

Samsung Introduces World's First '3-dimensional Movement Recognition' Phone

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Samsung Electronics unveiled the world's first "3D movement recognition" mobile phone SCH-S310. 'Accelerometer' is built in to accurately calculate and ascertain movement in three dimensional space and then carry out commands according to those calculations. Sophisticated sensing technology calculates the direction in which the mobile phone is moving as well as its speed of movement. The capability

extends beyond the identification of the general locus to include precise recognition of small and rapid movements as well as alphanumeric symbols.

The SCH-S310 phone allows users to dial phone numbers by waving the phone in the air in the shape of digits and symbols instead of pressing a keypad while they can delete unsolicited text messages by shaking the phone up and down.

The recognition of moving shapes in 3D space, using only sensors built into a mobile phone, is a daunting task. Samsung has developed and commercialized a moving algorithm to solve this problem.

Development of 3D movement recognition technology was a joint project between Samsung Electronics and the Samsung Advanced Institute of Technology. The project has resulted in applications for 22 domestic and foreign patents and 14 technical papers were presented at leading academic societies.

To date, movement sensors in mobile phones have been limited to slope calculations and applied to some games and bio-related features. However, the SCH-S310 can recognize continuous movement in 3-dimensional space.

Mobile phone input devices to date include the keypad, touch screen and voice recognition. In the future, however, 3D movement recognition technology will become an important user interface and revolutionize mobile phone designs and features.

This technology will do away with the need for complex keypads on mobile phones, MP3 players, digital cameras and other handheld products. This will particularly effect the way games are played on a mobile phone. Many functions will be controlled by movement instead

of buttons.

Samsung Electronics President Lee Ki-tae says, "Our new movement recognition technology opens a new chapter in natural communication. We will continue to work on technology breakthroughs for mobile phones that make life more convenient for people."

Features of SCH-S310

The Samsung Electronics SCH-S310 uses 3D motion recognition technology for user interface. A "beat box" can be created that will set the phone apart from others on the market with music functions.

User interface: The user can "write" the number "three" in the air. The mobile phone can read this movement and then dial "3." Shaking the phone twice will conclude a call or delete spam messages.

The user can draw a "O" or "X" in the air with the phone, which will recognize it and respond with a voice message "yes" or "no." Move the phone sharply to the right and the selection on the MP3 play function will move to the next tune on the list; move it to the left, and the selection will back up one number.

Moreover, Samsung has already developed movement-controlled functions that will be adopted on later models. These include switching from landscape to portrait when shooting video or snapping a still picture, or preventing the picture from becoming blurred from hand movement. Games will be played by moving the phone up, down, right or left, instead of pressing buttons. The phone will also be able to sense changes in body movement and provide advice on dieting or other health tips.

The "motion beat box" function enables the user to select a particular

sound from the menu such as "drum," "tambourine," "scratch" or "clap." Then he or she shakes the mobile phone and the beat will be re-created in rhythm with the motion. This enables the user to keep time with any tune being played.

With the music performance function, the phone will begin to play music after it is shaken by the user. The sensors in the phone identify the movement and adjust the beat accordingly.

Moreover, the Samsung SCH-S310 has a magnetic sensor built in that serves as a compass.

Finally, the latest mobile marvel from Samsung applies a "fresh new user interface." The intenna slide design comes with GPS, 1.3M-pixel camera, music-on-demand, and mobile banking capabilities.

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