

real IT
real HD
real flexibility

Journée en haute définition

TITAN

Namur le 25 mai

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Freedom to choose

L'embarras du choix

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Les Choix

- Tape
- DVCPROHD
- Broadcast quality/ features
- Video workflow

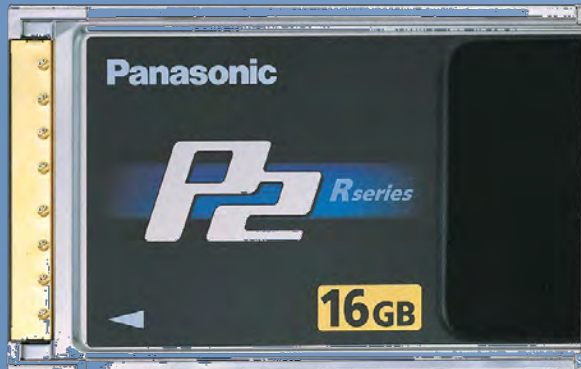
- Tapeless
- AVCI/ AVCHD
- Industrial quality/ features
- IT workflow

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New P2 card

Larger capacity & Lower cost



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New Compression (H.264 based)

AVC INTRA

AVCHD

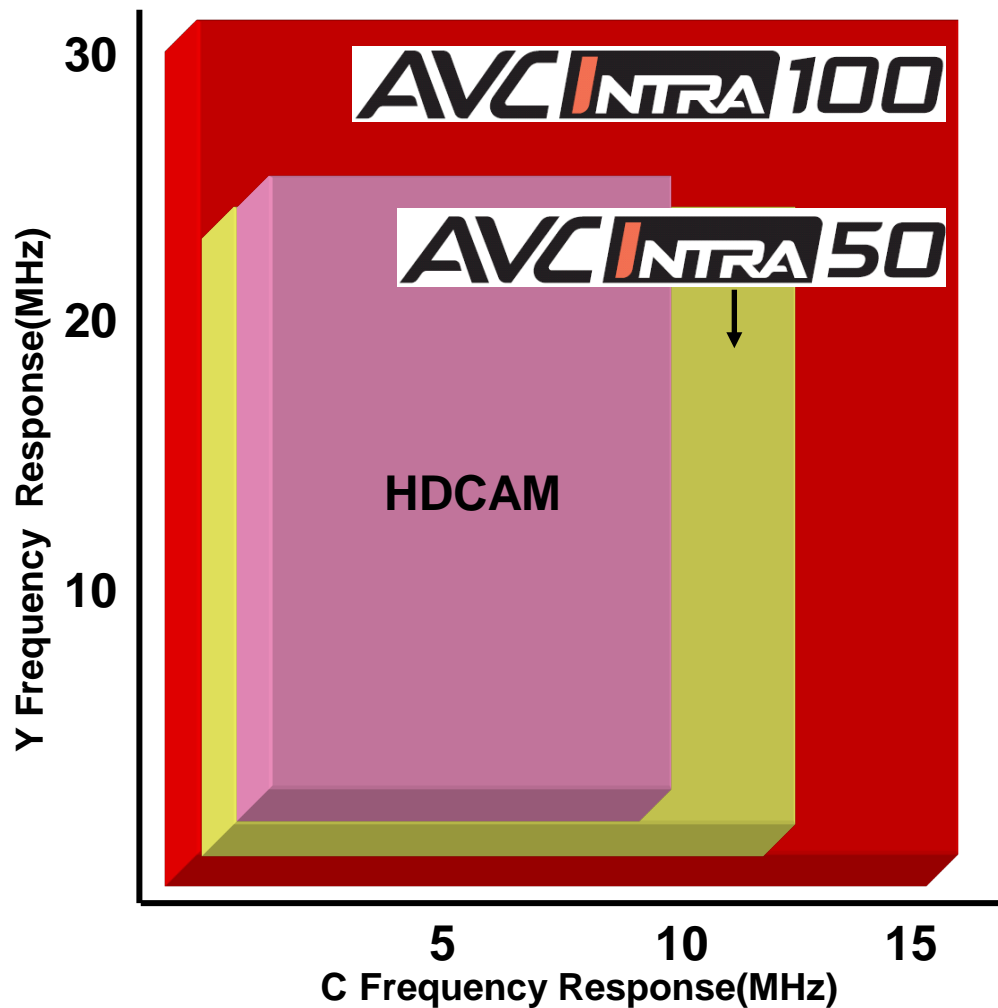
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AVC INTRA

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Recording Bandwidth of AVC-Intra

Recording bandwidth comparison



AVC-Intra 100M mode (4:2:2)

- Luminance : 1920 pix/line
- Chrominance : 960 pix/line
- *Bit depth 10bit

AVC-Intra 50M mode (4:2:0)

- Luminance : 1440 pix/line
- Chrominance : 720 pix/line
- *Bit depth 10bit

DVCPROHD

- Luminance: 1440 pix/line
- Chrominance : 720 pix/line
- *Bit depth 8bit

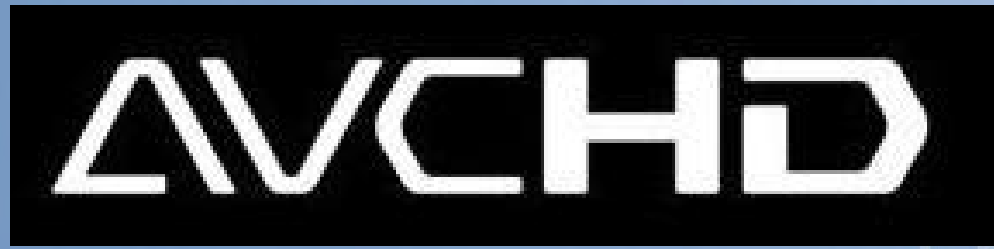
HDCAM

- Luminance : 1440 pix/line
- Chrominance : 480 pix/line
- *Bit depth 8bit

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AVCHD

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★ **Successor of DV in Consumer Market**

Developed by Sony & Panasonic

★ **H.264(MPEG4/AVC) compression**

H.264 is the Newest comp.technology



★ **Twice Efficiency than MPEG2(HDV,XDCAM)**



Bit Rate & Recording Time

	DVD-R/RAM		Blu-Ray		Solid State Memory
	Single side	Double Side	Single Side	Single Side Double Layer	SD/SDHC
	1.4GB	2.8GB	7.4GB (?)	14.8GB (?)	4GB
Max. 24Mbps	-	-	41min	82min	22min
13Mbps	14min	28min	75min	151min	41min
9Mbps	20min	41min	109min	219min	59min
6Mbps	31min	62min	164min	328min	88min

Comparison AVC-Intra and AVCHD

			
	100M mode	50M mode	
Rec. Media	P2 card		SD/SDHC card
Compression	H.264 based I-Only		H.264 Long GOP
Sampling Bit Rate	10 bit		8 bit
Sampling Format	4:2:2	4:2:0	4:2:0
Bit Rate	Approx. 100Mbps *Video Only	Approx. 50Mbps *Video Only	Up to 24Mbps
Advantage	Similar quality as HDD5	Similar quality as DVCPROHD by half bit rate	<ol style="list-style-type: none"> 1. Media Cost 2. Long time recording 3. Possible to design smaller body

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Camera Industrielle HD

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AVCHD

Palm camera recorder
AG-HSC1U

<Feature>

- 1. Compact, Mobility**
- 2. 3CCD Color Reproduction**
- 3. Reliability (No moving parts)**

<Schedule> Available Now

<List Price> 1.690€

<Specification>

1/4" 16:9 3CCD

x12 Leica Dicomar lens with Optical Image Stabilization

Recording Media : SD card

**Recording Format : AVCHD (H.264 HD)
(13 ,9 ,6 Mbps)**

Video Format : 1080/50i

Still Picture recording : 2.1Mega Wide

Audio 5.1ch with internal Mic

3.0" Wide LCD

HDMI, USB

Analog Component (D terminal)

AV output (Composite, Audio), S-Video Out

Included Accessory

**4G SD Card, SD stocker (40GB HDD), Battery,
AC adaptor, IR Remote, D cable, USB Cable**



DVCPRO HD **P2** miniCam AG-HVX200E

- Native 16:9 1/3" Progressive 3CCD
- First DVCPRO HD P2 Camcorder
 - First SD and HD Camcorder
 - 1080i/720P/576i
 - SD in 25M and 50MP2
- Recording Format
 - P2 Card : DVCPRO HD/50M/25M/DV
 - DV Tape : mini-DV



1. Leica Dicomar wide angle lens

- x 13 optical Zoom
- f=32.5~423mm (35mm cal)
- mechanical zoom
- OIS
- filter: 82mm

2. Video format

- 1080 50i,25P over 50i
- 720 50P,25P over 50P/native
- 576 50i,25P over 50i

AEHD *Camcorder*

AG-HPX500



P2HD

DVCPRO HD



HD P2cam AG-HPX500

< Features >

1. Low cost P2 HD
2. Shoulder type
3. Slow & Quick motion
4. Low Power Consumption 23W
5. 5 year Extended Warranty (w/ Registration)

< Target Availability >

June 2007

< Target list Price >

€13,800 (with EVF)

< Specification >

- **2/3" Progressive 3CCD**
- **Exchangeable Lens**
- 4 P2 Card Slot
- Recording Format
 - HD : 1080 50i/25p/60i/30p, 720 50P/25p 60p/24p
 - SD : 576 50i/25p, 480 60i/24p
- DVCPRO HD/DVCPRO50/DVCPRO/DV
- **Cinelike Gamma**
- **VFR Function**
- USB
- 1394 in/out
- HD-SDI Out
- TC / Gen Lock
- **CAC (Chromatic Aberration Compensation)**



P2HD

AG-HPX500

P2 camera:

High Reliability

Ruggedized against shock & vibration with P2

instant recording startup

clip thumbnail view

continuous recording

hot swapping

loop-record

pre-record

one-shot recording

interval recording

metadata

user assignable buttons

LCD monitor



P2HD

AG-HPX500

2/3 inch lens mount

HD/SD Multi-Format

HD: 1080/50i, 1080/25P

720/50P, 720/25P, 720/25PN

SD: 576/50i, 576/25P

Also switchable to 60Hz formats

Multi-Compression

DVCPROHD, DVCPRO50, DVCPRO and DV

Variable framerate function (12, 18, 20, 23, 25, 27, 30, 32, 37, 48 and 50 fps)



P2HD

AG-HPX500

4 P2 slots

HD-SDI/SD Down Conversion output

1 filter wheel(CLEAR/ 1/4 ,1/16, 1/64ND)

Cine-like gamma

CAC : Chromatic Aberration Compensation

User friendly:

Scene File Dial

Focus Assist

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Camera Broadcast

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DVCPRO HD camcorder AJ-HDX900



< Features >

1. High Cost Performance
2. World wide Format Support
3. 1394 High Picture Quality Upload

Availability :

RRP: €31.820

included

Viewfinder, Mic, baseplate

< Tentative Specification >

- 2/3" 1M pixels Progressive 3CCD
- Power Consumption: 34W (w/o EVF, Mic)
- Shooting Mode:
 - 1080/59.94i, 29.97P, 23.97P(2:3), 23.97PA
 - 1080/50i, 25P
 - 720/59.94P, 29.97P & 23.97P over 59.94P
 - 720/50P, 25P over 50P
- High Sensitivity: F10 (at 2000lux)
- Minimum Illumination: 0.032 lux (+62dB)
- 14 bit Camera A/D process
- 2 Optical Filter Wheel (ND & CC)
- Recording Tape Format: DVCPROHD-EX
- HD-SDI & D/C video output
- 1394 output w/ back-up rec. support
- New RCU (Remote Control Unit) support

P2HD *Camcorder*

AJ-HPX2100





P2HD

AJ-HPX2100

P2 camera:

High Reliability

Ruggedized against shock & vibration with P2

instant recording startup

clip thumbnail view

continuous recording

hot swapping

loop-record

pre-record

one-shot recording

interval recording

metadata

user assignable buttons

LCD monitor

P2HD

DVCPRO HD

DVCPRO 50

DVCPRO

Panasonic

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P2HD

AJ-HPX2100

HD/SD Multi-Format

HD: 1080/50i, 1080/25P
720/50P, 720/25P

SD: 576/50i, 576/25P

Also switchable to 60Hz formats

Multi-Compression

DVCPROHD, DVCPRO50, DVCPRO and DV

Additionally **AVC-Intra** which based on H.264. <Option: AJ-YBX200>

50Mbps – Similar quality as DVCPRO HD compression at 50Mbps

100Mbps – Full studio profile support

5 P2 slots

2 filter wheels (Cross/3200/4300/6300)

(CLEAR/ 1/4 ,1/16, 1/64ND)



P2HD

AJ-HPX2100

USB host function:

able to transfer images to low-cost harddrive without PC

Slot for wireless micro receiver

Option slot:

proxy recorder encoder

14-bit DSP with 5 Gamma modes

DRS (Dynamic Range Stretching)

P2HD

DVCPRO HD

DVCPRO 50

DVCPRO

DV



P2HD

AJ-HPX2100

HD-SDI/SD Down Conversion output

HD/SD SDI input for Pool Feed <Option:AJ-YA350>

5 pin stereo microphone

User friendly:

**user menu
focus assist**

P2HD

DVCPRO HD

DVCPRO 50

DVCPRO

DV

P2HD *Camcorder*

AJ-HPX3000



P2HD

DVCPRO HD

AVC INTRA



HD P2cam AJ-HPX3000

< Features >

1. High Picture Quality & Sensitivity

HD full pixel (high resolution) camera

High sensitivity up to F10

2. High Reliability

Ruggetize against shock & vibration with P2

3. High Speed

Direct edit on P2 card & high speed transfer

< Specification >

- **2/3" 2.2M pixels IT 3CCD**
- High Sensitivity: F10 (2000lux)
- 2 Optical Filter Wheels (ND & CC)
- Minimum Illumination:0.064lux(56dB)
- 14bit Camera A/D Process
- **Chromatic Aberration Compensation**
- Rec. Format:

HD; DVCPROHD & AVC-Intra (H.264)

DVCPRO HD :

1080/60i, 30P,24P,24PA(over 60i)

1080/50i, 25P(over 50i)

AVC-Intra (H.264 50M/100M) :

1080/60i,30PN,24PN, 1080/50i,25PN

SD; DVCPRO50

480/60i, 30P/24P/24PA(over 60i)

576/50i, 25P(over 50i)




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Les Media

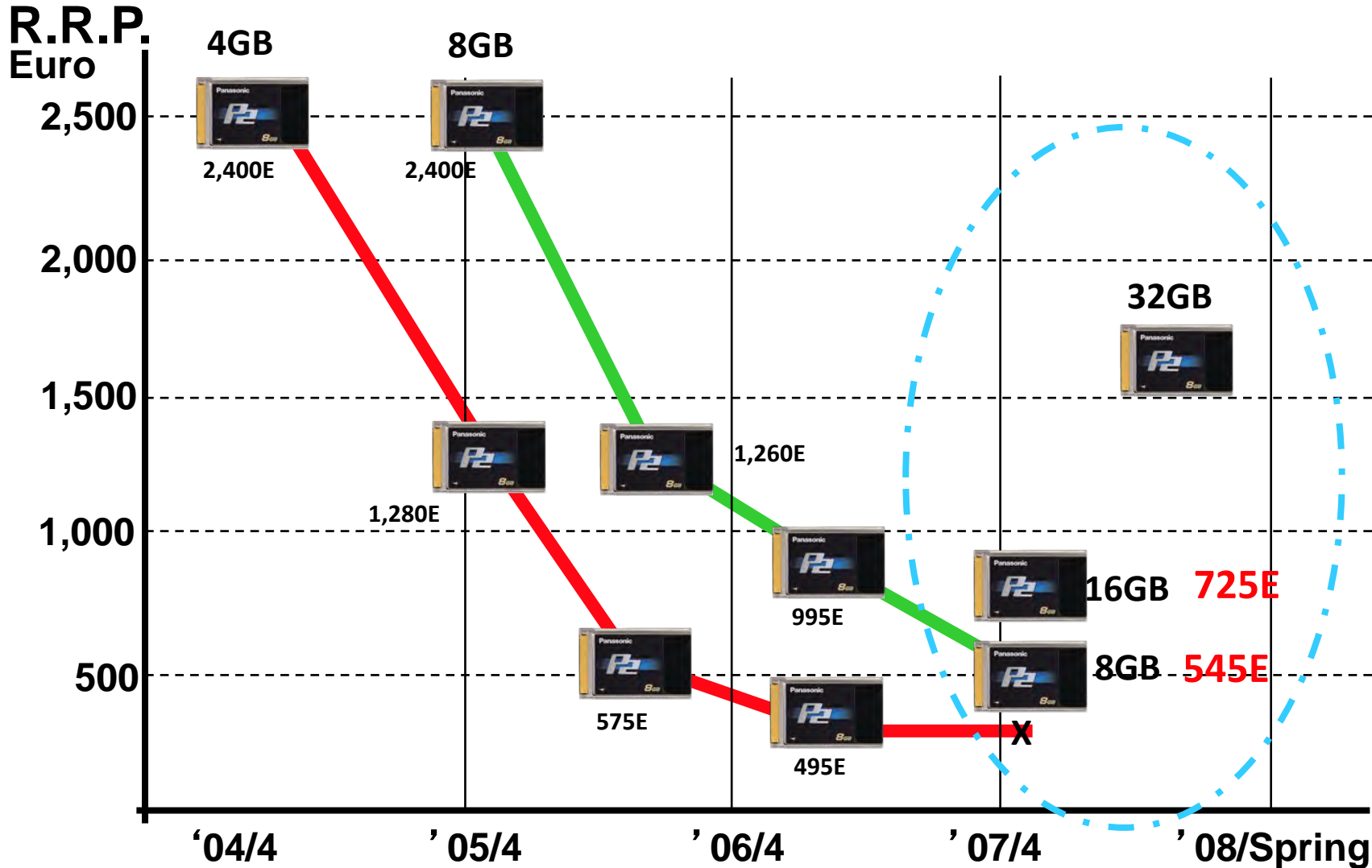
Bande / Carte Memoire

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Recording Time on to P2 card

<u>P2 card</u> Capacity		Rec. time per card		
		8GB 	16GB 	32GB 
HD	AVC-I (100M)	8min	16min	32min
	DVCPROHD	8min	16min	32min
	AVC-I (50M)	16min	32min	64min
SD	DVCPRO50	16min	32min	64min
	DVCPRO25	32min	64min	128min

P2 Card Price Schedule (Europe)



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Production Tools

DVCPRO HD EX Player/Recorder

AJ-HD1400



< Features : additional from current HD1200A >

1. support for 720/50P
2. All in One model (include 1394 / HD-SDI / SD-SDI / Up-con)
3. Editing (Assemble / insert / simple Joy stick / D-sub)

Available:

Now

RRP:

€25.450



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P2 drive
AJ-PCD20
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< Specification >

- Five P2 Card slots CardBus interface
- High speed data transfer USB2.0 / IEEE 1394b
- 2 Ways of Usage: Stand Alone or Built-in to PC 5" Bay
- Windows2000/XP and Mac OS X support

< Usage >

- Slot extender for PC based non-linear editors
- Slot extender for Servers or PCs for file transfer

RRP: €2.220

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P2HD

DVCPRO HD



HD P2 gear

AG-HPG10

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<Feature>

1. Record and PB of P2 card
2. Mobility
3. Digital Signal I/F (1394, HD SDI)

<Schedule>

August, 2007

<Specifications>

P2 card 2 slots

Video Format

Record

- 1080/60i, 1080/50i (DVCPROHD)
- 720/60p, 720/50p (DVCPROHD)
- 480/60i, 576/50i (DVCPRO50/25,DV)

Playback

- 1080/60i (DVCPROHD) (30p over 60i/24p over 60i/24pA over 60i)
- 1080/50i (DVCPROHD) (25p over 50i)
- 720/60p (DVCPROHD) (30p over 60p /24p over 60p /24pN /30pN)
- 720/50p (DVCPROHD) (25p over 50p /25pN)
- 480/60i (DVCPRO50/25,DV) (30p over 60i/24p over 60i/ 24pA over 60i)
- 576/50i (DVCPRO50/25,DV) (25p over 50i)

DVCPRO HD/DVCPRO50/DVCPRO/DV

3.5" LCD Monitor

Battery Operation

DC Input

USB Host Function

1394 in/out

HD-SDI Out

Composite / Component D Output

Audio out

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Field Viewing & Dump to HDD

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At 3.5" LCD Monitor

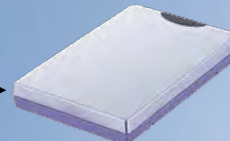
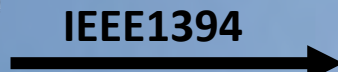


At Monitor

USB Host Function



USB HDD



IEEE1394 HDD

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P2 Mobile *AJ-HPM100*



P2HD

HD P2 mobile Recorder AJ-HPM100



< Features >

1. Portable Field Recorder/Player

- Compact & lightweight design

2. Field Playlist Making & Editing

- JOG/Shuttle dial & buttons operation
- Edit copy, AV split & Voice Over

3. Support Multi Formats

- Complete interface

< Specification >

- Compact & Light weight design (approx.6.5Kg)
- AC/DC & Battery operation
- Support Format

HD; DVCPROHD & AVC-Intra (H.264)

*H.264 will be option available in Jul. 2007

SD; DVCPRO50, DVCPRO & DV

- 9-inch LCD monitor with built-in ST speakers
- Playlist Making function
- Up Convert function (From SD to HD)
- Audio Split function
- Voice Over function
- Jog/Shuttle dial and various direct buttons
- 6 P2 card slots, 1 SD card slot

P2HD

HD P2 mobile Recorder AJ-HPM100

< Interface >

- HD/SD-SDI I/O *Switchable
- Analog Composite I/O
- Analog HD Component output
- Analog 4ch Audio I/O
- IEEE 1394 (AVC)
- USB2.0 (Host/Device)
- Time Code I/O
- Ref Video Input
- RS422 Remote
- DC and AC operation



Features of P2 mobile

<Applications>

- Searching Clips and Viewing
- Making Play List
- Edit Copy, Voice Over, Audio Split
- Copying P2 Contents
- Transmitting the Contents via SNG
- Back Up Recording for LIVE Broadcast



Interfaces

- Reference Input (SD)
- TC I/O (BNC × 2)
- RS-422 Remote

- IEEE-1394a (AV/C)
- USB2.0 (Host & Device)

- Composite I/O BNC × 2
- HD/SD Component Output BNC × 3
- HDSDI/SDI I/O BNC × 2
- Analog Audio I/O (4ch) XLR × 8

9inch Wide LCD Monitor

6 Slots

Jog/Shuttle Dial
and Buttons



AC and DC 12V Operation

Searching Clips and Viewing

- Easy to search the clips by using thumbnails
- Good operability (Jog/Shuttle Dial and Dedicated Buttons)



AJ-HPX2100



AJ-SPX900,800
AJ-SPC700



AG-HVX200



Operations Panel



Thumbnails

Playlist Making

- Easy setting of In & Out-points
- Edit Copy, Voice Over, Audio Split



"IN" + "ENTRY"



"OUT" + "ENTRY"



Viewing



Edit Copy

TENTATIVE

BD Changer AJ-CM50BD



< Specifications >

- 30 discs and 1 BD drive configuration
- Capacity: 1.5TB
- Include P2 Contents management software
- Dimensions (W x H x D): 200 x 300 x 700 mm
- I/F: USB2.0
- MTBF for BD drive (30,000 times insertion)
- Offline disc management

< Features >

- 1. BD changer Back-up System**
 - Auto back-up to multiple BD discs
- 2. Large Capacity**
 - Holds up to 30 discs (1.5TB)
- 3. P2-CMS Interface**



P2-CMS

*P2 Contents Management System software

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Metadata Handling

Content Management Software

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TENTATIVE



P2 Contents Management Software

AJ-SFCM01

< Feature >

- Import contents
 - P2 card, P2 cam, P2 deck, P2 drive,
 - P2 store, HDD, ...

-Automatic registration to database

-By Metadata

-Simple search by Metadata

-All text searching

-Export contents to

- Internal HDD

-External devices (HDD、BD etc.)

-Logging Function

-Comment input during watching contents

-Comment input before shooting

< Features >

1. P2 Contents Management

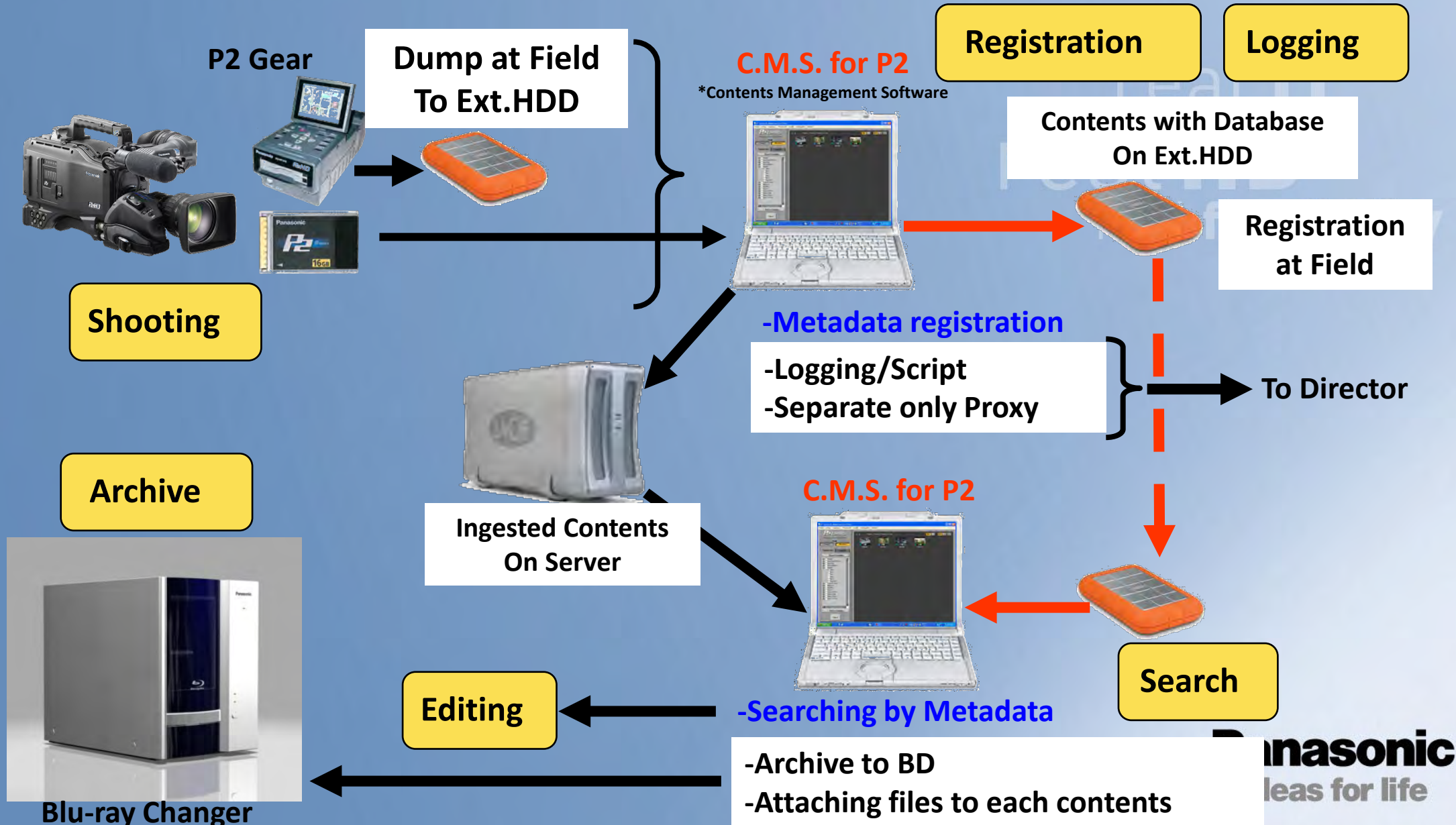
- Auto database registration

2. BD changer Back-up System

- Auto back-up to multiple BD discs

3. Metadata Editing

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Questions

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Merci Bien

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