



Making mobile devices more intuitive to use — **Powered by Ultrasound**

Elliptic's ultrasonic gesture recognition technology allows users to interact with devices in a natural and efficient way.

Large interaction space

180 degrees: ultrasonic echos can be sensed in front and on all sides of a device.

Robust & responsive

Works in every lighting condition, on the move, or even when users are wearing gloves.

Low power

The most power-efficient gesture solution available today.



→ How it Works

A speaker or earpiece sends an ultrasonic wave that bounces off the body and is recorded by the microphone. The distance and motion of the reflecting object can be measured by analyzing the echo.

→ Gesture Portfolio

The SDK kit supports a range of controls that enable you to create disruptive ways to interact with your devices and applications, and create your own gestures.

→ Performance

Elliptic Labs' efficient algorithms run smoothly even on computationally limited devices: gesture detection can be performed on an ARM application processor or with a low-power DSP (including while the phone is asleep).

Ultrasound Based Gestures



www.ellipticlabs.com



hello@ellipticlabs.com



NEW: BEAUTY Ultrasound Proximity Software (UPS)

Hardware-based optical sensors have been an indispensable part of every smartphone to turn off the screen and disable touch functionality when a user holds a device to their ear. By replacing these hardware components, with Elliptic Labs' "BEAUTY" – the first software-based solution to replace the optical proximity sensor – the unsightly black holes on the front of smartphone will be removed. The result is a more esthetically pleasing design.



Software Development Kit (SDK) Smartphone Gestures

Elliptic Labs offers a comprehensive suite of demo apps to show relevant use-cases for ultrasonic gesture recognition. The SDK includes sample code that is easy to integrate into any application.



➔ Supports a large number of form factors and platforms

- Android operating systems (Jelly Bean and up)
- Smartphones, tablets and laptops

➔ Faster time-to-market and support for of-the-shelves components

- Standard earpiece or speaker
- Standard audio microphones
- 96 KHz sampling rate
- 20+ KHz centre frequency

➔ Extended library of gestures and application samples

- Scrolling, multi layer interaction and always-on gestures work from above, below and all sides of a device.

Better design and visual appeal

Elliptic Labs' software can be added to any device using only a standard speaker and microphone. There is no need for unsightly holes or openings, allowing OEMs to deliver Elliptic Labs' suite of experiences to their customers, while reducing costs.



ELLIPTIC LABORATORIES, INC.

575 Market Street
Suite 3950
San Francisco, California 94105
United States of America

ELLIPTIC LABORATORIES AS

Akersgata 32
0180 Oslo
Norway
P (+47) 21 89 91 30

ELLIPTIC LABORATORIES LTD PTY

Rm 1933
600 Lu Ban Road
Jiang Nan Shipyard Building
200023 Shanghai
China