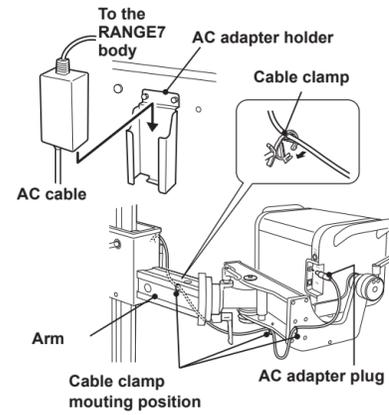


## Installing the AC Adapter, USB Cable, and a PC on the PC Table

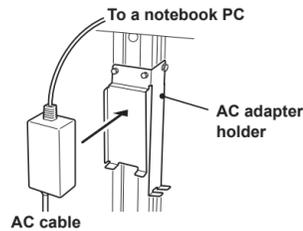
### 1. Attach the AC adapter to the AC adapter holder.

- (1) **Attach the AC adapter.**
  - Attach the RANGE7 AC adapter to the AC adapter holder as illustrated.
- (2) **Connect to the RANGE7.**
  - Insert the AC adapter plug into the AC adapter connection terminal on the back of the RANGE7, right-hand side.
- (3) **Secure the cable.**
  - Mount the cable clamp, and put the adapter cable through it. Then, check that the AC adapter cable will not become loose even if the platform is moved.



### 2. Install a notebook PC

- (1) **Put the notebook PC on the PC table.**
- (2) **Attach the AC adapter.**
  - Attach the notebook PC's AC adapter to the AC adapter holder on support 2.
- (3) **Connect to the notebook PC.**
  - Insert the AC adapter plug into the AC adapter connection terminal of the notebook PC. Please carefully read the instruction manual that comes with the notebook PC, and observe the precautions for operation.



### 3. Connect to a PC

- (1) **Insert the specified USB cable type B plug into the USB connection port on the back of the RANGE7, right-hand side.**

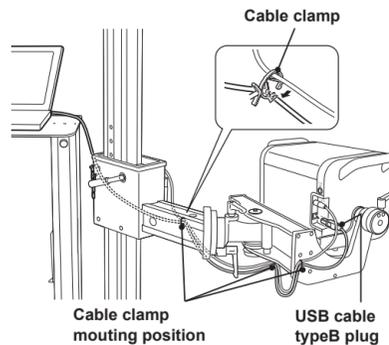
#### MEMO

- The instrument's USB connection port has a mechanism to hold the plug securely. When you insert the plug, you feel that it hits something first, but securely insert the plug past it to the end.

- (2) **Insert the other end of the USB cable (type A plug) into the USB port of the PC.**

#### Note

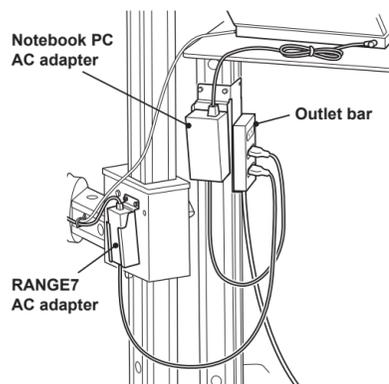
- Securely insert each plug to the end.
- Do not remove the USB cable during RANGE7 measurement or the data processing which follows.
- Put the adapter cable through the cable clamp attached on the arm, and check that the AC adapter cable will not become loose even if the platform is moved.



### Wiring example

#### Wiring example using outlet bar with magnet.

- Attach the magnet-mounted outlet bar to the AC adapter holder on support 2, and insert both AC cables of the RANGE7 and notebook PC AC adapters.
- Arrange each AC cable to the outlet bar to prevent tangling. Also, arrange the RANGE7 AC cable so that it is not pulled down when the elevating box is raised or lowered.



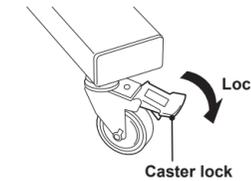
## Moving the Measurement Stand

### CAUTIONS FOR MOVING

- When moving the RANGE7 or computer away from an AC outlet, switch off the RANGE7 and computer before unplugging. Before moving, be sure to arrange the AC cables so that they will not be disturbed.
- After moving the stand set, make sure to lock the caster and insert the AC cords into the outlet.
- Be careful not to catch any of the cables to anything around them when moving the stand set.

- (1) **Release all the caster locks from positions before moving the stand set.**

- (2) **After moving to the desired position, lock all 4 caster locks to prevent accidental movement.**



## Safety Precautions

### CAUTION

- Before using this stand set, confirm that the connected parts of the supports, the legs, etc. are tight. If any part is loose, retighten the bolts or nuts to lock the connected parts.
- If any parts have problems such as a crack or large bend, do not use them. Please contact a KONICA MINOLTA-authorized service facility.
- Use this stand set on a level and flat surface. Using this stand set on an uneven or sloped floor may make this stand set unstable.
- When you move the stand set, ensure that the casters of the stand set do not roll over the power cord of the RANGE7 or USB cables, and that the operator does not stumble over such cord or cables.
- On a thick-piled carpet, etc., the casters may not move well. Use the stand set on a hard floor such as tile floor.
- Lock the casters before use. Not doing so may cause accidental movement of the stand set during measurement.
- Do not lean over, on, or against the supports or the PC table. Doing so may cause the stand set to breakdown or fall.
- The PC table is designed to place a notebook PC on it, and its maximum allowable load is 10 kg. Do not place an object that weighs more than the maximum allowable load or an object other than a notebook PC on the table. Doing so may cause the stand set to breakdown or fall.
- Do not place your hand near the elevating box of the PC table. Doing so may result in injury if your hand or finger gets caught between the elevating box and the PC table. (Check the caution label on the PC table.)
- When the RANGE7 is not mounted on the stand set, the elevating box may suddenly jump up, and your fingers may be caught or you may suffer a bruise by the impact of the arm part. When you mount or remove the RANGE7, or store this stand set, make sure to first insert the jump-prevention pin into the support after lowering the elevating box to the specified position.
- Do not touch the wire part on the back of support 1. Doing so may cause scratches on your hand or fingers.
- A strong spring is incorporated into support 1. Never disassemble support 1 or the elevating box. Doing so is dangerous.
- Do not lubricate the elevating box or the surface of the supports of this stand set. Doing so may result in failure of the braking mechanism, causing inappropriate installation position of the elevating box. This stand set has no parts that the customer can lubricate.
- If any trouble such as malfunctioning of moving parts including the elevating box is found, please contact a KONICA MINOLTA-authorized service facility.
- Do not overtighten the tilt lock lever or pan lock knob of the camera platform, or the lock lever of the elevating box. Doing so may cause damage to the lever.
- If any part of this stand set is lost or damaged, do not use a commercially available part as a substitute. Please contact a KONICA MINOLTA-authorized service facility. Using a commercially available part as a substitute may result in damage to the equipment or injury due to insufficient strength.

The Measurement Stand Set RA-200 is designed to hold the RANGE7 to enable more stable measurements. The Measuring Stand enables the RANGE7 to be easily positioned as required for taking measurements of subjects. The arm height can be adjusted over a wide range to allow measurements looking upward from a low position, looking downward from a high position, or anything in between. The RANGE7 itself can also be positioned horizontally, vertically, or tilted backward.

### CAUTIONS DURING ASSEMBLY

- Some parts have sharp edges. Wear long sleeves, long trousers, and leather work gloves during assembly.
- Some parts are heavy. Be careful not to catch your fingers between the parts or injure your toes by dropping such parts.
- Assembly should be performed by two or more people working together. Share the load when holding or attaching parts in order to avoid awkward or improper posture during assembly.
- Perform assembly in a sufficiently large space. Leaning parts against a wall, etc. may result in such parts falling over.

## Composition of RA-200 Measurement Stand Set [Package Components]

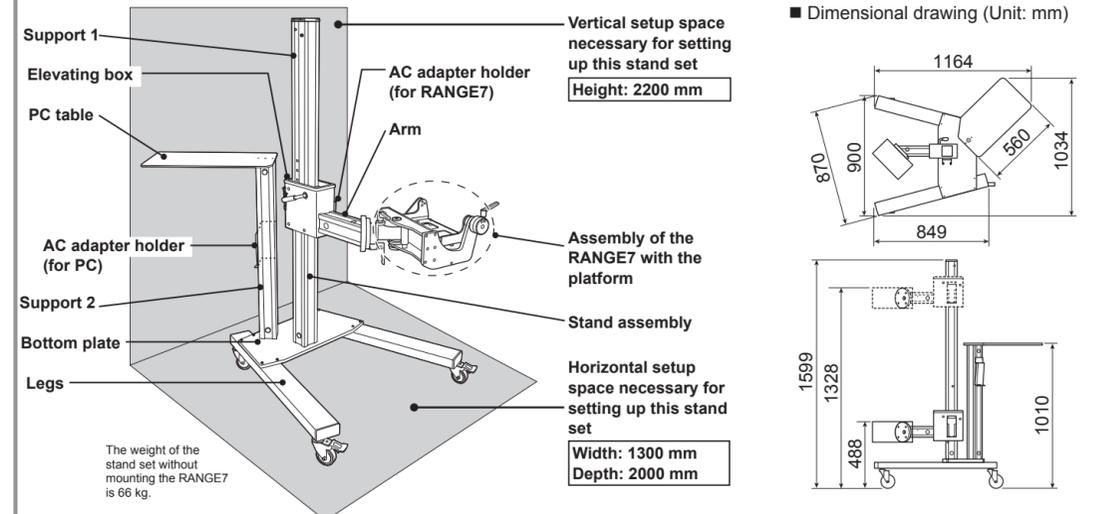
The measurement stand set RA-200 consists of two assemblies, the stand assembly and the RANGE7 mounting assembly, which are supplied separately. The stand assembly is divided into 3 sections, and as such 3 boxes are supplied. It is necessary to put these together before using this stand set. Make sure that you have all of the following parts.

Legs (Left and right legs are different.)	2	Support 1	1	PC table	1	Camera platform	1
Bottom plate	1	* With elevating box		Arm	1	Platform mounting screw (x4)	4
Hexagon socket head cap screws (M6)	8	Support 2	1	Hexagon flush bolt (M10 hexagon flat head screw)	1	AC adapter holder (1 of each use)	
Hexagon nuts (M10)	3			Cable clamp set	1	AC adapter holder for the RANGE7	
						AC adapter holder for a PC	

■ **Accessory tools**.....Spanner for M10 nut: 1, Hexagonal wrench (L) for M10 bolt: 1, Hexagonal wrench (S) for M6 bolt: 1

## Names of Parts and Setup Space

In addition to the dimensions of the stand set itself, additional space is required for mounting, moving and operating the RANGE7 as shown below.



# Measurement Stand Set RA-200 Assembly

## 1. Stand assembly

This stand set should be assembled according to the following procedures:

### (1) Attaching the legs

- Fix the right and left legs under the bottom plate. Use the four hexagon socket head cap screws from the top of the bottom plate and tighten the screws securely.
  - \* The left and right legs are different. Check the screw hole positions on the bottom plate and the legs when attaching them.

### (2) Attaching the supports

- Attach supports 1 and 2 to the bottom plate with the legs fixed.
  - Insert the bolt studs and positioning pins on the bottom of supports 1 and 2 into the corresponding holes on the bottom plate. Then, fasten the hexagon nuts on the bottom of the bolt studs and fix the supports.

### (3) Attaching the arm

- Insert the bolt stud and the positioning pins of the arm into the corresponding holes of the elevating box. Then, thread the hexagon nut onto the bolt stud from the opposite side.

### (4) Attaching the PC table

- Place the PC table on the upper side of support 2 after aligning the positioning pins in the correct positions. Secure the PC table using the hexagon flush bolt.

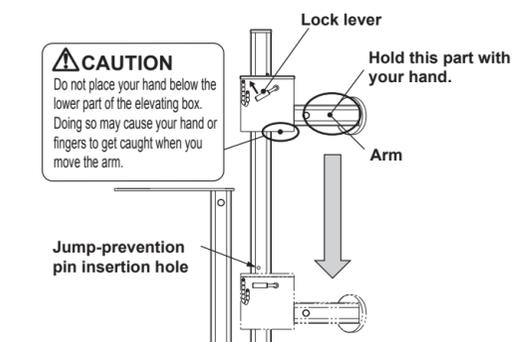
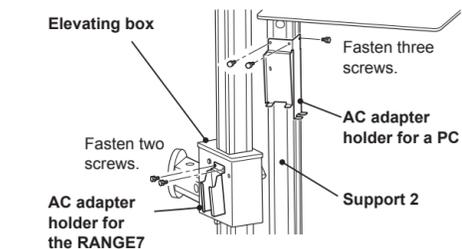
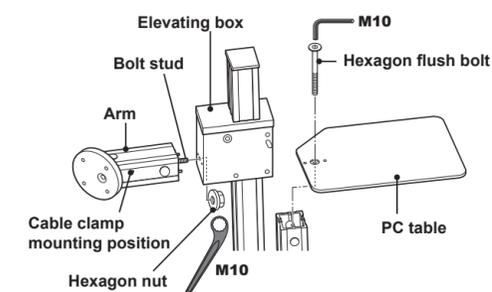
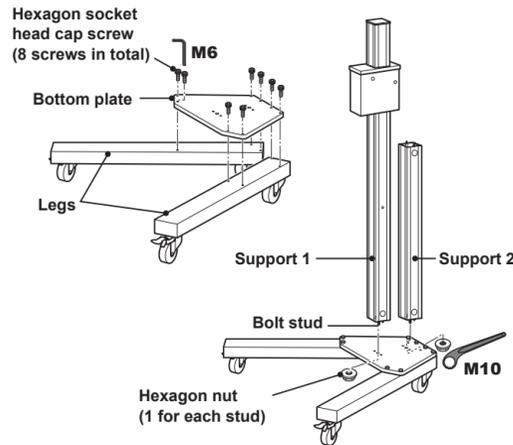
## 2. Attaching the AC adapter holders

- Attach the AC adapter holders to the elevating box and support 2, respectively.

## 3. Attaching the camera platform

### (1) Push down the elevating box to the jump-prevention position.

- Raise the lock lever in the direction of the arrow. In this state, a force of about 4 kg is applied upward. While holding the arm securely with your hand from above, push down the elevating part to the position of the jump-prevention pin-hole. Unless you hold the arm securely, the arm may suddenly jump up, which may result in catching your fingers between the parts or other injuries.



- After changing the height of the elevating box, return the lock lever to the original position. Although the lever returns to the original position automatically, tighten the lever slightly in the lock direction in order to ensure that the lock is secure. Until the jump-prevention pin is inserted into the support, keep holding the arm securely.

- Insert the jump-prevention pin into the hole of the support. You should insert the pin until it passes through the other side of the support.

### (2) Attach the camera platform to the arm

- Place the camera platform on the arm, align both hole positions, and tighten using the four hexagon bolts.
  - \* Secure 4 positions equally using the hexagonal wrench so that they do not become loose.

#### Note

- Please tighten all platform levers and secure them in place before attaching the platform.
- Setting the platform on the package box or a similar object makes it easier to attach the platform.

## 4. Mounting the RANGE7

### (1) Refer to section "3-(1)", and lock the elevating box at the jump-prevention position.

### (2) Adjust the stand set platform swing plate mounted on the arm horizontally, and fix it.

- Confirm that the pan lock knob, tilt lock lever, and swing angle adjusting lever are tightened.

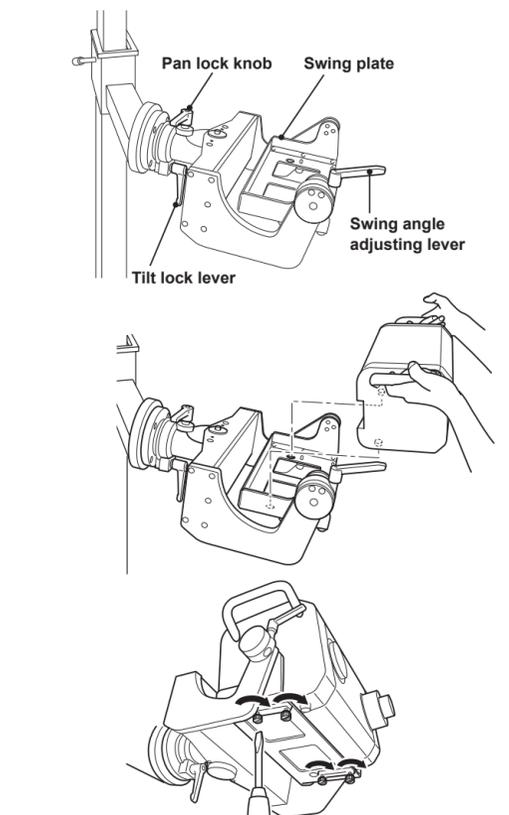
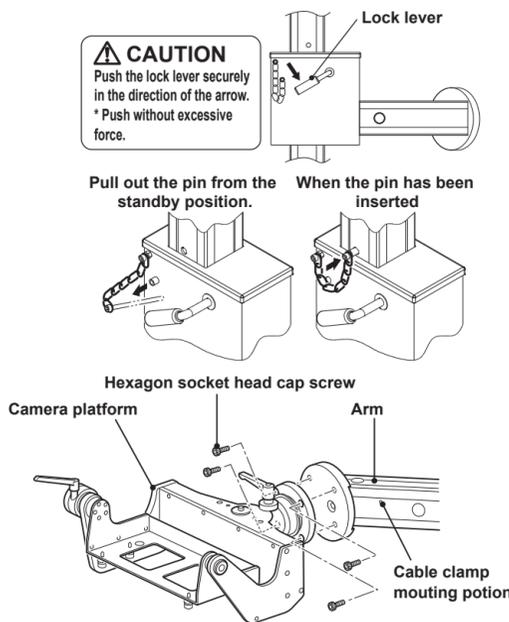
### (3) Holding the handles of the RANGE7, place the RANGE7 on the swing plate.

- Place the RANGE7 so that the two rubber legs on the backside of the four legs on the bottom of the RANGE7 securely fit the positioning holes on the swing plate.

### (4) Insert the four screws attached on the rear side of the swing plate into the platform mounting screw holes on the bottom of the RANGE7. Turn the screws clockwise and tighten them securely.

#### Note

- Reverse procedure of the above when removing the RANGE7.
- The fixing screws on the bottom of the swing plate are normally designed not to drop off. Please note, however, that they may drop off if you turn them forcefully away from the position allowable for the removal of the RANGE7.



## Elevating the RANGE7 [Moving the Elevating Box Up and Down]

#### Note

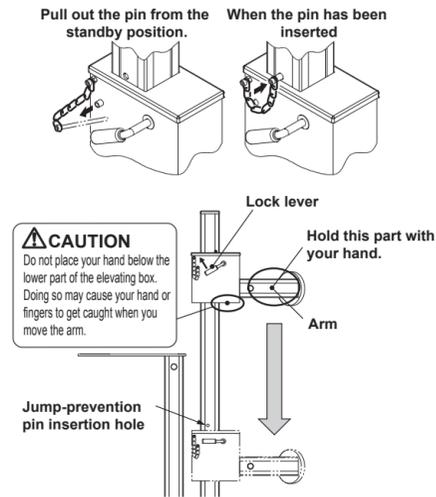
- Use a power cable and USB cables of an appropriate length. Using cables which are too short may pull the cable out at when elevating, causing equipment damage such as a broken connector. Using cables that are too long may cause them to get caught on the surroundings when you move the stand set.

### (1) Release the jump-prevention lock.

- Return the jump-prevention pin to the standby hole near the back side of the elevating box.
  - \* When using the stand set in an ordinary position, store the jump-prevention pin in the standby hole.

### (2) Elevating method

- Raise the lock lever in the direction of the arrow. In this state, vertical movement becomes possible.
  - \* With the RANGE7 mounted, a force of about 4 kg is applied downward. Therefore, support the arm part with your hand to prevent it from sliding down. (Do not hold the lower part of the elevating box.)
- After you have adjusted the height of the arm, return the lock lever to the original position. Although the lever returns to the original position automatically, tighten the lever slightly in the lock direction to lock the lever securely.



## Adjusting the RANGE7 Position [Operating the Platform]

The platform enables horizontal, vertical, and swing adjustment. Operate each lever to adjust the RANGE7 position.

#### Note

- Before changing the RANGE 7 position, check that there is no one nor any materials around the platform that may get hit.
- Excessively tightening the pan lock knob, tilt lock lever and swing angle adjusting lever result in damage to the equipment.
- Be careful not to get fingers caught in the base of the panning mechanism. Keep fingers away from this area.
- When changing the tilt direction of the RANGE7, be sure to lock the pan and swing positions first. In addition, when changing the pan or swing direction, lock the tilt position first.

