

Multi Touch Screen LCD of excellent toughness is adopted for new digital entertainment station. Restaurant environment is created to enable relaxing meals even when accompanied by children.

Installation Details

Entertainment equipment utilizing digital technology is being introduced as part of upgrading service for families.

As a service for families, McDonald's Co. Japan, the biggest hamburger restaurant chain in Japan, introduced "Playland" with a jungle gym and slide for children. Furthermore, "Digital Playland" co-developed by McDonald's Company, Japan and teamLab was added to the well-reputed Playland facility. Characterized as space-saving play equipment that enables children to play cheerfully owing to the full utilization of digital technology, it was introduced in August 2014 at the Kobe-Okubo Interchange restaurant that was refurbished as a family-centric restaurant in February the same year.

A touch panel display of excellent toughness and durability that supports simultaneous multi-detection is adopted.

"Digital Playland" is an interactive digital entertainment station that enables children to move displayed characters and draw pictures by directly touching and operating the screen. The basic performances of the system are as below.

- **Touch panel**

A touch panel is an essential function for playing by directly touching screen. It must be capable of detecting a plurality of simultaneous operations because children will assumingly play with their friends or operate the station with both hands. High detection accuracy is also required for smooth



The 65-inch screen is wide enough for 4 to 5 children to play simultaneously. The system with two displays enables many children to play at a time.

stress-free operation.

- **Toughness and durability**

A structure that is strong against impact is essential since children will assumingly hit the screen with hands and toys.

In view of that, our Multi Touch Screen LCD was adopted and highly evaluated because it features the following.

- **Support of up to 6 simultaneous touches**
- **Highly accurate touch detection without loss of content operability**
- **High toughness from the protective glass on the front surface**

In addition, a 65-inch screen size was chosen taking into consideration children's body height and the possibility of multiple children playing simultaneously. The system has two displays.



"Digital Playland" integrates two 65-inch displays, a PC for playing content, speakers, amplifier, etc. in a housing. It is also equipped with a cooling fan.

Professional Display System Report

Vol.24

McDonald's Company, Japan

Hyogo, Japan

Date delivered: August 2014

System Outline

System designed around a multi-touch-screen core

A touch panel that can simultaneously detect up to 6 touches at a time is incorporated in the Multi Touch Screen LCD (TH-65LFB70) adopted for "Digital Playland." The PC connected to the display operates the content and controls the images on the display in response to detected touches. In addition, the entertainment factor is further enhanced by playing back sounds from the speakers. The display is designed to be tough by mounting a roughly 3.2 mm-thick protective glass on the front. Therefore, a protective cover is unnecessary to set the screen in the housing, so vivid high-quality

images are displayed as is. Correct and quick reaction to screen touches is also maintained. The housing that contains two displays, a PC, speakers and an amplifier is equipped with an air cooling fan. Furthermore, system operation is more stable owing to a placeholder that ensures images are displayed when the PC is restarted. The system is connected to the internet over LAN so that content can be upgraded by rewriting data of the connected PC online. Everyday operation in the restaurant requires only a power supply for the system during hours of operation and does not increase staff

workload. Content was developed by teamLab to



The display is installed at a height that enables children to touch the top of the screen.



The screen is tough against impacts and pressure applied by planting hands.

enable children to discover various reactions and movements by touching various positions of the screen. Consideration was given to nurturing curiosity and imagination by providing children with an entertainment station. Furthermore, future upgrades are planned to always enable new content.



The interactive content displayed on the two screens was developed by teamLab. Play styles and behavior were verified through repeated tests with children.

After Installation

Visiting families seem to have increased after the introduction of "Digital Playland."

Mr. Fujisaki, manager of the Kobe-Okubo Interchange restaurant, told us about the effect of refurbishing, "I sense that visitors with children have increased after we refurbished the restaurant, but the facts are supported by increased sales of family meals." He also says that is functioning as an effective tool for family visitors noting that "While children play with 'Digital Playland,' which is about half an hour on average, parents relax and enjoy meals," as actual comments of "being able to relax and take it easy" have shown. Director Takeda and Chief Matsushima of the National Marketing Division, Marketing Head Office of McDonald's Co. Japan spoke of the future prospects, saying "We would like to continue collecting customer opinions and trends so as to reflect them on the future development of content and so forth, and offer services for children to play cheerfully. Also, we would like to expand the possibilities of "Digital Playland" further by linking the content with new menus and seasonal promotions."

■ Schematic view of "Digital Playland" for McDonald's Co., Japan

