Panasonic
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P2HD

P2 LINE-UP CATALOG
APRIL. 2012

Ready for Ne

The Next Stage for P2HD.
Meet the Advanced AVC-ULTRA Codec Family and New P2 Card.

AVC-ULTRA (AVC-Intra444) Camera Recorder
(Concept Model,* Under Development)

Micro P2 Card (Left) and Micro P2 Card Adaptor (Right)
(Under Development/Scheduled for Spring 2013 Release)

The Panasonic P2HD Series continues to lead the way toward file-based broadcasting and image production applications using the P2 card. In addition to offering levels of reliability, speed and rewrite performance that could only be possible with solid-state memory, P2HD Series models achieve superb images and extended recording with the advanced AVC-Intra codec.*2 Using P2 files in a variety of IT devices allows a consistent, file-based workflow — from high-speed transfer to editing, searching and archiving. The P2HD Series also helps to conserve the environment in ways that a memory-card recorder can do, because it requires no transport mechanism, has low power consumption, and enables repeated reuse of P2 card.
In these and many other ways, the versatility and advanced design of the P2HD Series open the door to the next stage of P2 progress. The new AVC-ULTRA Codec family starts with the AVC-Intra100 and AVC-Intra50, and welcomes the new AVC-Intra444,*3 with its remarkable Full-HD 4:4:4 images and next-generation 4K x 2K resolution, and the AVC-LongG,*4 for highly efficient, Full-HD image production with excellent cost-performance. The AVC-Proxy also joins the family with advanced image quality made possible by H.264 compression, while operating at a low bit rate for Internet use, browsing, and newsflash applications. In short, the P2HD Series meets all the needs of professional users, in terms of both image quality and efficiency.

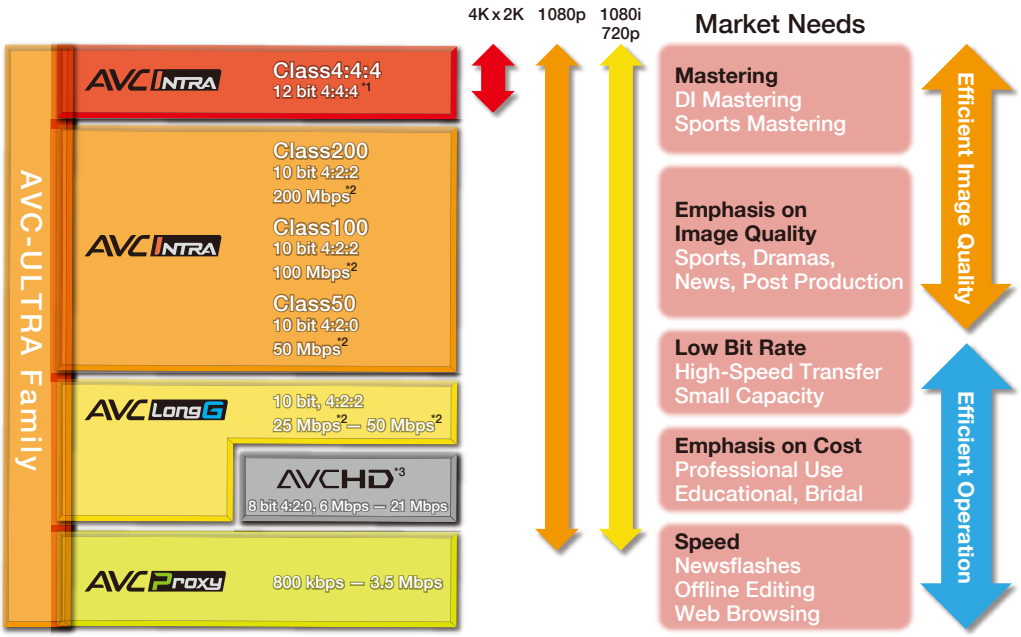
*1: Upgrade scheduled for the future. Not all formats of AVC-ULTRA will be supported. AVC-ULTRA upgrade is not free and the cost will be charged to the customers. *2: Available as an option for the AJ-HPX2000 and AJ-HPX2100. *3: Under development. Release date undecided. *4: Models with AVC-LongG expandability scheduled for future release.

xt Generation

AVC-ULTRA Upgradable*1 Camera Recorder
(Under Development/
Scheduled for Autumn 2012 Release)

AVC ULTRA

Meets detailed professional needs in image production,
from 4K x 2K mastering to streaming distribution.



*1: The bit rate is under consideration. *2: The bit rate is approximate at 1080/60i. *3: AVCHD is not included in the AVC-ULTRA family.

AVC-Intra Class4:4:4 (Under Development)

This new codec features 4K x 2K resolution. Rich 4:4:4 and 12bit color is extremely good for high-end editing.
Ideal for DI mastering and other high-end uses.

AVC-Intra Class200 (Scheduled for Future Release)

This new codec has twice the bit rate of the present AVC-Intra Class100.
Image quality is comparable with uncompressed data.

AVC-Intra Class100

Since its introduction in 2007, this codec has become a standard for
image production by combining excellent image quality with nimble mobility.
It newly support 1080/60p and 1080/50p formats.

AVC-Intra Class50

This highly efficient broadcast-use HD codec has been widely used since its 2007 introduction.
It produces DVCPRO HD-level images with a bit rate equivalent to SD (DVCPRO 50).

AVC-LongG (Scheduled for Future Release)

This new codec uses Long GOP compression. Achieving 4:2:2 10 bit image quality with
high compression efficiency, it brings high cost-performance to professional image production.

AVC-Proxy

This codec produces high-quality H.264-based proxy images while maintaining a low bit rate for
network data transfer, web streaming, and offline editing.

High Reliability and Fast Transfer

Speedy, Low-Cost Newsgathering with Excellent Mobility

Advanced, File-Based Workflow

High Reliability Supports Creativity

Image disturbances can be caused by 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 (-4°F to 140°F), and can be stored in temperatures from -40°C to 80°C (-40°F to 176°F). The P2 card's rugged specifications ensure reliable recordings under harsh conditions and enhance newsgathering mobility.

The absence of a transport mechanism and the ability to achieve file-based image acquisition — made possible by solid-state memory — speed up both mobility and media access. Mistakenly writing over valuable data and A/B-roll errors are also prevented. This makes it easier to concentrate on shooting.

Large 64 GB Capacity with a P2 card

The P2 card offers up to 64 GB of storage capacity, and up to 64 minutes of recording time with the AVC-Intra100 codec. This large capacity provides sufficient recording time even for a two-slot-recorder. With semiconductor memory capacity increasing yearly, you can expect even larger-capacity P2 cards with even greater economy in the future.

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

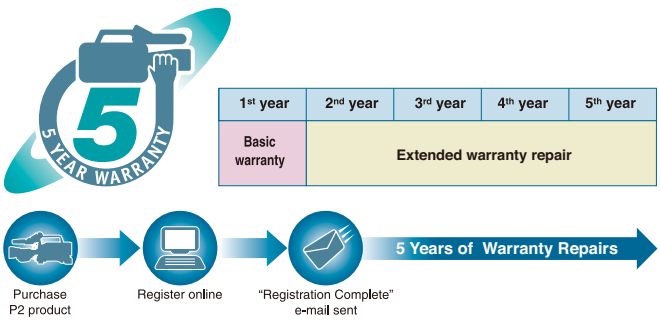
P2HD 5 Year Warranty Repair Program

The P2HD 5 year warranty repair program further enhances selecting P2 camera recorder's and recorder'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.

High-Speed Transfer, Access to IT Media

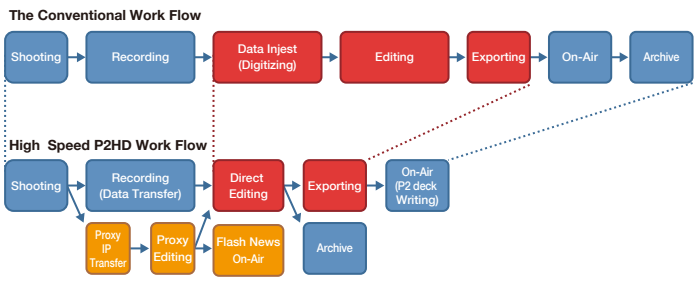
P2 content can be directly input to a file-based (Windows® PC/Mac) image system* through a variety of interfaces, including SuperSpeed USB 3.0, e-SATA, and IEEE 1394. Data can also be input to a P2-compatible nonlinear editor via a P2 drive, and copied to a commercially available HDD or SSD. The data can then be transferred over a network and shared for smooth on-air broadcasting or archiving. P2 files are based on the MXF (OP-ATOM) format, for fast and direct editing access. And editing work starts much faster than it does with a conventional VTR or even with another file-based device (MXF OP1a), because there is no digitizing or ingesting time required. Simultaneous background archiving and other functions also save time and lower costs.

*The PC must be installed with the P2 driver (downloadable for free) in order to mount P2 cards. Refer to "Service and Support" on the Panasonic Website (http://pro-av.panasonic.net/).



*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 have been used. Details about user registration and the program: For US Customers; www.panasonic.com/broadcast, For Outside US; http://panasonic.biz/sav/pass_e

Speeding Up the Workflow



P2 files are based on the MXF (OP-ATOM) format, so the files on P2 cards can be directly edited without the need for digitizing or ingesting. This greatly reduces the time required for editing, which in itself is generally the most time-consuming part of the workflow. Low-rate proxy data, which is recorded simultaneously, can be previewed on-site with a tablet PC or smartphone, and transferred over the Internet for newsflash use. Editing can then begin with the proxy data even before the actual data arrives for extra convenience and speed.

Metadata, Proxy, Wireless and Other Functions Enhance IT Integration to Revolutionize the Workflow

Helping to Conserve the Environment

The new systems cut CO^2 emissions under the dual themes of "Reuse" and "Reduce."

Metadata Management with Wireless Connectivity

P2 files can be provided with metadata containing the recording time, GPS position (when mounted with the option), text information (such as content name and staff information) and text memos tagged to selected frames. The AJ-HPX3100G P2 Camera Recorder uses a new wireless connection function* to input metadata from a tablet terminal or smartphone. Metadata-based searching and managing make it easy to integrate editing, broadcasting and archiving operations.

* The optional AJ-WM30 Wireless Module and AJ-SFU3100G Upgrade Software Key are required for wireless connection.

More Functional Proxy Data for Flash News Reports and Offline Editing

P2 cam (compatible models) can generate low-rate proxy data (video and audio) for breaking news transferred by public network or Webcasts. And the proxy data can be efficiently handled in advance with offline editing. The AJ-HPX3100G P2 cam can also generate*higher quality "AVC Proxy" data and allows proxy previews on a wireless terminal.

*The optional AJ-YDX30G Video Encoder Board is required for using proxy data.

P2HD Effectively Reduces CO_2 Emissions

From a management standpoint, environmental efforts are being increasingly reflected in the image and value of today's corporations. P2HD products meet the stringent Panasonic "Green Product" certification standards, which testifies for their excellent environmental performance. P2HD is closely linked with environmental conservation in routine broadcasting and production operations, making it a true with next-generation technology.

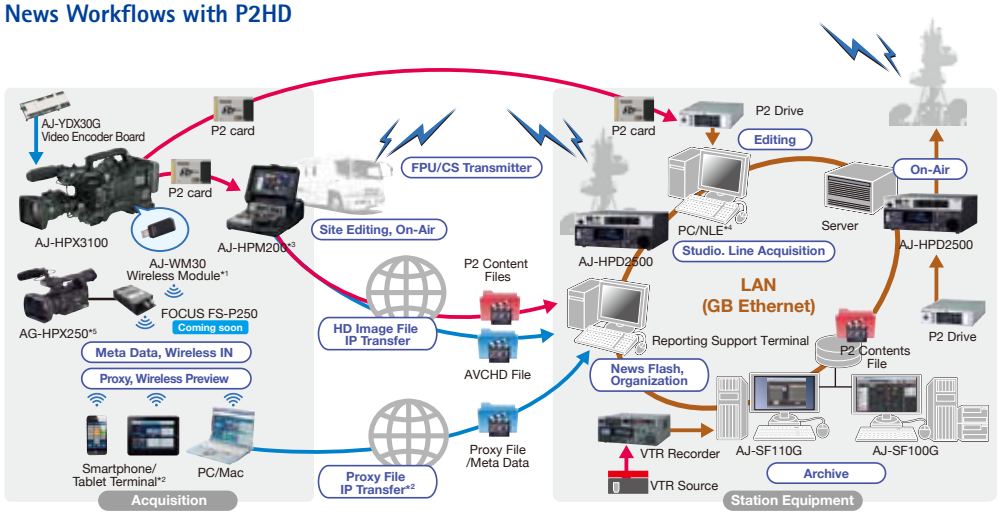
Reusing: Because abrasion-free, dropout-free P2 cards can be rewritten, TV stations don't generate large amounts of used tape like they do with VTRs. Also, because P2HD systems use solid-state memory, there are fewer parts to replace — such as recording heads and transport mechanism — which again cuts down on waste.

Reducing: P2 memory card recorders are lighter and require less power than VTRs. 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.

New Devices Further Cut Power Consumption

Reducing power consumption is one of the highest priorities in the development of P2HD products. The AJ-HPX3100G Camera Recorder achieves this with integrated circuitry such as a newly developed digital signal processer and AVC-Intra codec LSI. Compared with the previous AJ-HPX3000G, which was marketed from 2007 to 2010, it cuts power consumption by about 23%. The AG-HPG24 Portable Recorder incorporates an image-processing LSI to bring greater compactness, lighter weight, and lower power consumption to AVC-Intra recording and playback. In fact, it reduces power consumption by about 92% compared to the AJ-HD3700B HD D5 VTR, which as marketed from 2003 to 2010.

News Workflows with P2HD

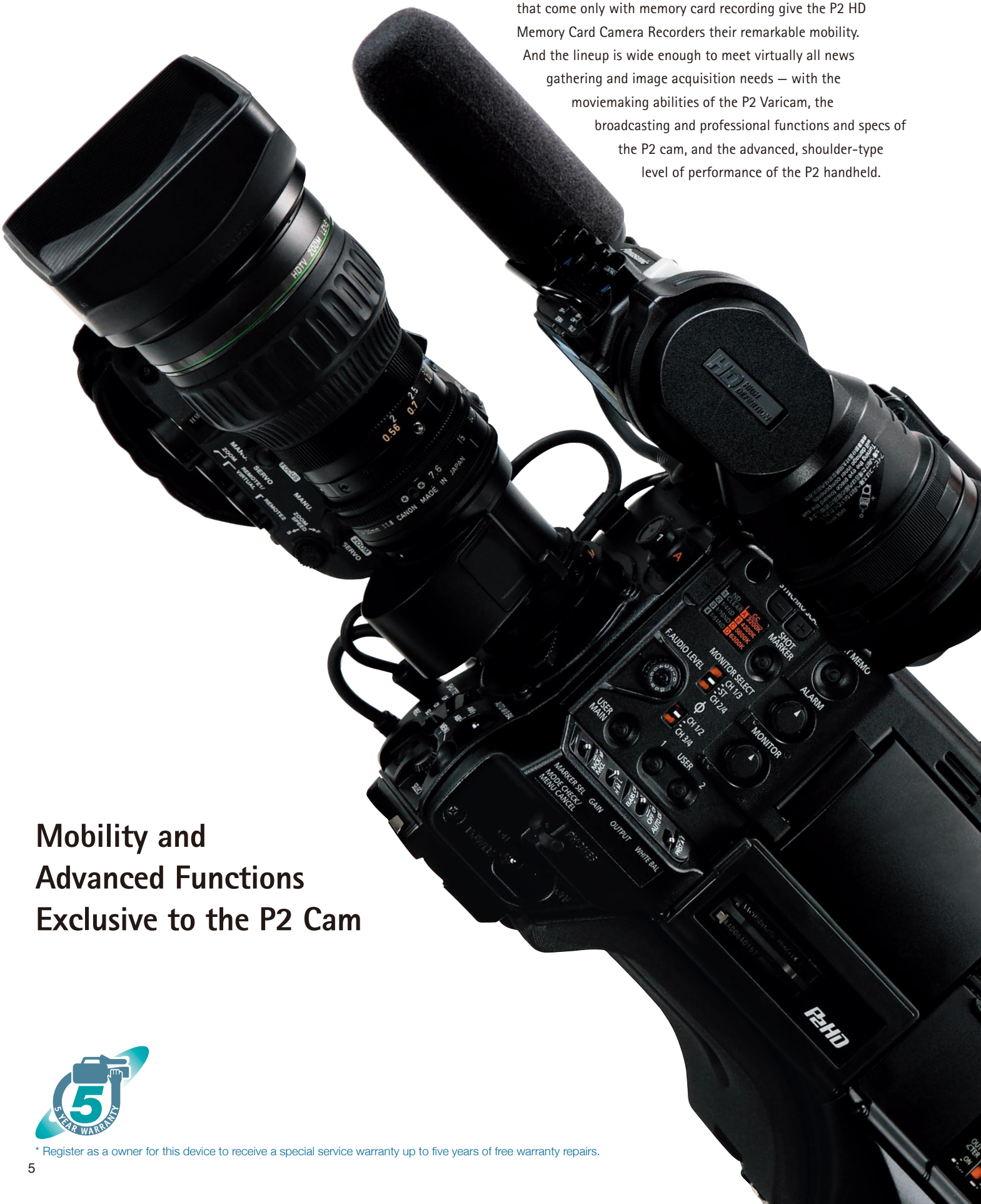


When recording, a variety of information is registered as metadata in P2HD files and proxy files. Recordings can then be transmitted to a station by a Field Pick-up Unit (FPU) from a broadcast van equipped with the AJ-HPM200 or delivered on a P2 card, HDD or SSD. Prior to the data's arrival, low-rate proxy or AVCHD*3 files can be transferred by FTP over the Internet for on-air broadcasting of breaking news, review to get up a program, or off-line editing.*4
All recordings are archived so network terminals inside the station can search for and preview them based on metadata.*5

*1: The optional AJ-WM30 Wireless Module and AJ-SFU3100G Upgrade Software Key are required for wireless connection. A device is connected in ad-hoc mode only. *2: Proxy data can be saved only in PCs/Macs. *3: Conversion to AVCHD files requires an AJ-HPM200 Memory Card Recorder equipped with an optional AJ-YCX250G AVCHD Codec Board. *4: See page 22 in this catalog for information on P2 alliance partners. *5: You may need to update its firmware. Please refer to the "service and support" on the Panasonic Website (http://pro-av.panasonic.net/).

CAMERA RECORDERS

The reliability, compact size, light weight and high-speed startup that come only with memory card recording give the P2 HD Memory Card Camera Recorders their remarkable mobility. And the lineup is wide enough to meet virtually all news gathering and image acquisition needs — with the moviemaking abilities of the P2 Varicam, the broadcasting and professional functions and specs of the P2 cam, and the advanced, shoulder-type level of performance of the P2 handheld.



Mobility and Advanced Functions Exclusive to the P2 Cam

5 YEAR WARRANTY

* Register as a owner for this device to receive a special service warranty up to five years of free warranty repairs.

AJ-HPX3700G

High-Quality P2HD VariCam for High-End Production, with RGB 4:4:4 Output in Full 1920 x 1080 Pixel Resolution and P-10 Log Gamma

- 2.2 megapixel 2/3 type CCD for full 1920 x 1080 HD images.
- Recording format: AVC-Intra100/50 and DVCPRO HD. AVC-Intra100 uses the 10 bit 4:2:2 sampling.
- HD SDI output of 23.98PsF/24PsF video signals.
- Dual-link HD SDI output for camera through 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.
- Selectable gamma modes, including Film-Rec.
- Scan-reverse function for film lens use.
- Grip handle has five threaded holes to mount film accessories.
- The Chromatic Aberration Compensation (CAC) function compensates for slight chromatic aberration at frame edges that cannot be compensated for by the lens (this function requires the use of a CAC-compatible lens).
- High F10 sensitivity at 2,000 lx. Minimum illumination of 0.042 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.
- 2 wheel (ND and CC) optical filters.
- 48 kHz/16 bit, 4 channel digital audio 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).
- Camera studio system (option) is supported.

AJ-HPX3700 Specification

Power Source :	DC 12 V (11 V to 17 V)
Power Consumption :	42 W, main unit only
Weight:	approx. 4.9 kg (10.8 lb), main unit only
Dimensions (W x H x D):	137 mm x 209 mm x 318 mm (5-7/16 inches x 8-1/4 inches x 12-9/16 inches) without handle and option cover (exclude projection)

AJ-HPX2700G

Multifunctional P2HD VariCam with a Variable Frame Rate from 1 to 60 fps: Superior Creativity and Outstanding Cost-Performance

- Variable Frame Rate of 1 fps to 60 fps in 720p, for creative overcranked or under cranked shooting.
- Recording format: AVC-Intra100/50 and DVCPRO HD. AVC-Intra100 uses the 10 bit 4:2:2 sampling.
- HD SDI Output at 23.98PsF/24PsF Video Signals.
- Selectable gamma modes, including Film-Rec.
- Scan-reverse function for film lens use.
- Two independent HD SDI outputs with parallel use capability.
- Grip handle has five threaded holes to mount film accessories.
- HD progressive 2/3 type 3 CCD system.
- The Chromatic Aberration Compensation (CAC) function compensates for slight chromatic aberration at frame edges that cannot be compensated for by the lens (this function requires the use of a CAC-compatible lens).
- 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.
- 2 wheel (ND and CC) optical filters.
- 48 kHz/16 bit, 4 channel digital audio 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.
- Camera studio system (option) is supported.

*Outputs DVCPRO HD codec recording only.

AJ-HPX2700 Specification

Power Source :	DC 12 V (11 V to 17 V)
Power Consumption :	38 W, main unit only, LCD monitor ON
Weight:	approx. 4.9 kg (10.8 lb), main unit only
Dimensions (W x H x D):	137 mm x 209 mm x 318 mm (5-7/16 inches x 8-1/4 inches x 12-9/16 inches) without handle and option cover (exclude projection)

AVC-Intra DVCPRO HD

AJ-HPX3100G

Featuring a 2.2 Megapixel CCD. High-End Performance in a Compact, Lightweight Design with Low Power Consumption.

- 2.2 megapixel 2/3 type CCD for full-HD (1920 x 1080) images.
- The AVC-Intra100 codec records 10 bit/4:2:2 sampling images.
- A high sensitivity of F11/F12,*1 and an excellent S/N ratio of 59 dB.*2
- Supports high-quality 24 bit audio recording (AVC-Intra100/50).*3
- Switchable between 59.94 Hz and 50 Hz recording for world wide use.
- SD (480i/576i) recording in DVCPRO 50, DVCPRO or DV codec.
- Chromatic Aberration Compensation (CAC) function works with a CAC-compatible lens.
- DRS (Dynamic Range Stretch) provides a wider dynamic range.
- F-REC mode and scan-reverse function.
- Digital Super Gain enables 0.005 lx of minimum illumination.
- Digital Zoom by 2x, 3x or 4x.
- 2 wheel (ND and CC) optical filters.
- A wireless network connection*4 lets you use a smartphone,*5 tablet device*5 or PC/Mac to confirm the camera status, to input metadata and also to view proxy video (streaming or playback)*6 as well as save it.*7
- A low center of gravity body offers unobstructed views and light weight.
- Power consumption is approx. 34 W for the camera recorder only.
- The one-clip recording function records multiple cuts in a single clip.
- Text memos, shot markers and metadata such as GPS*8 can be added.
- Scene file, user button and focus assist functions.
- Output for HD/SD SDI and composite monitor out, with built-in downconverter, and HD/SD SDI input are equipped.
- USB 2.0 (HOST/DEVICE), TC IN, TC OUT and GENLOCK IN which can be used for return video in, are equipped.
- UniSlot wireless receiver (option) and camera studio system (option) are supported.

*1: F11 sensitivity is attainable in 1080/59.94i mode, and F12 is attainable in 1080/50i mode.
*2: The S/N ratio is 59 dB when DNR is turned ON.
*3: Only in the AVC-Intra100/50 mode. For playback, equipment or software compatible with 24 bit audio is required. For details, refer to "Note Regarding 24 bit Audio" on the back cover.
*4: The optional AJ-WM30 Wireless Module and AJ-SFU3100G Upgrade Software Key are required for wireless connection.
*5: Playback of proxy data recorded in HQ or SHQ mode is possible. Panasonic doesn't guarantee all types of smart phone or tablet device working properly. .
*6: The optional AJ-YDX30G Video Encoder Board is required for use of proxy data. To view streaming proxy video, AG-HPX3100G may need to be updated. Please refer to the following web site for details. http://pro-av.panasonic.net/
*7: Proxy data can be saved only in PCs/Macs.
*8: The optional AJ-GPS910G GPS Unit is required.

A-HPX3100G Specification

Power Source :	DC 12 V (11 V to 17 V)
Power Consumption :	34W, main unit only
Weight:	approx. 3.9 kg (8.6 lb), main unit only
Dimensions (W x H x D):	140 mm x 270.5 mm x 335.8 mm (5-1/2 inches x 10-5/8 inches x 13-1/4 inches) without handle and option cover (exclude projection)

AJ-HPX2000/2100

Broadcasting 2/3 type P2HD Camera Recorder, Equipped with Five P2 card Slots and IEEE 1394a*2 Interface

- HD Progressive 2/3 type 3 CCD System.
- High sensitivity of F10 (at 2000 lx). Minimum illumination of 0.007 lx (at +74 dB gain).
- DRS (Dynamic Range Stretch) provides a wider dynamic range with minimal blown highlights and blocked shadows.
- 14 bit A/D processing and improved digital image processing technology.
- 12 pole linear matrix color correction function.
- Supports AVC-Intra100/50 codec (with the optional AJ-YBX200G).
- 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).
- Five P2 card slots allow continuous recording, card selection, hot-swap rec, loop rec and pre-rec.
- The One-Clip Record function enables multiple clips that were recorded separately by start/stop operations to be handled as a single clip.*1
- Immediate playback using a clip thumbnail display.
- Text memos and shot markers can be added.
- 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.
- Proxy data recording possible (with the optional AJ-YAX800G).
- IEEE 1394a*2 (AVC), USB 2.0 (Host and Device) interface.
- UniSlot wireless receiver slot.
- Camera studio system (option) is supported.

*1: The camera recorder software must be upgraded to the latest version. For details, visit http://pro-av.panasonic.net/en/index.html
*2: IEEE 1394a input/output are not available for AVC-Intra codec files.

AJ-HPX2000/2100 Specification

Power Source :	DC 12 V (11 V to 17 V)
Power Consumption :	36 W, main unit only, LCD monitor off
Weight:	approx. 4.5 kg (9.9 lb), main unit only
Dimensions (W x H x D):	137 mm x 209 mm x 317 mm (5-7/16 inches x 8-1/4 inches x 12-1/2 inches) without handle and wireless option cover (exclude projection)

AVC-Intra DVCPRO HD DVCPRO 50 DVCPRO DV

AG-HPX370 *series*

(AG-HPX370/371/372/373/374)

Full F10*[1] Sensitivity from a Newly Developed MOS Image Sensor. High-Quality Images in a Lightweight, Mobile, Compact Body.

- Featuring a new 1/3 type MOS sensor for full-HD (1920 x 1080) resolution and F10*[1] sensitivity.
- Comes mounted with a Fujinon 1/3 type 17x zoom lens (included)
- Chromatic Aberration Compensation (CAC) function.
- DRS (Dynamic Range Stretch) provides a wider dynamic range.
- Recording format: AVC-Intra100, AVC-Intra50 and DVCPRO HD.
- HD multi-format recording: 1080i and 720p.
- SD multi-codec recording in DVCPRO 50/DVCPRO/DV.
- 59.94 Hz/50 Hz selector function.
- Variable frame rate feature (in 720p, 20 steps) allows film-like slow-speed or quick-speed shooting.
- Seven-mode gamma, includes two Cine-Like modes.
- This redesigned shoulder-mount camera has a low center of gravity.
- Two P2 card slots are provided on the operation panel side.
- The One-Clip Record function enables multiple clips that are recorded separately by start/stop operations to be handled as a single clip.
- Scene file, user buttons, and focus assist functions
- Waveform and vectorscope display.
- A color viewfinder featuring the Liquid Crystal On Silicon (LCOS) display panel for bright, high-resolution images.
- A high resolution, 16:9 aspect ratio, 81.28 mm (3.2 inches) LCD monitor.
- Output for HD/SD SDI and Video, with built-in downconverter.
- USB 2.0 (Host/Device) and IEEE 1394a (AVC)*[2] interfaces. TC IN, TC OUT and GENLOCK IN terminals.
- RCU terminal for optional AJ-RC10G or AG-EC4G remote control unit.
- Proxy data recording possible (with the optional AJ-YAX800G).
- Camera studio system (option) is supported.

*1: Its sensitivity is F10 in 1080/59.94i and F11 in 1080/50i.
*2: IEEE 1394a input/output are not available AVC-Intra codec files.

AG-HPX500 *series*

(AG-HPX500/502)

Outstanding Cost-to-Performance and Superb 2/3 type Quality — the P2HD Camera Recorder for Video Professionals

- Standard 2/3 type interchangeable lens mount system.
- The Chromatic Aberration Compensation (CAC) function compensates for slight chromatic aberration at frame edges that cannot be compensated for by the lens (this function requires the use of a CAC-compatible lens).
- 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 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.
- 48 kHz/16 bit, 4 channel digital audio recording.
- Variable frame rate feature (in 720p, 11 steps) allows film-like slow-speed or quick-speed shooting.
- 720p native mode achieves a speed effect without requiring additional equipment. A VariCam-compatible 720p over 60p mode is also provided.
- Seven-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.
- RCU terminal for optional AJ-RC10G or AG-EC4G remote control unit.
- Camera studio system (option) is supported.

AG-HPX370 series Specification

Power Source :	DC 12 V (11 V to 17 V)
Power Consumption :	approx. 19 W, with VF, lens and LCD monitor ON
Weight:	approx. 3.6 kg (7.9 lb), without Lens, approx. battery and accessories
Dimensions (W x H x D):	246 mm x 251 mm x 441 mm (9-11/16 inches × 9-7/8 inches × 17-3/8 inches) excluding prominent parts 246 mm x 251 mm x 549 mm (9-11/16 inches × 9-7/8 inches × 21-5/8 inches) with Fujinon lens, excluding prominent parts

AG-HPX500 series Specification

Power Source :	DC 12 V (11 V to 17 V)
Power Consumption :	approx. 23W with Viewfinder and LCD monitor on
Weight:	approx. 3.8 kg (8.4 lb), without viewfinder
Dimensions (W x H x D):	140 mm x 261 mm x 318 mm (5-9/16 inches x 10-5/16 inches x 12-9/16 inches) without handle (exclude projection)

DVCPRO HD DVCPRO 50 DVCPRO DV

AG-HPX250

High-Powered Lens, High-Sensitivity Sensor and High-Quality Full-HD 10 bit 4:2:2 Recording — Shoulder-Type Performance in a Handheld Camera for Broadcasting and Production Work

- 22x (f = 28 mm to 616 mm, 35 mm equivalent) zoom lens with three manual operation rings – zoom, focus and iris.
- Featuring a new U.L.T. (Ultra Luminance Technology) image sensor (1/3 type 2.2 megapixel MOS sensor).
- Two mode of Focus assist (Expand and Focus-in-red)*1
- DRS (Dynamic Range Stretch) provides a wider dynamic range.
- HD multi-format recording: 1080/24p, 1080/25p, 1080/30p, 1080/50i, 1080/60i, 720/24p, 720/25p, 720/30p, 720/50p, 720/60p*2 and SD (480/24p, 480/30p, 480/60i, 576/25p, 576/50i)*2
- 59.94 Hz/50 Hz selector function.
- VFR (variable frame rate): Enables film-camera-like speed effects. 1080 setting: 17 steps of 1fps to 30fps, 720 setting: 25 steps of 1fps to 60fps (both at 59.94 Hz).
- Recording format: AVC-Intra100, AVC-Intra50 and DVCPRO HD/DVCPRO 50/DVCPRO/DV.
- Seven-mode selectable gamma, such as cine-like mode, for rich gradation.
- 4-position (OFF, 1/4 ND, 1/16 ND, 1/64 ND) optical neutral density filter wheel.
- It newly supports FOCUS FS-P250 portable H.264 proxy recorder*1 (coming soon/sold separately) for proxy recording and wireless network connection.*3
- Scene file, user buttons, and focus assist functions.
- Two P2 card slots enable consecutive recording and hot-swapping.
- The one-clip recording function records multiple cuts in a single clip.
- Pre-rec, loop rec, one-shot rec and interval rec capability.
- 48 kHz/16 bit, 4 channel digital audio recording. XLR 2 channel audio input terminals supporting 48 V phantom power supply.
- Genlock input and TC input/output provides multi-camera synchro shooting.
- Equipped with HD SDI output and HDMI output for easy connection to broadcasting and professional systems.
- USB 2.0 (Host/Device) and IEEE 1394a (AVC)*4 interface.

*1: AG-HPX250 may need to be updated. Please refer to the following web site for details. http://pro-av.panasonic.net/
*2: 60i, 24p and 30p, are actually recorded in 59.94 Hz, 23.98 Hz and 29.97 Hz, respectively.
*3: FOCUS FS-P250 (coming soon/sold separately) and AJ-WM30 (option) are required for wireless connection.
*4: IEEE 1394a input/output are not available for AVC-Intra codec files. AG-HPX250EJ does not support input via USB and IEEE 1394a.

AG-HPX250 Specification

Power Source :	DC7.2 V with battery, DC7.9 V with DC input
Power Consumption :	15.0 W (LCD ON)
Weight:	approx. 2.5 kg (5.5 lb), without battery and accessories
Dimensions (W x H x D):	180 mm x 195 mm x 438 mm (7 inches x 7-11/16 inches x 17-1/4 inches) without prominent parts

AG-HPX170 *series*

(AG-HPX170/171/172/173/174)

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

- A 13x zoom lens with 28 mm (35 mm equivalent) wide-angle setting, 72 mm diameter and cam-driven manual zoom.
- 1/3 type 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/50p mode.
- Selectable gamma including Cinelike mode.
- 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 model.)*
- 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 two 64 GB P2 cards in full frame rate DVCPRO HD.
- Multifunction P2 capabilities. Hot swapping (changing cards while recording), loop rec, pre-rec, one-shot rec and interval rec 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.
- Compact hand-held size weighs only 1.9 kg (4.2 lb).
- 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.

*60i, 24p, 30p, are actually recorded in 59.94Hz, 23.98Hz, 29.97Hz, respectively.
1080/24p is to be recorded in 1080/60i (59.94i) pull-down. 1080/25p is to be recorded in 1080/50i pull-down.

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 ON), 13.8 W (Max)
Weight:	approx. 1.9 kg (4.2 lb), without battery and accessories
Dimensions (W x H x D):	154 mm x 179.5 mm x 397 mm (6-1/8 inches x 7-1/8 inches x 15-11/16 inches) without prominent parts

AVC-Intra DVCPRO HD DVCPRO 50 DVCPRO DV

DVCPRO HD DVCPRO 50 DVCPRO DV

AG-3DP1G

High-Quality Images, High Sensitivity, Powerful Zooming and Multi-Camera Versatility. The Integrated Twin-lens Camera Recorder for Broadcast-Level 3D.

- High-powered 17x HD twin-lens system covers a wide shooting range.
- Remote control supported for focus, zoom, iris and convergence.
- 3D mode selection for maximum zooming effect: Near/Normal/Extra.
- New 3D assist functions (ALERT / CONV. / Z-WFM) for reliable and convenient 3D shooting.
- Monitor image selection of Left, Right, Mix or Side By Side modes.
- High-sensitivity, high-quality, dual 3MOS U.L.T. (Ultra Luminance Technology) image sensors.
- The AVC-Intra100 codec records 1920 x 1080 full-pixel HD 3D with 10 bit 4:2:2 full sampling to deliver stunning image quality.
- HD multi-format recording: 1080 60i/50i/30pN/25pN/24pN, 720 60p/50p/30pN/25pN/24pN.*
- 59.94 Hz/50 Hz selector function for global use.
- 3D or 2D recording mode selection onto double P2 card slots.
- Variable frame rate feature (in 720p mode only) allows film-like slow-speed or quick-speed shooting.
- Six-mode selectable gamma, including cine-like mode, for rich gradation.
- Focus assist button and 3-position gain seletor.
- Simplified waveform and vectorscope display.
- Scene file, user file, user buttons.
- 4-position (CLEAR, 1/4 ND, 1/16 ND, 1/64 ND) optical neutral density filters.
- 81.3 mm (3.2 inches) 16:9 LCD color monitor with approximately 921,000 dots.
- Equipped with GENLOCK IN and TC IN/OUT for multi-camera shooting.
- UniSlot wireless receiver and camera studio system are supported (option).
- Equipped with two HD SDI outputs with sync-rec function, RET input and 3D compatible HDMI output.
- An XLR 5 pin microphone terminal and two channels of XLR 3 pin audio input with +48V phantom power supply.
- Optional color AJ-CVF100G or B/W AJ-HVF21K viewfinder can be used.

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

AG-3DP1G Specification

Power Source :	DC 12 V (11 V to 17 V)
Power Consumption :	38 W (Camera only)
Weight:	approx. 6.1 kg (13.4 lb) with camera unit only approx. 7.9 kg (17.4 lb) with an AJ-HVF21KG, a DIONIC battery, two P2 cards, and an AJ-MC900G microphone
Dimensions (W x H x D):	235 mm × 270.5 mm × 667.5 mm (9-1/4 inches × 10-5/8 inches × 26-1/4 inches) with camera unit only, excluding protrusions

Panasonic 3D Production System

BT-LH910G
228.6 mm (9 inches)
HD/SD LCD Monitor

This compact monitor features a 3D shooting assist function.

* The monitor displays in 2D. Images cannot be viewed in 3D.

BT-3DL2550
647.7 mm (25.5 inches)
3D LCD Video Monitor

This broadcast monitor displays 3D images with lifelike depth.

AG-HPD24
Memory Card Portable Recorder "P2 portable deck"

AVC-Intra Recording, HDMI*1 Output and USB 3.0*2 Interface. FULL HD 3D Recording and Transmission with Two Units Sync Operation.

*1: Supports 3D *2: USB3.0 host interface

AG-HMX100
Digital AV Mixer

Low-cost HD/SD Digital AV Mixer with easy operation and versatile functions

AV-HS450
Multi-Format Live Switcher

This live switcher supports a variety of 3D output formats and allows wipe, dissolve and other effects. It can switch up to eight pairs of 3D video sources as standard.

*Option Boards: An AV-HS04M7D 3D SDI Output Board is required for 3D output.

AG-3DA1
Twin-Lens FULL HD 3D Camera Recorder

FULL HD 3D images are recorded in the AVCHD codec PH mode. This compact, lightweight approx. 2.4 kg (5.3 lb) all-in-one unit is unlike a conventional rig-type 3D camera system.

3D PROFESSIONAL

AVC INTRA

MEMORY CARD RECORDER

Literally Filled with Quality and System Functions

The P2 HD Memory Card Recorder features high image quality and versatile functions in a compact body with low power consumption. It offers broadcast-industry standard digital/analog input and output, and a wide range of IT interfaces. And it fully supports a variety of image producing and broadcast work, such as backing up camera recorder data, playing and transmitting P2 card data, uploading to nonlinear editors and servers, and copying files to an external HDD.

5 YEAR WARRANTY

* Register as a owner for this device to receive a special service warranty up to five years of free warranty repairs.

AG-HPD24

HD Recording, HDMI*1 Output and USB 3.0*2 Interface. FULL HD 3D Recording and Playback with Two Units in Sync Operation

- Three HD recording and playback codecs supported: AVC-Intra100 for high-quality 10 bit 4:2:2 images, AVC-Intra50, and DVCPRO HD.
- 1080i (60i/50i), 720p (60p/50p) multi-format and DVCPRO50/DVCPRO/DV multi-codec capabilities.
- 1080/24PsF input/output*3, native 1080/23.98p recording(AVC-Intra).
- Supports VARICAM and other variable frame-rate videos.*4
- Allows up-/down-conversion between HD and SD as well as cross-conversion between 720 and 1080 during playback.
- 24 bit 4 channel*5 or 16 bit 8 channel 48 kHz high-quality digital audio.
- RS-422A remote terminal (9 pin) to control as an player.
- Playback function previews P2 files from an external storage device.*6
- USB 3.0 (HOST): Transfers files to an external storage at about four times AVC-Intra100 normal speed.*7
- USB 2.0 (DEVICE): Uploads files to a PC or nonlinear editor.
- HDMI (3D compatible) out, HD/SD SDI in/out, video monitor out, audio monitor out, headphone out, REF input, TC in/out and XLR audio in.
- Hot-swap, loop rec and VANC recording.*9
- A USB keyboard*8 (USB 2.0) can be connected.
- Two-Unit Sync Operation for 3D Recording/Playback.*10
- Compact size with 2U height and half-rack width, 2 kg (4.4 lb) weight.
- Built-in front speaker for audio monitoring.
- Battery operation boosts convenience.
- AC power can be supplied via the AC adaptor (included).

*1: Supports 3D. *2: USB 3.0 host interface. *3: Only in AVC-Intra100/50 mode.
*4: Only in 720p mode. *5: Only in AVC-Intra100/50 mode. For playback, equipment or software compatible with 24 bit audio is required. *6: Playback is based on disk drive performance, including spindle speed. Panasonic cannot guarantee smooth playback without dropped frames. *7: The USB 3.0 standard has a maximum transfer rate of 5 Gbps. However, the actual transfer speed depends on the system configuration. *8: Keyboards with a rating of up to 100 mA can be used. Panasonic cannot guarantee that all USB keyboards will work properly.
*9: VANC recording is only possible at 59.94 Hz and 50 Hz. *10: 3D recording and playback are possible only in the AVC-Intra100/50 codec.

AG-HPD24 Specification

Power Source :	DC 7.2 V with battery, DC 7.9 V with AC adaptor
Power Consumption :	Approx. 19.8 W
Weight:	Approx. 2.0 kg (4.4 lb), main unit only
Dimensions (W x H x D):	214 mm x 88 mm x 200 mm, without support legs (8-7/16 inches x 3-1/2 inches x 7-7/8 inches)

AG-HPG20

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

- Three HD recording and playback codecs supported: AVC-Intra100 for high-quality 10 bit 4:2:2 images, AVC-Intra50, 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 camera recorder.*1
- Allows up-/down-conversion between HD and SD as well as crossconversion between 720 and 1080 during playback.
- 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. HDD Preview function allows playback*2 of HDD files.
- USB 2.0 (DEVICE): For transferring files to/from a nonlinear editor
- IEEE 1394a (AVC) interface enables DVCPRO HD/SD stream input/output.
- At about 1.1 kg (approx. 2.4 lb), easy to carry with one hand.
- Battery operation boosts convenience.
- 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.

*1: For interlinked recording, the camera recorder must support this function.
*2: In simplified HDD playback, the frame rate for refreshing the display is reduced.

AG-HPG20 Specification

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

AJ-HPD2500

A P2 Deck Enhances File-Based Broadcasting Workflows with Versatile Editing, Transmission and Networking Functions. It Supports 24 bit Audio.

- Three HD codecs supported: AVC-Intra100 for high-quality 10 bit 4:2:2 images, AVC-Intra50, and DVCPRO HD.
- 1080i and 720p recording and playback. 59.94 Hz/50 Hz switchable.
- 1080/24PsF in/out, native 24p recording with the AVC-Intra codec.
- SD (480/59.94i and 576/50i) codec supports DVCPRO 50, DVCPRO, and DV.
- Allows up-/down-conversion between HD and SD as well as cross-conversion between 720 and 1080 during playback, and up-conversion during recording.
- Hot-swap, loop rec and VANC recording.*1 It supports high-quality 24 bit audio (AVC-Intra100/50).*2
- Equipped with six P2 card slots and one SD card slot.
- Easy manual on-air transmission with one-clip playback and GUI hold.
- New playlist function includes advanced GUI and new functions such as independent AV tracks, insert/overwrite modes.
- It newly supports VDCP command via RS422 for supplying clip list to the controller.*2
- Recognize newly inserted P2 card during playback mode for emergency program change.*2
- Direct capture from an external VTR source onto the editing time-line via an RS-422A interface.
- Supports a simplified waveform and vectorscope display.
- Gigabit-Ethernet-compatible server/client function enables direct file transfer via internet. It supports reading and writing on P2 cards from an external server and PC.*2
- eSATA and USB 2.0 interfaces enable max. 4X (AVC-Intra100 or DVCPRO HD) high-speed copying to an external HDD and playback.*3
- AVCHD compatibility: playback, recording and cross-conversion between P2HD/AVCHD (with the optional AJ-YCX250G board).
- HD/SD SDI In/Out and AES/EBU digital audio In/Out.
- Analog I/O and versatile remote (RS-422A, RS-232C and parallel).
- 4U-size height for mounting into a 19 type rack (with optional adaptor).

*1: VANC recording is only possible at 59.94 Hz and 50 Hz.
*2: You may need to update its firmware. Please refer to the “service and support” on the Panasonic Website (http://pro-av.panasonic.net/).
*3: Playback is based on disk drive performance, including spindle speed. Panasonic cannot guarantee smooth playback without dropped frames.

AJ-HPD2500 Specification

Power Source :	AC 100 V to 240 V, 50 Hz/60 Hz
Power Consumption :	Max. 65 W (full option)
Weight:	approx. 13 kg (28.7 lb)
Dimensions (W x H x D):	424.0 mm x 175.2 mm x 414.7 mm (16-3/4 inches x 6-15/16 inches x 16-3/8 inches) without support legs, connector and jog dial

AJ-HPM200

Advanced P2 Mobile with Versatile Functions Such as Networking, AVCHD Compatibility (Optional) and eSATA Interface. It Supports 24 bit Audio.

- Three HD codecs supported: AVC-Intra100 for high-quality 10 bit 4:2:2 images, AVC-Intra50, and DVCPRO HD.
- 1080i and 720p recording and playback. 59.94 Hz/50 Hz switchable for any HD system worldwide.
- 1080/24PsF input/output, native 1080/24p recording (AVC-Intra).
- SD (480/59.94i and 576/50i) codec supports DVCPRO 50, DVCPRO, and DV.
- Allows up-/down-conversion between HD and SD as well as cross-conversion between 720 and 1080 during playback, and up-conversion during recording.
- Hot-swap, loop rec and VANC recording.*1 It supports high-quality 24 bit audio (AVC-Intra100/50).*2
- Equipped with six P2 card slots and one SD c ard slot.
- Play-list function includes advanced GUI and new functions such as independent AV tracks, insert/overwrite modes.
- It newly supports VDCP command via RS422 for supplying clip list to the controller.*2
- Recognize newly inserted P2 card during playback mode for emergency program change.*2
- Direct capture from an external VTR source onto the editing time-line via an RS-422A interface.
- Supports simplified waveform monitor and vectorscope display.
- Gigabit-Ethernet-compatible server/client function enables direct file transfer via internet. It supports reading and writing on P2 cards from an external server and PC.*2
- eSATA and USB 2.0 interfaces enable max. 4x (AVC-Intra100 or DVCPRO HD) high-speed copying to an external HDD and playback.*3
- AVCHD compatibility: playback, recording and cross-conversion between P2HD/AVCHD (with the optional AJ-YCX250G board).
- HD/SD SDI input/output provided to allow line recording. Enables REC Start/Stop in sync with camera recorder.
- IEEE 1394a (AVC) interface enables DVCPRO HD/SD stream in/out.

*1: VANC recording is only possible at 59.94Hz and 50Hz.
*2: You may need to update its firmware. Please refer to the “service and support” on the Panasonic Website (http://pro-av.panasonic.net/).
*3: Playback is based on disk drive performance, including spindle speed. Panasonic cannot guarantee smooth playback without dropped frames.

AJ-HPM200 Specification

Power Source :	AC 100 V to 240 V, 50 Hz/60 Hz / DC 12 V
Power Consumption :	AC: 60 W, DC: 12 V/4.8 A (full-option)
Weight:	approx. 6.6 kg (14.6 lb)
Dimensions (W x H x D):	301 mm x 120 mm x 412 mm (11-7/8 inches x 4-3/4 inches x 16-1/4 inches) without rubber shoes

AVC-INTRA DVCPRO HD DVCPRO 50 DVCPRO DV

Mobile Storage Unit “P2 MSU”

AG-MSU10

Fast Copying from P2 Cards to a Removable Solid-State Drive*1

- Data can be copied from a P2 card to an SSD (up to 2 TB capacity) at about 4x normal speed in AVC-Intra100.*2
- Equipped with a eSATA/USB 2.0 host/device interface. Data can be transferred from a P2 card to an external HDD, and from an SSD to a PC.*3*4
- eSATA/USB 2.0 terminals are also featured on the removable interface box, allowing direct PC connection.*3
- Battery driven with a compact, lightweight and durable design.

*1: The removable SSD is not included with the product. Use a commercially available removable SSD that is recommended by Panasonic. In addition to the removable SSD interface box that comes with the AG-MSU10 as a standard accessory, an additional AG-MBX10G can be purchased as an option. Do not use Hard Disk Drive instead of an SSD. For compatible SSD information, please refer to the following WEB site. http://pro-av.panasonic.net/en/sales_o/p2/ag-msu10/

*2: Without verification. File transfer speed varies depending on the SSD and external HDD writing speed, transferred files, P2 card version, and other conditions.

*3: A Device mode eSATA terminal is provided on the included removable SSD interface box. In Host mode, files can be transferred only between a P2 card and an external HDD. Files cannot be transferred between an internal SSD and an external HDD. The P2 card/SSD can be used in Device mode, but reading and writing with the P2 card is only possible with the USB 2.0 interface.

*4: When using a P2 CMS (described on page 17), be sure to use the newest version.

AG-MSU10 Specification

Power Source :	DC 7.2 V, with battery / DC 7.9 V, with AC adaptor
Current Consumption :	1.1 A
Weight:	AG-MSU10: approx. 770 g (1.69 lb) without SSD and Battery AG-MBX10G: approx. 135 g (0.3 lb) without SSD
Dimensions (W x H x D):	99 mm x 58 mm x 212 mm, excluding protrusions (3-15/16 inches x 2-5/16 inches x 8-3/8 inches)

Memory Card Drive “P2 drive”

AJ-PCD35

PCI Express Interface

Five P2 card Slots and High Speed PCI Express Interface

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

*The included P2 driver must be installed in the Windows PC or Mac. Please read “Notes Regarding the Handling of P2 Files Using a PC” on the back page.

AJ-PCD35 Specification

Power Source:	DC 16 V 0.6 A with AC adaptor, DC 12 V 0.8 A when PC built-in
AC Adaptor:	AC 100 V to 240 V (1.20 A), 50 Hz/60 Hz
Weight:	approx. 1.2 kg (2.6 lb)
Dimensions (W x H x D):	148.4 mm x 42.5 mm x 199.5 mm, excluding protruding parts (5-7/8 inches x 1-11/16 inches x 7-7/8 inches)
PC System Requirement:	Microsoft® Windows 7 Professional (SP1), Ultimate (SP1) 32bit/64bit Microsoft Windows Vista® Business (SP1, SP2), Ultimate (SP1, SP2) 32bit/64bit Microsoft Windows XP Professional (SP2, SP3) 32 bit Mac OS X 10.4, 10.5, 10.6, 10.7 (Intel® based Mac) 1 GB or more memory

Memory Card Drive “P2 drive”

AJ-PCD30

USB3.0 Interface

Super Speed USB 3.0 Interface Boosts Workflows for News and Other Productions

- The USB 3.0 interface lets you transfer P2 files at 1.5 Gbps or higher* when connected to a USB 3.0-compatible PC.
- Install the P2 drive into a 5 type bay on a desktop PC.
- With the AC adaptor, you can use it as a stand-alone external drive.

* When using multiple E Series P2 cards. The actual transfer rate varies depending on the file being transferred, the system, the application software, the P2 card version and other conditions. If the PC does not have a USB 3.0 interface, data is transferred via USB 2.0. The P2 card driver software (provided with the product or downloadable for free) must be installed to read data from or write data to P2 cards. Please read “Notes Regarding the Handling of P2 Files Using a PC” on the back page.

AJ-PCD30 Specification

Power Source:	DC 16 V 0.6 A with AC adaptor, DC 12 V 0.8 A when PC built-in
AC Adaptor:	AC 100 V to 240 V (1.20 A), 50 Hz/60 Hz
Weight:	approx. 1.2 kg (2.6 lb)
Dimensions (W x H x D):	148.4 mm x 42.5 mm x 199.5 mm, excluding protruding parts (5-7/8 inches x 1-11/16 inches x 7-7/8 inches)
PC System Requirement:	Microsoft Windows 7 Professional (SP1), Ultimate (SP1) 32 bit/64 bit Microsoft Windows Vista Business (SP2), Ultimate (SP2) 32 bit/64 bit Microsoft Windows XP Professional (SP3) 32 bit Mac OS X 10.5, 10.6, 10.7 (Intel® based Mac) 1 GB or more memory

Memory Card Drive “P2 drive”

AJ-PCD2G

USB2.0 Interface

Compact, Lightweight, Low-Cost — USB-Bus-Powered 1-Slot P2 drive Ideal for Mobile Applications

- USB bus powered operation, connecting to a PC or a Mac with USB cables (2 cables*1).
- Compact of 25.5 mm (1-1/16 inches) thick, lightweight of 200 g (0.44 lb) and low-cost.
- Comes with driver software for both Windows and Mac OS X.

*1: One cable for data transmission and power supply, and the other cable exclusively for power supply.
*The included P2 driver must be installed in the Windows PC or Mac. Please read “Notes Regarding the Handling of P2 Files Using a PC” on the back page.

AJ-PCD2G Specification

Power Source:	DC5 V 0.5 A
Weight:	approx. 200 g (0.44 lb) main unit only
Dimensions (W x H x D):	97 mm x 25.5 mm x 113 mm, excluding protruding parts (3-7/8 inches x 1-1/16 inches x 4-1/2 inches)
PC System Requirement:	Microsoft Windows 7 Professional (SP1), Ultimate (SP1) 32 bit/64 bit Microsoft Windows Vista Business (SP2), Ultimate (SP2) 32 bit/64 bit Microsoft Windows XP Professional (SP3) 32 bit Mac OS X 10.5, 10.6, 10.7 (Intel® based Mac) 512MB or more memory (Windows Vista, Windows 7, Mac OS X 10.6, 10.7 1GB or more memory)

AG-MSU10

AJ-PCD30

AJ-PCD35

AJ-PCD2G

AJ-SF100G/AJ-SF110G

Archives P2, AVCHD*1 and VTR Footage*2 onto LTO, and Enables Meta Searches, Direct Playback and Partial Retrieve from Archived Files

AJ-SF100G LTO/BD Archive Software

- AJ-SF100G software is installed onto a PC connected to an LTO drive, BD drive and removable HDD. It lets you archive, search, retrieve and play all P2 files and AVCHD files.*1
- Proxy data can be generated and metadata can be edited while archiving. Content can be searched easily by using metadata and proxy video.
- Video clips archived on LTO media can be directly played back.
- Any desired video segment can be selected and copied to another file. The video segment can be specified with IN/OUT marks added during playback.
- VTR control: IN/OUT points are specified via RS-422 remote for loading.
- VTR error rate monitoring record (via RS-422 Remote)

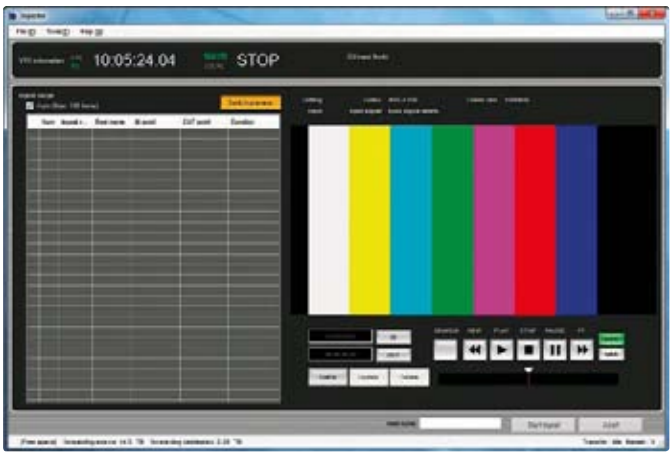
*1: Future compatibility planned.
*2: Requires ingesting by AJ-SF110G.

AJ-SF110G Video Ingest Software

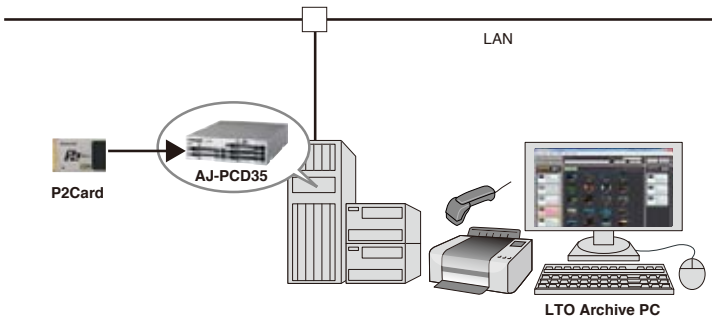
- This software converts VTR footage (HD/SD) to MXF files for AJ-SF100G archiving.
- VTR materials recorded with DVCPRO, DVCPRO 50 or DVCPRO HD systems can be converted to files, without encoding, via the IEEE 1394* interface.
- Video input via SDI terminal can be converted to a P2 file. SD video is converted to DVCPRO or DVCPRO 50, and HD video can be converted to DVCPRO HD or AVC-Intra (50 or 100 can be selected).
- Metadata can be added. VTR conversion footage can also be input with new metadata.
- By linking with the AJ-SF100G LTO/BD Archiving Software, the video ingest software ensures smooth previewing, metadata editing and archiving.

*Supports only HD: DVCPRO HD, SD: DVCPRO 50/DVCPRO.
HDV input and MPEG-TS input are not supported.

AJ-SF100G Screenshot

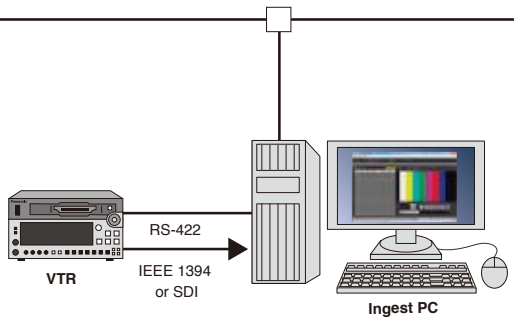


AJ-SF110G Screenshot



An Example of LTO/BD Archiving System Configuration

•LTO Archiving Software x 1, •PC (Work Station) x 1, •BD Drive x 1 or 2, •LTO5 Drive/SAS HBA x 1 or 2, •RAID Drive 1 (with RAID card), •Bar Code/BD-R Label Printer x 1 (using printable media), •Media Management Bar Code Reader x 1 (USB I/F, keyboard connecting type), •HD/SD SDI board 1 x 1



Example of Video Ingest System Configuration

•Video Ingest Software x 1, •HD/SD SDI board x 1, •RAID Drive x 1 (with RAID card), •PC (Work Station) x 1 (with IEEE 1394 board)

AJ-P2E064XG
AJ-P2E032XG
AJ-P2E016XG

Large Data Storage Capacity, High Transfer Speed and Superb Reliability for Professional Use.

- Up to 64 GB P2 card is available and it achieves a long recording time.
- Complies with the Type-II PC Card Standard (Card Bus) for direct plug-in to the PC card slot of a laptop PC.*1
- Highly reliable, solid-state memory resists shock, vibration, and temperature changes.
- Ensures a long service life with repeated recording and initialization.*2
- An individual serial number, bar code, and write-protect switch ensure strict security.
- The P2 card transfers data at a high speed up to 1.2 Gbps.*3

*1: The included P2 driver must be installed in a Windows PC or Mac. 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: Card replacement interval is about five years when entire (100%) data is rewritten once a day.
*3: 1.2 Gbps is maximum transfer speed when using P2card E series. Transfer speed is subject to be changed depended on system configuration.

P2 card Specification

Weight:	approx. 45 g (approx. 1.6 oz)		
Dimensions (W x H x D):	54 mm x 5 mm x 85.6 mm (2.13 inches x 0.2 inches x 3.37 inches)		
Capacity	**AJ-P2E016XG**	**AJ-P2E032XG**	**AJ-P2E064XG**
Recording Capacity:*	approx. 16 GB	approx. 32 GB	approx. 64 GB
Rec/Play Time	**AJ-P2E016XG**	**AJ-P2E032XG**	**AJ-P2E064XG**
AVC-Intra100			
1080/23.98pN, 24pN:	approx. 20 min.	approx. 40 min.	approx. 80 min.
720/23.98pN:	approx. 40 min.	approx. 80 min.	approx. 160 min.
1080/59.94i, 50i, 720/59.94p,50p:	approx. 16 min.	approx. 32 min.	approx. 64 min.
AVC-Intra50:	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.

AJ-SF100G LTO Archive Software

Hardware Required for System Configuration:	PC, P2 drive, Storage device such as LTO drive, BD drive, P2 drive or HDD
Software Required for System Configuration:	SQL Server® 2008 R2 Workgroup
Operating System:	Microsoft Windows 7 Professional 64 bit SP1 (English/Spanish/French/German)
Connection Verification Environment:	
CPU:	Xeon X5670 2.93 GHz or faster
Memory:	8 GB DDR-3 SDRAM (1333 MHz,ECC, 2GB x 4) - For single processor
Graphics card:	NVIDIA NVS 300/NVIDIA Quadro NVS 295
HDD:	1 TB hard disk drive (SATA, 7200 rpm) x 2 (RAID-1 configuration)
Databese:	SQL Server® 2008 R2 Workgroup
Card Reader:	Panasonic AJ-PCD35
LTO drive:	HP StorageWorks Ultrium 3000 SAS External Tape Drive
SAS card:	HP Smart Array P411/256 Controller (BBWC)
RAID:	Caldigit HDElement-CRC-4B-4TB BIOS AP SAJ308G6
SDI board:	Blackmagic Design DeckLink SDI
BD drive:	LG Electronics BE12LU30
Printer:	Canon PIXMA iP4950
A PC operation confirmed by Panasonic:	Hewlett-Packard HP Z800 Workstation

AJ-SF110G Video Ingest Software

Hardware Required for System Configuration:	PC, HD/SD SDI board, HDD drive
Operating System:	Microsoft Windows 7 Professional 64 bit SP1 (English/Spanish/French/German)
Connection Verification Environment:	
Graphics card:	NVIDIA NVS 300/NVIDIA Quadro NVS 295
HCPU:	Xeon X5670 2.93 GHz or faster
Memory:	8 GB DDR-3 SDRAM (1333 MHz,ECC, 2GB x 4) - For single processor
DD:	1 TB hard disk drive (SATA, 7200rpm) x 2 (RAID-1 configuration)
RAID:	Caldigit HDElement-CRC-4B-4TB BIOS AP SAJ308G6
SDI board:	Blackmagic Design DeckLink SDI
A PC operation confirmed by Panasonic:	Hewlett-Packard HP Z800 Workstation
*SDI board Blackmagic Design DeckLink SDI	
*VTR: AJ-HD3700B/AJ-SD93/AJ-HD1400	

* Note that the compatibility of the peripherals has been checked by Panasonic. However, not all functions are guaranteed. * The connection verification data is basically the verification result at the time of purchase of the peripherals. Panasonic does not guarantee connections set up independently by the customer.
* Panasonic does not guarantee functioning with all types of hardware and software versions.
* For inquiries regarding the checked peripherals, please contact the appropriate manufacturer.

Specifications Reference Data

Recording Time per LTO (1.5 TB) Tape

	Codec	Rec. Time
SD	DVCPRO	Approx. 96 hours
	DVCPRO 50	Approx. 48 hours
HD	DVCPRO HD	Approx. 24 hours
	AVC-Intra50	Approx. 48 hours
	AVC-Intra100	Approx. 24 hours

Recording Time per BD (50 GB) Disc

	Codec	Rec. Time
SD	DVCPRO	Approx. 3 hour 20 min.
	DVCPRO 50	Approx. 1 hour 40 min.
HD	DVCPRO HD	Approx. 50 min.
	AVC-Intra50	Approx. 1 hour 40 min.
	AVC-Intra100	Approx. 50 min.

*Approx. 180 hours per LTO (1.5 TB) tape or approx. 6 hours per BD (50 GB) disc can be archived in the case of AVCHD (compatibility planned, in HG mode: approx. 13 Mbps).

Comparison of LTO and BD data storage media

	LTO5	BD-R
Capacity	1.5 TB	50 GB
Transfer Speed (Maximum value)	140 MB/s = 1,120 Mbps	216 Mbps (half to write)

Support Desk

Mandatory tool for the all P2 users.
Visit http://pro-av.panasonic.net/ and click "P2 Support and Download"

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.

▲ Windows Vista Version

*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 allows you to ingest data into the HDDs of ordinary PCs or Macs, and also manage data within the PC/Mac. Please note that the newest Windows or Mac P2 driver must be installed on your PC/Mac to use this application.

▲ Mac Version

Applicable Functions

Windows XP Version:	Supports AVC-Intra files and proxy files.
Mac OS X Version:	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-Intra100 to DPX files. For details, please see the P2 CMS explanation on page 20.

Driver Software for P2 Products

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

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 Card Bus Driver).

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.

Ver1.5 for FinalCutPro6.0.3-6.0.5

*FinalCutPro7 natively supports decoding of AVC-Intra format.
* 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.

AVC-Intra Encoder for Compressor

Mac

(QuickTime file to AVC-Intra encoder plug-in for Compressor)

AVC-Intra Encoder for Compressor is a plug-in software that can encode an edited material on Apple FinalCutPro to AVC-Intra100, 50 and export it with QuickTime file or Panasonic P2 on Apple Compressor.
This plug-in has a capability that enables the user to input P2 metadata on Panasonic P2 export mode.

*Notice: This AVC-Intra Encoder plug-in software does not input standard-definition TV format (NTSC/PAL) to transcode. Also it does not convert HD TV format between 1080i, 1080p and 720p.
This AVC-Intra Encoder plug-in software inputs only QuickTime file format. In the case of P2 export, 4GB spanned clip in a P2 card is supported, but spanned clip with multiple cards is not supported.

One Clip Ingest Software

Win

One Clip Ingest Software is for combining the multiple clips on a P2 card or in a folder.

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.

PC operating condition

OS: Microsoft Windows 7, Windows Vista or Windows XP
Latest P2 driver for Windows must be installed. Log in with Administrator status

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.

CAC File for P2 Camera Recorder

(for AJ-HPX3700G/HPX2700G/HPX3100G/HPX3000G/ AG-HPX500 series/ HPX300 series/HPX370 series)

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.

OPTIONAL ACCESSORIES

Camera Studio System

[Applicable products: AJ-HPX3700G, AJ-HPX2700G, AJ-HPX3100G, AJ-HPX2000, AJ-HPX2100, AG-HPX500 series, AG-HPX370 series]

This new camera studio system boosts the level of cost-performance for a wide range of P2HD and DVCPRO HD camera recorders. BNC cables transmit degradation-free HD digital images up to 328 feet (100 meters) in addition to giving you full remote control

AG-CA300G
Camera Adaptor
Compact and Lightweight

AG-BS300
Base Station
Two SDI (HD/SD) Outputs and Composite Video Output

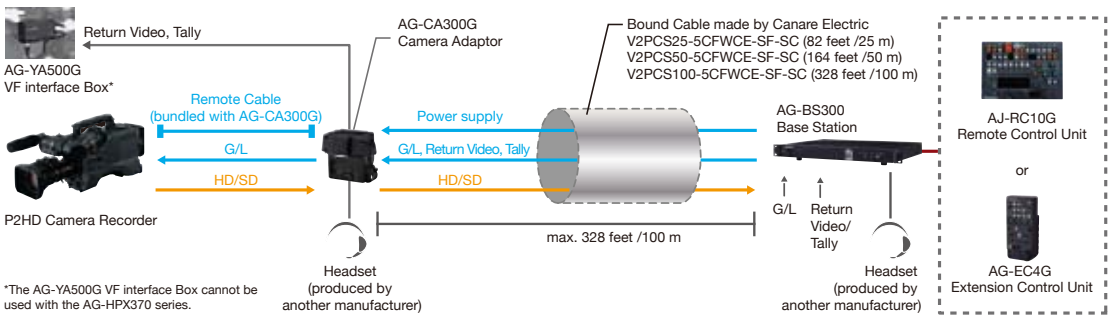
AG-EC4G
Extension Control Unit
For a Studio Camera System or Standalone Camera Recorder

AG-YA500G
VF Interface Box
For Viewfinder Display of Return Image and Tally

*The AG-YA500G VF Interface Box cannot be used with the AG-HPX370 series. The applicable viewfinder varies depending on the camera.

AJ-RC10G*
RCU (Remote Control Unit)
with 32 feet (10 meters) remote control cable
AJ-C10050G
Remote Control Cable
(164 feet /50 meters)

*Not available in some areas. Only functions that are supported by the camera can be controlled by the AJ-RC10G.



*The AG-YA500G VF interface Box cannot be used with the AG-HPX370 series.

P2 cam options

AJ-CVF100G
25.4 mm (1 inch) HD Color EVF
Utilizing a 25.4 mm (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-HPX3700G, AJ-HPX2700G, AJ-HPX3100G, AJ-HPX2000, AJ-HPX2100, AJ-HDC27H, AJ-HDX900, AG-3DP1G
- Weight: approx. 750 g (1.7 lb)
- Dimensions (W x H x D): 240 mm x 80 mm x 206 mm (9-1/2 inches x 3-3/16 inches x 8-1/8 inches)
- Power Consumption: 5.0 W

AJ-HVF21G
50.8 mm (2 inches) HD EVF
59.94 Hz/50 Hz switchable

AJ-HVF21KG
50.8 mm (2 inches) HD EVF
59.94 Hz/50 Hz switchable

AJ-VF20WB
50.8 mm (2 inches) EVF
16:9/4:3 switchable

AJ-VF15B
38.1 mm (1.5 inches) EVF
for 4:3

AJ-MC900G
Stereo Microphone

AJ-MC700
Microphone Kit

AG-MC200G
XLR Microphone

AJ-GPS910G
GPS Unit

SHAN-TM700
Tripod Adaptor

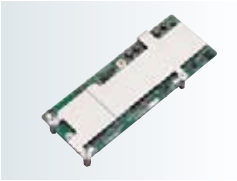
AJ-YAX800G
Video Encoder Card

*Camera Recorder software upgrade is required.

AJ-YA350AG
HD/SD Input Board
for AJ-HPX2000/HPX2100

P2 cam options

AJ-YBX200G
AVC-Intra Codec Board
for AJ-HPX2000/ HPX2100



AJ-YDX30
Video Encoder Board
for AJ-HPX3100G

AJ-WM30
Wireless Module for
AJ-HPX3100G
AJ-SFU3100G
Upgrade Software Key
for AJ-HPX3100G

AJ-SC900
Soft Carrying Case

*Not available in some area

SHAN-RC700
Rain Cover

*Not available in some area

P2 handheld options

AG-MC200G
XLR Microphone

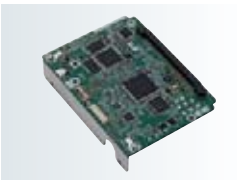
AG-B25
AC Adaptor Kit
for AG-HPX170 series

*This kit cannot be used with the AG-HPX250.

CGA-D54/CGA-D54s
Battery Pack (5,400 mAh)

P2 portable, P2 portable deck, P2 mobile, P2 deck and P2 MSU options

AJ-MA75P
Rack Mount Adaptor
for AJ-HPD2500



AJ-YCX250G
AVCHD Codec Board
for AJ-HPM200 and
AJ-HPD2500

AG-B25
AC Adaptor Kit
for AG-HPG20

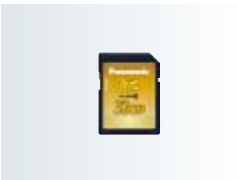
*This kit cannot be used with the AG-HPD24.

CGA-D54/CGA-D54s
Battery Pack (5,400 mAh)
for AG-HPG20, AG-MSU10
and AG-HPD24

AG-MBX10G
Removable Interface Box
for AG-MSU10

P2 general options

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



SD/SDHC Memory Card

BT-LH910G
228.6 mm (9 inches)
HD/SD LCD monitor

P2 cam, P2 handheld options		AJ-HPX3700G	AJ-HPX2700G	AJ-HPX3100G	AJ-HPX2000 AJ-HPX2100	AG-HPX500 series	AG-HPX370 series	AG-HPX170 series	AG-HPX250
Camera Adaptor	**AG-CA300G**	Yes	Yes	Yes	Yes	Yes	Yes		
Base Station	**AG-BS300**	Yes	Yes	Yes	Yes	Yes	Yes		
Extension 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		
25.4 mm (1 inch) HD Color EVF	**AJ-CVF100G**	Yes*1	Yes*1	Yes	Yes				
50.8 mm (2 inches) HD EVF	**AJ-HVF21G** **AJ-HVF21KG**	Yes	Yes	Yes	Yes				
50.8 mm (2 inches) EVF	**AJ-VF20WB**				Yes*2*3*4	Yes*3*4			
38.1 mm (1.5 inches) EVF	**AJ-VF15B**				Yes*2*3	Yes*3			
Stereo Microphone	**AJ-MC900G**	Yes	Yes	Yes	Yes				
Microphone Kit (monaural)	**AJ-MC700**					Yes	Yes		
XLR Microphone (monaural)	**AG-MC200G**					Yes	Yes	Yes	Yes
GPS Unit	**AJ-GPS910G**	Yes	Yes	Yes	Yes				
Tripod Adaptor	**SHAN-TM700**	Yes	Yes	Yes	Yes	Yes	Yes		
Video Encoder Card	**AJ-YAX800G**	Yes	Yes		Yes		Yes		
HD/SD Input Board	**AJ-YA350AG**				Yes				
AVC-Intra Codec Board*5	**AJ-YBX200G**				Yes				
Video Encoder Board*5	**AJ-YDX30**			Yes					
Wireless Module*5*6	**AJ-WM30**			Yes					
Upgrade Software Key	**AJ-SFU3100G**			Yes					
Soft Carrying Case	**AJ-SC900**	Yes	Yes	Yes	Yes	Yes	Yes		
Rain Cover	**SHAN-RC700**	Yes	Yes	Yes	Yes	Yes	Yes		
AC Adaptor Kit	**AG-B25**							Yes	
Battery Pack (5,400 mAh)	**CGA-D54** **CGA-D54s**							Yes	Yes
P2 Card (E series)*5	**AJ-P2E064XG** **AJ-P2E032XG** **AJ-P2E016XG**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SD/SDHC Memory Card		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HD/SD LCD monitor	**BT-LH910G**	Yes*7	Yes*7	Yes*7	Yes*7	Yes*7	Yes*7		
2/3 type HD Zoom Lens (CAC Applicable)*8		Yes	Yes	Yes		Yes			
2/3 type HD Zoom Lens		Yes	Yes	Yes	Yes	Yes			
Anton/Bauer Battery		Yes*9	Yes*9	Yes*9	Yes*9	Yes*9	Yes*9		
Anton/Bauer UltraLight 2	**33012**			Yes					
Anton/Bauer UltraLight 2	**33013**	Yes	Yes	Yes	Yes	Yes	Yes		
Portable H.264 Proxy Recorder (Coming soon)	**FOCUS** **FS-P250**								Yes*10

Yes: It is possible to use it. *1: Set VF SEL to COLOR in the MENU setting on the camera recorder. *2: A MENU setting on the camera recorder is required. The viewfinder image is a down-converted image. *3: Usable only when the camera recorder is set to 60 (59.94) Hz. *4: Set DOWNCON MODE to SQUEEZE in the MENU setting on the camera recorder. *5: To use the AVC-Intra Codec Board, Video Encoder Board, Wireless Module, and 16 GB/32 GB/64 GB P2 card, the software for the camera recorder may need to be updated depending on the existing software version. For details, see the Panasonic website. http://pro-av.panasonic.net/ *6: The optional AJ-SFU3100G Upgrade Software Key is required to use the AJ-WM30 Wireless Module. *7: A mounting bracket (purchased separately) is required to mount on a camera recorder. *8: See the option column on page 21 for the model numbers of CAC compatible lenses. *9: The applicable battery pack varies depending on the model. *10: You may need to update AG-HPX250 firmware. Please refer to the “service and support” on the Panasonic Website (http://pro-av.panasonic.net/).

P2 portable, P2 mobile, P2 deck, P2 MSU		AG-HPG20	AG-HPD24	AJ-HPM200	AJ-HPD2500	AG-MSU10
Rack Mount Adaptor*1	**AJ-MA75P**				Yes	
AVCHD Codec Board*2	**AJ-YCX250G**			Yes	Yes	
AC Adaptor Kit	**AG-B25**	Yes				
Battery Pack (5,400 mAh)	**CGA-D54** **CGA-D54s**	Yes	Yes			Yes
Removable Interface Box	**AG-MBX10G**					Yes
P2 Card (E series)*2	**AJ-P2E064XG** **AJ-P2E032XG** **AJ-P2E016XG**	Yes	Yes	Yes	Yes	Yes
SD/SDHC Memory Card		Yes	Yes	Yes	Yes	
HD/SD LCD monitor	**BT-LH910G**	Yes	Yes	Yes	Yes	

Yes: It is possible to use it. *1: A slide rail (purchased separately) is required for rack mounting. *2: To use the AVC-Intra Codec Board and 16 GB/32 GB/64 GB P2 card, the software for the camera recorder may need to be updated depending on the existing software version. For details, see the Panasonic website. http://pro-av.panasonic.net/

Other Manufacturers' Products

2/3 Type CAC Applicable Lenses for AJ-HPX3700/3100/2700

[Fujinon]
- **HA23x7.6BERM-M58**
- **HA22x7.8BERM-M58**
- **HA22x7.8BERD-S58**
- **HA22x7.3BERM-M58**
- **HA16x6.3BERM-M1**
- **HA16x6.3BERM-M58**
- **HA16x6.3BERD-S58**
- **HA18x7.6BERM-M58B**
- **HA14x4.5BERM-M1**
- **HA13x4.5BERM-M58B**

[Canon]
- **KJ22ex7.6B IASE***1
- **KJ22ex7.6B IRSE***1
- **HJ22ex7.6B IRSE A***1
- **HJ22ex7.6B IASE A***1
- **HJ22ex7.6B IASE***1*2
- **HJ21ex7.5B IRSE A***1
- **HJ21ex7.5B IASE A***1
- **HJ21ex7.5B IASE***1*2
- **HJ17ex7.6B IRSE A***1
- **HJ17ex7.6B IASE A***1
- **HJ17ex7.6B IASE***1*2
- **HJ14ex4.3B IRSE***1
- **HJ14ex4.3B IASE***1
- **HJ11ex4.7B IASE***1

[Angenieux]*3
- **T26x7.8BESSDHD-AA**
- **T19x7.3BESSDHD-AA**
- **T14x4.5BESSDHD-SB**

*1:The CAC function does not start working until rotation the Focus and Zoom rings from the end to end once, after switch ON the camera recorder.
*2:There are some production lots that are not compatible with the CAC function yet. Please consult your Canon sales if the production lot of the lens you are using is CAC ready.
*3:There are some production lots that are not compatible with the CAC function yet. Please consult your Angenieux sales if the production lot of the lens you are using is CAC ready.
Angenieux: http://www.angenieux.com

2/3 Type CAC Applicable Lenses for AG-HPX500 series

[Fujinon]
- **XA20sx8.5BRM-K3**
- **XA17x7.6BERM-M58B**
- **XA17x7.6BRM-M58B**
- **XA17x7.6BERM-M58D**
- **ZA22x7.6BERM-M58**
- **ZA17x7.6BERM-M58H**
- **ZA17x7.6BERM-M58C**
- **ZA12x4.5BERM-M58**

[Canon]
- **KJ22ex7.6B IRSD PS12**
- **KJ21ex7.6B IRSD PS12**
- **KJ20ex8.5B KRSD PS12**
- **KJ20x8.5B KRSD A**
- **KJ20x8.2B IRSD**
- **KJ17ex7.7B IRSD PS12**
- **KJ16ex7.7B IRSD PS12**
- **KJ16ex7.7B KRSD PS12**
- **KJ13x6B KRSD**
- **KJ10ex4.5B IRSD PS12**
- **KJ10ex4.5B IRSE A**
- **KJ10ex4.5B IASE A**

1/3 Type CAC Applicable Lenses for AG-HPX370 series

[Fujinon]
- **XT17x4.5BRM-K14**

[Canon]
- **KT20x5B KRSD PS12**
- **KT17ex4.3B IRSD PS12**

Bound Cable for Camera Studio System (between AG-BS300 and AG-CA300G)

[Canare]
V2PCS25-5CFWCE-SF-SC (82 feet/25 meters)
V2PCS50-5CFWCE-SF-SC (164 feet/50 meters)
V2PCS100-5CFWCE-SF-SC (328 feet/100 meters)

Power Cable for Camera Studio System (between AG-BS300 and AG-CA300G)

[Canare]
DC50V10-CE01PS-SC (164 feet/50 meters)
DC100V10-CE01PS-SC (328 feet/100 meters)

Canare Electric CO., Ltd.
http://www.canare.co.jp/oversea/mainmenu.html

Anton/Bauer
Dionic Battery

Anton/Bauer
Hytron Battery

Anton/Bauer
UltraLight 2
- **33012**
- **33013**

Portable H.264 Proxy Recorder for AG-HPX250
FOCUS FS-P250 *Coming soon*

*You may need to update AG-HPX250 firmware. Please refer to the "service and support" on the Panasonic Website (http://pro-av.panasonic.net/).

THE P2 PARTNERS

Adobe

- Adobe Creative Suite 5.5 Production Premium
- Adobe Creative Suite 5.5 Master Collection
- Adobe Premiere Pro CS 5.5

www.adobe.com

- Final Cut Pro X

www.apple.com/finalcutpro

usa.autodesk.com/

avid.com

AVC-Intra production
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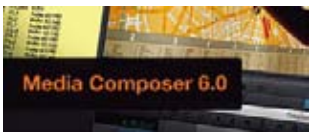

www.Avid.com/mediacomposer

bitcentral

- Create: Edit In a Browser
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www.bitcentral.com

DALET

- Dalet Enterprise Edition
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www.dalet.com

DVFilm RAYLIGHT

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www.dvfilm.com/raylight/mac/index.htm
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- EDIUS 6 Non-linear Editor
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- QTube
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- Qube

www.quantel.com

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www.telestream.net

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- PROXSYS PX-Series Professional Media Asset Management

www.FOCUSinfo.com

Please refer to the latest Non-linear Compatibilty Information,
P2 Support and Downlord and Service Information, etc. at Panasonic web site.

http://pro-av.panasonic.net/

*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. 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 http://pro-av.panasonic.net/ 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 http://pro-av.panasonic.net/en/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 http://pro-av.panasonic.net/. For operating requirements and details of other P2 editing software, visit the website of the relevant software manufacturer.

Note Regarding 24 bit Audio

Clips recorded using 24 bit audio must be played back with 24 bit compatible P2 equipment or the P2 Viewer. If clips are played back with equipment not compatible with 24 bit audio, the clip number will be indicated in red and the clips will not be played back. A P2 Viewer not compatible with 24 bit audio will not reproduce the sound properly. To play back those clips, use the latest version of P2 Viewer. For the latest information on 24 bit compatible P2 equipment and P2 Viewer, see “Support & Download” on the Panasonic website (http://pro-av.panasonic.net/).

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ISO 14001 EC98J2010

UKAS MANAGEMENT SYSTEMS 051

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

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