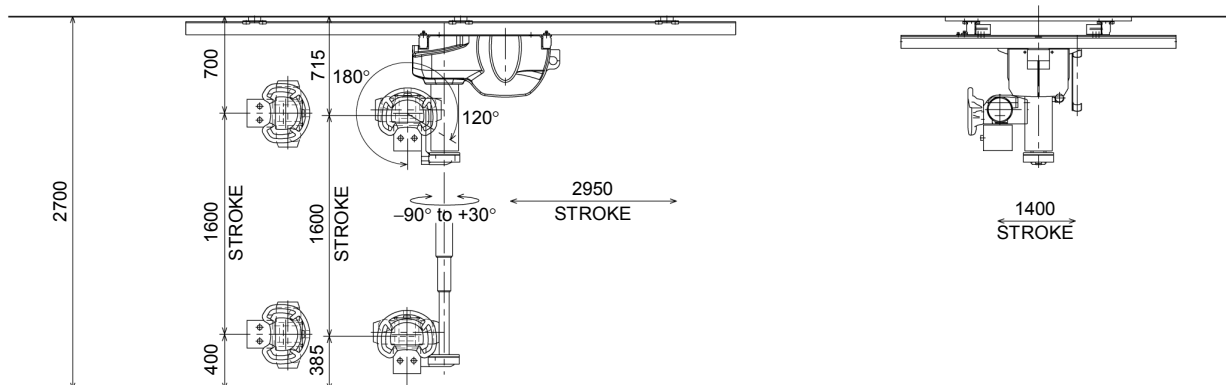
With ceiling height of 2,850 mm

### Rear-mounting type



With ceiling height of 2,850 mm

### Low-ceiling type



With ceiling height of 2,700 mm

**Remarks**

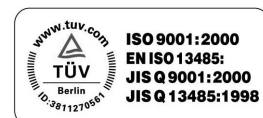
- \* Every value in this Product Data Sheet is a standard value, and it may vary a little from the actual at each site.
- \* The appearances and specifications are subject to change for reasons of improvement without notice.
- \* Certain configurations may not be available pending regulatory clearance. Contact your Shimadzu representative for information on specific configurations.



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Shimadzu Corporation Medical Systems Group has been certified by TÜV Rheinland as a manufacturer of medical equipment and systems in compliance with ISO9001: 2000 Quality Management Systems and EN ISO13485: 2000 Medical Equipment Quality Management Systems.