Touch feedback for kiosks

> Immersion's TouchSense technology let's the screen touch you for a change.

Most touchscreens, you touch them. This one touches back.

Immersion Corp.'s TouchSense technology for touchscreens supplies tactile cues, noticeably absent in current touchscreens, providing a more intuitive, personal, and natural experience.

Instead of just feeling the hard, unresponsive touchscreen surface, users perceive that buttons depress and release, just as physical buttons and switches do. The realistic and engaging response restores the rich tactile information conveyed through physical controls, such as when clicking a computer mouse, pushing a button, or depressing a membrane switch.

System designers can synchronize TouchSense tactile sensations with sound and on-screen graphical images for an even more powerful user experience.

Immersion first implemented its TouchSense force feedback technology in 1996 in gaming system peripherals. Since then, it has been incorporated into numerous computer and video console systems; medical simulation systems; rotary controls in cars from BMW, Rolls Royce and Volkswagen; and mobile phones from Samsung. TouchSense technology for touchscreens is the latest implementation, and has been designed to bring a new level of interactivity to the user experience at the kiosk.

Many touchscreen applications can be improved or expanded with TouchSense technology. For example, menu items programmed to supply a pulse sensation or a confirming push-back response may help machine operators improve efficiency. Buttons such as enter, next and other major and minor functions can supply a distinct and consistent feel throughout a kiosk application to assist consumers.

"TouchSense technology allows the user's sense of touch to join sight and sound for a more multisensory and engaging experience, one that can enhance performance, productivity, safety, or fun," said Dean Chang, Immersion CTO. "Touchscreen manufacturers and integrators can use this vibro-tactile, or haptic, technology to provide a more satisfying user experience for applications from automotive and industrial controls to point of sale, kiosk and gaming."

Olea Kiosk Builder

Olea Exhibits has developed a new Web-based sales initiative to capitalize on a perceived gap in the traditional kiosk marketplace.

"Our Kiosk Builder brand is intended to close the gap from a manufacturer to the general public," said Frank Olea.

"Currently in the marketplace, it can be very frustrating for someone to get pricing and information on kiosk enclosures in a fast, efficient format. Kioskbuilder.com is intended to work much like a Dell or Ford website in that you can choose your product, configure it and print out a quote in less than five minutes. Kiosks themselves are self service devices. Olea is working to make purchasing a kiosk as simple as using one."

To start, Kiosk Builder will offer four kiosk configurations based on popular existing Olea models. Each model provides a reasonable entry point for small businesses wishing to deploy a self-service kiosk.

Staying up with SmartPower Digital Photo Kiosks

To maintain uptime and reduce servicing, the latest generation of electronic power conditioners add kiosk-specific and "watch dog" software applications to guard data in case of power failure or lockups.

Fred Newtz, IT director for Horizon USA, one of the nation's largest, most innovative designers of interactive kiosks, recently made the switch to SmartPower UPS.

"Now that the new software allows us to monitor and protect specific software packages, well, that sealed the deal," Newtz said.

In 2002, SmartPower Systems of Houston developed a new "smart" electronic circuit and patented the third generation of its "TBF with Smart Ground" for digital technology that creates electronic power conditioners with more features, such as prolonged over-voltage protection at a cost considerably less than that of an isolation transformer (IT).

A 2005 report prepared by Santa Clara, Calif.-based power quality consulting, education and training firm PowerCET, on behalf of SmartPower, discusses the testing of TBF technology versus ITs by applying IEEE C.62.41 surges of 3,000 volts. The results showed that TBF surge attenuation on common mode was less than 0.5 volts, the same as an IT.

Results of testing commissioned by SmartPower placed the TBF units in the "power conditioning" category, yet the TBF units cost much less and take up a smaller footprint than an IT. The smart electronic circuits explain why TBF is referred to as "electronic" power conditioning, versus the electric circuits found in an IT.