

P2HD

PLUG INTO
THE FUTURE



A New Lineup with Better Images, Easier Operation and Lower Energy Consumption. The P2 HD Series advances the future of broadcasting and video production.

New additions to the P2 HD Series combine high-speed, large-capacity, solid-state memory with the latest HD imagery and Panasonic's acclaimed technologies. The P2 HD Series was developed for HD/SD production and uses the P2 card, which Panasonic designed for professional applications. By drawing on the outstanding reliability, speed and rewrite performance of the solid-state P2 card, and backed by a full 64 GB of storage capacity and the advanced AVC-Intra* codec, the P2 HD Series enables extended recording of high-quality images. Its seamless integration with IT equipment also leads to speedier workflows in broadcasting and video production.

The P2 HD Series lineup now includes the P2 HD Varicam for cinema production and the AG-HPX300 series for professional video production, to cover virtually all broadcasting and video production needs. P2 HD models have no transport mechanism, save energy, and feature a reusable design that helps to preserve the global environment. They offer an excellent solution to today's imaging needs and lead directly to the future of broadcasting and video production.

*See the products listed on pages 11 to 18 for details of applicable models.



P2HD

With its high reliability, large capacity and fast data transfers

The time-saving P2 card reduces production costs, resulting in higher operating efficiency



High Reliability Supports Creativity



The P2 HD being used in Alaska. Because no condensation or head clogging occurs with P2 equipment, it offers reliable operation under extremely harsh shooting conditions.

Image disturbances can be caused by condensation due to temperature changes, vibration and impact, while recording/playback heads can be clogged by dust and other particles. These problems, which often occur under harsh video production conditions, are eliminated by recording onto the solid-state P2 card. The P2 card withstands impacts up to 1,500 G and vibrations up to 15 G, operates in temperatures from -20°C to 60°C , and can be stored in temperatures from -40°C to 80°C . The P2 card's rugged specifications ensure reliable recordings under harsh conditions and enhance newsgathering mobility. Because solidstate memory requires no transport mechanism, it eliminates the possibility of condensation or clogging that occurs with tapes. Because data is saved in files, there is no risk of accidentally overwriting valuable data. Multi-card slots prevent roll change errors. And, in addition to instant startup and quick access, the P2 HD Series offers a wealth of functions, such as Pre-Rec, that ensure reliable recording of critical moments. With its superb reliability and performance, the P2 HD Series lets you record smoothly under rigorous field conditions and provides powerful support to creative video production.



64 GB Capacity Extends Recording Times and Lowers Costs

The P2 card offers up to 64 GB of storage capacity. A single P2 card can record up to 64 minutes with the DVCPRO HD or AVC-Intra 100 codec or up to 128 minutes with the AVC-Intra 50 codec.* This large capacity provides sufficient recording time even for a handheld camera-recorder or portable recorder with two card slots. New, more affordable E Series models have also been added to the lineup to respond to an even wider range of needs. With semiconductor memory capacity increasing yearly, you can expect even larger-capacity P2 cards with even greater economy down the road.

*See the products listed on pages 11 to 18 for details of AVC-Intra-ready models.

High-Speed Data Transfer to IT Systems Boosts Operating Efficiency

Files are saved onto the P2 card in MXF format. This allows direct data transfers to IT-based broadcasting and production systems configured with Non-linear editors and network servers. P2 equipment also comes with USB 2.0 and IEEE 1394 interfaces to support both Windows and Mac systems. A P2 drive with higher transfer speed of PCI express is also available. The P2 card mounts* directly to the PC card slot of a laptop PC. In addition to file-based recording, the P2 card boasts fast access and data transfer speeds, enabling direct on-card editing. Non-linear editing can also begin without digitizing or other time-consuming operations. Further, editing can be performed while transferring or saving recordings to a hard disk or other archiving system in the background. These features significantly reduce program production times, decrease the size of production crews, save labor, and increase cost benefits to operation and management.



* The PC must be installed with the included P2 driver in order to mount P2 cards. For editing, the PC must be installed with P2-compatible editing software available from various companies. Read "Notes Regarding the Handling of P2 Files Using a PC" on the back page.

Work Flow Comparison

The Current Work Flow

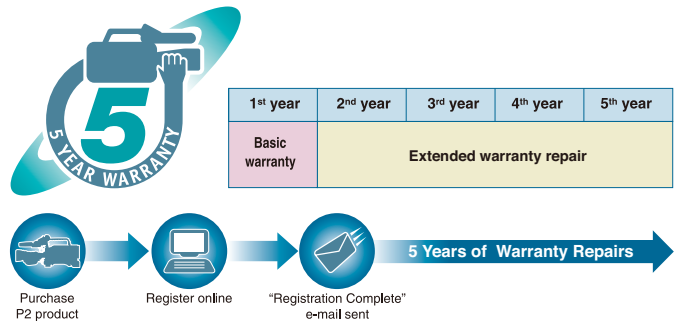


P2 HD Work Flow



P2 HD 5 Year Warranty Repair Program

The P2 HD 5 year warranty repair program further enhances the P2 card's outstanding reliability and durability, and helps to reduce running costs. Once you purchase an applicable model (indicated by a mark on the catalog's product introduction pages), simply register it at Panasonic's Website to be eligible for maximum five year warranty repair service.

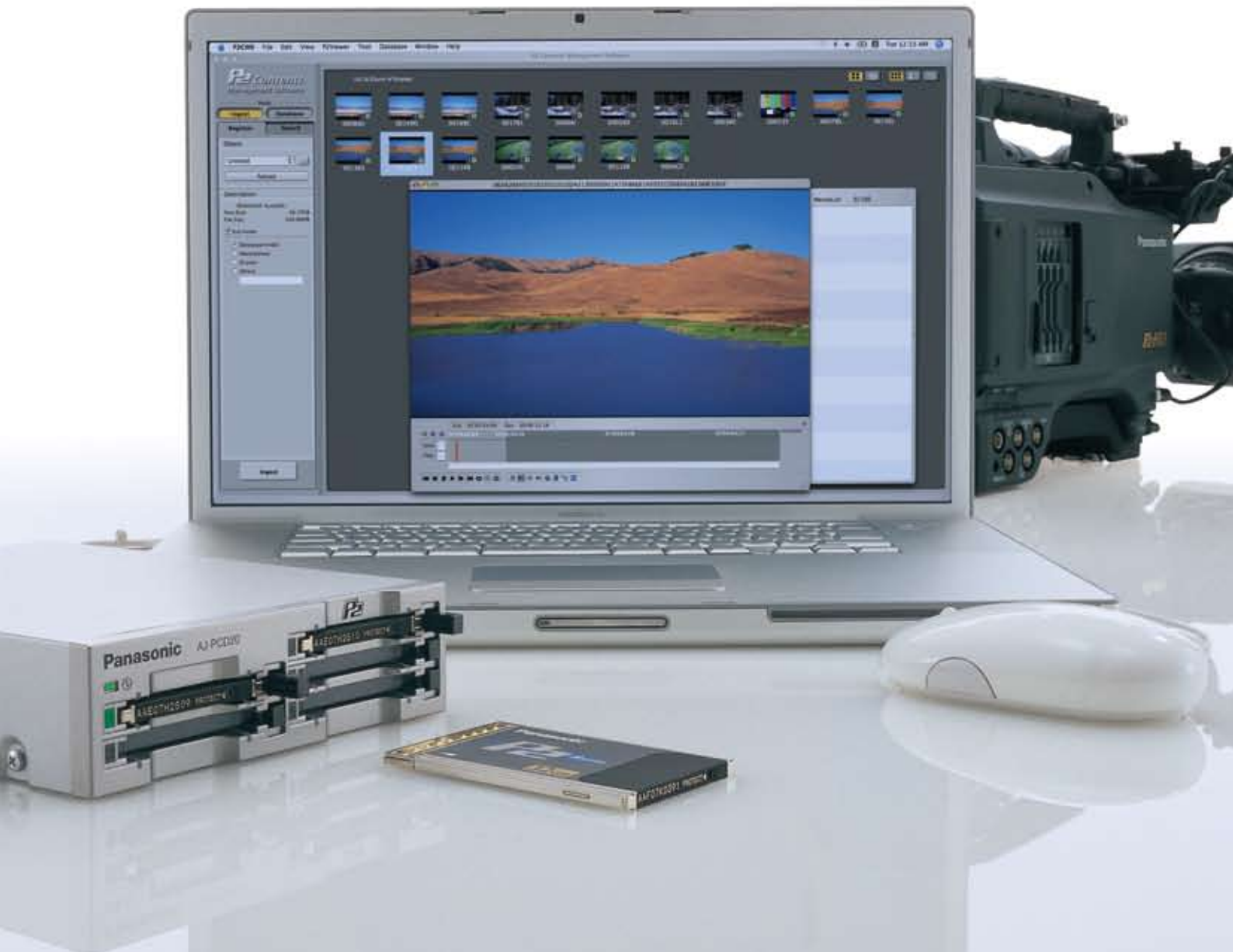


*Please note that this program is not available in some countries and regions. The basic warranty period may vary depending on the country or region. Not all repair work is covered by this extended warranty. The maximum warranty period may be adjusted depending on the number of hours the devices has been used. Details about user registration and the program: http://panasonic.biz/sav/pass_e

Workflow Based on IT Integration

High-Speed Transfer and Use of Metadata over the IT Infrastructure

P2 HD Revolutionizes the Broadcasting and Video Production Workflow



P2 Makes IT an Integral Part of the News Workflow

Many broadcasting stations are transitioning from tape-based news gathering and broadcasting equipment to IT (file-based) systems using Non-linear editors and network servers. The conversion, however, is often not smoothly accomplished because it requires time- and labor-intensive digitizing of tape recordings. The P2 card solves this problem by applying IT methods right from the recording process.

In addition to quick recording startups, P2 allows hot swapping and provides a text memo and shot marker function for added convenience in recording. In broadcast and production operations, the P2 mobile can be used for viewing, editing (creating playlists) and on-air transmission. You can also plug a P2 card into a laptop* and transfer data via FTP. The P2 drive can connect directly to a PC network or Non-linear editor in a broadcasting station. The USB 2.0/IEEE 1394b/PCI-Express interface allows fast transfer of P2 files to both Windows PCs and Mac.

*The included P2 driver must be installed in the Windows PC or Mac computer. Read "Notes Regarding the Handling of P2 Files Using a PC" on the back page.

Metadata and Proxy Files Offer New Solutions

SD card slots further expand the possibilities. On a Windows PC, you can create a metadata file containing the camera operator's name, program name, location and a text memo or other information, and add it to a video file via an SD card. Using this file together with a low-resolution proxy file lets you take advantage of PC and IT functions to perform convenient operations such as transferring data over a network or searching for metadata information.

An archive system can be easily constructed by uploading P2 files to a source-data server, by using P2 Contents Management Software (see page 17).

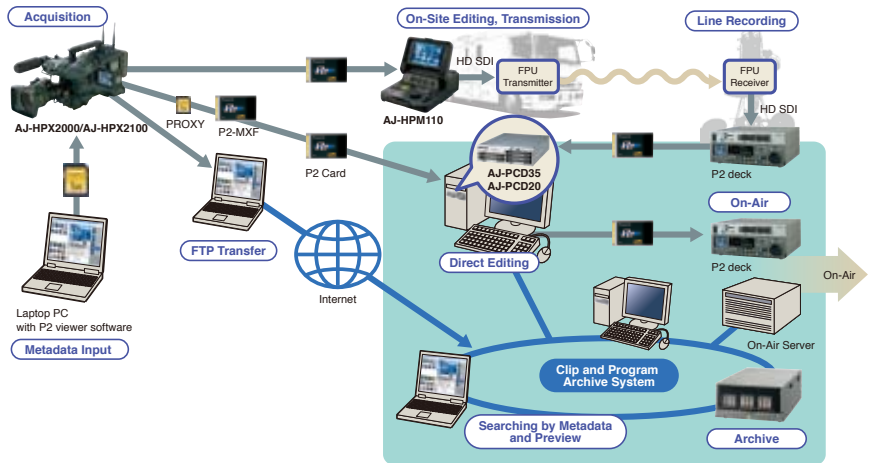
This allows an ordinary PC to conduct searches based on metadata and preview proxy video clips via the network. The system can be used for both on-air and recorded data, so valuable video assets that would never be utilized if they were stored on tape can be put to effective use.

Low-resolution proxy files can be quickly transferred and copied, for on-air transmission of news bulletins or for preliminary offline editing on a laptop PC before the full, high-resolution data arrives. This streamlines the workflow even more.

News Workflow with P2 HD

The P2 HD Series lets you build a broadcasting system that maximizes IT performance in all stages, from news gathering to on-air transmission. When recording, a variety of information is registered as metadata in P2 HD files and proxy files. Recordings can then be transmitted to a station by Field Pick-up Unit (FPU) from a broadcast van equipped with the P2 mobile or delivered on a P2 card. Prior to the data's arrival, low-resolution proxy files can be transferred by FTP over the Internet for on-air broadcasting of news bulletins, program scheduling, or off-line editing.* All recordings are archived so network terminals inside the station can search for and preview them based on metadata.

*P2 Proxy editing support: GrassValley EDIUS Broadcast series v4.5

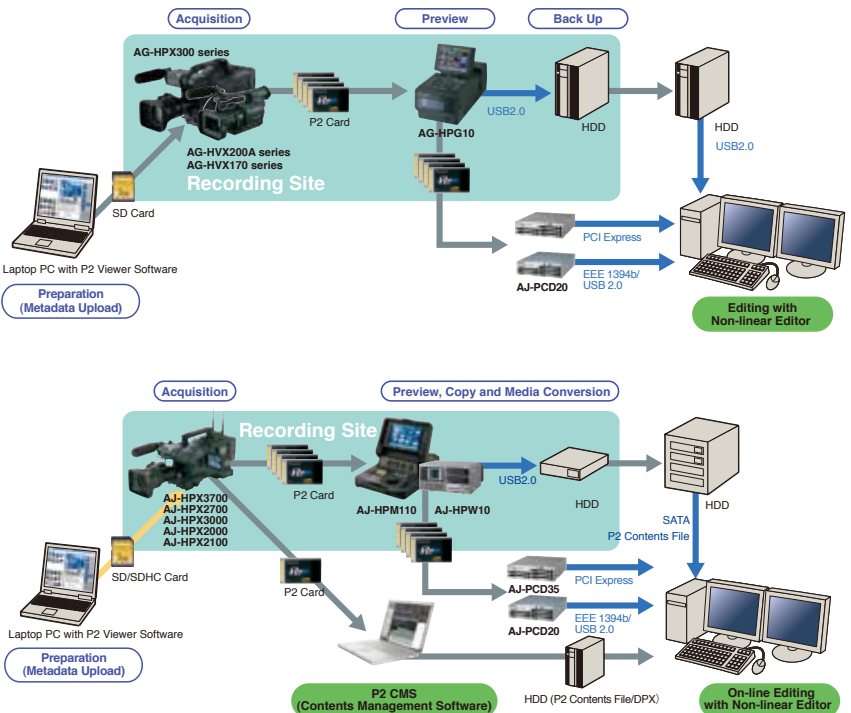


P2 HD-Based Program Production Workflow

P2 HD can cut both time and costs from program production. P2 HD models record video data into files. Unlike conventional VTRs, they do not require digitization. The files can be directly uploaded to a non-linear editor with simple drag-and-drop operation. Using the metadata attached to each file, IT devices can then easily manage the recorded data.

The AJ-HRW10G P2 rapid-writer copies data recorded on a P2 card onto an inexpensive removable hard disk at high speed. It also allows DC operation for reliable RAID 1 (mirroring) data backup in the field, without having to use a PC.

P2 Content Management Software (P2 CMS), downloadable for free, lets you ingest P2 files, copy them to other media, manage databases, preview video clips, and transcode to other DPX (uncompressed) data. It brings the kind of powerful support that video production operations need to manage content.



*See page 26 in this catalog for information on P2 alliance partners.

Helping the Environment

Preserving Beauty. Both In Images and in the Environment.

P2 HD Helps the Environment by Reusing and Reducing

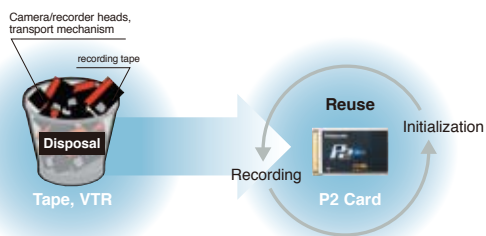




P2 HD Can Reduce About 2 Tons* of CO2 Emissions per TV Station per Year

Cutting CO2 emissions to protect the environment, and particularly to prevent global warming, is an urgent, worldwide issue. From a management standpoint, environmental efforts are being increasingly reflected in the image and value of today's corporations. P2 HD products meet the stringent Panasonic "Green Product" certification standards, which testifies for their excellent environmental performance.

Reusing: Because abrasion-free, dropout-free P2 cards can be rewritten tens of thousands of times, TV stations don't generate large amounts of used tape like they do with VTRs. Also, because P2 HD systems use solid-state memory, there are fewer parts to replace – such as recording heads and transport mechanism – which again cuts down on waste.



Reducing: P2 memory card recorders are lighter and require less power than VTRs for both recording and editing. For example, compared with our previous AJ-LT95 DVCPRO 50 Laptop Editor, the AJ-HPM110 P2 Mobile Recorder uses about 58% less electricity and its weight is reduced by about 49%. In addition to solving the problem of wasted tape, the P2 Mobile Recorder clearly reduces power consumption. These two achievements alone are able to cut about 2 tons* of CO2 emissions per station per year. In actual use, a variety of other processes combine to reduce power consumption even more, such as the fact that a compact, lightweight design and fast start-up let you stand-by on location with the power turned off. P2 HD is closely linked with environmental conservation in routine broadcasting and production operations, making it a true, next-generation technology.



* Using Panasonic 30-minute DVCPRO HD tapes and assuming that a TV station requires 10,000 cassette tapes per year. The reduction in CO2 emissions from the raw materials of 10,000 cassette tapes is calculated to be 1.52 tons.

Also, the difference in power consumption per unit between the AJ-LT95 Laptop Editor and AJ-HPM110 P2 Mobile Recorder is 84 watts, or approximately 245 kWh per year (84 W x 8 hours x 365 days). Assuming that a TV station replaces five AJ-LT95 units with five AJ-HPM110 units, the reduction in CO2 emissions is approximately 475 Kilograms.

Combining this with the 1.52 tons calculated above makes a total CO2 emission reduction effect of approximately 2 tons per year.

(According to a Panasonic survey.)

New Devices Further Cut Power Consumption

Reducing power consumption is one of the highest priorities in the development of P2 HD products. In the new AG-HPX300 series camera-recorder, new integrated circuits, including a digital signal processor and an AVC-Intra codec LSI, have further reduced the size of circuit boards. In addition to cutting size and weight, the new circuits lower power consumption in combination with a new image sensor. Compared to conventional tape-based DVCPRO HD camera-recorders, AG-HPX300 series power consumption has been reduced to less than half.

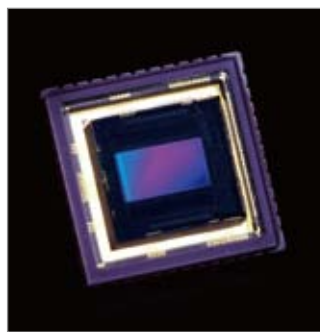
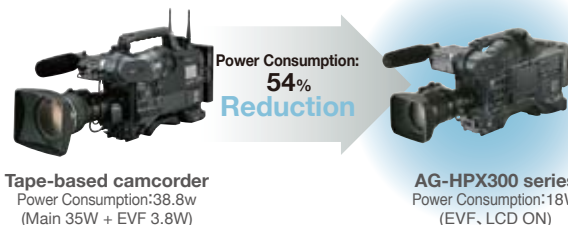


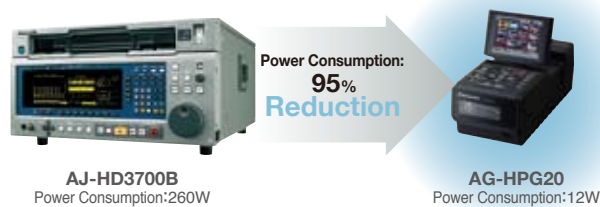
Image Sensor of AG-HPX300 series



AVC-Intra Codec LSI Board of AG-HPX300 series



The AG-HPG20 portable recorder also features a new circuit board that achieves AVC-Intra codec recording and playback in a smaller, lighter package with energy-saving efficiency. Compared to a tape-based HD D5 VTR with equivalent image quality, AG-HPG20 power consumption has been reduced to about 1/20.



Practical Application of the New AVC-Intra Codec

A New HD Production Style with Stunning Images and Excellent Efficiency



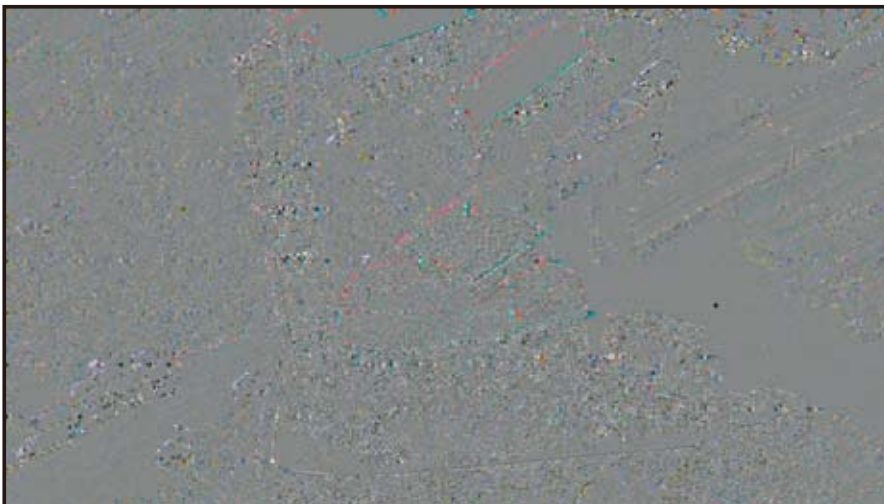
Sample Images of Intraframe Prediction

Upper: Original image

Right: Intraframe predictive image

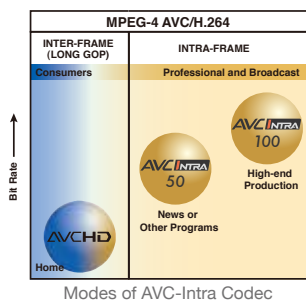
Bellow: Difference image obtained from
subtracting the intraframe predictive image from
the original image.

This shows the high accuracy of intra
prediction.



New AVC-Intra 100/AVC-Intra 50 Codec

AVC-Intra is a new codec that further advances HD production. It complies with the MPEG-4 AVC/H.264 international standard based on advanced motion-image compression technology, and offers both superb image quality and high compression. It uses an intra-frame compression system to bring important advantages to professional editing.



Applicable products

Product Type	Model	Standard
Camera-Recorder	AJ-HPX3700	Standard
	AJ-HPX2700	Standard
	AJ-HPX3000	Standard
	AJ-HPX2000/HPX2100	Option
	AG-HPX300 series	Standard
Recorder	AG-HPG20	Standard
	AJ-HPM110	Option
	AJ-HPS1500	Option
	AJ-HRW10	Standard

AVC INTRA 100

With the same bit rate as DVCPRO HD - this mode supports full-HD recording with 1920 x 1080 pixels. It allows camera-recorders to capture high-quality, HD-D5-level images.

AVC INTRA 50

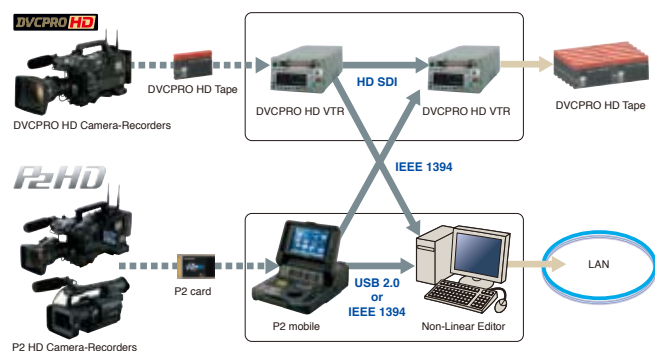
This mode delivers the same high picture quality as DVCPRO HD while using a bit rate similar to SD (DVCPRO 50). It also provides double the recording time of DVCPRO HD and allows quick data transfer and editing.

Codec Mode:	AVC-Intra 100	AVC-Intra 50
1080 Image Size:	1920 x 1080	1440 x 1080
720 Image Size:	1280 x 720	960 x 720
Sampling Format:	10 bit, 4:2:2	10 bit, 4:2:0
Bit Rate:	approx. 100Mbps	approx. 50Mbps
Recording Time (with a 64 GB P2 card):	64 minutes	128 minutes

*The camera-recorder software must be upgraded to the latest version.
The AVC-Intra codec is not supported by the AG-HPX170 series, AG-HVX200A series and AG-HPX500 series.

The DVCPRO HD Codec Fits Smoothly into Your Current Environment

DVCPRO HD codec recording and playback are standard on the P2 HD Series. The DVCPRO HD format, which stands at the apex of DVCPRO migration, uses 4:2:2 sampling to retain all color information and an intra-frame compression system just like that of AVC-Intra, supporting high-end video production with chromakey composition and high-precision editing. DVCPRO HD is widely used by broadcasting stations and movie companies around the world. Because P2 files are recorded with the same codec as the DVCPRO family, degradation-free conversion between tape and file is possible using an IEEE 1394 digital interface. This lets the P2 cam fit smoothly into a tape-based production environment and also allows the use of DVCPRO HD materials in a P2-file-based broadcasting system. HD (SD) SDI and analog interfaces are also provided for added flexibility.



AVC INTRA Technology

Intra-Frame (I-Only) Compression Superiority

Motion-image compression can be divided roughly into two methods: I-Only compression, which completes all processing within each frame, and Long GOP compression, which processes across multiple frames. AVC-Intra and DVCPRO HD use I-Only compression, while HDV uses Long GOP compression. The MPEG-4 AVC/H.264 standard encompasses both methods. In the images of broadcasting like flash-filled press conferences, fast-action sports, and music shows with confetti and electronic displays, I-Only compression exerts its superiority.

Also, because processing is performed frame-by-frame in I-Only, new-generation multi-core CPUs offer high-speed parallel processing. This makes I-Only compression more suitable for Non-linear editing than Long GOP, for which parallel processing is difficult due to its inter-frame dependence.

With its I-Only compression, AVC-Intra produces remarkably stable images that are unaffected by adjacent frames, and meets professional needs in virtually all situations and workflows.

Twice the Compression Efficiency of MPEG-2

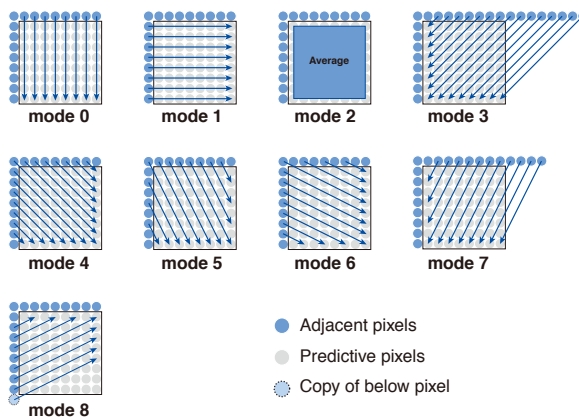
By selecting the most effective compression techniques from among those in compliance with the H.264 standard, AVC-Intra has doubled the compression ratio of MPEG-2, even with I-Only compression. Its intraframe predictive and context-adaptive entropy coding are particularly effective methods for boosting compression efficiency.

Intraframe predictive coding (intra prediction)

This process generates predictive images based on adjacent blocks of 8 x 8 pixels. Selecting the most suitable predictive mode from among nine luminance signal modes (see illustration) and four color signal modes, it generates accurate predictive images.

The residual data (obtained by subtracting a predictive image from the original input image) is recorded together with the predictive image. Because the prediction accuracy is high, there's minimal residual data, and thus high compression is achieved.

This process is conducted within the frame, so prediction accuracy remains high even with fast-motion images.



Context-adaptive entropy coding

The entropy coding process used in MPEG-4 AVC/H.264 utilizes CAVLC (Context Adaptive VLC) and CAVBAC (Context Adaptive Binary Arithmetic Coding), both of which are context adaptive. MPEG-2 uses a fixed table when performing the VLC coding, with the result that compression efficiency is low with some types of images. In context-adaptive coding, on the other hand, operation varies with different kinds of images and high compression efficiency is maintained at all times.

For further information about MPEG-4 AVC/H.264, including an explanatory video, please visit:
<https://www.pvc.panasonic.co.jp/pro-av/technology/>

High-Quality P2 HD VariCam for High-End Production, with RGB 4:4:4 Output in Full 1920 x 1080 Pixel Resolution and P-10Log Gamma



AJ-HPX3700

Memory Card Camera-Recorder (P2 cam)

High-End 1080 HD Image Quality for Film/Cinema Production

- 2.2 megapixel 2/3" CCD for full 1920 x 1080 HD images.
- Recording format: AVC-Intra 100/50 and DVCPRO HD. AVC-Intra 100 uses the 10 bit 4:2:2 sampling.
- HD SDI output of 23.98PsF/24PsF video signals.
- Dual-link HD SDI output for camerathrough RGB4:4:4/10 bit log gamma signals. Compatible with uncompressed, high-end workflows.
- Dual-link RGB 4:4:4 output with simultaneous 4:2:2 record in-camera.
- Variable frame rate function ranging from 1 fps to 30 fps.
- Film Rec 600% gamma function delivers wide dynamic range and high bit depth, without the extensive management and costs of other high-resolution camera solutions. No rendering, no de-bayering, no delays.
- Scan-reverse function for film lens use.
- New grip handle has five threaded holes to mount film accessories.
- CAC (Chromatic Aberration Compensation) function compensates for registration error and minimises lateral chromatic aberration in lenses.
- High F10 sensitivity at 2,000 lx. Minimum illumination of 0.042 lx (at 1 fps VFR and +30dB gain-up).
- 14 bit A/D processing, 12 pole linear matrix color correction function.
- DRS (Dynamic Range Stretch) provides a wider dynamic range with minimal blown highlights and blocked shadows.
- Scene file, user buttons, user menu and focus assist functions.
- Newly designed 2 wheel (ND and CC) optical filters.
- 48 kHz/16 bit, 4 channel digital audio recording.

Advanced P2 Memory Card Recording

- Switchable between 59.94 Hz and 50 Hz recording.
- Five P2 card slots allow continuous recording, card selection, hot swapping, loop rec, pre-rec, interval rec and one-shot recording.
- Text memos and shot markers can be added.
- Proxy data recording possible (with the optional AJ-YAX800G).
- USB 2.0 (Host and Device) interface.
- Genlock input, switchable to return video (HD-Y).

AJ-HPX3700 Specification

Power Source :	DC 12 V, battery or DC input
Power Consumption :	42 W, main unit only
Weight:	4.9 kg (10.8 lbs), main unit only
Dimensions (W x H x D):	137 mm x 209 mm x 318 mm (5-7/16" x 8-1/4" x 12-9/16") without handle and option cover

Multifunctional P2 HD VariCam with a Variable Frame Rate from 1 to 60 fps: Superior Creativity and Outstanding Cost-Performance



AJ-HPX2700

Memory Card Camera-Recorder (P2 cam)

Master-Quality and VariCam's Exclusive Variable Frame Rate

- Variable Frame Rate of 1 fps to 60 fps in 720p, for creative overcranked or under-cranked shooting.
- Recording format: AVC-Intra 100/50 and DVCPRO HD. AVC-Intra 100 uses the same 10 bit 4:2:2 sampling as HD-D5 VCRs.
- HD SDI Output at 23.98PsF/24PsF Video Signals.
- Film Rec 600% gamma function delivers wide dynamic range and high bit depth, without the extensive management and costs of other high-resolution camera solutions. No rendering, no de-bayering, no delays.
- Scan-reverse function for film lens use.
- Two independent HD SDI outputs with parallel use capability.
- New grip handle has five threaded holes to mount film accessories.
- HD progressive 2/3" 3 CCD system.
- CAC (Chromatic Aberration Compensation) function compensates for registration error and minimises lateral chromatic aberration in lenses.
- High F10 sensitivity at 2,000 lx. Minimum illumination of 0.021 lx (at 1 fps VFR and +30 dB gain-up).
- 14 bit A/D processing, 12 pole linear matrix color correction function.
- DRS (Dynamic Range Stretch) provides a wider dynamic range with minimal blown highlights and blocked shadows.
- Scene file, user buttons, user menu and focus assist functions.
- Newly designed 2 wheel (ND and CC) optical filters.
- 48 kHz/16 bit, 4 channel digital audio recording.

Advanced P2 Memory Card Recording

- Switchable between 59.94 Hz and 50 Hz recording.
- Five P2 card slots allow continuous recording, card selection, hot swapping, loop rec, pre-rec, interval rec and one-shot recording.
- Text memos and shot markers can be added.
- Proxy data recording possible (with the optional AJ-YAX800G).
- DVCPRO (IEEE 1394) output terminal* for back-up use.
- USB 2.0 (Host and Device) interface.

* Outputs DVCPRO HD codec recording only.

AJ-HPX2700 Specification

Power Source :	DC 12 V, battery or DC input
Power Consumption :	38 W, main unit only, LCD monitor ON
Weight:	4.9 kg (10.8 lbs), main unit only
Dimensions (W x H x D):	137 mm x 209 mm x 318 mm (5-7/16" x 8-1/4" x 12-9/16") without handle and option cover

High-End P2 Camcorder that Offers 1920 x 1080, 10 bit 4:2:2 Shooting



AVC INTRA DVCPRO HD DVCPRO 50

AJ-HPX3000

Memory Card Camera-Recorder (P2 cam)

High-end image quality for 1080i or 1080p productions

- 2.2 megapixel 2/3" CCD for full 1920 x 1080 HD images.
- Comes equipped with AVC-Intra codec board that supports AVC-Intra 100 and 50 modes. AVC-Intra 100 uses the same 10 bit 4:2:2 sampling as HD D5 VCRs.
- Chromatic Aberration Compensation function compensates for registration error and minimizes lateral chromatic aberration in lenses.
- Switchable between 59.94 Hz and 50 Hz recording for use anywhere in the world.
- Switchable to DVCPRO HD codec recording; also supports SD recording with the DVCPRO 50 codec.
- High F10 sensitivity at 2,000 lx (at 1080i). Minimum illumination of 0.064 lx (at +56 dB gain-up).
- 14 bit A/D processing, 12 pole linear matrix color correction function.
- DRS (Dynamic Range Stretch) provides a wider dynamic range with minimal blown highlights and blocked shadows.
- F-REC mode Cine-gamma and scan-reverse function.
- 48 kHz/16 bit, 4 channel digital audio recording.

P2 Card Recording and Advanced Functions

- Five slots that accommodate 64 GB P2 cards allow continuous recording, card selection, hot swapping, loop rec, pre-rec, interval rec and one-shot recording.
- Text memos and shot markers can be added.
- Proxy data recording possible (with the optional AJ-YAX800G).
- HD/SD SDI input allows line recording (with the optional AJ-YA350AG).
- IEEE 1394a (AVC), USB 2.0 (Host and Device) interface.
- Genlock input for HD Y or VBS input use.
- Scene file, user buttons, user menu and focus assist functions.
- 2 wheel (ND and CC) optical filters.
- UniSlot wireless receiver slot.

AJ-HPX3000 Specification

Power Source :	DC 12 V, battery or DC input
Power Consumption :	43 W, with optional HD/SD SDI input, LCD monitor off
Weight:	4.8 kg (10.5 lbs), main unit only
Dimensions (W x H x D):	137 mm x 209 mm x 318 mm (5-7/16" x 8-1/4" x 12-9/16") without handle and option cover

High-End P2 Camcorder that Offers DVCPRO HD (1080i/720p) Recording



AVC INTRA DVCPRO HD DVCPRO 50 DVCPRO 1X

AJ-HPX2000/2100

Memory Card Camera-Recorder (P2 cam)

High Sensitivity, High Quality HD/SD Recording

- DRS (Dynamic Range Stretch) provides a wider dynamic range with minimal blown highlights and blocked shadows.
- HD Progressive 2/3" 3 CCD System.
- High sensitivity of F10 (at 2000 lx). Minimum illumination of 0.007 lx (at +74 dB gain).
- 14 bit A/D processing and improved digital image processing technology.
- 12 pole linear matrix color correction function.
- DVCPRO HD (1080i and 720p) recording and playback. 59.94 Hz/50 Hz switchable for recording and playback in any HD system worldwide.
- SD (standard definition) codec (480/59.94i and 576/50i) supports DVCPRO 50, DVCPRO, and DV.
- 48 kHz/16 bit, 4 channel digital audio recording.
- Line recording via HD/SD SDI input (with the optional AJ-YA350AG).
- Supports AVC-Intra 100/50 codec (with the optional AJ-YBX200G).
- Scene file, user buttons, user menu, auto white balance with ATW.
- AJ-HPX2000: 4 Position Optical Filter.
- AJ-HPX2100: 2 wheel (ND and CC) Optical Filters.
- Viewfinder marker function.
- High-speed electronic shutter with synchro scan.
- UniSlot wireless receiver slot.

Reliable P2 Recording and Advanced Functions

- Reliable recording onto P2 cards with high resistance to shock, vibration and temperature changes, and no risk of accidentally overwriting.
- Five P2 card slots allow continuous recording, card selection, hot-swap rec, loop rec and pre-rec.
- Immediate playback using a clip thumbnail display on the built-in LCD monitor.
- Text memos and shot markers can be added.
- Proxy data recording possible (with the optional AJ-YAX800G).
- IEEE 1394a (AVC), USB 2.0 (Host and Device) interface.

AJ-HPX2000/2100 Specification

Power Source :	DC 12 V, battery or DC input
Power Consumption :	36 W, main unit only, LCD monitor off
Weight:	4.5 kg (9.9 lbs), main unit only
Dimensions (W x H x D):	137 mm x 209 mm x 317 mm (5-7/16" x 8-1/4" x 12-1/2") without handle and wireless option cover



Superb Quality and Outstanding Cost- Performance — a P2 HD Camera-Recorder for Video Professionals



DVCPRO HD DVCPRO 50 DVCPRO IX

AG-HPX500 series

Memory Card Camera-Recorder (P2 cam)
(AG-HPX500/502, model number varies on regions/areas.)

P2 cam for Professional HD/SD Production

- Standard 2/3" interchangeable lens mount system.
- Chromatic Aberration Compensation function compensates for registration error and minimizes lateral chromatic aberration in lenses.
- APT (Advanced Progressive Technology) produces higher image quality with HD Progressive 3 CCD and 19 bit digital signal processor.
- 1080i and 720p HD recording using the DVCPRO HD codec for broadcast use assures both superior images and top reliability.
- 50 Hz/60 Hz selector function allows 1080/50i and 720/50p HD recording for PAL areas.
- SD (480i/576i) recording in DVCPRO 50, DVCPRO or DV multi-codec.
- Four slots that accommodate 64 GB P2 cards allow continuous recording, card selection, hot swapping, loop rec, pre-rec, interval rec and one-shot recording.
- Text memos and shot markers can be added.
- 48 kHz/16 bit, 4 channel digital audio recording.

Variable Frame Rate Shooting and Variety of Interfaces

- Variable frame rate feature (in 720p, 11 steps) allows film-like low-speed or high-speed shooting.
- 720p native mode achieves a speed effect without requiring additional equipment. A VariCam-compatible 720p over 60p mode is also provided.
- Eight-mode gamma, includes two Cine-Like modes.
- Slow, synchro and high-speed shutter.
- Scene file, user buttons, user menu and focus assist functions.
- Output for HD/SD SDI (BNC), Video (BNC) and Component (D4), with built-in downconverter.
- TC input/output provides multi-camera synchro shooting.
- IEEE 1394a (AVC, Host and Device), USB 2.0 (Device) interface.
- DC power supply for the BT-LH80WU LCD monitor.
- RCU terminal for optional AJ-RC10G remote control unit.

AG-HPX500 series Specification

Power Source :	DC 12 V, battery or DC input
Power Consumption :	19 W, when record without option, LCD monitor on
Weight:	3.8 kg (8.4 lbs), without viewfinder 4.5 kg (9.9 lbs), with viewfinder
Dimensions (W x H x D):	140 mm x 261 mm x 318 mm (5-9/16" x 10-5/16" x 12-9/16") without handle

Newly Designed Camera-Recorder with Excellent Image Quality and a Compact, Lightweight Body. Equipped with a 1/3 Inch, 2.2 Megapixel Image Sensor and AVC-Intra Codec.



AVC INTRA DVCPRO HD DVCPRO 50 DVCPRO IX

AG-HPX300 series

Memory Card Camera-Recorder (P2 cam)
(AG-HPX300/301/302/303/304, model number varies on regions/areas.)

New

High-Quality HD Recording in 1920 X 1080-Pixel Resolution

- Equipped with a newly developed 1/3 inch, 2.2 megapixel image sensor for full-pixel (1920 x 1080) high-resolution HD recording.
- Comes mounted with a Fujinon 1/3 inch 17x zoom lens (included).
- Chromatic Aberration Compensation function.
- DRS (Dynamic Range Stretch) provides a wider dynamic range.
- Incorporates a newly developed 20 bit digital signal processor for high image quality and low power consumption.
- Recording format: AVC-Intra 100/50 and DVCPRO HD. AVC-Intra 100 uses the same 10 bit 4:2:2 sampling as HD-D5 VCRs.
- Multi-format HD: 1080/60i, 1080/24p/30p and 720/24p/30p/60p.*
- SD multi-codec recording in DVCPRO 50/DVCPRO/DV.
- Variable frame rate feature (in 720p, 20 steps) allows film-like low-speed or high-speed shooting.
- Seven-mode gamma, includes two Cine-Like modes.

*60i, 24p and 30p are recorded at 59.94 Hz, 23.98 Hz and 29.97 Hz, respectively.

New Design and Interfaces Improve Mobility and Operating Ease

- These redesigned shoulder-held cameras have a low center of gravity.
- Two P2 card slots are provided on the side operation panel.
- Scene file, user buttons, and focus assist functions.
- Waveform and vectorscope display, scene files, user buttons.
- Newly developed color viewfinder featuring a 0.45-inch, approx. 1,226,000-dot equivalent Liquid Crystal On Silicon (LCOS) display panel for bright, high-resolution images.
- New 3.5-inch LCD monitor with a 16:9 aspect ratio, offering high resolution of approx. 921,000 dots.
- Output for HD/SD SDI and Video, with built-in downconverter.
- USB 2.0 (Host/Device) and IEEE 1394a (AVC) interfaces. TC IN, TC OUT and GENLOCK IN terminals. *IEEE 1394 input/output not possible in AVC-Intra mode.
- RCU terminal for optional AJ-RC10G remote control unit.
- Proxy data recording possible (with the optional AJ-YAX800G).

AG-HPX300 series Specification

Power Source :	DC 12 V, battery or DC input
Power Consumption :	18 W, when record without option, LCD monitor on
Weight:	3.6 kg (8.4 lbs), without Lens, 5 kg (9.9 lbs), with Lens
Dimensions (W x H x D):	140 mm x 251 mm x 441 mm (6-11/16" x 6-15/16" x 17-3/8") excluding prominent parts 246 mm x 251 mm x 549 mm (6-11/16" x 6-15/16" x 21-5/8") with Fujinon lens, excluding prominent parts

Compact, Lightweight HD/SD Camera-Recorder Brings High Image Quality and Easy Handheld Mobility



DVCPRO HD DVCPRO 50 DVCPRO IX

AG-HPX170 series

Memory Card Camera-Recorder (P2 handheld)
(AG-HPX170/171/172/173/174, model number varies on regions/areas.)

High-Quality HD Shooting

- A 13x zoom lens with 28 mm (35 mm equivalent) wide-angle setting, 72mm diameter and cam-driven manual zoom.
- New 1/3" 16:9 progressive CCD for high image quality and sensitivity.
- High-performance DSP with 14 bit A/D conversion and 19 bit inner processing capability.
- 20 step frame rate selector for creative variable-speed shooting. Features 720p native mode and over 60p mode.
- Selectable gamma including Cinelike mode.

Advanced P2 Memory Card Recording

- Broadcast quality DVCPRO HD recording in 1080/720 HD multi-format.
- SD multi-codec recording in DVCPRO 50/DVCPRO/DV. 59.94 Hz: AG-HPX170/171, 50 Hz: AG-HPX171/172/173/174.
- Two P2 card slots allow up to 128 minutes of continuous HD recording when using 64 GB P2 card in full frame rate DVCPRO HD.
- Multifunction P2 capabilities. Hot swapping (changing cards while recording), loop rec, pre-rec, one-shot rec, interval rec and variable frame rate recording capability.
- Text memos and shot markers can be added.
- 48 kHz/16 bit, 4 channel digital audio recording. XLR 2 channel audio input terminals supporting 48 V phantom power supply.

Lightweight, Versatile Interfaces, Professional Design

- Compact hand-held size weighs only 1.9 Kilograms (4.2 lbs).
- Auto or manual operation of focus and aperture.
- Focus assist functions of center zoom, histogram and focus bar display.
- Waveform and vectorscope display. Scene files, user buttons.
- IEEE 1394 and USB 2.0 terminals for PC interface.
- HD/SD SDI output, component output (mini-D), time-code setting via IEEE 1394, and camera remote function.

AG-HPX170 series Specification

Power Source :	DC7.2 V with battery, DC7.9 V with DC input
Power Consumption :	10.9 W, 11.7 W (LCD), 13.0 W (Max)
Weight:	1.9 kg (4.2 lbs), without battery and accessories
Dimensions (W x H x D):	154 mm x 179.5 mm x 397 mm (6-1/8" x 7-1/8" x 15-11/16") without prominent parts

Handheld P2 HD Cam with Outstanding Mobility for News Acquisition and Video Production. Supports Variable Frame Rate Shooting.



DVCPRO HD DVCPRO 50 DVCPRO IX

AG-HVX200A series

Memory Card Camera-Recorder (P2 handheld)
(AG-HVX200A/201A/202A/203A/204A, model number varies on regions/areas.)

HD/SD Multi-Format Recording, Built-in DV Tape Drive

- A 13x zoom lens with a wider, 30 mm (35 mm equivalent) angle of view.
- New progressive CCD greatly improves S/N ratio and lowers smear.
- High-performance DSP with 14 bit A/D conversion and 19 bit inner processing capability.
- HD recording in 1080/24p*, 1080/60i and 720/60p in 59.94 Hz model. (1080/25p*, 1080/50i and 720/50p in 50 Hz models.)
- SD multi-codec recording in DVCPRO 50/DVCPRO/DV. 59.94 Hz: AG-HVX200A/201A, 50 Hz: AG-HVX201A/202A/203A/204A
- Multifunction P2 capabilities. Hot-swap (changing cards while recording), loop rec, pre-rec, one-shot rec, and interval rec functions.
- Immediate playback using a clip thumbnail display on the built-in LCD monitor.
- Built-in DV tape drive. Allows DV recording, down-conversion recording from P2 HD sources, and frame-rate conversion of clips recorded in native 720p.

Variable Frame Rate Function and Professional Specifications

- 11 step frame rate selector for creative variable-speed shooting. Features 720p native mode and over 60p (or 50p) mode.
- Auto or manual operation of cam-driven zoom, focus and aperture.
- XLR audio input terminals supporting 48 V phantom power supply, magnesium-alloy chassis, zebra, marker and tally lamp.
- Scene file, user buttons, white balance with ATW.
- IEEE 1394/USB 2.0: Directly mountable to Mac/Windows Non-linear editors. IEEE 1394 output for synchro backup recording. 1394 host mode for copying files onto an external HD.
- Analog component output, time-code setting via IEEE 1394, and camera remote function.

* 1080/24p is to be recorded in 1080/60i (59.94i) pull-down. 1080/25p is to be recorded in 1080/50i pul-down.

AG-HVX200A series Specification

Power Source :	DC7.2 V with battery, DC7.9 V with DC input
Power Consumption :	11.6 W (viewfinder), 12.0 W (LCD), 14.0 W (Max)
Weight:	2.5 kg (5.5 lbs), without battery and accessories
Dimensions (W x H x D):	168.5 mm x 180 mm x 390 mm (6-11/16" x 7-1/8" x 15-3/8") without prominent parts

Featuring HD SDI Input for High-Quality AVC-Intra Recording. Ideal for HD Field Recording or for Video Playback at Events



AVC INTRA DVCPRO HD DVCPRO 50 DVCPRO IX

AG-HPG20

New

Memory Card Portable Recorder (P2 Portable)

AVC-Intra Codec and HD SDI Input for High-Quality HD Recording

- Three recording and playback codecs supported: AVC-Intra 100 for high-quality 10-bit 4:2:2 images, AVC-Intra 50, and DVCPRO HD.
- 1080i (60i/50i), 720p (60p/50p) multi-format and DVCPRO50/DVCPRO/DV multi-codec capabilities.
- HD/SD SDI input/output provided to allow line recording. Enables REC Start/Stop in sync with camcorder.*
- Allows up-/down-conversion between HD and SD as well as cross-conversion between 720 and 1080 during playback.

*For interlinked recording, the camera-recorder must support this function.

Speeds Up Acquisition Workflow Using P2 Cards and External HDD

- Equipped with two P2 card slots to enable continuous recording, hot-swap REC, loop REC and UMID recording.
- Clip thumbnail display on the LCD monitor can be used for playback, deletion, clip copy, metadata editing, and text memo/shot marker addition.
- Diverse playback functions ideal for video demos and presentations, such as Format Auto, Variable Speed for slow-motion/double-speed playback, Resume, Single-clip and Repeat.
- Supports simplified waveform monitor and vectorscope display.
- USB 2.0 (HOST): For copying files between an external HDD and a P2 card.
- USB 2.0 (DEVICE): For transferring files to/from a nonlinear editor
- IEEE 1394a (AVC) interface enables DVCPRO HD/SD stream input/output.

*In simplified HDD playback, the frame rate for refreshing the display is reduced.

Compact, Lightweight, Battery-Operated Mobility

- At about 1.1 kilograms (approx. 2 lbs), easy to carry with one hand.
- Battery operation boosts convenience (with a 5,400 mAh battery pack).
- AC power can be supplied via the AC adaptor (included).
- Highly reliable, durable memory card recording has no moving parts, eliminating the concerns of a tape transport.

AG-HPG20 Specification

Power Source :	DC7.2 V with battery, DC7.9 V with DC input
Power Consumption :	approx. 12W
Weight:	approx. 1.1 kg (2.4 lbs)
Dimensions (W x H x D):	104 mm x 83 mm x 227 mm (4-1/8" x 3-5/16" x 8-15/16") without rubber shoes

Fast P2 Viewing, Backup and File Management for Field Acquisition.



DVCPRO HD DVCPRO 50 DVCPRO IX

AG-HPG10

Memory Card Portable Recorder (P2 gear)

Plug and Play Convenience Comes to P2 Viewing

- With its two P2 card slots and LCD monitor, you have super-quick access to thumbnail displays and viewing of camera-recorded content.
- HD/SD SDI output and component/composite output enable external monitoring and microwave feeds.
- Down-conversion (squeeze/letterbox/side cut) allows HD content to be viewed on an SD monitor.
- Multi-format, multi-codec, 59.94 Hz/50 Hz operation supports the HD/SD playback and recording* of the AG-HVX200A series.

*No recording possible (playback only) in 720pN (native) mode.

Versatile Backup Recording, File Copying, and More

- Records IEEE 1394 input onto P2 cards for camera-recorder backup.
- Copies P2 files onto an external hard disk via IEEE 1394 or USB 2.0 (host) interface.
- Uploads or downloads files to or from a PC-based Non-linear editor just like the P2 Drive, using the IEEE 1394 or USB 2.0 (device) interface.
- Repeat playback enables easy sales promotion or demonstration use.
- Supports simplified Wave Form Monitor and Vector Scope display

Compact, Lightweight, Battery-Operated Mobility

- At about 1.1 kilograms (approx. 2 lbs) for the main unit, the compact P2 Gear is easily carried with one hand.
- Battery-operation boosts convenience (with a 5400 mAh battery pack).
- AC power can be supplied via the AC adaptor (included).
- Highly reliable, durable memory card recording means no-moving-parts reliability, without the concerns of a tape mechanism.

AG-HPG10 Specification

Power Source :	DC7.2 V with battery, DC7.9 V with DC input
Power Consumption :	approx. 11 W
Weight:	approx. 1.1 kg (2.4 lbs)
Dimensions (W x H x D):	104 mm x 83 mm x 227 mm (4-1/8" x 3-5/16" x 8-15/16") without rubber shoes

Mobile HD/SD Recorder for Video Village, HD Assist, Recording, Viewing and On-Air Playback



AVC **INTRA** **DVCPRO HD** **DVCPRO 50** **DVCPRO** **IX**

AJ-HPM110

Memory Card Recorder (P2 mobile)

HD/SD Multi-Format include Native 1080/24p

- 1080i and 720p recording and playback. 59.94 Hz/50 Hz switchable for any HD system worldwide.
- Supports AVC-Intra 100 and AVC-Intra 50 codec with optional AJ-YBX200G codec board.
- 1080/24PsF input/output, native 1080/24p recording with optional AJ-YBX200G codec board.
- 8 channel, high-quality digital audio.
- SD (standard definition) codec (480/60i and 576/50i) supports DVCPRO 50, DVCPRO, and DV.
- Built-in up-converter, down-converter and cross-converter for playback.

Editing and On-Air Playback Functions

- Equipped with six P2 card slots and one SD card slot.
- Immediate playback using clip thumbnail display on 9" LCD monitor.
- Production of clips from external VTR sources via RS-422A remote
- Jog/shuttle dial and large audio fader.
- Creating New Clips From the Playlist (Editcopy function)
- Dubbing function (simplified voice-over function) for easy dialog addition.

Mobile Body and Various Interface

- USB 2.0: Host/device dual-mode capability. In host mode, files can be copied onto an external hard disk.
- IEEE 1394a: Connection to DVCPRO HD equipment for transferring compressed HD/SD streams. Backup recording also possible*.
- HD/SD switchable SDI IN/OUT.
- Analog IN/OUT, RS-422A Remote IN, TC IN/OUT.
- Compact, lightweight, durable. DC or AC operation.

*IEEE 1394 input/output not possible in AVC-Intra mode.

AJ-HPM110 Specification

Power Source :	AC 100 V to 240 V, 50 Hz/60 Hz / DC 12V
Power Consumption :	AC: 60W, DC: 12V/4.8A (full-option)
Weight:	6.5 kg (14.3 lbs)
Dimensions (W x H x D):	301 mm x 120 mm x 412 mm (11-13/16" x 4-12/16" x 16-1/4") without rubber shoes

HD/SD Multi-Format Studio Recorder with Versatile IT and Broadcasting System Interfaces



AVC **INTRA** **DVCPRO HD** **DVCPRO 50** **DVCPRO** **IX**

AJ-HPS1500

Memory Card Recorder/Player

HD/SD Multi-Format Editing and On-Air Transmission

- 1080i, 720p and 480i (59.94 Hz/50 Hz) recording and playback.
- Supports AVC-Intra 100 and AVC-Intra 50 codec with optional AJ-YBX200G codec board.
- 8 channel, high-quality digital audio.
- Built-in up-converter, down-converter and cross-converter for playback.
- Equipped with six P2 card slots and one SD card slot.
- LCD monitor built into front panel. Clip can be selected quickly on the thumbnail display with jog and dial controls.
- Playlist function enables speedy simplified editing of up to 100 events.

Interfaces for Both IT and Broadcast Systems

- USB 2.0: Host/device dual-mode capability. In host mode, files can be copied onto an external hard disk.
- 100 Base-TX/10 Base-T Ethernet: P2 files can be transferred using ftp/ Samba.
- HD/SD SDI I/O and AES/EBU digital audio IN/OUT.
- Analogue IN/OUT, RS-422A Remote IN, TC IN/OUT.
- 4U-size height for mounting into a 19 inch rack (with optional adaptor).

AJ-HPS1500 Specification

Power Source :	AC 100 V to 240 V, 50 Hz/60 Hz
Power Consumption :	Max. 80 W (Full option), 72W (No option)
Weight:	14 kg (30.9 lbs)
Dimensions (W x H x D):	424 mm x 175 mm x 415 mm (16-3/4" x 6-15/16" x 16-3/8") excluding feet, connector and jog dial



Portable, Network-Connectable P2 Rapid Writer for High-Speed Data Copying from P2 Cards to Large-Capacity HDDs



AJ-HRW10G

Hard Disk Storage Unit (P2 Rapid Writer)

New

[Scheduled for release in May 2009]

Transfers Files from P2 Cards to a Removable HDD at High Speed

- Internal P2 drive with five P2 card slots and PCI Express interface transfers data to an HDD at high speed.
- 5-inch bay allows installation of two commercial 3.5 inch HDDs*1 for use as removable media.
- Supports RAID1 (mirroring) for enhanced reliability. Also enables use in the normal 2-HDD setting (JBOD mode).
- FAT32 file format allows editing without digitizing when using a Windows/Mac/Linux-base nonlinear editor.
- Files can be shared through gigabit LAN (1000 Base-T) networks.*2

*1: Recommended HDD specifications: 3.5-inch type, SATA-II interface, 7,200 rpm or higher (commercially available HDD case for 5-inch bay is required for installation to the main unit.)

*2: Transfer speed varies depending on the network environment and host PC environment. HDD data is Read Only.

Portable Touch Panel with Preview Capability

- The 5-inch color LCD monitor with touch panel mounted on the front panel allows various operations, such as previewing content and copying files, as well as easy function setting.
- Lets you confirm P2 card and HDD recording status, clip properties and metadata. Metadata can be edited by using a software keyboard.
- Auto Copy mode can be set for automatic copy starts when the P2 card is inserted.
- Simplified playback of clips recorded by AVC-Intra and DVCPRO HD/DVCPRO 50/DV codecs.*3
- Provided with an Anton Bauer battery plate and carrying handle for excellent field portability.

*3: Black frames may be generated between clips, but this is not a malfunction. Since frames are dropped during AVC-Intra clip playback, the accuracy of the playback time cannot be guaranteed.

AJ-HRW10G Specification

Power Source :	DC 12 V, with battery or AC adaptor
Power Consumption :	70 W
Weight:	approx. 6.3 kg (13.9 lbs)
Dimensions (W x H x D):	368 mm x 177 mm x 303 mm (14-1/2" x 7" x 11-15/16")
PC System Requirement:	Connectable with Microsoft Network via Gigabit LAN

Portable Hard Disk Unit Copies P2 Card Data at High Speed



AJ-PCS060G

Portable Hard Disk Unit (P2 store)

- A portable hard disk unit with a P2 card slot, P2 store quickly and easily copies data from P2 cards.
- It runs on DC power, so you can use batteries or an AC adaptor.
- USB 2.0 connection makes it easy to link to a PC* or a P2 mobile.

AJ-PCS060G Specification

Power Source :	DC 7.2 V with battery pack, DC 7.9 V with AC adaptor
Power Consumption:	Max. 1.3 A (0.8 A when standard operation)
Weight:	0.65 kg (1.4 lbs)
Dimensions (W x H x D):	90 mm x 45 mm x 180.5 mm (3-9/16" x 1-13/16" x 7-1/8")
PC System Requirement:	Microsoft® Windows XP Professional (later SP2), Microsoft® Windows 2000 (later SP4), Mac OS X (10.4.2, 10.4.6) for PowerPC (exception of Intel CPU Mac OS X computers)

*The hard-disk drive is a high-precision device, and partial damage, or in the worst case, the loss of data can occur under some operating conditions. Do not consider the internal hard-disk drive as a permanent data storage device. No guarantee against data damage or loss is implied.

P2 Card Drive with Five P2 card Slots and High Speed PCI Express Interface



AJ-PCD35

Memory Card Drive (P2 drive)

New
PCI Express Interface

- High speed data transfer to Windows PC/Mac based Nonlinear Editor*.
- Install the P2 drive into a 5 inch bay on a desktop PC*.
- With the AC adaptor, you can use it as a stand-alone external drive.

AJ-PCD35 Specification

Power Source:	AC 100 V to 240 V (0.9 A to 0.5 A) 50 Hz / 60 Hz, DC 16 V (0.8 A) with AC adaptor, DC 12 V (1.0 A) when PC built-in
Weight:	1.2 kg (2.6 lbs)
Dimensions (W x H x D):	148.4 mm x 42.5 mm x 199.5 mm (5-7/8" x 1-11/16" x 7-7/8") excluding protruding parts
PC System Requirement:	Microsoft® Windows Vista Business (32 bit/64 bit) SP1, Windows XP Professional 32 bit (SP2, SP3), Macintosh OS X 10.4.11/10.5.5 (Intel Mac), 1 GB or more memory

*The included P2 driver must be installed in the Windows PC or Mac computer. Read "Notes Regarding the Handling of P2 Files Using a PC" on the back page.

P2 Card Drive with Five P2 card Slots and USB 2.0/IEEE 1394b Interfaces



AJ-PCD20 *USB2.0/IEEE 1394b Interface* Memory Card Drive (P2 drive)

- High speed data transfer to Windows PC/Mac based Nonlinear Editor*.
- Install the P2 drive into a 5 inch bay on a desktop PC*.
- With the AC adaptor, you can use it as a stand-alone external drive.

AJ-PCD20 Specification

Power Source:	AC 100 V to 240 V (0.9 A to 0.5 A) 50 Hz / 60 Hz, DC 16 V (0.8 A) with AC adaptor, DC 12 V (1.0 A) when PC built-in
Weight:	1.2 kg (2.6 lbs)
Dimensions (W x H x D):	148.4 mm x 42.5 mm x 199.5 mm (5-7/8" x 1-11/16" x 7-7/8") excluding protruding parts
PC System Requirement:	Microsoft® Windows Vista Business 32 bit/64 bit) -SP1, Windows XP Professional 32 bit (later SP2), Windows 2000 (later SP4), Macintosh OS X 10.4, 10.5, 512 MB or more memory

*The included P2 driver must be installed in the Windows PC or Mac computer. Read "Notes Regarding the Handling of P2 Files Using a PC" on the back page.

Large Data Storage Capacity, High Transfer Speed, Superb Reliability. Solid-State Memory Card for Professional Use. New, Affordable E Series Is Also Introduced.



AJ-P2C064AG/P2C032AG/P2C016AG Memory Card (P2 card A series)

A Large Data Storage Capacity and High Transfer Speed

- With four SD cards packaged into one, the P2 card offers four times the data storage capacity and four times the transfer speed of the SD card.
- The 64-GB card (AJ-P2C064AG) achieves a long recording time. Cards with larger capacities are also scheduled for the future.
- Complies with the Type-II PC Card Standard (Card Bus) for direct plug-in to the PC card slot of a laptop PC.*1

High Reliability Withstands Repeated Use

- Highly reliable, solid-state memory resists shock, vibration, and temperature changes.
- Ensures a long service life with repeated recording and initialization. The low-priced E Series is also introduced.*2
- An individual serial number, bar code, and write-protect switch ensure strict security.
- Thin PC-card size and ultra-light weight of 45 grams.

*1: The included P2 driver must be installed in a Windows PC or Mac computer. To use the P2 card, the driver must be updated in some P2 products. Read "Notes Regarding the Handling of P2 Files Using a PC" on the back page.

*2: E Series: Card replacement interval is about five years when entire (100%) data is rewritten once a day. The E Series cannot be used with the AG-CPD10.



New

AJ-P2E064XG/P2E032XG/P2E016XG Memory Card (P2 card E series)

[Scheduled for release in May (32GB, 16GB) or August (64GB) 2009]

P2 card Specification

Interface:	CardBus (PC Card standards)
Power Source:	DC 3.3 V ±0.3 V
Power Consumption:	approx. 1.5 W approx. 2.5 W for E series with AJ-PCD35
Operating Temperature/Humidity:	-20 °C to 60 °C/5 % to 90 % (no condensation)
Storage Temperature/Humidity:	-40 °C to 80 °C/5 % to 90 % (no condensation)
Weight:	AJ-P2C064AG: approx. 50 g Others: approx. 45 g
Dimensions (W x H x D):	54 mm x 5 mm x 85.6 mm

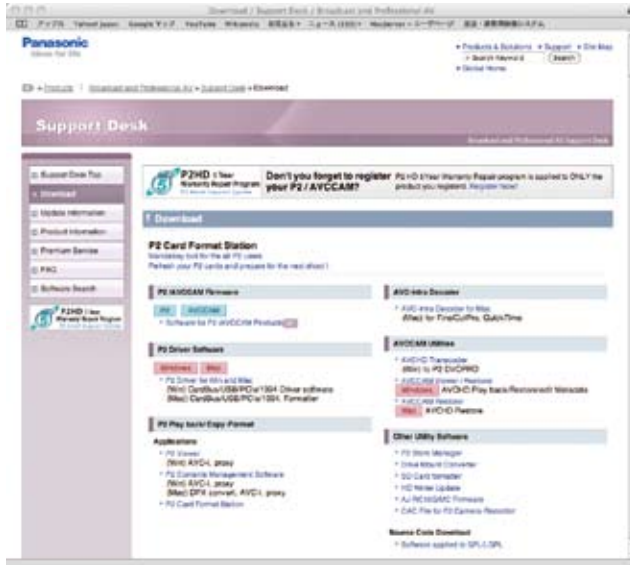
Capacity	AJ-P2C016AG AJ-P2E016XG	AJ-P2C032AG AJ-P2E032XG	AJ-P2C064AG AJ-P2E064XG
Recording Capacity:*	approx. 16 GB	approx. 32 GB	approx. 64 GB

Rec/Play Time	AJ-P2C016AG AJ-P2E016XG	AJ-P2C032AG AJ-P2E032XG	AJ-P2C064AG AJ-P2E064XG
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AVC-Intra 100 1080/23.98pN, 24pN: 720/23.98pN: 1080/59.94i, 50i, 720/59.94p, 50p:	approx. 20 min. approx. 40 min. approx. 16 min.	approx. 40 min. approx. 80 min. approx. 32 min.	approx. 80 min. approx. 160 min. approx. 64 min.
AVC-Intra 50:	approx. 32 min.	approx. 64 min.	approx. 128 min.
DVCPRO HD:	approx. 16 min.	approx. 32 min.	approx. 64 min.
DVCPRO 50:	approx. 32 min.	approx. 64 min.	approx. 128 min.
DVCPRO/DV:	approx. 64 min.	approx. 128 min.	approx. 256 min.

* Total card capacity includes space for data management such as system data, therefore, actual usable area is less than capacity indicated on the card.

Mandatory tool for the all P2 users.
 Visit <<https://www.pavc.panasonic.co.jp/pro-av/support/desk/e/index.htm>>



Support Desk

Website for Downloading P2 Software

P2 Driver Win Mac

The driver software is required for Windows PC or Mac to recognize the P2 Card.

*Include USB Driver, PCI Express(Pcie) Driver, CardBusDriver, IEEE1394 Driver, P2 Store Manager ,and P2 Card Formatter for Mac (only for AJ-PCD20/PCD35/Card Bus Driver)

P2 Viewer Win

This viewing application lets you play P2 files on a Windows PC. Please note that the newest P2 driver must be installed on your PC to use this application.

*This application does not support Mac. For Macintosh computers, please use the P2 Content Management Software.

P2 Contents Management Software Win Mac

In addition to letting you view P2 content, this application program allows you to ingest data into the HDDs of ordinary PCs, and also manage data within the PC. Please note that the newest Windows or Mac P2 driver must be installed on your PC to use this application.

Applicable Functions

Windows Version 1.2:	Supports AVC-Intra files and proxy files.
Mac Version 1.4:	Supports AVC-Intra files and proxy file DPX conversion function (which runs only on Intel Mac)

*DPX (Digital Picture Exchange) is an image file format for use in digital film work. Plug-in software must be separately installed for converting from AVC-Intra 100 to DPX files. For details, please see the P2 CMS explanation on page 18.

P2 Card Format Station Win

P2 Card Format Station enables users to perform format, update firmware, and error check the P2 Card through PCMCIA card drive on the PC or P2 Drive AJ-PCD10/PCD20.

*AJ-PCD35 is not compatible with this software. For more information, please visit us at <<https://www.pavc.panasonic.co.jp/pro-av/support/desk/e/index.htm>>

PC operating condition

OS: Windows 2000 or XP or Vista

Latest P2 driver for Windows is installed.

Log in with Administrator status

P2 Store Manager Win

Application for P2 Store (AJ-PCS060G).

Drive Mount Converter Win

The Drive Mount Converter is a Windows application for managing Type-S hard disks on which P2 card data is copied.

*A Type-S hard disk refers to one that is connected, via USB 2.0 or IEEE 1394, to a P2 device that is equipped with a USB Host or 1394 Host function. The Type-S hard disk is used for copying P2 card data. Please check the Operating Manual for your P2 device to determine whether or not it supports the configuring of a Type-S hard disk. Also, be sure to use a Type-S hard disk that allows connection via USB 2.0 or IEEE 1394.

AVC-Intra Software Decoder for Mac Mac

(AVC-Intra to QuickTime Transcoder software for Apple FinalCutPro) This Panasonic AVC-Intra Software Decoder enables users to preview and import AVC-Intra format clips recorded by Panasonic recorders on FinalCutPro, by installing on Mac OS installed FinalCutPro software.

Please select version of AVC-Intra Decoder for version of FinalCutPro.

Ver1.1.1 for FinalCutPro6.0.2

Ver1.2.1 for FinalCutPro6.0.3

* Notice: When previewing AVC-Intra on MacBookPro, "Limited Preview" is displayed on Log and Transfer window of FinalCutPro and audio is not able to be monitored.

AVCHD Transcoder Win

This application software transforms AVCHD clips recorded by Panasonic camera such as AVCCAM into P2 DVCPRO HD format. This enables users to edit the clips on non-linear editors which do not support AVCHD but P2 DVCPRO HD.

Available format

1080i59.94, 1080i50 and the following HD format that AG-HMC150 series cameras record are supported. 1080p29.97, 1080p25, 1080p23.98, 720p59.94 720p50, 720p29.97, 720p25, 720p23.98

*Cross-conversion is not available.

*Please control the data size under 4GB when you export a clip to a P2 card. The export speed to a P2 card is slower than a hard disk drive.

*This application software transforms AVCHD clips recorded by Panasonic camera only.

Driver Software for P2 Products

The firmware inside each product is the newest version available. Upgrading is possible with the use of an SD card.

CAC File for P2 Camera-Recorder

(for AJ-HPX3700/HPX2700/HPX3000/AG-HPX500)

The CAC function of the camera corrects the registration error caused by the slight chromatic aberration that the lens cannot compensate for. This minimizes color bleeding into the surrounding image areas. Lenses compatible with the CAC function whose CAC data is registered in the camera will automatically start CAC operation.

Supports P2 HD. This Windows PC utility makes it easy to view and copy P2 files.



▲ Windows Vista Version

Easy to Ingest and Manage P2 Content. The Newest Mac Version is compatible with PCI Express Interface for AJ-PCD35 drive.



▲ Mac Version

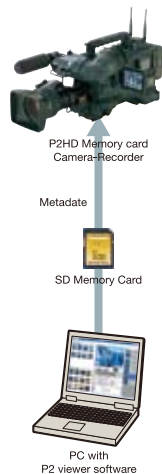
P2 Viewer 3.6

P2 Application Software (Download Free)

- Supports P2 clips (AVC-Intra, DVCPRO HD, DVCPRO 50, DVCPRO, DV) and proxy files.
- Displays shot markers, voice memos, HD 16:9 wide, and proxy clip information as thumbnail icons.
- Indicates metadata as tags in clip filtering displays.
- Displays the properties of each clip and allows certain properties to be edited.
- Lets you create metadata for uploading to a P2 cam using an SD Memory Card.
- Lets you play, delete, move, or write text memos and voice memos.
- Lets you copy clips to other P2 cards or hard disks.
- P2 users can download the latest version of this software from a special Web site, free of charge.



▲ Metadata edit dialog



PC System Requirements for P2 Viewer 3.6

Operating System:	Microsoft® Windows 2000 (SP4 or later) Microsoft® Windows XP Professional (SP2 or later) Microsoft® Windows Vista (Business or later)
Requirements:	Microsoft® DirectX 9.0b or later must be installed. P2 driver must be installed.
Recommended PCs:	SD: Pentium 4, 1.5 GHz or higher; 512 MB RAM or more (1 GB or more for Windows Vista) HD: Pentium D, 3.2 GHz or higher; 1 GB RAM or more
Languages Supported:	Japanese, U.S. English, Chinese (automatic recognition)

*DVCPRO HD clips can only be played by PCs that are equipped with a CPU that supports SSE2 commands, such as Pentium M, Pentium 4, Pentium D, and Celeron D.

P2CMS Ver.1.2 for Win, Ver.1.4 for Mac

P2 Contents Management Software (Download Free)

[Ver.1.2 (for Win) Supported AVC-Intra]
[Ver.1.4 (for Mac) Supported AVC-Intra]

- Mac 1.3 version supports a plug-in for converting AVC-Intra 100 files to DPX files. This helps to speed up and lower the cost of film production.
- P2 Viewer is built in and able to view P2 contents easily. In addition to the normal play back, able to view with +/- 4x speed at 0.5x steps.
- Display P2 contents by three modes; Thumbnail, Detail and Text.
- Contents can be speedily retrieved by automatically constructing the data base by using the metadata of P2 contents at the time of ingestion. Able to add, change and delete metadata.
- Quick search of P2 contents by using metadata keyword or categorized view.
- Property window indicate lists of P2 contents metadata. Some metadata can be changed by editing property.
- Text memo and voice memo are can be indicated, changed, deleted or added.
- Export: Able to handout and keep by copying P2 contents onto HDD and Optical media.
- Back up: Able to copy P2 contents onto optical media by the native P2CMS format. It aims to back up P2 contents registered in data base. When HDD trouble, P2CMS can restore P2 contents.
- Archive: It automatically delete MXF files of Video and Audio from HDD after copying to reduce the capacity of HDD.

Operating Environment (Windows)

- Microsoft® Windows XP Professional SP2. (Windows 2000 and Windows Vista are not supported.)
 - Microsoft® DirectX 9.0b or newer version must be installed. (This can be downloaded from the Microsoft Website)
 - Microsoft® .NET Framework 2.0 must be installed. (This can be downloaded from the Microsoft website automatically during installation.)
 - Full-color (32 bit) display, and an audio function must be equipped.
 - The P2 driver included with the P2 product must be installed.
- *To play back the AVC-Intra format, it is necessary to download the AVC-Intra decoder. To play back Proxy data, it is necessary to download the MPEG-4 decoder. DVCPRO HD format and AVC-Intra format clips cannot be played back with PCs that do not have a CPU that supports SSE2 instructions, such as Pentium M, Pentium 4, Pentium D and Celeron D.

Recommended Environment for Playing Codec Files (Windows)

DVCPRO HD: 3.2 GHz or greater Pentium D, 1 GB or greater RAM
AVC-Intra 50: 2.66 GHz or greater Intel Core2 Duo processor, 1 GB or greater DDR2-667 RAM
AVC-Intra 100: 3 GHz or greater dual-core Xeon processor, 1 GB or greater DDR2-667 RAM

Operating Environment (Macintosh)

- Mac OS X 10.4.11 (Intel Mac)
 - Mac OS X 10.5.5 (Intel Mac)
 - Quick Time 7.5.5 or greater
 - 2 GHz or greater Intel Core Duo processor.
 - 1 GB or greater RAM
 - 1,024 x 768 or greater display
 - The P2 driver included with the P2 product must be installed.
- *To play back the AVC-Intra format, it is necessary to download the AVC-Intra decoder. When you convert into DPX files, it is necessary to download the AVC-Intra decoder and DPX Plug-in. The system requirements of the installed software influences the system requirements of the application.

Recommended Environment to Play AVC-Intra Format Clips, and Convert into DPX Files (Macintosh)

- Dual CPU configuration quad-core Xeon processor
- 2 GB or greater RAM

Optional Accessories

P2 CAM (AJ-HPX3700/HPX2700/HPX3000/HPX2000/HPX2100, AG-HPX500 SERIES/HPX300 SERIES),
P2 HANDHELD (AG-HPX170/HVX200 SERIES) OPTIONS



AJ-CVF100G

New



1" HD Color EVF
(Will be available in 2nd quarter, 2009.)

Utilizing a 1-inch LCOS (Liquid Crystal On Silicon) display panel, the AJ-CVF100G provides cinematographers with accurate colors, fast motion response, excellent resolution, and smooth pixel edges for a natural look and feel, which minimizes the possibility of misdirected shots.

- Applicable Camera-Recorder: AJ-HPX3700, AJ-HPX2700, AJ-HPX3000, AJ-HPX2000, AJ-HPX2100, AJ-HDC27H, AJ-HDX900
- Weight: 750 g (1.7 lbs)
- Dimensions (W x H x D): 240 mm x 80 mm x 206 mm (9-1/2" x 3-3/16" x 8-1/8")
- Power Consumption: 5.0 W



AJ-HVF21G

2" HD EVF

59.94 Hz/50 Hz switchable



AJ-VF20WB

2" EVF 16:9/4:3 Switchable



AJ-VF15B

1.5" EVF for 4:3



BT-LH80WU

7.9" Wide LCD HD/SD Monitor

[SDI (HD/SD) standard equipped]



BT-CS80G

VF Cable

(Viewfinder Cable, DC Code)



SHAN-TM700

Tripod Adaptor



AJ-MC900G

Stereo Microphone



AJ-MC700

Microphone Kit



AG-MC200G

XLR microphone



CGA-D54/CGA-D54s

Battery Pack (5.4 Ah)



AG-B25

AC adaptor kit for
AG-HVX200A series



AJ-GPS910G

GPS Unit



AJ-SC900

Soft Carrying Case

*Not available in some area



SHAN-RC700

Rain Cover

*Not available in some area



AJ-YBX200G

AVC-Intra Codec Board



AJ-YA350AG

HD/SD Input Board for

AJ-HPX3000/AJ-HPX2000/
AJ-HPX2100



AJ-RC10G
RCU (Remote Control Unit)
with 10m remote control cable

AJ-C10050G
Remote Control Cable (50 m)

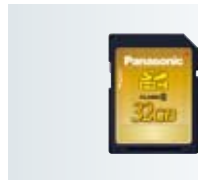


Camera System
(Will be available later 2009.)

AG-BS300
Base Station
AG-CA300G
Remote Control Camera Adapter
AG-EC4G
Extension Control Unit (ECU)
AG-YA500G
VF Interface Box



AJ-YAX800G
Video Encoder Card
*Camera-Recorder software upgrade is required.



SD/SDHC Memory Card



AJ-P2C064AG
AJ-P2C032AG
AJ-P2C016AG
P2 Card (A series)



AJ-P2E064XG
AJ-P2E032XG
AJ-P2E016XG
P2 Card (E series)

New
New
New

OTHER MANUFACTURER'S PRODUCTS



FUJINON 2/3" Zoom Lens



CANON 2/3" Zoom Lens



Anton/Bauer Dionic Battery



Anton/Bauer Hytron Battery



AntonBauer Ultra Light

Optional Accessories

P2 cam, P2 handheld options		AJ-HPX3700	AJ-HPX2700	AJ-HPX3000	AJ-HPX2000 AJ-HPX2100	AG-HPX500 series	AG-HPX300 series	AG-HVX170 series AG-HVX200A series
1 HD Color EVF	AJ-CVF100G	Yes*1	Yes*1	Yes*1	Yes*1			
2 HDEVF	AJ-HVF21G	Yes	Yes	Yes	Yes			
2 EVF	AJ-VF20WB			Yes*1*2	Yes*1*2	Yes*2		
1.5 EVF	AJ-VF15B			Yes*1*2	Yes*1*2	Yes*2		
7.9 Wide LCD HD/SD Monitor	BT-LH80WU	Yes	Yes	Yes	Yes	Yes	Yes	
VF Cable set (for BT-LH80WU)	BT-CS80G	Yes	Yes	Yes	Yes	Yes	Yes	
FUJINON 2/3 Zoom Lens		Yes	Yes	Yes	Yes	Yes		
CANON 2/3 Zoom Lens		Yes	Yes	Yes	Yes	Yes		
Anton/Bauer		Yes*4	Yes*4	Yes*4	Yes*4	Yes*4	Yes*4	
AntonBauer Ultra Light		Yes	Yes	Yes	Yes	Yes	Yes	
AC adaptor kit	AG-B25							Yes
Battery Pack (5.4 Ah)	CGA-D54 CGA-D54s							Yes
Soft Carrying Case	AJ-SC900	Yes	Yes	Yes	Yes	Yes	Yes	
Rain Cover	SHAN-RC700	Yes	Yes	Yes	Yes	Yes	Yes	
Tripod Adaptor	SHAN-TM700	Yes	Yes	Yes	Yes	Yes	Yes	
Stereo Microphone	AJ-MC900G	Yes	Yes	Yes	Yes			
Microphone Kit (monaural)	AJ-MC700					Yes	Yes	
Microphone Holder (monaural)	AG-MC200G					Yes	Yes	Yes
Base Station	AG-BS300	Yes	Yes	Yes	Yes	Yes	Yes	
Camera Adapter	AG-CA300G	Yes	Yes	Yes	Yes	Yes	Yes	
Extension Remote Control Unit	AG-EC4G	Yes	Yes	Yes	Yes	Yes	Yes	
VF Interface Box	AG-YA500G	Yes	Yes	Yes	Yes	Yes		
RCU (Remote Control Unit)	AJ-RC10G	Yes	Yes	Yes	Yes	Yes	Yes	
Remote Control Cable (for AJ-RC10G)	AJ-C10050G	Yes	Yes	Yes	Yes	Yes	Yes	
GPS Unit	AJ-GPS910G	Yes	Yes	Yes	Yes			
Video Encoder Card	AJ-YAX800G	Yes	Yes	Yes	Yes		Yes	
HD/SD Input Board	AJ-YA350AG			Yes	Yes			
AVC-Intra Codec Board*5	AJ-YBX200G				Yes			
SD/SDHC Memory Card		Yes	Yes	Yes	Yes	Yes	Yes	Yes
P2 Card (A series)*5	AJ-P2C064AG AJ-P2C032AG AJ-P2C016AG	Yes	Yes	Yes	Yes	Yes	Yes	Yes
P2 Card (E series)*5	AJ-P2E064XG AJ-P2E032XG AJ-P2E016XG	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Yes: It is possible to use it. *1: The MENU setting on the camera-recorder is required. Moreover, it becomes a down-converted image. *2: Either 59.94 (60) Hz or 50Hz can be used. *3: A supplied accessory for AG-HPX500. *4: The battery pack that the model can use respectively is different.

P2 PORTABLE (AG-HPG20), P2 GEAR (AG-HPG10), P2 MOBILE (AJ-HPM110), P2 DECK (AJ-HPS1500), P2 STORE (AJ-PCS060G), P2 RAID WRITER (AJ- HRW10G) OPTIONS



AJ-MA75P
Rack Mount Adapter



AJ-YBX200G
AVC-Intra Codec Board



CGA-D54/CGA-D54s
Battery Pack (5.4 Ah)



AG-B25
AC adaptor kit for
AG-HVX200A series



SD/SDHC Memory Card



AJ-P2C064AG
AJ-P2C032AG
AJ-P2C016AG
P2 Card (A series)



AJ-P2E064XG
AJ-P2E032XG
AJ-P2E016XG
P2 Card (E series)

New
New
New

OTHER MANUFACTURER'S PRODUCTS



Anton/Bauer Dionic Battery



Anton/Bauer Hytron Battery

P2 gear, P2 mobile, P2deck, P2store options	AG-HPG20	AG-HPG10	AJ-HPM110	AJ-HPS1500	AJ-HRW10	AJ-PCS60G
Rack Mount Adapter	AJ-MA75P			Yes		
AVC-Intra Codec Board*1 Battery Pack	AJ-YBX200G		Yes	Yes		
Anton/Bauer					Yes	
Battery Pack (5.4 Ah)	CGA-D54/CGA-D54s	Yes	Yes			Yes
AC adaptor kit	AG-B25	Yes	Yes		Yes	Yes
SD/SDHC Memory Card		Yes	Yes	Yes	Yes	
P2 Card (A series)*1	AJ-P2C064AG AJ-P2C032AG AJ-P2C016AG	Yes	Yes	Yes	Yes	Yes
P2 Card (E series)*1	AJ-P2E064XG AJ-P2E032XG AJ-P2E016XG	Yes	Yes	Yes	Yes	Yes

Yes: It is possible to use it. *1: The camera-recorder software must be upgraded to the latest version. For details, visit <https://www.pavc.panasonic.co.jp/pro-av/>

Optional Accessories

HD/SD LCD MONITORS

Panasonic LCD monitors help to maximize the mobility and comfort of a P2 production system. Select from three types. The 8.4" model also serves as an EVF in the field, and the attractively designed wide-screen 17" or large-screen 25.5" model saves space in OB vans or on the desktop. All models feature the superb image quality, high-speed response, wide viewing angle, and HD/SD multi-format capability that broadcast applications demand.



BT-LH80WU
7.9" Wide LCD HD/SD Monitor



BT-LH900A
8.4" LCD HD/SD Monitor



BT-LH1710
17" Wide LCD HD/SD Monitor

NEW



BT-LH1760
120Hz/100Hz Drive
17" Wide LCD HD/SD Monitor

Double Speed



BT-LH2550
25" Wide LCD HD/SD Monitor

Wide Color Space

The P2 Partners



- Adobe® Creative Suite® 4 Production Premium
 - Adobe® Creative Suite® 4 Master Collection
 - Adobe® Premiere® Pro CS4
- www.adobe.com



- Final Cut Studio 2
- www.apple.com

Autodesk



- Inferno® 2009
- Smoke® 2009
- Flame® 2009
- Flint® 2009

www.autodesk/me.com

Avid



Avid® Media Composer® family
Avid NewsCutter® family
Avid Liquid® family

www.avid.com

bitcentral



- Precis™ • Oasis™ • Newswheel™
- www.bitcentral.com

dalet



- DaletPlus News Suite
- www.dalet.com

DV Film



- RayLight / RayLight for Mac
 - MXFX
- www.dvfilm.com/raylight/mac/index.htm
www.dvfilm.com/MXFX



- XT(2)
Director
CleanEdit
Multicam(LSM)
- www.evs.tv/

FOCUS



- ProxSys
 - FireStore FS-100
 - HD file Converter Pro
- www.focusinfo.com

FOR.A



- MediaConcierge™
- <http://www.for-a.com/>

THOMSON



- K2 Summit Production Client
 - Aurora Suite—Ingest & Edit
 - EDIUS Nonlinear Editor
 - FIRECODER AVC-Intra Encoder
- www.thomsongrassvalley.com

HARRIS



- NEXIO AMP™
 - Velocity ESX™
 - Velocity XNG™
- www.broadcast.harris.com

Codec by MAIN CONCEPT



- DVCPROHD Codec SDK & plug-in for Adobe Premiere Pro
 - AVCHD Transcoder v2.1
 - MainConcept™ reference Transcoding Application
- www.mainconcept.com

matrox



- Matrox Axio™ HD/LE
 - Matrox RT.X2™
- www.matrox.com/

M O G SOLUTIONS



- Toboggan MediaTransfer
 - The Scribe
- www.mog-solutions.com

OMNEON



- Spectrum™
 - MediaDeck™
 - MediaGrid™
- www.omneon.com

opencube



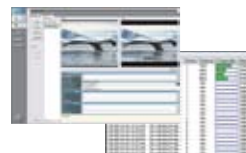
- New with version 2.2
 - AVC-Intra support
 - Automatic Ingest into Avid Interplay
- www.opencubetech.com



- NewsBox HD
 - sQ Server
 - sQ Edit Plus
 - iQ / eQ
- www.quantel.com



RHOZET



- Carbon Coder™
 - Carbon Server™
- www.rhozet.com

TELESTREAM



- Pipeline™ HD Dual
 - FlipFactory® ProHD
 - Episode®
- www.telestream.net

Please refer to the latest Non-linear Compatibility Information, P2 Support and Download and Service Information, etc. at panasonic web site.



<https://www.pavc.panasonic.co.jp/pro-av/index.html>

*NOTES REGARDING THE HANDLING OF P2 FILES USING A PC

Mounting and Transferring Files

The PC must be installed with the included P2 driver in order to recognize, copy and transfer P2 files. This driver is also necessary when using the PC card slot and when handling P2 files stored on a hard-disk device, such as P2 store. The included P2 driver is compatible with Windows Vista, Windows XP, Windows 2000 and Mac OS X. For other operating requirements, refer to the P2 installation manual. The P2 driver and the P2 installation manual can be downloaded free from a Panasonic website. Visit <https://www.pavc.panasonic.co.jp/pro-av/> and click "P2 Support and Download."

Preview and Nonlinear Editing

To preview (play) P2 files on a PC, it is necessary to install P2 Viewer software (downloadable for free, for Windows only) or P2 CMS content management software (downloadable for free, for both Windows and Mac), both from Panasonic, or P2-compatible editing software available from other companies (for details, visit https://www.pavc.panasonic.co.jp/pro-av/sales_o/p2/partners.html). Note that each software places specific requirements on the operating environment, and the operating environment must meet additional requirements to play and edit HD content on Windows PCs and Macs. For P2 Viewer or P2 CMS download and operating requirement information, visit <https://www.pavc.panasonic.co.jp/pro-av/>. For operating requirements and details of other P2 editing software, visit the website of the relevant software manufacturer.

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Panasonic®

Panasonic Corporation
Systems Business Group
 2-15 Matsuba-cho, Kadoma, Osaka 571-8503
 Japan
 Phone +81 6 6901 1161 Fax +81 6 6908 5969
<https://www.pavc.panasonic.co.jp/pro-av/>

[Countries and Regions]

Argentina	+54 1 308 1610	Kuwait	+96 522431385
Australia	+61 2 9986 7400	Lebanon	+96 11665557
Bahrain	+973 252292	Malaysia (PM & PSE)	
Belgium	+32 (0) 2 481 04 57	Mexico	+60 3 7809 7888
Bulgaria	+359 2 946 0786	Montenegro, Serbia	+52 55 5488 1000
Brazil	+55 11 3889 4035		
Canada	+1 905 624 5010	Netherlands	+41 (0) 26 466 25 20
China	+86 10 6515 8828	New Zealand	+31 73 64 02 577
(Hong Kong)	+852 2313 0888	Norway	+64 9 272 0100
Czech Republic	+420 236 032 552/511	Pakistan	+47 67 91 78 00
Denmark	+45 43 20 08 57	Palestine	+92 5370320 (SNT)
Egypt	+20 2 23938151	Panama	+972 2 2988750
Finland, Latvia, Lithuania, Estonia		Peru	+507 229 2955
	+358 (9) 521 52 53	Philippines	+51 1 614 0000
France	+33 (0) 1 55 93 66 67	Poland	+63 2 633 6162
Germany, Austria	+49 (0) 611 235 401	Portugal	+48 (22) 338 1100
Greece	+30 210 96 92 300	Puerto Rico	+351 21 425 77 04
Hungary	+36 (1) 382 60 60	Romania	+1 787 750 4300
India	+91 11 2437 9961 to 4	Russia & CIS	+40 21 211 4855
Indonesia	+62 21 385 9449	Saudi Arabia	+7 095 980 4206
Iran		Singapore	+96 626444072
(Vida)	+98 21 2271463	Slovak Republic	+65 6270 0110
(Panasonic Office)	+98 2188791102	Slovenia, Croatia, Bosnia, Macedonia	+421 (0) 2 52 92 14 23
Italy	+39 02 6788 367		
Jordan	+962 6 5859801	South Africa	+44 (0) 20 76 63 36 57
Kazakhstan	+7 727 298 0891	Spain	+27 11 3131622
Korea	+82 2 2106 6641		+34 (93) 425 93 00

Sweden	+46 (8) 680 26 41
Switzerland	+41 (0) 41 259 96 32
Syria	+963 11 2318422/4
Taiwan	+886 2 2227 6214
Thailand	+66 2 731 8888
Turkey	+90 216 578 3700
U.A.E. (for All Middle East)	
	+971 4 8862142
Ukraine	+380 44 4903437
U.K	+44 (0)1344 70 69 20
U.S.A.	+1 201 348 5300
Vietnam	+848 38370280



JQA-0443



Factories of Systems Business Group have received ISO14001:2004-the Environmental Management System certification. (Except for 3rd party's peripherals.)

SP-P2HDPE5



30K903ZM-1 Printed in Japan