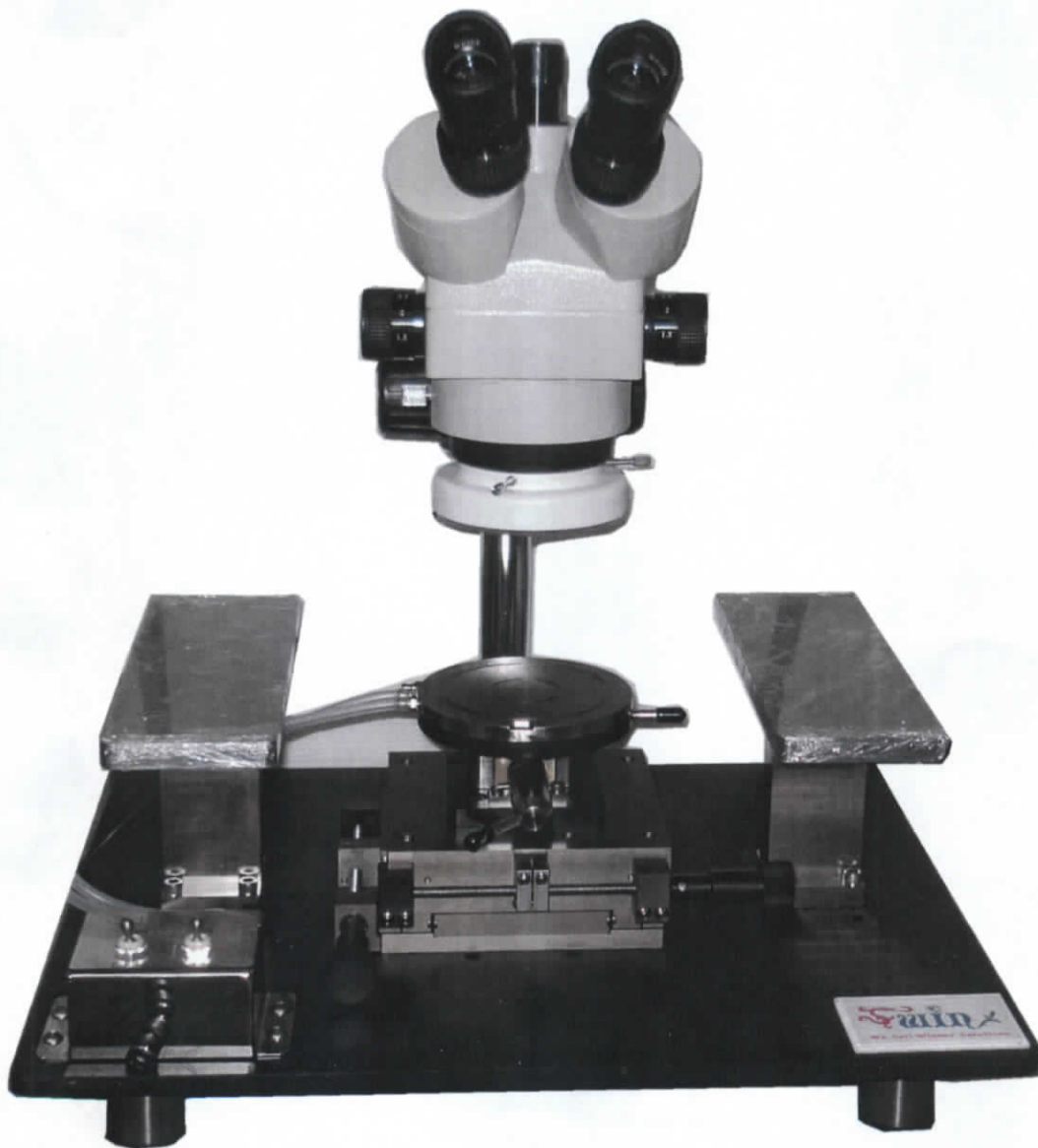
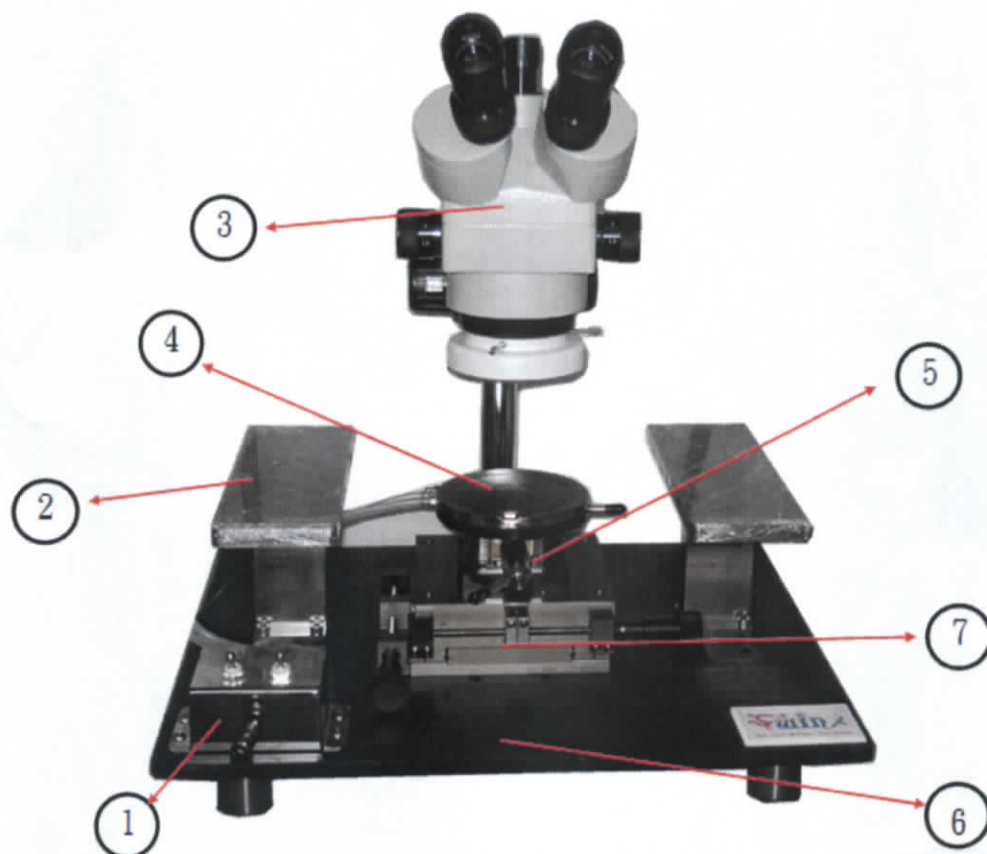


Probe Station (EPS4) Operation Manual



1. General Perspective

1.1 Probe Station



| | |
|---|---------------------------|
| 1 | Vacuum switch |
| 2 | Probe desk |
| 3 | Microscope(optional) |
| 4 | 4" chuck |
| 5 | Z-axis movements |
| 6 | Machine base |
| 7 | XY micro-slip tuning |
| | Micropositioner(optional) |

1.2 Vacuum pump (optional)

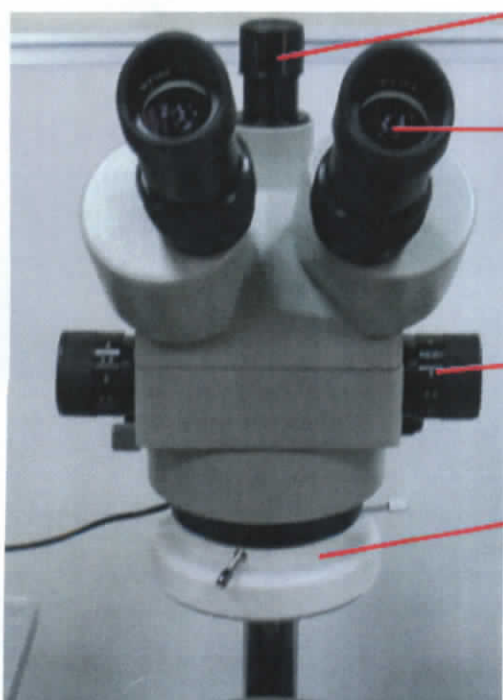


Vacuum source
PU tube

Power switch

Vacuum pump
Power line

1.3 Microscope



CCD(optional)

Eyepiece lens

Zoom knob

Light source

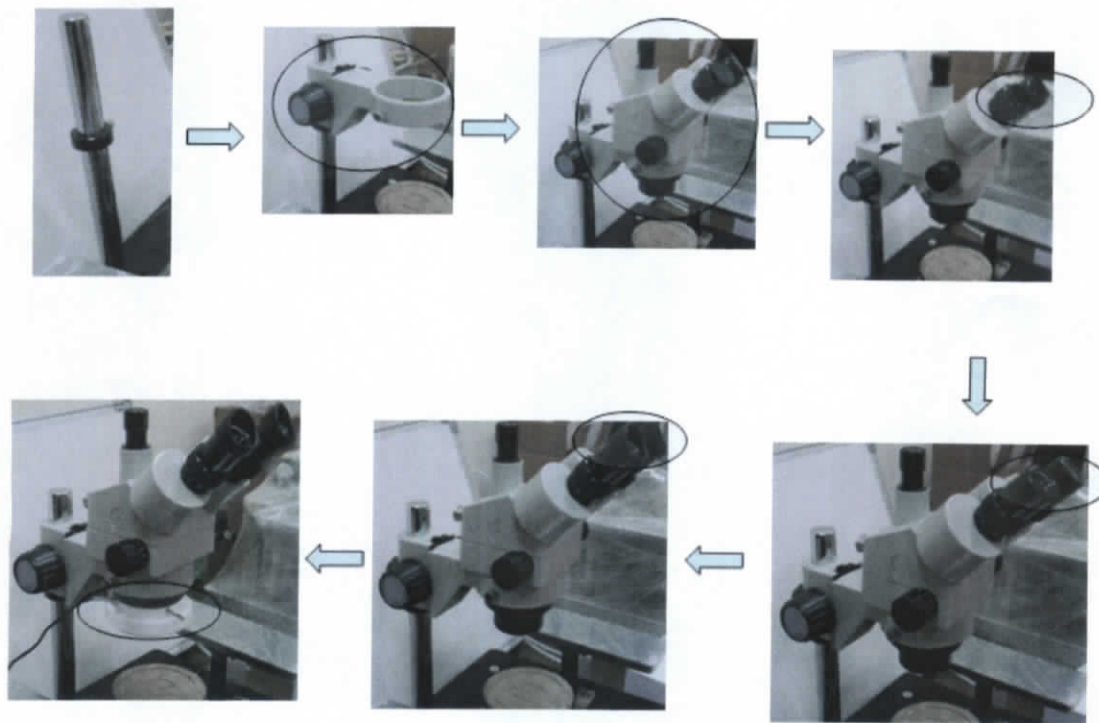
2. Assembly

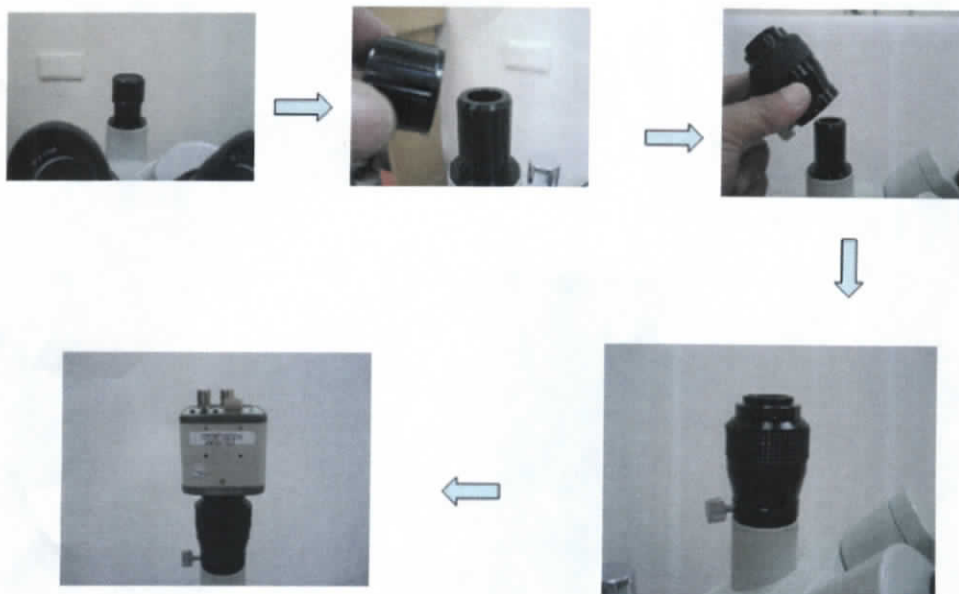
2.1 Take EPS4 from package box, and check whether the EPS4 and accessories are complete.

- (1) EPS4 Probe Station
- (2) Vacuum pump (optional)
- (3) Microscope head 、 head holder and light source (optional)
- (4) Micropositioner (optional)

2.2 Microscope setup

After EPS4 Probe Station body to be positioned, lock the microscope head holder on the microscope stand, then mount the microscope into the microscope head holder and lock it.





2.3 Vacuum pump installation and usage (optional)

(1) Connect the vacuum tube of vacuum pump to the switch box of EPS4 as the picture below.



Vacuum switch

PU tube interface

(2) Plug in the power cord of vacuum pump. Turn on the vacuum pump when connection completed.

3.EPS4 Probe Station operating instructions

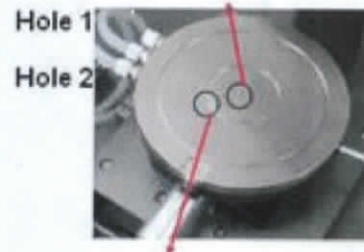
3.1 Plug the power of light source and vacuum pump at first.

3.2 Test sample placement:

Put the sample on the center of chuck and turn the vacuum switch 1 or both 1 and 2 on, which depends on sample size.



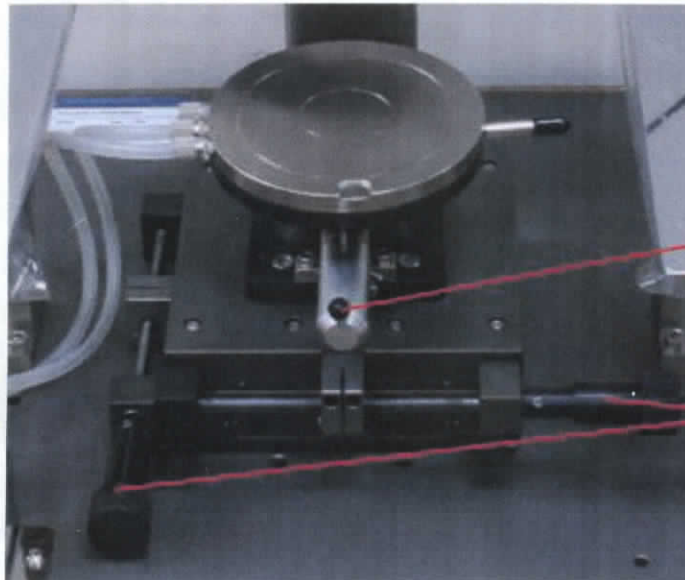
Suction hole 1 at the chuck center



Suction hole 2 at the inner groove



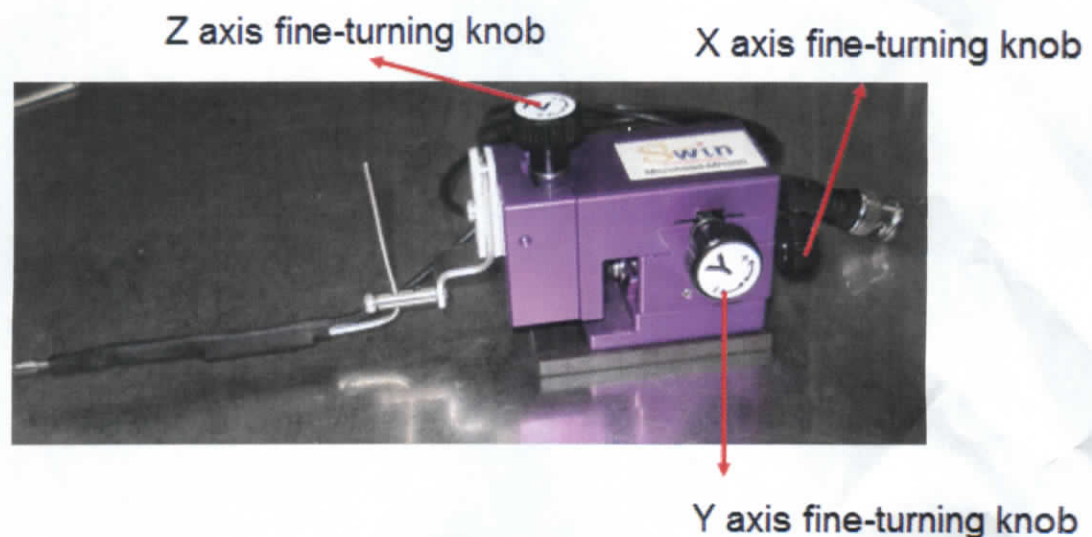
3.3 Move sample via chuck stage. Usually look for probing pads using low magnification which has larger field of view.



Z-axis movement knob

XY micro-slip knob

3.4 Place the Micropositioner on the probe desk, and let the probe tip be above the sample around 5~7mm. Then place the tip close to the measurement point and use the XY fine-turning knob to adjust the position, and fine-tune z-axis height to confirm the tip position is above the measurement point.

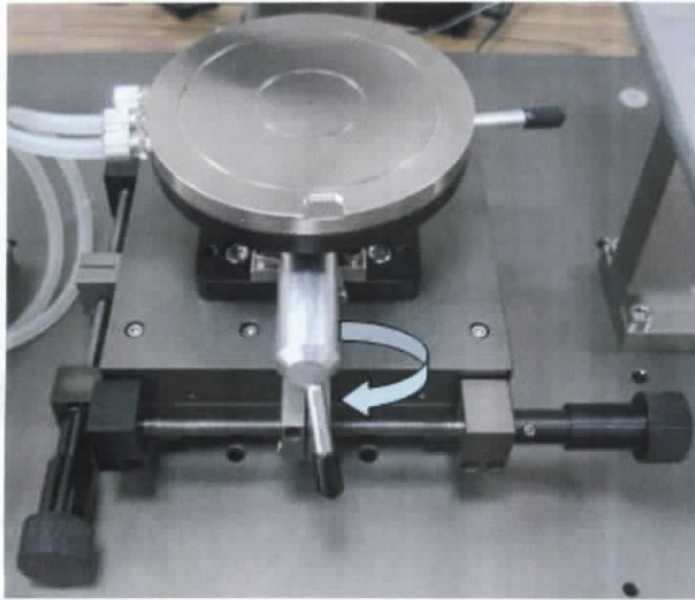


Z axis fine-turning knob

X axis fine-turning knob

Y axis fine-turning knob

3.5 Turn the z-axis movement knob clockwise to let the chuck up.



3.6 After measurement finish, turn the Z-axis movement knob counter-clockwise to let the chuck down.

3.7 Turn the vacuum switch “OFF”, and take out the sample from chuck.