



Flexible Control Panel Switching Displays

Interface solutions for production operators



At right, Live Production Switcher controls 32 cameras in small 31-inch control board.

SOURCE: BROADCAST PIX INC.

Managing 32 video cameras, videotape machines and a large queue of digital video clips simultaneously when broadcasting live on the air is challenging for any broadcasting company. This can only be done with a powerful production switcher, and it must also be easy to use.

Broadcast Pix Inc. is a leading provider of innovative live video production equipment that is used to create compelling live video. For its new production control board, Broadcast Pix chose

NKK Switches' SmartSwitch™ product to address four design challenges:

- Easy to use interface with a consistent look and feel using multiple devices.
- Manageable size and control panel mobility.
- Flexibility to quickly reconfigure the control panel interface to support specific live shows and events.
- Support multiple languages with a single panel design without customized legends.

SmartSwitch products from NKK combine a push-button switch and programmable OLED or LCD display in one device, allowing engineers to design an interface that provides easy navigation for complex real-time decision making.

Jack Swanton, vice president of Software Engineering at Broadcast Pix, said this new generation of broadcast panels has simplified the job of production operators. "With the push of a button the control panel instantly changes switch displays and panel function from sports, to news or to any other source," Swanton says. "If a certain video clip is selected with the SmartSwitch, its name is displayed on the switch and it appears also in the source row. The operator can be certain what the video clip is before pushing the button. Operator decisions can be made with certainty without wondering if somebody loaded the clip."

Broadcast Pix uses NKK's SmartSwitch because these devices are the smallest off-the-shelf programmable display devices available. With displays about the size of a nickel, NKK's SmartSwitch products are used to create panels where the function of each key can be reprogrammed instantly to meet the needs of the operator. Icons, graphics and text displayed on the push-button can be updated or changed based on the operator requirements.

The user interface challenges found in the broadcast industry are similar to other industries including medical, military, transportation, security and more. Control panels using NKK's SmartSwitch products are used in shipboard communication systems, power plant control rooms, flight simulators, medical equipment, restaurant equipment and irrigation systems to name a few applications where the design benefits are achieved.



SOURCE: MATT HEIDER, NKK SWITCHES

Programmable switches offer flexibility and easy navigation for quick decisions.

Description: Live Integrated Production System. The system includes a broadcast quality production switcher, multi-view, HD clip store, Inscribe HD CG, and format and aspect ratio converters.

Customer: Broadcast Pix Inc., Billerica, MA

Lead Design Engineer: Jack Swanton, vice president of Software Engineering

Product Name: Slate G5000 — 2ME Panel

Key Benefits/Features: The Slate G 5000 is unique in that it also includes and integrates all of the functionality of an entire live production control room — switcher, CG, clips store, still store, multi-view monitoring, aspect ratio and format conversion, and video routing. It creates a dramatically more cost-effective price point, which makes powerful live video productions suddenly affordable, in both equipment and staffing.

URLS: www.nkksmartswitch.com, <http://www.broadcastpix.com/The-Switcher-Redefined/Slate-G-5000.html>



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