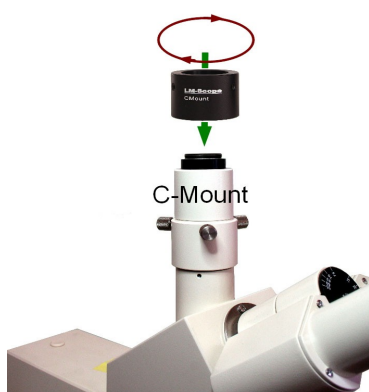


Operating instruction for the LM digital universal SLR adapter with C-mount extension



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. If necessary, hold down the button for releasing the camera thread.



Now screw the C-mount extension onto the phototube of your microscope in a clockwise direction.



- 1) You can now connect the entire unit (LM digital SLR adapter and camera) onto the C-mount photoport of your microscope.
- 2) Using an Allen key, you can now adjust the distance between C-mount extension and LM digital SLR adapter to the optimal value (please tighten all screws as evenly as possible).



If needed, the camera can be turned to another position with the three small screws of the T2 ring.



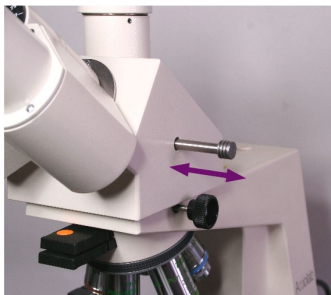
Now swivel in the 10x microscope lens and visually focus the image by means of the microscope focusing mechanism. Plan achromatic, plan fluor or plan apochromatic microscope lenses are optimal for perfect micro images.



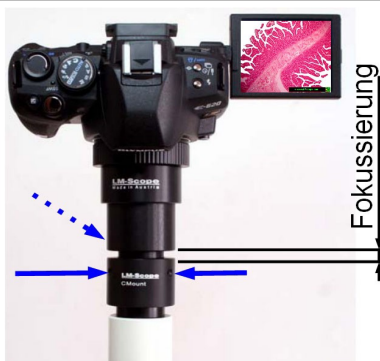
Switch the camera on and, if possible, use the automatic control program. If that is not possible, use the “automatic aperture control” setting. If these two options do not work, you can also work in “M” (manual) mode. We recommend that you reset the power saving mode on your camera to 10 minutes, otherwise 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 your microscope does not have a beam splitter (e.g. 60/40), remember to adjust the deflecting prism so that light can enter into the phototube.

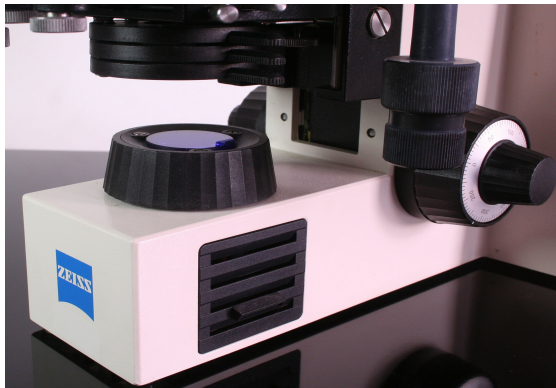


To achieve optimum focus, you have the possibility (as described above) of adjusting the distance between C-mount extension and LM digital SLR adapter using an Allen key.



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.

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 second or shorter) is recommended. Set the light sensitivity to 400 to 800 ASA. If the camera has it, enable the mirror lock-up function with at least a 3 second delay. 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 in the images. To avoid motion blurs, we recommend that you use a remote control release. Otherwise it is also possible to use the digital camera's self-timer function. Using a remote control system is also ideal (controlled from the PC); unfortunately, this is not supported by every camera.