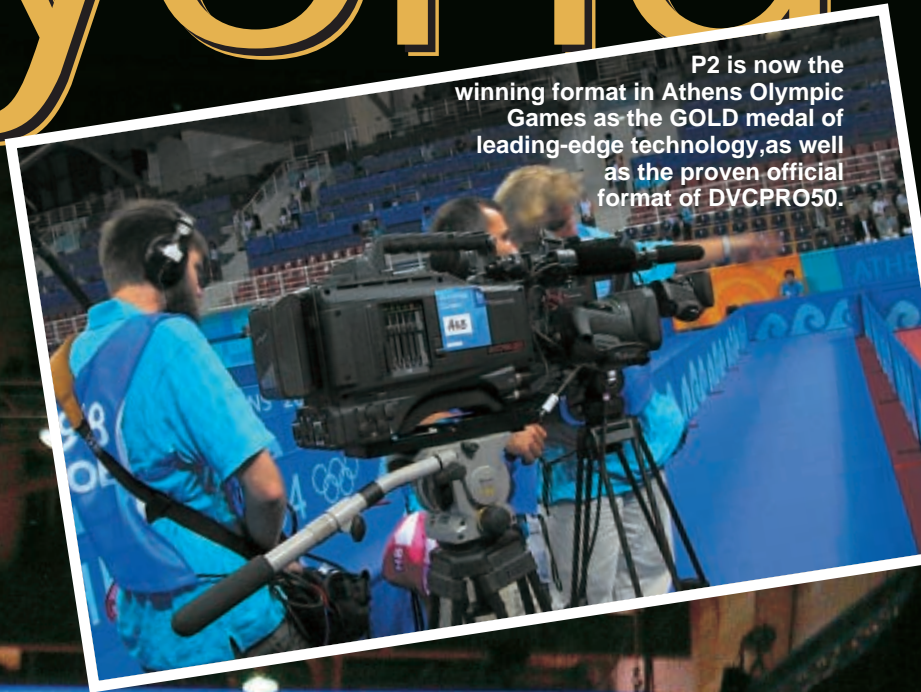


THE MAGAZINE FOR TODAY'S DIGITAL LEADERS.

Beyond

Issue 2

P2 is now the winning format in Athens Olympic Games as the GOLD medal of leading-edge technology, as well as the proven official format of DVCPRO50.



"The Future is Now" Welcome to the P2 Generation

The P2 series received wide acclaim when introduced at NAB2004.

24-hour cable news station New York 1 in the U.S. has begun using P2 equipment.



Athens, Greece

FROM ATHENS TO THE WORLD, P2 SHINES ON THE OLYMPIC STAGE



Panasonic has been a key provider of broadcast equipment and systems used at the Olympics since the Barcelona Games in 1992.

When DVCPRO50 was selected as the official video recording format by host broadcaster Athens Olympic Broadcasting (AOB), Panasonic supplied the equipment.

Panasonic was everywhere in Athens. A number of our DVCPRO50 VTRs, along with DVCPRO HD VTRs, cameras and LCD monitors, were in use at the International Broadcast Centre (IBC) and 38 event

venues.

The Olympic Games remain one of the world's brightest showcases for broadcast equipment, with the industry's latest and most advanced products on display. Having made a successful debut in Athens, P2 is now attracting keen attention from broadcasters around the globe.

P2 was employed by the AOB as part of its international broadcasting equipment. In Athens, on the grandest stage of all, P2 showed a worldwide



Staff members of Beijing TV use P2 equipment



"Using the P2 is brilliant, as it allows us very quick access to any part of the footage. As we are shooting our crowd cutaways at the start of the tape, then the match action later, we have to go backwards and forwards a lot on the tapes, and P2 handles this superbly, as we can go from the start to the end of the tape in seconds, not minutes."

Cheers
Tony Harley, Editor

audience that the future is now for this leading-edge technology.

Also Adopted by China's Beijing TV Station for coverage of the Athens Games, P2 series cams, decks and drives turned in gold-medal performances in actual broadcast use. This effort by the Chinese, carried out with the participation of Guangdong TV and Shanghai TV, was a test run of P2 equipment as part of preparations for the 2008 Beijing Games -the first Olympics to be held in China.



The International Broadcast Centre for the 2004 Games in Athens, Greece. The host broadcaster was supplied with an array of equipment and systems based on DVCPRO50, the official video recording format of the Athens Games.



left: NY1 staff using the P2 cam for news gathering
below: P2 was field-tested at Major League Baseball's season opening series at the Tokyo Dome.

NY1 TURNS TO P2

NY1, USA

New York 1, Time Warner Cable's 24-hour all-news station, is renowned for its quick news gathering and reporting. NY1 has also been a leader in converting to digital technology, as in 1996 it became first in the world to adopt Panasonic DVCPRO format equipment.

In 2003, when Panasonic discussed the development concept behind P2, NY1 heard the words "mobility" and "quick reporting" and was immediately interested. The company field-tested P2 this year in Tokyo from March 28 to 31, when Major League Baseball held its season opening series in Japan for the first time. Using the P2 cam, deck and drive, NY1 broadcast video footage recorded at the Tokyo Dome in news programmes in the United States.

The results were impressive, and NY1 quickly became the world's first station to adopt P2. The new equipment is in service already and will be used to cover the U.S. presidential election in November.

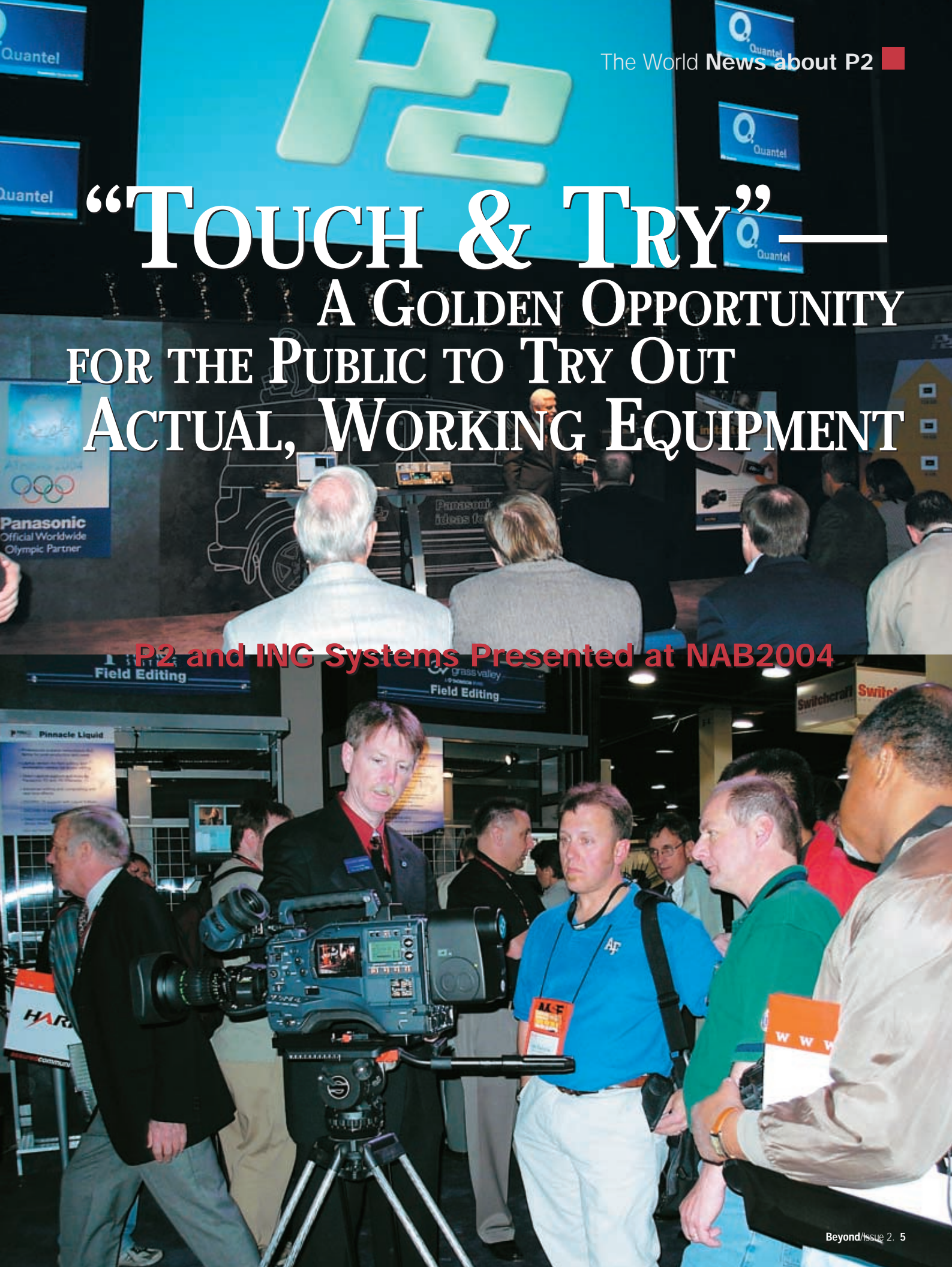


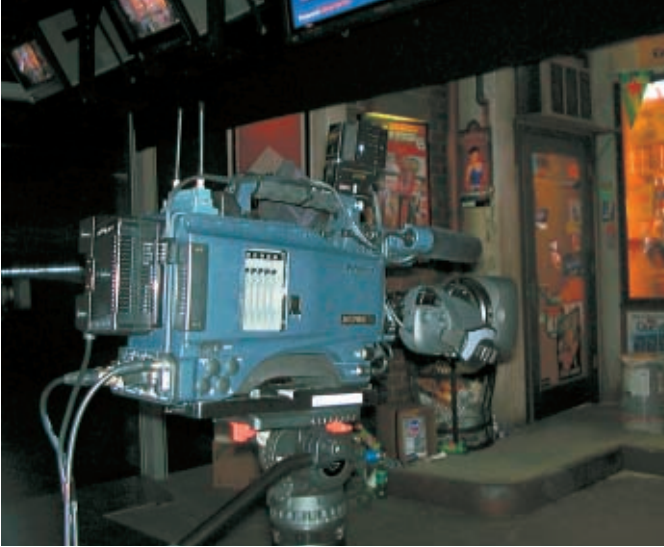
On The USA Campaign Trail

John Baisley, President, Panasonic Broadcast (second from left), presents to Steve Paulus, Senior Vice President/General Manager, NY1 News, one of the AJ-SPX800 DVCPRO P2 solid-state memory camcorders that the company has delivered to allow the station's news operations to convert to tapeless acquisition. The DVCPRO P2 camcorders are on the streets of New York City covering news events and play a prominent role in NY1's coverage of Republican National Convention. NY1 News, Time Warner's 24-hour, all-news cable station in New York City, is available to more than 2 million subscribers. In the photo, from left to right, are: Tom Moore, Vice President, Broadcast Sales, Panasonic Broadcast; Baisley; Paulus; and Joe Truncala, Director of Operations & Engineering, NY1 News. In addition to AJ-SDX800s, NY1 has also purchased AJ-SPD850 studio decks and AJ-PCD10 drives .

“TOUCH & TRY” — A GOLDEN OPPORTUNITY FOR THE PUBLIC TO TRY OUT ACTUAL, WORKING EQUIPMENT

P2 and ING Systems Presented at NAB2004





A P2 cam on display gave cameramen a first-hand opportunity to experience its outstanding operability.



The P2 demonstration drew large crowds



The Panasonic booth included display corners for its P2 partner companies.

P2 also took the spotlight in Las Vegas (U.S.) at NAB2004, the huge electronic media show hosted by the National Association of Broadcasters from April 19 to 22. The industry was captivated by Panasonic's P2 products and Information Technology News Gathering systems, or ING systems, which are built around the P2.

A number of P2 cams, decks and drives were provided at the Panasonic booth for visitors to handle and operate, while company reps demonstrated the P2's quick, reliable recording, playback, and transfer capabilities.

The Panasonic booth also provided display corners for P2 partner companies Avid, Dayang, Thomson, Pinnacle and Quantel, with demonstrations showing how seamlessly P2 links with non-linear editors and servers.

A year ago, the P2 concept was introduced at NAB2003 as part of Panasonic's vision for the future. A short 12 months later, P2 is a reality with products already on the market. Industry observers at NAB2004 shook their heads in astonishment at Panasonic's lightning-fast development of this new equipment series.

At its NAB2004 press conference, Panasonic disclosed some of the new products and ideas in the works. Concepts such as the migration of HD, P2 equipment for HD-D5 recording, and P2 equipment for MPEG recording drew the attention of journalists from around the world. Panasonic also publicised the names of broadcast stations that have adopted P2, stressing the new equipment's growing success in actual use.

Panasonic also hosted a party to celebrate P2. Officials from P2 family companies and from broadcast companies that have adopted P2 spoke to the assembled guests, giving glowing reports of their experiences with P2 equipment and encouraging others to join the family.

Press conference:
Highlighted P2 migration strategy
from SD to HD in the future.



below: A sample OB van
based on a compact 4WD
vehicle was also on
display, showing off the
advantages of P2's small
equipment size.



right: Partner companies
and customers gathered
and socialised.



■ The World Talks about P2

“Several advantages are expected from the use of solid state cameras that no longer require the mechanisms found in former systems; Shock and vibration resistance being a plus in field operations as well as instant recording and loop capabilities.... potential savings in maintenance costs and cassettes budget being also sought-after...”

This August, field experiments using the P2 camera we've just bought for testing will be conducted; this should help us to precise our views on the system...

Yet, regarding the price per unit, we believe that extractable cards should remain in their closet during current operations; hot-swap being exceptional; Also, P2 cameras should be downloadable right from a dedicated socket-base located in the newsroom ! (our new Paris' servers platform to be on air by December, still integrates this prospect)!

P2 should also offer convenient subclipping facilities for pre-editing on the spot, in low resolution (MPEG4) as well as Wifi connection for both Low and High resolution media to be sent to the studio... Full compatibility with existing DVCPRO equipment being also required...



Mr. Christian Augereau
Technical Director,
RFO (Réseau France Outre-mer)



“P2 WILL HAVE TO BE PROVED EFFICIENT AND RELIABLE”

RFO, France

RFO's potential goal is the restocking of ~ 150 cameras and peripheral devices (P2 drive and deck) in the coming years; this equipment will be spread out 10 locations in the world...

Meanwhile, P2 will have to be proved efficient and reliable.”



Mr. Emilio Carabelli
Technical Director,
Quote From ADNKronos



“Content creation, file handling and tapeless technology are just a few of the many features which will suit our operation. P2 means there will be no more time wasted waiting for ingestion.” He lists a number of important features; “news must be very fast, ready to broadcast in the shortest time; no more maintenance costs due to moving parts; a robustness of the system and last but not least the possibility to vary from 25 Mbits to 50 Mbits depending on the importance of the news.”

“P2 MEANS NO MORE TIME WASTED WAITING FOR INGESTION”

Quote From ADNKronos, Italy

Suzhou TV and Matsushita Electric signed an agreement in Suzhou on 15 July for the introduction of a major new DVCPRO P2 system. Suzhou TV is one of the most influential metropolitan TV stations in China, and it is actively incorporating new technologies for content production. Suzhou TV studied the current range of next-generation digital broadcasting technologies, and decided that Panasonic's DVCPRO P2 best meets its news production needs. Aimed mainly at news gathering and production, P2 will bring greater digitalisation and networking capabilities to the station's news programmes.



Mr. Guo Changxiong
Suzhou TV Chief Engineer

“WE HAVE ONE, CONSISTENT DEMAND: COST-PERFORMANCE.”

Suzhou TV, China



A 13th August agreement between Nanjing TV and Matsushita Electric calls for the delivery of DVCPRO P2 and DVCPRO50 equipment and systems. This contract includes three P2 news gathering and editing systems (a total of 6 systems), and 86 DVCPRO50 studio recorders. They will replace the station's entire analogue system, and will be used mainly by the production and news departments. The

“P2 IS GREATLY SPEEDING UP OUR DIGITALISATION AND NETWORKING.”

Nanjing TV, China



Mr. Wang Changsheng
Nanjing TV Chief Engineer

In the summer of 2004, Jinan in Shandong was one of the four venues of the Asian Cup. Shandong TV was in charge of broadcasting the games from Jinan Stadium. Panasonic DVCPRO50 systems and the superb skills of the Shandong TV staff combined to make the programmes a total success.

Encouraged by the results, Shandong TV is now moving toward digitalising its broadcast facilities. The station brought in a large fleet of Panasonic DVCPRO50 and HD-D5 studio recorders, and contracted with Matsushita Electric to jointly develop new semiconductor memory technology.

The station also plans to adopt DVCPRO P2 as a result of a highly detailed study, which showed that the speed and practicality of DVCPRO P2 should greatly improve their content production, particularly for news programmes. This improvement will come from DVCPRO P2's remarkable ability to network diverse processes. DVCPRO P2 met the station's needs in all stages of news production - from news gathering and editing to transmission and archiving. Shandong TV was also pleased with Matsushita Electric's effort to understand

the needs of users in China, and their response to these needs in the form of detailed modifications.

A station representative expressed the view that "Panasonic's news production systems, including P2, have been perfected to extremely high levels. They bring some remarkable solutions to broadcast stations."

Based on their joint development agreement with Matsushita Electric, Shandong TV plans to digitalise and increase the networking capabilities of all its channels.



Mr. Chen Jiazhen
Vice President, Shandong TV

“P2'S SPEED AND PRACTICALITY ARE A GOOD FIT FOR OUR NEWS PRODUCTION NEEDS”

Shandong TV, China



Avid

Products Supporting P2

- NewsCutter® Adrenaline™ FX
- NewsCutter® XP Mobile
- Avid Unity™ for News

www.avid.com



Production Automation Archiving Networking



Products Supporting P2

- X-edit

www.dayang.com



Products Supporting P2

- CleanEdit

www.evs.tv



Products Supporting P2

- Nexio NX4000TXS Transmission Server
- Nexio NX4000ITS Integrated Storage Server
- Nexio NewsFlash Editing Systems
- Nexio NewsFlash FX Editing Systems

www2.leitch.com/

“Avid and P2”

“Avid Technology, Inc. enthusiastically supports Panasonic’s groundbreaking P2 format with native support for P2 files. The integration of P2 technology with the industry-leading Avid® NewsCutter® nonlinear news editing system and Avid Unity™ for News environment provides a comprehensive acquisition-to-playback workflow with unprecedented speed, ease, and flexibility. Media can be seamlessly moved into shared storage, while all metadata is transparently registered in the Avid Unity MediaManager asset management system. Multiple journalists and producers can immediately preview media, create shot lists, enter logging information, and when necessary, send media directly to playback. When Avid Unity for News or Avid Unity LANshare™ for News and Panasonic P2 systems are installed at multiple sites, users can search all media at all sites, *simultaneously*. A simple drag and drop is all that’s needed to move media from a remote site to a local site, via existing LAN or WAN links.

Avid editors can access the P2 media natively and begin creating news stories using the Avid NewsCutter editing system’s wealth of news editing, effects, and workflow features. The NewsCutter newsroom computer system tool feature allows editors to open interactive Avid iNEWS or ENPS edit sessions simply and interactively editing video to the script. When the story is finished, editors simply move the story to air via the Send-to-Playback command, and use Post-to-Web to move the story to a Web server while automatically transcoding to Web resolutions. At any point in the workflow, media can be restored to a P2 card or drive, even directly from archival storage.”

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

“The joint development of the P2 workflow by Panasonic and Dayang triggers video editing and storage technology innovation”

“The new-generation P2 brings significant workflow change into TV stations and the global video broadcast circle. Avid, Pinnacle, Quantel, and Thomson will provide P2 supported equipment. In the Chinese local market, Dayang will provide P2 support for all the product lines while putting forward closer cooperation with Panasonic. It is expected that Panasonic will provide P2-employed hardware and network solutions at the same time as P2 introduction. Clients have attached great attention to the advanced P2 techniques as well as Dayang’s strong system integration competence.

Dayang expects P2 to be popularized in combination with the workflow of TV stations. A framework agreement was made by CCTV, Panasonic and Dayang on December 9, 2003, for a project utilizing P2 in producing programs for the CCTV economics channel. It inaugurates a new creative project module in the Chinese video-broadcasting field.

It is highly expected that the development of P2 will bring fantastic change to the video broadcasting field next year and, moreover, influence the future, with a view toward use in the 2006 World Cup and the Winter Olympics.”

Mr. Yao
President, Dayang Inc.

“Workflow at the Speed of News™ P2 Duo: Pinnacle and Panasonic Team to Improve Editing Workflow”

“As flash memory proliferates in everything from PDA’s to digital cameras, it was just a matter of time that the reliability of solid-state memory made its way into the first professional video cameras *with no moving parts*. Panasonic’s revolutionary P2 flash

MORE AND MORE COMPANIES



memory technology is poised to redefine how news is done. While Pinnacle Systems has been shipping tapeless news production systems such as Vortex™ News for a few years now, the missing link has been widespread adoption of a tapeless acquisition format. With P2, however, all that changes. Now, you can capture high-resolution video on a compact card that slips into your shirt pocket. Designed for the most demanding environmental conditions, the reliability of P2 is all but assured based on the proven track record of the SD memory chips inside. Plus, the handy PCMCIA format makes it universally accessible from any laptop or PC equipped with a card reader or USB2 serial bus. Simply remove the card and slip it into a card reader and you're ready to edit. No more transferring content from tape in real time. The high-bandwidth data transfer of P2 allows immediate access to video, giving an important edge in getting stories on the air. Pinnacle is integrating support for P2 in the latest versions of Liquid *Edition*, *chrome* and *blue* non-linear editing software. A simple *XReceive* software plug-in is all that's needed to support basic A/V file import into the editing environment. This plug-in is accessible to an installed base of over 50,000 Liquid users, giving Pinnacle customers in post production and news a path to an all tapeless process. And since NLEs such as Liquid *Edition* and Liquid *blue* integrate seamlessly into the Vortex News architecture, Pinnacle is able to offer an end-to-end tapless workflow, from acquisition to editing to playout—including support for rich, real-time graphics."

* Liquid Edition™, Liquid chrome™, Liquid blue™, Vortex™ News, and Workflow at the Speed of News™ are trademarks of Pinnacle Systems®, Inc.

Mr. Greg Lowitz
Vice President of
Marketing Networked Solutions Group
Pinnacle Systems, Inc.
Mountain View, California

“Quantel is extremely pleased to support P2”

“With News and Sports production accounting for around 40% of Quantel's business, we recognise the advantages of a new format which offers many benefits to the broadcaster, including extremely rapid mounting of acquired media. Quantel servers have supported native DVCPRO since the format was introduced. Now, broadcasters who combine P2 acquisition with Quantel's generationQ systems will be able to edit directly from the P2 memory, so gaining maximum advantage from Quantel's unique Frame Magic server technology.”

Mr. Trevor Francis
Team Leader, Broadcast
Quantel Inc.



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

“Thomson Supports Solid-State Memory”

“Thomson will support the Panasonic solid-state Professional Plug-in (P2) Series recording system and integrate it tightly into current generation Grass Valley™ brand digital news production and M-Series iVDR products, and plans to further integrate it across the product line. This next-generation workflow will make digital news acquisition and production as easy as removing a P2 card from a camera/recorder, inserting it into an iVDR for storage and playout - or immediately into the Grass Valley NewsEdit™ non-linear editing system for digital news production.

Thomson recognizes the overwhelming advantages that solid-state memory (SD) media provides over tape-based solutions. The potential offered by SD memory in terms of instant access and higher transfer speeds, coupled with the equipment ergonomic benefits of a new form factor, make SD technology an important one to support going forward.”

Mr. Jeff Rosica
Vice President
Strategic Marketing & Technology
Thomson Broadcast & Media Solutions



- Products Supporting P2**
- generationQ Editing Software
 - QView, QCut and QEdit Pro
 - QSServer
- www.quantel.com



- Products Supporting P2**
- News Edit
 - Profile M-Series
 - GVG News System

www.thomsongrassvalley.com

ARE PRODUCING P2-COMPATIBLE PRODUCTS



P2 - A JOINT DEVELOPMENT WITH THE WORLD'S BROADCASTERS

With P2, it's not just the technology that's new. It's the concept, too - achieving a better workflow in currently operating news and broadcasting operations by introducing equipment that dramatically reduces size, time and cost. Bringing this concept to life is not something an equipment manufacturer can do alone.

That's why Panasonic, developers of DVCPRO series equipment, listened closely to the demands of news and broadcasting companies. Our goal was to develop a next-generation system. Our approach was to form a partnership with leading broadcasters all around the world (as shown above) and develop the system together.

The result is P2.

Every stage of development - from initial concept to final specifications - was driven by actual needs and included extensive testing. That's why P2 is both highly innovative and extremely practical.

And it's why P2 is revolutionizing the workflow in the field and at the studios of news and broadcasting companies all around the world.

P2 Support Program

Panasonic has won the customers' confidence for outstanding DVCPRO Service around the world. As the P2 Series leads the workflow innovation from ENG to ING (IT-Based News Gathering), DVCPRO Service is now evolving to take advantage of IT technology. The P2 Support Program will blossom fully into an ING style providing GLOBAL, LOW-COST, and RAPID Service.

P2 Global Support Network

Panasonic presents the P2 Global Support Network. Fifty-four (54) support locations will be ready to support P2 products in 2004. In addition, (30) thirty of these locations are capable of supporting both NTSC and PAL systems and will provide 'ING' news crews support around the globe. For example, when you travel to Germany with NTSC equipment and require service, the support center in Germany can provide a backup unit.

P2 Low Running cost & 48 Hour Repair

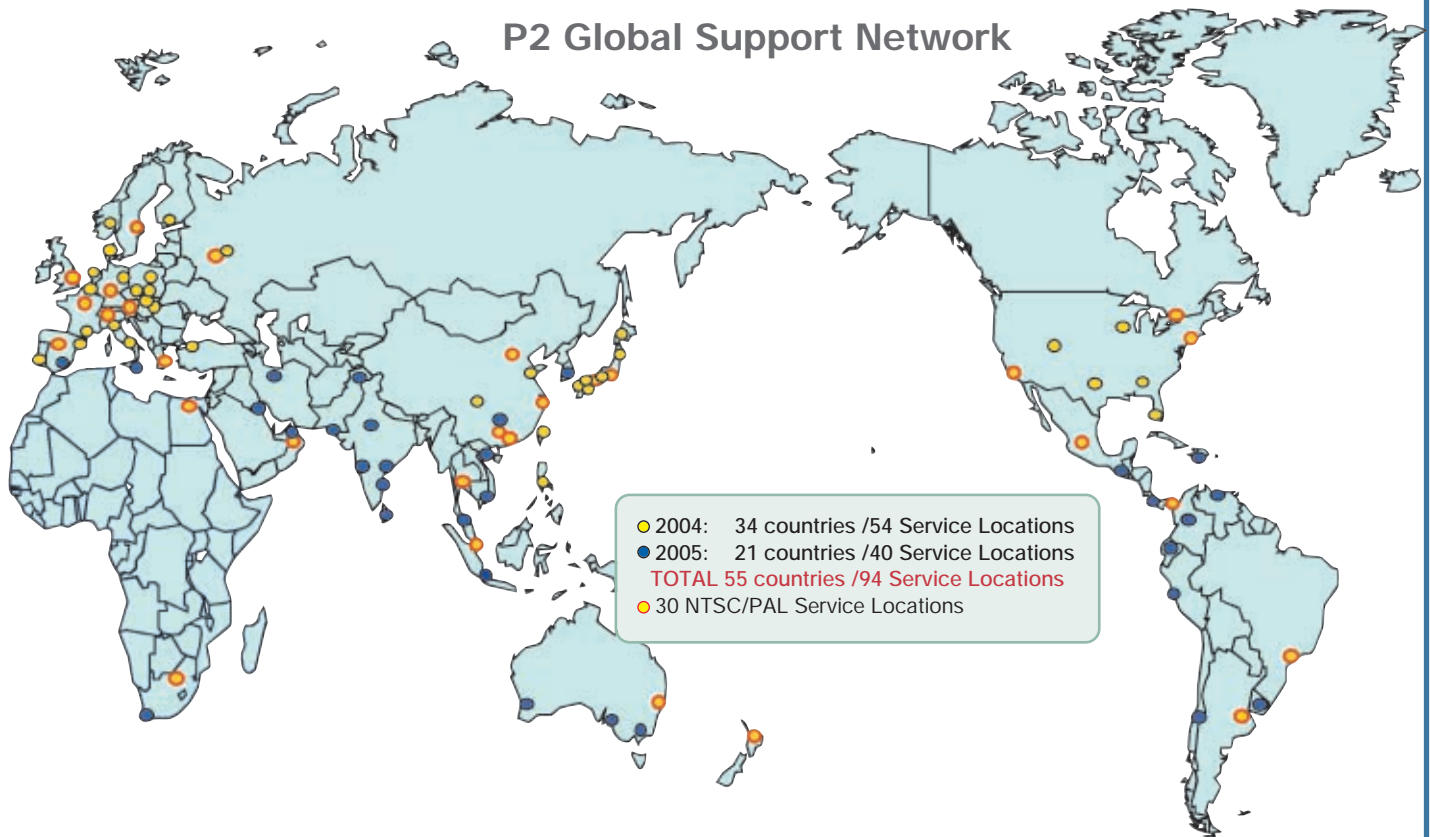
Unlike conventional VTRs, the P2 series doesn't require mechanism maintenance such as cleaning video heads, or replacing worn parts. Furthermore, with its "No Tape" mechanism, the P2 design eliminates most adjustments and provides for speedy and low-cost repair. Panasonic's P2 repair centers, equipped with special tools and skills, will target to complete repairs typically within 48 hours.

P2 IT-based Support (Option)

The P2 improves the support workflow with two IT-based support features (Optional).

One is software upgrading via an SD card. You can download the latest software from the Panasonic support Web Site to a SD card, put it into a P2 equipment and updating is done by a simple menu operation. Thus your P2 can always be up to date.

P2 SUPPORT – NEW CONCEPT, NEW TECHNOLOGY

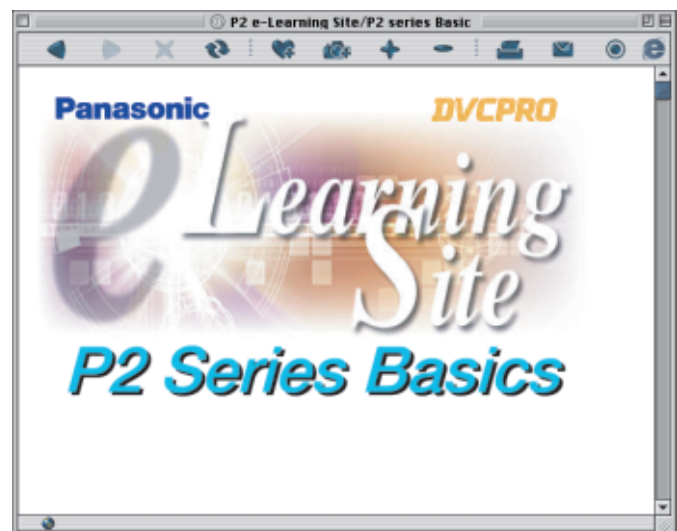


The other improvement is computer-enhanced diagnosis, that will minimize problems in the field by checking your P2 product's condition before it goes into the field.

P2 E-learning (Option)

Panasonic has held DVCPRO Web Based E-learning courses since 2001. The newly-offered P2 courses will help your smooth transition to an ING environment.

Course Contents: Features, Operation, Basic Technology, Circuit Description, Q & A.







Welcome to Beyond and the DVCPRO P2 world. I would like to express my deep gratitude for your interest in our products.

We were extremely pleased to see the positive response to our DVCPRO P2 series announcement at NAB2004 in April. The series has since been well received by broadcasters around the world, and many stations have placed orders. A number of new "P2 Partners" have also joined our product development activities. The revolutionary new DVCPRO P2 system was even called into action at this year's Athens Olympics, with the result that its practicality and reliability already have a proven track record -- incredibly fast progress for a next-generation system such as this.

These highly market-oriented products bring higher speed, quality and cost-performance to broadcasting operations. P2 is based on the same core technology as the SD Memory Card, now the world's most widely used digital media.

The P2 cam, P2 deck, P2 drive, P2 card and other key nonlinear equipment are all strategically supported by our partners, who are global leaders in their fields. And the P2 product range will continue to grow over time, bringing dynamic performance and greater efficiency to an ever-wider range of applications.

In line with our "open mind" strategy, Panasonic is working closely with our key partners in establishing a P2 workflow. With P2 as our base, we will continue developing ING systems and equipment that meet the industry's news gathering and production needs.

At the same time, we will introduce new P2 cards with greater memory capacity and launch P2-HD equipment as part of a migration from SD (standard definition) to HD (high definition).


I'm certain that our customer-oriented approach will allow everyone in the industry to adopt a long-term viewpoint in their investment strategies.

I hope this publication will be useful to you, helping you learn more about P2 and the industry's evolution.

We will keep you informed as this technology and family of products spread around the world through the mutual efforts of Panasonic and our partners. We look forward to your joining us in the ongoing evolution toward P2.



Tadao Shimozuru
Director, Professional AV Systems Business Unit
Systems Business Group
Panasonic AVC Networks Company
Matsushita Electric Industrial Co., Ltd.



P2 Takes You to the Beyond

Panasonic

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