

Instructions for Using the POWERVIEW™ Plus with a Scheimpflug Mount and Setting the Camera Back Focus Distance

Using the POWERVIEW™ Plus with a Scheimpflug Mount Camera

The Scheimpflug mount is used with stereo PIV to allow an angle to be used between the camera image surface and the lens to make the laser light sheet plane the plane of best focus. The camera lens mounting ring must be removed for the POWERVIEW™ camera to fit in the Scheimpflug mount. A CCD hood ring is provided to keep the Scheimpflug lens bellows from blocking the image or touching the CCD surface.



Loosen the three set screws that attach the ring to the camera body two turns, (do not remove the screws), using a 1/16" hex wrench. The screws are located on the top and sides of the camera body. (Do not loosen the set screws on the lens mount ring.)



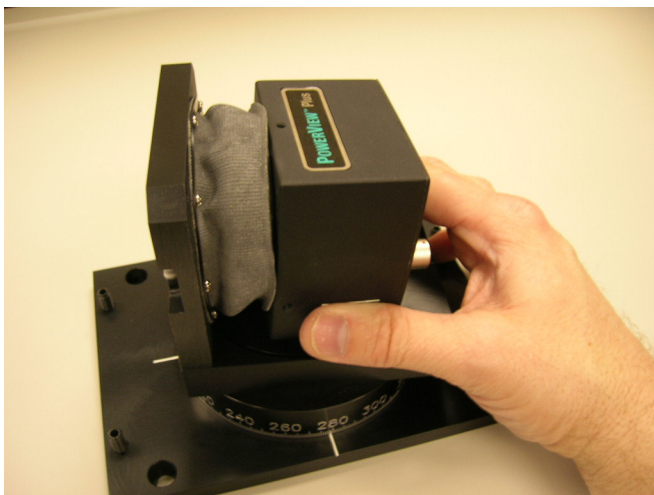
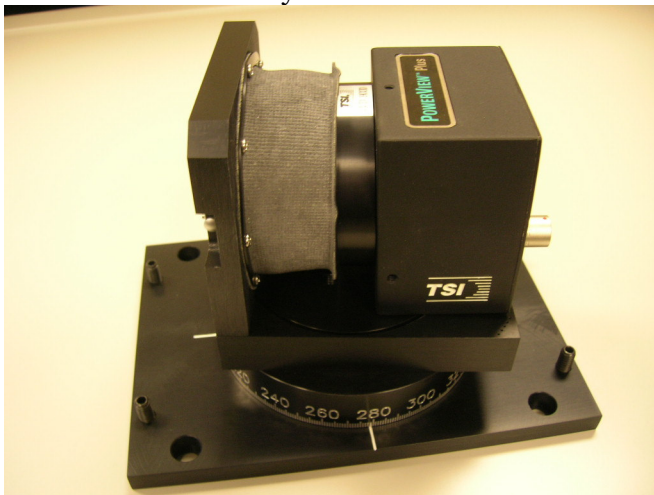
Remove the lens ring pulling straight out.

Insert the CCD Hood into the camera body and tighten the three set screws. Do not over tighten.

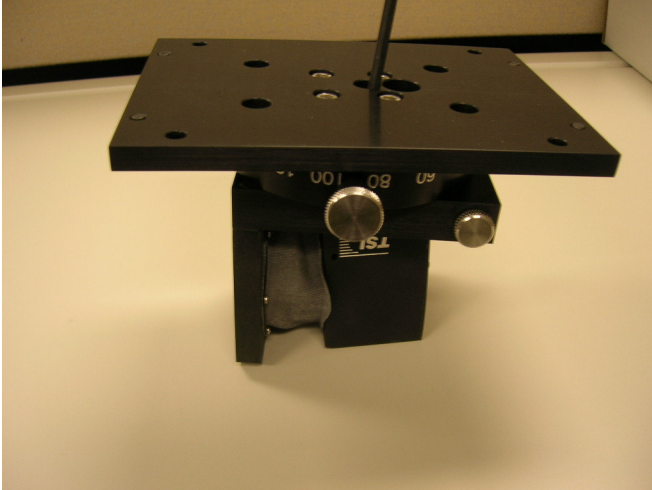




Place the camera body with CCD Hood on the Scheimpflug Mount.



Push the camera forward into position. Turn camera and Scheimpflug mount upside down and attach the camera to the Scheimpflug mount using a 3/8-16 and a 1/4-20 screw.



Replacing the Camera Lens Mount

The camera lens mount can be replaced by removing the camera from the Scheimpflug mount. Remove the CCD Hood by loosening the three set screws. Remove the CCD Hood by pulling straight out. Insert the Lens ring with a lens attached. Rotate the lens so that the dial faces up and tighten the three set screws. Do not over tighten.





Adjusting the POWERVIEW™ Plus Lens Mount Back Focus Distance

The camera lens ring is factory adjusted so that the lens focusing at infinity.

Adjustment to the back focus distance is not usually necessary. If you do want to adjust the back focus distance, have the camera connected to the computer and capturing images in continuous free run mode. Set the lens focus to infinity • and image a far away object.



Loosen the three set screws on the lens ring one turn, (do not remove the screws).



Turn the lens and lens ring to adjust the back focal distance so the far object is in focus with the lens set to infinity. Tighten the three lens ring set screws.

Loosen the camera body to lens ring set screws and rotate the lens so it is facing up. Tighten the set screws.