

3M Projected Capacitive System Enables Immersive Slot Machine Player Interface

The Application

The player deck on a slot machine is the primary interface between the player and the game and therefore, is a key element to the overall player experience. Players utilize the player deck to select the number of bet lines, the bet denomination, for help instructions, and to begin each round. Generally, bonus round interaction occurs on the main touchscreen display to detect the player's selection. Most player decks contain anywhere between 3 to 20 mechanical buttons (see figures 1 and 2).



Figure 1: Standard player deck solution with mechanical buttons.

The Problem

With the launch of many touch-first consumer electronic devices — smart phones, tablets, portable gaming — consumer expectations are changing and so are the expectations of casino players. The legacy mechanical button deck now has to compete with the more immersive experience that players expect from their electronic devices. Bally



Figure 2: Standard Mechanical Buttons (fixed content/location)



Figure 3: OLED Buttons (dynamic content/fixed location)

Technologies' options included OLED buttons or transparent buttons overlaid onto a display (see figure 3). Each provides programmable buttons that allows for customization of game denomination, language, and animation. However, the limitation of the OLED button layout, which does not offer significant benefit to the player or the casino over the standard mechanical button deck, still exists. Looking to introduce a more innovative solution that offered a step change in player experience, Bally needed to support full multi-touch on a full color display.

The Solution

3M Projected Capacitive Technology (3M PCT) has been specifically engineered to enable OEMs to offer players a more immersive player experience. The full multi-touch solution enables 10 finger touch



LEVEL 1: Lines and credits change, download and configuration ready

LEVEL 2: U-Win™ mystery bonus events

LEVEL 3: U-Shoot™ virtual shooting galleries; player customization

The iDeck's rugged surface is designed to resist spills, and is scratch resistant to MoHS 8 rating or above

Figure 4: Bally's three levels of player experience using the iDeck™.

performance with palm rejection and a response time of less than 10 milliseconds, while meeting the application requirements for gaming ESD of 27 KV and impact resistance. With this enabling solution, Bally was able to implement a revolutionary player experience deck that rivals the most innovative consumer electronic devices. With a full multi-touch solution, the full color display provides main screen interaction, more exciting bonus rounds, localization, and game content flexibility to support downloadable games.

The Result

With the 3M PCT solution selected as the touch interface, Bally Technologies was able to fully implement their vision and created a revolutionary game that has three levels of interaction (see figure 4). The first level is support for lines and credit changes, downloadable games and configuration support. The second level is more interactive bonus rounds that take place on the player deck display. And in the third level, full interaction with the main screen for a highly immersive gaming experience. When combined with an attractive industrial design that is water-tight and easy to clean, this new level of interaction provides players with an exciting game option.



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