About Rotating Stage Set

The rotating stage set is designed to rotate the object at certain angles accurately and facilitate scan operation and integration of the scanned images.

- The rotating stage set must be operated correctly and safely according to this manual and those supplied with the components. Failure to do so may result in unexpected accidents and trouble such as fire and electric shocks.
- Before using the rotating stage set connected with the host computer, read the instruction manuals of the rotating stage set, digitizer and host computer.

Contents

Rotating Stage



Rotating Table



Base



Motor Connecting Cable



Control Box



Calibration Charts S, M



RS-232C Cable



Hexagon Wrench (M4)



Mounting the Base

To stabilize the rotating stage, it must be mounted on the base.

Note

- The rotating stage must be mounted on the base before mounting the rotating table on it.
- If you are going to use the frame set, pay attention to the mounting position and direction of the rotating stage to prevent it's driving section influencing the digitizer's scan operation.

[Mounting Method]

1 Place the rotating stage on the base. Make sure that each of the positioning holes on the rotating stage is aligned with those on the base.

Note

Make sure that the positioning holes on the rotating stage and those on the base are aligned as illustrated.

2 Tighten the three hexagon bolts using the hexagon wrench that is supplied with the product. The procedure is now complete.

Mounting the Rotating Table



The rotating table is designed to ensure that an object can be placed on the rotating stage securely. If you are going to use a calibration chart, the rotating table must be used.

Note

- Before mounting the rotating table, the rotating stage must be mounted on the base.
- If you are going to use the frame set, the rotating table must be mounted in such a way that the calibration chart positioning holes on the rotating table face the front of the digitizer when the rotating stage is at its home position.

[Mounting Method]

1 Place the rotating table on the rotating stage. Make sure that each mount hole on the rotating table is aligned with those on the rotating stage.

Note

Pay attention to the rotating stage's home position and rotating table's mounting direction.

2 Tighten the four hexagon bolts using the hexagon wrench supplied with the product.

The procedure is now complete.



Connecting the Rotating Stage to the Computer

To operate the rotating stage from the computer using the Polygon Editing Tool, it must be connected to the computer as described below.

Ref. For the operating method of the rotating stage using the Polygon Editing Tool, refer to the software instruction manual.

[Connecting Method]

1 Make sure that the power switch of both computer and control box is set to OFF.

Note

If the rotating stage is connected to the computer with power turned ON, damage to the computer or rotating stage may result. Before connecting them, always make sure that power is turned OFF.



- 2 Connect the female plug of the motor connecting cable to the rotating stage.
- **3** Connect the male plug of the motor connecting cable to the "STAGE 1" terminal of the control box.



Plug one end of the RS-232C cable to the control box.



5 Plug the other end of the RS-232C cable to the serial port (COM port) on the computer. The procedure is now complete.

Setting the Control Box Current

Turn the current adjusting VR to set the current flowing when the rotating stage motor is rotating and when it is at stop.

Make sure that the current adjusting VR is set correctly. If not, the motor may burn or may not rotate properly due to insufficient torque.

[Memo/

For a detailed explanation of the adjusting method, refer to the instruction manual of the control box.

[Setting Method]

1 Turn the current adjusting VR using a flat-blade screwdriver to set it to the following positions.

<Settings>

- RUN: 7
- **STOP:** 3



Mounting the Calibration Chart

The calibration chart is designed to check the position of the rotation axis of the object that is placed on the rotating stage and scanned. It is an indispensable component to create 3D data (distance from the rotating stage's rotation axis to the digitizer, registration of scan images).

[Memo/

Normally, calibration chart S must be used. If it is not possible to perform calibration using calibration chart S, for instance, because of excessive distance to the object, use calibration chart M.

Note

When the calibration chart gets dirty, wipe it with a clean, soft, dry cloth. Never use solvents like thinner and benzene.

[Mounting Method]

Mount the rotating table on the rotating stage.

2 Position the calibration chart S so that its blacklined edge faces the digitizer, then place it on the rotating table. Make sure that its two positioning pins are fitted into the corresponding holes provided on the rotating table.

[Memo/

If it is not possible to perform calibration using calibration chart S, mount calibration chart M on the rotating table, and then perform calibration.

The procedure is now complete.

• When calibration is not possible with calibration chart S Position calibration chart M so that its black-lined edge faces the digitizer, then place it on the rotating table. Make sure that its three positioning pins are fitted into the slots provided on the rotating table.

[Memo/

When using calibration chart M, make sure that its black-lined edge faces approximately direct to the front of the digitizer.



