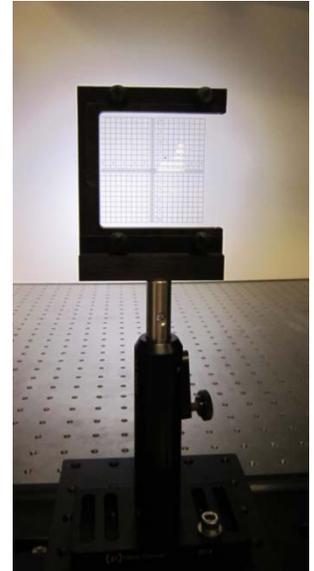


Optical Imaging Target

(Product ID: EC-T-25)

Optical Imaging Targets are used to set up planar imaging experiments. Align the laser sheet(s) to the front target face and then focus one or more cameras on the target. The numbers and orientation marks correlate one target image to another. At 1 mm thick, the back surface can be viewed with minimal error. One image can be warped to another with the targets using the grid crossing points. They are designed such that the axis of rotation is along the front target face. With a clear optical view of the target (and a completely clear edge) a laser sheet can easily skim along the target face. Due to the accuracy of the target image, the recorded image can be used to assess resolution. Using a high-resolution image, a line-spread function can be found by comparing the recorded images with the "ideal" high-resolution image.

Holders are made from aluminum and are black anodized. They have a "C" shaped design so that one of the target edges is "exposed" (see the photo). The targets are held in place by 4 nylon thumb screws, and the target slip-fits into a slot on the front-face of the holder. This design makes it easy to skim the laser sheet along the holder front-face. The holder is designed so that the axis of rotation is along the front face of the target (and so in principal, the target could be rotated 180 degrees and still have the front face in the same depth position).



TARGET SPECIFICATIONS

Substrate	2.5 inches x 2.5 inches x 1 mm thick, fused silica
Ruled area	50 mm x 50 mm
Major divisions	2.5 mm; minor divisions = 0.5 mm
Line thickness	0.17 mm

