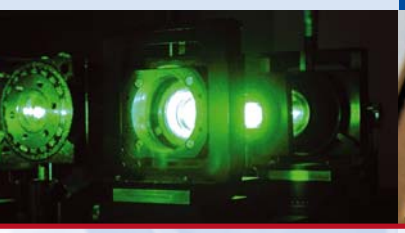
SLM

>> Spatial Light Modulators

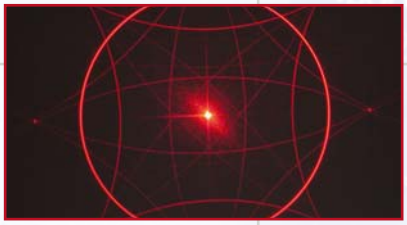



Spatial Light Modulators

HOLOEYE´s Spatial Light Modulator (SLM) systems are based on translucent or reflective liquid crystal microdisplays. These devices can modulate light spatially in amplitude and phase, so they act as a dynamic optical element. The optical function or information to be displayed can be taken directly from the optic design software or an image source and can be transferred by a computer interface. Implementation is accomplished using the VGA or DVI port of a standard PC graphics card. The SLM can be used just like an external plug & play monitor. In many cases no additional optics are necessary. The SLM can be incorporated in existing optical setups and devices. To guarantee the best performance, optical characterization measurements (e.g. phase modulation) are performed by HOLOEYE for each individual device.

Spatial Light Modulator Applications

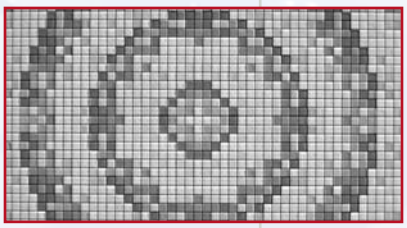
- Display Application
- Imaging & Projection
- Beam Splitting
- Laser Beam Shaping
- Coherent Wavefront Modulation
- Phase Shifting
- Optical Tweezers
- Holographic Projection
- Laser Pulse Modulation



Application fields range from bio-photonics, optical metrology, holography, optical interconnection such as switching and information encoding, interferometry to material processing.

Driver Software and Application Software

All HOLOEYE Spatial Light Modulators are controlled by a HOLOEYE driver software which runs on all Windows platforms. This software gives the opportunity to control all relevant image parameters and provides a very easy gamma control to configure the Spatial Light Modulator for different applications and wavelengths. Furthermore, a tailored Spatial Light Modulator application software allows the simple generation of diverse dynamic optical functions like gratings, lenses, axicons and apertures as well as the calculation of diffractive optical elements (DOE) from user defined images.



HOLOEYE Photonics AG
Albert-Einstein-Str. 14
12489 Berlin, Germany
Phone +49 (0)30 63 92 36 60
Fax +49 (0)30 63 92 36 62
contact@holoeye.com
www.holoeye.com

HOLOEYE **Pioneers in Photonic Technology**