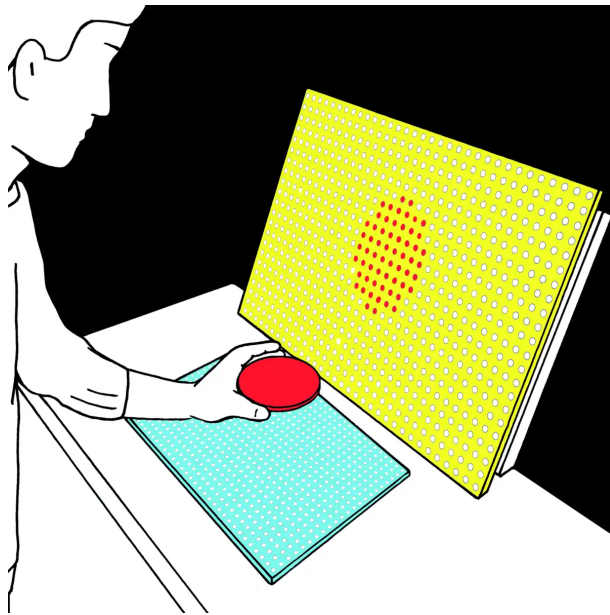


Fibre-optic "television"

How can an image be transferred to a screen?



Place your hand over the small black panel and observe the large panel.

Place one of the coloured circles on the small panel. Is the image really circular?

Take a look at the back of the large black panel.

The bright spots on both black panels are connected to 1536 light guides. Each pixel of one “screen” is connected to one pixel of the other “screen”.

The light guides are made of plastic (polymeric optical fibre, POF) and are also used for optical data transfer. These light guides consist of a core, in which light is directed, and a very thin plastic coat which totally reflects the light.

When placing a shape on the small panel, the shape is only detected with a limited number of light guides (pixels) and displayed on the other panel with the same number of pixels. The circle becomes an octagon. The more pixels used, the more accurately the original shape is reproduced.

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