

## Operating instruction TUSTB and LM digital SLR adapter

 <p>max. 25,3 mm</p> <p>The image shows a white microscope with a black TUSTB adapter attached to its eyepiece. A red dimension line above the adapter indicates its maximum external diameter is 25.3 mm.</p>	<p>The LM tube adapter (TUSTB) is designed for microscope tubes with an external diameter of max. 25,3 mm and an internal diameter of 23,2 mm.</p>
 <p>The image shows a close-up of the black TUSTB adapter being inserted into the white phototube of a microscope. A red arrow points to the adapter, which has 'LMscope TUSTB' printed on it.</p>	<p>Simply insert the adapter (TUSTB) into the phototube of your microscope. The TUSTB has six Allen screws. Tighten the three lower Allen screws equally until the TUSTB is symmetrically and centered on the tube.</p>
 <p>The image shows a black SLR camera with the LM digital SLR adapter attached to its lens mount. A red circle highlights the adapter, which has 'LM-SCOPE MADE IN AUSTRIA' printed on it.</p>	<p>Attach the LM digital SLR adapter to your camera using the bayonet mount. Make sure that the tip of the bayonet thread is exactly on the tip of the camera thread before turning clockwise until it locks into place. If necessary, hold down the button for releasing the camera thread.</p>
 <p>The image shows a close-up of the black T2 ring of the adapter. A small screwdriver is being used to adjust one of the three small screws on the ring.</p>	<p>If needed, the camera can be turned to another position with the three small screws of the T2 ring.</p>



Now simply insert the entire unit (LM digital SLR adapter and camera) onto the TUSTB, which is already fixed in the phototube of your microscope.



Swivel in the 10x microscope lens and visually focus the image by means of the microscope focusing mechanism. Plan achromatic, plan fluor or plan apochromatic microscope lenses are optimal for perfect micro images.



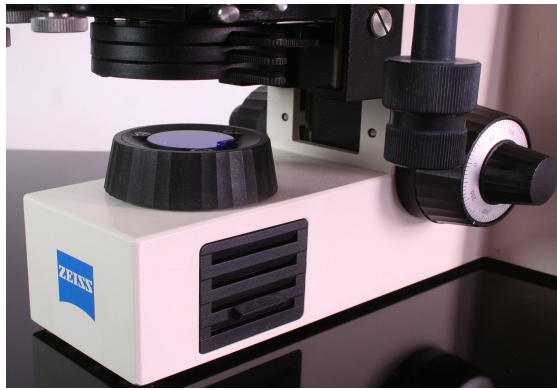
Switch the camera on and, if possible, use the automatic control program. If that is not possible, use the “automatic aperture control” setting. If these two options do not work, you can also work in “M” (manual) mode. We recommend that you reset the power saving mode on your camera to 15 minutes, otherwise the camera will constantly switch itself off.



With some cameras, a shutter release is only possible with the lens being in place. If this is the case with your camera, select the “release without lens” point in the setup menu (wording varies from manufacturer to manufacturer).



If the image is not in focus on the camera display, you can adjust this by raising the camera adapter unit with the help of the three upper Allen screws on the TUSTB. The TUSTB should still remain fixed in the phototube. Once you have found the optimal position, secure it by tightening the Allen screws.



Condenser with daylight filter (light blue)

Whenever possible, bright microscope illumination, halogen illumination, LED or a flash unit designed for short flash durations (optimal duration 1/600 sec. or shorter). Set the light sensitivity to 400 to 800 ASA. We recommend to use the LIVE VIEW mode of your camera. If this is not possible, activate the mirror lock-up. If needed, you can insert a daylight filter (light blue) into the illumination beam path or use your camera's controls to adjust the white balance.



Blurred images are mostly caused by releasing the shutter manually. This leads to vibrations, which are picked up as motion blurs, we recommend that you use a remote control release. Otherwise it is also possible to use the digital camera's selftimer function. Using a remote control system is also ideal (controlled from the PC); unfortunately, this is not supported by every camera, but Nikon and Canon cameras do support it.



Using the SLR viewfinder or the right angle viewfinder, focus the microscope image by means of the microscope focusing mechanism. Digital SLRs with LIVE VIEW and magnifying function (7x/10x/14x) are ideal for precise focusing. A magnification function is advantageous, as the camera display does not have the same resolution as the sensor. Not all camera models have a magnification function. If your camera has one, switch it on. It is also worthwhile using an external HD monitor, which ideally is connected to the camera via an HDMI connection