

## **Assembly Instruction XY-IMAGER System – Status March 2012**

### **Tools:**

Screwdriver, Torx and cross slot

Set of socket spanners (13mm, 17mm, 19mm)

Allen Key Set

Unpack all parts and place the components clearly.

Small parts, such as laser or connecting pin, can be easily overlooked in the package.

### **Assembling of XY-RACK**

Place the components as shown.

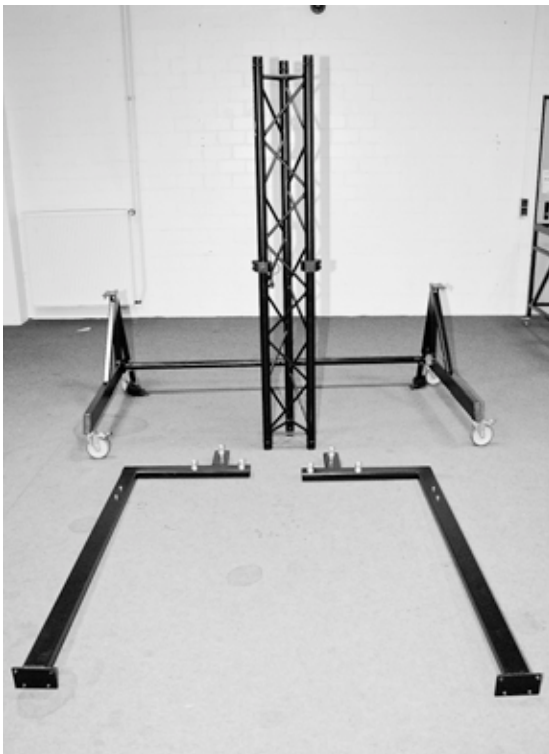
If the base should not be assembled yet, set it together, according to this picture.

Screw the rolls (brake wheels at the front side).

Connect the side parts of the base to the connecting rod, insert the bolts and the securing pins. Fix the stabilization.

Position the remaining components of the XY-RACK.

The base should now look as shown in the picture.



Connect the 3-point cross beam with the side parts as shown, insert the safety pins in the bolts.



Measure out the exact middle of the 3-point cross beam. Attach the flange as shown lying still on the RACK-top, before you assemble the RACK completely.



Place the upper part of the XY-RACK at the base and screw them together.



Fix the background system.



### Assembling XY-DESK

Assemble the base of the XY-DESK as shown. Do not tighten the screws on the cross braces, before the desk top is not equipped.



For the rotary unit XY-SPIN 300 you have to fix the rails at the bottom of the struts as shown.



Unpack the DESK carefully and remove the protection cover on the bottom of the circular opening. Attention, do not turn the screws in the wrong direction. The DESK could be damaged!



Place the plate on the DESK and look that it suitable fits. The edges of the frame may not stand in the circle cutout. As the desk frame is still not tight, you can make the alignment accordingly.



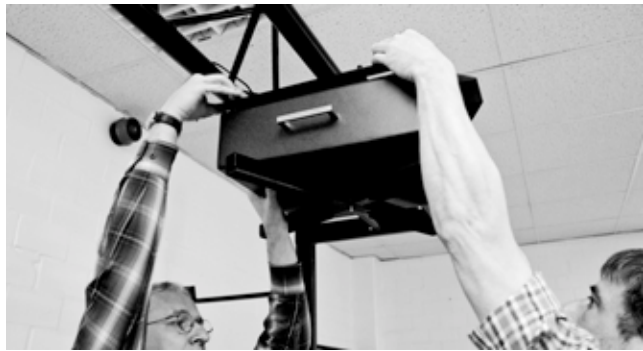
Screw the desk top with the clamping hooks tight as shown and then tighten the screws on the cross braces of the table frame.





### Installation of XY-TOP SPIN 50 on the XY-RACK

Screw the feet on the bottom a little bit out and install the rotation part in the flange plate as shown. First, hook in the feet on the front side, put the instrument completely back and then you hook in the feet on the back side. Pull the feet firmly and make sure that it is tight. Finally hook in the safety rope in the carrying handle.



### Installation of XY-SPIN 300

If not already done, install the plate-bearing tubes on the rotary plate. Adjust the rotary unit largely centered in the XY-DESK. For the plate centering you have to screw in the positioning pin so far, that there is only about 5mm protrude. Too far protruding pins could damage the plate.



Put the plate carefully with the positioning hole on the rotary module. If the rotary module should not stand exactly in the middle, pull it to the right position until the plate slides easily on the positioning pin. Make sure that you can turn the plate easily. Screw the feet out as far as the plate has a slight protrude of appr. 2-4mm.



## Installation of XY-BOOM

For transport, it may happen that a feet of the XY-BOOM is not yet mounted. Please screw it on immediately, before you lift the base from the pallet.

The bottom part should stand in front of you with the slightly raised rotary plate as shown. For mounting the BOOM you have to screw off the lever screws and the cover panel above.



Tighten the screws so far that the ends overlap only appr. 5mm.



Unscrew the nut from the BOOM and put the BOOM on the bottom part as shown. The safety bolt, which is standing out from the bottom part, should be there where the holes are.



Tighten the nut on the underside of the rotary plate only slightly, it don't have to sit firmly!



Put the cover panel with the holes right on the rotary module.  
Important! Make sure that the screws now have no more protrusion.



Place the lever screws and push them firmly down. Tighten the screws from underneath in the lever screw. Make sure that there is no space between the lever screw and the plate. If the screw is completely screwed in, the T-screw should be tightened. This is only possible when there is no space between the plate and the T-screw.



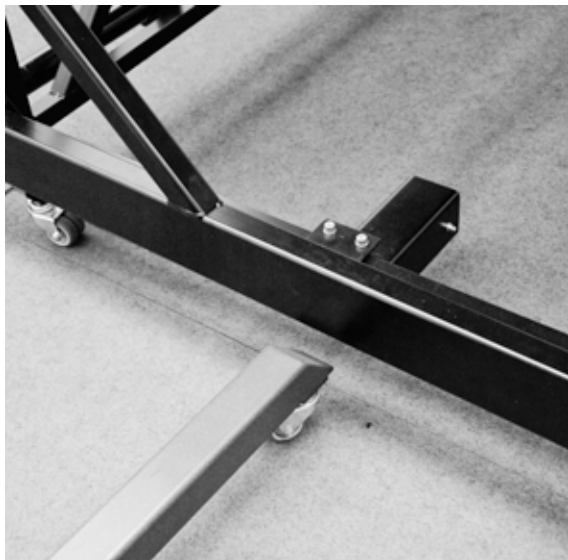


Pull the safety bolt down and check if the rotary moves are easy going. If it goes too strict, you have tightened the nut on the bottom too tightly.

Unscrew the small screws from the feet and insert the balancing weights with the recess facing up. Tighten the screws again and secure the weights.



If the XY-BOOM is used with the XY-DESK, you have to mount the positioning help on the left lower crossbar of the XY-DESK. Screw the guide tight, only if you have positioned the robotic arm with the rotation axis to the center of the rotating plate of the XY-SPIN 300.



Make all cable connections according to the manual instruction.



## Setting up the laser

Measure out the center of the rotary plate and make a small mark with a pencil.



Screw the positioning pin with the attached brazing solder in the opening of the top-mounted rotary unit XY-TOP SPIN 300. The brazing solder should hang just above the mark of the rotary plate. So would be the XY-DESK in line with the rotary unit XY-SPIN 300, with the rotary unit XY-TOP SPIN 50. Pull the tread brake firmly to the DESK and the RACK.

Because of the magnetic fixing the laser can be mounted anywhere. For an easier recent alignment of the DESK and the RACK, it makes sense, to position a laser on the DESK-side and a laser at the RACK, near the upper rotary unit. Now align both lasers on your mark.

