

## Google glass



Not to be confused with Google Goggles.

Google Glass is an optical head-mounted display designed in the shape of a pair of eyeglasses. It was developed by X (previously Google X)[9] with the mission of producing a ubiquitous computer.[1] Google Glass displayed information in a smartphone-like hands-free format.[10] Wearers communicated with the Internet via natural language voice commands.[11][12] Google started selling a prototype of Google Glass to qualified "Glass Explorers" in the US on April 15, 2013, for a limited period for \$1,500, before it became available to the public on May 15, 2014.[13] It also had a camera attached to it.



**Touchpad:** A touchpad is located on the side of Google Glass, allowing users to control the device by swiping through a timeline-like interface displayed on the screen.[28] Sliding

backward shows current events, such as weather, and sliding forward shows past events, such as phone calls, photos, circle updates, etc.

Camera: Google Glass has the ability to take photos and record 720p HD video.[29]

Display: The Explorer version of Google Glass uses a liquid crystal on silicon (LCoS)(based on an LCoS chip from Himax), field-sequential color system, LED illuminated display.[30] The display's LED illumination is first P-polarized and then shines through the in-coupling polarizing beam splitter (PBS) to the LCoS panel. The panel reflects the light and alters it to S-polarization at active pixel sensor sites. The in-coupling PBS then reflects the S-polarized areas of light at 45° through the out-coupling beam splitter to a collimating reflector at the other end. Finally, the out-coupling beam splitter (which is a partially reflecting mirror, not a polarizing beam splitter) reflects the collimated light another 45° and into the wearer's eye.