

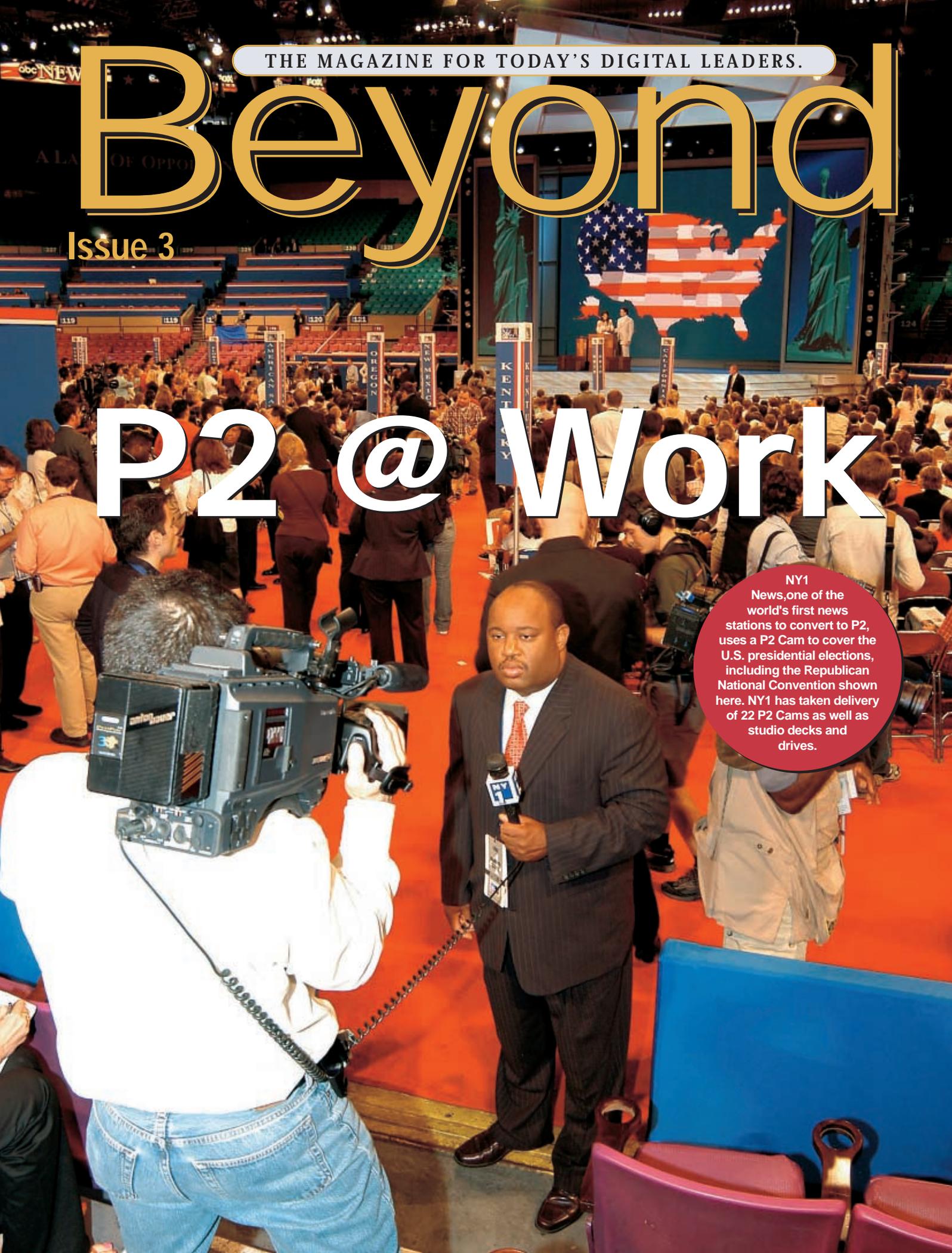
THE MAGAZINE FOR TODAY'S DIGITAL LEADERS.

Beyond

Issue 3

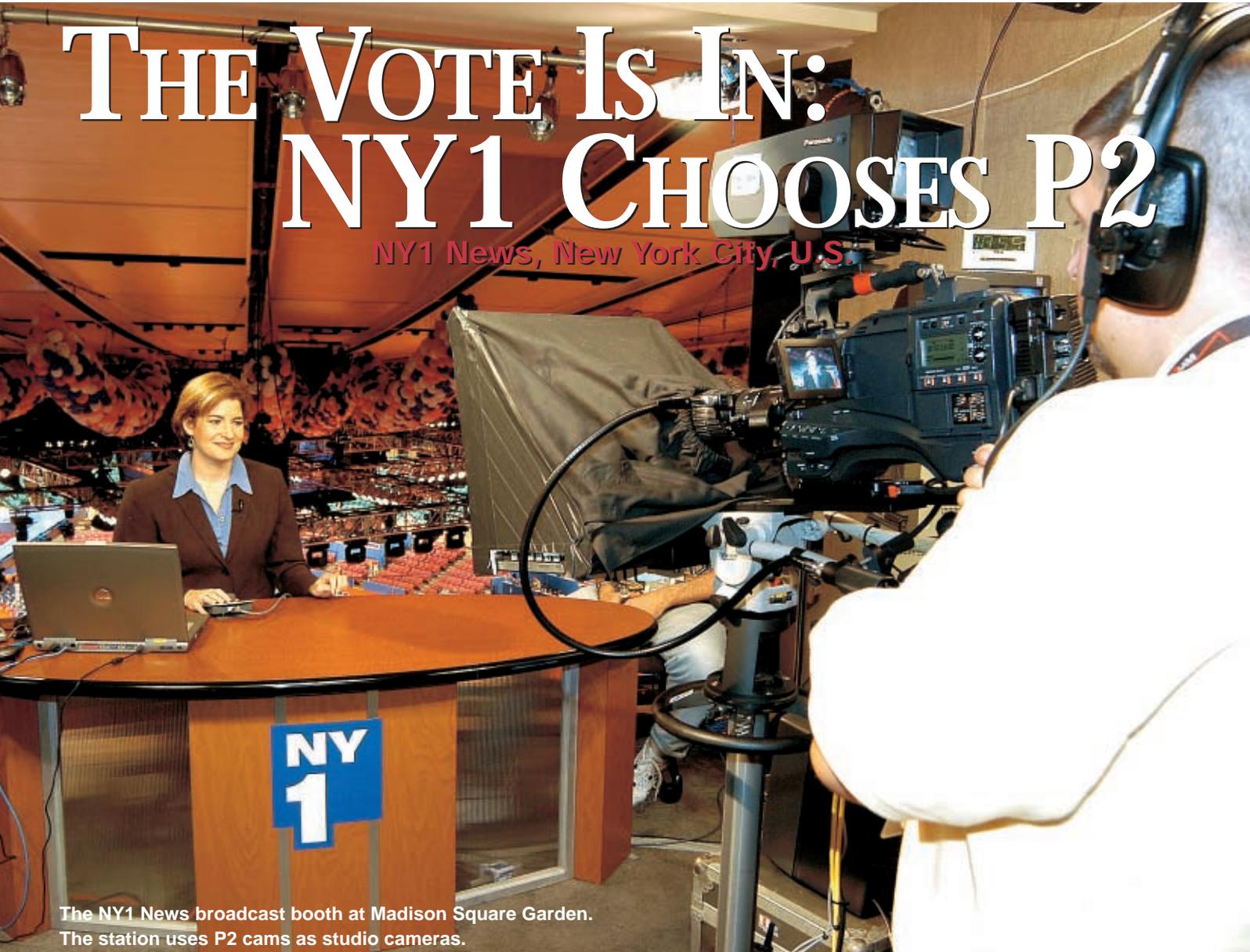
P2 @ Work

NY1
News, one of the world's first news stations to convert to P2, uses a P2 Cam to cover the U.S. presidential elections, including the Republican National Convention shown here. NY1 has taken delivery of 22 P2 Cams as well as studio decks and drives.



THE VOTE IS IN: NY1 CHOOSES P2

NY1 News, New York City, U.S.



The NY1 News broadcast booth at Madison Square Garden. The station uses P2 cams as studio cameras.

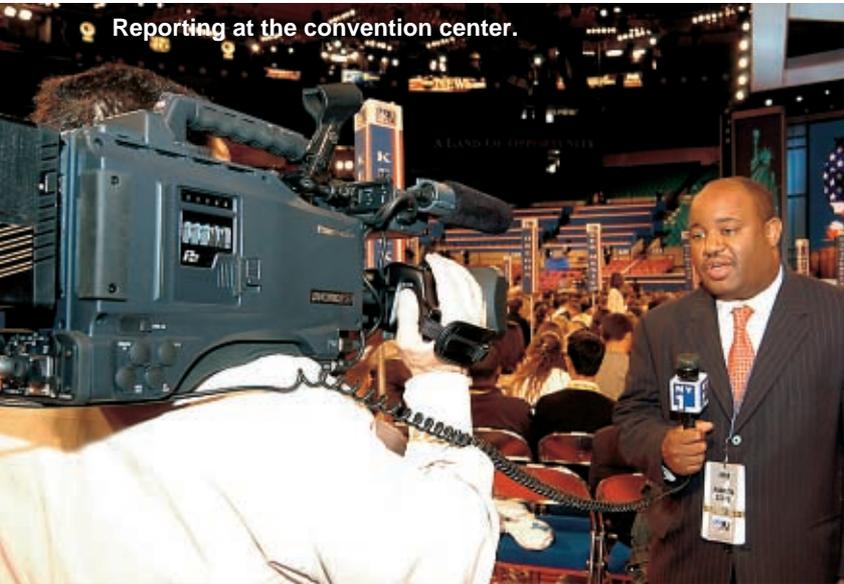
NY1 News, New York, NY, a Time Warner cable company that broadcasts news 24 hours a day, used P2 format equipment to cover the U.S. presidential election. Industry observers both in the U.S. and around the world took note of the station's decision to use P2 for the event, which was the focus of keen worldwide attention.

NY1, the first station in the industry to officially adopt the P2 format, also used P2 equipment at the four-day Republican National Convention held in New York City's Madison Square Garden in late August and early September. P2 cams were used for tapeless recording of convention events, all interviews, and in the newscasters' booth.

The main advantages of tapeless electronic news gathering are flexibility and production speed. With tape-based systems, footage has to be dubbed in during the

editing process and editors have to fast-forward and rewind through huge amounts of tape. With the P2 cam, on the other hand, each scene is recorded as a clip. Up to 12 clips can be displayed on the LCD color monitor on the camera's side panel, making playback extremely quick and easy. You also can mark the clips you want to use by simply pressing a button, and easily rearrange them into any order desired. This quick, easy process means that after gathering news, you can do much of the editing on the way back to the station. Actual in-studio editing time is cut dramatically.

For editing, NY1 News uses P2 decks, P2 drives and a Pinnacle Liquid nonlinear editing system. The operator simply drags and drops the desired clips from the P2 card to the editing system. Uploading time is fast – about half the actual recording time. The operator can trim the clips by



Reporting at the convention center.



Cameras cover a public demonstration outside the convention center.



Uploading data from a P2 drive to the Pinnacle Liquid nonlinear editing system.



Checking clips is easy with the P2 deck's built-in LCD color monitor.

simply pressing a button to mark the in and out points.

The speed and ease of P2 equipment have made firm believers of the NY1 News crews.

"P2 passed its first test with flying colors," said Steve Paulus, Senior Vice President/General Manager, NY1 News. "Our staff is adapting to the equipment quickly, citing its ease-of-use and flexibility. Our video journalists are able to mark clips and do a rough edit as they shoot, a tremendous benefit when you're dealing with the late-breaking stories typical of such a major event as the RNC."

Paulus is happy with the move to P2. "If station management has faith in its staff," he says, "the P2 investment is worth it." He points out that P2 offers huge savings potential because it completely eliminates the need for tape – an expense that runs around \$60,000 a year at

most stations. P2 cards are reusable, and even if you were to lose one card every two or three years you still reap sizable savings compared with typical tape costs.

P2 news gathering at NY1 is steadily gaining speed as the crew becomes more familiar with the new format. The station plans to add more P2 equipment in 2005, and is looking to speed up its editing system with P2 equipment as well. At that point, tape at NY1 will be a thing of the past.



LEADING THE MOVE FROM ENG TO ING NY1, A 24-HOUR NEWS STATION



NY1 is a Time Warner cable TV station that broadcasts news around the clock to more than 2 million homes. The company, whose motto is "Take the first step," is known around the world for its timely news gathering and broadcasting.

Because quick, on-the-spot news gathering is a priority at NY1, the station is a good candidate for the ING (information-technology news gathering) system Panasonic has developed with P2 as its core. NY1 not only was the world's first major station to adopt P2, it is also leading the world in applying advanced IT throughout its news system.

The station already has in operation a system that links data servers, transmission servers, and nonlinear editors on the desks of the editing suite. Only the news gathering process itself, which uses DVCPRO camera recorders, remains mostly linear (tape based). As NY1 adds P2 equipment for news gathering too, the station will convert to an entirely IT file-based system that achieves dramatically higher speeds in everything from news gathering to broadcasting.

Top: At NY1 there's a nonlinear editor on every desk.

Center: P2 decks are already mounted to the VTR rack for uploading data.

Bottom: A system combining Pinnacle servers with an Apple G4 computer.



NEW ZEALAND'S TV3 DECIDES ON P2

TVWorks, New Zealand



John Allen
Director of Operations and Engineering



TVWorks Ltd (broadcasters of TV3 and C4) and Panasonic New Zealand Limited today announced TVWorks' decision to adopt Panasonic's new P2 Solid State recording format. This will initially involve the purchase of a number of AJ-SPX900 news cameras along with the AJ-SPD850 P2 deck and AJ-PCD10 P2 drives. The first order of equipment will be deployed in 3's South Island News operation.

John Allen, director of operations and engineering for 3, said today, "The implementation of P2 heralds a major and exciting change in the way we acquire and process news material. The ability to directly mount the media and bypass the ingest process is a significant advantage.

P2 does demand a bigger departure from traditional workflows than alternative technologies and that serves to expedite our change to an IT-based infrastructure – but that's a very positive move and one we wanted to make. The adoption of Panasonic's P2 format will bring significant efficiency benefits and a faster turnaround of news stories in the field.

Once we have the backbone of our new IT infrastructure in place we are looking at a total replacement programme that should see us migrate all our news and current affairs acquisition to P2 over the next few years."

Rick Haywood, manager of Panasonic Broadcast & Display Systems Group in New Zealand, commented, "Needless to say we are delighted at 3's decision to adopt P2. It is difficult when you are introducing such radical technology, to get people to think outside the square and P2 really requires that. We are at the point where digital still photography was five years ago. People could see what the benefits were, but they just had to get the other pieces in place to take advantage of it, and look where digital still cameras are at today. P2 is much the same. We are really in our worst case scenario now as we launch the format, but this is an investment beyond today, and the future for this new format is not limited by any TV technology that we are aware of today.

P2 is far more than a "no moving parts" camera, it represents the final integration of the IT-based digital newsroom with the IT-based field camera. The possibilities are only just starting to be uncovered."



The Panasonic booth at BIRTV.

THE WORLD MEETS P2

Events in Beijing, Amsterdam and Japan Generate Excitement



A camera studio with a Formula 1 race car that will take part in China's first Grand Prix. The P2 camera was lined up together with DVCPRO and DV equipment.



The main stage of the Panasonic booth at IBC. Large crowds turned out for every P2 demonstration.

BIRTV Exhibition in Beijing

Spurred on by China's explosively growing economy, the Beijing International Radio & TV exhibition (BIRTV) has become one of the world's four most important broadcast equipment exhibitions. The 13th BIRTV, which took place over four days beginning August 25, attracted some 40,000 visitors.

Panasonic was a key exhibitor, arranging a large display under the theme "Get Ready to Go Beyond." The company highlighted both IT-based news systems centering on P2 and digital HD production systems, including Varicam. Items on display ranged from high-end broadcast equipment to low-cost video production gear.

In essence, the Panasonic exhibit served as a preview of the broadcast facilities expected to see use at the 2008 Beijing Olympic Games, preparations for which are now in full swing nationwide. The Panasonic display at BIRTV riveted the attention of many in China's broadcast industry, including stations already taking steps to introduce P2.

A press conference held by Panasonic two days before the show began drew around 40 journalists, mainly from China's broadcast industry and general interest magazines. In addition to talking about the equipment on display, staff gave presentations on the history of Panasonic's contributions to Olympic broadcasting and showed P2 equipment in action at

the Athens Games. The event helped promote Panasonic as a supplier of broadcast equipment for the upcoming Beijing Games.

IBC 2004 in Amsterdam

More than 40,000 people attended this year's International Broadcasting Convention (IBC) exhibition, which took place in Amsterdam over four days beginning September 10th. With deliberations under way about Europe's HD format and other issues facing the industry, the event — Europe's largest broadcast equipment exhibition — proved to be especially lively. Visitors expressed keen interest in the new products and technologies on display.

The Panasonic booth, arranged under the theme "Panasonic ideas for life," gathered the most attention of all, with P2 claiming the lion's share of the spotlight. Crowds were drawn to the "IT news gathering ideas" corner, where they saw displays of next-generation IT news gathering equipment, including a fully operational P2 system. The main stage of the Panasonic booth featured a display of new products and a presentation on use of P2 equipment at the recent Athens Olympic Games. Panasonic emphasized both its extensive record of support for past Olympic Games and its sponsorship of the upcoming 2006 Turin Winter Olympic Games in Italy.



A tape-cutting ceremony, with Executive Vice President Yukio Shohtoku of Matsushita Electric Industrial and others.

This stairstep display showed the histories of DVCPRO and P2 and future expectations for them.

Activities at IBC 2004 were recorded and broadcast across the U.S. by an IBC TV News crew that used P2 cams, P2 decks and P2 drives. Also demonstrated was an IT-based news system that used P2 equipment for almost everything from on-site news gathering and editing to on-air transmission. The event was broadcast to 60 local hotels and over a satellite link.

At an opening day press conference and reception, Panasonic was joined by guest representatives from Euro 1080, Apple, Avid, and Leitch, each of whom spoke about his or her company's P2-related activities. Apple and Leitch became new P2 partners at IBC 2004, officially announcing their support for P2 at the event. Avid announced that it was developing some products that support P2, and each company spoke of its high expectations for P2 and its plans involving P2. A summary of their presentations follows.

Apple

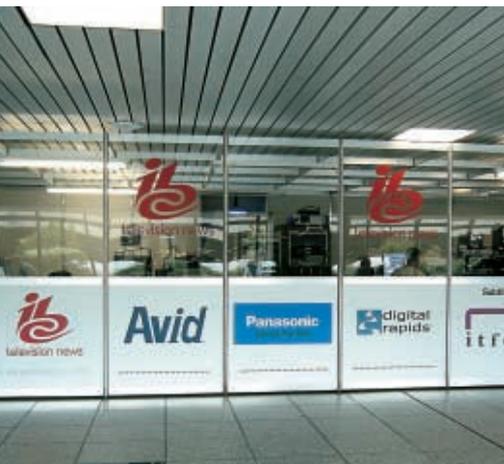
"Thank you very much. Apple and Panasonic have had a relationship for a number of years now, starting with

DVCPRO, DVCPRO 50, and this past NAB where we brought out FINALCUT PRO HD which was based on DVCPRO HD. It has been a great relationship for Apple, it has been great for Panasonic, and most importantly, it has been great for our customers. So I am very pleased to announce here today at IBC that our next version of FINALCUT PRO HD will also have support for the new 1080i/50 camera and support for P2 and we are thrilled about this. Thank you very much."

Mr. Richard Kerris
Senior Director
Professional Applications
Worldwide Product Marketing
Apple

Avid

"With its introduction of P2, Panasonic has done a great job in getting the industry -- and our customers -- to rethink the process of acquisition and the benefits that you get once you have acquired material to a new medium like P2. For example, you will be able to bring material directly into Avid



(left to right) IBC TV News production and broadcast studio; reporting with a P2 cam; editing desk with a P2 deck.



Mr. Richard Kerris



Mr. David Schleifer



Mr. Tim Slate

NewsCutter and Media Composer products and work with them directly out in the field. So, on a laptop installed with NewsCutter XP, you can plug in the P2 card and go right to work. There is no import process. The files on the P2 card are identical to the files we would generate ourselves, and we are able to bring that material right into the work environment and let people be productive immediately. The editors no longer have to shuttle from the beginning to the end of a tape, and they could do in seconds what had previously taken minutes to do. The same benefits are available on the laptop: instant random access to the media and the ability to use it easily and quickly. In the studio or broadcast facility, media can be moved quickly into a shared storage environment such as Avid Unity, where everybody can simultaneously have access to that material..."

Mr. David Schleifer
Director, Broadcast and Workgroups
Avid Technology, Inc.

Leitch

"The migration from SD to HD, tape to tapeless, and IT infrastructure are industry changes affecting broadcasters worldwide that are being supported and even driven by Leitch and Panasonic. Leitch's Integrated Content Environment encompasses all of the above changes and works to streamline production, news and on-air workflow. This is especially true for our server products, and by supporting P2, broadcasters can bring their field footage into their facility, move content into our shared storage, edit, and play-to-air very quickly. The other very important advantage of P2 is that it supports MXF, an open standard, making it very easy for us to integrate P2 into Leitch products. Leitch compliments Panasonic for their support of MXF. Leitch is also announcing our new HD server here at IBC and we will be using DVCPRO HD in the future since it fits easily into our software based codec strategy."

Mr. Tim Slate
Director of Product Marketing
Server Division
Leitch Technology Corporation

Panasonic Broadcasting Equipment Presentation Criss-Crosses Japan

From July 6th to the 30th, the Broadband Media Headquarters of the Panasonic System Solutions Company traveled to eight major cities across Japan with a presentation of Panasonic broadcasting equipment. More than 1,000 industry members were invited to see the presentation at appearances in Tokyo, Osaka, Nagoya, Takamatsu, Fukuoka, Hiroshima, Sendai and Sapporo.

The traveling presentation promoted P2-based IT news solutions and full HD production systems. In addition to current P2 equipment, it also introduced concepts for linking high-definition production as part of the next-generation workflow in broadcast studios.





Yasushi Tsubakihara, at work supporting the Beijing TV staff at the Athens Olympics.

On-Site Athens Olympics Report

Yasushi Tsubakihara
Professional AV Systems Business Unit Systems
Matsushita Electric Industrial Co., Ltd.

At each new Olympic Games the latest cameras, VTRs and other broadcast equipment make their debuts. This was the case in Athens too, with Panasonic's P2 equipment capturing the close attention of broadcasters around the world with a sparkling debut performance at the 2004 Games.

After Athens Olympic Broadcasting (AOB) used P2 systems to record the 2004 competitions, Beijing TV selected P2 as the official broadcast equipment for the 2008 Games. P2 also was used by a Chinese news gathering and broadcast group consisting of Beijing TV, Shanghai TV, and Guangdong TV.

I was assigned to Beijing TV as a member of the support staff. As such, I had a great opportunity to see P2 equipment in action and to hear what camera operators and editors said about it. The following is my report.

HEARTY CHEERS, WIDESPREAD ATTENTION BEHIND THE SCENES IN ATHENS: A REAL-LIFE P2 SUCCESS STORY

P2 in Operation at Beijing TV

While Beijing TV used P2 cams for all of its news gathering in Athens, other stations brought in footage recorded on DVCPRO 50 tape. A first-edit tape that contained the data (but had no titles, background music or sound effects) was then brought to a specially equipped studio, where it was combined with interviews and other footage to produce the final tape. This was transmitted to China via satellite. Because tapes were used in the operation, certain kinds of editing were required. In this case four editing methods were used.

1. Editing was done on a standalone P2 deck, and the finished data recorded onto a VTR.
2. A nonlinear editor was used to input text, and the results recorded onto a VTR.
3. A P2 drive and nonlinear editor were used to do the first edit, and the results were recorded onto a VTR.
4. The first edit was done with a tape-type laptop editor using the original tapes.

One of these first two methods was used about 70% of the time, and the third and fourth methods about 25% and 5%, respectively.

Before leaving Beijing for Athens, the crew took part in a seminar on how to use P2 equipment. The P2 cam inherits the superior operating ease that distinguishes DVCPRO camera recorders, so the crew had no problems there. The P2 deck's high-speed editing took a little getting used to. We covered this

pretty well in Beijing, though, so by the time the crew got to Athens their basic operation of the P2 deck was nearly flawless, and they could use the built-in LCD effectively.

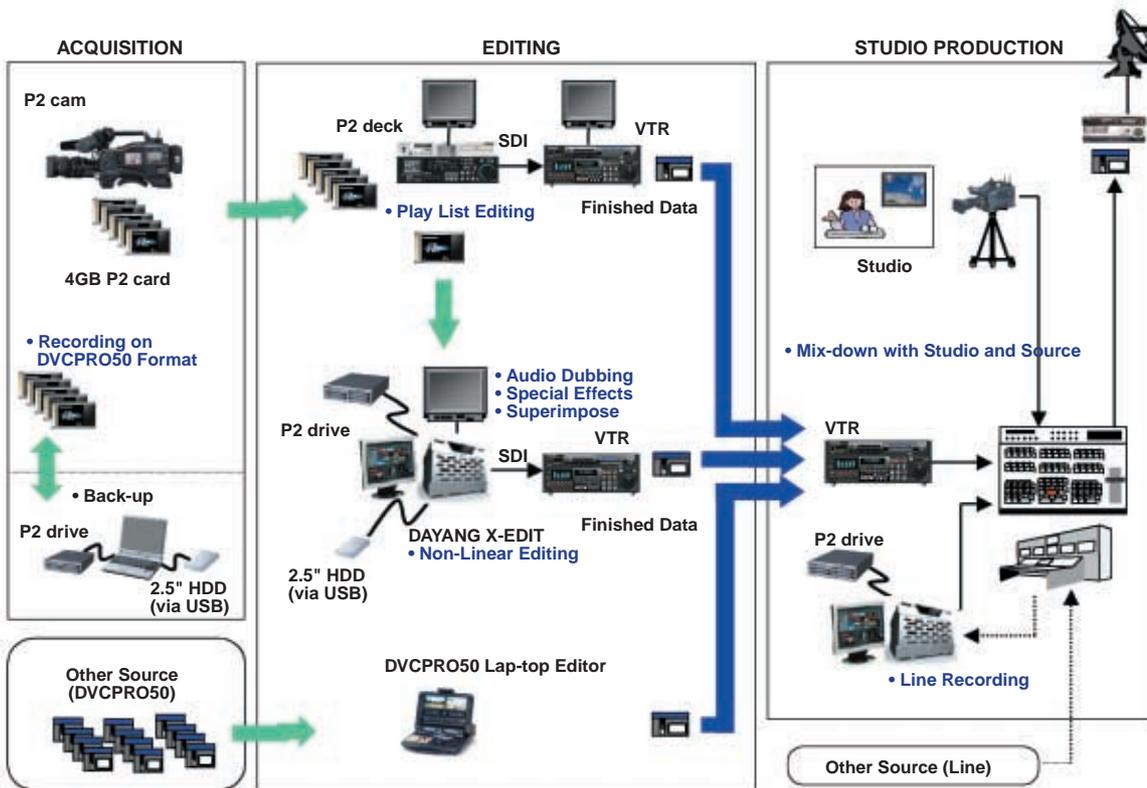
P2 Cam in the Spotlight

The P2 cam was continually in the eye of the world's broadcasters. "When I'm using the P2 cam," said one of Beijing TV's camera operators with a wry smile, "I get bombarded with questions about it. I guess it's natural." A member of a Greek TV station even showed up at the Beijing TV production base to report on the P2 system.

When asked about the differences between using the P2 cam and a conventional camera, operators new to the P2 grabbed their cam and demonstrated excitedly. It was as if words alone were not enough. Many mentioned the LCD color monitor. They pointed out some of the other advantages too, such as (1) the P2 cam lets you instantly play back the scene you just recorded, (2) there are no white balance errors because the image is in color, (3) the GUI controls are easy to understand, and (4) you can perform a number of tasks - marking and deleting, for example - right on the P2 cam.

Within a few days, the Beijing TV camera crew were amazed by the P2's seemingly endless recording features. One man said, "I really felt like I was doing great out there today," explaining that he saw other cameramen fumbling with tapes during the press conference. With the P2 cam's hot-swap function, you can replace cards while continuing to shoot. You don't end up with gaps (dead points) from exchanging tapes during a long press

P2 Work-flow at Athens Olympic (Beijing TV)



conference. It also means you don't need a backup camera to make sure you get everything.

Speed and Reliability That You Can Feel

Beijing TV used 4GB solid-state P2 cards. Each crew used three to five cards to record enough footage for three to four hours of program production per day. Crews needing temporary storage were given external USB-connected hard disk drives. The idea of using P2 cards over and over for recording – as opposed to using them to store footage – worked flawlessly.

Editing was faster too. Even though tape was used for the final version, editing took only about one third the normal time – mainly because the P2 deck itself handles instantaneous indexing and cut sequencing, and no re-editing was required for timing adjustment. If the system had a nonlinear editor, a P2 drive could have been used to directly edit the footage on the P2 card. This would have eliminated the need for uploading and downloading, saving even more time.

Even though this was the first time a P2 system was used for such a major event, we support staff members felt a kind of reassurance we'd never before experienced. The reason was that because P2 uses solid-state memory, no daily maintenance is required. In fact, there was no maintenance of any required during the entire operation. Nor was there a single problem.

P2 provided all these benefits even though there was a mixed workflow, rather than a full IT system. This gives me great confidence about P2's potential and expandability. When studio production is handled over a full P2 network, I'm sure the

results will be even better. I think many users will find P2 to be the perfect solution.



P2 ALSO REACHES FOR THE GOLD AT THE PARALYMPICS

All the action at four venues of the 2004 Athens Paralympics, which followed the Olympic Games, was captured and sent to world viewers by P2. The system was used to cover the Powerlifting, Equestrian, Volleyball and Basketball competition. The photo shows the action on the basketball court.

THE P2 PARTNERSHIP CONTINUES TO GROW

Panasonic has followed the "Open Mind" concept in developing nonlinear editing and servers, stressing the need for compatibility and interfacing with products from other companies. This springs from our understanding that users will benefit more from being able to continue using their present hardware and software than they would by having to switch to a closed system limited to Panasonic products.

As we created the P2 system, we actively provided information to other manufacturers and solicited their input. The companies (and products) listed on the page to the right already support or are in the process of supporting P2. We call them P2 partners.

There were four P2 partners at the start of 2004. Today there are eight. We feel confident that this number will continue to grow, with more and more manufacturers and suppliers joining the P2 partnership.



Products Supporting P2
 • Final Cut Pro
 (P2 support in a future release)
www.apple.com



Products Supporting P2
 • CleanEdit
www.evs.tv/



Quantel



Products Supporting P2
 • generationQ Editing Software
 • QView, QCut and QEdit Pro
 • sQServer
www.quantel.com



A **THOMSON** BRAND



Products Supporting P2
 • News Edit
 • Profile M-Series
 • GVG News System
www.thomsongrassvalley.com



Products Supporting P2
 • NewsCutter® Adrenaline™ FX
 • NewsCutter® XP Mobile
 • Avid Unity™ for News
www.avid.com



Production Automation Archiving Networking

Products Supporting P2
 • D³-Edit
 • DP-Edit
www.dayang.com



Products Supporting P2
 • Nexio NX4000TXS
 Transmission Server
 • Nexio NX4000ITS
 Integrated Storage Server
 • Nexio NewsFlash
 Editing Systems
 • Nexio NewsFlash FX
 Editing Systems
www2.leitch.com/



Products Supporting P2
 • Liquid Editing System
 • MediaStream Server
 • Vortex News System
 • Palladium Storage System
www.pinnaclesys.com





Welcome to the world "Beyond" and DVCPRO P2, and thanks for your interest in P2 products.

This year, following the huge response Panasonic received after our product announcement at NAB in April, we proceeded to propose a new ING (IT news gathering) production workflow centering on P2. We displayed P2 products and systems at prominent international broadcast equipment exhibitions, including BIRTV in Beijing in August, and IBC in Amsterdam in September. The P2 system also saw wide use at the 2004 Athens Olympic Games, giving the broadcast industry a striking demonstration of its capabilities and reliability. And in the U.S., NY1 News - the world's first major company to adopt P2 - used P2 equipment for its coverage of the U.S. presidential election. The results were outstanding.

These events have helped raise the industry's awareness of P2 in North America, China and Europe. As TV stations and other new users continue to praise P2 for its speed and cost performance, more and more companies will choose the P2 solution for their news gathering and broadcasting operations.

Panasonic continues to welcome new members into the partnership of companies developing products that support P2. At the IBC exhibition in September, Apple and Leitch announced that they were joining the P2 team, which will eventually bring P2 convenience to a wider range of users.

Now Panasonic is looking ahead to the 2005 InterBee international broadcast equipment exhibition in Japan. While our traveling exhibit in July 2004 brought P2 equipment and system solutions to invited guests in eight of Japan's major cities, the upcoming InterBee will give even more people exposure to P2. When the opportunity arises, please be sure to experience for yourself the speed and convenience that earned P2 such a positive response in North America, China and Europe. And more P2 is coming. Development is now under way of a high-definition version of P2 that we hope to release next year, and a continually widening range of P2 and ING systems are reaching the market.

P2 can be used for much more than news gathering. It has the potential to revolutionize the workflow in media and image production. As we move into the future, Panasonic will continue giving you information on new products, reports on how companies are using P2 equipment, and information on new P2 partners and compatible products. We look forward to many more people and companies going "Beyond" into the world of P2 innovation.



T. Shimozuru

Tadao Shimozuru
Director, Professional AV Systems Business Unit
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Matsushita Electric Industrial Co., Ltd.



P2 Takes You to the Beyond

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