

Fiberboard

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Multi-touch displays based on infrared (IR) light offer many advantages over alternative technologies. Existing devices either use complex custom electronic sensor arrays, or a camera that must be placed relatively distant from the display. FiberBoard is an easily constructed compact IR-sensing multi-touch display. Using an array of optical fibers, reflected IR light is channeled to a camera. As the fibers are flexible the camera is free to be positioned so as to minimize the depth of the device. The resulting display is around one tenth of the depth of a conventional camera-based multi-touch display. We describe our prototype, its novel calibration process, and virtual camera software based on multi-touch image processing tools.

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[FiberBoard: compact multi-touch display using channeled light](#)