



*Thin Film Measurement solution
Software, sensors, custom development
and integration*

MAPPING STAGE ASSEMBLY INSTRUCTIONS.

PRE-REQUISITS

Before stage assembly:

- a). Install TFCompanion software on the computer that will be used with MProbe system
Mapping plugin and stage USB driver (in case of USB port connected controller) need to be installed as well – please see software installation/configuration instructions.
- b). Prepare following items (included with the stage) :
 - 8-32 socket screws
 - 9/64 hex/alien key
 - small Philips screw-driver (optional maybe be needed for Transmittance option assembly)
- c). It is recommended that assembly is done by 2 people

I. After unpacking – place the stage platform on a sturdy table. Attach vertical and horizontal posts using 8-32 socket head screws (see. Fig 1)

Note. In case of Transmittance fixture- it need to be assembled first and the lens attached (as shown on the Fig. 1). Also, attached Fiberoptics patch cable to SMA connector of the Transmittance fixture (it will be more difficult to access it when the stage is fully assembled)

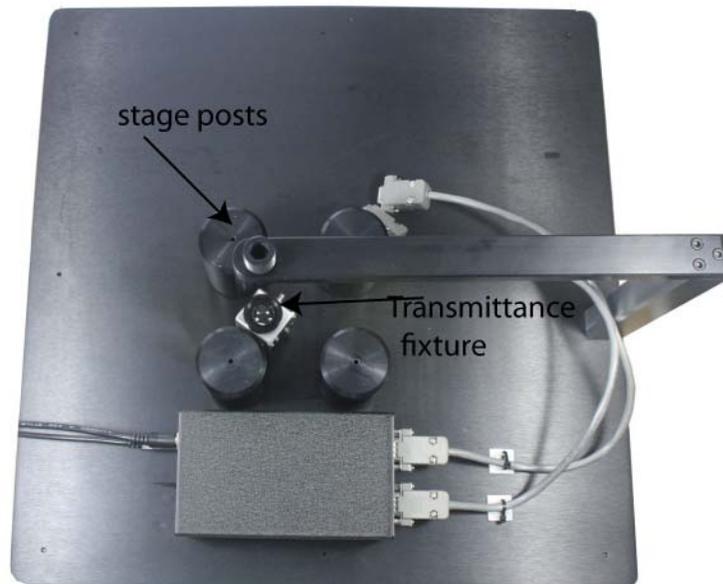


Fig. 1. Mapping stage with vertical post and horizontal probe holder. TO fixture assembled.

II. Attaching mapping stage

Mapping stage has 4 thru holes that need to be used to attach stage to 4 stage posts. Stage will need to be moved in order to make stage connecting holes accessible

- Place stage on the stage posts.
- Connect cables from stage controller to the mapping stage connector (Important. Please check that cables are connected to a matching axis. X axis of the controller -> to X axis of the stage, Y axis of the controller -> to Y axis of the stage).
- Connect power (24 V adapter) to stage controller
- Connect USB cable from computer to controller
- Start TFC Companion software and select Actions/Dynamic Mapping from the main menu – Mapping dialog will be displayed (Fig. 2)
- Select the port from drop down box and connect to the controller.
- Use Manual control to move the stage to the position where connecting holes are accessible. (fig. 2, 3)

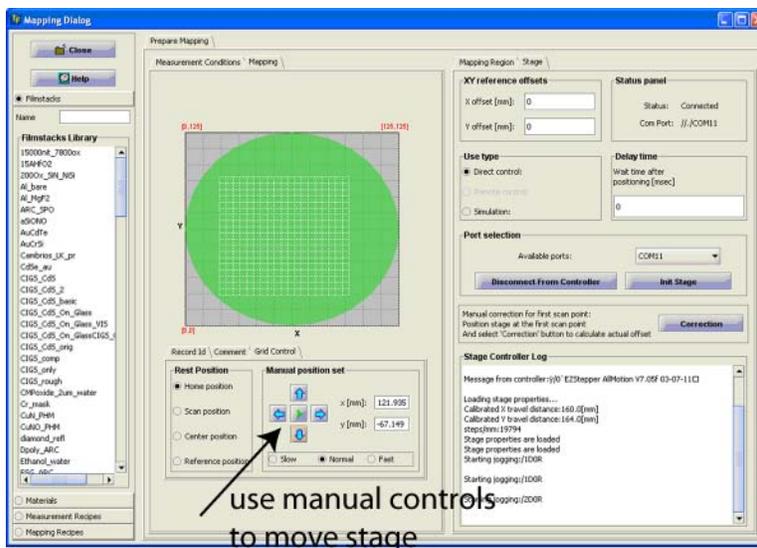


Fig.2 Mapping dialog. Connect to the controller and use manual controls (arrow buttons) to move the stage.



Fig. 3. Stage mounting holes are accessible, after stage is moved and can be lined-up with the threaded holes in stage post.



Fig. 4. Stage is mounted using two 8-32 screw (do NOT tighten the screws fully) before other 2 screws are inserted.

h). Now move stage to line –up remaining 2 holes. After putting the screws, you may need to move stage back to tighten first 2 screws.

III. Attach focusing lens.



Fig.5. Put reflectance probe thru the hole in the holder and attach it to the SMA connector on the lens. Do not connect other ends to the MProbe system yet...

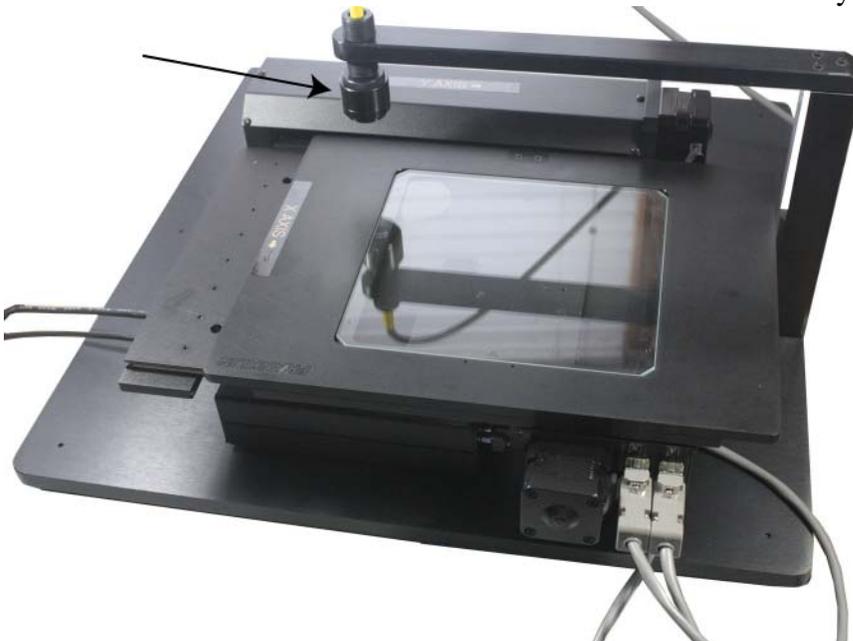


Fig. 6. After lens is attached to the probe – move the lens up and screw-in its end in the holder.

Now attach reflectance probe ends to the MProbe system, switch on light source and adjust the position/ height of the lens.