

LIKE NO OTHER™

SONY®



WELCOME TO THE NEW AGE OF NETWORKED VIDEO

From churches to college dorms, innovators are doing more exciting and effective things with networks and video displays than ever before. And Sony Electronics is driving the trend with a portfolio of powerful products to suit every application.

DIGITAL SIGNAGE MEETS NEED FOR SPEED, IMPACT, FLEXIBILITY.

Digital signage—dynamic, exciting and extraordinarily versatile—is lighting up more and more settings nationwide.

Sony is helping to drive this trend with a powerful combination of products ideal for signage applications.

Sony plasma displays are attention getting and reliable, and the NSP-100 network storage player is the perfect device to store and deliver content to displays and manage a site's entire digital signage operation.



PFM-42VIP/B

BORDERS BOOKS: “AHEAD OF THE CURVE”

When the latest sure-to-be bestseller hits the loading docks at a growing number of Borders bookstores nationwide, the “Coming Soon” signs over the checkout areas can turn into “Now Available” signs in a flash.

If Borders decides to lower a sale price, or if a popular item sells out, updating signage is a matter of mouse clicks rather than press runs.

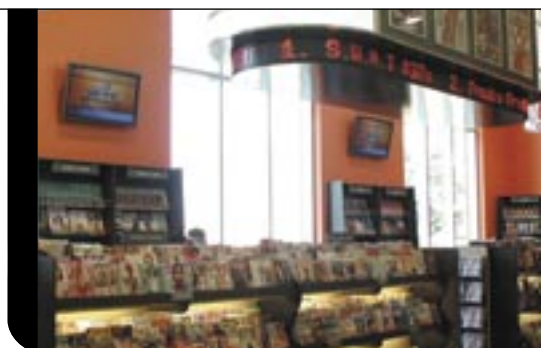
This flexibility is just one of the advantages Borders hopes to realize from its rollout of digital signage systems using Sony plasma displays, says Borders Group Creative Services Director Rich Fahle.

The company is implementing digital signage in 15 stores all over the country this spring, and the number is growing. Eventually, some 450 Borders locations could be involved, Fahle says.

“We’re ahead of the curve with what we think will be a very important communications tool,” he adds. “Everyone is excited about the wow! factor, and customers have been reacting extremely favorably.”

Fahle notes that digital signage with Sony plasmas means that in effect, seven or eight different ad messages can occupy the same space previously occupied by a single paper sign. Moreover, those messages can rotate in any sequence and time scheme Borders wants. And different messages can reach shoppers in different parts of the store. Music shoppers, book lovers, and browsers among the magazines can each see messages tailored to their own interests.

All of these flexible displays are driven by Sony’s network management software, which allows users to organize content into playlists. With these



playlists, complex messages can be scheduled for display based on day of the week, time of day, and location of the sign.

Borders stores are usually served by T-1 lines, so they enjoy plenty of bandwidth. Still, content and scheduling data for signs is transmitted overnight to keep the network free for sales transactions during business hours. As a rule, Fahle says, each screen is served by its own Sony NSP-100 network storage player.

The cashwrap area, though, gets special treatment. There, three NSP-100 units are synchronized to drive three screens, which can be addressed separately or combined into multi-screen displays. During checkout, Fahle says, “we focus on giving our customers a reason to come back, with messages about upcoming releases and promotions.”

Ad messages make use of Flash animations and other graphics, and Borders is considering a test of full-motion video. “The movement on the signs in itself is a huge benefit,” Fahle says. Other benefits include “our cost savings in signage and the immediacy of the messages.”

Borders worked with Convergent Media Systems of Alpharetta, GA to design and install the digital signage systems, and Fahle notes that Convergent delivered “a turnkey solution”



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Rich Fahle, Marketing Director, Borders Group, Inc.

that will be easy to replicate as the digital signage trial goes national.

LOCAL CONNECTIONS IN FLORIDA RESTAURANTS

Sony’s NSP-100 has also been the ideal tool for Market Specific Advertising of West Palm Beach, FL, in rolling out a new ad revenue-supported digital signage service for local restaurants.

MSA’s first installations are in three International House of Pancakes locations in Florida, says company president Terrence Tuck, but expansion plans call for new ventures in Texas and elsewhere, as well as extensions into doctors’ offices and other settings.

MSA’s appeal to the restaurateur is simple, Tuck says. “They can just rent us the wall space and we do an entirely turnkey operation, or we can do it as a co-op.” Either way, MSA sells ads and gets the content to the display screens in the restaurant, and the restaurant gets to use the screens at other times for training, company messages and

other content. “The ad revenues pay for the network,” says Tuck.

The big challenge, he adds, is bandwidth, especially for smaller local restaurants. “IHOP is still on dial-up,” he explains. As a result, MSA needed a way to store and play content locally, and only rely on the network connection for occasional overnight downloads.

“The NSP-100 lends itself very well to this use,” he says. MSA considered a computer-driven system, but it had to be rebooted too often, and someone at each site had to do that. In addition, the NSP-100’s small size made it easy to fit into restaurant settings where space is at a premium.



NSP-100 Network Storage Player

WHY DIGITAL SIGNAGE?

- No more printing costs and delays.
- Rotate messages any way you want.
- Fast and easy updating.
- Easy monitoring – You know when the message is displayed.
- Flexibility – vary messages by region, by store, even by department.
- Control – You get detailed reports about system activity so you can really gauge impact.

SONY PLASMAS

Sony’s PlasmaPro™ series are among the best performing and most versatile plasma panels available today.

In both 42 inch and 50 inch screen sizes and a variety of finishes, all PlasmaPro units offer:

- High resolution – Sony PlasmaPro 42 inch models offer Wide VGA (852x480) and a new XGA (1024x768) option.
- High brightness/Real Rich Color reproduction.
- Models available for either horizontal or vertical use.
- Multiple burn-in protection features.
- Built in scan converters for compatibility with all sorts of standard and high definition signals.
- Both 4:3 and 16:9 aspect ratio capability.
- Picture and picture capability (picture size adjustable) on model PFM-42VI and the new PFM-42XI.

NETWORKABLE PROJECTORS DRIVE COMMUNICATION, COLLABORATION.

- It is not always possible to meet in person, but you can still communicate face to face.
- Some decisions require lots of absolutely current data, presented in ways that are easy to understand.
- And occasionally, you just want to be sure your message has all the impact and staying power it can possibly have.

Sony LCD projectors are meeting all of these needs today, linked to IP networks and installed in conference rooms, control centers and other settings all over the world.

Sony's projector solutions are ideal for every presentation need:

- SuperLite® projectors are born to travel, ultra-portable devices that set up quickly in any environment.
- SuperBrite™ projectors are networkable, high brightness workhorses that deliver dazzling images to larger groups in normal room light.
- SuperSmart™ projectors offer wireless control through Sony's Air Shot™ system, along with network capability and a rich list of features. They're ideal for the most demanding applications.



"We want things to be displayed in a high quality manner because we create things in a high quality manner. Sony is the premier display brand in the video industry."

G. Rick Hutcheson, Vice President
Marketing and Client Service, Convergent Media Systems

"WE'RE A VIDEO POWERED COMPANY."

Convergent Media Systems delivers high quality video-based networks for e-learning, digital signage and business communications for scores of corporate clients all over the world.

So when it came time to design conference and control room facilities for its own use, Convergent knew exactly where to turn.

"We went with Sony," says G. Rick Hutcheson, vice president/Marketing and Client Service. "We're a video-powered company. We want things to be displayed in a high quality manner

because we create things in a high quality manner. Sony is the premier display brand in the video industry."

Convergent's Network Operations Center uses Sony projectors in rear-projection configuration to serve four 100-inch screens. The four screens can be treated individually or combined in various ways to display critical information about more than 100 client networks being managed by Convergent, Hutcheson says.

Those client networks, in turn, reach out to about 700,000 separate

Whitlock Group of Richmond, VA chose 2,800 ANSI lumen Sony LCD projectors for this training facility at Bloomberg Ltd. in Washington, DC. Why? Senior Engineer David Morris comments, "Blue is the hardest color to produce in projection, and Sony does a better job with blue than anyone else. Sony products are also great as far as reliability goes, with minimal maintenance. Bloomberg runs theirs all the time."



BC Group of Norcross, GA, a Sony partner, provided design and installation for Convergent's boardrooms and network operations center.

endpoints worldwide. "We use a myriad of online systems and tools," Hutcheson says, noting that network performance can be impacted by such variables as weather, so a television weather channel joins network diagrams and status information as common content on the display wall.

"We have fairly subdued lighting in the NOC," Hutcheson explains, "but we're still using large screens and it's a large venue, so the projectors have to be fairly stout."

The Sony VPL-PX40 delivers 2,000 ANSI lumens of brightness in XGA resolution (1024x768). It comes with a built-in web browser and 10 Base-T/100 Base-TX Ethernet for LAN connection.

In addition to supporting its network management operations, Convergent uses its NOC to welcome visitors, including potential clients. So the quality and versatility of the displays convey a strong marketing message as well, Hutcheson says.

Customers and prospects are also frequent visitors to the "Universe" conference room at Convergent's new headquarters facility. "This is a client-facing room," says Hutcheson. Among its most frequent uses are sales presentations and system demonstrations.

The display configuration in the conference room consists of two 42 inch Sony plasma screens mounted on articulated arms, flanking a large center screen that is served by a Sony LCD projector.

Convergent moved into its new facility in late 2003. The company worked with BC Group, based in Norcross, GA, on design and installation of the AV systems.



VPL-CX85

WHAT "MAKES OR BREAKS" A PROJECTED IMAGE?

Choosing projectors for a control room, conference facility or training center? Keep these critical performance criteria in mind.

NETWORKABILITY.

Projectors with IP addresses that can be controlled through the Internet or LAN offer big advantages in versatility. Sony's PJNet!™ Network Projector Management Software gives you unsurpassed control over all your projectors, allowing you to monitor, diagnose, troubleshoot and control from a central location.

MULTIPLE INPUT

COMPATIBILITY. You will be projecting everything from computer graphics to analog TV signals to high definition digital video. You need a projector that handles all of these elements equally well.

FLEXIBLE CONTROL, including powerful wireless control using Sony's new Air Shot™ technology.

BRIGHTNESS. High brightness is essential to make your images "snap" even in normal room light.

RESOLUTION. High resolution does not just mean sharper images. It also means more content can be displayed on screen while maintaining readability.

RELIABILITY. Especially in a 24/7 setting like a control room, you want a projector with a track record for trouble-free performance and easy maintenance.

POCKET-SIZED POWERHOUSE NSP-100 MAKES NETWORKED VIDEO A REALITY.

SMALL WONDER

At barely two pounds and the size of a hardcover novel, the NSP-100 is a tiny package to contain so much payload. Among the resources that help it do so much so well are:

- A built-in 40 GB hard disk drive, offering nine hours of video storage at 8 Mbps or 18 hours at 4 Mbps.
- An integrated web browser for system check via the Internet.
- RS-232C communications to link with plasma displays, projectors and other devices.
- Simple Network Management Protocol (SNMP) to confirm and verify operations.
- On-screen menu accessible by controls on the box or using remote control.
- 10/100 Base-T Ethernet networking.

Sony's network storage player NSP-100 is the key to delivering customized, flexible video over IP networks to a virtually unlimited number of viewing locations and displays, minimizing bandwidth impact or breaking the budget.

The NSP-100 stores digital content for display on a plasma screen or other display, along with playlist information and other data that determines what is displayed, when, and for how long.

With the NSP-100, users do not have to dedicate their network capacity to real time downloading. They can download both content and display instructions one time for multiple locations and show times—and return easily to revise and update as needed!

With Sony's BZNP100 and the new BZNPDI software, user playlists are more powerful than ever. Updating displays is easy because single content

elements can be updated without having to resend all the content referenced in a playlist.

"THE LIGHT BULB CAME ON FOR ME."

Greg Oldenburg, video producer and production coordinator at Fellowship Church in greater Dallas, TX, knew the NSP-100 was the solution to his problems as soon as he saw it.

Fellowship Church needed to route video signals to some two dozen different displays in different parts of its facility, including 13 plasma screens in its popular and heavily trafficked bookstore. Content embraces everything from animations to video clips promoting Christian recording artists whose latest works are on sale in the store.

"We had a company spec out a disc



"The real beauty of it is that it lets you spend time designing content rather than worrying about how to make it play."

Greg Oldenburg, Video Producer and Production Coordinator
Fellowship Church, Grapevine, TX

based video playback system, but it was far more expensive," Oldenburg recalls. Then, he saw the NSP-100 at a national trade show and realized "this was the perfect application for that device."

Fellowship Church has six NSP-100's now and plans to add more. In addition to the bookstore they support kiosks throughout the worship center and more displays in the church's childrens' building.

"The staff loves it," Oldenburg adds. "It's easy to learn. The real beauty of it is that it lets you spend time designing content rather than worrying about how to make it play."



Sony NSP-100 Network Storage Players serve up to 10,000 students at Columbia College, Chicago.

"NOTHING SHORT OF A REVELATION"

Columbia College wanted to distribute television programming to 13 buildings spread over a 27-square-block area of downtown Chicago. But running fiber lines to all these facilities was prohibitively expensive, and both line-of-sight issues and crammed frequencies worked against wireless transmission.

The answer was Sony's NSP-100, says Chief Engineer Dave Mason of Columbia's television department.

The department serves nearly 400 declared television majors, and the TV programming the department creates reaches out to nearly 10,000 students at the college. TV monitors and other display devices are located in building

lobbies, lounges, dining centers and other sites, and programming includes both short announcements and half-hour programs produced by students.

"The full capabilities of the NSP-100 system to deliver and distribute programming add up to nothing short of a revelation within the institution," says Mason. He adds that the college considered and tested other options before settling on the NSP-100, but they used too much bandwidth to be practical. Columbia worked with Digital System Technology, Inc., of Norcross, GA to implement its new video distribution system.

"With the NSP-100 one player can deliver multiple content to different areas of the campus," Mason says. "And it's very convenient. It's great. It almost fits in your pocket."

"THE BIGGEST SAVINGS IS FROM SAVING WORRY."

"Before, we had to have someone sitting there loading tapes and manning the button," says John Pankow, senior engineer in Campus Video Services at the University of Florida in Gainesville, describing how his department managed its video distribution.

The campus wide CATV system sends live and recorded lectures, performances, announcements and other contents to dozens of buildings, including residence halls housing some 8,000 students. Running the system by hand was becoming more and more unwieldy, Pankow says. "One alternative," he adds, "was to get a bank of video players and an automated playback system, but that was very expensive."

Instead, Pankow rolled out a fleet of Sony NSP-100s, all linked to a central video matrix switcher. "Now we can control and reprogram it all over the web. If we have five different people who want to put content on it, they can do that from five different locations."

The NSP-100 implementation, he adds, "also gives us the incredible benefit of not having to watch the clock seeing when to switch programs and play videotapes. While we're saving time and money, the biggest savings comes from saving worry."

A NEW "SMALL WONDER" JUST FOR GRAPHICS

Sony's NSP100 has already made a mark in digital signage applications such as training and corporate communications where video is the primary platform. Now Sony introduces the NSP-I, a new network storage player ideal for computer graphics.

This new device can rotate content easily for portrait mode displays, saving valuable production time and minimizing complexity. It provides real time updating so displays can respond to rapidly changing information, and allows independent data fields to be modified on the fly. Content can be easily managed and retrieved.

The new NSP-I can support a variety of file formats, including flash files for easy collaboration and reduced publishing time.



SONY LAUNCHES NEW PRODUCTS AT INFOCOMM

Infocomm 2004 provides the launch venue for a group of new Sony products that bring more flexibility and impact than ever to plasma displays in diverse settings.

The biggest news is the new PFM-42X1 plasma panel, a 42-inch plasma panel with 1024x768 resolution, progressive scanning, a 16:9 aspect ratio, and a best-in-industry life expectancy of 60,000 hours!

It's ideal for displaying computer output, HD video, and it's also DVI-HDCP ready. Optional speakers are powered by the PFM-42X1's 7W x 2 built in amplifier. For even more striking picture quality, the PFM-42X1 can realize up to 1.07 billion colors!

An array of networking options introduced at Infocomm will enable facilities to monitor and control, extend the life, and even prevent theft of the display. With these options, Sony plasmas will be able to pull content from websites, stream content, and

show presentations from a central server in multiple locations.

The hospitality market will welcome the smartplug capability in Sony's new tuners, which enables PlasmaPro displays to connect seamlessly with all major guest room video on demand systems.

These new accessories along with the new NSP-1, add up to complete solutions for digital signage, conferencing, facility monitoring, hospitality, and even arenas and stadiums!

Sony will also make projector headlines at Infocomm, featuring three exciting new products.

The VPL-CX85 is a true wireless



PFM-42X1



Convergent's reception area, looking into the network operations center designed and installed by BC Group.

system in a single package. Each CX85 comes equipped not only with its own 802.11 wireless card, but with a card for the user's computer – along with Air Shot™ software that loads quickly and easily via USB.

This 3,000 Lumen XGA projector achieves its high brightness while preserving super-quiet operation.

Infocomm will also be the world debut forum for Sony's new:

- VPL-CX75, 2,500 Lumen XGA projector with Air Shot™ and auto focus.
- VPL-CX70, a truly portable 5.5 pound projector delivering 2,000 Lumens and XGA resolution with auto-focus. ●