

## **Technical Note**

## Leica DMi8 Laser Safety Stage Cover Installation Instructions with Mounting Brackets in Situ

This document describes how to install this risk mitigation device to reduce access to laser radiation when the mounting brackets are already in place.

1. Align the stage cover's mounting holes with the slots in the mounting brackets. Fit but do not fully tighten the 4 screws and washers provided. Carefully lower the stage cover assembly until it is approximately 2mm above the stage assembly and then tighten the screws

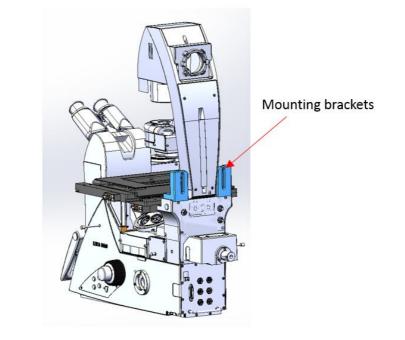


Figure 1: Mounting Brackets

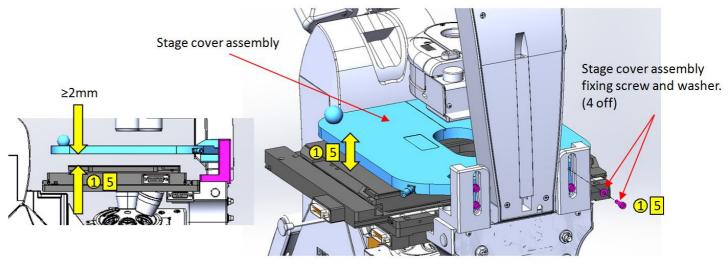


Figure 2: Securing the Stage Cover Assembly

- 2. Check that the condenser can be focused to produce Kohler illumination and still remain clear of the stage cover
- 3. Ensure that the stage cover can open freely
- 4. Reconnect the interlock cable and check its operation as per the next section



## Leica DMi8 Laser Safety Stage Cover and Mounting Brackets Installation Instructions

This document describes how to install this risk mitigation device to reduce access to laser radiation and the mounting brackets for it.

1. Position the mounting brackets as shown. Tighten each screw and then back them off 1/2 a turn.

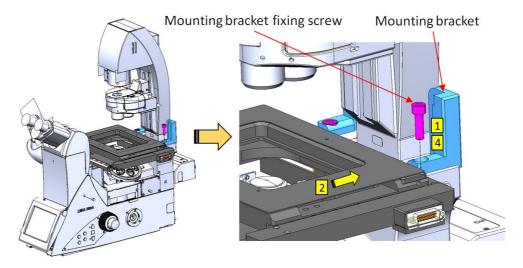
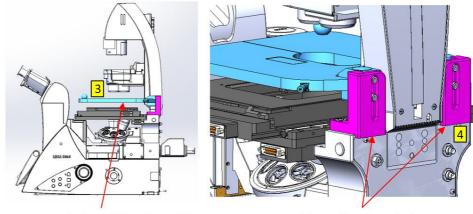


Figure 3: Initial Securing of Mounting Brackets

- Check if the stage travel in the "y" direction. If the stage can to come into contact with the mounting brackets then the stage's integrated limit switches need to be repositioned to prevent this. The limit switch positioning instructions are located at <u>http://asiimaging.com/docs/xystage\_limits</u>
- 3. Secure the stage cover as detailed on the previous page however this time position it as high as the mounting bracket's slot will permit



Stage cover in its highest position

Mounting brackets

Figure 4: Final Securing of Mounting Brackets

- 4. Whilst ensuring the rear face of the mounting brackets are parallel with the rear face of the microscope, fully tighten the mounting bracket fixing screws
- 5. Back the stage cover fixing screws off slightly (Figure 2) and carefully lower the stage cover until it is approximately 2mm above the stage. Retighten the stage cover fixing screws
- 6. Check that the condenser can be focused to produce Kohler illumination and still remain clear of the stage cover
- 7. Ensure that the stage cover can open freely





- 8. Get the External Interlock Cable (ASE-11399) out its bag, which was taped to the bottom of the stage cover
- 9. Connect the External Interlock Cable (ASE-11399) into the stage cover as shown overleaf



Figure 5: External Interlock Cable (ASE-11399) in Bag Underneath Stage Cover and Connected

10. Locate the section of interlock cable loom connected to your microscope, for example:



Figure 6: Nikon Ti2-E Interlock Connection

11. Disconnect the nearest Micro-Fit connection and connect the External Interlock Cable (ASE-11399) into this opening in the interlock cable loom as shown below:



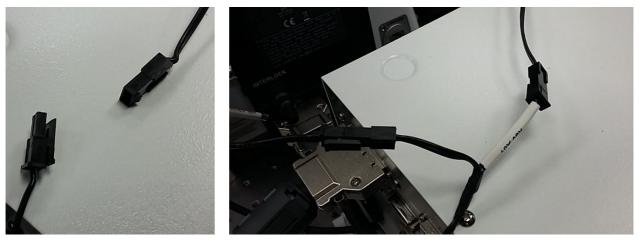


Figure 7: External Interlock Cable (ASE-11399) Connected into Interlock Cable Loom

12. Test the interlock system using the 'Guidelines for Safe Operation of Laser Products' in your Hardware Guide

