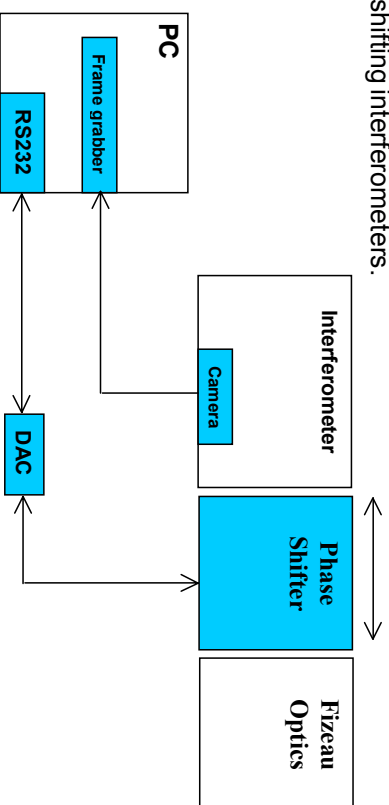


Generic Phase-shifting Software & hardware for all Interferometers

Initially developed to support FISBA OPTIK interferometers, Windows ®-based μ Shape™ measurement and analysis software can now be implemented on:

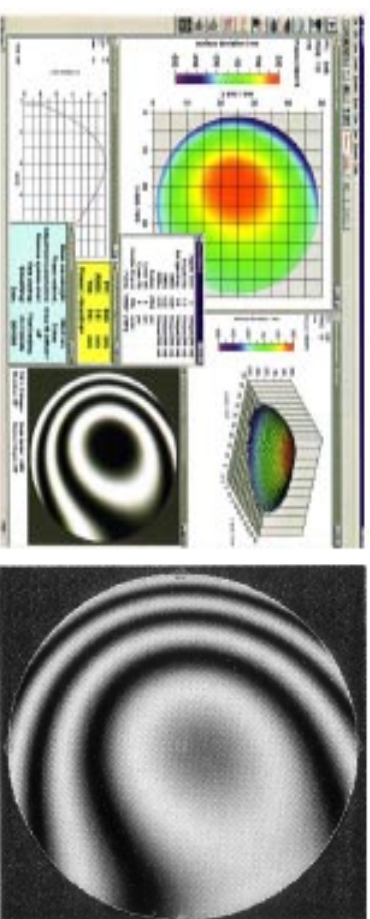
- existing phase-shifting interferometers requiring updating
- non-phase shifting interferometers.



Implementing the μ Shape™ phase-shifting interferometer package is quite simple. First, one needs to provide the camera signal to the supplied framegrabber. In many instances, this is as simple as using a 'T' type connector in the line where the BNC cable connects to a fringe monitor. The **Matrox Meteor II** board has been selected as the frame-grabber of choice since it supports **RS-170, CCIR** and some progressive scan cameras although other frame-grabbers are now also available.

The second step involves the phase-shifter itself. If a phase-shifting unit is already part of the instrument to be upgraded, the hardware kit will readily operate it (although may require an additional amplifier). For upgrading older Fizeau interferometers that do not have phase shifting (e.g. **Zygo Mark II, GPI**, etc.), **Armstrong Optical** can supply a 4" phase-shift accessory. This attaches to the interferometer behind the mounting flange allowing existing optical accessories to be used.

The μ Shape™ phase-shifting kit also includes a digital to analog converter (DAC) that attaches to a serial port on the PC. The DAC outputs a DC voltage from 0 to 10 volts and is all that is required to operate the **Armstrong Optical** phase shifter accessory (other existing high voltage phase shifters may require an amplifier).



That is all you need to upgrade to the user-friendly μ Shape™ measurement and analysis software. The latest software release (v4.9) offers all features needed to test optical surfaces and wave fronts both in measurement laboratories and in production environments. With the help of various statistics functions (slope analysis, fitting of Zernike and Legendre polynomials, MTF/PSF operations) it is now possible to completely characterize your test objects, in addition, add-on modules e.g. for homogeneity testing or multiple apertures, complete the interferometer software.

The phase shift upgrades are able to operate across all wavelength bands (visible, near-IR, mid-IR and far-IR).

Call us to discuss how we can help to upgrade your interferometer with the μ Shape™ measurement and analysis software and/or generic phase shifting hardware.

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